



The Urban Child Institute

A philanthropic organization that focuses on children

The institute is a coalition of community researchers, strategists and interventionists dedicated to the improvement of well-being of children, especially from conception to age 3.

We will improve the lives of children and increase the social capital of Memphis by accelerating the infusion of meaningful knowledge and intervention that will change existing policies. We will work to connect research and knowledge with action.

For other individuals and organizations who want also to improve the lives of children, they will find the institute to be a trustworthy partner and resource for expertise, advice and collaboration.

This State of Children in Memphis & Shelby County was initiated and funded by the institute. The purpose is to collect in one document all existing, important research data on children in Memphis and Shelby County. Many individuals and organizations have benefited from pieces of this data, but this is the only up-to-date effort to assemble all the data in one place with analysis of the data by professionals.

Data have been organized in five segments, or domains.

1. *Children's Demographics* is a necessary prelude of important statistics.
2. *Children's Health* is an overall physical exam of the city's children.
3. *Children's Educational Well-Being* is a community report card.
4. *Family, Home Environment & Economic Well-Being* points out the influence of family and home and focuses on the disastrous results of poverty.
5. *Children's Community Environment* documents the impact on children of their neighborhood.

The institute's objective is for this reference guide to encourage and rally others into action and change. The data contained herein should provide clear direction to government leaders, education and medical professionals, community welfare and religious organizations of all types for more steps to identify objectives and strategies to improve the state of our children. The potential for many such additional actions is highlighted throughout.

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Introduction



Under-educated children have no future.

In *The State of Children in Memphis and Shelby County, 2006*, we identified single-mother birth as the most dangerous condition for children in Shelby County. The dangerous nature of that condition has not changed and remains a difficult challenge for children in our community. In 2007 we document the link between single-mother births, inadequate education, and persistent poverty in the City of Memphis, one of the least-educated cities in America.

We document the high percentage of single-mother births that result in prematurity, low birth-weight and infants that have special needs. We present information that shows how the absence of two parents leads to poverty and inadequate care during pregnancy. Poverty frequently leads to sub-optimal nutrition and excessive stress for the mother, the fetus and the very young child. This stifles development of an infant's brain in the critical months following conception. Poverty and poor family structure results in compromised children entering the Memphis education system. Their brain development has lagged from the moment of conception.

This book includes an important section on the development of the human brain from *conception* to age 3. It documents the problems of inadequate brain stimulation that create difficulties for educators. A child who enters school with exposure to only one-third as many words as other children, whose brain has had only a fraction of the stimulation of other children's brains, can not be taught as quickly, as thoroughly or as successfully.

Memphis parents must deliver to our schools children who have been given the opportunity to reach their full potential for learning the basic skills of reading, writing and mathematics necessary to succeed in college or vocational school, or the city can not thrive.

Memphis is at the bottom of the barrel.

The U.S. is declining in educational standing worldwide. In 1991 only Canada and Finland had a higher percentage of young people with college degrees than the U.S. Today a dozen countries are equal to the U.S., and six (Belgium, Canada, Ireland, Japan, Korea and Sweden) have surpassed the U.S.

Even by U.S. standards roughly 75 percent of students in Tennessee fail to meet national grade appropriate standards, and Memphis is at the bottom in Tennessee. The average ACT score in Memphis City Schools (MCS) is almost three points below the Tennessee average, and the Tennessee average is below the national average. One of four adults in Memphis has less than a high school education.

State and local educators celebrate an increase in the number of students that are rated “proficient” and “advanced.” This improvement is largely because Tennessee educators consistently have lowered the scores needed to qualify as “proficient” and “advanced.” If the bar falls low enough, no effort is required to jump it, and there’s no reward. Our focus must change from compromising “success” to maximizing potential.

There are some signs of hope.

- The infant mortality rate among black children has decreased (2005).
- From 2001 to 2005 the pregnancy rate among local teenage girls dropped by double digits.
- The overall Memphis poverty rate is down (2005).
- The percentage of children in Memphis living in poverty is down (2005).
- Shelby County unemployment is down (2005).
- The percentage of children living in a family with no wage earner is down (2005).
- The number of deaths among children is down (2005).
- Dropout rate in MCS has declined by 25 percent and Shelby County schools by 50 percent (2006).
- MCS ACT average is up (2005).
- Fewer Memphis public schools are on probation.
- The number of new cases of Type II Diabetes reported is declining.
- The divorce rate is decreasing.
- Tennessee funding for pre-kindergarten programs will increase by \$25 million.
- The U.S. Congress passed an increase in the Federal minimum wage that, when signed by the President, will raise the minimum wage by 40 percent over the next two years (2008 & 2009)
- This book includes a section that outlines “best practices” for dealing with many of our problems affecting children. It should not be ignored.

Memphis must break the cycle.

Memphis can not afford even one more generation that is under-educated and dependent on society. Tennessee Governor Phil Bredesen has announced his impatience with under-achieving schools and school districts. He has made it clear that the state has the power, the right *and the intent* to take control of local schools that are not being operated effectively.

Time has run out. If MCS does not demonstrate *now* that it can educate the city's children, MCS can lose control of our schools.

Yet, educators face overwhelming challenges due to poverty and poor family structures. Everyone should understand the consequences of single-mother births. Attitudes must change. If we are unable to break this cycle, the city will stagnate.

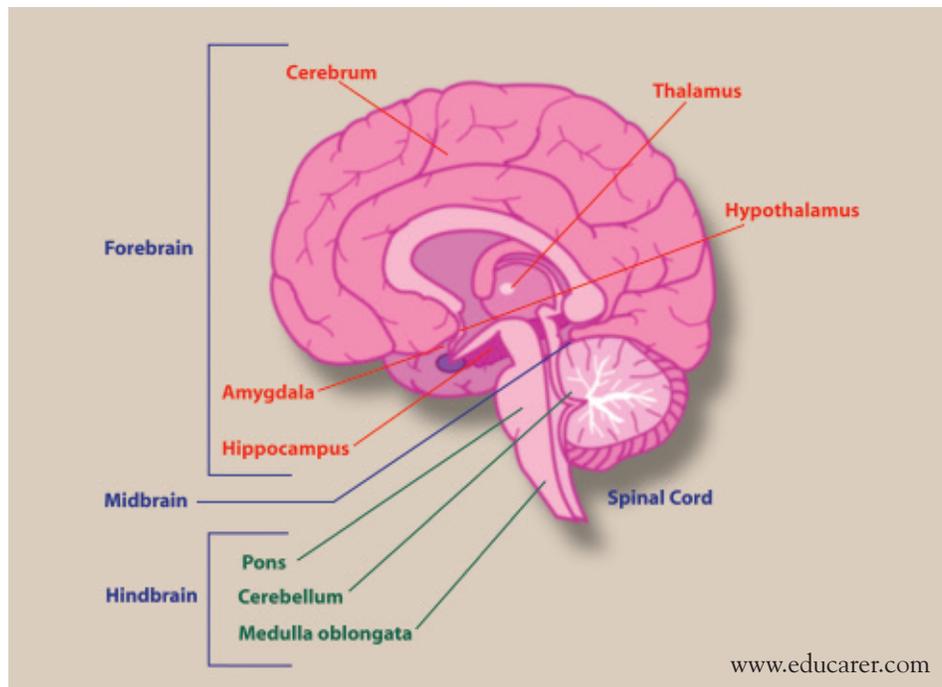
An under-educated city has no future.

From conception to Age 3: The building of the brain



The Urban Child Institute (TUCI) focuses on children from conception to age 3 because it is the period during which 80 percent of the human brain develops. Following is a brief description of what is known about human brain development and why this earliest period is such a critical influence on the rest of an individual's life.

Brain



A. First trimester in utero: Development of the central nervous system

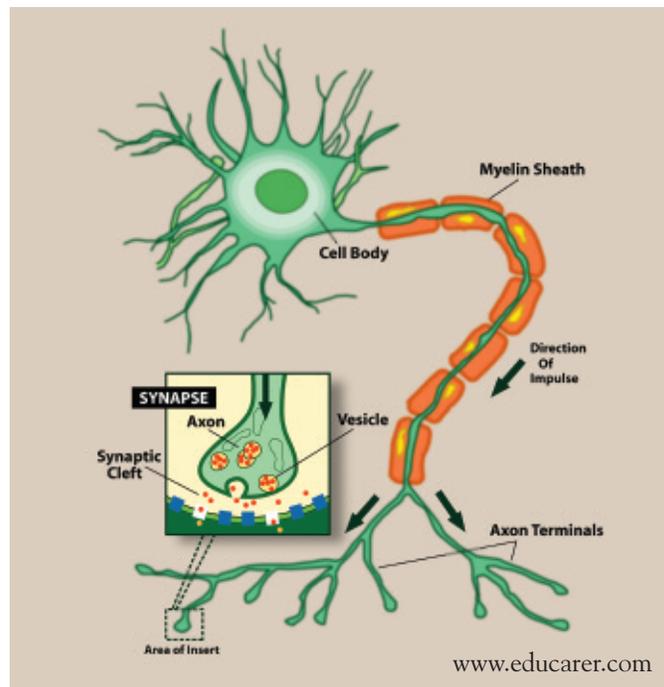
The central nervous system consists of the brain and the spinal cord. The spinal cord matures first, followed by the lower brain, or brainstem, and, finally, by the thinking part of the brain known as the cerebral cortex.

The nervous system begins to develop within the first days following conception. The so-called neural tube forms from the neural plate which appears by 16 days after conception. By 27 days the neural tube has closed and begun to transform into the brain and spinal cord of the embryo.

If the neural tube fails to close at the upper end of the embryo, the baby may be born without its cerebral cortex and only a very rudimentary brainstem. This condition is known as *anencephaly*, and it is not compatible with life. If the neural tube fails to close at its lower end, a condition known as *spina bifida* occurs. In this situation part of the spinal cord may develop outside the spine and be exposed easily to damage.

Fortunately, mothers now can take folic acid in the first few weeks of pregnancy to reduce significantly the possibility of neural tube defects.

Nerve Axon



About five weeks after conception nerve cells known as *neurons* begin to develop connections in the fetal spinal cord. These connections between neurons are called *synapses*. By the sixth week these early neural connections allow the fetus to make its first movements, which can be detected by ultrasound. More coordinated movements develop over the next several weeks even though most women can not detect fetal movements until approximately 18 weeks.

B. Second trimester in utero: The brainstem

The brainstem connects the spinal cord with the upper brain. During the second trimester of pregnancy the brainstem begins to control many of the most critical reflexes. These include sucking and swallowing reflexes, control over heart rate, breathing and blood pressure and development of the rhythmic contractions of the diaphragm and chest muscles that become the basis of breathing.

Most of these functions are operating by the end of the second trimester, and it is at this time that “babies” first become viable.

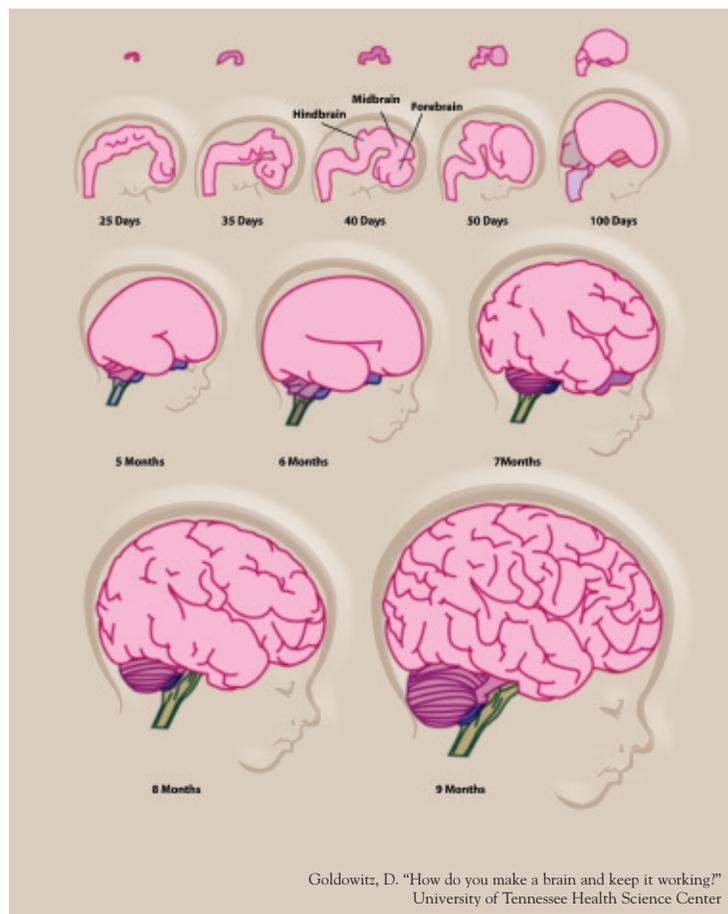
C. Third trimester in utero: Cerebral cortex

The cerebral cortex is the portion of the brain that is responsible for higher brain functions such as feelings, memory and thought. It is the final part of the central nervous system to develop. Fetuses in the third trimester can demonstrate primitive learning. They can respond to certain sounds such as a mother's voice.

Fetuses can be affected even by what occurs around them outside the womb. They can be affected positively or negatively by the levels and tones of voices, music and other sounds.

A newborn has most of its neurons at birth, but it is only after birth that the cerebral cortex begins to show its remarkable ability to assimilate and integrate the complex set of stimuli that the newborn and young child faces in the first years of life.

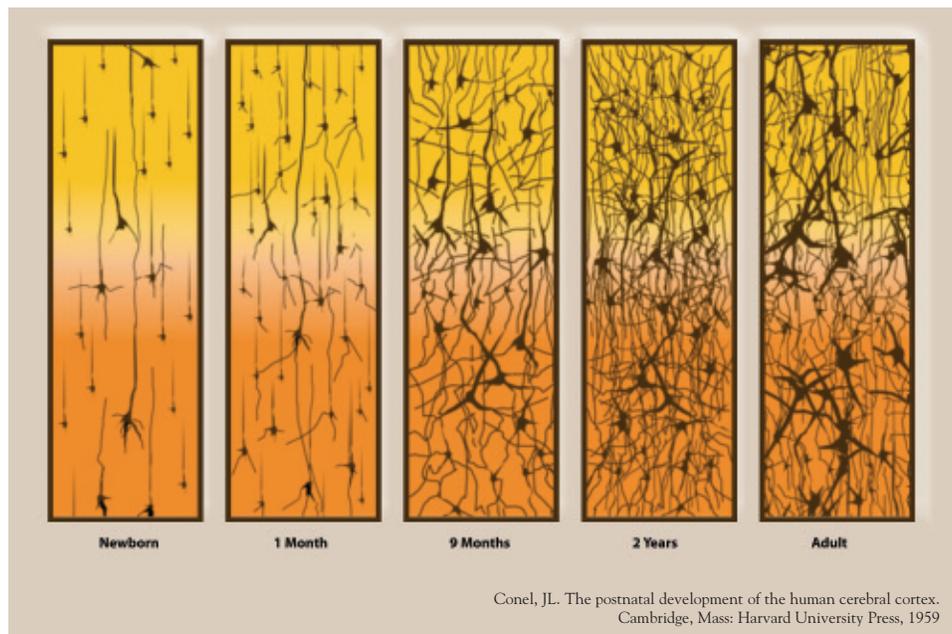
Development of the Human Brain



D. Year One

The brainstem controls most of the earliest activities of a newborn such as crying, sleeping, grasping, sucking, rooting and primitive reflexes. So most of the basic instincts and reflexes necessary for survival already are operating at birth. The cerebral cortex is somewhat “loosely wired,” but is prepared to become “hard-wired” in the next few years.

Development of Neurons and Synapses



A few facts about what goes on in the cerebral cortex in utero and the first few years of life demonstrate the incredible potential of a newborn. Among these are:

- By four to five months of gestation the fetus has 100 billion neurons.
- Neurons are being created at the rate of 250,000 per minute.
- The brain is being “wired” as the neurons develop connecting synapses.
- Within eight months after birth the infant brain may have as many as 1,000 billion synapses.

A natural “pruning” process reduces the number of synapses to about 500 billion by age 10, which is about average in the adult brain. The pruning process is determined, in part, by a use-it-or-lose-it phenomenon. Synapses that are being used persist. Those that are not stimulated disappear. All senses enhance the development of synaptic connections within the young brain. This includes touch/feeling, sound, vision, taste, emotional expressions and smell.

E. Early brain 'messages' are critical.

A stimulated neuron sends a message electro-chemically down its long tail (known as an *axon*). *Dendrites* branch off the axon and connect with each other creating *synapses*. Signals are sent across synapses through chemical neuro-transmitters. When a dendrite receives these signals it translates them into electro-chemical messages, and the entire process is repeated through multiple neurons.

The earliest “messages” that the infant brain receives have an enormous impact. Parents and other care-givers play critical roles in helping to stimulate these infant brains with the right messages. Loving, touching, talking to, singing and repeating the sounds and facial expressions of the infant all provide an ideal environment for an infant’s growing brain.

The level of exposure to language is crucial in the overall cognitive development of a young brain.

By age 4 a child of professional parents typically has heard 45 million words. A 4-year-old in an impoverished family will have heard, on average, 12 million words.

Language content also plays an important role. The same research estimated that impoverished children heard two negative statements for each positive statement. Children from families in which both parents are professionals heard six positive statements for each negative. Scientists believe these differences in the number and types of words to which young children are exposed have a major impact on school readiness.

F. Myelination allows hard-wiring of the brain.

Besides synapse formation and pruning, the other important post-natal event in the developing brain is known as *myelination*. Myelination represents a biological insulation that covers the brain cells and enhances the efficiency of the electrical transmission of signals along and among the neurons. It allows for much faster processing of information and accomplishment of more complex mental tasks.

Most myelination occurs in the first two or three years of life, but some may continue into the 20s. Myelination allows for the so-called “hard-wiring” of the brain.

While the brain can generate new neurons well into adulthood, it is at a fraction of the rate of the youngest years. It’s in these earliest years that the brain demonstrates its greatest sensitivity to influences of change.

G. The brain's glial cells

Most of an individual's neurons develop in utero. The post-natal growth of the brain is due largely to the development of synapses, the myelination process and the post-natal proliferation of the other principal brain cell known as the *glial* cells. These cells provide the scaffolding for the neuronal network, produce myelin and are involved in host defense and inflammatory responses in the central nervous system.

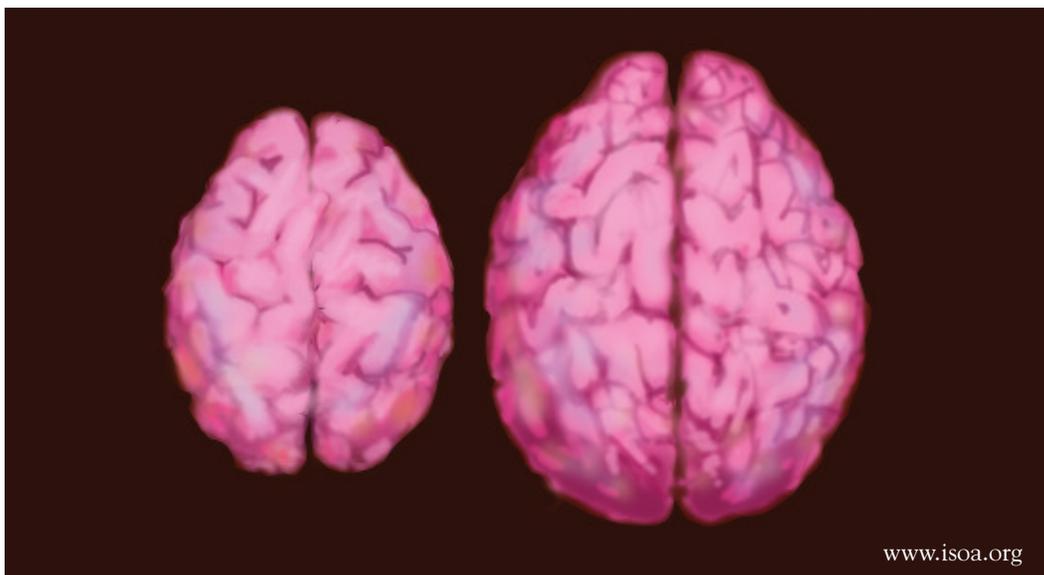
Severely emotionally and psychologically deprived children may have brains that are 20-30 percent smaller than those of normal children. Chronic negative stress can produce elevated levels of the hormone *cortisol* that can have an adverse effect on brain development. Among factors thought to produce negative stress in young children are extreme poverty, emotional or physical abuse, serious threats and repeated exposure to violence.

H. Brain damage from pre-natal alcohol

Excessive alcohol consumption by a pregnant woman can have a very deleterious effect on fetal brain development. *Fetal Alcohol Syndrome* is the most common, preventable cause of mental retardation in America. Figure 4 shows severe damage to the brain of a 5-day-old infant whose mother consumed large amounts of alcohol during pregnancy. The brain at right is normal.

Brain Damaged Pre-natally by Alcohol

Normal Brain



I. Nature and Nurture

Both nature and nurturing contribute to brain development. The two influences work together to produce the final product. *Genes* (nature) determine the when-where-and-how-many brain circuits are formed. The infant's *environment* (nurture) then shapes how those circuits are stimulated and used.

Data from many studies, mainly involving relatively small numbers of young children, demonstrate the impact that early positive interventions have on the outcome of children. These studies demonstrate a very positive return in education and employment achievement, as well as decreased cost to society in terms of lower rates of incarceration, and need for special education and welfare.

The studies have demonstrated the most impressive effect on those children who might be considered at highest risk.

J. Summary

It is not debatable that positive interventions from conception through the first three years of life have measurable impact on brain development.

TUCI believes that an investment in early childhood pays back in positive ways over lifetimes. This seems particularly true for young children considered at greatest risk. The need to address the existing significant inequalities in Shelby County is a moral issue and a practical investment in the community's future.

It is the institute's commitment to become the primary resource for the objective data about children in our city and county in order that better decisions are made about where and how the community should invest so that every child has a running start to success.

Best practices and interventions to address risks associated with poor child outcomes in Shelby County



The Urban Child Institute's Data Book, *The State of Children in Memphis and Shelby County II*, is divided into five domains: Demographics, Health, Education, Family & Home Environment and Community Environment. The purpose of the Data Book is to present in a single document the most up-to-date, important and comprehensive data on the health and well-being of children in Shelby County, highlighting the social and economic environments in which they live and the risks they face.

It's the objective of the institute to identify strategies and provide direction for community stakeholders and government agencies. The following summarizes what the research community knows currently about what works in improving the condition of low-income, at-risk children.

- Part I introduces the concept of best practices and how in recent years they have been applied to early childhood education and development by researchers and practitioners.
- Part II provides information on best early childhood practice models and intervention strategies that have been tested and proven effective.
- Part III reviews successful strategies for assisting low-income families in which most at-risk children live.

I. Introduction to Best Practices

Best practice is defined as “a technique or methodology that, through experience and research, has proven to lead reliably to a desired result. A commitment to using the best practices in any field is a commitment to use all the knowledge and technology at one's disposal to assure success.” (<http://searchvb.techtarget.com>)

By definition, then, best practice defines a program or intervention that has met the demands of scientific rigor. In *Early Childhood Interventions: Proven Results, Future Promise*, a book published in 2005, and one that has been used as a reference guide for early childhood interventions, the authors state that they “identify a sub-set of programs that meet our criteria for rigorous evaluation of program effects.” There certainly is merit in this method of evaluating social programs. Since both public and private resources are limited, initiatives will not continue to be funded if their effectiveness cannot be demonstrated.

The significance of the art of best practices, whether in reference to an individual family's practices in raising children or a community's practices in making children a priority, should not be ignored. Programs, even effective ones, tend to “treat the parent not as a human being with a mind, a worldview and values but as a subject who performs a set of behaviors. They teach procedural parenting.” (Kay Hymowitz, *What's Holding Black Kids Back?*)

In *Inequality at the Starting Gate* David Burkham states, “The way that we (social scientists) try to make sense of the world is to break the world into small bits and which little piece is important.” Alternately, “it should be clear by now that being a middle class – or an upwardly mobile immigrant – mother or father does not mean simply performing a checklist of proper behaviors. It does not mean merely following procedures. It means believing on some intuitive level in the mission and its larger framework of personal growth and fulfillment.” (‘Mission’ refers to the mission of raising children) (Hymowitz)

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Though Hymowitz does not address it in the article cited above, it seems reasonable to argue that what holds true for families also holds true for communities and our society at large. Making children a true priority is not merely about a set of public policies or initiatives that indicate on the surface that we care about children. It is a deeper societal belief in the value of all children. It would mean that before every private family and public policy decision we make, we would ask ourselves, “Is it good for the children?”

The *Reggio Approach* is a philosophy of early childhood education that was developed in Northern Italy in the mid-Twentieth Century and is practiced around the world. The philosophy encompasses the belief that children from birth are rich, strong and powerful, and that the healthy development of a child is dependent upon secure relationships with caregivers.

Scientists have shown that a human newborn baby's brain is one quarter the size of an adult's brain, and it depends on a stimulating environment and a healthy relationship with a primary caregiver for its full development. The specific initiatives determined to be best practices in terms of early childhood development are relationship-based programs that strengthen and enhance the relationship between the young child and the parent and/or caregiver thus positively affecting the early development of the child. Given that the majority of the growth of the human brain occurs in the first three years, these years of the child's life are especially critical to his/her development. For this reason there is a focus in this section on initiative strategies in early childhood.

Best practice literature reveals that these early years, when the brain is experiencing the majority of its growth, are the most crucial. The health and well-being of a child's family and community also are critical to the child's ongoing development. Family poverty leads to disease, inadequate health care, low education, poor adult supervision, unemployment and under-employment. Best practice literature indicates that there are initiatives that can be implemented and policy changes that can be made in order to shore up family income and stability. Thus a family can focus on the child's healthy development.

Early childhood intervention strategies, those initiatives that address the needs of children in the first three years of life, fall into one of three categories:

1. Home visitation/parent education
2. Pre-school/early childhood education
3. Home visitation/parent education combined with early childhood education.

Based on the Rand Corporation's comprehensive review of best practices, the key factors of these recommendations for best practices are listed below. There is potential for utilizing these best practice suggestions for turning science into action in Shelby County.

Shelby County already has a variety of services and interventions that provide parent education/home visitation, pre-school/early childhood education or some combination of the two that may be very effective. These, however, have not been evaluated in the same manner as the Rand study's programs. Many of the interventions that the Rand Corporation studied were established from their inception as clinical trial research studies making them more conducive to being evaluated using the rigorous standards of the Rand review. It is quite possible that other community-based interventions could be just as effective as these, but, due to the difference in design, cannot be evaluated by the same guidelines.

II. Best Practices – Rand Corporation Review

In 2005 Rand Corporation published a book titled, *Early Childhood Interventions: Proven Results, Future Promise*. In 2003 PNC Financial Services Group, Inc. began a 10-year, \$100 million initiative to improve school readiness for children from birth to age 5. As a part of this initiative Rand Corporation was asked to prepare an objective review of the current research addressing the potential for interventions in early childhood to improve outcomes for children and families.

Following is a list of items that were considered in that review:

1. The potential consequences of not investing additional resources in the lives of children – especially poor children – before school
2. The range of early intervention programs, especially those rigorously evaluated
3. The demonstrated benefits of interventions with high-quality evaluations
4. The returns to society associated with investing early in the lives of children (Rand Corporation)

The Rand review identified 16 programs with strong evidence bases and four additional programs with promising evidence bases. These programs are listed below. Those with strong evidence bases are identified as “Best Practices,” the others as “Promising Practices.” (<http://www.rand.org/>)

* denotes programs that at least one Memphis/Shelby County agency has implemented

**denotes a program that has been implemented in Memphis/Shelby County in the past

^ denotes interventions that are no longer in operation.

Home Visitation/Parent Education

Nurse Family Partnership (NFP) – Best Practice***

Goals:

- To improve prenatal health and birth outcomes
- To improve child health, development and safety
- To improve maternal life course outcomes.

Services Offered: Home visitation by trained nurses

Intensity of Intervention: Home visit schedule follows developmental stages of pregnancy and early childhood (approximately six-to-nine visits during pregnancy and 20 from birth to second birthday); postnatal visits average 61 minutes.

Program Currently Operating: Yes

<http://www.nccfc.org/nurseFamilyPartnership.cfm>

Developmentally Supportive Care: Newborn Individualized Developmental Care and Assessment Program (DSC/NIDCAP) – Promising Practice

Goal: To avoid developmental delays and mental/physical impairment

Services Offered: Intensive monitoring while in neonatal intensive care unit, including neurobehavioral observation; home visits afterward

Intensity of Intervention: Neonatal intensive care unit: Two 25-minute therapy sessions daily and home visits twice monthly for one hour

Program Currently Operating: Yes

<http://www.nidcap.org>

Parents as Teachers (PAT) – Promising Practice*

Goals:

- To empower parents to give their children a good start in life
- To prepare children for school
- To prevent and reduce child abuse

Services Offered: Home visits by parent educators, group meetings with parents, developmental health, vision and hearing screening, building networks to meet family needs

Intensity of Intervention: Weekly-to-monthly home visits/group meetings, 60-90 minutes

Program Currently Operating: Yes

<http://www.patnc.org>

Project Carolina Approach to Responsive Education (CARE) (with no early childhood education) – Best Practice

Goal: Improve cognitive development for high-risk children

Services Offered: Home visits (family education classes)

Intensity of Intervention: Family education: Visits every 10 days

Program Currently Operating: No^

Home Instruction Program for Preschool Youngsters (HIPPY) USA – Best Practice*

Goal: To help parents with limited education prepare their children for school

Services Offered: Parenting classes and books given to parents with activities to do with children, home visits.

Intensity of Intervention: Parents meet with para-professionals bi-weekly for 45-60 minutes, parents meet with children using HIPPY materials at least 15 minutes daily, parents have group meetings bi-weekly, 30 weeks per year for two years.

Program Currently Operating: Yes

<http://www.hippyusa.org>

Reach Out and Read – Promising Practice*

Goal: To encourage parents to read aloud to children to foster child literacy

Services Offered: Doctors and nurses give new books to parents at each well-child visit and provide advice about reading aloud with their child

Intensity of intervention: Regularly scheduled well-child visits

Program Currently Operating: Yes

<http://reachoutandread.org>

DARE to be You – Best Practice*

Goal: To improve parenting skills and child development in ways that contribute to children's resiliency to substance use later in life

Services Offered: Parent-child workshops with focus on parenting skills and developmentally appropriate children's activities

Intensity of Intervention: 15 to 18 hours of parent-training workshops and simultaneous children's programs, preferably in 10-12-week period

Program Currently Operating: Yes

<http://www.coopext.colostate.edu/DTBY/index.html>

Incredible Years – Best Practice

Goal: To promote child social and emotional competence and to address children's behavioral and emotional problems

Services Offered: Parenting classes and children's programs

Intensity of Intervention: Parents: 12-14 weeks, two hours per week, children: 18-20 weeks, two hours per week, teachers: Six days (42 hours)

Program Currently Operating: Yes
<http://www.incredibleyears.com/>

Preschool/Early Childhood Education

Oklahoma Pre-k – *Best Practice*

Goal: To improve child development and school readiness

Services Offered: Pre-school program

Intensity of Intervention: Part-day and full-day programs, school year

Program Currently Operating: Yes

<http://www.sde.state.ok.us>

Home Visitation/Parent Education combined with Early Childhood Education

Early Head Start – *Promising Practice**

Goals:

- To promote healthy prenatal outcomes
- To enhance development of children ages 0-3
- To support healthy family functioning

Services Offered:

- Home visits
- Child development services
- Parenting education
- Child care
- Child health and mental health care
- Family support

Intensity of intervention: Weekly home visits and at least 20 hours per week of center-based child care, or a combination of the two

Program Currently Operating: Yes

<http://www.acf.hhs.gov/programs/hsb/programs/ehs/ehs2.htm>

Syracuse Family Development Research Program (FDRP) – *Best Practice*

Goal: To improve child and family functioning that sustains growth after intervention ceases

Services Offered:

- Home visits
- Parent training
- Family child care

Intensity of Intervention: Weekly home visits, part-day child care (6-14 months), full-day child care (15-60 months) year round

Program Currently Operating: No^

Comprehensive Child Development Program (CCDP) – *Best Practice*

Goals:

- To enhance child development
- To help families achieve economic self-sufficiency

Services Offered: Multiple services such as early childhood education and care, intensive case management, counseling, life skills training, referrals

Intensity of Intervention: Varied across families, on average families participated for more than three years

Program Currently Operating: No^

Infant Health and Development Program (IHDP) – Best Practice

Goal: To reduce developmental, behavioral and other health problems

Services Offered: Early childhood development programs and family support services

Intensity of Intervention:

- Home visits: Weekly in year one and bi-weekly in years two and three
- Child care center: Daily part or full-day starting at age 1
- Parent meetings: Bi-monthly beginning at 12 months

Program Currently Operating: No^

Project CARE (with early childhood education) – Best Practice

Goal: To improve cognitive development for high-risk children

Services Offered: Child care and home visits (family education classes)

Intensity of Intervention:

- Child development center: Full-day daily, year round
- Family education: Visits every 10 days

Program Currently Operating: No^

Abecedarian – Best Practice

Goal: To determine whether early childhood education can prevent retarded development of high-risk children

Services Offered:

- Home visits
- Educational child care

Intensity of Intervention: Full-day daily, year-round child care, approximately bi-weekly home visits, school-age continuation services

Program Currently Operating: No^

<http://www.fpg.unc.edu/~abc/>

Houston Parent Child Development Center (PCDC) – Best Practice

Goal: To help economically disadvantaged children perform better in school

Services Offered:

- Home visits
- Parenting education
- Piagetian child care

Intensity of Intervention:

- Weekly home visits and four (two-day) family workshops for the first year
- Part-day (two or four mornings a week) child care
- Monthly or bi-weekly evening discussions for parents for second year

Program Currently Operating: No^

Early Training Project (ETP) – Best Practice

Goal: To improve the educability of young children from low-income families

Services Offered:

- Pre-school
- Home visits

Intensity of Intervention:

- Part-day pre-school in summer
- Weekly, year-round home visits

Program Currently Operating: No^

Perry Preschool – Best Practice

Goal: To improve the intellectual and social development of young children

Services Offered:

- Pre-school
- Home visits

Intensity of Intervention:

- Part-day daily pre-school
- Weekly home visits, school year, one or two years

Program Currently Operating: No^

<http://www.highscope.org>

Chicago Child Parent Centers (CPC) – Best Practice

Goal: To promote cognitive and socio-emotional development to prepare child for school entry and beyond

Services Offered:

- Pre-school
- Elementary K-3 programs
- Parent resources

Intensity of Intervention:

- Part-day pre-school school-year
- Regular K-3 school day, school-year
- Parent involvement in class half-day per week

Program Currently Operating: Yes

<http://waisman.wisc.edu/cls/Program.htm>

Head Start – Best Practice*

Goal: To increase school readiness (cognitive, socio-emotional and health) of children from low-income families

Services Offered:

- Pre-school
- Parent support and parenting programs

Intensity of Intervention:

• Part-day or full-day pre-school, school-year or year-round, one or two years – varies across sites. Parent involvement varies considerably across sites.

Program Currently Operating: Yes

<http://www2.acf.dhhs.gov/programs/hsb/>

In some cases, for example, the Syracuse Family Development Research Program, Federal grant money was withdrawn as a result of Federal deficits. In other cases, the studies were random to determine if the program could make a difference in the developmental trajectory of children. The answer is, yes. With the Abecedarian Project, for example, the program is not in operation in the way it was constructed for the North Carolina group, but the early childhood curriculum that was used has been made available to other programs. Securing the funding to take programs to scale is a constant issue even for best practice intervention model programs.

III. Potential strategies for assisting low-income children and families

In 2003 The Brookings Institution published *One Percent for the Kids: New Policies, Brighter Futures for America's Children*. The book was the result of four years of discussion among members of the Brookings Roundtable on Children, a group of scholars that was assembled to address ways of improving children's life prospects. The authors documented what they believe the best research suggests about new policy directions in the following domains:

- Income support for families
- Family formation and parenting
- Health care
- Early education and care
- Neighborhood environment

These are the same topics utilized for this TUCI data book. Not all of the ideas in *One Percent for the Kids* have been tested adequately using rigorous evaluations, but all of them seem promising based on the research that is available. The authors recommend the following ideas to policymakers, foundations and local communities for consideration. (www.brookings.edu)

The book's title was derived from a 1999 pledge by the United Kingdom's Prime Minister, Tony Blair, who said, "Our historic aim will be for ours to be the first generation to end child poverty. It is a 20-year mission, but I believe it can be done." Policymakers in the U.K. have taken this pledge seriously. An additional nine-tenths-of-one-percent of the U.K. gross domestic product is invested each year in children and families. If the United States were to make this same commitment, the additional annual spending for children and families would amount to approximately \$90 billion.

The suggestions below are broad-based recommendations, and they continue to surface in the literature reviews of what young children and families need to succeed in life:

- Quality health care for pregnant moms and children
- Positive, healthy and educational care-giving in the first years of life
- More disposable income
- Quality child care and pre-k training
- Intensive after-school programs
- Positive relationships between married and unmarried parents
- Affordable housing in safe neighborhoods.

A. Health

- Universal prenatal and perinatal screening services plus health insurance coverage
- Development of interventions to address severe behavioral and emotional problems in young children to guide the investment that is needed in those issues
- Exemption from welfare-related work requirements for mothers of children younger than six months old
- Exemption from full-time work requirements for mothers of children between six months and one year

B. Education

- Intensive, center-based, early education programs for high-risk children beginning at age 3 that are suggested in addition to pre-k for all 4-year-old children (See descriptions above for interventions that have been evaluated.)
- Universal pre-school for 4-year-olds (for example, Oklahoma Pre-k as mentioned above)
- Quality, intensive, after-school programming that emphasizes community service and engagement of teens in other productive activities during non-school hours

C. Home Environment/Family Formation and Parenting

- Marriage-friendly policies for TANF (Temporary Assistance for Needy Families), child support, and other income support policies
- Relationship programs to increase the quality of parental relationships, help couples (married and unmarried) resolve their personal issues and provide mentoring to new parents
- Development of an entire family campaign with the following examples of campaign goals:
 1. Encouraging parents to stay married
 2. Encouraging both parents, even if not married, to be involved in child rearing
 3. Offering training and education in parenting skills including nutritional topics such as breastfeeding, cognitive stimulation such as reading, emotional support and nurturing such as openly displaying love and affection and praising accomplishments
 4. Disseminating information to teenagers about the consequences of their own decisions for their children

D. Family Economics/Income Support for Families

- Child allowance for children under age 5 living in families with incomes below \$60,000
- Increase in the minimum wage (The U.S. Congress authorized in February 2007 a 40 percent increase in the Federal minimum wage over the next two years beginning in 2008. The bill is awaiting the President's signature. By 2009 the new minimum wage would be \$7.25 per hour. Some states, not including Tennessee, have laws that set the minimum wage higher than the Federal minimum)
- Expansion of the Earned Income Tax Credit (EITC)
- Removal of poor working families with children from the Federal tax rolls

E. Community Environment /Neighborhood Environments

- Increase the supply of housing vouchers.
- Subsidize housing in suburban, or at least economically integrated, areas.
- Require that developers set aside housing in new developments for low-income families.

* Programs that move public housing residents without their consent – for example, tearing down their housing projects – appear to generate only modest changes in children’s educational outcomes.

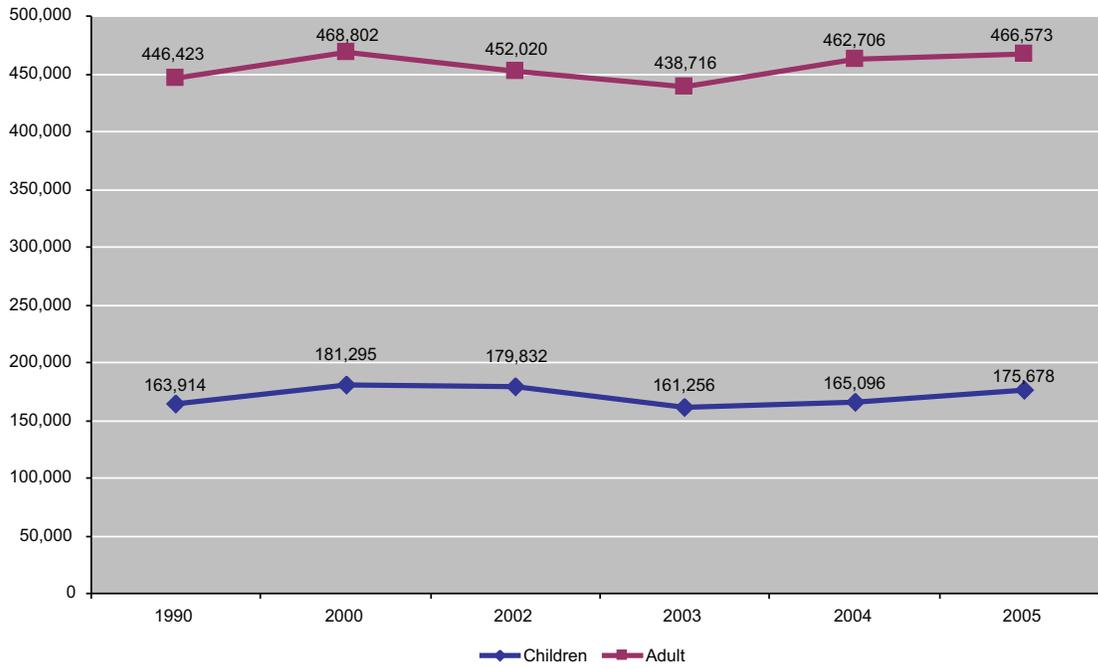
Children's Demographics



City of Memphis and Shelby County populations decrease for the first time in 150 years, due to fewer children.

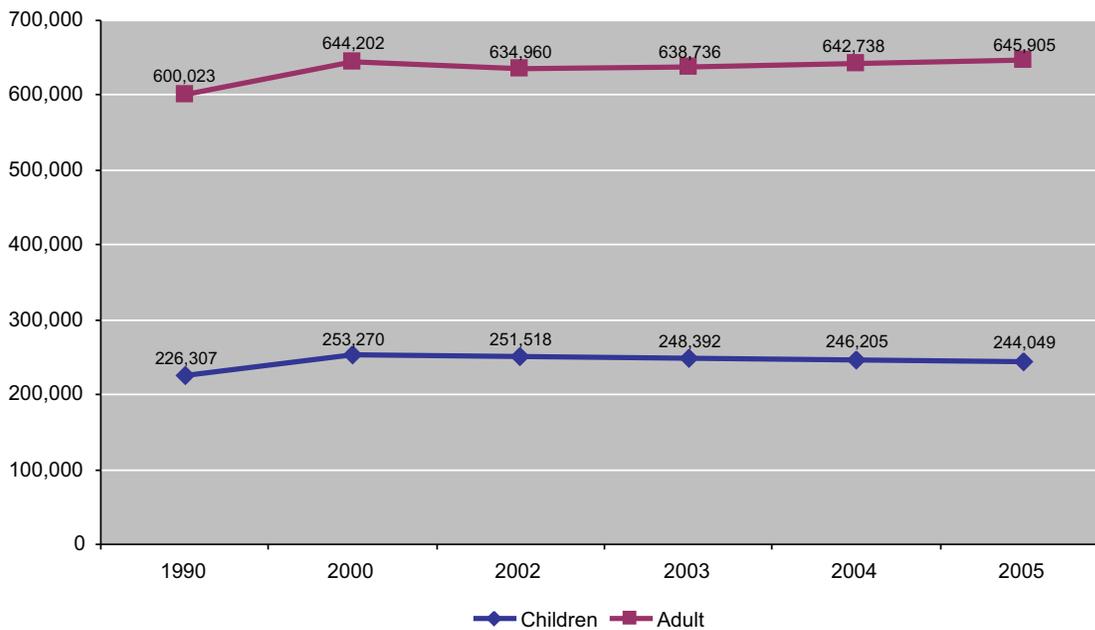
- From 2000 to 2005 the City of Memphis and Shelby County both decreased in population for the first time since the Yellow Fever epidemics of the 19th Century.
- After increasing by 71,142 persons in the decade from 1990 to 2000 Shelby County experienced a decline of 7,517 persons from 2000 to 2005.
- After increasing by 39,760 persons (7%) in the decade from 1990 to 2000 the City of Memphis experienced a decline of 7,841 persons (2%) from 2000 to 2005.
- The county's increase from 1990 to 2000 was the result of a growth of 26,963 in the child population (12%) and 44,179 (7%) in the adult population.
- The decline from 2000 to 2005 can be attributed entirely to a 9,221 (4%) drop in the child population.
- The increase in City of Memphis population from 1990 to 2000 was the result of a 17,381 (11%) increase in child population and 22,379 (5%) increase in adult population
- The decline in City of Memphis total population from 2000 to 2005 was due primarily to a 5,617 (3%) drop in Memphis' child population.
- The 642,251 residents of the City of Memphis accounted for 72 percent of the total population of Shelby County in 2005.

Population of Children and Adults in the City of Memphis, 1990-2005



Source: U.S. Census Bureau 1990 & 2000 and American Community Survey 2002-2005

Population of Children & Adults in Shelby County, 1990-2005

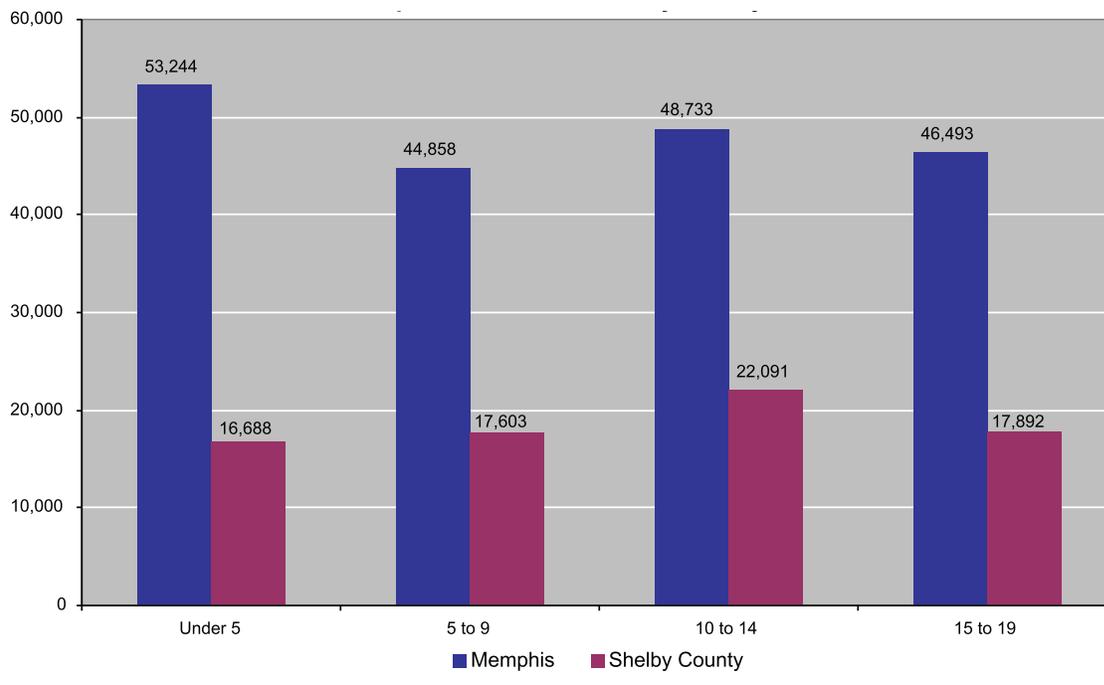


Source: U.S. Census Bureau 1990 & 2000 and American Community Survey 2002-2005

In the City of Memphis there are more children under age 5 than in any other age group.

- According to the American Community Survey's most recent data, 244,049 (27%) of Shelby Countians in 2005 were under the age of 18.
- In the City of Memphis in 2005 27 percent of the population was under the age of 18. Although the population of children in Memphis decreased by 5,617 (3%) in the five years from 2000 to 2005, a dramatic increase of more than 10,000 children (6%) in the single year from 2004 to 2005 was reported by the American Community Survey.

Distribution of Children by Ages in the City of Memphis & Suburban Shelby County, 2005



Source: American Community Survey, 2005

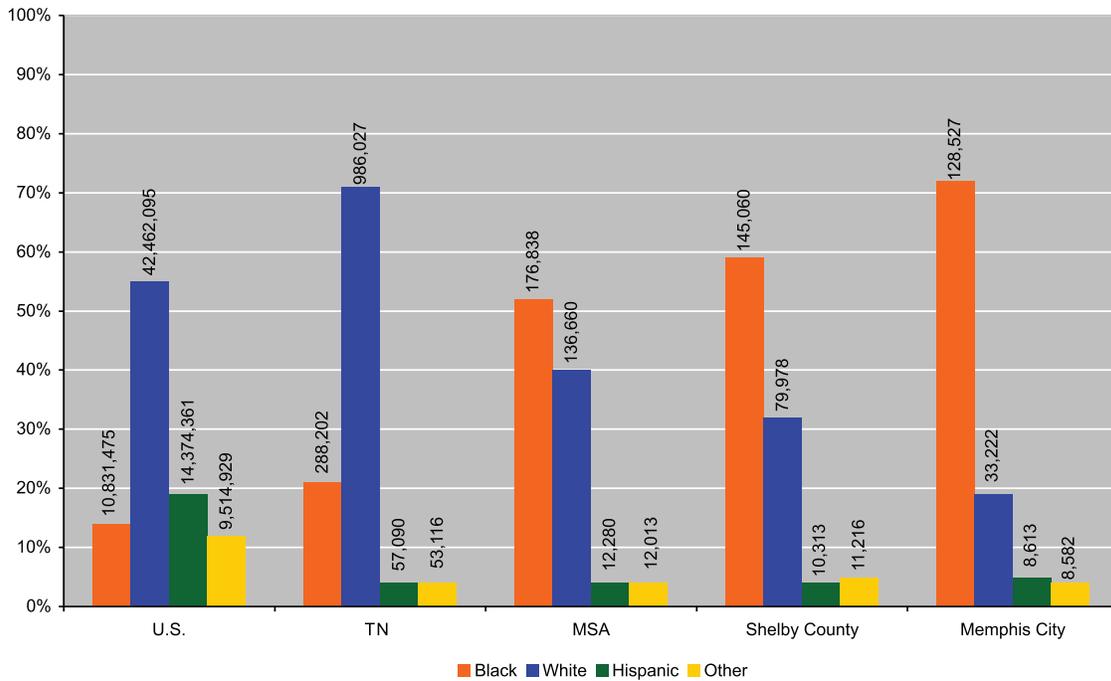
ACS estimates 336,085 children in the Memphis MSA.

- The 2005 American Community Survey includes an estimate that 336,085 children under 18 live in the Memphis Metropolitan Statistical Area (MSA), comprised of Shelby, Fayette and Tipton Counties in Tennessee, Crittenden County, Ark., and DeSoto County, MS.
- Nearly three out of four (244,049) reside in Shelby County, and nearly three out of four Shelby County children (175,678) live in the City of Memphis.
- The City of Memphis accounts for more than 52 percent of the total child population in the MSA and almost 56 percent of the MSA population under age 5.
- Children under age 5 represent more than a quarter of the total child population in the MSA (28%), 29 percent in Shelby County and 30 percent in the City of Memphis.

Races of Memphis & Shelby County children vary significantly from state and national averages.

- Both Shelby County and the City of Memphis vary significantly from the nation and the State of Tennessee in racial makeup of child populations. Whereas the youth population of America is approximately 14 percent black and Tennessee youth are about 21 percent black, in Shelby County 59 percent are black, and in the City of Memphis 72 percent of children are black.
- Shelby County's population of children consists of 68 percent non-white children, 145,080 black, 10,313 Hispanic and another 11,216 identified as "non-white."
- Of the child population of the City of Memphis only 19 percent is white.
- Suburban Shelby County's child population is 24 percent black and 69 percent white.
- In the MSA black children account for 52 percent of the child population, also well above the state (21%) and national (14%) averages.

Number and Percent of Children by Race in the City of Memphis & Suburban Shelby County, 2005



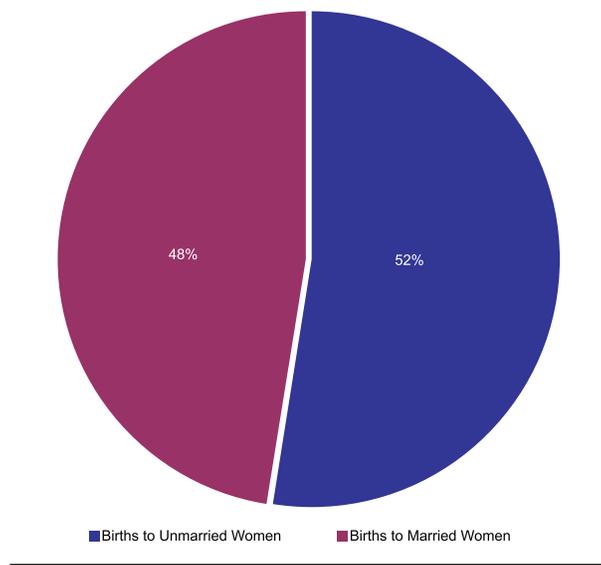
Source: American Community Survey 2005

Most Memphis & Shelby County problems begin at birth.

- From 2000 to 2004 there occurred a decrease of about four percent in Shelby County births to women between the ages of 15 and 50. Births increased by three percent, to 14,584, in 2005. More than half (7,645) were to unmarried women.
- The differences in the results of a child born to a single mother from a child born to a married couple are vast. “Marriage is associated with better health, higher earnings, and greater wealth among adults as well as with academic success and mental health among children” (*Haskin, McLanahan, & Donahue, 2005*)
- Children born to single mothers are at a greater risk of facing economic hardship and poverty. (*Child Trends, www.childtrendsdatabank.org/indicators/13teenbirth.cfm*).
- Due to financial insecurity single mothers are more likely to live in rented housing. This raises questions of community environment and correlates with higher rates of transience. (*Child Poverty Action Group, http://www.cpag.org.nz/childpoverty/Housing.html*) At school age family transience affects children’s ability to remain enrolled in the same school district.

- Additionally, children of single mothers are more likely to drop out of school. (Astone & Upchurch, 1994; Gottschalk, McLanahan, & Sandefur, 1994; Wu & Martinson, 1993)
- Children of single-mother births have lower educational attainment that results in less earning potential and lower occupational status as adults. (Amato, 2005)
- Children born to single mothers are at a greater risk of having their own children out of wedlock, having more troubled relationships, experiencing higher rates of divorce (if they do marry) and reporting more symptoms of depression. (Amato, 2005)

Distribution of Women 15 to 50 Years Old by Marital Status in Shelby County Who Had a Birth in the Past 12 Months, 2005



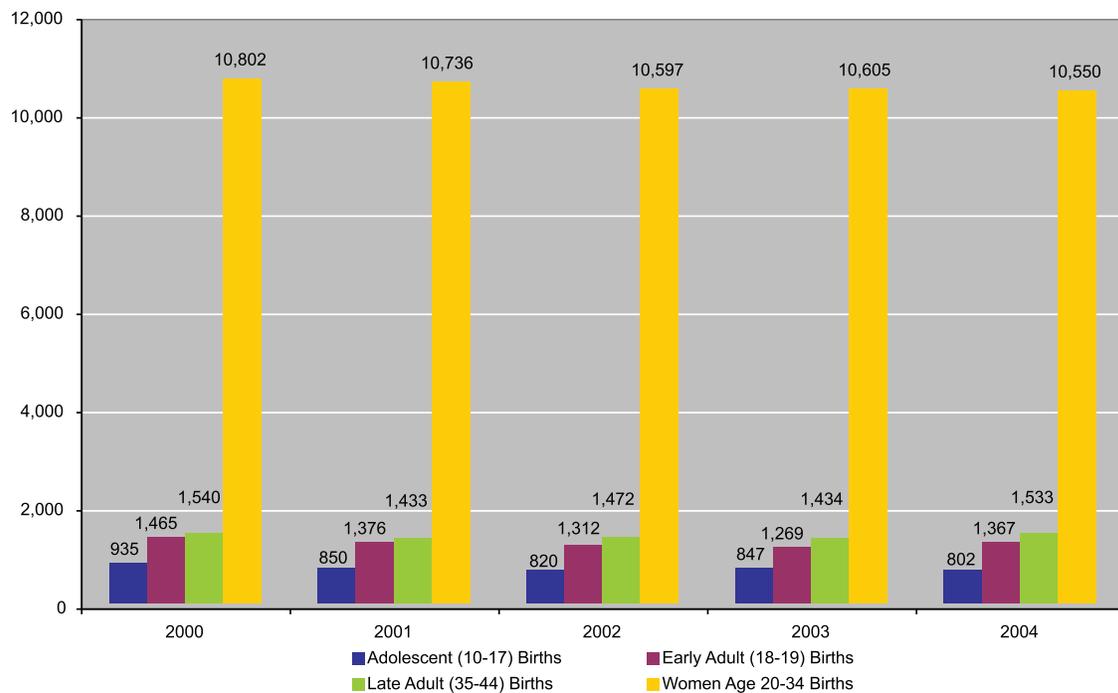
Source: American Community Survey, 2005

High-risk births are a continuing problem.

- The number of high-risk births in Shelby County remained constant or increased slightly from 2000 to 2004. High-risk births are divided into three classifications. They are “adolescent births,” defined as those to a girl between the ages of 10 and 17; “early adult,” defined as births to women ages 18 and 19, and “late adult,” births to women between the ages of 35 and 44.
- A “late adult” pregnancy is high-risk because women who become pregnant after the age of 34 are more likely to deliver a pre-term child than mothers between the ages of 20 and 34. (*Pre-term Birth: Causes, Consequences, and Prevention*, 2006)

- Additionally, diabetes and hypertension are more prevalent among older women, and infants born to mothers with these conditions are more likely to exhibit “growth restriction, pre-eclampsia and abruption.” (*Ibid*, 44)
- In 2004 the percentage of births to women between the ages of 35 and 44 increased by one percent, and accounted for 11 percent of all births in Shelby County.
- “Early adult” and “adolescent births” are considered to be high-risk due not only to pre-term birth, low birth-weight and higher infant death rate but also due to social risks. (*Child Trends, www.childtrendsdatabank.org/indicators/13teenbirth.cfm*)
- A teen parent traditionally is financially insecure. Younger mothers also are more likely to be psychologically and emotionally immature. (*Child Trends, www.childtrendsdatabank.org/indicators/13teenbirth.cfm*)

Number of Women 10 to 44 Years Old Who Had a Birth in the Past 12 Months by Age in Shelby County 2000-2004

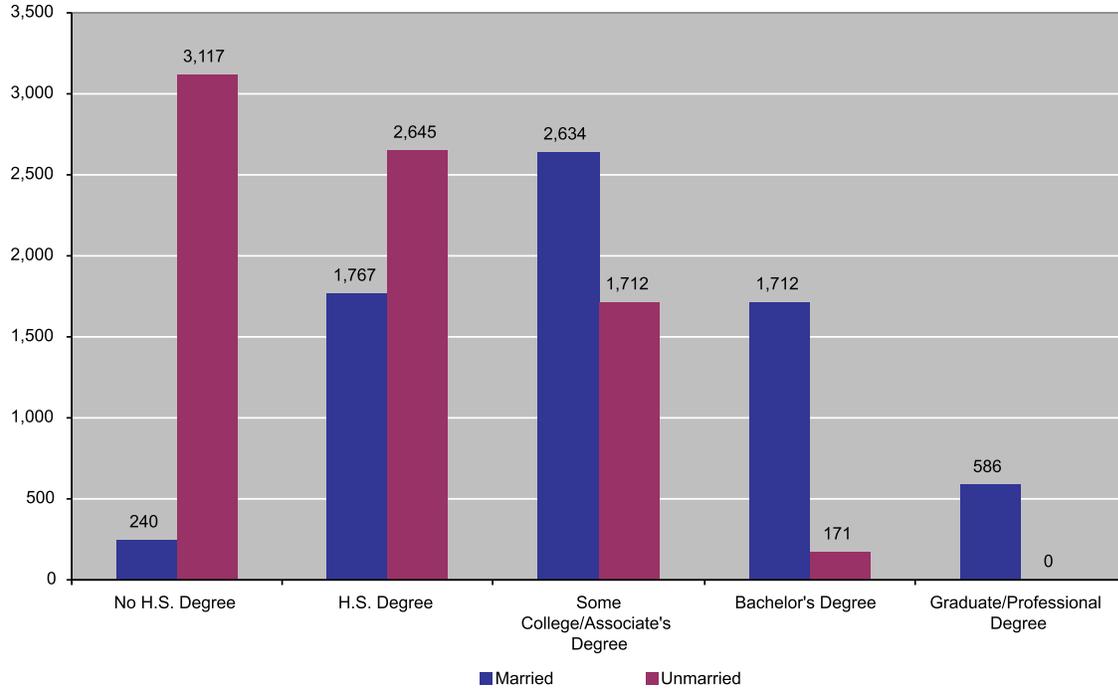


Source: Tennessee Department of Health

Married mothers are 10 times more likely to have high school diplomas than single mothers.

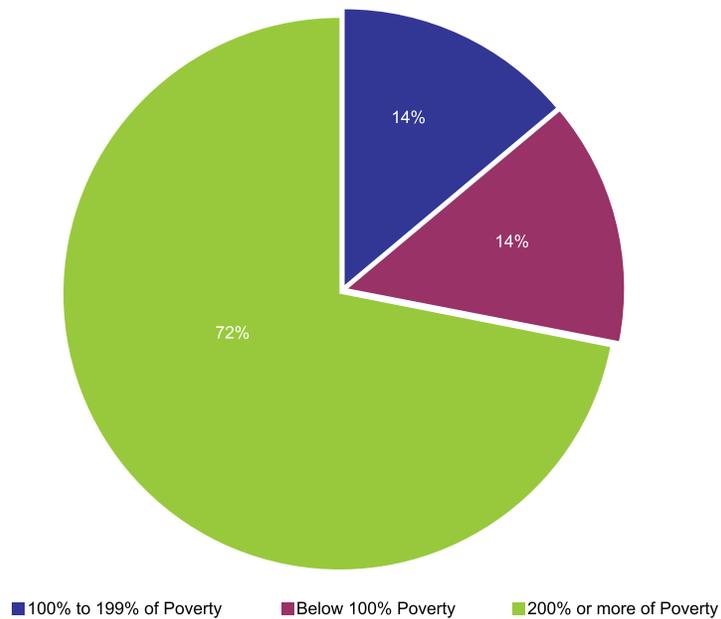
- The percentage of births to “early adults” in Shelby County remains constant at about nine percent. The percentage of “adolescent births” also remains consistent at about six percent.
- Forty-one percent (3,117) of single women in Shelby County who gave birth in 2005 did not have a high school diploma, compared to only four percent (240) of married mothers.
- Thirty-eight percent (2,634) of married mothers who gave birth in Shelby County in 2005 have a minimum of some college experience, whereas only 24 percent (1,893) of single mothers have any education beyond high school.
- Twenty-five percent of married mothers have a bachelor’s degree and an additional eight percent have graduate or professional degrees.
- Less education correlates directly to economic hardship.
- Among unmarried women in Shelby County who gave birth in 2005 over 50 percent are in poverty (living below 100% of poverty). Another one-quarter of the number of unwed mothers and their infants suffer from low incomes (100% to 199% of poverty).

**Distribution of Women 15 to 50 Years Old Who Had a Birth in the Past 12 Months
by Marital Status and Educational Attainment, Shelby County 2005**



Source: American Community Survey, 2005

**Distribution of Women Age 15 to 50 Who Had a Birth in the Past 12 Months
by Marital Status and Poverty, 2005**



Source: American Community Survey, 2005

Children's Health



Low-birth-weight infants remain a major problem.

Many believe that the status of, and commitment to, child health in a community reflects the values, overall health and well-being of the community.

How child health is measured varies. For some it's a measure of a few commonly accepted markers that typically include infant mortality rates, immunization rates, hospital admission rates, child death rates etc. Others take a broader view and see child health status as a reflection of those items plus many of the environmental factors that influence a child's overall well-being. Among these are the proportion of children living in poverty, school drop-out rates, proportion of children engaged in risky behaviors, educational achievement, gang involvement and exposure to environmental toxins.

One source that includes quality-of-life issues in child health is the Annie E. Casey Foundation's *Kids Count* report. In the *Kids Count 2006* report, Tennessee ranked 46 out of 50 states, and in most measurements Shelby County lagged behind the rest of the state.

While the data for child health in Shelby County looks grim, there is reason for some optimism. Infant mortality rates, birth rates for 15-17-year-old girls, and new cases of Type II diabetes are leveling off or declining in Shelby County. There appears to be the promise of increasing interest in identifying proven interventions to improve child health.

Infant mortality rate reflects a community's overall health.

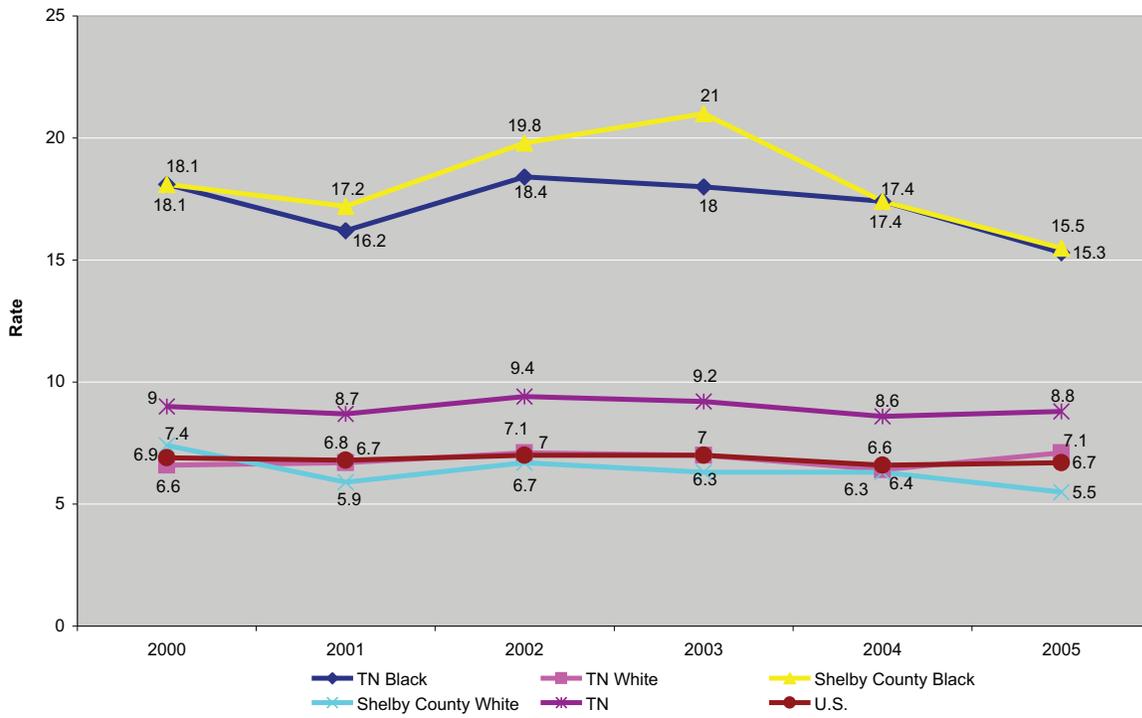
The infant mortality rate (IMR) is the number of deaths occurring in the first 12 months of life per 1,000 live births. It is one measure of the overall health of a community and reflects, to some degree, the commitment of a community to infants and to young mothers. It is one indicator also of access to care, quality of care, socioeconomic conditions and public health intervention. Despite the fact that, as a nation, one out of every six dollars is spent on healthcare, the U.S. has a higher IMR than many other nations.

Infants who die within the first month of life usually are those who are born very prematurely or with serious congenital anomalies, particularly of the cardiovascular system and/or respiratory tract. Infant deaths after one month and before 12 months of age are most frequently a result of Sudden Infant Death Syndrome (SIDS), congenital malformations or accidents.

Black IMR in Shelby County more than double U.S. rate.

The IMR in Shelby County varies greatly between the black and white populations. The 2005 black rate was 15.5 deaths per 1,000 births, almost three times the white rate in Shelby County (5.5) and more than double the overall U.S. rate. The good news in Shelby County is that, after a two-year spike in the IMR among black children, it decreased from 2003 to 2005 by 26 percent and came within two-tenths-of-one percent of the state average among black infants. The black IMR in Shelby County remains substantially more than double the overall U.S. rate, while the IMR among white Shelby Countians has continued to drop to more than 40 percent below the overall U.S. average.

Infant Death Rates per Thousand Births, 2000-2005



Source: Tennessee Department of Health Vital Statistics

- The basis for the difference in mortality between black and white infants is complex. Black infants are more likely than whites to be born prematurely and at a low birth-weight.
- While blacks as a group have less income than whites, the correlation between poverty and infant mortality is inconsistent.
- Among black and white mothers, the higher the educational level, the lower the infant mortality rate. Nevertheless, college-educated, non-smoking black women have a slightly higher IMR than do smoking white women who have not graduated from high school.
- A black infant born after 37 weeks of gestation (considered full term) has a higher infant mortality rate (1.74 times) than a white infant.

Reasons for the decrease in infant mortality in Shelby County from 2003 to 2005 are unclear. Undoubtedly more effective care of premature infants has contributed to a higher survival rate for at-risk infants. The State of Tennessee has made a major commitment to reduce infant mortality. Since Memphis has one of the highest IMRs in the state, the state has devoted resources to address specifically the issue in Shelby County.

In addition there are many local projects that focus on this issue. They include the Memphis Shelby County Health Department initiatives known as Healthy Start and Help Us Grow (HUG) programs. These and other efforts undoubtedly have contributed to the IMR decline in Shelby County, but much remains to be accomplished. (*Tennessee Department of Health Office of Policy, Planning and Assessment. Tennessee's Racial Disparity in Infant Mortality. March 2006; Tennessee Department of Health Vital Statistics 2005*)

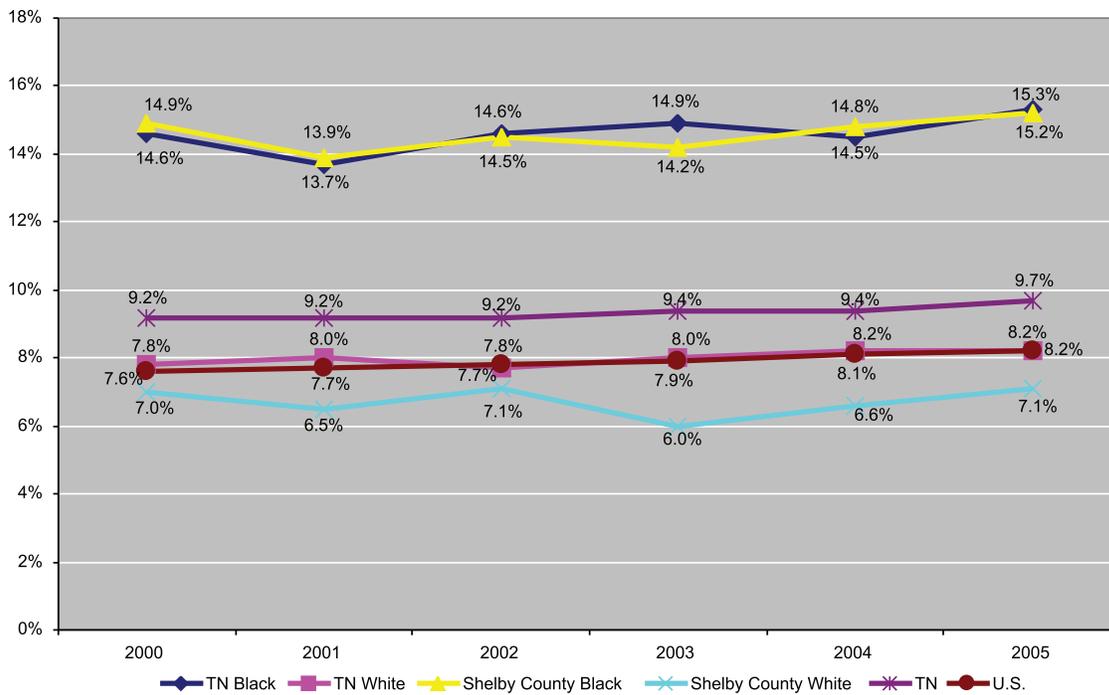
Low birth-weight is hard to overcome.

The earlier an infant is born, the greater the risk of death. Two-thirds of infants who die in the first year of life are born at less than 37 weeks gestation and are considered “*premature.*” While low birth-weight does not correlate exactly with gestational age, it frequently is used as a measurement of premature birth because determining exact gestational age often is difficult.

- Babies born weighing 2,500 grams (5 pounds, 8 ounces) and above, have a mortality rate of 3.3-per 1,000 live births.
- Low birth-weight infants (1,500-2,499 grams) die at a rate 18 times higher.
- Very low birth-weight infants (less than 1,500 grams at birth or less than 3 pounds, 5 ounces) have an IMR of 256 per 1,000 or 77 times higher than that of normal birth-weight infants.
- Reduction in premature births should reduce the number of infant deaths.

Nationwide the rate of low birth-weight/premature births has increased. In both Tennessee and Shelby County, the rate of low birth-weight newborns has remained flat over the past six years. An increasing percentage of premature infants are born after 32-37 weeks of gestation. At the same time there has been a slight decrease in those born at highest risk, before 32 weeks gestation. This trend, along with the improved care provided for premature babies, probably accounts for the continued decline in IMR despite the continuing high rate of premature births.

Percentage of Low-Weight Births, 2000-2005

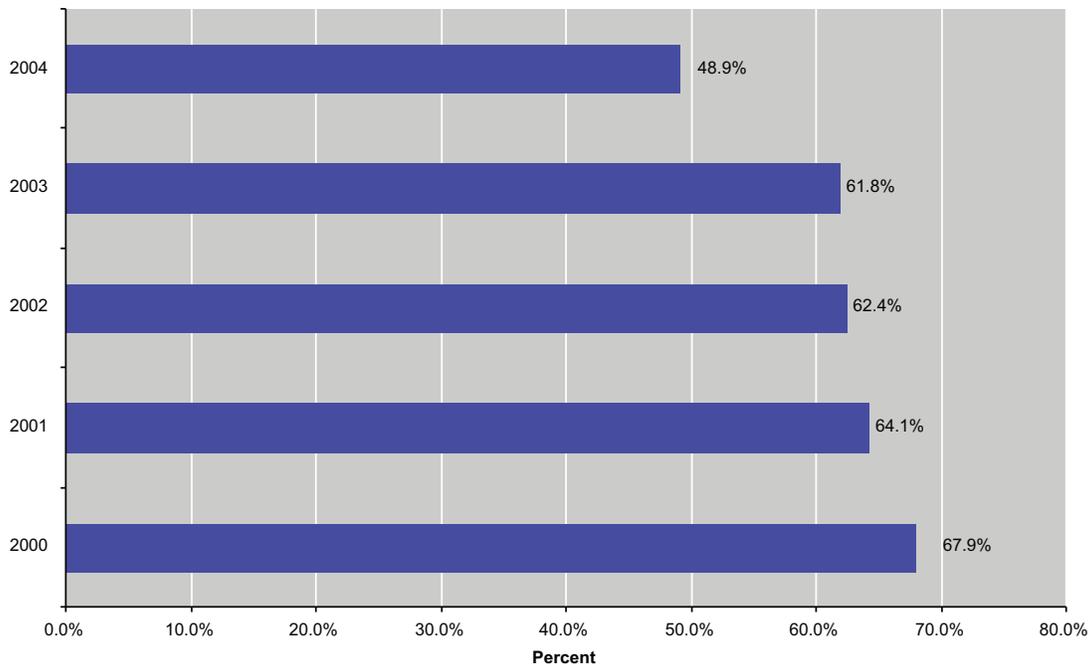


Source: Tennessee Department of Health Vital Statistics

As with mortality rates, there is a difference in the percentage of low birth-weight infants of black mothers and white mothers. Black mothers are more than twice as likely to have a premature baby as are white mothers.

Prematurity and low birth-weight are influenced by social, economic, biologic and genetic factors. There have been many efforts to reduce prematurity. One example has been the effort to extend early prenatal care to more women. Earlier prenatal care improves the health of both the mother and the fetus and contributes to a reduction in infant mortality. Yet, there is little evidence to suggest that early prenatal care decreases the likelihood of prematurity. Nevertheless, a disturbing trend in Shelby County is the 28 percent decline in babies whose mothers received adequate prenatal care.

Percent of Mothers in Shelby County with 'Adequate' Pre-Natal Care, 2000-2004



Source: Annie E. Casey Foundation; CLIKS Online.

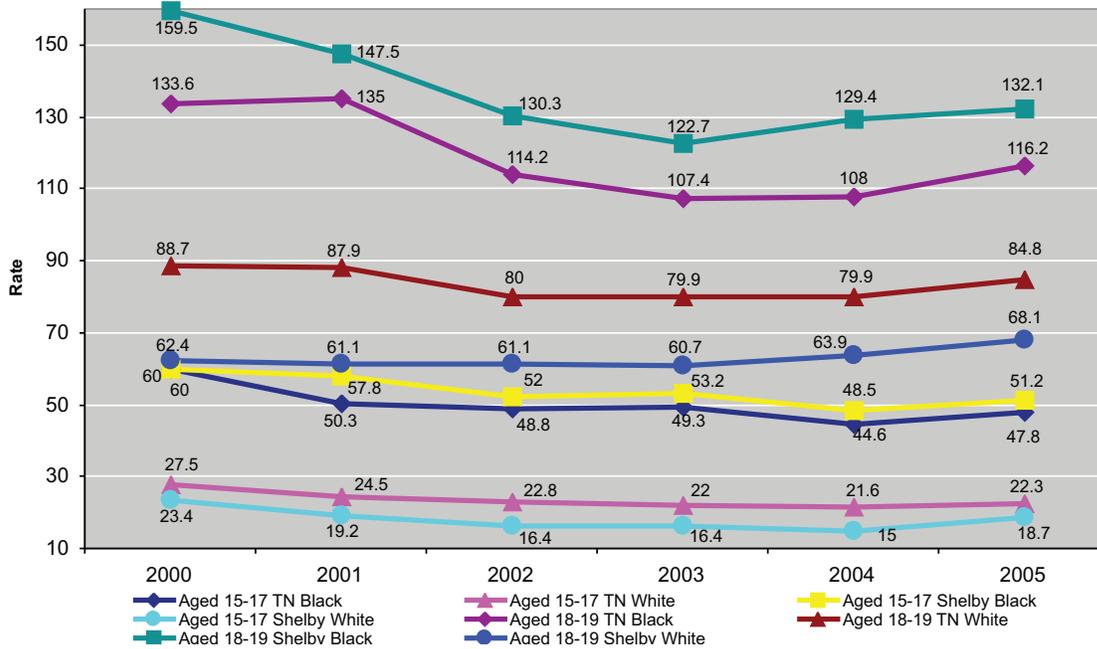
Although we know more about factors that influence a mother going into labor, there still is no unifying hypothesis to explain premature labor. (*Institute of Medicine. Preterm Births. Causes, Consequences and Prevention. Behrman RE and Butler AS eds. 2006; March of Dimes Peristats. Marchofdimes.com/peristats/*)

The risks for children of teenage mothers continue throughout life.

Pregnant women at greatest risk of delivering prematurely are those who are less than 20 years old at the time of delivery and those in their late 30s and older. Of the more than 14,000 births in Shelby County approximately 12 percent are to teenage mothers. In addition to having a higher infant mortality rate, children of teenage mothers are likely to grow up in poverty and suffer the consequences of poor health attendant with poverty.

Nationally there has been a steady decline in birth rates among teenagers since the 1960s. Tennessee and Shelby County have experienced similar trends, although there appears to be a leveling off and, perhaps, a slight increase in teenage birth rates in recent years.

Birth Rate per Thousand Females Age 15-19 by Race, 2000-2005



Source: Tennessee Department of Health Vital Statistics

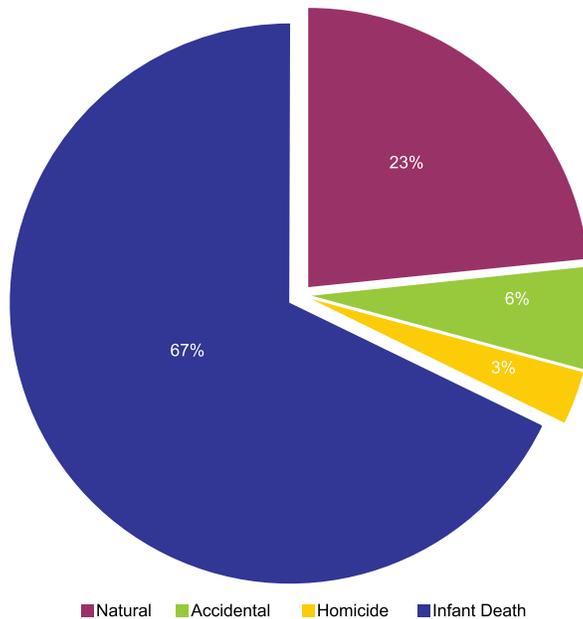
- The birth rate among black teens 15-17 years old is more than three times that of white girls 15-17. The good news is that among both black and white girls of these ages the birth rates dropped from 2000 to 2005 by 17 percent and 26 percent, respectively.
- The rate among black teens 18-19 years old is about double the white rate of 18-19-year-olds. The birth rate among 18-19-year-old black girls, though, dropped 17 percent from 2000 to 2005, while the rate among white girls the same ages increased by almost nine percent.

Programs focused on reducing teen pregnancy are wide-ranging in their approaches. Some promote abstinence and others the use of contraception. One factor that has contributed to the decline has been a greater willingness among adults to discuss teenage pregnancy and sexuality and to recognize the problems faced by teenage mothers. It is unclear, though, what has contributed the most to cause the decline. (*Institute of Medicine. Preterm Births. Causes, Consequences, and Prevention. Behrman RE and Butler AS eds. 2006; March of Dimes Peristats. Marchofdimes.com/peristats/; Annie E. Casey, Kids Count. CLICKS; Child Trends Data Bank*)

Sixty eight percent of deaths in the first 14 years in Shelby County occur in infancy.

In Shelby County two out of three children who die before age 15 die in the first year. Of deaths between age 1 and age 14 in Shelby County more than two-thirds are due to so-called natural causes. These include deaths from congenital anomalies and genetic conditions, infectious diseases and malignancy. Of the remaining deaths between age 1 and age 14 the majority is due to “unintentional injuries” (accidents).

Percent of Deaths of Shelby County Children Age 0-14 by Cause of Death, 2005



Source: Shelby County Health Department

The 2004 data nationally for 15-19- year-olds show that 50 percent of deaths are due to accidents, 14 percent homicides, 12 percent suicides and five percent to malignancy. While these data are not available for Shelby County, it is likely that they would reflect a similar pattern. (Hamilton BE et al, *Annual summary of vital statistics: 2005, Pediatrics*. 2007; 119:345-360.)

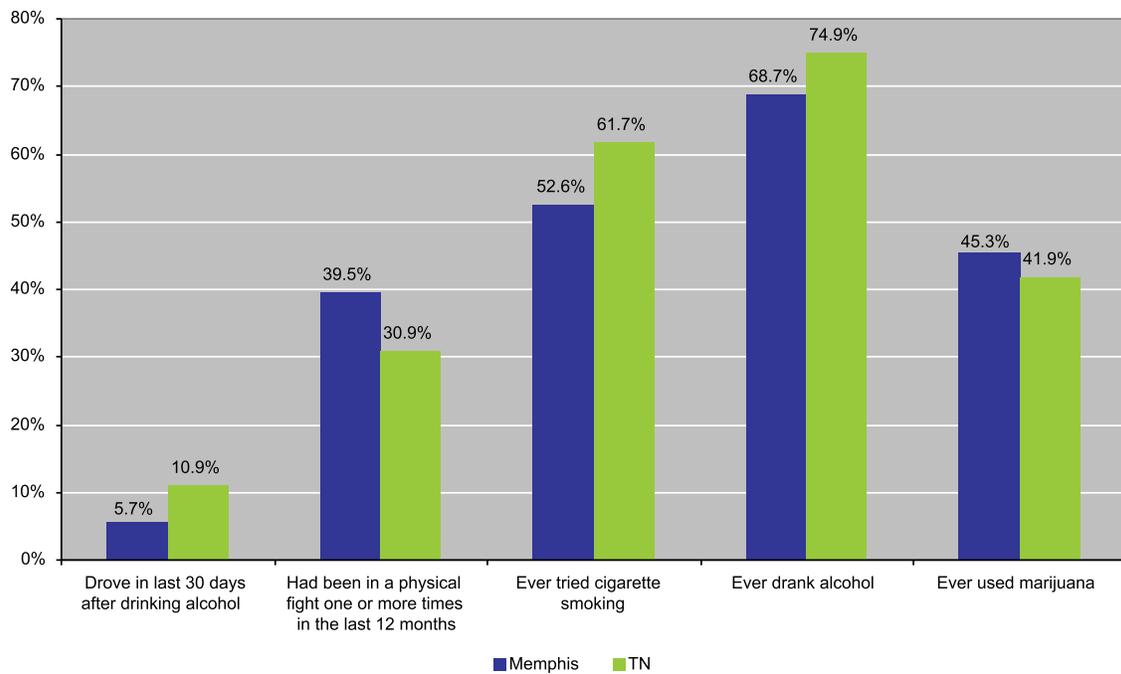
High-risk health behavior begins in adolescence.

Most high-risk health behavior is established during childhood or adolescence and continues into adulthood. For example, alcohol and/or drug use that contributes to motor vehicle accidents, unintentional injuries, homicide and suicide, begins as early as middle school. Likewise, unhealthy diet, lack of physical activity and tobacco use, all of which are linked closely to cardiovascular disease and cancer, begin before adulthood.

The City of Memphis is fortunate to have a validated mechanism, the *Youth Risk Behavioral Survey (YRBS)* to monitor the prevalence of risky health behavior among middle and high school students. The survey monitors six categories of health behavior thought to have the greatest impact on health and well-being. These categories include:

- Behavior that contributes to injuries
- Tobacco, alcohol and drug use
- Sexual activities
- Poor diet
- Lack of adequate physical activity

Percent of 'Risky Behavior' by Adolescents in Memphis and Tennessee, 2005



Source: Youth Behavioral Risk Surveillance Survey, 2005

One-fourth of high school students and one-third of middle school students reported riding in a car “in the last 30 days with a driver who had been drinking.” This is significant since motor vehicle crashes are the leading cause of death nationally among children age 1 to 18 and, of those crashes that result in injuries, approximately one-third involve alcohol.

There’s a direct correlation between violent behavior and school success. Students who engage in violence demonstrate a lack of interest in school. They have more behavior problems, higher absenteeism and drop-out rates. (Birnbaum AS, Lytle LA, Hannan PJ, Murray DM, Perry CL, Forster JL. *School functioning and violent behavior among young adolescents: a contextual analysis. Health Edu Res* 2003 Jun;18(3):389-403) Forty percent of MCS high school students reported being in a fight one or more times in the last 12 months.

Smoking remains a serious problem.

Tobacco use is the most common cause of preventable disease and death in the U.S., and it begins most commonly in adolescence or early adulthood. Eighty percent of adult smokers began smoking before the age of 20. Of people who start smoking as teens, approximately one-third will die prematurely of a smoking-related disease. Furthermore, tobacco is considered a gateway drug that can lead to alcohol, marijuana and other illegal drug use.

Over half of MCS high school and 40 percent of MCS middle school students reported having tried cigarettes. While these numbers are lower than reported by students statewide, and less than five percent of students report smoking cigarettes daily, we should not become complacent about adolescent tobacco use.

Smoking also has a negative impact on younger children. Environmental tobacco smoke (ETS), also known as second-hand smoke, contains almost 4,000 chemicals to which infants and children are exposed when someone smokes around them. Children, especially young children, who breathe ETS are at risk for many serious health problems such as ear infections, hearing problems, respiratory infections and asthma. (Committee on Environmental Health, *Environmental Tobacco Smoke: A Hazard to Children. Pediatrics* 1997 99: 639-642)

Additionally, smoking during pregnancy can lead to serious health problems in newborns. Babies born to mothers who smoke are twice as likely to be born with low birth-weight and are three times as likely to die from Sudden Infant Death Syndrome. The U.S. Public Health Service estimates that if all pregnant women in the United States stopped smoking there would be an 11 percent reduction in stillbirths and a five percent reduction in newborn deaths. (March of Dimes. http://www.marchofdimes.com/professionals/14332_1171.asp)

Adolescent use of alcohol is linked to delinquent behavior.

According to the National Institute on Alcohol Abuse and Alcoholism, adolescents who begin drinking before age 15 are four times more likely to develop alcohol dependence than those who begin at age 21.

- There is mounting evidence that repeated exposure to alcohol during adolescence leads to long-lasting deficits in cognitive abilities, including learning capability and memory.
- Alcohol use has a negative impact on school performance and is related to high-risk sexual behavior, depression, suicide and other drug use.
- Adolescent alcohol use also has been associated with an increased risk of physical or sexual abuse, often by persons of the same age. Researchers estimate that alcohol use is implicated in at least one-third of cases of sexual assault and acquaintance-or-date-rape cases among adolescents and college students.
- Adolescents who use alcohol while pregnant increase their risk of having complications during pregnancy as well as giving birth to an infant with fetal alcohol syndrome. (*Alcohol and Development in Youth-A Multidisciplinary Overview. Alcohol Research and Health. Volume 28, Number 3, 2004/2005*)
- Alcohol use was reported by two-thirds of MCS high school students and 44 percent of middle school students. One-third of the high school students reported use “within the last 30 days.”

Marijuana use remains high among MCS teens.

Almost half of MCS high school students surveyed reported using marijuana at least once (45.3%) and almost a one-fourth (23.5%) reported using it in the past 30 days. These percentages are slightly higher than those reported by high school students statewide. Less than half as many MCS students, however, reported use of methamphetamine (2.4%) than students statewide (5.6%). This may be a result of the high proportion of black students in the MCS system and the lower incidence of use of methamphetamines among black youth.

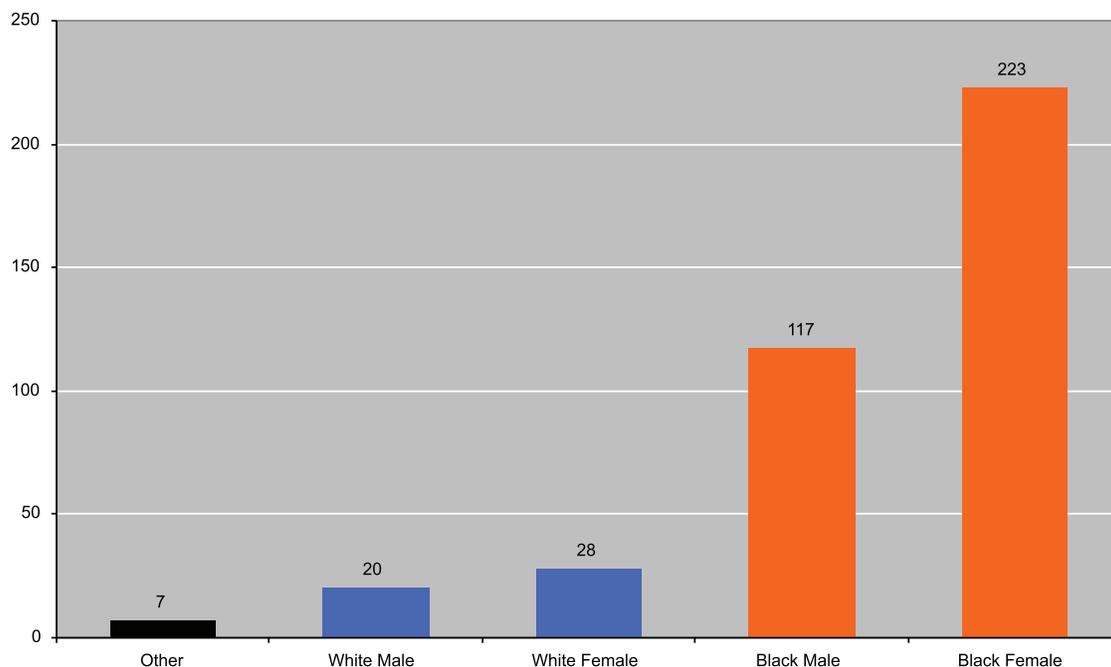
Obesity is an epidemic locally and statewide.

The Tennessee Comptroller's Report (March, 2006), "Weighing the Costs of Obesity in Tennessee," includes, "State law has recognized Tennessee as a state with epidemic proportions of childhood obesity, one of the highest rates of pediatric obesity and childhood type II diabetes, and one of the highest rates of heart disease in the United States."

Also from the report is data that direct medical costs associated with obesity in Tennessee were \$1.84 billion in 2003. Numerous epidemiological studies have shown that overweight children are more likely to be overweight adults and suffer from the complications of obesity (e.g. diabetes, cardiovascular disease, hypertension, stroke, osteoarthritis, gall bladder disease, breast cancer, colon cancer and depression).

Local data from the University of Tennessee Health Science Center (UTHSC) demonstrate the dramatic increase in type II diabetes associated with the rise in obesity. Once thought of as an adult disease, and even referred to as "adult-onset diabetes," type II diabetes used to be rare in children. In 1990 there were four cases diagnosed at UTHSC. Since that time there have been almost 400 cases diagnosed. The number of cases peaked in 2002 with 45 new cases diagnosed and now appears to have decreased slightly. Black females are at greatest risk.

Number of Cases of Type 2 Diabetes in Children by Race & Gender, 1990-2006



Source: University of Tennessee Health Science Center & Le Bonheur Children's Medical Center, Stender, Christensen, Burghen, et al.

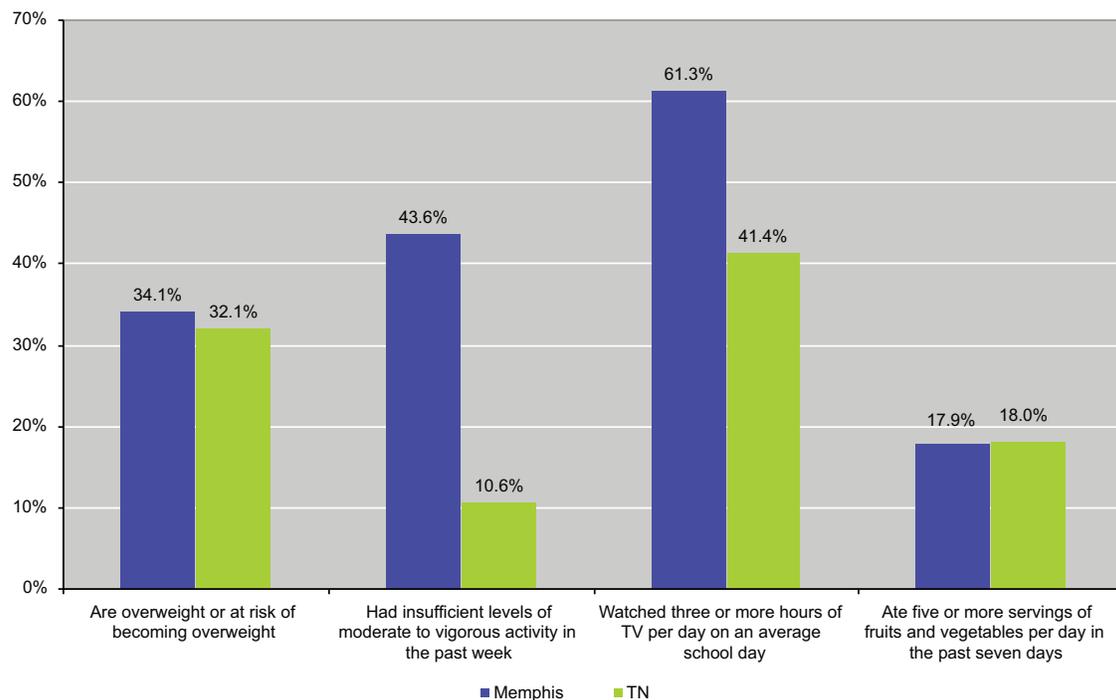
Using data from the 2005 YRBS, in which students reported their weight and height, 18 percent of MCS high school students would have a body mass index (BMI) in the “at-risk for overweight” category and 16 percent in the “overweight” category. These percentages are consistent with the State of Tennessee, 18 percent and 15 percent respectively, but higher than national percentages (13.1% and 15.7%).

More than 40 percent of MCS high school students reported inadequate levels of physical activity. That is four times the rate of students statewide.

This is important because many experts consider physical activity to be a cornerstone of prevention and/or management of childhood obesity and the associated health consequences. Physical activity has been shown to promote fat-loss, increasing energy expenditure, improving the metabolic profile, while at the same time improving psychological well-being. Physical activity also is associated with other health benefits, including a reduced risk of early death, coronary heart disease, hypertension, colon cancer, diabetes mellitus, depression and anxiety. Physical activity is also associated with an enhanced ability to perform daily tasks.

Sedentary behaviors, particularly television viewing, also have been implicated strongly in our childhood obesity epidemic. More than 60 percent of MCS students reported viewing three or more hours of TV on an average school day. Research has shown black and Hispanic children and adolescents tend to participate in even fewer vigorous activities and/or more sedentary activities than whites, with differences noted as early as elementary school. (*Institute of Medicine. Preventing Childhood Obesity: Health in the Balance. 2005*) This may explain the higher numbers reported by Memphis students than students statewide.

Weight, Nutrition and Physical Activity in Memphis and Tennessee, 2005



Source: Youth Behavioral Risk Surveillance Survey, 2005

MCS students demonstrate poor eating habits.

Less than 20 percent of MCS students or students statewide reported eating more than five servings of fruits and vegetables per day. Although this may seem to be a minor issue, it likely has significant public health implications.

Fruits and vegetables contain essential vitamins, minerals and fiber that may provide up to 20 percent protection against heart disease, stroke and cancer. It has been estimated that diet might contribute to the development of one-third of all cancers, and that increasing fruit and vegetable consumption is the second most important cancer prevention strategy, after reducing smoking. In addition, eating fruit and vegetables can help achieve other dietary goals including increasing fiber intake, reducing fat intake and helping to maintain a healthy weight. (*Dietary Guidelines for Americans, 2005*)

Some fruits and vegetables are also good sources of folate (e.g. green leafy vegetables and oranges). All women of child-bearing age are recommended to increase their consumption of foods naturally rich in folate and foods fortified with folic acid to prevent the development of spinal tube defects. (*March of Dimes. http://www.marchofdimes.com/pnhec/173_769.asp*)

Shelby County students' sexual activity leads to a variety of problems.

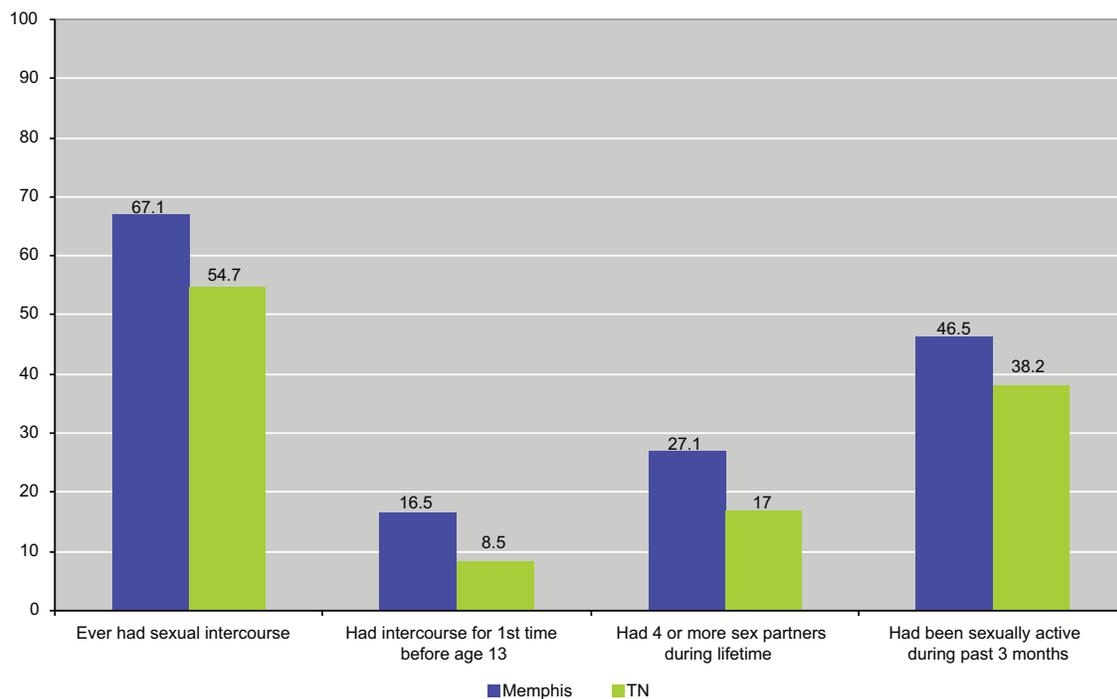
High school students in Memphis and Shelby County report being more active sexually than their counterparts across Tennessee. Also a higher percentage report first intercourse before age 13 and having sex with multiple partners. The negative consequences of teen sexual activity can be seen in the high rate of sexually transmitted diseases, pregnancy and early parenting among adolescents in the City of Memphis.

Studies suggest that parental, developmental and peer influences contribute to the early initiation of sexual activity. These include living in a single-parent home, the influence of an older sibling, the perception that peers are sexually active, early pubertal development, deviant peer groups, sexual abuse and alcohol and drug use. (*Alan Guttmacher Institute. Family Planning Perspectives. 2001; 33*)

Many adolescents in Memphis and Shelby County are exposed to one or more of these risks.

Chlamydia is the most frequently reported bacterial, sexually transmitted disease in the United States. In 2005 more than 975,000 chlamydial infections (332.5 cases per 100,000) across all age groups were reported to CDC from the 50 states and District of Columbia. Under-reporting is substantial because most people with chlamydia are not aware of their infections and do not

Sexual Activity by Adolescents in Memphis and Tennessee, 2005



Source: Youth Behavioral Risk Surveillance Survey, 2005

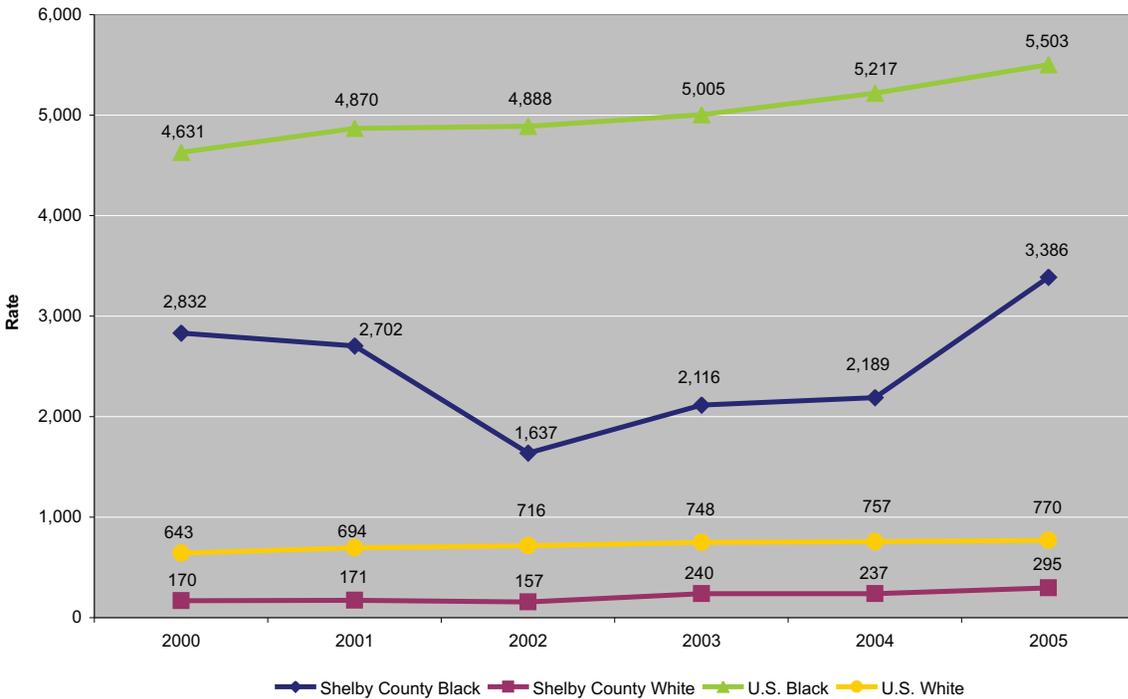
seek testing. Also testing is not often performed if patients are treated for their symptoms. An estimated 2.8 million Americans are infected with chlamydia each year.

Women frequently are re-infected if their sex partners are not treated. Chlamydia can be transmitted during vaginal, anal or oral sex. Chlamydia can also be passed from an infected mother to her baby during vaginal childbirth. In pregnant women there is some evidence that untreated chlamydial infections can lead to premature delivery. Babies who are born to infected mothers can get chlamydial infections in their eyes and respiratory tracts. Chlamydia is a leading cause of early infant pneumonia and conjunctivitis (pink eye) in newborns.

Any sexually active person can be infected with chlamydia. The greater the number of sex partners, the greater the risk of infection. Because the cervix (opening to the uterus) of teenage girls and young women is not fully matured, they are at particularly high risk for infection if sexually active. (<http://www.cdc.gov/std/stats/chlamydia.htm>).

- Tennessee ranks eighth among the 50 states for the reported rate of Chlamydia.
- Shelby County has one of the highest rates in the state.
- The number of cases of Chlamydia reported in 15-to-19-year-olds in Shelby County doubled between 1994 and 2004 and continues to rise, especially among black teens.
- The number of cases reported among white 15-to-19-year-olds, has remained relatively low.

Rates of Chlamydia in 15-19 Year Olds by Race in Shelby County and U.S., 2000-2005



Source: Tennessee Department of Health

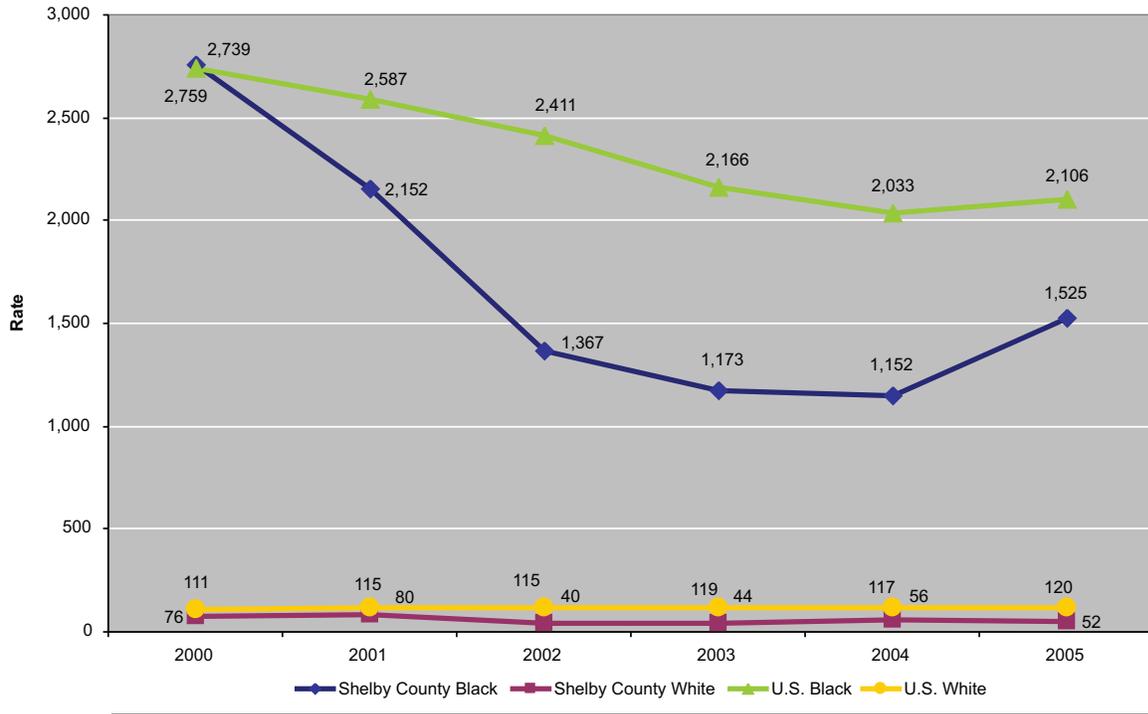
It must be stressed that these are “reported” cases, and actual numbers may be masked by changes in screening practices, use of diagnostic tests with differing test performance and changes in reporting practices.

Gonorrhea remains a very common infectious disease. CDC estimates that more than 700,000 persons in the U.S. are infected anew with gonorrhea each year. Only about half of these infections are reported to CDC. In 2005 339,593 cases (all age groups) were reported to the CDC. Untreated gonorrhea can cause serious and permanent health problems in both women and men.

In women gonorrhea is a common cause of pelvic inflammatory disease (PID). PID can damage the fallopian tubes enough to cause infertility or increase the risk of ectopic pregnancy. Ectopic pregnancy is a life-threatening condition in which a fertilized egg grows outside the uterus, usually in a fallopian tube. In men, gonorrhea can cause epididymitis, a painful condition of the testicles that can lead to infertility if left untreated. Gonorrhea can spread to the blood or joints. This condition can be life threatening.

In addition, people with gonorrhea are more likely to contract HIV, the virus that causes AIDS. HIV-infected people with gonorrhea are more likely to transmit HIV to someone else. If a pregnant woman has gonorrhea, she may give the infection to her baby as the baby passes through the birth canal during delivery. This can cause blindness, joint infection or a life-threatening blood infection in the baby. (<http://www.cdc.gov/std/Gonorrhea/STDFact-gonorrhea.htm#what>)

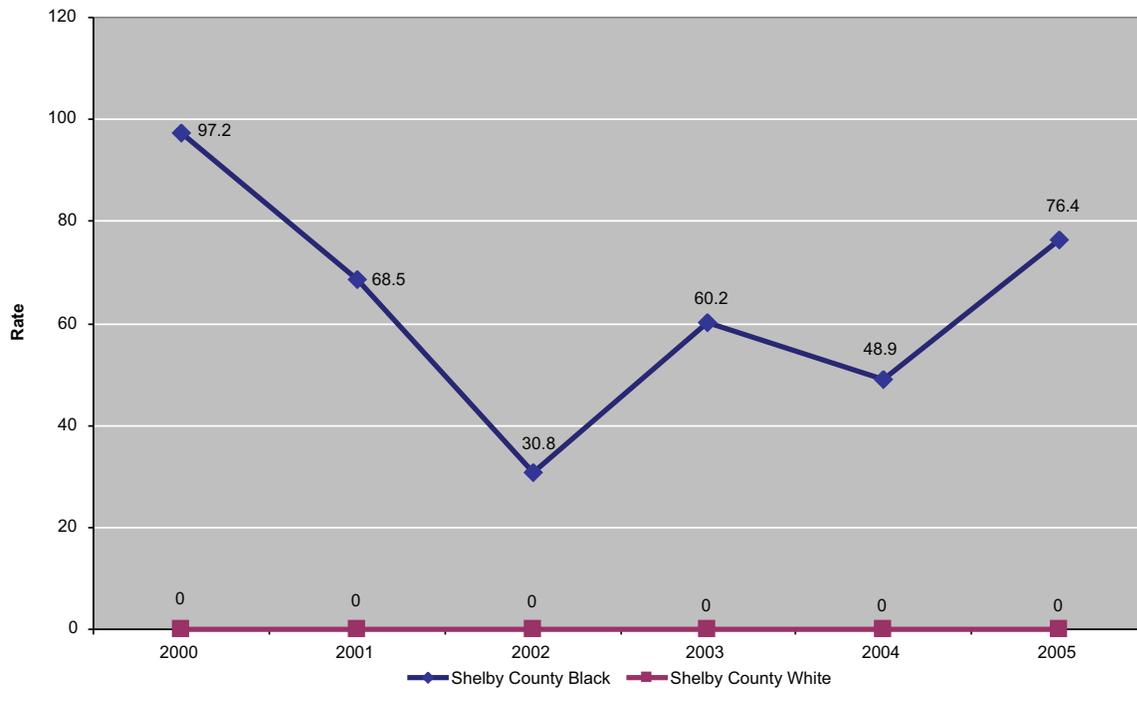
Rates of Gonorrhea in 15-19 Year Olds by Race in Shelby County and U.S., 2000-2005



Source: Tennessee Department of Health

The number of reported cases of gonorrhea in 15-to-19-year-olds in Shelby County has declined sharply over the past decade, with a slight increase between 2004 and 2005. It is too early to tell if this increase is just a normal variation or the beginning of a real increase in reported cases. As Chlamydia, only “reported” cases have been captured. The true incidence is higher and remains unknown.

Rates of HIV/AIDS in 15-19 Year Olds by Race in Shelby County, 2000-2005



Source: Shelby County Health Department

Young people in the United States are at persistent risk for HIV infection. This risk is especially notable for youth of minority races and ethnicities.

- Black persons accounted for 55 percent of all HIV infections reported among persons aged 13–24 in 2004. (<http://www.cdc.gov/hiv/resources/factsheets/youth.htm>)
- In Shelby County there were 32 cases of HIV/AIDS reported among 15-to-19-year-olds in 2005. This represents a rate of 76.4 cases per 100,000.
- National comparison data for this age group were not available, however the reported rates for black and white adults and adolescents 13 years and older were 97.2 and 10.7 per 100,000, respectively. (<http://www.cdc.gov/hiv/topics/surveillance/resources/reports/2005report/table5b.htm>)

Family, Home Environment & Economic Well-Being



Fewer than four out of 10 children in Memphis live with both parents.

American children are born into and grow up in a variety of family types. Research shows consistently that the well-being of children is affected primarily by family income, structure and education level. Family structure refers to the family type and marital status of parents or guardians. Most children live in married-parent families, single-parent families or families headed by a grandparent or other relative.

Family life is the single greatest influence on a child's achievement throughout his/her academic career. Research shows that the differences in child rearing and home environment affect cognition, social and emotional development and academic achievement.

There is good news for children in falling rates of teen pregnancy and divorce, but there are still many family issues of concern. Tremendous disparities still exist among family incomes of different racial and ethnic groups and between single-parent and married-couple families.

The relationships between family type, education, income and race result in different opportunities for children in Memphis and Shelby County. Continued understanding of the reciprocal relations between income, race, educational attainment and family type is needed in order to improve conditions for all children in our community.

Early child development, school readiness, delinquency and educational attainment all are associated with the advantages and disadvantages of a family's economic situation. Economic disadvantages often mean less-educated parents with poor parenting skills. Financial stress itself also affects parenting. Along with mother's education and age at first birth, family income is the best predictor of developmental outcomes from children.

Being near or below the poverty level is a special risk. Child poverty in Shelby County poses serious challenges because it is pervasive, long-standing and increasing. Nearly 45 percent of Shelby County children live in families with economic security issues.

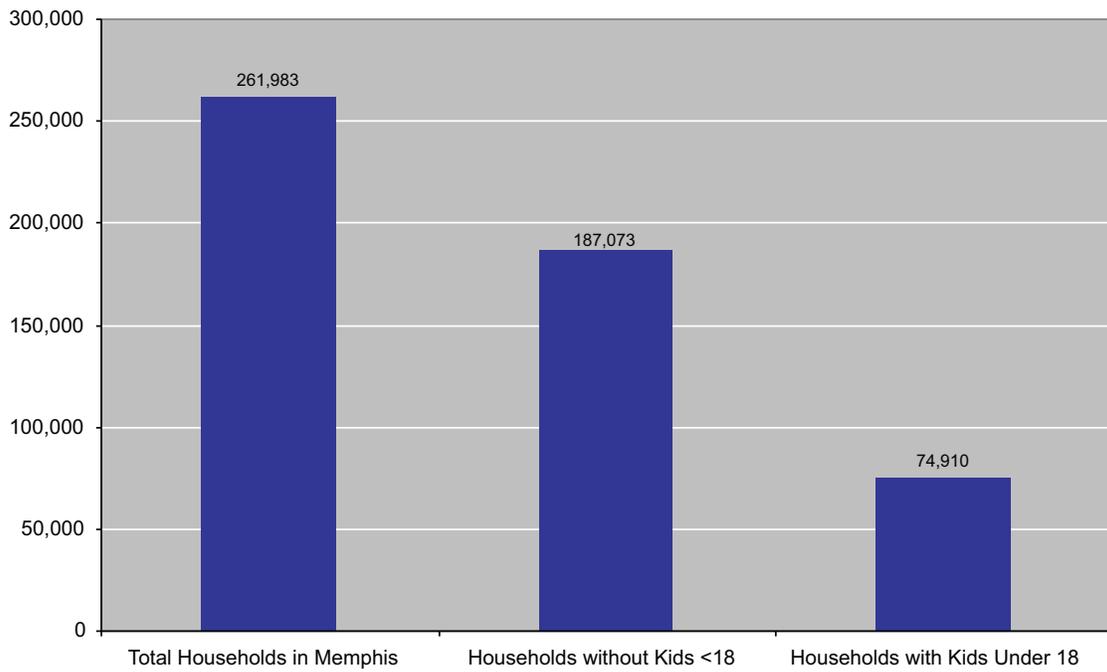
This domain explores the dimensions of family and home environment in Memphis and Shelby County and the role they play in supporting healthy child development.

Children do best when they live in families with two parents who have college degrees and a stable, steady residence. Children are most vulnerable in families headed by a single parent, in which case they are more likely to live in poverty. Single and early parenthood contributes to many problems facing children because parents are less likely to finish school and earn higher degrees, two important factors in improving the well-being of children. In Memphis and Shelby County, as across the country, higher wages and salaries correspond to higher levels of education, which in turn affects children's school readiness and vocabularies. (*Meaningful Differences*)

The number of households with children is shrinking.

Of the more than 100 million households in the United States, one in three has children at home. While parents with children at home made up a majority of U.S. voters in 1956 (55%), today they constitute a shrinking minority.

City of Memphis Households by Presence of Children, 2005

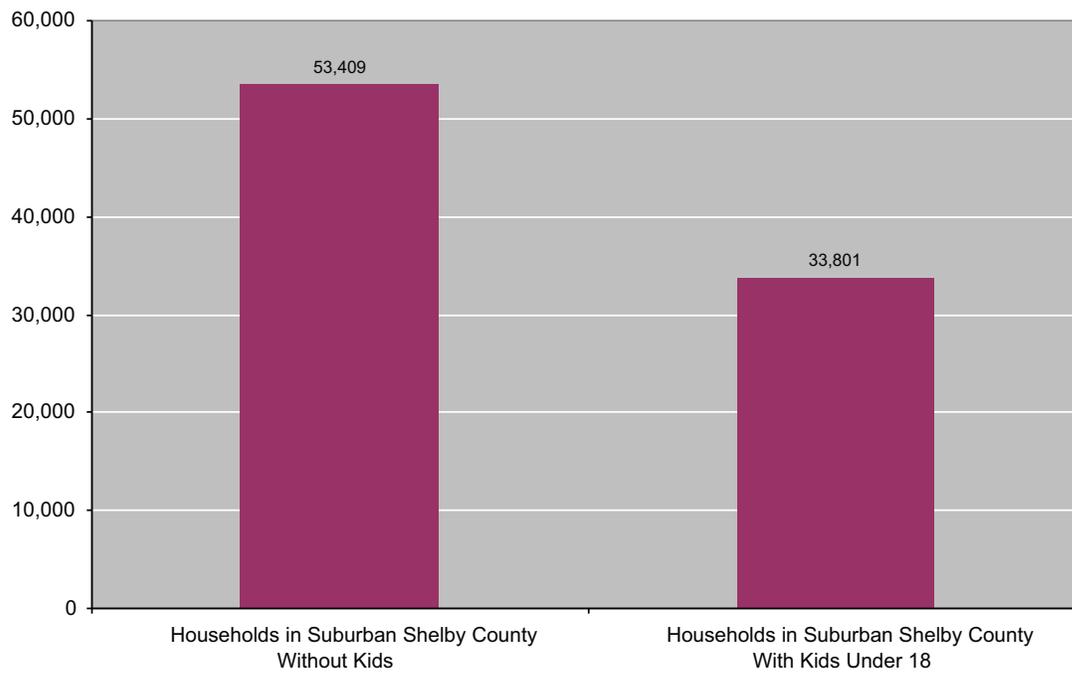


Source: American Community Survey, 2005

Less than one-third of households in the City of Memphis (29%) and Shelby County (31%) have children.

There were fewer households with children in the City of Memphis in 2005 than in 2004 (ACS). The largest concentration of families with children is in suburban Shelby County. The percentage of households with children in the Memphis MSA is about the same as in Shelby County.

Suburban Shelby County Households by Presence of Children, 2005



Source: American Community Survey, 2005

As the number of households with children in the U.S. declines it becomes more difficult to maintain an effective political force for children.

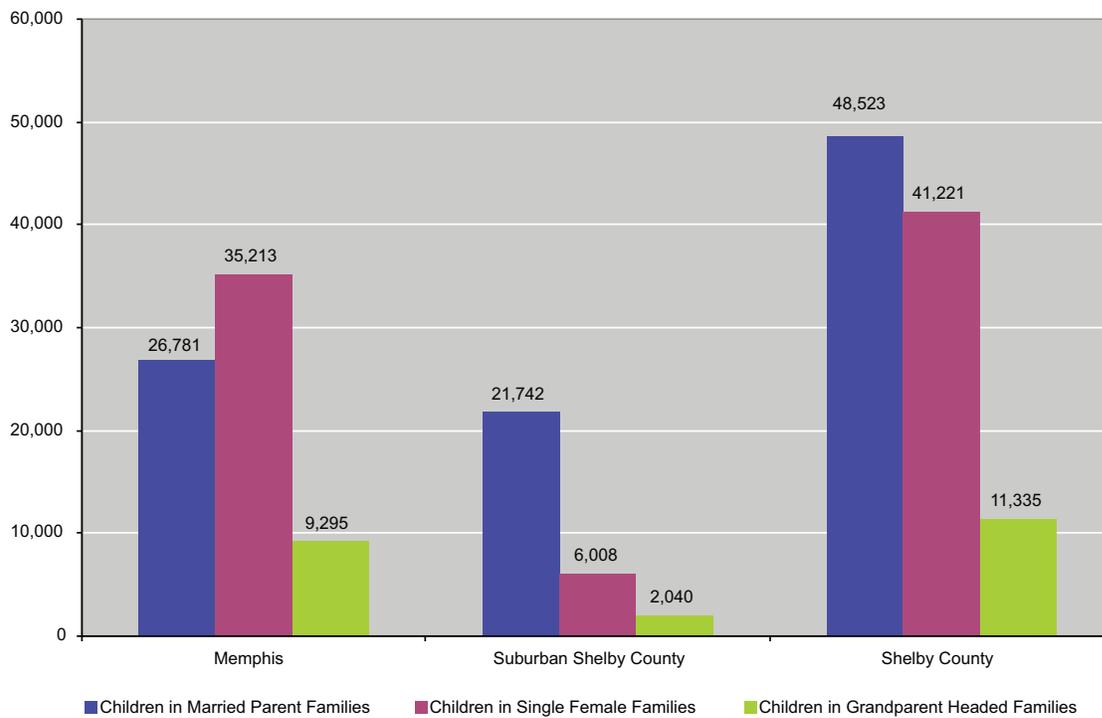
In November, 2006 83 percent of voting Tennesseans passed Amendment 2, the Property Tax Relief Act, to enable people over the age of 65 to opt out of paying property taxes. Since Tennessee has no state income tax, property taxes comprise the bulk of revenue for all local government activities, including education. That this amendment passed so overwhelmingly is no accident. When the majority of people do not have contact daily with children it becomes increasingly difficult to make children's issues a priority.

Children, while equally in need, do not vote and thus rely on support from their caretakers and the community to advance children's issues.

In the City of Memphis only 38 percent of children live in a two-parent household.

- More than half of all children in the City of Memphis live in a household headed by a single-mother, and fewer than four in 10 live in a two-parent household.
- In suburban Shelby County, on the other hand, 73 percent of children live in two-parent households, and only one in five lives in a single-woman household.
- In the State of Tennessee 75 percent of children live in two-parent households.
- Only 14 percent of City of Memphis children living in poverty live with married parents. The other 86 percent are with single women.
- Younger children in Memphis are more likely to live in a single-mother family than are older children.

Shelby County Children by Living Arrangements, 2005

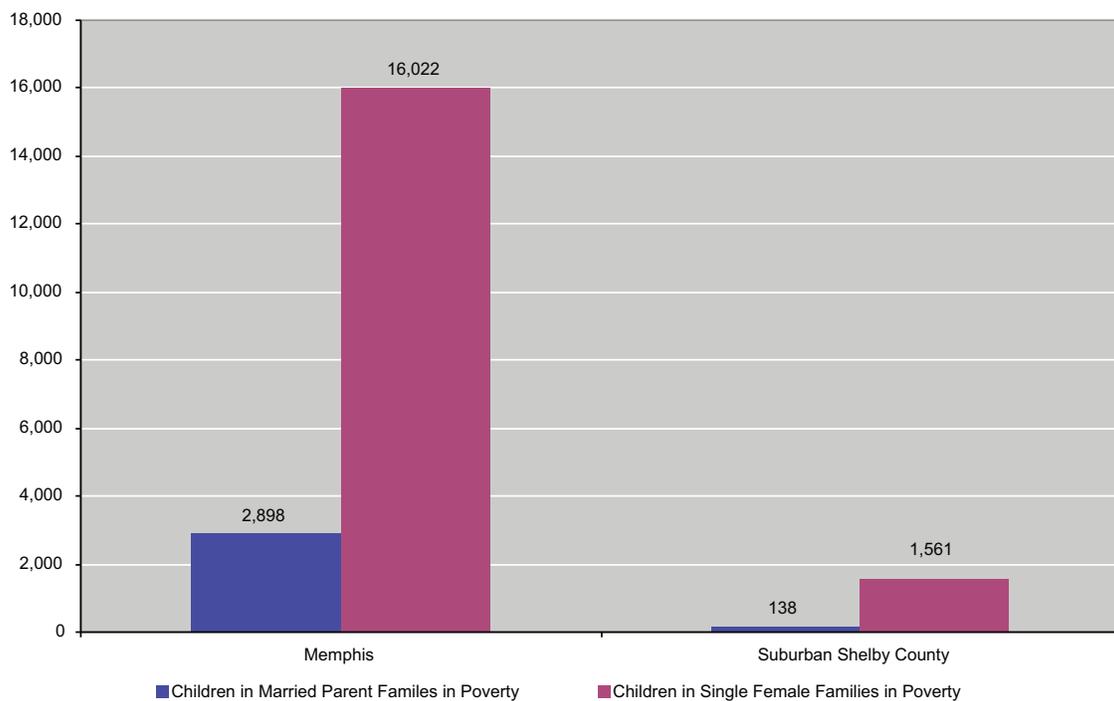


Source: American Community Survey, 2005

Children in single-mother households are six times more likely to live in poverty.

Poverty-level income is determined by an arguably outdated formula implemented in 1959. It is based on family size. Eligibility for some income-support programs such as Temporary Assistance to Needy Families (TANF), or Families First in Tennessee, requires income well below the poverty level to qualify. Eligibility for other programs is determined by other factors such as the definitions of “extreme poverty, near poverty” and “low income.”

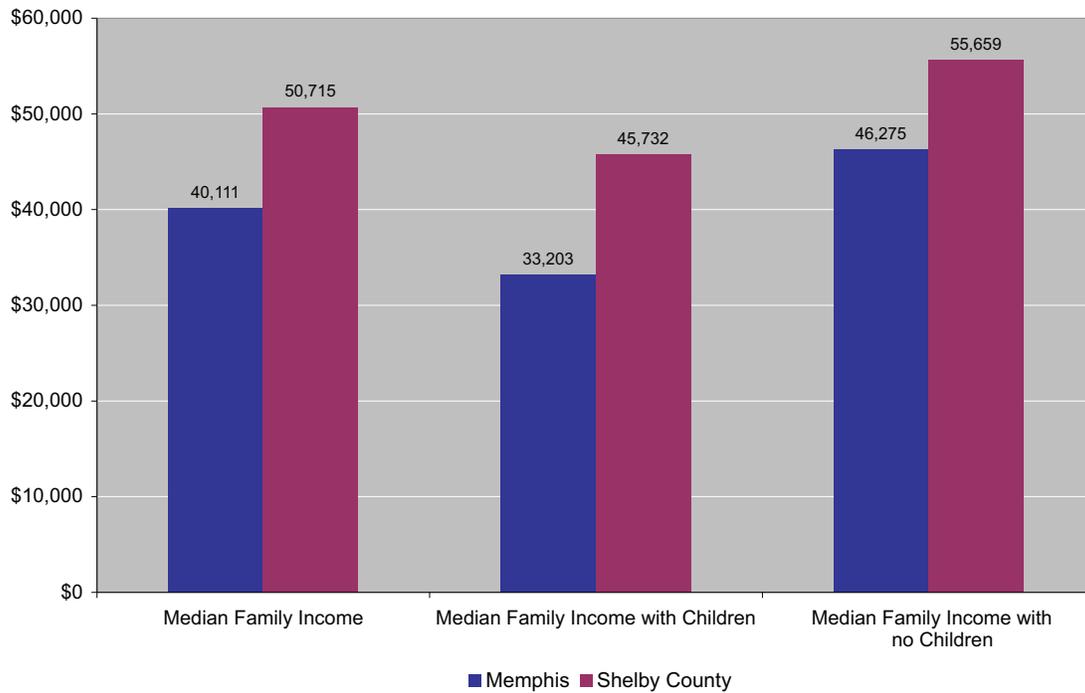
Families with Children in Poverty by Living Arrangement, 2005



Source: American Community Survey, 2005

City of Memphis family incomes are 29 percent below U.S. median, and the gap is widening.

Median Family Income in Memphis & Shelby County, 2005



Source: American Community Survey, 2005

- Median household income in the City of Memphis is \$33,244. In Shelby County it is \$40,839. (ACS 2005)
- National, median household income is \$46,242. In the City of Memphis families earn 29% percent less than the national median.
- While the national median has grown by 10 percent since 2000 (up from \$41,994), the City of Memphis median income has increased by only three percent (from \$32,285).
- In the City of Memphis white single mothers have twice the annual income of black single mothers.
- White married couples earn 20 percent more in Memphis than do black married couples.

As these findings suggest, low-income families and single-parent families are not all the same. The data reflect the reality that there are many different paths to poverty, and there are subtle but important differences that characterize the well-being of children and families in Memphis.

City of Memphis families have few assets and little or no economic safety net.

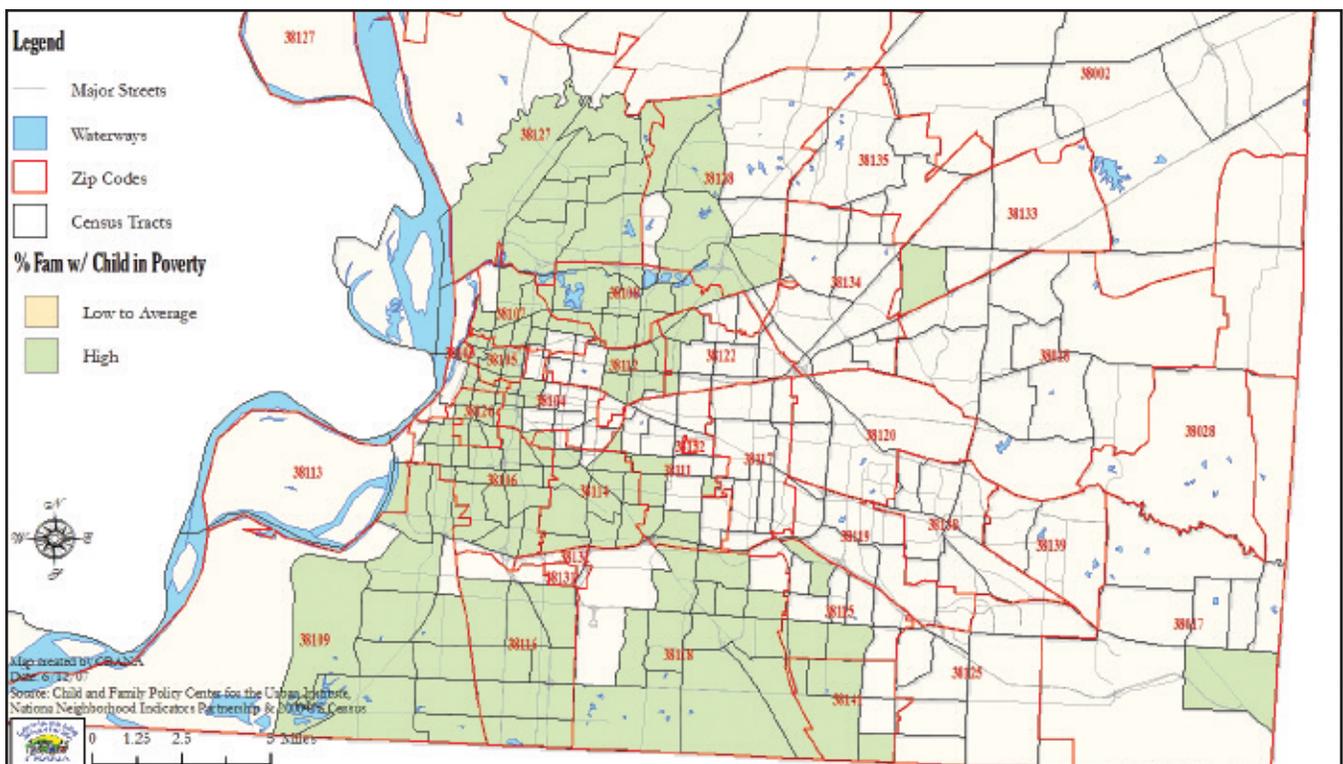
The majority of City of Memphis families have few financial assets and little wealth to protect against economic hardship. Census data commonly report annual income, but accumulated assets (measures of wealth) are just as important for gauging family security and estimating the likelihood of economic stress.

- Economic stress can affect pre-natal care and parenting even in families that are not poor economically.
- Economic stress also affects the rate at which children change schools, and that affects student achievement.

One estimate of wealth comes from IRS data on household income from interest, dividends and rent, all of which imply assets that can cushion against economic insecurity.

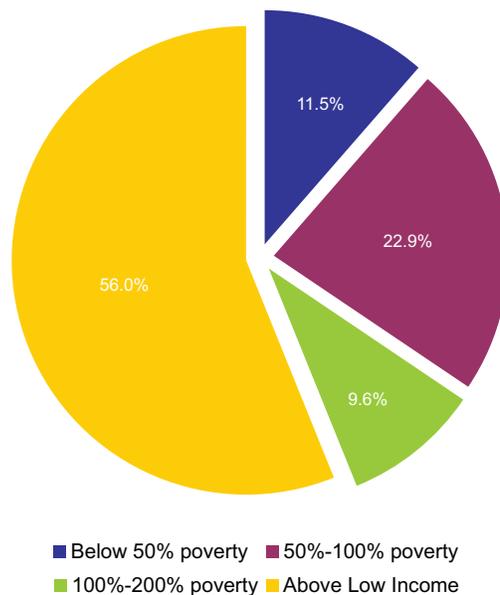
- Only about half of Shelby County census tracts fall within the normal range of asset income compared to households nationally.
- In the City of Memphis, 65 percent of census tracts (107) have high proportions of households with few financial assets.
- Only one low-asset tract lies outside the City of Memphis in suburban Shelby County.
- The majority of these low-asset census tracts are in predominantly black neighborhoods.

Distribution of Census Tracts with Low Incidence of Households Having Dividend Interest or Rental Income



Poverty is growing in Shelby County.

Living Standards of Shelby County Children, 2000



Source: U.S. Census, 2000

Children in poverty increased by 10 percent county-wide from 2000 to 2005. From 2004 to 2005 an abnormally substantial decrease (from 16,596 to 4,400) occurred in suburban Shelby County, and a similarly dramatic increase (53,158 to 59,328) occurred in the City of Memphis as a result of annexation of a portion of suburban Shelby County by the City of Memphis.

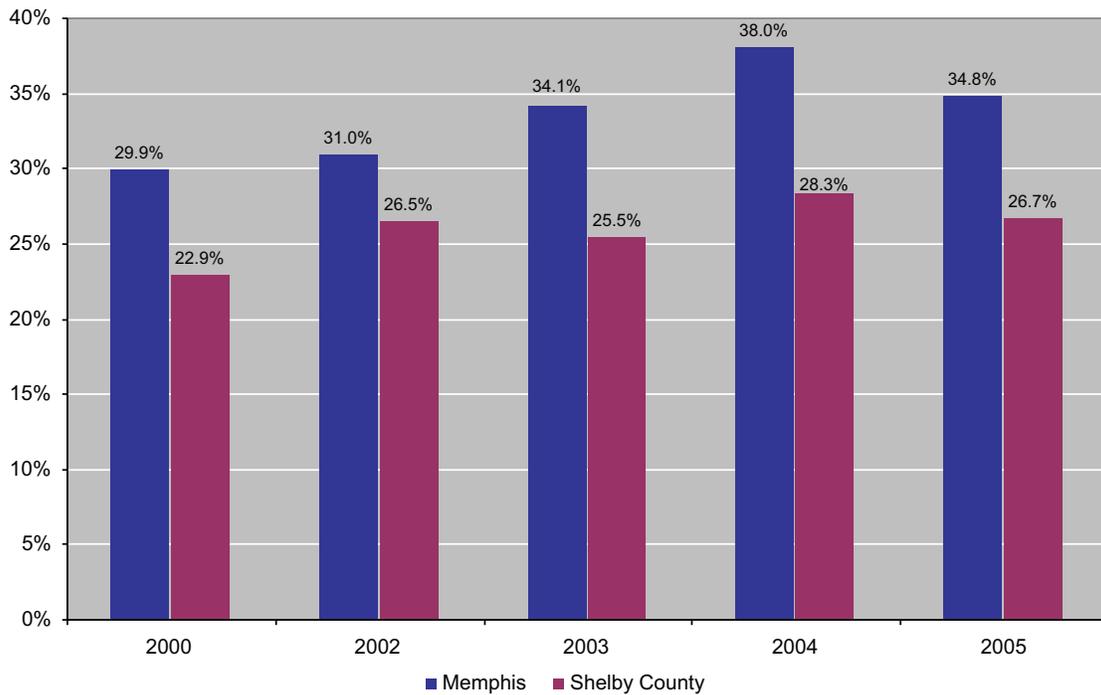
The percentage of children living below poverty in the City of Memphis increased by almost five percent between 2000 and 2005 and in suburban Shelby County by almost four percent.

- In the City of Memphis 59 percent of children are in low income or poverty.
- In Shelby County 44 percent are in economically vulnerable families.
- The typical size of a poor family in the City of Memphis is three. The 2005 (most recent) poverty level for a family of three is \$15,735.
- “Extreme poverty” or “very poor” are defined as a family with 50 percent or less of poverty level income, or \$7,868 for a family of three.
- “Near poverty” level is defined as income between the poverty level and the poverty level plus 25 percent, or \$19,669.

“Low income” eligibility for programs such as Section 8 subsidized housing vouchers means income of up to 80 percent of the “area median income” (AMI) for families in the metropolitan area. The current AMI for Shelby County is \$41,250 for a family of three.

Some government reporting methods and child advocacy programs use a standard of up to 200 percent of poverty level income to mean “low income.” In the City of Memphis, 200 percent of the poverty level for a family of three is \$31,470, which is almost 25 percent less than the AMI. The 200 percent method, which is included in data below, therefore, is a conservative estimate of economic disadvantage.

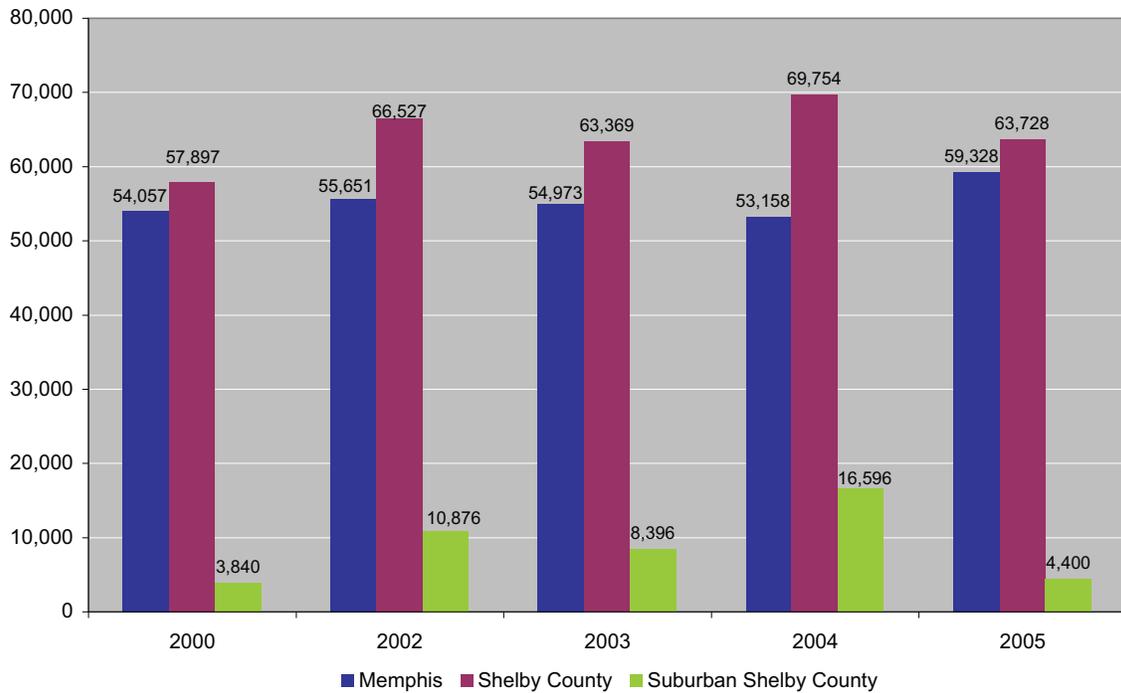
Percent of Children Living Below Poverty in Memphis & Shelby County, 2000-2005



Source: U.S. Census 2000, American Community Survey, 2002-2005

Shelby County patterns are heavily influenced by what happens in the City of Memphis, but the trend data show that children in suburban Shelby County suffer setbacks as well. This suggests that low-income suburban families have not been insulated from economic trends during this period, also that some poor and economically marginal families are moving from Memphis to suburban Shelby County.

Number of Children Living in Poverty in Memphis & Shelby County, 2000-2005



Source: U.S. Census 2000, American Community Survey, 2002-2005

Poverty is predictable.

Links between poverty, race and ethnicity remain strong in Memphis and Shelby County.

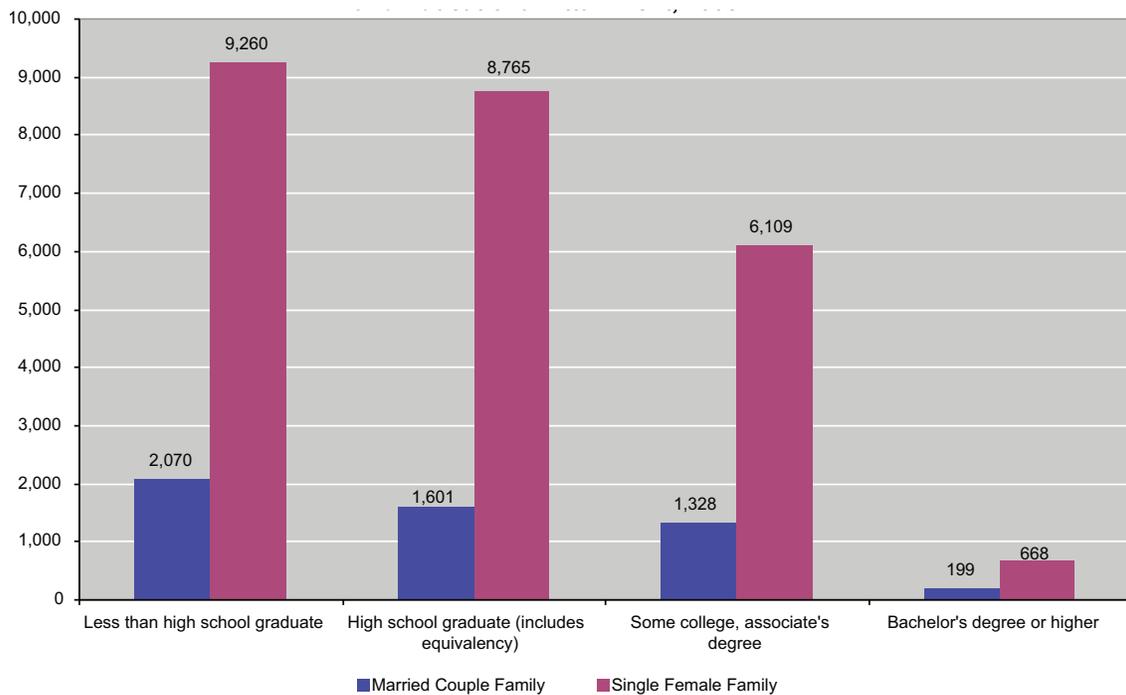
Even when education levels are comparable, white men and women in Memphis earn more than black and Hispanic workers. This is due primarily to the concentration of black and Hispanic workers in lower-paying industries and/or jobs.

The more educated the parent(s), the less likely a child lives in poverty.

Whether in married-couple families or single-mother families, the higher the education level, the less likely a child is to be living in poverty. Locally one out of four children is born to a mother with less than a high school education.

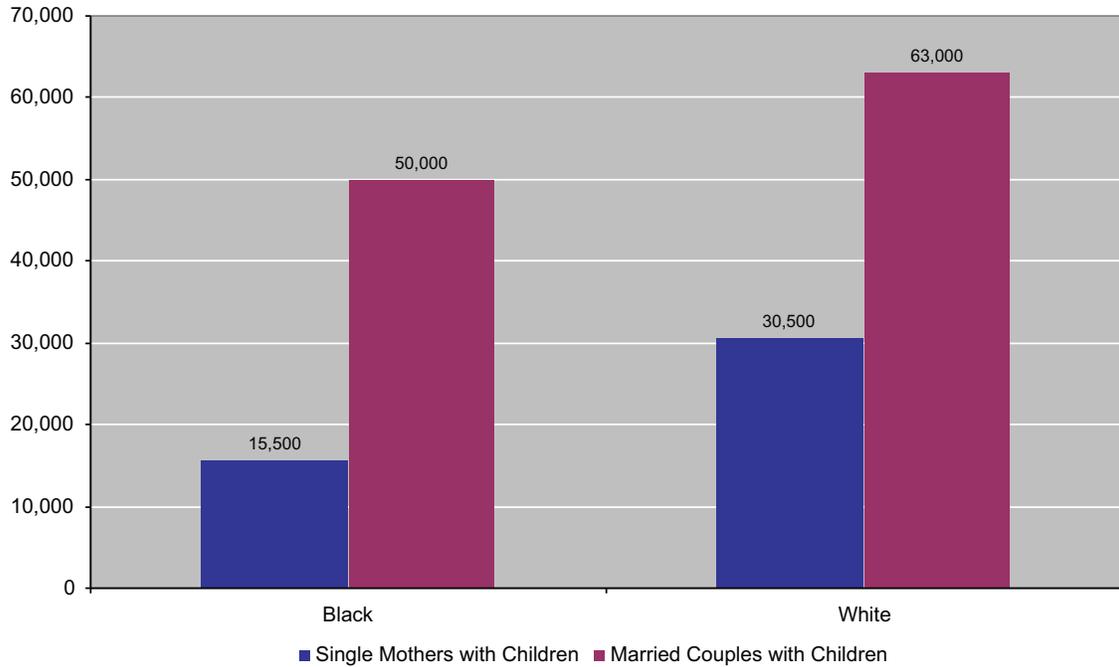
Families headed by single mothers have significantly lower incomes than do two-parent families.

Families Living in Poverty in Memphis by Family Type and Educational Attainment, 2005



Source: American Community Survey, 2005

Differences in Family Income in Memphis by Living Arrangements and Race, 2000



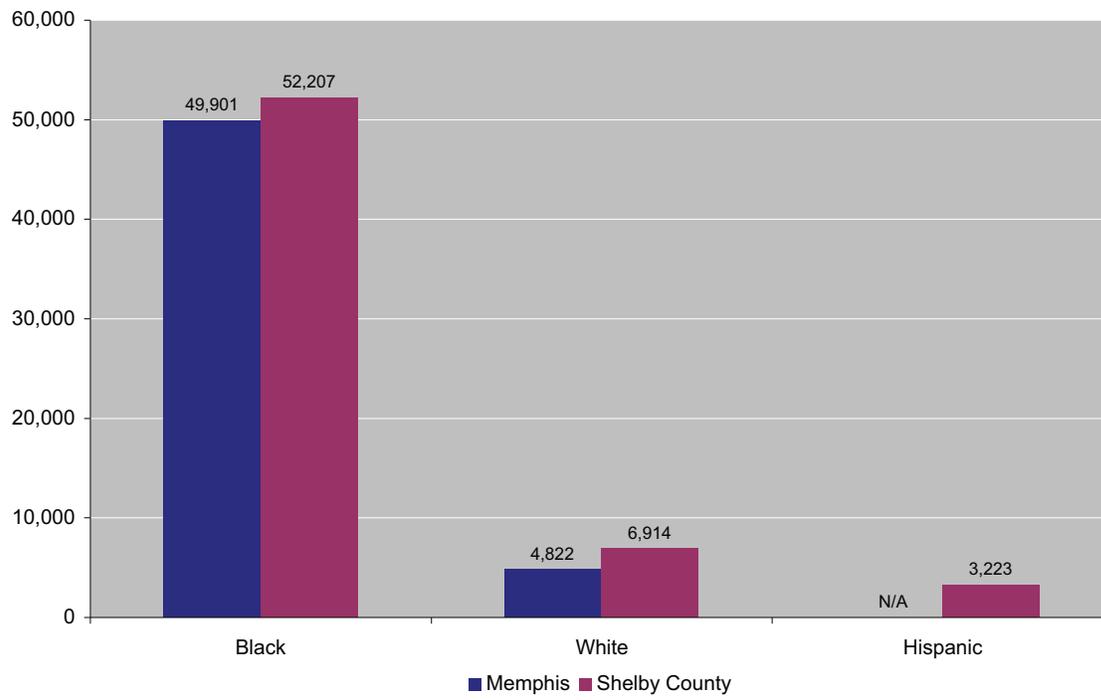
Source: U.S. Census Bureau, 2000

Mother's education and age when her first child is born are important predictors of child poverty. Those factors define in most cases her education and marital status, both of which are strong determinants of poverty, especially for black children in Shelby County.

National research demonstrates that when unmarried girls and young women with little education have children, the fathers are unlikely to be significant contributors to family income, even if parents are married. This is less true of older, and better-educated, single mothers whose additional education leads to higher income.

Black children are three times more likely and Hispanic children more than twice as likely, to be in poverty than are non-Hispanic, white children.

Number of Children Living in Poverty by Race & Ethnicity, 2005



Source: American Community Survey, 2005

Poverty spawns a host of negative conditions and outcomes in children. Included are:

- Health problems
- Child abuse and neglect
- Unreadiness for school and delinquency
- Lack of educational attainment
- Likelihood of teenage pregnancy
- Marriage prospects
- Employment and income

Research supports that poverty and poor child development are associated with single parenting, teen mothers and low parent education. Yet, poverty introduces stress on child development that cannot be explained alone by single parenting, young mothers or mother's education.

Living in old, dilapidated housing is associated with lead poisoning from peeling paint. Lead poisoning impairs brain development and damage that cannot be reversed.

Poverty is associated with housing insecurity. Poor families experience high rates of residential transience compared to families with moderate and higher incomes, and poor families are more likely to be evicted for non-payment. Moving from neighborhood to neighborhood means children changing schools, which is associated with reduced achievement.

Poverty is also associated with unreliable transportation options, utility cut-offs, even food insecurity. All of these challenges increase parental stress, which, along with parental education, is associated with parenting skills, child neglect and abuse.

Early childhood development is affected by verbal stimulation, which varies considerably by parent education. Mother's education is one of the strongest predictors of school readiness.

Most of the relationship between poverty and its effects on children can be mediated by interventions such as pre-and-pre-kindergarten programs demonstrable results.

Where expectations are set low, children are written off.

post-natal home visits, quality and other investments that yield

Poverty also is associated with prophecies. Where expectations are written off or begin to assume caretakers, teachers, juvenile justice or others in positions of authority. These influencers need practical understanding of how to work best with children from diverse backgrounds.

labeling and self-fulfilling prophecies are set low, children are written off or begin to assume

Poverty accounts for most of the disparity in outcomes for children from diverse racial and ethnic backgrounds. We need to learn more about ways in which race and ethnicity act independently from socio-economic background on particular indicators.

Housing has a major impact on a child's development.

Home ownership is one reflection of family income and stability. In the City of Memphis 29 percent of low-income families own their homes. Two out of three low-income families rent. Median rent in the City of Memphis is \$683 and \$697 in Shelby County. In Memphis the median home value is \$86,200 and in Shelby County it is \$118,200.

Median income for a single mother with two children in Shelby County is \$18,000. Without the help of subsidies, if she paid the median rent it would amount to 46 percent of her income. Median income for a married couple with one child is \$34,000. "Median rent" for a married couple would amount to 25 percent of the family's income.

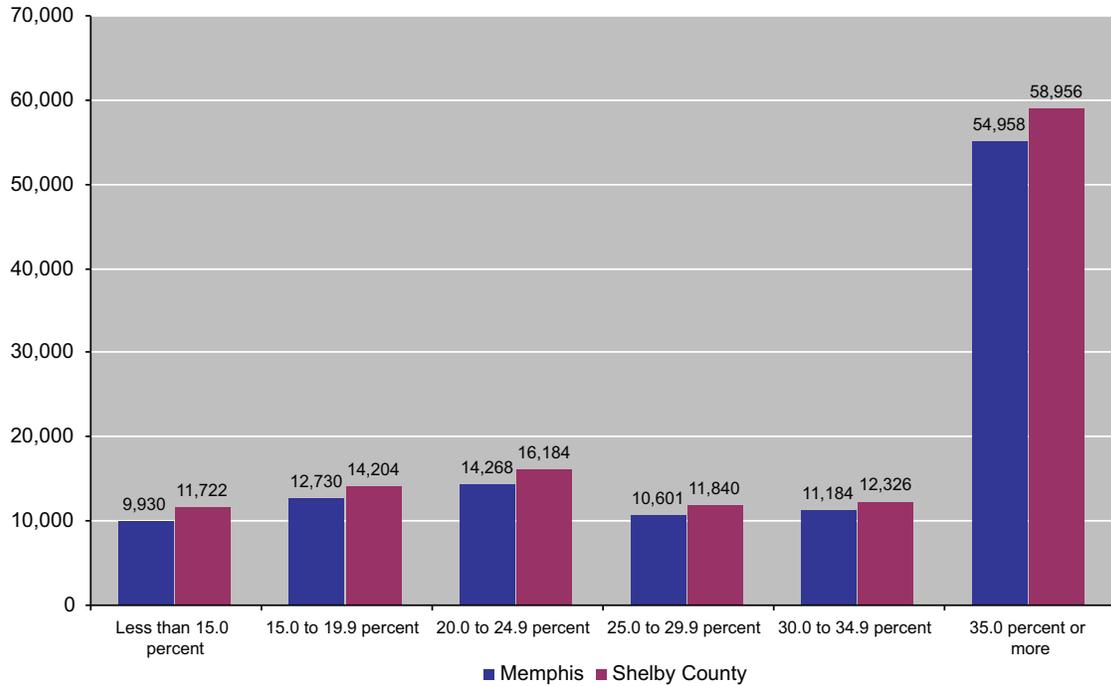
Despite the fact that Memphis is one of the lowest-cost housing markets in America, more than half of renters in Memphis and Shelby County spend more than one-third of their income for rent.

Home ownership also is an indicator of neighborhood stability. Transience is an indicator of instability. Suburban Shelby County has a low transient population and a high percentage of residents who live in the same home as last year.

In the City of Memphis black and Hispanic families are twice as likely as white families to have moved in the past year. The largest number of newcomers to Shelby County is Hispanic.

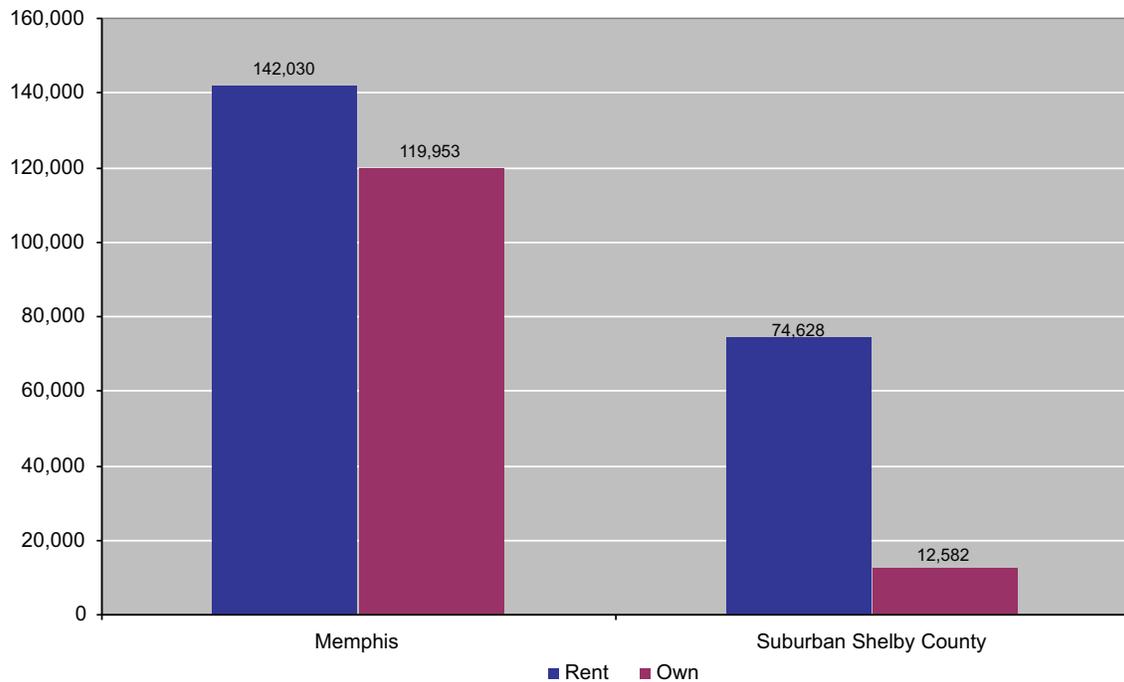
The replacement of low-income housing with mixed income housing in downtown and uptown Memphis has displaced many families throughout the county, with roughly only 20 percent returning to their previous neighborhoods.

Percent of Income Spent on Rent in the City of Memphis, 2005



Source: American Community Survey, 2005

Home Ownership in the City of Memphis and Suburban Shelby County, 2005



Source: American Community Survey, 2005

A daily average of 550 children in Shelby County are homeless.

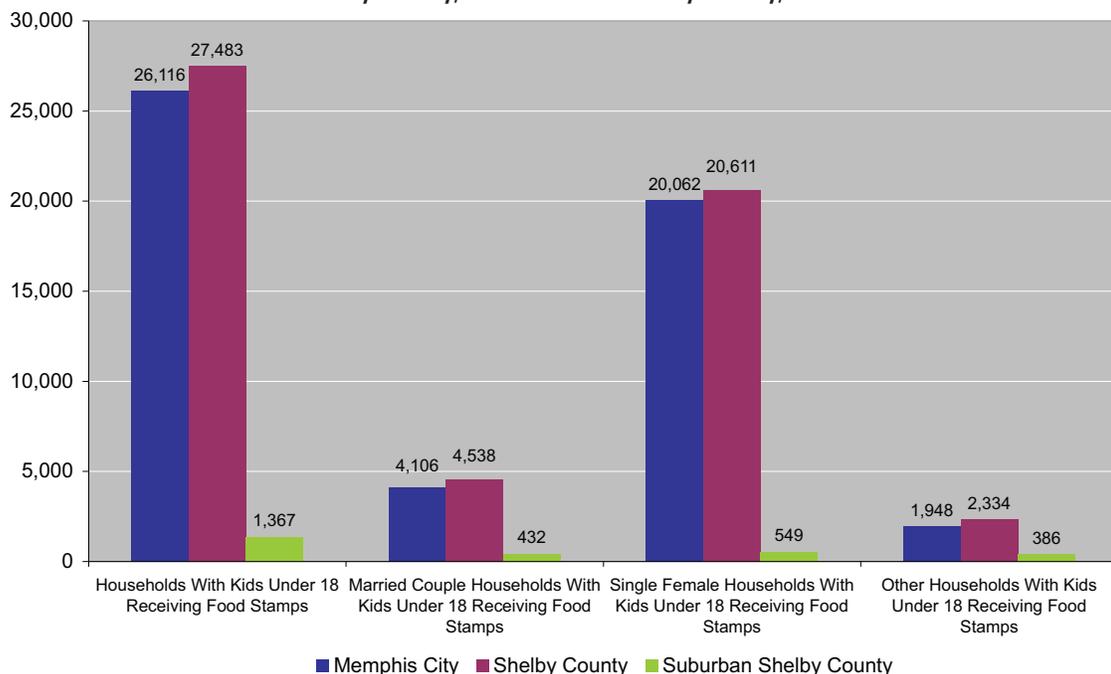
Definitions of homelessness include “temporarily displaced, precariously or marginally housed and chronically homeless.” On any given day, 1,900 people in Shelby County are homeless. This includes 225 families with about 550 children.

At some point during 2004 15,960 people, including 3,074 families with 7,187 children, were either homeless or precariously housed. (*Community Collaborative on Children, Youth and Families Needs Assessment*; 2006)

Three out of four food stamp recipients are single mothers with children under 18.

- In Shelby County families whose incomes fall below the poverty line are eligible for public assistance.
- For a family of three the Federal poverty level is \$16,600.
- The majority of food stamp recipients in Shelby County reside within the Memphis city limits.
- In the City of Memphis 76 percent of food stamp recipients are single mothers with children under 18.

Households Receiving Food Stamps in the City of Memphis, Shelby County, and Suburban Shelby County, 2005



Source: American Community Survey, 2005

- Another 16 percent of food stamp recipients in the City of Memphis are married-couple families with children under 18.
- Few residents of suburban Shelby County receive food stamps.

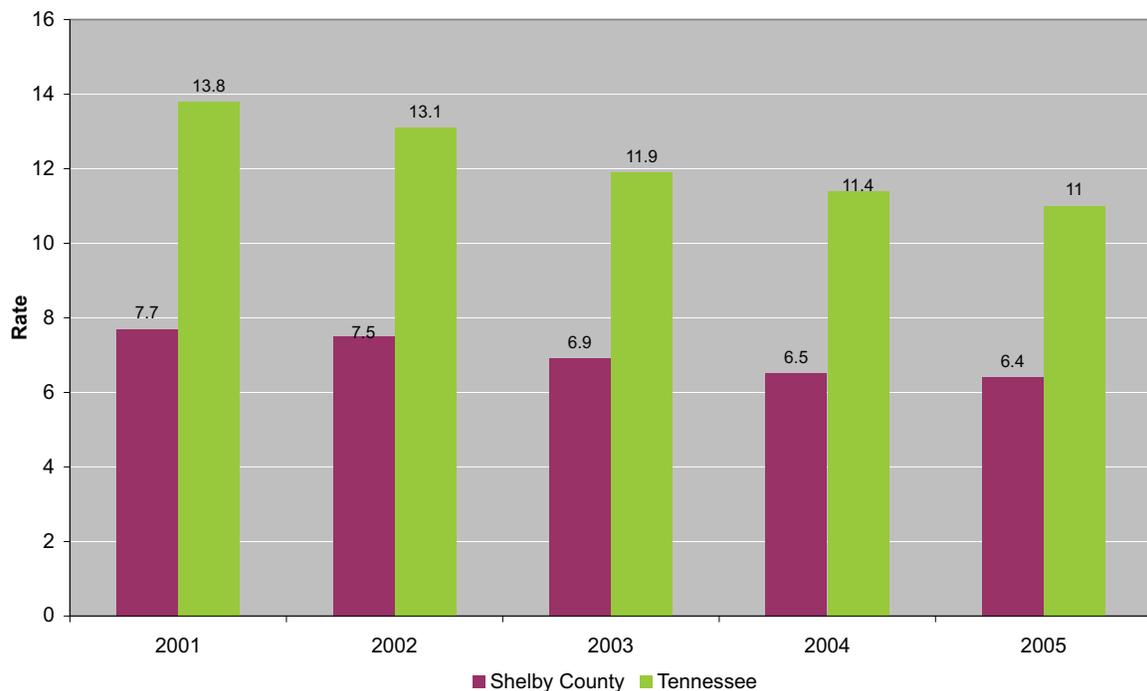
Earn Benefits is another program that benefits low-income Shelby County families. It is a program that is available through SeedCo, a workforce development intermediary organization that serves as a clearing house for low-income individuals in New York City, Baltimore, Buffalo, Atlanta and Shelby County. Residents throughout Shelby County can apply for assistance with housing, health and related expenditures pertaining to children and families.

Qualified applicants can receive assistance from Memphis, Light, Gas and Water, from Families First for health care and Transitional Child Care and for access to Early Head Start and Head Start, and WIC (Women, Infants and Children).

Marriage rate in Shelby County declining faster than state rate.

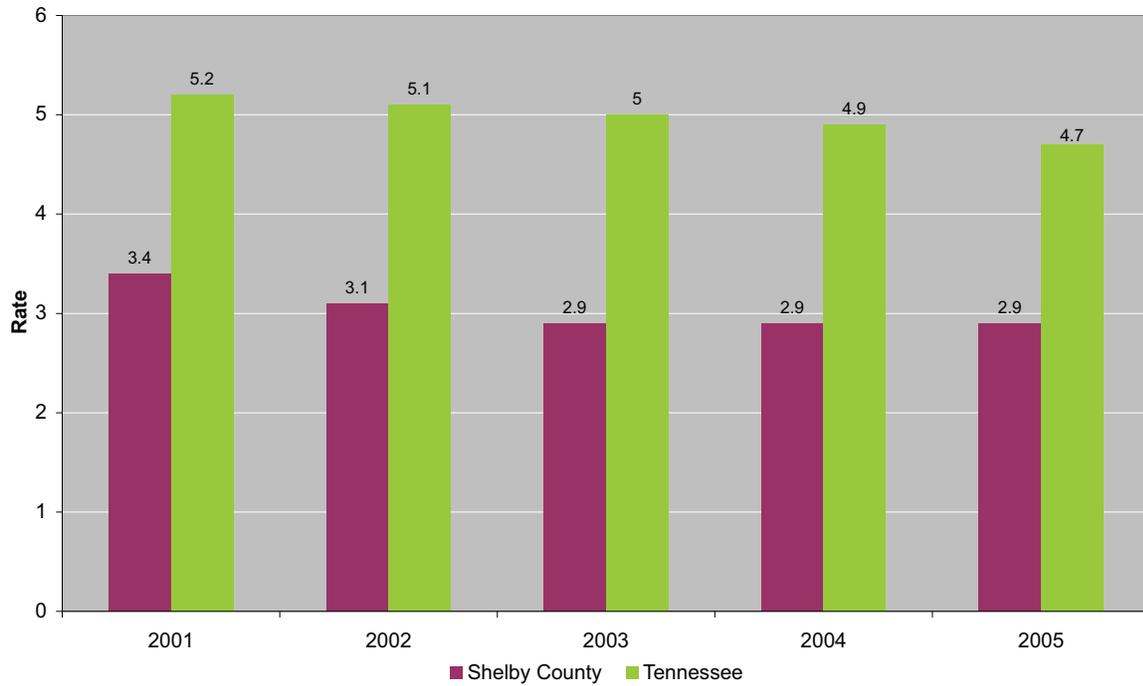
Marriage rates in Shelby County and statewide have declined steadily since 2001, but still the Tennessee rate runs consistently and substantially higher than Shelby County's marriage rate. Divorce rates in Shelby County and throughout Tennessee also have declined. The Tennessee divorce rate continues to be substantially higher than the rate in Shelby County.

Marriage Rates in Shelby County and Tennessee, 2001–2005



Source: Tennessee Department of Health

Divorce Rates in Shelby County and Tennessee, 2001–2005

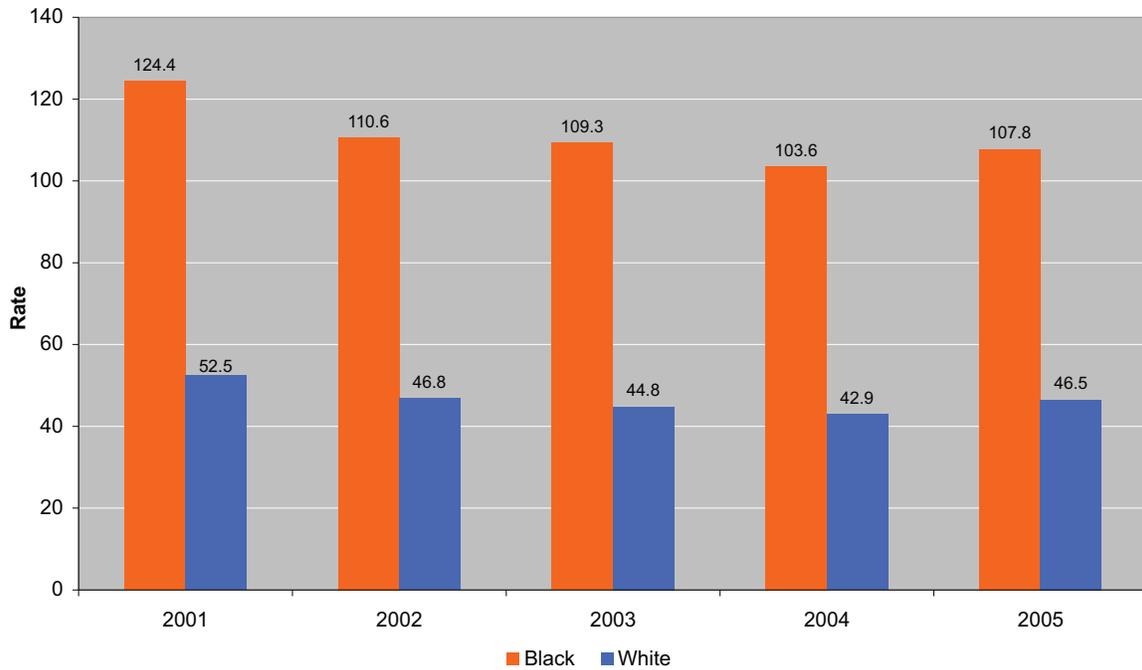


Source: Tennessee Department of Health

Decreasing rates of divorce may be one bright spot for child well-being. We know that two-parent families are likely to have higher incomes and higher levels of education and stability.

The brightest spot has been the steady decline in the rate of teenage pregnancy in Shelby County from 2001 to 2005.

Pregnancy Rates of Families Age 15–19 in Shelby County by Race & Ethnicity, 2001–2005



Source: Tennessee Department of Education

The rate of pregnancies by black teenagers aged 15-19 decreased by 12 percent, and the rate of pregnancies by white teens, 15-19 decreased by 14 percent.

Children's Educational Well-Being



Based on U.S. performance measures three out of four Tennessee students are scoring below proficient.

This domain examines educational well-being in Memphis and Shelby County from three perspectives.

1. Child development and pre-kindergarten education
2. Academic achievement and progress from kindergarten through high school
3. Educational attainment of the Memphis and Shelby County population ages 18-24

Availability, cost and quality of education for all children is assessed. Opportunities for children to arrive at school ready to learn are explored. Tennessee's *Universal Pre-Kindergarten* program is examined and compared with other *UPK* programs throughout the country.

In the second section TCAP and NAEP scores for Memphis City Schools (MCS) and Shelby County Schools (SCS) are reported for 2006. Confidence in public education in Memphis and Shelby County is examined in terms of per-pupil expenditures and enrollment in public and private schools.

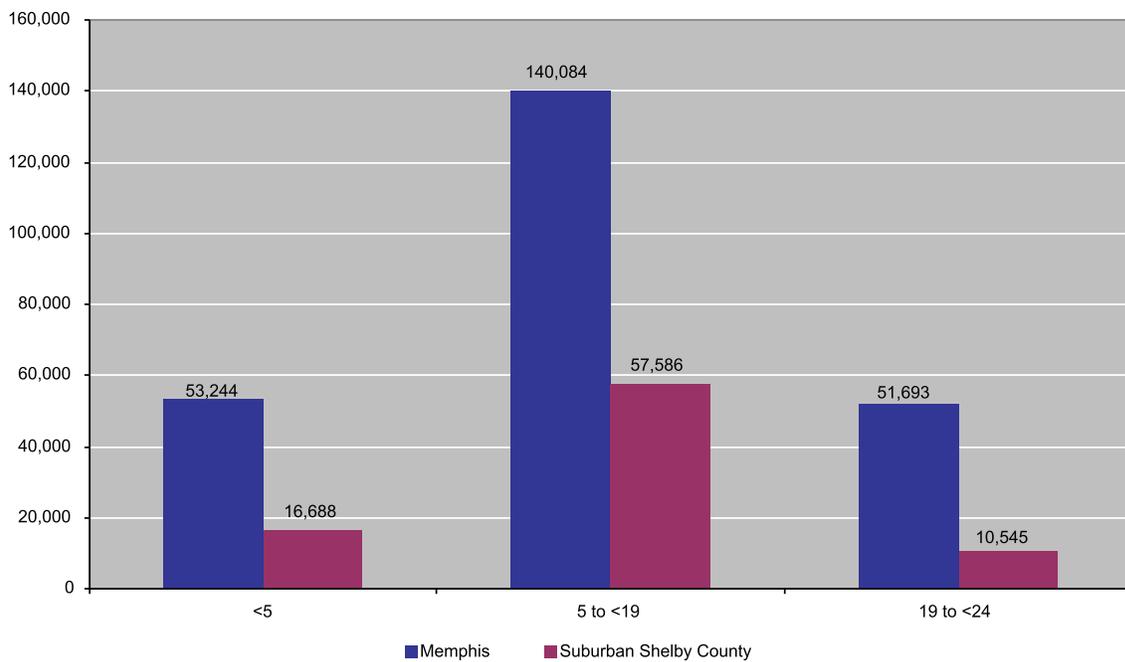
The third section is devoted to the "knowledge economy" in Memphis and the role that educational attainment plays in the lives of young adults to get and hold jobs that pay a living wage.

Overall, this chapter contains a comprehensive picture of educational opportunities for children and young adults in Memphis and Shelby County in the context of the State of Tennessee and the United States.

Who is attending public school in Memphis & Shelby County?

Before considering education in the City of Memphis and Shelby County it is important to review who is being educated. Memphis and Shelby County both have substantial populations under the age of 24. The percentage of young people in each age group in Memphis and Shelby County is nearly equal.

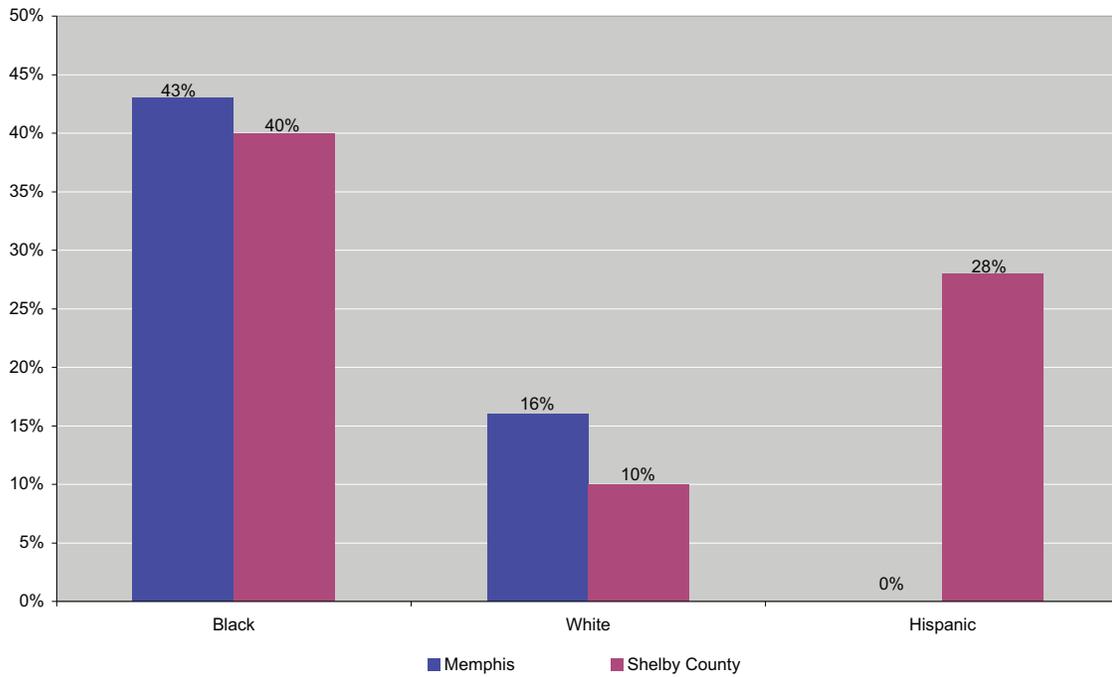
Distribution of Under-24 Population in the City of Memphis and Shelby County, 2005



Source: American Community Survey, 2005

- One in 10 is pre-kindergarten, under age 5.
- Slightly less than one-third are age 6-19, the K-12 population.
- The “knowledge economy” group, ages 19 to 24, represents 10 percent of people in Memphis and Shelby County.
- More children under age 5 live in poverty in the City of Memphis than in suburban Shelby County.

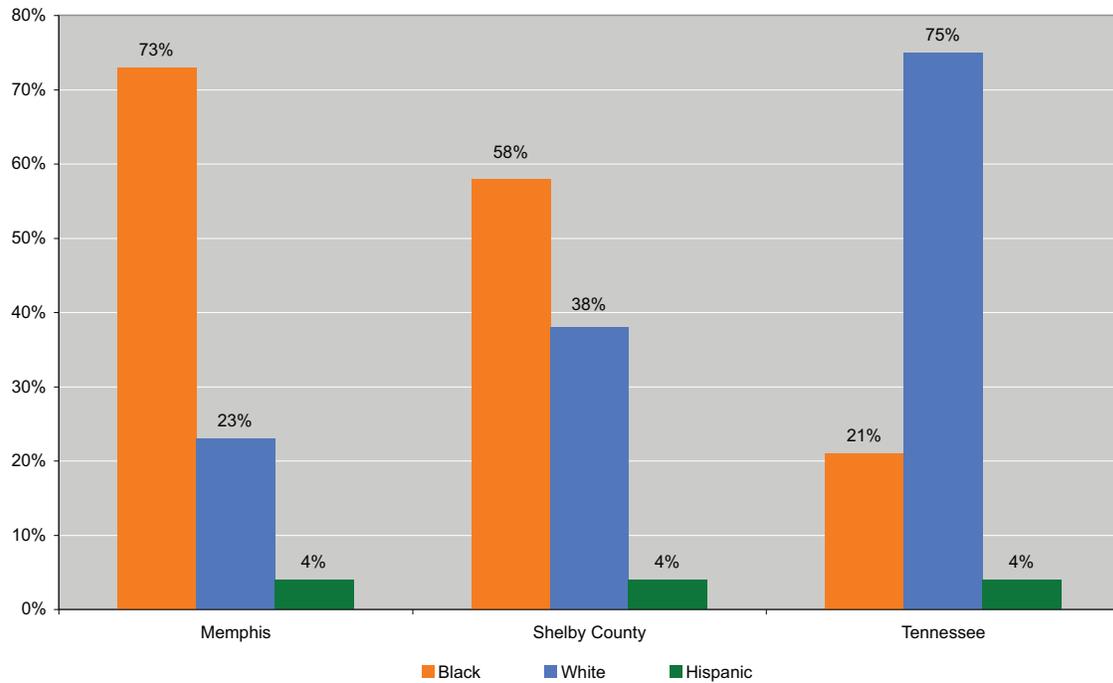
Distribution of Children Under-5 Living in Poverty by Race & Ethnicity in the City of Memphis and Shelby County, 2005



Source: American Community Survey, 2005

- Ten percent of white children under age 5 in Shelby County live in poverty, whereas 40 percent of black children under age 5 in Shelby County live in poverty.
- One in four Hispanic children in Shelby County lives in poverty. The American Community Survey does not register enough Hispanic children in the City of Memphis for a separate count.
- Seventy-five percent of children under age 5 in Memphis, and more than half of children under age 5 in Shelby County, are black.

Distribution of Children Under-5 by Race & Ethnicity in the City of Memphis, Shelby County and Tennessee, 2005



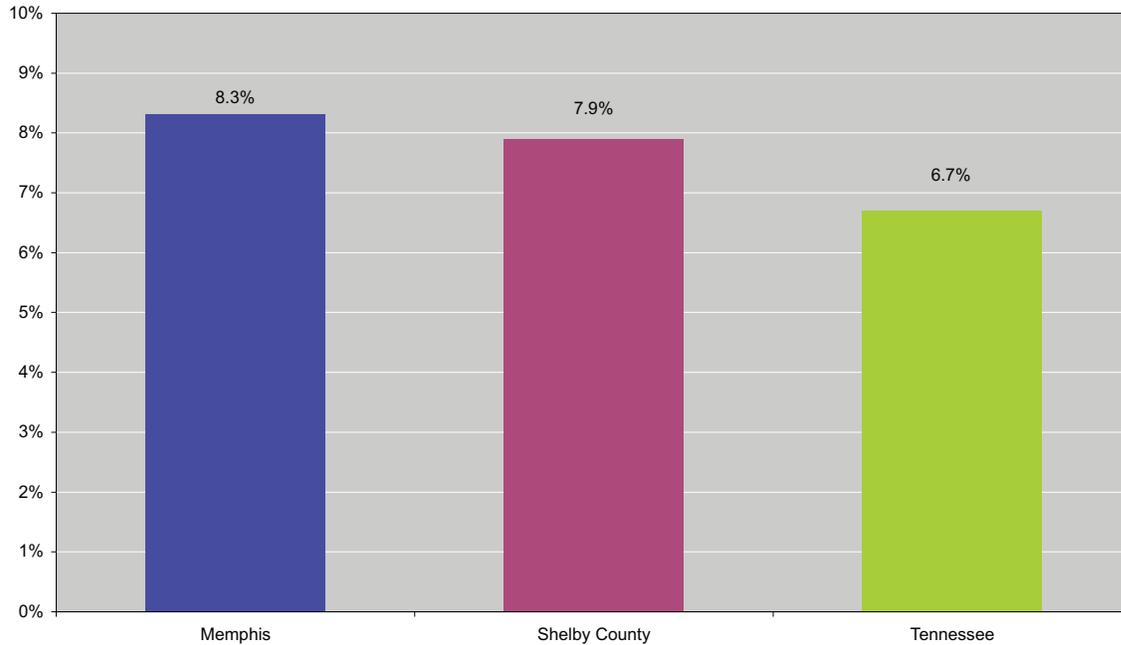
Source: American Community Survey, 2005

Child care and pre-kindergarten readiness are special challenges in Memphis & Shelby County.

- Both the City of Memphis and Shelby County have disproportionately large populations of children under age 5.
- Sixty-eight percent of births in Memphis and 52 percent in Shelby County are to unwed mothers, the majority of whom live in poverty.
- Welfare legislation enacted in 1996 requires these mothers to work, go to school or actively seek 40 hours of work per week.

Because the first years of life are so critically important, this creates a disproportionately great need for high-quality, accessible and affordable child care in both the city and county.

Children Under-5 as a Percent of Population in the City of Memphis, Shelby County and Tennessee, 2005



Source: American Community Survey, 2005

School readiness depends on a child's home life.

Children's experiences before they enter school make a great difference in their capacity to learn and thrive in an academic setting. If children are prepared unequally to attend school, they will perform unequally. The quantity and quality of words to which children are exposed have a great impact on their education.

- Children in professional families hear an average of 11 million words annually.
- Children in working class families hear an average of six million words.
- Children in welfare families hear only about three million words a year, and 80-90 percent of the words they hear are negative. (*Meaningful Differences*)

Before entering kindergarten the average cognitive score of children in the highest SES group is 60 percent higher than the average of the lowest SES group. Moreover, average math achievement is 21 percent lower for black students than for white students and 19 percent lower for Hispanics. (*Inequality at the Starting Gate*)

Governor Bredesen's plan commits Tennessee to pre-kindergarten education.

- Tennessee ranks 33rd out of 38 on the National Institute for Early Education Research's index of states that provide enough access to pre-school learning for children.
- Tennessee ranks ninth out of 10 on quality standards in place for pre-schools. This includes the requirements that pre-school teachers have bachelor's degrees and that class sizes and student-teacher ratios be small.
- The state ranks 19th out of 38 on pre-k funding, a ranking that is expected to improve as a result of the new budget. (CA Kumar 3.23.06)

The governor's universal pre-kindergarten initiative is part of a national movement toward providing quality preparatory education for 3-and-4-year-olds. This program targets primarily at-risk children and seeks to "provide (them) with the learning experiences they need in order to succeed in kindergarten."

The program is voluntary. Parents and communities can decide whether they need and want pre-kindergarten programs. The program will be available to all 4-year-olds with a priority given to at-risk children and high-priority communities. High standards that include small class size, quality curricula and teacher standards will be maintained.

An Office of Early Learning has been established to coordinate and administer the pre-k initiative, work closely with Head Start as well as local agencies and serve as the clearing house for information. The existing pilot pre-k programs will be "grandfathered" into the universal pre-k program.

All programs will be funded fully and incorporated into the Basic Education Program. (<http://www.tennessee.gov/governor/prek/activities/index.htm>)

In the City of Memphis there are 67 state-subsidized pre-k classes and seven in suburban Shelby County. Ninety-one percent (124 of 136) of school districts in Tennessee are participating in the state-funded pre-k program. (10.23.06 *Chattanooga Times Free Press*) This demonstrates the need for child care throughout the state.

Pre-kindergarten is a measurable predictor of success.

Pre-kindergarten classes offer opportunities that involve socio-emotions, language, physical development, literacy preparation and engagement in math, science, social studies and creative arts. The development and encouragement of these skills is particularly important for at-risk children. Research, such as that by Hart and Risley (*Meaningful Differences*), shows that children from different socio-economic classes enter kindergarten with very different skills and levels of preparation. At-risk children also begin school 18-24 months behind their more advantaged peers. (Hart&Risley)

Data collected from four segments of children show the difference that pre-kindergarten makes in the lives of less-advantaged children. The study follows three groups of children per segment:

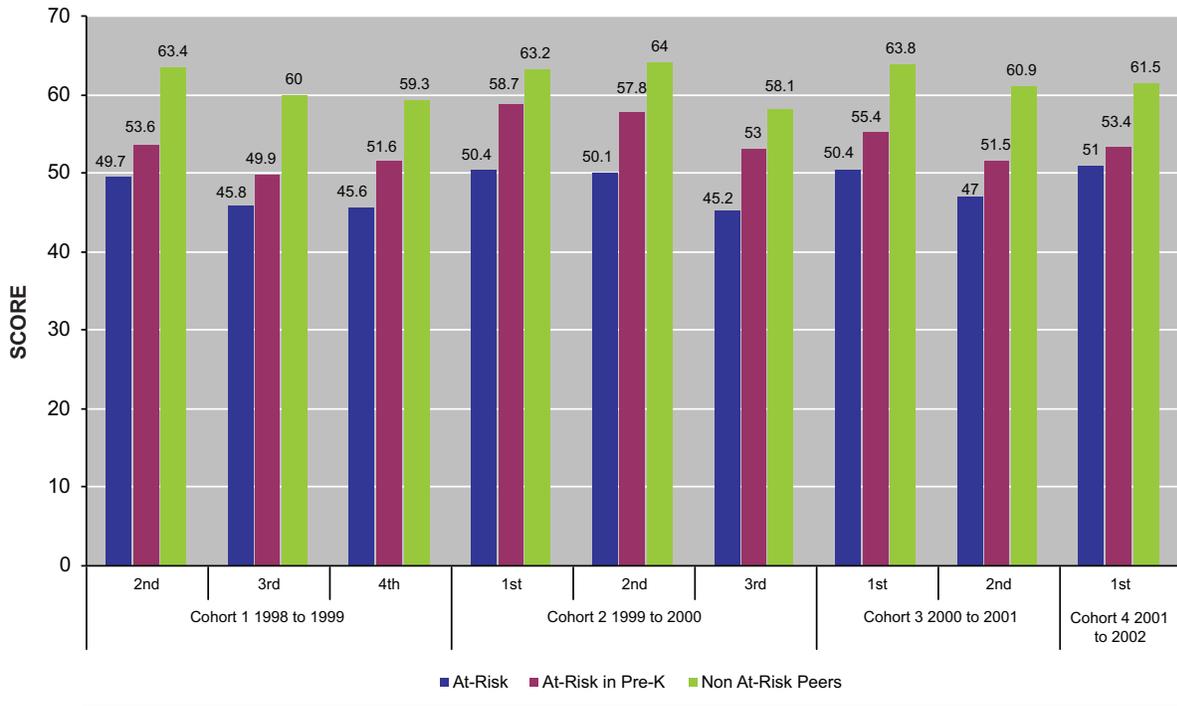
- At-risk with no pre-kindergarten
- At-risk in pre-kindergarten
- Not-at-risk peers

For each segment in every grade, the at-risk group without pre-kindergarten preparation scored the lowest. The at-risk group with pre-kindergarten scored higher, and the not-at-risk children scored the highest. (*Tennessee pre-kindergarten longitudinal data, 1998-2002*)

While all students' scores taper off each year that they are tested, it is clear that the at-risk group that receives pre-kindergarten instruction makes and maintains progress above the at-risk group without pre-k.

According to a report released by the Center for Economic Development in June 2006 (*The Economic Promise of Investing in High-Quality Preschool: Using Early Education to Improve Economic Growth and the Fiscal Sustainability of States and the Nation*), investing in "high-quality pre-kindergarten programs (and) implementing pre-school programs for all students whose par-

Achievement by Risk Category of Pre-Kindergarten Children in Tennessee, 1998-2002



Source: Tennessee Department of Education

ents want them to participate (will generate) significant public and private benefits, producing \$2 to \$4 in net present-value benefits for every dollar invested, having a positive impact on state budgets and boosting long-term economic growth.”

Long-term evaluations of early education programs such as *High/Scope Perry Preschool Program*, *Abecedarian* program and *Chicago Child-Parent Centers* have shown tremendous and far-reaching societal benefits that extend far beyond individual gains. These include:

- Overall higher academic achievement
- Fewer grade repetitions
- The necessity for fewer special education classes
- Increased likelihood of high school graduation and college enrollment
- Decreased juvenile crime
- Decreased likelihood of child-neglect and abuse
- Increased participation in the workforce and higher overall wages
- Decreased likelihood of being dependent on public assistance or becoming teenage parents

The implications for children in Memphis are profound. One in four (26%) children under age 5 lives in a low-income family. Another 19 percent live in poverty. An additional 17 percent live in dire poverty. The opportunity for advancing Memphians’ educational potential from a young age is tremendous.

Children in Memphis have the most to gain from universal pre-kindergarten education because at-risk children are overwhelmingly the target audience for this program.

Tennessee pre-kindergarten budget increased 80 percent to \$55 million.

In 2005, the Tennessee pre-k budget was \$25 million, which covered 300 new pre-k classrooms serving approximately 6,000 students.

This year an additional \$20 million was authorized, reaching a total of 673 classes statewide that serve 13,500 students. The total amount allocated for Tennessee’s Universal Pre-Kindergarten program in 2006-2007 is \$45 million, or \$3,333 per child.

Nationwide enrollment in pre-school programs has increased by 16 percent since 2002.

Child care is big business in Memphis & Shelby County.

According to the 2004 report, *The Economic Impact of the Child Care Industry in Shelby County, TN*, “Child care services are a significant segment of the overall Shelby County economy. When child care expenditures are calculated to include related indirect and induced expenditures, they account for one-and-one-half percent of the Shelby County gross product.” The con-

Funding for Universal Pre-Kindergarten, 1998–2007

SCHOOL YEAR	FUNDING	NUMBER OF CLASSES	NUMBER OF CHILDREN
1998-1989	\$3 million (state)	30	600
2000-2001	\$6 million (state) \$9 million (TANF) added in January	60 90 added mid-year	1,200 1,800 added mid-year
2003-2004	\$10 million (state) TANF funding ended	147	2,500
2005-2006	\$10 million (state) \$25 million (lottery)	146 pilot classes 300 pre-K for all classes	8,900
2006-2007	\$55 million (state) added additional \$20 million)	673	13,500

Source: Tennessee Department of Education, March 2006 Presentation to Senate Education Committee; Commercial Appeal, July 14, 2006

tribution of child care services is about equal to the Hotels and Lodging (1.32%) and Amusement sectors (1.85%).

Moreover, the report states that, “The child care sector will continue to grow in Shelby County as the percentage of the population under 17 years of age is expected to grow.” The population growth is due, in large part, to high birth rates among the black and Hispanic populations.

The increased state funding for pre-kindergarten classes also will increase employment in this sector of the economy. The aforementioned 1996 welfare reforms, the need for child care spaces in classrooms, as well as for staff, and Federal and state subsidies to fund the programs have resulted in an explosion of the child care business locally.

Quoting a 1999 article from the *Memphis Flyer*, *Who's Watching the Kids?*, “A series of controversies -including two deaths - has shattered confidence in Memphis day care centers,” included the following: “Day care is a booming, lucrative industry in Memphis. In the past 20 years, the number has increased from about 40 to over 800. Most of that growth occurred in the past six years, thanks in part to Governor Don Sundquist's initiative, *Families First*, a program that provides day-care assistance for welfare recipients as they enter the workforce.”

Tennessee rates child-care centers on three different levels.

Tennessee has implemented a rating system to measure the levels of care given to children in centers across the state and is in the process of creating more rigorous standards.



One-Star Center

- Director has a high school diploma and minimum of five years relevant experience.
- All staff members have high school diplomas and at least 10 percent have 30 hours of training.
- Staff members have had no probation within the last year and no more than five minor civil penalties.
- A bulletin board for parent communication and one annual parent group meeting are required.
- Small classroom sizes and low teacher-to-student ratios
- Minimum pay scale for teachers plus two benefits from a list of 11 items
- Assessment by observation



Two-Star Center

- Director has a high school diploma and minimum eight years experience.
- All staff members have high school diplomas and *25 percent have three years experience and 30 hours training or are enrolled in associates program.*
- No probation within previous year and no more than *four* minor civil penalties
- A bulletin board for parent communication, one annual parent group meeting, *one quarterly newsletter and one parent/teacher/child conference per year* are required.
- Smaller class sizes and lower teacher-to-student ratios
- Minimum pay scale for teachers plus *three* of 11 benefits

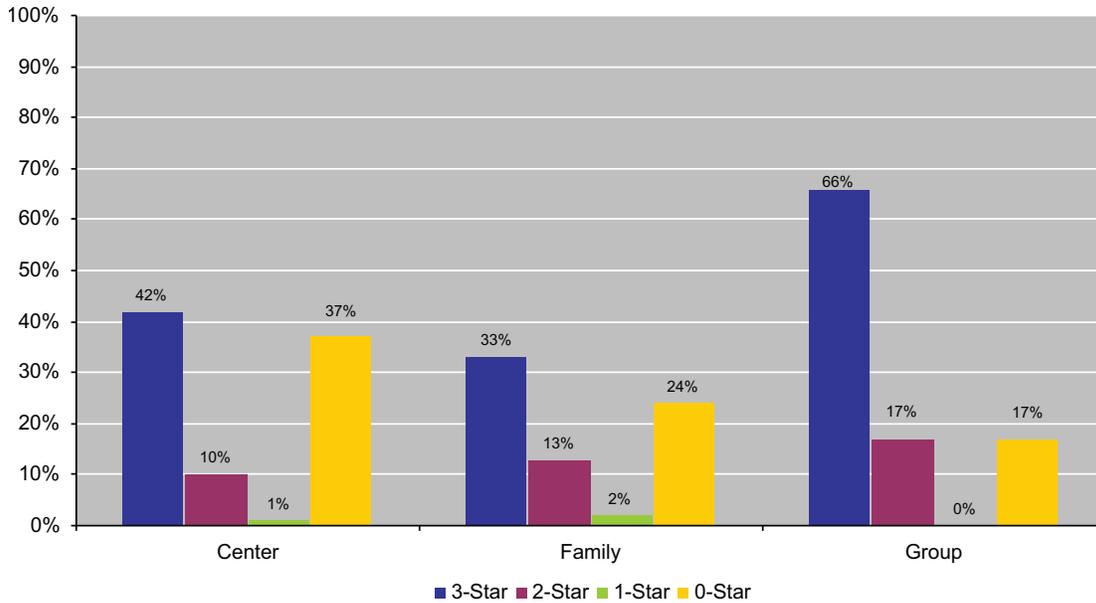


Three-Star Center

- Director has a high school diploma, *20 hours of training annually, seven years experience in child development, associate's degree in child development or a relevant area or a bachelor's degree or above in child development or relevant area.*
- All staff members must have high school or GED diploma and *six hours of training annually.*
- *Half of staff members must have four years experience or three years experience and two years of documented enrollment in child care development training or one year of experience and an associate degree or above in a related area.*
- *Written plan for staff turnover and absences*
- No probation for one year and *no suspensions*
- Bulletin board for parent communication, one parent group meeting per year and one parent/teacher/child conference per year
- *Monthly newsletter to parents*
- *One family workshop annually*
- Establish and maintain parent advisory council.

Only about one-third of child-care centers in Shelby County have earned a three-star rating.

Tennessee Rating of Child Care in Shelby County by Type of Care Provider, 2006



Source: Tennessee Department of Human Service Child Care Licensing

Due to the higher cost of three-star centers most children cannot afford to attend, even with subsidies. While most Shelby County children in local day-care centers would benefit from the higher quality care in three-star centers, they are the least likely to be enrolled therein.

Center-Based Care: Twenty percent of *center-based* child-care centers in Shelby County have a three-star rating. Another 10 percent have a two-star rating, slightly more than one-third are below a one-star rating and 10 percent of centers are not yet rated.

Family-Based Care: One in three *family-based* child-care centers in Shelby County has a three-star rating. One in four is below a one-star rating.

Group-Based Care: Two in three *group-based* child-care centers in Shelby County have three-star ratings. Seventeen percent have two-star rating, and another 17 percent are below a one-star rating.

The status of children in child care in Shelby County.

- Statewide there is enough capacity for 80 percent of pre-k-age children to participate in center-based, family-based or group-based care.
- In Shelby County there are nearly 70,000 children under age 5, and there are 1,066 location-based child-care centers.

- Of the 12,000 4-year-olds in Shelby County, only seven percent have been enrolled in pre-k classrooms. Another 86 percent are enrolled in licensed child care. The remaining are in the care of relatives or unregulated care.
- Of 7,400 3-year-old “certificate-children” in Shelby County, 11 percent are enrolled in *Head Start*, and 84 percent are enrolled in child-care centers.
- There is a total capacity of 114,000 child-care-licensed spaces in Shelby County. More than half (58%) of the spaces are dedicated to children in the *Families First* certificate program.
- Twenty-two-thousand children of *Families First*, *Transitional Families First* and/or at-risk families are eligible for child care subsidies.
- Forty-seven percent of all 3-and-4-year-olds in Shelby County are enrolled in pre-school. About half (47.7%) are enrolled in public facilities and half (52.4%) in private (AECF 2000).

National accreditation exists also for child-care centers.

Another measure of quality in child care centers is **NAEYC** accreditation. *The National Association for the Education of Young Children* gives accreditation to centers that meet the following 10 standards. Key subjects are in bold.

1. Provide positive **relationships** among all children and adults to encourage each child’s sense of individual worth and belonging as a part of a community.
2. Implement a **curriculum** consistent with its goals for children, and promote social, emotional, physical, language and cognitive learning and development.
3. Use developmentally, culturally and linguistically appropriate and effective **teaching** approaches.
4. **Assess children’s learning and development** by ongoing, systematic, formal and informal approaches.
5. Promote the nutrition and **health** of children, and protect children and staff from illness and injury.
6. Employ and support a **teaching staff** with the educational qualifications, knowledge and professional commitment necessary to promote learning and development across the diverse needs of children.
7. Establish and maintain collaborative relationships with each **child’s family** to foster children’s development in all settings.
8. Establish relationships with, and use the **resources** of, the children’s **communities**.
9. Maintain a safe and healthful environment that provides appropriate and properly maintained indoor and outdoor **physical environments**.
10. Implement policies, procedures and systems that support stable staff and strong personnel, fiscal and program **management**. (Source: <http://www.naeyc.org/academy/standards/>)
 - Forty-one centers (4%) in Shelby County are NAEYC-accredited.
 - The demand for quality child care in Shelby County exceeds the availability of open spaces for children in pre-k classrooms.

Financial options for child care in Shelby County.

Families needing assistance with the cost of child care have several options in Tennessee:

- *Families First* (FF) requires no payment by families. Eligibility is based on the program's guidelines.
- Working families on *FF* are eligible for Transitional Child Care Assistance and meet a co-pay requirement based on a sliding income scale.
- At-Risk Child Care is available for families leaving the Transitional Child Care Assistance program. A fee is based on a sliding income scale.
- At-Risk Child Only assistance is available for children living with a care-giver, other than the child's parents, who is eligible for assistance.
- Teen Child Care Assistance is available for mothers who are enrolled in high school or middle school and who must stay in school in order to receive child-care assistance. Parents or grandparents must co-pay an amount based on a sliding income scale.

Extreme Shelby County poverty increases the need for child care.

- According to the Federal government, the poverty level for a family of three in 2006 was \$16,600 per year.
- Twenty-eight percent of children under age 5 in Shelby County live in poverty, and in the City of Memphis 36 percent of children under age 5 live in poverty.
- A significantly greater percentage of black children (43%) than white children (16%) in Memphis live in poverty.
- According to the *National Center for Children in Poverty*, "Research consistently shows that, on average, families need an income of about twice the Federal poverty level to make ends meet," or roughly \$33,200 per year.
- In 2005 51 percent of Memphians earned less than \$35,000 a year, and more than one in four families (29%) lived below the poverty line of \$16,000 per year.

Established in 1964, Federal poverty guidelines state that the average family should spend roughly one-third of household income on housing, one-third on food and one-third on everything else. According to the National Association of Child Care Resource and Referral Agencies, low-income Tennesseans spend about \$200 more toward average child-care payments than their monthly rent.

"In Tennessee a family of three with one infant and one pre-school child pays a median monthly rent of \$564, while their average monthly child-care costs at a licensed child-care center are \$761." (*Nashville City Paper*, February 6, 2006)

Federal poverty guidelines and child care costs are unrealistic.

Scenario 1: *Mary and Joe are married with one child, Billy (age 2). Their combined annual income is \$59,000, the median family income of a married parent family with children for Memphians. Mary's and Joe's combined annual income makes them ineligible for child care subsidies.*

- The average, unsubsidized yearly cost for Billy's child care is \$103 per week, \$5,355 a year. This is 16 percent of Mary and Joe's gross income.
- The average weekly cost of a three-Star-or-NAEYC-accredited child care center for Billy is \$191 per week, \$9,932 a year. This is nearly one-sixth (17%) of Mary and Joe's gross income.
- Based on the Federal poverty guidelines, if Mary and Joe enroll Billy in the highest quality of child care, they would spend one-sixth of their annual income on child care, half the amount that the guidelines state should be allocated for *all other* family expenses except food and housing.

Scenario 2: *Megan is a single mother of two, Michelle, age 5, and Michael, age 3. Megan has an annual income of \$18,000, the average annual income for single mothers in Memphis.*

- The average, unsubsidized yearly cost of child care is \$103 per week per child, or \$10,710 per year for two children. Unsubsidized child care is the equivalent of nearly two-thirds (60%) of Megan's income.
- The average weekly cost of a three-star-or-NAEYC-accredited child care center for both children is \$285 per week, or \$14,768 annually. The highest quality of child care for two children would cost Megan 82 percent of her annual salary.
- The weekly cost of *subsidized* child care for two children is \$33 per week, or \$1,716 annually, only nine percent of Megan's salary.
- The only way that Megan falls within the Federal poverty level guidelines for budgeting (one-third on housing, one-third on food, one-third on everything else) is if her children are in subsidized child care.

***Families First* is a good but limited program.**

As of June, 2006 more than 20,000 children in Shelby County were enrolled in subsidized child care. Seventy percent of these children were enrolled in child care subsidized through *Families First*, and an additional 22 percent were funded by *Transitional Families First* benefits.

Families receiving benefits through *Families First* are eligible for an uninterrupted 18 months plus an additional 18 months of *Transitional Families First* child care coverage when summary benefits for the family end. Most families, however, do not receive benefits for a continuous 18

months, and there is a mandatory three-month interim period between sequences of coverage. There is a lifetime limit of 60 months total for receiving *Families First* benefits.

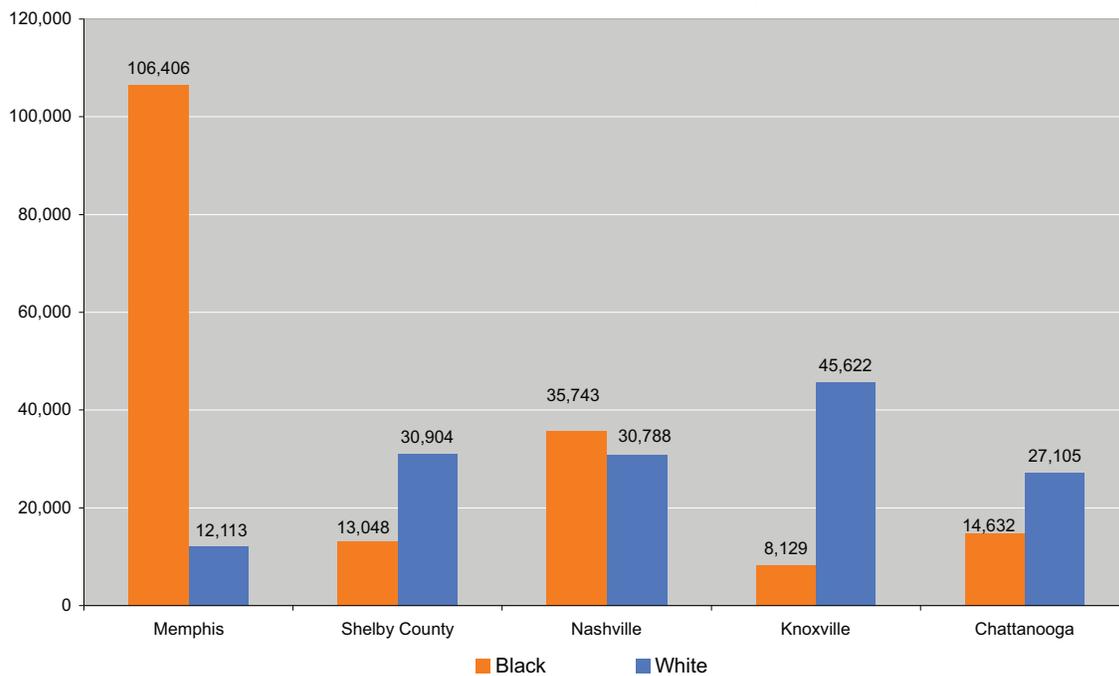
Additionally, low-income, working families may be able to receive assistance by placing their names on a waiting list. However, due to budget shortfalls, growing numbers of families on Families First and an increasing number of names on the waiting list, it is closed indefinitely to additions.

Memphis City Schools is the 21st largest school district in America.

Children enter the educational system from a variety of backgrounds. Social, economic and cultural influences have an impact on the educational success of children. Furthermore, educational success has a major impact on children's development and life chances. Cumulatively, these variables have a major impact on the economic and social progress of the community.

- One in five of Tennessee's children lives in Shelby County.
- Memphis City Schools (MCS) district is the largest in Tennessee and the 21st largest in the nation.

Distribution of Public School Enrollment by Race, 2006



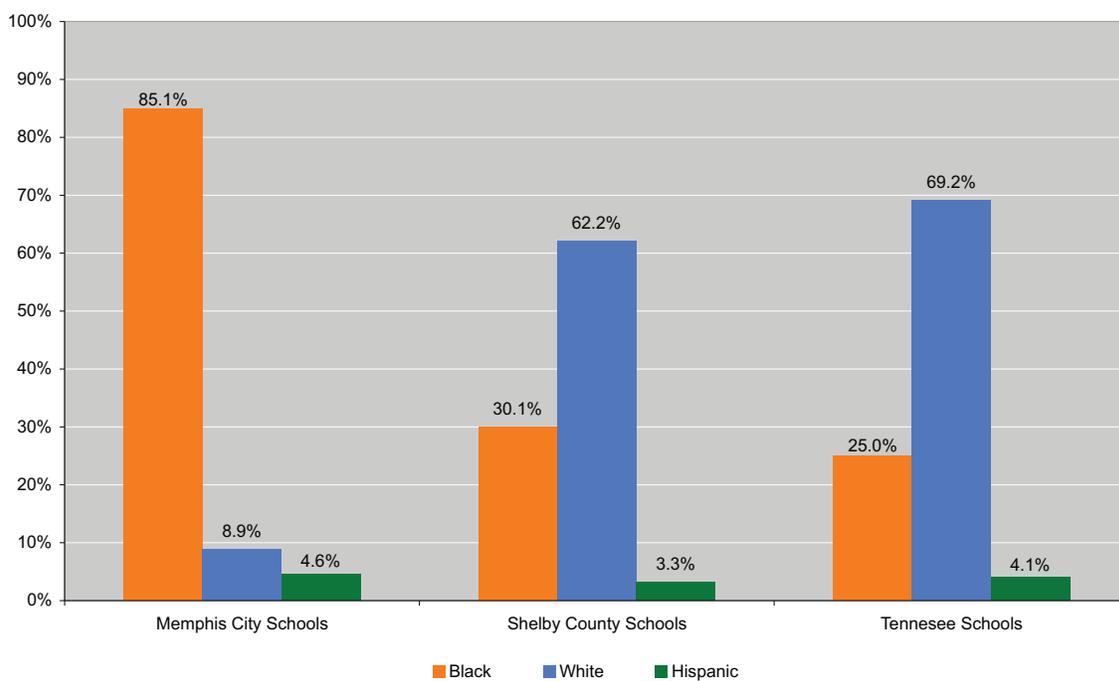
Source: Tennessee Department of Education

- Memphis serves more minority students than any other district in Tennessee.
- Nearly 20 percent of the population in Shelby County is aged 5-17, the school-age population.
- MCS serves 116,000 students in 112 elementary, 25 middle and 31 high schools.
- By comparison, Shelby County Schools (SCS) serves about 45,000 students in 28 elementary, 13 middle and seven high schools.

MCS has the greatest number of at-risk students.

- Eighty percent of MCS students are black, 10 percent are white, and less than 10 percent are Hispanic.

Percent of Student Population by Race & Ethnicity. 2006

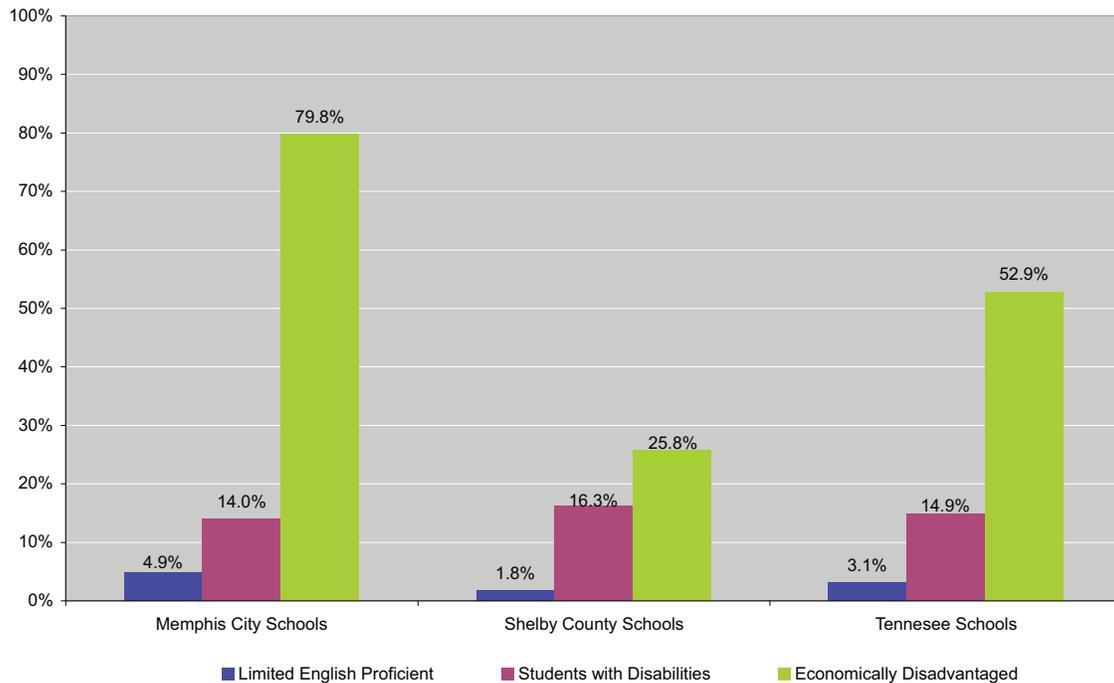


Source: Tennessee Department of Education

- One-third of SCS students are black, about two-thirds are white, and a small percentage is Hispanic.
- Across Tennessee, one-fourth of students are black, two-thirds of students are white and a small percentage is Hispanic.
- Low socio-economic status has more impact on knowledge than factors such as race, ethnicity, home reading and family educational expectations. (*Economic Policy Institute 2002*)

- Eighty percent of students in MCS come from economically disadvantaged families.

Percent of Student Population by Risk Category, 2006



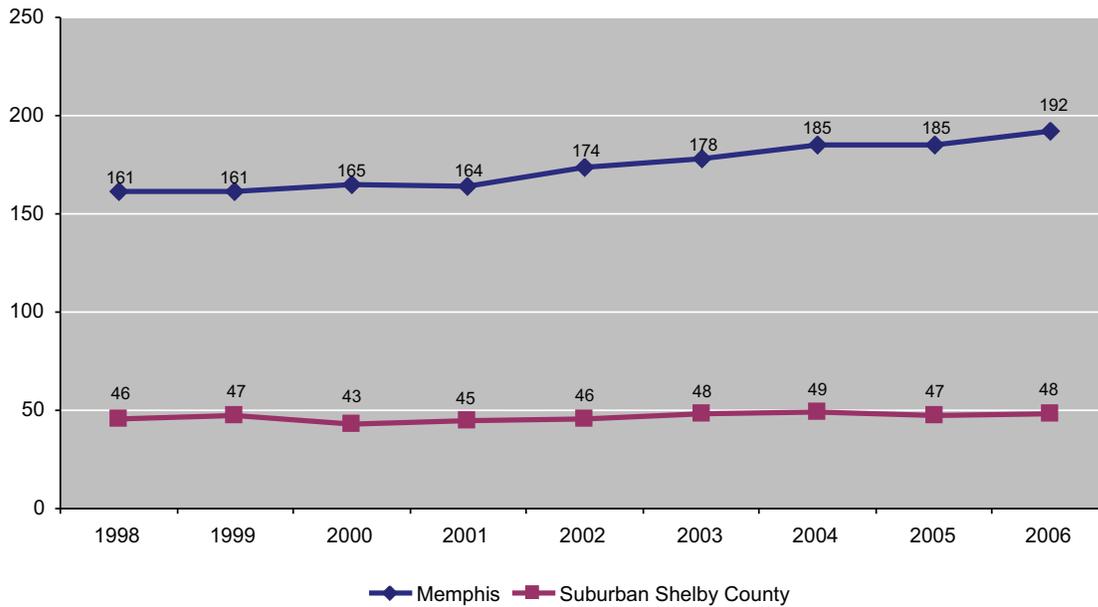
Source: Tennessee Report Card

- In 94 percent of MCS schools the majority of students are from low-income families. In 75 percent of the schools at least 75 percent of students come from low-income families.
- Only about 25 percent of students in suburban Shelby County come from economically disadvantaged families.
- Half of all students (52.9%) in Tennessee come from economically disadvantaged families.
- In 2000 nearly 60 percent of white children in the City of Memphis and 95 percent of black children attended MCS. Six years later, the number of white students has changed significantly. By 2006 97 percent of black children aged 5-17 still attended public schools, but less than half (49%) of white children aged 5-17 were enrolled in MCS. (2006 MCS, 2005 ACS)
- Nationwide 85 percent of 5-17-year-olds attend public schools.

The SCS trend of white student flight is repeating the MCS pattern of the '60s.

- In the 10 years from 1996 to 2006 student enrollment has increased seven percent in SCS and 17 percent in MCS.

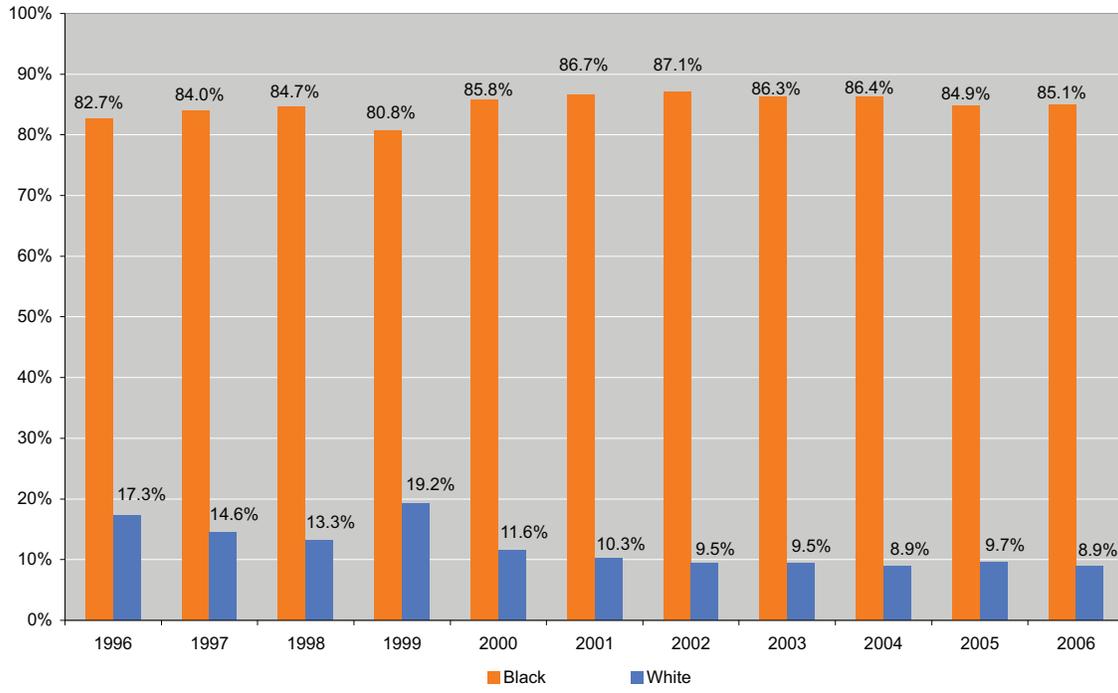
Number of Schools in the City of Memphis and Suburban Shelby County, 1998–2006



Source: Tennessee Report Card 1998 - 2006

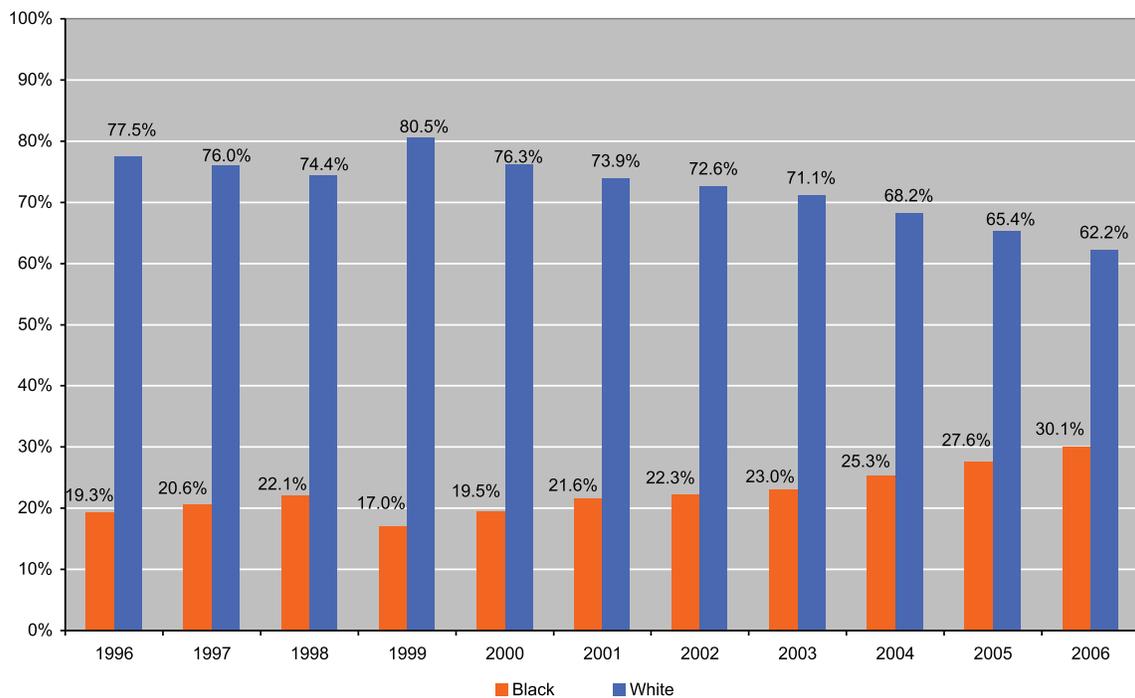
- The percentage of white students in MCS decreased by 49 percent and in SCS by 40 percent. The black student number in MCS increased by three percent and by 36 percent in SCS.
- Thus, the substantial gap between the overwhelming number of black students and small number of white students in MCS continues and is widening. The overwhelming majority of white students that existed in SCS for decades no longer exists, and if the current county trend continues, the racial mix in SCS will approximate that in MCS.
- School districts with a substantial percentage of low-income students spend, on average, 40 percent more per-student than other districts.
- MCS spends approximately \$3,500 more per student than the national average.

Distribution of Students by Race in Memphis City Schools, 1996–2006



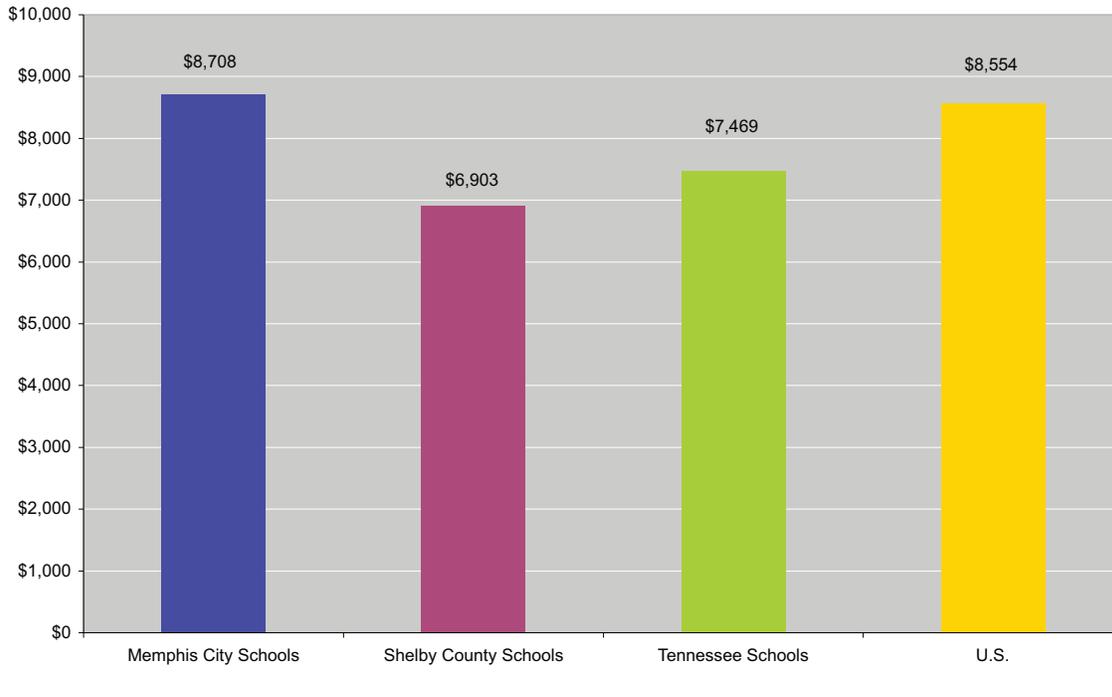
Source: Tennessee Report Card

Distribution of Students by Race in Shelby County Schools, 1996–2006



Source: Tennessee Report Card

Per-Pupil Expenditures, 2006



Source: Tennessee Report Card

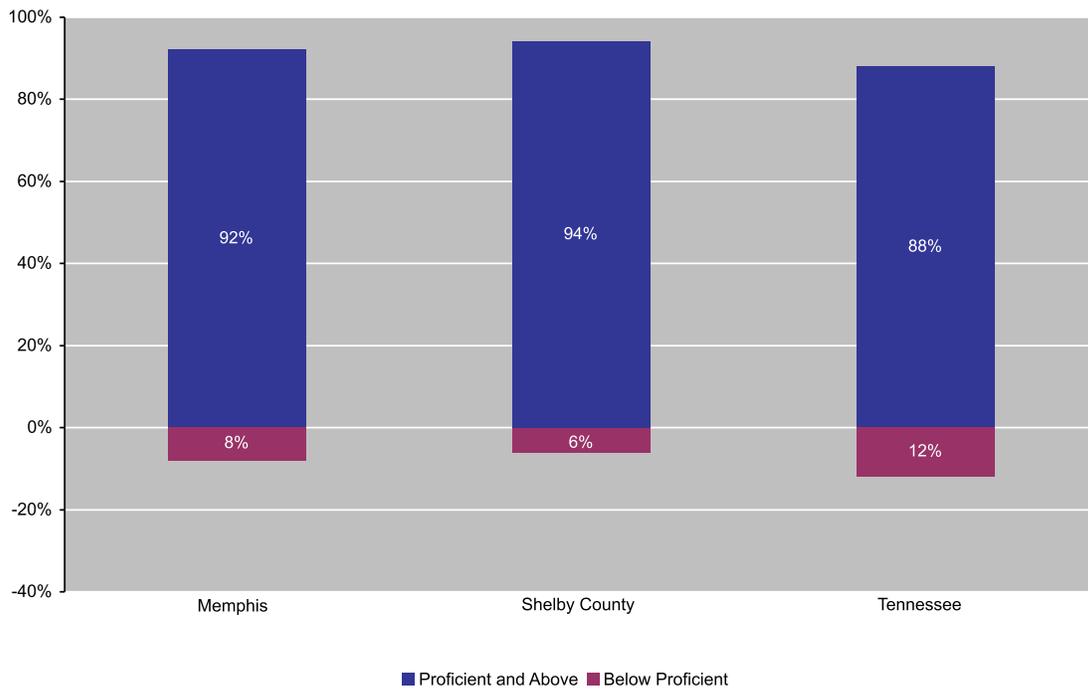
SCS and schools throughout Tennessee spend less than the national average per-student. Although per-pupil spending varies widely in the U.S. local school funding is determined, in large part, by property taxes. Districts with higher property taxes spend more per student, so there is a socio-economic bias embedded in school spending.

- The number of MCS schools in good standing with the State of Tennessee increased by 10 percent (103 to 114) from 2005 to 2007. The number on the “high priority” list decreased by one-third (57 to 36). To be removed from the “high priority” list schools must make what is defined as, “Adequate Yearly Progress” for two consecutive years.
- From 2005 to 2007 the number of so-called “target schools” increased by 46 percent (24 to 35).

Reading is a good measure of educational achievement.

MCS students perform at about the same TCAP reading level as the average of students statewide, and in the other three metropolitan areas of Tennessee, Nashville (Davidson County), Knoxville (Knox County) and Chattanooga (Hamilton County). SCS students perform slightly above the state average.

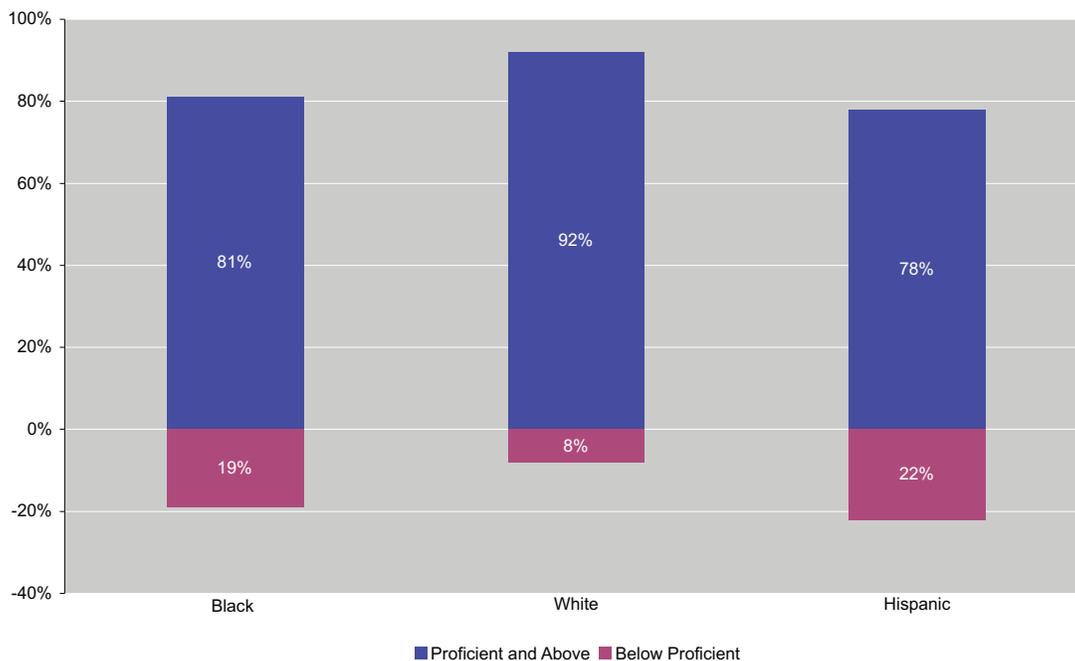
Reading TCAP Performance, 2006



Source: Tennessee Report Card

Average TCAP Reading scores for black students fall below those of white students in MCS, and scores for Hispanic students are lower than both.

Reading TCAP Performance by Race & Ethnicity in MCS, 2006



Source: Tennessee Report Card

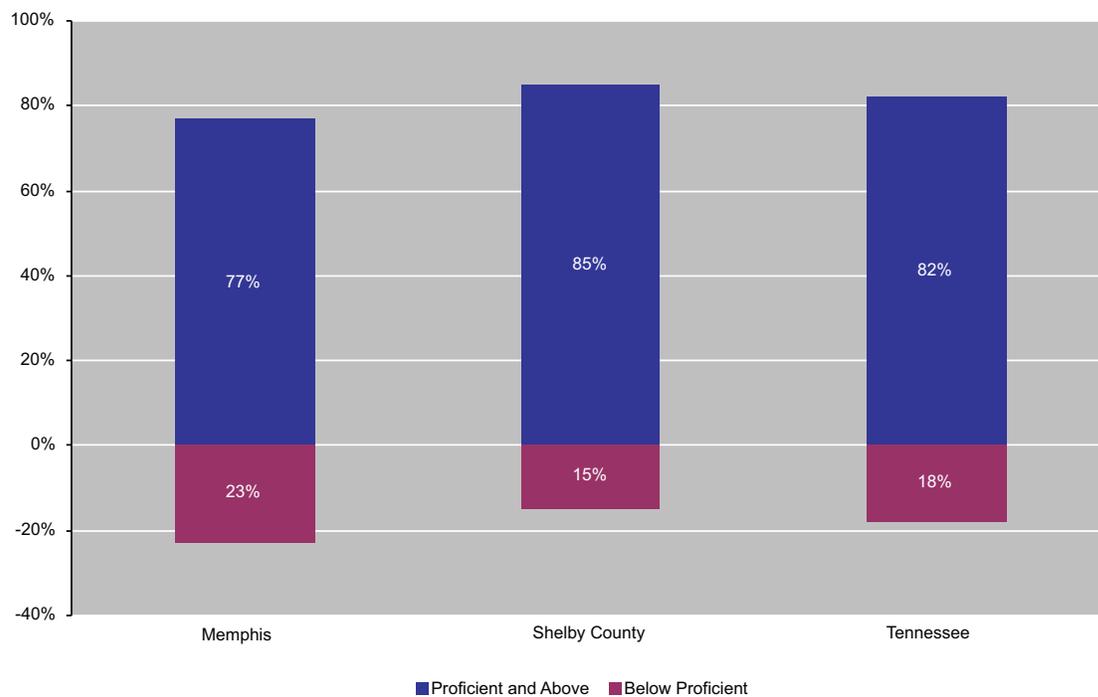
High-risk students are a challenge.

Reading scores are reported for three student risk-groups, students that are economically disadvantaged, have disabilities and/or limited English proficiency.

All three risk-groups score below the reading average of other students. Family income and economic well-being is the strongest predictor of student achievement, and the majority of MCS students are economically disadvantaged.

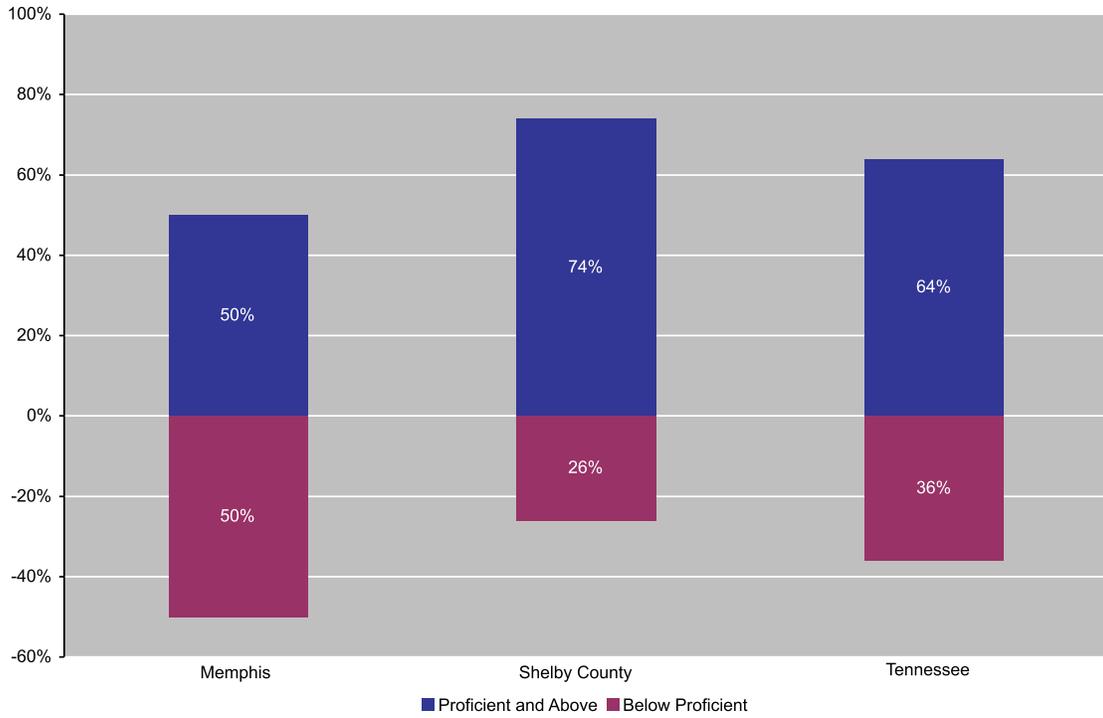
Economic circumstances and the growing number of Hispanic students in both MCS and SCS are major challenges.

TCAP Reading Proficiency by Economically Disadvantaged Students, 2006



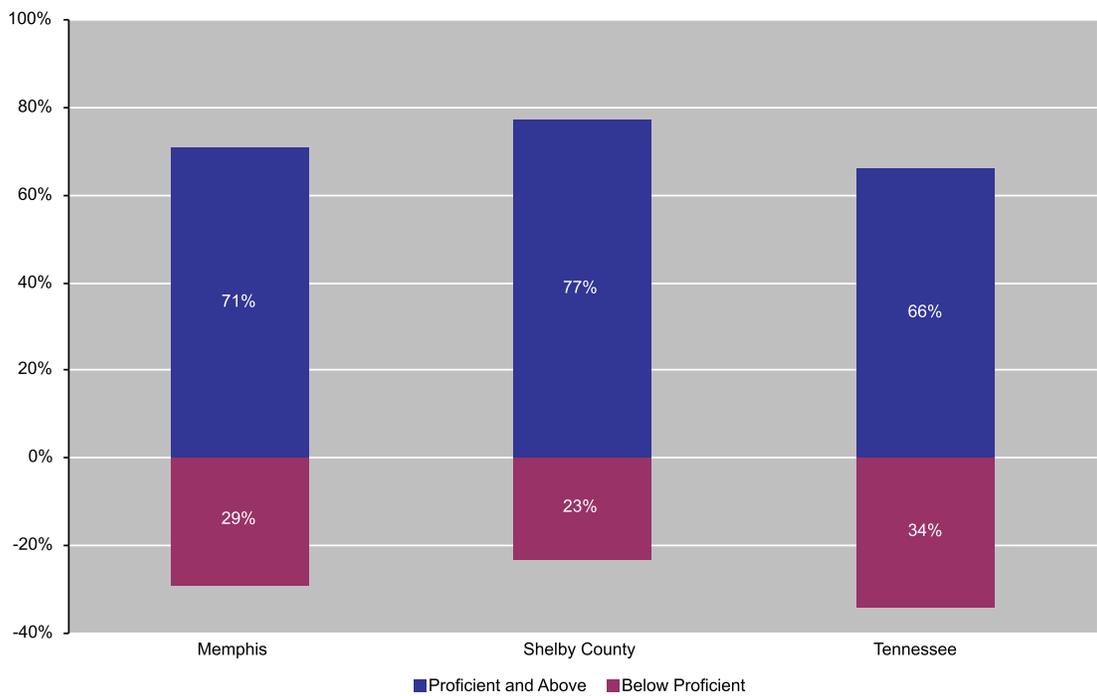
Source: Tennessee Report Card

Reading TCAP Performance by Students with Disabilities, 2006



Source: Tennessee Report Card

Reading TCAP Performance by Students with Limited English Proficiency, 2006

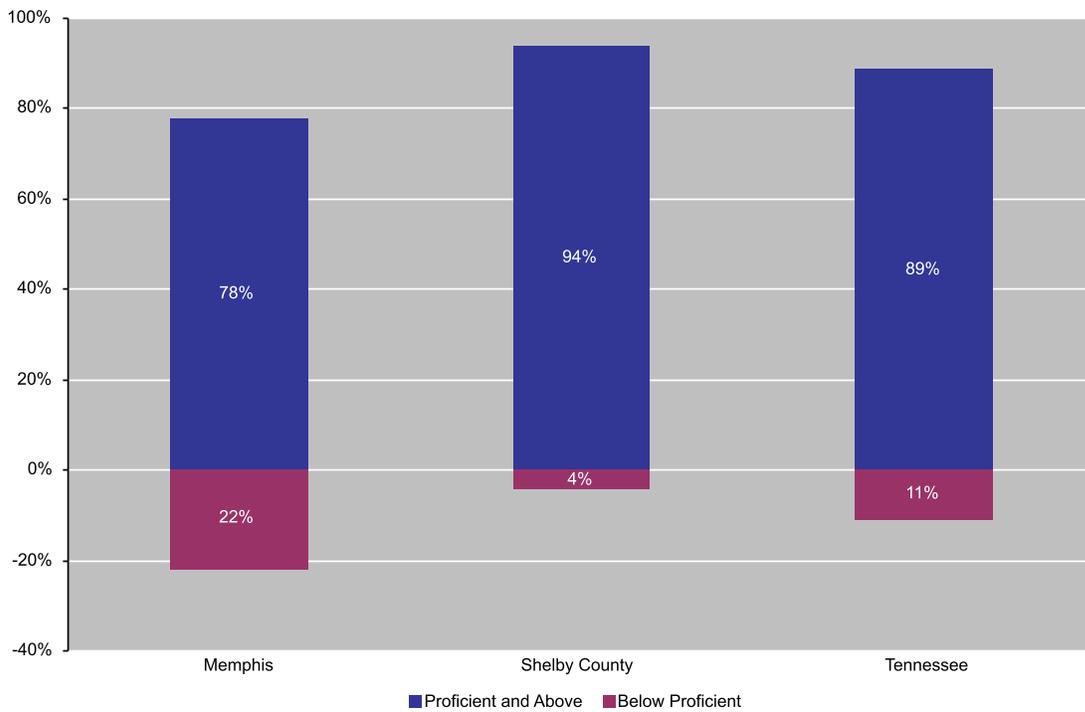


Source: Tennessee Report Card

MCS math scores remain below, SCS scores well above, state average.

- The gap between average MCS scores and average statewide scores is larger in math than in reading. While MCS students read on a par with students across the state, they score significantly below the state average in Math.
- SCS students, on the other hand, score measurably better than the state average.

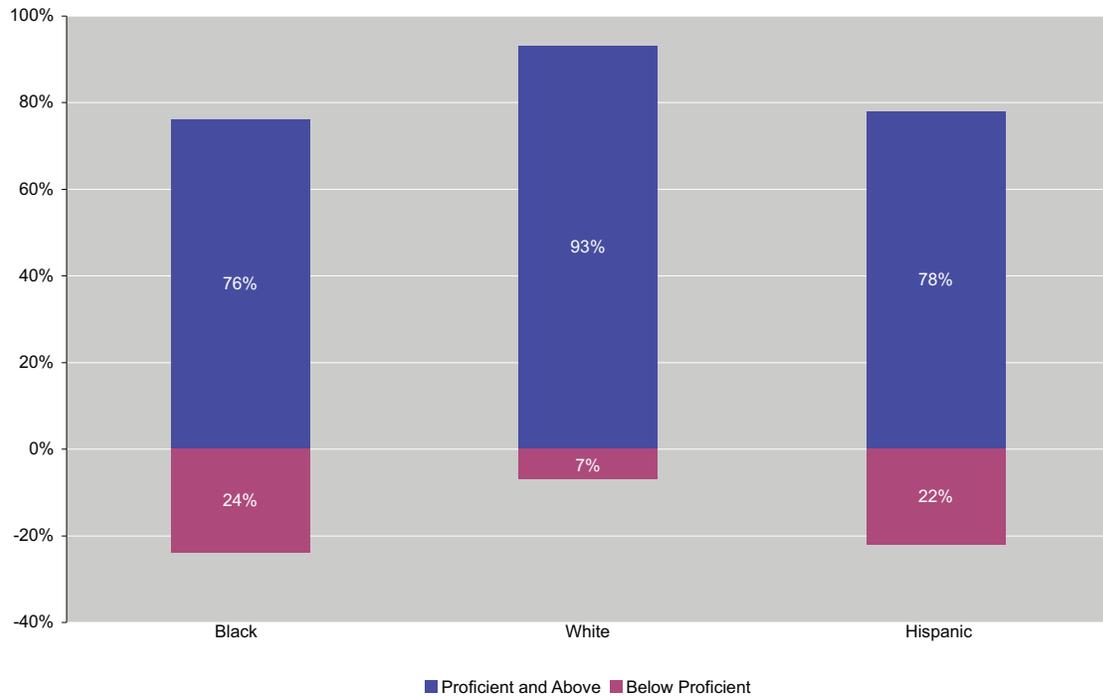
Math TCAP Performance, 2006



Source: Tennessee Report Card

- White students in MCS score higher than both black and Hispanic students locally and the all-student state average (Figure 23).

Math TCAP Performance in MCS by Race & Ethnicity, 2006

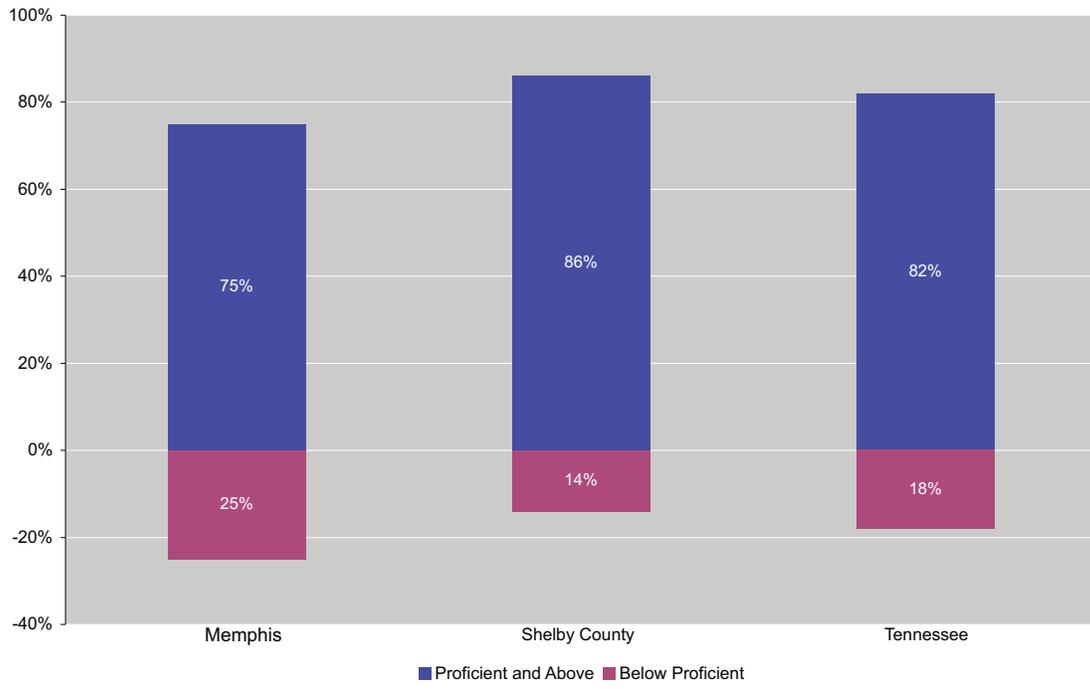


Source: Tennessee Report Card

MCS at-risk category math scores vary by risk while all SCS categories beat state.

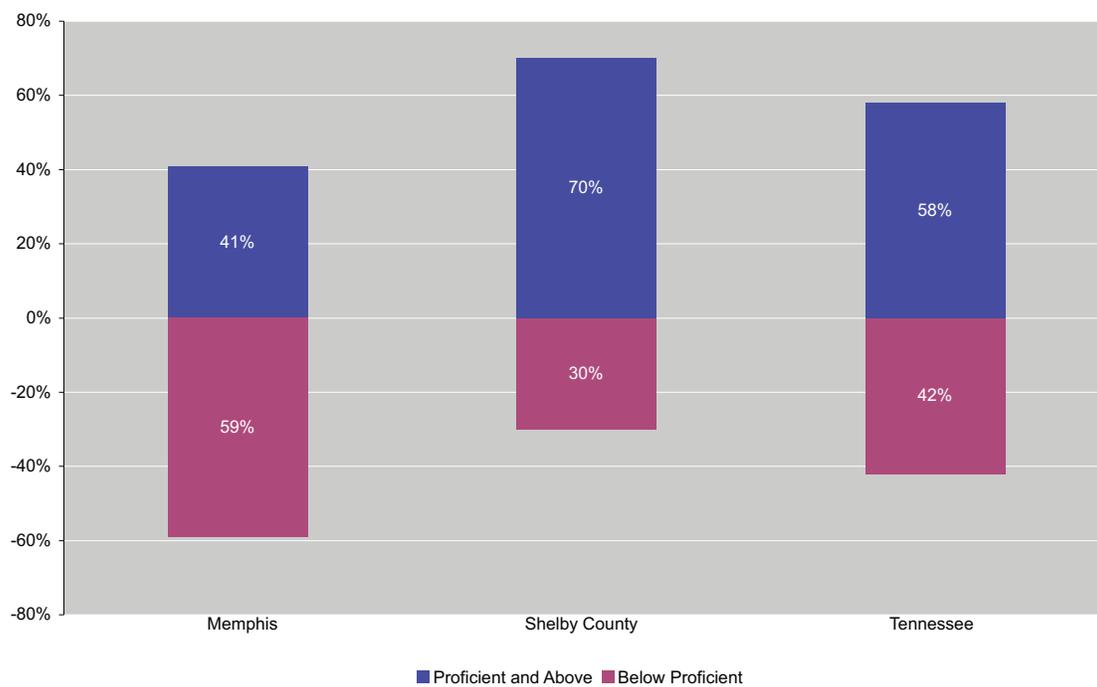
MCS students score below the Tennessee math averages in both the economically disadvantaged and disabilities risk-groups. Conversely, MCS students with limited English proficiency score above the state average. SCS students in all three risk categories out-perform the state averages.

Math TCAP Performance by Economically Disadvantaged Students, 2006



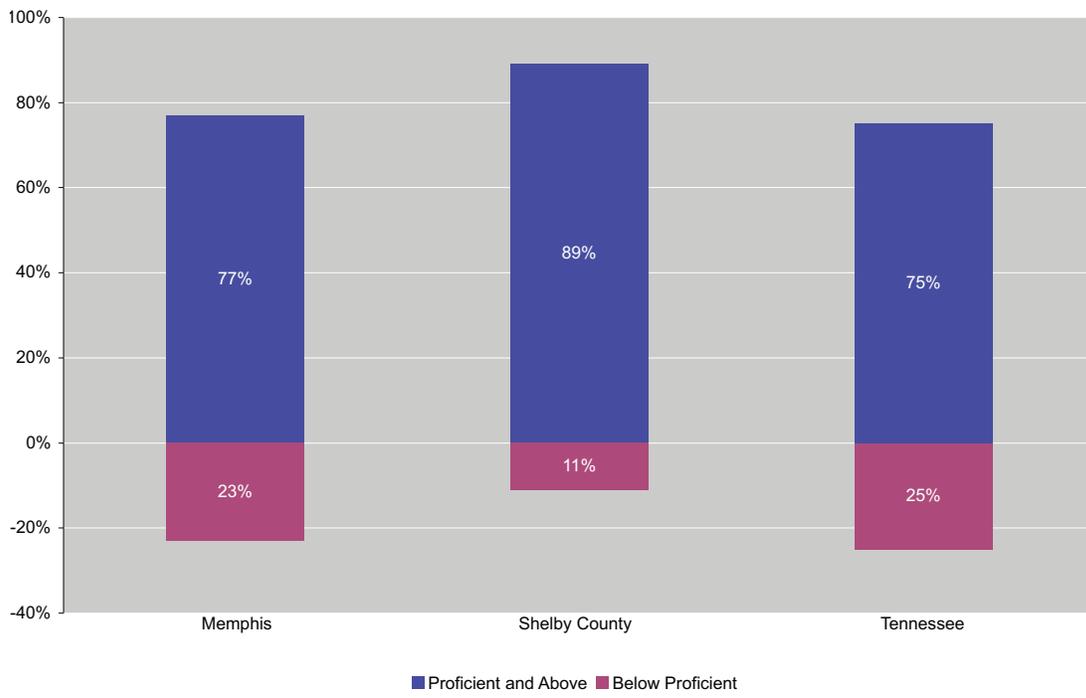
Source: Tennessee Report Card

Math TCAP Performance by Students with Disabilities, 2006



Source: Tennessee Report Card

Math TCAP Performance by Students with Limited English Proficiency, 2006



Source: Tennessee Report Card

State and national testing are 'apples and oranges.'

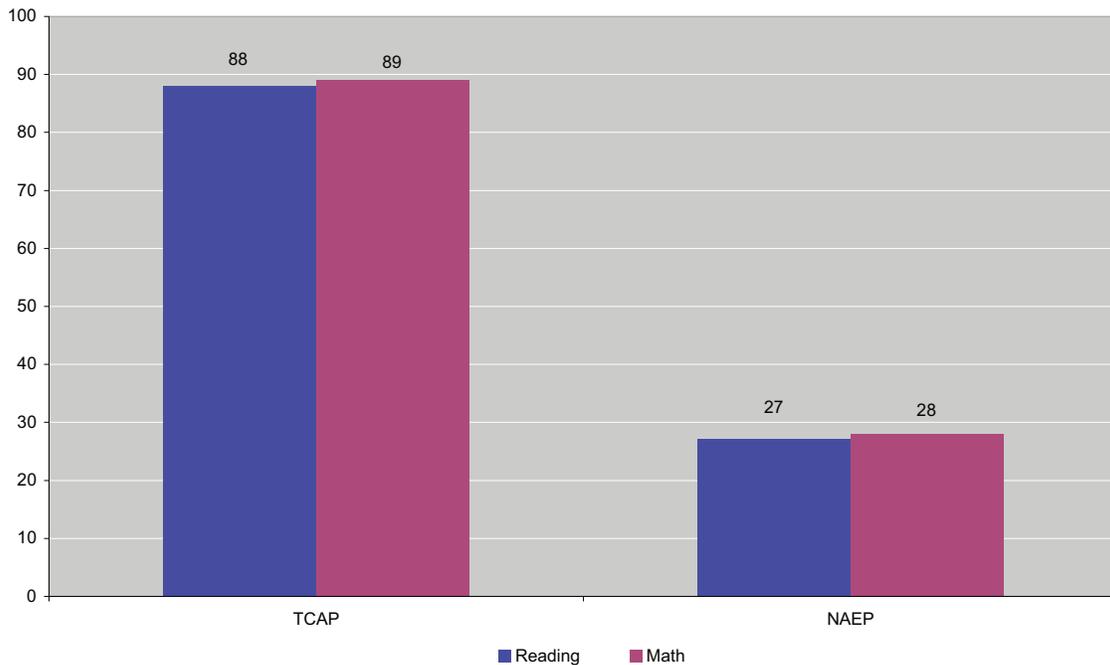
It is difficult to compare MCS and SCS students with students nationwide because they are tested differently. MCS and SCS students are tested on the Tennessee TCAP test. Nationally students are measured on the NAEP (National Assessment of Educational Progress) test. Because a sampling of students in Tennessee is tested on the NAEP we can draw some comparison of student performance.

Differences between TCAP and NAEP present an uncomfortable probability.

- TCAP has three rankings: *Advanced*, *Proficient* and *Below Proficient*.
- NAEP has four rankings: *Advanced*, *Proficient*, *Basic* and *Below Basic*.
- NAEP *Basic* level denotes “partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade assessed.”
- Tennessee Department of Education reports the TCAP *Proficient* level to be comparable to the NAEP *Basic* level.
- This suggests that Tennessee assigns grades of *Proficient* to some students with “partial mastery” of fundamental skills.

- Results of TCAP and NAEP paint two very different pictures of educational achievement in Tennessee. The NAEP is administered every two years. TCAP is given annually.

Comparison of TCAP & NAEP Scores in Reading and Math in Tennessee



Source: Tennessee Report Card, 2006 & NAEP, 2005

By national standards only one in four Tennessee students is at grade level.

NAEP is the, “gold standard of large-scale assessments because of its high technical quality and because it represents the best thinking of educational specialists...and content specialists...from around the nation,” according to the U.S. Department of Education.

While TCAP scores indicate that most students in Tennessee are proficient in reading and math, NAEP results suggest that Tennessee student performance is much lower, with a little more than one-fourth of all Tennessee students at grade level in reading and math.

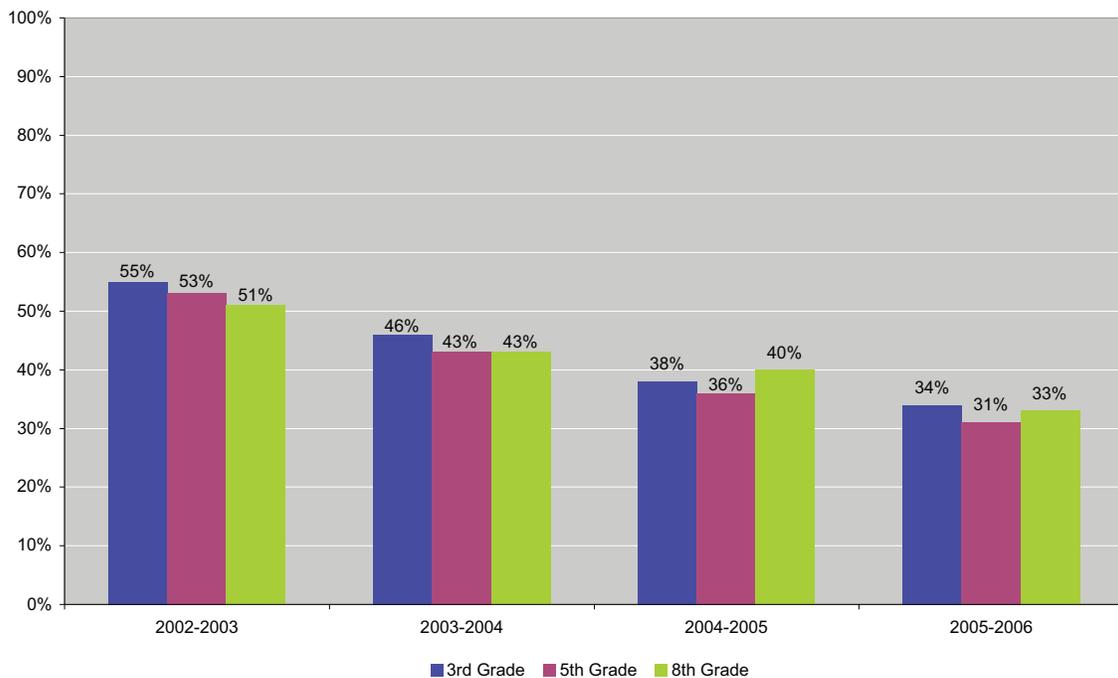
The U.S. Department of Education asserts that NAEP data “will highlight the rigor of standards and tests for individual states: If there is a large discrepancy between children’s proficiency on a state’s test and on their performance on the NAEP, that would suggest that the state needs to take a closer look at its standards and assessments and consider making improvements.”

The gaps in average scores between ethnic and socio-economic groups on the TCAP are striking. The gaps on NAEP paint an even bleaker picture.

Academic progress in Tennessee is hard to measure because the yardstick keeps shrinking.

- The percentage of questions students must answer correctly on TCAP to be considered proficient has declined steadily in the past four years in Grades 3, 5 and 8.

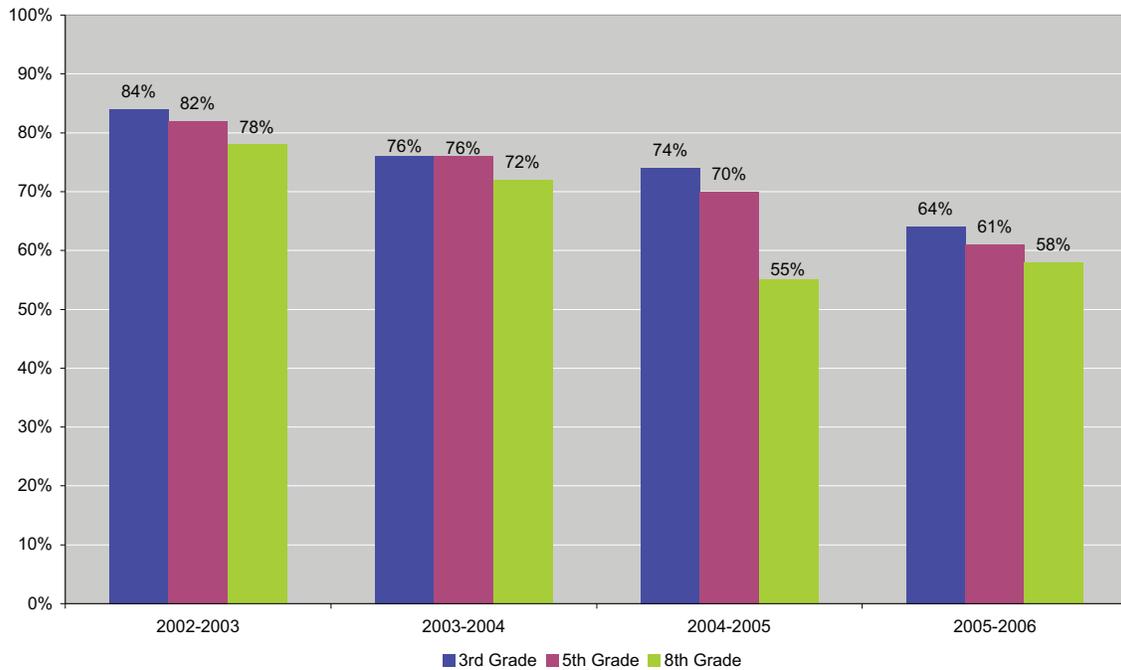
Decreasing Percentage of Questions Students Must Answer Correctly for TCAP Reading Proficiency



Source: Tennessee Report Card

- In 2002 third-graders needed to answer 55 percent of questions correctly to be considered *Proficient*. By 2006 they needed to answer only 34 percent correctly.
- Eighth-graders in 2002 needed to answer 51 percent of questions correctly to be considered proficient. By 2006 33 percent correct answers was considered *Proficient*.

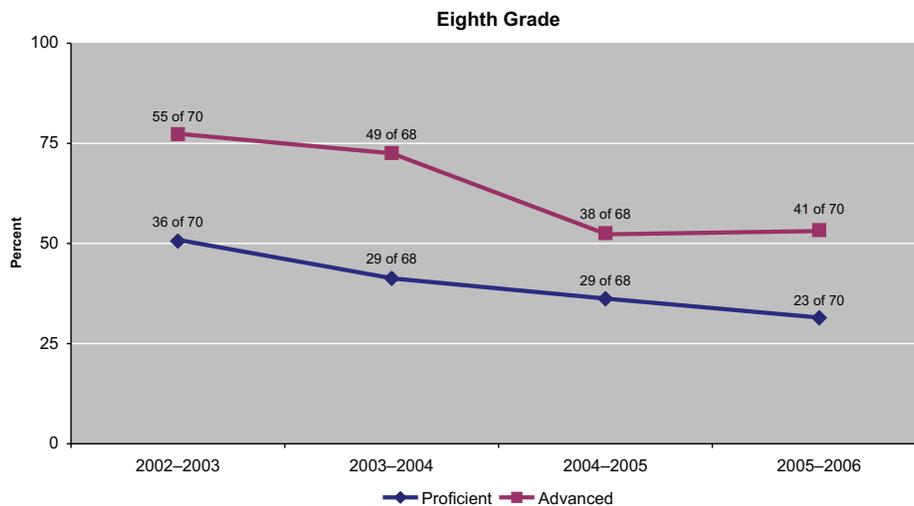
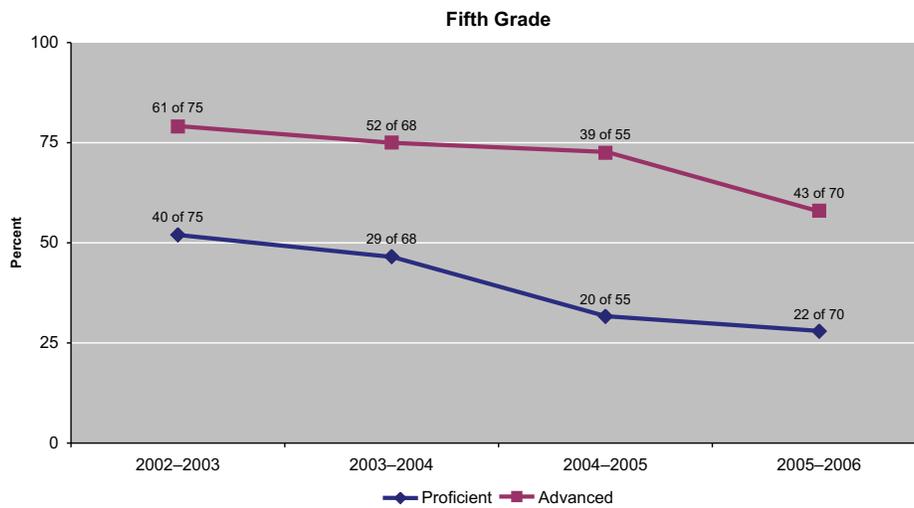
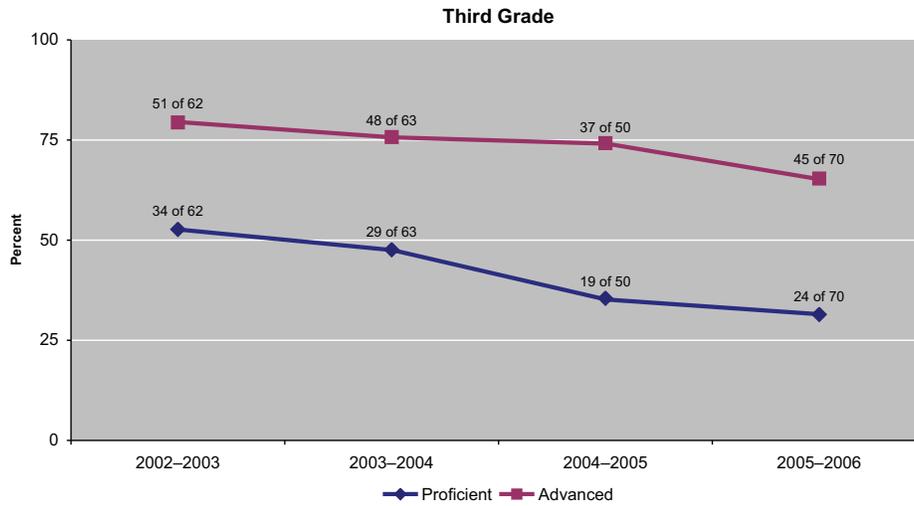
Decreasing Percent of Questions Students Must Answer Correctly for TCAP Reading Advanced, 2002–2006



Source: Tennessee Report Card

- Standards for *Advanced* measurement of subject matter also have decreased over the past four years.
- To be considered *Advanced* in 2002 students were required to answer roughly four out of five questions (80%) correctly.
- In 2006 students only needed to answer two out of three questions (67%) correctly.
- By 2006 fifth-and-eighth-graders needed to answer 25 percent fewer questions correctly than they were in 2002.

TCAP Score and Percentage Requirements for Proficient and Advanced, 2002–2006



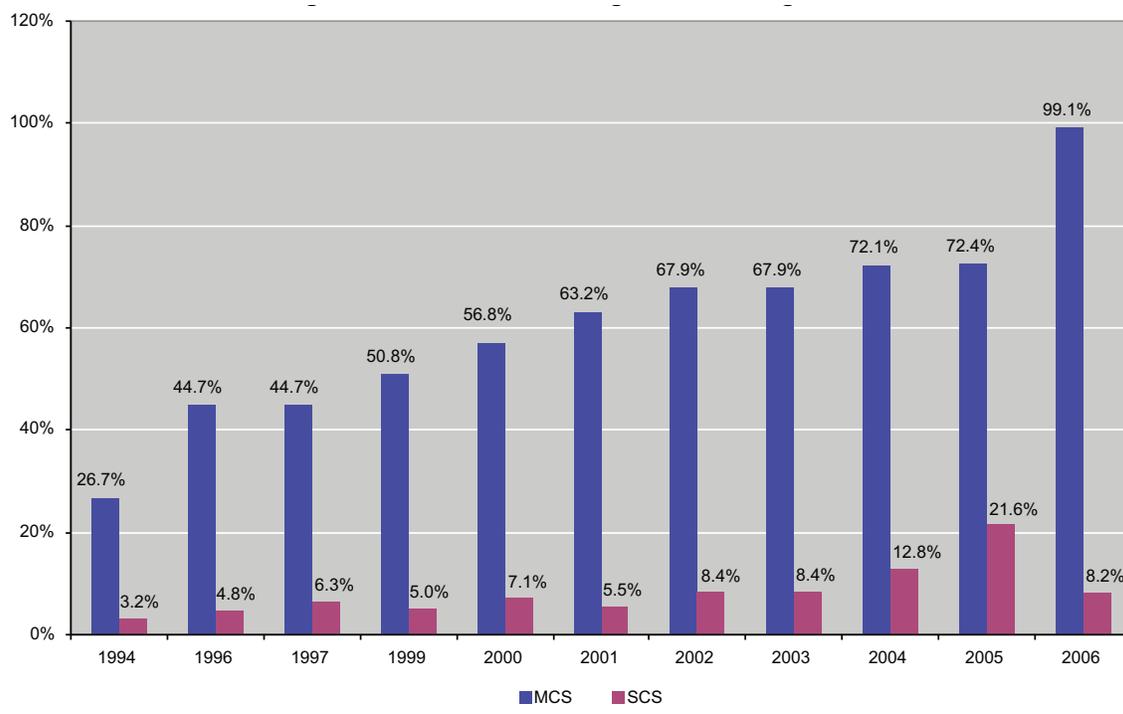
Source: Tennessee Report Card

MCS depends on the Federal dole.

The number of public schools in the MCS receiving Title I funding, which is extra money from the Federal government to educate children in low-income families, has increased dramatically over the past decade.

In 1994 one in four schools in MCS received Title I funding. By 2006 nearly every public school in Memphis received Title I funding. This means that there has been a dramatic increase in the number of low-income students in the City of Memphis.

Percentage of MCS & SCS Receiving Title I Funding, 1994–2006



Source: Tennessee Report Card

MCS teachers work in a revolving door.

The number of “stable” students, those who do not change schools during the school-year, steadily decreased between 1999 and 2006.

In half of all MCS schools at least two out of five students change schools during the school year for reasons other than grade promotion. The average classroom has 25 students. So during the school-year half of all teachers have a turnover of 40 percent (10 students). In 85 percent of all MCS schools at least one out of three students changes schools during the school year.

Only two percent of MCS schools can be considered to have relatively stable student populations or a maximum of 10 percent student turnover in a school-year.

What next for the Class of '07?

- Two-thirds (67%) of MCS students graduate on time from high school. Tennessee-wide 80 percent of students graduate on time.
- Two out of three (67%) MCS students now take the ACT exam, a 27 percent increase.
- The average ACT score in MCS is 17.9, more than three points below the Tennessee average (20.7). The U.S. average is 21.1. Only two MCS schools have ACT averages equal to, or above, the U.S. average.
- It's expected that students with ACT scores of 18 and up on English will succeed in college composition, and those who score 22 and up on Math likely will earn B or C grades in college algebra.
- Students entering an in-state, two-year, higher education program can expect to pay approximately \$5,000 tuition over two years for an associate degree. Students can expect to pay approximately \$21,000 tuition in-state over four years for a bachelor degree.
- Of the 1,193 students entering Southwest Tennessee Community College as freshmen in 1999 only 4.4 percent had graduated within three years, and 10 percent had matriculated to other higher education.
- Youngsters entering the workforce in a minimum-wage job directly after high school can expect to earn \$10,712 a year (2007 Federal minimum wage), according to the Memphis Living Wage Coalition. MLWC defines a living-wage as \$20,000 a year plus benefits.

To say it bluntly, 75 percent of Tennessee students are below proficient.

In 2006 Tennessee and North Carolina were selected to participate in a "Growth Model" pilot project as a part of No-Child-Left-Behind's mandate that students show academic progress year to year. In this program students who scored below *Proficient* were allowed to be counted as *Proficient* if their schools expected them to become *Proficient* within a three-year period.

Counting students *Proficient* in years when they are not helps schools to make *Adequate Yearly Progress* (AYP), a key provision under NCLB that keeps schools off the High Priority lists, one of the penalties for low achievement. This is part of the "safe harbor" provision that allows schools to make AYP and that makes failure less likely for a school system.

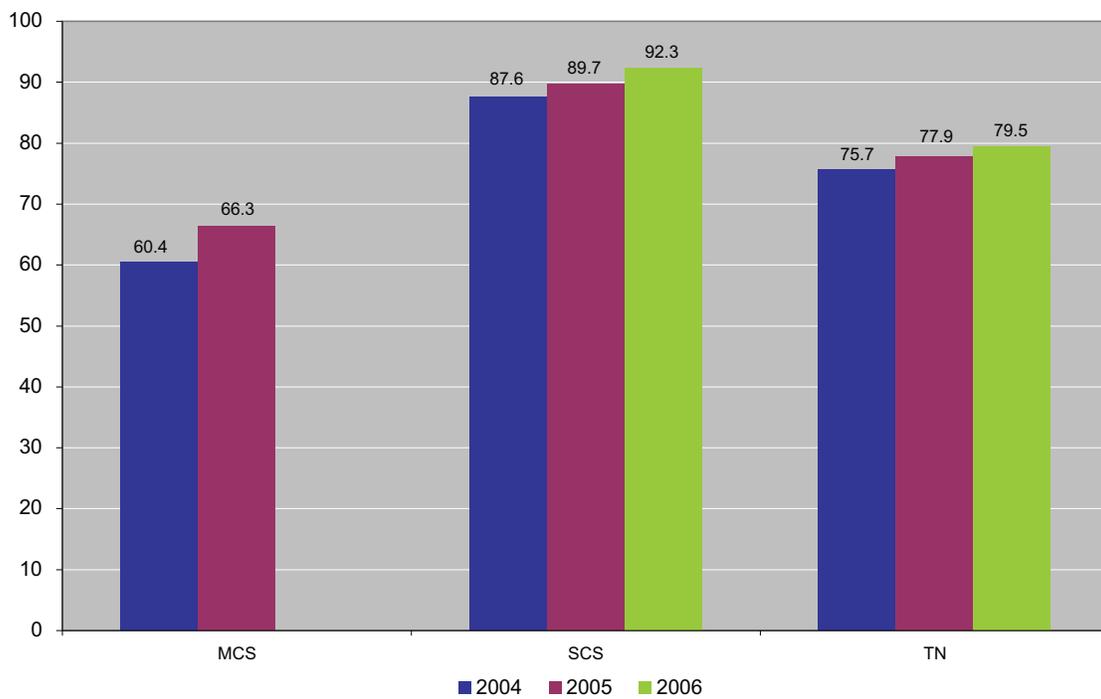
TCAP results indicate that most students in the City of Memphis are performing close to their peers across the state in reading and math. This picture is encouraging given that MCS educates a disproportionate share of low income and minority students. Confidence in the high marks awarded by TCAP, however, is undermined by the less encouraging results of all Tennessee students on the NAEP exam, which suggests that only 27 percent of Tennessee students are at grade-level and *Proficient*.

In less polite terms, this means that almost three out of four Tennessee students are below proficient, and the public seems to know it.

Moreover, a high school graduation rate of only two out of three students graduating on time in MCS portends a bleak future. *The Organization for Economic Cooperation and Development* (OECD) released a report entitled *Education at a Glance* in 2006 that outlines the economic implications for not having a high school diploma. Among the key findings were:

- The United States is losing ground as other nations make faster and bigger gains.
- Adults who don't finish high school in the U.S. earn only 65 percent of those with a high school diploma. No other country has such a severe income gap.
- The U.S. ranks 11th in the percentage of 25-to-34-year-olds with high school diplomas.
- "The lack of candor about the rate at which public school students are graduating from high school is a fundamental problem in education." (*HS Grad Rates in the US*)
- The target graduation rate for the State of Tennessee is 90 percent. Only 67 percent of MCS students graduate on time, 75 percent of students statewide graduate on time and 80 percent of SCS students graduate on time.

High School Graduation Rates, 2004–2006

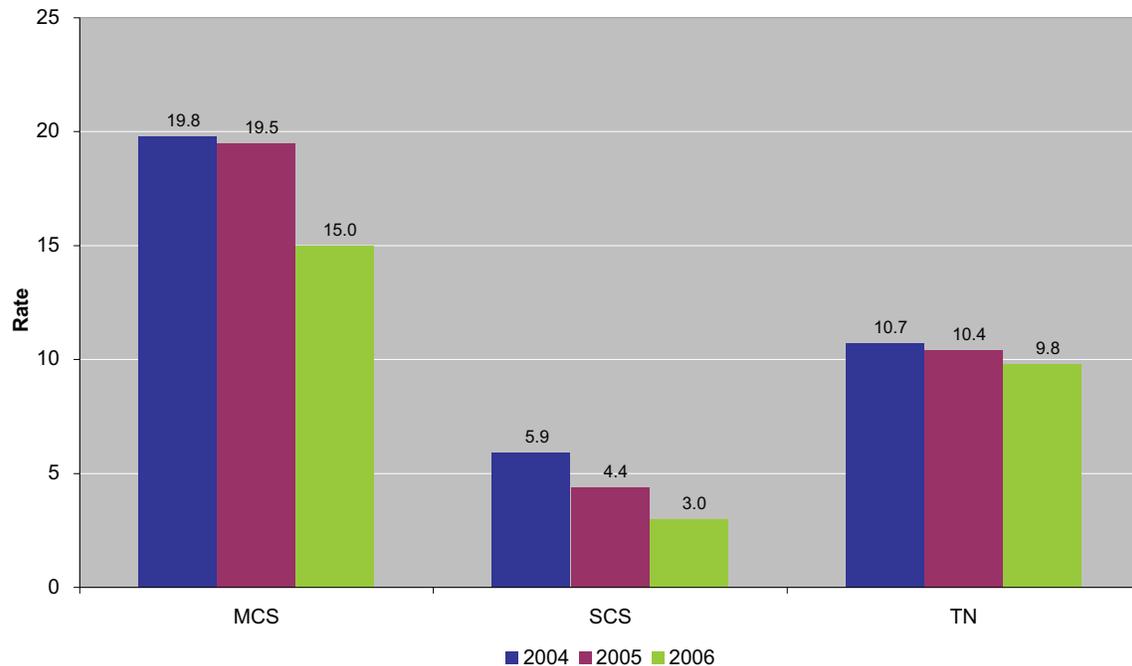


Source: Tennessee Report Card

Graduation rates in conjunction with test scores provide a more complete picture of school performance than test scores alone because a school's test proficiency rate is higher if low-performing students drop out, and their scores are not included. (*GAO Report, September 2005, "Education Could Do More"*) The dropout rate in Tennessee has remained fairly constant since 2004, while MCS dropout rate (highest in the state) has declined about 25 percent and SCS has been cut in half.

A *Cumulative Promotion Index (CPI)* can determine the probability of a student's graduation. In 2002 MCS had a CPI of 45.3 percent. In 2003, the index had risen to 48.5 percent, but in 2005 the CPI had dropped to 45 percent. (*PIPE Memphis 2007, Understanding Graduation and Dropout Rates in Memphis City Schools: An Issue Brief*)

Cohort Dropout Rate, 2004–2006

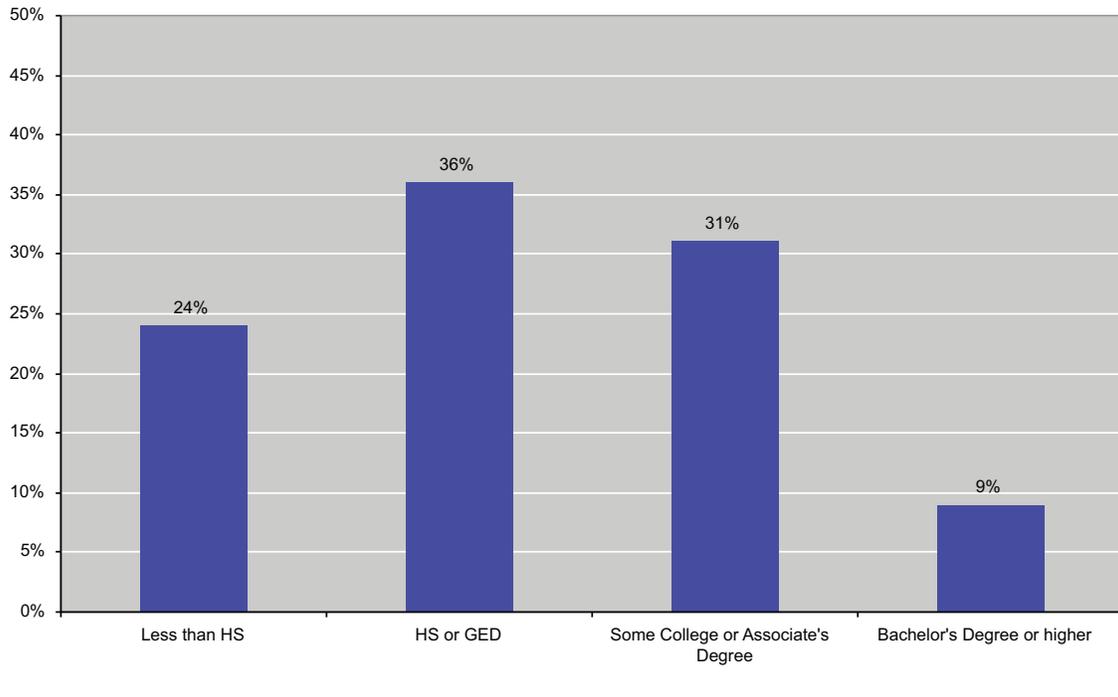


Source: Tennessee Report Card

Memphis is one of the least-educated cities in America.

- In Memphis almost one in four adults (24.3%) has less than a high school education.
- A little over one-third (36.7%) have high school diplomas or equivalent only. Less than one out of three (30.5%) has completed some college or has an associate degree. Fewer than one out of 10 (8.5%) has a bachelor degree or higher.

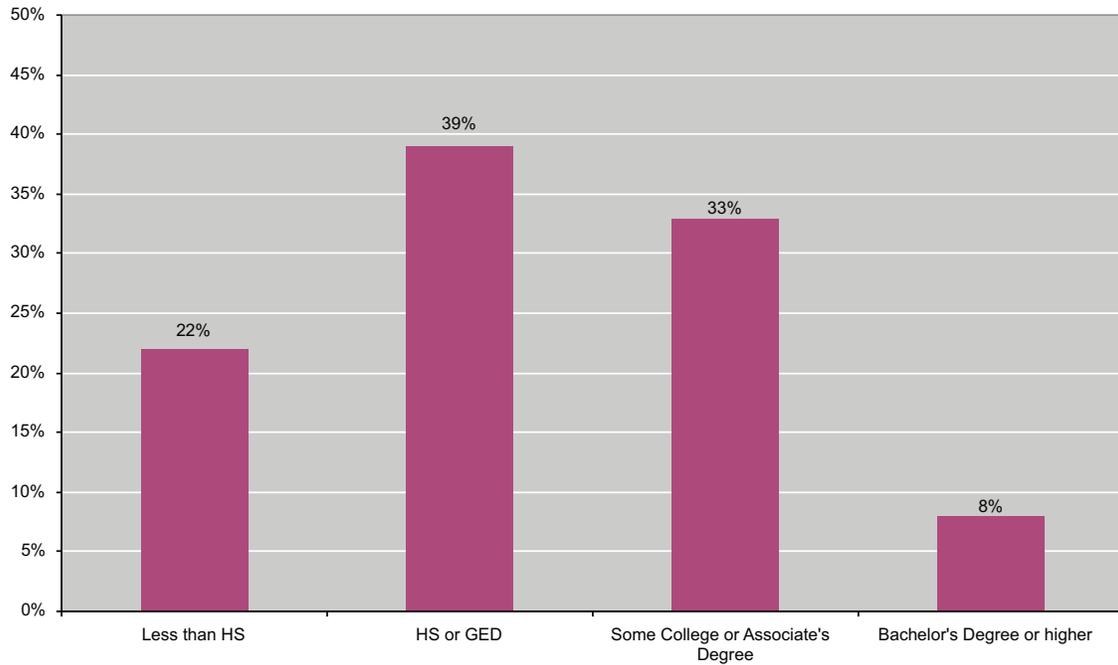
Educational Attainment by Memphians Age 18–24, 2005



Source: American Community Survey, 2005

- In Shelby County 22.1 percent have less than a high school diploma, 36 percent have a high school diploma or equivalent only, 31.3 percent have completed some college or have an associate degree and 10.8 percent have bachelor degrees or higher.

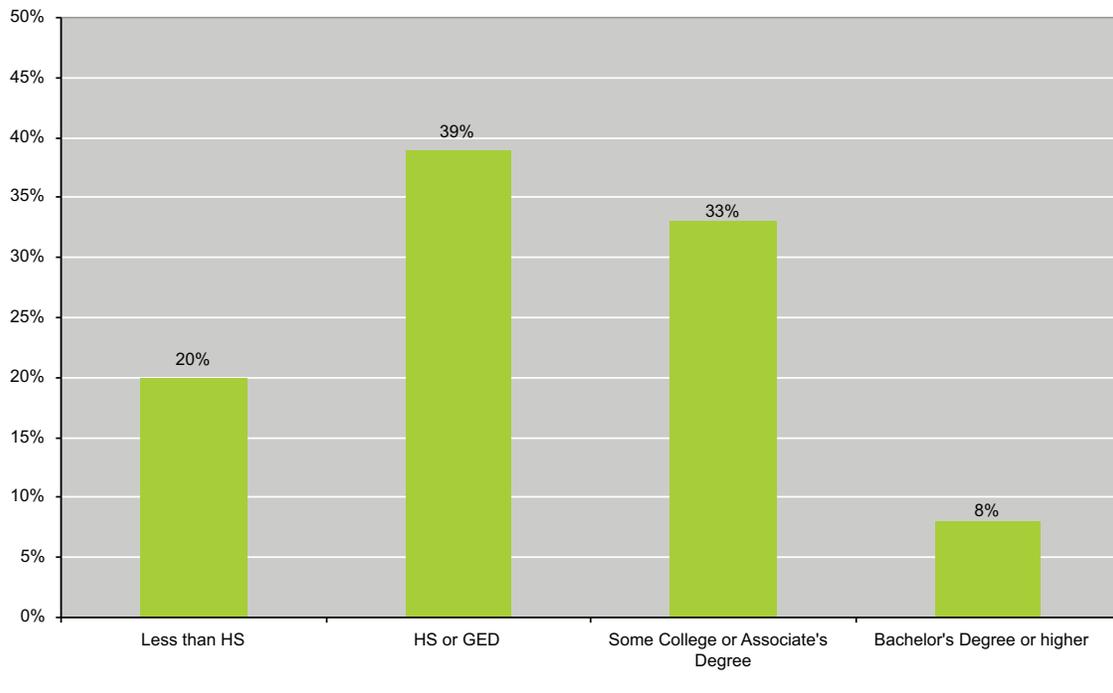
Educational Attainment by Shelby Countians Age 18–24, 2005



Source: American Community Survey, 2005

- In Tennessee about one in five (19.5%) persons has less than a high school diploma.
- Two out of five have high school diplomas or equivalent only.
- One out of three (32.5%) has completed some college or has an associate degree.
- Fewer than one in 10 (8%) has a bachelor degree or higher.

Educational Attainment by Tennesseans Age 18–24, 2005

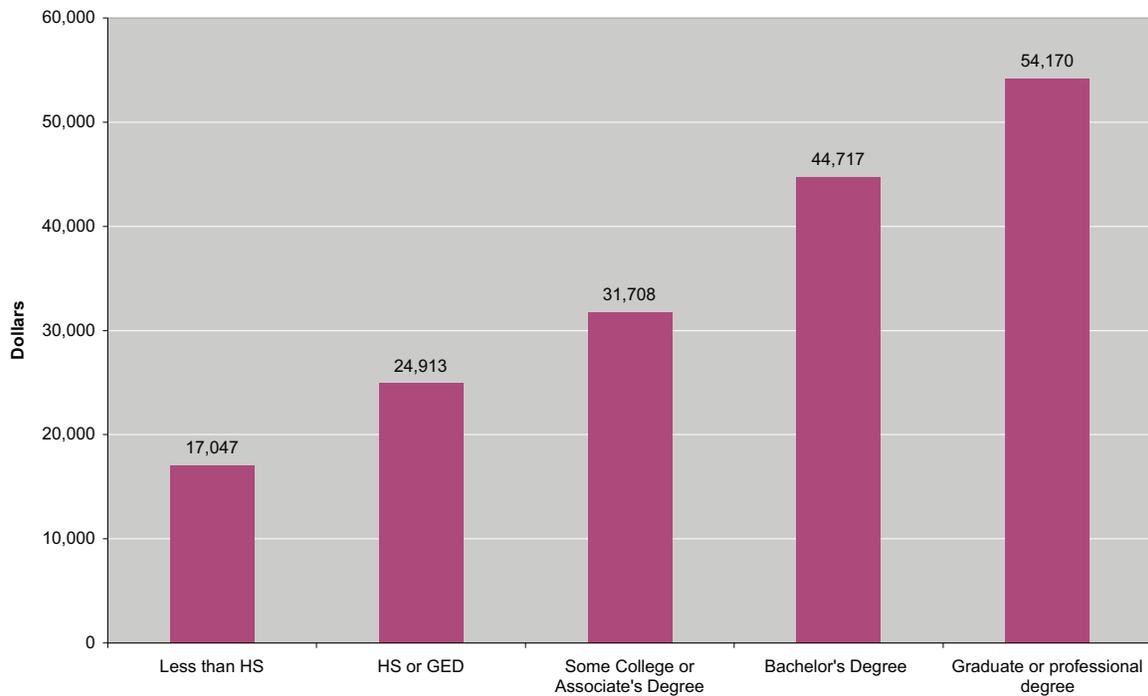


Source: American Community Survey, 2005

Average Shelby County income is only \$1,804 above the label, 'low-income.'

- Income correlates closely to educational attainment. In Shelby County median annual income is \$31,804, and \$30,000 is considered low-income.
- Workers with less than a high school diploma can expect to make half as much as the median income, which puts the worker at the poverty level.

Income by Educational Attainment in Shelby County, 2005



Source: American Community Survey, 2005

- A high school diploma increases the average salary, but keeps the worker in the low-income category.
- Some college or an associate degree places the wage-earner on par with the average income in Shelby County, or slightly above low-income.
- A person with a bachelor degree earns one-third more than the average, and an individual with a graduate or professional degree can expect to earn about twice the average in Shelby County.

Memphis is unprepared to participate in the 'Knowledge Economy.'

According to former U.S. Treasury Secretary, Lawrence Summers, the *Knowledge Economy* is the transitioning of our national economy from one based on the production of physical goods to one based on the production and application of knowledge. (*Tennessee and the Knowledge Economy*)

As centers of production move from the global north to the global south through trade agreements such as NAFTA, from countries like the United States to countries in Latin America and Southeast Asia, the accumulation, dissemination and synthesis of information have supplanted industrial infrastructure in developed countries. Production of goods has shifted south, while production and control of information has developed in the north.

This means that increasingly in developed countries the pursuit of higher education is mandatory. While a high school diploma was once a valid form of currency in obtaining gainful employment, the need for a college education or higher degree has become a requirement rather than a luxury.

Proficiency in manipulating information, rather than proficiency in product manufacturing, is a key component of the knowledge economy.

Competing in the knowledge economy requires investing in human capital rather than physical capital.

In 2001, the *Tennessee Advisory Commission on Intergovernmental Relations* released a report entitled “*Tennessee and the Knowledge Economy.*” Among its key findings are:

- One in five jobs today requires a college degree.
- Another one in four jobs requires training beyond college.
- Remaining jobs will require limited on-the-job training of less than 12 months.

Among some of the policy implications in this report are:

- A need for continued investment in the quality of education in Tennessee
- Improving worker training
- Supporting research and development
- Attracting (and retaining) workers from knowledge economy sectors to live and work in Tennessee

These findings have profound implications for Memphis and Shelby County. While some employers in the knowledge economy are located in Shelby County, such as International Paper and FedEx, others such as Dell, chose to locate in Nashville because Davidson County has more desirable conditions to foster recruitment and retention of workers who can compete in the knowledge economy.

Children's Community Environment



The City of Memphis is fraught with high-risk neighborhoods for children.

Child support systems, peer influences and other external factors are brought to bear at the neighborhood level. Children experience “neighborhood effects” on their health, education and general welfare. Social support and peers can mitigate or aggravate risks such as family poverty and economic hardship. The community environment can undermine or reinforce the effects of parenting on child development. Research has tended to distinguish among high poverty and lower poverty neighborhoods as the best way of gauging neighborhood effects, but new statistical applications are enabling us to identify “high vulnerability” neighborhoods where interventions might be a priority. With more detailed analysis we will be able to identify poor neighborhoods where child outcomes are better than expected. That will enable us to understand better how neighborhoods can counter family-level risks.

Understanding high-risk neighborhood environments and their independent effects.

The significance of concentrated poverty and decentralizing poverty for children and families is difficult to gauge without knowing more about their neighborhoods. It's not enough to assume that poor families moving to neighborhoods that have been less poor historically will result in enhanced opportunities and better outcomes for children.

The Child and Family Research Center, in conjunction with The Urban Institute's Annie E. Casey-supported “Making Connections” initiative, developed an index of neighborhood-level risks for early child development. The index is based on statistical indicators that have been related to neighborhood effects on child outcomes.

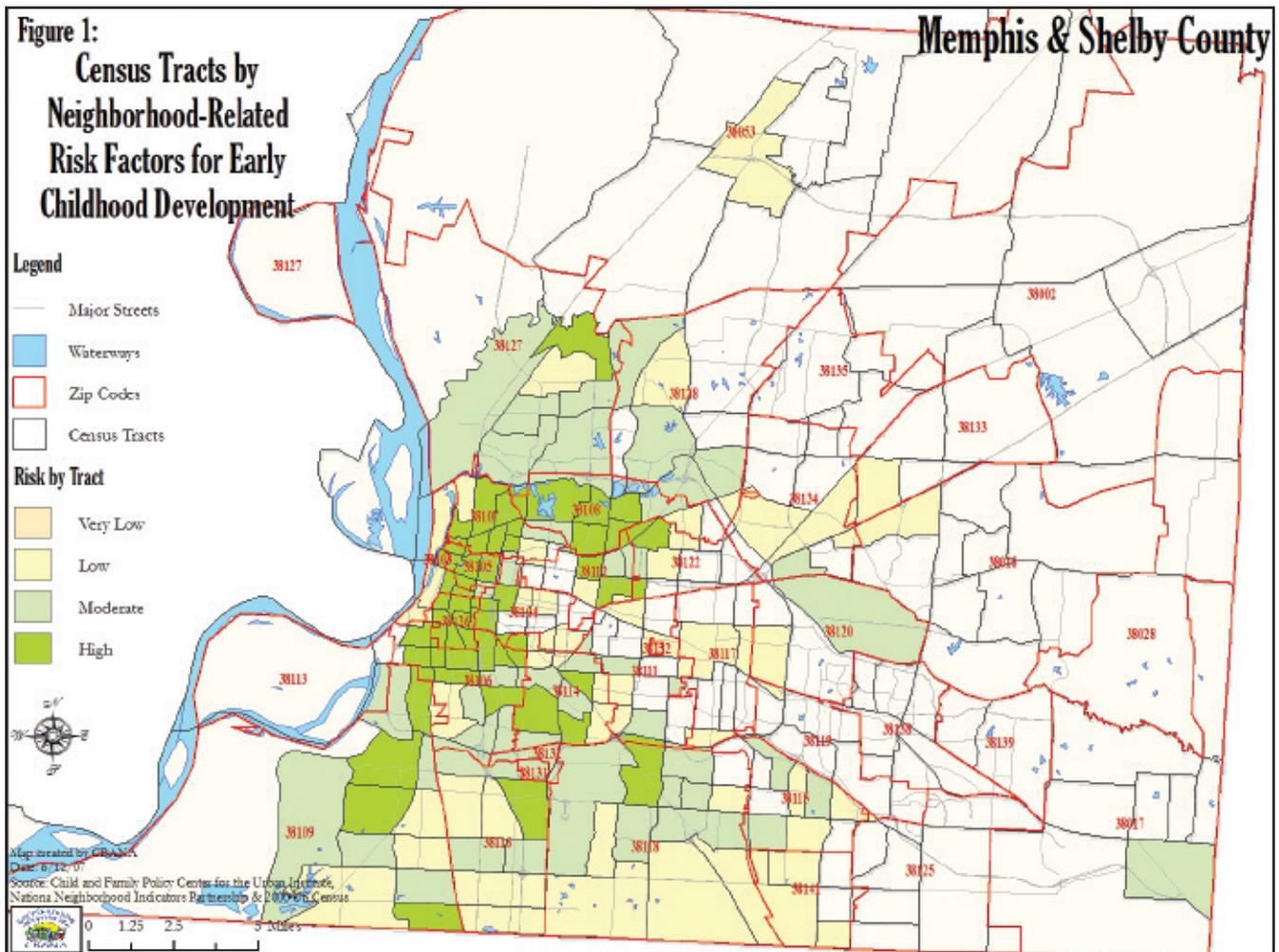
Each of the more than 68,000 U.S. census tracts was coded in comparison to nationwide norms on 10 indicators. “Vulnerable” census tracts vary significantly from the national statistical norms for indicator characteristics.

Poverty is associated with the vulnerability index but was not included as an individual indicator. This enables researchers to grasp better the more specific circumstances that undermine healthy child development in vulnerable neighborhoods.

When we compare the number of neighborhoods with concentrated poverty to neighborhoods high on the Child Vulnerability Index we can narrow the focus locally to 50 percent fewer census tracts including 48,000 children in 48 high-risk tracts.

The highest-risk census tracts represent over one out of every five census tracts in Memphis (22%). This smaller, but nevertheless significant, group of neighborhoods may require more intense supportive interventions than high-poverty neighborhoods in general.

Census Tracts by Neighborhood-Related Risk Factors for Early Childhood Development



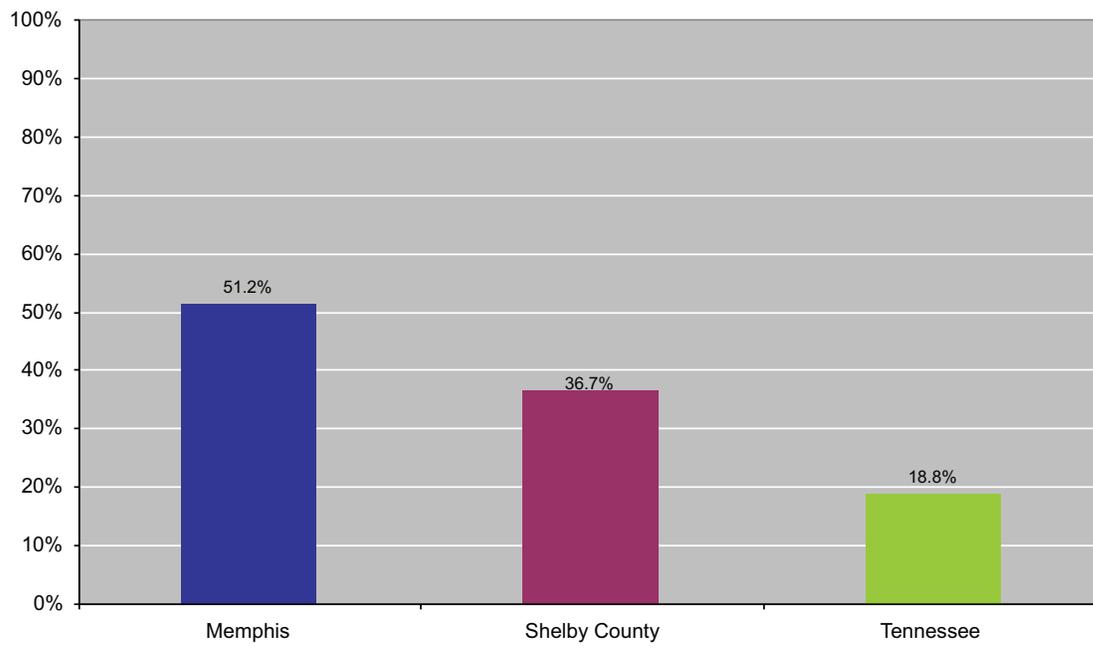
Neighborhoods of concentrated poverty are concentrated in the City of Memphis.

Concentrated neighborhood poverty is defined as a neighborhood (census tract) in which at least 20 percent of households live below the poverty level. As is family poverty, neighborhood poverty also is associated with poor health and developmental outcomes for children.

Jobs and good schools are less likely to be found in neighborhoods of concentrated poverty. This places parents at a disadvantage and lowers the quality of family environment. Additionally, half of the children in high poverty neighborhoods change schools at least once a year. Changing schools is associated with academic under-performance.

- More than half (92,741) of all children in the City of Memphis in 2000 lived in neighborhoods of concentrated poverty. Nearly all Shelby County children who resided in areas of concentrated poverty in 2000 lived in the City of Memphis.

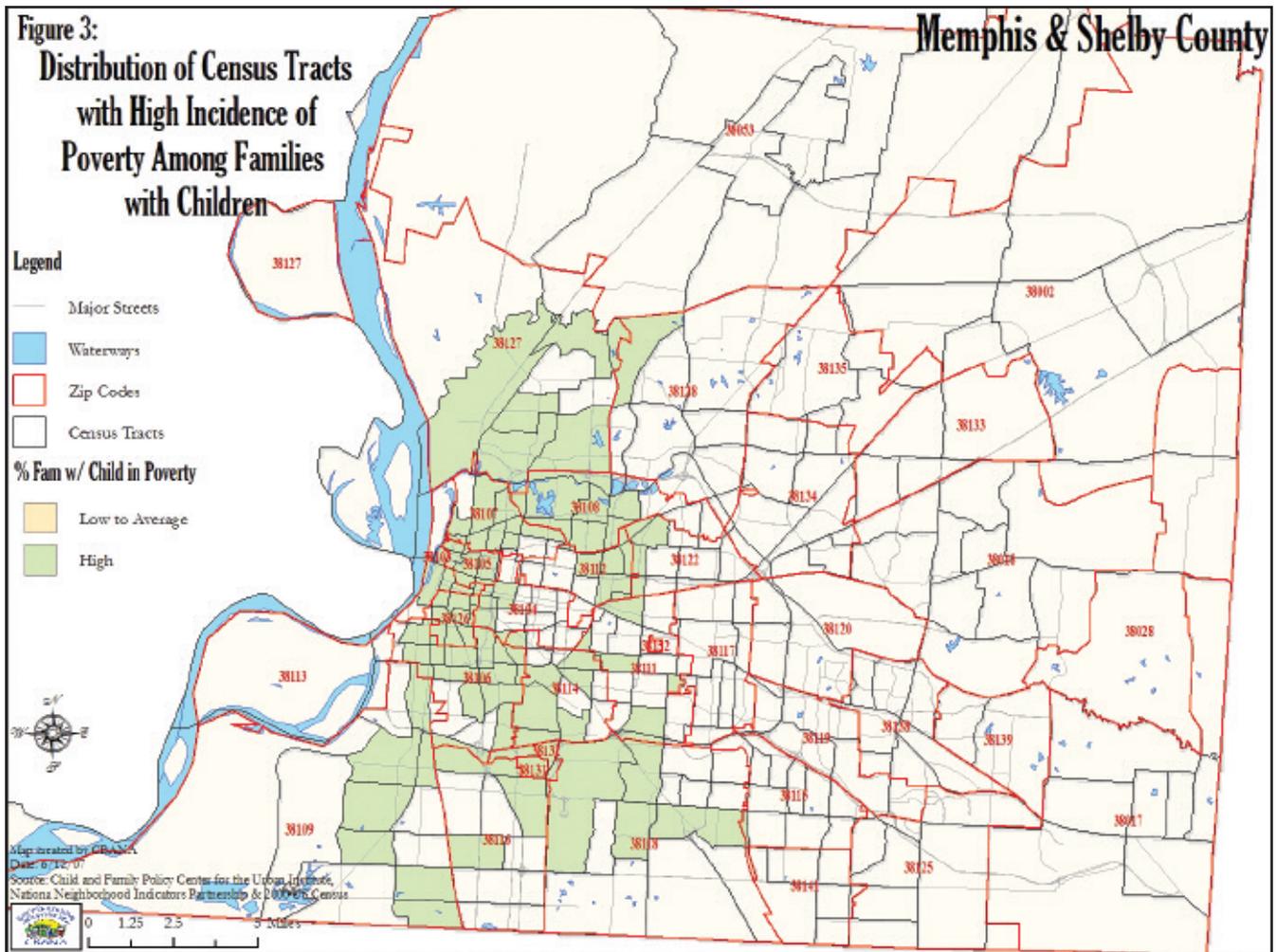
Distribution of Children Living in Neighborhoods of Poverty in the City of Memphis, Shelby County and Tennessee, 2000



Source: Annie E. Casey Foundation Kids Count, 2000

- Nearly half of Memphis census tracts (74 tracts) had a high concentration of poverty among families with children in 2000.

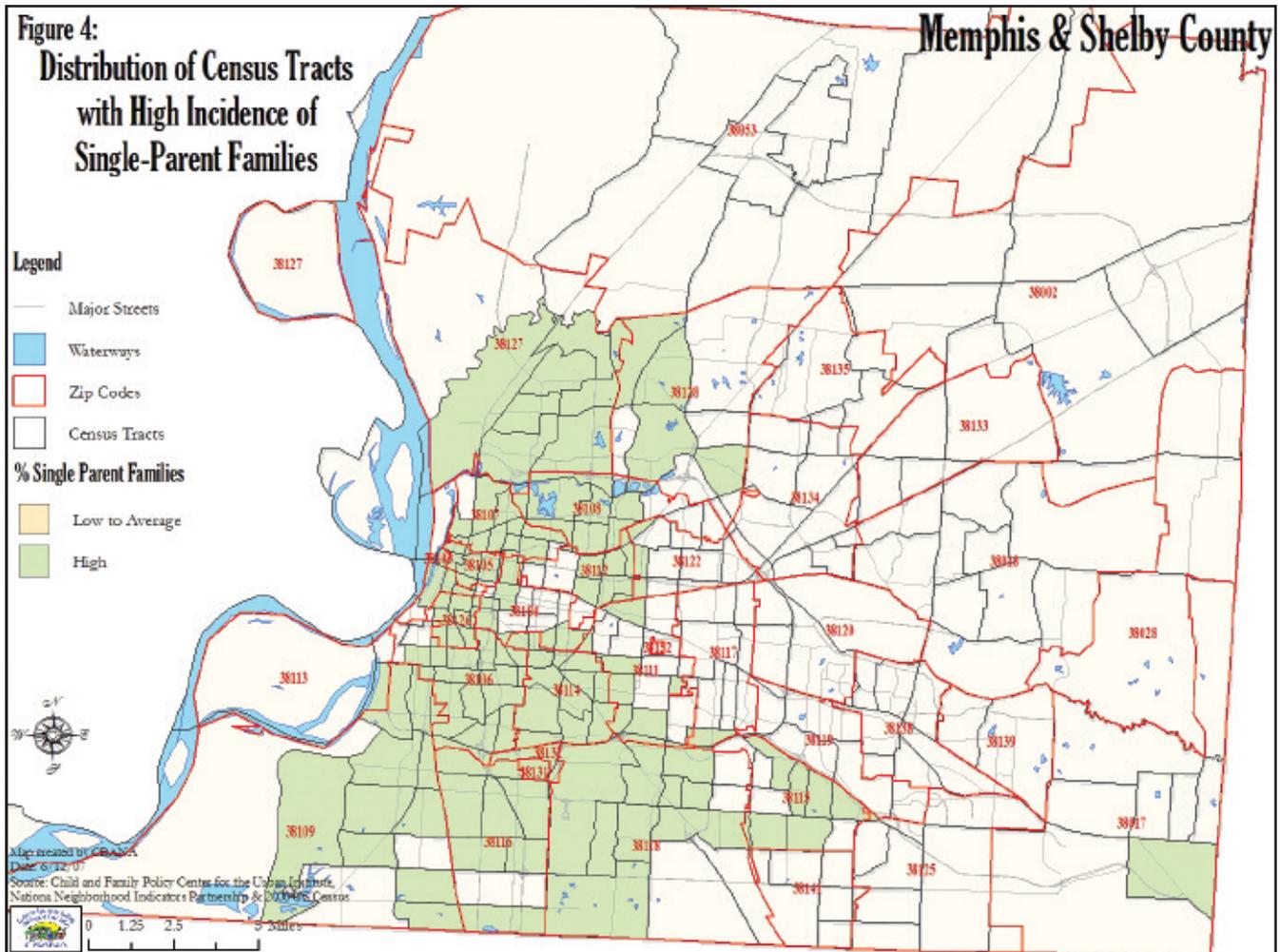
Distribution of Census Tracts with High Incidence of Poverty Among Families with Children



Although this pattern should not be confused with census tracts having large actual numbers of poor and low-income children, it does imply that there is very little variation among families with children in the neighborhood. That is important in terms of peer influences.

In fact, the larger actual numbers of poor and low-income families with children are increasingly outside of these tracts. Yet, they are located in tracts with high proportions of single-parent families that have moved out of the highest-poverty neighborhoods in response to demolition of public housing and other low-cost housing.

Distribution of Census Tracts with High Incidence of Single-Parent Families



- Nearly two out of three Memphis census tracts (106 tracts) and one suburban tract had high incidences of single-parent families in 2000.

When families in poverty leave one neighborhood it appears that they re-concentrate in another.

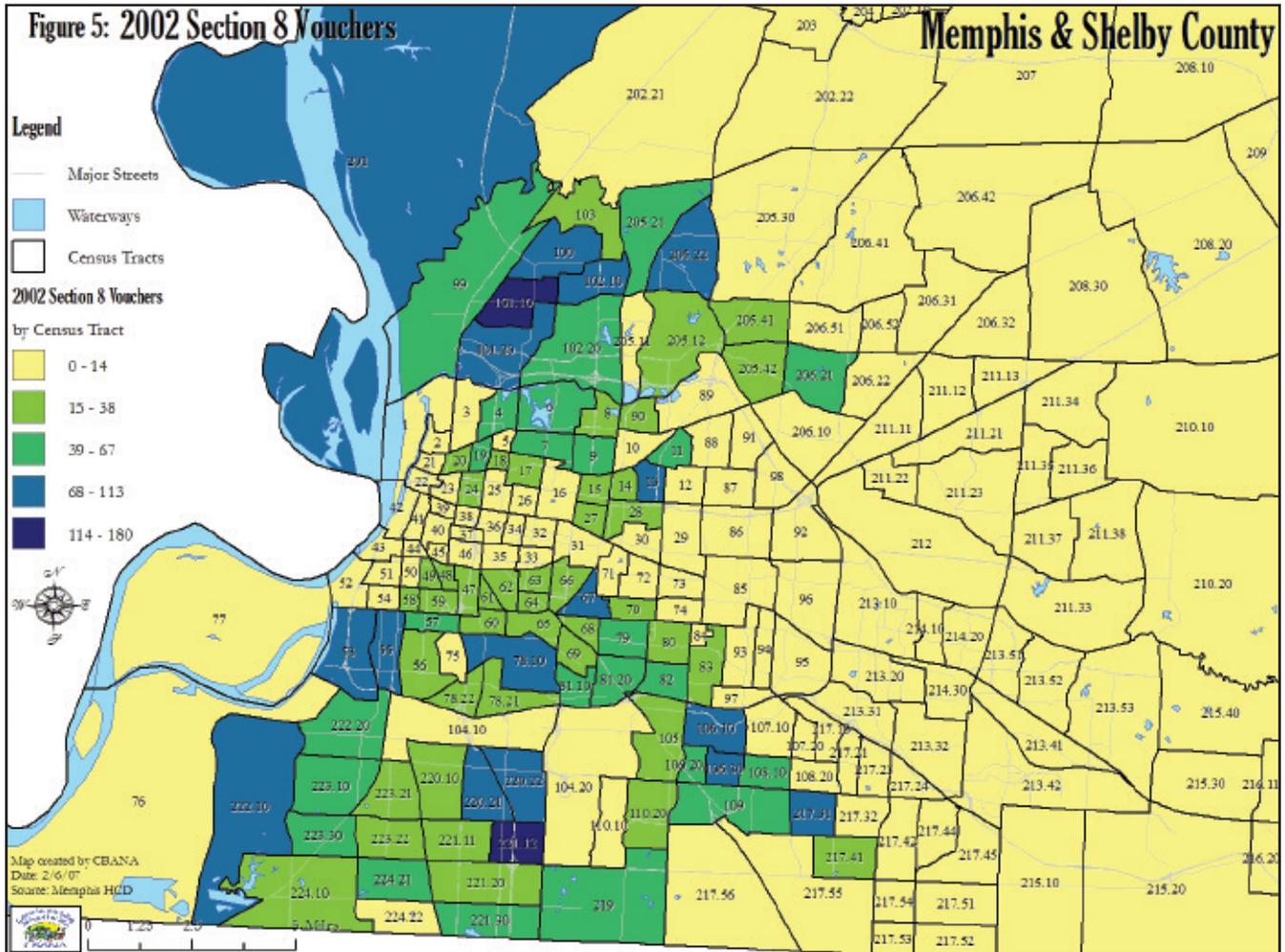
The difference in the appearances of Figure 4 and Figure 3 represents the decentralization of poverty and the changing geographic dynamics of reaching higher-risk families. De-concentration of poverty was encouraged in many cities. Public housing was demolished, and poor families were relocated into neighborhoods with less poverty and greater educational and employment opportunities. This strategy offered promising outcomes for children, according to research from the 1970s.

More recent research, though, shows less favorable outcomes. This may reflect the tendency for poverty pockets to re-cluster within better-off census tracts. It may be evidence that these formerly higher-income census tracts are moving toward concentrated poverty status in Memphis and across the country. (See endnote 2.)

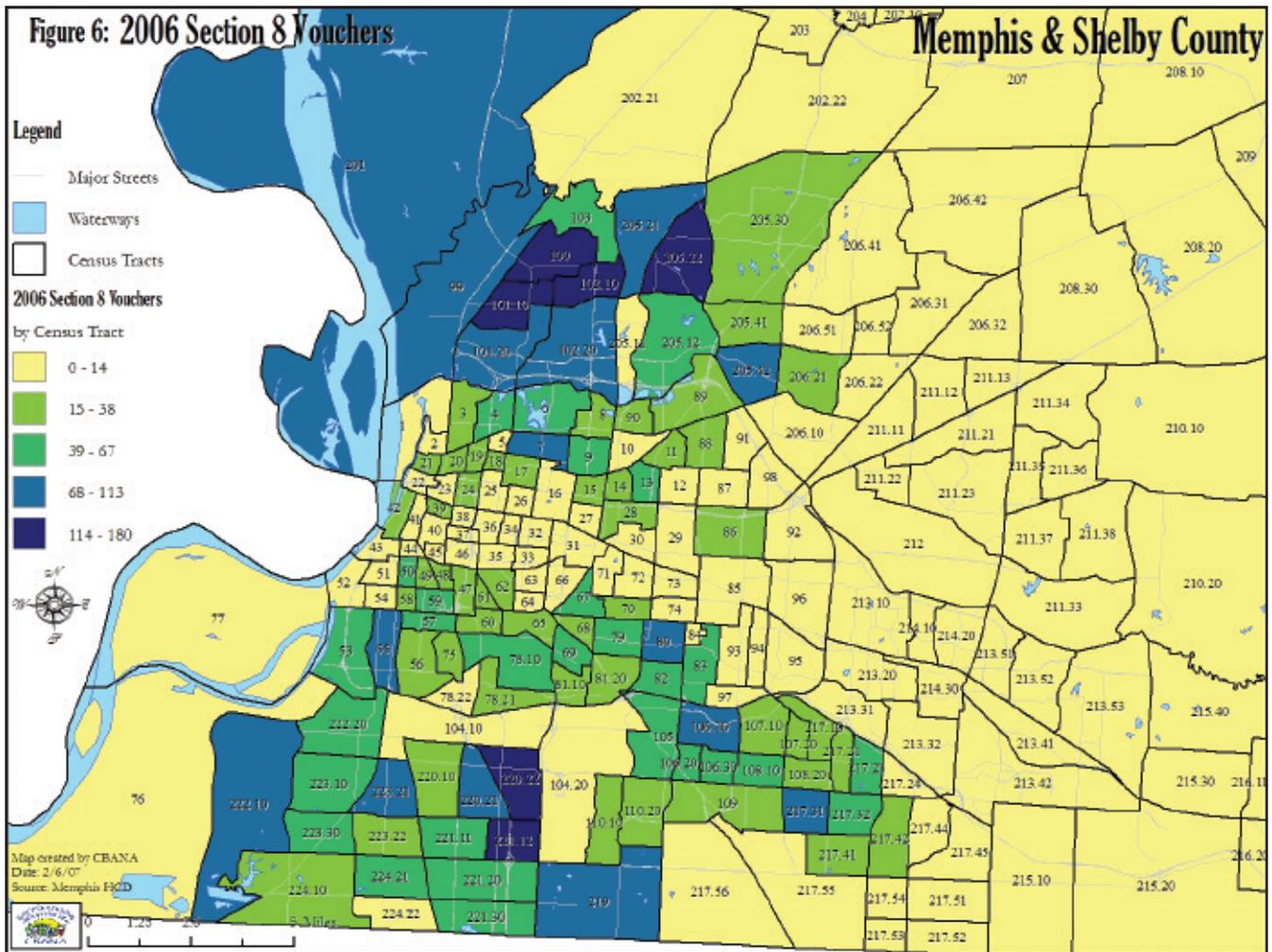
Higher-income neighborhoods that absorb poor-or-low-income families are lower risk overall on the Child Vulnerability Index and generally have greater institutional and organizational resources. However, there may be an absence of support systems, such as child care, for single parents in neighborhoods where traditionally there have been fewer single-parent families.

The decentralization of Section 8 Housing Choice Vouchers is evident in the comparison of density maps from 2002 and 2006. When low-income households decentralize by leaving one area they appear to re-concentrate in other neighborhoods.

2002 Section 8 Vouchers



2006 Section 8 Vouchers



Support services for low income families may be less developed in neighborhoods receiving large numbers of new voucher households. For example, the Earned Income Tax Credit is an organized outreach strategy to low-income, working families that are eligible. In Zip Code 38126, an inner-city Zip Code with highly concentrated poverty and well-established channels for outreach, 75 percent of eligible families actually filed for the tax credit. In Zip Codes 38115 and 38118, where labor force participation is much higher (a pre-requisite for getting the tax credit), poverty less concentrated and the number of low-income households increasing, only 50 percent and 59 percent of eligible households, respectively, filed for the tax credit.

Social Capital is a key asset in neighborhood environment.

Neighborhoods that provide a supportive environment to reinforce effective parenting, complementary opportunities for positive child development, surrogate supervision, nurturing and positive stimulation for children, are said to have high “social capital.” Such neighborhoods can counter risks to health and child development that are generally associated with poverty.

Neighborhoods with concentrated poverty and physical blight tend to have low social capital. Poverty is a problem not only because poor families lack personal resources for effective parenting, but also because community support systems in poor neighborhoods may also be lacking. Poverty and blight mean poor living conditions and high rates of residential transience. Neighbors are less likely to know, and look out for, one another than in more stable neighborhoods.

- When neighborhood support systems are strengthened families and children are more likely to overcome challenges associated with poverty.
- Neighborhoods of concentrated poverty suffer often from near-absence of role models that contributes to weak social capital.
- Low labor force participation is associated with absent role models, weak connections to outside resources and anti-social behavior.

We can understand neighborhood-level risk factors better by knowing more about how families perceive their neighborhoods and neighbors in Memphis and Shelby County. Social surveys measure resident perceptions of social capital and threats to social capital using a standard set of questions.

One out of every five-to-six households in Shelby County is in a neighborhood where signs of neglect signal a lack of care and concern. Data from the American Housing Survey for Memphis and Shelby County reveal that blighted neighborhoods are concentrated in the City of Memphis.

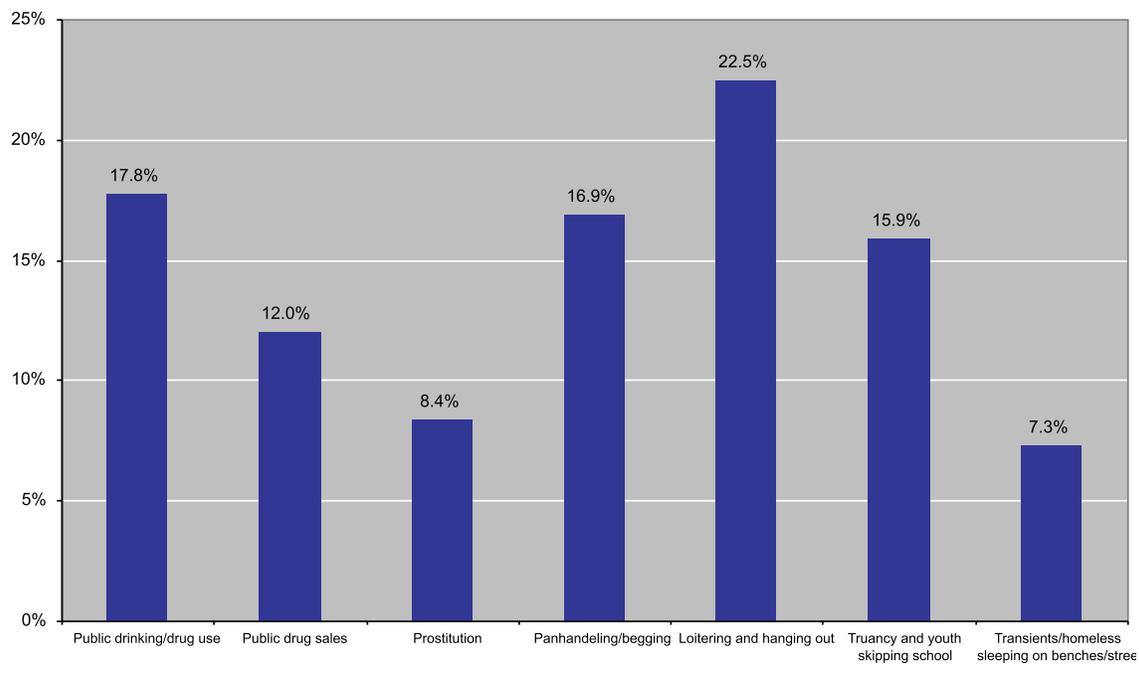
Children can identify assets and liabilities in their neighborhoods.

Asked to describe what they thought of in relation to the terms “healthy” and “unhealthy,” middle school children in a TUCI-sponsored “Health Information Project” in north Memphis focused on neighborhood blight. They described the redeveloped “uptown” neighborhood as healthy, and the neighborhood surrounding Humes Middle School as unhealthy.

National research from the Project on Human Development in Chicago Neighborhoods documented the relationship between blight and diminished social capital, which in turn appears to be related to parental stress.

- Of all the social disorder surveyed, loitering and hanging out is the most common (22.5%).
- Transience and homelessness is reported the least.
- Overall, one out of every five-to-six households in Shelby County is confronted with social disorder.

Resident Reports of Neighborhood Social Disorder by Problems

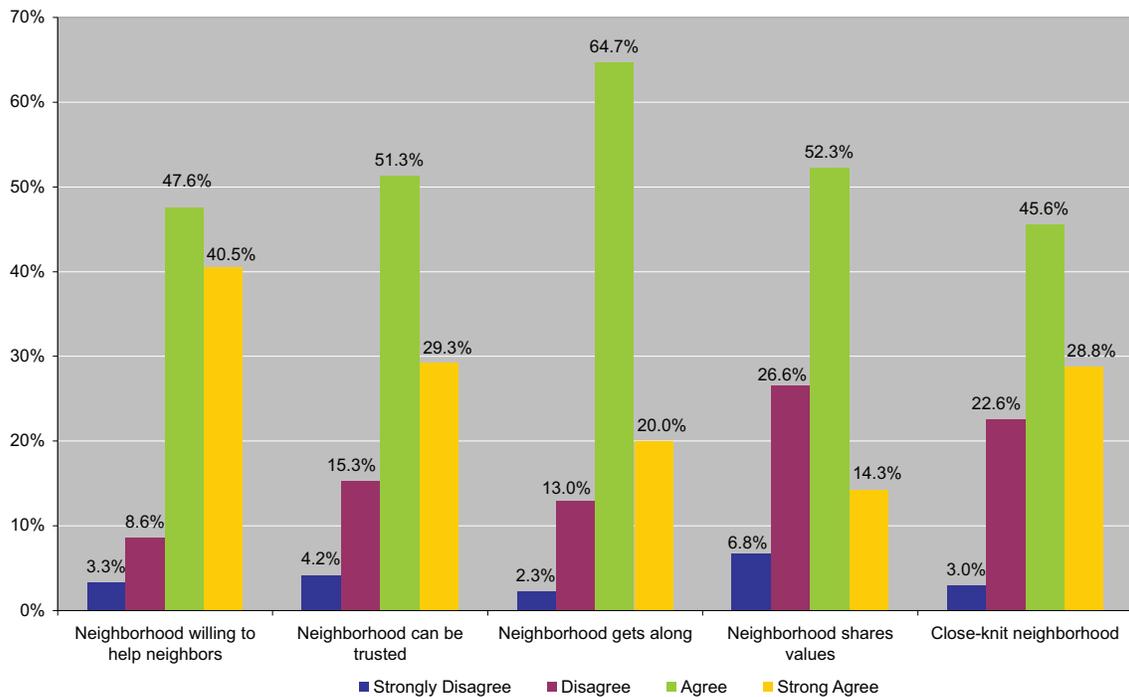


Source: *Mid-South Social Survey: Memphis and Shelby County Criminal Victimization Survey, 2003-2005*

Social support varies widely among neighborhoods. Some parents and families perceive themselves in resource-rich environments while others experience isolation.

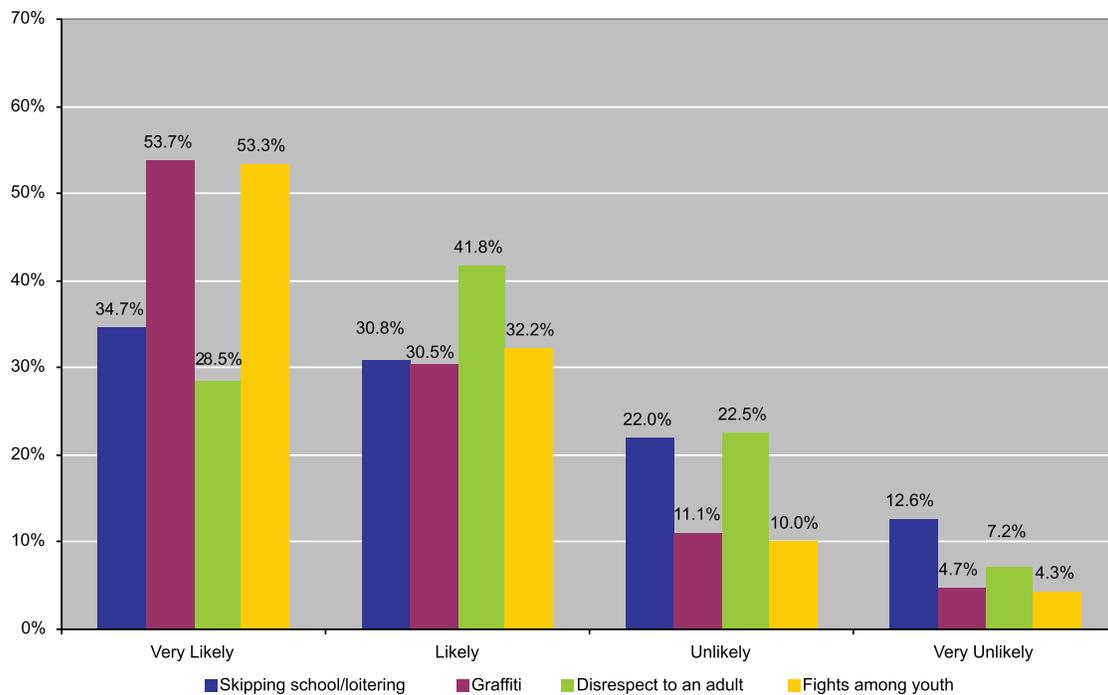
Little more than half of adult respondents envision their neighborhoods as environments where clear standards of behavior are likely to be enforced by neighbors.

Resident Perception of Likelihood of Social Support from Neighbors



Source: Mid-South Social Survey: Memphis and Shelby County Criminal Victimization Survey, 2003-2005

Resident Perception of Likelihood of Neighbors' Willingness to Intervene



Source: Mid-South Social Survey: Memphis and Shelby County Criminal Victimization Survey, 2003-2005

Comparing crime rates will become easier.

Police departments across the country voluntarily submit crime data to the FBI Uniform Crime Reports (UCR). In any given year many departments, including those in the largest and historically highest crime cities, do not report for various reasons. It is also important to understand that different police departments use different standards for classifying and reporting crimes. So comparing data from city to city should be undertaken only with caution.

Memphis and Tennessee are among the first jurisdictions to conform to the National Incident-Based Reporting System (NIBERS), a new system that eventually will be required for all reporting jurisdictions. NIBERS will have the effect of increasing the number of reported incidents because crimes in which more than one charge is involved (a mugging/aggravated assault associated with a robbery) will be reported as separate incidents. In most non-NIBERS reporting such an event counts as only one crime (the most serious of included offenses).

Risk of victimization is a widely variable factor.

Crime rates typically are calculated in terms of number-of-incidents-per-100,000 residents in a given year. The term “victimization risk” is sometimes used to estimate how likely an individual is to be victimized by a particular crime. For example, if there are 1,000 incidents of violent crime per 100,000 residents, individuals have a one in 100, or one percent, chance of being a victim.

It’s important to remember, however, that true victimization risk depends on a wide variety of risk factors. These include with whom a person interacts, neighborhood conditions and other demographic factors that are associated with social networks and neighborhoods. Low income families in poor neighborhoods are at greatest risk for most types of criminal victimization. For low-income children, neighborhood-associated victimization risk adds to other risks that undermine healthy development.

Community-based crime prevention strategies often focus on changing social networks and neighborhood conditions to reduce victimization risk for children in particular.

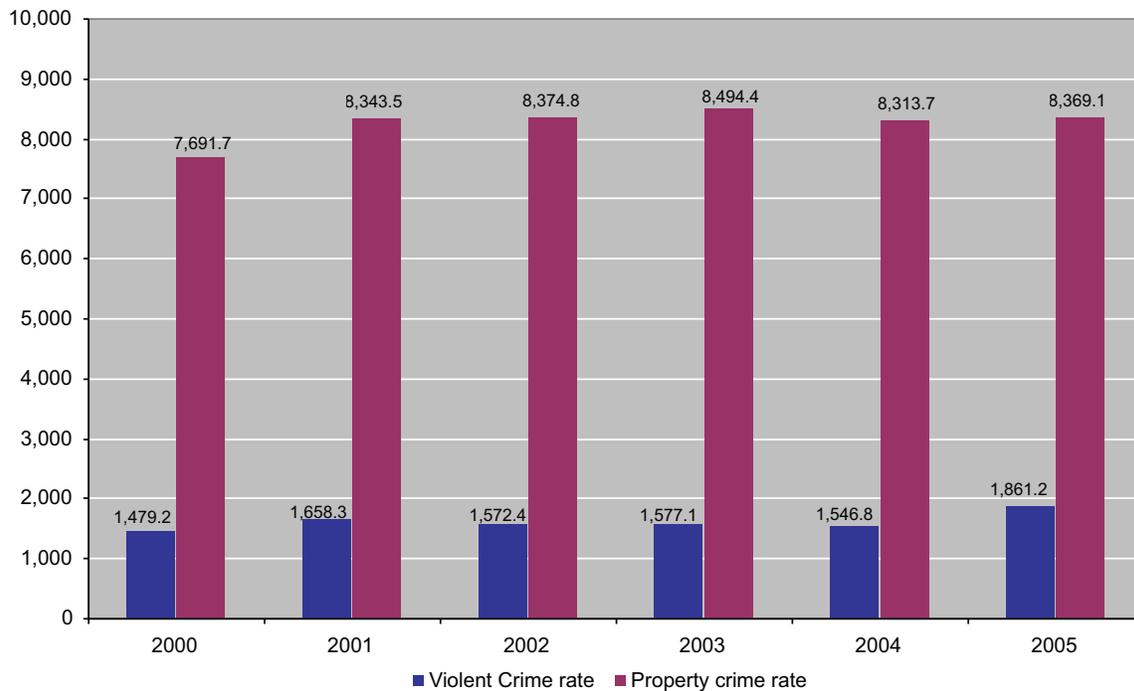
***Blue CRUSH* in Memphis is showing signs of success fighting crime.**

Beginning in 2005 crime escalated across the country, particularly in cities with populations between 500,000 and 1,000,000. This escalation followed more than a decade of declining crime rates after crime had peaked in the early-to-mid-1990s. The decline had been attributed to such factors as the waning “crack” trade, improved economy, the impact of strategic crime-prevention, law enforcement funding and higher incarceration rates. The recent escalation has been attributed to a reversal of those factors, but it is likely that factors differ in different cities.

As other cities Memphis crime escalated in 2005 and 2006. The Memphis Police Department, working with the Center for Community Criminology at the University of Memphis, designed and implemented a so-called “Blue CRUSH” (*Crime Reduction Using Statistical History*) strategy. Blue CRUSH is a strategy to identify and track patterns of criminal incidents and target specialized resources based on these patterns. After successful neighborhood tests Blue CRUSH was implemented city-wide in September, 2006. Shortly thereafter, crime in Memphis began to decrease as it continued to escalate in the rest of the country.

Crime in the City of Memphis decreased in October through December of 2006, and the January, 2007 rate was 12 percent lower than the January, 2006 rate.

Memphis Crime Rate by Violent and Property Crime, 2000–2005



Source: University of Memphis, Center for Community Criminology and Research

Crime in Memphis actually decreased faster in some traditionally high-crime neighborhoods while increasing in traditionally safer, more middle-class neighborhoods. This “decentralization” of crime appears to stimulate greater fear among middle-class citizens who typically have enjoyed higher expectations of neighborhood safety. It may create a perception that nothing is being done or can be done.

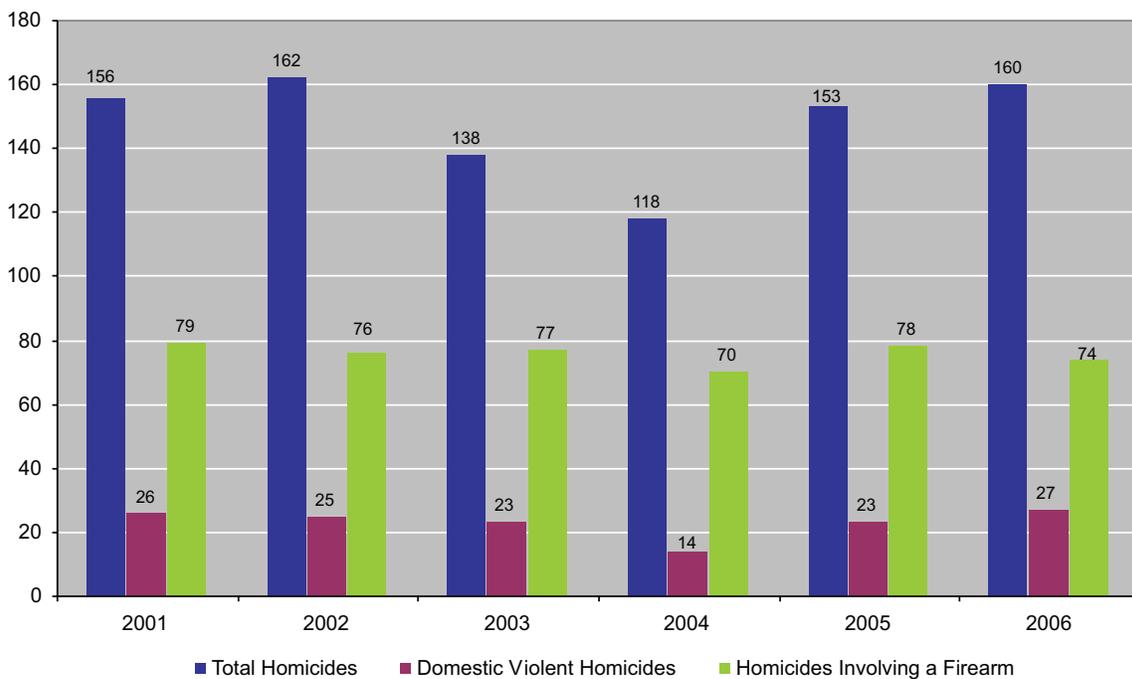
For example, the Hickory Hill area has been associated with increased crime since the mid 1990s, even while the remainder of the city was experiencing decreasing crime. Despite its reputation during that time, however, Hickory Hill’s crime remained lower than inner-city neighborhoods. An exception was the swath of high-density apartment complexes where households moving out of the inner city were likely to re-locate.

By the end of 2006 crime was down substantially in both traditionally higher-crime and lower-crime police precincts. To extend the Hickory Hill example, the number of reported crimes declined 19 percent and 20 percent in the Mt. Moriah and Ridgeway precincts in January, 2007 compared to January, 2006.

Another indication of strategic law enforcement making a difference is evident in an analysis of Memphis homicide data, including domestic-violence-related homicides, from 2002 through 2006. It shows a significant decrease in homicides overall and especially in domestic homicides in 2004.

Analysis by the Center for Community Criminology and Research reveals that the decrease is due almost entirely to a decrease in gun-related deaths. Gun-related deaths may be correlated with the Project Safe Neighborhoods, “Gun Crime is Jail Time,” media campaign. Gun violence and homicides dipped dramatically during, and immediately following periods of media saturation, then rose after the campaign ended.

Distribution of Total Homicides in the City of Memphis Involving Firearms or Domestic Violence, 2001–2006



Source: University of Memphis, Center for Community Criminology and Research

The roles of children as perpetrators and victims

National research is beginning to analyze involvement of children as crime victims and perpetrators. Chicago’s Chapin Hall Center for Children reports that arrests of juveniles for murder increased by 20 percent in 2005 compared to an increase of only six percent for adults. Robbery arrests for juveniles increased 11 percent. We do not yet have comparable reports for Memphis and Shelby County.

Families with children have been moving from higher-crime (poorer) to lower-crime (more middle-class) areas nationally and in Memphis and Shelby County. National data from The Urban Institute's "Moving to Opportunity" research suggests that children moving from higher-crime to lower-crime neighborhoods continue to be at higher-risk of victimization or involvement in crime. It may be that support systems in middle class neighborhoods, such as mentoring programs or meeting places such as Boys and Girls Clubs or Girls, Inc., need to be strengthened. It may be also that old, risky associations follow them into their new neighborhoods.

Preliminary analysis suggests that supportive resources may not have responded to children who are at higher risk for delinquency and neglect when they moved from inner city neighborhoods to mid-city neighborhoods such as Whitehaven, Hickory Hill and Raleigh.

Despite concerns about youth involvement in crime and delinquency in Memphis and Shelby County, juvenile court data reveal a decrease in the number of referrals for delinquency between 2000 and 2004. Actual numbers are down, and they reflect a declining percentage of youth being referred to juvenile court during this period. It is not known, however, how much of the decrease may be associated with the recently publicized diversion programs being operated in Germantown and Bartlett.

Tennessee Department of Health Department of Health Statistics. (2007). "Tennessee Vital Statistics Summary Resident Data 2005." *Tennessee Department of Health*. Retrieved February, 2007, from <http://health.state.tn.us/statistics/PdfFiles/VSSum05.pdf>

Tennessee Department of Health Office of Policy, Planning and Assessment. (2005). "Tennessee's Racial Disparity in Infant Mortality." *Tennessee Department of Health*. Retrieved March, 2006, from <http://health.state.tn.us/statistics/PdfFiles/IM2006.pdf>.

"Tennessee's Voluntary Pre-Kindergarten Program: Every Child Ready Early." (2007).

Wu, L.L, Martinson, B.C. (April, 1993). "Family Structure and the Risk of a Premarital Birth." *American Sociological Review*. 58(2):210-232.

Youth Risk Behavioral Survey. <http://www.mcsk12.net/admin/research/YRBS-2003.html>.

Glossary



Advanced is a score on the TCAP and NAEP that denotes mastery of grade-appropriate knowledge of skills and assets.

At-Risk children and students as defined by national testing standards are those who come from economically disadvantaged backgrounds, have limited English proficiency and/or have disabilities.

***Axon** is the tail of a neuron.

AYP is the acronym for Adequate Yearly Progress, a measurement created by NCLB to assess the performance of individual schools. A school is rated to have achieved AYP if its students achieve scores of proficient to a standard set by the district, with exceptions for students in at-risk categories.

Basic is a fourth score, or category of measurement, used on the NAEP but not the TCAP. Basic means that the student has partial mastery of prerequisite skills that are fundamental for proficiency.

Body Mass Index is a measure of body fat based on an individual's height and weight.

Below Proficient on the TCAP and NAEP means that the student has not mastered prerequisite or grade-appropriate knowledge.

Creative Class is an identity coined by Richard Florida to describe a cadre of workers with skills and contributions for a post-industrial society.

Cut Scores define the percentage of questions that a student must answer correctly to be considered Proficient or Advanced.

ED is the acronym for the provisional TCAP category, Economic Disadvantage.

Families First is Tennessee's Welfare reform program which replaced Aid to Families with Dependent Children in 1996.

Gestation is a synonym for pregnancy.

Graduation rates are defined in several ways: By entering ninth grade cohort and by percent of twelfth graders who are graduated from high school that school year. By measuring the freshman class as it enters the ninth grade and again at graduation to determine how many finish high school on time. By looking at the percent of graduating seniors (twelfth graders) it is possible to learn how many students were graduated from the senior class that year.

Infant mortality rate (IMR) is the number of deaths per 1,000 live births that occur in the first 12 months of life.

Knowledge Economy defines an economy that demands high levels of education and knowledge rooted in science, technology, engineering, mathematics and computers, rather than physical strength or dexterity.

STEM is an acronym for science, technology, engineering and mathematics.

LEP is the acronym for the provisional TCAP category, Limited English Proficient.

Low Birth-Weight is a weight of less than 2,500 grams, or about 5 pounds 8 ounces, of an infant at birth.

Memphis MSA (Metropolitan Statistical Area) defines the area comprised of the Tennessee counties of Shelby, Tipton and Fayette, Crittenden County, AR and DeSoto County, MS.

NAEP is the acronym for National Assessment of Educational Progress, the identity of a test given to a sample of students in every state to assess the progress of students nationally.

NAEYC is the acronym for National Association for the Education of Young Children that gives accreditation to child care centers nationwide based on performance and standards of excellence in the areas of curriculum, staff, center attributes and family and community relationships. NAEYC maintains a national database of accredited centers.

NCLB is the acronym for No Child Left Behind that identifies the 2001 reauthorization of the Elementary and Secondary Education Act that enacted vast educational reforms to improve the standing of low-performing schools with rewards for achievement and penalties for lack thereof.

***Neuron** is a nerve cell.

To **Peg** a state standardized test to the national test means that the state test is written to reflect the rigor and content of the national test (NAEP).

Physical Activity is defined as any kind of physical activity that increases heart rate and causes hard breathing for a period during a total of at least 60 minutes per day on five or more of the seven days preceding the survey.

Pre-Kindergarten is a program to educate three-and-four-year-olds in classroom settings while functioning also as child care with emphasis on social, emotional and cognitive preparation for kindergarten.

Premature Birth (Prematurity) defines an infant born in less than 37 weeks.

Proficient is a TCAP and NAEP test result that identifies a student as having prerequisite knowledge for grade-appropriate learning.

School Readiness defines the state of a child with the relative social, emotional and cognitive abilities to enter kindergarten.

Stability or **Instability** define the degree of transience of students between schools during the school year other than for grade promotion.

Star Quality Rating System is a measurement of one-two-or-three-star ratings given to child care centers in the State of Tennessee.

SWD is the acronym for the provisional TCAP category, Students With Disabilities.

***Synapse** is an area of the human brain in which communication between nerve cells occurs.

TANF is the acronym for Temporary Assistance to Needy Families, a Federal initiative that allows states to develop and implement programs that provide assistance and work opportunities for needy families.

TCAP is the acronym for Tennessee Comprehensive Assessment Program, a standardized exam that measures student achievement in Grades 3-12 in Tennessee public schools. TCAP results are used to fulfill No Child Left Behind requirements.

Title I is a Federal program that provides funds to schools that have a significant percentage of students who are “low-income” or “poor.”

YRBS is the acronym for Youth Risk Behavior Survey that was created by the Center for Disease Control (CDC) in 1990 to measure certain behaviors among youths. YRBS includes school-based surveys conducted and reported on national, state and local levels. YRBS was first administered in Memphis City Schools (MCS), Grades 6-12, during the 2003-04 school year, repeated in the 2005-06 and scheduled again for the 2007-08 school year. Details about the Memphis YRBS are available at <http://www.mcsk12.net/admin/research/YRBS-2003.html>.

*= In section entitled What’s the big deal about 0-3

Works Cited



Alan Guttmacher Institute. (2001:33). *Family Planning Perspectives*.

Amato, Paul. (2005). "The Impact of Family Formation Change on the Cognitive, Social, and Emotional Well-Being of the Next Generation." *The Future of Children*, Vol. 15 No. 2. Retrieved March, 2006, from http://www.futureofchildren.org/usr_doc/05_FOC_15-2_fall05_Amato.pdf.

American Academy of Pediatrics. (1997) "Committee on Environmental Health, Environmental Tobacco Smoke: A Hazard to Children." *Pediatrics*. 99: 639-642

Annie E. Casey Foundation. <http://www.aecf.org>.

Annie E. Casey Foundation. CLIKS. <http://www.kidscount.org/cgi-bin/cliks.cgi>.

Annie E. Casey Foundation. (2006). Kids Count. Annie E. Casey Foundation. Baltimore, M.D. Retrieved January, 2006, from <http://www.aecf.org/MajorInitiatives/KIDSCOUNT.aspx>.

Astone, N.M., Upchurch, D.M. (August, 1994). "Forming a Family, Leaving School Early, and Earning a GED: A Racial and Cohort Comparison." *Journal of Marriage and the Family*. 56(3): 759-771.

Atreya, V. (2006). "Childcare costs outstrip monthly rents." *Nashville City Paper*. Nashville, T.N.

Behram, B.E., Butler, A.S. (2006). "Preterm Birth: Causes, Consequences, and Prevention." *Institute of Medicine of the National Academies*. Washington, D.C. Retrieved December, 2006, from <http://www.nap.edu/catalog/11622.html>.

Birnbaum, A.S., Lytle et al. (June, 2003). "School functioning and violent behavior among young adolescents: a contextual analysis." *Health Edu Res*. 18(3):389-403.

Center for Disease Control. <http://www.cdc.gov/std/stats/chlamydia.htm>

Center for Disease Control. <http://www.cdc.gov/std/Gonorrhea/STDFact-gonorrhea.htm#what>

- Center for Disease Control. <http://www.cdc.gov/hiv/resources/factsheets/youth.htm>
- Center for Disease Control.
<http://www.cdc.gov/hiv/topics/surveillance/resources/reports/2005report/table5b.htm>
- Chang, Cyril. (2004). "The Economic Impact of the Child Care Industry in Shelby County, Tennessee." *Memphis, Methodist LeBonheur Center for healthcare Economics, Fogelman College of Business and Economics*. Memphis, T.N.
- Chattanooga Times Free Press. (2006). "Bredesen Touts Pre-K Program." Chattanooga.
- Child Trends Databank. <http://www.childtrends.databank.org>.
- Child Trends Databank. (2005). "Teen Births." Retrieved March, 2005, from
<http://www.childtrends.databank.org/indicators/13TeenBirth.cfm>.
- Committee for Economic Development. (2006). "The Economic Promise of Investing in High-Quality Preschool: Using Early Education to Improve Economic Growth and the Fiscal Sustainability of States and the Nation."
- "Community Guide to School Funding." (2005).
- Department of Health and Human Services (HHS) & the Department of Agriculture (USDA). (2005). "Dietary Guidelines for Americans 2005." Retrieved February, 2005, from
<http://www.healthier.us.gov/dietaryguidelines/>.
- "Education Could Do More." (September, 2005).
- Frantz, A. (1999). "Who's Watching the Kids?" *Memphis Flyer*. Memphis, T.N.
- Gottschalk, P., McLanahan, S, & Sandefur, G. (1994). *Confronting Poverty: Prescriptions for Change*. Harvard University Press. Cambridge.
- Hamilton BE, et al (2007). "Annual summary of vital statistics: 2005." *Pediatrics*. 119:345-360.
- Hart, B. & Risley, T.R. (2004). *Meaningful Differences in the Everyday Experience of Young American Children*. Paul H. Brookes Publishing Co. Baltimore, MD.
- Haskin, R., McLanahan, S., & Donahue, E. (2005). "The Decline in Marriage: What to do?" Brookings Institute. Washington, D.C. Retrieved January, 2006, from
<http://www.brookings.edu/es/research/projects/wrb/publications/pb/200509foc.pdf>.

- Hymowitz, K. (2005). "What's Holding Black Kids Back?" *Manhattan Institute for Policy Research*. New York, NY. Retrieved December, 2006 from http://www.city-journal.org/html/15_2_holding.html.
- Institute of Medicine. (2005). "Preventing Childhood Obesity: Health in the Balance."
- Karoly, L.A., Kilburn, M.R., Cannon, J.S. (2005). *Early Childhood Interventions: Proven Results, Future Promise*. Rand Corporation. Santa Monica, CA.
- Koplan, J.P., Liverman, C.T., & Kraak, V.I. (2005). *Preventing Childhood Obesity: Health in the Balance*. National Academies Press: Washington, DC.
- Kumar, R.B. (2006). "Tennessee low in pre-K report but has big plans." *Commercial Appeal*. Memphis, T.N.
- Lee, V.E., Berkham, D.T. (2002). *Inequality at the Starting Gate: Social Background Differences in Achievement as Children Begin School*. Economic Policy Institute. New York, NY.
- March of Dimes Peristats. <http://www.marchofdimes.com/peristats/>
- March of Dimes. http://www.marchofdimes.com/pnhec/173_769.asp.
- March of Dimes Peristats. http://www.marchofdimes.com/professionals/14332_1171.asp
- Memphis P.I.P.E. (Spring, 2007). "Understanding Graduation and dropout Rates." *Memphis PIPE*. Memphis, T.N.
- National Association for the Education of Young Children. (2007). "NAEYC Early Childhood Program Standards." Washington, D.C.
- NIAAA Interdisciplinary Team on Underage Drinking Research. (2004/2005). "Alcohol and Development in Youth-A Multidisciplinary Overview." *Alcohol Research and Health*. 28(3).
- Relations, T.A.C.O.I. (May, 2001). "Tennessee and the Knowledge Economy."
- Sawhill, I. (2003). *One Percent for the Kids: New Policies. Brighter Futures for America's Children*. Brookings Institute. Washington, D.C.
- The Tennessee Comptroller's Report. (March 2006). "Weighing the Costs of Obesity in Tennessee." Retrieved March, 2007, from <http://www.comptroller1.state.tn.us/repository/RE/FinalObesityReport.pdf>.
- Tennessee Department of Education. (2006). "Tennessee TCAP Scores."