Promoting optimal brain development for children from conception to three.

Center for Urban Child Policy

EARLY CHILDHOOD COMPREHENSIVE SYSTEMS

Experiences that fill a child's first three years have a direct and substantial impact not only on brain development but on subsequent intellectual, social, emotional, and physical growth. Early childhood comprehensive systems are designed to put all children on a pathway to success in school and life. The successes of these state-level initiatives are noteworthy. This policy brief discusses Early Childhood Comprehensive Systems, and what such a system might mean for the optimal brain development of young children in Memphis and Shelby County, Tennessee.

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Setting Our Children - And Our City - On A Path to Success

Several years ago, children across Memphis entering kindergarten were given a readiness assessment known as the Developing Skills Checklist. The results of that test were troubling, suggesting that only 27% of five year olds were fully ready to start kindergarten (First Year's Institute, October 2005). Our community has good reason to be concerned by these results. These are the children who will be tomorrow's workers, tax-payers, and parents.

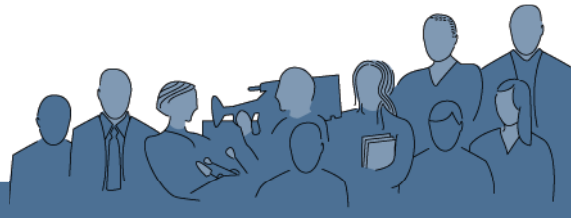
Recent advances in the science of brain development help to explain these alarming findings. Science tells us, for example, that the period of most rapid brain development occurs long before children enter kindergarten. During the first three to four years of a child's life, they are learning at an astonishing rate through their interactions with parents, family members and care-givers and with the world around them. These early learning experiences – in turn – provide the foundation on which later skills and abilities are built (National Scientific Council on the Developing Child, 2004 and 2006).
In order to succeed academically and socially, children need to establish a solid foundation of socio-emotional, cognitive, behavioral and physical development skills long before they enter kindergarten (Kagan et al, 1995). A child's family and community supports that developmental process when it provides children with a safe, nurturing, and stimulating environment.

Over a decade ago, these scientific findings compelled the California Legislature to adopt Proposition 10, which created a program called First 5 California. In part, the enabling language for that initiative stated:

- A child's first three years are the most critical in brain development, yet these crucial years have inadvertently been neglected. Experiences that fill the child's first three years have a direct and substantial impact not only on brain development but on subsequent intellectual, social, emotional, and physical growth.
- California taxpayers spend billions of dollars on public education each year, yet there are few programs designed specifically to help prepare children to enter school in good health, ready and able to learn, and emotionally well developed. Children who succeed in school are far more likely to engage in meaningful social, economic, and civic participation as adults and to avoid the use of tobacco and other addictive substances.

First 5 California, and other state level initiatives to support the early brain development of young children, are designed to put all children on a pathway to success in school and life. The successes of these state-level initiatives are noteworthy:

- In California, Illinois and North Carolina, more kids are enrolled in high-quality early childhood care and education programs,

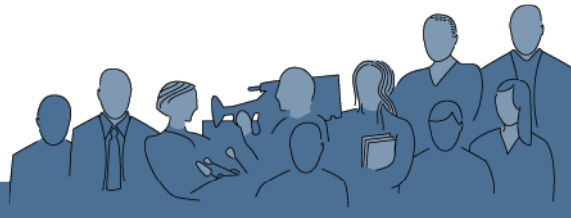


- Significantly more young children have access to health care coverage, and
- Significantly higher numbers of children reach kindergarten ready to learn.
- Moreover, these gains are durable. In North Carolina, comprehensive early childhood investments are credited with raising the entire state's performance on the 4th grade National Assessment of Educational Progress. This is no small accomplishment.

In Memphis and Shelby County, many children are at high risk for poor developmental outcomes as a result of fragile families, impoverished early childhoods, insecure access to health care and nutrition, and fear. The result is that many of our children start life facing high levels of toxic stress during their early developmental years, stress brought on by community and family uncertainty, poverty, and violence, creating a poor foundation of early developmental skills. In turn, as these children enter kindergarten, their diminished early experiences translate into developmental deficits, including diminished vocabularies, weaker pre-reading and pre-math skills, and a harder time working and playing well with other children. Since our ability to learn new materials and develop more complex skills is based on the effective mastery of basic skills, children who start kindergarten at a disadvantage are likely to remain behind their more academically advantaged peers as they grow (National Scientific Council on the Developing Child, 2004 and 2006).

In short, when children have an unequal start in life, this inequality translates into achievement gaps once children start school. At the same time, we have also learned – through more than 40 years of careful research and evaluation – that high-quality investments in early childhood that foster optimal brain development offer at-risk children some protection from these same risk factors. Not only do we understand what effective interventions look like, but we have also learned that these interventions are smart community development strategies: They pay for themselves many times over in terms of both improved individual outcomes and reduced societal costs (Barnett 1996, Clements et al. 2004, Olds et al, 1997).

Children are more likely to reach school on the strongest possible footing when their developmental needs are supported from birth onward. These needs include physical health and safety, social and emotional support and interaction, and cognitive engagement and development. Too often, when we think about these different needs, we think of them in isolation. Family income, for example, is understood to be a function of patterns of employment, wage, and welfare support. Early childhood care and education, in turn, is understood as a function of the quality of interactions between young children and the caregivers in their lives – including both family members and early childhood care providers and teachers. In turn, the distinctions we draw between different facets of nurturance in a child's life correspond to different systems of support –



including social services, child protective services, child care, and health care systems. Today, critical services that support early childhood development and well-being are provided by a bewildering array of agencies at many government levels (Hodgkinson 1989).

At the heart of each of these isolated systems stands the same child, and our ability to best serve that child's needs is heightened by re-focusing our systems of care and support on the collective needs of that child (c.f.: Hodgkinson 1989). Responding to this compartmentalization, the federal Maternal and Children's Health Bureau has sought to support state and local efforts to develop the "whole child" by synchronizing multiple systems of support for optimal early childhood development through Early Childhood Comprehensive Systems (ECCS).

What is an Effective Early Childhood Comprehensive System (ECCS)?

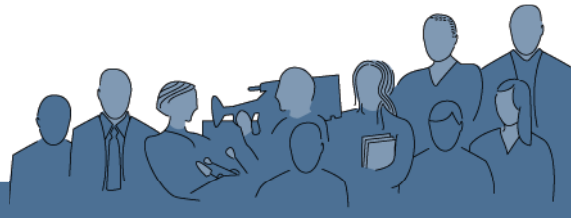
ECCS initiatives are efforts to coordinate systems of care that support children from birth through kindergarten entry across the full range of young children's developmental needs. The Maternal and Child Health Bureau has identified five key components of an effective ECCS. These include: physical and mental health services, family support services, parent education programs, early care and education programs, and early intervention services (Maternal and Child Health Bureau, n.d).

Constructing a Sustainable ECCS Supports Early Childhood Brain Development

An ECCS plan with the power to improve children's developmental outcomes requires the creation of multiple system level components. These components should include:

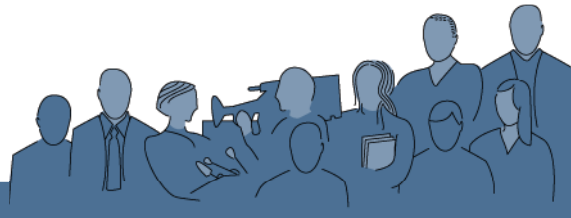
~ A leadership model that includes stakeholders and families to coordinate the existing network of services into a system of care;
~ Increased funding and strategic use of existing funds to improve access to programs and increase the quality of services;
~ Unified quality standards to ensure that services effectively support healthy development in systems that include multiple types of service providers; and
~ Evaluation metrics which guide program development, allocation of resources and help create sustained public support for the ECCS through a demonstration of improved outcomes.

The following table compares the leadership models, funding strategies, quality standards and evaluation systems of established ECCS' in California, North Carolina and



Illinois. Each of these systems has been effective at coordinating existing resources around children and improving child outcomes in the process over the last 10 years.

Early Childhood Comprehensive System	California [i]	North Carolina [ii]	Illinois [iii]
Leadership Model	State level First 5 Commission and 58 county level First 5 Commissions	ECCS Consortium formally linked to the DHHS Children's Services Advisory Committee during planning	The Birth to Five Project which is composed of state agencies and existing non-profit/ foundation collaboratives
Funding for Programs	Federal and state funding that is augmented by a state tobacco tax and support from philanthropic organizations such as the David and Lucille Packard Foundation	Federal and state funding that is augmented by support from non-profits and private charities	Federal and state funding is augmented by non-profit and foundation funds; 11% of funds earmarked for infant and toddler services

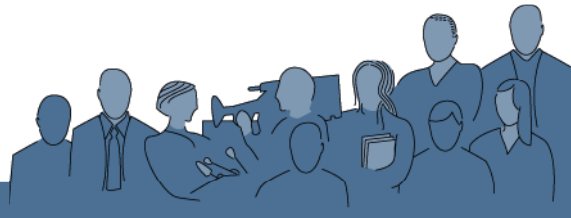


Quality Standards for Programs	Infant/toddler care quality raised by creating "early learning guidelines, program standards, a curriculum framework, a developmental assessment and professional development initiatives	Developmental science used as basis for training service providers; Training for providers in core competencies of early relationships and neurobiology of social/emotional development; Use evidence based practices to enhance outcomes	All programs for infants and toddlers must conform to a best practice curriculum and developmental model
Evaluation Measures	First 5 has developed an evaluation data system for service providers to collect evaluation data on children in their programs and outcomes [iv]	All programs are measured using the Shared Indicators for School Readiness Project to evaluate their programs; Creation of Shared Early Childhood Data System	All providers are required to use one of 30 approved test instruments to measure improvement in child outcomes [v]

California

First 5 California was created in 1998 as the result of ballot proposition 10. It amended the California State Constitution to create the First 5 system in order to sponsor community initiatives and encourage creativity in layering funding to increase quality and access to services to support early development (First 5, 2009). California's ECCS is only loosely unified at the state level, due in large part to the size and diversity of California's population. The county level First 5 commissions have been responsible for increasing access to services, improving quality standards and working creatively with community organizations to create points of service for children into the ECCS.

For example, county level First 5 commissions have partnered with the State Department of Health and local providers to create a Children's Health Initiative to provide health insurance and a medical home to children who do not qualify for the state chil-



dren's health insurance program. To date, the Children's Health Initiatives have provided health insurance and a medical home to about 87,000 children across California (Institute for Health Policy Solutions, 2004).

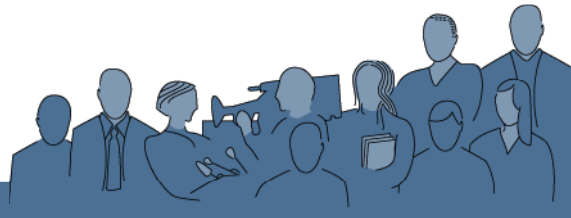
Illinois

Illinois' Birth to Five Project has helped to increase the amount of high quality early care for infants and toddlers, while also ensuring that a diverse range of providers all provide a uniformly high quality of care for those children. The Early Childhood Development Block Grant funding is distributed as needed to local level programs and services by their oversight committee. The committee has reserved 11% of all ECDBG funds to provide early care and education programs for children from 0 to 3. They mandate that funds are only spent on high quality, best practice care that will conform to their Birth to Three program standards (Illinois State Board of Education, 2002). Through the Early Childhood Development Block Grant, Illinois has been able to expand their targeted pre-kindergarten program to a universal program for all 3 and 4 year olds.

The Birth to Five Project leadership in state government has also done an excellent job in recent years in increasing access to social, emotional and mental health screenings. They have used grant money from the Commonwealth Fund's Assuring Better Child Health and Development Initiative to train medical professionals across the state to conduct social and emotional developmental health screenings. They also use education dollars to fund social and emotional developmental health screenings through the state's pre-school program. Their efforts have lead to increased social and emotional health screenings and treatment for children across the state (Doctors et al 2007).

North Carolina

North Carolina's ECCS was established more recently than California's or Illinois. However, they have a very strong foundation of early childhood programs to build upon in developing their ECCS. One of the major players in North Carolina's ECCS is the North Carolina Partnership for Children's Smart Start program. The Smart Start program was created in 1993 as an act of the North Carolina Legislature. The program combines public and private funds to provide high quality early childhood programs through public and private providers across the state. In the last 15 years, the program has increased access to high quality pre-K by 300%. Smart Start funds are also used statewide to provide for home visiting programs, family supports, nutrition, health and mental health services. Children's increased access to high quality pre-K and other developmental supports has resulted in better preparation for kindergarten



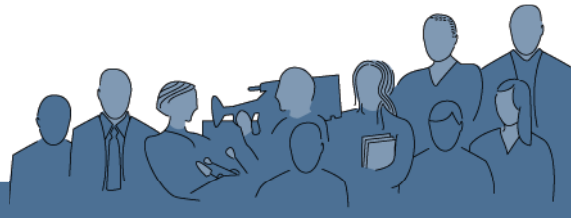
and improved scores on state and national achievement tests in 4th grade (Doctors et al 2007).

North Carolina's ECCS has also created and used a very innovative research and evaluation tool to measure children's outcomes associated with participation in ECCS programs. ECCS partners collaborated to create the Shared Indicators for School Readiness Project that is used to evaluate the outcomes of all programs in their ECCS system. Prior to creating the ECCS, all of the existing programs had their own data systems and metrics for measuring outcomes associated with their programs. The Shared Indicators for School Readiness system enables all providers to observe the ways that their services contribute to kindergarten readiness.[vi] Thus, it has become a tool for measuring outcomes and for program planning and resource allocation (Nelson, 2005).

The Existing Network of Early Childhood Development Supports in Shelby County

Currently, a dangerously high percentage of children in Shelby County are at risk of poor outcomes in school and life given the vulnerability of their early childhoods. Over half of our children are born into families which lack the basic financial and social resources needed to optimize their early brain development. Since they lack access to quality supports for early development, they arrive at the first day of kindergarten already at a disadvantage. As they grow up, most of these children never catch up to their better prepared peers and are significantly more likely to fall further behind, fail a grade, never learn to read, drop out of school, become parents early, have difficulty finding a job that pays a living wage, and turn to crime. Reaching adulthood without academic preparation or skills, and without social and emotional competencies means that they are unprepared to join the workforce, own homes or provide for their own children's healthy development. The future health and well-being of Memphis depends on our ability to make targeted public investments in at-risk children that will enable them to arrive at school ready to learn and grow into a successful, productive and healthy workforce.[vii]

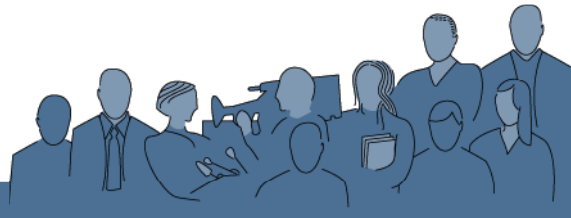
Making investments that will provide us with the kinds of improved outcomes that we want to see for our children and our city is a multi-step process that will involve both political will and infrastructure building. Most components of an ECCS are currently available in Shelby County, but they do not cover the needs of our entire at-risk population. The majority of these services are paid for with federal and state funding. There is no one existing proven program model that incorporates all of the components required for an ECCS. However, multiple state ECCS plans and the Center for Law and Social Policy (CLASP) have recommended that child care providers or a medical home



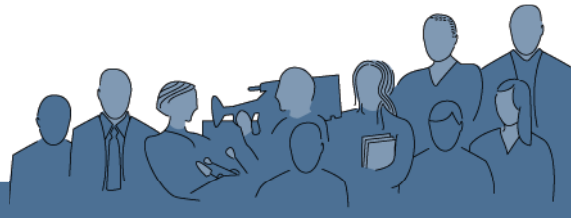
could be utilized as a point of access to all the services in an ECCS.

The Early Head Start and Head Start programs help provide coordination of care to at-risk children for the services included in an ECCS. Having a unified point of access to services through Head Start has helped improve at-risk children's school and life outcomes for several decades. Multiple states are examining the possibility of or are working with home and center based child care providers, currently funded under the Child Care Development Block Grant, to become Early Head Start and Head Start providers (Hoffmann, 2009). This collaboration will provide state agencies with an improved capacity to help at-risk children access services to support all of their developmental skills.

ECCS Components	Program for At-Risk Kids	Funding Mechanism	# and Percent of Eligible Children (0 to 5) Enrolled in Services	% of Service Providers who ranked as High Quality or who Use a Best Practice Model
Mental & Physical Health Services	TennCare (Medicaid) (0-5)	Federal funds (75%) State funds (25%)	31,462 (93%) viii	100% ix
Mental and Physical Health	CoverKids (SCHIP) (0-5)	Federal funds (75%) State funds (25%)	875 (21%) x	100% xi
	Food Stamps	Federal funds (100%)	30,271 (87%) xii	n/a
	WIC	Federal Funds (68%) Other funds (32%)	27,128 (59%) xiii	n/a



ECCS Components	Program for At-Risk Kids	Funding Mechanism	# and Percent of Eligible Children (0 to 5) Enrolled in Services	% of Service Providers who ranked as High Quality or who Use a Best Practice Model
Parent Education/ Family Support	Home Visiting programs (0-5)	See notes xvi	1,427 xiv	37%
	TANF (Welfare) (0-5)	Federal (81%) State (16%) Other funds (3%)	8,607 (33%) xv	n/a
Early Care and Education	DHS Child Care (0-5)	Federal (86%) State (9%) Other funds (5%)	7,949 (30%) xvi	60% xvii
	Early Head Start (0-3)	Federal funding (100%)	95 (2%) xviii	100%
	Head Start (3&4)	Federal funding (100%)	2,296 (22%)xix	100%
	Public Pre-K (3&4)	Federal (4%) State (82%) Lottery funds (14%)	2,540 (24%) xx	100%



ECCS Components	Program for At-Risk Kids	Funding Mechanism	# and Percent of Eligible Children (0 to 5) Enrolled in Services	% of Service Providers who ranked as High Quality or who Use a Best Practice Model
Early Intervention Services	TEIS (0-3)	Federal (28%) State (71%) Local funds (1%)	909 [xxi] (35%)	n/a

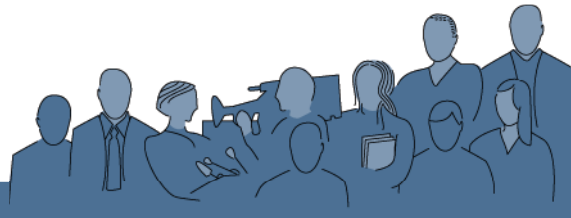
Transforming the Existing Network of Programs into an ECCS

The current network of services for at-risk children in Shelby County has the capacity to support healthy early development. However, there are several large problems with our current system that impede our ability to provide comprehensive services. Our current network of programs serves, on average 37% of the eligible population with wide variations depending on the functions of the program. There are also wide variations in program quality, depending on the industry with the important note that various services do not have well known quality and evaluation metrics in place.

Lawmakers and children's advocates in Tennessee should carefully study the ways that other states, such as North Carolina, California, and Illinois, have collaborated to build solid leadership across programs for an ECCS. Meeting the full range of Memphis children's developmental needs will require a commitment on the part of all service providers to meeting the full developmental needs of children.

Our ability to improve access through service coordination is limited because nearly 75% of the funding for our program network comes from the federal government. Ultimately, providing greater access to higher quality services will require us to innovate new ways to raise funding and to administrate programs.

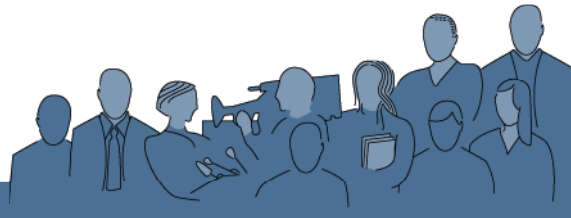
Expanding access to programs will require the use of programs that have traditionally had different quality metrics. Therefore, maintaining the quality of care will require us to create unified quality standards for all programs in the ECCS. Enabling providers to meet those quality standards will also require that we invest in continuing education



and training programs.

Finally, creating a sustainable ECCS system will require that our existing network of programs create a unified evaluation and outcome system. Currently, most programs maintain their own program metrics and evaluations. A unified evaluation system provides the capacity to see the contribution of each part of an ECCS to kindergarten readiness and the ability to modify programs and funding to respond to the needs of children over time.

For More Information On The Well-Being Of Young Children In Memphis And Shelby County, Please Visit The Urban Child Institute, And The State Of Children In Memphis And Shelby County: Data Book.



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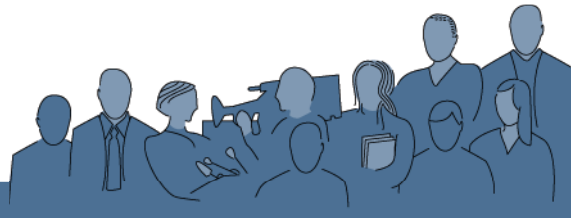

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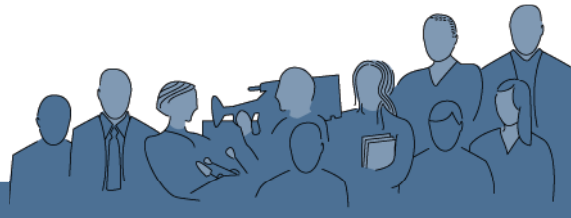

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End Notes

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ii.Nelson, Deborah C. (2005). North Carolina's Plan for an Early Childhood Comprehensive System. Washington D.C.: State Early Childhood Comprehensive System Initiative. Accessed July 15, 2009. <http://www.state-eccs.org/stateplans/plans/northcarolina_plan.pdf>

iii. Doctors et al (2007)

iv. First 5 California (2009). Reporting Information and Fiscal Forms. Author. Accessed July 15, 2009 < http://www.ccfc.ca.gov/evaluation/reporting-tools.asp>

v. Illinois State Board of Education (February 2009). State Performance Plan, Part B: Years 2005-2010. Author. Accessed July 2009 < http://www.isbe.state.il.us/spec-ed/pdfs/state_performance.pdf>

vi. For more information about the School Readiness Indicators Project in North Carolina, please see the Education Development Center piece listed in the references.

vii. For more information about the potential costs and benefits of investing in best practice proven programs for at-risk children in Memphis, please see our "Class of 2025 Presentation" http://www.theurbanchildinstitute.org/Download.php?fileId=49f09f388a9453.48978902 and the Urban Child Institute's "The State of Children in Memphis and Shelby County: Databook IV" http://www.theurbanchildinstitute.org/get_involved.php

viii. CUCP 2009, estimate based on percent of all children (0-5) in Tennessee who reside in Shelby X number of children in Tennessee who had public health insurance in 2008, according to the March 2008 CPS.

ix. Both TennCare and CoverKids utilize the American Pediatric Association's Early Periodic Screening, Diagnosis and Treatment Program to deliver health care services to at-risk children.

x. Koch 2009

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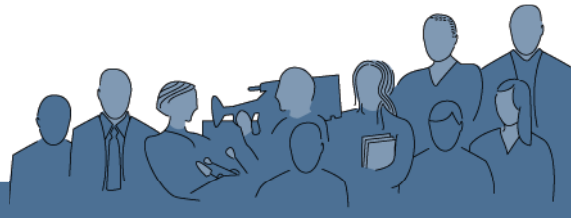

References

xi. Participation rate from June 2009 for all individuals as reported on TN DHS website. Food stamps are available for most individuals up to 125% FPL. Children under 18 were 34% of food stamp recipients in Shelby County as of 2006, according to Annie E Casey Kids Count Data. Children under 6 made up 40% of the Shelby county population of children under 18 who live at 125% of the FPL. Assuming that children made up roughly same portion of participants and participation is divided evenly across age range 0 to 18, we arrive at an estimate of 30,271 children under 6 receiving food stamps in Shelby in June 2009.

xii. Participation rate from April 09 as reported on TN Department of Health website. WIC covers pregnant women, infants and children up to 185% FPL. Slight overestimation of population because adult participants not separated out from children and census data only includes individuals up to 175% FPL. Estimate for children in Shelby 5 and under who are 185%FPL taken from Factfinder 2007. Table B17024. AGE BY RATIO OF INCOME TO POVERTY LEVEL IN THE PAST 12 MONTHS.

xiii. There are currently 7 active formal home visitation programs in Shelby County. The percentage of funding they receive from different entities is difficult to ascertain because most of these programs do not keep public data on where their funding comes from. There are also many informal home visiting programs run in the city by various religious and community organizations.

xiv. 1,427 is the best estimate we can derive because two of the programs included in our home visitation services do not have caps on the number of eligible participants. This data was collected and synthesized by Kenya Bradshaw of the Urban Child Institute in 2006. It is also beyond the scope of this inquiry to determine how much of the eligible population they serve because each program has different requirements for participation.

xv. CUCP 2009 estimate based on the % of all children in poverty 0 to 18 on TANF as of Dec. 08 * # of children 0 to 5 in Shelby County in poverty as listed in Table B17001. POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE of American Factfinder 2007.

xvi. CUCP 2009 estimate based on Monthly Average % of children statewide served by CCDF care. National Association of Child Care and Resource Referral Agencies. (2009) Average Number of Children Served Each Month by Age in Fiscal Year 2007. Author. Accessed July 16, 2009 < http://www.naccrra.org/randd/ccdbg-tanf/avg-monthly-number-of-children-served-by-age> X number of children by age in Shelby County from American Factfinder.

xvii. This estimate was derived from counting the # of DHS regulated child care slots in Shelby County, serving children 0 to 5, that were not public pre-K or Head Start slots. High quality is defined for our purposes as being those who received a 3 star rating or had DOE certification. Listings sampled on July 17, 2009.

xviii. Warr 2009 as reported in Devlin 2009

xix. CUCP 2009, estimate based on number of children in Head Start statewide X % of 4 and 5 year old children in Tennessee who reside in Shelby County.

xx. CUCP 2009, estimated based on number of Pre-K classrooms in Memphis City Schools and Shelby County Schools

xxi. Kilpatrick 2009

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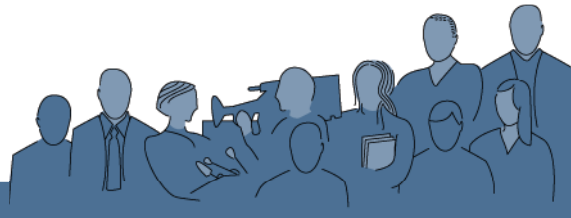

References

For further information on the estimates included in this brief, please contact Frances Breland with the Center for Urban Child Policy of the Urban Child Institute, Memphis, TN.

The Urban Child Institute (TUCI) promotes optimal brain development for children from conception to age three. TUCI's Center for Urban Child Policy supports that mission by building our understanding of inputs to - and implications of - early brain development in our community.

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