2014 FRANKLIN COUNTY CHILDREN’S REPORT
How Toxic Stress Threatens Success
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The health and well-being of our community's children provide a window into the conditions of our community, reflecting the many assets and opportunities that enable children to thrive, as well as illuminating the challenges that can limit a child’s growth and development. The well-being and development of Franklin County’s children are influenced by a variety of factors in our community, from parents and peers, to schools and environment. The 2013 Champion of Children report, *Why Neighborhoods Matter to Education*, identified the role children’s neighborhoods and physical environments play in child development and educational success. The 2013 report also illustrated that thriving environments support thriving children, documenting the models of neighborhood-based child programming investments that have proven successful.

Our 2014 report focuses on another set of challenges and opportunities impacting children in Franklin County. Childhood trauma and stress can be corrosive and damaging to childhood development and success for children in poverty. This can mean lives consumed by stress, anxiety and insecurity, passing from one generation to the next.

While trauma and stress can limit a child’s outcomes, research shows that supportive structures can counteract those forces. The 2014 Champion of Children Signature Event featured author Paul Tough, whose book, *How Children Succeed*, features evolving understandings of how stress and trauma impact children, and explores factors and structures that support success and foster resiliency. Our 2014 Champion of Children report focuses on these themes and considers what steps they suggest for meeting the needs of Franklin County’s children and fostering an environment where all children have the opportunity to succeed.
What is toxic stress?

Toxic stress is strong, frequent, and/or prolonged adversity—such as physical or emotional abuse, chronic neglect, caregiver substance abuse or mental illness, exposure to violence, and/or the accumulated burdens of family economic hardship—without adequate adult support.²

The impact on our children

Children with toxic stress live much of their lives in fight, flight or fright (freeze) mode. They respond to the world as a place of constant danger. With their brains overloaded with stress hormones and unable to function appropriately, they can’t focus on learning. They fall behind in school or fail to develop healthy relationships with peers or create problems with teachers and principals because they are unable to trust adults. Some kids do all three. With despair, guilt and frustration pecking away at their psyches, they often find solace in food, alcohol, tobacco, methamphetamine, inappropriate sex, high-risk sports, and/or work and over-achievement.³

This kind of prolonged activation of the stress response systems can disrupt the development of brain architecture and other organ systems, and increase the risk for stress-related disease and cognitive impairment, well into the adult years.⁴

When toxic stress response occurs continually, or is triggered by multiple sources, it can have a cumulative toll on an individual’s physical and mental health—for a lifetime. The more adverse experiences in childhood, the greater the likelihood of developmental delays and later health problems, including heart disease, diabetes, substance abuse and depression. Research also indicates that supportive, responsive relationships with caring adults as early in life as possible can prevent or reverse the damaging effects of toxic stress response.⁴

A complexity of stressors is being borne by many Franklin County families, heightened by the economic insecurity produced by the recession and housing crisis. As data indicates, these economic stressors impact a broad group of families across our county, from inner city to suburb. In our report, we look beyond the poverty statistics for our community’s children to ask: What does this mean for child development? What can we do as a community to respond to these stressors that threaten our children and therefore the future well-being of our community?
As shown in our “Backpack graphic” below, children dealing with various stressors associated with poverty have a higher chance of attempting suicide, increased risk of heart disease and stroke, and higher chance of alcohol abuse. Additionally, students of low-income families—families affected by the stress of poverty—are six times more likely to drop out of high school and preschoolers have often lived in three different homes by the time they reach kindergarten.
### Franklin County Children’s Stress Profile

The stressors affecting children in our community are complex and interrelated, and impact a broad group of families across our county.

### Population

<table>
<thead>
<tr>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHILD POPULATION</td>
<td>284,835</td>
</tr>
<tr>
<td>Population under age 5</td>
<td>85,223</td>
</tr>
<tr>
<td>Population ages 5 to 17</td>
<td>199,612</td>
</tr>
</tbody>
</table>

### Family

<table>
<thead>
<tr>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHILDREN WITH OPEN CHILDREN SERVICES CASES</td>
<td>4,351</td>
</tr>
<tr>
<td>Had been a victim of abuse</td>
<td>3,788</td>
</tr>
<tr>
<td>Had been a victim of neglect</td>
<td>1,809</td>
</tr>
<tr>
<td>Dependency as protective reason for opening</td>
<td>696</td>
</tr>
<tr>
<td>Reside in certified foster care homes</td>
<td>855</td>
</tr>
<tr>
<td>SINGLE-PARENT HOMES</td>
<td>96,942</td>
</tr>
<tr>
<td>CHILD SUPPORT CASES</td>
<td>78,292</td>
</tr>
<tr>
<td>Collection rate on current support due</td>
<td>-</td>
</tr>
<tr>
<td>TERMINATION OR DISSOLUTION OF MARRIAGE CASES FILED</td>
<td>5,781</td>
</tr>
<tr>
<td>Total marriage terminations with children</td>
<td>1,697</td>
</tr>
<tr>
<td>Total marriage dissolutions with children</td>
<td>844</td>
</tr>
</tbody>
</table>

### Poverty

<table>
<thead>
<tr>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHILD POPULATION FOR WHOM POVERTY STATUS IS DETERMINED</td>
<td>281,107</td>
</tr>
<tr>
<td>Child poverty</td>
<td>70,700</td>
</tr>
<tr>
<td>CHILD POVERTY BY RACE AND ETHNICITY</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>26,047</td>
</tr>
<tr>
<td>Black or African American</td>
<td>36,118</td>
</tr>
<tr>
<td>Asian</td>
<td>1,260</td>
</tr>
<tr>
<td>Some other race</td>
<td>7,275</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>7,968</td>
</tr>
<tr>
<td>COST-BURDENED HOUSEHOLDS</td>
<td></td>
</tr>
<tr>
<td>Total households in Franklin County: 471,438</td>
<td></td>
</tr>
<tr>
<td>Owner-occupied housing units: Paying 30 percent or more</td>
<td>59,558</td>
</tr>
<tr>
<td>Renter-occupied housing units: Paying 30 percent or more</td>
<td>99,293</td>
</tr>
</tbody>
</table>

### Housing

<table>
<thead>
<tr>
<th>Count</th>
<th>% YOUTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOMELESSNESS</td>
<td></td>
</tr>
<tr>
<td>Total individuals served in emergency shelters</td>
<td>8,910</td>
</tr>
<tr>
<td>Total children served</td>
<td>2,168</td>
</tr>
<tr>
<td>STUDENTS IN A SCHOOL BUILDING LESS THAN A FULL YEAR</td>
<td>32,987</td>
</tr>
</tbody>
</table>

### Education

<table>
<thead>
<tr>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>STUDENTS IN FAILING SCHOOLS</td>
<td></td>
</tr>
<tr>
<td>Total students in Franklin County</td>
<td>192,470</td>
</tr>
<tr>
<td>Students attending schools with an “F” rating</td>
<td>78,219</td>
</tr>
<tr>
<td>EDUCATIONAL ATTAINMENT OF NEW MOTHERS</td>
<td></td>
</tr>
<tr>
<td>Women Age 15-50 who had a birth in the past 12 months: 18,950</td>
<td></td>
</tr>
<tr>
<td>Less than high school graduate</td>
<td>3,388</td>
</tr>
<tr>
<td>High school graduate (includes equivalency)</td>
<td>3,146</td>
</tr>
<tr>
<td>Some college or associate's degree</td>
<td>4,596</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>5,127</td>
</tr>
<tr>
<td>Graduate or professional degree</td>
<td>2,693</td>
</tr>
<tr>
<td>ACCESS TO EARLY CHILDHOOD EDUCATION</td>
<td></td>
</tr>
<tr>
<td>Number of children for every high quality early childhood education space</td>
<td>6.6</td>
</tr>
</tbody>
</table>

### Health & Safety

<table>
<thead>
<tr>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOW BIRTH WEIGHT</td>
<td></td>
</tr>
<tr>
<td>Total births in Franklin County, 2013</td>
<td>18,737</td>
</tr>
<tr>
<td>Low or very low birthweight</td>
<td>1,720</td>
</tr>
<tr>
<td>LEAD POISONING</td>
<td></td>
</tr>
<tr>
<td>Total children screened (0 - 72 Months)</td>
<td>19,713</td>
</tr>
<tr>
<td>Children with elevated blood lead levels (EBLLs)</td>
<td>51</td>
</tr>
<tr>
<td>CHILD OBESITY</td>
<td></td>
</tr>
<tr>
<td>Children ages 2-5 who are obese</td>
<td>-</td>
</tr>
<tr>
<td>YOUTH HOMICIDES</td>
<td>18</td>
</tr>
<tr>
<td>INFANT MORTALITY</td>
<td>117</td>
</tr>
<tr>
<td>TEEN BIRTHS</td>
<td>309</td>
</tr>
<tr>
<td>ADMISSIONS TO JUVENILE DETENTION SYSTEM</td>
<td>2,840</td>
</tr>
<tr>
<td>Females</td>
<td>686</td>
</tr>
<tr>
<td>Detention alternative</td>
<td>71</td>
</tr>
<tr>
<td>Hold</td>
<td>292</td>
</tr>
<tr>
<td>House arrest</td>
<td>323</td>
</tr>
<tr>
<td>Males</td>
<td>1,954</td>
</tr>
<tr>
<td>Detention alternative</td>
<td>154</td>
</tr>
<tr>
<td>Hold</td>
<td>1,209</td>
</tr>
<tr>
<td>House arrest</td>
<td>591</td>
</tr>
<tr>
<td>CRIME</td>
<td></td>
</tr>
<tr>
<td>Total violent crime</td>
<td>5,603</td>
</tr>
<tr>
<td>Total property crime</td>
<td>59,134</td>
</tr>
</tbody>
</table>

### Food

<table>
<thead>
<tr>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHILDREN EXPERIENCING FOOD INSECURITY</td>
<td>59,450</td>
</tr>
<tr>
<td>FRANKLIN COUNTY FOOD ASSISTANCE PROGRAM (SNAP)</td>
<td></td>
</tr>
<tr>
<td>Child recipients</td>
<td>128,914</td>
</tr>
<tr>
<td>FREE &amp; REDUCED PRICE LUNCH</td>
<td></td>
</tr>
<tr>
<td>Number of free &amp; reduced lunch applications</td>
<td>93,668</td>
</tr>
<tr>
<td>% change 2003-2013</td>
<td>-</td>
</tr>
</tbody>
</table>
Vicki’s Story

Sixteen-year-old Vicki has had an unstable and chaotic home life. She and her siblings have moved numerous times and even been homeless on occasion. She lives with her father, and her mother is living in another state.

From the time she was 6 years old, Vicki has had one constant positive influence in her life, her Big Sister Laurie Hendrickson through Big Brothers Big Sisters of Central Ohio, a program supported by United Way. For more than a decade, Laurie has been there to help, encourage and support her Little Sister through all the challenges in her young life. This long-term, stable relationship has helped Vicki blossom. She has gained confidence and shown tremendous growth in all areas of her development.

With Laurie by her side, Vicki participates in many school activities and does community service.

She has become a leader and is a straight A student.

“She’s on track to be the first one of her siblings to graduate from high school. And she knows that’s a BIG deal!”
Our ‘cognitive structures’ and stress

The role of environments in effecting positive child outcomes is well-established. Well-functioning “opportunity structures” provide essential supports for positive child development and benefit entire communities. These include physical structures such as quality schools, nearby health care facilities, healthy food sites, safe spaces for recreation, adequate public services, and so on.

More recently, however, advances in neuroscience have begun to explore how the environments children encounter daily, good or bad, literally shape their brains. These findings have far-reaching implications not only for child welfare, but success in adulthood. In short, research has begun to demonstrate how the built structures and emotional experiences of childhood mold cognitive development and impact child success and beyond.

For children living in “opportunity poor” neighborhoods, these new understandings about the connections between environments, traumatic stress and cognitive development provide important guidance as to the steps needed to ensure that every child in Franklin County reaches her full potential. We know that neighborhoods that lack sound opportunity structures like high-quality schools, safe streets and play spaces, and fresh food outlets limit the range of choices available to parents and their children. But we must better understand how cognitive development itself can be impaired or promoted by the environments that surround our children.

Childhood environments operate in systemic and reciprocal ways. For example, environmental conditions (e.g., inadequate housing or failing schools) can limit choices, limited choices can create stress, stress can impair health and functioning, impaired functioning can inhibit opportunities to find employment or thrive in school, lack of work or a sound educational footing can limit access to health-promoting environments, and on and on. These environments also impact the functioning of primary relationships in children’s lives, in healthy or unhealthy ways.
Family economic conditions seem to impact children because they affect the material and social resources available to children and family psychological processes, such as parental emotional well-being and parenting styles.\(^5\)

Promotion of child well-being, therefore, requires attention to the system of conditions and relationships present in children’s lives. Research has begun to show that neglect of these can impair children’s cognitive development and later adult functioning. Thus a good place to start this year’s report begins with the brain.

**The impact of positive and negative experiences on brain development**

The brain is made up of multiple systems that develop differently as a result of the combined influences of genetic predisposition\(^6\) and lived experience.\(^7\) As a result, positive and negative experiences during our infancy and childhood can dramatically impact our physical, mental and emotional development.

Figure 1: Hierarchy of Brain Development

The regions of the brain develop sequentially. The lower part of the brain develops first and is where information is initially processed. Experiences are “felt” here first.\(^8\) This means that information is processed even before it reaches the upper region of the brain, our consciousness—that is, a person can experience very complex feelings, emotions and behaviors well before this information reaches intentionality connections in the cortex.\(^9\)

In addition, the health of the upper regions of the brain depends on the prior successful development of the lower regions.\(^10\) The cortex is the last part of the brain to fully mature (the human brain continues to develop into our early 30s) and serves as the receptacle of complex thoughts and feelings that we associate with “being human.” When a child enjoys experiences that are consistently healthy, vibrant or enriching—for example reading, sharing or loving attention—the cortex is being strengthened and built. In turn, a strong cortex builds a response system that can better regulate itself—a stress response system that is more resilient.\(^11\) The power of consistent, predictable, and nurturing experiences and relationships to affect brain development cannot be overstated. Only through such nurturing experiences is a child’s full cognitive potential able to be realized—and all parts of the brain able to function successfully.\(^12\)
A stress response system that is not strengthened and engaged in positive ways can have a powerful, debilitating effect on a child’s development. Although some stress is actually healthy for children, stress that is layered and prolonged becomes toxic, and can literally make children sick, or even produce health crises in adulthood (Figure 2). The more “tuned up” one gets from trauma or stress, the more scrambled the cortex becomes—the region of the brain that regulates our emotions and attachments, and that houses our intellectual capacity.

This means that our earliest experiences in life literally shape our brains. Eighty percent of the brain is organized and developed in the first four years of life. Positive, predictable experiences aid that development, while consistently stress-producing experiences impair it. One study found an almost 9% reduction in the size of the hippocampus—through which memory and emotions are controlled—in children suffering the effects of childhood trauma.

As shown in Figure 3, children suffering severe trauma or neglect have smaller brains. In the CT scan on the left is an image from a healthy 3-year-old with an average head size. The image on the right is from a 3-year-old suffering from severe sensory-deprivation.
The impact of childhood trauma

The everyday trauma that too often is a part of life in impoverished communities can inflict long-term damage on children. Childhood trauma is not confined to these communities, of course, and is an important social concern wherever it occurs. It also comes in myriad forms. For example, physical abuse, such as shaking, can have direct effects on brain development and result in a range of disabilities, cognitive as well as behavioral, or even death. Neglect—whether physical, mental or emotional—can result in cognitive and motor delays (such as language development), anxiety, depression, challenges forming healthy attachments and other behavioral disorders.

Abused children may experience chronic activation of their fear response system with the result of reduced activation of other regions of the brain, for example, those involved in complex thought. When a child is repeatedly subjected to a stressful, hostile environment, strategies for survival are honed and healthy cognitive development is imperiled. The stress response system can actually shut down the upper regions of the brain where our capacities for language, and complex and abstract thought are strengthened and stored, and children “exposed to threat and who have minimal ‘buffering’ from caregivers, develop overactive and overly reactive stress response systems.”

Adverse Childhood Experiences (ACEs)

A chronically activated stress response system minimizes our capacity for rationality and empathy, and decreases our ability to regulate our emotions. Groundbreaking research conducted from 1995 to 1997 at Kaiser Permanente demonstrated the stunning connections between early childhood trauma and adult health. The study, known as the ACE study (Adverse Childhood Experiences), documented the emotional and physical impacts of trauma and household dysfunction experienced in early childhood. In the study, seven categories of adverse childhood experiences were examined: psychological, physical or sexual abuse; violence against mother; or living with household members who were substance abusers, mentally ill or suicidal, or ever imprisoned. The number of categories of these adverse childhood experiences was then compared to measures of adult risk behavior, health status and disease. Each experience was assigned a score of 1.

The results were sobering. Compared with children experiencing zero Adverse Childhood Experiences, as seen in Figures 4 and 5, children with four or more ACEs had an increased risk of heart disease by 220%; of stroke by 240%; of diabetes by 160%; and of chronic bronchitis/emphysema by 390%. An ACE score of 6 or more could lower life expectancy by two decades, the study revealed.

ACEs exact a high emotional toll as well. According to the study, children who experienced four or more ACEs were 1,220% more likely to attempt suicide, 470% more likely to try illegal drugs, and 740% more likely to become addicted to alcohol. In short, adverse childhood experiences have life-long consequences.

What is trauma?

From a neuro-developmental perspective trauma is not the event—it is the individual’s response to the event. Traumatic stress occurs when an extreme experience overwhelms and alters the individual’s stress-related physiological system in a way that results in functional compromise in any of the widely-distributed stress response systems: neuroimmune, neuroendocrine, autonomic, and central nervous system networks.
that are deleterious to individual, family and community health.

More recent research following Kaiser’s seminal ACE study has confirmed other harmful effects of childhood abuse and neglect. Abused children are 22% more likely to develop learning disorders and to need special education. Abused children have greater rates of juvenile delinquency as well.25 Adults who were abused as children have higher incidences of heart disease, chronic lung disease, cancer and liver disease; and are more likely to be smokers or obese.26 Every 47 seconds in the United States, a child is abused or neglected,27 and post-investigation, nearly 40% of these children either receive no support services or less than they need.28 In 2013, half of the 4,351 open child services cases in Franklin County were for abuse or neglect.29 (Figures 6 and 7)

In our community critical stressors during childhood to look out for include:

- Distressed or neglected external bonding, for example, a depressed or overwhelmed mom with limited capacity to bond with child, perhaps due to post-partum depression. Also, a mom who grew up in an environment of stress or abuse herself may experience limited bonding ability.

- Intrauterine stress/trauma, for example, drug abuse by mom during pregnancy

- Stress, trauma or chaos experienced by the child herself, such as through exposure to neighborhood violence

Many children, especially those in the welfare system, will have experienced all three of these.30
Makayla’s Story

Sixteen-year-old Makayla has had a difficult time trusting adults in the past, and with good reason. She has been in foster care since she was a baby, moving 10 times in 14 years. She has experienced abuse, neglect and the murder of her 17-year-old brother.

She first found the Boys & Girls Club of Central Ohio, a program funded in part by United Way of Central Ohio, at age 13. At that time, Makayla was quiet and angry at the world. Looking back, she describes herself as “the worst person.” The more she got involved with the club, though, the more comfortable and confident she became. According to the club’s director, she just hadn’t had the opportunity to shine before.

And now Makayla does nothing but shine. She has become a leader in the club’s service group that volunteers to improve the neighborhood and community. Her newfound confidence in herself and her abilities has completely changed her attitude in school, where she now gets As and Bs.

“\nThe Boys & Girls Club taught me a lot about expressing myself and believing in myself. The club has turned my life around and helped me become a better person. Today I’m motivated to do good things with my life.“
The cognitive impacts of scarcity: the stress of poverty

It is no stretch to suggest that families living in poverty experience greater stress than more affluent families. This is due not simply to a lack of money, but the constraints poverty imposes on time and mental resources. Adults in impoverished households may find it necessary to work two or three jobs just to stay afloat. They may work shifts or in workplaces that cause them to miss parent teacher conferences. When a car is unaffordable, users of public transit must rely on schedules set by others to get to work, to the grocery store and to other important appointments. Many transit systems offer more limited services at night and on weekends, increasing transit users’ anxieties about how to get to work or other places. When a family’s income is inadequate or suddenly reduced due to the loss of a job or a health crisis, adults worry about feeding their children, being able to pay the rent or make mortgage payments and being able to buy needed medicines, among many other things. Poverty is not just about material deprivation, it is an experience felt in nearly every aspect of life.

New research is showing just how ‘mentally taxing’ poverty really is.

“Scarcity captures our attention, and this provides a narrow benefit: We do a better job of managing pressing needs. But more broadly, it costs us: We neglect other concerns and we become less effective in the rest of our life.”

This research shows that when the mind is focused on anxieties—the rent, the electric bill, finding child care and so forth—cognitive resources are depleted, leaving less mental energy and cognitive control to think strategically, or to consider the long-term consequences of decisions. Chronic anxieties associated with poverty—not simply poverty itself—make it difficult to plan effectively for the future.
One of the things the poor lack most is bandwidth. The very struggle of making ends meet leaves them with less of this vital resource. This shortfall is not of the standard physiological variety, having to do with a lack of nutrition or stress from early childhood hindering brain development. Nor is bandwidth permanently compromised by poverty. It is the present-day cognitive load of making ends meet: when income rises so too does cognitive capacity.

Parenting in poverty

Seen through this lens, we can begin to see how parenting in the context of poverty might be rendered more difficult as a result of the increased cognitive load required of parents who have to juggle many balls at once, and put out fire after fire. Good parenting, by contrast, is assisted by the availability of stores of untaxed mental resources.

Consider a study on food stamps, which recipients receive monthly, at the beginning of the month. For many households, these stamps are not enough to last the month, and so bandwidth (i.e. the level of our mental resources) is more taxed as the end of the month approaches. Research has found this is also the time when parenting is likely to be most difficult. In fact, one study found that these were the times when children of poor parents acted up the most and were being disciplined in school more often. Quite simply, “[b]eing a good parent requires many things. But most of all, it requires freedom of mind. That is one luxury the poor do not have.”

The development of safe, secure and nurturing relationships (i.e. attachments) is critical for healthy neuro-development, and for children navigating highly stressful environments, these relationships serve as an especially important buffer against the most harmful impacts of that stress. When the cognitive loads of the parents and caregivers of these children are overtaxed, their ability to serve as those buffers is diminished. As put by one expert, “often, the circumstances of a mother’s life overwhelm her natural coping capacity... When you are bombarded by poverty, uncertainty, and fear, it takes a superhuman quality to provide the conditions for a secure attachment.”

Research suggests that poverty itself cannot fully account for differences in executive function among children, even though we would predict that the child from a more affluent home, with more material resources, would perform better than a child from an impoverished home. While executive function and family income are correlated, newer research shows that stress—above and beyond poverty—has a significant impact on how well a child can engage his or her executive capacity.

What is executive function?

Located in the pre-frontal cortex, this area of the brain is home to the cognitive skills that allow us to deal with confusing and unpredictable information and situations. It is what allows for cognitive control, or the ability to regulate our thoughts.
Growth in child poverty

Poverty has risen dramatically as a result of the recession and the long-lasting unemployment many households are experiencing. The growth in child poverty, especially among children of color, has been remarkable. In 2012, nearly one in five children in the United States was poor, and nearly one in three children of color was poor. More than one-third of children of color under the age of 2 were poor, years during which the brain is rapidly developing. The emergence of a ‘recession generation’ means that, as one study has found, “about a quarter of children who suffer from recession-induced poverty will spend at least half of their remaining childhood in poverty.”

While almost 30% of children in poverty lived in urban areas, 40% lived in suburbs. By 2000, the number of neighborhoods of suburban concentrated poverty was greater than those in rural areas and suburban poverty continues to rise at a higher rate than poverty in the central city.

Figures 8 and 9 show the growth in suburban child poverty for Franklin County. In 2012, almost 20% of children in our suburbs were poor. While suburban poverty may look a lot like urban poverty in terms of educational achievement, health measures, and unemployment for example, poor suburbs may lack essential support services commonly clustered in urban areas, resulting in a more isolated suburban poor. Children born into impoverished conditions face numerous challenges to healthy development—physical, emotional and mental.
Poverty can have detrimental impacts on nearly all aspects of a child’s life—from hunger, to family instability, risks of homelessness, unsafe neighborhoods, and involvement in the criminal justice system—all can seriously undermine a child’s chance for success later in life. 47

**Stability in school, home and families.** Research has shown that stability in schools and the home plays an important role in academic achievement. Studies find that students who move frequently (schools and/or housing) perform worse academically than their peers, particularly if they undergo multiple moves. In Chicago, a study of sixth graders over a 6-year period found that students who had moved four or more times experienced what amounted to a one-year educational gap compared to their peers who had not moved. 48 In the 2012–2013 school year, 32,987 or 17% of students in Franklin County attended one school for less than a full academic year. 49 Again, we can see the continued effects of the recession on children: 73% more public school children in the U.S. were homeless in 2012 compared to 2007—or nearly 1.2 million children. 50
Family structure can also impact child development. Single parent households may have fewer resources to provide for the healthy development of their children. The median income of single, female-headed households was one-third that of married couple households. In 2013, more than 50% of African American children and more than 30% of Hispanic children lived with only one parent, compared to about 20% of white children. About 6% of African American children and 4% of Hispanic children lived with neither parent, compared to 3% of White children. These children tended to live with grandparents or another relative.

**Parental incarceration.** The effects of parental incarceration can also be quite significant to a child’s healthy development. Imprisonment of a parent interrupts positive, nurturing relationships, especially between mothers and children. The development of these relationships is especially critical for newborns and infants; when the opportunity to bond is disrupted, this has huge implications for the emotional and behavioral health of the child.

Parental incarceration can impact children throughout their adolescence. Children from 2 to 6 years old at the time of incarceration exhibit attachment issues, what researchers refer to as “insecure attachments...a consequence of adverse shifts in life circumstances.” These experiences can lead to cognitive and relationship development issues. As a result of this insecurity, children may internalize the experience, resulting in greater anxiety, depression, withdrawal or hyper-vigilance, to name a few. Externally, children may be more aggressive, angry and hostile. One study has estimated that as many as 70% of young children with imprisoned mothers will exhibit these problems. School-age children have more school-related problems, including poorer grades or aggression—over 50% of children in such situations—and increased absences from school for a period of time (out of fear). Issues of suspension and dropping out are more likely for adolescents as a result of parental incarceration.

In essence, these children are experiencing a great deal of stress, and as noted above, this can have extremely negative impacts on the healthy development of children. Not only do children experience these cognitive, emotional and behavioral challenges, but these experiences are exacerbated by the increased economic instability that accompanies incarceration of a parent. Studies have shown a strong link between parental incarceration and economic strain in a child’s life.
Food insecurity and educational success. Food insecurity and hunger also impact a child’s ability to learn. The recession greatly increased food insecurity for families. Between 2007 and 2011, there was a 94% increase in unemployment. In response, reliance on SNAP (i.e. food stamps) rose by 70% over the same period. 63 45% of SNAP participants are under the age of 18, 64 and 20% of children in the United States—and in Franklin County—live in food insecure households, meaning that they do not know where their next meal is coming from. 65 Hunger and food insecurity during the early years of a child’s life (0-3 years old) are especially damaging, impacting physical and mental development. In Franklin County, about 21% of children experience food insecurity 66 and 45% are recipients of SNAP assistance. 67

Research shows that going hungry makes children sick. 68 And children miss more school. When they do make it to class, hungry children have a harder time focusing, and may be more irritable or experience fatigue more than other children. 69 Food insecure children—children not yet experiencing the state of hunger—were found to exhibit higher levels of aggression or distressed behaviors, as well as a greater tendency to be withdrawn. 70 Even mild to moderate undernourishment can limit children’s ability to grasp basic skills. 71 One study found that food insecure children performed lower on math and reading, and were more likely to repeat a grade. 72 Hunger and food insecurity, above and beyond poverty, have significant and negative impacts on children’s educational performance.
Safety and juvenile justice. When children feel safe, they will play. As an activity, play has a big role in the healthy development of children. Play facilitates the development of important social, physical and cognitive skills. For example, through play, a child develops gross motor skills, advanced fine motor skills, language skills and social skills. A sense of safety comes from experiencing a predictable world, one of order and consistency. Unfortunately, too many of our children are growing up in neighborhoods that are anything but orderly.

The United States has a remarkably high rate of gun violence—children and teens under age 17 are 17 times more likely to die from such violence than peers in 25 other high-income countries. African American children and teens are five times more likely, and Hispanic children and teens three times more likely, to be exposed to gun violence than are white children and teens. Such violence is the number one cause of death for African American children and teens ages 1 to 19. In Ohio, the proportion of homicide deaths to African American children was more than 3.5 times their representation in the general population. Of the 182 deaths from all causes to African American boys ages 15 to 17 years, 51% (93) were homicides, while only 4% (19) of the 499 deaths from all causes to white boys ages 15 to 17 years were homicide.

A child is arrested every 21 seconds in the United States. Children living in concentrated poverty are more likely to interact with the juvenile justice system, especially children of color. For example, although children of color between 10 and 17 years make up only 16% of the population, they make up 34% of children arrested and 68% of children in residential placement (i.e. rehabilitation centers). The experience of incarceration impacts mental, physical and emotional health. Children involved in the juvenile justice system have increased risks of experiencing sexual assault, physical abuse and suicide. For children placed in adult prison, the risks are even greater—they are 36 times more likely to commit suicide than their peers in juvenile detention centers. In Franklin County, 2,640 youth were admitted to the juvenile detention system in 2013.
Tamera’s Story

City Year, a program supported by United Way of Central Ohio, first met Tamera when she was off track as a student at Mifflin High School and seemed destined to become a drop-out statistic. She rarely attended school. She had behavior challenges when she was at school, and she was failing all her classes.

Jennifer Fowler, a City Year Impact Manager at Mifflin, says “Tamera had no motivation to attend or do well in school. Her mother had passed away and her father was not interested in school. She had no one pushing her at all.”

City Year made sure Tamera had close mentoring relationships in the school so that she would have someone she could talk to, vent to and who could mentor her through her challenges at all times. It took longer than they anticipated, but finally Tamera began to come around and seek their help. Her grades began to improve, and she began to get more involved with school and service projects.

Our goal at first was that she would improve her grades from F’s to C’s, so that she could be passing.

Now, though, C’s are not acceptable for Tamera. She is striving for all A’s and B’s, and meeting her goals. “She’s a different kid entirely,” says Jennifer. “She never misses school and she strives for excellence. It’s phenomenal.”
Understanding the costs of failure and the returns on investment

Given the stark prospects of many children in Franklin County, and what new research says about neighborhoods, opportunity and cognitive development, it is increasingly clear that our investments in children need to change and expand. And while these early interventions will be costly, the long-term hidden costs our community currently pays as a result of under-investments in youth are even greater. Geoffrey Canada, founder of the successful Harlem Children’s Zone (HCZ) project, summarized the issue of cost to an audience of 600 at the 2013 Champion of Children event,

“If you look at our HCZ cost structure, outside of the classroom, we’re spending an additional five thousand dollars per child. People think that’s expensive. I have a map in my office that charts the incarceration rates in Manhattan... And I tell people, ‘That’s 40,000 dollars a year.’ No one blinks an eye. People don’t blink an eye. We have created a system in this country where we are totally prepared to go to scale on failure.”

Unfortunately, our policy and program responses often fail to align with what neuroscience tells us can improve life outcomes—health, economic and educational. We invest too little in children during their early years when their cognitive and non-cognitive abilities are the most malleable. Gaps in non-cognitive abilities between advantaged and disadvantaged children appear early in the lives of children, and are heavily influenced by the environments in which they grow up and the relationships they enjoy from birth—those things that neuroscience tells us are important for healthy child development. In fact, “schooling after the second grade plays only a minor role in alleviating these gaps. Schooling quality and school resources have relatively small effects on ability deficits and only marginally account for any divergence by age in test scores across children from different socioeconomic groups.”

Thus, to optimize our community investments in child cognitive and non-cognitive capacities, those investments should be made early, during the period when children’s brains are most malleable (Figure 12). These early investments are especially important for children from disadvantaged communities who navigate stressful environments, or who lack strong attachments to caregivers able to serve as buffers against the stresses of such environments or adverse circumstances.
The returns on early childhood education. Childhood poverty and the impacts associated with it, including lower educational attainment, poorer health, unemployment and involvement in the criminal justice system, cost the United States an estimated $500 billion a year, or 4% of GDP. However, one study finds that making high-quality pre-kindergarten available to every child in the United States could yield an increase in GDP of 3.7%—nearly counterbalancing the costs of childhood poverty. Other studies show a 7 to 10% return on investment, per year, for every dollar spent on high-quality early childhood education. (Figure 12)

Figure 12: Returns to a unit dollar invested

Rate of return to investment in human capital

- Programs targeted towards the earliest years
- Preschool programs
- Schooling
- Job Training
- Post-School

The returns on primary and postsecondary education. Educational attainment has many implications for almost every aspect of our lives, including employment, health, earnings, housing and so on. The impacts of inadequate educational attainment stretch beyond the individual well-being, they affect society as well. Inadequate education is associated with lost productivity and economic output, lower tax revenues, greater reliance on social services, and increased costs associated with the criminal justice system. One study found “that each new high school graduate would yield a public benefit of $209,000 in higher government revenues and lower government spending for an overall investment of $82,000, divided between the costs of powerful educational interventions and additional years of school attendance leading to graduation.” Every high school graduate would yield a net economic benefit to the public estimated at $127,000, an amount 2.5 times greater than the per student costs. Research elsewhere shows that those who complete four years of college pay, on average, 78% more in taxes than high school graduates, and those with a professional degree pay, on average, three and a half times more than that of high school graduates (Figure 13).

The returns in positive health outcomes and reduced health costs. Educational attainment also positively impacts health—the greater one’s educational attainment, the less that individual relies on public health systems, in particular Medicaid and Medicare. One study estimated the cost savings to the public health system to be as much as $40,500 per high school graduate. By contrast, the cost to the national economy for every high school student who dropped out of high school from the Class of 2011 has been projected to be a loss of $154 billion in income.

The returns in crime reduction and lowered enforcement costs. The cost impacts of crime are many. They include costs of policing, trials, incarceration, probation and supervised release, among others. Gun violence alone contributes a substantial cost to the U.S. economy—an estimated $174.1 billion a year from deaths and injuries resulting from gun violence. Child abuse and neglect also have long-term costs to the economy, an estimated $80.3 billion a year, mostly due to lost productivity. Studies show that increasing educational attainment can improve public safety and cut law enforcement costs significantly. In Franklin County, it costs $118,260 per year per child involved in the juvenile justice system.

Figure 13: Median Earnings and Tax Payments of Full-Time Year-Round Workers Ages 25 and Older, by Education Level, 2011

The bars in this graph show median earnings at each education level. The red segments represent the estimated average federal, state and local taxes paid at these income levels. The gold segments show after-tax earnings. The numbers in parentheses on the y-axis indicate the percentage of all full-time year-round workers with each education level in 2011. Taxes paid include federal income, Social Security, Medicare, state and local income, sales and property taxes. Percentages may not sum to 100 because of rounding.

Rosemary’s Story

From the time she was 8 years old, Rosemary and her younger brother were raised by their aunt in Franklinton, a neighborhood with high teenage pregnancy rates and low high school graduation rates.

When she was 12 years old, she became involved with LeaderSpark, a youth leadership program supported by United Way of Central Ohio. LeaderSpark is designed to build community and empower youth to become community leaders through hands-on involvement, goal-setting and simulation of real-life issues.

Through LeaderSpark, Rosemary participated in neighborhood service projects, gave presentations to her peers about anti-bullying and learned to appreciate her Franklinton neighborhood, flaws and all. “LeaderSpark taught me that anyone who cares about their neighborhood, even teenagers, can really make a difference by getting involved and bringing people together,” she says.

Although small in stature, Rosemary has big plans for her life. Now 19 years old and finishing her first year at Ohio Dominican University, she’s working toward a Masters in Special Education.

“My involvement in LeaderSpark helped me in so many ways, including getting a Good Neighbor Scholarship to college. After I graduate, I plan to return and teach in Franklinton.”
What is resilience?

We’ve spent a fair amount of time discussing just how impactful stress and trauma are on the developing child. Yet we also know that how the child responds to traumatic events and stressors is just as important. And children who can cope the best often have strong support systems and relationships to buffer the effects of stress.

What makes a child resilient? Noted psychiatrist Dr. Bruce Perry, who has spent his career helping children in crisis, outlines three aspects of resilience:102 temperament—which depends on genetics but also the intrauterine environment (is the mother calm during pregnancy, with social and prenatal support?); attuned care-giving—the ability of the caregiver to remain calm during periods of stress (a stressed caregiver, even to an ‘easy tempered’ baby can have negative impacts on the development of the child’s stress response system); and the presence of healthy attachments—nurturing, sustained relationships with caregivers. As social beings, it is our social connections that allow us to weather periods of trauma, and the more and healthier relationships we have, the more resilient we are. Importantly, this means the child has to be able to access these relationships, i.e. has to know how to make social connections, and that is learned from birth.

Parental resilience and social supports

The development of resiliency in children is impacted by the degree of resiliency exhibited by their caregivers—how parents respond to the stress can actually be more influential than what the stressor is, in determining the response and outcomes for both the child and the parent.103 Parental resilience benefits not just the parent—in terms of managing his/her own stress—but the child and the relationship itself. The parent is able to provide more nurturing attention, which leads to more secure attachments and feelings of safety by child, and thus a better-attuned stress response system for the child.104
Social supports are important to the development of parental resiliency—“for both mothers and fathers—high levels of emotional, informational, instrumental or spiritual support are associated with positive parental mood; positive perceptions of and responsiveness to one’s children; parental satisfaction, well-being and sense of competence; and lower levels of anxiety and depression.”

The importance of care and resiliency, and the presence of secure attachments have been documented by numerous studies. In one study, researchers found that they could more reliably predict which students would graduate high school based on measures of early parental care alone than either IQ or achievement test scores. By the age of 4, using early prenatal care data, the researchers were able to predict likelihood of high school completion with 77% accuracy.

While early insecure and anxious attachments are more likely to produce challenges to children later in life, it is not a foregone conclusion. Corrective measures can be taken. Often, parenting styles reflect the way that parent was raised. Increased education about positive child development that incorporates the learning from neuroscience about healthy brain development can help parents avoid repeating counterproductive parenting practices that were a part of their own childhoods. For example, one study found that interventions targeted to parents can help develop secure parent-child attachments previously absent, as measured by their cortisol levels. These studies suggest that quality parenting is not just psychologically or emotionally beneficial, but biochemically important as well.

This research provides hope for reversing the effects of insecure caregiver attachments beyond infancy. Clearly, the earlier the intervention, the better, but efforts targeted later in life can also be helpful. Interventions throughout childhood and adolescence can help children develop resiliency, including interventions targeted to non-cognitive skills. Similarly, interventions targeted at parents can have substantial benefits.

**Early Intervention: Pregnant Women**

Healthy development of the child begins before birth, and this is why prenatal care and maternal support are so important. In fact,

> All of the neurobiological systems involved in empathy, stress regulation and reward are being actively organized in babies, even before they leave the womb. So as simple as this seems, the first, crucial step in creating a caring child, a future good citizen, is to care for his mother. Pregnant women need to be safe, nourished and nurtured. They need to be surrounded by loving people who support them and ease their stress.... The bottom line is that an isolated mother is a distressed mother... We need to do everything we can to support mothers of young children, from making sure their basic emotional and physical needs are met to just hanging out with them and being available when they need us most.
Empathy is more than a “feel good” emotion; it is hard-wired into our brains.\textsuperscript{111} Empathy allows us “to relieve one another’s stress and to make one another happy.”\textsuperscript{112} Without empathy, trust suffers, and trust in each other is central to our collective success. Scholars have surmised that this is in part why countries that exhibit more interpersonal trust—trusting relationships extending beyond one’s immediate family—enjoy greater economic prosperity.\textsuperscript{113} High trust levels have been shown to be a strong predictor of increased standards of living.\textsuperscript{114} Countries with lower economic inequality in turn have also been shown to have a higher quality of life.\textsuperscript{115}

New research is showing that trust is itself chemical and encoded in our brains, and that how much trust we experience is moderated by our environments and relationships.\textsuperscript{116} Thus, children growing up in stressful environments may experience less trust, and ultimately less happiness.\textsuperscript{117}

Research also shows that unstructured time for play is particularly important to the development of empathy and healthy brain development, and that “poor children who have less structured activities are actually more self-reliant and caring.”\textsuperscript{118}

Diversity in our daily environments is also important for the development of empathy and resiliency. Such exposure allows children to become familiar with other people, cultures and beliefs different from their own. Inclusive environments minimize the ‘space’ between people that can lead to ‘relational poverty.’

One of the most important environments to apply these lessons is the school environment:

Schools also need to be engaged and helped to become more developmentally aware…many of the elements of modern education can decrease opportunities for healthy relational interactions and by doing so actually undermine the core mission of education. The way many schools structure their classes and other activities can actually make it harder to learn both cognitive and socio-emotional content.\textsuperscript{119}

Indeed, studies have found that “children feel more connected to inclusive schools. And schools that report greater student connectedness have lower rates of drug use, violence, heavy drinking, smoking and suicide attempts—so the benefits don’t just go to the children who would otherwise be victimized, but to the whole community.”\textsuperscript{120}

Taken together, this research shows that life history matters—the circumstances under which children grow up—but institutions matter as well. A critical question for every community is how well its institutions, such as schools, are functioning to promote trusting and empathetic relationships. Predictability and trust reduce stress.\textsuperscript{121} Thus, institutions have a critical role to play in facilitating pro-social behaviors.
Brandon’s Story

In the Franklinton neighborhood where Brandon grew up, very few teenagers dream of going to college and even fewer actually do. Many of his friends didn’t graduate from high school. There were negative influences all around him, and it was difficult for Brandon to see that he had any choices about his future. There were countless times when he considered dropping out of high school, too.

When Brandon was 12 years old, Gladden House and its Youth Services Program, which is funded by United Way of Central Ohio, became his home away from home. He found people there who were positive role models and who saw possibilities in him that he couldn’t even imagine. Youth Services at Gladden kept Brandon off the streets and out of trouble. The staff believed in him and motivated him to do something worthwhile with his life.

Brandon is the first person in his family in two generations to graduate from high school and the first to go to college. Today, he’s about to graduate from Ohio University with a degree in social work.

“One day I’m going to help the community by helping teens overcome obstacles to success. I’m living proof that it isn’t easy, but with the right support, it’s possible.”
Living in poverty can produce immense amounts of stress that over time, without relief, can turn toxic and dramatically influence the physical, mental and emotional development of a child. This trauma follows the child throughout her life—impacting educational, economic and quality of life outcomes. Last year, our report focused on how structural environments—in particular, our neighborhoods—impact educational outcomes for children growing up in poverty. This year, we focus on children’s physiological environments, and how stress impacts a child’s educational outcomes, and her quality of life more broadly. Thanks to groundbreaking new research, we now have a more nuanced understanding of the complex, long-term relationship between educational success and environment: It is not just the structural resources children have access to that are important, but the quality and consistency of relationships and degrees of stress that children experience.

The damage from toxic stress, luckily, can be undone. But it takes reliable, holistic and long-term interventions. The two main takeaways from the research on the physiological environment of the child are: first, brain development in early childhood is rapid and lasting, which means that the timing of our investments matter; and second, relationships have the power to heal, which means that investments in people who care for children matter. And so we must ask ourselves—what are we prepared to do to help ensure that the 25% of at-risk children in our communities have the best chance for success? Or, as Geoffrey Canada asked, are we prepared to face the damage done if we continue to “go to scale on failure?” Next we outline how these research findings can be applied to families and caregivers, to neighborhood leaders and associations, and to policy and systems leaders.
Parents, caregivers and concerned citizens

For parents and caregivers—or anyone who comes into contact with children on a daily basis—we now know just how critically important it is to provide care that is consistent, safe and predictable. Quite simply, “healthy relational interactions with safe and familiar individuals... buffer and heal trauma-related problems.” Even when damage has been done, positive and healthy relationships can promote healing and the healthy development of the child. Early relationships with caregivers “create a very literal template... for the child’s brain about what humans are.”

For children who experience attentive, nurturing care, they will associate humans with safety, comfort and sustenance; those who experience abuse or neglect will associate humans with fear, chaos and pain. These associations have implications for the health of future relationships for the child. In short, early relationships are formative, and thus extremely important. Any relationship that provides consistent, attuned nurture and support can serve as an important buffer for children against trauma. One does not have to be a parent to provide such a relationship. Even for children living in chaotic environments, mentors and teachers, for example, have the power through their time and attention to help heal the traumatized child.

Neighborhood leaders and associations

For neighborhood leaders and associations working with children in our communities, the research calls for a renewed understanding of what children need: high-quality, stable supports. For neighborhood stakeholders, this means strategies should focus on providing long-term and reliable programming and support for children. A safe and predictable environment is a fundamental building block for healthy development—what can neighborhood leaders and organizations do to create these safe spaces? Community-based organizations correctly devote a lot of resources and attention to providing access to structural resources for children and families in their communities, such as affordable housing, healthy food, job training or health care. The next question is how can leaders and organizations provide not just the structural resources children need, but the physiological resources as well? How can they support the socio-emotional development of children? How do support services and educational resources need to be staffed? What skill sets need to be developed for individuals working with children impacted by constant stress? What kinds of neighborhood events and programming best provide stable environments? How can we educate and empower our informal child mentors — store owners, neighbors, Y staff — to provide or link kids to stable supports? When it comes to investing in supports for children, it is not a question of either “structure” or “nurture,” but a matter of both/and. To approach it as a choice between the two—structures or physiology—is a false choice.

And so we must ask ourselves—what are we prepared to do to help ensure that the 25% of at-risk children in our communities have the best chance for success?
Policy and systems leaders

The research on the effects of stress on cognitive development challenges policymakers and systems leaders to expand their scope of investment and problem-solving, to create policies and practices that reflect the two key lessons from the latest research: begin as early as possible, the earliest intervention is the strongest and most cost-effective, and it is never too late, relationships with stable adults and caregivers can heal, setting the child on a new path to success.

For education policy, this requires expanding our concept of “early education” to include the health and well-being of the mother. We have learned that stress regulation for children begins in the womb. Policies and programs that provide support to at-risk mothers are imperative—from nutritional support to emotional support. The more resources mothers have, the more equipped they will be to form nurturing attachments with their babies. And these first relationships are critical for setting the child on a path to healthy development. But the support for these mothers cannot end at birth.

We know that from 0 to 3 years old, the brain is developing at an incredible rate. By 4 years of age, over 80% of the brain is developed. Thus, pre-K is an incredibly fragile time in the development of the child. Babies and toddlers who experience prolonged stress or trauma during this stage of development can experience long-term damage—their physiology is altered. And while interventions for at-risk youth exist at every stage of development, we must heed what the research shows us—that the earliest intervention is the strongest. Interventions made at these earliest years generate the biggest return on investment.

We must also reassess how our systems and institutions support at-risk youth. At-risk youth who are behaviorally challenged are more likely to be labeled as a ‘problem’ and tracked into special education, and thus out of our mainstream systems. Without interventions, as the child grows older, he is likely to move through the mental health system, and ultimately, the juvenile justice system, because stress-induced challenges do not disappear if not addressed. What would it look like if policy and systems leaders understood how discrete systems of the brain develop differently, and how experiences in the early years of development shape mental, emotional and physical capacities—and applied them to policy and program design? How would we, for example, rethink our approach to school discipline? To mental health? Or to juvenile justice?

The questions posed above present an entry point for stakeholders of all types—parents, communities, government and systems stakeholders—to re-engage thoughtful, research-based problem-solving in order to take care of our most precious asset—our children.

In the next section, we lift up guiding principles for policies and programs along the child development spectrum. We link to current programming in Franklin County that is incorporating these principles.
Bradley’s Story

Bradley Parker Jr., a 23-year-old Mary Orton camp counselor and recent Ohio State University graduate, first came to Mary Orton as a 10-year-old with an attitude and a blue Mohawk. He works there now because he knows first-hand what the program can do for inner-city children. It helped him manage life as a teen in his Weinland Park neighborhood.

“I thought camps like this only existed in movies and on TV shows. My specialty now is working with kids who come from the same background.”

Every summer, nearly 150 disadvantaged, inner-city youth have the opportunity to attend the nature-based, 8-week day camp experience at Camp Mary Orton through Godman Guild’s Summer Youth Empowerment Program (S.Y.E.P.), a program supported by United Way of Central Ohio. In addition to building educational and social skills, the program provides transportation and healthy meals, a lifeline to these children during the long summer months.

With approximately 89% of campers in the program qualifying for 100% tuition support in 2013, Godman Guild’s S.Y.E.P. helps youth become productive and socially competent citizens of the community and their schools. Like Bradley, these youth are more likely to graduate from high school and succeed in careers and in life.
The early childhood years

Provide prenatal care and support. Prenatal support is one of the necessary precursors for healthy child development. Programs that develop a holistic approach to supporting mothers, not only focusing on neonatal health and nutrition before and after birth, but also the mental and emotional health of at-risk mothers, help ensure that a stable foundation is being laid for babies and their mothers. Critically, these programs must extend beyond birth, to provide ongoing support for mothers as they transition into motherhood. We cannot abandon at-risk mothers and children during the most dramatic period of development—0 to 3 years old. Systems leaders must keep in mind the development continuum, and ensure that interventions and resources exist for every level of child development—Mother through 12.

Create systems of stability. Systems leaders, neighborhood leaders and civic associations should devise ways to provide wrap-around services that serve as a protective buffer for families, seeking ways to increase food security, housing stability, access to mental and physical health care, etc. We know that the more stable the environment the child grows up in, the better for the child’s brain development. Helping at-risk families achieve a measure of stability decreases stress. A successful example of providing wrap-around services that promote stability is United Way’s Family Stability Initiative.

When seeking out social supports or services we should ensure that help is provided in a manner that does not inadvertently increase stress. Such an approach reflects research on the “bandwidth” dilemma many families in poverty experience. The ability to provide nurturing, attuned caregiving requires mental resources, but for families and caregivers living in poverty, this mental freedom is stretched thin from simply trying to make ends meet. What other stressors are the parents and family facing, and how can community and other support structures be tapped to help lessen the load? Multiple stressors can impede the ability of families to utilize services that would provide them with resources they need.

Anecdotally, organizations have shared their struggles in getting parents to use the resources available. For example, they may participate in an initial sign-up to start, but fail to complete the registration process. Systems leaders, as well as neighborhood leaders and associations, must reach out to these parents and specifically ask what challenges they are facing in following through, and design strategies to minimize these barriers as much as possible.

For policy leaders, ensuring a stable environment means increasing, leveraging and communicating the varied state, local and national resources families have access to and it means ensuring that these resources are reliably available for those most in need. Policies should support, not impede, at-risk families working towards stability and security. Access to dependable resources for at-risk families allows these parents and caregivers the ability to devote critical attention to the socio-emotional development of the child.
Adolescents and older youth

_Nurture the development of relationships._ We know that the development of consistent, positive relationships can have powerful effects on youth, especially those who have experienced trauma. For example, mentoring relationships have been shown to have numerous positive outcomes, including: improvements in self-esteem; better relationships with parents and peers; greater school connectedness; improved academic performance; and reductions in substance use, violence and other risk behaviors.\(^{126}\)

Concerned citizens and neighborhood leaders have a clear role to play in supporting the development of these positive relationships. An estimated 20% of youth lack the presence of a caring adult in their lives, and at-risk youth are disproportionately represented in this number.\(^{127}\) Bruce Perry describes the current socio-emotional state of our society as “relationally impoverished”—youth today are growing up with far fewer relational interactions with attuned and nurturing adults than at any time in our history (about 1/16th the relational ratio for which our brains are designed).\(^{128}\) This impoverishment defies a human truth: _we are a relational species, and we need the presence of multiple secure, positive, attuned relationships to thrive._

Quite simply, we need each other. Thus, even those youth who have a caring parent in their lives can benefit from the development of additional positive relationships.

_Develop trauma-informed interventions._ We know that children who experience trauma exhibit behavioral challenges, and if these are acted out in classrooms, kids may be re-traumatized from strict punishments:

> Reactive, punitive discipline measures such as out-of-school suspension and expulsion or restraint and seclusion do not address the challenging behavior, they re-traumatize children, sending them on a ‘tried and true road to prison or dropping out of school, and a life damaged for no good reason.’\(^{129}\)

We also know that discipline varies by race. Data compiled by the Ohio Children’s Defense Fund show that the level of disparity between out-of-school suspension rates for black and white students in Ohio’s largest urban school districts ranges from a factor of 1.9 to a factor of 13.3.\(^{130}\) This means that the average black student enrolled in these districts is four times more likely to be suspended than the average white student.\(^{131}\) For the child experiencing trauma at home, the school may represent the only safe haven for him or her. If she is then removed from the school, any structural and relational supports she may have built or come to depend on are gone.
Based on this research, systems leaders have a responsibility to develop trauma-informed systems of care in the school to ensure that children are receiving the help they need, that reflects their physiological reality, and minimizing the risk of mis-diagnosis (for example, with ADHD, or tracked into special-education classes). Training can be provided to teachers and other administrative staff to enable them to identify, assess and treat traumatized children.

**Move beyond collaboration.** Ensuring the success of our children is challenging but imperative. Although the challenges are many, a patchwork of programs does exist to support parents, children and communities in reaching success. Unfortunately, there has been no comprehensive inventory of what programs are available where and by whom. **Asset-mapping** of existing programs can illuminate where specific populations and programs co-exist, and where additional resources need to be deployed.

Greater coordination and collaboration among sectors and initiatives is typically the flip side of the asset-mapping coin. However, there is growing evidence that for sustained progress on these issues, leaders must do more than collaborate. Although individuals, organizations and systems leaders have already invested in improving our children’s chance of success, the complexity of the challenge is bigger than what any individual organization or collaboration of organizations can fix alone. A new approach—collective impact—is gaining traction in the social service field.

**Collective Impact.** Collective impact happens when a core group of people or organizations come together around a shared goal with a common set of strategies and performance measures. Such an approach is different from collaborations because it requires a common agenda (including agreed upon definitions of the problem and the goals), a backbone support organization with dedicated staff (separate from the organizations involved), a shared performance measurement system, continuous communications, and mutually reinforcing activities among all participants. Importantly, participating organizations and stakeholders are not asked to abandon their activities or missions, but rather to carry out the activities at which they excel in a way that supports and is coordinated with the actions of others in the group.

With collective impact, the process itself is the solution. A collective impact approach creates “a continuous feedback loop that [leads] to [collective learning and] collective identification and adoption of new resources and solutions.” This approach requires a great deal of trust-building, and a long-term commitment.
Conclusion

As a community, we must better understand the harmful role that trauma and stress play in child development and our community’s broader educational challenges. The experience of poverty for children is often more than an issue of time-limited material deprivation. It inflicts stress and trauma that can inhibit a child’s development and future prospects. Worse, research shows that these effects can stretch across generations, locking children, parents and grandparents into repeating patterns of stunted life trajectories.

We must approach the multiple negative impacts of chronic stress and trauma with a multigenerational lens—one that acknowledges that a child raised by a parent who was herself the product of an environment characterized by heightened levels of insecurity, stress and/or violence will require targeted investments to counteract the amplified effects of lifelong disadvantage.

In short, our community needs to embrace local practices and policies that counteract trauma, foster resiliency and support the “whole child.” The future successes of our community’s children will thus require not only classroom and schoolhouse interventions, but improvements to the conditions that surround children’s lives—structurally and physiologically. Proactive and sustained attention by a broad group of stakeholders to these issues will be necessary to meet educational and civic goals, and to move toward a future in which today’s children grow into the adults who will take leadership of our community.
Community Collaborations

**Columbus Kids and Franklin County Kids.** Columbus Kids works in partnership with more than 300 community organizations to help prepare children for kindergarten. Recognized as “the first of its kind in the nation,” the program is designed specifically to increase early detection of developmental delays and speech or hearing problems among preschoolers in the Columbus City School district. It also helps students receive the intervention services they require to be ready to enter kindergarten prepared for success.

With funding from the Franklin County Board of Commissioners, United Way began partnering with the South-Western City School District in 2013 on the Franklin County Kids initiative which uses the successful Columbus Kids model. Franklin County Kids greatly expands the number of children who will receive early detection services.

**Infant Mortality Task Force.** The Greater Columbus Infant Mortality Task Force was formed in November 2013 by Columbus City Council President Andrew Ginther, who charged Columbus Public Health and Nationwide Children's Hospital with leading a task force to reduce the number of infants who die or face ongoing illnesses and disabilities because of challenges in the first year of life. The Task Force is in the process of developing a community plan that will reduce the rate of infant mortality in Columbus/Franklin County by nearly 40 percent, from the 2011 benchmark rate of 9.8 infant deaths per 1,000 live births to 6 per 1,000, and cut the racial disparity gap between white and black infants in half.

**Learn4Life.** Learn4Life is a neutral backbone organization guided by a mission to ensure every child and student receives the support they need to succeed academically and thrive in a fulfilling career. The organization supports individuals and organizations supporting this mission from educators to families, from service providers and nonprofits, to the business community and elected officials. Learn4Life is a focused ‘birth to career’ community-wide support system seeking to create a culture of community ownership through implementation of a collective impact model and support of community efforts toward these goals.

**SPARK (Supporting Partnerships to Assure Ready Kids).** SPARK is an intervention program serving children ages 3-6. SPARK seeks to build reading, language and social skills of these children in order to help prepare them for school. SPARK is a family-focused program that has helped more than 4,200 families prepare their children for kindergarten. In addition, SPARK works with schools to help ensure easy transitions for children as they enter elementary school.

**United Way’s Stable Families Initiative.** This initiative, established in 2008, creates long-lasting change by addressing and resolving the issues that push families to the brink of homelessness. In 2012 alone, 2100 children slept in emergency shelters in central Ohio, and on a typical night, more than 200 children will sleep in a shelter bed. The program provides wrap-around services that serve as a protective buffer for families during this tumultuous period. These include family counseling; short-term financial support for rent, transportation, job training and utility bills; assistance in negotiations with landlords and others to help families stay in their homes; help locating resources for health care, after-school care and special needs; and other support that can help families prevent future crises. One of the greatest benefits families receive from participating in the program is increased stability—in family, in housing and in school.
Government

Franklin County Children Services. Franklin County Children Services is the public agency mandated by federal and state law to ensure that our community’s children are safe and well cared for. We provide protection, care and permanency for children who are abused, neglected or dependent. By being in partnership with more than 100 agencies and organizations, and with the help of over 700 employees, 500 kinship families, 200 adoptive families, 500 volunteers and mentors and hundreds of community foster parents, the agency is committed to making sure that every child has a safe and stable home. Children Services social workers and support staff work to build stable and supportive living settings for young people, strengthen family life and assist parents in meeting their responsibilities to their children. FCCS receives approximately 30,000 referrals annually through our 24-Hour Child Abuse Hotline—(614) 229-7000.

Franklin County Department of Job and Family Services (FCDJFS). FCDJFS provides numerous services designed to support the basic needs, stability and well-being of families in Franklin County. FCDJFS is the governmental agency responsible for the administration of Food Assistance, Medicaid, Cash Assistance and Publicly Funded Child Care. Additionally, FCDJFS demonstrates its commitment to the well-being and success of youth ages 0-24 through a continuum of contracted services. FCDJFS funds the following services: trainings for licensed in-home child care providers, kindergarten readiness programs, youth after-school programs, early childhood and youth intervention services, youth summer camps and youth summer employment programs, annually impacting Franklin County’s youth by more than $122 million.

Franklin County Family and Children First Council: Building Better Lives (BBL). Franklin County Family and Children First Council began the Building Better Lives initiative in 2012 in an effort to promote healthy early brain development for Franklin County children. Based on the research of Dr. Bruce D. Perry from Child Trauma Academy, the initiative educates parents and professionals on the impact of trauma and adverse childhood experiences on early brain development and focuses on teaching strategies to offset potential negative child impact and build resilience in children. Together with many community partners, the initiative has trained more than 3,000 parents and professionals, and has implemented pilot projects in six preschool settings and two school systems. These pilots are helping teachers and administrators incorporate rhythm and other regulating activities into their daily classroom, and stressing the important role that relationship and attachment have in building a child’s capability to overcome adversity, to learn and to develop social-emotional skills, all characteristics that lay the groundwork for developing into a successful adult. Westerville City Schools and South-Western City Schools are currently implementing Dr. Perry's neurosequential model in some classrooms and schools, with other districts to follow.
Social Services and Agencies

Action for Children
Amethyst, Inc.
Asian American Community Services
Big Brothers Big Sisters of Central Ohio (Franklin County)
Boy Scouts of America, Simon Kenton Council (Franklin County)
Boys & Girls Clubs of Columbus, Inc.
Buckeye Ranch
Catholic Social Services, Inc. (Franklin County)
The Center for Family Safety and Healing
The Center for Healthy Families
Central Community House
Children’s Hunger Alliance
City Year, Inc.
Clintonville/Beechwold Community Resources Center
Columbus Early Learning Centers
Columbus Urban League, Inc.
Communities In Schools of Central Ohio
Community Development for All People
Community Shelter Board
Directions for Youth and Families
Ethiopian Tewahedo Social Services
Girl Scouts of Ohio’s Heartland Franklin County
Gladden Community House
Godman Guild Association
Huckleberry House, Inc.
J. Ashburn Jr. Youth Center
Kaleidoscope Youth Center
LeaderSpark
LifeCare Alliance
Local Matters
Lutheran Social Services of Central Ohio
Maryhaven
Mental Health America of Franklin County
NCBC Human Services Corporation
Neighborhood House, Inc., The
Salvation Army of Greater Columbus, The
South Side Learning & Development Center
St. Stephen’s Community House
St. Vincent Family Center
YMCA of Central Ohio
YWCA of Columbus
Champion of Children, A United Way of Central Ohio Initiative

Champion of Children’s mission is to promote awareness of education issues, publish research that helps inform investment in children in central Ohio and mobilize individuals to support education efforts. Champion of Children supports and promotes United Way of Central Ohio’s community results and bold goals:

**Kindergarten Readiness Result:** Children will enter kindergarten physically, emotionally, socially and cognitively ready to succeed.  
**Bold Goal:** Increase the percentage of young children entering kindergarten in Franklin County public school districts who score in the top two screening categories of the Kindergarten Readiness Assessment — Literacy (KRA-L) from 71% to 85%.

**High School Graduation Result:** Youth graduate from high school well-prepared for additional learning and productive careers.  
**Bold Goal:** Increase the percentage of students who graduate from high school in Franklin County public school districts from 87% to 95%.

Since 1994, Champion of Children has been a leading voice of advocacy for quality education for children in central Ohio. In 2010, United Way of Central Ohio expanded its efforts to include the Champion of Children initiative to continue helping children succeed in school, from birth through graduation. For more information, please visit: liveunitedcentralohio.org/champion-of-children.

The Kirwan Institute for the Study of Race and Ethnicity

The Kirwan Institute for the Study of Race and Ethnicity was established in 2003 as a center for interdisciplinary research at The Ohio State University. The Kirwan Institute works to create a just and inclusive society where all people and communities have opportunity to succeed. For more information, go to kirwaninstitute.osu.edu.

Community Research Partners

CRP is a nonprofit research, evaluation and data center based in Columbus, Ohio, with a mission to strengthen communities through data, information and knowledge. CRP is a partnership of the City of Columbus, United Way of Central Ohio, The Ohio State University and the Franklin County Commissioners. CRP is also central Ohio’s data intermediary, and a partner in the Urban Institute’s National Neighborhood Indicators Partnership. Since its inception in 2000, CRP has undertaken hundreds of projects in central Ohio, statewide, and across the country. With every project, our goal is to partner with our clients to turn data into information that can guide organizational and community decision-making. For more information, please visit: communityresearchpartners.org.
Download the report and share it with your colleagues, family and friends: liveunitedcentralohio.org/champion-of-children
References Cited

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15. Supra n. 6 at 7
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17. Id. at 7
18. Id.
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21. Supra n. 6 at 10
23. Supra n. 19 at 165
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CHAMPION OF CHILDREN PATRONS

Tara Abraham
Dean Cheryl Ackerberg
Drs. Jamie and Steve Allen
Carol Andreae and Jim Garland
Wally Bakare
Nancy Nestor-Baker, PhD
Lori Barreras and Alex Fischer
Michael Bloch
Barbara A. Boyd
Richard Boylan
Honorable Yvette McGee Brown and Tony Brown
David Chesebrough
Melinda Church and Dr. Bill Benson
Robin and Greg Comfort
Stephanie and David Connor
Beth Crane and Richard McKee
Jim Crane
Sandy Doyle-Ahern
Carrie and Brandon Dupler
Lisa and Larry Ellerbrook
Maria and Brian Ellis
Beth Grimes Flood and Tom Flood
Drs. Patricia and Steven Gabbe
Andrew Ginther
Michael Glimcher
Joy and Mike Gonsiorowski
Andrea and Chris Guilliams
Paula and Wayne Harer
Angel and Chris Harris
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Gloria and Dale Heydlauff
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Lisa and Alan Hinson
Marlene Hyman and Fred Andrele
Amy and Mark Johnson
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Renee and Ronald Kauffman
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Jed and Joyce Morison
Linda and Mike Morris
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Debby and Larry Ritter
Cheryl Roller and Chuck Taylor
Rachel and Keith Sanders
Ira Sharfin
Aurelia and Ernie Stern
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