Shelby County Early Childhood Education
Factbase compendium

December 2015
## Factbase overview

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Context</td>
<td>2-6</td>
</tr>
<tr>
<td>0-3 year olds</td>
<td>8-50</td>
</tr>
<tr>
<td>4-year olds</td>
<td>52-61</td>
</tr>
<tr>
<td>K-3rd</td>
<td>63-88</td>
</tr>
<tr>
<td>Continuum</td>
<td>90-123</td>
</tr>
</tbody>
</table>
Context: promising momentum, but a need and opportunity to go further along full birth to third grade continuum

Early learning and early literacy are critical for children’s long-term success
- 2011 study: children who do not read on grade level by 3rd grade 4x more likely to not have a high school diploma by age 19
- 3rd grade reading proficiency a stronger predictor of high school dropouts than poverty; when a low-income student can read by 3rd grade, has ~9 in 10 chance of graduating

Too few students in Shelby County are meeting this important standard
- Today only ~4 in 10 3rd grade students in Shelby County can read on grade level
- Potential contributing factors: pre-K quality inconsistent, opportunity for more coordination across, prenatal- age 3; pre-K; and K-3 sectors

Recent efforts in Shelby County have built positive momentum, e.g.,
- Shelby County Consortium received $3M from local government to expand pre-K by 400 seats, while Tennessee won federal Preschool Development Grant to expand by 1,000 more seats
- Shelby County Schools became the grantee for Head Start

Furthermore, there is growing collaboration to strengthen support for the birth to 3 age cohort
- Local groups like the Early Success Coalition and Seeding Success are building collaboration among community stakeholders to improve early outcomes and Kindergarten readiness

We now have the opportunity to build upon this progress with a coordinated plan and coalition

Draft statement of objective:
All children and families in Shelby County receive the aligned, high-quality support they need from birth so that all children read on grade level by third grade

1. Donald J. Hernandez, "Double Jeopardy: How Third-Grade Reading Skills and Poverty Influence High School Graduation," 2011. 2. SCS data only
Multi-faceted approach used to develop Shelby County early childhood education (ECE) recommendations

- Interviews and 1:1s with Steering Committee members and local stakeholders
- Interviews with relevant Tennessee state agencies on current agenda and existing efforts
- Interviews with experts / leaders from communities outside Shelby County
- Analysis of Shelby County data on access, participation, performance and quality
- Research factbase on emerging practices and successful external models
Diverse coalition of stakeholders on the Shelby County Early Childhood Steering Committee

Sandra Allen, LeBonheur Children’s Hospital/Early Success Coalition
Malika Anderson, Achievement School District
Jessica Ball, Hyde Family Foundations
Jim Boyd, Pyramid Peak Foundation
Kathy Buckman-Gibson, Chamber of Commerce/Chairman's Circle
Kristi Ford, Bartlett City Schools
Trina Gilliam, LeBonheur Children's Hospital/Early Success Coalition
Sandy Guntharp, Ready Set Grow/MAEYC
Karen Harrell, Porter-Leath
Joey Hassel, TN Department of Education
Dr. Hank Herrod, The Urban Child Institute
Martha Jackson, Jesse Mahan Child Care Center
Jerri Jackson, Millington Municipal Schools
Lora Jobe, PeopleFirst Partnership
Cate Joyce, Seeding Success

Sean Lee, Porter-Leath
Mayor Mark Luttrell, Shelby County Government
Dr. Deanna McClendon, Shelby County Schools
Katie McPherson, Achievement School District
Misty Moody, TN Department of Education
Dr. Mary Palmer, Southwest Tennessee Community College
Chris Peck, ACE Foundation
Dianne Polly, Shelby County Education Foundation
Dr. Barbara Prescott, PeopleFirst Partnership
Dr. Heidi Ramirez, Shelby County Schools
Dr. Loretta Rudd, University of Memphis
Channel Sallie, Shelby County Schools
Mark Sturgis, Seeding Success
Blair Taylor, Memphis Tomorrow
Cathy Thompson, Achievement School District
Paul Young, Shelby County Government
Keisha Walker, Shelby County Government/Early Success Coalition
Recommendations developed with input from several additional stakeholders, experts, and leaders in ECE

**Within Shelby County**
- Peter Abell, Books from Birth
- Michael Collins, Germanshire Elementary
- Shelly Counsell, University of Memphis
- ZB Davis, TFA Memphis
- Taylor DeMagistris, Teacher Town
- Tosha Downey, Teacher Town
- Betty Dupont, Hope House
- Nate Ferguson, Where We Live Mid-South
- Anasa Franklin, SCS Performance Management
- Rorie Harris, SCS Performance Management
- Sutton Mora Hayes, Where We Live Mid-South
- Dottie Jones, CoactionNet
- David Jordan, Agape
- Catherine Monaco, Impact America – TN
- Bob Nardo, Libertas
- Alicia Norman, Perea School
- Jason Ogle, SCS Assessment and Accountability
- Lindsey Osborne, SCS Talent Acquisition
- Courtney Robertson, Knowledge Quest
- Principal Strickland, Manor Lake Elementary
- Mrs. Thomas, Joyland Academy
- Greg Thompson, Pyramid Peak
- Athena Turner, TFA Memphis
- Ashley Walton, SCS Talent Acquisition
- Elizabeth Wilson, TECTA
- Brian Wright, University of Memphis

**Within Tennessee**
- Connie Casha, Tennessee Dept of Education
- Katari Coleman, Dept of Human Services
- Misty Moody, Tennessee Dept of Education
- Gary Smith, Tennessee Dept of Education
- Lisa Wiltshire, Tennessee Dept of Education

**Outside Tennessee**
- Julie Asher, Harvard University
- Susan Bales, Frameworks Institute
- Steve Barnett, NIEER
- Madeleine Bayard, Rodel Foundation of Delaware
- Charles Carter, Harvard University
- Alan Cohen, Dallas ISD
- Ann Cook, Salt Lake City Community Learning Center
- Kim Day, Drew Charter School
- Alex Hales, TFA Dallas
- Cynthia Kuhlman, CF Foundation
- Derek Little, Louisiana Dept of Education
- Jaime Meyers, Commit
- Jessica Pizarek, Policy Link
- Al Race, Harvard University
- Sara Remington, Rhode Island Dept of Health
- Julie Sweetland, Frameworks Institute
- Todd Williams, Commit

---

Draft—for discussion only
Shelby County Early Childhood Plan targeted at improving access and quality along birth to 3rd grade continuum

<table>
<thead>
<tr>
<th>Access and awareness</th>
<th>0–3 yr olds</th>
<th>4 yr olds</th>
<th>K–3rd grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish incentives to create more high quality seats in areas with unmet demand</td>
<td>Increase capacity of high-quality pre-K programs</td>
<td>Build ecosystem of wraparound and supplemental academic support providers in K–3rd</td>
<td></td>
</tr>
<tr>
<td>Strengthen child care certificate distribution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raise family and community awareness of value of early learning</td>
<td>8 Adopt a common definition of high quality pre-K</td>
<td>12 Mentor and train schools to expand on-campus SEL supports</td>
<td></td>
</tr>
<tr>
<td>4 Expand in home and unlicensed provider supports</td>
<td>9 Improve pre-K quality</td>
<td>13 Strengthen pre-service preparation through exposure to more relevant coursework and classroom experiences</td>
<td></td>
</tr>
<tr>
<td>5 Increase usage of developmental screeners</td>
<td>11 Mitigate summer learning loss</td>
<td>14 Enhance professional learning opportunities through more effective implementation of coaching, PLCs and PD</td>
<td></td>
</tr>
<tr>
<td>6 Improve referral conversion for home visitation</td>
<td></td>
<td>15 Encourage district/school leadership to better align instructional practices and expectations across the pre-k to 3rd continuum</td>
<td></td>
</tr>
<tr>
<td>7 Strengthen state QRIS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td>10 Increase capacity of high-quality pre-K programs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuum</td>
<td>17 Adopt community-wide scorecard with measures across birth to 3rd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 Adopt common assessment approach from birth to 3rd grade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 Recruit and retain high quality early educators</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 Implement a holistic place-based model</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 Build data sharing infrastructure to coordinate services and inform action</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 Build analytic, research and continuous improvement capability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 The PeopleFirst Partnership, as the backbone organization, to coordinate and oversee implementation of the Plan</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Draft—for discussion only
0-3 year olds
# Overview of early childhood care for 0-3 year olds

<table>
<thead>
<tr>
<th>Sources of early child care for children aged 0-3</th>
<th>Additional family / child support services</th>
<th>In home programs for families</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unlicensed family care homes, or in own homes</td>
<td>Early intervention services</td>
<td>Supports at-risk parents</td>
</tr>
<tr>
<td>~27,600</td>
<td></td>
<td>(e.g., first-time parents,</td>
</tr>
<tr>
<td>Family care homes with max of 4 unrelated</td>
<td></td>
<td>low income, single parents)</td>
</tr>
<tr>
<td>children</td>
<td></td>
<td>through home visits to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>support parents in better</td>
</tr>
<tr>
<td>Family members (e.g., mothers) taking care of</td>
<td></td>
<td>engaging with their children,</td>
</tr>
<tr>
<td>children full-time</td>
<td></td>
<td>and providing support on</td>
</tr>
<tr>
<td></td>
<td></td>
<td>health issues</td>
</tr>
<tr>
<td>Unlicensed alternate approval homes</td>
<td>Home visitation programs</td>
<td></td>
</tr>
<tr>
<td>~700 seats</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family care homes with max of 4 unrelated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homes participate in Child and Adult Care Food</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program (CACFP), and receive inspections and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>training on health and nutrition¹</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Licensed centers and homes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25,843 seats</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,305 seats</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publicly-funded programs (e.g., Early HeadStart,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Headstart and Special Education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24,538 seats</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child care centers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group and family child care homes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1300 seats</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supports for families with children who</td>
<td></td>
<td></td>
</tr>
<tr>
<td>have developmental delays (e.g., assistive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>technologies, speech therapists, physical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>therapy, counseling); needs identified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>through a screener</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000 seats</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supports to reach families directly in home</td>
<td></td>
<td></td>
</tr>
<tr>
<td>including social media outreach (e.g., mobile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>apps), parent mentoring, parental groups</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ Sponsoring agencies for the Alternate Approval Homes include Porter Leath, Our Daily Bread, Alpha Omega, Karmu Nutrition, etc.

Source: Porter Leath, Tennessee Department of Education, Tennessee Department of Human Services, Early Success Coalition
Understanding the access gap for early care seats allows for intentional growth of new seats in areas of most need.

**Understanding the access gap**

**Question**
- Which neighborhoods in Shelby County lack sufficient early care seats (relative to their 0-3 year old populations)?
- Are these neighborhoods in low income and/or high population areas?

**Impact**
- Additional public seats (e.g. Early Head Start) can be deployed in areas of most need
- Incentivize private providers to locate new, high-quality seats in areas of most need

**Methodology**

Identify neighborhoods with access gap for early care seats
- Estimate number of early care seats available in each zip code
- Compare estimated seats with 0-3 year old population in each zip code to identify underserved areas

Consider additional factors contributing to need for additional seats
- Understand income levels and absolute population of each zip code

Determine highest need areas by combining results of access gap and demographic characteristic analyses

Source: BCG analysis
Two-thirds of zip-codes in Shelby County have less than 50% coverage by licensed early care providers.
Access gap most prevalent in five zip codes that have larger 0-3 populations and lower median household income

1. Percentage served more than 100% likely due to families bringing children to neighborhoods where jobs are located
Source: US Census Bureau, National Association for the Education of Young Children, Urban Child Institute
## Additional characteristic of families in five zip codes with most prevalent access gap

<table>
<thead>
<tr>
<th>Zip-code</th>
<th>Child under 6 in single-parent home (%)</th>
<th>Children under 18 living in rental housing (%)</th>
<th>Population that did not complete high school (%)</th>
<th>Non-institutionalized population with no health insurance coverage (%)</th>
<th>Unemployed population over 16 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Shelby County</td>
<td>70.1</td>
<td>49.0</td>
<td>14.0</td>
<td>15.8</td>
<td>7.8</td>
</tr>
<tr>
<td>Frayser (38127)</td>
<td>83.0</td>
<td>71.8</td>
<td>25.3</td>
<td>18.5</td>
<td>12.6</td>
</tr>
<tr>
<td>Hickory Hill (38115)</td>
<td>90.1</td>
<td>70.4</td>
<td>16.8</td>
<td>24.1</td>
<td>10.5</td>
</tr>
<tr>
<td>Oakhaven/Parkway Village (38118)</td>
<td>65.0</td>
<td>64.9</td>
<td>24.4</td>
<td>24.7</td>
<td>12.4</td>
</tr>
<tr>
<td>Raleigh (38128)</td>
<td>71.5</td>
<td>60.6</td>
<td>18.5</td>
<td>22.1</td>
<td>8.7</td>
</tr>
<tr>
<td>White Haven (38116)</td>
<td>70.6</td>
<td>64.1</td>
<td>14.8</td>
<td>18.0</td>
<td>11.0</td>
</tr>
</tbody>
</table>

**Comparison of target zip codes to Shelby County overall**
- Up to 20% more single-parent homes
- ~10-20% more families in rental housing
- Up to 11% higher population that did not complete high school
- Up to 10% more families with no health insurance coverage
- Up to 5% points higher unemployment

Source: U.S. Census Bureau, 2009–2013 5-Year American Community Survey
Increasing coverage to 50-75% in these zip codes would require ~2400-6500 additional early care seats

~2,400-6,500 additional seats needed to get 50-75% coverage of the 0-3 year old population with access to licensed seats in the highest need zip codes

Source: US Census Bureau, 2013 American Community Survey, National Association for the Education of Young Children, Urban Child Institute
## Access gap supporting detail by zip code

<table>
<thead>
<tr>
<th>Neighborhood</th>
<th>Zip code</th>
<th>0-3 year old population</th>
<th>Served (%)</th>
<th>Household income ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downtown</td>
<td>38103</td>
<td>273</td>
<td>73</td>
<td>56,388</td>
</tr>
<tr>
<td></td>
<td>38104</td>
<td>968</td>
<td>74</td>
<td>36,398</td>
</tr>
<tr>
<td></td>
<td>38105</td>
<td>419</td>
<td>21</td>
<td>17,348</td>
</tr>
<tr>
<td>Cordova</td>
<td>38016</td>
<td>2,689</td>
<td>34</td>
<td>66,845</td>
</tr>
<tr>
<td></td>
<td>38018</td>
<td>1,052</td>
<td>177</td>
<td>31,979</td>
</tr>
<tr>
<td>East Memphis</td>
<td>38117</td>
<td>1,611</td>
<td>49</td>
<td>62,580</td>
</tr>
<tr>
<td></td>
<td>38119</td>
<td>1,204</td>
<td>63</td>
<td>58,276</td>
</tr>
<tr>
<td></td>
<td>38120</td>
<td>585</td>
<td>62</td>
<td>83,396</td>
</tr>
<tr>
<td>Frayser</td>
<td>38127</td>
<td>3,858</td>
<td>29</td>
<td>25,592</td>
</tr>
<tr>
<td>Hickory Hill</td>
<td>38115</td>
<td>3,604</td>
<td>37</td>
<td>29,230</td>
</tr>
<tr>
<td></td>
<td>38125</td>
<td>2,236</td>
<td>31</td>
<td>65,465</td>
</tr>
<tr>
<td></td>
<td>38141</td>
<td>1,635</td>
<td>20</td>
<td>51,228</td>
</tr>
<tr>
<td>Jackson Berclair</td>
<td>38108</td>
<td>1,052</td>
<td>32</td>
<td>22,497</td>
</tr>
<tr>
<td></td>
<td>38122</td>
<td>1,539</td>
<td>16</td>
<td>34,735</td>
</tr>
<tr>
<td>Midtown/Chickasaw Gardens</td>
<td>38111</td>
<td>2,134</td>
<td>65</td>
<td>35,558</td>
</tr>
<tr>
<td></td>
<td>38112</td>
<td>1,076</td>
<td>39</td>
<td>30,418</td>
</tr>
<tr>
<td>North Memphis/Uptown</td>
<td>38107</td>
<td>1,043</td>
<td>39</td>
<td>27,151</td>
</tr>
<tr>
<td>Oakhaven/Parkway Village</td>
<td>38118</td>
<td>3,206</td>
<td>34</td>
<td>31,979</td>
</tr>
<tr>
<td>Raleigh</td>
<td>38128</td>
<td>2,857</td>
<td>31</td>
<td>35,053</td>
</tr>
<tr>
<td></td>
<td>38134(^1)</td>
<td>2,423</td>
<td>61</td>
<td>47,529</td>
</tr>
<tr>
<td>South Memphis</td>
<td>38106</td>
<td>1,344</td>
<td>74</td>
<td>22,374</td>
</tr>
<tr>
<td></td>
<td>38109</td>
<td>2,312</td>
<td>42</td>
<td>31,067</td>
</tr>
<tr>
<td></td>
<td>38114</td>
<td>1,377</td>
<td>58</td>
<td>24,019</td>
</tr>
<tr>
<td></td>
<td>38126</td>
<td>494</td>
<td>74</td>
<td>14,889</td>
</tr>
<tr>
<td>White Haven</td>
<td>38116</td>
<td>2,689</td>
<td>47</td>
<td>37,714</td>
</tr>
<tr>
<td>Arlington</td>
<td>38002(^2)</td>
<td>2,179</td>
<td>38</td>
<td>90,327</td>
</tr>
<tr>
<td>Bartlett</td>
<td>38133</td>
<td>1,304</td>
<td>33</td>
<td>63,184</td>
</tr>
<tr>
<td></td>
<td>38134</td>
<td>2,423</td>
<td>61</td>
<td>47,529</td>
</tr>
<tr>
<td></td>
<td>38135</td>
<td>1,223</td>
<td>15</td>
<td>77,880</td>
</tr>
<tr>
<td>Collierville</td>
<td>38017</td>
<td>2,062</td>
<td>70</td>
<td>99,256</td>
</tr>
<tr>
<td>Germantown</td>
<td>38138</td>
<td>920</td>
<td>92</td>
<td>97,649</td>
</tr>
<tr>
<td></td>
<td>38139</td>
<td>965</td>
<td>47</td>
<td>131,948</td>
</tr>
<tr>
<td>Lakeland</td>
<td>38002</td>
<td>2,179</td>
<td>38</td>
<td>90,327</td>
</tr>
<tr>
<td>Millington</td>
<td>38053</td>
<td>1,739</td>
<td>20</td>
<td>51,513</td>
</tr>
<tr>
<td>Other</td>
<td>38028</td>
<td>154</td>
<td>37</td>
<td>91,209</td>
</tr>
</tbody>
</table>

1. Repeated in two neighborhoods.  
2. Repeated in two neighborhoods  
Source: Greater Memphis Chamber
Proximity to home primary decision making factor for families in selecting early care

Factors affecting parents' choice of childcare

<table>
<thead>
<tr>
<th>Location of childcare center</th>
<th>Distance from home and from workplace</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Quality of school</th>
<th>Development and progress of child in school</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dedication of director and staff</td>
</tr>
<tr>
<td></td>
<td>Resource availability</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reputation</th>
<th>Word of mouth in community</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Recommendations by friends and family</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Costs</th>
<th>Fees charged by school</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acceptance of TN child care voucher</td>
</tr>
</tbody>
</table>

|Schools' requirements of parents| Mandatory parental involvement at specific events (e.g. Parent-Teacher conferences) |

Quotes from private daycare operators

"99% of my kids come from the neighborhood.. parents want that convenience"

"70% of the children coming from my neighborhood, but we are an exception .. that percentage is probably much higher in other schools"

"Choices of parents are driven first by proximity..."
## Addressing the possible barriers to enrollment for children aged 0–3 to attend quality childcare

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Possible strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Culture</strong></td>
<td></td>
</tr>
<tr>
<td>Cultural reasons (preference to care for children themselves)</td>
<td>• Support <strong>expansion of parenting programs</strong> (e.g. ESC-supported Nurturing Parenting and Strengthening program) in Shelby County</td>
</tr>
<tr>
<td></td>
<td>• Provide <strong>free community-based parent and child enrichment classes</strong> (e.g. through Universal Parenting Places) to develop touch-points and informal parent networks that disseminate information about quality childcare options</td>
</tr>
<tr>
<td>Childcare decisions primarily driven by convenience</td>
<td>• Develop understanding of <strong>how families define convenience</strong> (the geographical radius and what hours does the option need to be open)</td>
</tr>
<tr>
<td></td>
<td>• <strong>Develop parents' knowledge around value of early learning</strong> (see points below) over time, beyond convenience</td>
</tr>
<tr>
<td><strong>Knowledge</strong></td>
<td></td>
</tr>
<tr>
<td>Lack of awareness about child care certificate</td>
<td>• Develop <strong>multi-channel approach</strong> in Shelby County with early care organizations, to <strong>disseminate clear, easy-to-follow information about child certificates program</strong> (e.g. collaboration with 6 delivery hospitals in Shelby County, Child Care Resource and Referral Center, radio advertisements, ESC, TUCI)</td>
</tr>
<tr>
<td>Lack of knowledge of value of quality childcare</td>
<td>• Collaborate with organizations (e.g. Neighborhood Christian Center) to <strong>run weekend or evening classes for parents on childcare provider options</strong></td>
</tr>
<tr>
<td>Parents holding out for free quality programs such as HeadStart</td>
<td>• Provide <strong>Shelby County-specific information/check-list</strong> for parents on what constitutes quality childcare and available options through websites such as ESC, Urban Child Institute, etc.</td>
</tr>
<tr>
<td></td>
<td>• Develop a &quot;<strong>One-App</strong>&quot; system (similar to New Orleans’) where applications for childcare spots are integrated in one system, to streamline process and provide information of where high quality spots are available</td>
</tr>
<tr>
<td><strong>Policy</strong></td>
<td></td>
</tr>
<tr>
<td>Restrictions on child care certificates</td>
<td>• Evaluate a <strong>policy change that removes or increases the 60 month lifetime limit</strong> for eligible families</td>
</tr>
<tr>
<td></td>
<td>• Consider <strong>increased funding for the child care certificate program</strong> to improve accessibility</td>
</tr>
</tbody>
</table>

Source: BCG interviews
Distribution and usage of child care certificates

**Distribution**

- **Context:** Families can only receive child care certificates for a limit of 60 months (or 5 years) per family. In 2014, ~13,000 children in Shelby County received certificates
  - Possible to have multiple children enrolled concurrently during five year period

**Usage**

- **Context:** Of the 13,000 recipients of the child care certificates, 85% attend licensed care, and 15% of them attend unlicensed care (based on University of Memphis study\(^1\))

**Potential implications**

- **Evaluate policy change (and funding implications) to remove the family time limit of certificates**
- **Determine extent to which lower access to child care certificates drives preference of families towards unlicensed child care**

---

1. Breakdown of distribution based of University of Memphis 2004 study. Given that the Shelby County population in 2004 was 910,000, and population in 2014 was 930,000, we assume that the current breakdown in distribution remains the same.
Source: TN Dpt of Human Services, 2013 American Community Survey, Kids Count, Temporary Assistance for Needy Families (TANF), University of Memphis, BCG Interview
### Broad spectrum of local efforts to raise family and community awareness about the value of early learning...

<table>
<thead>
<tr>
<th><strong>Urban Child Institute</strong></th>
<th><strong>Knowledge Quest zone</strong></th>
<th><strong>Child Care Resource and Referral Center</strong></th>
<th><strong>Universal Parenting Place</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Runs radio advertisements via WLOK station 15 times a week on 'Touch Talk Read Play' with strong audience among women aged 35+</td>
<td>Runs 5 Learning Academies (after-school care for pre-K to high school), community garden, community family events in South Memphis</td>
<td>Educates and assists families in finding quality childcare and offers parents and providers courses such as playground safety</td>
<td>Provides early-intervention counseling for all families, to prevent toxic stress and support emotional and behavioral health of children</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Nurturing Parenting Program</strong></th>
<th><strong>Strengthening Families Program</strong></th>
<th><strong>Collaborative Action Network (CAN)</strong></th>
<th><strong>Neighborhood Christian Center</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>ESC-led program that teaches on positive parenting (as opposed to abusive) skills. Curriculum offered through agencies Agape, Le Bonheur, etc.</td>
<td>ESC-led life-skills courses to increase resilience of families using effective discipline, etc. delivered through partners (Signal Centers and The Works)</td>
<td>ESC-led Kindergarten Readiness CAN developing awareness building strategies (e.g. more education sessions with parents who are waiting at DHS office)</td>
<td>Runs TUCI's 'Touch Talk Read Play' training program with a focus on low income families (200 families attended last year)</td>
</tr>
</tbody>
</table>

Source: BGC interviews, Program websites
…however, there are still gaps in awareness, demand for quality and uptake of services…

Lack of awareness and demand for quality

"Community does not value the importance of early childhood education. Tennessee has one of the highest dropout rates in the nation"

"There is not a market demand for quality – families do not generally see the value of early education"

"Current efforts reach parents who are already interested in early childcare … how do we reach those who are not … "

Reduced uptake of services

"About 85% of parents signing up, but true participation is whether books are actually opened and used to engaged children"

"There may be a negative view of these services, current outreach not always operating in a trusted way close to the ground"

…particularly among the hardest-to-reach populations

Source: BCG interviews
### External examples of how similar gaps in awareness are being addressed

**Awareness building among "hardest-to-reach"**

<table>
<thead>
<tr>
<th>Mobile-based outreach</th>
<th>Increasing uptake of services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vroom</strong> (Commit)</td>
<td></td>
</tr>
<tr>
<td>Mobile app &quot;Vroom&quot; which contains 500+ daily activity ideas for how parents can engage with their children being deployed in Dallas, TX</td>
<td><strong>Grassroots-led team outreach</strong></td>
</tr>
<tr>
<td></td>
<td>Local readiness teams consisting of parenting groups, social work agencies, etc work in neighborhoods to increase awareness about importance of quality childcare</td>
</tr>
</tbody>
</table>

**Focus on facilities in lower income neighborhoods**

<table>
<thead>
<tr>
<th><strong>Too small To Fail</strong></th>
<th><strong>Center-based coordination by school district</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Wash Time is Talk Time&quot; awareness drive aims to reach families in low income neighborhoods. The drive encourages parents to talk, read and sing to children at laundromats. Being piloted in Oakland, California, with aims to reach 5,000 laundromats in underserved communities</td>
<td>Early childhood and family learning &quot;Judy&quot; centers led by Montgomery County Public Schools. Coordinates programs with a wide range of partners that together reach almost every family</td>
</tr>
</tbody>
</table>

**Creation of early childhood learning networks**

<table>
<thead>
<tr>
<th>Strengthening Families Illinois</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have hub programs that recruit local childhood programs to create early learning networks</td>
</tr>
</tbody>
</table>

Source: Program websites, BCG Interviews
Books from Birth's data-base of children under five could be used as a supplemental channel for reaching families.

### What is Books from Birth?
- Organization which promotes kindergarten readiness and strengthens family bonds in Shelby County by providing age-appropriate books for all children from birth to age five for free

### High participation rates
- Works closely with the 6 delivery hospitals in the county, to outreach to parents and increase sign-ups into program
- Delivers 40,000 books/monthly (reaches 60% of under 5 year olds in Shelby County)
- 93% repeat enrollments month to month

### Data-base for children under age five
- Data collected are child's name, gender, birth date, parent's name and email address and postal address
- About 85% of under 5 year olds would have been through the program at some point
- Currently have 10 years of data of every child ever enrolled in the program; of which there is current address data for 60% of under 5 year olds
- System has ability to track length of enrollment by children, any change in address (through the postage system), drop out rates, re-enrollment by child
- Data currently being consolidated using a salesforce.com platform

### Current collaboration to increase early childhood education
- Sends out monthly emails with Urban Child Institute about child development
- Emails are sent to 27,000 working emails addresses of parents, of which 5,000 emails are opened each month

### Other possible collaborations to increase early childhood education
- Usage of "children who drop-out" data (about 5% each month) as potential identifier of children who might be at risk to need intervention services
- Usage of comprehensive database of addresses to educate parents about other domains such as nutrition beyond early literacy

Source: BCG Interviews.
Versame's Starling is an innovative wearable word tracking device aimed at increasing word exposure for 0–4 year olds.

Starling is an educational wearable...

- Tracks the number of words a child hears and says each day
- For use with 0–4 year olds
- Paired with a smart phone app that provides analytics and suggestive activities
- Priced at ~$130 per device

... based on research that shows correlation between words learned and IQ

![Cumulative words spoken to child (M) vs Child's age in months graph]

IQ of 117
IQ of 107
IQ of 79

Potential use in Shelby County

Could be a more innovative way of reaching parents in homes and getting them more actively engaged in interacting with their children

Can also be used by childcare givers in early care education centers

Aggregating analytic data across individual users can give community-level data on language exposure to children

Source: Versame.com; The Early Catastrophe: The 30 Million Word Gap by Age 3 (1993); A Longitudinal Investigation of the Role of Quantity and Quality of Child Directed Speech in Vocabulary Development (2012)
Screening tools are a common way to inform the need for early interventions

Screeners are a way to identify and monitor children with developmental delays and inform the use of early interventions and special education
- Multi-dimensional test on 3 domains: physical, language and adaptive
- Providers can utilize information to refer parent/family to early interventions services

Administered by trained professionals (e.g., childcare providers during start and end of year, medical professionals during well-child visits)

Frequency:
- Birth: 2–6x
- 1 yr: 2–4x
- 2 yr: 2–3x
- 3 yr: 2

Costs paid for by childcare providers; Medicaid and some insurance programs also cover during well-child visits

Training required
- Training to providers being offered through Le Bonheur and TN American Academy of Pediatrics; parents can receive training on how to fill-up form through DVDs and pamphlets

Current use in Shelby County by providers is limited
- 6 providers currently sponsored under Project Launch in 2015
- 50 providers sponsored under Shelby County grant 2 year ago (25 dropped out)
- 5 NAEYC accredited schools
- 5 Early Head Start providers

Delaware: Changed policy to increase insurance coverage of screeners from 36 month well-visits, to both 9 and 18-month well-child visits and added requirement for providers to use screeners to obtain a 4 or 5 Star Rating

Colorado: New Colorado Shines rating system gives points for documenting developmental screenings and for providing referral information

Source: National Early Childhood Technical Assistance paper, Early Head Start Technical Assistance paper, Washington State Guide to Early Assessments, Project LAUNCH Shelby County Environmental Scan
Despite current efforts, limited use of screeners in Shelby County today

Efforts underway to encourage use of screeners
- Shelby County Office of Early Childhood and Youth grant in 2013 provided Ages and Stages (ASQ) training and materials to **50 providers**
- Project LAUNCH sponsoring ASQ costs to **six 3-star providers** with ongoing implementation support by LeBonheur, with plans to roll out further
- TN American Academy of Pediatrics providing training on how to implement developmental screening (~30 pediatricians received training)

However, need to make further progress
- **Only ~ 10% of providers use screeners** (requirement only for Early Head Start, NAEYC providers to use screeners)
  - Only 25 of 50 providers who received training from Shelby County grant still using ASQ
  - $550 one-time cost per center for ASQ viewed as prohibitive by some providers

Thus, referrals for early intervention services also low

**Estimated sources of referral for early intervention services (TN DOE)**

- **46%** Families and childcare providers
- **30%** Primary Care (Pediatricians)
- **18%** Medical Facilities (Hospitals)
- **5%** Others (e.g. Government agencies, Therapists)

**Memphis Delta in bottom 3rd of regions in TN for referrals into early intervention services**

<table>
<thead>
<tr>
<th>Region</th>
<th>% referrals for 0-3 year olds</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Tennessee</td>
<td>21</td>
</tr>
<tr>
<td>East Tennessee</td>
<td>21</td>
</tr>
<tr>
<td>Southwest</td>
<td>20</td>
</tr>
<tr>
<td>Northwest</td>
<td>20</td>
</tr>
<tr>
<td>Upper Cumberland</td>
<td>15</td>
</tr>
<tr>
<td>South Central</td>
<td>14</td>
</tr>
<tr>
<td>Memphis Delta</td>
<td>12</td>
</tr>
<tr>
<td>Greater Nashville</td>
<td>12</td>
</tr>
<tr>
<td>Southeast</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: TN Department of Education, BCG Interviews, Project LAUNCH Environmental Scan 2014
ASQ and BRIGANCE good candidates for screening tools and being used in pockets in Shelby County today

<table>
<thead>
<tr>
<th>Description</th>
<th>ASQ</th>
<th>BRIGANCE</th>
<th>Child Development Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 21 age-specific questionnaires</td>
<td>• Age specific questionnaire that can be scheduled any time during a year</td>
<td>• Questionnaires include 85 developmental milestones divided by month</td>
<td></td>
</tr>
<tr>
<td>• Must be used with ASQ-SE to get social-emotional score</td>
<td>• In-person, mailed or online</td>
<td>• In person</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• $550 (ASQ-3 and ASQ-SE), photocopiable questionnaires</td>
<td>• $309 + $69 for 60 sheets of questionnaires</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Early Head Start</td>
<td>• Intervention programs (Operation Smart Child)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Hospitals – LeBonheur</td>
<td>• School districts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Interventions – Parents as Teachers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• School districts</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• $550 (ASQ-3 and ASQ-SE), photocopiable questionnaires</td>
<td>• $309 + $69 for 60 sheets of questionnaires</td>
<td>• $150 + $45 for 75 sheets of questionnaires</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• $309 + $69 for 60 sheets of questionnaires</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• $315 + $18 for 50 sheets of questionnaires</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• $315 + $18 for 50 sheets of questionnaires</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• $315 + $18 for 50 sheets of questionnaires</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary users</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Early Head Start</td>
<td>• Intervention programs (Operation Smart Child)</td>
<td>• Hospitals</td>
<td></td>
</tr>
<tr>
<td>• Hospitals – LeBonheur</td>
<td>• School districts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Interventions – Parents as Teachers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• School districts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pros and cons</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Easy to understand</td>
<td>• Easy to understand</td>
<td>• Questionnaire containing the same 10 open-ended questions across all ages</td>
<td></td>
</tr>
<tr>
<td>• Quick to fill (&lt;15 min)</td>
<td>• Quick to fill (&lt;15 min)</td>
<td>• In-person, mailed or online</td>
<td></td>
</tr>
<tr>
<td>• Only one-time upfront costs</td>
<td>• Only screener which includes academic domain (for &gt; age 2)</td>
<td>• $315 + $18 for 50 sheets of questionnaires</td>
<td></td>
</tr>
<tr>
<td>• Used and supported by many organizations in Shelby County</td>
<td>• Assumes parents knowledgeable about developmental stages for children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Higher upfront cost</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The CDI has 2 screeners: Infant Development Inventory birth—8 months, and the Child Development Review Parent Questionnaires 8 months–60 months
Source: National Early Childhood Technical Assistance System; Early Head Start Technical Assistance Paper; Program Websites; BCG interviews

Draft—for discussion only
Impact TN's direct push model for vision screening could be adapted for developmental screeners

**What they do**

- **Provide vision screening** using a SPOT digital camera [4500 children screened in Shelby County in last year]
- **Provide tax preparation to families** at scheduled tax sites [400 families received services in Shelby County last year]

**How they are successful**

- **Convenient and free services**
  - AmeriCorp members come to childcare centers
  - Screening is fast (30 sec per child)
  - Screening and follow-up are free

- **Strong outreach team**
  - Team cold-calls early care centers (85% say yes to screening)
  - Prioritized licensed providers by income of population served
  - Building out contact list for unlicensed providers
  - Send out postcards on tax services

- **Partnerships**
  - Partner with Porter Leath to screen children in Head Start
  - Partner with Southern College of Optometry for follow-up care

**Possible expansion of scope**

- **Increasing awareness of quality early childcare**: Work with organizations such as Urban Child Institute to deliver other types of information to the providers on the day of screening

- **Expanding services to include developmental screening**: Possibility that AmeriCorp volunteers help train parents to conduct first screening so parents know how to conduct future screenings; refer parents to the TN Early Intervention System for any follow-ups required; and provide parents with developmentally appropriate activities that they can do with their children at home [Would require application for staff with AmeriCorp's state-level office]

Source: BCG Interviews
Shelby County also offers variety of home visitation services for families of 0–3 year olds

<table>
<thead>
<tr>
<th>Evidence based home visitation</th>
<th>Non-Evidence based home visitation</th>
<th>Family wraparound services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse-Family Partnership</td>
<td>Several e.g., Help Us Grow; One By One; First Steps; Parent Aide; Operation Smart Child</td>
<td>Family Service Staff (administered through Porter-Leath)</td>
</tr>
<tr>
<td>Healthy Families America</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents As Teachers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Evidence based home visitation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse-Family Partnership</td>
<td>Several e.g., Help Us Grow; One By One; First Steps; Parent Aide; Operation Smart Child</td>
<td>Family Service Staff (administered through Porter-Leath)</td>
</tr>
<tr>
<td>Healthy Families America</td>
<td>Several e.g., Help Us Grow; One By One; First Steps; Parent Aide; Operation Smart Child</td>
<td>Family Service Staff (administered through Porter-Leath)</td>
</tr>
<tr>
<td>Parents As Teachers</td>
<td>Several e.g., Help Us Grow; One By One; First Steps; Parent Aide; Operation Smart Child</td>
<td>Family Service Staff (administered through Porter-Leath)</td>
</tr>
</tbody>
</table>

### Description
- **Evidence based home visitation**
  - Nurse-Family Partnership
  - Healthy Families America
  - Parents As Teachers

### Non-Evidence based home visitation
- Several e.g., Help Us Grow; One By One; First Steps; Parent Aide; Operation Smart Child

### Family wraparound services
- Family Service Staff (administered through Porter-Leath)

### Description
- Nurse-Family Partnership
  - RN delivered service; more focus on health/medical
- Healthy Families America
  - Focus on health issues (e.g., ensure each family has medical provider)
- Parents As Teachers
  - Support parents to engage children (e.g., role of fathers in child’s lives)
- Non-Evidence based home visitation
  - Several e.g., Help Us Grow; One By One; First Steps; Parent Aide; Operation Smart Child
  - Family Service Staff (administered through Porter-Leath)
- Several e.g., Help Us Grow; One By One; First Steps; Parent Aide; Operation Smart Child
  - Family Service Staff (administered through Porter-Leath)

### Eligibility
- **Income**
- **Age of child**
- **Any other requirements**

### Number of families served
- Nurse-Family Partnership: 174
- Healthy Families America: 145
- Parents As Teachers: 268
- Several e.g., Help Us Grow; One By One; First Steps; Parent Aide; Operation Smart Child: ~370
- Family Service Staff (administered through Porter-Leath): 47

### Unfilled capacity
- Nurse-Family Partnership: -
- Healthy Families America: ~25
- Parents As Teachers: ~25
- Several e.g., Help Us Grow; One By One; First Steps; Parent Aide; Operation Smart Child: -
- Family Service Staff (administered through Porter-Leath): -

### Estimated cost to serve per family
- Nurse-Family Partnership: ~$5,000
- Healthy Families America: $3,800
- Parents As Teachers: ~$3,000
- Several e.g., Help Us Grow; One By One; First Steps; Parent Aide; Operation Smart Child: Varies
- Family Service Staff (administered through Porter-Leath): ~$1,200

---

1. Update in cost of Nurse-Family Partnerships to reflect operating costs per family, consistent with costs calculations for the other intervention services.
2. Often temporarily due to families transitioning out of the program

Source: Program websites, Steering Committee interviews
The evidence-based intervention models have shown efficacy locally in Shelby County...

### Nurse Family Partnerships
- Serve 174 low-income women at an operating costs/family ~$5,000
- 2014/2015 data
- Healthy births > 5.5 lbs (%): 86.7 vs. 85.3 (2% increase)

### Healthy Families America
- Serve 145 families at risk of abuse at an operating costs/family ~$3,000
- 2014 data
- Healthy births > 5.5 lbs (%): 88.2 vs. 85.3 (3% increase)

### Parents As Teachers
- Serve 268 low-income families at an operating cost of ~ $3,000
- 2014 data
- Healthy births > 5.5 lbs (%): 91.0 vs. 85.3 (6% increase)

Research shows a baby's weight at birth is strongly associated with higher math and reading scores from third–eighth grade (0.5lb increase in birth weight is associated with a 0.187 std deviation increase in test scores)

- **Scope**
- Shelby County impact
- Other outcomes tracked
  - 50% drop in women smoking during pregnancy
  - 88% of births were full-term
  - 92.9% children up to date with immunizations at 12 months
  - 88.5% women delayed pregnancy by at least one year
  - 98.5% children remained in parent's home without report of abuse of neglect
  - 96.1% women delayed pregnancy by at least 1 year
  - 84.7% infants born at full-term
  - 82% of children show improvement in pre and post school readiness assessment

Note: ESC Benchmark is based on African-American births over 5.5 lbs in Shelby County
Source: Urban Child Institute; Memphis Data Partners; Institute of Policy Research; Northwestern University
...and nationally across academic, health, parenting measures

**Nurse Family Partnership**

**Stronger academic performance**

Peabody Individual Achievement Test scores (avg scores over 6-yr period)

<table>
<thead>
<tr>
<th></th>
<th>85.70</th>
<th>88.78</th>
</tr>
</thead>
<tbody>
<tr>
<td>n= 613</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memphis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TN, 2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

+4%

**Healthy Families America**

**Positive parenting amongst mothers**

Mothers displaying positive parenting (%)

<table>
<thead>
<tr>
<th></th>
<th>92.8</th>
<th>96.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

+4%

n= 522, New York, 2009

**Parents As Teachers**

**Higher kindergarten readiness**

Children entering Kindergarten ready (%)

<table>
<thead>
<tr>
<th></th>
<th>71</th>
<th>78</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

+10%

n= 7,000, Missouri, 2006

**Evidence of impact on health and costs**

- 79% reduction in the number of days of hospitalization for children
- n= 1,178; Memphis, TN; 1988

**Returns on program**

- Net savings to taxpayers per family = ~$17,000 annually
- Analysis done in 2004

**Improved Parenting Knowledge**

- 80% learned new parenting skills
- 54% learned new child discipline techniques
- 76% learned new ways to play with their children
- n = 1,688, TN, 1997

**Higher academic scores at 3rd grade**

Student scoring above lowest score at third grade (%)

<table>
<thead>
<tr>
<th></th>
<th>79</th>
<th>84</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

+6%

n= 7,000, Missouri, 2006

Note: Only showing research studies with statistically significant results

Sources: Program Websites, Brookings Institute, Washington State Institute for Public Policy, Princeton University
There is a need for expansion of home intervention services

~7.5% of 0-3 year olds in Shelby County are in toxic-stress (~4000 children)

Number of children aged 0–3: 54,113

Children in poverty: 25,400

Children at risk of being in "toxic-stress": 6,096

Children in "toxic-stress": 4,069

Poverty rate=47%

Households with 2 or 3 ACES in Memphis = 24%

Households with 4 or more ACES in Memphis = 16%

Adverse Childhood Experience factors are
• Child abuse (physical, emotional sexual)
• Child neglect (physical, emotional)
• Household dysfunction (mental illness, incarcerated relative, mother treated violently, substance abuse, divorce)

Broad range of needs for at-risk families
• Food security, housing, health insurance
• Specialized medical services to address multiple social-emotional and development problems
• Regularized tracking for referrals and follow-up completion across multiple medical and intervention services
• Child welfare services for physical safety, injury, and child custody

1. Based on Shelby County Adverse Childhood Experiences Survey 2014
Source: US Census Bureau, 2013 American Community Survey, KIDS COUNT data center, Memphis Data Partners, ACE Awareness Foundation
What is an Adverse Childhood Experience factor?

The three categories of ACEs include

- **Abuse**
  - Physical
  - Emotional
  - Sexual
- **Neglect**
  - Physical
  - Emotional
- **Household dysfunction**
  - Mental illness
  - Incarcerated relative
  - Mother treated violently
  - Substance relative
- **Divorce**

Results from Shelby County ACE Survey

- The leading **child abuse** ACE in Shelby County is **emotional abuse**

  - Physical abuse: 14%, 15%, 12%
  - Emotional abuse: 23%, 25%, 20%
  - Sexual abuse: 11%, 12%

- The leading **household dysfunction** ACE in Shelby County is **substance abuse**

  - Incarcerated household member: 12%, 11%, 7%
  - Mental illness in household: 13%, 18%, 19%
  - Substance abuse in household: 25%, 29%, 30%
  - Violence between adults: 22%, 19%, 16%

Source: Adverse Childhood Experiences in Shelby County publication, November 2014
ACE Awareness Foundation research further reinforces that the return on high quality early interventions is significant.

High quality early interventions lower the impacts of Adverse Childhood Experiences (ACEs) and show a return on investment of 6:1.

$1 Investment

$6 Return

$194,700 Total economic lifetime benefit per participant

$143,400 Increased lifetime net earnings
  From HS graduation and higher education

$15,500 Increased tax revenue
  From HS graduation and higher education

$28,200 Reduced health care and mortality costs
  Reduced smoking costs
  Reduced depression costs
  Reduced drug treatment costs

$7,600 Public system savings
  K-12 system savings for reduced need for special education and grade retention
  Justice system savings from reduced crime
  Reduced need for public assistance
  Child welfare system savings from reduced child abuse and neglect

Key strategies
Parent education and coaching
Home visitation
Quality early childhood care and education
Pre-Kindergarten

Source: ACE Awareness Foundation
Referral conversion for home visitation programs < 50% in Shelby County

Current sources of referral to home visitation programs

- ESC specialists
- Woman, infant, children clinic
- Word of mouth (walk-ins)
- Schools
- Door-to-door campaigns
- Local community agencies
- Social services

Retention rates higher, but room for improvement in conversion rates

2014 Shelby County data for home visitation programs

- Conversion: 45%
- Retention (6 months): 85%
- Retention (1 year): 64%

Current efforts to boost referrals include the following

- Early Success Coalition has hired three specialists to provide direct outreach to families and build capacity of other referral channels
- Early Success Coalition piloting program of using 'trusted' community agencies to conduct localized outreach efforts (e.g., BBQs)
- Actively working with current sources of referrals (e.g. parent educators in the Parents As Teachers program, partner with an Early Head Start/Head Start program)
- Participating in local health & community fairs and speaking engagements in the community
- Setting-up informational tables at local stores, shopping malls and churches

Source: Program websites, BCG Interviews
## What more can be done to boost referrals conversion to home visitation programs?

### Possible barriers

<table>
<thead>
<tr>
<th>Transient families</th>
<th>Lack of access to child vouchers</th>
<th>Distrust of service providers</th>
<th>Stigma associated with using services</th>
<th>Unable to see value of services</th>
<th>Lack of connection with service provider</th>
</tr>
</thead>
</table>
| • Focus efforts at public facilities used by lower-income neighborhoods (e.g., "Wash Time is Talk Time" awareness drive at Laundromats)  
• Collaborate with homeless assistance system to identify families in need | • Build awareness about non-voucher-based services  
• Provide support/referral services to employment agencies  
• Develop engagement strategy via mobile/social media (e.g., Healthy Kids Healthy Ozarks manages a Facebook page where they regularly post general education pieces and information about community gatherings) | • Develop a map of community "assets"/trusted people and collaborate with them, using them as references  
• Use "local champion" who have used the services and can share back experiences with the community | • Conduct focus group on language/messaging of outreach services e.g., consider messages that have the concepts of "support" or "partnership" instead of "coach"  
• Conduct publicity campaign emphasizing support nature of services (e.g., "Love that Baby" Family Visiting Campaign where families inform how program helped them be the best parents they could be) | • Providing evidence of services by linking past users/"local champions" with potential clients  
• Give families some flexibility to guide the interaction/tailor curriculum to each family’s needs and address their most urgent concerns (e.g. facing eviction) before parenting | • Customize matching of service providers to potential clients who shared similar background and/or display of connection to experiences |

### Targeted strategies to address possible barriers

Source: PEW charitable trusts home visitation survey May 2015, BCG analysis
Increasing home visitation participants in Rhode Island required addressing barriers to outreach and conversion

Rhode Island's efforts started 1.5 years ago after realizing low participation rates in home visitation programs, and the need to scale-up programs.

### Barrier
- **Low participation rates**
- **Lack of time and resources for referral sources (e.g., OB/GYNs, WIC clinics)**
- **Lack of coordination between programs (e.g., multiple agencies going after same client)**
- **Lack of engagement/connection with potential clients**

### Approach
- **Low participation rates**
  - Launched mass media marketing campaign (Radio, Pandora, Spotify and Facebook advertisements), rebranded as "Family Visiting" rather than "Home Visiting"
  - Used 'relatable imagery and language that emphasized low cost
  - Placed materials in non-traditional places (e.g., laundromats, nail salons)
- **Lack of time and resources for referral sources (e.g., OB/GYNs, WIC clinics)**
  - Worked with IT department of local hospitals to include referral link in Electronic Medical Record system
  - Increased frequency in which staff were stationed at Women Infant Care clinics
- **Lack of coordination between programs (e.g., multiple agencies going after same client)**
  - Created a single referral collection agency for each region with 'no wrong door' policy
  - Formed local implementation teams which led weekly meetings with home visitation programs to allocate referrals transparently
- **Lack of engagement/connection with potential clients**
  - Trained staff on "motivational interviewing" with 2.5 day workshop, individualized feedback, and monthly check-ins to improve engagement skills
  - Hired staff that reflected and could speak languages of target communities (e.g., Creole)

Source: BCG Interview, Pew Summit
Some communities like Durham, NC are piloting lower cost visitation models that are showing early positive results.

**Program description**

Lower cost pilot of a home visitation model, designed to address family and infant needs immediately following hospital discharge

- Available to anyone who requests it (all newborns in a catchment area are eligible)
- Registered nurses provide assessment for newborn and possibly follow up services
- Nurse actively links families with needed services
- One home visit is ~$300 to $400 per year per family on average
- Pilot currently funded by Duke Endowment

**Initial Impact**

Assessment of ~550 mothers who used Durham Connects reveals those subject to the program:

- Have 16% more connections to community resources (in past 3 months)
- Are 28% less likely to report clinical anxiety
- Adopt significantly higher quality parenting behaviors (e.g., hugging, reading)
- Have higher quality home environments (rated by independent researchers)
- Utilize higher quality child care, as rated by the North Carolina 5-Star Child Care Rating System
- Utilize 50% less emergency medical care (across the first 12 months of life)

Source: Durham Connects website
95% of regulated childcare seats for 0-3 year olds in Shelby County are served through private providers...

<table>
<thead>
<tr>
<th>Regulated Seats for 0-3 Year Olds</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Early HS Seats (0-3 Year Olds)</td>
<td>352</td>
</tr>
<tr>
<td>Head Start Seats (Incl. 3 Year Olds Only)</td>
<td>738</td>
</tr>
<tr>
<td>Special Ed Seats (Incl. 3 Year Olds Only)</td>
<td>215</td>
</tr>
<tr>
<td>Regulated Private Provider Seats</td>
<td>24,538</td>
</tr>
<tr>
<td>Total Regulated Seats for 0-3 Year Olds</td>
<td>25,843</td>
</tr>
</tbody>
</table>

**Publicly funded seats for 0-3 year olds: 5%**

- Early HS Seats (0-3 Year Olds): 352
- Head Start Seats (Incl. 3 Year Olds Only): 738
- Special Ed Seats (Incl. 3 Year Olds Only): 215
- Regulated Private Provider Seats: 24,538
- Total Regulated Seats for 0-3 Year Olds: 25,843

Unregulated private providers also offer many seats, thus public funding for 0-3 year old seats is even smaller

1. Assumes each Head Start classroom has 9 3-year olds.
2. Assumes custom distribution of children's ages based on provider type (e.g. center vs. family home) and min/max age limits

Source: Porter Leath, Tennessee Department of Education, Tennessee Department of Human Services

Draft—for discussion only
...however, view into provider quality is limited as majority of providers are either not rated or have the same rating.

**Licensed Providers in Shelby County**

- **Dept of Education: 293 Providers**
  - 34%
- **Dept of Human Services: 564 Providers**
  - 66%

857 Total Providers

**Providers Licensed by Department of Human Services: Star Quality Ratings**

<table>
<thead>
<tr>
<th># of providers</th>
<th>0 Star</th>
<th>1 Star</th>
<th>2 Stars</th>
<th>3 Stars</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>37</td>
<td>3</td>
<td>39</td>
<td>385</td>
</tr>
</tbody>
</table>

**Shelby County's Star rating is assigned based on the following categories:**

1. Director's qualifications (for centers only)
2. Teaching staff's qualifications
3. Developmental learning
4. Parent involvement
5. Program assessment (on-site observation)
6. Ratios and group sizes (for centers only)
7. Center's pay/benefit plans for staff (for centers only)
8. Business management practices (for home-based providers only)

1. Includes 6 NAEYC accredited providers.
2. Includes 30 NAEYC accredited providers.
3. NAEYC accredited providers included in both Not Rate and 3-star rating categories as relevant.

Source: Tennessee Department of Human Services, Tennessee Department of Education, National Association for the Education of Young Children.
In contrast, Delaware ratings system has more spread and more inclusion of academic quality measures.

Only 42% of programs are rated... 

![Chart showing number of programs rated and unrated]

...but more variation in rating distribution

![Bar chart showing distribution of star ratings]

Delaware’s rating system
(Maximum of 100 points)

- Learning Environment and Curriculum (max 30 points): using the Environment Rating Scale
- Professional Development and Qualifications (max 30 points)
- Family and Community Partnerships (max 20 points)
- Management and Administration (max 20 points)

For discussion: how could TN's star rating system be made a more robust barometer of quality?

1. As of September 2015
2. Includes NAEYC accredited programs

Draft—for discussion only
NAEYC is a strong evidence-based standard for early childhood education...

### Research Study

- **Study of school readiness in accredited child care centers (226 children across 22 centers in Minnesota in 2005)**
- **Study of correlation between characteristics of early childhood teachers and program quality (41 lead teachers at Northern California child care centers in 2007)**
- **Study of differences between NAEYC accredited and non-accredited centers (~5000 staff across 380 centers in 33 states in 1996)**

### Outcomes

- **2X as many children kindergarten ready**
- **Higher levels of program quality and teacher sensitivity**
- **Accredited centers had lower staff turnover and more developmentally appropriate activities**

Source: Minnesota Department of Human Services; Gerber, Whitebook, and Weinstein (2007); Bloom (1996)
...however, uptake of NAEYC accreditation in Shelby County is limited due to existing barriers

Today, several barriers exist to pursuing NAEYC accreditation...

NAEYC accreditation requires:

1. Pipeline of qualified teachers required to receive accreditation

2. Staffing resources

   - NAEYC-sCHOOL
     - Student: staff ratio: 1:6
     - Annual staff cost: $30K per year

   - Other provider
     - Student: staff ratio: 1:8
     - Annual staff cost: $18K per year

   NAEYC ~2x more expensive

However, providers are not properly incentivized to pursue NAEYC accreditation

- Additional reimbursements are not awarded through the certificate program to compensate for higher cost of the program

...resulting in very few NAEYC accredited providers in Shelby County

![Chart showing number of providers](chart.png)

Only ~5% of licensed providers are NAEYC accredited

<table>
<thead>
<tr>
<th>Dept. of Education</th>
<th>Dept. of Human Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAEYC-accredited</td>
<td>6</td>
</tr>
<tr>
<td>Non-accredited</td>
<td>287</td>
</tr>
<tr>
<td>NAEYC-accredited</td>
<td>30</td>
</tr>
<tr>
<td>Non-accredited</td>
<td>534</td>
</tr>
</tbody>
</table>

1. Assumes all non-staff costs are equivalent (e.g. instructional materials, classroom equipment)

Source: Tennessee Department of Human Services, Tennessee Department of Education, National Association for the Education of Young Children, Porter Leath

Draft—for discussion only
...and existing centers not all concentrated in low income areas

25% of NAEYC accredited centers located within top two income quartile zip codes

Sources: US Census Bureau, 2013 American Community Survey, National Association for the Education of Young Children
Room for improvement in TN QRIS system relative particularly related to strengthening standards and supports

<table>
<thead>
<tr>
<th>Delaware Stars</th>
<th>Tennessee Stars</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strengthening rating standards</strong></td>
<td><strong>No specification of approved curriculum</strong></td>
</tr>
<tr>
<td>Evidence-based curricula</td>
<td>No requirements or mention of use of screeners</td>
</tr>
<tr>
<td>Widespread use of screeners</td>
<td>No specification on the use of approved assessments</td>
</tr>
<tr>
<td>Formative assessments</td>
<td>Environment Rating Scale assessment for learning environment as requirement</td>
</tr>
<tr>
<td><strong>Provider assessment and reimbursement</strong></td>
<td>Providers receive tiered reimbursement based on star-levels</td>
</tr>
<tr>
<td>Assessment approach</td>
<td>Childcare Resource and Referral Center, TN Childcare Training Alliance, and TopStar Mentoring Programming support training</td>
</tr>
<tr>
<td>Tiered reimbursement</td>
<td>TECTA grant available for CDA tuition assistance</td>
</tr>
<tr>
<td><strong>Assistance to incent adoption among providers</strong></td>
<td>Limited funding for technology and equipment (used to be available under TSAM grant)</td>
</tr>
<tr>
<td>Technical assistance</td>
<td>Social media and email communications via Kids Central TN website</td>
</tr>
<tr>
<td>PD support</td>
<td>Part of Books to Birth literacy campaign</td>
</tr>
<tr>
<td>Technology and equipment</td>
<td>Childcare Resource and Referral Center running family engagement at DHS District Office and via telephone</td>
</tr>
<tr>
<td><strong>Growing awareness among parents and community</strong></td>
<td>Delaware Stars runs own campaign. Present at every education community event.</td>
</tr>
<tr>
<td>Self campaigns</td>
<td>Partnership with other campaigns such as Grade Level Reading, First Book</td>
</tr>
<tr>
<td>Partnerships</td>
<td>Local readiness team run by hundreds of volunteers (including parent groups) reach out to local childcare providers within their neighborhoods</td>
</tr>
<tr>
<td>Grassroots</td>
<td>Potential shortfalls are marked with (---)</td>
</tr>
</tbody>
</table>

Source: BCG Interviews, program websites
Local and state efforts have been underway in attempts to improve the QRIS in Tennessee

Current efforts and considerations to improve QRIS

- TN Department of Human Services running **information sessions with parents and providers** to better understand their needs to inform changes to the QRIS system

- The state is considering the following changes to QRIS:
  - Modifying method of state program assessments to improve quality control by moving from scheduled to unannounced inspections
  - Considering **enhancements to observation rubric** from ECERS to the CLASS assessment to get a better view into the interactions between children and providers

- PeopleFirst and Chamber Chairman's Circle have been pursuing effort over past several years to improve robustness of QRIS system

Potential challenges

- **Pushback from providers**
  - Estimate that two-thirds of providers do not want to see changes to the Star-Rating System (based on state survey)

- **Fiscal constraints**
  - Limited budget with little flexibility to offer financial incentives without outside funds
  - Have to seek ways to improve standards in tight fiscal environment

- **Compelling participation in training**
  - Need for incentives to encourage providers to receive training through TN Early Childhood Training Alliance (currently estimate only ~30% of providers in TN participate in training)
  - Currently TopStar mentoring program runs voluntary training program for family-run centers. Will need for more deliberate initiative to encourage centers to meet heightened standards

The plan is for the review to be completed by 2016, with implementation in 2017

Source: BCG Interview
## Efforts beyond QRIS to improve provider quality

### Professional development support
- TN Early Child Training Alliance has **30 hour orientation program for teachers**
- TopStar has voluntary **mentoring program** for family-run child care centers
- Childcare Resource and Referral Center (Le Bonheur) provides **training** for teachers

### Capacity building
- Childcare Resource and Referral Center offers a **library of resources** for providers increasing training manuals, adaptive toys and equipment, and training videos

### Technical assistance
- Project LAUNCH provides training to providers on **use of screeners**

### Financial incentives
- **Discounted tuition to obtain CDA certification** offered by the Council for Professional Recognition

### Perspectives from external models
- Cuyahoga County, OH has created courses at local community college to **improve the administration** of childcare centers
- Marion County, IN has trained 10 professionals to instruct over 200 early educators on the use of **program assessments**
- Erie County, NY has Success by Six programs with training specialists who offer classes related to **emotional development** of young children
- Marion County, IN is piloting **Centers of Excellence** where visitors learn about quality in real-life settings
- Erie County, NY has Success by Six program which offers **quality improvement mentors** to provide guidance and technical support
- LA County, CA has Investing In Early Educators **stipend program** to increase retention and academic preparedness of teachers

Source: BCG interviews and program websites
Licensure requirements should incorporate standards of quality; monitor outcomes to establish scope of licensure

**Learns from research**

Licensure can help **ensure basic levels of health and safety**, and can lead to **improved student outcomes** (lower student: teacher ratio led to positive impacts on learning quality in the Perry Preschool research).

However, **gains are dependent** on how quality standards are incorporated into licensure requirements (e.g., 1-3 star licensed programs showed no gains over unlicensed centers in New Mexico in a 2014 study).

**Implications for Shelby County**

Incorporate **standards of quality** into licensure requirements in TN and also **improve supports** to unlicensed centers (e.g., through Alternate Approval Homes).

Establish a **five year longitudinal study** to evaluate the kindergarten readiness of children who are in licensed vs. unlicensed centers.

If licensed pathway leads to children being more K-ready, mandate that all publically funded early childcare providers have to be licensed over time.

Source: BCG Interviews, Childtrends, QRIS Compendium
QRIS should be made mandatory over a phased period of time for all licensed centers

Learnings from research

Louisiana is one of the only states to require publicly-funded center-based programs to participate in the new QRIS (started in 2015)

North Carolina does not mandate QRIS, but in 2011, limited receipt of subsidies to only 3, 4 and 5 star child care programs (led to majority of programs becoming 3 star or higher over a two year period)

RAND research finds that the impact of QRIS is not immediate and direct, but it is an umbrella for multiple activities that can support quality improvement

Implications for Shelby County

Include inputs to the QRIS that are tied to measures of quality (e.g., use of research-informed curricula and standards, having majority of staff credentialed with a CDA or higher)

Tie reimbursements rates to QRIS to gives a direct incentive to providers to improve and cover increased costs to meet new requirements

Require all licensed centers to participate in QRIS through a phased period of time, with adequate funding

Source: BCG Interviews, Child Care Aware of America, RAND
Early care reimbursement rates by state

Comparison states have more star ratings and associated reimbursements than TN

<table>
<thead>
<tr>
<th></th>
<th>Tennessee</th>
<th>Delaware</th>
<th>Michigan</th>
<th>Texas</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 star</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>1 star</td>
<td>105%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>2 star</td>
<td>115%</td>
<td>100%</td>
<td>107%</td>
<td>105%</td>
</tr>
<tr>
<td>3 star</td>
<td>120%</td>
<td>123%</td>
<td>113%</td>
<td>114%</td>
</tr>
<tr>
<td>4 star</td>
<td>-</td>
<td>143%</td>
<td>120%</td>
<td>116%</td>
</tr>
<tr>
<td>5 star</td>
<td>-</td>
<td>156%</td>
<td>126%</td>
<td></td>
</tr>
</tbody>
</table>

Note: For ease of comparison, the reimbursement rates for each state has been indexed against that state's base rate for 0 stars

Source: State websites
Louisiana’s efforts to raise provider quality supported by state legislation, phased roll-out and support...

Louisiana’s strategy to raise quality of childcare

**Formation of local community networks of providers, headed by lead agencies (e.g. CCRR) to:**
- Administer CLASS observations twice a year
- Simplify enrollment process for families

**Efforts jump started by State legislation (Act 3 in 2012) that all publicly funded preschool, Head Start and childcare program will be unified into a statewide early childhood network by 2015/16**

**Phased roll-out of community networks with funding tied to participation**
- Rolled out in 3 phases over two years
- If a provider does not participate by 2015-16 school year, public funding will be at risk

**State funding to providers**
- $400 per classroom for implementation of CLASS observations ($2.5M in total; expected to be ongoing), $700k for purchase of Teaching Strategies Gold, $2.5M one-time funding to support pilots,
- *Plans to tie public funding to CLASS performance over time*

**Provision of technical support**
- Teachers trained on CLASS and Teaching Strategies GOLD
- DOE provides training to lead agencies (required to report network progress to State)
- DOE provided start-up funding to train and build up initial cadre of CLASS observers

**Lessons learned**

**State legislation** can help significantly accelerate ownership of stakeholders towards common goals

Community networks headed by lead agency create **local ownership and accountability**

Pilots rolled out in stages allow for feedback, engagement, and continuous improvement

Technical and fiscal supports required to catalyze improvements in quality

Reliably administered **assessment tools** (e.g., CLASS) enable continuous improvement at classroom level

...with quality ratings for providers in Louisiana shown through use of report card

Provider quality rated through report card

Support to help providers achieve grade

Reward performance based on grade
- Strengthening of School Readiness tax credits and linkage of tax credit to grades on report cards

Assist teachers to assess students accurately
- Feedback for teachers from CLASS-observers conducted twice a year
- Coaching for teachers on improving instruction
- Support for teachers to set goals and plan

Financial support to increase teacher credentials
- Increased scholarship program by 10 times to $5 million for certification and higher-level courses; priority given to publicly-funded teachers

Quality standards-based curriculum
- Provision of standards-based curriculum and Teaching Strategies Gold assessment to providers
- Training program for teachers to use curriculum and assessment accurately

- Launched in September 2014, pilot in 7 districts
- All preschools that receive public money will be graded by 2015/16

Source: Louisiana Early Childhood Policy Blueprint and Early Childhood Guidebook
4-year olds
High-quality offerings for 4-year olds use a holistic approach with a more integrated outlook.

Drivers of quality informed by following models:

- Multi-faceted approach to high-quality offering for 4-year olds
- Wraparound services (nutrition, health, etc)
- Professional Development for teachers
- High Quality Teachers
- Targeted programs (e.g. Summer Program)
- Data to inform instruction
- Family Engagement and Awareness

Concerted efforts to integrate pre-K with K-3rd continuum

- Leadership investment in ensuring sustained progress from grade to grade
- Quality teachers at all grades, including earlier years
- Consistent pedagogy across levels
- Regular dialogue between district and early care providers
- Development of data infrastructure to collect longitudinal data on student performance

Source: BCG experience and expert interviews

Draft—for discussion only
## Perspectives on what drives higher K-readiness

**Based on focus group with Shelby County Kindergarten teachers**

### Themes

<table>
<thead>
<tr>
<th>Understand every child's starting point</th>
<th>Supporting quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Prior programming doesn't tell the whole story. Exposure to vocabulary and technology (through school or family) have a big impact on readiness</td>
<td></td>
</tr>
<tr>
<td>• Baseline assessments can gauge a child's starting point, but observing the child is key</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Focus on raising bar, while also closing the gap</th>
<th>Supporting quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Today, we are almost required to spend more time on weaker students (based on RTI)</td>
<td></td>
</tr>
<tr>
<td>• If you teach to the top instead, you raise the bar for everyone and end up closing the gap</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Take a broader view of high-quality teaching</th>
<th>Supporting quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Need to focus on the whole child – not just academics and &quot;teaching to the test&quot;</td>
<td></td>
</tr>
<tr>
<td>• Should inspire a love for learning</td>
<td></td>
</tr>
<tr>
<td>• It's not just about alphabet cards, but about synthesis and application of skills</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Improved alignment between pre-K and Kindergarten</th>
<th>Supporting quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• When teachers are in the same school, they can walk down the hallway, know what's going on in other grades, and plan accordingly</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Increase frequency and access for parental input</th>
<th>Supporting quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• When we make events on weekends, parents come. They want to be involved - we just have to provide them with opportunities and we need to start earlier</td>
<td></td>
</tr>
<tr>
<td>• Some parents in poverty are embarrassed of their clothes or their questions sounding dumb so they won't engage. We still need to reach them because it makes a difference</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expose family to current educational expectations</th>
<th>Supporting quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Things have changed. Kindergarten is the new first grade, but their parents don't realize that</td>
<td></td>
</tr>
<tr>
<td>• If parents spend time in classrooms, they realize the academic content they need to support</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expose kids to structure and key focus areas early</th>
<th>Supporting quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Knowing how to listen and comprehend can be incorporated into early childhood education and makes a difference in kindergarten</td>
<td></td>
</tr>
<tr>
<td>• Understanding routines, procedures (e.g. walking in a line) makes learning process easier</td>
<td></td>
</tr>
</tbody>
</table>

---

Note: Based on 9/22 focus group with six Shelby County kindergarten teachers with wide range of experience (2 years of experience to 22 years of experience)
High variability in absolute performance and improvement exists in Shelby County pre-K classrooms today.

Shelby County 2015 pre-K Istation reading results (end of year)
\% of students performing at grade level
*Data only included for schools with results for 12+ children in May 2015*

Each line represents a school.

Shelby County 2015 pre-K Istation reading results
Increase / (decrease) in \% of students performing at grade level
*Data only included for schools with results for 12+ children in both Jan/Feb 2015 and May 2015 assessments*

Each line represents a school.

Bright spots exist in Shelby County and can be learned from to inform what can be replicated to drive higher outcomes across all classrooms.

---

1. If Jan/Feb 2015 results showed 50\% of students performing at grade level and May 2015 results showed 70\% of students performing at grade level, bar would be depicted as 20\%.

Source: Shelby County Schools Istation results

*Draft—for discussion only*
The Tennessee Succeeds plan focuses on early learning programs, including a statewide k-readiness assessment.

Tennessee Succeeds plan focused on three main goals...

- Tennessee will rank in top half of states on 4th and 8th grade NAEP in 2019
- Tennessee will have an average public ACT composite score of 21 by 2020
- The class of 2020 will be on track to achieve 55% postsecondary completion in six years

...and outlines "Early Foundations & Literacy" as a key priority

The plan puts in place a long-term strategy to confront lack of progress in early grades reading and writing, which includes:

- Implementing effective screening and high-quality interventions in early grades
  - Currently in progress of developing a state-wide, multi-dimensional kindergarten readiness screener which will help determine which pre-K programs are meeting standards
- Continued trainings to target teacher knowledge of best practices
- Developing an academic coach network across the state to share effective strategies and provide on-the-job teacher training
- Committed to improving pre-K quality

Source: Tennessee Department of Education, news articles, press releases
State-led kindergarten entry screener to be piloted in select districts in Fall 2016 and rolled out statewide in Fall 2017

State timeline

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>December 2015</strong></td>
<td><strong>June 2016</strong></td>
<td><strong>Late 2016 / early 2017</strong></td>
</tr>
<tr>
<td>• Produce report of kindergarten entry screener (KES) options and draft RFP for vendors</td>
<td>• Select KES with input from ECE Council and Phase I districts (first districts to pilot KES)¹</td>
<td>• Analyze KES implementation and child outcome results from KES</td>
</tr>
<tr>
<td>• Outline requirements for KES (e.g., must be multidimensional, include a social-emotional learning component)</td>
<td>• Train educators and administrators in Phase I districts to implement KES in Fall 2016</td>
<td>• Survey teachers and districts implementing the KES in fall 2016</td>
</tr>
<tr>
<td><strong>January 2016</strong></td>
<td><strong>July / August 2016</strong></td>
<td><strong>Fall 2017</strong></td>
</tr>
<tr>
<td>• Select ECE Council with representation from key groups and convene council to provide input on RFP</td>
<td>• Train educators and administrators in Phase I districts to implement KES in Fall 2016</td>
<td>• Implement KES statewide</td>
</tr>
<tr>
<td><strong>March 2016</strong></td>
<td><strong>September 2016</strong></td>
<td></td>
</tr>
<tr>
<td>• Complete review process of RFP and open for vendor response</td>
<td>• Implement KES in Phase I district schools</td>
<td></td>
</tr>
</tbody>
</table>

1. Phase 1 districts will include those that received funding from the pre-K expansion grant. Other districts (particularly outside of Nashville and Memphis) will be permitted to “opt in” to the pilot so that more representative statewide data can be gathered.

Source: Interview with Tennessee Department of Education
Alignment from pre-K to 3rd requires coordination on assessments, planning time, and support during transitions.

**Potential strategies to increase pre-K to 3rd alignment**

| Assessments          | Utilize assessments that are *correlated with one another and early predictors of 3rd grade literacy* so interventions can be put in place early on.  
<table>
<thead>
<tr>
<th></th>
<th>Keep assessments <em>stable</em> once implemented.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical planning</td>
<td>Protect <em>vertical planning</em> time to ensure there are no gaps in content* between grades and inform teaching practices of earlier grades to ensure alignment of similar content.</td>
</tr>
<tr>
<td>within a school</td>
<td></td>
</tr>
<tr>
<td>Joint planning</td>
<td>Institute <em>deliberate joint planning on pedagogy</em> between pre-K teachers from offsite locations and kindergarten teachers to ensure smooth transition.</td>
</tr>
<tr>
<td>across sites</td>
<td></td>
</tr>
<tr>
<td>Family involvement</td>
<td>Provide opportunities for <em>parents and students in offsite pre-K classrooms</em> to <em>meet</em> with prospective <em>kindergarten teachers</em> and <em>visit schools</em> so expectations for kindergarten are appropriately set (as done in Perea Preschool).</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: BCG interviews
CLASS is a tool to inform quality of teacher-student interactions, which is a predictor of student outcomes.

### About CLASS

The Classroom Assessment Scoring System (CLASS) is an observation instrument that assesses quality of teacher-child interactions. Assessment can be used to inform targeted professional development for teachers.

CLASS can be administered in classrooms from ages infant—K12.

Teachers are assessed on a scale of 1–7, on three domains (or categories of teach-child interactions):
- Emotional support
- Classroom organization
- Instructional support

Implementation: CLASS is conducted by observers twice a year. CLASS observers are trained and certified through Teachstone, the organization that provides training in CLASS.

**Costs:** Costs of CLASS materials (~$1,000/toolkit), cost of administering CLASS (~$400/classroom annually, based on Louisiana’s experience)

**Users:** CLASS is used by all Head Start programs (including TN Head Start) and a growing number of states through their QRIS (total of 17 states using CLASS).

### Evaluation of CLASS

- Students in classrooms with higher CLASS ratings realize statistically significant gains in achievement and social skills development (2008 study of 2439 students in 671 pre-K classrooms).
- Teachers who received feedback and professional development after CLASS showed greater improvement in quality of interactions (113 teachers in 2008 study).
- CLASS measure of teacher-child interaction quality consistently was the strongest predictor of children’s learning (2013 study of 2500 children in public pre-K programs).

Note: While CLASS is a good tool to measure quality of interaction, it does not measure other components such as the rigor of the curriculum being used.

Source: Journal Science, Edweek, Science Mag, CLASS program website, Head Start, BCG Interviews.
Overview of offerings for 4-year olds in Shelby County

Shelby County 4-Year Old Population

- Total 4-Year Old Population: 13,528
- Not Income Eligible: 4,072
- Eligible for VPK: 9,456

VPK Seats: 2,640
- Head Start Seats: 1,023
- Special Ed Seats: 326
- County Comm. Seats: 400
- Current Expansion Grant Seats: 640

Add'l Exp. Seats by 2017: 360
- Gap in Public Seats: 4,067
- NAEYC Accredited Seats: 195
- 3 Star Provider Seats: 1,645
- Other Private Pre-K Seats: 438
- Population Without Pre-K: 1,789

5,029 public Pre-K seats available in Shelby County today through different funders.

Up to ~20% of children eligible for publicly funded pre-K likely do not have access to a curriculum-based pre-K program.

Wider variance in quality and level of inclusion of curriculum-based component for these seats.

Likely a conservative estimate.

Shelby County Schools: 4,449 seats
- Millington: 100 seats
- Bartlett: 60 seats
- ASD: 420 seats
- Total: 5,029 seats

1. Assumes eligibility for VPK is consistent with eligibility for free and reduced lunch.
2. Assumes all classrooms are filled to capacity.
3. Assumes all Head Start classrooms have 11 4-year olds.
4. Assumes custom distribution of children's ages based on provider type (e.g. center vs. family home) and min/max age limits.

Source: 2013 American Community Survey, Tennessee Commission on Children and Youth, Tennessee Department of Human Services, Shelby County Schools, Steering Committee interviews.
Estimated cost of extending curriculum-based pre-K to remaining ~1,800 4-year olds is ~$6M per year

**Current State Funding**

4-year olds not enrolled in curriculum-based pre-K today that are eligible for VPK are likely to be recipients of state-funded vouchers
- Vouchers are used as a form of payment for daycares, family home centers, etc.

On average, the Childcare Certificate Program provides **$3,500 annually per child** for reimbursement of care for eligible 4-year olds
- Represents blended voucher reimbursement rates for 4-year olds for regulated and unregulated providers

**Curriculum-Based Funding**

Curriculum-based pre-K programs require funding of **~$7,000 per child per year**
- Cost assumption based of blended cost of Head Start program cost per child, county commission pre-K classroom cost per child, etc.

Incremental cost of curriculum-based pre-K per child: $7,000 - $3,500 = $3,500

Shortage of 1,800 curriculum-based seats (conservative estimate)

Incremental cost of extending curriculum based Pre-K = **$6 million**

Source: Tennessee Department of Human Services, Tennessee Department of Education, Porter Leath, Steering Committee interviews

Draft—for discussion only
Summer learning dosage analysis suggests reading for 1400 minutes can stem learning loss and drive gains over summer

### Issue
- At the end of pre-K, 60-70% of students are performing at grade level in Shelby County
- However, at the beginning of kindergarten only 32% of these students are performing at grade level
- Learning loss over the summer is significant in Shelby County and must be addressed

### Seeding Success model for summer literacy program

<table>
<thead>
<tr>
<th>Develop partnerships and train staff</th>
<th>Collect data (start, ongoing, end)</th>
<th>Put interventions in place</th>
<th>Study start/end data to reach conclusions</th>
</tr>
</thead>
</table>
| Identify partners (e.g., Knowledge Quest, Agape, Memphis Athletic Ministries, Memphis Teacher Residency) to conduct summer reading programs | Collect start / end data for each student on reading proficiency levels (using Reading A-Z curriculum) once program is in place | Based on real-time data collection, put relevant interventions in place for individual students | Analyze start and end data to determine most effective programmatic elements:  
  - Dosage (number of weeks, hours per day)  
  - Curriculum  
  - One-on-one vs. small group |
| Provide partners with appropriate training on how to deliver summer literacy program for students (pre-K to 12th) | Collect and report real-time data on individual student performance across multiple metrics:  
  - Student attendance  
  - Student engagement | For students not attending program, call parents to follow-up on individual students |  |
|  |  | For students not engaging in content, provide more one-on-one or small group instructional time |  |
|  |  | Analyze start and end data to determine most effective programmatic elements:  
  - Dosage (number of weeks, hours per day)  
  - Curriculum  
  - One-on-one vs. small group |  |

### Learnings
- Students who read for 1,400 minutes (~23 hours) over the summer see an increase in reading level equivalent to 2 to 2.5 months in the academic year (compared to the loss that often happens in the summer)
- To effectively scale summer literacy programs, the school district should play an active role in instituting a consistent program that measures progress and quality

---

1. Based on summer program carried out for 1,000 students (of which data was collected and analyzed for 350 students). Students ranged from pre-K to 12th grade with ~10% in pre-K or K
2. Source: Seeding Success, Steering Committee member interviews
K-3rd grade
Approach used to develop preliminary evaluation of kindergarten to 3rd grade strengths and gaps

- Interviews with administrators and educators from Shelby County Schools, ASD, municipal school districts
- Analysis of current state data on participation, performance and quality
- Review of AdvancED Quality Assurance Review for Shelby County Schools
- Interviews with principals from schools that are "beating the odds"

Evaluation of K - 3rd grade strengths and gaps
Analysis of current K-3rd offering in Shelby County highlights pockets of promise and areas for improvement (I)

**Developmentally appropriate classrooms and resources**
- Only permitted to use **high-quality state approved resources**
- Target high need zip codes to ensure each SCS classroom has 5 computers
- Adopted **Imagine Learning** (online program), which targets letter knowledge via games for 4+ year olds (available in 35-40% of SCS classrooms in early grades)
- Focused initiative from central office team to help schools **setup classrooms** to facilitate **small group instruction**
  - While computers and other equipment exists, not always used in ways to maximize value, such as for small group instruction

**Multi-dimensional focus (social, emotional and academic development)**
- **Head Start grant** reinforced with Shelby County leadership the value of focusing on multiple dimensions (especially social emotional learning) in early childhood education
- Rolled out **Class** in K-2nd grade, an evaluation system that tracks teacher-student interactions particularly related to **social-emotional support and development**
- Several operators in ASD have **deeper integration of SEL** into their curriculum
  - No adoption of **research-informed curriculum** focused on social emotional competence yet (e.g. Second Step) county-wide

**Mindset spanning full continuum of early education**
- This **Shelby County ECE effort** and what will follow builds **collaboration of stakeholders across continuum** to develop common understanding and align on and pursue common priorities
- Structure of **SCS Early Childhood Division** from pre-K to 2nd grade with Instructional Advisors overseeing K-2nd grade promotes continuum mindset
  - **Different assessments** used at every stage of early childhood continuum perpetuates siloed thinking at each age and grade level (e.g. Istation, SAT-10, TCAP, TNReady)

**Strength**  **Potential area for action**  **Opportunity to be re-evaluated**

Source: Interviews with Shelby County, Bartlett, and Millington administration; AdvancED school review, BCG analysis
Analysis of current K-3rd offering in Shelby County highlights pockets of promise and areas for improvement (II)

Family engagement and opportunities for families to learn about available resources

- Piloting the **Nurturing Parenting Curriculum** as a parent engagement program in 10 SCS classrooms. Parents take assessments on how to support children at home
- Emerging **community outreach programs** which provide increasing enrichment and extracurricular opportunities for students and parents (e.g. English language help offered to non-native parents and students )
  - **Deeper family engagement not yet widespread.** Family wraparound supports available in pre-K discontinued in later grades.

All children ready to learn

- All SCS students receive **free breakfast and lunch**
- **Before- and after-school enrichment opportunities** available through School Age Child Care (SACC) program on-site, including literacy, math, and recreational activities at subsidized rate [effectiveness of programs TBD]
  - **Wraparound services** administered by Porter-Leath only available in pre-K (e.g. health and developmental screenings, medical dental services, in-home family support and counseling). Difficult for families to lose support once relationships and trust established

Culture of higher expectations for children and educators

- **Destination 2025** goals provides momentum and shared vision for success in Shelby County (80% of seniors will be college or career ready, 90% of students will graduate on time, 100% of college-or-career-ready graduates enroll in post-secondary opportunities)
  - **Lack of accountability** for principals to retain high-performing teachers in early grades
  - **Lack of accountability** for teachers to drive gains in early childhood grades because evaluations largely based on aggregate school performance (not individual performance)

Source: Interviews with Shelby County, Bartlett, and Millington administration; AdvancED school review, BCG analysis

Strength ✅  Potential area for action ✗  Opportunity to be re-evaluated
High quality teaching

- More **concerted focus** at SCS on **building out literacy foundation** by laying out literacy progressions more deliberately and investing in literacy coaches
- > 40% teachers reported **inadequate preparation** to teach **foundational literacy skills**
- **Lack of targeted PD opportunities** for K-2nd grade teachers relative to teachers in later grades (particularly around data-driven instruction)
- **Kindergarten classroom observation** showed **low percentage** of teachers engaging in **any instructional practice** (need increased accountability for more consistent and quality implementation of curriculum in K-2nd grade)

Approach that meets each child's learning needs

- Implementation of **RTI²** identifies at-risk students and provides targeted interventions
- Implementation of **Comprehensive Literacy Improvement Plan** includes 90 minute literacy blocks with small group instruction based on student’s skill level (being rolled out)
- **Small group instruction is still rare**, need quality PD to train teachers on technique and ensure children not in rotation with teacher have instructional work (not busy work)
- **Formative assessments largely not utilized** to tailor teaching approach
- **Enrollment forecasting** is challenging causing situations where students are moved in and out of classrooms in the middle of the year, causing disruption to learning

  - *For discussion*: Are special education services being deployed in a manner (e.g., pullout vs. integrated model) that best meet students needs?

Strong leadership in schools

- **Instructional Leadership Directors** support raising the bar in teaching and leadership instruction and providing support and guidance (from AdvancEd)
- **Culture of collegiality and trust** exists in SCS and is critical in promoting leadership effectiveness (from AdvancED)

  - *For discussion*: Is there evidence that school leaders have strong expertise in early learning?

---

Source: Interviews with Shelby County, Bartlett, and Millington administration; AdvancED school review, BCG analysis

**Draft—for discussion only**
Based on the current state analysis, several potential priority areas for strengthening K-3rd in Shelby County

<table>
<thead>
<tr>
<th>Focus areas</th>
<th>Supporting evidence</th>
</tr>
</thead>
</table>
| 1. **Wraparounds / family engagement** | - **Wraparound support** not continued beyond pre-K (e.g., family support model)  
- Every school **not required** to have on-campus **SACC (School Age Child Care)** program for care before or after school (effectiveness of these programs still TBD) |
| 2. **Social-emotional learning**   | - Current approach to social-emotional learning primarily **reactive** (e.g., restorative justice)  
- **No widespread adoption of explicit evidence-based curriculum** focused on social emotional competence (e.g. Second Step) (though some questions about priority / capacity to implement alongside focus on literacy foundations) |
| 3. **Instructional delivery**      | - > 40% teachers reported **inadequate preparation** to teach **foundational literacy skills**\(^1\)  
- In sampling of 12 Kindergarten teachers, only 2 following any type of **instructional plan**\(^1\)  
- Many classrooms still use primarily **full group instruction**, or implement small groups ineffectively (e.g., busy work for groups not in rotation with teacher) |
| 4. **Alignment from pre-K to 3rd** | - **Different assessments** used at every stage of early childhood continuum  
- **Transition may be more challenging for students** between pre-K and K-3rd grade particularly when pre-K classroom not collocated in elementary school  
- **To be addressed in 4-year old section** |
| 5. **Continuous improvement capacity** | - Lack of **aggregate data** to inform improvement (e.g., teacher gaps, program effectiveness)  
- Lack of **analytical/research capacity** to analyze data and inform continuous improvement  
- Recognition of need and **community assets** emerging to address (e.g., Seeding Success)  
- **To be addressed under continuum section** |

---

1. SCS-specific.  Source: BCG interviews
High-quality ECE offerings require several conditions to be in place within a child's school or center:

- Developmentally appropriate classrooms and resources
- Mindset spanning full continuum of early education
- Multi-dimensional focus (social, emotional and academic development)
- Family engagement and opportunities for families to learn about available resources
- All children ready to learn
- Strong leadership in schools and centers
- High quality teaching
- Approach that meets each child's learning needs
- Culture of higher expectations for children and educators
- High-quality ECE offering

Note: Informed by national research, including Roland Fryer, Mass Insight, Education Endowment Foundation, Institute of Education Sciences, and Gallup. Also incorporates BCG experience and further adapted to Shelby County based on input from Steering Committee member interviews.
### Conditions that need to be in place to drive quality (I/II)

Conditions within unit of change (e.g. classroom, school, center)

---

**Developmentally appropriate classrooms and resources**

- Carefully planned room which facilitates learning through its physical environment and use of age appropriate and culturally appropriate materials
- Availability of physical resources in classroom/school to support learning (e.g. library, kidney table, computers, headphones)

**Multi-dimensional focus (social, emotional and academic development)**

- Emphasis on social and emotional development in addition to cognitive development
- Standardized social-emotional assessment (e.g., Ages and Stages from age 0–5 years) to identify those in need of early social-emotional interventions

**Mindset spanning full continuum of early education**

- Common set of assessments, metrics, and understanding of goals across the continuum to help measure and communicate progress towards a shared vision
- Collaboration between early care providers and educators across the continuum to ensure curriculum and standard coordination

**Family engagement and opportunities for families to learn about available resources**

- Regular parent/teacher contact through conferences, phone calls, report cards, PTA, etc.
- Resources available for parents to be involved in child's academic progress through reading or reinforcing other concepts taught in the classroom
- School outreach to parents to increase awareness about available services
- Trusted relationships between parents and teachers/principals allowing for free exchange of information

---

*Draft—for discussion only*
Conditions that need to be in place to drive quality (II/II)
Conditions within unit of change (e.g. classroom, school, center)

- **All children ready to learn**
  - Basic physical, emotional, mental health needs of the child are met
  - Non-academic supports that remove impediments to learning (e.g., nutrition, health, transportation, afterschool and summer enrichment)

- **Culture of higher expectations for children and educators**
  - High academic and behavioral expectations for all
  - Educators empowered, supported, and accountable for continuously improving their practice
  - Children and educators excited and hopeful for the future

- **High quality teaching**
  - Teachers with high level of training / credentials and opportunities for PD
  - Rigorous teaching aligned to standards
  - Consistent approach to instruction, common language, and use of curriculum
  - Alignment of instruction during transition points to ensure seamless learning
  - Purposeful use of tools and resources to support instruction

- **Approach that meets each children's learning needs**
  - Data used to tailor instruction to students' specific needs
  - 'High dosage' tutoring and/or other targeted interventions
  - Students engaged and owning their learning

- **Strong leadership in schools and centers**
  - Leadership focused on academic achievement, has high expectations, promotes a positive culture
  - Principal builds and develops a strong team that is accountable for their performance
  - Many leaders empowered within the building
3rd grade TCAP scores show SCS has been closing its performance gap relative to statewide averages.

![Bar chart showing 3rd grade TCAP scores for Reading, Math, and Science from 2013 to 2015. The chart compares Shelby County Schools (in dark green) and Tennessee Average (in light gray). Source: Tennessee Department of Education, Shelby County Schools.]

---

Source: Tennessee Department of Education, Shelby County Schools
High variability in 3rd grade proficiency in SCS suggests "bright spots" exist and need to be understood

3rd grade SCS TCAP reading scores
% of students proficient or advanced

79% of SCS schools perform below state average

State Average: 43%
District Average: 32%

Need to understand what high-performing schools are doing differentially and replicate where possible

Source: Tennessee Department of Education, Shelby County Schools
17% of SCS elementary schools exceed expectations on 3rd grade reading proficiency based on family income levels

% of students achieving proficiency
Based on 3rd grade TCAP reading scores

Each dot on the scatter plot represents one elementary school (n=110)

Note: School considered to be "exceeding expectations" if actual proficiency percentage is 10% greater than expected proficiency percentage (based on income level regression)
Source: Tennessee Department of Education, Shelby County Schools, BCG analysis

Draft—for discussion only
23% of SCS elementary schools exceed expectations on 3rd grade math proficiency based on family income levels

% of students achieving proficiency
Based on 3rd grade TCAP math scores

Each dot on the scatter plot represents one elementary school (n=110)

% of students eligible for free or reduced lunch

Schools exceeding expectations based on regression analysis

Note: School considered to be "exceeding expectations" if actual proficiency percentage is 10% greater than expected proficiency percentage (based on income level regression)
Source: Tennessee Department of Education, Shelby County Schools, BCG analysis
There is an opportunity to understand what high-performing schools are doing differentially and replicate where possible.

### Outperformance in reading proficiency

<table>
<thead>
<tr>
<th>School</th>
<th>Expected Proficiency(^1)</th>
<th>Actual Proficiency(^1)</th>
<th>Difference (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gardenview</td>
<td>25</td>
<td>64</td>
<td>38</td>
</tr>
<tr>
<td>Delano</td>
<td>26</td>
<td>57</td>
<td>31</td>
</tr>
<tr>
<td>Bethel Grove</td>
<td>22</td>
<td>44</td>
<td>22</td>
</tr>
<tr>
<td>Freeman</td>
<td>48</td>
<td>69</td>
<td>21</td>
</tr>
<tr>
<td>Downtown</td>
<td>31</td>
<td>50</td>
<td>19</td>
</tr>
<tr>
<td>Knight Road</td>
<td>22</td>
<td>39</td>
<td>17</td>
</tr>
<tr>
<td>Circles of Success</td>
<td>24</td>
<td>40</td>
<td>16</td>
</tr>
<tr>
<td>Oakshire</td>
<td>25</td>
<td>41</td>
<td>16</td>
</tr>
<tr>
<td>White Station</td>
<td>45</td>
<td>59</td>
<td>14</td>
</tr>
<tr>
<td>Jackson</td>
<td>21</td>
<td>35</td>
<td>14</td>
</tr>
<tr>
<td>Mem. Bus. Academy</td>
<td>31</td>
<td>45</td>
<td>14</td>
</tr>
<tr>
<td>Manor Lake</td>
<td>23</td>
<td>36</td>
<td>13</td>
</tr>
<tr>
<td>Keystone</td>
<td>24</td>
<td>36</td>
<td>12</td>
</tr>
<tr>
<td>Ida B. Wells</td>
<td>26</td>
<td>38</td>
<td>12</td>
</tr>
<tr>
<td>Hickory Ridge</td>
<td>23</td>
<td>35</td>
<td>11</td>
</tr>
</tbody>
</table>

1. % of students expected to be proficient and actually proficient based on regression analysis of all Shelby County elementary schools (% of students eligible for FRL and % of students proficient)

Source: Tennessee Department of Education, Shelby County Schools, BCG analysis

### Outperformance in math proficiency

<table>
<thead>
<tr>
<th>School</th>
<th>Expected Proficiency(^1)</th>
<th>Actual Proficiency(^1)</th>
<th>Difference (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knight Road</td>
<td>39</td>
<td>78</td>
<td>39</td>
</tr>
<tr>
<td>Oakshire</td>
<td>42</td>
<td>76</td>
<td>34</td>
</tr>
<tr>
<td>Freeman</td>
<td>61</td>
<td>90</td>
<td>28</td>
</tr>
<tr>
<td>Mem. Bus. Academy</td>
<td>47</td>
<td>75</td>
<td>28</td>
</tr>
<tr>
<td>Jackson</td>
<td>38</td>
<td>65</td>
<td>27</td>
</tr>
<tr>
<td>Springdale</td>
<td>38</td>
<td>65</td>
<td>27</td>
</tr>
<tr>
<td>Delano</td>
<td>42</td>
<td>67</td>
<td>24</td>
</tr>
<tr>
<td>Promise Academy</td>
<td>43</td>
<td>68</td>
<td>24</td>
</tr>
<tr>
<td>Manor Lake</td>
<td>39</td>
<td>64</td>
<td>24</td>
</tr>
<tr>
<td>Charjean</td>
<td>40</td>
<td>64</td>
<td>24</td>
</tr>
<tr>
<td>Newberry</td>
<td>43</td>
<td>65</td>
<td>21</td>
</tr>
<tr>
<td>E. E. Jeter</td>
<td>67</td>
<td>89</td>
<td>21</td>
</tr>
<tr>
<td>Southern Ave</td>
<td>43</td>
<td>63</td>
<td>20</td>
</tr>
<tr>
<td>Keystone</td>
<td>40</td>
<td>59</td>
<td>19</td>
</tr>
<tr>
<td>Gardenview</td>
<td>42</td>
<td>61</td>
<td>19</td>
</tr>
</tbody>
</table>

Schools with solid outperformance in math/reading; to be further evaluated to understand factors contributing to strong performance.
Overview of wraparound services that can be offered from Pre-K to 3rd

Health and nutrition
- Coordinate school-wide screenings or annual health fair with free immunizations, dental checks, and vision and hearing screenings
- Offer nurses and wellness program to work with children who have health or behavioral problems
- Provide students in crisis with interventions to address emotional and behavioral challenges, enhance coping skills, and improve student emotional and physical health
- Help qualify parents for federal food / nutrition programs (e.g. SNAP, WIC)
- Offer food and nutrition program to teach parents how to shop and cook on food stamp budget
- Offer family access to community resources that promote health and wellbeing (e.g. YMCA)

Education and enrichment
- Provide after school and Saturday tutoring in literacy and math
- Host AmeriCorps volunteers tutoring students struggling in math and science
- Facilitate summer bridge program for students at risk of being behind
- Offer outside programs coming to campus to hold physical activity classes
- Plan enrichment activities such as field trips and special events to enhance learning environment
- Organize program through which a book is delivered to child's home every month for 5 years

Community and family
- Give parents access to parent coaches / social workers who provide advice on parenting, stress, trauma, taking advantage of public benefits, etc.
- Provide parents with access to developmental screener showing child's developmental progress
- Maintain a lending library in the community where families can borrow books and toys
- Run a community center with adult education services (e.g. GED, English language, computer training), trainings, and space for parent meetings, outreach, etc.
- Network with other social service agencies to help provide food, shelter, clothing, etc.


Draft—for discussion only
Wraparounds are an important contributor to longer-term academic performance in Shelby County.

**Context**

Longitudinal study conducted from 2007-2012 with 6,000+ students

Identified 4 Shelby County cohorts from K–3rd grade based on different programming at age 4:

- Traditional Pre-K (academic focus)
- Head Start (wraparound focus)
- Dual (academic + wraparound)
- Control group (no/unknown pre-K)

**Results**

- Groups with more academic exposure at age 4 outperformed control group during full K-3rd grade spectrum
- Group with primarily wraparound support at age 4 showed increase in academic performance over time, and was on par with groups who had more academic-focused pre-K by the 3rd grade

Source: Marie Sell, "Longitudinal Impact of Memphis City Schools Pre-K and Shelby County Head Start," March 2013

**3rd grade TCAP results by cohort**

Score (# of questions correct)

- Reading: 38, 39, 39, 38, 38, 39
- Math: 39, 37, 38, 39, 40, 40
- Science: 41, 42, 42, 40, 40
- Social Studies: 40, 40, 40

Legend:
- Traditional pre-K (academic focus)
- Head Start (wraparound focus)
- Dual (academic + wraparound)
- Control (no/unknown pre-K)
Perspectives on extending wraparounds and family supports into K-3rd

Wraparound and family supports in Drew Charter School model (Atlanta)....

Drew Charter School is a birth to 12th grade academic model in the East Lake community of Atlanta. It is a model with academics deeply embedded in a set of family and wraparound support services.

- AmeriCorps volunteers tutoring students struggling in math and science
- After school and Saturday tutoring in literacy and math
- Family access to YMCA resources which promote health and wellbeing
- Summer bridge program for students at-risk of being behind via Georgia Tech
- Economic stability supports for families (e.g., financial literacy, career counseling)
- Dedicated staff member to actively coordinating across wraparounds and partnerships

...have contributed to successful outcomes

- One of top performing schools in Atlanta (from <60% to over 95% proficiency over ten year period)
- 73% reduction in crime
- 70% employment in public housing
- Improved health and wellness of families

There is an opportunity to extend wraparound services beyond pre-K and to better coordinate existing services.

Source: BCG project experience and interviews
Despite some barriers to expanding K-3rd wraparounds, strategies can be put in place to overcome these hurdles

Barriers to expanding wraparounds

- Wraparound providers do not operate at full capacity (despite need for their services) due to implementation challenges
- Focus for providers today is largely on tracking attendance, which is important, but should be accompanied by instructional focus
- Need for leaders with deep commitment to neighborhoods where they are well-positioned to spearhead change
  - For example, Knowledge Quest leader is dedicated to mobilizing change in 38126
- Conversion of referrals to wraparound services is suboptimal given transient nature of the community and lack of trust with providers
- Limited resources/capacity prevent providers from attending trainings (e.g., results based leadership) on scaling programs
- Service providers do not always subscribe to a mindset of continuous improvement, where they consistently assess and improve programs

Perspectives on overcoming barriers

- **Use data to target supports**: Continue Seeding Success-led effort to analyze data across multiple cross-sections (attendance/literacy by grade) to understand largest areas of need so wraparound supports are targeted
- **Scale and recruit providers**: Help existing providers attract and staff to scale up and recruit new providers to increase overall capacity in Shelby County in areas of highest need
- **Build advisory capacity**: Partner with organizations that can offer supplemental resources/trainings to providers on topics that will allow them to operate efficiently, build capacity, and continuously improve
Range of ways to enable stronger focus on social emotional learning (SEL) in K-3rd

Spectrum of social-emotional supports for K-3rd

- **Direct parent interventions**
  - Discussion groups with other parents and suggested home activities

- **Stand-alone SEL curriculum**
  - 20-30 min SEL lessons several times a week, with hands-on practice activities

- **SEL embedded in teaching practice**
  - Class meetings for team building, cross-age buddies, school-wide community building

- **Infused academic SEL curriculum**
  - Reading aloud and book discussions using SEL vocabulary

Outcomes from SEL focus

- Improved academic performance
- Increased positive social behavior
- Reduced emotional distress
- Reduced conduct problems

Example roll-outs from external models:
- Fast Track study comparing measured outcomes in kindergarten and 13-19 years later in three cities and one rural setting showed social competence linked with higher education

Source: Program websites
Libertas' Pre-K model focuses on incorporating social-emotional learning in curriculum and community

Montessori School in the Achievement School District located in Frayser. Focuses on advancing social-emotional learning. 125 students between ages of 3 and 7. Goal to grow up to age 12 and have 350 students. Focuses on SEL through curriculum and integrated community

1 Curriculum embeds SEL in day to day school activities

   Lessons of Grace and Courtesy
   • Focused on how children practice living and working in a community with people
   • Provides students with language and movements of pro social behavior (e.g., how to blow nose, how to solve a problem with others)
   • Fosters SEL through establishing a peace corner in the class, singing group songs, and showcasing art on the wall

   Tier 3 intervention
   • Intervention approach for troubled children with most severe trauma with support from school counselor and social worker

2 SEL is reinforced through school/community partnership activities

   Familiarize teachers with community
   • Provide a neighborhood tour for teachers to familiarize them with the context, challenges and background of school children in order to tailor teaching if appropriate

   Foster relationship between teachers/families
   • Provides individualized 1:1 welcome for teacher and caregivers before the school year

   School support efforts of community enrichment center
   • Provide community family enrichment center with donated clothes, snacks, books to borrow, parenting courses, family and community events
   • Provide computers for parents who need to apply for jobs or register their children for benefits
Existing pre-service efforts are working towards providing more relevant coursework and practical experience.

### Traditional pre-service programs

**University of Memphis** is the traditional pre-service program that brings the most teachers into Shelby County.

- In 2012-2013, 445 individuals completed the program, with 173 focusing on elementary education (K-6th grade).

### Alternative pre-service programs

**TFA Memphis and Memphis Teacher Residency (MTR)** are the primary alternative pre-service programs.

- In 2012-2013, TFA Memphis awarded 187 licenses (with 164 focused on 4th-8th grade).
- In 2012-2013, MTR awarded 28 licenses (with 13 focused on K-6th grade).

### Areas of Focus

#### Programs

- Added course on how to effectively use observation and assessments.
- Strengthened literacy courses to focus on how students acquire language.
- In process of adding clinical faculty member who has deep expertise in literacy.
- Placing students alongside mentor teachers so they learn from observation in a classroom setting.
- Placing emphasis on how to best engage with a diverse set of children from different backgrounds.

#### Alternative pre-service programs

- Practical experience teaching summer school to learn classroom management and lesson delivery.
- Frequent feedback provided by coaches who observe trainees several times a week.
- Small group forums to practice teaching new lessons, reacting to classroom challenges, etc.
- Lesson-planning instruction from coaches.
- Coursework on instruction planning and delivery, classroom management, diversity, community, and literacy development.

---

1. Traditional pre-service program areas of focus based on University of Memphis, and alternative pre-service program areas of focus based on TFA.

Source: Report Card on the Effectiveness of Teacher Training Programs, Shelby County Schools, Teach for America, Memphis Teacher Residency, Steering Committee member interviews, University of Memphis interview.
Pre-service report card provides key information on teacher quality, but lacks focus on early childhood metrics

Report Card on the Effectiveness of Teacher Training Programs

- In 2007, state began requiring an assessment on effectiveness of teacher training programs
- Law requires that the report include data on the performance of each program’s completers in the following areas: placement and retention rates, Praxis II pass rates, and TVAAS
- Report card has been redesigned by Tennessee Higher Education Commission to include additional metrics so it is a more effective tool for evaluating teacher prep programs

Report card includes key metrics related to teacher performance...

Data included on current version of report card includes:
- Average GPA for program's completers
- Average test scores for program's completers (e.g. SAT)
- Number of completers with each academic credential (e.g. Bachelor's, Master's, license only)
- Praxis II (certification exam) pass rates for program's completers
- Placement/retention in Tennessee public schools for past 4 years
- Average TVAAS scores based on 4th-8th grade TCAP exams (completers from this program vs. statewide average and beginning teachers average)
- Average TVAAS scores based on high school end of course exams (completers from this program vs. statewide average and beginning teachers average)

...however, early childhood metrics should be included as well

Additional data points to be considered for inclusion:
- Pre-K teachers: average growth in % of children kindergarten ready
- Kindergarten teachers: average student achievement growth in Istation scores
- 1st and 2nd grade teachers: average student achievement growth measured by state assessment
- 3rd grade teachers: average student achievement growth measured by TNReady

Including ECE metrics on report cards can incentivize pre-service programs to improve program quality

Draft—for discussion only
While many supports for effective instruction in place in Shelby County, reality in the classroom often lags

Districts have put in place structural elements consistent with effective instructional delivery...

- Research-based practices defined and articulated by districts/operators (e.g., effective lesson planning, formative assessments, and other key aspects of instructional delivery)
- Literacy coaches w/ deeper literacy knowledge being deployed to schools at a target 1:5 school ratio (SCS)
- Grade-level PLCs being deployed to deepen instructional delivery
- Structured 90 minute literacy blocks being rolled out
- Classroom space being organized to support small group instruction
- Teacher learning progressions (what skills should develop at what rate) have been laid out to help improve teachers’ literacy foundational knowledge (SCS)

...however, some gaps in implementation at the classroom level (primarily SCS-focused; for discussion: do other districts face similar, additional challenges?)

- Limited use of formative assessments to inform small group instruction
- Classrooms set up for small group instruction, but many either primarily use full group instruction or lack instructional focus in small groups where teacher not present (doing busy work)
- In recent observations of 12 Kindergarten teachers, only 2 (16%) following any instructional plan (SCS)
- PLC time on calendar, but not necessarily right content and facilitation in place

Potential hypotheses on root causes of implementation gaps:

- Teachers not adequately prepared to teach foundational literacy skills
- No feedback loop to understand effectiveness of strategies
- Need to continue focus on talent (e.g., Teacher Town, operator-specific retention efforts)

Source: BCG interviews and analysis
Possible areas of focus to address root causes of implementation gaps in Shelby County

<table>
<thead>
<tr>
<th>Potential root causes</th>
<th>Possible areas of focus</th>
</tr>
</thead>
</table>
| Teachers not adequately prepared to teach foundational literacy skills                | • Pre-service preparation (efforts underway nationally, e.g., Deans for Impact)  
• Deployment of literacy coaches / specialists  
• PLCs infused with right content and facilitation  
• Classroom observation with tailored PD                                                                 |
| No feedback loop to understand effectiveness of strategies                           | • Continuous improvements mechanisms and capacity to measure impact and implementation fidelity of key strategies (e.g., PLCs, coaches, wraparound, SEL, family programs) and make adjustments based on data and stakeholder feedback |
| Limited talent pipeline                                                              | • Attraction and retention of effective educators, with at least proportional focus on the early grades (e.g., Teacher Town, district-specific retention efforts) |
TFA-sponsored support for instructional coaches in Dallas outlines several best practices

**DISD model for training instructional coaches**

<table>
<thead>
<tr>
<th>Develop partnership</th>
<th>Key learnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Identify high-quality partner (e.g., TFA) with staff who can support training for instructional coaches.</td>
<td>Coaches most effective when hired by principal and both have a shared vision for goals, role, responsibilities, etc.</td>
</tr>
<tr>
<td>• Employees must (1) have strong content knowledge and (2) be able to share best practices for coaching teachers.</td>
<td><strong>Principal relationship</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lead monthly group meetings</th>
<th>Hands-on approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>• TFA teacher coaches held monthly group meetings for instructional coaches from schools in 2 feeders patterns in DISD (3 hours)</td>
<td>Coaches require hands-on observation / feedback on &quot;how&quot; to best deliver content in a way that is useful to teachers</td>
</tr>
<tr>
<td>– First 90 minutes cover actual content that coaches need to cover with teachers</td>
<td><strong>Dedicated resource</strong></td>
</tr>
<tr>
<td>– Next 90 minutes cover best methods for conveying this content to teachers</td>
<td>Coaches most effective when one coach assigned per school and not used to &quot;backfill&quot; for lunchroom monitor, etc.</td>
</tr>
<tr>
<td>• Consists of tactical topics, including building literacy foundations (assuming no prior knowledge), and how to use iStation results to plan student interventions</td>
<td><strong>Authority</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Check-in during monthly 1-on1’s</th>
<th>Baseline in place</th>
</tr>
</thead>
<tbody>
<tr>
<td>• TFA teacher coaches visit instructional coaches monthly in school to provide 1-on-1 support</td>
<td>Coaches benefit when have authority so teachers feel compelled to adopt their advice</td>
</tr>
<tr>
<td>• 1-on-1 meetings focused on how to implement learnings from group meetings</td>
<td><strong>Baseline in place</strong></td>
</tr>
<tr>
<td>• For example, TFA teacher coaches observe and give coaches feedback on how to communicate with teachers, how to help teachers analyze gaps, etc.</td>
<td>Coaches more sustainable when starting point is clearly defined and specific goals and plan for measurement are in place</td>
</tr>
</tbody>
</table>

**Sequence to be repeated each month during academic school year**

Source: Teach for America – Dallas interview
Effective PLCs require structured meetings in a trusted environment that address key teaching challenges

- **Effective facilitators** should be selected who are respected by teachers, guide productive conversation, and promote action-oriented discussions
- Facilitators must establish clear structure in PLCs so members understand the purpose and goals (e.g., selecting instructional strategies / assessment techniques, analyzing student work)
- PLCs should use formative benchmark and assessment data to determine the most pressing instructional needs for students so that most relevant topics can be covered at PLC meetings
- Use of mock PLC meeting videos allow teachers to identify key behaviors, practices, and dialogue that foster/inhibit collaboration during PLC meetings

- Leaders must model trusting relationships and create conditions where teachers can have open conversations that get them to reflect deeply about their teaching to understand individual strengths and challenge areas
- If principals are present at PLC meetings while teachers share instructional challenges, teachers should not be criticized or penalized, but instead recognized for their contributions
- School and district leaders need to ensure that teachers have adequate scheduled time to meet in PLCs and the necessary resources, tools, and instructional support to be successful

- **Learning walks**, a process in which teams of school leaders and PLC facilitators participate in classroom observation, can be an effective tool to understand how decisions in PLC meetings are implemented in classrooms
- Teachers should be given individual feedback and the learning walk team members should also collaboratively create a summary of observations made across the school
- Learning walk feedback should be non-evaluative and should be another resource for teachers to take advantage of PLC experience and improve instructional delivery

Source: American Institutes for Research, SEDL Insights
A closed-loop model should be used to inform continuous improvement in Shelby County

1. Generate **hypothesis** about potential new programs/initiatives or changes to existing programs/initiatives that will drive better **student outcomes**

2. Brainstorm best course of action to implement **proposed change**

3. Based on results, **determine which (if any) components** of the new or modified program/initiative were **successful**

4. Consider **scaling effective programming**

5. Reflect on less successful initiatives to understand what could be **adjusted in the future** to achieve better results

6. Implement the plan carefully

7. **Make note of specific circumstances** in place that may impact results of the programmatic changes

8. Where possible, **initially implement changes on smaller scale** (e.g. pilot programs)

9. Utilize **available research capacity** to analyze results from new or modified program/initiative

10. **Understand impact of program** compared to previous results and expected results

**Strong analytical capacity is critical to the effective implementation of the continuous improvement model**

Source: Carnegie Foundation, BCG experience
Continuum
Single scorecard being piloted across country in effort to emphasize "continuum view" and track progress

<table>
<thead>
<tr>
<th>Organization</th>
<th>Cradle-to-career components</th>
<th>Learnings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organization</strong></td>
<td><strong>Cradle-to-career components</strong></td>
<td><strong>Learnings</strong></td>
</tr>
<tr>
<td>Used in 60 and neighborhoods across the US</td>
<td>Kindergarten readiness (3 indicators)</td>
<td>Scorecards focused on measuring minimum sufficient, yet comprehensive set of measures</td>
</tr>
<tr>
<td></td>
<td>Middle school participation rate (2 indicators)</td>
<td>Intermediary indicators tracked with greater frequency than once annually to inform more immediate action</td>
</tr>
<tr>
<td></td>
<td>College access and completion (2 indicators)</td>
<td>Goals set for metrics are based on historical trajectory and state and national averages</td>
</tr>
<tr>
<td><strong>PeopleFirst Partnership</strong></td>
<td><strong>15 indicators across spectrum</strong> (including 6 indicators for health, safety and family)</td>
<td>Scorecards are dynamic not static (e.g., Commit! adding a social emotional assessment as part of its Kindergarten readiness indicator in 2017)</td>
</tr>
<tr>
<td><strong>Tennessee</strong></td>
<td>Kindergarten readiness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Middle school math</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post secondary access</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Academic proficiency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>% graduating from high school</td>
<td></td>
</tr>
<tr>
<td><strong>PeopleFirst Partnership</strong></td>
<td><strong>6 indicators across spectrum</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kindergarten readiness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Middle school math</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post secondary access</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Third grade reading</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High school graduation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>College and career readiness</td>
<td></td>
</tr>
<tr>
<td><strong>Dallas</strong></td>
<td><strong>11 indicators across spectrum</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kindergarten readiness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Middle school math</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post secondary access</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3rd grade reading</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8th grade math</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8th grade science</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percent college ready per SAT/ACT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Higher education and workplace</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4th grade math</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10th/11th grade PSAT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High school graduation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1st year post-secondary retention</td>
<td></td>
</tr>
</tbody>
</table>

Source: Organization websites, BCG experience
## County-wide scorecard metrics: criteria for inclusion

### Criteria for scorecard metrics

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurable</td>
<td>Should be measurable and have a path forward on data collection</td>
</tr>
<tr>
<td>Aligned to 3rd grade literacy</td>
<td>Should be contributing factors to 3rd grade reading proficiency</td>
</tr>
<tr>
<td>Succinct yet comprehensive</td>
<td>Represent comprehensive view of ECE in the most succinct way possible</td>
</tr>
<tr>
<td>Multi-dimensional focus</td>
<td>Collectively represent whole child measures (e.g. health, social-emotional, academic)</td>
</tr>
<tr>
<td>Full continuum focus</td>
<td>Collectively focus on all stages of continuum</td>
</tr>
<tr>
<td>Not redundant</td>
<td>Should not be repetitive or highly correlated with one another</td>
</tr>
</tbody>
</table>

### Metrics to be evaluated independently to ensure criteria are met

- % of children with recommended immunizations – beyond a certain threshold (which Shelby County has achieved) does not significantly contribute to 3rd grade literacy
- % with access to non-emergency medical care – difficult to determine standardized view of what constitutes non-emergency care, and no clear path to measurement
- % of children with 5+ servings of fruits and vegetables daily - requires knowledge of food consumed both at home and at school for each child, making measurement difficult
- % of children requiring serious disciplinary action - disciplinary action measures used subjectively and difficult to measure across county

### Full set of metrics should be evaluated together to ensure criteria are met
Stakeholder groups can use scorecard metrics to understand areas of highest need for strategic planning

### Implementation

<table>
<thead>
<tr>
<th>Goal-Setting</th>
<th>Frequency</th>
<th>Revisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Scorecard targets should be informed by historical Shelby County data, state and national averages</td>
<td>• Scorecard data should be updated annually to provide various stakeholder groups with current view on progress towards collective goals</td>
<td>• Scorecard should be revisited frequently (e.g. at least annually) to determine if metrics and/or targets should be added or removed. <strong>Current research</strong> on early indicators of third grade proficiency should inform changes</td>
</tr>
</tbody>
</table>

### Scorecard Use

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Use of scorecard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers, staff, general public</td>
<td>• Understand Shelby County progress and performance on key early education metrics</td>
</tr>
<tr>
<td>School districts</td>
<td>• Identify strategic areas for improvement • Inform resource allocation • Inform policies, procedures, and operations to improve performance on lagging metrics • Share best practices across school districts</td>
</tr>
<tr>
<td>Hospitals and public health providers</td>
<td>• Identify strategic areas for improvement • Inform resource allocation</td>
</tr>
<tr>
<td>Local and state government</td>
<td>• Inform state goals in early education • Inform resource allocation to health and education initiatives</td>
</tr>
<tr>
<td>Philanthropists</td>
<td>• Inform highest areas of need within early childhood education</td>
</tr>
</tbody>
</table>
Proposed county-wide scorecard for birth to 3rd grade continuum

- A single scorecard across the birth to 3rd grade continuum can align the community to a common set of goals linked to 3rd grade reading proficiency, and transparently measure and communicate progress towards the goals such that stakeholders understand which areas may need additional focus in the medium- to long-term.
- ECE scorecard is an expansion of current PeopleFirst Partnership scorecard with metrics adopted by this consortium and will be integrated with the Community Foundation's Where We Live Mid-South project (community indicator website).
- All metrics on the scorecard must be measurable and aligned to 3rd grade literacy. Collectively, metrics should also be succinct yet comprehensive, have a multi-dimensional focus, have a full continuum focus, and not be redundant.

### Proposed scorecard metrics

**Health / SEL**

- **Area of interest:** Social-emotional development, school attendance, health
- **Potential metrics:**
  - % of children exposed to SEL activities or curriculum
  - % of children with satisfactory attendance
  - % of children with BMI > 30

**Academic**

- **Area of interest:** 1st grade reading / math proficiency, 2nd grade reading / math proficiency, 3rd grade reading / math proficiency
- **Potential metrics:**
  - SAT-10
  - State administered test to be developed by Fall 2016
  - TNReady

### Purpose / context

- A single scorecard across the birth to 3rd grade continuum can align the community to a common set of goals linked to 3rd grade reading proficiency, and transparently measure and communicate progress towards the goals such that stakeholders understand which areas may need additional focus in the medium- to long-term.

---

1. Social emotional component of ASQ.
2. Should plan to adopt statewide kindergarten readiness screener when rolled out. Source: Promise Neighborhoods Institute, Early Success Coalition.
Guiding principles for assessments across the continuum suggest room for improvement in Shelby County

If multiple assessments are used across grade levels, results from all assessments should be:
- correlated with one another
- early predictors of 3rd grade literacy so interventions can be put in place early on

If multiple assessments are used, skills / domains tested should be aligned

Once appropriate assessments are in place, strategy should be held consistent for multiple years

Draft—for discussion only
Executive summary: building a pipeline of quality ECE professionals (0-4 year olds) in Shelby County

The annual supply of professionals earning ECE credentials in Shelby County is not large enough to compensate for the significant turnover that private providers face each year.

Research suggests that training and education for caregivers linked to higher quality care and better student outcomes:
- Research shows teachers with Bachelors in ECE appear to be the most effective. However, teachers with associate's degrees or CDAs are still more effective than those with less education/training.

Today, graduates from the University of Memphis with a Bachelors in Child Development and other individuals with Bachelors degrees rarely pursue teaching positions with 0-4 year olds due to low compensation offered.

Given the limited pipeline of Bachelors students and the value shown in CDAs, CDAs should be considered the "minimal" acceptable standard for quality ECE professionals in Shelby County:
- Only ~40% of staff in many private childcare centers have a CDA or more advanced degree. TECTA provides support locally for individuals interested in pursuing CDA.

The following actions should be taken to build a pipeline of quality ECE professionals:
- Require 4 and 5 star centers to have 60% and 80% of their staff, respectively, hold a CDA or higher credential.
- Increase reimbursements for 4 and 5 star centers such that centers can afford to pay employees with CDAs $12 per hour or more (to recognize the value of the CDA and encourage others to pursue it).
- Conduct a longitudinal study of children 0-4 years old with exposure to instructors with various levels of training to determine the (a) impact of instructor training on kindergarten readiness, (b) instructor training level necessary to drive learning outcomes, and (c) suggested mix of training levels required for each star-rating [if necessary, adjust requirements tied to star ratings to be consistent with findings from longitudinal study).
- Increase capacity of training programs (e.g., TECTA, state efforts) to manage growing demand for certification resulting from new policies.
Pipeline for quality ECE professionals (0-4 year olds) in Shelby County is not sufficient

Supply of early childcare professionals is constrained...

~3,500 early childcare professionals needed to serve Shelby County licensed providers

Estimated 40% turnover per year (25% switch to other providers, and 15% leave early childcare)

525 new early childcare professionals needed annually

<table>
<thead>
<tr>
<th>Credential</th>
<th>Annual completers</th>
</tr>
</thead>
<tbody>
<tr>
<td>TECTA training</td>
<td>230</td>
</tr>
<tr>
<td>Child Development Associate</td>
<td>50</td>
</tr>
<tr>
<td>Early Childhood Certificate</td>
<td>20</td>
</tr>
<tr>
<td>Associate's Degree</td>
<td>10</td>
</tr>
<tr>
<td>Bachelor's Degree (Child Dev)</td>
<td>0³</td>
</tr>
<tr>
<td>Total</td>
<td>310</td>
</tr>
</tbody>
</table>

Remaining demand filled by untrained staff

- There are not enough trained, high-quality child care professionals entering the industry to replace those who leave each year
- Moreover, in childcare centers today no more than 50% of staff have a CDA or higher credential

...in part because of compensation and certificate reimbursement rates

Individuals joining early childcare centers are not incentivized to pursue training programs given current compensation structure:

<table>
<thead>
<tr>
<th>Credential</th>
<th>Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>No training</td>
<td>$7.25/ hr</td>
</tr>
<tr>
<td>TECTA training</td>
<td>$7.50/ hr</td>
</tr>
<tr>
<td>Child Development Associate</td>
<td>$9-10/ hr</td>
</tr>
<tr>
<td>Early Childhood Certificate</td>
<td>$9-10/ hr</td>
</tr>
<tr>
<td>Associate's Degree</td>
<td>$10-12/ hr</td>
</tr>
</tbody>
</table>

Centers do not award significantly higher compensation for higher levels of training as their finances are constrained by certificate reimbursement rates set by the state

1. Based on 0-4 year old populations and required adult to child ratios in Tennessee. 2. Listed in order of least to most rigorous credential. 3. Bachelors completers listed as 0 because very few graduates from Bachelor programs pursue jobs as teachers in childcare centers or schools for 0-3 year olds. 4. Hourly wage rates are approximations based on Steering Committee member interviews and discussions with TECTA.

Note: Analysis includes caregivers for all 0-3 year olds and 4-year olds in the care of private providers. Source: Steering Committee interviews, TECTA, Department of Human Services
Research suggests training and education for caregivers is correlated with quality care and better student outcomes.

A meta-analysis shows training of caregivers is important to providing high-quality early childcare.

A review of studies from 1980-2005 shows a significant positive effect of training on the competency of caregivers in childcare.

Studies (examined in the review) suggest that the training of caregivers is a cornerstone for quality in early childcare.

Caregivers with higher educational levels:
- Provide more language stimulation
- Have more knowledge of developmentally appropriate practice
- Stimulate the social and physical skills of children more often
- Offer richer learning experiences
- Perform better on global childcare quality measures (ECERS, ITERS)
- Are more sensitive

A longitudinal study shows caregiver training for 3+ year olds is correlated with higher student outcomes.

A longitudinal study of 1,300+ children examined:
- If student outcomes are better when centers meet professional standards (e.g., child to staff ratios, caregiver training)
- Which standards contributed most to student outcomes at each age

The study showed the more standards met at a childcare center the better the outcomes in terms of school readiness, language comprehension, and behavior at 36 months.

The research also showed child outcomes (with respect to cognitive development, school readiness, and behavior) were best predicted by:
- Child-staff ratio at 24 months
- Caregiver training and education at 36 months

Source: "Does training matter? A meta-analysis and review of caregiver training studies" (Early Childhood Research Quarterly, 2006); "Child Outcomes When Child Care Center Classes Meet Recommended Standards for Quality" (American Journal of Public Health, 1999)
### Supporting research

<table>
<thead>
<tr>
<th>Non-credit training</th>
<th>Teachers with non-credit training (e.g., workshops) show mixed results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- A study of regulated family child care providers from three communities examined the impact of noncredit training on childcare quality through the Family-to-Family program. At two sites, average global quality increased modestly, and at the third site no change was noted. Average process quality did not change at any site</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CDA</th>
<th>Teachers with a CDA are more effective than those with only high school</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Study of 400+ classrooms of infants, toddlers, and preschoolers found:</td>
</tr>
<tr>
<td></td>
<td>- Children with teachers who have CDA training received a higher frequency of positive initiation than children in other classrooms</td>
</tr>
<tr>
<td></td>
<td>- Children whose teachers had a least a BA in ECE or CDA training had higher frequencies of language play and positive management</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Associate's Degree</th>
<th>Teachers with associate's degree training provide more developmentally appropriate care</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Study of teachers with &gt; 12 credit hours of coursework in associate's degree program showed they provided higher quality care. These teachers showed:</td>
</tr>
<tr>
<td></td>
<td>- Significant gains on ECERS / ITERS and the Teacher Belief Scale</td>
</tr>
<tr>
<td></td>
<td>- More developmentally appropriate care (measured by ECERS / ITERS)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bachelor's Degree</th>
<th>Teachers with bachelor's degrees provide higher quality care</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Study analyzing 227 child care centers found bachelor's degree teachers were more sensitive, less harsh / detached, and more appropriate in caregiving with infants, toddlers, and preschoolers than teacher's without a bachelor's</td>
</tr>
<tr>
<td></td>
<td>- Study also revealed that children in programs with sensitive and responsive teachers received higher language scores than other children</td>
</tr>
</tbody>
</table>

### Learnings

Several studies show teachers with CDAs, Associates, and Bachelors degrees provide higher quality care (compared to control groups):
- Research on non-credit training is mixed

When degrees are compared, one study showed that teachers with the most advanced education (e.g., Bach. in ECE) appeared to be most effective. However, teachers with associate's degrees / CDAs were still more effective than those with less education / training

---

Note: While the majority of research shows caregiver training/education results in higher quality care, some studies found differing results on the impact of training/education with different age groups.

Source: Impact of Training and Education for Caregivers of Infants and Toddlers (National Center for Children in Poverty, 2005); “Early Education Quality: Higher Teacher Qualifications for Better Learning Environments” (Whitebook, 2003); The effect of education on child care teachers' beliefs and classroom quality (Cassidy, 1995); “Bachelor's Degrees Are Best: Higher Qualifications for Pre-Kindergarten Teachers Lead to Better Learning Environments for Children” (Whitebook, 2003)
Students pursuing a Bachelors in Child Development in Shelby County are interested in careers as ECE teachers...

The University of Memphis offers a Bachelors in Child Development and Family Studies
- Students learn to create learning environments that promote children’s healthy development
- Does not lead to teaching license (needed in pre-K onwards) so teaching jobs limited to those for 0-4 year olds

Conducted survey of ~50 current students to learn about their views on post-graduation career options

Career interests

<table>
<thead>
<tr>
<th>Most desired career post-graduation</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE teacher</td>
<td>21</td>
</tr>
<tr>
<td>Govt agency</td>
<td>6</td>
</tr>
<tr>
<td>Non-profit</td>
<td>13</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
</tr>
</tbody>
</table>

40% of current students surveyed indicated a career as an ECE teacher was the most desirable post-graduation option

Salary expectations

<table>
<thead>
<tr>
<th>Salary expectations for possible careers</th>
<th>% of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE teacher</td>
<td>25%</td>
</tr>
<tr>
<td>Govt agency</td>
<td>20%</td>
</tr>
<tr>
<td>Non-profit</td>
<td>20%</td>
</tr>
</tbody>
</table>

Avg ECE teacher salary est.: $38K (similar to non-profit estimate)
- In reality, ECE teachers with Bachelors earn ~$20-30K

Influential factors in job selection

<table>
<thead>
<tr>
<th>Most influential factors in selecting job</th>
<th># of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job descrip</td>
<td>28</td>
</tr>
<tr>
<td>Salary</td>
<td>24</td>
</tr>
<tr>
<td>Stability</td>
<td>23</td>
</tr>
<tr>
<td>Culture</td>
<td>7</td>
</tr>
<tr>
<td>Location</td>
<td>7</td>
</tr>
<tr>
<td>Hours</td>
<td>6</td>
</tr>
</tbody>
</table>

~50% of respondents said compensation would be either the #1 or #2 most influential consideration when selecting a position

Students' expectations are not aligned with job market, especially with respect to factors (e.g., compensation) that are important to them

1. Number of students selecting job characteristic as first or second most influential factor. 2. Assumes unlicensed Bachelors in Child Development filling ECE teacher roles
Note: Survey specified ECE teacher is instructing children ages 0-4
Source: Survey of 50 current University of Memphis students pursuing Bachelors in Child Development, BCG analysis

Draft—for discussion only
...however, low compensation offered to ECE teachers often results in them pursuing other opportunities.

Interviews conducted with University of Memphis graduates (Bachelor of Professional Studies in Child Development and Family Studies) to learn about their job searches and current positions.

"I want a child life specialist job in a hospital. I can't pay off my college loans if I make $9-10 per hour in a day care center. Plus I went to school for four years, it's just not enough."

"I didn't look at jobs inside the classroom because I know jobs outside the classroom pay more and are a better fit for me. Porter Leath offers $17 per hour for pre-K family service workers, and I get to work with kids and families that need help."

"I worked at a day care center for $8 / hour when I was in school, but they didn't increase my pay after I graduated. Now, I make $12 / hour answering phones and scheduling appointments at a cancer center. I won't do it forever, but it's a better option for now."

"Of course, salary is a big deal. A lot of the girls in my class decided to go to grad schools so they could get better jobs working in early childhood. With our bachelors degrees right now, we could get more money working in retail than with kids."

"I used to work at a day care center, but there was no predictability in the hours. If not enough kids showed up that day, my hours would get cut short and I wouldn't get paid. It was completely unreliable so I left."

"Since we don't get teaching licenses, a lot of people also come in looking for other types of jobs – mostly working in the medical field as an early intervention specialist, speech pathologist, or in physical therapy for kids with developmental disabilities."

Graduates with a Bachelors in Child Development typically pursue non-teaching careers due to compensation and other interests.

Source: Interviews with 5 Bachelor in Child Development graduates from the University of Memphis
### 0-4 year old educator pipeline: credential overview

**Figures below reflect percentage of staff with that training level for a given center type**

<table>
<thead>
<tr>
<th>Childcare type</th>
<th>High school</th>
<th>High school + TECTA</th>
<th>CDA</th>
<th>ECE Certificate</th>
<th>Assoc. degree</th>
<th>Bach. degree</th>
<th>Bach. degree + license</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private day care</td>
<td>~40%</td>
<td>~20%</td>
<td>~40%</td>
<td>&lt;5%</td>
<td>&lt;5%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>NAEYC operated center</td>
<td>0%</td>
<td>~15%</td>
<td>~40%</td>
<td>&lt;5%</td>
<td>~15%</td>
<td>~30%</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>Early Head Start</td>
<td>0%</td>
<td>0%</td>
<td>~15%</td>
<td>&lt;5%</td>
<td>~20%</td>
<td>~55%</td>
<td>~10%</td>
</tr>
<tr>
<td>Head Start</td>
<td>0%</td>
<td>0%</td>
<td>~30%</td>
<td>&lt;5%</td>
<td>~25%</td>
<td>~40%</td>
<td>~5%</td>
</tr>
<tr>
<td>SCS Community Partner</td>
<td>0%</td>
<td>0%</td>
<td>~50%</td>
<td>&lt;5%</td>
<td>&lt;5%</td>
<td>~15%</td>
<td>~35%</td>
</tr>
<tr>
<td>SCS VPK</td>
<td>0%</td>
<td>~10%</td>
<td>&lt;5%</td>
<td>&lt;5%</td>
<td>~40%</td>
<td>0%</td>
<td>~50%</td>
</tr>
</tbody>
</table>

**Implications**

If a CDA is considered the "minimal" acceptable standard, private childcare centers will require support to
(a) hire new staff, or
(b) train current staff
- Only ~40% of staff in private centers have a CDA credential

In addition to support for private providers, capacity must be built for resources (e.g., courses) required to earn CDA by expanding TECTA’s CDA support program

---

1. Training listed from least to most rigorous. 2. Includes employees with high school graduation at most. 3. Training includes TECTA training or other short courses or workshops outside of a recognized credential. Also includes those who have passed the ParaPro Assessment

Note: Includes assistant teachers as well as lead teachers. Figures above are estimates based on expert interviews. Source: Interviews with Steering Committee members, TECTA, SCS
### 0-4 year old educator pipeline: compensation overview

All compensation figures adjusted to reflect hourly wage; figures represent starting wage for newly trained employees.

<table>
<thead>
<tr>
<th>Childcare type</th>
<th>High school</th>
<th>High school + TECTA³</th>
<th>CDA</th>
<th>ECE Certificate</th>
<th>Assoc. degree</th>
<th>Bach. degree</th>
<th>Bach. degree + license</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private day care</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>10</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>NAEYC operated center</td>
<td>NA</td>
<td>9</td>
<td>10</td>
<td>10</td>
<td>12</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>Early Head Start⁴</td>
<td>NA</td>
<td>NA</td>
<td>10</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>Head Start⁴</td>
<td>NA</td>
<td>NA</td>
<td>12</td>
<td>12</td>
<td>13</td>
<td>15</td>
<td>22</td>
</tr>
<tr>
<td>SCS Community Partner</td>
<td>NA</td>
<td>NA</td>
<td>11</td>
<td>12</td>
<td>12</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>SCS VPK</td>
<td>NA</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>NA</td>
<td>22</td>
</tr>
</tbody>
</table>

#### Implications

If 4-star and 5-star ratings require 60% and 80% of employees, respectively, to have at least CDAs, their staff costs will increase meaningfully.

For enough people to consider pursuing a CDA, wages may need to be raised to $12/hr, which would further increase costs for centers.

An average center could incur the following incremental costs annually to comply with new regulations:

- 4 star center: $45K
- 5 star center: $70K

---

1. Training listed from least to most rigorous. 2. Includes employees with high school graduation at most. 3. Training includes TECTA training or other short courses or workshops outside of a recognized credential. Also includes those who have passed the ParaPro Assessment. 4. Compensation shown is average of assistant teachers and teachers with same credential levels. Note: Includes assistant teachers as well as lead teachers. Figures above are estimates based on expert interviews. Source: Interviews with Steering Committee members, TECTA, SCS.
TECTA

TECTA (Tennessee Early Childhood Training Alliance) offers professional development and support to teachers working with children ages birth to 12 years old.

Any provider who works with children in licensed and regulated programs in Tennessee is eligible for the majority of TECTA services.

TECTA offers orientation sessions that consist of 30 hours of training in five different areas:
- Infant/toddler care (for teachers of children 0–3)
- Center based care (for teachers of children 3-5)
- Family child care
- School age care
- Child care administration (child care directors)

TECTA also offers other services, including support for individuals pursuing CDA, tuition assistance, accreditation assistance, etc.

Child Development Associate (CDA)

A CDA (Child Development Associate) is a national credential awarded by the Council for Professional Recognition.

In order to earn a CDA, candidates must:
- Be 18 years of age and have a high school diploma/equivalent
- 120 hours of formal early childhood education training in specific subject areas
- 480 hours of professional experience in the past 5 years working with children
- Complete Direct Assessment Application
- Meet with Professional Development Specialist to:
  - Review professional portfolio
  - Observe work with children
  - Reflect on areas of strength
- Complete multiple-choice CDA exam

Candidates interested in pursuing a CDA can receive support from TECTA to complete education requirements.
### ECE Certificate

The Early Childhood Education Technical Certificate program is offered at Southwest Tennessee Community College

- Prepares early childhood professionals by developing competencies in developmentally appropriate practices

The certificate requires completion of 7 courses (total of 20 credit hours):
- Intro to Early Childhood Education
- Safe, Healthy Learning Environment
- Early Childhood Curriculum
- Infant, Toddler, Child Development
- Family Dynamics and Community Involvement
- Clinical Practicum I (includes 45 clock hours in early childhood practical experience)
- Elective course

### Associates Degree

The Associate of Applied Science (AAS) in Early Childhood Education is also offered at Southwest Tennessee Community College

- Prepares students for career opportunities in ECE and specifically addresses the needs of assistant teachers in Head Start programs

The degree requires two-years of study (four semesters) and the completion of 60 credit hours

The program includes two required Practicum courses that require practical experiences of at least 145 hours
### Executive summary: both existing and new efforts should be considered to address the K-3rd teacher shortage

<table>
<thead>
<tr>
<th>Current K-3rd grade teacher shortage</th>
<th>Existing pipeline expansion efforts</th>
<th>Other pipeline expansion efforts for consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a nationwide shortage of K-12th grade teachers today</td>
<td>Districts are taking actions to increase teacher pipeline</td>
<td>Innovative approaches to expanding teacher pipeline can begin in high school</td>
</tr>
<tr>
<td>The shortage disproportionately impacts rural / low-income districts, including Shelby County</td>
<td>• Modifying application to be &quot;candidate friendly&quot;</td>
<td>• Launching Teacher Cadet course/program in high schools to expose students to practice of teaching</td>
</tr>
<tr>
<td>• There are still ~150 teacher vacancies in SCS today (including 60 elementary teacher vacancies)</td>
<td>• Reaching out to previous applicants</td>
<td>• Offering college scholarships for students who agree to teach in Shelby County for a certain number of years</td>
</tr>
<tr>
<td>• Vacancies caused in part by diminishing pipelines from Univ. of Memphis and other organizations</td>
<td>• Focusing on nearby states, especially where supply exceeds demand (e.g., Kentucky)</td>
<td>Other efforts can include adding more teacher leader roles that give skilled teachers more responsibility and increased compensation as a retention strategy</td>
</tr>
<tr>
<td>– For example, SCS had 95 TFA corps members last year, but only 57 members this year</td>
<td>• Targeting career changers</td>
<td>• Expanding partnership with Leading Educators</td>
</tr>
</tbody>
</table>

**External groups are also focusing on growth initiatives**

- Investing in recruiting and training talent through alternative pre-service programs:
  - Teach for America
  - Relay/GSE
  - Enhancing brand of teaching in Memphis (e.g., billboards, www.teach901.com)

Source: Shelby County Schools, Steering Committee member interviews, Teacher Town, NPR, New York Times, US News & World Report

Draft—for discussion only
There is a significant shortage of elementary school teachers in Shelby County today

There is a nationwide shortage of K-12th grade teachers that exists today

- During the economic downtown, several college students chose to pursue careers in teaching which were perceived to be more stable
- In the last few years as the economy has recovered, fewer graduating college students are joining the workforce as teachers
- In select teaching programs, enrollment is down more than 50% over the past five years
- This shortage disproportionately impacts rural and low-income districts, including Shelby County

Furthermore, there is significant evidence of a teacher shortage in Shelby County

- Shelby County Schools typically makes 600-800 external hires annually
- SCS had 50 teacher vacancies on first day of in-service, and 70 teacher vacancies on the first day of school
  - Vacancies can increase during the school year as retirement dates are not aligned with the school year
- Today, there are still 150 teacher vacancies in SCS (including 60 elementary teacher vacancies)
- Vacancies are caused in part by diminishing pipelines from the University of Memphis and other organizations (both traditional and alternative pre-service programs)
  - For example, SCS had 95 TFA corps members last year, but only 57 members this year

Source: Shelby County Schools, Steering Committee member interviews, NPR, New York Times, US News & World Report
Existing efforts have provided initial momentum around expanding the talent pipeline in Shelby County

**District-led efforts**

Districts try to fill teacher vacancies with certified substitutes in the short-term

- However, if and when certified substitutes are found, they are often not certified in their assigned grade/subject

Application process being revisited in an effort to increase number of submissions:

- Teacher application process previously designed to "weed" candidates out, and is being modified to be more "candidate friendly" (e.g., reducing time to complete application from 3 hours to 1 hour)

District is also targeting new pipelines as a result of the teacher shortage:

- Reaching out to previous applicants
- Participating in career fairs for educators
- Focusing on other nearby geographies, especially those where teacher supply exceeds demand (e.g., Kentucky)
- Targeting career changers
  - However, new regulations no longer allowed to directly apply for teaching licenses, making this difficult

**External efforts**

Teacher Town has developed partnerships with a number of organizations to encourage potential candidates to pursue teaching careers in Memphis:

- Rigorous summer training program and student teaching experience, followed by coaching and development throughout a two-year commitment to serve as a teacher in a high-need school
- One-year program with a Masters in Urban Education, an internship in the classroom, support from a coach, and a commitment to teach in a Memphis school for 3 years
- Two-year program with a structured and gradual on-ramp into teaching, including a Masters of Arts in Teaching and certification for a teaching position at a public school in Memphis

1. Based on efforts in Shelby County Schools
Source: Interviews with Shelby County Schools, Teacher Town, and Pyramid Peak
Teacher Town-facilitated efforts have targeted increasing awareness and enhancing the brand of teaching

In addition to developing partnerships with organizations to recruit teachers, Teacher Town also works alongside organizations to: 1) enhance awareness and marketing efforts targeted at teachers; 2) help new teachers adapt to Memphis; 3) promote professional development opportunities for teachers; and 4) play an advocacy role to influence legislation and community narrative.

Improve respect and prestige of teaching through high profile marketing efforts

Previously implemented a high profile marketing campaign in Memphis to transform how the city views teachers.

The "I teach. I am" campaign showed the faces of 20 of Memphis' best teachers on billboards, in-school posters, social media, and other mediums.

Support district marketing and recruiting of teachers through a centralized website

Partnered with City Leadership to develop a state of the art website to promote teaching in Memphis and connect candidates to open positions (www.teach901.com).

The website markets the "Teacher Town, USA" mission to become the hub for excellent teaching and highlights the positive aspects of living in Memphis.

There are several innovative approaches to expanding the talent pipeline for teachers beginning in high school.

**Teacher Cadet Program**

The Teacher Cadet program exposes talented high school students in select states to teaching and encourages them to pursue it as a career.

- Offered as a dual credit course (high school and college credit) in some states
- Typically taught for a minimum of one class period per day for a year
- Some programs include a “field experience” where high school students work in elementary schools to get exposure to a real classroom
- Program currently in place in Arkansas, North Carolina, and South Carolina

**Impact**

- In North Carolina, 25%+ who were Teacher Cadets in high school became Teaching Fellows (scholarship program for top students training to be teachers)

**Golden Apple Scholars**

The Golden Apple Scholars identifies talented high school seniors (and first and second-year college students) who have the promise and drive to be excellent teachers in high-need schools.

- Awarded significant tuition assistance to attend select colleges
- Participate in teaching internships and seminars on the art and craft of teaching through a residential Summer Institute
- Receive mentorship from a Golden Apple teacher
- Scholars agree to teach for five years in an Illinois School of Need

**Impact**

- 82% of Golden Apple Scholars teach 5+ years in schools of need

---

1. Tuition assistance converts into a loan if five year teaching requirement is not completed

Source: Teacher Cadet Program (North Carolina, South Carolina, Arkansas); Golden Apple Scholars Program
Teacher-leader roles can be implemented as a retention strategy for high-quality teachers

Teacher-leader roles (e.g., grade chairs, curriculum coordinators, etc.) allow high-performing teachers to assume roles where they are able to help individual teachers improve instructional delivery and student outcomes

- **Leading Educators**, which now has a presence in Shelby County, provides rigorous training to prepare teacher-leaders to manage, coach, and lead other teachers

Teacher-leader roles can be used as a retention strategy, as they allow high quality talent to take on more responsibility, support school leadership, receive higher compensation, and extend their reach

- Example of annual stipend for teacher selected to be teacher-leader: ~$2,500

In addition to retaining strong talent, districts with teacher-leaders have shown significant student progress

**Impact**

Reading performance for students targeted by Leading Educators Fellows (2013-2014)

- **Beginning of Year**
  - Above grade level
  - On grade level
  - Below grade level

- **End of Year**
  - Above grade level
  - On grade level
  - Below grade level

Source: Leading Educators, Education Week
Elements for a successful place-based effort to drive quality improvement across birth to 3rd grade continuum

A place-based model provides coordinated education, support services and infrastructure in an identified neighborhood to support a child's holistic growth across the birth to 3rd grade continuum.

**Alignment of curriculum and pedagogy**
- Alignment of curriculum, pedagogy and teacher planning across continuum
- Builds parents' trust and sets expectations as child moves through continuum
- Eases children's transitions between levels

**Professional development of early educators**
- Builds cohorts of leaders amongst providers
- Provides targeted PD towards administrators
- Develops provider capacity to conduct screeners
- Can pilot an "iconic" center within neighborhood

**Family awareness and support**
- Provide family intervention support (e.g., case mgmt, medical, screeners)
- Pilot new models of in-home supports (e.g., mobile push messages, Nurturing Baby Program)

**Understanding of neighborhood demand and supply**
- Develop understanding of families' barriers to enrollment in high quality early child care
- Test targeted solutions to address barriers
- Increase number of high quality providers over time

**Enablers to drive a place-based effort**
- **Leadership driven collaboration and alignment**: A single lead organization that establishes goals, roles, oversees progress and captures lessons learnt
- **Adequate resources** to test full set of elements within a neighborhood
- **Measurement**: Track progress (including intermediary indicators to 3rd grade proficiency) relative to a control group, with results being used to inform continuous improvement within the model
Criteria for selecting place-based locations

**Criteria for choosing location**

- **High-needs area**
  - Low median household income

- **Presence of providers and partners** who can take on leadership roles

- **Existing Efforts**
  - Place-based efforts already underway that can help accelerate progress

- **Base level of community infrastructure**

**Methodology**

- **Overlay zip codes** (placed into quartiles based on median household income) **with:**
  - **Existing place-based efforts**: e.g., Knowledge Quest, Universal Parenting Places, Project Launch sites, ESC-supported programs
  - **Early Head Start and Head Start run by Porter Leath**
  - **Existing professional development for child care providers**: SCS Early Learning Center, Memphis Public Library
  - **Schools with some existing place-based efforts**: e.g. Frayser and Germanshire
Confluence of some existing place-based elements in Frayser (38127) and South Memphis (38106)

Potential launch sites:
- Frayser (38127)
- South Memphis (38106)

Leadership-driven collaboration and policies to support student pipeline
- Frayser
- Germanshire Elementary School

Professional development of early educators
- Memphis Public Library
- SCS Ridgeway Early Learning Center

Family awareness and support
- Project Launch sites
- Knowledge Quest zone (Learning Academies)
- Universal Parenting Place
- ESC-supported Nurturing Baby program

Head Start Centers run by Porter Leath
- Early Head Start
- Head Start

Median Household Income
- First quartile >65k
- Second quartile >36k to <65k
- Third quartile >31k to <36k
- Fourth quartile <31k

Source: Program websites, US Census
## Place-based elements currently underway in Shelby County

<table>
<thead>
<tr>
<th>Element</th>
<th>Existing place-based effort</th>
<th>Neighborhoods</th>
</tr>
</thead>
</table>
| Leadership-driven collaboration | • Principal of Germanshire Elementary School recruits Kindergarten students from nearby Ridgeway Early Learning Center's pre-K classrooms  
• ASD changed compliance standards to hold operators accountable to pre-K programs | • Germanshire  
• Frayser |
| Professional development of early educators | • SCS's Early Learning Center offers directors and providers of 3 star-centers professional development training on assessments and curriculum  
• Memphis Public Library offering provider training | • Hickory Hill  
• South Memphis |
| Family awareness and support | • Universal Parenting Places hold counseling sessions for families to support behavioral and emotional development of children  
• Knowledge Quest runs 5 Learning Academies (after-school care) for pre-K onwards  
• Project Launch supports case management of "at-risk children", and mental health consultation for children through providers  
• ESC-led Nurturing Baby program provides home visits by nurse to family of newborn (to be launched in 2016) | • South Memphis, East Memphis  
• South Memphis  
• South Memphis  
• South Memphis |

Source: Program websites, BCG interviews
Frayser (38127) has a strong network of early childcare, schools, and wraparound supports

Existing placed-based efforts in Frayser (38127)

- 8 ASD schools from pre-K to grade 12, with case management support from Agape (The Achievement Schools Network operates 5 out of the 8 schools)
- Porter Leath offering 3 Early Head Start and Head Starts together with family service staff providing family wraparounds

Illustrative examples on how to build out more holistic place-based effort

**Leadership:** Appoint an organization already operating in neighborhood (such as organizations mentioned on the left hand side of slide) to take on leadership role

Organization to take **lead for driving alignment of curriculum and pedagogy** between age spans; and working with parents of children aged 0-3 to **increase awareness of pre-K+ options** in Frayser

**Professional Development:** Provide **professional development training** for early childhood educators at a local center (e.g. Library, School, Head Start) on effective child-teacher interactions and developmentally-appropriate activities (consider centralizing across existing efforts and boosting overall capacity)

**Family awareness and support:** Consider extending Project Launch case management and referral services to families in Frayser

**Pilot direct supports to families** (e.g. mobile-based support services) and work with families to refine program and improve efficacy

**Develop understanding on barriers to enrollment** to quality early care and test solutions (e.g. run parent focus group)

**Robust set-up:** Develop a **clear baseline of current student performance** at third grade and intermediary indicators (e.g. 1st and 2nd grade Istation results) within Frayser and track progress

Begin efforts to secure **catalytic funding** to support testing additional place-based elements (e.g. professional development, focus groups)

Source: Program websites, BCG Interviews
South Memphis (38106) has variety of family support services, quality education and provider training

Existing placed-based efforts in South Memphis

- Knowledge Quest Learning Academy (after-school care) for grade 2-12
- Porter Leath offering 2 Early Head Start and Head Start centers with family service staff providing family wraparounds
- Early childcare provider training offered through Public Library and Project Launch
- ESC-led Nurturing Baby program to be launched

Illustrative examples on how to build out more holistic place-based effort

**Leadership:** Appoint an organization already operating in neighborhood (such as organizations mentioned on the left hand side of slide) to take on leadership role.

**Organization** to take on the lead for driving alignment in curriculum and pedagogy between age spans, and increasing parental awareness across levels

**Policies:** Advocate for "opt-out" option for parents regarding wraparound services, to facilitate referral of children to services based on child's performance

**Professional Development:** Consider piloting a 'one-stop shop' professional development center in neighborhood for early childcare providers that covers early literacy skills, use of screeners, etc. Alternatively, build a South Memphis cohort within SCS Early Learning Academy

**Family awareness and support:** ESC can leverage Nurturing Baby program to reach out to parents, and understand barriers to enrollment to quality early care and test solutions

**Robust set-up:** Develop a clear baseline of current student performance at third grade and intermediary indicators (e.g. 1st and 2nd grade Istation results) within South Memphis and track progress

Begin efforts to secure catalytic funding to support testing additional place-based elements (e.g. professional development, focus groups)

Source: Program websites, BCG Interviews
## Community-based efforts to integrate early childcare into the pre-K+ system

### Limited alignment between early care providers and pK+ system in Shelby County today

"Care for ages 0–3 is seen as glorified babysitting, with no focus on actual education of child … pre-K is when it actually starts"

"You can tell when a child has exposed to a high quality early childcare environment … because it easier to assimilate them into the classroom … unfortunately, it doesn't happen very often"

### What two communities are doing to bridge the gap

#### Salt-Lake City Community Centers

- Community centers built in two low-income neighborhoods situated between elementary and middle schools, in Salt Lake City, Utah
- Pre-K **classrooms for 3 year olds** and wraparound services (including Parents as Teachers program) housed in community centers
- Usage of **same Creative Curriculum** for 3 to 4 year olds
- Families of 3 year olds invited to attend **parent-child classes** to understand curriculum and expectations
- In beginning of program, 40% of three year olds are meeting developmental milestones; after one year, 60% are meeting milestones

#### Drew Charter School

- Charter school serving children (birth to 18) with a strong focus on early literacy and language, in East-Lake Atlanta
- **Early learning academy with 5 classrooms for children age 0 to 3** housed at local YMCA
- Academy **focuses on developing language skills** to help children transition to literacy focus at pre-K level
- Drew Charter's **Literacy Center** develop aligned pedagogy methods for all levels
- Drew Kindergarteners perform 2-3x higher on AimsWeb measures (eg letter name & sound fluency) than peers
- 85% of Drew 3rd graders come in meeting or exceeding expectations (driven by strength of early learning)

**Source:** BCG Interviews
We have a starting point for measurement and data infrastructure in Shelby County

What we are working towards

- State ED-FI platform as base infrastructure for broader birth to 18 data mart
- Integration of data from districts through or alongside the state's ED-FI platform (ChildPlus currently being used across districts to track K-readiness, but does not link into K-12 PowerSchool Student Information System)
- Data-sharing agreements between school districts and service providers
- Timely and accurate tracking of student participation performance data, etc to improve practice and services
- Capacity building of staff in districts and providers to analyze data for continuous improvement
- User-friendly dashboards that display aggregated information and protect student level information

Where we are today

Progress underway

- State’s ED-FI platform being developed with planned integration with the ASD
- SCS developing own ED-FI platform
- Seeding Success building a data mart and capacity through training lead authorized data users at partner organizations (grant supported over next 1.5 years)
- Seeding Success also providing direct resource capacity to partners
- CoactionNet building out case management system

Potential constraints

- Schools and providers primarily using data for compliance not continuous improvement
- Need to ensure two ED-FI systems are seamlessly linked
- Today, most districts and schools are not focused on this type of analysis (research departments primarily focused on grants, compliance)

Source: BCG Interviews
CoactionNet being piloted across three zip-codes for case management but no direct linkages with other data systems

"Journey" of a family enrolled in the ESC program

Current Progress
- Has 600 children under 2 and 1400 children under 17 in system
- 5 out of 25 ESC agencies participating

Current Challenges
- No data-sharing agreements with school system and dependent on agencies' own agreements with schools (e.g. AGAPE has agreement with ASD)
- Agencies are not yet familiar with use of data to inform decisions
- CoactionNet has no input on data submitted; difficult for CoactionNet to take more proactive role in conducting program evaluations
- Funding for CoactionNet uncertain beyond 5 year Project Launch funding, may have to move to self-sustaining fee-based model

About CoactionNet
- On-line case management system for agencies
- Coordinates services and interagency referrals for shared clients to help streamline process
- Record family and individual client information including demographic information, past appointments, and past referrals
- Collects data for program evaluation (efficacy analysis still in early stages)
- Currently piloted in three zip codes

Source: BCG Interviews, Project Launch website

Draft—for discussion only
Data and analytics can be used by early childhood stakeholders to inform quality improvement decisions

### Illustrative near-term use cases

(based on readiness of infrastructure and capacity building)

<table>
<thead>
<tr>
<th>Service Providers</th>
<th>Early Childhood Governance</th>
<th>Philanthropy</th>
<th>District Leadership</th>
<th>Principals</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence of service effectiveness to inform modifications to program to produce greater impact</td>
<td>Showcasing of positive outliers to shine spotlight on best practices and encourage local collaboration</td>
<td>Data to inform which investments have brought greatest gains to students to inform allocation of funding across the cradle to career continuum</td>
<td>Assessing aggregate teacher performance data to understand what needs are common across teachers, and how to tailor PD accordingly</td>
<td>Understanding students' prior participation in programs and services in order to inform stating point of students and how to tailor instruction appropriately</td>
<td>Use of formative assessments to inform small group instruction</td>
</tr>
<tr>
<td>Timely data (e.g. course attendance or test scores) to help identify students and required types of services and interventions</td>
<td>Evidence around effectiveness of programs to inform continuous improvement</td>
<td>Understanding effectiveness and parameters of success of programs to inform whether to expand scope and how to replicate programs across more schools/sites</td>
<td>Showcasing of positive outliers to shine spotlight on best practices and encourage collaboration between teachers and schools</td>
<td>Aggregated and segmented student growth to prioritize resource allocation towards high impact levers</td>
<td></td>
</tr>
</tbody>
</table>

### Illustrative longer-term use cases

| Source: BCG analysis and interviews |
Commit! efforts in Dallas to increase familiarity and trust around data collection and elevate strategic use

Phased approach to secure buy-in

Developing trust with agencies
- Adopted a phased approach in use of data – first built comfort around what was being measured and why, and data accuracy
- Showed results in aggregate vs. agency-specific
- Once trust and understanding was reached, showed and analyzed data with more granularity

Investing in resources
- Hiring of data analytics and data visualization team

Data visualization
- Using data tools to layout data in an easy-to-interpret manner to inform continuous improvement and more informed decisions on scale-up

Highlighting positive outliers
- Showcasing agencies which have performed well to celebrate successes; use of data as a "spotlight" rather than a "hammer"

Enabling community to use data
- Set up of web-based data dashboard available to general public

Building a community-ready dashboard

- User-friendly interface
- Data sorted at campus, district level
- Specific data-pulls available (e.g. students counts by grade, teachers experiences percentages, SAT/ACT % taking)

Note: Commit! is a backbone organization in Dallas that is supporting a coalition of stakeholders in making progress on the cradle-to-career continuum
Source: BCG interview and Commit! website
Policy advocacy will require the collaboration of many partners to work together to drive change.

Each recommendation with policy implications will need a coalition of stakeholders (at the local and state levels) to come together to advocate for policy change. As the backbone, PeopleFirst will help convene stakeholder coalitions in support of policy advocacy and implementation.

Each stakeholder coalition involved with policy advocacy will assume the following roles:

- **Develop partnerships**: Identify and capitalize on relationships in their network that have expertise/influence to aid in policy change (e.g., statewide organizations) and involve them in the effort.
- **Make the case**: Bring expertise of each stakeholder group to the combined body to make an effective case for policy change (e.g., data on existing programs).
- **Build awareness and support**: Raise the issue with local and state officials to generate interest and support, respond to potential concerns, understand potential risks and work to mitigate them.
- **Draft policy**: Contribute to drafting of policy proposal that can be used as a starting point in legislative sessions.
- **Support implementation**: Once policy has passed, assist government agencies or other organizations with implementation and other challenges that may arise.
Social impact bonds can serve as innovative funding source

What is it?

- Government sets a performance outcome and will pay a third party if the organization meets that target
- Investors only fund social programs, which have been proven and externally validated against a control group
- Targets are tied to tangible cost avoidance (e.g. reduction in the number of children who require special education)
- First piloted in the UK in 2010
- Goldman Sachs Social Impact Fund especially active in this space in the U.S.

Out of the 50 projects in development in the U.S., 5 projects implemented so far, and 2 currently underway in early childhood

### Utah High Quality Pre-School Initiative

- $7 million bond funded by Goldman Sachs and Pritzker Family Foundation (started in 2013)
- Implemented by United Way
- Funds 3,500 students in program focused on increasing school readiness among at-risk 3 and 4 year olds
- Performance outcome: number of children that require special education or remedial action after pre-K
- Positive results in 2015: Only 1 of expected 110 students needed special education

### Chicago Child-Parent Center Pre-School Initiative

- $16.9 million bond funded by Goldman Sachs and Pritzker Family Foundation (started in 2014)
- Implemented by Chicago Public Schools
- Supports the expansion of the Child-Parent Center model to 2,620 children
- Performance outcome: number of children that are kindergarten ready; require special education after pre-K; score above national average for 3rd grade reading

---

1. Utah districts are given a fixed payment of $2,600/student to provide special needs/remedial education. If the state realizes avoided costs due to the program, Goldman Sachs and Pritzker will receive a portion of the savings (95%, or $2,470 per child through 6th grade and 40% or $1,040 per child after)

Source: BCG Interview, Program websites, NYTimes