Maryland Early Childhood Risk and Reach Assessment

Sarah Daily, Kate Welti, Nicole Forry, & Laura Rothenberg Child Trends

September 30, 2012

Introduction

The years prior to school entry present a critical developmental opportunity for young children. Research has shown high quality early care and education programs that adopt a comprehensive approach to child development are effective facilitators of school readiness and long-term outcomes for disadvantaged children. For example, effective early care and education programs have led to outcomes such as improvements in academic performance, higher earnings, and lower levels of criminal behaviors later in life. Research has provided a compelling argument for investments in high quality early care and education programs, particularly programs targeted to young children most at-risk for later school failure. As policymakers continue to increase access to early care and education programs, they also seek innovative strategies to target limited resources towards programs that can provide the most benefit to young children at highest risk for negative outcomes.

One type of needs assessment specifically designed to help policymakers make strategic decisions about future investments in early childhood is a "risk and reach assessment." A "risk and reach assessment" enables stakeholders to review regional- or county-level data that identifies the greatest areas of need or "risk" as specified by selected indicators such as poverty status, low birth weight, low maternal education, or other indicators of interest to the state. These findings are then compared with "reach" data that may include the type and location of selected early childhood programs, capacity, and utilization rates. Pennsylvania was the first to pilot this type of assessment in 2006⁵ and the District of Columbia has conducted risk and reach assessments annually since 2009. As required by the *Head Start Reauthorization Act* of 2007, all state Early Childhood Advisory Councils are required to, "conduct periodic needs assessment of the quality and availability of early childhood education and development programs... for low-income children in the state." As a result, more states are exploring the use of a risk and reach assessment to inform recommendations for future state investments.

Purpose of this Report

The purpose of the *Maryland Early Childhood Risk and Reach Assessment* is to analyze family risk indicators that may affect educational outcomes and the reach of Maryland's network of early childhood programs, which may address or mitigate those risks. While this report does not provide a comprehensive overview of all early childhood programs in Maryland, it does highlight the density and

⁷ Head Start Reauthorization Act, P.L. 110-134, 2007. Section 11: Early Childhood Coordination and Improvement. For more information see: http://eclkc.ohs.acf.hhs.gov/hslc/standards/IMs/2008/resour_ime_001_010308.html



¹ Shonkoff, J. & Meisels, S. (2000). Early childhood intervention: A continuing evolution. In J. P. Shonkoff & S. J. Meisels (Eds)., The handbook of early childhood intervention, 2nd edition (pp. 3-31). Boston, MA: Cambridge University Press.

² Halle, T., Forry, N., Hair, E., Perper, K., Wandner, L., & Vick, J. (2009). Disparities in early learning and development: Lessons from the early childhood longitudinal study – birth cohort (ECLS-B). Washington, DC: Child Trends.

³ Brooks-Gunn, J., Fuligni, A. S., & Berlin, L. J. (2003). Early child development in the 21st Century: Profiles of current research initiatives. New York, NY: Teachers College, Columbia University.

⁴ Burr J. & Grunewald, R. (2006). Lessons learned: A review of early childhood developments studies. Minneapolis, MN: Federal Reserve Bank of Minneapolis.

⁵ For more information on Pennsylvania, see: http://www.pakeys.org/pages/get.aspx?page=EarlyLearning Reach

⁶ For more information on DC, see: <u>http://osse.dc.gov/publication/early-childhood-risk-and-reach-analysis-2010</u>

capacity of select programs that have been associated with positive academic/pre-academic outcomes for children. Likewise, the full universe of possible child and family risk factors is not considered. Rather, specific risk factors were selected based on literature that relates each indicator to children's education and well-being, and the availability of data at the county level. A comparison of county-level risk and reach indicators are presented with the intention of informing state- level decisions about how to target funding to high need areas. This information can also help counties across Maryland develop a better understanding of their early care and education programming needs.

Methodology

There are three parts to the risk and reach assessment presented in this report. First, family risk indicators that can potentially affect child outcomes are identified for each county in Maryland. The prevalence of selected risk factors is then used to assign each county an "average risk level." Next, the capacity and quality of specific early care and education programs are identified by county. These data comprise the assessment of Maryland's "reach." The final step in the assessment includes identifying the prevalence of "at-risk" children in various risk categories by county and the number of children who are served or who can be served through various early childhood programs. Comparing both risk indicators and reach data together can help to identify the counties in greatest need for future early care and education investments. For more information about the data sources used in this assessment, see the Methodology Box at the end of this report. Note that for the purposes of this report, Baltimore City is categorized as a county and Baltimore county is included as its own jurisdiction and does not include data from Baltimore City. The terms jurisdiction and county are used interchangeably throughout the report to include all counties and Baltimore City.

Risk Factors

While there are a wide range of factors that can affect developmental outcomes for children, this report focuses on ten selected indicators. These risk indicators were selected based on their relevance to children's educational outcomes and the availability of data at the county-level. Data included in this report were obtained from: the 2010 Decennial Census, the 2008-2010 American Community Survey 3-Year Estimates, 2009 and 2010 Vital Statistics data, the 2012 Kids Count Report for Maryland, and the Maryland State Department of Education.

Percentage of children under age five living in families below the poverty level

Children who grow up in poverty, especially when experienced early in the child's life and over a prolonged period of time, fair worse on tests of cognitive abilities than their more affluent peers. In 2010, a family of four was considered to be living at or below the federal poverty level if they earned \$22,314 or less. Based on the 2008-2010 American Community Survey 3-Year Estimates, Kent had the highest percentage of children under the age of five living in families below the poverty level (36.5%) in the state. Kent was followed by: Allegany (29.0%), Worcester (28.5%), and Garrett (26.6%).

Percentage of births to unmarried mothers

Research indicates that children born to single mothers face a higher risk of experiencing instability in living arrangements, living in poverty, and having socio-emotional problems later in life. ¹⁰⁻¹³ In 2010, the

Thomas, Adam and Isabel Sawhill. (2005) "For Love and Money? The Impact of Family Structure on Family Income. *The Future of Children*, 15.



⁸ Brooks-Gunn, J., & Duncan, G. J. (1997). The effects of poverty on children. Future of Children, 7, 55-71.

⁹ U. S. Census Bureau. (2010). Preliminary estimate of weighted average poverty thresholds for 2010. Retrieved from http://www.census.gov/hhes/www/poverty/data/threshld/.

national estimate of births to unmarried mothers was 41%, according to National Vital Statistics data. ¹⁴ In Maryland, the counties with the highest percentage of births to unmarried mothers appear in Baltimore City (67.2%), Somerset (64.2%) and Dorchester (63.3%). It is important to note that the percentage of births to unmarried mothers was over 50% in seven (nearly one-third) of Maryland's 24 counties, including Baltimore City.

Percentage of births to teenage mothers

Children born to teen mothers are more likely to perform poorly on tests of cognitive ability and are more likely to be retained a grade than children born to older mothers. ¹⁵ According to the National Vital Statistics, the national average of births to teenage mothers (age 19 and under) in 2010 was 10%. ¹⁶ The Maryland jurisdictions with the highest percentage of births to teenage mothers include: Somerset (17.0%), Dorchester (15.0%), Baltimore City (13.7%), and Allegany (12.5%).

Percentage of births to mothers with less than 12 years of formal education

Research demonstrates that children born to mothers with higher levels of education are more likely to excel in areas such as school readiness, educational achievement, and pro-social behaviors.¹⁷ National Vital Statistics data indicate that in 2008, 22% of women who gave birth in the U.S. had completed less than 12 years of formal education.¹⁸ In Maryland, the jurisdictions with the highest percentage of births to mothers with less than 12 years of formal education include Baltimore City (25.1%), Caroline (24.9%), and Dorchester and Somerset (22.6% and 22.3%, respectively).

Percentage of low birth weight infants

Even after accounting for demographic factors such as family income, research demonstrates that low birth weight children score significantly lower on tests of cognitive abilities than normal birth weight children.¹⁹ Studies have shown that, later in life, low birth weight children are more likely to struggle with mental arithmetic, visual-motor and fine motor skills, spatial abilities, expressive language, and memory.²⁰ The national average of low birth weight infants born in 2010 was 8%, according to National Vital Statistics data.²¹ In Maryland, the following counties had the highest percentage of low birth

²¹ Martin, J. A., Hamilton, B. E., Sutton, P. D., Ventura, S. J., Matthews, T. J., & Osterman, M. J. K, Wilson, E. C., and Mathews, T. J. (2012). Births: Final data for 2010. *National Vital Statistics Reports*, *61*(1), 1-100.



¹¹ Haveman, R., Wolfe, B., & Pence, K. (2001). Intergenerational effects of nonmarital early childbearing. In L. L. Wu, & B. Wolfe (Eds.), Out of wedlock: causes and consequences of nonmarital fertility. New York, NY: Russell Sage Foundation.

¹² Demo, D., and Cox, M. (2000). Families with young children: A review of research in the 1990s. *Journal of Marriage and the Family*, 62(4) 876-895.

¹³ McLanahan, S. and Sandefur, G. (1994). Growing up with a Single Parent: What Hurts, What Helps. Cambridge, MA: Harvard University Press.

¹⁴ Martin, J. A., Hamilton, B. E., Sutton, P. D., Ventura, S. J., Matthews, T. J., & Osterman, M. J. K, Wilson, E. C., and Mathews, T. J. (2012). Births: Final data for 2010. *National Vital Statistics Reports*, *61*(1), 1-100.

¹⁵ Moore, K.A., Morrison, D.R., & Greene, A.D. (1997). Effects on the children born to adolescent mothers. In R. Maynard (Ed.), *Kids having kids* (pp.145-180). Washington, DC: The Urban Institute Press.

¹⁶ Martin, J. A., Hamilton, B. E., Sutton, P. D., Ventura, S. J., Matthews, T. J., & Osterman, M. J. K, Wilson, E. C., and Mathews, T. J. (2012). Births: Final data for 2010. *National Vital Statistics Reports, 61*(1), 1-100.

¹⁷ Child Trends DataBank (2010). Parental Education. Retrieved from www.childtrendsdatabank.org/?q=node/183

¹⁸ Martin, J. A., Hamilton, B. E., Sutton, P. D., Ventura, S. J., Matthews, T. J., & Osterman, M. J. K. (2010). Births: Final data for 2008. *National Vital Statistics Reports*, *59*(1), 1-71.

¹⁹ Hack, M., Klien, N. K., & Taylor, H. G. (1995). Long-term developmental outcomes of low birth weight infants. *The Future of Children: Low Birth Weight, 5*.

²⁰ Ibid.

weight infants: Baltimore City (11.6%), Fredrick (11.2%), Somerset, Charles, and Prince Georges counties (10.1%, 10.0%, and 10.0%, respectively).

Percentage of births to mothers who did not receive prenatal care

Mothers who have insufficient prenatal care are at a higher risk of having children with poor early childhood cognitive and language skills, particularly when the mothers engage in risky behaviors such as drinking, smoking, or drug use while pregnant.²² In Maryland, the jurisdictions with the highest percentages of births to mothers who did not receive adequate prenatal care include: Prince George's county (46.0%), Washington county (36.0%), Baltimore City (35.1%), and Charles, Wicomico, and Baltimore counties (33.4%, 32.6%, and 31.6%, respectively).

Uninsured Children

Research demonstrates that children's healthy development is essential to school readiness, academic success, and overall well-being.²³ However lack of access to affordable health care can impede children's healthy development. In 2010, nearly 6% of all children in Maryland under the age of five lacked any type of health insurance, including Medicaid or State Children's Health Insurance Program (SCHIP).²⁴ The Maryland counties with the highest percentage of uninsured children include Kent (7.3%), Garrett and Caroline (both 7.0%), and Worcester (6.9%).

Children Not Ready for Kindergarten

School readiness is a term used to define children's physical, social-emotional, cognitive, and language development. Children who start kindergarten demonstrating the skills and abilities necessary for school entry are more likely to stay on track with their classmates throughout their educational careers.²⁵ In the 2011-2012 school year the five counties that had the highest percentage of children considered approaching readiness²⁶ or developing readiness²⁷ on the composite measure of the Maryland Model for School Readiness kindergarten school readiness portfolio-based assessment²⁸ include: Baltimore City (35.5%), Washington (33.5%), Prince George's (33.0%), Cecil (32.0%) and Talbot (30.5%) counties.

Title I School Status

Title I, Part A (Title I) of the Elementary and Secondary Education Act provides financial assistance to local educational agencies and schools with high numbers or high percentages of children from low-income families to help ensure that all children meet challenging state academic standards. Alone, Title I status is not necessarily a risk factor, however, it is one indicator of the socio-economic status of the families attending that school. Nationally 61.7% of all elementary schools received Title I funds in the

²⁸ The Maryland Model for School Readiness composite measure includes assessments of children's academic abilities (language/literacy, mathematical thinking, scientific thinking, and social studies), personal and social development, the arts, and physical development.



²² Boccanfuso, C., Moore, K. A., & Whitney, C. (2010). Ten ways to promote educational achievement and attachment beyond the classroom. Washington, DC: Child Trends.

²³ Johnson, K., & Rosenthal, J. (2009). Improving care coordination, case management, and linkages to service for young children: Opportunities for states. Portland, ME: The National Academy for State Health Policy.

²⁴ KIDS COUNT. (2009). Children without health insurance by age group – 2009. Baltimore, MD: The Annie E. Casey Foundation.

²⁵ Haskins, R., & House, C. (2005). Closing achievement gaps. Policy Reports. Princeton, NJ: The Future of Children.

²⁶ Approaching Readiness means students inconsistently demonstrate skills, behaviors, and abilities which are needed to meet kindergarten expectations successfully and require targeted instructional support in specific domains or specific performance indicators.

²⁷ Developing Readiness: Students do not demonstrate skills, behaviors, and abilities, which are needed to meet kindergarten expectations successfully and require considerable instructional support in several domains or many performance indicators

28 The Maryland Model for School Readiness composite measure includes assessments of children's academic abilities

2007-2008 school year. ²⁹ All schools in Caroline and Somerset counties (n = 5 and n = 4, respectively) received Title I funding in the 2012-2013 school year. Baltimore City (88.2%), Garrett (87.5%), and Kent (83.3%) had the next highest percentages of Title I elementary schools.

Title I Schools with School Improvement Plans

Schools receiving Title I funding that fail to meet Adequate Yearly Progress (AYP) benchmarks are automatically identified for school improvement, which may include corrective action or restructuring, and the provision of resources targeted to help children achieve AYP. Half of Maryland's districts had at least one Title I elementary school that qualified for School Improvement. Dorchester (75%), Baltimore City (51.5%), and Prince George's county (52.1%) had the highest percentages of schools implementing improvement plans.

Table 1. Selected Risk Indicators, by County

| Table 1. Sele | ctea Kisk i | naicators, | by County | | | | | | | | | |
|---------------------|--|---|--|--|---|--|--|--|--|--|---|---|
| County | # of Children Under 5 (2010) ¹ | % Population Under 5 (2010) ¹ | % Children Under 5 Living in Families Below Poverty Level ² | % Births to Unmarried Mothers (2010) ³ | % Births to Teen Mothers (2010) ³ | % of Births to Mothers with Less than 12 Years of Formal Education (2009) ⁴ | % Low Birth Weight Infants (2011) ⁵ | % Births to Mothers who Did Not Receive Prenatal Care (2010) ⁵ | % of Uninsured Children (2010) ⁵ | % of Children Not Considered Ready for Kindergarten (2011-2012) ⁵ | % of Title I Bemenatary Schools (2012-2013) ⁶ | % of Title I Elemenatary Schools with School Improvement Plans (2012-2013) ⁶ |
| Allegany | 3,496 | 4.7% | 29.0% | 46.0% | 12.5% | 13.4% | 8.9% | 24.6% | 5.0% | 16.5% | 57.1% | 12.5% |
| Anne Arundel | 34,586 | 6.4% | 6.6% | 32.3% | 6.0% | 10.9% | 8.1% | 21.8% | 4.6% | 23.5% | 17.7% | 0.0% |
| Baltimore City | 41,152 | 6.6% | 23.5% | 67.2% | 13.7% | 25.1% | 11.6% | 35.1% | 5.1% | 35.5% | 88.2% | 51.5% |
| Baltimore County | 48,074 | 6.0% | 9.2% | 39.1% | 6.4% | 10.9% | 9.1% | 31.6% | 6.1% | 20.0% | 43.0% | 19.6% |
| Calvert | 4,988 | 5.6% | 8.0% | 38.7% | 6.8% | 6.5% | 6.8% | 21.8% | 4.4% | 18.0% | 30.8% | 0.0% |
| Caroline | 2,314 | 7.0% | 8.2% | 54.2% | 10.6% | 24.9% | 8.4% | 25.0% | 7.0% | 7.0% | 100.0% | 0.0% |
| Carroll | 9,031 | 5.4% | 12.1% | 28.0% | 5.9% | 8.0% | 5.8% | 26.4% | 4.1% | 12.5% | 13.0% | 0.0% |
| Cecil | 6,424 | 6.4% | 18.0% | 41.6% | 9.7% | 11.3% | 8.7% | 21.9% | 4.9% | 32.0% | 41.2% | 0.0% |
| Charles | 9,438 | 6.4% | 7.7% | 43.2% | 7.4% | 9.2% | 10.0% | 33.4% | 4.8% | 25.0% | 28.6% | 16.7% |
| Dorchester | 2,037 | 6.2% | 20.8% | 63.3% | 15.0% | 22.6% | 11.2% | 26.5% | 5.5% | 30.0% | 57.1% | 75.0% |
| Frederick | 14,862 | 6.4% | 8.3% | 31.4% | 5.7% | 12.2% | 7.5% | 24.0% | 4.7% | 17.5% | 11.1% | 25.0% |
| Garrett | 1,553 | 5.2% | 26.6% | 31.7% | 11.5% | 17.3% | 6.0% | 17.9% | 7.0% | 15.0% | 87.5% | 0.0% |
| Harford | 14,982 | 6.1% | 12.8% | 29.2% | 5.2% | 8.4% | 7.3% | 21.3% | 4.3% | 19.5% | 17.6% | 33.3% |
| Howard | 17,363 | 6.0% | 4.4% | 21.8% | 2.9% | 7.6% | 8.3% | 26.8% | 4.3% | 16.5% | 27.5% | 0.0% |
| Kent | 995 | 4.9% | 36.5% | 49.4% | 7.8% | 17.0% | 9.2% | 22.7% | 7.3% | 23.0% | 83.3% | 0.0% |
| Montgomery | 63,732 | 6.6% | 9.4% | 29.7% | 3.8% | 13.1% | 7.7% | 30.7% | 5.4% | 26.0% | 19.1% | 16.0% |
| Prince George's | 58,564 | 6.8% | 9.9% | 53.6% | 8.9% | 17.5% | 10.0% | 46.0% | 6.6% | 33.0% | 36.1% | 52.1% |
| Queen Anne's | 2,711 | 5.7% | 2.4% | 34.3% | 5.1% | 8.8% | 8.9% | 15.5% | 5.5% | 22.0% | 37.5% | 0.0% |
| St. Mary's | 7,580 | 7.2% | 15.1% | 33.4% | 6.8% | 13.1% | 5.6% | 25.2% | 4.9% | 20.0% | 22.2% | 0.0% |
| Somerset | 1,277 | 4.8% | 14.8% | 64.2% | 17.0% | 22.3% | 10.1% | 26.4% | 6.3% | 15.5% | 100.0% | 0.0% |
| Talbot | 1,861 | 4.9% | 13.1% | 41.7% | 5.9% | 14.5% | 8.3% | 20.6% | 6.7% | 30.5% | 75.0% | 33.3% |
| Washington | 9,002 | 6.1% | 20.2% | 45.4% | 9.2% | 14.9% | 7.7% | 36.0% | 5.2% | 33.5% | 22.2% | 16.7% |
| Wicomico | 6,142 | 6.2% | 22.8% | 54.1% | 11.9% | 18.1% | 9.0% | 32.6% | 5.7% | 24.0% | 26.7% | 12.5% |
| Worcester | 2,324 | 4.5% | 28.5% | 50.0% | 8.6% | 11.3% | 9.1% | 26.6% | 6.9% | 18.0% | 21.4% | 0.0% |
| TOTAL | 364,488 | 6.3% | 10.6% | 41.7% | 7.4% | 14.3% | 8.9% | 31.0% | 5.5% | 25.0% | 44.9% | 15.2% |

Data are from the 2010 Census

[&]quot;Public School, BIE School, and Private School Data Files."



² Data are from the 2008-2010 American Community Survey 3-Year Estimates, produced by the Maryland State Data Center

³ Data are from 2010 Vital Statistics Data

⁴ Data are from 2009 Vital Statistics Data

 $^{^{\}rm 5}$ Data are from the KidsCount Data Center (specific dates of data indicated in parentheses)

⁶ Data provided by Maryland State Department of Education

²⁹ U.S. Department of Education (2007-2008.) National Center for Education Statistics, Schools and Staffing Survey (SASS),

Assignment of Average Risk Levels

The method for determining the average risk level of each county is consistent with the risk and reach assessments published in Pennsylvania and the District of Columbia. Specifically, for each risk indicator, the counties with the highest percentages of children affected by the risk indicator reported in Table 1, received a ranking of "3", the middle third received a ranking of "2" and the bottom third with the lowest percentages of children affected by the risk indicator received a ranking of "1". The individual risk levels (i.e. 1, 2, or 3) were summed then divided by the total number of risk factors (n = 10). An average risk level of "1" indicates a county with an overall low average of risk factors, "2" for moderate risk, and "3" for high risk. Harford, Howard, Anne Arundel, and Carroll counties had the lowest average risk levels. Baltimore city, Dorchester, Prince George's, Kent, Somerset and Wicomico all received an overall high average risk level (see Appendix Table A1 for the ratings of each county).

Reach Programs

Maryland's Office of Child Care Licensing Branch regulates licensed child care arrangements in the state to ensure providers meet a minimum set of health, safety, and program standards as defined by state legislation. Programs that consistently meet annual licensing requirements provide a safe and healthy environment for children to grow, develop, and learn. The prevalence and capacity of licensed child care centers and family child care homes are important indicators for assessing the extent to which the supply of regulated child care can meet the demand of families with young children. In order to maximize low-income parents' ability to afford licensed care, Maryland offers child care subsidies, which pay a portion of child care costs, to eligible parents. Thus, the prevalence and capacity of child care centers and homes that accept child care subsidies as a form of payment are important indicators of the extent to which there is an available supply of child care that caters specifically to the needs of low-income families seeking support. In addition to licensed child care, Maryland offers public prekindergarten (pre-K) programs to children who meet specified income requirements or are otherwise determined to be at-risk. The prevalence and availability of these programs (licensed child care and pre-K programs), are key components of the reach analysis.

In addition to understanding the availability of these programs, indicators of quality are also important dimensions to assess. While multiple definitions of program quality exist, this report focuses on a select set of indicators related to licensing compliance, staff credentials, and accreditation. Licensing compliance represents an indicator of the floor of quality with non-compliance representing violations to the basic health and safety standards set forth in state licensing regulations. Staff credentials are an indicator of provider quality as credentials certify achievement of certain benchmarks suggested by state policymakers, such as receiving a certain number of training hours, or obtaining an educational degree. Finally, program accreditation is an indicator of high quality in an early care and education program across various domains, such as curriculum, teaching, and assessment. These quality indicators are discussed by program type, that is, all licensed child care centers and homes, and as a subset of child care centers and homes that accepted child care subsidy.

³⁰ For more information see:





Capacity of Licensed Child Care Centers and Homes

Licensed child care centers in Maryland include preschools, child development centers, nursery schools, before-school and after-school programs, school-age child care, and early learning centers.³¹ Capacity in licensed child care facilities is determined for infants and toddlers (ages 0-2) and children ages 3 through school age. Since capacity cannot be calculated specifically for children ages birth to five, Table A2 and A3 indicate the total capacity of licensed facilities to serve children birth through school age. Nonetheless, the capacity utilization rate of licensed facilities can provide an indication of areas across the state that serve a majority of children birth to five or are over capacity. Overall, Maryland's licensed child care centers have the capacity to serve 30.1% of children in the state under the age of five. Counties that have the highest center-based utilization rates among children birth to five include St. Mary's county (87.8%), Dorchester (87.3%), and Anne Arundel (87.1%). In Caroline county, the enrollment of children birth to five exceeds the total capacity of center-based care settings (102.8%). It is also important to note that though capacity includes all children from birth through school age, St. Mary's county and Caroline county only have the ability to serve 15% and 17% (respectively) of the population of children under the age of five that reside in those counties, if all center-based slots were allocated to this age group.

A licensed family child care home in Maryland is defined as a residence other than the child's residence in which paid care is provided to children younger than 13 years of age.³² Family child care providers in Maryland have the capacity to serve 14% of Maryland's children under the age of five. Licensed family child care providers in Caroline (33.8%), Queen Anne's (25.2%), Talbot (22.2%), St. Mary's (21.7%) and Washington (21.6%) counties have the highest capacity to care for children under age five. Licensed family child care was least prevalent in Montgomery (9.8%), Prince George's (10.7%), and Garrett (11.7%) counties (see Appendix Table A3).

Subsidized Child Care Center and Family Child Care Home Providers' Capacity to Serve Children under Age Five

Child care subsidies are an important support for low-income families, which aid parents' ability to access child care so they can go to work or school. In Maryland, over 6,000 child care providers received subsidy reimbursements between February 2007 and September 2010 (n = 6,340). The capacity of subsidized providers to serve children under the age of five is reported in Appendix Table A4 and Table A5. It is important to note that though a provider accepted children whose care was subsidized by the state, their reported total capacity is not necessarily designated only for subsidized care. Therefore, the total available capacity may be an overestimate of slots individual providers are willing to designate to subsidized care. It should also be noted that the capacity of current providers that might be willing to serve a child with a subsidy, but did not do so between January 2011 and August 2012, is not included in this analysis.

In five counties in Maryland over 70% of the slots for subsidized center-based care are allocated to children ages birth to five: Somerset (83.1%), Worcester (77.6%), Garrett (77.2%), and Kent (71.4%). Subsidized center-based child care slots in Caroline county are over capacity, there are 400 children enrolled in centers that only have the capacity to serve 392 children (102.0%). Subsidized family child

³² For more information see Subtitle 15, Chapters 01-15, Family Child Care (COMAR 13A.15.01-.15) at: http://www.msde.maryland.gov/MSDE/divisions/child_care/regulat.htm



³¹ For more information see Subtitle 16, Chapters 01-19, Child Care Centers (COMAR 13A.16.01-.19) at: http://www.msde.maryland.gov/MSDE/divisions/child_care/regulat.htm

care providers in only two counties allocated over 70% of available slots to children ages birth to five, Allegany (76.8%) and Garrett (75.3%).

Pre-K Program Enrollment

Counties throughout Maryland offer state-funded pre-kindergarten (pre-K) programs for four-year-old children who are homeless or from economically disadvantaged families. While some pre-K programs are offered for a full-day, others operate 2.5 hour sessions five days a week in the mornings and afternoons. First priority is given to children who are homeless or from low-income families, if space is available programs can enroll children who demonstrate a lack of readiness for school, as determined by the county.³³

During the 2011-2012 school year all four-year old children who met the first priority criteria (homeless or low-income) had access to a state-funded pre-K program. Thirteen of the 24 jurisdictions in Maryland also had the capacity to serve all the children who met the second set of priority criteria, that is, children who were determined to benefit from a pre-K program to help bolster their readiness for kindergarten. A number of other counties did not have the capacity to enroll all eligible children in this second group of "Priority 2" children. State-funded pre-K programs in Baltimore County, Fredrick, and St. Mary's counties all had waitlists ranging from 114 to 319 Priority 2 children. Priority 2 waitlists in Washington and St. Mary's counties were close to or exceeded 100 children (see Appendix Table A6).

Licensing Compliance

Within the Maryland Office of Child Care, the Licensing Branch is specifically responsible for monitoring program compliance with child care regulations, investigating complaints of improper or illegal child care, taking enforcement action against the licenses of programs found to be in serious violation of child care regulations, and helping child care programs to achieve and maintain regulatory compliance. On an unannounced basis, at least once within each year, state inspectors perform an onsite assessment of all licensed facilities to ensure that the health, safety, and program standards detailed in legislation are met and maintained.

If a facility fails to meet any of the licensing requirements they will receive a licensing violation. Four of the licensing non-compliance categories are reported in this report, based on the availability of data by county. One example of capacity non-compliance would be if the total number of children present exceeds the number of children specified on the facility's license. Similarly, a facility can receive a staff-to-child ratio non-compliance violation if the number and age of the children per staff member does not align with licensing standards. Child protection non-compliance includes violations relate to child discipline, child safety and security, or child abuse or neglect. Supervision non-compliance includes violations such as the lack of individualized attention and care, lack of supervision by qualified staff, or the lack of specialized supervision during activities such as playground time, transportation, or water play.

In 2012, 10.5% of licensed center-based providers were cited for violating a licensing standard that fell into one of the four categories identified above. Center-based providers in Wicomico county received the highest percentage of licensing violations (25.9%), which were largely due to child protection non-

³³ Lack of readiness is defined by MSDE as any child who exhibits low levels of personal, social development, language and literacy, mathematical thinking, scientific thinking, social studies, the arts, or physical development and health. For more information see: http://www.msde.maryland.gov/MSDE/divisions/child_care/early_learning/PreK-K



compliance. Charles county (16.7%), Calvert (15.0%), and Baltimore City (14.2%) also received higher than average licensing violations, all of which were primarily due to child protection and staff to child ratio non-compliance issues. Comparatively, center-based providers in Allegany, Caroline, Kent, and Talbot counties did not receive any licensing violations in 2012.

Family child care providers overall demonstrated a low incidence (2.7%) of licensing non-compliance in 2012. Dorchester (7.1%), Kent (6.7%), St. Mary's (6.7%) and Calvert (5.9%) counties each had the highest rates of licensing non-compliance among family child care providers. These incidents were distributed fairly equally across capacity, supervision, and child protection non-compliance violations (see Appendix Tables A7 and A8).³⁴

Tiered Reimbursement System

Maryland supports a voluntary tiered reimbursement system which recognizes child care programs serving children with a child care subsidy that adhere to quality standards that exceed those for state licensing requirements. There are four levels of tiered reimbursement, each one recognizing a child care provider's participation in program accreditation and provider credentialing, provision of a high quality learning environment, and parent involvement opportunities, and an evaluation of program quality using an environmental rating scale.

In 2010, 38 of the 1,785 center-based providers and 32 of the 4,512 family child care providers that accepted child care subsidies participated in the tiered reimbursement system (2% and less than 1%, respectively). Among the 24 counties in Maryland, 16 counties had six or fewer providers participating in the tiered reimbursement system. Thirty-three of the 38 center-based providers and 29 of the 32 family child care providers participated in the tiered reimbursement system at level three or four (See Appendix Tables A 9 and A10).

Child Care Credentialing System

Maryland's voluntary child care credentialing system recognizes child care providers who exceed minimum education and training requirements of state licensing. There are six credential levels which recognize providers based on the number of training clock hours, educational degree received, professional activities, and other selected training or professional experiences. As indicated above, when providers participate in the child care credentialing system, they can contribute to their program's rating in the tiered reimbursement system.

A little over half of all center based providers are not currently participating in the child care credentialing system (55.4%). However, there are many counties with high levels of participation. In one-third of center-based providers in Talbot and Garrett counties, all staff participate in the credentialing system (35.3% and 33.3%, respectively). This high rate of involvement is followed by Caroline and Calvert counties, in which 25.0% and 23.7% of center-based providers have engaged all staff in the credentialing system. The majority of family child care providers do not participate in the credentialing system (86.0%). Rates of participation are highest in Calvert and Worcester counties, in which 37.7% and 30.0% of family child care providers indicated all staff at their sites participated in the credentialing system (see Appendix Tables A11 and A12).

³⁴ Note that inspection data are missing for 15% of providers across the state.



Staff Credential Levels

There are seven credential levels (Levels 1 through 4, 4+, 5, and 6), each of which articulates a specified set of criteria staff members must meet. At Level 2 and higher, providers participating in the credential program must complete additional training hours that go beyond licensing regulations and engage in professional activities for a certain number of hours each year. Higher level credentials (Levels 4 through 6) require educators to obtain 135 clock hours in core knowledge training, and progress on to obtain either associates, bachelor's, or master's degrees in early childhood.

Tables A13 and A14 report the percent of providers with *any staff* at each credential level. "Any staff" could mean one, some, or all staff have achieved the specified credential level. Therefore, these data provide an indication of the percent of centers with credentialed staff, not the percent of staff within centers or family child care homes with credentials. Center-based providers were most likely to have at least one staff member with a Level 1, 2, or 3 credential (16.3%, 14.8%, and 26.3%, respectively). Though overall participation in the credentialing system was lower among family child care providers, the levels in which these providers participated were generally similar to that of center-based providers. More family child care providers participated in Level 1 (3.8%) and Level 3 (4.1%) than the other levels.

Accreditation

Accreditation is a voluntary process of self-study, program improvement, and independent review in which child care providers can engage to demonstrate that they meet national, regional, or state standards of quality. While different accrediting bodies may utilize different criteria, achieving accreditation is a nationally recognized indicator that a program is employing best practices in early childhood education.

Approximately 4% of all providers in Maryland have achieved program accreditation. Two counties stand out for their high levels of accredited programs. Nearly 20% of providers in Montgomery county have been accredited, most by the National Association for the Education of Young Children. Ten percent of providers in Prince George's county are accredited, most by the Maryland State Department of Education Accreditation process. Less than 2% of providers were accredited in Caroline (1.0%), Cecil (1.1%), Dorchester (.7%), Kent (.3%) and St. Mary's (.8%) counties. (see Appendix Table A15).

Analyzing Risk and Reach Together

As reported above, each of Maryland's counties were assigned an "average risk level" based on the prevalence of specified risk factors. Simultaneously considering this average risk level and the reach indicators in the county may be useful for assessing where the greatest need exists for targeted investments in early childhood. The following section discusses the degree of access and availability of early care and education programs and services in high risk counties, and the quality of specified programs and services. Table 2 classifies counties by low, moderate, and high average risk level.

³⁵ For more information see: http://marylandpublicschools.org/NR/rdonlyres/D68F205B-0C8C-40BB-90F0-AC91486BC2B9/14173/MDCHILDCARECREDENTIALLEVELSCTsept07.pdf



10

Table 2. Counties by Average Risk Level

| Higl | h | Mode | rate | Low | |
|--------------------|--------------------------|---------------------|--------------------------|--------------|--------------------------|
| County | Average Risk level | County | Average Risk level | County | Average Risk level |
| Baltimore City | 2.9 | Allegany | 2.2 | Washington | 1.8 |
| Dorchester | 2.8 | Baltimore County | 2.2 | Montgomery | 1.7 |
| Prince George's | 2.6 | Caroline | 2.2 | Queen Anne's | 1.7 |
| Kent | 2.5 | Talbot | 2.2 | St. Mary's | 1.6 |
| Somerset | 2.4 | Worcester | 2.1 | Calvert | 1.4 |
| Wicomico | 2.3 | Cecil | 2 | Frederick | 1.4 |
| | | Charles | 2 | Harford | 1.4 |
| | | Garrett | 2 | Howard | 1.4 |
| | | | | Anne Arundel | 1.3 |
| | | | | Carroll | 1.3 |

To aid an understanding of the dispersion of risk across the state, Table 3 presents the average risk level of each county by urbanicity. Urbanicity is one way to measure the population density of a county, where urban counties have the highest population density and rural counties have the lowest. Urbanicity classifications are based on 2010 Census population estimates. Baltimore city was the only jurisdiction classified as urban. Counties in the region immediately surrounding Baltimore, or located in the region defined by Census as the "Suburban Washington Region", were defined as suburban. All other counties were defined as rural. Understanding average risk level by urbanicity may help policymakers make more informed decisions about the types of resources and programs that would be most effective in meeting the needs of children in different types of counties.

Table 3. Average Risk Level by Urbanicity

| Table 3. Average Risk Level by Urbanicity | | | | | | | | |
|---|--------------------------|------------------|--------------------------|----------------|-----------------------|--|--|--|
| Rural | | Suburban | | Urban | | | | |
| County | Average Risk level | County | Average Risk level | County | Average Risk level | | | |
| Calvert | 1.4 | Anne Arundel | 1.3 | Baltimore City | 2.9 | | | |
| St. Mary's | 1.6 | Carroll | 1.3 | | | | | |
| Queen Anne's | 1.7 | Frederick | 1.4 | | | | | |
| Washington | 1.8 | Harford | 1.4 | | | | | |
| Charles | 2 | Howard | 1.4 | | | | | |
| Cecil | 2 | Montgomery | 1.7 | | | | | |
| Garrett | 2 | Baltimore County | 2.2 | | | | | |
| Worcester | 2.1 | Prince George's | 2.6 | | | | | |
| Talbot | 2.2 | | | • | | | | |
| Allegany | 2.2 | | | | | | | |
| Caroline | 2.2 | | | | | | | |
| Dorchester | 2.8 | | | | | | | |
| Kent | 2.5 | | | | | | | |
| Somerset | 2.4 | | | | | | | |
| Wicomico | 2.3 | | | | | | | |

³⁶ For more information, see http://planning.maryland.gov/msdc/census/cen2010/PL94-171/CNTY/2010Pop%20Summary.pdf



20

Access to Early Care and Education Programs

Reach indicators related to the availability of and access to early care and education programs include the capacity of licensed centers, family child care homes, child care providers who accept subsidies, and access to public pre-K programs. The capacity utilization rates of center-based and family child care settings can indicate parents' preferences for care setting by county. By identifying the preferred care settings in each county it is possible to target interventions either related to assess and improve the quality of those settings or develop strategies for parent education and outreach anchored in those settings. Center-based providers in Dorchester and Somerset, two of the four rural counties that received a "high average risk level," allocated a high percentage of available slots to children under the age of five (87.3% and 81.2%, respectively). Though Caroline county received an overall moderate risk rating, center-based care settings in this county were over capacity, utilizing 102.8% of all available slots to enroll children under the age of five. Comparatively, center-based providers in high risk rated Baltimore City and Prince George's county enrolled low percentages of children birth to five in all available center-based settings (62.4%, and 54.7%) indicating that nearly half of the children under the age of five in these jurisdictions are utilizing care settings other than center-based care. Moderate risk rated Allegany and Garrett counties enrolled the highest percentages of children birth to five in family child care settings (76.8% and 75.3%; see Appendix Tables A2 and A3).

As indicated above, child care subsidies are an important support for low-income families. High risk rated Prince George's and moderate risk rated Charles counties enrolled the lowest percentage of children ages birth to five in subsidized center based care of any jurisdiction in Maryland (41.3% and 33.5%). Moderate risk rated Caroline county only had the capacity to serve 392 children birth to five in subsidized center-based care, yet 400 children under the age of five enrolled in these settings (102.0%). Subsidized family child care providers across the state enrolled comparable percentages of young children, allocating, on average, 63% of available slots to children birth to five. There was very little variation in the capacity utilization rates across high, moderate, or low risk jurisdictions (see Appendix Tables A4 and A5).

Access to public pre-K programs is another important indicator of 'reach'. As reported in Appendix Table A6, all counties had the capacity to serve income-eligible four-year-old children during the 2011-2012 school year. In addition nearly all high risk counties were able to enroll all Priority 2 children, with the exception of Dorchester and Wicomico counties, which had 7 and 95 children on pre-k waitlists.

Quality of Early Care and Education Programs

Indicators of program quality discussed in this report include licensing compliance, participation of subsidized providers in the tiered reimbursement system, staff credentialing, and accreditation status. High risk rated Wicomico county had the highest overall incidences of licensing non-compliance, which may indicate that center-based providers in this county struggle to maintain basic health and safety requirements (see Appendix Tables A7 and A8). Other high, moderate and even low risk rated counties with high rates of licensing non-compliance among center-based providers include Charles (16.7%, moderate risk rating), Calvert (15.0%, low risk rating) and Baltimore City (14.2%, high risk rating). High risk rated Dorchester and Kent counties had low levels of non-compliance among center-based providers, (5.6% and 0%) yet had the highest rates of noncompliance among family child care providers (7.1% and 6.7%).



Among the 6,340 child care providers who accepted child care subsidies, only 70 were participating in the state's tiered reimbursement system as of 2010 (38 center-based providers and 32 family child care providers; see Appendix Table A9 and A10). Since overall state participation in the tiered reimbursement system was low, meaningful distinctions between high and low risk counties were not possible. Though high risk rated Baltimore city had the most providers participating in the tiered reimbursement system of any county in the state (12 providers), this was still fewer than 1% of all centers in the city.

The lowest percentages of center-based providers with at least some credentialed staff appeared in high and moderate risk rural counties: Cecil (21.2 %), Garret (27.8%), and Kent (30.3%; see Appendix Table A11). Similarly, the highest percentages of family child care providers with no credentialed staff appeared in rural counties: Somerset (93.9%), Cecil (92.0%), and St. Mary's (91.0%; see Appendix Table A12). Evaluation of the level of staff credentials by county provides a slightly different interpretation of these data.

Throughout Maryland, less than 5% of all providers are accredited. All 15 rural counties had the lowest rates of accreditation in the state, less than 3.2%.

Implications for Policies, Programs, and Future Research

This report presented a select set of risk indicators that are negatively associated with young children's education outcomes and indicators of the capacity to reach young children in Maryland through select early care and education programs. While this report does not provide a comprehensive review of all early childhood programs in Maryland, the data in this report can be used to inform an understanding of the degree to which children, particularly at-risk young children in Maryland, have access to quality care.

The data evaluated in this report indicate that a quarter of Maryland counties, primarily rural counties, have higher than average prevalence of selected risk indicators, such as poverty, single and/or teen motherhood, low birth weight, and lack of readiness for kindergarten. Counties identified as having the highest risk indices include Baltimore City, Dorchester, Kent, Prince George's, Somerset, and Wicomico counties. Policymakers may consider prioritizing resources designed to improve early childhood program access or quality in these counties. The data provided in Table 1 can help policymakers understand the prevalence of specific risk indicators that seem to be particular problems in these counties. Assessing individual risk indicators across counties may help to inform the use of effective strategies specifically designed to reduce the incidence of these risks. For example, Baltimore City has the highest percentage of children considered not ready for kindergarten. Specific strategies could be targeted towards promoting school readiness in this county, such as forming partnerships between local elementary schools and early care and education settings. Elementary schools have a vested interest in the incoming cohort of kindergarten children. Partnerships could, for example, focus on communicating the skills and abilities that are expected of kindergarten children to licensed care providers and parents, friends, and family members who may also care for young children and sharing resources to help promote school readiness. As another example, Prince George's county has the highest percentage of mothers who did not receive prenatal care. Specific outreach strategies in this county could include awareness and education campaigns about the importance of prenatal care targeted for church groups, schools, community centers, libraries, billboards, TV ads, or other outlets that may be effective in reaching mothers early in their pregnancy.

Similarly, most of Maryland's high and moderate risk counties are located in rural areas. While some policies may be effective in urban or suburban counties, rural counties may require a different set of



strategies tailored to the unique needs of the children, families, and providers in these counties. For example, families in rural areas may prefer family child care homes as opposed to child care centers due to the proximity of available care to their home. As a result, policies and programs designed to support the quality of family child care programs may be a more efficient use of resources than policies that target child care centers. Similarly, child care providers in rural counties may not have access to the same professional development resources and opportunities as providers in suburban or urban counties. Therefore, innovative strategies to improve the provision of mobile or online resources to these providers may be most effective in engaging and meeting the needs of rural providers.

While this report can help to inform the development of targeted county-level strategies, the data presented in this report can also aid state-level strategies to improve program access and quality. Data presented in Tables A7 through A14 indicate that, overall, there are low levels of provider participation in Maryland's tiered reimbursement system and credentialing program, and few providers have achieved accreditation. Future research efforts comparing provider participation rates in these programs to those in other states may be informative. Identifying expected levels of participation in tiered reimbursement, credentialing, and accreditation programs may also help to determine if improvement goals are necessary and, if so, define reasonable benchmarks of participation. Further exploration of these data could also help inform targeted efforts to further promote participation in these programs. Interviews and focus groups with providers who are or are not participating in these programs can illuminate our understanding of effective incentives and possible disincentives or barriers to provider participation.

The data presented in this report can be used to start a state-level policy conversation about the location of high risk children and families and the prevalence and quality of available early care and education programs in the counties in which these families reside. The analysis included in this report suggests three different strategies for addressing the needs of high risk children and families that can be pursued individually or as a combined approach. One strategy involves targeting efforts solely to the counties identified as having a high average risk level. A second strategy includes identifying the risk factors that are particularly high within a county or even across the state and focusing efforts on evidence-based interventions designed to mitigate those risks. Finally, a third strategy involves not only focusing on the moderate or high risk counties, but also considering the urbanicity of these counties and how to effectively tailor improvement efforts to meet the unique needs of different types of counties.



Appendix

Table 1. Assignment of Average Risk Level

| Table 1. Ass | signment of | Average | KISK Level | | | | | | | | |
|--------------|--|--|---|--|--|--|--|---|---------------------------------------|---|-----------------------|
| County | % Children Under 5 Living in Families Below Poverty Level ² | % Births to Unmarried Mothers (2010) ³ | % Births to Teen Mothers (2010) ³ | % of Births to Mothers with Less than 12 Years of Formal Education (2009) ⁴ | % Low Birth Weight Infants (2011) ⁵ | Infant Mortality Rate per 1,000 Live Births (2010) ⁵ | % Children in Families Receiving Aid Through Medicaid/ SCHIP | | % of Title I ⊟emenatary Schools | % of Title I Elemenary Schools with Improve- ment Plans | Average Risk level |
| Baltimore | | | | | | | | | | | |
| city | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2.90 |
| Dorchester | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2.80 |
| Prince | | | | | | | | | | | 2.50 |
| George's | 1 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2.60 |
| Kent | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 1 | 2.50 |
| Somerset | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 1 | 3 | 1 | 2.40 |
| Wicomico | 3 | 3 | 3 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | 2.30 |
| Allegany | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 2.20 |
| Baltimore | | | | | | | | | | | |
| County | 1 | 2 | 2 | 1 | 3 | 3 | 3 | 2 | 2 | 3 | 2.20 |
| Caroline | 1 | 3 | 3 | 3 | 2 | 2 | 3 | 1 | 3 | 1 | 2.20 |
| Talbot | 2 | 2 | 1 | 2 | 2 | 1 | 3 | 3 | 3 | 3 | 2.20 |
| Worcester | 3 | 3 | 2 | 2 | 3 | 1 | 3 | 2 | 1 | 1 | 2.10 |
| Cecil | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 1 | 2.00 |
| Charles | 1 | 2 | 2 | 1 | 3 | 3 | 1 | 3 | 2 | 2 | 2.00 |
| Garrett | 3 | 1 | 3 | 3 | 1 | 1 | 3 | 1 | 3 | 1 | 2.00 |
| Washington | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 3 | 1 | 2 | 1.80 |
| Montgomery | 1 | 1 | 1 | 2 | 1 | 3 | 2 | 3 | 1 | 2 | 1.70 |
| | | | | | | | | | | | |
| Queen Anne's | 3 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 1 | 1.70 |
| St. Mary's | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 1.60 |
| Calvert | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1.40 |
| Frederick | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 1.40 |
| Harford | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 3 | 1.40 |
| Howard | 1 | 1 | 1 | 1 | 2 | 3 | 1 | 1 | 2 | 1 | 1.40 |
| Anne Arundel | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 1.30 |
| Carroll | 2 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 1.30 |

^{1 =} Low Risk



^{2 =} Moderate Risk

^{3 =} High Risk

Table A2. Capacity and Enrollment of Center-Based Providers, 2012

| Table A2. Capacity | | | Center- | | | |
|--------------------|-------------------------|--------------------------|-------------------------|--------------------------------------|-------------|-----------------|
| | | | Based | | | |
| | | | Providers | - " | | |
| | # of | # of Center- | Capacity to Serve | Enrollment of Children Under Five | | Capacity as a % |
| | Children | Based | Children of | in Center-Based | Capacity | of Children |
| County | Under Five ¹ | Providers ^{2,3} | all Ages ^{2,3} | Care ² | Utilization | Under Five |
| Allegany | 3,496 | 20 | 851 | 559 | 65.7% | 24.3% |
| Anne Arundel | 34,586 | 112 | 7,486 | 6,524 | 87.1% | 21.6% |
| Baltimore City | 41,152 | 269 | 13,903 | 8,681 | 62.4% | 33.8% |
| Baltimore County | 48,074 | 229 | 13,946 | 10,647 | 76.3% | 29.0% |
| Calvert | 4,988 | 28 | 1,186 | 835 | 70.4% | 23.8% |
| Caroline | 2,314 | 10 | 393 | 404 | 102.8% | 17.0% |
| Carroll | 9,031 | 47 | 3,514 | 2,667 | 75.9% | 39.0% |
| Cecil | 6,424 | 28 | 1411 | 910 | 64.5% | 22.0% |
| Charles | 9,438 | 39 | 2,392 | 1,339 | 56.0% | 25.3% |
| Dorchester | 2,037 | 15 | 561 | 490 | 87.3% | 27.5% |
| Frederick | 14,862 | 65 | 4,930 | 3,221 | 65.3% | 33.2% |
| Garrett | 1,553 | 17 | 461 | 374 | 81.1% | 29.7% |
| Harford | 14,982 | 49 | 3,882 | 2,734 | 70.4% | 25.9% |
| Howard | 17,363 | 99 | 7,262 | 5,731 | 78.9% | 41.8% |
| Kent | 995 | 9 | 266 | 197 | 74.1% | 26.7% |
| Montgomery | 63,732 | 314 | 21,842 | 16,049 | 73.5% | 34.2% |
| Prince George's | 58,564 | 268 | 16,414 | 8,985 | 54.7% | 28.0% |
| Queen Anne's | 2,711 | 9 | 607 | 418 | 68.9% | 22.4% |
| St. Mary's | 7,580 | 26 | 1,138 | 999 | 87.8% | 15.0% |
| Somerset | 1,277 | 9 | 639 | 519 | 81.2% | 50.0% |
| Talbot | 1,861 | 14 | 782 | 498 | 63.7% | 42.0% |
| Washington | 9,002 | 38 | 2,775 | 1,940 | 69.9% | 30.8% |
| Wicomico | 6,142 | 31 | 2,179 | 1,489 | 68.3% | 35.5% |
| Worcester | 2,324 | 15 | 775 | 650 | 83.9% | 33.4% |
| TOTAL | 364,488 | 1,760 | 109,595 | 76,860 | 70.1% | 30.1% |

Sources:

³Counts include only center-based providers that indicated at least one child age birth to five was enrolled at the time of inspection.



¹U.S. Census Bureau 2010 Census Demographic Profiles, Prepared by the Maryland Department of Planning, Projections and Data Analysis/State Data Center, May 2011.

² MSDE Division of Early Childhood Licensing Inspection Data (3/1/11 – 7/31/12)

Table A3. Capacity and Enrollment of Family Child Care Providers, 2012

| County | # of Children Under Five ¹ | # of Family Child Care Providers ^{2,3} | Capacity of Family Child Care Settings to Serve Children of all Ages 2,3 | Enrollment of Children Under Five in Family Child Care Settings ² | Capacity Utilization | Capacity as a % of Children Under Five |
|---------------------|---|---|--|--|-------------------------|---|
| Allegany | 3,496 | 69 | 526 | 404 | 76.8% | 15.0% |
| Anne Arundel | 34,586 | 612 | 4,651 | 3,116 | 67.0% | 13.4% |
| Baltimore City | 41,152 | 725 | 5,535 | 3,278 | 59.2% | 13.5% |
| Baltimore County | 48,074 | 933 | 7,093 | 4,490 | 63.3% | 14.8% |
| Calvert | 4,988 | 142 | 1,085 | 643 | 59.3% | 21.8% |
| Caroline | 2,314 | 104 | 783 | 460 | 58.7% | 33.8% |
| Carroll | 9,031 | 191 | 1,418 | 832 | 58.7% | 15.7% |
| Cecil | 6,424 | 121 | 918 | 529 | 57.6% | 14.3% |
| Charles | 9,438 | 234 | 1,760 | 1,034 | 58.8% | 18.6% |
| Dorchester | 2,037 | 49 | 381 | 239 | 62.7% | 18.7% |
| Frederick | 14,862 | 383 | 2,779 | 1,669 | 60.1% | 18.7% |
| Garrett | 1,553 | 24 | 182 | 137 | 75.3% | 11.7% |
| Harford | 14,982 | 353 | 2,648 | 1,691 | 63.9% | 17.7% |
| Howard | 17,363 | 351 | 2,641 | 1,755 | 66.5% | 15.2% |
| Kent | 995 | 25 | 184 | 125 | 67.9% | 18.5% |
| Montgomery | 63,732 | 837 | 6,272 | 4,048 | 64.5% | 9.8% |
| Prince George's | 58,564 | 805 | 6,244 | 3,834 | 61.4% | 10.7% |
| Queen Anne's | 2,711 | 97 | 684 | 444 | 64.9% | 25.2% |
| St. Mary's | 7,580 | 223 | 1,643 | 958 | 58.3% | 21.7% |
| Somerset | 1,277 | 34 | 263 | 165 | 62.7% | 20.6% |
| Talbot | 1,861 | 53 | 414 | 254 | 61.4% | 22.2% |
| Washington | 9,002 | 254 | 1,941 | 1,331 | 68.6% | 21.6% |
| Wicomico | 6,142 | 130 | 984 | 659 | 67.0% | 16.0% |
| Worcester | 2,324 | 38 | 296 | 204 | 68.9% | 12.7% |
| TOTAL | 364,488 | 6,787 | 51,325 | 32,299 | 62.9% | 14.1% |

inspection.



Sources:

1 U.S. Census Bureau 2010 Census Demographic Profiles, Prepared by the Maryland Department of Planning, Projections and Data Analysis/State Data Center, May 2011.

MSDE Division of Early Childhood Licensing Inspection Data (3/1/11 – 7/31/12)

Counts included only family child care providers that indicated at least one child age birth to five was enrolled at the time of

Table A4. Capacity and Enrollment of Subsidized Center Based Providers to Serve Children Under Age **Five**

| County | Subsidized Centers' Total Capacity ¹ | Subsidized Centers' Enrollment of 0-3 Year-Olds ² | Subsidized Centers' Enrollment of 4-5 Year-Olds ² | Subsidized Centers' Total Enrollment of Children 0-5 ² | Capacity Utilization |
|------------------|---|--|--|---|-------------------------|
| Allegany | 945 | 211 | 234 | 445 | 47.1% |
| Anne Arundel | 12,182 | 3,662 | 3,309 | 6,971 | 57.2% |
| Baltimore City | 14,613 | 5,043 | 3,074 | 8,117 | 55.5% |
| Baltimore County | 20,061 | 6,399 | 4,490 | 10,889 | 54.3% |
| Calvert | 2,191 | 486 | 508 | 994 | 45.4% |
| Caroline | 392 | 236 | 164 | 400 | 102.0% |
| Carroll | 4,588 | 1,615 | 1,178 | 2,793 | 60.9% |
| Cecil | 1,591 | 498 | 403 | 901 | 56.6% |
| Charles | 4,192 | 788 | 617 | 1,405 | 33.5% |
| Dorchester | 636 | 196 | 221 | 417 | 65.6% |
| Frederick | 6,275 | 1,665 | 1,330 | 2,995 | 47.7% |
| Garrett | 501 | 219 | 168 | 387 | 77.2% |
| Harford | 5,034 | 1,520 | 1,216 | 2,736 | 54.4% |
| Howard | 11,311 | 3,145 | 2,380 | 5,525 | 48.8% |
| Kent | 266 | 97 | 93 | 190 | 71.4% |
| Montgomery | 28,282 | 9,180 | 7,042 | 16,222 | 57.4% |
| Prince George's | 21,259 | 5,396 | 3,392 | 8,788 | 41.3% |
| Queen Anne's | 682 | 236 | 222 | 458 | 67.2% |
| St. Mary's | 1,780 | 499 | 631 | 1,130 | 63.5% |
| Somerset | 629 | 252 | 271 | 523 | 83.1% |
| Talbot | 820 | 315 | 189 | 504 | 61.5% |
| Washington | 3,880 | 919 | 966 | 1,885 | 48.6% |
| Wicomico | 2,836 | 828 | 600 | 1,428 | 50.4% |
| Worcester | 813 | 332 | 299 | 631 | 77.6% |
| TOTAL | 145,759 | 43,735 | 32,995 | 76,730 | 52.6% |



Source: MSDE Division of Early Childhood Licensing Inspection Data (3/1/11 – 7/31/12)

Subsidy provider subset of ELIS totals based on mean capacity of each provider, averaging all non-zero inspection figures.

²Subsidy provider subset of ELIS totals based on mean enrollment (>0) of each provider at one or more inspection points between 1/2011 and 8/2012.

Table A5. Capacity and Enrollment of Subsidized Family Child Care Providers to Serve Children Under **Age Five**

| County | Subsidized Family Child Care Settings' Total Capacity ¹ | Subsidized Family Child Care Settings' Enrollment of 0-2 Year-Olds ³ | Subsidized Family Child Care Settings' of 2-5 Year-Olds ² | Subsidized Family Child Care Settings' Enrollment of Children 0-5 ² | Capacity Utilization |
|------------------|--|--|--|---|----------------------|
| Allegany | 526 | 110 | 294 | 404 | 76.8% |
| Anne Arundel | 4,651 | 950 | 2,166 | 3,116 | 67.0% |
| Baltimore City | 5,535 | 934 | 2,344 | 3,278 | 59.2% |
| Baltimore County | 7,093 | 1,390 | 3,100 | 4,490 | 63.3% |
| Calvert | 1,085 | 208 | 435 | 643 | 59.3% |
| Caroline | 783 | 134 | 326 | 460 | 58.7% |
| Carroll | 1,418 | 266 | 566 | 832 | 58.7% |
| Cecil | 918 | 153 | 376 | 529 | 57.6% |
| Charles | 1,760 | 308 | 726 | 1,034 | 58.8% |
| Dorchester | 381 | 61 | 178 | 239 | 62.7% |
| Frederick | 2,779 | 546 | 1,123 | 1,669 | 60.1% |
| Garrett | 182 | 40 | 97 | 137 | 75.3% |
| Harford | 2,648 | 523 | 1,168 | 1,691 | 63.9% |
| Howard | 2,641 | 593 | 1,162 | 1,755 | 66.5% |
| Kent | 184 | 40 | 85 | 125 | 67.9% |
| Montgomery | 6,272 | 1,499 | 2,549 | 4,048 | 64.5% |
| Prince George's | 6,244 | 1,259 | 2,575 | 3,834 | 61.4% |
| Queen Anne's | 684 | 124 | 320 | 444 | 64.9% |
| St. Mary's | 1,643 | 292 | 666 | 958 | 58.3% |
| Somerset | 263 | 45 | 120 | 165 | 62.7% |
| Talbot | 414 | 95 | 159 | 254 | 61.4% |
| Washington | 1,941 | 351 | 980 | 1,331 | 68.6% |
| Wicomico | 984 | 194 | 465 | 659 | 67.0% |
| Worcester | 296 | 60 | 144 | 204 | 68.9% |
| TOTAL | 51,325 | 10,175 | 22,124 | 32,299 | 62.93% |



Source: MSDE Division of Early Childhood Licensing Inspection Data (3/1/11 - 7/31/12) ¹ Subsidy provider subset of ELIS totals based on mean capacity of each provider, averaging all non-zero inspection figures.

²Subsidy provider subset of ELIS totals based on mean enrollment (>0) of each provider at one or more inspection points between 1/2011 and 8/2012.

Table A6. Total Prekindergarten (4 year old) Enrollment, 2011-2012

| County | Total # Sites | Total # Students Enrolled | Income Eligible Students (Priority 1) | Students Enrolled Under Other Criteria (Priority 2) ¹ | Priority 2 Students Placed on a Waiting List | |
|------------------|------------------|---------------------------------|---|---|---|--|
| Allegany | 14 | 467 | 417 | 50 | 0 | |
| Anne Arundel | 37 | 1,552 | 1,257 | 295 | 11 | |
| Baltimore City | 113 | 4,646 | 4,225 | 421 | 0 | |
| Baltimore County | 73 | 3,026 | 2,534 | 492 | 319 | |
| Calvert | 9 | 305 | 230 | 75 | 0 | |
| Caroline | 5 | 303 | 246 | 57 | 0 | |
| Carroll | 11 | 257 | 232 | 25 | 30 | |
| Cecil | 13 | 524 | 397 | 127 | 60 | |
| Charles | 21 | 889 | 523 | 366 | 0 | |
| Dorchester | 7 | 256 | 193 | 63 | 7 | |
| Frederick | 21 | 867 | 760 | 107 | 215 | |
| Garrett | 7 | 131 | 86 | 45 | 26 | |
| Harford | 19 | 664 | 558 | 106 | 0 | |
| Howard | 25 | 787 | 492 | 295 | 44 | |
| Kent | 5 | 128 | 77 | 51 | 0 | |
| Montgomery | 62 | 2,699 | 2,690 | 9 | 0 | |
| Prince George's | 90 | 3,906 | 3,835 | 71 | 0 | |
| Queen Anne's | 5 | 250 | 215 | 35 | 0 | |
| St. Mary's | 14 | 707 | 484 | 223 | 114 | |
| Somerset | 5 | 205 | 169 | 36 | 0 | |
| Talbot | 4 | 253 | 136 | 117 | 0 | |
| Washington | 12 | 491 | 459 | 32 | 8 | |
| Wicomico | 12 | 612 | 481 | 131 | 95 | |
| Worcester | 5 | 385 | 256 | 129 | 0 | |
| TOTAL | 589 | 24,310 | 20,952 | 3,358 | 929 | |

Source: MSDE, 2012.



¹ Other criteria include any child who exhibits a lack of readiness in personal and social development, language and literacy, mathematical thinking, scientific thinking, social studies, the arts, or physical development and health.

Table A7. Licensing Critical Non-Compliance Status of Center-Based Providers, March 1, 2011–July 31, 2012

| County | # of Inspections | % of Inspections with Non- compliance in Any of the Four Critical Compliance Areas | % of Inspections with Capacity Non- compliance | % of Inspections with Supervision Non-compliance | % of Inspections with Child Protection Non- compliance | % of Inspections with Staff to Child Ratio & Group Size Non- compliance |
|---------------------|---------------------|--|---|--|---|---|
| Allegany | 16 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Anne Arundel | 134 | 9.7% | 0.7% | 2.2% | 9.7% | 1.5% |
| Baltimore City | 225 | 14.2% | 3.1% | 1.8% | 9.8% | 6.2% |
| Baltimore County | 272 | 11.8% | 1.5% | 2.2% | 8.1% | 2.9% |
| Calvert | 40 | 15.0% | 0.0% | 2.5% | 10.0% | 7.5% |
| Caroline | 7 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Carroll | 68 | 5.9% | 1.5% | 1.5% | 2.9% | 2.9% |
| Cecil | 27 | 11.1% | 0.0% | 0.0% | 11.1% | 0.0% |
| Charles | 54 | 16.7% | 0.0% | 0.0% | 9.3% | 13.0% |
| Dorchester | 18 | 5.6% | 0.0% | 0.0% | 0.0% | 5.6% |
| Frederick | 72 | 6.9% | 0.0% | 0.0% | 2.8% | 4.2% |
| Garrett | 15 | 6.7% | 0.0% | 0.0% | 0.0% | 6.7% |
| Harford | 51 | 13.7% | 2.0% | 3.9% | 3.9% | 3.9% |
| Howard | 113 | 13.3% | 0.9% | 0.9% | 8.8% | 6.2% |
| Kent | 7 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Montgomery | 298 | 9.7% | 1.7% | 1.7% | 7.4% | 2.0% |
| Prince George's | 284 | 7.7% | 1.8% | 0.7% | 6.3% | 2.8% |
| Queen Anne's | 9 | 11.1% | 0.0% | 0.0% | 11.1% | 0.0% |
| Somerset | 4 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| St. Mary's | 31 | 9.7% | 0.0% | 3.2% | 3.2% | 3.2% |
| Talbot | 13 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Washington | 45 | 4.4% | 0.0% | 0.0% | 0.0% | 4.4% |
| Wicomico | 27 | 25.9% | 3.7% | 0.0% | 18.5% | 7.4% |
| Worcester | 13 | 7.7% | 0.0% | 7.7% | 7.7% | 0.0% |
| TOTAL | 1,843 | 10.5% | 1.4% | 1.5% | 7.2% | 3.7% |

Source: MSDE Division of Early Childhood Licensing Inspection Data (3/1/11 – 7/31/12)



Table A8. Licensing Critical Non-Compliance Status of Family Child Care Providers, March 1, 2011 – July 31, 2012

| County | # of Inspections | % of Inspections with Non- compliance in Any of the Three Critical Compliance Areas | % of Inspections with Capacity Non- compliance | % of Inspections with Supervision Non-compliance | % of Inspections with Child Protection Non- compliance |
|------------------|---------------------|---|--|--|---|
| Allegany | 45 | 0.0% | 0.0% | 0.0% | 0.0% |
| Anne Arundel | 453 | 2.9% | 2.2% | 0.9% | 0.0% |
| Baltimore City | 594 | 3.7% | 1.5% | 0.8% | 1.7% |
| Baltimore County | 695 | 3.7% | 1.6% | 2.0% | 0.1% |
| Calvert | 102 | 5.9% | 1.0% | 4.9% | 0.0% |
| Caroline | 66 | 0.0% | 0.0% | 0.0% | 0.0% |
| Carroll | 152 | 1.3% | 0.7% | 0.7% | 0.0% |
| Cecil | 94 | 1.1% | 0.0% | 1.1% | 0.0% |
| Charles | 183 | 3.3% | 1.6% | 1.1% | 0.5% |
| Dorchester | 28 | 7.1% | 3.6% | 0.0% | 3.6% |
| Frederick | 268 | 0.7% | 0.4% | 0.4% | 0.0% |
| Garrett | 17 | 0.0% | 0.0% | 0.0% | 0.0% |
| Harford | 245 | 1.2% | 0.8% | 0.4% | 0.0% |
| Howard | 266 | 2.3% | 2.3% | 0.0% | 0.0% |
| Kent | 15 | 6.7% | 6.7% | 0.0% | 0.0% |
| Montgomery | 610 | 2.6% | 1.8% | 0.8% | 0.5% |
| Prince George's | 678 | 2.7% | 2.4% | 0.6% | 0.0% |
| Queen Anne's | 64 | 1.6% | 0.0% | 1.6% | 0.0% |
| Somerset | 19 | 0.0% | 0.0% | 0.0% | 0.0% |
| St. Mary's | 150 | 6.7% | 2.0% | 4.7% | 0.7% |
| Talbot | 39 | 2.6% | 2.6% | 0.0% | 0.0% |
| Washington | 193 | 0.0% | 0.0% | 0.0% | 0.0% |
| Wicomico | 94 | 4.3% | 3.2% | 1.1% | 0.0% |
| Worcester | 24 | 0.0% | 0.0% | 0.0% | 0.0% |
| TOTAL | 5,094 | 2.7% | 1.6% | 1.0% | 0.3% |

Source: MSDE Division of Early Childhood Licensing Inspection Data (3/1/11 – 7/31/12)



Table A9. Subsidized Center-Based Providers Participation in the Tiered Reimbursement System, 2010

| | # of Center- Based Providers Receiving Child Care | Total # of Subsidized Centers Participating in the Tiered Reimbursement | | | | |
|-----------------|---|---|---------|---------|---------|---------|
| County | Subsidies ¹ | System | Level 1 | Level 2 | Level 3 | Level 4 |
| Allegany | 14 | 0 | 0 | 0 | 0 | 0 |
| Anne Arundel | 135 | S | 0 | 0 | 0 | S |
| Baltimore City | 215 | 6 | 0 | S | s | S |
| Baltimore Co | 257 | S | 0 | 0 | 0 | S |
| Calvert | 44 | S | 0 | S | 0 | S |
| Caroline | 6 | 0 | 0 | 0 | 0 | 0 |
| Carroll | 65 | S | 0 | 0 | S | S |
| Cecil | 23 | 0 | 0 | 0 | 0 | 0 |
| Charles | 52 | 0 | 0 | 0 | 0 | 0 |
| Dorchester | 16 | S | 0 | S | S | 0 |
| Frederick | 78 | S | 0 | 0 | S | S |
| Garrett | 6 | S | 0 | 0 | S | 0 |
| Harford | 62 | 0 | 0 | 0 | 0 | 0 |
| Howard | 90 | 0 | 0 | 0 | 0 | 0 |
| Kent | S | 0 | 0 | 0 | 0 | 0 |
| Montgomery | 276 | S | 0 | S | S | 0 |
| Prince George's | 304 | s | 0 | 0 | S | S |
| Queen Anne's | 7 | 0 | 0 | 0 | 0 | 0 |
| St. Mary's | 27 | 0 | 0 | 0 | 0 | 0 |
| Somerset | 6 | S | S | 0 | 0 | 0 |
| Talbot | 12 | S | 0 | 0 | 0 | S |
| Washington | 36 | S | 0 | 0 | 0 | S |
| Wicomico | 38 | S | 0 | 0 | S | 0 |
| Worcester | 12 | S | 0 | 0 | 0 | S |
| TOTAL | 1,785 | 38 | S | S | 13 | 20 |

Source: Child Trends analyses' of Maryland Child Care Administrative Tracking System, 2011.
¹Among those who accepted a subsidy Feb. 07-September 2010



s = Data were suppressed if the cell count was 5 or less.

Table A10. Subsidized Family Child Care Providers Participation in the Tiered Reimbursement System, 2010

| Country | # of Family Child Care Providers Receiving Child Care Subsidies ¹ | Total # of Providers Participating in the Tiered Reimbursement | 1 14 | Lovel2 | Lovel 2 | Laurid |
|------------------------|---|--|----------------|---------|---------|----------------|
| County Allegany | 58 | System S | Level 1 | Level 2 | Level 3 | Level 4 |
| Anne Arundel | 266 | S | 0 | 0 | 0 | s |
| Baltimore City | 844 | 6 | 0 | s | 2 | S |
| Baltimore Co | 649 | S | 0 | 0 | 0 | S |
| Calvert | 83 | S | 0 | 0 | 0 | S |
| Caroline | 74 | S | 0 | 0 | 0 | S |
| Carroll | 98 | 0 | 0 | 0 | 0 | 0 |
| Cecil | 90 | 0 | 0 | 0 | 0 | 0 |
| Charles | 150 | S | 0 | 0 | 0 | S |
| Dorchester | 44 | 0 | 0 | 0 | 0 | 0 |
| Frederick | 158 | S | 0 | S | 0 | 0 |
| Garrett | 22 | 0 | 0 | 0 | 0 | 0 |
| Harford | 216 | 0 | 0 | 0 | 0 | 0 |
| Howard | 146 | S | S | 0 | 0 | S |
| Kent | 20 | 0 | 0 | 0 | 0 | 0 |
| Montgomery | 380 | S | 0 | 0 | 0 | S |
| Prince George's | 687 | s | 0 | 0 | 0 | S |
| Queen Anne's | 64 | S | 0 | 0 | S | S |
| St. Mary's | 85 | 0 | 0 | 0 | 0 | 0 |
| Somerset | 27 | 0 | 0 | 0 | 0 | 0 |
| Talbot | 36 | S | 0 | 0 | 0 | S |
| Washington | 184 | S | 0 | 0 | S | S |
| Wicomico | 103 | S | 0 | 0 | 0 | S |
| Worcester | 28 | S | 0 | 0 | 0 | S |
| TOTAL | 4,512 | 32 | s | S | s | 24 |

Source: Child Trends analyses' of Maryland Child Care Administrative Tracking System, 2011.
¹Among those who accepted a subsidy Feb. 07-September 2010



s = Data were suppressed if the cell count was 5 or less.

Table A11. Percent of Child Care Center Providers with Staff Participating in the Child Care Credentialing System, 2011

| County | % of Center-Based Providers Where No Staff Have Credentialing | % of Center-Based Providers Where Some Staff Have Credentialing | % of Center-Based Providers Where All Staff Have Credentialing |
|------------------|--|--|--|
| Allegany | 45.0% | 50.0% | 5.0% |
| Anne Arundel | 51.1% | 43.1% | 5.9% |
| Baltimore City | 52.1% | 37.8% | 10.1% |
| Baltimore County | 60.5% | 33.2% | 6.3% |
| Calvert | 35.6% | 40.7% | 23.7% |
| Caroline | 0.0% | 75.0% | 25.0% |
| Carroll | 39.8% | 55.7% | 4.6% |
| Cecil | 72.7% | 21.2% | 6.1% |
| Charles | 65.8% | 30.1% | 4.1% |
| Dorchester | 57.1% | 33.3% | 9.5% |
| Frederick | 44.7% | 45.6% | 9.7% |
| Garrett | 38.9% | 27.8% | 33.3% |
| Harford | 58.2% | 41.8% | 0.0% |
| Howard | 53.5% | 39.6% | 6.9% |
| Kent | 70.0% | 30.0% | 0.0% |
| Montgomery | 63.6% | 33.6% | 2.8% |
| Prince George's | 60.7% | 33.1% | 6.3% |
| Queen Anne's | 33.3% | 50.0% | 16.7% |
| St. Mary's | 50.0% | 34.1% | 15.9% |
| Somerset | 33.3% | 55.6% | 11.1% |
| Talbot | 11.8% | 52.9% | 35.3% |
| Washington | 49.2% | 42.6% | 8.2% |
| Wicomico | 52.3% | 40.9% | 6.8% |
| Worcester | 37.5% | 56.3% | 6.3% |
| TOTAL | 55.4% | 37.5% | 7.1% |

Source: Child Trends' analyses of data provided by MSDE, Office of Child Care Credentialing Branch, 2011.



Table A12. Percent of Family Child Care Providers with Staff Participating in the Child Care Credentialing System, 2011

| County | % of Family Child Care Providers Where No Staff Have Credentialing | % of Family Child Care Providers Where Some Staff Have Credentialing | % of Family Child Care Providers Where All Staff Have Credentialing |
|------------------|--|---|---|
| Allegany | 85.7% | 0.0% | 14.3% |
| Anne Arundel | 88.1% | 1.2% | 10.7% |
| Baltimore City | 85.3% | 1.8% | 13.0% |
| Baltimore County | 87.0% | 2.3% | 10.7% |
| Calvert | 61.1% | 1.2% | 37.7% |
| Caroline | 85.6% | 1.6% | 12.8% |
| Carroll | 85.6% | 1.4% | 13.1% |
| Cecil | 92.0% | 0.0% | 8.0% |
| Charles | 82.7% | 2.4% | 14.9% |
| Dorchester | 87.9% | 0.0% | 12.1% |
| Frederick | 89.0% | 1.8% | 9.2% |
| Garrett | 80.8% | 3.9% | 15.4% |
| Harford | 90.4% | 1.0% | 8.7% |
| Howard | 87.4% | 1.2% | 11.5% |
| Kent | 78.6% | 0.0% | 21.4% |
| Montgomery | 87.3% | 4.5% | 8.2% |
| Prince George's | 84.3% | 2.0% | 13.7% |
| Queen Anne's | 87.1% | 0.9% | 12.1% |
| St. Mary's | 91.0% | 0.9% | 8.2% |
| Somerset | 93.9% | 0.0% | 6.1% |
| Talbot | 86.7% | 0.0% | 13.3% |
| Washington | 82.9% | 0.0% | 17.1% |
| Wicomico | 80.5% | 0.7% | 18.8% |
| Worcester | 67.5% | 2.5% | 30.0% |
| TOTAL | 86.0% | 1.9% | 12.2% |

 $Source: Child\ Trends'\ analyses\ of\ data\ provided\ by\ MSDE,\ Office\ of\ Child\ Care\ Credentialing\ Branch,\ 2011.$



Table A13. Percent of Child Care Center Providers With Any Staff at Each Credential Level, 2011

| % of | | | % of % of % of | | | % of % of | | |
|---------------------|-----------|----------------|----------------|-----------|-----------|----------------|-----------|--|
| | Providers | | Providers | Providers | Providers | Providers | Providers | |
| | With Any | % of Providers | With Any | With Any | With Any | With Any | With Any | |
| | Staff at | With Any Staff | Staff at Level | Staff at | Staff at | Staff at Level | Staff at | |
| County | Level 1 | at Level 2 | 3 | Level 4 | Level 4+ | 5 | Level 6 | |
| Allegany | 10.0% | 0.0% | 20.0% | 15.0% | 0.0% | 15.0% | 30.0% | |
| Anne Arundel | 20.7% | 16.5% | 30.9% | 8.5% | 2.1% | 9.0% | 8.5% | |
| Baltimore City | 18.9% | 14.7% | 24.8% | 10.4% | 1.3% | 8.5% | 16.0% | |
| Baltimore County | 15.2% | 14.3% | 23.5% | 6.6% | 0.6% | 8.6% | 7.5% | |
| Calvert | 10.2% | 13.6% | 45.8% | 25.4% | 3.4% | 22.0% | 15.3% | |
| Caroline | 0.0% | 37.5% | 50.0% | 50.0% | 12.5% | 75.0% | 12.5% | |
| Carroll | 30.7% | 15.9% | 38.6% | 19.3% | 1.1% | 12.5% | 20.5% | |
| Cecil | 12.1% | 6.1% | 9.1% | 12.1% | 0.0% | 9.1% | 6.1% | |
| Charles | 13.7% | 11.0% | 16.4% | 6.9% | 0.0% | 11.0% | 8.2% | |
| Dorchester | 14.3% | 19.1% | 28.6% | 9.5% | 4.8% | 9.5% | 14.3% | |
| Frederick | 19.4% | 20.4% | 32.0% | 19.4% | 1.9% | 17.5% | 14.6% | |
| Garrett | 5.6% | 0.0% | 16.7% | 44.4% | 11.1% | 11.1% | 44.4% | |
| Harford | 15.2% | 15.2% | 30.4% | 3.8% | 1.3% | 5.1% | 10.1% | |
| Howard | 13.8% | 13.8% | 30.2% | 10.6% | 0.6% | 11.3% | 15.1% | |
| Kent | 0.0% | 0.0% | 10.0% | 0.0% | 0.0% | 20.0% | 0.0% | |
| Montgomery | 15.2% | 12.9% | 24.9% | 6.7% | 0.7% | 7.1% | 13.4% | |
| Prince George's | 14.6% | 17.7% | 19.0% | 6.8% | 1.3% | 5.2% | 4.7% | |
| Queen Anne's | 16.7% | 33.3% | 33.3% | 16.7% | 0.0% | 16.7% | 16.7% | |
| St. Mary's | 11.4% | 15.9% | 25.0% | 4.6% | 0.0% | 9.1% | 11.4% | |
| Somerset | 55.6% | 0.0% | 44.4% | 22.2% | 0.0% | 22.2% | 44.4% | |
| Talbot | 5.9% | 17.7% | 58.8% | 41.2% | 23.5% | 52.9% | 52.9% | |
| Washington | 11.5% | 9.8% | 32.8% | 18.0% | 6.6% | 13.1% | 16.4% | |
| Wicomico | 20.5% | 18.2% | 36.4% | 6.8% | 4.6% | 20.5% | 22.7% | |
| Worcester | 31.3% | 25.0% | 43.8% | 18.8% | 0.0% | 18.8% | 18.8% | |
| TOTAL | 16.3% | 14.8% | 26.3% | 10.0% | 1.5% | 9.9% | 12.2% | |

Source: Child Trends' analyses of data provided by MSDE, Office of Child Care Credentialing Branch, 2011.



Table A14. Percent of Family Child Care Home Providers With Any Staff at Each Credential Level, 2011

| | % of | | | % of % of % of % of | | | | |
|---------------------|-----------|----------------|----------------|---------------------|-----------|----------------|-------------------|--|
| | Providers | | Providers | Providers | Providers | Providers | % of Providers | |
| | With Any | % of Providers | With Any | With Any | With Any | With Any | With Any | |
| | Staff at | With Any Staff | Staff at Level | Staff at | Staff at | Staff at Level | Staff at | |
| County | Level 1 | at Level 2 | 3 | Level 4 | Level 4+ | 5 | Level 6 | |
| Allegany | 3.9% | 0.0% | 3.9% | 2.6% | 1.3% | 1.3% | 1.3% | |
| Anne Arundel | 3.3% | 1.6% | 3.1% | 1.9% | 1.0% | 0.6% | 0.3% | |
| Baltimore City | 3.6% | 1.5% | 4.7% | 2.7% | 0.5% | 1.2% | 0.6% | |
| Baltimore County | 4.1% | 2.0% | 3.4% | 2.0% | 0.3% | 0.7% | 0.7% | |
| Calvert | 16.7% | 3.1% | 9.9% | 4.9% | 2.5% | 1.2% | 1.2% | |
| Caroline | 0.8% | 2.4% | 6.4% | 1.6% | 2.4% | 1.6% | 0.0% | |
| Carroll | 2.7% | 1.4% | 4.1% | 2.7% | 0.5% | 1.8% | 1.4% | |
| Cecil | 3.1% | 0.0% | 2.5% | 1.2% | 1.2% | 0.0% | 0.0% | |
| Charles | 4.5% | 1.7% | 5.2% | 2.1% | 2.8% | 0.4% | 0.7% | |
| Dorchester | 3.5% | 0.0% | 6.9% | 1.7% | 0.0% | 0.0% | 0.0% | |
| Frederick | 2.7% | 1.6% | 2.7% | 1.8% | 1.1% | 0.7% | 0.7% | |
| Garrett | 0.0% | 3.9% | 7.7% | 0.0% | 3.9% | 3.9% | 0.0% | |
| Harford | 3.1% | 1.7% | 2.7% | 0.2% | 0.7% | 1.0% | 0.2% | |
| Howard | 4.5% | 1.4% | 3.8% | 1.4% | 1.2% | 0.0% | 0.5% | |
| Kent | 3.6% | 3.6% | 7.1% | 7.1% | 0.0% | 3.6% | 0.0% | |
| Montgomery | 3.0% | 1.2% | 4.4% | 2.8% | 1.1% | 0.2% | 0.5% | |
| Prince George's | 3.8% | 1.7% | 5.0% | 2.0% | 1.1% | 1.8% | 0.6% | |
| Queen Anne's | 2.6% | 1.7% | 3.5% | 0.9% | 2.6% | 0.9% | 0.9% | |
| St. Mary's | 2.6% | 0.9% | 1.7% | 2.2% | 1.7% | 0.0% | 0.0% | |
| Somerset | 0.0% | 0.0% | 3.0% | 3.0% | 0.0% | 0.0% | 0.0% | |
| Talbot | 0.0% | 1.7% | 5.1% | 0.0% | 5.0% | 1.7% | 0.0% | |
| Washington | 6.4% | 1.9% | 3.8% | 3.2% | 1.0% | 0.6% | 0.6% | |
| Wicomico | 5.4% | 1.3% | 5.4% | 2.0% | 3.4% | 0.7% | 1.3% | |
| Worcester | 5.0% | 0.0% | 12.5% | 2.5% | 12.5% | 0.0% | 0.0% | |
| TOTAL | 3.8% | 1.6% | 4.2% | 2.2% | 1.2% | 0.8% | 0.6% | |

Source: Child Trends' analyses of data provided by MSDE, Office of Child Care Credentialing Branch, 2011.



Table A15. Percent and Number of Providers by Accreditation Status, 2011

| Number of Providers by Accreditation I | | | | | | , |
|--|---------------------------|-------|------|-------|-------|-------|
| County | % of Accredited Providers | NAEYC | MSDE | MSCES | NAFCC | Other |
| Allegany | 2.7% | 0 | 18 | 1 | | 0 |
| Anne Arundel | 7.4% | 10 | 8 | 10 | 11 | 14 |
| Baltimore City | 7.0% | 3 | 13 | 20 | 4 | 10 |
| Baltimore County | 8.0% | 5 | 18 | 21 | 3 | 10 |
| Calvert | 3.2% | 0 | 17 | 2 | 2 | 2 |
| Caroline | 1.0% | 0 | 7 | 0 | | 0 |
| Carroll | 4.6% | 3 | 10 | 1 | 8 | 11 |
| Cecil | 1.1% | 0 | 5 | 3 | | 0 |
| Charles | 2.4% | 3 | 4 | 4 | 6 | 0 |
| Dorchester | 0.7% | 0 | 4 | 0 | 1 | 0 |
| Frederick | 7.0% | 7 | 27 | 6 | 4 | 6 |
| Garrett | 2.7% | 0 | 18 | 0 | 1 | 0 |
| Harford | 3.5% | 4 | 4 | 7 | 2 | 8 |
| Howard | 5.5% | 8 | 13 | 6 | 9 | 3 |
| Kent | 0.3% | 0 | 1 | 0 | | 1 |
| Montgomery | 19.8% | 36 | 30 | 31 | 17 | 27 |
| Prince George's | 10.0% | 18 | 6 | 26 | 14 | 7 |
| Queen Anne's | 1.5% | 0 | 7 | 1 | 1 | 2 |
| St. Mary's | 0.8% | 0 | 0 | 1 | 5 | 0 |
| Somerset | 2.0% | 2 | 5 | 6 | | 1 |
| Talbot | 2.1% | 0 | 5 | 7 | 2 | 1 |
| Washington | 2.7% | 2 | 7 | 4 | 5 | 1 |
| Wicomico | 2.1% | 0 | 9 | 2 | 4 | 0 |
| Worcester | 2.0% | 0 | 6 | 5 | 3 | 0 |
| TOTAL | 4.2% | 101 | 242 | 164 | 102 | 104 |

Source: MSDE Internal documents

NAEYC: National Association of the Education of Young Children MSDE: Maryland State Department of Education Accreditation MSCES: Middle States Commission on Elementary Schools

NAFCC: National Association for Family Child Care

"Other" includes Association Montessori Internationale, American Montessori Society, National Afterschool Association, and the National Early Childhood Program Association.



Data Sources and Definitions Used in this Report

Data for this report are drawn from several sources. Population estimates for children under the age of five are drawn from the 2010 Decennial Census. Data for the selected risk indicators were obtained from the following sources:

American Community Survey 3-Year Estimates, 2008-2010³⁷

• Percentage of children under age five living in families below the poverty level (2010). The data on poverty status of households were derived from answers to the income questions. Since poverty is defined at the family level and not the household level, the poverty status of the household is determined by the poverty status of the householder. For example, in 2010 a family of four was considered to be living below the federal poverty level if they earned an annual income of \$22,314 or less.

Vital Statistics data, 2009, 2010 38

- Percentage of births to unmarried mothers (2010). Respondents were asked about births within 12 months of the survey administration.
- Percentage of births to teenage mothers (2010). This includes any woman under the age of 18 who gave birth within 12 months of the survey administration.
- Percentage of births to mothers with less than 12 years of formal education (2009). Respondents were given credit for completing 12 year of formal education even if they did not receive their high school diploma.

Kids Count Report for Maryland³⁹

- Percentage of low birth weight infants (2011). Low birth weight was defined as less than 2,500 grams, which is consistent with the International Classification of Diseases, Ninth Revision and the International Classification of Diseases, Tenth Revision.
- Uninsured Children (2010). Data available for uninsured children by county includes all children under the age of 18.
- Percentage of births to mothers who did not receive prenatal care (2010). Respondents were
 asked to report the month in which they first received prenatal care. Percentages included in
 this indicator include mothers who never received prenatal care or receive care late in their
 third trimester.
- Children Not Ready for Kindergarten. Children were deemed not ready for kindergarten based on the average score they received on the Maryland Model for School Readiness kindergarten assessment in the domains of "language and literacy" and "mathematical thinking." 40

Maryland State Department of Education

- Percentage of Title I Elementary Schools (2012-2013). Data for each county was determined by
 calculating the number of elementary schools that received Title I targeted or schoolwide
 assistance as a percentage of all elementary schools in that county.
- Percentage of Title I Elementary Schools with School Improvement Plans. Data for each county
 was determined by calculating the number of elementary schools that received Title I targeted
 or schoolwide assistance and are implementing a school improvement plan, as a percentage of
 all Title I elementary schools in that county.

http://www.census.gov/acs/www/Downloads/data_documentation/SubjectDefinitions/2010_ACSSubjectDefinitions.pdf

⁴⁰ For more information, see: http://marylandpublicschools.org/NR/rdonlyres/BCFF0F0E-33E5-48DA-8F11-28CF333816C2/31940/2011 12 statereport web .pdf



³⁷ For more information, see:

³⁸ For more information, see: http://dhmh.maryland.gov/vsa/Documents/10annual.pdf

³⁹ For more information, see: http://datacenter.kidscount.org/data/bystate/StateLanding.aspx?state=MD

Reach data were provided by a number of Maryland resources, as indicated below.

- Capacity of Center-Based Providers and Family Child Care Providers. Data were derived from the MSDE Division of Early Childhood Licensing Inspection Data (3/1/11 7/31/12)
- Capacity of Subsidized Providers to Serve Children under Age Five. Data were derived from the MSDE Division of Early Childhood Licensing Inspection Data (3/1/11 7/31/12)
- *Total Prekindergarten (4 year old) Enrollment, 2010-2011.* Data were provided by the Maryland State Department of Education, Division of Early Childhood, Early Learning Branch, 2012.
- Licensing Non-Compliance Status, 2011. Data were derived from the Maryland State Department of Education, Maryland Licensing Inspection Data, 2012.
- Subsidized Providers Participation in the Tiered Reimbursement System, 2010. Data were derived from the Maryland Child Care Administrative Tracking System, 2010.
- Percent of Centers with Staff Participating in the Child Care Credentialing System. Data were provided by the Maryland State Department of Education, Division of Early Childhood, Office of Child Care Credentialing Branch, 2011.
- Percent of Providers with Any Staff at Each Credential Level. Data were provided by the Maryland State Department of Education, Division of Early Childhood, Office of Child Care Credentialing Branch, 2011.
- Percent and Number of Providers by Accreditation Status. Data were provided by the Maryland State Department of Education, Division of Early Childhood, 2012.

Other research reports from this study are available at http://www.mdmnresearchpartnership.com/.

Funding for the Maryland Research Capacity Grant is provided through grant #90YE0107/01 from the Office of Planning, Research and Evaluation in the Administration for Children and Families, U.S. Department of Health and Human Services. The contents of this report are solely the responsibility of the authors and do not necessarily represent the official views of the Office of Planning, Research and Evaluation, the Administration for Children and Families, or the U.S. Department of Health and Human Services.

Acknowledgements

This report would not be possible without the contributions and guidance of key individuals in the Maryland State Department of Education, Division of Early Childhood Development: Phil Koshkin, Chief, Research and Evaluation; John Spears, Senior Human Services Consultant RESI, Jenaya Smith, Early Learning Specialist, and Michele Goady Director, Special Initiatives. The authors would especially like to thank Rolf Grafwallner, Assistant State Superintendent, Division of Early Childhood Development for his vision and support for this report. Additional thanks to Child Trends staff Tamara Halle, Co-Director of the Early Childhood Development Program Area, for her review and guidance during the development of this report and Paula Daneri, Research Assistant for her contributions to the data presentation.

© Child Trends Publication # 2012-41

