



**Office of Child Development and Early Learning
Pennsylvania Departments of Education and Public Welfare
Program Reach and County Risk Assessment
State Fiscal Year 2006-2007
June 2007**

Introduction

The Office of Child Development and Early Learning is committed to using data to inform policies and practices. Research consistently shows that children at risk of school failure benefit from quality early learning opportunities, benefits which extend to our families, communities, and the Commonwealth. This report provides information about how well the Commonwealth is doing reaching its young children with the provision of quality early childhood services, with special attention to “at risk” children for Fiscal Year End 2006-2007. The report:

- compiles information on the number of children served and funding levels for early childhood programs supported by state and federal investments;
- includes an analysis of educational and family risk factors and identified counties most likely to benefit from early childhood investments based on those risk factors.

Through the examination of county-level early childhood programming and the evaluation of salient educational and family risk factors, this data can be used to: 1) track progress in reaching all children, 2) help communities better understand their early childhood programming needs, particularly in counties where there are high risks, and 3) inform future decisions regarding early care and education investments.

Methodology

All data is provided in the Excel spreadsheet titled “ECE_Analysis_June_2007” which is available on the Pennsylvania Department of Education website at www.pde.state.pa.us and Pennsylvania Key website at www.pakeys.org.

The data was compiled in four stages: 1) Gathering relevant information about state-funded early childhood program usage by county, 2) Selecting education and family risk factors and gathering information on number or percentage of children in various risk categories by county, 3) Developing an Average Risk Level (ARL) to identify those counties with the greatest risks and therefore need for early childhood investments, and 4) Combining the ARL information with the state-funded early childhood program usage information to identify county usage by risk. Descriptions of the four stages of data collection are provided below as well as where to find the data in the “ECE_Analysis_June_2007” spreadsheet.

- I. June 2007 program reach and funding data was collected and compiled for existing state-administered early childhood education programs for children served under five years of age. Programs included:
 - a. Pre-K Counts Public/Private Partnership Reach Data (Tab 4),

- b. Keystone STARS Reach Data (Tab 5),
 - c. Head Start State and Federal Reach Data (Tab 6),
 - d. Accountability Block Grants Reach Data (Pre-K Only) (Tab 7),
 - e. Community Engagement Groups Reach Data (Tab 8),
 - f. Title I Funding for Pre-K through 2nd Grade Reach data (Tab 9), and
 - g. Child Care Works/Subsidy Reach Data (Tab 10).
- II. Education and family risk indicators were identified and county-level data was collected on each indicator. Additionally, community readiness data was collected to provide an overview of the progress made in each county for Pre-K enrollment (Tab 7). The seven education and family risk indicators chosen for inclusion in the risk analysis model includes (Tab 13 and Tab 14):
- a. **Rate of children under age five living in Low Income families** (2000 US Census defines “low income” as below 200% of federal poverty level) - Children living in poverty are more likely to have poor nutrition, chronic health problems, and be less prepared for and have more difficulty in school.
 - b. **Percent of families with related children under age five living below poverty level** (2000 US Census defines “poverty” as below 100% of federal poverty level) – Potential efforts to support early childhood and school readiness may include outreach to families in poverty. Thus, a family measure of poverty was included in addition to the actual child rates to identify counties that had high numbers of families living in poverty.
 - c. **Percent of single mother-headed families with children under age five living below poverty level** (2000 US Census) – Research shows that children living with both biological parents are less likely to exhibit behavior problems, and children living with married parents are less likely to experience economic hardship (Golden 2005). Women, who are single parents, as well as those who cohabit with their child’s other parent, tend to have lower educational attainment, less income, and higher rates of child abuse and domestic violence than married women (Whitehead and Popenoe, 2004).
 - d. **Percent of children receiving aid through TANF** – This measure was included to identify counties that have high rates of use of government assistance. Long-term outcomes of quality early childhood programs demonstrate reduced use of welfare during adulthood.
 - e. **Rate of births to mothers with less than a high school degree** (Pennsylvania Department of Health) - Children who live with parents with a low education level are less likely to receive cognitive stimulation and high quality child care during crucial development periods and are more likely to have diminished reading skills.
 - f. **PSSA: Percent below proficient in 3rd grade math** (Pennsylvania Department of Education) – Early childhood investments should demonstrate improved academic outcomes.

g. **PSSA: Percent below proficient in 3rd grade reading** (Pennsylvania Department of Education) – Same as above.

- III. Counties were ranked by status on the various risk indicators and broken into quartiles to determine risk levels of low, moderate-low, moderate-high, and high risk. Scores of one (low) through four (high) were assigned for each indicator and then tallied and averaged to determine an overall “Average Risk Level,” or ARL, for each county (Tab 14 and Tab 15).
- IV. Once all program and indicator data was compiled, the results were analyzed in conjunction with county risk level to determine the extent to which early childhood programming and funding has been targeted to those counties with the greatest need, or more precisely, with the highest ARL (Tab 1 and Tab 2). Using these comparisons, future recommendations for additional investments can be determined.

Findings

Listed below are the Commonwealth’s 67 counties and their Average Risk level, based on the FY 2006-2007 analysis:

Low Risk Counties	Average Risk Level (ARL)	Moderate-Low Risk Counties	Average Risk Level (ARL)	Moderate-High Risk Counties	Average Risk Level (ARL)	High Risk Counties	Average Risk Level (ARL)
Bucks	1.00	Butler	1.14	Beaver	2.14	Bradford	3.14
Montgomery	1.00	Centre	1.14	Cameron	2.14	Northumberland	3.14
		Pike	1.14	Columbia	2.14	Potter	3.14
		Chester	1.29	Forest	2.14	Clinton	3.29
		Cumberland	1.29	Lackawanna	2.29	Huntingdon	3.29
		Elk	1.57	Lancaster	2.29	Jefferson	3.29
		Westmoreland	1.57	Lehigh	2.29	Lawrence	3.29
		Monroe	1.71	Tioga	2.29	McKean	3.29
		Northampton	1.71	Allegheny	2.43	Mercer	3.43
		Sullivan	1.71	Cambria	2.43	Mifflin	3.43
		Delaware	1.86	Carbon	2.43	Clearfield	3.57
		Snyder	1.86	Lycoming	2.43	Crawford	3.71
		Union	1.86	Bedford	2.57	Philadelphia	3.71
		Washington	1.86	Berks	2.57	Venango	3.71
		Adams	2.00	Franklin	2.57	Fayette	4.00
		Perry	2.00	Fulton	2.57	Greene	4.00
		Wayne	2.00	Schuylkill	2.57		
		York	2.00	Somerset	2.57		
				Wyoming	2.57		
				Armstrong	2.71		
				Juniata	2.71		
				Lebanon	2.71		
				Luzerne	2.71		
				Susquehanna	2.71		
				Warren	2.71		
				Blair	2.86		
				Montour	2.86		
				Clarion	3.00		
				Dauphin	3.00		
				Erie	3.00		
				Indiana	3.00		

Direct Impact Programs for Children under five in PA

- **Early Childhood Program Usage** – On average, state and federally funded early childhood programs (including Pre-K Counts Public/Private Partnership, Keystone STARS, Head Start State and Federal, and Accountability Block Grants for Pre-K) are reaching 26% of children under age five statewide (Tab 1, Column N and Tab 3, Column U), ranging from 8% to 57% on a county basis (Tab 1, Column N). Program reach is greatest on average in the moderate-high risk counties (28%). Of all the state investments, most children are being reached through the Keystone STARS program, which averages service to 19% of children birth – five years. As of the end of the 2006-2007 fiscal year, the statewide percent of children in providers participating in STAR 2, STAR 3, and STAR 4 are 4.1%, 1.17%, and 2.69%, respectively. An average of 3.86% of the children under five are served in the STAR 3 and 4 facilities (see STAR 3 and STAR 4 sites in Tab 5, Column S).

Out of 67 counties in Pennsylvania only one county, Sullivan, served over 50% of their children under five in state/federal-funded early childhood programs. Sullivan is a rural moderate-low risk county, which may explain this higher percentage of reach of 57%. In addition, Sullivan county also serves the highest percent of children under five in Head Start programs statewide and has one of the lowest numbers of children under five (281 children). The county with the lowest reach is Wyoming, which is a rural mix moderate-high risk county where only 8% of their young children are served in quality early childhood programs.

If we look at the subset of preschool age children, we see that 30% of three and four year olds statewide are served in quality early childhood education settings that include Pre-K, Head Start, and STARS 3 and 4.

- **Early Childhood Program Funding (FY 2006-2007)** – On average, children served in state and federally funded early childhood programs (including Keystone STARS, Head Start State and Federal, and Accountability Block Grants for Pre-K, Community Engagement Groups, and Title I Funding for Pre-K through 2nd Grade) are funded at the rate of \$1,930 per child served (Tab 1, Column O and Tab 3, Column W). Generally, funding has been targeted at counties with the greatest risk. The 16 high risk communities are all receiving funding above the statewide average per child spending.

Wyoming County had the highest spending per child for all quality early childhood education programs at \$6,092. The ten highest spending per child counties were either of high risk (Clearfield, Fayette, Greene, Lawrence, and McKean) or moderate-high risk (Armstrong, Cameron, Indiana, Juniata, and Wyoming). All of these counties were classified as rural or rural-mix.

Cumberland County had the lowest spending per child at \$576. Meanwhile, nine of the ten lowest spending per child counties were of low risk (Bucks and Montgomery) or moderate-low risk (Centre, Chester, Cumberland, Monroe,

Northampton, Pike, and York). One county was of moderate-high risk – Dauphin. Eight of these counties were urban or urban-mix while two were rural.

- **Pre-K Counts Public/Private Partnerships** were established at 25 school districts in 18 different counties in FY 2006-2007. Overall, 7,169 children were reached through the pilot programs with the greatest number of students served in Philadelphia (1,675), Allegheny (1,395), Dauphin (728), Northampton (563), and Lackawanna (444) counties. All of these counties are classified as urban and four of these counties received a moderate-high (Allegheny, Dauphin, and Lackawanna) to high (Philadelphia) average risk level score. Pre-K Counts Public/Private Partnership sites were present in three of the 16 high risk counties and 8 of the 31 moderate-high risk counties in the state.

Huntingdon County's *Pre-K Counts Public/Private Partnership* programs reached the greatest percentage of children under age five in the county at 9.03% while the lowest percentage was .43% in Montgomery County. Despite having the first and second highest raw numbers of children served, Philadelphia and Allegheny counties only reached 1.71% and 1.96% of children under five respectively due to the large number of children under five years in these counties.

- **Keystone STARS** (as of June 30, 2007) was the state-funded early childhood initiative that reached the greatest number of young children, averaging at 19% statewide in all Keystone STARS levels. Children served in STAR 2, STAR 3 and STAR 4 sites, which are considered higher quality settings that research relates to positive child outcomes, showed on average that approximately 7.95% of children are served in these high quality programs (Tab 5).

Generally, Keystone STARS was serving greater percentages of children on average in moderate-high risk counties and low risk counties. There were 13 counties that served greater than a quarter of children under five in Keystone STARS programs. Eight (Cambria, Columbia, Dauphin, Forest, Lehigh, Lycoming, Montour, Tioga) of these counties were moderate-high risk; four (Centre, Cumberland, Monroe, Wayne) were moderate-low risk; one was low risk; and one (Crawford) was high risk. Further, one of the 16 high risk counties had average Keystone STARS participation that exceeded the state average (19%) whereas one of the two low risk counties had higher Keystone STARS average participation than the state rate.

These figures, combined with community readiness data (Tab 11, Column J), show the average availability of high quality child care (i.e. STAR 2, 3, or 4 and/or NAEYC, NAFCC, NAA, or NECPA accredited) at 11.85% in high risk counties compared to 20.87% in low risk counties with moderate-high counties and moderate-low counties demonstrating availability of 17.03% and 15.93% respectively.

As of June 2007,¹ there were 3,767 child care facilities within the Keystone STARS system, covering all counties and reaching an estimated 138,210 children in the Commonwealth. Overall 61% of centers, 47% of group homes, and 23% of family homes are participating in Keystone STARS (42% of regulated child care facilities were participating in Keystone STARS).

- **Accountability Block Grants** (FY 2006-2007) have been used for “Quality Pre-K” programming in 28 counties throughout the state. Nine of the 28 counties that use ABG funds for Pre-K are high risk counties (Bradford, Clearfield, Crawford, Huntingdon, Lawrence, McKean, Northumberland, Philadelphia, and Potter) (Tab 7). Of these nine, eight fell above the average (0.62%) for percent of children reached that are under five years receiving quality ABG Pre-K spending (Bradford, Crawford, Huntingdon, Lawrence, McKean, Northumberland, Philadelphia, and Potter). However, community readiness indicators reveal that three of the high risk counties that spend no ABG money on Pre-K are providing public school Pre-K services (Fayette, Mercer, and Venango). Thus, a total of 12 high risk counties offer some type of Pre-K services.

Overall, counties using ABG funds for Quality Pre-K reached between .15% and 4.50% of the children under five population through these programs. Among the top five counties in terms of reach, or those serving more than 3% of the population under age five, two (Lebanon and Susquehanna) were moderate-high risk while three (Lawrence, McKean, and Potter) were high risk.

- **Head Start State and Federal** (FY 2006-2007) has reached all 67 counties in Pennsylvania (Tab 6). Nine of the 10 counties serving the highest percentage of children are rural or rural-mix (Cameron, Clearfield, Columbia, Greene, Juniata, Mercer, Montour, Schuylkill, and Sullivan). Sullivan County served the highest (35.04%) percentage of children in state and federal head start programs, while Pike County served the lowest at 4.84%.

Head Start Supplemental reached 15 of the 16 high risk counties in the state; however only seven of these counties performed better than the state average (0.79%) in reaching percentages of children under five in Low Income families. Twenty-seven of the 31 moderate-high risk counties also reached some percentage of the under five Low Income population.

In FY 2006-2007, there were a total of 49 agencies in 57 counties administering Head Start services in the state, reaching 5,779 students through almost \$40 million in supplemental assistance grants. This left 10 counties that received no Head Start Supplemental Assistance Grants.

¹ This data reflects information provided in the Keystone STARS June 2007 report.

Among the 57 counties that received Head Start Supplemental Assistance Grants, the percent of children under age five from *Low Income* households² served ranged from a low of .24% in Bucks County, a low risk county, to a high of 11.88% in Cameron County, a moderate-high risk county. Philadelphia and Allegheny served the highest number of children, at 1,474 and 780, respectively; however, they did not place among the top 10 counties for percent of children served. Philadelphia only reached 2.61% while Allegheny was only slightly more successful, reaching 3.06%.

Indirect Impact Programs for Children under five in PA

- **Child Care Works** subsidies were provided to 80,000 children under age five as of July 2007 (Tab 10). (Child Care Works serves a total of 117,000 children on a monthly basis including school-age children.) On average, subsidies are used for 11% of all children under five or 30% of children under five in Low Income families (less than 200% of poverty). Focusing on use among children under five in Low Income families, percentage of children served ranged from 4.24% in Fulton County to 41.74% in Philadelphia County.

Future Directions and Limitations of Use

The Office of Child Development and Early Learning is using the program reach and risk analysis data to better tailor supports to communities. This compilation of information is shared to better inform and arm communities to consider appropriate early childhood investments. We intend to provide additional information on Nurse Family Partnership, Parent-Child Home Program, and Pennsylvania Pre-K Counts as well as additional analysis and discussion of Title 1 funds and Child Care Works Subsidy in future editions. Finer analysis will be conducted on the STARS data as well. Finer analysis by age (e.g., number as a percentage of three- and four-year-olds served in Head Start and Pre-K may be more appropriate than overall percentage under five), and consideration of alternative risk data, such as births to teen mothers or numbers of students with disabilities, and the incorporation of Early Intervention data are considerations for future revisions of this Risk and Reach analysis.

Your feedback is welcome on this data, analysis, and report. This will be an evolving project that will adjust to meet usage demands. If you have suggestions or would like to tell how your community used the information, please contact the Office of Child Development and Early Learning, at 717-346-9320 or via email at RA-dpwoednet@state.pa.us.

² The population of interest for children reached is “children 5 years and under from *Low Income families*,” as Head Start primarily serves children in poverty or from Low Income households.