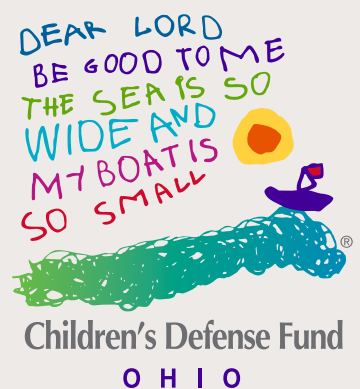




Ohio's Appalachian Children at a Crossroads: A Roadmap for Action





About Children's Defense Fund-Ohio

The Children's Defense Fund Leave No Child Behind® mission is to ensure every child a *Healthy Start*, a *Head Start*, a *Fair Start*, a *Safe Start* and a *Moral Start* in life and successful passage to adulthood with the help of caring families and communities.

CDF provides a strong, effective and independent voice for *all* the children of America who cannot vote, lobby or speak for themselves. We pay particular attention to the needs of poor children, children of color and those with disabilities. CDF educates the nation about the needs of children and encourages preventive investments before they get sick, drop out of school, get into trouble or suffer family breakdown.

CDF began in 1973 and is a private, nonprofit organization supported by individual donations, foundation, corporate and government grants. The Children's Defense Fund-Ohio (CDF-Ohio) is a state office of the Children's Defense Fund. CDF-Ohio was established in 1981 to meet the needs of our most vulnerable children in the state of Ohio.

For over 30 years, CDF-Ohio has championed policies and programs that lift children out of poverty and place all Ohio children on a path to successful adulthood. To support children and families in Ohio, CDF-Ohio works to improve health care access and health outcomes for children and their families, ensure policies and practices keep children in school, create a juvenile justice system that rehabilitates our youth and reduces recidivism, build a high quality and stable early childhood care and education system, and harness the statewide and national CDF youth and community networks to change the lives of Ohio's children.

Foreword

Children's Defense Fund-Ohio (CDF-Ohio) has a long commitment to the Ohio Appalachian region. We began our investigation into Appalachian Ohio with our 2001 report—*Ohio's Appalachian Children*—which provided a first-ever comprehensive look into the well-being of the region's children. We are pleased today—15 years later—to share with you *Ohio's Appalachian Children at a Crossroads: A Roadmap for Action*.

We know children do not come in pieces and that hunger, homelessness, and violence all affect childhood well-being. We also know what works to improve our children's lives, such as access to a high-quality early childhood education system. In 2012 at our National Conference in Cincinnati, with suburbs in the region, former Chairman of the Federal Reserve Ben Bernanke explained that the return on investment for early education was 10 percent or higher. "Very few alternative investments can promise that kind of return. Notably, a portion of these economic returns accrues to the children themselves and their families, but studies show that the rest of society enjoys the majority of the benefits." The prosperity of our great State and the Appalachian region is compromised without these economic returns.

Knowing that sustainable change must be rooted in the region, it was critical for us to collaborate with partners who live and work in Appalachian Ohio and who care deeply about children and the region's future. We gratefully acknowledge Battelle for Kids (BFK), Corporation for Ohio Appalachian Development (COAD), and the Foundation for Appalachian Ohio (FAO) for their partnership in the preparation of this report and their commitment to next steps.

As you study the Report's data, research, and policy and program recommendations, the region's possibilities will shine through. Children's Defense Fund-Ohio and our partners ask you to join us on our journey and commitment to every Ohio Appalachian child.

Children's Defense Fund-Ohio

Renuka Mayadev
Executive Director

Michael Corey
Policy Analyst

Pamela Kreber
Associate Director, Operations & Fundraising

Dilynn Roettker
Policy Fellow

Dawn Wallace-Pascoe
Director of Data & Research

Our Partners

Battelle for Kids
Jim Mahoney
Executive Director

Tracy Nájera
Senior Director, Human Capital

Corporation for Ohio Appalachian Development
Ronald J. Rees
Executive Director

Maureen Boggs
Early Care & Education Division Director

Foundation for Appalachian Ohio
Cara Dingus Brook
President & CEO

Megan Wanczyk
Vice President of Stewardship and Programs

Table of Contents

Introduction 5

The Region: Appalachian Ohio 7

Demographic Overview 8

Economic Stability..... 10

Birth and Babies 14

Early Childhood Care and Education 17

Primary and Secondary Education 22

Child Health..... 27

Food Insecurity and Nutrition..... 30

Philanthropic Capital 32

Final Recommendations 33

Data Tables 34

Data Definitions and Sources 52

Endnotes 57

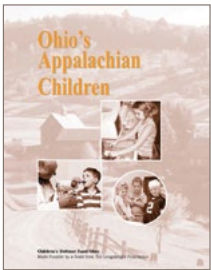
Acknowledgments 62

About Our Partners 63

Introduction

Ohio's 32 Appalachian counties stretch from the shoreline of Lake Erie (Ashtabula County) to the hills of Belmont and Monroe counties and then wind west to the suburbs of Cincinnati (Clermont). The families of Appalachian Ohio are steeped in a timeless tradition. Long held values of hard work, self-sufficiency, and close-knit families have provided a foundation for strong communities. Generations have called this region home. The land is naturally beautiful, though rocky, unforgiving, and not easy to travel.

Historically, communities sustained themselves on coal mining jobs, careers in manufacturing, and local trade tied to personal relationships. Today, those opportunities are more scarce than in decades past. Children bear the brunt of the poverty that now grips so much of the region.



CDF-Ohio began our investigation into Appalachian Ohio with our 2001 report—*Ohio's Appalachian Children*—which provided a first-ever comprehensive look into the well-being of the region's children. The region continues to suffer many of the same challenges today—poverty, health disparities, and pervasive food insecurity to name a few—that existed in 2001. While there are signs of hope, the passage of time has made many of the problems more acute.

Our interconnected and digital world further isolates Appalachian households that do not have access to the Internet. And most recently, a drug epidemic has ravaged entire Appalachian communities with a wake of babies born exposed to opiates.

It is a critical time for Appalachian Ohio. CDF-Ohio has a long commitment to this region. We present this report—*Ohio's Appalachian Children at a Crossroads: A Roadmap for Action*—to bring awareness to the region's current challenges and, more importantly, to promising practices and recommendations for action.

The report provides a current snapshot of the well-being of children in Ohio's Appalachian region. It begins with a demographic overview then discusses indicators in the areas of economic stability, birth and babies, early childhood education and access, primary and secondary public education, and health and nutrition. To the extent that comparative data are available, the report examines changes in the indicators since the first edition of this report was published in 2001. Based on report findings, we identify and prioritize current needs and make long-term recommendations for policy, outreach, community action, and regional focus. We believe with the right public and private partnerships and investments the region can seize the opportunities and surmount the challenges.

Every Appalachian Ohio Child Counts

Approximately 1 in 6 Ohio children live in Appalachian Ohio. These 450,000 children are the future of the region. In order to sustain future economic prosperity, the region's children must be career ready. Economists predict that baby boomer retirements will leave our state industries scrambling for skilled workers at the same time that manufacturing is resurging due to jobs returning from overseas. Over the next twenty years, it will take virtually every child in the region to replace retiring workers and that does not account for our projected growth in manufacturing employment.¹

We must consider our investment in each child a priority. We cannot continue to believe that children who live in poverty, and who experience sustained hunger and poor health outcomes will be ready to learn and will successfully enter our workforce. Knowing the critical part each child will play in our economic future, it is time for a real commitment to break from the routine and use *Ohio's Appalachian Children at a Crossroads: A Roadmap for Action* for urgent change.



The well-being and future of Appalachia's children is at a crossroads. Let's build on the strengths and assets of the region by focusing on the most important asset of all—Ohio's Appalachian children.

Key Report Highlights

1. **Economic stability of children and families has not improved.** The child population in Appalachian Ohio has decreased in the last 15 years, but a higher percentage of children live in poverty. Appalachia as a region and many counties within the region have the highest child poverty in all of Ohio. Families continue to have household incomes well below the rest of the state, and unemployment remains higher than statewide figures.
2. **Babies in the region are at increased risk.** The region has seen a rise in the proportion of babies born at low birthweight since 2000. Like the rest of the state, babies in Appalachian Ohio face high rates of infant mortality compared to national levels. Pregnant women use tobacco at higher rates than pregnant women statewide. The region has seen alarming increases in the number of babies born with exposure to opiate drugs.
3. **High-quality early childhood care and education (ECE) is critical for children, but is challenged** by relatively higher numbers of children per available space and difficulties on the business and workforce side of providing services. A high-quality early childhood education has not consistently been seen as crucial to a child's development.
4. **Results are mixed for educational outcomes for primary and secondary students.** Children are meeting the key milestones of kindergarten readiness, third grade reading proficiency and high school graduation on par with the rest of Ohio. Appalachian school districts are leading the state in students earning credentials and college credit while still in high school. However, students from Appalachia are significantly more likely than their peers statewide to need to take remedial coursework in college. Fewer adults in the region have completed four-year degrees.
5. **There are clear health disparities between Appalachian children and children statewide.** Children in Appalachia face shortages of primary, dental, and mental health providers in addition to long distances to children's hospitals. Health issues such as childhood obesity, food insecurity, and lack of dental care disproportionately affect Appalachian children.

The Region: Appalachian Ohio

Appalachia is a 205,000 square-mile area that follows the Appalachian Mountains and spans all or part of 13 states.² Ohio's Appalachian region stretches from Clermont County in southwest Ohio, across the southeastern part of the state, to Ashtabula County in the northeast corner.³ In 2008, the Appalachian Regional Commission designated Ashtabula, Trumbull, and Mahoning Counties as Appalachian, bringing the number of Appalachian counties from 29 as noted in Ohio's Appalachian Children (2001) to 32 counties today.⁴

There is diversity within those 32 counties. About one-third of these counties border the Ohio River. Most counties are rural and have no urban center nearby, while other counties such as Mahoning, Trumbull, Columbiana, and Clermont include or are near larger cities. Vinton County has just over 13,000 residents, while Mahoning has 234,000. Holmes County is home to the largest Amish community in Ohio, with Amish making up nearly half its 40,000 residents.⁵ Counties may share designation as Appalachian, but they are also unique.

Transportation is a common challenge as it relates to the geography of the region. Major interstates I-77 and I-70 pass through Appalachian Ohio yet much of the region is quite remote. Lack of public transportation in the rural areas given the widespread geography creates barriers to employment, accessing medical care, taking children to child care or school, or simply being connected to support systems of family and friends. With so many miles to cover, reliable transportation and affordable gas are vital to the residents of Appalachian Ohio.



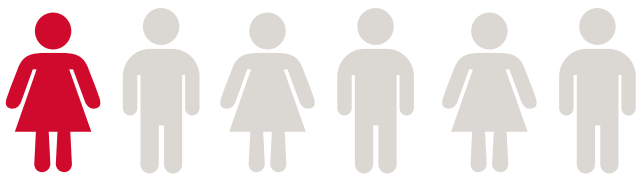
Ohio's 32 Appalachian Counties

Adams	Jefferson
Ashtabula	Lawrence
Athens	Mahoning
Belmont	Meigs
Brown	Monroe
Carroll	Morgan
Clermont	Muskingum
Columbiana	Noble
Coshocton	Perry
Gallia	Pike
Guernsey	Ross
Harrison	Scioto
Highland	Trumbull
Hocking	Tuscarawas
Holmes	Vinton
Jackson	Washington

Demographic Overview

Child Population

More than 450,000 children live in Appalachian Ohio. The number of children in the region has decreased by nearly 50,000 since the year 2000. The child population in Ohio decreased as well, but at a slower rate. Appalachian children made up 17.6% of Ohio's child population in 2000, and currently represent nearly the same percent (17%).



1 in 6 Ohio children live in Appalachia

Data Highlights:

- Counties vary widely in the size of their child populations. Noble County has just 2,718 children compared to 49,129 children in Clermont County. Mahoning and Trumbull Counties also have more than 40,000 children each. The counties with the smallest child populations are Noble, Monroe, Vinton, Harrison, and Morgan, all with fewer than 4,000 children each.
- The counties with the biggest drops in terms of percent change in child population between 2000 and 2013 were Mahoning (-21%), Trumbull (-20%), Columbiana (-18%), and Washington (-17%). Holmes was the only Appalachian county whose child population grew (+5%).

Race and Ethnicity

In contrast to national and state trends, the racial and ethnic make-up of children in Appalachian Ohio has changed very little since 2000.

Data Highlights:

- Whites currently comprise 92.1% of the child population compared to 93% in 2000.
- The percentage of Appalachian children who are Hispanic nearly doubled from 1.5% in 2000 to 2.9% in 2013, but still remains very small.
- The percentage of children who are Black (6.8%) and Asian (.8%) has increased by less than one percentage point since 2000.

Appalachian Households

In both Appalachia and in Ohio overall, 61% of children live in married parent households. Appalachia has a lower percent (20.9%) than Ohio (23.5%) of households headed by a mother only. Appalachia has a higher percent (7.9%) of children living in a household headed by a grandparent than the state average (6.6%). The percentage of children living with a male only (6.6%) and with other relatives are similar to statewide percentages. A higher percentage of Appalachian children live in foster or unrelated households (2.4%) than statewide (1.9%).

Since 2000, the percentage of children in Appalachia and statewide that live in married parent households has declined, with a slightly sharper decline in Appalachia. The percentage of children living in female or male only headed households has increased, as has the percentage of children living with grandparents.

Household Head	Appalachian Household Structure of Families with Children			
	2000		2013	
	Appalachia	Ohio	Appalachia	Ohio
Married parents	68.4%	66.5%	60.7%	60.6%
Male only	5.3%	5.0%	6.6%	6.0%
Female only	17.4%	19.7%	20.9%	23.5%
Grandparent	5.6%	5.4%	7.9%	6.6%
Other relative	*	*	1.5%	1.5%
Foster or unrelated family	*	*	2.4%	1.9%

*Comparison household Census data not available



Children in Foster Care

U.S. Census data show that 2.4% of children lived with foster or unrelated families in 2013. According to state-level data, there were 3,994 Appalachian children in foster care (also known as substitute care) in Ohio for a rate of 8.9 children per 1,000 children in the population. The rate for Ohio was slightly lower at 8.5 children per 1,000. However, comparing rates over time shows that the number and rate of children in foster care has increased in Appalachian Ohio in 2013 compared to 2001, while the number and rate for Ohio has decreased during that same period.

Data Highlights:

- In 2001, the rate of children in foster care was 7.6 in Appalachia, with 3,839 children. The Ohio rate was 12.7 per 1,000. In 2013, the rate was 8.9 children in Appalachia and 8.5 in Ohio.
- Vinton (20.9) and Perry (18.8) had the highest rates of children in foster care in 2013 in the region. Noble (2.2) and Carroll (2.6) had the lowest.

Overall Demographic Trends:

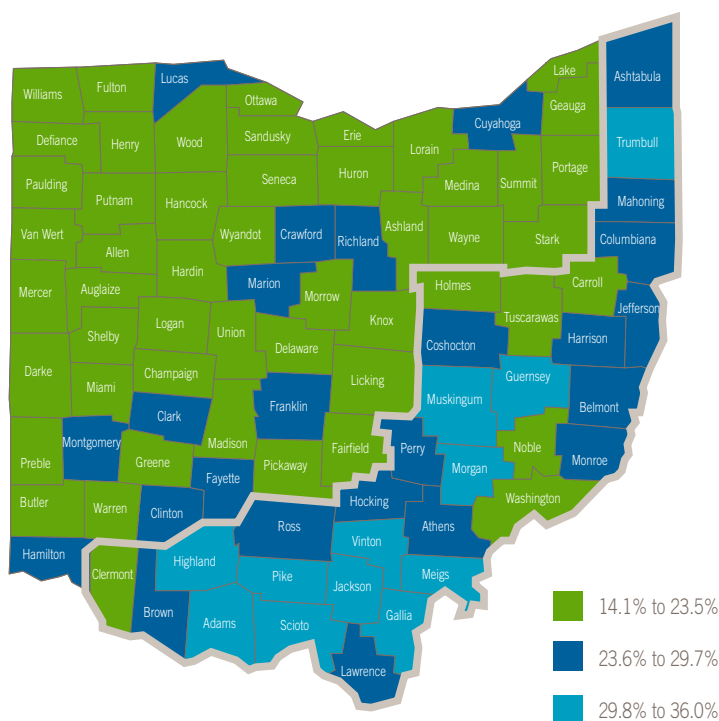
- The child population in the region is decreasing, but still represents nearly the same proportion of Ohio's overall child population (17%).
- Children in Appalachian Ohio remain overwhelmingly White. However, the Hispanic child population has doubled since 2000, and the Asian and Black child populations have increased slightly.
- The majority of children live in married parent households, although the percentage has declined since 2000. The percentage of children living in households headed by their mother only, father only, or by grandparents has increased.
- The number and rate of children in foster care has increased in Appalachia since 2001 in contrast to decreases statewide.
- Both statewide and in the region, the percentage of babies born to unmarried mothers has increased from about 35% in 2000 to about 45% in 2013. The percentage of Appalachian babies born to single mothers in 2000 and 2013 was within 1% of the state average.

Economic Stability

One of the biggest threats to a child's healthy development is growing up in poverty.⁶ The toxic pressure of childhood poverty stunts children's emotional and physical growth, and puts them at a higher risk of having poor academic achievement and dropping out of high school. This, in turn, increases the likelihood of unemployment, economic hardship, poor health, and involvement in the criminal justice system as an adult.⁷ Sadly, child poverty has been a well-known and persistent problem in Appalachian Ohio.

Ohio's economy was hit hard during the Great Recession of 2008, but there have been many signs of recovery. Unemployment rates have fallen and median incomes are on the rise. These trends are occurring in Appalachian Ohio as well. Despite these positive signs, the economic recovery has been slow to reverse the negative effects on children. Looking back over the past 15 years, we find that in Appalachia today a higher percentage of children are poor, unemployment is higher, median incomes continue to lag behind the state average, and working families are struggling to make a living wage. Children in the region are still waiting to be part of the economic recovery.

Percentage of Children Living in Poverty

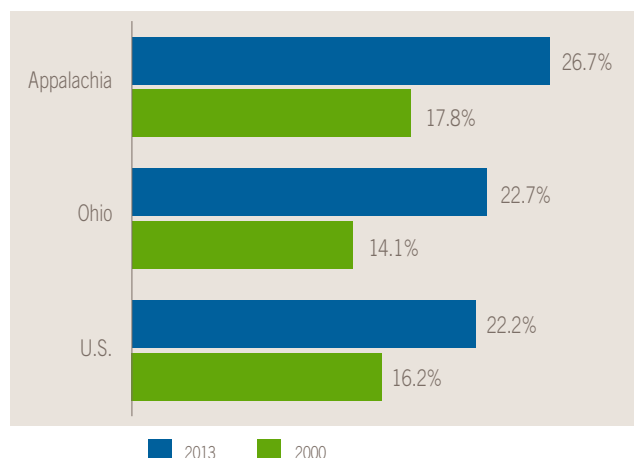


Source: U.S. Census SAIPE, 2000 and 2013

Child Poverty

As in 2000, the region has a higher percentage of children living in poverty (26.7%) than statewide (22.7%) or nationally (22.2%). Within Ohio, the top twelve counties with the highest rates of child poverty in the state are within Appalachia. High poverty counties are especially concentrated in the southern section of the state.

Child Poverty 2000–2013



Children are considered to be living in poverty when their family's household income is below \$23,550 for a family of four.⁸ The federal poverty guideline often is used as a factor in determining eligibility for various public assistance programs. For example, household income must be at or below 130% of the federal poverty level (FPL) for a family to be eligible for the Supplemental Nutrition Assistance Program (SNAP), also known as food stamps. As shown in the table below, the percentage of children in Appalachia whose family's income falls below 100%, 125%, and 200% of the federal poverty level (FPL) occur at higher rates than children statewide. Further, Appalachian children under age six fall below these thresholds at even higher rates than their Ohio peers.

Children Below Selected Federal Poverty Levels (FPL), 5-Year Average

		Below 100% FPL		Below 125% FPL		Below 200% FPL	
	Total	Number	Percent	Number	Percent	Number	Percent
Under age 6							
Appalachia	140,430	42,620	30.3%	52,298	37.2%	78,669	56.0%
Ohio	842,562	230,831	27.4%	282,754	33.6%	418,586	49.7%
Under age 18							
Appalachia	452,342	117,070	25.9%	146,250	32.3%	228,014	50.4%
Ohio	2,650,819	605,140	22.8%	756,726	28.5%	1,168,698	44.1%

Source: ACS 5-yr, B17024, 2009-2013

Data Highlights:

- Regionally, child poverty grew from 17.8% (88,624 children) in 2000 to 26.7% (117,514 children) in 2013. A higher percentage of children are poor in Appalachia than statewide or nationally.
- Child poverty increased in every Appalachian county from 2000 to 2013. The counties with the largest percentage point increases were Trumbull (17 points) and Highland (16.4 points).
- Pike County has the highest rate of child poverty in Appalachia and in Ohio at 36%. Adams, Vinton, Guernsey, Gallia, Highland, Morgan, Trumbull, Scioto, Meigs, Muskingum, and Jackson counties all have child poverty rates of 31% or more.
- Nearly 1 in 3 Appalachian children under age six live below the poverty level.

Student Economic Disadvantage: Another Measure of Poverty

The Ohio Department of Education (ODE) tracks a broader measure of poverty within the schools known as “student economic disadvantage.” The ODE website has specific guidelines but in general, students are considered to be economically disadvantaged if they are eligible for free or reduced price lunch or if their parent or guardian receives public assistance.⁹

Data Highlights:

- 55% of Appalachian students were considered economically disadvantaged compared to 48.5% for Ohio in the 2013–2014 school year.
- The percentage of students economically disadvantaged has increased every year since 2005 (the first year this measure is publicly available) when the percent was 35.5%—representing an increase of 20 percentage points.
- Although the student population in the region has declined by 29,289 since 2005, the actual number of economically disadvantaged students grew by 39,031 during that same time period.

Working Families and Income

The majority of families with children in Appalachia are working families.¹⁰ Both parents work in 59% of married couple families. In single parent families, 73.9% of single fathers and 65.5% of single mothers work. Compared to the rest of the state, Appalachia has a lower overall rate of people who are working.

Family incomes in Appalachia are substantially lower than statewide incomes. The median household income in 2013 in Appalachia was \$41,265 compared to \$48,138 statewide, a difference of nearly \$7,000. Single parents in the region struggle to make living wages. More than half of single moms in Appalachia have income less than \$20,000 and 70% make less than \$25,000. Half of single fathers make less than \$30,000.¹¹

Data Highlights:

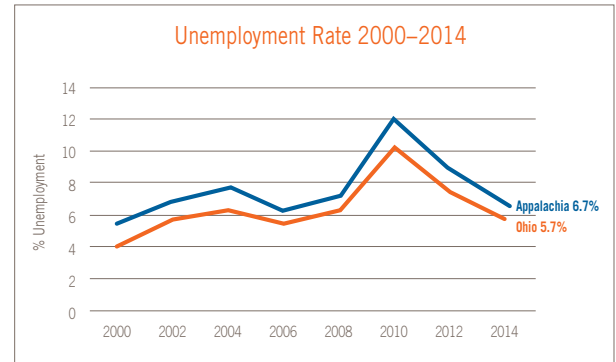
- Household incomes in Appalachia were lower than Ohio overall in both 2000 and 2013. However, the gap has narrowed from a difference of \$8,078 less in Appalachia in 2000 to \$6,873 less in 2013.
- Every county except Holmes (\$49,118) and Clermont (\$61,398) have median household incomes below the statewide level. The lowest median household incomes in the region and in Ohio are in Athens (\$35,783), Morgan (\$36,057), and Scioto (\$36,682) counties.

Unemployment

The unemployment rate in Ohio's Appalachian region has exceeded the state unemployment rate every year since 2000. After peaking at 12.2% in 2010, the rate declined and was at a seven-year low of 6.7% unemployment in 2014.

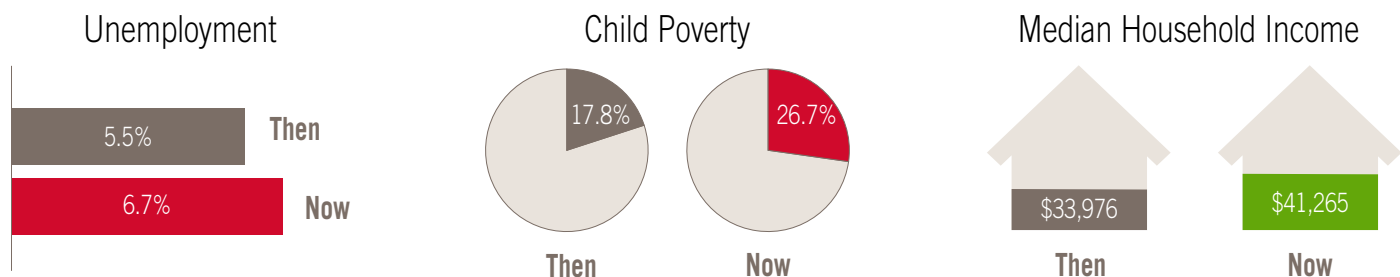
Data Highlights:

- In 2000, only nine of the 32 counties in Appalachia had unemployment rates higher than 7%. In 2014, more than half (18 counties) had rates higher than 7%.
- Monroe (10.8%), Adams (9.1%), Meigs (9%), and Pike (9%) counties have the highest unemployment rates.



Source: Ohio Department of Job and Family Services

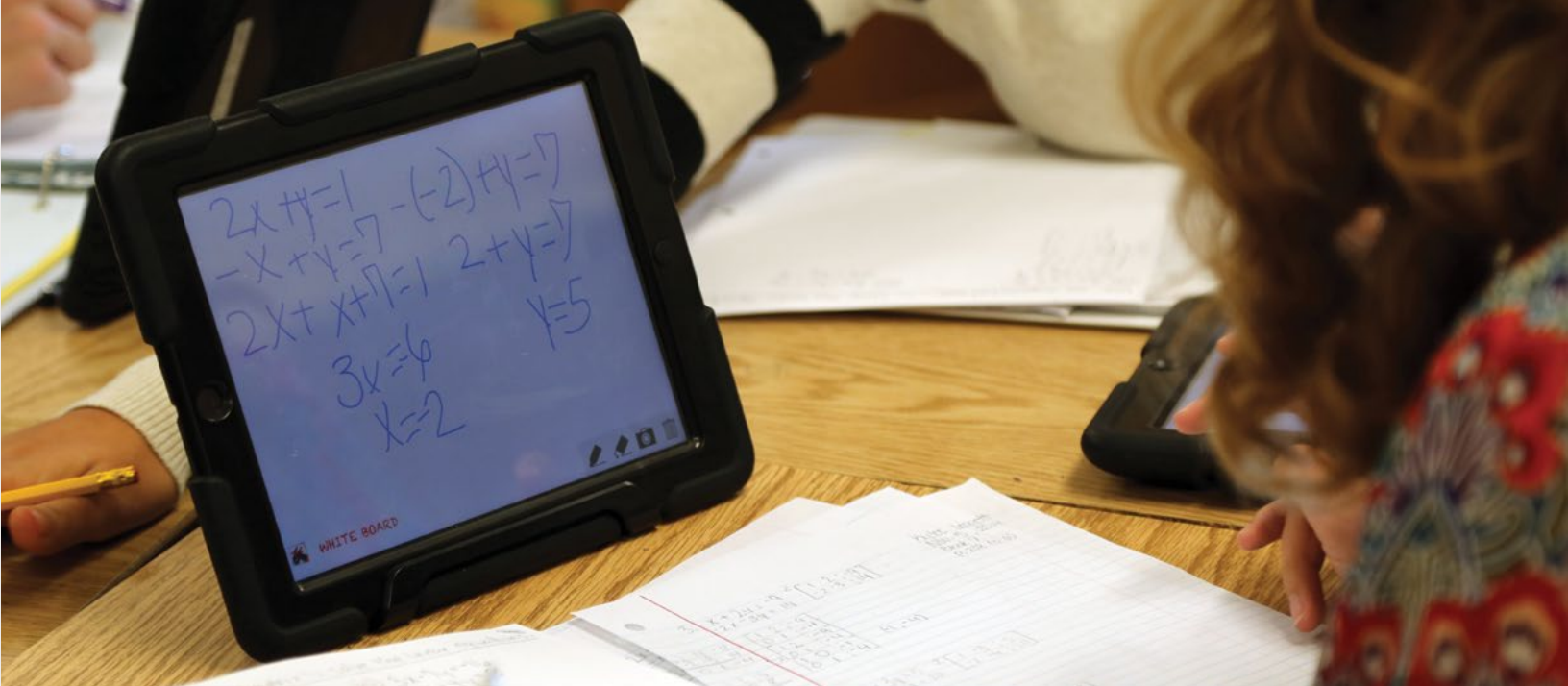
Appalachian Ohio Then (2000) and Now



Recommendations

Recognizing the interdependence of place and people, promising solutions to allow children and families gain economic stability are grounded in local partnerships. To further increase system efficiencies and reach both adults and children, a two generation (two gen) approach can begin to strengthen communities.

- 1. Ohio's 32 Appalachian Counties Should Join the Rural Impact County Challenge (RICC) to Reduce Poverty.** The National Association of Counties (NACo) and White House Rural Council launched a national initiative to *help advance counties' efforts to reduce the number of rural children and families living in poverty*.¹² The RICC urges rural counties to adopt a Call to Action to develop an actionable plan to achieve concrete results on behalf of rural children and families.¹³ The RICC network will share research, funding opportunities, and best practices on what works. In summer 2016, the RICC will convene a national summit to help counties move their action plans forward, measure results, and share strategies. Ohio's 32 Appalachian counties joining RICC would not only make a strong statement about the cross-county commitment to reduce child poverty but also connect the region to national collaborations.
- 2. Implement Two-Generation Strategies to Launch Thriving Families.** Research shows that two-gen strategies that *bring together programs for children and adults using an intentional, coordinated approach* can give families more opportunities to succeed and break the cycle of poverty.¹⁴ By simultaneously focusing on needs of both the child and the parent, two-generation strategies aim to help families thrive. For example, schools or early childhood education programs could provide programs for parents that better equip them with ways to be involved in their child's development, deal with stress, or manage their finances.¹⁵ Highland County is one of 10 national communities to participate in The Rural IMPACT, which has adopted two-generation strategies to achieve positive outcomes for families.¹⁶ The Highland County Community Action Organization (HCAA) has already identified families currently enrolled in Head Start and Early Head Start programs and is beginning to assess the families' employment, educational, and other support needs. This two-gen approach bridges the effort on early childhood education (Head Start) with cross system connections (education and job skills and housing needs).¹⁷

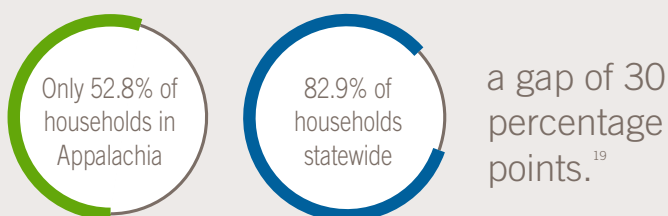


Inadequate Broadband Access Holds Region Behind

Technology has changed dramatically since the writing of the original *Ohio's Appalachian Children* report in 2001. The speed of connectivity and the array of devices that are available now compared to 15 years ago are remarkable. In relatively remote areas like Appalachia, technology offers great promise for connecting students to educational resources, enhancing businesses' communication, promoting community and economic development, and providing new ways of delivering health care. A cornerstone for the use of technology is fast, reliable, and affordable broadband.

The Federal Communications Commission (FCC) has set a target broadband speed of 25 megabits per second (Mbps) download and 3 Mbps upload.¹⁸ Appalachian Ohio falls drastically behind the rest of the state in the availability of broadband at this benchmark speed.

Households with Access to the Benchmark Broadband Speed



There are significant economic implications, as well as societal implications to broadband access, that range from precision farming, telehealth, e-commerce, smart energy, emergency services, and online education.

Children in Appalachia are disproportionately affected by the lack of broadband availability, as 44% of the Ohio households that cannot access broadband at the benchmark tiers or higher are in the region.²⁰ This gap shortchanges children compared to their peers statewide, who are more likely to be able to access broadband in their homes. Adult learners also need broadband access for online courses and degrees, professional development, and training. Lack of broadband affects employment, as more and more job postings are online and employers contact applicants electronically. It also limits work from home opportunities.

Lack of adequate broadband also can limit access to new approaches to providing health care to children in the region. For example, telehealth and telepsychiatry are methods of providing care where practitioners connect with patients and other practitioners through the web. Project LAUNCH for Appalachian Ohio, a federally funded initiative administered through Ohio University from 2009–2014 to improve health for young children age 0 to 8 and their families, included telepsychiatry among its strategies.²¹ For these approaches to work most effectively, there must be fast, reliable broadband connectivity.

Though efforts such as those spearheaded by the nonprofit organization, Connect Ohio, are ongoing, much work remains to address the lack of adequate broadband.²² There is no easy solution to making broadband available across the region. In the meantime, by utilizing public and private partners, broadband “hot spots” could be established at schools, libraries, civic facilities, restaurants, parks, and so forth, creating community cohesion while simultaneously providing an important bridge in the Internet age for community members lacking broadband access where they live.

Birth and Babies

Across Ohio and in the Appalachian region, there have been some disturbing trends affecting the health and well-being of babies since 2000. A higher proportion of babies are born at low birthweight, one of the leading causes of infant death. In the last 10 years, Ohio's rate of infant mortality has been among the highest in the nation, and has just begun to improve. And most recently, Ohio and especially the Appalachian region have seen staggering increases in the percentage of babies born with exposure to opiate drugs. Despite these troubling findings, there has been positive news in that the teen birth rate has fallen.



Prenatal Care

Early prenatal care is vital to ensuring the health of pregnant women and their babies.²³ Pregnant women in Appalachia are less likely to receive prenatal care during the first trimester than pregnant women statewide.

Data Highlights:

- In Ohio's Appalachian region, 68.7% of pregnant women received prenatal care in the first trimester in 2013 compared to 71.4% across the state.
- Mothers in Washington (82.2%), Athens (79.7%), and Brown (79.2%) counties received first trimester care at the highest rates while Holmes (39.2%), Jefferson (50.8%), and Harrison (53.3%) had the lowest rates in the region.

Teen Births

Following national and statewide trends, Appalachian Ohio has fewer teen births now than 15 years ago. The teen birth rate is defined as the number of births per 1,000 females aged 15–17.

Data Highlights:

- The rate of teen births in Appalachia has fallen from 23.3 births in the year 2000 to 14.1 births in 2012 (births per 1,000 females age 15–17). The teen birth rate declined more sharply statewide during that same time period, from 24.3 to 12.8 births.
- The teen birth rate in Appalachian Ohio (14.1 births) is above the state rate of 12.8.
- All but five Appalachian counties (Pike, Belmont, Hocking, Vinton, and Harrison) have lower teen birth rates now than in 2000.

Low Birthweight Babies

Babies that weigh less than 5.5 lbs. (2500 grams) at birth are considered to be born low birthweight. Low birthweight babies are at an increased risk of having developmental problems, short- and long- term disabilities, and dying within the first year of life.²⁴ The percentage of babies born at low birthweight is higher now than it was in 2000 for both Appalachian and Ohio newborns.

Data Highlights:

- In 2000, 7.6% of babies were born low birthweight in Appalachia and 7.9% in Ohio. Both the state and regional rates have risen since 2000.
- In 2013, 8.2% of babies in Appalachia were born at low birthweight. The rate for Ohio is slightly higher at 8.5%.
- Counties with the highest rates are Mahoning (10.7%), Athens (10.6%), Ross (10.6%), and Monroe (10.1%). Holmes (4.1%) and Harrison (4.4%) counties have the lowest rates of babies born at low birthweight.

Infant Mortality

The State of Ohio has received much-deserved attention in recent years for its high infant mortality rates. The infant mortality rate is the number of babies who died before their first birthday per 1,000 live births. In 2012, Ohio had the highest infant mortality rate (7.6 deaths per 1,000 births) among the 10 most populous states and exceeded the national average.²⁵ More recent data show that the Ohio rate has fallen to 6.8.²⁶ To combat infant mortality, several collaborations, initiatives, and educational campaigns have been launched across the state involving multiple state and human service agencies.

Data Highlights

- The 2012 infant mortality rate in Appalachia was 7.6 deaths per 1,000 births—the same as Ohio's rate.
- Appalachian counties with the highest rates are Pike, Highland, Gallia, Harrison, Carroll, Mahoning, and Scioto, all with rates higher than 10 infant deaths per 1,000 live births.
- Vinton, Noble, Morgan, and Meigs counties have the lowest infant mortality rates.



The teen birth rate
fell 40% since 2000

Recommendations

Appalachian Ohio babies need our urgent attention. Our focus must be to improve maternal health before, during, and after pregnancy. Babies are being born in our Appalachian communities with the challenges of low birthweight and exposure to drugs, leading many not to reach their first birthday. Our goal is for Appalachian Ohio babies to survive and thrive and begin childhood safe and strong. To meet this goal, we must address the complex problems surrounding infant mortality with specific improvements to health care access and delivery. We must also address the social determinants of health, such as employment options, access to healthy foods, stable housing, and access to transportation.

1. Reduce Infant Mortality Rates Through Improving Prenatal Care Systems and Supports. State, local, provider, and non-profit sector resources must collaborate to successfully reach mothers and babies. The “Centering Pregnancy” model, launched in July 2015 in three cities (Columbus, Dayton, Toledo) and Muskingum County (an Appalachian county) at four community health centers across the state provides a two year test-run of a successful model.³² The Centering Pregnancy program integrates prenatal care, education, and support to improve birth and infant health outcomes by focusing resources where they are most needed. In the Centering Pregnancy model, groups of up to a dozen women with similar gestational ages meet together, learn care skills, participate in facilitated discussions, and develop a support network with one another. The program provides a safe place for expectant mothers to share life experiences with other women who understand their situation, build a community of support, and provide positive peer encouragement to make healthy choices during their pregnancy.

2. Reduce Infant Mortality Rates Through Lowering the Rates of Maternal and Household Smoking. Women who smoke during pregnancy are more likely to have a low birthweight baby, deliver prematurely, or lose a baby to sleep-related death. Appalachian pregnant women smoke during pregnancy at higher rates than pregnant women statewide. The Ohio Partnership for Smoke Free Families, which seeks to reduce smoking among pregnant Ohio women is operating an evidence-based program in six counties in southeast Ohio.³³ Focused on training health providers and other maternal and young children support providers, the program saturates communities with a quit smoking message. While the effort is still in the early stages of data collection, preliminary data shows providers are not only asking if a pregnant woman is a smoker but also sending a message that quitting is a viable and reachable option. Additional funding and broader outreach of smoking cessation programs, like the Ohio Partnership for Smoke Free Families, will begin to save our babies.

3. Focus on the Neonatal Abstinence Syndrome (NAS) Crisis in Appalachian Ohio. Preventing NAS, the effect of mothers’ opiate dependency on infants, is vital to the health and well-being of babies. We need resources specifically targeted at the counties in Appalachian Ohio that are currently in a state of emergency—Scioto (76.0 per 1000 births), Lawrence (66.7), and Pike (57.7) have the highest rates of NAS among Ohio’s Appalachian counties and in the state overall—more than six times the state rate.

Efforts to handle the surge of babies exposed to opiates are underway in Ohio. At the statewide level, the Maternal Opiate Medical Support (M.O.M.S.) Project was started in May 2014 through a collaboration of state sponsors (e.g., the Ohio Department of Mental Health and Addiction Services, Office of Health Transformation).³⁴

Through recent evaluation data the M.O.M.S. model has proven to be successful by engaging pregnant women in counseling,³⁵ Medication-Assisted Treatment (MAT) and case management. We urge the expansion of M.O.M.S to reach more mothers in Appalachian Ohio, specifically in the southern hot spots. Expanding state efforts such as the M.O.M.S. project now is crucial to our Appalachian children’s health.

In handling the NAS crisis, we must create and support systems that encourage stable families. There is promise being shown in our court system. Ohio has 20 Family Dependency Treatment Courts (FDTs) that, through treatment and rehabilitation of parents whose children are in the child protection system, have proven effective for encouraging mothers and fathers to enter and complete substance use disorder treatment. Though many Appalachian counties currently have FDTs, expanding the number to each of the region’s 32 counties would maximize the benefits of the specialized courts for Appalachian children.

Finally, Ohio must work closely with neighboring states and with federal authorities to limit access to illegal drugs and to the abuse of legal drugs at the root of NAS.



Smoking contributes to low birthweight and infant mortality.

In 2013, 22.6% of babies born in Appalachia had a mother who smoked during pregnancy versus 16.6% statewide. Compared to babies across Ohio, an Appalachian baby is 36% more likely to have a mom who smoked during pregnancy. Four Appalachian counties (Morgan, Vinton, Guernsey, and Pike) had rates of 30% or higher.³¹

Early Childhood Care and Education

Research has shown unequivocally that high-quality early childhood programs play a vital role for children in building a strong educational foundation, especially for low-income children.³⁶ Children undergo tremendous brain development from birth to age five. High-quality early care and education can help them meet the key academic, social, emotional, and physical milestones that prepare them for kindergarten and enable them to transition successfully into elementary school. Investing in children during their early years is critical for them to succeed in school and in life so that they are prepared for successful lives that support the region for the future.

Early care and education is not only a critical factor in children's development, it is an economic necessity for many families. Preschool, child care, and other early childhood education programs are essential to families and employers because they provide necessary care so parents can work. Parents can lead more productive and satisfying careers when they know that their young children are receiving a high-quality education in a safe and nurturing environment.

Head Start

Head Start and Early Head Start are federally funded programs that promote the school readiness of young children from low-income families through agencies in their local community. Head Start serves three- and four-year olds and Early Head Start serves infants and toddlers. Services include: early learning; health, development, and behavior screenings and follow-up; social and emotional development; nutrition; family goal-setting; social services; transition services; and services for children with disabilities.³⁷

Data Highlights

- Head Start and Early Head Start served 8,723 children in Appalachian Ohio in 2012.
- 88.3% (7,705) of those children were in Head Start and 11.7% (1,018) were in Early Head Start.
- 14 of the 32 Appalachian counties have no Early Head Start programs: Belmont, Carroll, Columbiana, Gallia, Harrison, Holmes, Jackson, Jefferson, Meigs, Muskingum, Ross, Trumbull, Tuscarawas, and Vinton.

Publicly Funded Child Care

Publicly Funded Child Care (PFCC) helps parents who are working or are in school to pay for child care.³⁸ Having this option is crucial for Ohio's families due to the high cost of care for young children. The monthly cost of child care can quickly add up to be a significant portion of a family's budget, sometimes surpassing mortgage or rent payments. Publicly funded child care programs are licensed by the Ohio Department of Job and Family Services (ODJFS) and can include child care centers, Head Start programs, and licensed Type B home providers, as well as some school-age programs and camps.

To qualify initially, family income must be below 130% of the federal poverty level (\$2,628 per month for a family of four). Families who are transitioning to work or to school from cash assistance who are not already receiving publicly funded child care services have an initial eligibility of up to 150% FPL (\$3,032 per month for family of four). Once enrolled in publicly funded child care, families can continue with the program until they reach 300% FPL (\$6,063 per month for a family of four). This offers children in the program continuity of care and education to prepare them for school.³⁹

Data Highlights:

- 21,599 Appalachian Ohio children age 0 to 17 were enrolled in PFCC in 2013.
- Appalachia is below the state average in the percentage of children enrolled in publicly funded child care with 4.8% of children compared to 6.9% of children enrolled statewide. The range of enrollment is fewer than 2% of children in Holmes and Monroe counties to 8.4% in Mahoning County.



Public Preschool – Early Childhood Education (ECE)

Ohio's public school system also provides a pre-kindergarten program. The Ohio Department of Education (ODE) has awarded Early Childhood Education (ECE) funding to city, local, exempted village, joint vocational school districts, or Educational Service Centers to provide preschool services for three- and four-year-olds of income-eligible families. A school district may contract with a Head Start agency, chartered nonpublic school, Educational Service Center, or licensed child care to provide the preschool services.⁴⁰ The majority of children enrolled are in preschool special education programs.

Data Highlights:

- There are nearly 300 public preschool sites in Appalachia, representing 21.6% of the total sites in Ohio.
- 6,931 children are enrolled in funded ECE or preschool special education in the region.

Cost of Care

Child care is costly—sometimes approaching the cost of college tuition—even when families qualify for PFCC. As the table shows, Appalachian Ohio families spend an average of \$148 or more per week or \$7,696 per year for subsidized, full-time child care for children under age three. The younger the child, the higher the cost. Cost of care for one year for an infant at the discounted, state rate would be \$8,528 which is 74% of the cost of in-state tuition and fees at Ohio University, at \$11,548 for 2015–16.⁴¹

Yearly Child Care Costs for Families with Subsidized Child Care				
Age Group	Full-time child care centers	Head Start programs	Licensed Type A family child care	Licensed Type B family child care
0–17 mos.	\$8,528 (\$164/wk)	Free*	\$8,424 (\$162/wk)	\$6,916 (\$133/wk)
18–35 mos.	\$7,696 (\$148/wk)	Free*	\$7,696 (\$148/wk)	\$6,864 (\$132/wk)
3–5 yrs.	\$6,916 (\$133/wk)	Free*	\$6,708 (\$129/wk)	\$6,188 (\$119/wk)
5 yrs. & over	\$6,136 (\$118/wk)		\$5,512 (\$106/wk)	\$5,616 (\$108/wk)

*This program is federally funded and free to all qualifying families

Source: coad4kids Provider Database

Understanding Why Children Are Not Enrolled in ECE Programs

Reasons for not enrolling a child in an early childhood program are many:

- Some families may not understand the value of early education, or think that age three is too young for preschool.
- Barriers such as work schedules that conflict with program hours and lack of transportation may prevent enrollment.

Even with subsidized care, parents may struggle to pay their share (co-pay). Families whose incomes are just over the eligibility limits—the working poor—are even less likely to be able to afford the full price. When the service is not affordable, families may choose unlicensed, poor quality care; or they may choose to 'care for their own,' a common Appalachian value. Currently, there is no data system in place to track these children and assess the need and demand for care, making it difficult to design strategies to serve more children.

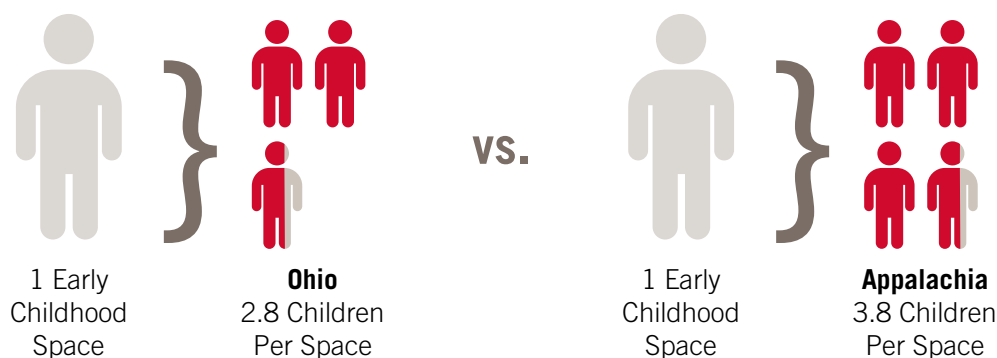
Supply and Demand for Early Childhood Education Programs

Understanding the supply and demand for center-based early childhood education programs is important for practitioners, families, and communities. A valuable source of such supply and demand data for early childhood programs is found in Early Childhood Ohio's *Early Learning and Development County Profiles*.⁴² Created using data from the 2011–2013 timeframe, the profiles are based on an older quality rating system. However, they still enable us to see the general picture of supply and demand.

Data from the profiles shows that as a region, there are a total of 38,795 center-based early learning and development program spaces. These include 13,870 licensed spaces in early childhood education programs in public schools and 24,925 spaces in ODJFS licensed child care programs. With 146,121 children under age six in the region, for every space available, there are 3.8 children to serve.

Data Highlights:

- In Appalachia, there are 3.8 children under age six for every early learning and development program space compared to 2.8 children per space for the state.
- The range is 2.4 children per space (Mahoning) to 17.9 (Holmes). Counties with the fewest children per space are Mahoning (2.4), Athens (2.7), Jefferson (3.2), Clermont (3.2), and Harrison (3.4). Holmes (17.9), Carroll (7.5), Meigs (6.3), Highland (5.9), and Vinton (5.7) counties have the most children per space.
- Only two Appalachian counties—Mahoning and Athens—have fewer children per space than the state rate. In the other 30 Appalachian counties more children exist per space than in other parts of the state.



High-Quality Early Childhood Education

High-quality early childhood education programs positively affect children's cognitive and social development and make a lasting impact on academic and social success.⁴³ A recent study of Appalachian preschool classrooms by The Ohio State University's Crane Center for Early Childhood Research and Policy found that classroom quality, measured in terms of emotional support, classroom organization, and instructional support, is a consistent predictor of kindergarten readiness.⁴⁴ In turn, kindergarten readiness is an important predictor of a student's future success in school, including key milestones such as third grade reading.⁴⁵

To promote high quality in early childhood programs, ODJFS initiated its statewide quality rating and improvement system, *Step Up to Quality* in 2008. As of 2014, all types of licensed programs in Ohio are eligible to participate, and by 2025 all publicly funded programs must be quality rated at 3, 4, or 5 stars. Programs of all types are entering the system now, gaining valuable training and technical assistance to improve quality according to Ohio's early learning standards. Even programs not serving publicly funded families can participate voluntarily, providing more quality opportunities for all Ohio children.

Through concerted efforts to promote quality, 47% of Appalachian center-based early learning and development program spaces are in accredited, quality-rated, or public preschool programs compared to 39% of spaces statewide.⁴⁶

Early Childhood Business

Supply and demand are key factors in the early childhood education industry, just as in any other business. To provide children a quality experience there must be vendors operating within an efficient business model and families to use the services. It is a complex operation, with programming and regulations, plus education standards per children's ages. There is limited revenue, therefore it has a low profit margin, under the best of circumstances. Yet early childhood businesses affect children's care and education.

A successful program is one that is fully equipped with a quality curriculum, developmental activities, and highly skilled personnel and it must be financially stable. A new federal software tool, the Program Cost of Quality Calculator (PCQC), estimates the cost of high-quality care and helps show the gap between cost of quality care and the available revenue to support it.⁴⁷ Tested in Ohio in 2015, results show that the typical highly subsidized small rural program cannot break even.⁴⁸ A contributing factor is Ohio's reimbursement rate for rural providers, rates that are significantly less than in urban counties. Reimbursement rates need to support the cost of quality, regardless of the location of the program. A proposed rate change for rural providers will go into effect July 1, 2016.

The fact is that Appalachian Ohio ECE businesses are challenged to sustain themselves. According to data maintained by the Corporation for Ohio Appalachian Development (COAD), the child care resource and referral agency that serves 30 counties in southeast Ohio, 26% of the child care programs in the region closed between January 2012 and November 2014; a net loss of 16% of the supply.⁴⁹ This trend in closures was slightly slowed the following year but continued to spiral downward with an 18% closure rate to arrive at a not insignificant net loss of 9% for the region. During that 12-month period between November 1st of 2014 and October 31st of 2015, 47 child care programs opened in the region. This was offset by closures at a rate of three closures to every opening.⁵⁰ According to U.S. Small Business Administration loan performance data as reported on www.cfa-commercial.com, the failure rate of child care businesses nationwide is 15.3%.⁵¹ We are losing options in our region faster than the national average; we are losing supply faster than we are gaining.

Early Childhood Workforce

Building and maintaining a high-quality early childhood workforce is another challenge in the region. The staff turnover rate is high, compensation is low, and it often is difficult to find qualified ECE staff. Statewide, we know that staff turnover rates for ODJFS teachers are 22% and assistant teachers are 30%.⁵² Low child enrollment, due in part to the high cost of care to families, prevents programs from keeping qualified staff and quality programming. Program closures eliminate options and jobs. This vicious cycle affects the ECE workforce and the employers, families, and children that the field is expected to support.

In 2015, Ohio University and COAD partnered to conduct an early childhood workforce study in the region.⁵³ Findings revealed that low pay, lack of educated applicants, and lack of desire for degrees are key issues to be addressed. Monthly incomes were reported in the survey, but estimating annual income reveals that child care providers in the region earn:

Provider Income		
Type of Provider	Monthly Income	Annual Income
Family child care providers	\$2,296	\$27,552
Center-based teachers	\$2,565	\$30,780
Center directors	\$2,720	\$32,640

Source: Essex & Putnam (2015). Appalachian Early Childhood Workforce Study Summary Report.

COAD hears anecdotally that the region has a shortage of qualified ECE staff, yet there is little incentive to pursue more education because employees are not necessarily compensated in higher wages for additional education and certification. The majority (59%) of center directors and 65% of teachers hold bachelor's degrees or higher, compared to only 13% of family child care providers. When asked about future educational plans, 78% of family child care providers and 77% of teachers said they are not interested in taking classes to work toward a degree. However, the ECE profession demands ongoing education, especially with the implementation of Quality Rating and Improvement Systems and an increase in age-specific certifications.

Despite these challenges, ECE workers do remain in their positions and plan to continue. The average director spends 10 years; teachers eight years, and family child care providers, 12 years in the field. Seventy percent of family child care providers, 75% of teachers, and 61% of directors expect to be working in the field three years from now. Providing better pay and incentives to pursue further education would help to attract and retain the workforce.



Recommendations

Children in Appalachian Ohio need high-quality and affordable early childhood care and education to set them on a course for success in school and in life.

- 1. Early Learning Systems and Public School Systems Must Work in Unison.** Together, early learning systems and public schools should work together to prepare our children for school. A cross-system transition plan for children that would track a child's experiences from birth would allow a seamless school transition by providing educators personal history, growth opportunities, and individualized needs. Building a culture that understands the importance of early childhood education, school readiness efforts must include family engagement. Ohio's federal Early Learning Challenge Grant funds are targeted to engage families in 12 at-risk school districts. This program, the Family and Community Engagement pilot, is focusing on family engagement to promote the two overarching goals of early childhood: that children are born healthy and stay healthy, and that children are ready for kindergarten.
- 2. Build an Appalachian Ohio ECE Hub.** Early childhood education hubs are community coordinating bodies that bring together the key systems of a child's early learning experience. These contributors include health care providers, early childhood educators, human and social services professionals, K–12 school district leaders, and private sector champions. ECE hubs provide the structure required to sustain a high-quality, early childhood system.

Statewide, ReadySetSoar in Dayton, PRE4CLE in Cleveland, and within the region, Success by 6 in Brown County, are three established early childhood education hubs that serve as good models to emulate.

- 3. Improve Financial Sustainability of Early Childhood Education and Invest in Its Workforce Development.** Longtime efforts to build quality early childhood programming options across the region, such as a statewide quality rating system (Step Up to Quality),⁵⁴ have resulted in a higher percentage of rated centers in this region compared to the rest of the state. However, regional programs are closing at a rate of 18% annually, exceeding national rates. The lower reimbursement rate Appalachian centers receive compared to those in urban counties may be a major cause of these closures. A proposed redesignation that would improve rural rates as of July 1, 2016 is a step in the right direction. By 2025, all publicly funded early childhood programs must be "highly rated." However, there are increasing challenges in finding and keeping qualified and experienced personnel to support all levels of students. Appalachian Ohio needs community-based trainers to help build a field of degreed classroom personnel and directors. Instructors also are needed to provide in-service training that is required to meet quality indicators such as health and safety classes, administrative practices, or curriculum and standards.

To recruit and retain more talented teachers, we must increase the number of teacher scholarships, and work to increase compensation across all levels of teaching in Appalachia. We must partner to work on innovative compensation plans to reduce turnover and sustain employees in all early childhood education systems.

Primary and Secondary Education

In Ohio's Appalachian region, approximately 280,875 children, or 15.6% of the state's students, attend one of the 168 traditional public school districts. One in four districts (27.5%) in Ohio are considered to be in Appalachia. Barriers such as limited resources and opportunities affect the success of these schools and the children they serve. Though there are numerous challenges, many schools in Ohio's Appalachian region are leveraging resources and using effective strategies to provide quality education programs.

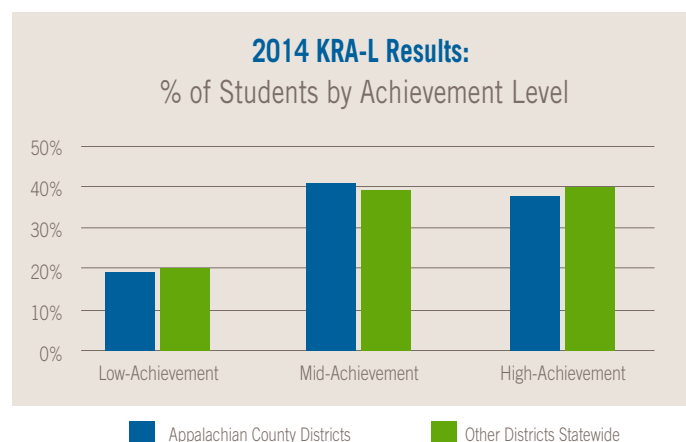
Ready to Learn

A child's readiness to learn and be successful in school requires that they be supported and nurtured in all areas of their development. The state's early learning standards build a solid foundation for children birth through five years old fostering their learning and development for school readiness.⁵⁵

The State of Ohio's kindergarten readiness assessment for literacy (KRA-L) was administered to rising kindergartners through school year 2014. The assessment helped educators evaluate a child's literacy skills prior to entering kindergarten. Starting in fall 2014, Ohio's kindergarten readiness assessment expanded to assess students in additional areas of social skills, mathematics, science, social studies, language and literacy, and physical well-being and motor development. It is important to note that the kindergarten readiness assessment does not determine kindergarten admittance, but rather provides valuable information about student needs and how best a kindergarten team can support the learner.

Data Highlights:

- From 2012–2014, 18–19% of children evaluated statewide using KRA-L lived in Ohio's Appalachian counties.⁵⁶
- Results of the KRA-L from 2012–2014 for children in Appalachian counties were generally consistent with performance of children statewide, but slightly lagging in the high-achievement level. Results from the 2014 school year are shown in the graph.



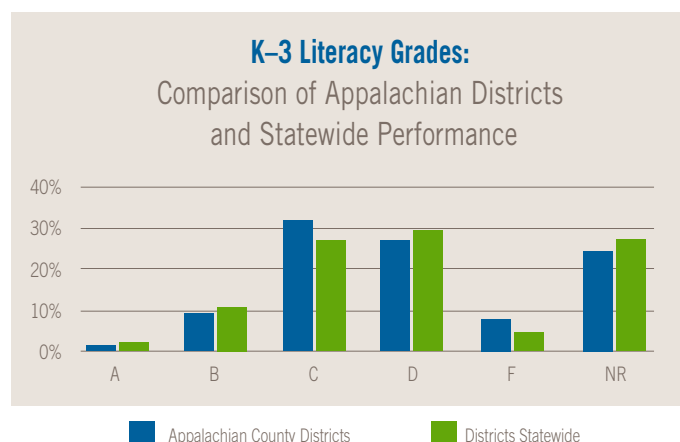
New State Policy—Third Grade Reading Guarantee

Ohio's Third Grade Reading Guarantee (TGRG) is a policy enacted in 2013–2014 school year to identify and provide greater support to students in kindergarten through grade three that are behind in reading. Research shows that children who are not reading at grade level by the end of grade three are more likely to have learning difficulties in all classroom subjects in later grades.⁵⁷ To demonstrate reading proficiency, third graders are required to pass a reading test from an ODE approved list for promotion to the fourth grade.⁵⁸

Schools also are evaluated on how well they are preparing students in reading. Beginning in 2015, a K–3 Literacy Grade on Ohio's Report Card captures schools' monitoring, support and performance in preparing children as readers from kindergarten through third grade.

Data Highlights:

- In 2014, 97.3% of Appalachian students met or exceeded the TGRG score for promotion to fourth grade compared to 95.8% of students across the state.
- However, based on 2015 K–3 Literacy Grades for schools, Appalachian districts are lagging other districts statewide in the upper levels of performance.⁵⁹



Source: Ohio Department of Education

Achievement & Growth

Traditionally, the performance of schools has been based on achievement data, or the percentage of students who pass a state test at a single point in time. While providing some useful information, passage rates alone are incomplete measures of school effectiveness and are positively correlated with socioeconomic status.⁶⁰ It is for this reason that Ohio's value-added measure is important as it looks at academic gains of student populations over the course of the year, regardless of where students began the year. For example, value-added measures can tell us how much math knowledge a group of students gained from one school year to the next.

Using multiple data sources is critical, especially when trying to determine the academic health or instructional needs of a school district. Student learning is complex and conclusions should not be drawn on achievement data alone.

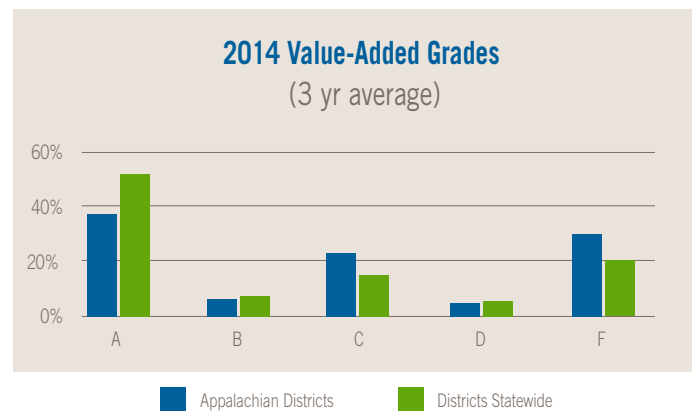
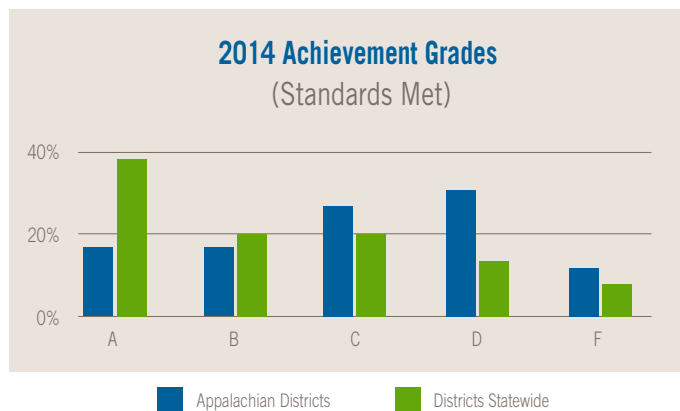
Data Highlights:

- Appalachian districts trail the rest of the state in achievement report card grades. In 2014, 15.5% of Appalachian districts received an A for Indicators Met, meaning 90% or more students in those districts passed the state math and reading tests in grades 4–8. Of the other districts statewide, 36.7% received an A.⁶¹
- Appalachian districts trail the rest of the state in Ohio's value-added measure in math and reading in grades 4–8. A report card grade of a "C" in value-added means that students made a year's growth. In 2014, 65% of Appalachia districts received a C or better in value-added, compared to 74% of other districts statewide.
- Appalachian districts trailing other districts statewide in both achievement and value-added results has been a trend in prior years.



Promising Practice

Over a three-year period, Franklin Local School District (Muskingum County) has been a top performer in value-added results. In the 2013–2014 school year, the district received an "A" grade on its state report card for overall value-added. The teachers and leaders in Franklin Local use this data in combination with other sources to make decisions about how best to reach every child's instructional needs.





Rural school districts typically have a lower percentage of students who go to college than other locales. According to ACT research (Radunzel, 2014), students entering college with dual credit are more likely to be successful in college as evidenced through this population's higher grades and higher rates of degree completion when compared to students who did not earn college credit while in high school.

College, Career, and Life Readiness

Adults ages 25 and over who live in Ohio's Appalachian region are less likely to have attended college compared to adults across Ohio.⁶² In all, 25.2%, or 1 in 4 Ohio adults completed a 4-year degree or higher compared to only 15.9%, or about 1 in 6 adults in Ohio's Appalachian region. Though this statistic suggests that fewer adults are pursuing a degree, this is not the whole story. Ohio's Appalachian region is also experiencing a rural "brain drain" reality where young adults who have completed a degree are leaving the region in search of higher wages and jobs.⁶³

	Educational Attainment	
	Adults Ages 25 and over in Ohio's Appalachian Region	Adults Ages 25 and over Statewide
Some college, no degree	18.9%	20.8%
Completion of Associate's Degree	7.9%	7.9%
Completion of a 4-year degree, Master's degree, and advanced degrees	15.9%	25.2%

Source: National Center for Education Statistics, U.S. Census Bureau

The challenge is clear, especially for Appalachian school districts—how do we build on our successes and continue improving in areas where we lag the rest of the state? We need to start early and ensure that all students are on track to be academically successful and have the foundational skills needed to pursue their life goals.

According to many studies and researchers, the three main barriers to postsecondary success are:

1. Aspirations
2. Academic Preparedness
3. Affordability

In terms of aspirations, our children, like most, dream big. However, an awareness gap exists between the life goals of our students and what it takes academically to achieve and realize those dreams and aspirations. According to the ACT, approximately 88% of eighth graders surveyed nationally plan to participate in some form of postsecondary education when they graduate from high school.⁶⁴ However, there is a clear aspiration-academic preparedness gap when nationally fewer than 39% of students who took the ACT earned a college-ready score. Our students can dream big, but they must also be aware of what is required of them academically to pursue their aspirations.

Regardless of whether a student's goal after high school is to enter higher education, the workforce, or the military, we are living in a society where knowledge and skills are valued and a high school diploma must represent more. To accomplish our community goals for all students to be prepared for life beyond high school, we need to know how our schools are performing and what is needed to improve.

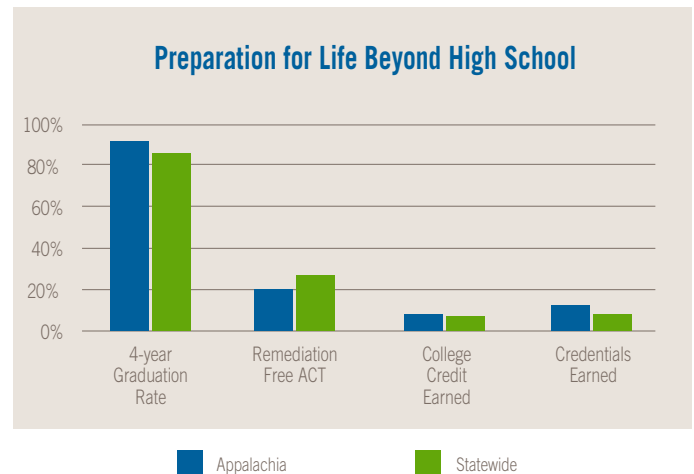
As a response to these community concerns, the Ohio Department of Education released new measures of student success beyond high school beginning in the 2013-2014 school year. This new feature will grade school districts based on their performance in supporting students' transitions to adulthood. These measures include ACT participation, average ACT scores, industry credentials (e.g., welding, HVAC, peace officer, EMT) earned by the graduating class, and percentage of the class earning college credit while still in high school.⁶⁵

Data Highlights:

- Students in Appalachia graduate from high school at similar rates as their peers across Ohio.
- Appalachian districts are leading the state in credentials earned while still in high school.
- The metric showing “remediation free ACT” is significantly lagging. This metric demonstrates that just 19.8% of students in Appalachian districts are scoring highly enough on the ACT to predict that they will not be required to take remedial math or English language arts once in college, versus 29.8% of students statewide. Remedial coursework credits do not count towards a degree, rather they are viewed as “developmental” courses to fill in learning gaps for students.

The low percentage of students with remediation free ACT scores indicates that schools in Ohio’s Appalachian region must be concerned with the rigor—or the level of difficulty—in their courses. More challenging high school curricula will better prepare students for college-level coursework and industry credentialing for demonstrated workforce competencies.

In terms of college affordability, the state of Ohio’s implementation of the College Credit Plus (CCP) program provides an opportunity for high school students to earn college credit while still in high school. The new program takes the place of the post-secondary enrollment option (PSEO) program and other dual enrollment programs that have existed in Ohio. The new CCP removes barriers for students to make college coursework more accessible than before providing an opportunity for students to get a head start on their college education before they graduate from high school. At a time where financing a college education leaves many students and their families in debt, these types of programs directly address college affordability. Students in Ohio’s Appalachian region are on par with the rest of the state on this particular measure, which bodes well for these students in addressing college affordability.



College Affordability is a growing issue for students across the country and is most felt among the segments of the population that have the least ability to pay for higher education. *The Wall Street Journal* reported that the 2015 college graduating class was the most indebted ever, averaging more than \$35,000 in loans.⁶⁶



Created in 2012, Building Bridges to Careers is a community-wide initiative that seeks to engage the Marietta City School District, local business, students and their families in the many occupational opportunities and experiences available within the Washington County community.

This program links community partners to students by focusing on problem-based learning that aligns curriculum with real-world issues, job shadowing, mentoring, and providing career information to students. Job shadowing gives students a 4–6 hour hands-on experience in a job of their choosing. Career Mentoring, which is taking place at the middle school level, focuses on decision-making processes and leveraging resources and materials through Ohio Means Jobs.

For more about the program visit <http://buildingbridgestocareers.org>, and explore their Career Pathway videos highlighting local county residents recalling how they chose their career and how they managed adversity in their path.

Recommendations

Improving educational outcomes for students in Ohio's Appalachian region involves strengthening ties and collaborations among key partners, using multiple data points to understand performance and progress, and focusing on place-based strategies that link educational pathways with regional workforce opportunities.

- 1. Strengthen Connections Between Early Childhood Programs and the School Districts to Support Children's Readiness for Learning.** Rising kindergarteners in Appalachia are on par with their peers from across the state in terms of academic performance on the KRA-L. However, this indicator does not tell the whole story. A child's readiness to learn also includes their social and emotional preparedness extending to the family's readiness to support their young learners. Connections between early childhood programs and successful entry into kindergarten require collaboration between ECE providers, local school districts, and parents. These connections must support successful transitions addressing the whole child's needs beyond the academic.
- 2. Use Multiple Data Points Such as Growth and Achievement Data to Understand the Performance and Progress Context.** Policymakers, community leaders, and practitioners in the field have access to more data than they can possibly use. Focusing on key benchmarks is critical. Using multiple data points such as growth and achievement provide a more holistic "snapshot" of needs and identify targeted areas for improvement.
- 3. Focus on Place-based Strategies that Provide Value to Students and Their Future,** such as the Building Bridges to Career Opportunities program in Marietta, Ohio, that demonstrate relevance and connections between coursework and real-world opportunities through career pathways. The job shadowing and career mentoring components serve not only to educate students, but to build closer relationships between the school district and the business community to support economic vitality and build a regional talent pipeline.
- 4. Pursue Collaborative Solutions Through Collective Action.** There is power in numbers. A school district or community's ability to address local and regional concerns are oftentimes thwarted by lack of resources or capacity to act. Collective action, as demonstrated in the Ohio Appalachian Collaborative, represents a proven strategy that works for rural communities throughout the Appalachian region and in rural areas throughout the country.⁶⁷



Promising Practice

Creating Opportunity Through Collective Action

The Ohio Appalachian Collaborative (OAC), started in 2010, is a partnership between 27 rural school districts to achieve a shared goal of improving student outcomes within the region. The OAC is a recipient of a 2013 Straight A Innovation Grant through the State of Ohio to expand dual enrollment programs in partner districts. Providing dual enrollment courses, now part of the College Credit Plus (CCP) program has had significant impacts on students and their families. In the 2014–2015 school year, students in the OAC school districts have earned 9,746 semester hours of college credit saving students and their families more than \$2.4 million in tuition costs.

Child Health

Health is the foundation of a child's well-being. Access to affordable quality health care is critical to promoting children's growth and development. More than half of children in Ohio's Appalachian region are covered by Medicaid, but there are shortages of primary, dental, and mental health providers. Additionally, children in the region face food insecurity and relatively high rates of obesity, which can negatively affect their health. A vast region such as Appalachian Ohio demands creative approaches that use technology, mobile health options, and food distribution and local health promotion events to improve access to care.



A Look at Health Disparities

CDF-Ohio's issue brief, *Health Disparities are Leaving Ohio's Rural Children Behind*, gives an in-depth look at disparities in children's health in rural areas including Appalachia and makes recommendations for local initiatives and state policy changes to restore food security, combat childhood obesity, and increase access to health care.

Access to Health Providers

Historically, Appalachian families have struggled to access even basic preventative health care for their children. This pervasive problem stems from a lack of providers in a relatively large geographic area without sufficient public transportation and community resources to adequately meet the needs of many low-income families. These barriers to care present daily, compounding costs for children who cannot see a provider when they have an infection, a cavity, or a mental illness. Beyond worsening health outcomes, untreated health issues decrease children's ability to succeed in school, profoundly impacting their social and economic opportunities.

Data Highlights:

- Ohio has six children's hospitals, but none are located in Appalachia.⁶⁸ Those who have the resources often travel to metropolitan centers such as Columbus or Cincinnati for care.⁶⁹
- Primary care provider shortages seem to have improved in the last 15 years: 21 Appalachian counties were designated Health Professional Shortage Areas (HPSAs) in 2015, down from 24 counties in 2001.⁷⁰
- All but four Appalachian counties (Clermont, Jefferson, Mahoning, and Trumbull) were designated as Mental Health Professional Shortage Areas in 2015.⁷¹
- Not all children are able to access pediatric care. According to one source, the average rate of pediatricians per 1,000 children in Appalachia (.42) was half the statewide rate (.84) in 2013.⁷² Further, nine Appalachian counties had no physicians who designated general pediatrics as their practice specialty: Carroll, Harrison, Holmes, Meigs, Monroe, Morgan, Noble, Perry, and Vinton.



21 Appalachian counties are designated Health Professional Shortage Areas

Ashtabula
Belmont
Carroll
Coshocton
Guernsey
Harrison
Highland

Hocking
Holmes
Jackson
Lawrence
Mahoning
Monroe
Morgan

Noble
Perry
Scioto
Trumbull
Tuscarawas
Vinton
Washington

Oral Health

The single most common unmet health need among children in Ohio's Appalachian region is accessing dental care.⁷³ Many Appalachian children have never received any dental care, and children in the region are more likely than children statewide to have untreated tooth decay. All but four Appalachian counties are designated Dental Health Professional Shortage Areas. Adding to the problem, many dentists in the area do not accept Medicaid.⁷⁴

Data Highlights:

- In 2015, 28 Appalachian counties were designated Dental Health Professional Shortage areas.⁷⁵ This is more than double the number of counties designated in the region in 2001 (12).⁷⁶
- The percentage of children in Appalachia (12%) that have never received dental care is similar to the state rate (12.4%).⁷⁷ However, in five Appalachian counties, more than 20 percent of children have never visited the dentist: Perry (28.3%), Vinton (23.4%), Belmont (22.6%), Holmes (20.1%), and Noble (20.1%).
- Appalachian children were 1.5 times more likely to have untreated tooth decay (27%), than the average Ohio child (18.7%) as of 2010. The six worst Appalachian counties had rates of untreated tooth decay higher than 40 percent: Holmes (48.6%), Ashtabula (46.2%), Jefferson (44.7%), Lawrence (44%), Meigs (43.3%), and Vinton (41.5%). Only four Appalachian counties had rates lower than 20 percent: Coshocton (19.3%), Hocking (18.7%), Guernsey (17.7%), and Clermont (6.1%).

Medicaid

Ohio Medicaid offers vital health care programs for low-income families, pregnant women, and children. Medicaid is available to uninsured children up to age 19 in families with household income up to 206% of the federal poverty level (FPL), insured children up to age 19 in families with income up to 156% FPL, and pregnant women in families with income up to 200% FPL. Medicaid is available to parents with income up to 90% FPL.⁷⁹ Medicaid-eligible individuals under the age of 21 are eligible for Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) services.

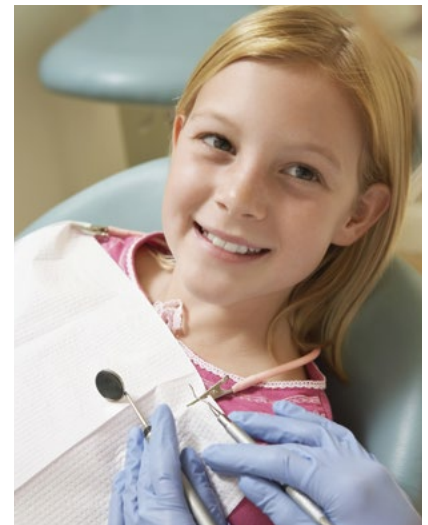
Data Highlights:

- Medicaid's Healthy Start and Healthy Families programs provided health insurance for 3 of 5 Appalachian children (60.5%), and over half of Ohio's children (50.6%) at some point during the year in 2013.
- In all but two Appalachian counties (Clermont, 45.4% and Holmes, 18.6%) more than half of the children are enrolled in Medicaid's Healthy Start and Healthy Families programs. The four Appalachian counties with the highest rates of enrollment were Pike (85.3%), Vinton (80%), Adams (78.2%), and Jackson (74.8%).
- Compared to 15 years ago, a much higher percentage of children in Appalachia are enrolled in Medicaid today. Estimates vary, but between 28% to 37% of Appalachian children were enrolled in Medicaid in 2001.⁸⁰



Promising Practice

In Mahoning, Trumbull, and Columbiana counties, the "Smile Station" van provides mobile dental care to uninsured children and adults. The Smile Station visits local schools, day care centers, summer camps, homeless shelters, a free clinic, and senior citizen day care facilities, and is expanding services to other areas of the counties.⁷⁸



Persistent Issue: Lead

An issue that has drawn both state and national attention in recent months has been lead poisoning in children. While Ohio has made strides over the past 15 years in decreasing the number of children with lead poisoning, this remains a considerable problem, with 10,000 children annually being diagnosed with lead poisoning. While lead poisoning through water access has drawn the most media attention, approximately 90 percent of Ohio's diagnosed children are exposed to lead through *paint*.⁸² This problem is acute across Appalachia, with old housing stock and therefore deteriorating lead paint. Ohio must work to educate residents of the need to be vigilant with the risks of exposure to lead-based paint in older homes, and to ensure proper screening is conducted for children potentially exposed to lead paint.

Recommendations

Of the numerous health challenges in Appalachia, a lack of access to health care is a recurring theme at the root of the problem. At the same time, there are alarming public health crises around maternal health, substance use, food insecurity, and childhood obesity that require expanded, robust health services across Appalachia.

To ensure child health in Appalachian Ohio becomes a priority:

1. Assist Providers and Health Systems as Patient Centered Medical Home Transformation Continues.

Ohio is undergoing a health care system transformation by encouraging and expanding the use of Patient Centered Medical Homes (PCMH) across the state. A PCMH is a team-based care delivery model led by a primary care provider who comprehensively manages a patient's health needs with an emphasis on health care value and quality. The Ohio Office of Health Transformation is currently designing the PCMH model and encouraging all primary care practices to participate. The program is designed to encourage practices to improve how they deliver care to their patients over time by providing structured, proactive, and coordinated care for patients rather than episodic treatments for illnesses. Practices throughout Appalachia Ohio should go through this transformation process with the state, and be part of this new health care delivery system in Ohio.

2. Integrate Use of Community Health Care Workers into Health Care Systems.

Community health workers (CHW) are frontline public health workers that can coordinate and manage care in personal ways that make health care more effective. CHWs are trusted members of a community who work with patients to improve health care delivery by navigating challenges such as language, transportation, and barriers to care. As practices participate in the PCMH model, they should expand the use of CHWs in combating a range of issues from infant mortality to chronic diseases such as diabetes and asthma.

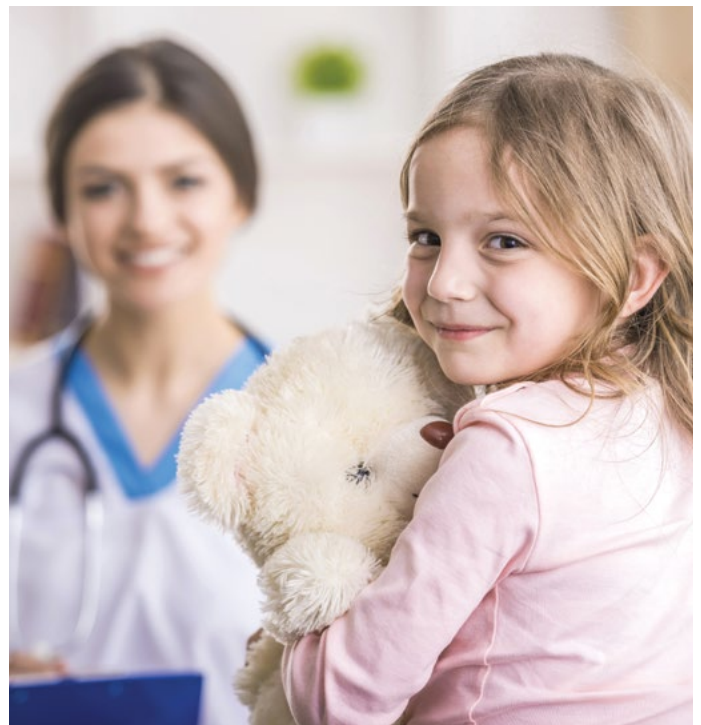
3. Expand the Reach of Health Care at Existing Facilities.

Expanding the reach of health care at existing facilities across Appalachia will be critically important in improving health care across the region. One way to accomplish this is through the use of mobile health services. Some existing efforts in Ohio include mobile dental vans called “Smile Stations” operating in Mahoning, Trumbull, and Columbiana Counties; portable dental units, which set up temporarily in select locations such as schools; and school-based health centers. Another way to accomplish this is through taking advantage of the federal “free care” rule, which allows schools to be reimbursed for services provided to Medicaid-eligible students.⁸¹ Ohio should review Medicaid service and provider options in a school setting and seize this new tool to improve health care.

4. Modernize the Dental Care Workforce to Expand Access in Appalachian Ohio. To ease the current dental health professional shortages in Appalachian Ohio, we recommend that the scope of practice of dental hygienists, dental therapists, and dental hygienist therapists are expanded to meet children's basic oral health needs.

5. Overcome Barriers to Telehealth and Utilize Its Services More Widely. Telehealth continues to offer tremendous opportunities across the country in delivering health care services into regions that are lacking physical resources. They are also vehicles of cost-savings—for patients and taxpayers alike. Nationwide Children's Hospital in Columbus, for example, uses telehealth in several ways to connect its practitioners with patients in other parts of the state. Telehealth helps Nationwide Children's (1) To consult with physicians in other parts of Ohio to provide better care; (2) To hold care conferences to improve continuity of care for patients that have transferred from one part of the state to Nationwide Children's; and (3) To interpret diagnostic tests sent from other institutions for review.

There are several obstacles in Appalachian Ohio to expanding telehealth services: Insufficient access to broadband, workforce, a lack of flexibility in billing, and limitations in scope of practice. These challenges must be addressed to fully realize the opportunity telehealth presents for improving delivery of health care services in underserved regions like Appalachian Ohio.



Food Insecurity & Nutrition

Food Insecurity

A foundation of consistent access to adequate and healthy food is vital to ensuring our children live healthy and successful lives. In Appalachia, more than one-fourth of children face food insecurity. Child food insecurity refers to the household-level economic and social condition of limited or uncertain access to adequate food.⁸³ Not having sufficient access to nutritious foods can lead to devastating cognitive deficiencies, as well as dramatic increases in the likelihood of developing physical and mental diseases.⁸⁴ A toddler who experiences severe food insecurity is 3.4 times more likely to be obese at 4.5 years old.⁸⁵ The impact of these shortages is most often felt among low-income children, who face numerous barriers to reliable sources of healthy foods. While there are federal and state programs that try to address child food insecurity, many low-income Appalachian children face participation barriers such as limited community participation and inadequate transportation.

Data Highlights:

- In 2012, more than 1 in 4 children in Appalachia were in food insecure households (26.2%), slightly higher than the state average (25.2%).
- Five Appalachian counties had rates higher than 30 percent: Jackson (32.4%), Pike (31.5%), Vinton (30.7%), Meigs (30.5%), and Scioto (30.3%). Clermont County had the lowest Appalachian rate (21.7%), followed by Holmes (23.3%), Washington (24%), Tuscarawas (24.4%), Brown (24.5%), and Lawrence (24.6%).

Food Assistance

The Supplemental Nutrition Assistance Program (SNAP), commonly known as food stamps, helps to ensure that children in low-income families have the food they need to grow and thrive. Families may qualify if their household income is at or below 130% of the federal poverty level.⁸⁶ The amount of the SNAP benefit depends upon several factors including household size, income, expenses and in some cases, resources. The average monthly SNAP benefit was \$132 in 2013.⁸⁷ With cuts to SNAP in recent years, families increasingly rely on emergency food assistance from foodbanks.

Data Highlights:

- 33.5% of children in Appalachia are eligible to receive SNAP compared to 29.8% of Ohio children.
- The range is 6.4% (Holmes) of children eligible to 47.8% (Vinton).
- Nearly three-fourths of Appalachian counties are above the state average for the percent of children eligible for SNAP. In Vinton, Pike, Scioto, Adams, Meigs, Lawrence, Ross, Muskingum, and Jackson counties more than 40% of children are eligible for SNAP.

Summer Food Service Program Sites

More than half (52.7%) of children in Appalachia and 46.9% of children statewide received free or reduced price lunch through the National School Lunch Program (NSLP) during the school year in 2012.⁸⁸ During the summer months when school is not in session, however, it is challenging to continue to meet their nutritional needs. In 2014, 1,624 Summer Food Service Program sites served 3.8 million free meals to Ohio children who may otherwise have gone without food during the summer months.⁸⁹

Data Highlights:

- According to the Ohio Department of Education's 2015 summer food site listing, Appalachian Ohio had 251 sites in 24 counties.
- Appalachia's share (16.2%) of the total sites in Ohio (1,550) was roughly proportionate to its share of the state's child population (17%).
- However, the distribution of these sites across the region shows many Appalachian children are underserved by the program. Eight Appalachian counties did not have any summer feeding sites in 2015 (Brown, Carroll, Guernsey, Harrison, Holmes, Monroe, Noble, and Vinton),⁹⁰ and seven counties had fewer than five sites (Adams, Belmont, Clermont, Coshocton, Highland, Morgan, and Tuscarawas). These 15 counties share over a third (36.9%) of Appalachian children, yet only 6.4% of the region's feeding sites.
- On the other hand, the three Appalachian counties with the most sites, Ashtabula (27), Trumbull (26), and Muskingum (22), share about one-fifth (19.3%) of Appalachian children, yet almost a third (29.9%) of its feeding sites.

Promising Practice

Summer Food Delivery Brings Meals to Children

In 2014, a pilot program provided funding for Summer Food Service Program sponsors to deliver meals to the homes of children who lack transportation to the feeding site. Five sponsors were able to provide 11 child-friendly, shelf-stable meals each week to about 1,700 at-risk and underserved children in remote areas of Adams, Athens, Gallia, Holmes, Jackson, Lawrence, Meigs, Pike, Scioto and Vinton Counties.⁹¹



Childhood Obesity

Childhood obesity has more than doubled in children and quadrupled in adolescents nationally in the past 30 years.⁹² Obesity increases a child's risk of decreased school performance, and is linked with increased risks for anxiety, depression, suicide, and other chronic diseases.⁹³ Rural and Appalachian children are 55% more likely to be obese than those in urban areas, and so are disproportionately at risk for these adverse health outcomes.⁹⁴

Many low-income Appalachian children face environmental and socioeconomic barriers to accessing nutritious foods and living an active lifestyle—both things that can reduce childhood obesity. For example, many Appalachian communities have limited access to public transportation, and inadequate funding for facilities, equipment, and physical activity programs. In addition, many Appalachian children reside in food deserts.⁹⁵ They are among a quarter of rural Ohioans who must travel more than 10 miles to find a grocery store.⁹⁶

Data Highlights:

- In Ohio, a higher percentage of children were overweight or obese in Appalachia (40.3%) than statewide (34.7%) in 2010.
- In the entire Appalachian region, only three counties have lower childhood obesity rates than the state average: Morgan (34.1%), Jefferson (32.9%), and Noble (24.4%).
- The five Appalachian counties with the highest childhood obesity rates were Lawrence (51%), Adams (48.8%), Pike (46.9%), Guernsey (45.3%), and Jackson (45%).

Recommendations

Food insecurity is a problem across Appalachia. In our recent report on early childhood hunger, we found that our babies, toddlers, preschoolers and school-aged children are going hungry.⁹⁷

- 1. Increase Participation in Summer Food Service Programs.** To reach hungry children in the summer, Ohio must open Summer Food Service Program sites in every Appalachian county with a focus to improve participation. For example, increased participation rates can be achieved by making transportation available to and from the Summer Food Service Program sites. Best practices indicate that partnering with civic, faith, and community groups to sponsor feeding sites that combine academic enrichment and nutrition, such as at Children's Defense Fund Freedom Schools®, and Ohio University's Kids on Campus program.
- 2. Ease the Cost Burden for Summer Feeding Sites.** One challenge that sites face is the financial difficulty of meeting all the operational costs in Appalachian Ohio. One agency operating a Summer Food Program site in Appalachia, for example, is only able to provide meals by using other funds to pay costs not covered in the reimbursement rate. A mechanism is needed to determine the true cost of operating a Summer Food Service Program and to adjust the reimbursement rate to what is actually required to provide meals that meet nutritional guidelines and the food handling requirements of a given state.

The state can expand new state programs such as the Summer Rural Delivery Meals program, which provided 11 meals weekly to nearly 2,000 children through community drop-off locations and home delivery in six Appalachian counties.⁹⁸

- 3. Encourage Public-Private Partnerships to Overcome Food Deserts.** The lack of access to grocery stores and supermarkets is a considerable problem. Food deserts in Appalachian Ohio exist in two ways: Grocery stores are either not nearby, or are too expensive for too many families to afford the healthy food that our families need.

There was encouraging news in March 2016, when the Finance Fund Capital Corporation (FCAP) launched the Healthy Food for Ohio (HFFO) program, a public-private partnership to provide financial and other support toward the development of grocery stores and other fresh food retail in low-income underserved communities across Ohio. Neighborhood residents, local businesses, community based organizations and various government agencies should collaborate to apply for this funding to increase access to grocery stores and healthy, affordable food in their communities.

- 4. Expand Food Education Programs.** Communities across Appalachia should follow the public-private collaborations of food education that are having positive effects across the country. A federal program piloted in Marietta called "Food is Elementary,"⁹⁹ and the School Wellness Initiative, are great examples of programs that increase access to nutritious food and physical activities.¹⁰⁰ Efforts like these not only help to overcome hunger, they improve the eating habits and overall health and outcomes of children. Expanded food education programs are an important part of reversing the growing trend of childhood obesity.

Philanthropic Capital

Compared to the rest of Ohio, fewer funds are available from philanthropic resources in Appalachian Ohio. In fact, there is a substantial gap in philanthropic assets—funding available through philanthropy—compared to the rest of the state. Appalachian Ohio has only \$762 philanthropic dollars per capita versus \$7,437 per capita outside the area. Put another way, the rest of the state has nearly 10 times more philanthropic dollars to invest in its citizens through grants, scholarships, and partnerships than Appalachian Ohio does.¹⁰¹

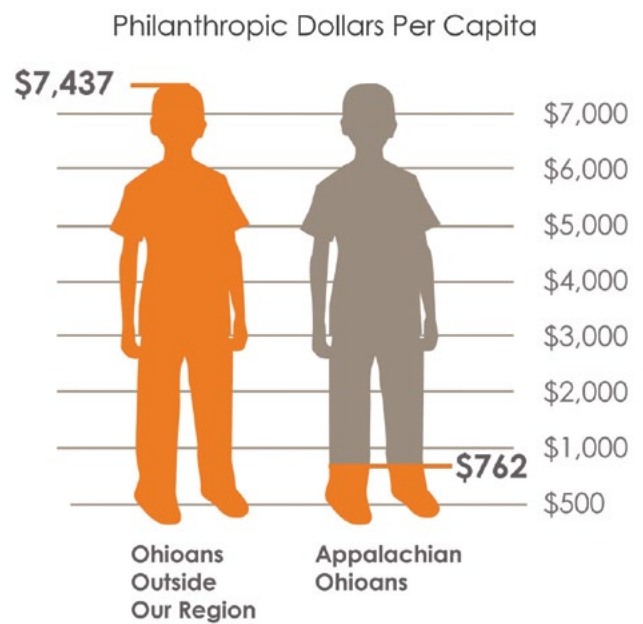
Increasing philanthropy dollars in the region would help make it possible to begin implementing many of this report's recommendations.

Recommendations

Build much-needed philanthropic capital that can be used to provide long-term, sustainable investments in children, the future of Ohio's Appalachian region.

Increase the permanent philanthropic assets dedicated to Appalachian Ohio's communities. With more permanent and flexible philanthropic dollars, Appalachian Ohio will have greater ability to create opportunities for its citizens and communities. Through grants, scholarships, and support to other partnerships, a region sees deeper investments in the promise of its citizens. Each of the areas highlighted throughout this report, as well as the recommendations made throughout, could benefit from greater investment in existing, emerging, or new initiatives to move them forward. Philanthropic dollars can spur innovation and when philanthropy has the resources to act as a partner to the public and private sector, they can together make great advancements for the children of Appalachian Ohio.

APPALACHIAN OHIO'S PHILANTHROPY GAP



Source: Foundation Center 2015, used with permission from Foundation for Appalachian Ohio



Final Recommendations

Children are the future of Appalachian Ohio. We need to act now to ensure that they grow and develop into productive adults who will be the region's future community and business leaders, workers, teachers, health care providers, and parents. To accomplish this, businesses, policymakers, community groups, educators, faith leaders, and families must unite and work together as partners in creating change for children. Specifically, we recommend that Appalachian Ohio:

1. End the cycle of child poverty in the region and help families achieve economic stability.

- Ohio's 32 Appalachian counties should join the Rural Impact County Challenge (RICC) to reduce poverty.
- Implement two-generation strategies to launch thriving families.

2. Improve maternal health before, during and after pregnancy.

- Reduce infant mortality rates through improving prenatal care systems and supports.
- Reduce infant mortality rates through lowering the rates of maternal and household smoking.
- Focus on the neonatal abstinence syndrome crisis in Appalachian Ohio.

3. Make high-quality early childhood education possible for every child in Appalachian Ohio.

- Early learning and public school systems must work in unison.
- Build an early childhood education hub.
- Improve financial sustainability of early childhood education and invest in its workforce development.

4. Improve educational outcomes for primary and secondary students in Ohio's Appalachian region through collaborations among key partners, better use of data, and strategies that help students connect learning to their futures.

- Strengthen connections between early childhood programs and the school districts to support children's readiness for learning.
- Use multiple data points such as growth and achievement data to understand the performance and progress context.
- Focus on place-based strategies that provide value to students and their future.
- Pursue collaborative solutions through collective action.

5. Increase children's access to health care using creative approaches that ensure better and more frequent delivery of services throughout the Appalachian region.

- Assist providers and health systems as Patient Centered Medical Home transformation continues.
- Integrate use of community health care workers into health care systems.
- Expand the reach of health care at existing facilities.
- Modernize the dental care workforce to expand access in Appalachian Ohio.
- Overcome barriers to telehealth and utilize its services more widely.

6. Reduce hunger and food insecurity in the region.

- Increase participation in Summer Food Service programs.
- Ease the cost burden for summer feeding sites.
- Encourage public-private partnerships to overcome food deserts.
- Expand food education programs.

7. Build much-needed philanthropic capital that can be used to provide long-term, sustainable investments in children, the future of Ohio's Appalachian region.

- Increase the permanent philanthropic assets dedicated to Appalachian Ohio's communities.

Data Tables

Demographics

COUNTY	CHILD POPULATION								
	Child Population (#)	Change from 2000 (#)	Under Age 6 Population (#)	Age 6–17 Population (#)	White (%)	Black (%)	American Indian (%)	Asian (%)	Hispanic (%)
Ohio	2,649,830	-236,755	835,807	1,814,023	79.9	17.4	0.4	2.4	5.5
Appalachia	449,322	-59,359	137,030	312,292	92.1	6.8	0.3	0.8	2.9
Adams	6,851	-341	2,099	4,752	97.8	1.8	0.3	0.1	1.4
Ashtabula	22,692	-4,114	6,971	15,721	93.5	5.4	0.3	0.8	6.6
Athens	9,844	-1,518	3,121	6,723	92.9	4.0	0.4	2.7	2.4
Belmont	13,330	-1,889	4,181	9,149	94.7	4.5	0.2	0.6	1.5
Brown	10,455	-1,286	3,169	7,286	97.7	1.7	0.1	0.5	1.3
Carroll	6,165	-1,086	1,728	4,437	97.6	1.9	0.3	0.2	2.1
Clermont	49,129	-478	15,027	34,102	95.5	2.6	0.3	1.6	2.7
Columbiana	22,187	-5,030	6,804	15,383	96.0	3.3	0.2	0.5	1.8
Coshocton	8,633	-1,005	2,677	5,956	96.6	2.8	0.2	0.4	1.5
Gallia	7,057	-708	2,244	4,813	94.3	4.8	0.3	0.7	1.6
Guernsey	9,093	-1,574	2,833	6,260	94.7	4.4	0.4	0.6	1.6
Harrison	3,267	-378	993	2,274	95.6	3.9	0.2	0.3	1.4
Highland	10,700	-348	3,242	7,458	95.9	3.4	0.4	0.3	1.4
Hocking	6,699	-488	1,969	4,730	97.5	1.7	0.4	0.4	1.2
Holmes	14,618	733	4,764	9,854	99.1	0.7	0.1	0.2	1.0
Jackson	7,867	-602	2,429	5,438	97.0	1.9	0.5	0.6	1.6
Jefferson	13,310	-2,424	3,982	9,328	89.3	9.9	0.2	0.6	1.9
Lawrence	14,034	-1,189	4,208	9,826	95.3	3.9	0.2	0.6	1.3
Mahoning	48,409	-12,486	14,462	33,947	74.8	23.5	0.4	1.3	8.0
Meigs	5,242	-254	1,570	3,672	97.5	1.9	0.2	0.5	0.8
Monroe	3,046	-524	941	2,105	98.1	1.5	0.1	0.3	0.9
Morgan	3,292	-491	933	2,359	93.1	6.0	0.4	0.4	1.2
Muskingum	20,082	-1,851	6,316	13,766	90.8	8.2	0.5	0.5	1.7
Noble	2,718	-472	925	1,793	98.2	1.1	0.4	0.4	0.7
Perry	8,877	-721	2,662	6,215	97.8	1.6	0.4	0.3	0.8
Pike	6,809	-721	2,079	4,730	96.6	2.5	0.6	0.4	1.3
Ross	17,117	-501	5,189	11,928	92.7	6.3	0.5	0.6	2.0
Scioto	17,301	-2,002	5,423	11,878	95.2	3.6	0.7	0.5	2.2
Trumbull	43,754	-10,934	12,987	30,767	85.8	13.2	0.3	0.7	2.7
Tuscarawas	21,337	-1,768	6,566	14,771	96.4	2.4	0.5	0.6	3.9
Vinton	3,058	-417	853	2,205	97.5	1.8	0.6	0.1	1.5
Washington	12,349	-2,492	3,683	8,666	96.5	2.4	0.3	0.8	1.8

FAMILY STRUCTURE (RELATIONSHIP TO HEAD OF HOUSEHOLD)					
Married couple family (%)	Male only headed household (%)	Female only headed household (%)	Grandchild (%)	Other relative (%)	Foster or unrelated (%)
60.6	6.0	23.5	6.6	1.5	1.9
60.7	6.6	20.9	7.9	1.5	2.4
61.4	6.5	22.5	5.9	1.4	2.2
56.5	8.6	20.3	9.1	1.5	4.0
59.1	7.2	20.6	7.9	3.1	2.1
63.1	7.2	20.5	6.1	0.6	2.4
60.9	5.2	18.0	10.4	1.3	4.3
74.7	4.9	11.6	5.6	1.7	1.5
68.0	7.7	15.6	5.8	0.9	2.1
60.4	7.4	19.1	8.0	2.5	2.6
69.5	4.2	17.4	6.0	0.5	2.3
63.3	10.0	14.3	10.3	0.2	1.8
59.3	5.9	21.4	10.0	0.7	2.7
65.4	5.1	15.9	8.0	2.2	3.4
59.2	10.1	19.1	7.2	0.9	3.4
64.5	4.8	18.4	8.9	0.0	3.4
89.7	0.9	4.9	3.5	0.5	0.6
55.5	6.1	24.9	7.9	2.6	2.9
57.4	3.7	27.5	7.9	1.8	1.8
54.2	8.4	19.8	11.9	3.6	2.2
53.3	6.2	29.7	6.9	1.6	2.3
58.4	8.2	19.9	9.0	1.4	3.0
62.4	14.8	15.4	5.0	0.9	1.5
63.3	6.5	18.6	7.0	1.4	3.1
54.6	6.8	26.3	7.2	1.6	3.5
65.5	7.0	19.1	6.4	0.0	2.0
59.1	6.1	21.7	9.9	1.8	1.4
50.8	11.9	20.9	11.7	1.8	2.9
58.4	5.1	22.0	10.3	0.9	3.3
54.0	7.9	18.4	15.0	1.8	2.9
55.5	6.0	27.8	7.9	1.4	1.3
68.0	5.0	19.1	5.3	1.5	1.1
56.1	9.2	17.6	9.6	6.1	1.4
67.0	6.7	13.6	8.5	1.2	3.0

FOSTER CARE	
Foster care (#)	Foster care rate
22,448	8.5
3,994	8.9
101	14.7
267	11.8
122	12.4
77	5.8
177	16.9
16	2.6
569	11.6
108	4.9
31	3.6
37	5.2
75	8.2
42	12.9
157	14.7
69	10.3
63	4.3
52	6.6
130	9.8
52	3.7
344	7.1
76	14.5
9	3
19	5.8
164	8.2
6	2.2
167	18.8
59	8.7
199	11.6
261	15.1
245	5.6
168	7.9
64	20.9
68	5.5

COUNTY	CHILD POVERTY					
	Children in poverty (%)	Increase from 2000 (% pts)	Children < 100% FPL	Children < 125% FPL	Children < 200% FPL	Students econ disadvantaged (%)
Ohio	22.7	8.6	22.8	28.5	44.1	48.5
Appalachia	26.7	8.9	25.9	32.3	50.4	55.1
Adams	35.2	11.7	29.0	38.5	57.3	69.7
Ashtabula	29.2	10.9	25.5	34.8	52.9	58.9
Athens	29.5	8.2	29.2	35.0	52.5	53.5
Belmont	25.2	4.5	22.9	28.3	43.6	45.7
Brown	25.7	10.0	19.0	29.2	49.2	52.4
Carroll	23.5	6.9	23.8	28.5	52.9	51.5
Clermont	14.1	4.8	14.0	18.9	32.4	40.7
Columbiana	27.4	10.2	26.7	31.6	49.5	56.0
Coshocton	24.8	10.6	26.6	33.7	55.6	58.5
Gallia	33.2	8.9	22.7	28.0	48.0	53.9
Guernsey	33.9	11.9	34.8	42.2	55.6	57.5
Harrison	26.1	7.8	30.0	34.9	52.5	53.5
Highland	33.2	16.4	28.7	37.4	59.0	54.9
Hocking	26.8	9.1	22.8	29.7	49.0	56.9
Holmes	20.2	0.2	23.1	31.3	60.1	39.7
Jackson	30.1	8.5	38.2	44.9	65.1	67.2
Jefferson	26.7	7.2	27.6	33.6	51.2	69.6
Lawrence	28.5	2.4	22.6	30.0	48.9	57.3
Mahoning	26.8	8.7	28.7	34.9	52.0	54.0
Meigs	31.4	5.2	31.2	35.5	52.9	78.6
Monroe	25.5	3.5	34.1	40.2	55.8	62.4
Morgan	33.1	9.7	27.1	30.8	48.3	59.9
Muskingum	30.3	11.8	26.7	32.4	54.3	55.5
Noble	21.7	4.7	25.9	30.3	50.8	40.1
Perry	27.1	8.7	28.3	34.6	51.0	63.5
Pike	36	11.6	32.5	42.3	61.3	76.6
Ross	28.1	11.0	29.3	36.0	54.3	61.9
Scioto	32.1	6.1	30.2	36.5	53.0	66.6
Trumbull	32.3	17.0	30.9	36.4	52.7	55.2
Tuscarawas	21.7	8.4	22.9	30.5	50.2	41.7
Vinton	35.1	10.2	33.0	38.4	58.7	78.3
Washington	22.3	5.8	20.0	26.9	47.5	46.4

INCOME & UNEMPLOYMENT	
Median household income (\$)	Unemployment rate (%)
48,138	5.7
41,605	6.7
37,259	9.1
40,899	7
35,783	6.8
39,264	6.6
43,050	7.2
44,622	6
61,398	5.3
41,996	6.4
39,496	7.3
39,447	7.5
39,760	6.7
40,343	5.9
40,419	7.6
42,376	6.3
49,118	3.9
37,823	8.6
38,074	8
41,137	6.5
41,076	6.6
40,023	9
41,000	10.8
36,057	7.8
40,399	7
42,425	7.6
41,586	7.2
41,092	9
42,730	6.3
36,682	8.7
41,951	7
44,121	5.4
37,842	7.9
41,236	6.2

PARENTAL EMPLOYMENT				
Married, both employed or in armed svcs. (%)	Married, only husband employed (%)	Married, only wife employed (%)	Single dad employed (%)	Single mom employed (%)
63.6	26.6	6.5	79.4	70.8
59.0	28.6	7.5	73.9	65.5
47.7	30.1	11.5	67.2	47.4
59.5	28.7	8.2	72.6	68.4
55.8	25.9	10.3	54.8	57.2
59.1	28.0	9.0	75.2	66.9
61.0	23.1	11.8	73.0	70.3
54.5	28.2	9.4	90.4	74.8
67.4	27.0	3.6	84.6	72.0
59.9	26.7	8.3	68.3	66.4
52.7	31.8	10.1	71.2	69.5
57.8	32.3	3.5	58.4	78.2
57.9	29.9	7.4	94.2	64.4
59.5	28.2	6.2	48.0	61.0
56.0	27.8	9.1	86.2	65.3
63.0	25.9	6.7	81.2	63.2
33.8	62.3	1.7	81.2	66.8
53.3	27.7	13.0	58.8	55.8
59.0	28.8	7.1	79.4	60.9
60.8	28.1	6.3	66.0	64.3
64.6	24.5	7.3	79.8	69.3
44.8	34.8	11.3	68.4	57.0
47.4	43.6	2.3	93.5	67.1
48.4	34.6	8.3	79.9	61.3
63.0	23.0	6.3	63.1	61.0
47.5	33.7	5.0	82.6	77.7
62.9	24.1	9.8	64.1	55.1
51.9	28.7	9.4	55.4	35.9
56.0	26.4	10.3	76.5	65.4
53.4	24.3	13.1	60.0	54.7
60.0	28.3	7.7	72.8	68.3
62.4	29.8	5.1	84.2	66.8
46.6	46.2	2.8	88.7	47.9
57.8	28.2	8.9	70.8	76.0

Birth and Babies

COUNTY					
	1st trimester prenatal visit (rate)	Teen birth (rate)	Low birthweight (rate)	Infant mortality (rate)	Neonatal Abstinence Syndrome (NAS) rate per 1,000 live births
Ohio	71.4	12.8	8.5	7.6	8.8
Appalachia	68.7	14.1	8.2	7.6	15.4
Adams	72.1	11.9	6.9	5.9	15.9
Ashtabula	62.5	13.7	8.3	8.1	9.8
Athens	79.7	19.2	10.6	1.7	29.8
Belmont	66.5	15.3	7.3	5.7	10.0
Brown	79.2	6.2	7.7	9.9	15.8
Carroll	62.7	13.3	8.0	11.0	0.7
Clermont	76.7	8.7	7.3	8.4	14.3
Columbiana	69.1	11.7	7.4	4.5	11.2
Coshocton	68.2	15	8.5	2.3	4.1
Gallia	72.1	11.6	8.1	13.4	13.6
Guernsey	73.9	15.6	8.9	4.3	21.1
Harrison	53.3	22.2	4.4	12.2	3.8
Highland	63.4	18.5	8.5	14.0	9.4
Hocking	75.4	20.8	7.5	3.1	18.9
Holmes	39.2	3.6	4.1	6.2	0.5
Jackson	66.7	23.5	9.9	4.8	13.2
Jefferson	50.8	11.8	9.7	7.6	23.6
Lawrence	78.9	17.5	6.6	8.7	66.7
Mahoning	69.8	12.9	10.7	10.8	13.1
Meigs	78.2	15.5	7.7	0.0	14.2
Monroe	62.9	15.6	10.1	6.5	13.9
Morgan	67.9	6.5	8.3	0.0	4.8
Muskingum	75.2	15.5	8.5	3.9	5.0
Noble	67.6	4.1	7.3	0.0	12.9
Perry	73.2	8.8	9.0	7.7	18.7
Pike	69.8	25	8.4	17.8	57.7
Ross	70.7	10.1	10.6	7.2	22.1
Scioto	69.2	21.4	6.7	10.2	76.0
Trumbull	66.4	11.8	7.9	8.6	9.7
Tuscarawas	65.2	10	7.7	9.0	2.8
Vinton	69.4	25.5	9.9	0.0	16.9
Washington	82.2	9.5	7.8	1.6	12.4

Early Childhood

COUNTY	Publicly funded preschool enrollment (#)	Head Start enrollment total birth to 5 (#)	Public Preschool Enrollment (ODE) ^a	Early learning and development program enrollment ^b	Total early learning and development program spaces ^c	Spaces that are accredited, quality rated, or public preschool (%)	Children per early learning and development spaces in centers (#)
Ohio	183,191	38,849	30,184	238,867	309,632	39	2.8
Appalachia	21,599	8,723	6,931	31,832	38,795	46.9	3.8
Adams	222	174	150	354	452	60.2	5.1
Ashtabula	1,278	443	315	1,604	1,911	63.4	4.0
Athens	363	191	240	746	1,172	47.4	2.7
Belmont	453	238	265	851	894	33.6	4.8
Brown	342	177	160	547	683	40.7	5.0
Carroll	149	62	106	265	267	67.0	7.5
Clermont	1,518	568	473	3,641	5,166	33.7	3.2
Columbiana	1,724	358	217	1,711	1,694	39.4	4.3
Coshocton	391	259	140	555	642	73.1	4.4
Gallia	303	168	157	487	496	43.3	4.7
Guernsey	455	286	208	785	836	66.0	3.5
Harrison	81	56	80	287	323	57.9	3.4
Highland	364	279	131	584	595	57.5	5.9
Hocking	184	132	91	499	467	39.0	4.5
Holmes	189	152	88	356	269	76.2	17.9
Jackson	242	189	112	564	620	41.9	4.3
Jefferson	609	249	354	932	1,311	27.0	3.2
Lawrence	594	528	306	892	1,197	76.6	3.9
Mahoning	4,078	1,003	535	4,838	6,417	47.0	2.4
Meigs	182	151	122	246	267	45.7	6.3
Monroe	59	107	90	154	208	82.7	4.6
Morgan	110	83	51	189	306	43.5	3.5
Muskingum	1,330	285	347	1,524	1,623	39.4	3.9
Noble	112	114	75	208	215	98.6	4.0
Perry	343	232	231	528	576	70.3	5.0
Pike	178	307	162	428	526	63.1	4.2
Ross	1,034	255	291	1,186	1,372	42.7	4.0
Scioto	982	500	479	1,286	1,645	44.6	3.5
Trumbull	2,487	669	355	3,109	4,063	40.3	3.5
Tuscarawas	732	265	366	1,461	1,468	64.8	4.7
Vinton	100	20	83	181	172	59.9	5.7
Washington	411	223	151	834	942	28.0	4.2

^aECE funded spaces + preschool special educ. spaces

^bODE licensed spaces + ODJFS center spaces

^cODE + ODJFS

K-12 Education

District IRN	School district name	County	Enrollment	Achievement letter grade (indicators met)	Value-added letter grade (3 yr avg.)	4-yr HS grad rate (%)
Ohio			1,574,039			89.4
Appalachia			280,875			90.3
61903	Adams County/Ohio Valley Local	Adams	3,884	D	C	91.9
00442	Manchester Local	Adams	815	C	D	95.2
43513	Ashtabula Area City	Ashtabula	3,516	F	C	77.9
45856	Buckeye Local	Ashtabula	1,808	A	C	86.1
43810	Conneaut Area City	Ashtabula	1,728	D	A	82.5
44057	Geneva Area City	Ashtabula	2,577	B	A	90.1
45864	Grand Valley Local	Ashtabula	1,361	C	F	86.4
45872	Jefferson Area Local	Ashtabula	1,779	C	F	90.6
45880	Pymatuning Valley Local	Ashtabula	1,301	B	B	87.5
45906	Alexander Local	Athens	1,586	C	A	98.0
43521	Athens City	Athens	2,747	D	C	93.9
45914	Federal Hocking Local	Athens	1,008	F	F	90.9
44446	Nelsonville-York City	Athens	1,201	C	F	83.9
45922	Trimble Local	Athens	849	F	F	94.4
45203	Barnesville Exempted Village	Belmont	1,265	B	F	95.3
43570	Bellaire Local	Belmont	1,262	D	A	79.2
45237	Bridgeport Exempted Village	Belmont	786	D	D	88.1
44347	Martins Ferry City	Belmont	1,399	C	A	88.7
46003	Shadyside Local	Belmont	809	C	F	93.7
45997	St. Clairsville-Richland City	Belmont	1,718	C	A	93.9
46011	Union Local	Belmont	1,518	D	D	87.6
46037	Eastern Local	Brown	1,324	B	B	94.2
46045	Fayetteville-Perry Local	Brown	889	D	C	92.2
45377	Georgetown Exempted Village	Brown	1,009	D	A	98.7
46078	Ripley-Union-Lewis-Huntington Local	Brown	981	C	A	87.7
46060	Western Brown Local	Brown	3,224	D	A	84.6
46177	Brown Local	Carroll	663	D	F	95.1
45278	Carrollton Exempted Village	Carroll	2,178	C	A	92.2
46300	Batavia Local	Clermont	2,175	D	C	89.2
46318	Bethel-Tate Local	Clermont	1,701	B	A	92.1
46326	Clermont Northeastern Local	Clermont	1,566	C	F	85.7
46334	Felicity-Franklin Local	Clermont	939	D	A	86.3
46342	Goshen Local	Clermont	2,700	A	B	97.6
45500	Milford Exempted Village	Clermont	6,312	A	A	95.5
45559	New Richmond Exempted Village	Clermont	2,415	A	B	91.8
46359	West Clermont Local	Clermont	7,911	B	F	92.2
46367	Williamsburg Local	Clermont	996	C	C	93.9
46425	Beaver Local	Columbiana	1,910	C	A	88.6
45328	Columbiana Exempted Village	Columbiana	1,002	A	A	93.8

ACT participation (% of class)	ACT mean score	Achieved remediation-free ACT score (% of graduates)	Graduates with an industry-recognized credential (%)	Graduates with at least 3 dual-enrollment credits (%)	Some College, No Degree (% adults ≥ age 25)	Associate's Degree (% adults ≥ age 25)	4-year degree and beyond (% adults ≥ age 25)	
66.3	22	29.8	4.3	11.0	20.8	7.9	25.2	
58.3	21	19.9	5.4	10.2	18.8	7.8	15.9	
40.2	22	19.1	0.0	12.2	15.7	6.4	10.5	
59.7	19	4.8	0.0	4.8	15.7	5.7	9.3	
41.0	21	12.8	0.0	0.0	19.9	6.6	12.6	
59.6	22	21.9	0.0	0.0	21.6	8.1	12.1	
46.8	20	14.3	0.0	0.0	19.2	6.3	9.4	
55.2	22	22.9	0.0	0.0	21.8	6.7	14.3	
61.8	21	19.1	0.9	25.5	22.8	7.4	11.3	
43.0	21	14.8	0.0	13.4	19.9	7.9	16.7	
37.5	21	14.4	0.0	8.7	20.1	3.3	11.6	
27.3	22	12.1	10.1	11.1	18.2	12.3	19.9	
23.2	24	13.8	6.6	0.0	17.2	8.9	43.1	
40.9	20	4.6	27.3	0.0	17.1	9.4	23.1	
29.0	20	8.6	4.3	0.0	19.5	14.2	8.8	
50.0	21	14.8	11.1	1.9	20.0	7.2	9.9	
45.9	21	16.5	1.2	5.9	18.1	8.6	16.1	
35.4	20	10.4	0.0	0.0	19.6	10.2	10.3	
50.9	20	6.8	1.7	0.0	22.0	5.9	9.2	
52.2	20	11.3	1.7	0.0	23.7	8.7	14.3	
54.0	21	15.9	3.2	0.0	18.0	10.3	15.5	
75.0	22	29.6	0.8	5.3	20.4	9.8	19.6	
45.4	21	18.6	1.0	0.0	17.9	14.4	12.4	
50.0	21	16.3	0.0	18.6	15.6	9.4	13.0	
48.1	22	23.4	0.0	26.0	16.3	6.0	13.1	
52.6	21	16.7	0.0	34.6	15.6	6.0	10.5	
55.4	19	6.2	0.0	26.2	18.4	6.2	9.6	
43.5	20	11.7	0.0	12.6	16.2	6.3	10.5	
47.5	21	13.1	0.0	1.6	17.6	7.0	17.5	
52.0	21	19.0	0.6	21.8	19.1	6.2	10.3	
53.2	22	20.9	4.3	0.0	19.2	8.7	22.8	
69.3	23	36.8	0.0	6.1	20.2	6.1	10.2	
57.1	20	15.0	0.0	23.3	17.6	7.4	14.2	
37.0	20	9.6	0.0	0.0	13.7	8.8	8.0	
52.8	21	17.9	8.5	17.0	16.3	7.4	17.5	
67.5	24	42.2	3.6	3.6	18.7	8.6	36.0	
60.1	22	26.8	0.0	8.7	18.7	5.0	23.3	
51.8	22	22.8	0.2	0.0	21.6	9.5	24.3	
62.2	21	22.0	0.0	22.0	20.9	5.9	13.5	
46.3	22	22.8	0.0	0.7	19.5	7.6	14.9	
70.8	23	35.4	0.0	3.1	18.8	10.4	18.6	

K-12 Education

District IRN	School district name	County	Enrollment	Achievement letter grade (indicators met)	Value-added letter grade (3 yr avg.)	4-yr HS grad rate (%)
46433	Crestview Local	Columbiana	1,265	B	C	96.9
43919	East Liverpool City	Columbiana	2,153	F	A	89.0
43927	East Palestine City	Columbiana	1,162	D	F	86.9
45443	Leetonia Exempted Village	Columbiana	747	C	A	87.7
45450	Lisbon Exempted Village	Columbiana	901	B	A	90.8
44735	Salem City	Columbiana	2,084	B	A	88.7
46441	Southern Local	Columbiana	881	D	A	88.9
46458	United Local	Columbiana	1,271	B	B	96.8
45039	Wellsville Local	Columbiana	776	C	A	92.9
43828	Coshocton City	Coshocton	1,770	D	A	94.9
46474	Ridgewood Local	Coshocton	1,305	C	F	93.8
46482	River View Local	Coshocton	2,106	C	F	94.5
65680	Gallia County Local	Gallia	2,198	B	C	87.3
44032	Gallipolis City	Gallia	2,002	B	C	89.7
43695	Cambridge City	Guernsey	2,097	D	C	83.9
69682	East Guernsey Local	Guernsey	983	D	D	94.4
47308	Rolling Hills Local	Guernsey	1,772	D	A	87.5
47548	Conotton Valley Union Local	Harrison	399	D	B	100.0
45245	Harrison Hills City	Harrison	1,504	D	C	83.7
47613	Bright Local	Highland	715	F	F	95.7
47621	Fairfield Local	Highland	957	B	A	95.2
45401	Greenfield Exempted Village	Highland	1,959	D	F	79.6
44123	Hillsboro City	Highland	2,548	D	A	82.1
47639	Lynchburg-Clay Local	Highland	1,172	A	A	91.1
44248	Logan-Hocking Local	Hocking	3,987	B	F	95.3
47688	East Holmes Local	Holmes	1,736	A	A	98.3
47696	West Holmes Local	Holmes	2,429	B	C	92.5
44156	Jackson City	Jackson	2,489	B	A	95.3
47761	Oak Hill Union Local	Jackson	1,261	C	C	93.9
45021	Wellston City	Jackson	1,494	D	F	92.1
47787	Buckeye Local	Jefferson	1,881	D	C	97.3
47795	Edison Local	Jefferson	1,597	D	F	93.6
47803	Indian Creek Local	Jefferson	2,168	D	F	87.6
44826	Steubenville City	Jefferson	2,281	C	F	90.9
44917	Toronto City	Jefferson	881	D	C	90.9
45294	Chesapeake Union Exempted Village	Lawrence	1,349	D	D	92.2
47928	Dawson-Bryant Local	Lawrence	1,165	C	A	87.8
47936	Fairland Local	Lawrence	1,649	A	B	93.9
44149	Ironton City	Lawrence	1,441	C	A	94.2

ACT participation (% of class)	ACT mean score	Achieved remediation-free ACT score (% of graduates)	Graduates with an industry-recognized credential (%)	Graduates with at least 3 dual-enrollment credits (%)	Some College, No Degree (% adults ≥ age 25)	Associate's Degree (% adults ≥ age 25)	4-year degree and beyond (% adults ≥ age 25)
60.2	21	19.4	4.1	7.1	16.6	8.9	15.0
42.9	20	10.4	0.0	0.0	17.2	12.0	8.1
39.3	21	14.3	3.6	2.4	21.8	7.8	8.0
47.7	19	6.2	6.2	10.8	16.0	9.3	14.8
51.3	21	15.8	0.0	13.2	16.1	7.7	10.2
51.4	22	18.1	0.0	8.5	19.7	8.4	14.8
30.6	20	8.3	1.4	0.0	13.2	7.7	11.8
61.3	22	33.3	4.3	17.2	15.4	9.5	14.0
58.6	19	8.6	0.0	21.4	18.5	8.9	6.3
51.3	21	18.0	6.4	24.4	16.9	6.1	13.0
38.5	21	16.7	7.3	25.0	18.2	9.1	11.7
53.9	22	21.8	9.7	46.1	16.2	8.7	12.5
58.0	20	12.7	22.7	6.7	18.8	7.2	10.7
65.1	22	28.1	13.7	10.3	15.9	7.1	19.8
52.4	21	16.1	5.4	13.7	22.1	8.5	15.8
50.6	21	16.9	12.4	21.4	19.1	6.8	9.7
44.4	20	11.1	9.0	22.9	17.8	9.1	9.8
59.5	19	9.5	11.9	19.1	15.4	10.2	8.6
36.4	20	9.3	3.1	0.0	17.6	9.8	9.7
70.2	20	21.3	0.0	14.9	24.9	8.9	13.2
58.1	22	25.8	8.1	14.5	15.9	9.0	14.5
38.0	20	9.2	3.5	2.1	15.8	8.0	11.1
36.8	23	15.4	0.0	13.4	23.0	7.8	11.2
46.7	22	20.0	8.9	14.4	18.9	6.0	10.0
43.5	22	18.9	9.3	22.4	19.3	9.3	13.6
81.0	24	50.0	1.7	0.0	5.9	1.5	5.4
50.3	22	19.9	2.0	5.5	13.6	6.7	10.5
62.9	21	22.9	12.9	0.0	18.6	6.1	16.2
49.0	20	15.3	24.5	5.1	12.7	7.4	14.0
42.1	20	7.9	8.7	0.0	13.6	8.2	14.8
54.4	21	15.0	5.4	21.1	17.3	10.4	10.7
51.6	22	17.2	4.5	47.1	18.0	10.4	9.2
47.8	22	21.7	1.9	6.2	20.2	13.7	18.4
53.0	21	18.9	1.5	37.1	19.6	9.9	18.6
50.0	19	10.6	0.0	19.7	22.8	11.7	15.1
51.5	21	17.5	0.0	12.6	20.9	8.3	18.6
50.0	21	15.9	0.0	15.9	23.5	7.8	11.5
48.9	22	20.6	0.0	14.5	18.2	8.1	17.7
73.3	21	24.4	0.0	2.3	20.5	6.6	17.1

K-12 Education

District IRN	School district name	County	Enrollment	Achievement letter grade (indicators met)	Value-added letter grade (3 yr avg.)	4-yr HS grad rate (%)
47944	Rock Hill Local	Lawrence	1,482	D	A	90.8
47951	South Point Local	Lawrence	1,720	D	C	89.5
47969	Symmes Valley Local	Lawrence	786	C	C	88.5
48298	Austintown Local	Mahoning	5,350	C	F	91.4
48306	Boardman Local	Mahoning	4,335	A	A	91.7
43703	Campbell City	Mahoning	1,184	F	A	76.9
48314	Canfield Local	Mahoning	2,665	A	A	95.8
48322	Jackson-Milton Local	Mahoning	826	C	C	92.9
48330	Lowellville Local	Mahoning	597	A	C	98.2
48348	Poland Local	Mahoning	2,105	A	A	94.6
48355	Sebring Local	Mahoning	585	D	F	93.3
48363	South Range Local	Mahoning	1,253	A	C	92.5
48371	Springfield Local	Mahoning	1,079	A	D	95.9
44859	Struthers City	Mahoning	1,930	C	A	88.3
48389	West Branch Local	Mahoning	2,135	C	A	95.3
48397	Western Reserve Local	Mahoning	712	A	A	93.1
45161	Youngstown City	Mahoning	5,111	F	F	67.8
48512	Eastern Local	Meigs	787	D	C	96.4
48520	Meigs Local	Meigs	1,699	D	F	87.8
48538	Southern Local	Meigs	695	C	F	96.1
48652	Switzerland Of Ohio Local	Monroe	2,372	F	F	86.3
48777	Morgan Local	Morgan	1,901	D	A	87.2
48835	East Muskingum Local	Muskingum	2,163	B	C	89.5
48843	Franklin Local	Muskingum	2,044	C	A	97.9
48850	Maysville Local	Muskingum	2,268	D	A	92.8
48876	Tri-Valley Local	Muskingum	3,029	A	A	90.7
48884	West Muskingum Local	Muskingum	1,434	C	C	93.6
45179	Zanesville City	Muskingum	3,312	F	F	89.4
45252	Caldwell Exempted Village	Noble	789	D	F	95.6
48900	Noble Local	Noble	921	D	F	91.8
45351	Crooksville Exempted Village	Perry	1,095	F	F	88.9
44479	New Lexington City	Perry	1,819	F	F	89.4
49056	Northern Local	Perry	2,194	B	C	90.9
49064	Southern Local	Perry	679	D	A	91.1
49122	Eastern Local	Pike	800	D	A	86.4
49130	Scioto Valley Local	Pike	1,405	F	A	76.9
49148	Waverly City	Pike	1,832	F	C	86.8
49155	Western Local	Pike	772	F	A	81.3
49494	Adena Local	Ross	1,208	D	A	89.0
43745	Chillicothe City	Ross	2,720	F	F	86.7
49502	Huntington Local	Ross	1,203	D	D	87.4
49510	Paint Valley Local	Ross	876	D	F	87.7

ACT participation (% of class)	ACT mean score	Achieved remediation-free ACT score (% of graduates)	Graduates with an industry-recognized credential (%)	Graduates with at least 3 dual-enrollment credits (%)	Some College, No Degree (% adults ≥ age 25)	Associate's Degree (% adults ≥ age 25)	4-year degree and beyond (% adults ≥ age 25)
41.2	21	13.5	0.0	5.9	15.0	4.8	10.6
50.4	20	10.5	0.0	3.0	17.6	7.2	14.5
52.5	20	13.1	0.0	0.0	12.0	9.7	12.2
55.8	21	17.1	7.0	14.0	23.0	7.8	19.6
57.4	22	23.9	4.6	2.7	24.7	6.0	28.2
42.9	19	8.8	12.1	0.0	20.3	4.8	9.6
90.7	24	54.0	2.1	16.9	18.1	8.1	41.0
56.0	21	17.9	11.9	0.0	19.1	5.5	17.8
75.0	21	23.2	1.8	0.0	23.8	6.9	21.0
87.1	23	45.7	1.6	1.6	21.6	6.1	40.2
53.3	20	13.3	20.0	17.8	19.4	7.0	15.3
74.8	24	39.3	8.4	0.0	19.3	6.5	22.1
76.7	22	35.6	11.0	1.4	17.3	4.9	21.1
68.2	21	27.9	7.8	0.0	19.9	6.8	12.9
62.8	22	28.4	10.8	38.5	18.3	7.0	15.1
72.4	22	29.3	6.9	34.5	22.4	6.4	15.0
33.4	17	1.8	4.0	13.5	21.5	5.9	11.2
53.6	22	25.0	5.4	14.3	15.2	10.6	14.3
33.6	20	9.9	14.5	0.0	15.9	9.6	11.0
35.3	18	3.9	0.0	2.0	22.4	10.3	10.9
48.0	20	13.2	19.1	3.9	15.0	10.1	10.9
34.0	20	10.3	47.4	0.0	21.1	7.7	10.1
63.8	23	30.3	2.6	13.8	18.4	12.2	18.6
61.0	22	27.4	11.0	30.8	19.8	7.8	10.5
75.2	21	25.6	3.2	49.6	19.4	6.6	8.1
55.8	22	25.6	0.0	2.3	20.6	9.1	15.2
61.5	21	23.9	0.9	1.8	23.5	9.5	19.8
66.3	22	13.0	6.4	16.5	19.5	7.0	11.8
58.8	21	20.6	17.7	11.8	14.3	5.1	8.0
49.3	20	11.0	16.4	31.5	11.7	8.2	11.0
53.1	20	14.8	8.6	23.5	16.1	9.0	7.7
19.9	19	2.8	4.3	0.0	18.7	8.4	7.8
35.2	21	13.3	7.3	1.8	20.4	9.2	14.8
35.6	19	6.7	13.3	13.3	18.4	5.9	4.8
45.8	19	10.2	18.6	0.0	12.0	5.6	9.1
47.1	20	12.5	14.4	0.0	14.6	4.4	12.6
39.6	21	12.5	8.3	0.0	18.3	7.1	15.0
47.9	18	6.3	12.5	0.0	10.1	4.8	4.2
47.5	20	11.0	4.2	5.9	18.4	9.2	14.3
47.5	21	13.8	3.8	0.0	19.4	7.8	15.8
33.7	20	7.4	11.6	7.4	12.1	9.8	10.1
38.3	21	12.4	6.2	4.9	10.8	8.2	18.0

K-12 Education

District IRN	School district name	County	Enrollment	Achievement letter grade (indicators met)	Value-added letter grade (3 yr avg.)	4-yr HS grad rate (%)
49528	Southeastern Local	Ross	1,203	C	A	89.4
49536	Union-Scioto Local	Ross	2,089	C	F	87.8
49544	Zane Trace Local	Ross	1,527	D	B	94.1
49593	Bloom-Vernon Local	Scioto	930	B	A	93.0
49601	Clay Local	Scioto	598	D	F	95.5
49619	Green Local	Scioto	568	F	C	89.2
49627	Minford Local	Scioto	1,524	C	A	96.5
44461	New Boston Local	Scioto	469	F	F	90.9
49635	Northwest Local	Scioto	1,516	D	F	99.0
44669	Portsmouth City	Scioto	1,777	F	C	86.2
49643	Valley Local	Scioto	974	C	A	97.7
49650	Washington-Nile Local	Scioto	1,435	D	B	98.4
49668	Wheelersburg Local	Scioto	1,481	A	C	97.4
50096	Bloomfield-Mespo Local	Trumbull	288	A	C	95.0
50112	Bristol Local	Trumbull	701	B	A	92.3
50120	Brookfield Local	Trumbull	1,118	D	F	87.4
50138	Champion Local	Trumbull	1,484	A	A	93.0
44065	Girard City	Trumbull	1,763	A	A	97.0
50161	Howland Local	Trumbull	2,809	B	C	91.1
45427	Hubbard Exempted Village	Trumbull	1,997	C	B	93.6
50179	Joseph Badger Local	Trumbull	844	C	C	95.1
50245	LaBrae Local	Trumbull	1,391	B	A	93.0
50187	Lakeview Local	Trumbull	1,813	A	C	98.8
50195	Liberty Local	Trumbull	1,216	D	A	89.0
50203	Lordstown Local	Trumbull	520	A	F	97.5
50211	Maplewood Local	Trumbull	805	A	A	98.5
50153	Mathews Local	Trumbull	792	C	F	86.6
50229	Mcdonald Local	Trumbull	873	B	C	96.4
45567	Newton Falls Exempted Village	Trumbull	1,233	D	A	87.7
44495	Niles City	Trumbull	2,476	C	B	82.7
50237	Southington Local	Trumbull	575	C	F	88.9
44990	Warren City	Trumbull	5,069	F	F	74.3
50252	Weathersfield Local	Trumbull	969	A	A	91.3
43778	Claymont City	Tuscarawas	2,105	C	F	92.5
43893	Dover City	Tuscarawas	2,716	B	B	97.1
50278	Garaway Local	Tuscarawas	1,208	A	F	96.3
50286	Indian Valley Local	Tuscarawas	1,890	C	C	95.4
44487	New Philadelphia City	Tuscarawas	2,869	C	D	90.2

ACT participation (% of class)	ACT mean score	Achieved remediation-free ACT score (% of graduates)	Graduates with an industry-recognized credential (%)	Graduates with at least 3 dual-enrollment credits (%)	Some College, No Degree (% adults ≥ age 25)	Associate's Degree (% adults ≥ age 25)	4-year degree and beyond (% adults ≥ age 25)
52.9	21	23.5	10.6	3.5	16.3	5.0	7.7
53.2	22	23.1	9.0	0.0	21.7	8.0	13.7
44.1	22	16.2	5.9	0.0	20.4	9.6	13.7
63.2	22	22.8	0.0	17.5	16.8	7.3	11.4
68.2	23	25.0	0.0	4.6	19.0	9.8	18.9
54.1	19	10.8	0.0	5.4	19.9	9.2	10.8
57.6	21	18.1	0.0	0.0	22.0	9.6	13.9
48.5	17	3.0	0.0	0.0	17.9	4.2	10.4
54.4	20	11.7	0.0	4.9	15.3	9.2	10.6
44.8	21	12.6	0.0	18.4	22.6	7.8	16.9
75.0	23	43.2	0.0	0.0	16.6	5.3	14.8
40.8	21	12.8	0.0	7.2	25.0	7.9	8.4
76.6	25	0.0	0.0	0.0	18.2	9.3	19.7
80.0	21	25.0	15.0	15.0	10.0	3.4	7.8
57.7	21	21.2	11.5	19.2	15.6	7.6	11.1
54.4	20	15.5	3.9	0.0	18.7	6.8	13.6
70.4	23	37.4	1.7	11.3	15.8	7.0	16.8
70.7	20	19.6	5.3	18.8	18.1	8.5	18.7
59.5	22	25.1	0.0	28.7	19.7	7.1	26.9
49.7	20	14.5	9.3	23.1	21.6	6.7	19.1
62.3	22	26.2	13.1	0.0	16.6	5.1	13.9
57.9	21	21.1	7.9	7.9	18.4	5.6	8.5
57.8	22	23.0	10.6	25.5	20.2	9.4	24.7
70.3	19	18.6	4.2	19.5	19.0	7.4	26.4
72.5	23	37.5	7.5	25.0	18.6	7.5	11.7
60.6	22	28.8	19.7	39.4	18.0	6.8	20.4
55.2	23	31.3	17.9	9.0	20.5	6.5	20.1
85.7	21	28.6	8.9	16.1	22.5	5.0	19.5
57.9	22	25.4	7.9	5.3	21.0	7.1	9.5
57.7	21	18.5	8.3	14.3	18.6	7.6	15.3
60.0	23	31.1	13.3	0.0	18.2	9.6	12.0
47.1	19	9.4	5.7	1.4	19.4	6.7	11.0
72.5	21	26.1	7.3	8.7	18.6	7.0	17.3
56.9	21	20.6	1.4	10.3	14.3	6.0	8.1
71.6	23	39.9	6.7	0.0	19.1	7.9	21.9
70.4	23	27.2	1.2	19.8	9.8	5.0	11.1
55.7	22	20.6	3.8	19.1	14.5	4.6	10.5
64.3	22	29.0	3.1	15.0	18.7	7.2	17.2

K–12 Education

District IRN	School district name	County	Enrollment	Achievement letter grade (indicators met)	Value-added letter grade (3 yr avg.)	4-yr HS grad rate (%)
45542	Newcomerstown Exempted Village	Tuscarawas	1,077	D	A	87.9
50294	Strasburg-Franklin Local	Tuscarawas	631	C	F	94.2
50302	Tuscarawas Valley Local	Tuscarawas	1,537	A	A	92.6
50393	Vinton County Local	Vinton	2,234	F	C	91.0
43604	Belpre City	Washington	1,048	F	F	84.3
50484	Fort Frye Local	Washington	913	C	F	97.4
50492	Frontier Local	Washington	705	D	F	86.7
44321	Marietta City	Washington	3,007	D	F	85.1
50500	Warren Local	Washington	2,245	C	A	90.5
50518	Wolf Creek Local	Washington	644	B	D	96.4

ACT participation (% of class)	ACT mean score	Achieved remediation-free ACT score (% of graduates)	Graduates with an industry-recognized credential (%)	Graduates with at least 3 dual-enrollment credits (%)	Some College, No Degree (% adults ≥ age 25)	Associate's Degree (% adults ≥ age 25)	4-year degree and beyond (% adults ≥ age 25)
38.4	21	14.1	9.1	13.1	16.7	5.0	9.3
63.5	22	19.2	11.5	28.9	17.0	4.9	15.7
58.2	23	30.3	6.6	0.8	17.2	8.0	18.6
39.5	21	14.4	10.2	2.4	15.9	8.4	8.5
42.2	21	15.7	6.0	6.0	22.9	13.1	11.9
50.0	21	12.8	9.0	14.1	14.7	11.5	11.5
5.0	15	0.0	6.7	1.7	15.5	6.6	9.3
38.7	21	14.9	4.7	8.1	20.6	9.5	21.7
60.5	23	31.1	10.0	12.6	21.5	9.2	14.5
55.4	21	23.2	17.9	26.8	16.6	6.6	15.3

Child Health

COUNTY							
	Publicly funded health care (%)	Health Professional Shortage Area (HPSA)	Dental HPSA	Mental Health HPSA	Pediatricians per 1,000 children (ratio)	Children never visited dentist (%)	3rd graders with untreated decay (%)
Ohio	50.6				0.84	12.1	18.7
Appalachia	60.5	21 counties	28 counties	28 counties	0.42	12	27
Adams	78.2		X	X	0.15	17.8	33.5
Ashtabula	62.3	X	X	X	0.31	17.7	46.2
Athens	67.7		X	X	0.51	11.3	32.4
Belmont	58.5	X	X	X	0.15	22.6	29.8
Brown	64.7		X	X	0.19	13	21.6
Carroll	57.9	X		X	0.00	14.2	29.2
Clermont	45.4				0.71	14.9	6.1
Columbiana	60.7		X	X	0.41	18.7	28
Coshocton	59.0	X	X	X	0.12	11.2	19.3
Gallia	67.5		X	X	1.56	10.1	35.9
Guernsey	65.1	X	X	X	0.44	12.3	17.7
Harrison	63.1	X	X	X	0.00	4.8	29.6
Highland	67.3	X	X	X	0.09	7.4	23
Hocking	70.0	X	X	X	0.30	6.7	18.7
Holmes	18.6	X	X	X	0.00	20.1	48.6
Jackson	74.8	X	X	X	0.38	14.8	39.6
Jefferson	66.0				0.23	3.8	44.7
Lawrence	68.4	X	X	X	0.50	7.2	44
Mahoning	61.8	X	X		0.70	17.8	22.2
Meigs	71.9		X	X	0.00	14.2	43.3
Monroe	63.4	X	X	X	0.00	6.6	32.1
Morgan	65.8	X		X	0.00	9.7	35.4
Muskingum	67.0		X	X	0.70	12.8	26.5
Noble	61.8	X	X	X	0.00	20.1	23.6
Perry	67.1	X	X	X	0.00	28.3	23.5
Pike	85.3		X	X	0.29	13.6	29.2
Ross	68.0		X	X	0.58	6.6	33.4
Scioto	72.0	X	X	X	0.46	15.9	27
Trumbull	60.2	X	X		0.37	19.3	22
Tuscarawas	50.8	X	X	X	0.37	15.2	24.7
Vinton	80.0	X	X	X	0.00	23.4	41.5
Washington	53.9	X	X	X	0.32	11.8	35.6

Hunger & Food Insecurity

COUNTY	Child food insecurity rate	SNAP participants (% children)	Summer Food Service Program sites (#)	Overweight and obesity (%)
Ohio	25.2	29.8	1,550	34.7
Appalachia	26.2	33.5	251	40.0
Adams	29.7	42.6	2	48.8
Ashtabula	26.7	35.7	27	36.3
Athens	27.9	39.3	8	40.4
Belmont	25.3	29.8	3	40.5
Brown	24.5	32.6	0	38.1
Carroll	25.7	28.4	0	43.3
Clermont	21.7	19.8	3	37.2
Columbiana	26.4	33.2	10	35.8
Coshocton	28.2	32.2	3	40.2
Gallia	26.9	39.4	9	44.3
Guernsey	28.5	35.8	0	45.3
Harrison	28.2	32.4	0	38.9
Highland	27.9	34.7	1	39.3
Hocking	26.1	35.9	5	41.3
Holmes	23.3	6.4	0	35.2
Jackson	32.4	40.5	21	45.0
Jefferson	28.2	39.0	5	32.9
Lawrence	24.6	41.0	11	51.0
Mahoning	25.0	39.2	15	38.2
Meigs	30.5	41.9	6	44.4
Monroe	28.2	29.3	0	44.5
Morgan	27.7	34.3	1	34.1
Muskingum	27.9	40.6	22	36.4
Noble	27.1	24.7	0	34.4
Perry	27.8	36.3	14	38.8
Pike	31.5	46.9	7	46.9
Ross	27.8	40.9	16	37.1
Scioto	30.3	45.0	17	44.5
Trumbull	26.5	34.3	26	43.3
Tuscarawas	24.4	25.1	3	35.7
Vinton	30.7	47.8	0	38.4
Washington	24.0	27.7	16	40.4

Broadband

COUNTY	Households served with FCC target broadband speed ^a (%)
Ohio	82.9
Appalachia	52.8
Adams	53.8
Ashtabula	77.8
Athens	58.0
Belmont	77.0
Brown	64.7
Carroll	21.9
Clermont	99.5
Columbiana	50.6
Coshocton	69.4
Gallia	15.8
Guernsey	51.8
Harrison	10.1
Highland	62.3
Hocking	12.8
Holmes	11.6
Jackson	72.8
Jefferson	65.9
Lawrence	43.3
Mahoning	9.5
Meigs	24.9
Monroe	0.0
Morgan	49.5
Muskingum	90.4
Noble	39.1
Perry	22.3
Pike	59.2
Ross	88.2
Scioto	82.9
Trumbull	49.2
Tuscarawas	3.0
Vinton	39.4
Washington	55.8

^aFCC target is ≥ 25 Mbps Download/
3 Mbps Upload Speeds

Data Definitions and Sources

Regional Calculations

Unless otherwise noted, regional rates or percents are calculated by dividing the number of cases for the region into the applicable total. For example, the percent of children in poverty in Appalachian Ohio

$$\frac{\text{sum of the number of children in poverty in each Appalachian county}}{\text{total of all children in Appalachia}}$$

Achievement Grades (2014)

Definition: The Indicators Met grade on Ohio's Report Card measures the percent of students who passed the state tests.

Source: Ohio Department of Education, School Report Card Download Data. Extracted from <http://reportcard.education.ohio.gov/Pages/Download-Data.aspx>

Comments: An indicator represents a tested area (i.e. 5th grade math). An A represents 90-100% of indicators met; C is 70-79%; F is below 50%.

Babies Born Exposed to Drugs (2009-2013)

Definition: The hospital discharge rates for neonatal abstinence syndrome (NAS) per 1,000 live births. Regional NAS rate calculated by Ohio Department of Mental Health & Addiction Services.

Source: Data request, Ohio Department of Mental Health & Addiction Services.

Babies Born at Low Birthweight (2013)

Definition: The percentage of babies born weighing less than 5.5 pounds at birth.

Source: Ohio Department of Health, Office of Vital Statistics. County birthweight groups, data run provided June 25, 2015.

Births to Teen Mothers (2012)

Definition: The number of births per 1,000 females age 15 to 17. The regional rate is the average of the county rates.

Source: Ohio Department of Health, Office of Vital Statistics. Birth counts and rates for Ohio females by population age group, data run provided May 20, 2014.

Child Population (2013)

Definition: A count of all persons under the age of 18 within a state or county.

Source: Puzzanchera, C., Sladky, A. and Kang, W. (2014). Easy Access to Juvenile Populations: 1990-2013. Retrieved from <http://www.ojjdp.gov/ojstatbb/ezapop/>

Child Population by Race and Ethnicity (2013)

Definition: A count of all persons of each race or ethnicity under the age of 18 within a state or county.

Source: Puzzanchera, C., Sladky, A. and Kang, W. (2014). Easy Access to Juvenile Populations: 1990-2013. Retrieved from <http://www.ojjdp.gov/ojstatbb/ezapop/>

Comments: Hispanic or Latino is considered an ethnicity, which is measured separately from race. Thus, race and ethnicity numbers may total more than 100 percent.

Children Below Selected Federal Poverty Levels (FPL) (2009-2013)

Definition: Ratio of income to poverty level by age.

Source: U.S. Census, American Community Survey 2009-2013.

Children Eligible for the Supplemental Nutrition Assistance Program (SNAP) (2013)

Definition: The percent of children eligible for SNAP/Food Stamps.

Sources: Ohio Department of Job and Family Services data request.

Children Enrolled in Medicaid (2013)

Definition: The percentage of children receiving health insurance through Medicaid or the State Children's Health Insurance Program (SCHIP), called Healthy Start and Healthy Families.

Sources: Ohio Department of Medicaid data request. Child Population: U.S. Census Bureau.

Comments: The statewide total is an unduplicated count. County totals are the number of children enrolled through that county; children may be enrolled through more than one county in a year.

Children in Foster/Substitute Care (2013)

Definition: The number of children in substitute care who were in foster care on January 1 of each year. This number reflects children placed by public agencies only. Children who have been placed with more than one public agency may be double-counted.

Source: Ohio Department of Job and Family Services data request.

Comments: Rates are calculated by dividing the number of children in foster care by the child population and multiplying by 1,000.

Children in Poverty (2013)

Definition: An estimate of the percentage of children living below the poverty guideline.

Source: U.S. Census, Small Area Income and Poverty Estimates (SAIPE) 2013. Extracted from <http://www.census.gov/did/www/saipe/data/statecounty/data/2013.html>

Children in Public Preschool (ODE) (2011)

Definition: The total number of Ohio Department of Education early childhood education funded spaces and preschool special education spaces.

Source: Early Learning and Development County Profiles. Provided by Community Research Partners through a data request.

Children in Publicly Funded Child Care (2013)

Definition: Total unduplicated count of children receiving publicly funded child care.

Source: Ohio Department of Job and Family Services data request.

Children per Early Learning and Development Program Space (2011-2012)

Definition: The number of children under age six per each early learning and development program space.

Source: Early Learning and Development County Profiles. Provided by Community Research Partners through a data request.

Children Who Have Never Received Dental Care (2008)

Definition: The percentage of children who have never visited a dentist.

Source: Ohio Family Health Survey 2008 survey response reported on Ohio Department of Health Oral Health Surveillance System, <http://publicapps.odh.ohio.gov/oralhealth/default.aspx>

Children with Untreated Tooth Decay (2009–2010)

Definition: The percentage of third graders with untreated decay.

Source: Ohio Department of Health, 2009-2010 Oral Health and BMI Survey, <http://publicapps.odh.ohio.gov/oralhealth/default.aspx>

College Credit Earned (2014–2015)

Definition: Of the high school students who graduated from high school in 2015, the percentage of those graduates who earned at least three credit hours of college coursework by graduation.

Source: Ohio Department of Education, Interactive Local Report Card. Extracted from <http://reportcard.education.ohio.gov/Pages/Download-Data.aspx>

Comments: Data is reported by school district and is aggregated to represent those districts in the Appalachian region compared to the rest of the state.

Credentials Earned (2014–2015)

Definition: Of the high school students who graduated from high school in 2015, the percentage of those graduates who earned an industry-recognized credential by graduation (e.g. EMT, Commercial Driver's License, HVAC, etc.).

Source: Ohio Department of Education, Interactive Local Report Card. Extracted from <http://reportcard.education.ohio.gov/Pages/Download-Data.aspx>

Comments: Data is reported by school district and is aggregated to represent those districts in the Appalachian region compared to the rest of the state.

Early Learning and Development Program Enrollment (2012)

Definition: The total enrollment under age six in ODE licensed sites and ODJFS child care centers.

Source: Early Learning and Development County Profiles. Provided by Community Research Partners through a data request.

Early Learning and Development Program Spaces (2012–2013)

Definition: The total number of spaces in child care centers licensed by the Ohio Department of Job and Family Services combined with the total number of preschool program spaces licensed by the Ohio Department of Education.

Source: Early Learning and Development County Profiles. Provided by Community Research Partners through a data request.

Early Learning and Development Program Spaces that are in Accredited, Quality Rated, ECE, or PSE Programs (Public Preschool) (2012–2013)

Definition: The percent of the total of early learning and development program spaces that are in (1) licensed child care centers accredited and/or quality-rated by the Ohio Department of Job and Family Services or in (2) Early Childhood Education (ECE) or Preschool Special Education (PSE) spaces funded by the Ohio Department of Education.

Source: Early Learning and Development County Profiles. Provided by Community Research Partners through a data request.

Educational Attainment (2009–2013)

Definition: The highest level of post-secondary education attained by adults age 25 and older.

Source: National Center for Education Statistics and U.S. Census Bureau 5-year ACS estimates.

Family/Household Structure (2009–2013)

Definition: The relationship of a child to the head of the household.

Source: U.S. Census, American Community Survey 2009–2013.

Food Insecurity (2012)

Definition: Food insecurity refers to the USDA's measure of lack of access, at times, to enough food for an active, healthy life for all household members and limited or uncertain availability of nutritionally adequate foods. Food insecure children are defined as children living in households experiencing food insecurity.

Source: Feeding America's Map the Meal Gap project, extracted from <http://www.feedingamerica.org/hunger-in-america/our-research/map-the-meal-gap/data-by-county-in-each-state.html>

Health Professional Shortage Areas (HPSAs) (2015)

Definition: HPSAs may be designated as having a shortage of primary medical care, dental or mental health providers. They may be urban or rural areas, population groups or medical or other public facilities.

Source: Health Resources and Services Administration, <http://www.hrsa.gov/shortage/>

Head Start Enrollment (2012–2013)

Definition: Children age birth to 5 enrolled in Head Start or Early Head Start.

Source: Early Learning and Development County Profiles. Provided by Community Research Partners through a data request.

High School Graduation Rate (2014–2015)

Definition: The four-year longitudinal high school graduation rate.

Source: Ohio Department of Education, Interactive Local Report Card. Extracted from <http://reportcard.education.ohio.gov/Pages/Download-Data.aspx>

Comments: Data is reported by school district and is aggregated to represent those districts in the Appalachian region compared to the rest of the state.

Infant Mortality (2012)

Definition: The number of babies who died before their first birthday per 1,000 live births.

Source: Ohio Department of Health, Office of Vital Statistics. Extracted from <https://www.odh.ohio.gov/~media/ODH/ASSETS/Files/cfhs/Infant%20Mortality/collaborative/2014/2007-2012%20IM%20BY%20RACE%20%20COUNTY.pdf>

K–3 Literacy Grades (for schools) (2015)

Definition: The K–3 Literacy Grade on Ohio's Report Card captures schools' monitoring, support and performance in preparing children as readers from kindergarten through third grade.

Source: Ohio Department of Education, School Report Card Download Data. Extracted from <http://reportcard.education.ohio.gov/Pages/Download-Data.aspx>

Kindergarten Readiness Assessment–Literacy (KRA-L) (2014)

Definition: The percentage of students by achievement level on Ohio's 2013-14 Kindergarten Readiness Assessment for Literacy.

Source: Ohio Department of Education, School Report Card Advanced Reports. Extracted from <http://reportcard.education.ohio.gov/Pages/Power-User-Reports.aspx>

Comments: Low-Achievement represents the percentage of children needing intense support, Mid-Achievement represents the percentage of children needing targeted support, High-Achievement represents the % of children needing enrichment support. The K–3 Literacy Grades began being graded on 2015 report cards and is different from the Third Grade Reading Guarantee score for student promotion from third grade to fourth grade.

Median Household Income (2013)

Definition: The median divides the income distribution into two equal parts: one-half of the cases falling below the median income and one-half above the median. Median income is based on the distribution of the total number of households and families including those with no income.

Source: U.S. Census, Small Area Income and Poverty Estimates (SAIPE) 2013. Extracted from <http://www.census.gov/did/www/saipe/data/statecounty/data/2013.html>

Neonatal Abstinence Syndrome (NAS)—see Babies Born Exposed to Drugs

Overweight and Obese Children (2010)

Definition: Overweight refers to children who fall between the 85th and 95th percentiles on the CDC BMI-for-age growth charts. Obese refers to children who fall above the 95th percentile. Overweight/obese refers to all children who fall above the 85th percentile.

Source: Ohio Department of Health. A Report on the Body Mass Index of Ohio's Third Graders 2004-2010. Extracted from <http://www.odh.ohio.gov/~media/ODH/ASSETS/Files/health%20resources/reports/2011bmireport.ashx>.

Parents Who Work by Household Type (2007–2011)

Definition: Employment status by specified types of families with own children.

Source: U.S. Census, American Community Survey 2007-2011.

Pediatricians per 1,000 Children (2013)

Definition: The ratio of pediatricians per 1,000 children under age 18.

Source: U.S. Department of Health and Human Services, HRSA Health Workforce Interactive Map, <http://ahrh.hrsa.gov/arfdashboard/ArfGeo.aspx>

Notes: Calculated using total of MD's and DO's, NF Peds_Gen_Tot_Pat_Care_2013 fields and child population (under 18). Calculations by CDF-Ohio. The data only includes MD's and DO's who indicated that pediatrics is their primary occupation and does not include general practitioners who may also include pediatrics in their practice. The data source includes only physicians who are members of the American Medical Association (AMA). Not all physicians are AMA members.

Prenatal Visit During First Trimester (2013)

Definition: The percent of births in which the mother had her first prenatal visit during the first trimester of pregnancy. The regional rate is the average of the county rates.

Source: Ohio Department of Health, Center for Public Health Statistics and Informatics. Vital Statistics County Birth Summary, 2013, data run provided September 24, 2015.

Remediation Free ACT (2014–2015)

Definition: Of the high school students who took the ACT, the percentage that achieved a score that the ACT considers to be “college-ready”. The “college-ready” designation assumes that the student will not be required to take “remedial” courses that are not credit-bearing when they enroll in college.

Source: Ohio Department of Education, Interactive Local Report Card. Extracted from <http://reportcard.education.ohio.gov/Pages/Download-Data.aspx>

Comments: Data is reported by school district and is aggregated to represent those districts in the Appalachian region compared to the rest of the state.

Students Economically Disadvantaged (2013–2014)

Definition: The percent of students in poverty in school districts as defined by the Ohio Department of Education (ODE). In general, students are considered to be economically disadvantaged if they are eligible for free or reduced price lunch or if their parent or guardian receives public assistance. Full definition in FY2014 District Profile Report, <http://education.ohio.gov/Topics/Finance-and-Funding/Finance-Related-Data/District-Profile-Reports/FY2014-District-Profile-Report>

Source: Ohio Department of Education. Extracted from <http://reportcard.education.ohio.gov/Pages/Power-User-Reports.aspx>

Summer Food Service Program Sites (2015)

Definition: Counties in which Summer Food Service Program (SFSP) sites were located. SFSPs are part of the National School Lunch Program.

Source: Ohio Department of Education. Extracted from <http://education.ohio.gov/Topics/Other-Resources/Food-and-Nutrition/Summer-Food-Service-Program/2015-Summer-Food-Service-Program>

Unemployment Rate (2014)

Definition: Unemployment refers to persons who were not employed during the reference week, but who were actively seeking work, waiting to be called back to a job from which laid off, or waiting to report within 30 days to a new payroll job. The unemployment rate is unemployment as a percentage of the civilian labor force.

Source: Ohio Department of Job and Family Services, Ohio Labor Market Information, Local Area Unemployment Statistics. Extracted from Civilian Labor Force Estimates Query tool at <http://ohiolmi.com/asp/laus/vbLaus.htm>

Comments: Rates are not seasonally adjusted.

Value-Added Grades (3-year averages) (2014)

Definition: The Value-Added Grade on Ohio’s Report Card measures the district’s average progress for its students the past three years in math and reading, grades 4–8.

Source: Ohio Department of Education, School Report Card Download Data. Extracted from <http://reportcard.education.ohio.gov/Pages/Download-Data.aspx>

Comments: A report card grade of a “C” in value-added means that students made a year’s growth or growth similar to the district average in the state. An “A” means there is significant evidence students made more than the district average in the state. An “F” means there is significant evidence students made less than the district average in the state.



Endnotes

- ¹ Appalachian Partnership for Economic Growth estimate based on U.S. Census and Bureau of Labor Statistics data.
- ² Appalachian Regional Commission (n.d.). *The Appalachian region*. Retrieved from http://www.arc.gov/appalachian_region/TheAppalachianRegion.asp.
- ³ Unless otherwise noted, this publication uses the Appalachian Regional Commission's classifications of counties as Appalachian. The list is found at <http://www.arc.gov/counties>.
- ⁴ In order to be able to compare regional indicators between 2001 and present day, this new report includes those three counties as part of Appalachia in 2001 calculations. Rather than using the data and tables from the 2001 report as the basis for comparisons, the data in this version will use newly analyzed historical data for the 32-county region obtained directly from the data source.
- ⁵ Holmes County Chamber of Commerce (n.d.). *Quick facts*. Retrieved from <http://www.holmescountychamber.com/index.php>. With its large and culturally distinct Amish population, Holmes County is often an outlier on many of the report's indicators.
- ⁶ Annie E. Casey Foundation (2015). *2015 KIDS COUNT data book*. Retrieved from <http://www.aecf.org/resources/the-2015-kids-count-data-book/>.
- ⁷ Children's Defense Fund (2014). *Ending child poverty now*. Retrieved from <http://www.childrensdefense.org/library/PovertyReport/EndingChildPovertyNow.html>.
- ⁸ U.S. Department of Health and Human Services (2013). *2013 poverty guidelines*. Retrieved from <http://aspe.hhs.gov/2013-poverty-guidelines>.
- ⁹ Ohio Department of Education (2015). *FY2014 district profile report*. Retrieved from <http://education.ohio.gov/Topics/Finance-and-Funding/Finance-Related-Data/District-Profile-Reports/FY2014-District-Profile-Report>.
- ¹⁰ U.S. Census Bureau (2007-2011). *American Community Survey 5-Year Estimates*. Data provided by Ohio University's Voinovich School of Leadership and Public Affairs for COAD Regional Profile. Calculations by CDF-Ohio.
- ¹¹ U.S. Census Bureau (2009-2013). *American Community Survey 5-Year Estimates*. Calculations by CDF-Ohio.
- ¹² National Association of Counties (2015). *Rural Impact County Challenge: A national effort to combat rural poverty*. Retrieved from <http://www.naco.org/rural-impact-county-challenge-national-effort-combat-rural-child-poverty>.
- ¹³ Ibid.
- ¹⁴ Annie E. Casey Foundation (2014). *Creating opportunity for families: A two-generation approach*. Retrieved from <http://www.aecf.org/resources/creating-opportunity-for-families/>, pg. 8.
- ¹⁵ Mosele, A., Patel, N. & Stedron, J. (2014). Top ten for 2Gen: Policy ideas and principles to advance two-generation efforts. Retrieved from http://b3cdn.net/ascend/1b324c19707d1e43c6_p4m6i2zji.pdf.
- ¹⁶ The White House, Office of the Press Secretary (2015). *White House fact sheet: 10 communities named rural IMPACT demonstration sites*. Retrieved from <http://www.usda.gov/wps/portal/usda/usdahome?contentid=2015/09/0267.xml>.
- ¹⁷ Yoder, D., Teegarden, P., Crawford, G. & Campbell, T. (2016). *Program innovations for addressing rural child poverty: A two generation approach* [PowerPoint slides]. Retrieved from http://www.communityactionpartnership.com/storage/cap/documents/MLTC%2016/program_innovation_rural_child_poverty_a_two_generation_approach_2016.pdf.
- ¹⁸ Connect Ohio (2015). *Broadband: Empowering life-long learning in Ohio*. Retrieved from http://connectohio.org/sites/default/files/connected-nation/broadband_in_education_web_final.pdf. The FCC benchmark target is 25 Mbps Download/3 Mbps Upload.
- ¹⁹ Connect Ohio (2015). *Data request: 25 Mbps download/3 Mbps upload data*.
- ²⁰ Connect Ohio (2015). *Broadband: Empowering life-long learning in Ohio*. Retrieved from http://connectohio.org/sites/default/files/connected-nation/broadband_in_education_web_final.pdf.
- ²¹ Ohio Department of Health (n.d.). *Project LAUNCH fact sheet*. Retrieved from <https://www.odh.ohio.gov/~media/ODH/ASSETS/Files/mch/LAUNCH%20fact%20sheet.pdf>.
- ²² At the end of 2015, Connect Ohio reports on its website that its state procured funding had expired. It reported further that it would be seeking funding from the General Assembly in 2016. See <http://connectohio.org/blog/post/future-connect-ohio>.
- ²³ Centers for Disease Control and Prevention (2011). *Pregnancy and prenatal care*. Retrieved from <http://www.cdc.gov/healthcommunication/toolstemplates/entertainment/tips/pregnancyprenatalcare.html>.
- ²⁴ Annie E. Casey Foundation (2014). *2014 KIDS COUNT data book*. Retrieved from <http://www.aecf.org/resources/the-2014-kids-count-data-book/>.
- ²⁵ Ohio Department of Health (2013). *Infant mortality fact sheet*. Retrieved from <http://www.odh.ohio.gov/~media/ODH/ASSETS/Files/cfhs/Infant%20Mortality/collaborative/Infant%20Mortality%20Fact%20Sheet%202013.pdf>.
- ²⁶ Ohio Department of Health (2014). *2014 Ohio infant mortality data: General findings*. Retrieved from <http://www.odh.ohio.gov/~media/ODH/ASSETS/Files/cfhs/Infant%20Mortality/2014%20Ohio%20Infant%20Mortality%20Report%20Final.pdf>.

- ²⁷ Ohio Department of Health (2013). *Neonatal abstinence syndrome (NAS) in Ohio, 2004- 2013, preliminary report*. Retrieved from <http://www.healthy.ohio.gov/~media/HealthyOhio/ASSETS/Files/injury%20prevention/NAS%20Summary%20Report%200317b.pdf>.
- ²⁸ Ibid.
- ²⁹ Ohio Department of Mental Health and Addiction Services Data Request, August 2015.
- ³⁰ Ohio Department of Health (2013). *Neonatal abstinence syndrome (NAS) in Ohio, 2004- 2013, preliminary report*. Retrieved from <http://www.healthy.ohio.gov/~media/HealthyOhio/ASSETS/Files/injury%20prevention/NAS%20Summary%20Report%200317b.pdf>.
- ³¹ Ohio Department of Health, Bureau of Vital Statistics (2013). *County birth summary*. Data run September 24, 2015.
- ³² Ohio Department of Health (n.d.). *Centering pregnancy*. Retrieved from <https://www.odh.ohio.gov/odhprograms/cfhs/centering/pregnancy.aspx>.
- ³³ Kington, D. (2015). *Voinovich School project promotes smoking cessation intervention in SE Ohio*. Retrieved from https://www.ohio.edu/voinovichschool/article.cfm?customel_datapageid_1792195=2716777.
- ³⁴ Applegate, M. & Hurst, M. (2016). *Interagency strategies to improve NAS outcomes in Ohio [PowerPoint slides]*. Presentation with Centers for Medicare & Medicaid Services on Medicaid Innovation Accelerator Program: Interagency Strategies to Improve NAS Outcomes in Ohio.
- ³⁵ Ohio Department of Mental Health and Addiction Services (n.d.). *Maternal Opiate Medical Support (M.O.M.S.) Project*. Available at <http://mha.ohio.gov/Default.aspx?tabid=671>. M.O.M.S. engages pregnant women in counseling, with goals for mothers (e.g., 30% improvement in 12-month retention rates), infants (e.g., reducing the length of time infants are in the hospital by 30%), and families (e.g., improved family stability).
- ³⁶ Annie E. Casey Foundation (2015). *2015 KIDS COUNT data book*. Retrieved from <http://www.aecf.org/resources/the-2015-kids-count-data-book/>.
- ³⁷ U.S. Department of Health and Human Services (n.d.). *Head Start services*. Retrieved from <http://www.acf.hhs.gov/programs/ohs/about/head-start>.
- ³⁸ Ohio Department of Job and Family Services (n.d.). *Helping families afford child care*. Retrieved from <http://jfs.ohio.gov/cdc/Page4.stm>.
- ³⁹ Ohio Department of Job and Family Services (2015). *Publicly funded child care monthly gross income chart*. Retrieved from <http://jfs.ohio.gov/cdc/docs/September2015300-FPL.stm>.
- ⁴⁰ Ohio Department of Education (n.d.). *Early learning*. Retrieved from <https://education.ohio.gov/Topics/Early-Learning>.
- ⁴¹ Ohio University (2015). *Tuition table*. Retrieved from <https://www.ohio.edu/admissions/tuition/index.cfm>.
- ⁴² Early Childhood Ohio (2013). *Early learning and development county profiles*. Retrieved from http://www.earlychildhoodohio.org/county_profiles.php.
- ⁴³ National Association for the Education of Young Children (n.d.). *A call for excellence in early childhood education*. Retrieved from <https://www.naeyc.org/policy/excellence>.
- ⁴⁴ Khan, K., Justice, L., & Jiang, H. (2016). *Profiles of school readiness among rural Appalachian children from low-income homes*. Columbus, OH: Crane Center for Early Childhood Research and Policy, The Ohio State University.
- ⁴⁵ Logan, J., Justice, L. M., & Pentimonti, J. (2014). *Kindergarten readiness and the "third grade reading guarantee."* Columbus, OH: Crane Center for Early Childhood Research and Policy, The Ohio State University. Retrieved from <http://sites.ehe.osu.edu/ccec/files/2014/04/CCEC-White-Paper-Winter-2014-PDF.pdf>.
- ⁴⁶ Early Childhood Ohio (2013). *Early learning and development State of Ohio profile*. Retrieved from http://www.earlychildhoodohio.org/files/county/State_EarlyLearning_and_DevelopmentProfile.pdf.
- ⁴⁷ U.S. Department of Health & Human Services, Office of Child Care (2015). *Provider Cost of Quality Calculator (PCQC)*. Retrieved from <https://www.ecequalitycalculator.com/Login.aspx?ReturnUrl=%2f&AspxAutoDetectCookieSupport=1>.
- ⁴⁸ groundWork (2016). *The dollars and cents of early learning: Investing in success*.
- ⁴⁹ COAD Early Care & Education Division (2015). *Programs opening and closing January 2012 through November 2014 [Data file]*.
- ⁵⁰ COAD Early Care & Education Division (2016). *Programs opening and closing November 1, 2014 through October 31, 2015 [Data file]*.
- ⁵¹ Rauth, J. (2012). *SBA loan performance report in conjunction with NAICS*. Retrieved February 10, 2016, from http://cfa-commercial.com/wp-content/uploads/2012/08/sba_loan_performance_by_naics_code.xls.
- ⁵² Ohio Education Research Center (2013). *2013 workforce study, Ohio early learning & development programs, general analysis*. Retrieved from earlychildhoodohio.org/files/resources/2013%20Workforce%20Study-General%20Analysis%20Report.pdf.
- ⁵³ Essex, G. & Putnam, W. (2015). *Appalachian early childhood workforce study summary report*. Ohio University: The Gladys W. and David H. Patton College of Education and Institute for Democracy in Education.
- ⁵⁴ Ohio Department of Job & Family Services (n.d.). *Step Up to Quality: Ohio's voluntary quality rating system*. Retrieved from <http://jfs.ohio.gov/cdc/stepUpQuality.stm>.
- ⁵⁵ Ohio Department of Education (n.d.). *Birth through kindergarten entry learning and development standards*. Retrieved from http://education.ohio.gov/Topics/Early-Learning/Early-Learning-Content-Standards/Birth-Through-Pre_K-Learning-and-Development-Stand.
- ⁵⁶ Ohio Department of Education (2012-2014). *KRA-L Data*. Retrieved from <http://reportcard.education.ohio.gov/Pages/Power-User-Reports.aspx>.
- ⁵⁷ Annie E. Casey Foundation (2010). *Early warning! Why reading by the end of third grade matters*. Retrieved from <http://www.aecf.org/resources/early-warning-why-reading-by-the-end-of-third-grade-matters/>.

- ⁵⁸ The Ohio Department of Education (n.d.). *Third grade reading guarantee*. Retrieved from <http://education.ohio.gov/Topics/Early-Learning/Third-Grade-Reading-Guarantee>.
- ⁵⁹ The Ohio Department of Education (2014-2015). *School district achievement data download*. Retrieved from <http://reportcard.education.ohio.gov/Pages/Download-Data.aspx>.
- ⁶⁰ Sirin, S. R. (2005). *Socioeconomic status and academic achievement: A meta-analytic review of research*. Review of Educational Research, 75, 417-453. Retrieved from http://steinhardt.nyu.edu/scmsAdmin/media/users/lec321/Sirin_Articles/Sirin_2005.pdf.
- ⁶¹ Ohio Department of Education (2014-2015). *School district growth data download*. Retrieved from <http://reportcard.education.ohio.gov/Pages/Download-Data.aspx>.
- ⁶² American Community Survey (2008-2013). Education Demographics and Geographic Estimates (2008-2013). Table [B15003] EDUCATIONAL ATTAINMENT FOR THE POPULATION 25 YEARS AND OVER . Retrieved February 16, 2016 from <http://nces.ed.gov/programs/edge/demographic.aspx>.
- ⁶³ Carr, P. J., & Kefalas, M. (2009). *Hollowing out the middle: The rural brain drain and what it means for America*. Boston, MA: Beacon Press.
- ⁶⁴ Radunzel, J., Noble, J., & Wheeler, S. (2014). *Dual credit/dual-enrollment coursework and long-term college success in Texas*. Retrieved from <https://www.act.org/research/policymakers/pdf/DualCreditTexasReport.pdf>.
- ⁶⁵ Ohio Department of Education (n.d.). *Prepared for success measure*. Retrieved from <http://education.ohio.gov/Topics/Data/Report-Card-Resources/Prepared-for-Success-Measure>.
- ⁶⁶ Sparshott, J. (2015, May 8). Congratulations, class of 2015. You're the most indebted ever (for now). *The Wall Street Journal*. Retrieved from <http://blogs.wsj.com/economics/2015/05/08/congratulations-class-of-2015-youre-the-most-indebted-ever-for-now/>.
- ⁶⁷ Battelle for Kids (2016). *Generating opportunity and prosperity: The promise of rural education collaboratives*. Retrieved from <http://battelleforkids.org/docs/default-source/publications/generatingopportunityprosperityview.pdf?sfvrsn=2>.
- ⁶⁸ Ohio Children's Hospital's Association (2015). *Leading the nation in cost-effective, high-quality care, research and innovation*. Retrieved from http://www.ohiochildrenshospitals.org/docs/2015OCHA_Snapshot.pdf. The six children's hospitals are Rainbow Babies & Children's Hospital/University Hospitals, Akron Children's Hospital, Nationwide Children's Hospital, ProMedica Toledo Children's Hospital, Dayton Children's Hospital, and Cincinnati Children's Hospital.
- ⁶⁹ The Ohio Department of Health (2012). *Hills and valleys: The challenge of improving oral health in Appalachian Ohio*. Retrieved from <http://www.odh.ohio.gov/~media/ODH/ASSETS/Files/ohs/oral%20health/Appalachian%20Report%20FINAL.ashx>.
- ⁷⁰ HPSAs are designated by the Department of Health and Human Services, Health Resources and Services Administration. Geographic area designations may be done for whole counties (usually rural), neighborhoods (usually urban) or groupings of townships or census tracts that are demographically and socio-economically similar. Population groups eligible for designation include low income, Medicaid eligible, homeless and migrant farmworkers within a defined geographic area. Primary Care HPSAs are based on a physician to population ratio of 1:3,500. <http://www.hrsa.gov/shortage/>.
- ⁷¹ U.S. Department of Health and Human Services (2015). *Area health resource files: Health workforce dashboard*. Retrieved September 15, 2015 from <http://ahrh.hrsa.gov/arfdashboard/ArfGeo.aspx>. Mental Health HPSAs are based on a psychiatrist to population ratio of 1:30,000. <http://www.hrsa.gov/shortage/>.
- ⁷² U.S. Department of Health and Human Services (2015). *Area health resource files: Health workforce dashboard*. Retrieved September 15, 2015 from <http://ahrh.hrsa.gov/arfdashboard/ArfGeo.aspx>. The data includes only physicians who are members of the American Medical Association (AMA). Not all physicians are AMA members.
- ⁷³ Ohio Department of Health (2012). *Hills and valleys: The challenge of improving oral health in Appalachian Ohio*. Retrieved from <http://www.odh.ohio.gov/~media/ODH/ASSETS/Files/ohs/oral%20health/Appal%20data%20brief%20with%20revisions%20per%20Dr%20Wymyslo.pdf>.
- ⁷⁴ Ibid.
- ⁷⁵ U.S. Department of Health and Human Services (2015). *Area health resource files: Health workforce dashboard*. Retrieved September 15, 2015 from <http://ahrh.hrsa.gov/arfdashboard/ArfGeo.aspx> <http://www.hrsa.gov/shortage/>. Dental HPSAs are based on a dentist to population ratio of 1:5,000.
- ⁷⁶ Ohio Safety Net Dental Clinics (2015). *Dental health professional shortage areas (HPSAs) Ohio map*. Retrieved September 10, 2015 from <http://ohiodentalclinics.com/PDFs/HPSAmap.pdf>.
- ⁷⁷ The Ohio Department of Health (2012). *Hills and valleys: The challenge of improving oral health in Appalachian Ohio*. Retrieved from <http://www.odh.ohio.gov/~media/ODH/ASSETS/Files/ohs/oral%20health/Appalachian%20Report%20FINAL.ashx>.
- ⁷⁸ Ibid.
- ⁷⁹ Ohio Department of Medicaid (n.d.). *Programs for children, families and pregnant women*. Retrieved from <http://medicaid.ohio.gov/FOROHIOANS/Programs/ChildrenFamiliesandWomen.aspx>.
- ⁸⁰ The 2001 Ohio's Appalachian Children report cited Medicaid enrollment at 28%, while new calculations from the KIDS COUNT Data Center estimate 37%. These differences are likely attributed to changes over time in the parameters used when requesting data from Ohio Medicaid.
- ⁸¹ United States Department of Education (2016). *Healthy students, promising futures: State and local action steps and practices to improve school-based health*. Retrieved from <http://www2.ed.gov/admins/lead/safety/healthy-students/index.html>.

- ⁸² Ohio Department of Health (2016). *Frequency of identified sources of lead exposure in risk assessments*. Unpublished data, received Feb. 26, 2016 from Ohio Department of Health.
- ⁸³ Map the Meal Gap (2015). *Executive summary*. Retrieved from <http://www.feedingamerica.org/hunger-in-america/our-research/map-the-meal-gap/2013/map-the-meal-gap-2013-exec-sum.pdf>.
- ⁸⁴ Coleman-Jensen, A., Nord, M. & Singh, A. (2013). *Household food security in the United States in 2012, ERR-155*. U.S. Department of Agriculture, Economic Research Service. Retrieved from <http://www.ers.usda.gov/media/1183208/err-155.pdf>.
- ⁸⁵ Cook, J. & Jeng, K. (2009). *Child food insecurity: The economic impact on our nation*. Chicago, IL: Feeding America. Retrieved from <https://www.nokidhungry.org/sites/default/files/child-economy-study.pdf>.
- ⁸⁶ Ohio Department of Job and Family Services (2015). *Food assistance fact sheet*. Retrieved from <http://jfs.ohio.gov/factsheets/foodassistance.pdf>.
- ⁸⁷ Ibid.
- ⁸⁸ Children's Defense Fund-Ohio (2014). *Ohio's KIDS COUNT 2014 data book*. Retrieved from <http://www.cdfohio.org/research-library/kids-count/2014.pdf>.
- ⁸⁹ Ohio Department of Education (n.d.). *Summer food service program*. Retrieved from <http://education.ohio.gov/Topics/Other-Resources/Food-and-Nutrition/Summer-Food-Service-Program>.
- ⁹⁰ Vinton County had no sites listed on the Ohio Department of Education's summer food service site listing for 2015, but local providers indicate that one did operate.
- ⁹¹ Ohio Department of Job and Family Services (2014). *Executive Order 2014-01K: Directing expenditure of fiscal year 2014 TANF funds*. Retrieved from <http://www.governor.ohio.gov/Portals/0/Executive%20Order%202014-01K.pdf>.
- ⁹² Centers for Disease Control and Prevention (2015). *Child obesity facts*. Retrieved from <http://www.cdc.gov/healthyschools/obesity/facts.htm>.
- ⁹³ Ohio Department of Health (2012). *Overweight and obesity: Third grade children*. Retrieved from https://www.odh.ohio.gov/~media/ODH/ASSETS/Files/data%20statistics/maternal%20and%20child%20health/sa_obesity.pdf.
- ⁹⁴ Berlin, K. S., Hamel-Lambert J., & DeLamatre, C. (2013). Obesity and overweight status health disparities among low-income rural Appalachian preschool children. *Children's Health Care*, 42(1), 15-26.
- ⁹⁵ Children's Defense Fund-Ohio (2014). *Health disparities are leaving Ohio's rural children behind*. Retrieved from <http://www.cdfohio.org/research-library/2014/health-disparities-are.pdf>. A food desert is traditionally defined as an area further than one mile in urban areas and 10 miles in rural areas from a grocery store.
- ⁹⁶ Ohio Department of Health (2013). *Obesity in rural Ohio*. Retrieved from <http://www.odh.ohio.gov/~media/ODH/ASSETS/Files/chss/news%20and%20upcoming%20events/2013%20Rural%20Health%20Conference%20Presentations/1%20LHDs%20-%20Obesity%20in%20Rural%20Ohio%20AW%20Final.ashx>.
- ⁹⁷ Children's Defense Fund-Ohio (2016). *The early childhood hunger imperative*. Retrieved from <http://www.cdfohio.org/research-library/2016/the-early-childhood-hunger.pdf>.
- ⁹⁸ Ohio Association of Foodbanks (2013). *Feeding Ohio children while school is out*. Retrieved from http://ohiofoodbanks.org/docs/publications/childhood_hunger.pdf.
- ⁹⁹ Offenberger, J. (2013). *Food is Elementary program information*. Retrieved from Marietta College <http://news2.marietta.edu/node/9454>.
- ¹⁰⁰ Osteopathic Heritage Foundation (2013). *Reducing the prevalence of obesity: A step forward 2003-2010*. Retrieved from <http://osteopathicheritage.org/Uploads/Images/Books/obesityReport/>.
- ¹⁰¹ Foundation for Appalachian Ohio (2016). *Annual Report 2015*. Retrieved February 5, 2016 from http://www.appalachianohio.org/wp-content/uploads/2016/02/2015FAOAnnualReport_FINAL.pdf.

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Contributors

Thank you to the following individuals for their expert assistance in preparing the report:

Pam Born

Practice Manager, Obstetrics and Gynecology
Ohio Health O'Bleness Hospital
Athens Medical Associates

Jessie Cannon

Director, Community Wellness Initiatives
Nationwide Children's Hospital

Sharon Daniels

Head Start/Early Head Start Director
Lawrence County Early Childhood Academy

Bethany Fisher

Graduate Student
Ohio University College of Health Sciences &
Professions

George Goddard

ECE Division Assistant Director
Corporation for Ohio Appalachian Development

Carol Greentree

Director, Communications
Battelle for Kids

Valerie Heiby

Director of Development
Finance Fund

Kim Horn

Resource and Referral Counselor
Corporation for Ohio Appalachian Development

Joanne Geiler Marte

Director, Learning and Leading
Battelle for Kids

Jessica Martin

Graduate Student
Ohio University College of Health Sciences
& Professions

Rick Massati

Health Services Policy Specialist
Office of Quality, Planning & Research
Ohio Department of Mental Health & Addiction
Services

John Molinaro

President and CEO
Appalachian Partnership for Economic Growth

Gary Obloy

Executive Director
Community Action Commission of Belmont
County

Joy Padgett

Outreach & Customer Support
Ohio Environmental Protection Agency

Asti Payne

Development & Community Relations Coordinator
Hocking.Athens.Perry Community Action

Heather Reed

Program Director, Healthcare Access Initiative
Ohio Colleges of Medicine Government
Resource Center

Rebecca Robison-Miller

Director, College and Community Partnerships
College of Health Sciences and Professions
Ohio University

Sherry Shamblin

Chief of Behavioral Health Care Operations
Hopewell Health Centers

Lindsay Shanahan

Executive Director
Connect Ohio

Leanne Siegenthaler

Lead Designer
Battelle for Kids

Mary Wachtel

Legislative Director
Public Children Services Association of Ohio

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About Our Partners



Battelle for Kids

Battelle for Kids is an organization dedicated to moving education forward for students by supporting the educators who work with them every day. We believe in the power of educators. We know that by helping educators to become their best, we have the opportunity to change lives. Whether you're talking to a former teacher creating one of our professional learning resources, a software developer on our technology team, a business professional developing processes that make implementation more efficient, or a communications expert working with a school district to launch a new initiative, everything we do is guided by this core belief.



Corporation for Ohio Appalachian Development (COAD)

The Corporation for Ohio Appalachian Development (COAD) is a private, non-profit community-based organization serving rural, mostly Appalachian, counties in eastern and southern Ohio. It is comprised of 17 Community Action Agencies that serve a 30 county area. COAD has three major program divisions: Community Development, Early Care and Education and Senior Programs. COAD also offers scholarship assistance and leadership development opportunities.

COAD's mission is to provide a unified voice and representation for its member agencies and the constituents that they serve—primarily low-income families, children, and the elderly. Since 1971, COAD has worked to improve the quality of life for all residents of Appalachian Ohio.



Foundation for Appalachian Ohio

The Foundation for Appalachian Ohio is a regional community foundation serving Appalachian Ohio's 32 counties with the mission to create opportunities for Appalachian Ohio's citizens and communities by inspiring and supporting philanthropy.

Since 1998, the Foundation has been working with donors who are passionate about Appalachian Ohio, its communities, and its future to create a region abundant in possibilities. We're here to help donors give back to what is closest to their hearts and leave a legacy of giving that will make a difference for generations.



Children's Defense Fund

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