

The Economic Impact OF THE Early Care and Education Industry *in Ohio*

PREPARED BY THE

NATIONAL ECONOMIC DEVELOPMENT AND LAW CENTER



BACKGROUND

THE ECONOMIC IMPACT OF THE EARLY CARE AND EDUCATION INDUSTRY IN OHIO

The National Economic Development and Law Center (NEDLC), with a grant from the W.K. Kellogg Foundation, is working with states across the nation to produce reports and recommendations on the economic impact of the early care and education industry. The economic impact reports articulate early care and education in economic development terms and quantify the ways in which the industry is critical to the state's economy. In addition, the reports help to build local partnerships aimed at increasing the industry's capacity to respond to the shifting early care and education needs of America's families. For the Ohio report, NEDLC partnered with Build Ohio. Build Ohio is an alliance of groups and individuals working collaboratively on behalf of young children and their families to ensure that policies, programs, services are responsive to the needs of Ohio families, careful in the use of public and private resources, and effective in preparing our youngest citizens for a successful future. An Advisory Board of Ohio statewide leaders in the fields of business, government, early care and education, and economic development helped shape this report.

NATIONAL ECONOMIC DEVELOPMENT AND LAW CENTER

NEDLC is a research and consulting non-profit organization that uses community and economic development strategies to improve the economic and social status of low-income persons. NEDLC's mission is to develop and maintain the economic security of low-income persons and communities. With a budget of over five million dollars and a diverse funding base, including support from foundations and fee-for-service revenue, NEDLC works in partnership with hundreds of organizations around the country. Our partners include non-profit organizations, government agencies, business, labor organizations and the philanthropic community. Working together, we develop local capacity and improve and transform systems important to the lives of low-income people across the nation.

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Section One

Introduction

The early care and education industry in Ohio encompasses the range of programs outside of traditional K – 12 education that are part of the formal economy and which are designed to nurture, support, enrich, and educate children from birth through age 12. The industry has two main functions, both of which have changed significantly over time, and both link the industry to the economy.

The early care and education industry serves two main purposes:

- Provides stimulating, age appropriate early learning opportunities and supports healthy development so that children are ready to succeed in school
- Enables parents to maintain employment and/or obtain education and training

The early care and education industry provides stimulating age-appropriate learning opportunities and supports the healthy development of children so that they are ready to succeed in school and life. The research and public will surrounding the education and developmental needs of young children have increased dramatically over the last two decades. Many more parents now require early education and out-of-school-time programs as part of their children's education. For children from birth through age five, quality programs help them develop core skills and competencies that prepare them for future success in traditional K to 12 education. For children ages 6 through 12, before- and after-school programs ensure children's safety while providing enriching educational activities that support the traditional school curriculum.

The other major function of the early care and education industry is that it enables parents to maintain employment and/or obtain education and training leading to employment. Historically, parents have been solely responsible for the care and education of their young children during the workday. Single parent working families and families with two working parents were rare. In those families that did have two working parents or a single working parent, care and education was generally entrusted to relatives, neighbors, and friends. Today, the majority of children live in families in which all parents work. As a result of the demand for early care and education services, the role of the industry in the economy has also transformed. The industry has become a significant component of the economic infrastructure of the state, and it is a driver of the economy, providing financial benefits in three main ways.

The early care and education industry is an economic driver. It:

- Provides significant jobs and generates considerable revenue in its own right
- Supports a strong future economy by preparing children to enter K-12 education ready to learn the skills necessary to succeed in school and become productive workers
- Enables employers to attract and retain employees and increase their productivity, and enables parents to maintain employment and/or obtain education and training



First, early care and education is a major industry in Ohio in its own right. Research presented in this report demonstrates that early care and education is a significant income-generating, job-creating industry, contributing more annual gross receipts and employing more people than many other important and recognized industries in the state.¹

Second, quality early care and education programs ensure a strong future economy. Recent research on early brain development demonstrates that, far from being a luxury, early care and education for children from birth through age five is a vital service, improving children's health, school readiness, and eventual contribution to society.² The quality of early education opportunities is linked to positive outcomes in school for children in all income brackets, though studies have shown particularly striking findings in children from low-income families. Three separate longitudinal studies of targeted, intensive intervention programs for low-income children have indicated significant long-term outcomes in areas such as grade repetition and special education needs, higher educational attainment, and home ownership in adulthood. Many of the outcomes reduce future public spending, in such areas as K-12 education, criminal justice and welfare assistance, which result in a 12 percent rate of public return on investment.³

Third, the early care and education industry plays a significant role in enabling employers to attract and retain employees and to increase productivity by reducing employee turnover and absenteeism. Like transportation and housing, without accessible, affordable early care and education, employees may experience barriers to working, and their employers and the economy as a whole suffer.

SCOPE OF THE REPORT

This report analyzes the significance of the early care and education industry to the economy. Specifically, it:

- Describes demographic and economic trends and their implications for the early care and education industry
- Quantifies the direct economic impact that early care and education currently has on Ohio's economy through gross receipts and direct employment
- Discusses economic development and business benefits of early care and education, including bottom-line returns for individual businesses and returns on targeted public investment
- Provides recommendations to build the capacity and sustainability of quality, affordable early care and education

OHIO'S FORMAL EARLY CARE AND EDUCATION INDUSTRY

Early care and education encompasses a range of programs designed to nurture, support, enrich, educate and protect the health and safety of young children. Programs may also enable parents to work or attend school. Programs included as "formal" in this report are of three basic types: *licensed* centers and programs, *certified* family child care homes and voluntary *registered-only* family child care homes. Licensed facilities and certified family child care homes meet minimum standards established by the state legislature.

¹ See Section 3 for further discussion of results and methodology.

² J.P. Shonkoff and D.A. Phillips, Editors. *From Neurons to Neighborhoods: The Science of Early Childhood Development*. Washington, D.C.: National Academies Press, 2000.

³ Art Rolnick and Rob Grunewald. *Early Childhood Development: Economic Development with a High Public Return*. Fedgazette. Minneapolis, MN: Federal Reserve Bank of Minneapolis, January, 2003.

Licensed and Certified Early Care and Education Programs

The Ohio Department of Job and Family Services (ODJFS) licenses child care centers. This includes full-time, part-time and some school-age programs. Part-time programs are often referred to as private preschool programs. Head Start programs are also licensed by ODJFS.⁴

County departments of job and family services certify family child care homes. These independent small businesses provide care for no more than six children at one time. They are run by sole proprietors who are partially reimbursed for child care provided in their own homes for low-income working families.⁵

The Ohio Department of Education (ODE) licenses preschool and some school-age programs operated by public and non-public chartered schools.⁶ Complete data is not available on enrollment, cost and staffing for all of these programs, and they may not be included in this report unless they receive funding through ODE.

Registered-only Family Child Care Homes

Regional child care resource and referral agencies operate voluntary registration programs for family child care homes. These independent small businesses provide care for no more than six children at one time but do not receive any public funding. Certified family child care homes may also choose to register with the Child Care Resource & Referral Association (CCR&R).

OHIO'S INFORMAL CARE SYSTEM

The majority of informal care providers in Ohio are not required to meet any health and safety standards. Care provided by friends, neighbors and relatives, generally referred to as kith and kin care, is not regulated in Ohio unless state and federal funds are used to help pay for the care. Babysitters and nannies are not part of Ohio's formal system of care and education. In addition, family child care home businesses that do not receive public funds may care for up to six children at one time without meeting any health and safety standards. They are not required to undergo criminal background checks, are not inspected, and are not required to register with the CCR&R.

Other early care and education programs meet funding or program standards but do not have sufficient funding, enrollment, and/or staffing data available and therefore are not included in the economic analyses of this report. These programs include: early care and education programs associated with Help Me Grow, Even Start, and summer camps.

Although informal care and education arrangements are widely used, and also add much to the economy, it is difficult to ascertain their impact because there is not accurate data for the sector. Therefore this report focuses primarily on formal early care and education. By excluding informal care, this report's findings are conservative estimates of the total impact that early care and education has on the economy.

Analyses in this report only include the formal early care and education industry and exclude the informal sector making the economic estimates conservative in terms of the full impact of the industry.

⁴ See Ohio Revised Code Chapter 5104 for definitions of programs that are subject to licensing.

⁵ See Ohio Revised Code Chapter 5104 for definitions of family child care homes. This includes individuals who are care for children from more than one family as well as care provided by family, friend, or neighbor when public funding is provide.

⁶ See Ohio Revised Code Chapter 3301 for definitions of programs that are subject to licensing.



PUBLIC FUNDING FOR EARLY CARE AND EDUCATION

State and federal funding is available for a variety of programs to meet the needs of children and their families based on specific eligibility criteria. The majority of funding for direct early care and education services comes through federal channels—roughly 80 percent. In most cases, in addition to licensing requirements, publicly funded programs must meet additional or higher standards. Resources provided to these programs for direct services are included in the gross receipts of the early care and education industry and are part of the formal industry for the purposes of this report.

Child Care Assistance is state and federal funding provided to help low-income working families purchase child care. Families can choose from licensed centers or programs or certified family child care homes. They pay a portion of the fee based on a sliding fee scale.

Head Start/Early Head Start Programs are child development programs for low-income children supported by federal and/or state funds. These programs are now licensed by ODJFS.

Early Childhood Special Education Programs are licensed by ODE and funded by state and federal resources through ODE. These programs enroll preschool children with disabilities and some typically developing children.

Public Preschool Programs are licensed and partially funded through ODE. These programs enroll low-income preschool children and other children on a sliding fee scale.

21st Century Community Learning Centers are after-school programs funded by federal grants through ODE.⁷

State and/or federal funding also supports a variety of enhancements, parent or family supports and initiatives that are considered part of the early care and education system. However, the following programs are not included in the formal industry for the purposes of this report.

Even Start is a family literacy program incorporating a preschool program component supported by federal funds through ODE.

Help Me Grow are family-centered services for expectant parents and children birth to age three using state and federal funds through Ohio Departments of Health, Job and Family Services and Mental Retardation/Developmental Disabilities. It provides the following services: newborn home visiting, screenings and referral to community resources and early intervention services for children with developmental delays and/or disabilities. Services are delivered in the child's home and in a variety of settings specific to child and family needs.

OUTLINE OF THE REPORT

Following this introduction, Section Two provides a demographic and economic profile of the state and the implications for the early care and education industry. Section Three analyzes the overall economic effects of the early care and education industry as measured by industry earnings, employment and current levels of government investment. Section Four explores the links between early care and education, business, and economic development. Finally, Section Five considers future implications for the state's economy, provides conclusions and offers recommendations.

⁷ Only children ages 0 through 12 were included in enrollment, funding, and staffing estimates for these programs.

Section Two

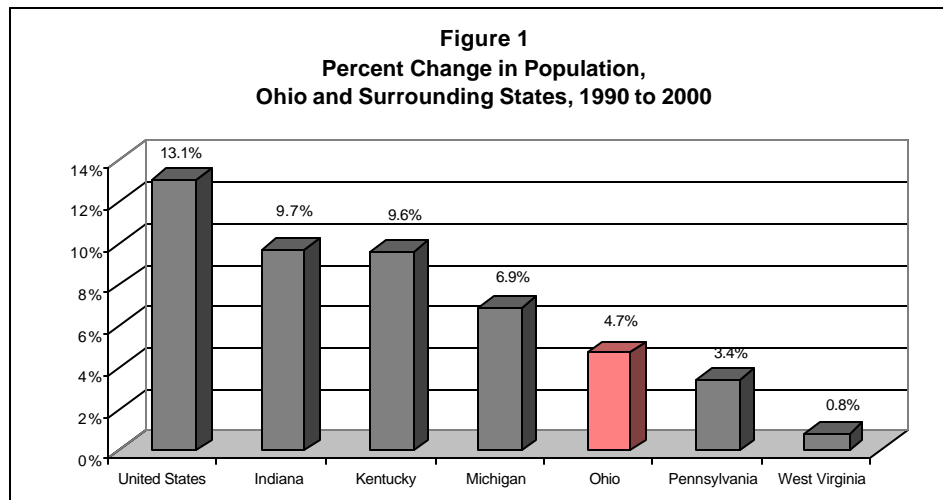
Demographic & Economic Profile of Ohio

Ohio's demographic and economic trends have significant implications for early care and education programs for young and school-age children in the state. This section gives a brief overview of those trends, including population shifts, labor force characteristics, employment demands, and family economics in the state. The section also discusses the economic implications for the early care and education industry.

POPULATION

Population Growth

With an estimated 11.4 million residents in July 2003, Ohio is the seventh most populous state in the nation.⁸ However, Ohio's population is growing modestly. Ohio ranked 46th in percentage population growth between 1990 and 2000, increasing only 4.7 percent compared to a national growth of 13.1 percent. Ohio's growth rate from 1990 to 2000 was significantly lower than that of three border-states: Indiana, Kentucky, and Michigan, although it was higher than that of Pennsylvania and West Virginia (see Figure 1).⁹ The state's moderate growth has continued since 2000, growing 0.7 percent from 2000 to 2003.¹⁰



Implications for the Early Care and Education Industry

Ohio's population is not growing as rapidly as the rest of the nation. Early care and education is one of several economic infrastructures that are key to attracting and retaining businesses and working families.

⁸ U.S. Census Bureau. *Annual Population Estimates by State*, 2003.

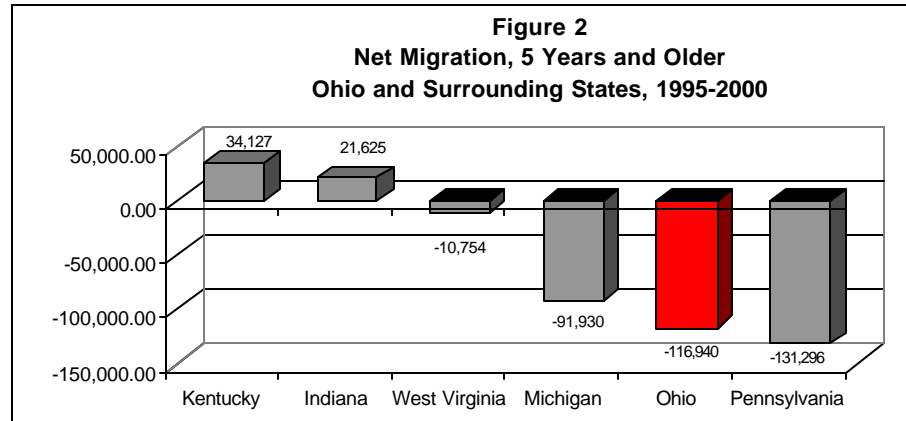
⁹ *Ibid.*

¹⁰ U.S. Census Bureau. *Cumulative Population Estimates, April 2000 to July 2003*.



Brain Drain

A significant contributing factor to Ohio's slow growth was migration out of the state. From 1995 to 2000, about 589,000 people moved to Ohio from other states, compared with 706,000 moving out, for a net migration loss of 116,940 (see Figure 2).¹¹ That loss included 18,409 young adults between the ages of 25 and 39.¹² This trend continued between 2000 and 2003.¹³



Net out-migration of any group, but especially of young adults, is of concern for Ohio since typically the better-educated, highly skilled people tend to move from state to state seeking better career opportunities.¹⁴ Of the 20 largest U.S. metropolitan areas in 2000, Cleveland was one of only three that experienced a net out-migration rate of young adults.¹⁵ This "brain drain" may indicate a broader economic issue: Ohio lacks a large, fully developed high-tech sector, which can provide jobs for people with technology or other advanced degrees.¹⁶

Ohio's total population is expected to increase to 11.8 million by 2015.¹⁷ Between 1995 and 2025, projections indicate that Ohio will have 4.4 million births.¹⁸ However, based on percent change in population projections for 1995 to 2025, Ohio will rank only 48th in population growth during that period.¹⁹

Early Care and Education Implications

Improving economic infrastructures like transportation, housing, and early care and education attracts and retains businesses and young working families, reducing the negative effects that "brain drain" has on the state's economy.

¹¹ U.S. Census Bureau. *Domestic Migration Across Regions, Divisions, and States, 1995-2000*.

¹² U.S. Census Bureau. "Migration of the Young, Single, and College Educated: 1995-2000," November 2003, Census 2000 Special Reports.

¹³ U.S. Census Bureau. *Cumulative Estimates of Population Change for the United States; April 2000 to July 2003*.

¹⁴ Rosemary R. Gliem. "Ohio's Geographic Mobility," Ohio Trends Newsletter, Ohio State University Extension Data Center, Vol. 1, Number 3, July 2000.

¹⁵ U.S. Census Bureau. *Census 2000 Special Reports: Migration of the Young, Single, and College Educated: 1995-2000*. The other two cities were Philadelphia and Detroit.

¹⁶ P.D. Gottlieb, Center for Regional Economic Issues. *The Problem of Brain Drain in Ohio and Northeast Ohio, 2001*.

¹⁷ Ohio Department of Development, Office of Strategic Research. *Population Projections by Age and Sex: 2005-2030*.

¹⁸ Ibid.

¹⁹ P. Campbell. "Current Population Reports," P25-1131; Issued May 1997.

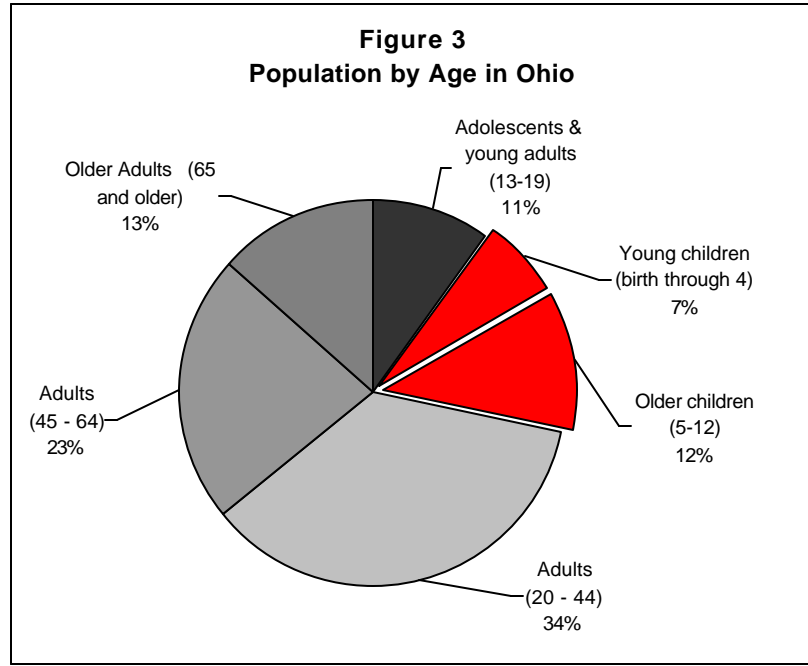
Ohio's Children

Of the estimated 11.4 million people in Ohio in 2003, more than 18 percent of the total population (over 2 million residents) are children ages birth through age 12 (see Figure 3.)²⁰ Children ages birth through age 12 outnumber seniors 65 and older in the state.²¹

Broken down by early care and education age groups, the population currently includes approximately 149,000 infants (birth through 12 months), 300,000 toddlers (one year through two years) and 306,000 preschoolers (three years through four years).²² In addition, there are 1.32 million school-age children ages 5 through 12.²³

Children as a percentage of the population are concentrated in those counties that have experienced high overall growth.²⁴ In general, urban/suburban settings in Ohio saw the biggest increase in population in

those under 18 with a seven percent increase in population.²⁵ During the same time period, however, rural settings saw an 11 percent decrease in those residents under 18.²⁶ Aside from job losses due to a declining manufacturing sector, an inaccessible education infrastructure, including early care and education, may be one of several factors drawing working families out of rural areas. Ohio's rural population faces a number of unique barriers to early care and education including a shortage of suitable facilities. Low population density and transportation barriers also often make these services financially unfeasible.



Early Care & Education Implications

Geographic differences in the population growth of children highlight the need for targeted investments in the early care and education industry, which will satisfy the needs of working families in both urban and rural areas. If current population trends continue, early care and education programs in urban and suburban areas should see an increase in demand. Businesses in rural areas need to create nontraditional and cost efficient solutions to early care and education barriers, in order to meet the needs of rural working families if they are to prosper.

²⁰ U.S. Census Bureau. *Annual Population Estimates by State*, 2003.

²¹ *Ibid.*

²² *Ibid.*

²³ *Ibid.*

²⁴ Center for Family and Demographic Research, Bowling Green State University. *Ohio Population News: Child Well-Being*, May 2001.

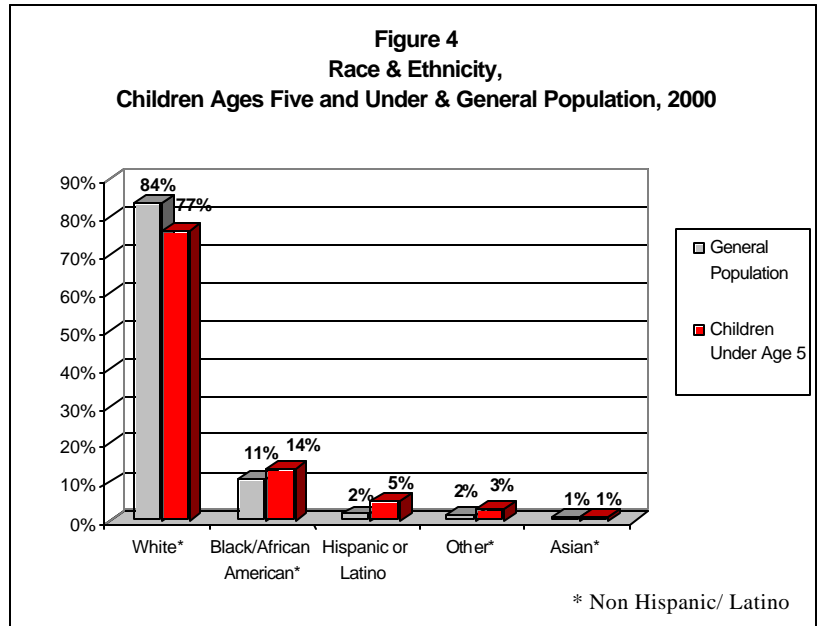
²⁵ *Ibid.*

²⁶ *Ibid.*

Diversity

Ohio is becoming increasingly diverse but is still predominantly white/Caucasian. Ohio children under age five are significantly more diverse in terms of race and ethnicity than the state's general population (see Figure 4).²⁷

Ohio's black or African-American population makes up 11.5 percent of the state's total population, comparable to the national average of 12.3 percent.²⁸ Projections estimate that 14.1 percent of Ohio's population will be black or African-American by 2025.²⁹



Ohio's Hispanic/Latino population makes up only 2 percent of its population, compared to the national average of 12.5 percent.³⁰ However, Ohio's Hispanic/Latino population grew by 55 percent from 1990 to 2000,³¹ and is projected to account for 3 percent of Ohio's population in 2025.³²

Early Care & Education Implications

The increasing diversity in Ohio's children requires a varied array of culturally appropriate early care and education programs. In some areas, dual- or multi lingual staff, in particular Spanish-speakers, are necessary to communicate with children and their parents, and culturally sensitive curricula and care are necessary. Bi-lingual informational materials relating to early care and education should be available to families who need them.

LABOR FORCE AND JOBS

Working Parents

Of the nearly 5.8 million Ohio workers,³³ over one in four is a parent with a child under 18 living in a household where all parents work. Almost one in ten labor force participants has a child

²⁷ U.S. Census Bureau. *Ohio's Population Projections: 1995 to 2025*. The following racial groups are all non-Hispanic/Latino: White/Caucasian, Black/African American, Asian, and "other."

²⁸ Ibid.

²⁹ Ibid.

³⁰ Ibid.

³¹ Center for Family and Demographic Research, Bowling Green State University. *Ohio Population News: Child Well-Being*: May 2001.

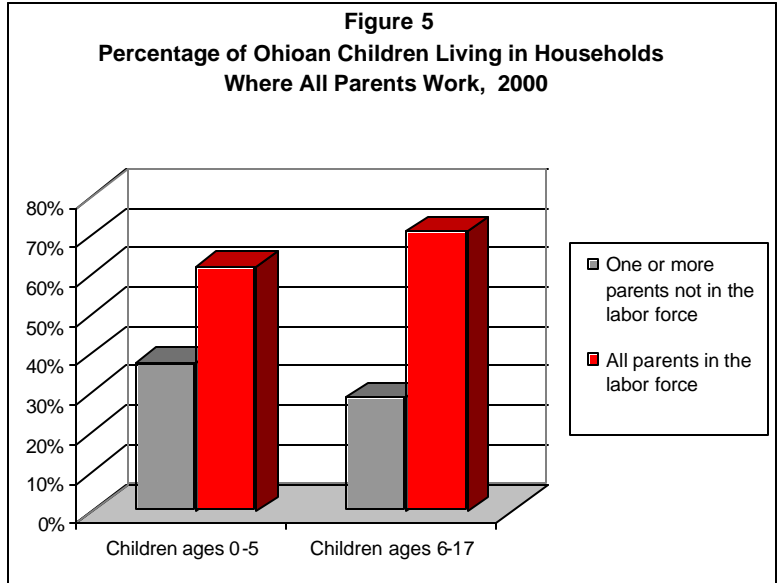
³² U.S. Census Bureau. *Ohio's Population Projections: 1995 to 2025*.

³³ Ohio Job and Family Services, Office of Workforce Development. *Civilian Labor Force Estimates*, December 2003. The labor force includes those who are employed or actively looking for work.

under age six.³⁴ In Ohio, female labor force participation, a key indicator of need for early care and education services, increased from 55 percent in 1990 to 59 percent in 2000.³⁵

The majority of children live in households in which all parents work (see Figure 5).³⁶ Almost 71 percent of children between the ages of six and eighteen (1.3 million children) have all parents in the labor force, and 62 percent or 540,000 children under six have all parents in the labor force (see figure 5).³⁷ This represents a dramatic increase from 1990, when just 55 percent of Ohio children under 6 had all parents in the workforce.³⁸

Not all families use formal early care and education. Some may arrange work schedules so that one parent is always home with children and others may choose to place children with family, friends or neighbors while they are at work. However, since there is only space for approximately 270,000 children at any one time in ODJFS licensed child care centers and 540,000 young children live in homes where all parents work, many families have no alternative but to use un-inspected options.³⁹



Higher Education & The Workforce

On average, Ohio's labor force generally has less educational attainment than most states in the country. In 2001, approximately 46 percent of the adult population had received an education beyond high school compared to the United States average of 52 percent.⁴⁰ Ohio ranks 39th in the nation in the number of adults over 25 with a bachelor's degree or higher.⁴¹

As education levels increase, labor force participation and levels of employment increase as well. For example, only 44 percent of those with less than a high school education participated in the Ohio labor force in 2002, as compared to over 80 percent for those with a bachelor's degree or higher.⁴²

Those with less education traditionally fare worse during times of general unemployment, such as the recent recession. Between 2000 and 2002, Ohio workers with less education were more

³⁴ U.S. Census Bureau. *Census 2000*.

³⁵ U.S. Census Bureau. *Census 1990 & 2000*.

³⁶ U.S. Census Bureau. *Census 2000*.

³⁷ *Ibid.*

³⁸ U.S. Census Bureau. *Census 1990 & 2000*.

³⁹ Capacity estimates for licensed child care centers are based on 2004 Ohio Child Care Resource and Referral Association (OCCRRA) Statistics.

⁴⁰ E. J. Malecki and Hazel A. Marrow -Jones, OSU Center for Urban and Regional Analysis. "Ohio: Looking at the Future" (Based on a presentation titled "Ohio: A Profile," which was presented at a meeting of Governor Taft's Cabinet and staff, at Shawnee State Park, September 6, 2001. Sandra Livingston. "Brain Drain: Grads with Advanced Degrees are Flowing Out of Ohio," February 23, 2003, Cleveland Plain Dealer.

⁴¹ *Ibid.*

⁴² A. Hanauer and L.Perl. *The State of Working Ohio 2003*. Policy Matters Ohio. September, 2003.



likely to be unemployed to begin with and had a higher percentage growth rate in unemployment than those who were better educated.⁴³

While the Ohio Board of Regents does not track the number of students in higher educational institutions with children, the board does track student enrollment by age. In 1997 there were over 363,000 students over the age of 25 enrolled in higher education programs, indicating that there may be a significant number of students who may need early care and education for their children while they attend school.⁴⁴

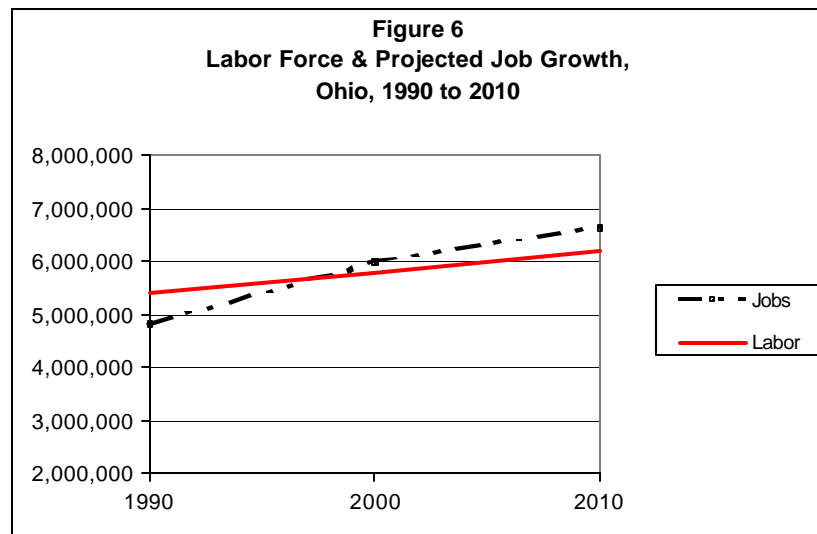
Early Care & Education Implications

Targeted investments in the state's educational system, including early care and education, is needed to increase the future supply of skilled and educated workers in the state.

Labor Force

By 2010 Ohio's labor force is projected to grow to 6.2 million. In 2000, females accounted for 47.6 percent of the labor force and by 2010 they are expected to account for 48.8 percent.⁴⁵ In addition to being more female, Ohio's labor force will become increasingly more diverse, mirroring Ohio's demographic rise in diversity.⁴⁶

Despite high unemployment levels currently, the supply of labor is expected to grow at a slower rate than the demand for workers over the long-term (see Figure 6).⁴⁷ Projections indicate that by 2010, there will be 6.7 million jobs in Ohio and the labor force is only expected to include 6.2 million workers (see Figure 6).⁴⁸



In order to maintain economic output in the future, Ohio's labor force participation and/or productivity rates will have to increase. The state's private sector and economic development planners need to explore new strategies to expand and support Ohio's workforce.

⁴³ A. Hanauer and L.Perl. *The State of Working Ohio 2003*. Policy Matters Ohio. September, 2003.

⁴⁴ Ohio Board of Regents. "Enrollment in Ohio's Institutions of Higher Education: Student Count By Age, Sex, and Rank," October 1997.

⁴⁵ Bureau of Labor Market Information, Office of Research, Assessment, and Accountability. *The Ohio Economy and Labor Market*, October 2003.

⁴⁶ Ibid.

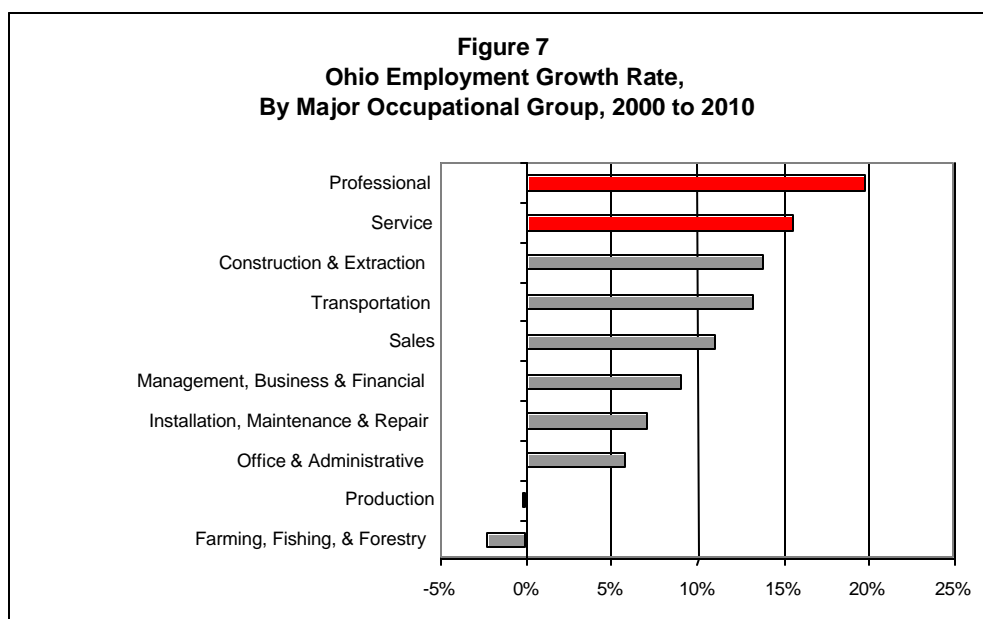
⁴⁷ Ibid.

⁴⁸ Ibid.

Employment Trends

In addition to projecting overall growth in employment in Ohio, employment trends indicate that shifts will occur in the kind of work that the Ohio economy will demand. As of September of 2003, the trade/transportation/utilities sector employed the largest percentage of the labor force, followed closely by manufacturing. In the near future, however, the largest growth in employment will be in professional and service occupations.⁴⁹

Professional occupations, including computer-related occupations, are expected to experience the fastest growth between 2000 and 2010, adding 201,250 jobs. On the other end of the earnings and educational spectrum, service-related industries are expected to add 162,420 jobs from 2000 to 2010 (see Figure 7 for a complete breakdown).⁵⁰



More job opportunities will exist for individuals with education or training beyond high school. The percentage of jobs that require an associate degree will grow the most quickly, at 23 percent. Overall, job categories that require post-secondary training or education, including professional services, will grow faster than the predicted 11 percent growth rate for all occupations.⁵¹

Technical, business, professional, and some health services areas require highly skilled employees and have relatively high wages. Educational opportunities to develop a skilled future workforce and re-train working adults for new employment areas must be in place.

The growth areas in social and some health services and in the retail and wholesale trades also require work outside of traditional workday hours. These workers require supports that sustain economic self-sufficiency and an infrastructure that enables them to work during non-traditional hours. Five out of the ten occupations with the most projected openings from 2000 to 2010 paid an average wage of less than \$10 per hour in 2001.⁵²

⁴⁹ Bureau of Labor Market Information, Office of Research, Assessment, and Accountability. *The Ohio Economy and Labor Market*, October 2003.

⁵⁰ Ibid.

⁵¹ Bureau of Labor Market Information, Office of Research, Assessment, and Accountability. *Ohio Job Outlook 2000 to 2010*.

⁵² Ibid.



In contrast, manufacturing jobs, which are declining rapidly, typically pay a higher wage. In 2001, a non-supervisory worker in the manufacturing sector made on average \$700 per week whereas a non-supervisory worker in the retail trade made under \$300 per week.⁵³ By 2010, manufacturing will continue to lose jobs at a projected negative rate of 3.3 percent.⁵⁴

Ohio is in the process of aggressively diversifying its economy and pursuing jobs in specific industries, such as technology and research and development. This effort has been supported through initiatives such as the *Third Frontier Project*.⁵⁵ Currently, Ohio has a 14 percent higher concentration of technology operations than the United States, making it a potentially attractive place for other technology companies to relocate. It ranks 11th nationally in terms of research and development contracts, and 9th nationally in number of patents granted. In addition, the state was ranked fourth overall in the nation for business climate in 2003, using criteria such as plant performance and real estate.⁵⁶ Overall, Ohio is working to be a "major center of emerging technologies."⁵⁷ To reach that goal it needs to ensure that there is a quality education system that includes early care and education for current and future workforce development and retention.

Early Care & Education Implications

- 1) Projected increases in highly skilled jobs increase the need for quality early care and education programs to prepare the future workforce and early care and education supports for parents seeking education and training.
- 2) Increased employment in lower-wage service and retail areas highlights the necessity for affordable early care and education programs available outside the traditional workday.

FAMILY ECONOMICS

Early Care and Education and the Family Budget

Early care and education programs are a significant expense for families in most income brackets in Ohio. The average annual cost for full-time licensed center-based care and education for an infant or toddler is over \$6,200, almost as much as the undergraduate tuition for an Ohio resident at The Ohio State University (\$6,651 for a full year).⁵⁸ Full-time center-based care for a preschooler in Ohio costs over \$5,000 per year.⁵⁹

Early care and education costs for an infant or toddler (\$6,200) are almost as much as the undergraduate tuition for an Ohio resident at The Ohio State University (\$6,651 for a full year).

These are significant expenses for young families at a time when they are likely to have fewer resources.⁶⁰ A family at the state's median family income (\$50,377) would spend 12 percent of

⁵³ A. Hanauer and L.Perl. *The State of Working Ohio 2003*. Policy Matters Ohio. September, 2003.

⁵⁴ Ohio Department of Job and Family Services. *Ohio Job Outlook to 2010*.

⁵⁵ Bureau of Labor Market Information, Office of Research, Assessment and Accountability. *High Technology and the Third Frontier: Information Resources for Defining Ohio's Future*, 2003.

⁵⁶ *2003 Business Climate Report*, Site Selection Magazine.

⁵⁷ Ohio Department of Development, Office of Strategic Research. *Ohio's Economy, 2003*.

⁵⁸ These average annual early care and education cost estimates are based on 2004 Ohio Child Care Resource and Referral Association (OCCRRA) Statistics The Ohio State University, Admissions Department. *Resident Tuition and Fees 2003-2004*. These costs do not include room and board costs. Other Ohio State tuition information can be found at: <http://www-afa.adm.ohio-state.edu/undergrad/admissions/frscholarships.asp>

⁵⁹ These average annual early care and education cost estimates are based on 2004 Ohio Child Care Resource and Referral Association (OCCRRA) Statistics.

⁶⁰ G. Becker and N. Tomes. "Human Capital and the Rise and Fall of Families." *Journal of Labor Economics*, Vol. 4(3):S1-S39, 1986.

annual income for full-time center-based infant care.⁶¹ This same family would spend 21 percent of income if both a preschooler and an infant were in care.⁶²

Ohio's child care assistance program helps some income eligible working families purchase education and care. Parents pay a portion of the costs based on a sliding fee scale. In September 2003, the families of 100,214 low-income children received help paying for early care and education.⁶³

In 2003, the state reduced eligibility for child care assistance, and higher co-payments were enacted. For a single parent working as retail salesperson earning \$9.54 per hour, full-time center-based early care and education for an infant would account for over 31 percent of his or her total annual income of \$19,843.⁶⁴ As a result of the changes made in SFY 2003, this family is not eligible for assistance with child care costs in 2004. It is estimated that only one in ten eligible Ohio children receive early care and education assistance funded through the Child Care and Development Block Grant (CCDBG), which is the principal source of federal funds for child care assistance.⁶⁵

For a single parent working as a retail salesperson, full-time center-based early care and education costs for an infant would account for over 31 percent of total annual income.

Family Economic Self-Sufficiency

The Economic Policy Institute's *Basic Family Budget Method* measures the amount of income needed for a family to afford basic needs for "a safe and decent standard of living" without relying on government assistance.⁶⁶ Almost 22 percent of residents in Ohio live in families with incomes that are less than a *basic family budget*, ranking Ohio as one of the least self-sufficient states in the Mid-West.⁶⁷ A single parent family with one child in the Cleveland area would have to earn almost \$24,000 per year to meet their basic family needs without government assistance. Likewise, a single parent family in rural Ohio with one child would have to earn almost \$20,000 per year in order to be self-sufficient (see Appendix A for a complete breakdown of basic family budgets by area in Ohio).⁶⁸

Only one-third of the occupations in Ohio with the greatest absolute projected growth from 2000 to 2010 paid an annual wage in 2001 that met the *basic family budget* for a single parent family with one child (\$23,848) in the Cleveland area.⁶⁹

However, one of Ohio's strongest attributes for attracting businesses and high-skilled workers to the state is its relatively low cost of living and high quality of life. But Ohio's median family income has trailed housing costs for single-family homes. Median income grew by 74 percent (in unadjusted dollars) between 1985 and 2000, while housing costs increased by 115 percent (in unadjusted

⁶¹ U.S. Census Bureau. *Census 2000*.

⁶² *Ibid.*

⁶³ Ohio Department of Jobs and Family Services. *CCIDS Statewide Utilization Analysis by Child*, September 2003.

⁶⁴ Ohio Department of Job and Family Services. *Ohio Job Outlook to 2010*. Average annual wage was calculated by assuming that the single parent worked 40 hours per week, 52 weeks per year, for the 2001 average hourly rate for a retail salesperson (\$9.54).

⁶⁵ Fight Crime Invest in Kids. *Preventing Crime with Quality Child Care: A Critical Investment in Ohio's Safety*, 2004. Many eligible families, particularly in rural areas, may refuse or not need child care assistance.

⁶⁶ Economic Policy Institute. *Hardships in America: The Real Story of Working Families, 2001*. The *basic family budget* is the minimum wage needed to cover basic costs of housing, food, transportation, health care, and early care and education in the local area, and it varies depending on the location and size of the family.

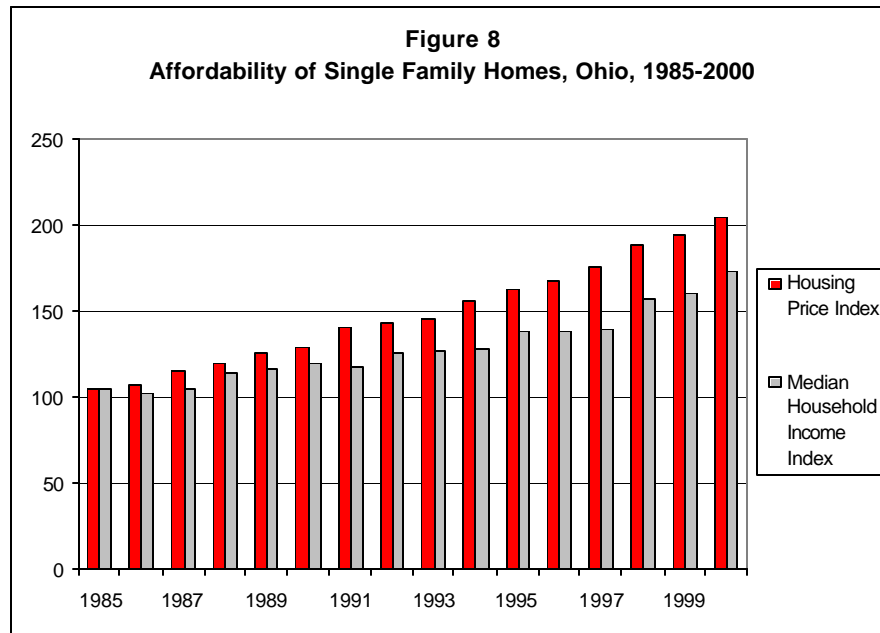
⁶⁷ *Ibid.*

⁶⁸ *Ibid.*

⁶⁹ The Ohio Department of Job and Family Services. *Ohio Job Outlook to 2010*. Economic Policy Institute. *Hardships in America: The Real Story of Working Families, 2001*.



dollars; see Figure 8).⁷⁰ The fair market rate for renting a two-bedroom apartment is currently \$617 per month averaged across the state, or \$7,404 annually.⁷¹



Early Care & Education Implications

Only one third of the occupations with the greatest projected absolute growth from 2010 paid annual wage in 2001 that met the *basic family budget* for a single parent family with one child in the Cleveland area (\$23,848). Affordable early care and education is needed to increase the self-sufficiency of Ohio's families.

Poverty

Approximately 22 percent of Ohio workers earn a wage that would not raise a family of four above the official poverty level (\$18,244).⁷² According to *Census 2000*, 235,026 families lived under the federal poverty line in Ohio—almost 8 percent of all families.⁷³ Of the 20 counties in Ohio with the highest poverty rates for families with children under 5 years of age, 17 were in Appalachia.⁷⁴ From 2000 to 2003, the percentage of children in poverty increased almost 12 percent.⁷⁵

The percentage of families living under the federal poverty line increases for families with younger children. While 12 percent of families with children 18 and under are in poverty, over 16 percent of families with children under five live below the poverty line.⁷⁶ Furthermore, the percentage of families living in poverty increases dramatically for single-mother families; 49 percent of single-

⁷⁰ Policy Matters. *The State of Working Ohio...In Short: A 2002 Series on Ohio Workers*.

⁷¹ National Low Income Housing Coalition. *Out of Reach: America's growing wage-rent disparity, 2002*. Annual wage is based on the assumption that rent is 30% of total income.

⁷² A. Hanauer and L. Perl. *Policy Matters Ohio: The State of Working Ohio, 2003*.

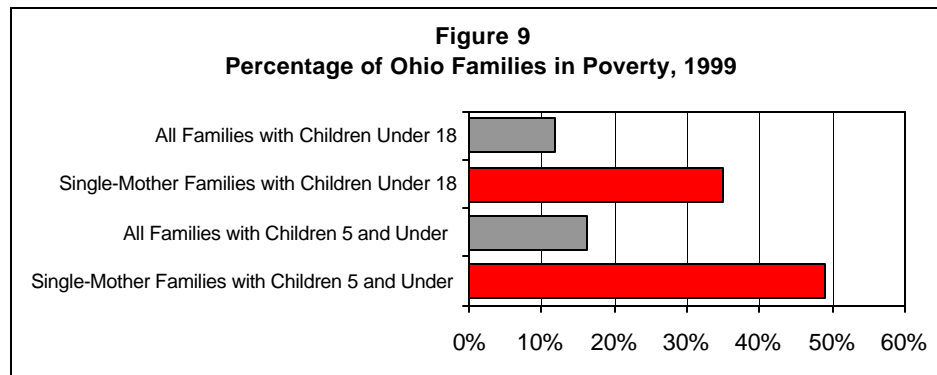
⁷³ U.S. Census Bureau, Table DP-3. Profile of Selected Economic Characteristic: 2000.

⁷⁴ *Ibid.*

⁷⁵ Coalition on Human Needs. *Poor Children in the States, 2004*. Calculations based on data from U.S. Census Bureau, American Community Survey.

⁷⁶ U.S. Census Bureau, Table DP-3. Profile of Selected Economic Characteristic: 2000.

mother families with children under five (see Figure 9).⁷⁷ And those are the people most dependent on early care and education services for labor force participation.



Early Care & Education Implications

The availability of affordable early care and education affects families across all income brackets. Stable, affordable early care and education enables parents to pursue and maintain employment opportunities and ensures a stable labor force. Single parent families, those most dependent on early care and education for employment, are also most likely to be living in poverty. Supports are needed to ensure that these families have economic opportunities to become self-sufficient.

IMPLICATIONS

Ohio's shifting economic and demographic landscape creates a challenge for its early care and education industry. Changing and evolving economic and social conditions – population shifts, growing diversity, increased labor force participation by parents, labor force shortages, and employment shifts – fuel a continuing need for accessible, affordable, and quality early care and education programs.

⁷⁷ U.S. Census Bureau, Table DP-3. Profile of Selected Economic Characteristic: 2000.



Section Three

Economic Profile of the Early Care and Education Industry

To assess the economic characteristics of the early care and education industry in Ohio, this section quantifies:

- The size of the industry, as reflected in output or gross receipts
- The total direct employment of the industry
- The capture of federal and state monies designated for early care and education
- The size and characteristics of the early care and education market

The section also highlights barriers that the industry experiences in supplying affordable, accessible, and quality early care and education for Ohio families. It should be emphasized that this economic analysis only covers the formal industry (as described in Section 1), which includes:

- 3,617 licensed child care centers
- 18,414 certified family child care homes
- 2,200 registered-only family child care homes
- 115 public pre-school programs
- 89 Head Start/Early Head Start programs
- 333 Early Childhood Special Education programs
- 865 ODE Latchkey classrooms
- 33 21st Century programs

This analysis does not cover the informal early care and education industry (see Section 1 for a detailed description of the informal sector).

THE SIZE OF THE EARLY CARE AND EDUCATION INDUSTRY

Measuring Industry Output or Gross Receipts

Output, also known as gross receipts, measures the size of an industry in terms of the overall value of the goods and services produced by that industry over the course of a given year. For the early care and education industry, gross receipts are equal to the total amount of dollars flowing into the sector in the form of payments for care, including both parent fees and federal and state funds. The vast majority of public funding—roughly 80 percent—comes from federal funds.

State and national surveys do include “child day care services” as an industry classification, and the diversity of establishments, which includes self-employed individuals, programs run by religious or social organizations, and not-for-profit and for-profit small businesses and chains, causes an underestimate by most economic and business survey methodologies. This study uses a more accurate method of measuring the size of the industry, relying primarily on data from state agencies charged with administering part of the complex system that makes up the formal early care and education industry (please see Appendix B for a detailed methodology).

Using the more comprehensive methodology, the total gross receipts of the early care and education industry in Ohio is \$1.95 billion, including \$1.62 billion for all center-based programs. Registered-only and certified family child care homes contribute \$270 million in gross receipts. The child care food program contributes an additional \$56 million.

In total, the early care and education industry in Ohio generates \$1.95 billion in gross receipts.

Parents pay the majority of these dollars. For example, 76 percent of children in licensed child care centers and 100 percent of children in registered (not certified) family child care homes are unsubsidized.⁷⁸ However, a significant percentage of gross receipts are paid by government assistance programs to make early care and education programs affordable for low-income families.⁷⁹ This gross receipts value of \$1.95 billion includes any subsidies from employers to parents, since they would make up a portion of the consumer price paid towards programs the parents purchase for their children. This analysis does not include any employer monies invested in a program outside of consumer price. This results in an underestimate of the total dollars going into the industry. Due to insufficient information, the gross receipts estimate also excludes contributions to industry providers from philanthropic organizations.

Note: The U.S. Census Bureau's Economic Census reports gross receipts for "child day care services" totaling \$489 million in Ohio in 1997.⁸⁰ This value is just 25 percent of the comprehensive value calculated in this report. Some of the discrepancy is likely due to the time difference between surveys while some is due to the Census Bureau's less comprehensive industry classification.

Gross Receipts Compared with Other Industries

Comparing the early care and education industry's gross receipts with other industries in the state puts the gross receipts calculation into context. Ohio industries range widely in size, from \$2.3 million for motion picture and video distribution to more than \$33 billion for motor vehicle manufacturing.⁸¹ Comparing the early care and education industry with Ohio's other industries indicates that early care and education is more than twice the size of investment banking and securities dealing (\$806 million).⁸² See Figure 1 and Appendix D for additional comparisons. The industry generates considerably more gross receipts than livestock and products (\$1.67 billion) and corn production (\$715 million), and is similar in size to other industries in the state recognized as being significant, such as motor vehicle brake system manufacturing (\$2.07 billion), which is a critical piece of the state's motor vehicle manufacturing industry.⁸³ The early care and education industry also generates almost as many gross receipts as insurance agencies (\$2.43 billion).⁸⁴

The gross receipts of early care and education are similar to insurance agencies in Ohio and significantly larger than investment banking and securities dealing.

⁷⁸ Based on 2004 Ohio Child Care Resource and Referral Association Agency (OCCRRA) Statistics.

⁷⁹ Eligibility for child care assistance and government programs like Head Start vary.

⁸⁰ U.S. Census Bureau. 1997 Economic Census. The Census is mailed to a list based on U.S. businesses with employer identification numbers (EIN), and excludes private households and governments. The 1997 Economic Census is the most recent for which data is available, and although the value has been adjusted to 2003, it may not reflect industry changes over the past five years.

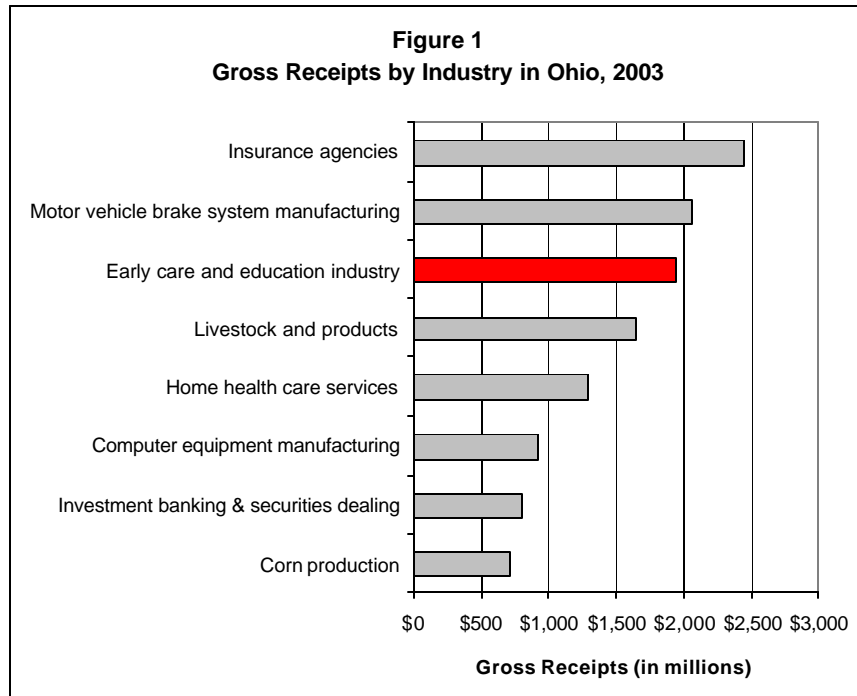
⁸¹ Based on the U. S. Census Bureau's 1997 Economic Census, and adjusted to 2003 values using the CPI.

⁸² Ibid.

⁸³ Ibid.

⁸⁴ Livestock gross receipts are derived from Ohio Agricultural Research and Development Center. *2002 Ohio Farm Income: Cash Receipts by Ohio Farmers from Livestock, Crops, and Government Payments by Five Year Intervals, 1975-1995 & Yearly 1996-2002*, and updated to 2003 dollars using the CPI. All other values are based on the U. S. Census Bureau's 1997 Economic Census, and adjusted to 2003 values using the CPI.





Industry Employment

Direct employment for early care and education in 2003 in Ohio is estimated to be 56,631 full-time equivalent jobs (FTEs). This figure is derived from the number of children in different types of programs, assuming compliance with minimum staffing requirements imposed by licensing laws for different age groups, and minimal support staffing in centers. Direct employment estimates for some government funded child development centers and before and after-school programs were derived from estimates of administrators in the various programs (please see Appendix B for a detailed methodology).

The total number of people working in the industry is likely higher because so many early care and education professionals work part-time. In addition, the estimate derived from statewide data also understates the total early care and education economic activity because it only counts formal establishments, excluding the informal sector. In addition, the estimate is based on the minimum staff-child ratio required by state law. Some early care and education operators choose to maintain higher staff-to-child ratios in order to improve program quality, meet funding requirements, or to achieve accreditation requirements or specific quality goals that increase their business' competitiveness. For example, as of May 2004 in Ohio, there were 365 early care and education programs accredited by the National Association for the Education of Young Children, whose accreditation process requires higher staff-to-child ratios and lower group sizes than the state mandates.⁸⁵

The formal early care and education industry directly supports approximately 56,631 full-time equivalent jobs.

⁸⁵ National Association for the Education of Young Children. *NAEYC Accredited Program Search, Ohio*, May 2004.

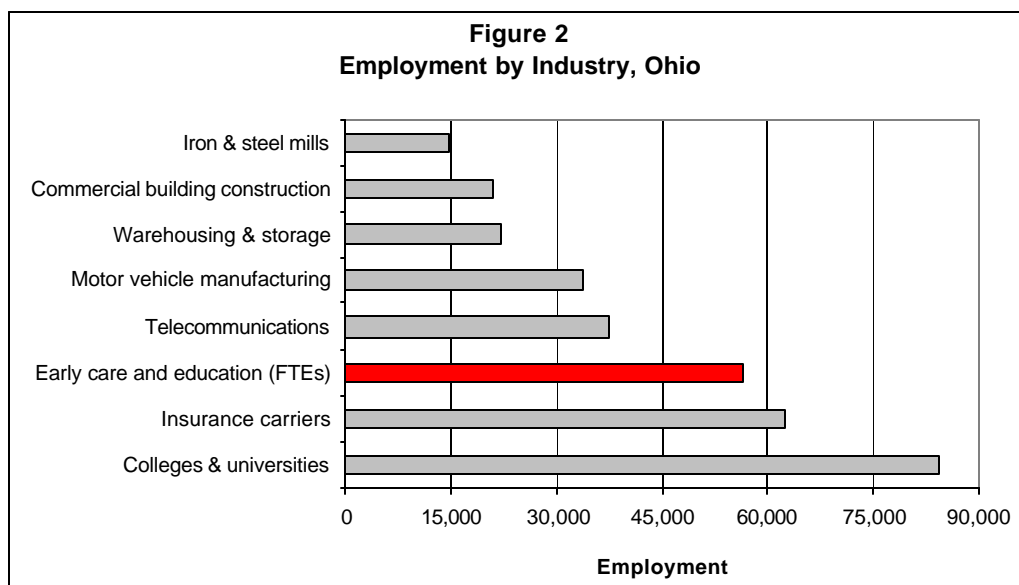
Analyses in this report are conservative because they:

- Do not include the informal early care and education industry.
- Do not include revenue and employment in indirect support services through the early care and education infrastructure, including research, oversight, administration, and training activities.
- Do not include business investments, including separate grants to early care and education providers and donations from philanthropic organizations.
- Only include full-time equivalent employment (FTE) and do not include part-time jobs in the industry.
- Assume minimum state mandated staff-to-child ratios, even though many early care and education programs choose to use higher ratios to meet quality standards or accreditation requirements.

Direct Employment Compared with Other Industries

To put employment findings in context, the number of FTEs in early care and education is compared to employment in other industries. That number, 56,631, is similar to the number of employees in insurance carriers (62,485) and truck transportation in the state (63,465).⁸⁶ See Figure 2 and see Appendix D for additional comparisons. There are more FTEs in early care and education in the state than there are workers in telecommunications (37,340) or motor vehicle manufacturing (33,667).⁸⁷

The formal early care and education industry employs more people in the state than WalMart and the telecommunications and vehicle manufacturing industries.



⁸⁶ Data is from the 2002 Ohio Covered Employment and Wages (ES-202) survey.

⁸⁷ Ibid.



The leading private employer in Ohio, WalMart (37,000 part-time and full-time jobs), employs fewer people in the state than early care and education.⁸⁸ Finally, the early care and education industry employs almost half as many people as the Ohio State Government (129,000 employees), the largest public sector employer in the state.⁸⁹

MEASURING INDIRECT AND INDUCED EFFECTS

Early care and education is linked to the rest of the local economy through a number of avenues. For example, providers purchase supplies from other businesses and early care and education employees spend their earnings in part on locally produced goods and services. These linkages can be measured using an input-output model and its associated multipliers, a methodology used by some economic development specialists. Many informed observers have indicated that these effects are not part of a conservative approach and thus these analyses are not included in the main body of this report. An analysis of these linkages is included in Appendix C.

In addition, the early care and education industry pays taxes to state and federal governments. Because of the diversity of establishments, the direct tax contribution is not possible to calculate. Indirect business taxes, however, including excise, sales, and property taxes, total \$17.9 million.⁹⁰

FEDERAL AND STATE FUNDING

The majority of public funding for direct early care and education services in Ohio is federal—roughly 80 percent. The availability of federal and state early care and education investments plays an important role in supporting local economic development, sustained employment of low-income families, and development of Ohio's children for school readiness and future economic success. There are a number of programs that provide direct services in local communities. Many of them are described here with the most recent funding information available.

- The Ohio Department of Job and Family Services (ODJFS) Subsidized Child Care Program supports a portion of the cost of early care and education services to assist income-eligible parents who are maintaining employment or attending education/training classes that will lead to employment. Families may choose their own licensed child care center or certified family child care home. In SFY 2003, low-income families with gross monthly income at or below 185 percent of the federal poverty line (\$1,869 per month for a family of two) were eligible for early care and education assistance.⁹¹ The ODJFS Subsidized Child Care Program was awarded approximately \$469.7 million in public funds to serve approximately 196,000 children from birth through age 12 over a 12-month period.⁹² In September of SFY 2003, the families of 81,249 low-income children received help paying for early care and education.⁹³
- Head Start/Early Head Start child development programs represent another significant area of public funding. Head Start/Early Head Start serves children from birth to age five, pregnant women and their families in child-focused programs designed to increase

⁸⁸ Ohio Department of Development. *Major Employers, 2003*.

⁸⁹ Data is from the 2002 Ohio Covered Employment and Wages (ES-202) survey.

⁹⁰ Based on direct multipliers in the IMPLAN input-output model. See Appendix B for more details about the model.

⁹¹ Ohio Department of Job and Family Services. *CCIDS Statewide Analysis By Child, SFY 2003*. Families receiving transitional child care assistance are families who are no longer available for Ohio Works First (OWF). Such families must have received OWF financial assistance in at least three of the six months immediately preceding the first month of ineligibility for OWF. Families eligible for transitional child care are eligible for twelve consecutive months of child care benefits or until the family monthly income exceeds 150% of the federal poverty level (FPL), whichever comes first, from the first month of ineligibility for OWF.

⁹² Ohio Department of Job and Family Services. *CCIDS Statewide Analysis By Child, SFY 2003*.

⁹³ Ohio Department of Jobs and Family Services. *CCIDS Statewide Utilization Analysis by Child, September 2003*.

school readiness of young children in low-income families.⁹⁴ In 2003, Ohio received more than \$237 million in federal funds for Head Start/Early Head Start.⁹⁵ Ohio also funds Head Start programs in the state. In SFY 2003, Ohio invested almost \$88 million to enroll more children in Head Start programs.

- The Ohio Department of Education (ODE) supports a number of early care and education programs throughout the state. For example, ODE funds local school districts that offer public preschool. In SFY 2003, ODE spent \$18.5 million on public preschools. In FFY 2003, school districts received \$342 million in Federal Title I funds. Some of these monies are used to fund separate public pre-school programs, but information on what percentage of Title 1 funds school districts use is currently unavailable and therefore not included in this analysis.
- Early childhood special education programs, also funded through the ODE, are provided to meet the needs of children with disabilities, ages three through five, as required by the Individuals with Disabilities Education Act. These programs received almost \$91 million in federal and state funds in SFY 2003.
- ODE funds 21st Century Community Learning Centers, which are before and after-school programs that offer educational, health, and social services to the state's school-age children. In SFY 2003, 21st Century grantees received over \$7.8 million in federal funds.⁹⁶
- Lastly, the United States Department of Agriculture runs a child care food program, which contributes dollars to the local economy, amounting to \$56.5 million for Ohio. These federal funds enable providers to supply nutritious meals for children in low-income families attending their early care and education programs.

In total, state and federal funding for early care and education in Ohio was almost \$969 million in 2003.

The early care and education industry in Ohio received \$969 million in federal and state funds in 2003.

In 2003, the Ohio Department of Taxation received 59,075 personal returns claiming a tax credit for "child care." In total over \$9.5 million in tax obligation was offset by the credit. However, this amounts to an average savings of only \$160 per family compared to an average early care and education cost for an infant of over \$6,200 per year.⁹⁷

Ohio has one of the strongest state tax credits for employer-provided child care of the 20 states in the United States that offer employers child care tax credits.⁹⁸ Despite the comparative strength of its incentives, few businesses in Ohio utilize these tax credits. In 2000, of almost 105,000 corporate filers, only 8 claimed a child care tax credit, for a combined savings of \$132,500

⁹⁴ US Department of Health and Human Services, Administration for Children, Youth and Families; Head Start website at <http://www2.acf.dhhs.gov/programs/hsb/about/index.htm>.

⁹⁵ U.S. Department of Health and Human Services. *FY 2003 Head Start and Early Head Start Funding Plan*.

⁹⁶ Only funding for direct services for children ages 6 through 12 were included in this number.

⁹⁷ Ohio Department of Taxation. *State of Ohio Personal Income Tax Summary, 2003*. Child care cost information comes from 2003 Ohio Child Care Resource and Referral Association Data.

⁹⁸ National Women's Law Center. *The Little Engine that Hasn't: The Poor Performance of Employer Tax Credits for Child Care*, 2002.



statewide.⁹⁹ The National Women's Law Center believes that the poor utilization of tax credits may stem from a number of factors, including:

- The credits may be too weak.
- Employers may be ill-informed about the credits.
- Uncertainty about the continued availability of the credits may discourage employers.
- Many employers have little or no state tax liability to offset credits.
- Tax credits are not well suited to address the quality or affordability of care and education.¹⁰⁰

THE EARLY CARE AND EDUCATION MARKET

Demand

Currently, the early care and education industry, has the capacity to serve over 527,000 children at any one time.¹⁰¹ There were an estimated 2.07 million children ages 0 through 12 in 2003, indicating that the industry can serve approximately 25 percent of all children at any one time. The industry can only serve 40 percent of children ages 0 through 12 with all parents in the labor force at any one time.

The early care and education industry can serve approximately 527,000 children at any one time. That is only 40 percent of children with all parents in the labor force.

Demand for the industry relies on these key factors:

- Need
- Quality
- Affordability
- Accessibility
- Preference

These five factors are interrelated, thus making it difficult to quantify market demand from an economic standpoint. In *Child Care Quality*, Deborah Vandell and Barbara Wolfe note that there are two causes for market failure for quality early care and education: 1) parents lack accurate information about quality early care and education, and 2) society doesn't realize that the benefits "accrue not just to the parents and to the child but to society in general," although parents are primarily responsible for the cost.¹⁰²

There seems to be little doubt that given the high labor force participation rates of parents in Ohio, the need for some form of early care and education to enable parents to work and obtain training and education is strong. Parental demand for quality may increase as more parents

⁹⁹ National Women's Law Center. *The Little Engine that Hasn't: The Poor Performance of Employer Tax Credits for Child Care*, 2002.

¹⁰⁰ *Ibid.*

¹⁰¹ 2003 data for all for all certified, licensed, and registered child care programs come from the Ohio Department of Job and Family Services, Ohio Child Care Resource and Referral Association, the Ohio Department of Education, and the U.S. Department of Health and Human Services. Enrollment for public preschools, Head Start/Early Head Start, 21st century, Early Childhood Special Education, and ODE Latchkey Programs was used as a proxy for capacity because accurate capacity information was not available. Also, many of the slots in the total capacity exist in programs that are operate either part-day and/or part-year.

¹⁰² D. Vandell and B. Wolfe. *Child Care Quality: Does it Matter and Does it Need to Be Improved?*, 2000. As cited in: J. Lombardi. *Time To Care: Redesigning Child Care to Promote Education, Support Families, and Build Communities*, 2003.

understand the importance of quality early education opportunities and how to identify quality programs.

Affordability and accessibility remain critical barriers for many families who need or would prefer quality licensed early care and education. Demographic and economic trends indicate that more families will be challenged by these issues as the low-wage workforce expands. Location, hours of operation, and transitions between part-day programs all affect a parent's ability to use the programs. Rural and urban areas differ in what is the best service delivery system, since transportation and commutation patterns as well as parental preferences differ in different locales. Efforts to expand the industry to meet the growing needs of working parents and to improve the quality will not be successful unless affordability and accessibility for parents are addressed.

MAXIMIZING BENEFITS OF EARLY CARE AND EDUCATION

The early care and education industry is expected to be one of the top five fastest growing industries in the state from 2000 to 2010.¹⁰³ This is based on recent growth of the industry and expectations that demographic and economic trends contributing to that growth will continue. There are challenges, however to the increased demand for quality, affordable, and accessible programs. These include:

- Shortage of integration with economic development activities
- Barriers to increased quality
- Insufficient investment by other industries and government

First, although early care and education programs are part of the economic infrastructure that enables parents to work and obtain education and training, they are often not included in traditional economic development activities designed to stimulate the state's economy. For example, though early care and education providers are one of the largest groups of self-employed individuals in Ohio and also represent a significant portion of small businesses in the state, resources available to other small businesses and entrepreneurs in Ohio, such as business skills training and technical assistance in getting loans, are often not available or targeted to them. There are some notable and positive exceptions, however. For example, the Ohio Community Development Finance Fund has offered a Child Care Capital Fund (linked deposit model) to Head Start providers.

Example: Ohio Community Development Finance Fund indirectly supports commercial lending for long-term mortgages on facilities by enabling banks to offer low-interest loans to Head Start providers. Between 1996 and 2001 the Community Finance Fund placed \$6.1 million in linked deposits enabling \$31.3 million in projects with discounted interest rates from local banks. As a result, 18 facility projects have been financed, creating 130 classrooms for 2,210 children. The Child Care Capital Fund combined with other Head Start and child care-based planning products have leverage \$63.1 million, assisting 25,556 low-income children.¹⁰⁴

Second, to improve quality, increasing the educational credentials of the early care and education workforce is critical. Low wages, poor benefits, and a shortage of resources for higher education opportunities lead to high turnover and an unstable and less educated workforce. In 2001,

¹⁰³ Ohio Department of Job and Family Services. *Ohio Job Outlook to 2010*.

¹⁰⁴ James. R. Klein, Ohio Community Development Finance Fund. Interview. National Economic Development and Law Center, 2004.



the average hourly wage of a child care center professional in Ohio was \$8.11.¹⁰⁵ If that worker worked full-time, he/she would earn an annual wage of just \$16,868.

In a survey of Ohio's child care center workforce in 2001, 36 percent of assistants and 21 percents of teachers reported that they had been at their current center for less than one year. Additionally, less than 50 percent of child care center assistants reported having college credits, and 30 percent of child care center teachers reported that they have no college credits.¹⁰⁶

There are a number of efforts to improve educational attainment, wages, benefits, and the retention rate of the early care and education workforce. For example, Cuyahoga and Stark Counties participate in T.E.A.C.H. Early Childhood® Project Ohio (Teacher Education Compensation Helps) which provides scholarships and financial rewards for those in the industry who are participating in the child development associates degree or child development associate credential programs. In SFY 2003, T.E.A.C.H. Early Childhood® Project Ohio invested approximately \$424,000 in scholarships and rewards for early care and education workers. In addition, each of the 12 regional child care resource and referral agencies across the state fund local training initiatives and refer providers to available training opportunities.¹⁰⁷ Also, the Ohio Association for the Education of Young Children identified advocacy for rights, raises and respect for Ohio's early childhood workforce as the strategic initiative of its statewide Public Policy Network for 2004 to 2005.¹⁰⁸

Third, relying on parents to pay the full cost of quality, accessible early care and education is not realistic. As household expenditures in other areas increase (see the previous section), and in many cases, wages go down, quality early care and education is cost-prohibitive for families in many income brackets. On the other side of the ledger, providers face many barriers to increasing supply and improving affordability and accessibility. For example, many rural providers have to contend with transportation issues and low population density. Family child care homes and child care centers also face a number of difficult legal barriers, including "land use and deed restrictions, zoning ordinances, objections from landlords, and liability concerns."¹⁰⁹

IMPLICATIONS

The substantial size of the industry means that it not only supports the economy by allowing parents to work and preparing children for future academic success, but it also contributes to the economy's vitality by employing significant numbers of workers, generating substantial gross receipts, and purchasing goods and services from many other industry sectors. The industry also supports the economy by garnering significant levels of federal and state funds available to provide early care and education to low-income families. These families represent a substantial portion of the existing and potential workforce, and are vital to the continued growth of the economy.

Meeting the challenges of accessibility, affordability and high quality will ensure that the early care and education industry can meet the needs of families and support Ohio's overall economic growth.

¹⁰⁵ Ohio Department of Job and Family Services. *Ohio Job Outlook to 2010: Industries with High Employment Prospects, 2000-2010*.

¹⁰⁶ Ohio Association for the Education of Young Children. *Ohio Child Care Center Workforce Study*, 2003.

¹⁰⁷ Interview. M. Pauline Hosenfeld, T.E.A.C.H. Ohio, Director. National Economic Development and Law Center, 2004.

¹⁰⁸ Interview. Kim Tice, Executive Director, Ohio Association for the Education of Young Children. The National Economic Development Center, 2004.

¹⁰⁹ The Child Care Law Center. *Increasing the Child Care Supply*. As cited on: <http://www.childcarelaw.org>, 2004.

Section Four

Early Care and Education, Business and Economic Development

In addition to being a significant job-creating, income-generating industry in its own right, there are four key ways in which the early care and education industry benefits Ohio businesses and the state's economy as a whole. It:

- Enables a working parent labor force in Ohio
- Drives labor force productivity by decreasing absenteeism, reducing turnover, and enhancing recruitment at existing businesses
- Cultivates Ohio' future workforce by improving the cognitive skills and emotional well-being of children and ensuring that they enter the K-12 school system ready to continue learning
- Offers a financial return by reducing future public spending in such areas as criminal justice, remedial education, unemployment, and welfare

ENABLING A WORKING PARENT LABOR FORCE

A strong early care and education industry:

- Sustains labor force participation rates of parents
- Enables career development and educational advancement
- Attracts young working families and businesses to the state and helps retain them

Sustaining Labor Force Participation

Most parents work outside the home. Almost one in four labor force participants are parents with children under 18 who live in households where all parents work, and almost one in ten are parents with children under age six. In total, there are over 865,000 Ohio families with children under 18 in which all parents work, and these families earn over \$38.8 billion annually.¹¹⁰ Working parents with children under 6 earn \$17.1 billion every year.¹¹¹ These estimates provide a snapshot of the vital role that working parents play in the economy.

Early care and education is similar to roads, public works, and bridges because it is one of the economic infrastructures that enables labor force participation. Providing the infrastructure so that parents who wish to work outside the home can do so is critical to meeting workforce demands of an economically competitive region.

Nearly one in four Ohio workers has children under 18 and lives in a household where all parents work. Together these workers earn more than \$38.8 billion annually.

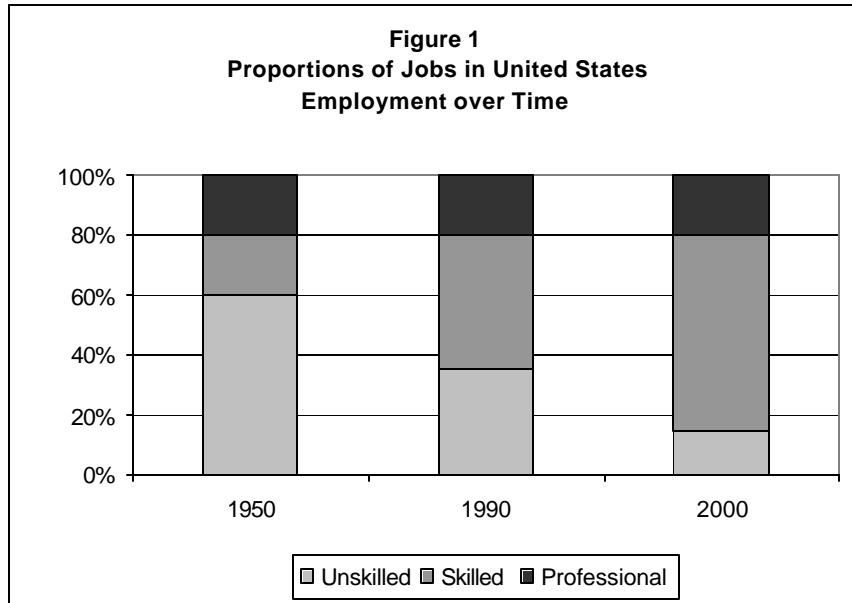
¹¹⁰ Based on Census 2000 median income by family type, employment status of householders by children and age, and average number of children in each family type in Ohio.

¹¹¹ This estimate is derived from Census 2000 median income by family type, and families who have at least one child under 6. They may also have older children, so many are included in the estimate of families with children under age 18.

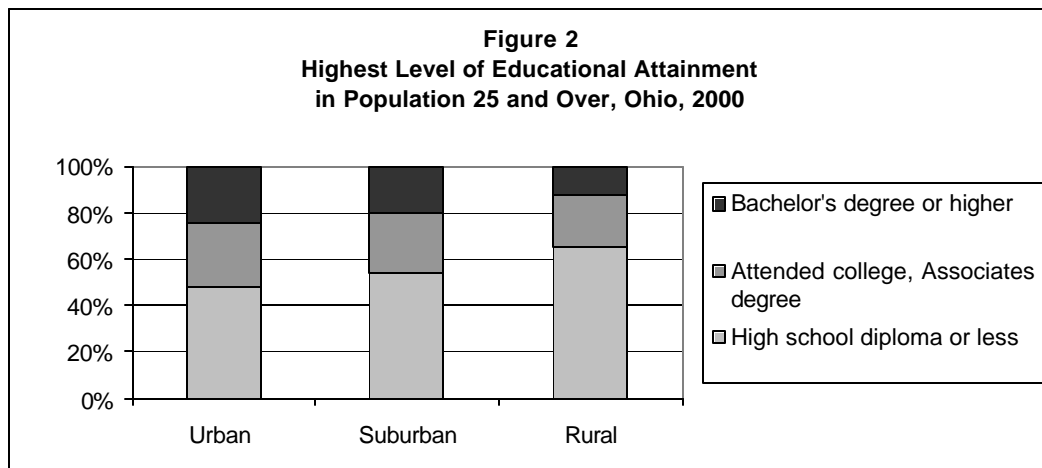


Enabling Career Development and Educational Advancement

More and more jobs require higher educational attainment and skills training (see Figure 1).¹¹² The availability of affordable, accessible early care and education affects parents' ability to pursue their own schooling or training. As the state's economy shifts to industries that require advanced technology, ensuring that Ohio's workers have access to skills training and higher education degrees to prepare them to enter the workforce as skilled professionals or to retrain them in mid-career for changing labor force demands is paramount.



The current Ohio workforce is unprepared for the demands of the labor market (see Figure 2).¹¹³ In comparison to the percentage of the population with some post-secondary education, Ohio lags behind the national average.¹¹⁴ Ohio's Chamber of Commerce recognizes the importance of continued investment in workforce development strategies. It states: "Education and life-long learning is the foundation of a better life. It is more important than ever that students leave Ohio's schools not only with a diploma, but with the basic skills they need to find meaningful and sustainable employment."¹¹⁵



¹¹² Figure 1 from the North Carolina Budget and Tax Center. *The State of the State's Economy: From Boom to Bust and Beyond*. Raleigh, Fall 2003.

¹¹³ U.S. Census Bureau. *Census 2000*.

¹¹⁴ The Ohio Third Frontier Project. *Jobs & Prosperity: Ohio's Strategy for the Third Frontier, A Report to the Ohio Business 200*. October 2002.

¹¹⁵ Ohio Chamber of Commerce. *Ohio Chamber of Commerce Public Policy Agenda, Education and Workforce Development*, 2004.

Clearly, for parents, who make up a significant portion of the emerging, dislocated, and incumbent workforce, early care and education options are critical to enabling these educational opportunities. Strengthening early care and education supports for parents would increase human capital in Ohio and benefit:

- Parents through higher incomes
- Government through larger tax revenues, decreased parental reliance on government programs, and lower unemployment
- Businesses through a more skilled workforce and better productivity.

Strengthening early care and education supports for parents so that they can attend educational programs benefits the economy.

In a long-term study of low-income families who needed government assistance to meet basic family needs, mothers with children who participated in an intensive child development program, which included parental involvement, achieved higher educational and employment status than similar mothers whose children were not randomly assigned to the program.¹¹⁶

Higher educational attainment reduces the likelihood of needing various government supports. A recent study investigating higher education opportunities for individuals transitioning from welfare to work found that 88 percent of individuals receiving welfare assistance who obtained four-year college degrees discontinued participation in welfare after earning their degree.¹¹⁷ Unemployment is also less likely for those who have attained higher education. For example, while 9 percent of the nation's labor force with less than a high school diploma were unemployed between October 2002 and October 2003, 5.4 percent of those with high school graduation, 4.8 percent of those with an associate's degree or some college, and 3.1 percent of those with a Bachelor's degree or higher were unemployed.¹¹⁸ Ensuring access to higher education for parents will help them remain employed and able to meet the skilled labor force demands in Ohio in the coming years.

On-Campus Early Care and Education

Many colleges and universities are committed to supporting parents' access to higher education by providing on-site early care and education facilities. Unfortunately, the funding that makes these programs affordable to students is often in jeopardy. Mark Collins, Vice President of Academic and Student Services at North Central State College in Mansfield, Ohio, emphasizes the importance of subsidized on-site early care and education programs for parent students. "Without question, the presence of a high quality, subsidized child development center on-campus has enabled a significant number of students to engage in higher education activities that would otherwise be unavailable to them.

However, there is still a significant unmet need that exists relating to serving more children. Currently, our Child Development Center has a waiting list of over one hundred children."¹¹⁹ Policies that

"Without question, the presence of a high-quality, subsidized child development center on-campus has enabled a significant number of students to engage in higher education activities that would otherwise be unavailable to them."
Mark Collins, Vice President of Academic and Student Services, North Central State College, Mansfield, Ohio

¹¹⁶ Discussion of results of *The Abecedarian Study*, as cited on www.fpg.unc.edu/~abc/.

¹¹⁷ T. Karier, *Welfare Graduates: College and Financial Independence*, Levy Economics Institute of Bard College, as cited in *Grassroots to Graduation: Low-income Women Accessing Higher Education*. Boston: Wellesley College Center for Research on Women and Women's Institute for Housing and Economic Development, 2003.

¹¹⁸ U.S. Department of Labor. *The Employment Situation: October 2003*. Washington, D.C. : U.S. Department of Labor Bureau of Labor Statistics, 2003.

¹¹⁹ Interview. Mark Collins, Vice President of Academic and Student Services, North Central State College, Mansfield, Ohio. National Economic Development and Law Center, 2004. This child development center serves students from both North Central State College and Ohio State University, Mansfield.



enable parents with limited incomes to pursue higher education and that offer assistance with early care and education costs benefit the economy.

Research also demonstrates that student parents using on-campus early care and education:

- Have higher graduation rates than their counterparts on campus
- Are more likely to remain in school and graduate in fewer years
- Have higher grade point averages¹²⁰

Similarly, student parents indicate that the availability of early care and education is critical to their decision to enroll in college.¹²¹ Unfortunately, limited capacity in programs offered during non-traditional hours prevents parents from enrolling in classes or trainings that are offered outside of the traditional workday.

Attracting and Maintaining Businesses and Skilled Young Workers

One of the Ohio Department of Development's three main overarching goals is to "showcase Ohio as unique place for business investment, entertainment and quality living."¹²² An affordable, quality early care and education system plays an important role in Ohio's quality of life, and enhances Ohio's attractiveness for businesses and skilled workers.

A recent report found that Ohio does a "slightly better than average" job at retaining Ohio graduates and does a "below average" job of attracting out-of-state workers than other states.¹²³ However, because economic developers are still uncertain as to whether a qualified workforce attracts businesses or vice versa, the report recommends that Ohio should focus on policies that attract and retain both businesses and young, skilled workers.¹²⁴ Initiatives that encourage young adults and working families to settle in Ohio are critical to maintaining a healthy workforce. Economic infrastructures, policies, and incentives that attract businesses are equally essential in ensuring a healthy Ohio economy.

Improving early care and education makes Ohio a more attractive place to live and work, and maintains Ohio's competitiveness in attracting businesses to the state.

Maintaining a skilled workforce is also a critical component of attracting businesses to Ohio. As Governor Bob Taft said in his inaugural address, "If Ohio is to prosper in the knowledge economy, we must take bold measures to keep the best and brightest here at home, to graduate persons who have mastered the art of problem solving and working in teams, and who have the ability to learn new skills throughout their careers."¹²⁵ The Ohio Department of Development's *Ohio's Manufacturing Agenda* underscores this as well. "Upgrading the skills of Ohio's workers is essential for manufacturers to compete in today's economy."¹²⁶ Ensuring that parents are not left out of workforce development efforts will benefit the state's economy.

"If Ohio is to prosper in the knowledge economy, we must take bold measures to keep the best and brightest here at home."

Governor Bob Taft

¹²⁰ *Impact of Campus-based Child Care on Academic Success Student Parents at SUNY Community Colleges, 1989, and Child Development Center Participant Analyses, Bronx (New York City) Community College, 1994.* As cited by The National Coalition for Campus Children's Centers in their policy brief: *Campus Child Care Bill: Child Care Access Means Parents in School Act, S1151 and H.R. 3936, 1999.*

¹²¹ Child Care City Council at the City College, 1998. As cited by The National Coalition for Campus Children's Centers in their policy brief: *Campus Child Care Bill: Child Care Access Means Parents in School Act, S1151 and H.R. 3936, 1999.*

¹²² Ohio Department of Development. *Ohio Department of Development Goals, 2004.*

¹²³ P.D. Gottlieb, Center for Regional Economic Issues. *The Problem of Brain Drain in Ohio and Northeast Ohio, 2001.*

¹²⁴ *Ibid.*

¹²⁵ Governor Taft. Governor Taft's Inaugural Address, January 13, 2003.

¹²⁶ Ohio Department of Development. *Ohio's Manufacturing Agenda, 2003.*

Just as businesses try to gain a competitive edge in recruiting employees, the state tries to recruit the best businesses to Ohio. Relatively low business costs in relation to other states, a strong workforce, healthy communities, and high quality of life all contribute to business relocation decisions. So does a strong, quality early care and education infrastructure. It supports current workforce development and prepares young Ohioans for future labor demands.

A DRIVER OF INCREASED LABOR FORCE PRODUCTIVITY

The availability of affordable, accessible, quality early care and education has positive effects on businesses' bottom lines. As a result, individual businesses use early care and education as a business tool to:

- Increase employee retention
- Reduce absenteeism
- Enhance recruitment of skilled workers

Increasing Employee Recruitment and Retention

Attracting and retaining staff is priority, particularly for companies that rely on highly skilled workers. Non-portable benefits, such as early care and education, are effective business tools to increase recruitment and retention. Family-friendly policies indicate a company's commitment to the well-being of potential and existing employees and their personal lives, which make the company more attractive in a competitive workforce market. Company values are particularly important when trying to attract highly specialized workers, whether or not they have young children.

While more and more employers are utilizing early care and education benefits as a means to attract and retain quality employees, most employers miss out on this opportunity. For example, in a survey of businesses by the U.S. Chamber of Commerce, only 32 percent reported actively assisting "their employees in addressing employment challenges such as, child or dependent care, transportation or housing."¹²⁷

A survey of working women in Ohio, reported that 83 percent of the women don't have early care and education benefits.¹²⁸ In a survey of manufacturers in Ohio, over 96 percent reported that they did not "provide any form of assistance for child care."¹²⁹ Furthermore, in a 2002 survey of businesses across all industries in Central Ohio, Northern Kentucky and Southeastern Indiana, 78 percent reported that they did not offer any form of child care assistance. Though companies with more than 500 employees were significantly more likely to provide child care benefits, 48 percent reported that they did not provide any child care assistance.¹³⁰

In a survey of working women in Ohio, 83 percent reported that they did not receive early care and education benefits.

A survey of employers in Northeastern Ohio (Ashtabula, Cuyahoga, Geauga and Lake counties) yielded similar information about the lack of business-provided early care and education benefits, even though nearly three-quarters of businesses surveyed reported that programs aimed at helping employees balance work and family responsibilities have a positive impact on recruitment and retention. In this survey of employers:

- Only 16 percent reported offering child care resource and referral assistance
- Less than 3 percent reported offering on or near-site child care

¹²⁷ U.S. Chambers of Commerce, Center for Workforce Preparation. *Keeping Competitive: Hiring, Training, and Retaining Qualified Workers*, 2001.

¹²⁸ Lake, Snell, Perry and Associates. *Working Women Say: Ohio Executive Summary*, 2000.

¹²⁹ Ohio Manufacturers' Association. *Employee Benefits Survey*, January 2002.

¹³⁰ Employers Resource Association. *Personnel Policy and Practice Survey*, October 2002.



- Only 33 percent reported offering a tax-free dependent care assistance plan
- Only 5 percent reported offering vouchers/discounts for child care.¹³¹

As a whole, employers in Northeastern Ohio were significantly less likely to offer early care and education benefits than employers surveyed nationwide in 2000 by Bright Horizons Family Solutions¹³² The relative scarcity of early care and education benefits does not help with the retention of employees. Yet there is strong evidence that providing them does. Those who feel supported in their family roles and who feel that their workplaces support a balance between work and home obligations are less likely to leave their jobs. A national study of companies that offer child care centers to their employees found that turnover was nearly one-half in those who used the center compared to other workers.¹³³ The survey also found that more than half of the center users had been with their company for more than five years and nearly half had been with their company for more than ten years. In a national survey, 19 percent of employees at companies with early care and education programs indicated that they have turned down another job rather than lose work-site early care and education.¹³⁴

A national study of companies that sponsor early care and education centers to their employees found that turnover was nearly one-half in those who used the center compared to other workers.

When employees do leave because of early care and education problems or transfer to a company with better options, companies lose human capital and incur high turnover costs. A meta-analysis of 15 different turnover cost studies found that average turnover costs for a full-time employee making \$8 per hour are over \$9,000, 56 percent of the annual wages for that employee.¹³⁵ For salaried employees, costs are at least 150 percent of the base salary, and increase for higher-paid and more valued staff.¹³⁶

It has also been demonstrated that early care and education benefits is a good business tool when companies want to increase the career advancement of female employees, an expressed goal of many organizations.¹³⁷

Ohio's Experience

A 2003 survey of Procter & Gamble employees using a near-site child care center operated by the Cincinnati Children's Hospital, yielded the following results:

- 89 percent reported that the center increases their pride in Procter & Gamble
- 85 percent reported that the center increases morale
- 65 percent reported that the center reduces absenteeism
- 89 percent reported that the center reduces stress related to managing work/family
- 84 percent reported that the center improved productivity at work

¹³¹ Employers Resource Association. *Personnel Policy and Practice Survey*, October, 2002

¹³² *Ibid.*

¹³³ Bright Horizons Family Solutions. *The Real Savings from Employer-sponsored Child Care: Investment Impact Study Results*. Boston, MA: Bright Horizons, 2003.

¹³⁴ Simmons College, *Benefits of Work-Site Child Care*, 1997, as cited by Bright Horizons Family Solutions.

¹³⁵ Sasha Corporation. Turnover costs in 15 different studies. www.sashacorp.com. November 2003.

¹³⁶ W. Bliss. *The Business Cost and Impact of Employee Turnover*. New Jersey: Bliss & Associates, Inc., 1999, www.blissassociates.com.

¹³⁷ *Ibid.* Other companies who have been recognized as one of the "100 Best Companies for Working Mothers" have expressed goals for advancing women in their organization.

- 94 percent reported that the center added to overall job satisfaction¹³⁸

Cincinnati Children's Hospital also operates a separate center for its employees, Children's for Children, which has been a successful recruiting and retention tool for the hospital. According to a survey of hospital employees who use the center, the program boosts job satisfaction and employees pride.¹³⁹ Not surprisingly, the hospital's administration has been very satisfied with the return on investment they receive from the on-site child care center. As Ronald B. McKinley, PhD., Vice President of Human Resources of Cincinnati Children's Hospital Medical Center states, "Cincinnati Children's Hospital provides child care at two locations for our employees and those of the Procter & Gamble Company. Both corporations have found that high quality child care translates into positive employee relations. Users of the programs develop heightened loyalty to the companies and having long-term employees is part of our strategic goals."¹⁴⁰

"Cincinnati Children's Hospital provides child care at two locations for our employees and those of the Procter & Gamble Company. Both corporations have found that high quality child care translates into positive employee relations. Users of the programs develop heightened loyalty to the companies and having long-term employees is part of our strategic goals."

*Ronald B. McKinley, PhD., Vice President of Human Resources,
Cincinnati Children's Hospital Medical Center*

Locally, a number of other companies in Ohio offer on- or near-site early care and education, some of which include: Rubbermaid, Columbus Children's Hospital, Grant Hospital, Riverside Hospital, Health Alliance of Greater Cincinnati, and the Children's Medical Center.¹⁴¹

According to a 2002 staff development and work/life survey for The Ohio State University, approximately one third of parents employed at the university with children younger than 15 report having serious problems with emergency/back-up care, finding temporary care when schools are closed, and finding child care for evening or weekends, and approximately one in four experience problems finding affordable, quality child care.¹⁴² As a result, one of the five recommended priority actions for The University was to "expand and improve work/life policies and programs, including a paid parental leave policy and improved child care support for parents."¹⁴³

Options for Increasing Business Productivity

In a survey of employees, a top human resources and consulting firm found that caring for dependents was one of the top six employee benefit considerations. However, early care and education benefits were not considered by employers to be essential.¹⁴⁴ Businesses can avoid this disconnect by offering benefit packages that focus on their employees' needs and thus reduce costs stemming from absenteeism, low productivity, and turnover.

¹³⁸ Children's for Children—Procter and Gamble. "Child Care Center Surveys Show Positive Results and Some to Ponder." December 2003.

¹³⁹ A.F. Kinch and L. J. Schweinhart. *Achieving High Quality Child Care: How Ten Programs Deliver Excellence Parents Can Afford*. Published by the National Association for the Education of Young Children, 2004.

¹⁴⁰ Interview. Ronald B. McKinley, PhD., Vice President of Human Resources of Cincinnati Children's Hospital Medical Center. National Economic Development and Law Center, 2004.

¹⁴¹ Bureau of Child Care & Development. *Ohio Employer Tool Kit of Child Care Options*, 1998. This report was written for the Ohio Corporate Child Care Work Group by the Corporation for Ohio Appalachian Development and funded by the Ohio Department of Job and Family Services.

¹⁴² The Ohio State University. *Report of the Presidential Commission on Staff Development and Work/Life*, 2002.

¹⁴³ *Ibid.*

¹⁴⁴ Merk. *Using Benefits to Attract and Retain Employees*, 1999. As cited on www.probenefits.com.



Child Care Options for Ohio Employers

Examples from the *Ohio Employer Tool Kit of Child Care Options*

Child Care Option # 1: Child Care Resource and Referral

- Partner with Child Care Resource and Referral Agencies

Child Care Option # 2: Policies and Programs That Help Parents Afford Child Care

- Create a cafeteria-style benefit plan or a dependent care spending assistance plan (DCAP)
- Offer a child care voucher/reimbursement program, develop corporate discounts and/or contract with a local child care program to reserve child care slots for employees

Child Care Option # 3: Flex-Time and Leave Policies

- Offer flextime, part-time options, flexi-place, compressed work week, and job sharing
- Structure sick/personal leave to meet child care needs

Child Care Option # 4: Child Care Services and Programs

- Develop a network of child care providers for your employees
- Contract for on or near-site child care

On-site early care and education is not feasible for many employers in the state. But other options to increase retention do exist. For example, Park National Bank in Newark reimburses employees for early care and education costs by matching employees dollar for dollar for up to \$2,500 per child per year.¹⁴⁵ Supporting this care and education provides a good return on investment for the bank. As William T. McConnell, Park National Bank's Chairman of the Board notes about onsite early care and education benefits, "Having good employees who stay with you is important to maximizing profits."¹⁴⁶ Allstate Insurance, located in Hudson, Ohio, offers discounts at child care centers. Businesses can also contract with local child care resource and referral agencies (CCR&Rs) to provide specialized technical assistance to help their employees find the services that meet their needs. Several major employers in southwestern Ohio, such as General Motors, SafeCo, and Nationwide Insurance, contract with 4-C for Children to provide enhanced resource and referral services for their employees.¹⁴⁷

The overwhelming majority of businesses in Ohio are small businesses, however, and they face particular challenges to providing employee benefits, including early care and education. While most employee benefits provide an economy of scale for larger companies, they are less economically efficient for smaller companies. On-site early care and education, for example, is not financially feasible for the majority of smaller employers. However, there are cost-efficient ways that small employers can support the early care and education needs of their employees. For example, the *Ohio Employer Tool Kit of Child Care Options* offers three low-cost options that may work for smaller employers who are trying to increase retention, loyalty, morale and productivity. Small businesses can:

¹⁴⁵ Interview. Jane Harkness, Human Resources Department, Park National Bank. The National Economic Development and Law Center, 2004.

¹⁴⁶ Bureau of Child Care & Development. *Ohio Employer Tool Kit of Child Care Options*, 1998. This report was written for the Ohio Corporate Child Care Work Group by the Corporation for Ohio Appalachian Development and funded by the Ohio Department of Job and Family Services.

¹⁴⁷ Interview. Ilene Hayes, Coordinator of Corporate Marketing Seminars, 4-C, Cincinnati. The National Economic Development and Law Center, 2004.

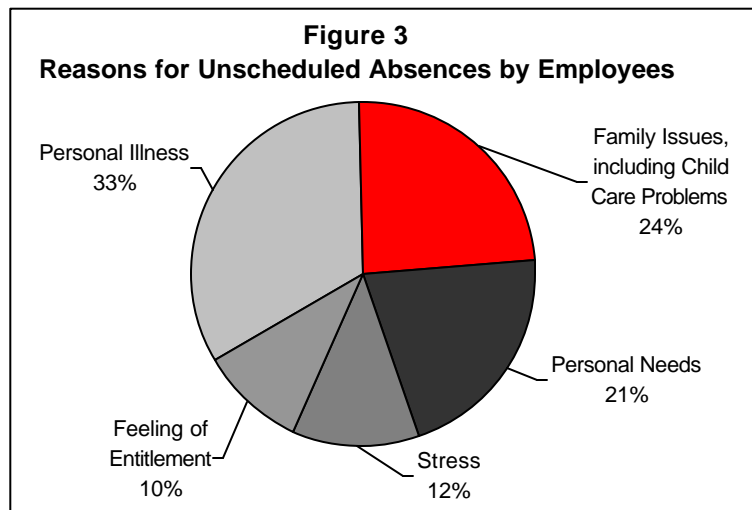
- Join together to support a early care and education program or programs that serve employees from participating companies
- Create or join existing community partnerships to work towards improving the affordability, quality, and supply of early care and education
- Offer pre-tax flexible spending accounts for early care and education costs¹⁴⁸

Example# 1: *Champion of Children* in Franklin County is a partnership of large and small corporations, public and private funders, early education professionals, and community leaders who come together to create quality early childhood education and care opportunities for all young children. More than \$1 million has been raised within the county to support quality early care and education for children of families who are “caught in the cross bows of welfare reform—families who make too much to qualify for public child care subsidies and not enough to afford full costs of quality early childhood education.”¹⁴⁹

Example# 2: Franklin County’s *Start Smart* is a five-year, up to \$12 million public private initiative designed to increase children’s readiness for kindergarten and success in life. Some of the private contributors include: the United Way of Central Ohio, the Crane family, KnowledgeWorks, Lucent Technologies, NCT Ventures, Sara and Randy Wilcox, Abigail and Leslie Wexner, Kaplan Companies, Childcraft, Kiwanis, and The Columbus Foundation.¹⁵⁰

Reducing Absenteeism

Unscheduled absenteeism in 2002 cost small businesses an average of \$60,000 annually and more than \$3.6 million for large companies, according to a national survey of human resource executives.¹⁵¹ While one-third of unscheduled absences were due to personal illness, one-quarter were due to family issues, including children’s illness and unscheduled breakdown of early care and education arrangements (see Figure 3).



Currently, approximately 16 percent of major employers nationally offer sick or emergency back-up care to reduce absenteeism of their employees.¹⁵² These programs provide a significant return on investment. PNC Financial Services Group, a 6,000- employee company with offices in

¹⁴⁸ Bureau of Child Care & Development. *Ohio Employer Tool Kit of Child Care Options, 1998*. This report was written for the Ohio Corporate Child Care Work Group by the Corporation for Ohio Appalachian Development and funded by the Ohio Department of Job and Family Services.

¹⁴⁹ Champion of Children. *Case Statement*. As cited on: <http://www.cocfund.org/casestment.htm>

¹⁵⁰ Start Smart, Columbus. Fact Sheet. Retrieved August 10th, 2004 on: <http://www.smartstartcolumbus.org/media.html>

¹⁵¹ Harris Interactive. *The 2002 CCH@ Unscheduled Absence Survey*. Riverwoods, IL: CCH®, 2003.

¹⁵² Hewitt Associates. “Hewitt Study Shows Work/Life Benefits Continue to Grow Despite Slowing Economy” April 23, 2001. www.was.hewitt.com



Cincinnati, found a 91.7 percent return on investment from a newly implemented back-up program. PNC recovered 3,060 parent-days at work and received positive feedback from parent-employees, their coworkers, and their managers, who report less distraction and more loyalty.¹⁵³

OHIO'S FUTURE LABOR FORCE

There is a demonstrable link between high-quality early care and education programs and the preparation of qualified, skilled individuals entering the labor force. While not every early care and education program can guarantee lifelong success for its participants, quality programs can increase children's ability to enter traditional K-12 schooling ready to continue learning so that they are prepared for future opportunities.¹⁵⁴ This has been learned from decades of research dedicated to understanding the effects of early care and education on young children.

The National Academy of Sciences recently brought together a committee of experts to synthesize research on early childhood development. They agreed that "the effects of child care derive not from its use or nonuse but from the quality of the experiences it provides to young children."¹⁵⁵

For example, a national survey found that young children who attended higher quality and more stable early care and education centers had the following characteristics through elementary school, compared to peers in care settings rated as having poorer quality:¹⁵⁶

- Improved math and language ability
- Enhanced cognitive and social skills
- Fewer behavioral issues

The effects of child care derive not from its use or nonuse but from the quality of the experiences it provides to young children.

While more research will enable a better understanding of the long-term effects of high-quality early care and education for all children, current findings indicate that investments in early education have greater returns than educational investments in later life because younger people have more time to generate returns on investments and because "skill begets skill."¹⁵⁷

"Early learning begets later learning and later success."

James J. Heckman, Nobel Prize-Winning Economist, University of Chicago

Government and economic development leaders have openly discussed the need for the state to ensure that it has a skilled workforce prepared for the economic demands of tomorrow. These recent efforts are more likely to succeed if there is an understanding that quality early care and education is a critical component of that education system.

¹⁵³ K. D'Appolonia. *The Business Case for Back-Up Child Care*. PNC Financial Services Group. Presented at the 2003 WorkFamily Congress in New York, NY, October, 2003.

¹⁵⁴ J. Brooks-Gunn. "Do You Believe in Magic? What We Can Expect from Early Childhood Intervention Programs." *Social Policy Report*, 17, 1. Society for Research in Child Development, 2003.

¹⁵⁵ J. Shonkoff and D.A. Phillips, Editors. *From Neurons to Neighborhoods: The Science of Early Childhood Development*. Washington, D.C.: National Academies Press, 2000, p. 307.

¹⁵⁶ E. S. Peisner-Feinberg, M. R. Burchinal, R. M. Clifford, M. L. Culkin, C. Howes, S. L. Kagan, and N. Yazejian. "The Relation of Preschool Child-Care Quality to Children's Cognitive and Social Development Trajectories through Second Grade." *Child Development*. September/October 2001, Volume 72, Number 5, Pages 1534-1553. Quality was assessed in this study using the following criteria: classroom quality measures using the Early Childhood Environment Rating Scale (ECERS), teacher sensitivity using the Caregiver Interaction Scale (CIS), child-centered teaching style using Early Childhood Observation Form (ECOF), teacher responsiveness using Adult Involvement Scale (AIS). In addition, teacher-child relationship and child assessment measures were used.

¹⁵⁷ James J. Heckman and Aaron Wildavsky Forum. Policies to Foster Human Capital Joint Center for Poverty Research working paper, Northwestern University/University of Chicago, page 39.

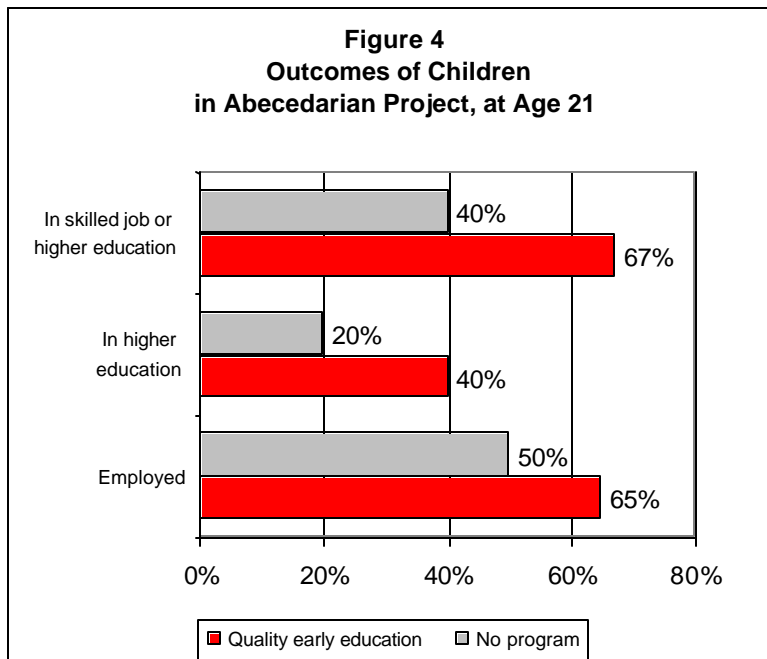
The *Third Frontier Project*, Ohio's \$6 billion, ten-year initiative to improve Ohio's knowledge base economy outlines six main strategies that must occur in order for Ohio to compete in the new economy. One of the strategies, *Workforce: Talent for Tomorrow*, states that in order to have a world-class workforce, "Every child must start school ready to learn."¹⁵⁸ However due to recent state budget constraints, Ohio has cut eligibility for early care and education assistance and increased family co-payments for low-income working families. Given the research that demonstrates that high quality early care and education increases school readiness, reducing access to these programs does not support Ohio's long-term goals for economic development.

"Every child must start school ready to learn" in order for Ohio to have a world-class workforce.
Ohio's Third Frontier Project

Locally, businesses are recognizing the importance of investing in the future workforce. For example, PNC Bank's "Grow Up Great Program" is a \$100 million dollar, ten-year commitment to improving school readiness in Ohio, Pennsylvania, Kentucky, Delaware, and New Jersey. Grow up Great is providing grants for Head Start programs in Ohio and has already invested \$50,000 in a child development research center at the University of Cincinnati. Other private foundations are committed to improving the quality of early childhood development programs to ensure that children are ready for school and ready to succeed in life. The Kellogg Foundation's S.P.A.R.K. (Supporting Partnerships to Assure Ready Kids) is a national initiative to help communities unite resources to better prepare children for school. Kellogg has committed \$4.3 million to the Sisters of Charity Foundation of Canton to develop a S.P.A.R.K Initiative in Stark County. S.P.A.R.K. will provide early education services to at least 1,000 children in urban and rural areas of Stark County and support children's transitions into schools.¹⁵⁹

AN INVESTMENT WITH A SIGNIFICANT FINANCIAL RETURN

Cost-benefit analyses of three long-term, high-quality, early education intervention programs indicate that there are significant future public savings when money is invested in high-quality early care and education, particularly for low-income children. In the Abecedarian Study, a group of low-income children was randomly assigned to an early intervention program and a second group of participants was not offered the program. At age 21, the investigators found that children who participated in the early intervention program were significantly more likely to attend college and be in a high-skilled job or in higher education (see Figure 4).¹⁶⁰



¹⁵⁸ The Ohio Third Frontier Project. *Jobs & Prosperity: Ohio's Strategy for the Third Frontier*, October, 2002.

¹⁵⁹ Interview. Joni T. Close, Director of the Quality Child Care Initiative, Sisters of Charity Foundation of Canton. The National Economic Development and Law Center, 2004.

¹⁶⁰ See The Frank Porter Graham Child Development Institute at the University of North Carolina at Chapel Hill, *Early Learning, Later Success: The Abecedarian Study*. www.fpg.unc.edu/~abc/.



In another long-term study, the Chicago CPC Study, low-income children in a high-quality, child-focused intervention program were less likely to drop out of high school, be in special education, repeat a grade, or be arrested as juveniles than peers.¹⁶¹ A third study, The High/Scope Perry Pre-School Project, found that individuals who were in the high-quality early care and education program as children earned more money, were more likely to own their own home and were less likely to have been on welfare at age 27 than their peers who were not randomly assigned to the program.¹⁶²

Decreasing the need for remedial education in the traditional school system and decreasing involvement in the criminal justice and welfare systems save public funds otherwise spent on these programs. Increased earnings by adults who attended quality early education programs translate to a larger tax base. Future savings can also be found in criminal justice costs and tangible costs to victims of crime; decreased child welfare spending associated with child abuse and neglect; and decreased health costs from smoking and other causes. Economists have analyzed the overall costs and benefits of these three early care and education programs, revealing that significant cost savings were realized in each program (see Table 1 for a summary).¹⁶³

	Number of Years of Program	Average Annual Cost per Child	Total Cost of Program per Child	Lifetime Benefit to Society per Child
Chicago CPC Study	2, half-day	\$3,500	\$7,000	\$48,000
High/Scope Perry Pre-School Project	2, half-day	\$6,000	\$12,000	\$108,000
Abecedarian Project	5, full-day	\$7,200	\$36,000	\$136,000

All dollar values are based on a three percent discount rate.

These findings indicate the economic value of investing in quality early care and education, especially for low-income children. However, children in middle- and high-income families also experience academic problems, including significant grade retention and high school dropout rates.¹⁶⁴ Nationally, 12 percent of middle-income children are held back at some point during school, and 11 percent drop out of school before graduating high school.¹⁶⁵ One study shows that there is a linear relationship between income and school readiness (see Figure 5).¹⁶⁶ A third of middle-income children and a fourth of upper-middle-income children lack “key pre-literacy skills when they enter kindergarten.”¹⁶⁷ These findings provide evidence that high quality preschool programs may be cost

¹⁶¹ A. J. Reynolds, J. A. Temple, D. L. Robertson, E. A. Mann. “Long-term effects of an early childhood intervention on educational achievement and juvenile arrest- A 15-year follow-up of low-income children in public schools.” *Journal of American Medical Association*, May 19, 2001, v. 285, no. 18, pp. 2239-2346.

¹⁶² L. J. Schweinwart, H. V. Barnes, and D. P. Weikart. *Significant benefits: The High/Scope Perry preschool study through age 27* (Monographs of the High/Scope Educational Research Foundation, 10). Ypsilanti, MI: High/Scope Press, 1993.

¹⁶³ Reynolds, Arthur J., Temple, Judy A., Robertson, Dylan L., Mann, Emily A. “Age 21 Cost-Benefit Analysis of the Title I Chicago Child-Parent Center Program: Executive Summary”, 2001, and Reynolds, A. J., Temple, J. A. Robertson, D. L., Mann, E. A. & Ou, S. “Prevention and cost-effectiveness in the Chicago Child-Parent Centers.” Paper presented at the Biennial Meeting of Society for Research in Child Development, Tampa, FL, April 2003. Values are in 1998 dollars, and benefits are based on a 3% discount rate evaluated at beginning of pre-school participation. Barnett, Steven, W. *Lives in the Balance: Age 27 benefit-cost analysis of the High/Scope Perry Preschool Program*. Ypsilanti, MI: High/Scope Press. Values are in constant dollars and based on a 3% discount rate. Leonard N. Masse and W. Steven Barnett. *A Benefit Cost Analysis of the Abecedarian Early Childhood Intervention*. New Brunswick, NJ: National Institute for Early Education Research, 2002. Values are in 2002 dollars, and are discounted at 3%.

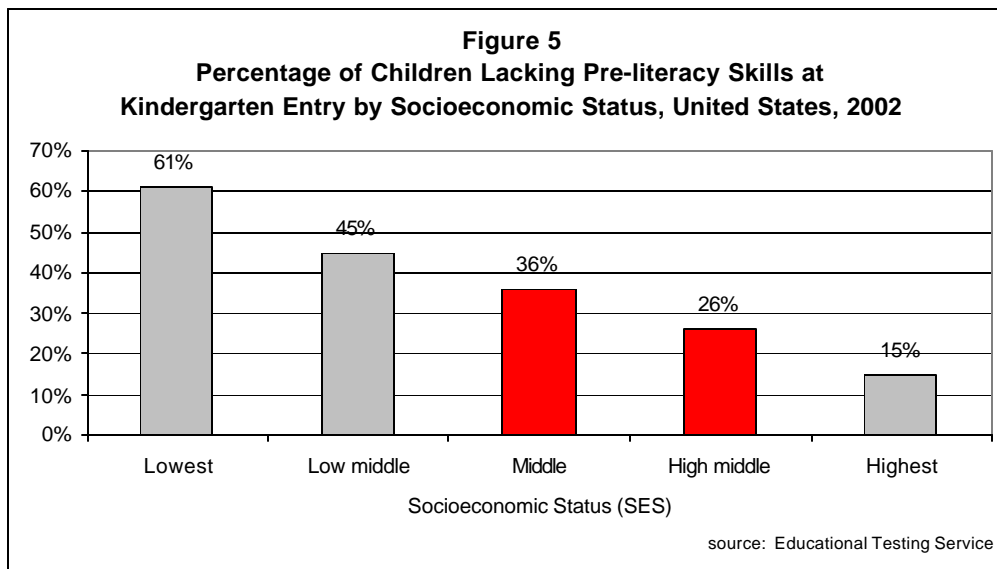
¹⁶⁴ W. S. Barnett. *Characteristics of Successful Early Education Programs*. Presentation at *The Economics of Early Childhood Development: Lessons for Economic Policy* conference, Federal Reserve Bank of Minneapolis, October 17, 2003. Information is based on the National Center for Education Statistics.

¹⁶⁵ Coley, R.J. *An Uneven Start*. Educational Testing Service, Princeton, New Jersey 2002. As cited in *Kids Can't Wait to Learn: Achieving Voluntary Preschool for All in California*, Preschool California, 2004.

¹⁶⁶ Ibid.

¹⁶⁷ Ibid.

effective for children in most income brackets. As one economist notes, “If you were to get one-tenth the public savings from high quality preschool for middle-income children (as you do for low-income children), high quality preschool programs would still be cost effective.”¹⁶⁸



After-school programs for school-age children also save public sector dollars. A review of multiple research studies to evaluate the effects of after-school programs showed significant gains in school engagement, school attendance, academic performance, and positive youth development.¹⁶⁹ A cost-benefit analysis found financial benefits from improved school performance, increased compensation, reduced juvenile and adult criminal activity, and reduced welfare costs outweighed the costs of increased attendance at school and the cost of programs.¹⁷⁰

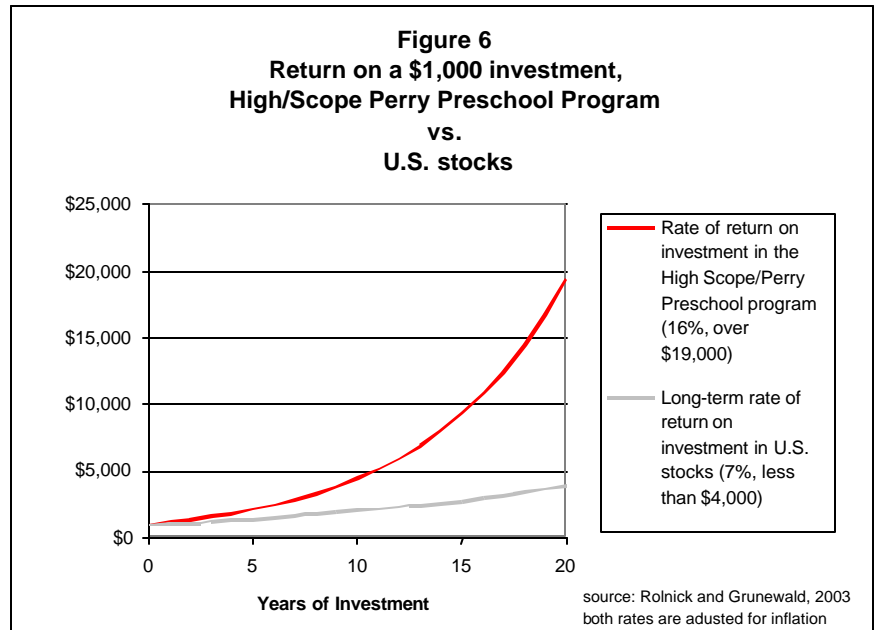
In a George Mason University study, 91 percent of Police Chiefs surveyed agreed that “If America does not make greater investments in after-school and educational child care programs to help children and youth now, we will pay more later in crime, welfare, and other costs.”¹⁷¹ Additionally, in a survey of the nation’s law enforcement leaders, 69 percent chose providing “more educational child care programs for preschool age children and after-school programs for school age youngsters” as the option with the greatest impact in reducing youth violence and crime.¹⁷² Locally, Tom Streicher, Cincinnati Chief of Police, believes that quality programs are essential in fighting crime: “When Congress fails to support child care programs, it forces police to fight crime with one hand tied behind our backs. By investing now in our most vulnerable youth, we can guarantee they never grow up to become our most wanted adults.”¹⁷³

“When Congress fails to support child care programs, it forces police to fight crime with one hand tied behind our backs. By investing now in our most vulnerable youth, we can guarantee they never grow up to become our most wanted adults.”
Tom Streicher, Cincinnati Chief of Police

¹⁶⁸ W.S. Barnet. *Preschool-for-All Hearing*, Sacramento, CA, August 4th, 2004.
¹⁶⁹ B.M. Miller. *Critical Hours: Afterschool Programs and Educational Success*.
¹⁷⁰ W.O. Brown, S.B. Frates, I.S. Rudge, and R.L.Tradewell. *The Costs and Benefits of After-school Programs: The Estimated Effects of the After School Education and Safety Program Act of 2002*. Claremont, CA: The Rose Institute, September, 2002.
¹⁷¹ Fight Crime, Invest in Kids, *Poll of Police Chiefs conducted by George Mason University Professors Stephen D. Mastrofski and Scott Keeter*. Washington, DC, November 1, 1999.
¹⁷² Mason-Dixon Polling and Research. *Ohio Law Enforcement Leadership Survey*, 2002.
¹⁷³ Fight Crime Invest in Kids. “New Report for Ohio Shows Quality Child Care Cuts Crime, Saves Money,” 2004.



A recent study by economists at the Federal Reserve Bank in Minneapolis used the High/Scope Perry Preschool Project findings to estimate returns on public investment. Quality early childhood development programs for low-income children generate a 16 percent rate of return on investment, 12 percent of which is a public rate of return.¹⁷⁴ They found that, “Most of the numerous projects and initiatives that state and local governments fund in the name of creating new private businesses and new jobs result in few public benefits. In contrast, studies find that well-focused investments in early childhood development yield high public as well as private returns.”¹⁷⁵ They demonstrate that the High/Scope Perry Preschool Program’s 16 percent return on investment when adjusted for inflation is considerably higher than the long-term return on U.S. stocks, 7 percent (see Figure 6).¹⁷⁶



“There are some areas of clear agreement between market economists and child development researchers. The time has come to invest in young children, and there are substantial gains to be made from these investments if they are made wisely.”

-Jack Shonkoff, Co-Editor of *From Neurons to Neighborhoods*¹⁷⁷

IMPLICATIONS

Early care and education, business, and economic development are linked in many ways. A healthy early care and education industry ensures that the current labor force has access to jobs and career advancement opportunities and helps businesses attract and retain the best employees and increase their productivity. Investments in high-quality early care and education programs reduce future public expenditures and help the state have a skilled and productive future workforce. In the same way that local government and the private sector collaborate to increase the availability of affordable housing and quality transportation systems in order to attract a skilled workforce, they benefit from investing together in the early care and education infrastructure. Investing in quality early care and education benefits all stakeholders:

¹⁷⁴ A. Rolnick and R. Grunewald. *Early Childhood Development: Economic Development with a High Public Return*. Fedgazette. Minneapolis, MN: Federal Reserve Bank of Minneapolis, January, 2003.

¹⁷⁵ Ibid.

¹⁷⁶ Ibid.

¹⁷⁷ J. Shonkoff. Closing remarks at *The Economics of Early Childhood Development: Lessons for Economic Policy* conference, Federal Reserve Bank of Minneapolis, October 17, 2003.

- Businesses benefit when quality, affordable, accessible early care and education options attract new skilled workers to the area
- Communities benefit when parents have access to safe, quality early care and education for their children while they work outside the home
- Taxpayers benefit when costs for criminal justice, remedial education, and welfare decline
- Children benefit because they enter the traditional K-12 school system socialized and ready to continue learning
- Ohio benefits when children are prepared to meet its demand for skilled employees in the future



SECTION FIVE

CONCLUSION AND RECOMMENDATIONS

A quality, affordable and accessible early care and education industry in Ohio plays an important role in economic development in the state.

- It generates \$1.95 billion in gross receipts annually and provides almost 57,000 jobs. This puts it on a par with other significant Ohio industries such as insurance agencies, motor vehicle manufacturing, and telecommunications.
- The industry enables parents to train and retrain to meet the state's growing demands for skilled workers and allows parents to work during non-traditional hours.
- Early care and education ensures a strong future economy for the state because children in high-quality programs are better prepared for kindergarten and more likely to become lifelong learners ready to meet the demands of Ohio's future economy.
- It saves the government money. That is because low-income children, particularly, who participate in high-quality programs at a young age have a reduced likelihood of negative outcomes, such as remedial education, crime and welfare.
- It attracts and increases retention of young professionals who want to work for companies with family-friendly policies.

Four main challenges impede the early care and education industry from growing and maximizing the impacts of investment by families, employers, and state and municipal governments:

- Minimal integration with economic development
- Insufficient financial investments
- Economic barriers to improving quality
- Financial limitations of consumers

The findings in this report can be used to educate legislators, businesses, the public, and the early care and education industry about the economic and educational importance of an affordable, quality, early care and education system in Ohio.

Once all the stakeholders recognize the link between early care and education and the economy, they can work together to ensure that:

- The early care and education industry is a vital part of the state's economic development, workforce development and overall education system.
- All children in early care and education programs in Ohio receive high quality early care and education to benefit children and the state's future economy.
- Early care and education programs are accessible and affordable to all families in Ohio who want and need them.

The following strategies are proposed to address the challenges and ensure that the early care and education industry meets Ohio's economic needs. Included are examples of specific low-

and no-cost solutions and cost-effective policies for each group of stakeholders. These strategies are suggestions, intended to spark creative solutions to the challenges that hamper the early care and education industry's growth and effectiveness.

Recommendation #1: Ensure that the early care and education industry is a vital part of the state's economic development, workforce development, and overall education system.

Business Examples

- Offer early care and education providers access to training sessions on budgeting, computer usage, and management techniques.
- Advocate to government for quality early care and education as a vital component of current and future workforce development.
- Establish partnerships with government to create innovative funding mechanisms that leverage private sector dollars, such as seed funds or low-interest loan funds for facility creation, renovation or expansion, or funding for quality enhancement or expansion.
- Engage early care and education representatives in economic development and business community planning efforts and activities, such as those of local Chambers of Commerce.
- Allocate space for early care and education facilities within business/commerce parks or in close proximity to businesses.
- Create business liaisons to serve on local early care and education boards and planning councils.
- Serve as business mentors to early care and education providers.

Government Examples

- Incorporate early care and education into economic development strategies designed to improve Ohio's education system.
- Create special incentives for businesses operating in or wishing to relocate to Ohio that provide early care and education and work/family benefits.
- Review and amend existing community planning and zoning documents to remove barriers for the early care and education industry. Provide incentives for developers to incorporate facilities for early care and education in their plans.
- Amend the WIA (Workforce Investment Act) Plan to include early care and education as an allowable/fundable activity, and include the industry in other workforce development activities.
- Provide incentives to increase business skills of early care and education providers, including establishing an Early Care and Education Business Institute, SBDC and SCORE trainings, and a business mentorship program for providers.
- Engage small business support services, such as low-interest loans and incubator projects of the U.S. Small Business Administration and state entrepreneurship programs, to work with early care and education directors and owners to increase financial sustainability of their programs.
- Incorporate early care and education information into state and local economic development materials as part of the community profile and recruiting process.



Early Care and Education Industry Examples

- Educate legislators, financial institutions, businesses, the public, and early care and education colleagues about the economic advantages of a high quality early care and education system.
- Seek opportunities for early care and education program directors and owners to serve on Chambers of Commerce, Workforce Development Boards, and Economic Development Commissions.
- Advocate for new sources of funding for early care and education quality initiatives such as funds related to or targeted at economic development and business recruitment.
- Survey and publicize business benefits, best management practices, and successful efforts that businesses have made towards creating quality, affordable early care and education, and include those in an update of the *Ohio Employer Tool Kit of Child Care Options*.
- Advocate for and take advantage of access to technical assistance, training, financing products and other resources for small businesses, such as the community-college-sponsored Small Business Centers (SBCs), and federally sponsored Small Business Administration programs, offered within the community by government and big businesses.
- Engage businesses leaders on advisory boards and planning councils.

Recommendation # 2: Ensure that all children in early care and education programs in Ohio receive high quality early care and education to benefit children and the state's future economy.

Business Examples

- Advocate for government policies, programs, and resources to improve the quality of early care and education programs.
- Invest in local initiatives that enhance the quality of care, such as Franklin County's *Champion of Children*.
- Earmark corporate charitable giving funds as investments in early care and education services and quality improvement initiatives.
- Partner with local resource and referral agencies to assist parent-employees in locating quality early care and understanding the elements and effects of quality programs.
- Provide information for all employees on how to choose and assess quality early care and education.

Government Examples

- Provide resources and incentives to improve the quality of early care and education programs by implementing a voluntary quality rating system and supporting accreditation.
- Improve the quality of the workforce by expanding the T.E.A.C.H. (Teacher Education and Compensation Helps) Early Childhood® Ohio scholarship model statewide.
- Support programs to enhance teachers wages to reduce turnover, such as implementing a Child Care Wage\$® program in Ohio. The Child Care Wage\$® project provides education-based stipends to low-paid workers.

- Increase the number of Ohio institutions of higher learning offering Early Childhood Development degree programs, and build the capacity and quality of existing Early Childhood Development programs to serve the current and incumbent early care and education workforce.
- Provide high quality, universal, voluntary access to preschool to all three- and four-year-old children and full day kindergarten for all five-year-old children in Ohio.
- Support a loan forgiveness program for early care and education providers who have graduated with a degree in early childhood development.
- Work with districts toward development of preschool programs using state and federal funds.
- Implement health and safety protections for children in the informal early care and education system.

Early Care and Education Industry Examples

- Inform parents of the elements of quality early care and education and its importance.
- Demonstrate to businesses and government that more public and private investment is needed to reap the short- and long-term benefits of quality early care and education.
- Work with business and government leaders to promote quality early care and education initiatives.
- Encourage resource and referral agencies and professional and trade organizations to expand technical assistance to providers.

Recommendation # 3: Ensure that early care and education programs are accessible and affordable for all families in Ohio who want and need them.

Business Examples

- Advocate for increased federal and state early care and education funding to ensure that employees have access to the early care and education services they need.
- Offer individual early care and education benefits to employees. Two options include reimbursements or direct payments to nearby or on-site quality establishments and/or offer pre-tax flexible spending accounts that include early care and education as an option for employees (See a section of *Ohio Employer Toolkit of Child Care Options* on page 32 for more examples).
- Initiate or participate in public/private partnerships designed to meet the early care and education needs of working families in Ohio.
- Partner with individual early care and education providers and resource and referral agencies to ensure that programs are accessible to employees' diverse schedules and work needs.

Government Examples

- Make early care and education programs a priority in the Capital Budget and the Two Year Operations Budget.



- Provide incentives for early care and education programs that operate during hours outside the traditional workday, serve children with special needs, serve children from different age groups, care for mildly ill children, and/or meet the needs of rural and migrant families in Ohio.
- Promote public and school transportation plans that address the early care and education accessibility needs of parents and children in Ohio, and recognize rural early care and education transportation barriers.
- Increase the capacity and availability of subsidized on-campus early care and education programs in Ohio's institutions of higher education.
- Increase funding for early care and education programs for Ohio's migrant workforce.

Early Care and Education Industry Examples

- Develop and participate in public and private partnerships to create funding streams for affordable, quality, early care and education programs for Ohio families who want and need them.
- Educate the public about gaps in early care and education supports for working families.
- Educate individual early care and education providers through resource and referral agencies and professional and trade organizations about the need for flexible and accessible options for parents.
- Increase use of surveys to assess the early care and education needs and preferences of businesses and their employees, including the need for part-time early care and education, and care during non-traditional work hours.

IMPLICATIONS

Given the comprehensive economic benefits of early care and education for business, government, and Ohio citizens, planning for and investing in a strong early care and education industry in Ohio should not be the responsibility of providers alone. A diverse group of stakeholders—government, business, and industry leaders – has a role in the vitality of the industry. Working and planning together, they can reach innovative solutions to the industry's challenges.

APPENDIX A

Economic Policy Institute's *Basic Family Budgets, Ohio, 1999*

Table 1
Basic Family Budgets for A One Parent, One Child, Ohio, 1999

	Monthly Expenses								Total Yearly
	Housing	Food	Child Care	Trans- portation	Health Care	Other necessities	Taxes	Total Monthly	
Akron	\$554	\$230	\$358	\$161	\$179	\$243	\$154	\$1,879	\$22,546
Canton- Masillon	\$472	\$230	\$358	\$148	\$179	\$217	\$35	\$1,640	\$19,674
Cincinnati	\$531	\$230	\$358	\$170	\$179	\$236	\$139	\$1,843	\$22,112
Cleveland- Lorain-Elryia	\$594	\$230	\$358	\$170	\$179	\$255	\$201	\$1,987	\$23,848
Columbus	\$553	\$230	\$358	\$170	\$179	\$243	\$160	\$1,893	\$22,717
Dayton- Springfield	\$542	\$230	\$358	\$161	\$179	\$239	\$142	\$1,851	\$22,214
Hamilton- Middlefield	\$566	\$230	\$358	\$148	\$179	\$247	\$156	\$1,884	\$22,606
Lima	\$448	\$230	\$358	\$158	\$179	\$210	\$21	\$1,604	\$19,247
Mansfield	\$433	\$230	\$358	\$158	\$179	\$205	\$14	\$1,577	\$18,925
Steubenville- Weirton	\$419	\$230	\$358	\$158	\$179	\$201	\$8	\$1,553	\$18,637
Toledo	\$528	\$230	\$358	\$161	\$179	\$235	\$124	\$1,815	\$21,780
Youngstown- Warren	\$439	\$230	\$358	\$161	\$179	\$207	\$18	\$1,592	\$19,100
Huntington- Ashland	\$437	\$230	\$358	\$148	\$179	\$207	\$13	\$1,572	\$18,858
Parkersburg- Marietta	\$417	\$230	\$358	\$158	\$179	\$200	\$8	\$1,550	\$18,596
Wheeling	\$419	\$230	\$358	\$158	\$179	\$201	\$8	\$1,553	\$18,637
Rural Ohio	\$428	\$230	\$358	\$197	\$179	\$204	\$30	\$1,626	\$19,513



APPENDIX B

Methodology for Calculating Gross Receipts and Direct Employment for Early Care and Education

The economic contribution of the early care and education industry is significantly undercounted in traditional economic accounting tools and alternate methodologies for collecting data are necessary.

UNIVERSE OF OHIO'S FORMAL EARLY CARE AND EDUCATION INDUSTRY

The early care and education industry includes formal programs for children from birth through age twelve:

- Child care centers licensed through the Ohio Department of Job and Family Services (ODJFS)
- Family child care homes certified through county departments of ODJFS
- Registered-only family child care homes, registered with the regional child care resource and referral agencies (CCR&Rs)
- Full- and part-time public pre-schools and latchkey programs, funded primarily by the Ohio Department of Education (ODE)¹⁷⁸
- Head Start/Early Head Start child development programs
- Early Childhood Special Education Programs, licensed by ODE
- 21st Century Community Learning Centers, after school programs funded by federal grants through ODE.¹⁷⁹

The estimates of gross receipts and direct employment represent a “snapshot” of the industry taken at a particular time. It is important to note that the estimates only capture the formal early care and education industry, because enrollment and costs are difficult to measure for the informal early care and education sector. Adding informal, legally unlicensed care would increase gross receipts and direct employment figures.

GROSS RECEIPTS

Direct service dollars include the following programs and/or funding:

- Private pay by parents who do not receive ODJFS funding for programs that take place in licensed child care centers, registered-only family child care homes, licensed private part-day pre-schools, and ODE-licensed latch-key programs.
- Federal and state funds to low-income families to subsidize the cost of early care and education distributed through ODJFS.

¹⁷⁸ Some public pre-schools in Ohio enroll children who live in families whose median income is above 185 percent. Care and education for these children is funded by parents, and not the Ohio Department of Education. There are a number of preschools that operate in public schools that do not receive grants from the Ohio Department of Education. However accurate enrollment and cost information is not available and therefore, these programs are not included in gross receipts and direct employment analysis.

¹⁷⁹ Only children ages 0 through 12 were included in enrollment, funding, and staffing estimates for these programs.

- Parental co-payments of families who receive some part of children's fees from ODJFS
- Federal and state funds for all Head Start programs, including Early Head Start
- Federal and state funds for Early Childhood Special Education
- State funding for pre-schools in public schools
- Parental payments for preschool in public schools that receive grants from ODE
- Expenditures from the United States Department of Agriculture child care food program

Gross receipts estimates for registered-only family child care homes, certified Type A family child care homes, licensed child care centers, and ODE licensed latchkey programs, are based on this calculation:

$\text{Full-time Equivalent Enrollment} \times \text{Average Cost/Child/Year} = \text{Gross Receipts}$
--

With the exception of ODE licensed latchkey programs, full-time equivalent enrollment numbers are derived from the Ohio Child Care Resource and Referral Association's (OCCRRA) database which tracks capacity and vacancy in licensed child care centers (including private school-age programs and private preschools) by children's age groups (infant, toddler, and pre-school-age child) as well as in registered-only family child care homes. Each of the 12 regional child care resource and referral agencies (CCR&Rs) across the state collects comprehensive local data on the availability and use of licensed establishments and most formal, legally unlicensed programs. The information is then pulled into a statewide database which includes all actively licensed child care centers, registered and certified family child care homes, and licensed private part-day pre-schools. Enrollment numbers were derived by subtracting reported vacancies from reported capacity in November-December 2003.¹⁸⁰ Enrollment numbers for ODE-licensed latchkey programs were generated from onsite inspections of latchkey programs where the total number of children enrolled were reported. Some latchkey programs had multiple inspections reported. In that case, an average was taken.

In order to calculate the average yearly rate for each type of care and each age group the November-December 2003 average market rate information from OCCRRA was used. For center-based early care and education programs, this was broken down by age, and by county. Because enrollment cannot be broken down by age for registered-only family child care homes, county early care and education costs for toddlers were used as a proxy for an average rate for children of all ages (see Table 1 for a range of county average rates).¹⁸¹

¹⁸⁰ Enrollment numbers for licensed child care centers and registered-only pre-schools account for extra capacity in centers and homes that provide care outside the traditional workday. Enrollment for some licensed child care centers, certified Type A family child homes, and some registered-only family child care homes was derived from OCCRRA's June 2004 survey.

¹⁸¹ Costs for toddlers were used as a proxy for a median cost in each county.



**Table 1
Statewide Average Annual Costs
For Early Care and Education Programs, 2003**

Program	Total Full-time Capacity	Total Full-time Equivalency Enrollment	Average Annual Cost
Licensed Child Care Centers			
Infant	17,591	16,825	\$6,287
Toddler	36,251	34,050	\$5,506
Pre-school	131,560	120,049	\$5,095
School-age children ¹	85,240	76,831	\$2,845
Registered-only Family Child Care Homes	16,776	10,820	\$5,271
ODE Licensed Latchkey Programs	N/A	17,300	\$3,412
Certified Family Child Care Homes ²	135,994	39,986	N/A
Public Pre-schools ³	N/A	8,649	N/A
Head Start/Early Head Start	N/A	49,897	N/A
Early Childhood Special Education	N/A	19,182	N/A
21 st Century	N/A	8,429	N/A

¹ Average annual costs for school age children is based on full-time costs for 13 weeks per year and part-time for 39 weeks.
² Enrollment for certified is *not* full-time equivalent, it is the total number of unduplicated children served by certified family child care homes.
³ The majority of revenue for pre-schools in public schools comes from the Department of Education. However, many families who live above 185 percent of the federal poverty line pay for preschool in public schools. On average, they pay \$61.00 per month for 9 months (\$549 per year).

Gross receipts for public preschools, Head Start/Early Head Start, Early Childhood Special Education programs, 21st Century programs, and the United States Department of Agriculture child care food program equal the total budget spending in state fiscal year 2003, as reported by the ODE and the U.S. Department of Health and Human Services. Lastly, gross receipts for certified family child care homes were primarily derived from SFY 2003 state and family co-payment spending, as reported by the ODJFS. Gross receipts for certified family child care homes Type A were derived from enrollment and cost data from a June 2004 OCCRA survey.

DIRECT EMPLOYMENT

Direct employment is an estimate of the total number of full-time equivalent jobs available in the early care and education industry.

The number of people working in registered-only and certified family child care homes was calculated based on enrollment using licensing requirements. All registered-only and certified family child care homes have one employee on the premises at all times. Type A certified homes were estimated to have two employees on the premises at all times. For registered-only family child care homes, extra full-time equivalent employment accruing from homes that offer extra shifts of care were also included.

For licensed child care centers, ODE-licensed latchkey programs, 21st Century Community Education Centers licensing ratios were also used, according to Table 2. These were applied to enrollment, which was estimated according to the method described above.

For public preschools and Early Childhood Special Education programs full-time employment estimates were derived from the ODE statewide database.

The Head Start/Early Head Start full-time employment estimate is based on statewide data from the Head Start Program Information Report for the 2002-2003 Program Year. Because of the number of Head Start employees who are part-time, each employee was considered .75 of a full-time equivalency. This is a conservative measure of employment in Head Start.

Table 2 Staff to Child Ratios Used to Generate Employment Estimates, By Program, Ohio					
Program	All ages	Infant	Toddler	Pre-schooler	School-age child
Licensed child care centers		1:6	1:8	1:13	1:19
ODE-licensed Latch-key Programs		N/A	N/A	N/A	1:20
Early Childhood Special Education Programs	1:8	N/A	N/A	N/A	N/A
Public Pre-schools		N/A	N/A	2:20	N/A



Appendix C

Indirect and Induced Effects of the Early Care and Education Industry

Every industry, including early care and education, is linked to the rest of the local economy through a number of avenues, reflecting the fact that establishments purchase supplies from other businesses and the industry's employees spend their earnings in part on locally produced goods and services. The linkages of the early care and education industry in Ohio can be measured using an input-output model and its associated multipliers, a methodology used by some economic development specialists. While the multiplier methodology is not without controversy, these estimates illustrate that early care and education is an important integrated component of Ohio's economy, both through its direct employment and output, and through its economic linkages.

These estimates for the impact of early care and education on indirect and induced earnings and other productivity effects are based on the application of the 2001 Ohio module of the IMPLAN Input-Output (I-O) model. Initially developed for use by the U.S. Forest Service, IMPLAN is now used in many fields. It relies on the same basic model structure and underlying economic data as the U.S. Department of Commerce Bureau of Economic Analysis Regional Impact Modeling System (RIMS).

I-O models use area-specific data on industrial and commercial activity to trace the linkages between industries. IMPLAN is based on a table of direct requirement coefficients which indicate the inputs of goods and services from various industries required to produce a dollar's worth of output in another, single industry. Standard economic "production functions"—the capital, labor and technology needed to produce a given set of goods—determine how changes in one industry's demand ultimately affect the demand for the inputs to that industry. For example, producing a ton of steel may require three workers and a particular set of equipment, which would not be required if the steel were no longer needed. Likewise, child care programs must purchase educational materials, facilities and professional staff services.

IMPLAN contains more than five hundred economic sectors, and uses economic census data to compile regional economic information. National data are adjusted for the industrial and trading patterns for the subject region. Based on this structure, IMPLAN estimates the regional economic impact that would result from a dollar change in demand of a particular industry.

The multiplier effect estimates the links between an industry and other areas of the economy. For this analysis, Type II multipliers, which exclude government spending, are used. Estimates for the impact of child care on the economy are based on three primary types of multipliers:

- Direct effects: Effects introduced into the state's economy as a result of spending on early care and education.
- Indirect effects: Effects reflecting spending by the early care and education industry.
- Induced effects: Effects on household spending by the early care and education workforce. These effects reflect changes in the state's economy caused by increases or decreases in spending patterns as a result of the direct and indirect activity.

For Ohio, the various multipliers for the child care industry are reported in Table 1.

Table 1 Child Care Industry Type II Multipliers Ohio			
	Indirect	Induced	Total Type II
Output	0.373	0.387	1.76
Value-Added	0.379	0.419	1.79
Employment	0.128	0.153	1.44
Indirect Business Taxes	1.7	2.179	3.874
Labor Income	0.313	0.353	0.666

These multipliers may be used to assess indirect and induced effects of these economic indicators. Based on a gross receipts of \$1.95 billion in the early care and education industry, \$727 million in indirect output. Gross receipts totaling \$1.95 billion also correspond to over \$754 million in induced output. In total, direct, indirect, and induced industry output for the Ohio early care and education industry totals \$3.43 billion.

Similarly, a direct employment estimate of 56,631 jobs in licensed early care and education corresponds to 7,248 indirect jobs sustained by the early care and education industry. In addition, the early care and education industry sustains 8,664 induced jobs. In total, direct, indirect, and induced employment for the Ohio early care and education industry totals 72,543 in this analysis.



Appendix D

Gross Receipts and Direct Employment Comparisons with Industries in Ohio

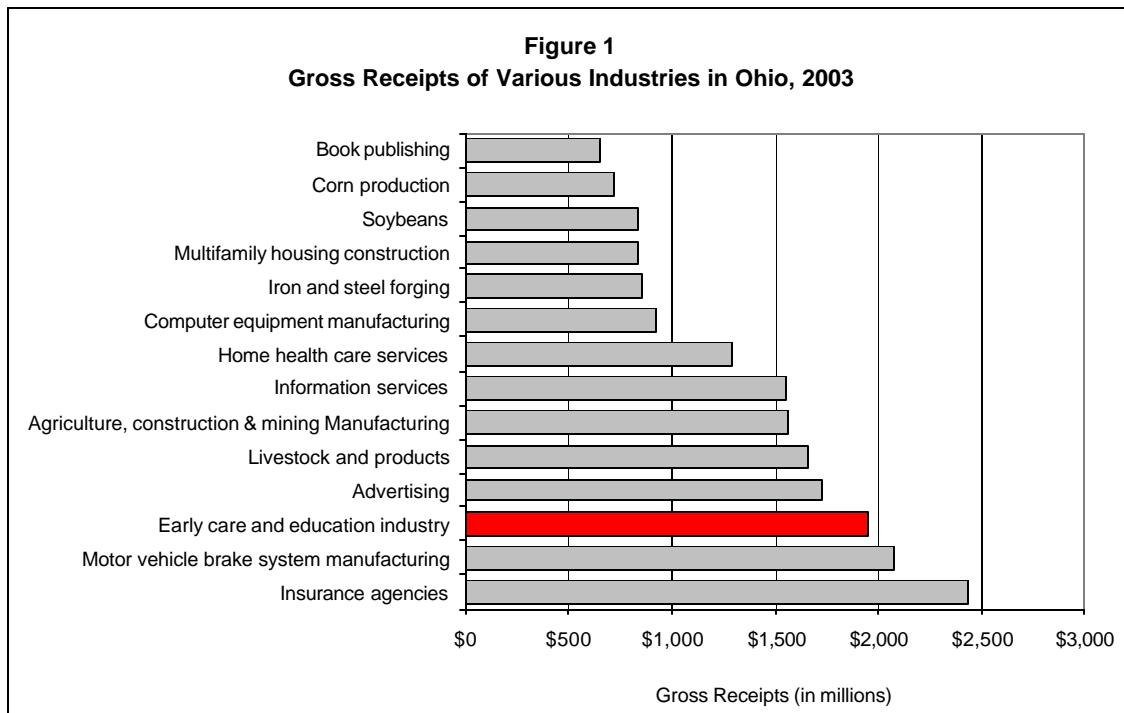


Figure 2
Employment by Industry in Ohio

