



THE ECONOMIC IMPACT OF THE EARLY CARE AND EDUCATION INDUSTRY IN FRESNO COUNTY 2007



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Fresno County Child Care & Development
Local Planning Council



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BACKGROUND

The National Economic Development and Law Center (NEDLC) is a national research and consulting organization dedicated to building economic health and opportunity in vulnerable communities. NEDLC partners with a diverse range of colleagues to develop innovative strategies and programs that result in systemic change and help people become—and remain—economically secure. NEDLC is working with states and counties across the nation to produce reports and recommendations on the economic impact of the early care and education (ECE) industry. The economic impact reports articulate ECE in economic development terms and quantify the ways in which the ECE industry is critical to the economy. In addition, the reports help to build local partnerships aimed at increasing the industry's capacity to respond to the shifting ECE needs of families.

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And of course, none of this would have been possible without the financial support of First 5 Fresno County. The vision of First 5 Fresno County is that all children 0-5 years will achieve optimal social, emotional, physical and cognitive development. Its mission is to be a catalyst for creating an accessible and effective network of quality services for young children (0-5) and their families.

The Fresno County Office of Education and the Fresno County Child Care & Development Local Planning Council appointed the Fresno County Advisory Board consisting of leaders in the fields of business, government, ECE and economic development. It was the hard work of this board that provided the vision, direction, and expertise needed for the development of this report.

Fresno County Advisory Board Members:

- **Kathy Bray**, Greater Fresno Area Chamber of Commerce, Denham Resources
- **Ginny Burdick**, Community Medical Centers
- **Linda Conde**, First 5 Fresno County
- **Mike Foley**, Valley Small Business Development Corporation
- **Charles Francis**, Fresno City College Training Institute
- **Ralph Garcia**, Economic Development Corporation serving Fresno County
- **Bernard Jimenez**, County of Fresno
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- **Pamela Lassetter**, Fresno County Workforce Investment Board
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- **Jeff Webster**, Fresno County Rural Transit Agency
- **Jim Yovino**, Fresno County Office of Education

The Fresno County Office of Education and the Fresno County Child Care & Development Local Planning Council appointed the Fresno County Technical Committee consisting of stakeholders in the early care and education industry. It was the hard work of this committee that provided data and guidance for the report's methodology.

Fresno County Technical Committee Members:

- **Linda Conde**, First 5 Fresno County
- **Andy Hernandez**, Fresno County Economic Opportunities Commission Head Start
- **Bernice Hostetter**, Fresno County Office of Education, Migrant Education Program
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- **Jane Martin**, Central Valley Children's Services Network
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- **Anita Walton**, Supportive Services, Inc.
- **Patti Williams**, Fresno County Department of Employment/CalWORKs

The Fresno County Child Care & Development Local Planning Council is a forum which supports planning and actions countywide to promote a quality child care system that meets the needs of all of the children and families of Fresno County.

Local Planning Council Membership:

- **Luis Santana**, Fresno Covenant Foundation, LPC Chairperson
- **Vong Mouanoutoua**, Law Offices of Paul C. Lo, LPC Vice Chairperson
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- **Sharon Williams**, The Learning Center, Kingsburg

For a copy of the Executive Summary of this report, please visit www.fcoe.net/lpc/reports.htm

TABLE OF CONTENTS

Section One: Introduction	1
Section Two: Linking Early Care and Education, Business and the Current Economy	6
Section Three: High-quality Early Care and Education Cultivates Fresno County’s Future Workforce	20
Section Four: Economic Profile of the Early Care and Education Industry	30
Section Five: Maximizing Benefits of Early Care and Education.....	44
Section Six: Conclusion and Recommendations	52
 Appendix A: Fresno County’s Formal Early Care and Education Industry	 57
Appendix B: The Self-Sufficiency Standard, Fresno County, 2003	58
Appendix C: Methodology for Calculating Gross Receipts and Direct Employment.....	59
Appendix D: Fresno County Investments	63
Appendix E: Child Care Licensing Requirements, State of California	66
Appendix F: Bibliography	69

Section One

Introduction

The Economic Impact of the Early Care and Education Industry in Fresno County

The Early Care and Education (ECE) industry in Fresno County encompasses a range of programs designed to nurture, support, enrich and educate children from birth through age 12, outside of traditional K-12 education. This report aims to bridge the gap between economic development planning and ECE by demonstrating that ECE is a critical component of Fresno County's current and future economy. Policymakers, business leaders, urban planners and a host of other community leaders are already discussing ways to improve the economic vitality and quality of life for families in Fresno County. Although it is an important part of the county's economy, ECE is often left out of these discussions and plans. This report shows that these nontraditional stakeholders have a vested interest in ensuring that there is a high-quality and affordable ECE system in Fresno County.

This report uses the term "Early Care and Education" or "ECE" to reflect the variety of education and care programs which parents typically access. These programs are also commonly referred to as "child care," "early childhood education programs," "after-school" and "latchkey" programs, and "out-of-school time programs."

The county's ECE programs can be broken down into three main categories: licensed family child care programs, licensed child care centers and license-exempt providers. Licensed child care centers can be either public or private and they may be for-profit or non-profit. A number of programs are operated in licensed child care centers, including: infant/toddler, preschool, school-age, and Head Start programs. They also include programs like state preschool that are funded directly by the California Department of Education—Child Development Division. License-exempt providers include before- and after-school programs for children ages 5 through 12 (e.g., 21st Century and After School Education and Safety programs) and license-exempt providers who provide care with government funding (e.g., relative care). These programs vary widely in content, organization, sponsorship, source of funding, and relationship to public school and government regulations. For a diagram depicting these programs, please see Appendix A.

The definition of high-quality ECE varies. Establishing a single definition for high-quality ECE is not a goal of this report. However, the report does highlight several studies of high-quality programs (as defined by the studies' authors) that have yielded positive long-term outcomes and have generated significantly higher economic benefits than their initial costs. ECE program quality relies on three main factors, including the quality of the teacher (e.g., experience, training and educational attainment), the quality of the facility, and the involvement of parents. Local ECE leaders note that the quality of ECE in Fresno County varies, yet no formal assessment of the quality of ECE has been done at either the county, statewide, or national level.

KEY FINDINGS FROM THIS ANALYSIS

This study captures the benefits and functions of the ECE industry in economic terms. The industry has two main functions that link the industry to the economy.

1. High-quality ECE provides safe, stimulating age-appropriate learning opportunities that support the healthy development of children so that they are ready to succeed in school and life. 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-12 classrooms.¹ For children ages five through 12, before- and after-school programs ensure children's safety while providing enriching educational activities that support the traditional school curriculum.²
2. High-quality ECE also enables parents to maintain employment and/or access education and training that lead to employment advancement. Today, the majority of children in Fresno County live in families in which all parents work. Working families with children ages birth through 12 earn \$3 billion annually in the county.³

The ECE industry serves two main purposes:

- Provides stimulating, age-appropriate learning opportunities that support healthy development so that children are ready to succeed in K-12 classrooms
- Enables parents to maintain employment and/or obtain education and training

As a result of the demand for ECE services, the industry has become a significant component of the economic infrastructure of the county and it is a driver of the economy, providing financial benefits in three main ways:

1. **Quality ECE programs ensure a strong future workforce.** Recent research on early brain development supports the conclusion that high-quality ECE for children from birth through age five is a vital service, improving children's health, school readiness and eventual economic contribution to society.⁴ The quality of early education opportunities is linked to positive outcomes in school for children in all income brackets. Some studies have shown particularly striking findings in children from low-income families.⁵ Three separate longitudinal studies of targeted, intensive intervention programs for low-income children have indicated significant and positive 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

¹ Shonkoff, J. and Phillips, D. Eds. (2000). *From Neurons to Neighborhoods: The Science of Early Childhood Development*. Washington, D.C., National Academies Press.

² National Institute on Out-of-School Time. *Making the Case: A Fact Sheet on Children and Youth in Out-of-School Time*. (2005). Center for Research on Women at Wellesley Centers for Women, Wellesley College, Wellesley, Mass.

³ U.S. Census Bureau. (2000). *Census 2000*. Retrieved from <http://factfinder.census.gov>. Updated to 2006 using the CPI.

⁴ Shonkoff, J. and Phillips, D. Eds. (2000).

⁵ Coley, R (2002). *An Uneven Start*. Educational Testing Service, Princeton, N.J.. As cited in *Kids Can't Wait to Learn: Achieving Voluntary Preschool for All in California*, Preschool California.

K-12 education, criminal justice and welfare assistance, which result in a 12 percent rate of public return on investment.⁶

2. **ECE is a critical support for the current workforce.** The ECE industry plays a significant role in enabling employers to attract and retain employees and to increase productivity by reducing employee turnover and absenteeism. Similar to transportation and housing, without accessible and affordable ECE, employees may experience barriers to working, and their employers and the economy as a whole suffer.⁷
3. **ECE is a major industry in the county in its own right.** Research presented in this report demonstrates that ECE programs generate an estimated \$201.1 million in gross receipts. This compares to other significant industries in the county. It is also a job-creating industry, employing over 8,500 full-time equivalent jobs.

As an economic driver, ECE:

- 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
- Provides a significant number of jobs and generates considerable revenue in its own right

FRESNO COUNTY'S EARLY CARE AND EDUCATION UNIVERSE

The economic analyses in this report (e.g., gross receipts and direct employment) focus on the county's formal ECE industry as defined below. The following programs are included in this report:

- Licensed child care centers (including all Head Start and CDE-CDD funded programs)
- Licensed family child care homes (large and small)
- After School Education & Safety (ASES) and 21st Century license-exempt after-school programs in public schools
- License-exempt substance abuse centers
- License-exempt child care centers in public high schools

⁶ Rolnick, A. and Grunewald, R. (2003). *Early Childhood Development: Economic Development with a High Public Return*. Fedgazette. Minneapolis, Minn., Federal Reserve Bank of Minneapolis. Analysis was based on the High/Scope Perry Preschool Project in Michigan.

⁷ Chase, R. and Shelton, E. (2001). *Child Care Use in Minnesota: Report of the 1999 Statewide Household Child Care Survey*. Wilder Research Center; Minneapolis. Almost 25 percent of parents with children from birth to age five responded that problems with child care in the last 12 months prevented them from keeping or accepting the kind of job they wanted.

- License-exempt care providers who provide care with government funding (e.g., relatives)

All of the programs in the county's formal ECE industry are either a) required by law to meet minimum health and safety standards set by the state legislature and regulated by the California Department of Social Services, through the Community Care Licensing Division, or b) legally license-exempt. All of these programs also have data that are tracked and updated regularly (see Appendix A).

Licensed Child Care Centers

A variety of center-based ECE programs are licensed by the California Department of Social Services, through the Community Care Licensing Division including:

- Private for-profit and non-profit licensed child care centers
- Head Start, Early Head Start, and Migrant Head Start programs
- Before- and after-school programs run by private providers in public school facilities
- Faith-based programs
- Employer-sponsored centers and back up care
- On-campus college child care centers
- California Department of Education, Child Development Division-funded child development programs, such as State Preschool

Native American Head Start

Native American Head Start programs are not required to be licensed by the California Department of Social Services, through the Community Care Licensing Division, though they follow guidelines similar to other Head Start programs.

Licensed Family Child Care Homes

Small family child care homes are independent small businesses that provide care for no more than eight children at one time, and large family child care homes can care for no more than 14 children at one time. Family child care homes are licensed by the California Department of Social Services, through the Community Care Licensing Division.

Subsidized Relative and In-Home Care Providers Receiving Vouchers

Relative and in-home care providers are those providers who are not required to be licensed, but have been authorized to receive government payments through parent voucher payments.

License-Exempt Providers

The following license-exempt providers are included in this report; other license-exempt before- and after-school programs are not included in the report due to a lack of accurate data:

- 21st Century programs
- After School Education and Safety programs (ASES)
- License-exempt on campus high school child care centers

Early Care and Education Providers/Programs Not Included in this Report

Care provided by friends, neighbors and relatives (e.g., nannies), who do not receive vouchers is not regulated in Fresno County and therefore there is very little data on how many of these providers there are, how much they charge and how many children they serve. We do know that there are three nanny agencies in Fresno County, and anecdotal evidence suggests that these providers care for a significant number of children in the county. In addition, more than 9,400 grandparents in Fresno County were solely responsible for the care of grandchildren under the age of 18.⁸ Although these care and education arrangements are widely used and also add much to the economy, it is difficult to ascertain their impact because of a lack of collected data.

Unregulated care providers (e.g., care provided by friends, neighbors, and relatives who do not receive vouchers) are not included in this analysis because very little data on this part of the industry is available.

Parks and Recreation license-exempt before- and after-school programs, and some license-exempt before- and after-school programs in public schools have been excluded.⁹ **By excluding these types of ECE programs, this report's findings are conservative estimates of the total impact that ECE has on the economy.**

OUTLINE OF THE REPORT

Following this introduction, section two explores the economic effects that ECE has on the current economy by enabling parents to work and update their skills. Section three analyzes the long-term economic benefits that high-quality ECE programs create. Section four highlights the direct economic effects of the ECE industry, including revenue, direct employment and government investment. Section five analyzes barriers to maximizing the benefits of the ECE industry. Lastly, section six considers future implications for Fresno County's economy.

⁸ U.S. Census Bureau. (2005a). *Fresno County, Selected Social Characteristics, 2005*. Retrieved November 3, 2006 from <http://factfinder.census.gov>

⁹ 21st Century and After-School Education and Safety Program (ASES) are included in this report. All other license-exempt before- and after-school programs that are operated in a public school have not been included in our analysis.

Section Two

Linking Early Care and Education, Business and the Current Economy

This section describes the role that Early Care and Education (ECE) plays in supporting the current workforce and driving labor force productivity.

By creating opportunities for labor force participation and promoting career development, the ECE industry plays a vital role in supporting Fresno County's overall economy. Through its support of the workforce, the ECE industry contributes to increased profitability among local businesses. The availability of ECE promotes a healthy bottom line by driving productivity, by decreasing turnover and absenteeism, increasing focus on the job, and increasing the pool of potential new employees. This section also presents a variety of cost-effective ECE strategies for employers.

SUPPORTS THE CURRENT WORKFORCE

The ECE industry plays an important role in supporting Fresno County's existing labor force. It:

- Sustains labor force participation of parents
- Promotes career development and educational advancement

Before exploring the ways in which the ECE industry is linked to the current workforce, understanding the characteristics of the county's workforce is critical. Since 1949, Fresno County has been the nation's most productive agricultural county.¹⁰ Agricultural product sales in 2005 totaled \$4.6 billion, led by sales of grapes, almonds, milk, tomatoes and cattle.¹¹ Although agriculture is still one of the dominant sectors in Fresno County, the number of workers employed in agriculture fell by more than 18 percent between 2000 and 2005.¹² Economists and policymakers have noted a shift toward knowledge-based industries such as professional services and energy development, which rely on a highly-skilled workforce and advances in technology.¹³ For example, the number of workers employed in health/social services as well as education services has increased by 19 and 21 percent, respectively.¹⁴

¹⁰ Great Valley Center. (n.d). *Fresno County*. Retrieved July 2006 from <http://www.greatvalley.org/resources/counties/fresno.aspx>

¹¹ Rural Migration News. (2006). *California Agriculture*. Retrieved July 2006 from <http://migration.ucdavis.edu/rmn>

¹² California Employment Development Department. (2006b). *Industry Employment and Labor Force—By Annual Average, March 2005 Benchmark*. Retrieved July 2006 from <http://www.labormarketinfo.edd.ca.gov/>

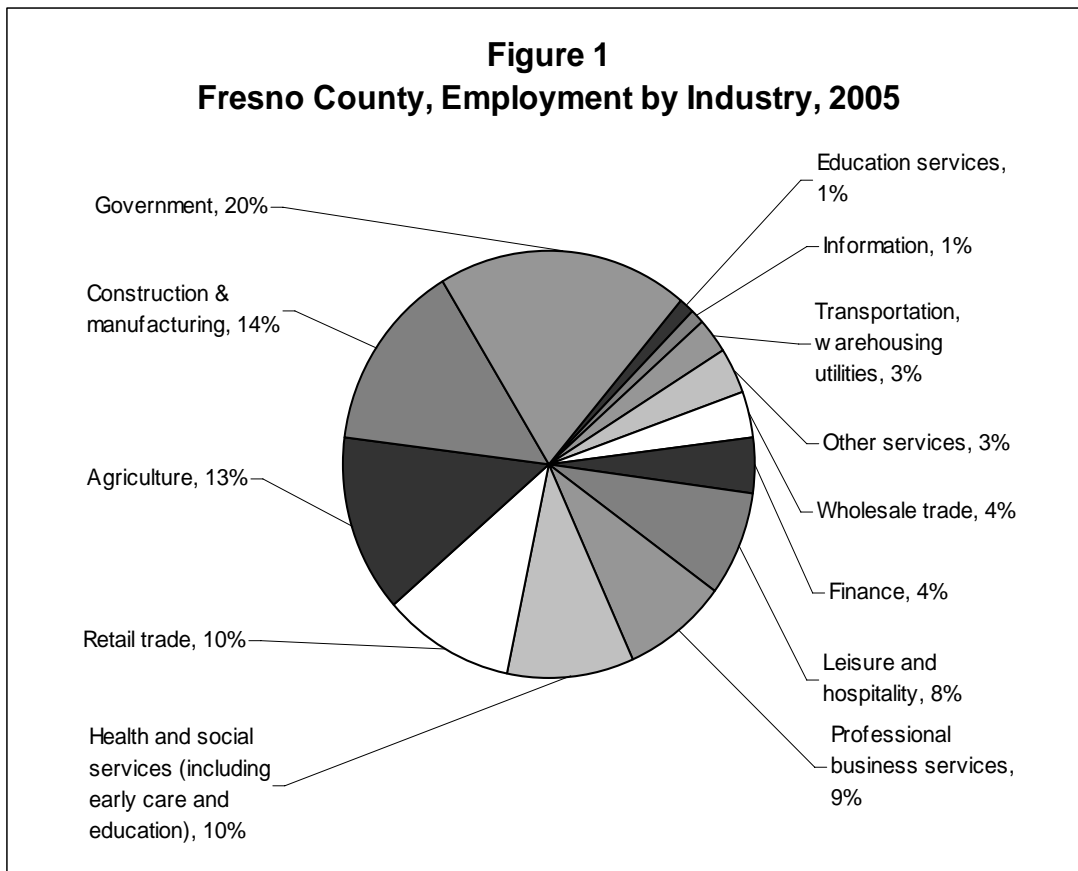
¹³ California Employment Development Department. (2006b).

¹⁴ California Employment Development Department. (2006b).

An estimated 410,000 Fresno County residents participate in the labor force.¹⁵ Similar to other counties in the Central Valley, Fresno County's economic well being is consistently challenged by high rates of unemployment. In 2005, the county's average annual unemployment rate was 9 percent, compared to 5.4 percent statewide.¹⁶ In the Central Valley, the unemployment rate varies by season.¹⁷ Unemployment tends to decrease in the spring and summer due to increased farm and construction activity.¹⁸

Implications for Early Care and Education

The seasonal nature of Fresno County's economy creates varying demands for ECE services.



Source: California Employment Development Department, 2005.

¹⁵ California Employment Development Department. (2006b).

¹⁶ California Employment Development Department. (2006a). *Fresno County Profile*.

¹⁷ Great Valley Center. (2005). *Assessing the Region Via Indicators: The Economy 1999-2004*. Retrieved July 2006 from <http://www.greatvalley.org/>

¹⁸ Great Valley Center. (2005).

Between 1990 and 2005, Fresno County's labor force grew by nearly one quarter, adding more than 80,000 people to the workforce.¹⁹ By the year 2020, the number of Fresno County residents ages 20 to 64 (the age group that makes up the majority of the labor force) is expected to be nearly 640,000, an increase of 25 percent since 2004.²⁰ Currently, the public sector employs 20 percent of the county's workforce, followed by construction and manufacturing (14 percent); agriculture (13 percent); retail trade and health and social services (each at 10 percent; see Figure 1).^{21,22}

Implications for Early Care and Education

To ensure the availability of high-quality jobs for the county's growing workforce, Fresno County must be able to attract quality employers. ECE gives working parents flexibility to build their skills, and a stronger workforce attracts quality employers that can grow the Fresno County economy.

Sustains Labor Force Participation

Most children in Fresno County live in families where all parents work. In particular, 51 percent of children ages 0 to 5 and 56 percent of children ages 6 through 12 live in households where all parents participate in the labor force (see Figure 2).²³

¹⁹ California Employment Development Department. (2006b).

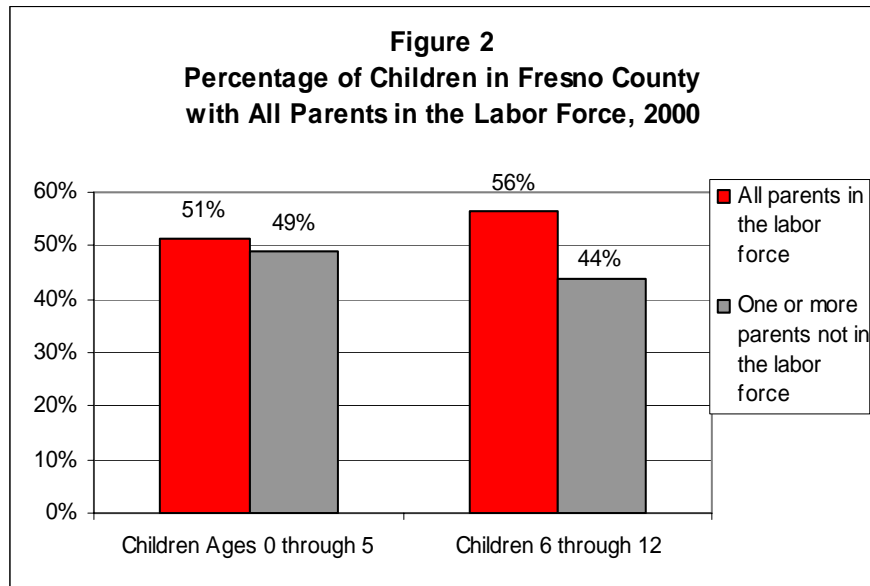
²⁰ State of California, Department of Finance. (2004c). *Population Projections by Race/Ethnicity, Gender and Age for California and Its Counties 2000-2050*. Retrieved July 2006 from <http://www.dof.ca.gov>

²¹ California Employment Development Department. (2006b).

²² The Educational Services sector comprises establishments that provide instruction and training in a wide variety of subjects. This instruction and training is provided by specialized establishments, such as schools, colleges, universities, and training centers. These establishments may be privately owned and operated for profit or not for profit, or they may be publicly owned and operated. They may also offer food and accommodation services to their students. Educational services are usually delivered by teachers or instructors that explain, tell, demonstrate, supervise, and direct learning. Instruction is imparted in diverse settings, such as educational institutions, the workplace, or the home through correspondence, television, or other means. It can be adapted to the particular needs of the students, for example sign language can replace verbal language for teaching students with hearing impairments. All industries in the sector share this commonality of process, namely, labor inputs of instructors with the requisite subject matter expertise and teaching ability.

Source: U.S. Census Bureau. (2002). *2002 NAICS Definitions*. Retrieved November 20, 2006 from <http://www.census.gov/epcd/naics02/def/NDEF61.HTM>

²³ California Employment Development Department. (2006b).



Source: U.S. Census Bureau, 2000.

Working families make up a noticeable share of the total labor force at any one time. Families with children under the age of six where parents work account for almost 8 percent of the county's labor force, and approximately 20 percent of labor force participants live in households with children under the age of thirteen where all parents work.²⁴ In total, these 80,000 families (i.e., families with children ages 12 and younger, where all parents work) earn over \$3 billion annually in Fresno County.²⁵

Implications for Early Care and Education

Working parents with children ages birth through 12 make up 20 percent of the county's labor force and earn over \$3 billion annually in Fresno County.

Not all families use formal ECE programs that are highlighted in this report. Some may arrange work schedules so that one parent is home with children. Others may place children in informal care arrangements. Furthermore, technology advances have enabled more people to work from home, expanding ECE options for families (up to 4 percent of the labor force—13,696 individuals—works from home in Fresno County).²⁶ For parents who must use ECE services, investing in ECE in Fresno County gives these parents affordable, high-quality options.

²⁴ Based on Census 2000 income for various family types with and without children. Updated to 2004 population by using provisional California Department of Finance Estimates. Updated to 2006 dollars by using the CPI.

²⁵ Census 2000 and California Department of Finance Estimates. Updated to 2006 dollars by using the CPI.

²⁶ U.S. Census Bureau. (2005b). Fresno County, California, 2005: Selected Economic Characteristics. Retrieved from <http://factfinder.census.gov>

Clearly, parents play a vital role in the economy. If ECE is not accessible or affordable, many parents may not be able to work. As a result, the quality of the labor pool suffers. Pamela Lassetter, Assistant Director of the Fresno County Workforce Investment Board, identifies the lack of early care and education opportunities as one of the major impediments to finding employment. "Parents who desire to work struggle to find low-cost and quality early care and education, so significant numbers of jobs remain unfilled."²⁷

"Parents who desire to work struggle to find low-cost and quality early care and education so jobs remain unfilled."

Pamela Lassetter, Assistant Director of the Fresno County Workforce Investment Board

The Self-Sufficiency Standard measures the amount of income needed for a family to adequately meet its needs without government assistance. An adult with two young children needs \$29,055 to meet the family's most basic needs (for more family types, please see Appendix B). While the median household income for Fresno County residents was \$35,952 in 2003, working full-time at minimum wage (\$6.75 per hour) offers an annual salary of \$14,040, less than half of the self-sufficiency wage.²⁸

Although more affordable than many regions in California, Fresno County residents are increasingly challenged by the shrinking supply of affordable housing.²⁹ As of May 2006, the median price of a home in Fresno County was \$299,500, compared to a statewide median price of \$469,000.³⁰ Although the median home price in Fresno is measurably lower than the statewide median, housing costs continue to rise, increasing nearly 11 percent since May 2005.³¹ Nearly one-half of Americans can afford to purchase a local median-priced home, but less than 20 percent of Fresno County residents can afford a median-priced home.³² However, Fresno County's affordability index is higher than the statewide average, where less than 15 percent of residents can afford to purchase a median-priced home.³³

According to the State of California, Department of Housing and Community Development, renters face the greatest affordability challenges.³⁴ Nearly 45 percent of Fresno County's households are renter households.³⁵ Fresno County's Fair Market Rent for a two-bedroom apartment was approximately \$700 in 2005, compared to the statewide average of approximately \$1,150 for a comparable unit. Despite the relatively

²⁷ Lassetter, Pam. Phone interview by Melissa Ramos 6 November 2006.

²⁸ Pearce, D. (2003).

²⁹ According to the National Low Income Housing Coalition, affordable housing represents the generally accepted standard of spending no more than 30 percent of one's income on housing.

³⁰ DataQuick Information Systems. (2006). *California Home Sale Price Medians*. Available online at <http://www.dqnews.com>.

³¹ DataQuick Information Systems (2006).

³² California Association of Realtors. (2006). *C.A.R. Reports December's Housing Affordability Index at 14 percent*. CAR defines the affordability index as the percentage of households that can afford to purchase a median-priced home. Retrieved from <http://www.car.org>

³³ California Association of Realtors. (2006).

³⁴ State of California, Department of Housing and Community Development. (2006). *California's Deepening Housing Crisis*. Retrieved from <http://www.hcd.ca.gov/hpd/hc021506.pdf>

³⁵ National Low Income Housing Coalition. (2005). *Out of Reach 2005*. Retrieved from <http://www.nlihc.org/orr2005/>

low housing costs, housing costs are still a significant burden, particularly on low-income families. In Fresno County, the Housing Wage for a two-bedroom apartment is \$13.50 per hour, double the minimum wage.³⁶

In a study of long-term employment after welfare, researchers found that two factors—job quality and the availability of ECE—determined a working mother’s ability to sustain employment after leaving welfare.³⁷ Women with access to safe and affordable center-based ECE and with access to quality jobs (positions with higher wages and affordable health insurance) were more likely to have stable employment two years after leaving welfare.³⁸

An evaluation of Early Head Start (EHS), a child development program that serves low income infants and toddlers and their families, suggests that these programs have a significant impact on improving the self-sufficiency of parents. Of EHS participants, 60 percent participated in education or job training versus 51 percent of control group and 87 percent of EHS participants were employed at some time during the first 26 months compared to 83 percent of parents in the control group.³⁹

Promotes Career Development and Educational Advancement

A shortage of highly skilled and educated workers in Fresno County undermines the county’s ability to attract new businesses with higher paying jobs and thus, impedes the county’s long-term economic prosperity. Approximately one quarter of residents do not have high school diplomas and only 20 percent have college degrees.⁴⁰ Statewide, approximately 20 percent of residents do not have high school diplomas, and approximately 29 percent have bachelor’s degrees.⁴¹ A strong ECE industry gives working parents the flexibility they need to broaden their skills and encourage their participation in the labor force. A more educated and skilled workforce builds economic prosperity by attracting employers who pay higher wages and offer greater benefits.

Accessible ECE can enable parents seeking additional training and education to attend courses. A more educated workforce benefits:

- 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 increased productivity

³⁶ National Low Income Housing Coalition. (2005). According to NLIHC, a housing wage is the amount a full-time worker must earn per hour in order to afford a Fair Market Rent apartment.

³⁷ Boushey, H. (2004). *Staying Employed After Welfare: Work Supports and Job Quality Vital to Employment Tenure and Wage Growth*. Retrieved August 30, 2006 from http://www.epinet.org/content.cfm/briefingpapers_bp128

³⁸ Boushey, H. (2004).

³⁹ Love, et al. (2004). *Making a Difference in the Lives of Infants and Toddlers and Their Families: The Impacts of Early Head Start, Volume: Final Technical Report*. Washington, DC: U.S. Department of Health and Human Services, xvii.

⁴⁰ U.S. Census Bureau. (2004). *2004 American Community Survey*. Retrieved July 2006 from <http://factfinder.census.gov>

⁴¹ U.S. Census Bureau. (2004).

Educational advancement for parents also enables them to earn higher incomes and reduces the likelihood of needing various forms of government support. In a national study investigating higher education opportunities for individuals transitioning from welfare to work, researchers found that 88 percent of welfare recipients who obtained four-year college degrees discontinued participation in welfare after earning their degree.⁴²

Higher education also decreases the likelihood of unemployment. Nationwide, while the average annual unemployment rate was 5.1 percent in 2005, unemployment rates varied according to level of education: those who did not graduate from high school (7.6 percent); those with high school diplomas (4.7 percent); those with some college or associate's degrees (3.9 percent); and those with bachelor's degrees or higher (2.3 percent).⁴³

Subsidized ECE on college and university campuses is an important element that enables parents to update their skills. Policies that enable parents (especially those with limited incomes) to pursue higher education benefit the economy. Research demonstrates that student parents who use on-campus ECE:

Subsidized on-campus ECE programs enable working parents to update their skills.

- Have higher grade point averages
- Are more likely to remain in school and graduate in fewer years
- Have higher graduation rates than their campus counterparts⁴⁴

Similarly, student parents indicate that the availability of ECE is critical to their decision to enroll in college.⁴⁵ Limited capacity in ECE programs offered during non-traditional hours prevents parents from enrolling in classes or programs that are offered outside of the traditional workday.

A number of community colleges and universities in the county have on-campus ECE programs. For example, the Fresno State Programs for Children at CSU Fresno offer the largest early education and care program within the CSU system. With four on-campus ECE sites serving nearly 200 children, the program serves as a model for high schools, community colleges, and businesses throughout Fresno County. While the children of university faculty and staff are eligible for services, priority is given to students.⁴⁶ The University recognizes the importance of accessible and quality care, which enables

⁴² Karier, T. (2003). *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 for Research on Women and Women's Institute for Housing and Economic Development.

⁴³ U.S. Department of Labor, Bureau of Labor Statistics. (2006). *Household Data Annual Averages*. Retrieved July 2006 from <http://www.bls.gov>

⁴⁴ *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 Means Parents in School Act, S1151 and H.R. 3936, 1999*.

⁴⁵ National Coalition for Campus Children's Center. (1999). Policy Brief entitled *Campus Child Care Bill: Child Care Access Means Parents in School Act, S1151 and H.R. 3936*.

⁴⁶ Students use approximately 95% of the program's spaces.

students to go to school and build their skills. Without conveniently-located and subsidized ECE, many student-parents would be forced to delay or defer enrollment at Fresno State.⁴⁷

ECE programs at local community colleges provide an additional opportunity for parents to advance their education and skills. In the Coalinga area, the West Hills Child Development Center at West Hills Community College is the only local provider of infant care. The Center is also one of the few providers to offer services to special needs children. Since there are so few ECE providers in rural areas, providing a convenient source of quality ECE enables parents, especially those who have limited access to transportation, to build their skills (personal conversation with Kathy Watts, Program Director, August 4, 2006).

The Reedley College Infant/Toddler Lab School offers high-quality and affordable ECE to more than 50 children, and it is one of the few centers in the Reedley area to provide services to infants. Most of the parents who use the center cannot afford private ECE services, so by keeping fees low, the program enables parents to work or attend classes at Reedley College. As a trusted resource serving Reedley and the surrounding communities since 1977, the center now finds itself serving multiple generations of the same families (personal conversation with Megan B. Sweeney, Site Supervisor, November 7, 2006).

Without the services provided by the Fresno City College Child Development Center, many student parents and community members would not be able to work. The majority of the Center's 82 ECE slots are used by the general community, who use the Center's traditional and Migrant Head Start Services. While the center offers a convenient source of quality care, particularly for those who have limited or no access to transportation, there are still more than 230 children on the Center's waiting list. Without the Center's services, there would be even fewer opportunities for quality ECE (personal phone conversation with Mary Ann Mateo-Laeno, Co-coordinator, August 8, 2006).

DRIVES LABOR FORCE PRODUCTIVITY

Like other components of a strong economic infrastructure, the ECE industry supports businesses by increasing employee productivity. The availability of affordable, accessible, quality ECE has positive effects on businesses' bottom lines.

Nationally and locally, businesses realize that they can increase their profitability by working to ensure that high-quality ECE options exist for their employees. For individual businesses, ECE:

- Increases employee retention
- Reduces absenteeism
- Enhances recruitment of the most skilled workers
- Increases on-the-job productivity

⁴⁷ Mathis, Catherine. Phone interview by Melissa Ramos 10 August 2006.

Increases Employee Retention

Particularly for companies that rely on highly skilled workers, retaining existing staff is a priority. Employees with young children may consider discontinuing work or moving to a more family-friendly company if they are not able to find suitable ECE solutions. Those who feel supported in their new family roles or who feel that their workplaces offer a balance between work and home obligations are less likely to leave their jobs.⁴⁸ When employees do leave because of ECE problems or transfer to a company with better ECE options, companies lose human capital and incur high turnover costs.

A national study of companies that offer onsite ECE to their employees found that turnover was nearly 50 percent lower for those who used the center when compared to other workers.⁴⁹ The survey also found that more than half of the center's users had been with their company for more than five years, and nearly half had been with their company for more than ten years.⁵⁰ Another national survey found that 19 percent of employees at companies with ECE programs indicated that they have turned down other job opportunities rather than lose work-site ECE.⁵¹

While the number of employers offering ECE benefits as a means to attract and retain quality employees grows, most employers miss out on this opportunity. In a survey of businesses by the U.S. Chamber of Commerce, only 32 percent reported actively assisting "their employees in addressing challenges such as child or dependent care, transportation or housing."⁵² Another survey of employees confirmed this disconnect between employers and employees. While caring for dependents was one of the top six benefits employees desire, employers in a similar survey did not find it essential.⁵³

A meta-analysis of 15 different turnover cost studies found that the average turnover costs for a full-time employee earning \$8 per hour are over \$9,000, 56 percent of the annual wages for that employee.⁵⁴ For salaried employees, costs are at least 150 percent of the base salary, and increase for higher-paid and more valued staff.⁵⁵

Small businesses in Fresno County are using ECE benefits as a retention tool. Denham Resources, a staffing firm with 15 employees, offers low-cost ECE benefits to its employees. While they do not have the financial resources to provide an onsite child care center, Denham Resources offers employees flexible schedules which

Locally, Denham Resources offers flexible schedules, which allows parents to spend time with their children. As a result, of this and other benefits, Denham Resources has significantly lower turnover than similar small businesses.

⁴⁸Blue Cross Blue Shield of Massachusetts. (2003). *Blue Cross Blue Shield of Massachusetts Names One of the 100 Best Companies for Working Mothers Nationwide*. Retrieved from <http://bcbsma.com>.

⁴⁹Bright Horizons Family Solutions. (2003b). *The Real Savings from Employer-sponsored Child Care: Investment Impact Study Results*. Boston, MA: Bright Horizons.

⁵⁰Bright Horizons Family Solutions. (2003b).

⁵¹Simmons College, *Benefits of Work-Site Child Care*, 1997, as cited by Bright Horizons Family Solutions.

⁵²U.S. Chamber of Commerce, Center for Workforce Preparation. (2001). *Keeping Competitive: Hiring, Training, and Retaining Qualified Workers*.

⁵³Merk. (1999). Using Benefits to Attract and Retain Employees. As cited on <http://www.probenefits.com>.

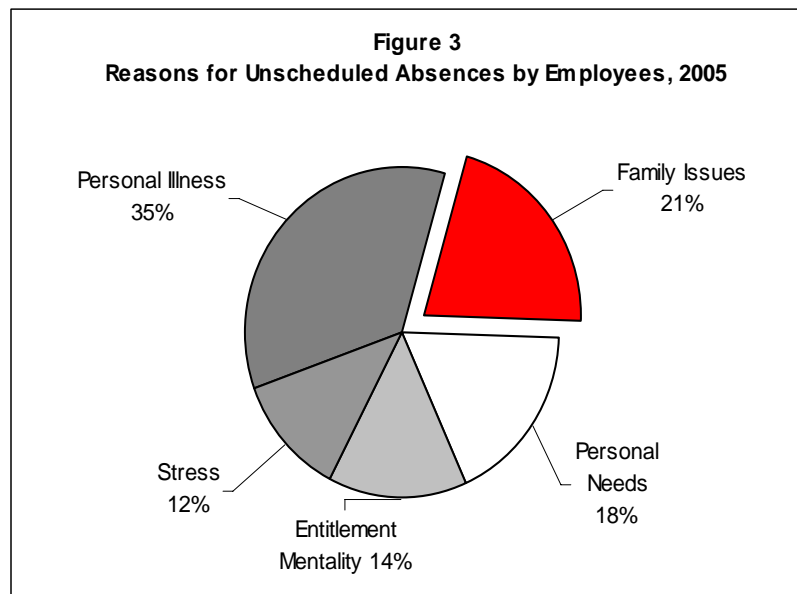
⁵⁴Sasha Corporation. (2003). *Turnover Costs in 15 Different Studies*. Retrieved from <http://www.sashacorp.com>.

⁵⁵Bliss, W. (1999). *The Business Cost and Impact of Employee Turnover*. Retrieved from <http://blissassociates.com>.

allows employees to spend time with their children (either onsite or at home). During after-school hours and school breaks, parents can bring their children to work, or they can arrange their schedules to allow them to be at home with their children. For Denham Resources, the economic benefits are clear because turnover costs for small companies are tremendous. Nationwide, the average tenure for staffing agency employees is three years, but at Denham Resources, the average tenure is 13 years. As a small business, Denham Resources has integrated flexible spending plans and work schedules into their total compensation package that can make long-term economic sense for the company and its employees.⁵⁶

Reduces Absenteeism

Nationally, unscheduled absenteeism in 2005 cost businesses an average of \$660 per employee, costing large employers up to \$1 million per year.⁵⁷ More than one-fifth of all unscheduled absences are due to family issues, which include ECE breakdowns (see Figure 3). Onsite ECE and emergency back-up ECE are among the most effective work-life programs that reduce unscheduled absenteeism.⁵⁸



Source: CCH Incorporated, 2006.

Nationwide, approximately 16 percent of major employers offer sick or emergency back-up ECE to reduce employee absenteeism.⁵⁹ These programs provide a significant return on investment. For example, J.P. Morgan Chase found that operating a back-up child care center, as well as providing employees with resource and referral consulting to help them find stable quality care, had an annual savings of \$800,000, a 112 percent return on the company's investments in ECE benefits.⁶⁰

Residents living in rural, unincorporated areas of Fresno County face challenges in accessing opportunities for education and employment. In addition, working parents who live in rural areas

Parents living in rural areas face fewer provider choices and travel farther to providers.

⁵⁶ Bray, Kathy, phone interview with Melissa Ramos 4 October 2006.

⁵⁷ CCH Incorporated. (2005). *2005 CCH Unscheduled Absence Survey*. Retrieved July 2006 from <http://www.cch.com/press/news/2005/200510121h.asp>

⁵⁸ CCH Incorporated. (2005).

⁵⁹ Hewitt Associates. (2001). *Hewitt Study Shows Work/Life Benefits Continue to Grow Despite Slowing Economy*. Retrieved from <http://www.was.hewitt.com>

⁶⁰ Bright Horizons Family Solutions. (2003c). *Return on Investment*. Presentation.

face greater challenges in finding quality ECE and this barrier impacts their ability to have stable employment. A lack of ECE options increases the likelihood that employees will miss work to care for sick children.

Fresno's California Business Furnishings offers employees an alternative to absenteeism. Although they do not have the resources to offer an onsite child care center, children (who are ill or on school break) are permitted to come to work with their parents. California Business Furnishings has designated office space where children can recuperate from illness, complete their homework, or play. Rather than missing work to attend to family needs, parents are encouraged to integrate their family lives into the office culture.⁶¹

Enhances Recruitment

The accessibility of quality, affordable ECE, onsite or in the community, is a strong recruitment tool for businesses. A knowledge-based economy depends almost exclusively on skilled workers who have numerous choices for where they want to live, and employers are beginning to realize how they can address the quality of life.⁶² Family-friendly policies indicate a company's commitment to the well-being of potential new employees and their personal lives, and make the company more attractive in a competitive workforce market. Particularly for highly specialized workers, company values are critical to attracting the best of the labor pool, with or without young children.

Nurses are among the most difficult groups of healthcare workers to recruit and retain.⁶³ These challenges are due to work-related pressures, including extended work hours, dire staffing shortages, and frequent overtime.⁶⁴ These challenges make it difficult for healthcare workers to find ECE solutions that meet their needs. According to a study by Bright Horizons Family Solutions, twenty-four percent of nurses have seriously considered leaving their jobs due to ECE issues, and nurses with young children miss an average of 9 days per year due to a child's illness, breakdowns in ECE, or mismatches between ECE and work schedules.⁶⁵ Among health care centers that offer onsite ECE, Bright Horizons Family Solutions found that voluntary turnover among child care center users reduced by nearly 90 percent, offering more than \$1 million in savings in replacement costs alone.⁶⁶

By providing high quality, onsite ECE, one local medical center has taken a proactive approach to addressing the problem of employee recruitment and retention. St. Agnes Medical Center in Fresno subsidizes onsite ECE for all medical center employees with children ages six-weeks

Given the existing nursing shortage and the fierce competition for nurses among the county's four hospitals, offering onsite child care gives St. Agnes Medical Center a distinct advantage in recruiting the best nurses.

⁶¹ Davidian, Doug, phone interview with Melissa Ramos 5 October 2006

⁶² Fresno Area Collaborative Regional Initiative. (n.d.). *About Us*. Retrieved July 2006 from <http://www.fresnocri.org/main.asp?p=15>

⁶³ Bright Horizons Family Solutions. (2003a). *The Business Impact of Employer-Sponsored Child Care in Hospitals*. Retrieved September 2006 from <http://www.brighthorizons.com/site/pages/Hospital%20Study.FINAL.pdf>

⁶⁴ Bright Horizons Family Solutions. (2003a).

⁶⁵ Bright Horizons Family Solutions. (2003a).

⁶⁶ Bright Horizons Family Solutions. (2003a).

through 12-years-old.⁶⁷ In addition to social and cognitive development, the center offers intergenerational programming where older adults and seniors regularly interact with the Center's children. To accommodate the varying schedules of health care staff, services are available during nontraditional hours.⁶⁸

Increases Productivity

Working parents who know their children are in high-quality ECE settings are better able to focus on their jobs. Employees with inadequate ECE are more likely to be late for work, absent or distracted than parents who are confident about their children's ECE arrangements.⁶⁹ Working parents often worry about their school-age children during the time period between the end of the school day and when parents get home. This effect has been named Parental After-School Stress (PASS). Parents with high levels of PASS are more likely to experience negative productivity-related patterns than parents with low PASS, including job distractions, missed work, making errors and missing meetings and deadlines. Parents are more at risk for PASS when their children spend more time unsupervised after school and their jobs are less flexible.⁷⁰

Business leaders throughout the state are realizing the tangible benefits of ECE. With a consortium of other businesses, Gap Inc. offers onsite ECE at its San Francisco headquarters. In addition to helping employees with young children address their ECE needs, onsite ECE has had a positive rate of return for Gap Inc. As Bill Tompkins, V.P. of Gap Inc.'s Total Rewards highlights:

"We have experienced quite positive returns on our investment in child care. Turnover rates for employees who use our supported child care center are significantly less than the rest of our employee population, which saves real dollars and boosts productivity," (phone conversation, May 2005).

ECE Options for Businesses of All Sizes

Businesses throughout the country are integrating Flexible Spending Accounts into their benefits packages, though the majority still does not utilize this cost effective measure to reduce ECE costs for their employees. Locally, AT&T's Flexible Spending Account program allows employees to use up to \$5,000 per year (pre-tax) for dependent care expenses, including ECE. Since telecommunications is such a rapidly changing industry, AT&T recognizes that talented and dedicated employees are the key to the company's future success, and offering competitive benefits allows employees to reach their career objectives and personal goals (personal conversation with Eric Johnson, Executive Director, Public Relations, November 7, 2006).

Two of the county's largest private employers offer their employees Flexible Spending Accounts to offset the cost of ECE. Community Medical Centers and Foster Farms, which employ 4,600 and 2,500 workers respectively, allow employees to use "pre-tax"

⁶⁷ St. Agnes Medical Center. (2006). *Child Development Center*. Retrieved September 22, 2006 from <http://www.samc.com/UMAP.asp?PageTag=Childcare>

⁶⁸ Price, Mia. Phone interview with Melissa Ramos, 4 October 2006

⁶⁹ Brown, J. (2002). *How Does High-quality Child Care Benefit Business and the Local Economy*. Seattle: Economic Policy Institute.

⁷⁰ The Community, Families & Work Program. (2004). *Parental After-School Stress Project*.

dollars on federally approved necessities such as medical expenses and ECE costs. Employees do not pay Federal, State or Social Security taxes on the money set aside or used through the Flexible Spending Accounts, so using the plans decreases an employee's taxable income and increases disposable income. In addition to attracting employees with young children, Flexible Spending Accounts allow employers to offer ECE solutions without increasing salary expenses.

The government sector in Fresno County employs 20 percent of the county's workforce. Similar to other large employers in the region, Fresno County offers a Flexible Benefits Plan to meet the ECE needs of its workers. Although Flexible Spending Accounts are offered by some of the county's largest employers—Community Medical Centers, Foster Farms, and Fresno County government—Flexible Spending Accounts can easily be scaled-down to accommodate the needs of smaller employers.

A national study by the Center for Work-Life Policy found that small business employers generally offered work-life solutions (including ECE solutions) on an informal or case by case basis.⁷¹ The lack of formal policies led to confusion and turnover among employees as well as a lack of understanding (among employers) about the cost savings and productivity gains that can be achieved through simple strategies to balance work and life.⁷²

In Fresno County, the majority (55 percent) of employees work for companies that employ fewer than 100 people.⁷³ While many companies are challenged by the rising costs of fringe benefits, small firms in particular struggle to provide benefits such as health care and ECE benefits. However, there are cost-efficient ways that

Fifty-five percent of Fresno County employers employ fewer than 100 people. Smaller employers have access to innovative strategies that will help their employees access quality ECE.

smaller employers can support the ECE needs of their employees. Smaller businesses have access to a number of innovative strategies that rely on their ability to be flexible and help employees solve ECE issues individually.⁷⁴ For example, in a 2005 survey of employers, small employers (those with less than 100 employees), were significantly more likely to offer range of benefits related to improved work flexibility than employers with more than 100 employees. For example, 66 percent small employers allow employees to return to work gradually after child birth, in comparison to just 49 percent of large employers.⁷⁵

With a small staff of 20 employees, the United Way Fresno County makes reasonable schedule accommodations to meet the needs of new parents. As long as a mother is nursing, the United Way Fresno County will allow her to bring her child into the office. In addition, employees at United Way Fresno County can use up to ten sick days per year

⁷¹ Center for Work Life Policy. (2006). *Work Life Balance in Small Business*. Retrieved September 5, 2006 from <http://www.worklifepolicy.org/documents/initiatives-smallbusiness.pdf>

⁷² Center for Work Life Policy. (2006).

⁷³ California Employment Development Department. (2006c). *Number of Employees by Size Category, 3rd Quarter 2004, by County for California*. Retrieved July 2006 from <http://www.labormarketinfo.edd.ca.gov/>

⁷⁴ Hendrickson, S. (2006). *Helping employees with child care isn't hopelessly expensive*. San Francisco Business Times.

⁷⁵ Bond, et al. (2005). *National Study of Employers*. Families and Work Institute, pp 3-5.

to care for ill family members, including children. These policies have increased loyalty among the policy's direct beneficiaries, as well as those not directly impacted.⁷⁶

To summarize, Family Friendly Options for Employers include:⁷⁷

- On- or near-site ECE
- Company-purchased spaces in local child care centers
- Back-up ECE
- Employer-contracted ECE for mildly-ill children
- Dependent care financial assistance
- Flextime, flexi-place, compressed work weeks, and job sharing
- Sick/personal leave to meet dependent care needs
- Dependent care resource and referral agency partnerships
- Cafeteria-style benefit plan or a dependent care pre-tax account
- Educational events for employees around ECE and other work-life issues

ECE benefits do not just benefit employees with children. Based on data compiled from more than 140,000 employees at various companies nationwide, 78 percent of workers feel their work environment would improve if their co-workers' ECE needs were addressed.⁷⁸

SECTION SUMMARY

Innovative ECE solutions not only meet the needs of working families, but they also support productivity and profitability among businesses. Throughout Fresno County and the State of California, employers of all sizes are implementing creative and cost-effective solutions for the ECE needs of their employees. Their efforts are rewarded with a quality workforce and a healthier bottom line. The next section explores how the ECE industry shapes the future workforce.

⁷⁶ Kriegbaum, Rich Phone interview with Melissa Ramos, 4 October 2006.

⁷⁷ United Way of the Bay Area and One Small Step. (2002). *Choosing Care: An Employers Guide to Child Care Options*.

⁷⁸ Burud, S. (2002). As cited by the United Way of the Bay Area and One Small Step in *Choosing Care: An Employers's Guide to Child Care Options*. Claremont Graduate University.

Section Three

High-Quality Early Care and Education Cultivates Fresno County's Future Workforce

In addition to strengthening the current workforce, Early Care and Education (ECE) is an essential component of the education system. It cultivates the future workforce and offers a significant public financial return.

Quality ECE lays the foundation for strong academic performance, social skills, and discipline—key elements for continued success. Recent research points to significant gains to Fresno County's K-12 system by better preparing children to start school.

Research by James Heckman confirms that a child's early years provide the foundation for a full range of human competencies including cognitive, linguistic, social and emotional.⁷⁹

According to James Heckman, "Both the mastery of skills that are essential for economic success and the development of their neural pathways follow hierarchical roles...such that later attainments build on foundations that are laid down earlier;" in other words, as he puts it, "skill begets skill."⁸⁰

Heckman's findings are further supported by Harry T. Chugani, Chief of Pediatric Neurology and Development Pediatrics at Children's Hospital of Michigan. Chugani found that at birth, only 25 percent of neural connections responsible seeing, hearing, speech production and receptive language are formed, but by the age of three, 90 percent of these connections are developed.⁸¹ These findings indicate that quality ECE is a strong predictor of successful adult outcomes.⁸²

The definition of high-quality ECE varies. Establishing a single definition for high-quality ECE is not a goal of this report. However, this section does highlight several studies of high-quality programs (as defined by the studies' authors) that have yielded positive long-term outcomes that provide a significant return on investment. These high-quality programs all utilized experienced ECE teachers with college-level education, high-quality facilities and a high level of parental involvement and education. Local ECE leaders note that the quality of ECE in Fresno County varies. Because no formal evaluation of the

⁷⁹ Heckman, James. (2006). *The Technology and Neuroscience of Skill Formation*. PowerPoint presentation for the Invest in Kids Working Group.

⁸⁰ Heckman, James. (2006).

⁸¹ Madrid, Ophelia. (2006, September 7). *Brain Network Forms Early, Research Says*. The Arizona Republic.

⁸² Heckman, James. (2006).

quality of ECE programs has been done at the county, statewide, or nationwide level, it is impossible quantify how many programs are high-quality. This section suggests that investments for increasing the quality of ECE in the county have the potential to provide significant long-term economic rewards that far exceed their initial costs. However, due to a shortage of data on local program quality, this report does not quantify the long-term benefits of existing programs.

PREPARES CHILDREN FOR SUCCESS IN SCHOOL AND BEYOND

In Fresno County, 37 percent of second grade students scored “below basic” or “far below basic” on the California Standards Test in English-Language Arts, and 27 percent of second grade students scored “below basic” or “far below basic” in mathematics.⁸³ While no ECE program can guarantee lifelong success for its participants, quality early childhood education and care can increase children’s ability to enter traditional K-12 schooling ready to continue learning, which better prepares them for future opportunities.⁸⁴ Decades of research have sought to understand the effects of ECE on young children. A number of large surveys and long-term studies have consistently found that high-quality ECE programs are beneficial to young children’s growth and development, and contribute to their success later in life. These studies have also found that quality ECE offers financial returns, surpassing the effects of traditional economic development investments.

Ralph Garcia, Director of Community Development at the Economic Development Corporation serving Fresno County, clarifies the role that ECE plays in cultivating Fresno County’s future workforce. In addition to supporting working families, investments in ECE are critical to developing a qualified future workforce. To attract the best employers—those with high wages, strong benefits packages, and opportunities for growth—Fresno County must invest in developing a workforce that is not only adequate but is also ready to compete. “The future of Fresno County’s communities depends on how we prepare the workforce, and this starts with early care and education”⁸⁵

“The future of Fresno County’s communities depends on how we prepare the workforce, and this starts with early care and education.”

Ralph Garcia, Director of Community Development, Economic Development Corporation serving Fresno County

⁸³ California Department of Education. (2005a). *California Standardized Testing and Reporting*. Retrieved November 3, 2006 from <http://dq.cde.ca.gov/dataquest/>

⁸⁴ Brooks-Gunn, J. (2003). Do You Believe in Magic? What We Can Expect from Early Childhood Intervention Programs. *Social Policy Report*. 17 (1).

⁸⁵ Garcia, Ralph. Phone interview with Melissa Ramos 4 December 2006

A national survey found that in comparison to peers in lower-quality care settings, young children who attend higher-quality and more stable ECE programs had the following characteristics through elementary school:

- Improved math and language ability
- Enhanced cognitive and social skills
- Fewer behavioral issues⁸⁶

The National Academy of Sciences 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.”⁸⁷ Schools and universities receive public and private investments because their role in educating and better preparing children for the future labor market is clear. While more research will enable a better understanding of the long-term effects of high-quality ECE 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.”⁸⁸

Government and economic development leaders have openly discussed the need for a skilled workforce prepared for the economic demands of tomorrow. More recently, they have begun to recognize that early care and education is a critical part of an educational system that will create a skilled future workforce. Fresno County needs to “cultivate, attract and retain educated talent because these highly skilled individuals are a magnet for innovative businesses and industry.”⁸⁹

According to Fresno County Superintendent of Schools Larry L. Powell, ECE helps prevent gaps in school performance. “We want every child to be performing at grade level. Children who have quality early care and education are healthier and more prepared to read and learn. They spend less time trying to play catch up.” Superintendent Powell also believes that a quality workforce starts with ECE. “It is in the best interest of business leaders to invest in early care and education because it results in a stronger workforce.”⁹⁰

“We want every child to be performing at grade level. Children who have quality early care and education enter school healthier and more prepared to read and learn.”

Larry L. Powell, Fresno County
Superintendent of Schools

⁸⁶ Peisner-Feinberg, E. S. et al. (2001). The Relation of Preschool Child-Care Quality to Children's Cognitive and Social Development Trajectories through Second Grade. *Child Development*. 72 (5): 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.

⁸⁷ Shonkoff, J. and Phillips, D.A., Eds. (2000).

⁸⁸ Heckman, J.J. and Wildavsky, A.W. (1999). *Policies to Foster Human Capital*. Joint Center for Poverty Research working paper. Chicago: Northwestern University/University of Chicago, 39.

⁸⁹ Lyles Center for Innovation and Entrepreneurship. (2006). *The Innovation Economy Agenda*. 11. Retrieved August 2006 from <http://www.lylescenter.com/>

⁹⁰ Powell, Larry L. Phone interview with Melissa Ramos 19 January 2007.

The Committee for Economic Development (CED), a national nonpartisan research and policy organization, made up of CEOs and University presidents, highlights the need for an inclusive education system. They urged the nation:

...”to view education as an investment, not an expense, and to develop a comprehensive and coordinated strategy of human investment. Such a strategy should redefine education as a process that begins at birth and encompasses all aspects of children’s early development, including their physical, social, emotional, and cognitive growth.”⁹¹

Other business leaders also recognize the link between high-quality ECE and a strong future economy. James E. Rohr, Chairman and CEO of PNC Financial Services Group has spoken widely about the return on investment from quality preschool, “The day-to-day reality of succeeding in an increasingly competitive marketplace demands skilled and educated workers. Investing in the academic success of our children directly contributes to the overall economic health of our nation.”⁹²

HIGH-QUALITY EARLY CARE AND EDUCATION’S SIGNIFICANT PUBLIC RETURN

There are no long-term studies conducted with the children of Fresno County, but there are three long-term studies from other parts of the country that provide evidence of the long-term benefits of quality ECE in Fresno County.

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 ECE, particularly for low-income children. In the three studies discussed below, common quality elements include qualified staff comprised of teachers with specific training in early education, low teacher turnover rates, and classrooms with low child-to-teacher ratios.⁹³

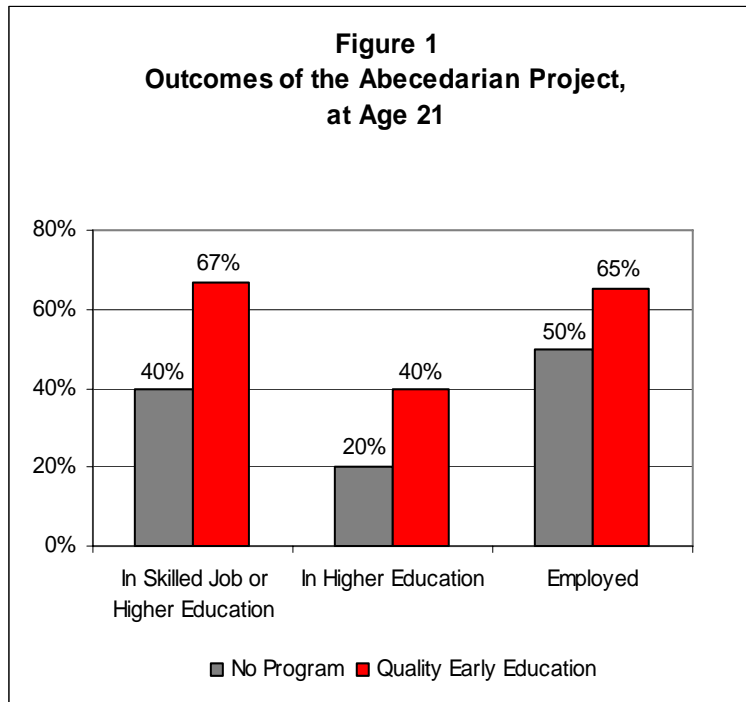
In the Abecedarian Study, a group of low-income children was randomly assigned to an early intervention program and a second group of participants was not offered the program. The investigators found that children who participated in the early intervention program were, at age 21, significantly more likely to be in a high-skilled job or in higher education (see Figure 1).⁹⁴

⁹¹ Committee for Economic Development. (2004). As cited from *Exceptional Returns* by the Economic Policy Institute.

⁹² As quoted in Committee for Economic Development. (2006). *The Economic Promise of Investing in High-Quality Preschool*. Retrieved August 22, 2006 from http://www.ced.org/docs/report/report_prek_econpromise.pdf

⁹³ While experts differ on the precise definition of what constitutes “high-quality” early care and education programs, there is general agreement that programs with these three elements qualify.

⁹⁴ See The Frank Porter Graham Child Development Institute at the University of North Carolina at Chapel Hill, *Early Learning, Later Success: The Abecedarian Study*. Available online at <http://www.fpg.unc.edu/~abc/>



Source: The Frank Porter Graham Child Development Institute

In the Chicago Child Parent Center (CPC) Study, low-income children in a high-quality, child-focused intervention program were less likely than their peers to drop out of high school, be in special education, repeat a grade, or be arrested as juveniles.⁹⁵ In particular, the Chicago CPC study found that children who did not participate in the program were 70 percent more likely to be arrested for a violent crime by the age of 18.⁹⁶ The High/Scope Perry Preschool Project compared adults at age 40 who received high-quality ECE as young children with peers who did not. The study found that the group who received early childhood education instruction earned more money, were more likely to have a savings account, and were less likely to be repeat criminal offenders than their peers who were not randomly assigned to the program. Cost-benefit analyses of these differences reveal that the high-quality programs returned as much as \$17 for every \$1 spent in early childhood.⁹⁷

Economists have analyzed the overall costs and benefits of these three ECE programs, revealing significant returns on investment in each program (see Table 1 for summary).⁹⁸

⁹⁵ Reynolds, A.J. et al. (2001). 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*. 285 (18): 2239-2346.

⁹⁶ Fight Crime: Invest in Kids California. (2006). *Paying the Price for the High Cost of Preschool in California*. Retrieved from <http://www.fightcrime.org/ca>

⁹⁷ Schweinwart, L.J. et al. (1993). *Significant Benefits: The High/Scope Perry Preschool Study Through Age 27*. Monographs of the High/Scope Educational Research Foundation. Ypsilanti, MI: High/Scope Press, 10.

⁹⁸ Source: Reynolds, A.J. and Temple, J.A. (2006). *Economic Returns of Investments in Preschool Education: A Vision for Universal Preschool Education*. The Chicago CPC and the Perry Preschool Project were both half-day programs. The Abecedarian was a full-day project.

Table 1 Summary of Costs and Benefits per Participant in 2002 Dollars for Three Early Care and Education Programs				
	Number of Years Child is in Program	Average Annual Cost Per Child	Total Cost of Program Per Child	Lifetime Benefit to Society Per Child
Chicago CPC Study	2	\$4,856	\$7,384	\$74,981
Perry Preschool Project	2	\$9,759	\$15,844	\$138,486
Abecedarian Project	5	\$13,900	\$35,864	\$135,546

Source: Reynolds, A.J. and Temple, J.A., 2006.

Benefits for Children at All Income Levels

These findings demonstrate the economic value of investing in quality ECE, 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. Nationally, 12 percent of middle-income children are held back at some point during school, and 11 percent drop out before graduating high school.⁹⁹ A third of middle-income children and a fourth of upper-middle-income children lack “key pre-literacy skills” when they enter kindergarten.¹⁰⁰ These findings provide evidence that high-quality ECE programs may be cost-effective for children across most income brackets. As economist W.S. Barnett noted, “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.”¹⁰¹

High-Quality Early Care and Education for Fresno’s Diverse Populations

Studies indicate that rates of enrollment and the quality of center-based ECE vary by ethnicity.¹⁰² Evidence suggests that increases in Latino and African American enrollment in high-quality preschool has the potential to decrease existing school readiness gaps.¹⁰³ Currently, nearly 38 percent of kindergarten students in Fresno County public schools are English language learners.¹⁰⁴ The vast majority of these English language learning students speak Spanish (80 percent), but students who speak Hmong, Punjabi and Khmer also represent considerable numbers of English language learners.¹⁰⁵

⁹⁹ Coley, R. J. (2002). *An Uneven Start*. Princeton, New Jersey: Educational Testing Service. As cited in *Kids Can’t Wait to Learn: Achieving Voluntary Preschool for All in California*, Preschool California 2004.

¹⁰⁰ Coley, R.J. (2002).

¹⁰¹ Barnett, W.S. (2004, August 4). Preschool-for-all Hearing, Sacramento, CA.

¹⁰² Magnuson, K.A. and J. Waldfogel. (2005). Early Childhood Care and Education: Effects on Ethnic and Racial Gaps in School Readiness. *Future of Children*. 15(1): 169-196. Although African American children are more likely than white children to attend preschool, they may experience lower-quality care. Latino children are less likely than whites to attend preschool. However, African American and Latino children are more likely than whites to attend Head Start.

¹⁰³ Magnuson, K.A. and J. Waldfogel. (2005).

¹⁰⁴ California Department of Education, (2005d). *Number of English Learners by Language*. Available online at <http://data1.cde.ca.gov/dataquest/>

¹⁰⁵ California Department of Education, (2005d).

Continued success in school varies by race and ethnicity. Disparities in academic achievement become clear in looking at the 2005 results for the California High School Exit Exam. While 76 percent of white students passed the math section of the exam, only 46 percent of Hispanic/Latino students and 40 percent of Black/African American students passed the math section.¹⁰⁶ Even if these students had fulfilled their course requirements, the inability to pass the California High School Exit Exam prevented them from receiving their high school diplomas, further challenging their future economic prospects. Evidence suggests that high-quality and culturally appropriate ECE programs can help close the achievement gap.¹⁰⁷

Returns on Public Investment

A study by economists at the Federal Reserve Bank in Minneapolis used the High/Scope Perry Preschool Project findings to estimate the returns on public investment from reduced spending and increased tax payments resulting from quality ECE. 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.¹⁰⁸ Researchers 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.”¹⁰⁹ 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 2).¹¹⁰

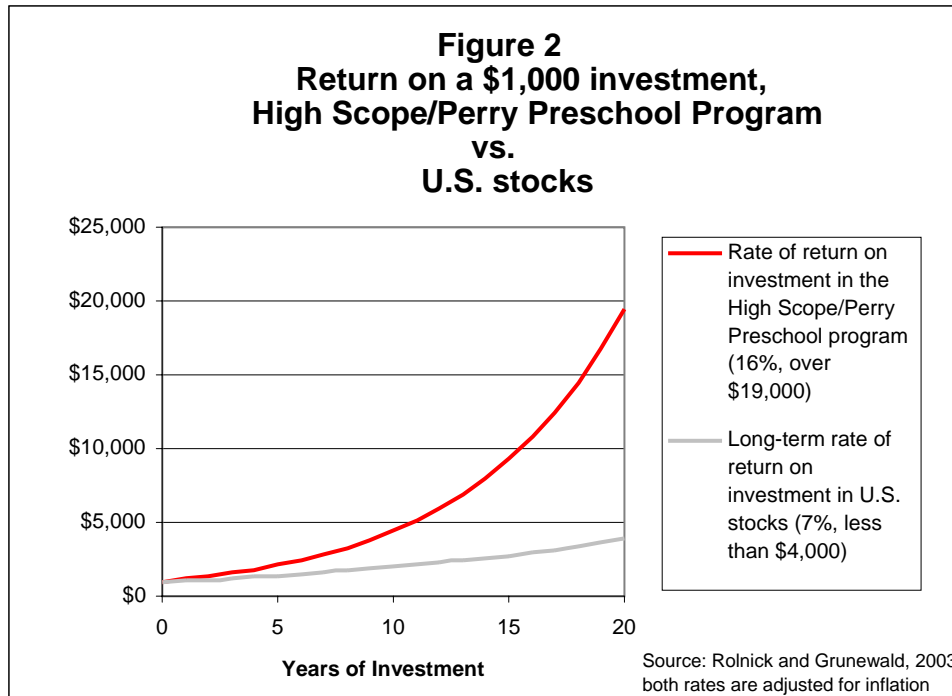
¹⁰⁶ California Department of Education, (2005b) *California High School Exit Exam Results by Gender and Ethnic Designation*. Available online at <http://data1.cde.ca.gov/dataquest/>

¹⁰⁷ The Woodrow Wilson School of Public and International Affairs at Princeton University and The Brookings Institution. (2005). *The Future of Children; School Readiness: Closing Racial and Ethnic Gaps*. 15 (1).

¹⁰⁸ Rolnick, A and Grunewald, R. (2003). Early Childhood Development: Economic Development with a High Public Return. *Fedgazette*. Minneapolis, MN: Federal Reserve Bank of Minneapolis.

¹⁰⁹ Rolnick, A and Grunewald, R. (2003).

¹¹⁰ Rolnick, A and Grunewald, R. (2003).



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 to school engagement, school attendance, academic performance and positive youth development.¹¹¹ A cost-benefit analysis found that financial benefits from improved school performance, increased compensation, reduced juvenile and adult criminal activity, and reduced welfare costs outweighed the cost of programs.¹¹²

Quality of life is affected by after-school programs as well. At least 50 percent of youth crime occurs in the hours after school.¹¹³ A study of eighth graders found that children caring for themselves for 11 hours or more per week were twice as likely to smoke cigarettes, drink alcohol or use drugs.¹¹⁴ Risk behaviors during adolescence predict a future of increased criminal behavior and health problems in adulthood.

“Education is less expensive than incarceration. The earlier our children are engaged in appropriate services, the more likely they will avoid criminal activity and incarceration.”

Margaret Mims, Fresno County Sheriff

In a George Mason University study, 91 percent of police chiefs surveyed nationwide 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.”¹¹⁵

¹¹¹ Rolnick, A and Grunewald, R. (2003).

¹¹² Brown, W.O. et al. (2002). *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.

¹¹³ U.S. Department of Justice (1997) as cited by the Massachusetts Executive Office of Public Safety. *Cops & Kids Fact Sheet*, 2000.

¹¹⁴ D. A. Farbman. (2003). *The Forgotten Eighty Percent: The Case for Making the Most out of Children's Time out of School*, Boston.

¹¹⁵ Fight Crime, Invest in Kids. (1999). *Poll of Police Chiefs conducted by George Mason University Professors Stephen D. Mastrofski and Scott Keeter*.

As the Committee for Economic Development states, “Money invested today in high-quality, early education will help children develop the social, emotional, and academic foundations that will serve them throughout life.”¹¹⁶

Long-term Outcomes

In a study exploring the effectiveness of Early Head Start in meeting the needs of low-income families, researchers at the U.S. Department of Health and Human Services found that Early Head Start “dramatically increased the percentage of children who were in good quality care,” and evidence suggests that quality center-based care is associated with positive developmental outcomes.¹¹⁷ Furthermore, an evaluation of Early Head Start by the U.S. Department of Health and Human Services indicates that Early Head Start significantly and positively impacted infant and toddlers by:

- Increasing cognitive development and reducing the number of children at-risk for developmental delays
- Improving language development
- Strengthening parenting skills of participants¹¹⁸

There are significant long-term cost-savings associated with the outcomes achieved by Early Head Start programs, but long-term research is needed to quantify the exact cost-benefit ratio from investing in Early Head Start.

According to Janet L. Yellen, President and CEO, Federal Reserve Bank of San Francisco, “...skill acquisition is a cumulative process that works most effectively when a solid foundation has been provided in early childhood. As such, programs to support early childhood development...not only appear to have substantial payoffs early but also are likely to continue paying off throughout the life cycle.”¹¹⁹

In 2005, the RAND Corporation, a nonprofit research organization, analyzed the costs and benefits of a universally accessible preschool program in California. Using a very conservative methodology, they found that universal preschool, if implemented throughout California, would generate a return on investment of \$2.62 for every dollar spent.¹²⁰ Among the report’s conclusions, RAND found that universal preschool would lead to a 19 percent reduction in juvenile crime and significant reductions in the number

¹¹⁶ Committee for Economic Development. (2006). *The Economic Promise of Investing in High-quality Preschool*. Retrieved August 2006 from http://www.ced.org/docs/report/report_prek_econpromise.pdf

¹¹⁷ Love, et al. (2004). *The Role of Early Head Start in Addressing the Child Care Needs of Low-Income Families with Infants and Toddlers: Influences on Child Care Use and Quality*. Washington, DC: U.S. Department of Health and Human Services, xvii.

¹¹⁸ Love, et al. (2004). *Making a Difference in the Lives of Infants and Toddlers and Their Families: The Impacts of Early Head Start, Volume: Final Technical Report*. Washington, DC: U.S. Department of Health and Human Services, xvi-xvii.

¹¹⁹ Federal Reserve Bank of San Francisco. (2006). *Economic Inequality in the United States*. Retrieved from <http://frbsf.org/news/speeches/2006/1106.html>

¹²⁰ RAND Corporation. (2005). *Labor and Population: The Economics of Investing in Universal Preschool Education in California*. Retrieved from <http://www.rand.org>

of children who were abused and neglected.¹²¹ RAND highlighted that this investment provides a higher return than other investments made by local and state governments in the name of economic development. According to RAND,

Notably, in the case of early childhood investments, the net gains to government and society as a whole are not zero sum but constitute real benefits in terms of lower government outlays, a more skilled future workforce, and a more responsible citizenry. Moreover, these conclusions rest on scientific evidence that these outcomes are attributable to the investment in preschool education itself and would not occur under the status quo.¹²²

The RAND study also highlights the indirect benefits that a universal preschool program would have on California's economy through enhanced quality of life, increased labor force participation, and reduced productivity drags, such as turnover and absenteeism.¹²³

SECTION SUMMARY

ECE and Fresno County's future economic success are critically linked in many ways. Investments in building and maintaining a high-quality ECE system reduces future public expenditures and helps Fresno County develop a skilled, productive and competitive workforce. In the same way that local government and the private sector collaborate to increase the availability of affordable housing and quality transportation systems, they mutually benefit from investing together in an ECE system as it too is vital to the county's economic development. Investing in quality ECE becomes a catalyst for Fresno County's economic success:

- Taxpayers benefit when costs for criminal justice, remedial education, unemployment and welfare decline as a result of high-quality ECE
- Communities benefit when high-quality ECE enhance quality of life by improving outcomes for youth
- Children benefit because they enter the K-12 school system socially, emotionally and academically prepared to continue learning
- Businesses benefit from the cultivation of the county's future workforce. Quality ECE improves the skills and well-being of young children, so they are better prepared for employment

¹²¹ Fight Crime: Invest in Kids California. (2005). *Paying the Price for the High Cost of Preschool in California*. Retrieved from <http://www.fightcrime.org/ca>

¹²² RAND Corporation. (2005).

¹²³ RAND Corporation. (2005).

Section Four

Economic Profile of the Early Care and Education Industry

The early care and education (ECE) industry includes a range of programs that serve children ages birth through age 12, outside kindergarten through twelfth grade (K-12) education. This section highlights the direct economic benefits that the ECE industry generates for Fresno's economy. To assess these economic characteristics, this section quantifies:

- The size and characteristics of the ECE market
 - ❖ Supply
 - ❖ Need
 - ❖ Demand
 - ❖ Fresno County's Children
 - ❖ ECE and the Family Budget
- The size of the industry, as reflected in output or gross receipts
- The total full-time equivalent employment of the industry
- The total public investment in ECE

THE EARLY CARE AND EDUCATION MARKET

Supply

With a total of 25,000 spaces, these programs serve Fresno County's children with part-time and full-time ECE programs.¹²⁴ There are 1,325 licensed ECE programs in Fresno County, including:

- 851 small licensed family child care homes
- 182 large licensed family child care homes
- 292 licensed child care centers

Additionally, there are over 3,354 license-exempt in-home and relative providers receiving vouchers in Fresno County, and these providers serve more than 8,600 children.¹²⁵

¹²⁴ Source for number of spaces is California Child Care Resource & Referral Network, *The 2005 California Child Care Portfolio*. Available online at <http://www.rnnetwork.org/rnnet/uploads/1134426532.pdf> and enrollment data provided by Children's Services Network, Fresno County Office of Education Child Care & Development Local Planning Council, Fresno County Economic Opportunities Commission, Head Start, and PACE Alternative Payment Program. The number of children served is greater than the number of spaces because programs may serve different children in the morning and in the afternoon.

¹²⁵ Data provided by PACE Alternative Payment Program.

Need

In Fresno County, there are nearly 130,000 children ages 0 to 13 with all parents in the labor force, but there are only 25,000 licensed ECE spaces.¹²⁶ Licensed ECE is available for approximately 19 percent of children with all parents in the labor force.^{127,128} Statewide, licensed ECE is available for approximately 20 percent of the 4.9 million children with all parents in the labor force.^{129,130}

Demand

Demand for the industry relies on these key factors:¹³¹

- **Need:** Given the high labor force participation rates of parents in the county, the need for some form of ECE to enable parents to work and obtain training and education is strong.
- **Quality:** Parental demand for quality increases as more parents understand the importance of quality early education opportunities and how to identify quality programs.
- **Affordability:** Demographic and economic trends indicate that more families will be challenged by affording the programs they desire for their children as wages rise more slowly than the cost of living in the county.
- **Accessibility:** Location, hours of operation and transitions between part-day programs all affect a parent's ability to use programs.

These four factors are interrelated, thus making it difficult to quantify market demand from an economic standpoint. In the book *Child Care Quality*, Deborah Vendell and Barbara Wolfe note that there are two other reasons for why the ECE industry cannot meet the demand for quality ECE on its own. One, parents lack accurate information about quality ECE. Two, the benefits of quality ECE “accrue not just to the parents and to the child but to society in general.” However, the market does not recognize these external benefits, and parents are primarily responsible for the cost.¹³² Fresno County does not currently have a quality rating system for ECE providers, which limits the ability of parents to identify high-quality programs for their children.

¹²⁶ U.S. Census Bureau. (2000). Census 2000. Retrieved from www.factfinder.census.gov and California Child Care Resource & Referral Network (2005). *The 2005 California Child Care Portfolio*. Available online at <http://www.rnnetwork.org/rnnet/uploads/1134426532.pdf>

¹²⁷ U.S. Census Bureau. (2000).

¹²⁸ California Child Care Resource & Referral Network. (2005).

¹²⁹ U.S. Census Bureau. (2000).

¹³⁰ California Child Care Resource & Referral Network. (2005).

¹³¹ Smith, E. (2004). *Understanding Child Care Supply and Demand in the Community*, Columbia, Md., The Enterprise Foundation.

¹³² Vandell, D. and Wolfe, B. (2003). *Child Care Quality: Does it Matter and Does it Need to Be Improved?* As cited in J. Lombardi. *Time To Care: Redesigning Child Care to Promote Education, Support Families, and Build Communities*.

A 2006 survey of licensed ECE providers by Children's Services Network, the county's resource and referral agency, indicates that while the industry only has the capacity to meet a fraction of the number of children who need care, there still are some spaces that remain unfilled. For example, full-time equivalent enrollment in family child care homes utilizes 62 percent of the licensed spaces. However, the majority of family child care providers do not choose to serve as many children as they are licensed for, which means that in reality there are not as many empty spaces for children as the data may imply. Secondly, the licensed capacity for infants, toddlers and preschoolers in center-based programs operates at a high degree of utilization. Full-time equivalent enrollment accounts for approximately 87 percent of licensed capacity for these two age groups. However, full-time equivalent enrollment only utilizes half of the capacity for school age programs, because the majority of the enrollment for this age group is part-time.¹³³

Fresno County's ECE system is heavily utilized. Furthermore, unfilled spaces in Fresno County may be out of reach for many families because of cost, location, transportation or availability during nontraditional hours.

While individual ECE spaces may remain unfilled, they may not be accessible to many families due to struggles with cost, location, transportation, or availability during nontraditional hours. In addition, not all parents choose licensed ECE services. While many children are placed in the care of relatives, family friends, or other unlicensed care providers, the lack of licensed ECE points to a critical shortage in ECE services.

In Fresno County's ECE centers, preschool spaces represent nearly three-quarters of all ECE center spaces and infant spaces represent just six percent of all child care center spaces.¹³⁴ However, the California Child Care Resource & Referral Network notes that parental requests for information about infant care represent one-third of all information requests.¹³⁵ While there is already a shortage of ECE services for infants, demographers estimate that births in Fresno County will increase by 17 percent between 2004 and 2014, further straining service provision.¹³⁶

Fresno County's Children

ECE programs serve children ages from birth through age 12. To further define the needs of these children, ECE advocates generally use the following subcategories: infant/toddler (ages 0 through 2); preschool-age (ages 3 through 4); and school-age (ages 5 through 12). In 2004, there were over 200,000 children from birth through age 12 in Fresno County, representing approximately 23 percent of the county's population (see Figure 1).¹³⁷

¹³³ Children's Services Network. (2006). *Survey of Licensed Child Care Providers*.

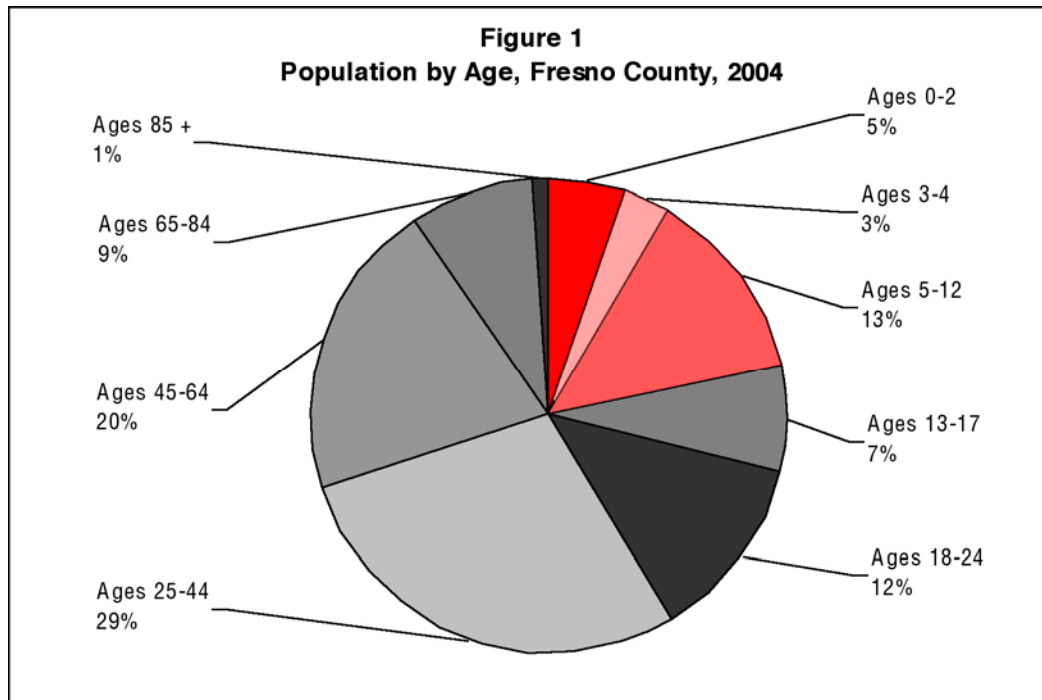
¹³⁴ California Child Care Resource & Referral Network, (2005).

¹³⁵ California Child Care Resource & Referral Network, (2005).

¹³⁶ State of California, Department of Finance, Demographic Research Unit. (2004b). *Historical and Projected Births By County, 1970-2014*. Retrieved August 2006 from <http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/ReportsPapers.asp>

¹³⁷ State of California, Department of Finance. (2004a). *Estimated Race/Ethnic Population with Age and Sex Detail, 2000-2004*. Retrieved from <http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/ReportsPapers.asp>

By 2020, Fresno County's overall population is projected to grow to nearly 1,115,000 residents, a 25 percent increase.¹³⁸ Over the same period, the population of children who are served by ECE programs is projected to grow to 250,000 an increase of 50,000 children or 25 percent.¹³⁹ To accommodate this growth, Fresno County will need to create opportunities for affordable, quality ECE. To serve just one-third of these children, Fresno County would have to add 1,111 ECE spaces per year for the next 15 years, or three spaces per day.



Source: State of California, Department of Finance, 2004.

Implications for Early Care and Education

The projected population increases will strain existing ECE services in Fresno County. To meet the ECE of just one-third of all projected children from 2005 to 2020, Fresno County will have to add 3 spaces per day over the next 15 years.

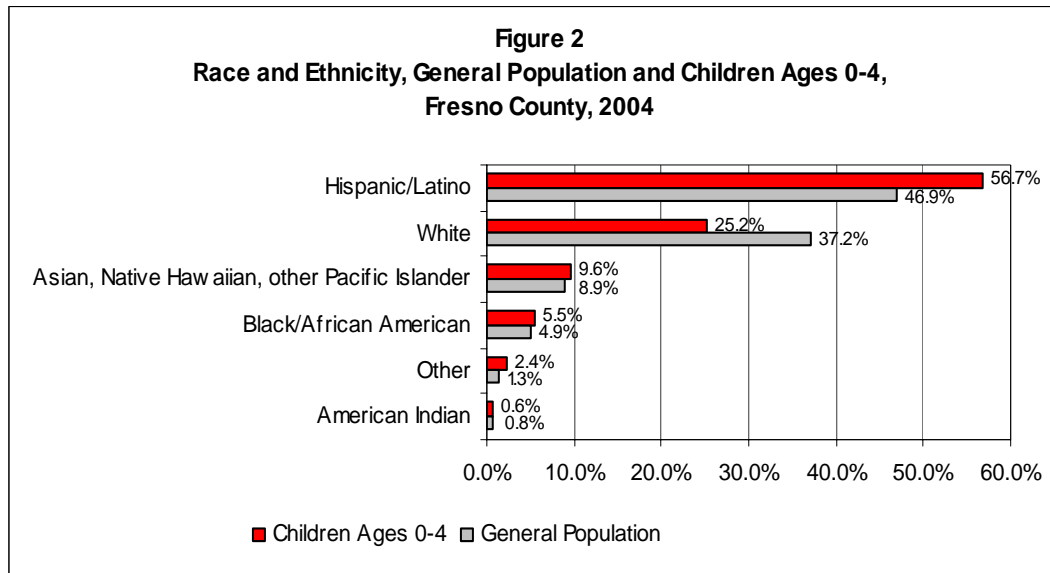
For the population served by ECE programs (children ages birth through 12), Hispanic/Latino children constitute the majority. Nearly 57 percent of the 200,000 children between the ages of zero and four are Hispanic/Latino, compared to the countywide Hispanic/Latino population of 47 percent.¹⁴⁰ By 2020, almost 70 percent of the children ages birth through 12 will be Hispanic/Latino.¹⁴¹

¹³⁸ State of California, Department of Finance. (2004c). *Population Projections by Race/Ethnicity, Gender and Age for California and Its Counties 2000-2050*. Retrieved from <http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/ReportsPapers.asp>

¹³⁹ State of California, Department of Finance. (2004c).

¹⁴⁰ State of California, Department of Finance. (2004a).

¹⁴¹ State of California, Department of Finance. (2004c).



Source: State of California, Department of Finance, 2006.

Currently, nearly 38 percent of kindergarten students in Fresno County public schools are English language learners.¹⁴² The vast majority of these English language learning students speak Spanish (80 percent), but students who speak Hmong, Punjabi and Khmer also represent considerable numbers of English language learners.¹⁴³

Given the region's large agricultural sector, a significant percentage of children enrolled in Fresno's public schools are migrants. Approximately 17 percent of Fresno County's total K-12 enrollment of more than 183,000 students is migrant students.¹⁴⁴ In seven of the county's school districts, migrant students accounted for more than half of student enrollment.¹⁴⁵ Three-hundred-fifty children are currently enrolled in Migrant Head Start, a program that targets the ECE needs of migrant children.¹⁴⁶ Although many families qualify for subsidized programs, services are not guaranteed, and there is currently a waiting list to enter Fresno's Migrant Head Start programs.^{147 148}

¹⁴² California Department of Education, (2005d). *Number of English Learners by Language*. Retrieved from <http://data1.cde.ca.gov/dataquest/>

¹⁴³ California Department of Education, (2005d).

¹⁴⁴ Fresno County Child Care and Development Local Planning Council. (2006). *Child Care Needs Assessment*.

¹⁴⁵ Fresno County Child Care and Development Local Planning Council. (2006).

¹⁴⁶ Fresno County Child Care and Development Local Planning Council. (2006).

¹⁴⁷ Fresno County Child Care and Development Local Planning Council. (2006).

¹⁴⁸ The eligibility criteria for the Migrant Education Program and Migrant Head Start differ. According to the Fresno Office of Education, "To qualify for the Migrant Education Program, a migrant child must have moved within the past three years across state or school district boundaries with a migrant parent... to obtain temporary or seasonal employment in an agricultural, fishing, or food processing activity. The child may be in any grade between preschool and the 12th grade..." To qualify for Migrant Head Start programs, children must meet requirement of age, migrant status, source of income and income level. Sources: Fresno County Office of Education. *Migrant Region IV*. Retrieved February 27, 2007 from <http://migrant.fcoe.k12.ca.us/default.asp> and Community Action Partnership of Madera County. *Fresno Migrant Head Start Program*. Retrieved February 27, 2007 from http://www.maderacap.org/headstart_fresno.html

In addition to Migrant Head Start programs, the Fresno Interdenominational Refugee Ministries (FIRM) Family & Community Partners Preschool serves children from refugee and immigrant families from Southeast Asia, Latin America, and Eastern Europe as well as some Native American Families.¹⁴⁹ FIRM's preschool program charges significantly less than the market rate to allow families from various economic backgrounds to participate.

Early Care and Education and the Family Budget

ECE is a significant expense for families in most income brackets. The average annual cost for full-time, licensed, center-based ECE for an infant is \$9,477, and full-time, center-based early care and education for a preschooler costs \$6,432 in Fresno County.¹⁵⁰ For Fresno County residents, median household income in 2003 was \$35,952.¹⁵¹ For a family at that income with a preschooler and infant in center-based early care and education, the ECE costs would make up almost one-half of their income before taxes. For a complete breakdown of ECE costs, see Table 1.

Table 1 Average Annual Unsubsidized Cost for Early Care and Education, Based on 2005 Market Rate Survey, Fresno County			
Type of Early Care and Education Arrangement	Infant and Toddler	Preschool Age	School Age
Licensed Child Care Center	\$9,477	\$6,432	\$5,253
Licensed Family Child Care Home	\$6,081	\$5,588	\$5,068

Source: California Department of Education, Child Development Division, 2005.

While ECE is a considerable expense for all families, it is particularly difficult for low-income families. For a family that earns the county's median household income, ECE accounts for more than one-quarter of household expenses (see Figure 3).¹⁵² In comparison, full-time, unsubsidized ECE costs significantly more than the undergraduate tuition at California State University, Fresno (\$3,039 for two semesters for the 2006-2007 academic year).¹⁵³

For a household with one minimum wage earner, unsubsidized licensed ECE for one infant would account for more than one-half of the entire household's budget.¹⁵⁴

¹⁴⁹ Children Now. (2006). *The Promise of Preschool*. Retrieved from <http://childrennow.org>

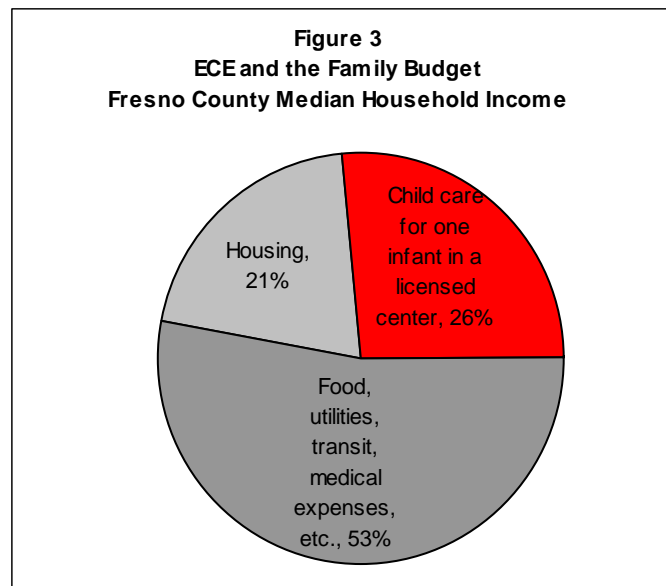
¹⁵⁰ California Department of Education, Child Development Division (2005). *Market Rate Survey Information, Fresno County*. Retrieved November 2, 2006 from: <http://www.cde.ca.gov/fg/aa/cd/ap/index.aspx>.

¹⁵¹ California Employment Development Department. (2006a). *Fresno County Profile*. Retrieved from <http://www.labormarketinfo.edd.ca.gov/>

¹⁵² Analysis based on a median household income of \$35,952, with child care expenses of \$9,477 and housing expenses of \$7,560.

¹⁵³ California State University, Fresno. (2006). *Fees and Expenses*. Retrieved from <http://www.csufresno.edu/catoffice/current/fees.html>

¹⁵⁴ California Child Care Resource & Referral Network, (2005).



Source: California Child Care Resource & Referral Network, California Employment Development Department and California Department of Education, Child Development Division.

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 ECE 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 private and public subsidies.

State and national surveys do include “child day care services” as an industry classification, but they underestimate the size of the industry because of its 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.¹⁵⁵ This study uses a more accurate method of measuring the size of the ECE industry, primarily relying upon data from the Children’s Services Network (CSN); Fresno County Office of Education, Fresno County Child Care & Development Local Planning Council; and Fresno County Economic Opportunities Commission, Head Start.

For licensed family child care homes and classrooms in licensed child care centers that are not fully funded by the California Department of Education-Child Development Division (CDE-CDD) or Head Start, gross receipts were calculated by multiplying average yearly consumer price by usage. Usage was defined as full-time equivalent enrollment. For family child homes, full-time equivalent enrollment was estimated by a directly surveying family child care providers. Full-time equivalent enrollment was

¹⁵⁵ The North American Industry Classification System (NAICS) is the most used classification system, separating industries into 20 major sectors, and 1,196 industry subsectors. “Child Day Care Services” is NAICS code 624410.

estimated by subtracting full- and part-time vacancies from licensed capacity. To ensure that gross receipts were accurately captured, rates and usage information were broken down by type of establishment (licensed child care centers and licensed family child care homes). Price and usage were further broken down by age of child (infant and toddler, pre-school age and school age; see Appendix C for more details on the methodology).

Annual government expenditure information was used for all Head Start classrooms (Head Start, Early Head Start, Migrant Head Start and Native American Head Start), all classrooms funded for by the CDE-CDD, (e.g., state preschool, general child development, and latchkey programs) and license-exempt in-home and relative care providers receiving vouchers.

Based on the methodology briefly described above, the estimated value of annual gross receipts for the formal ECE industry in Fresno County is \$201.1 million:

- \$105.7 million for licensed child care centers, including CDE-CDD funded programs and excluding Head Start funded programs
- \$31.8 million for Head Start, Early Head Start, Migrant Head Start and Native American Head Start programs
- \$32.5 million for licensed family child care homes (small and large)
- \$14.3 million for license-exempt providers who receive voucher payments
- \$15.3 million for After School Education and Safety (ASES) programs and 21st Century license-exempt before- and after-school programs in public schools¹⁵⁶
- \$88,000 for license-exempt substance abuse centers
- \$1.4 million for license-exempt child care centers in high schools

The ECE industry generates \$201.1 million in gross receipts in Fresno County.

While parents pay a significant amount of these gross receipts, government programs assist in making ECE programs affordable for low-income families.¹⁵⁷

GROSS RECEIPTS COMPARED WITH OTHER INDUSTRIES

The ECE industry plays a key role in Fresno County's economy, and to demonstrate its significance, the following section compares ECE to other key industries in the county. The ECE industry generates more gross receipts than employment services (\$132.2

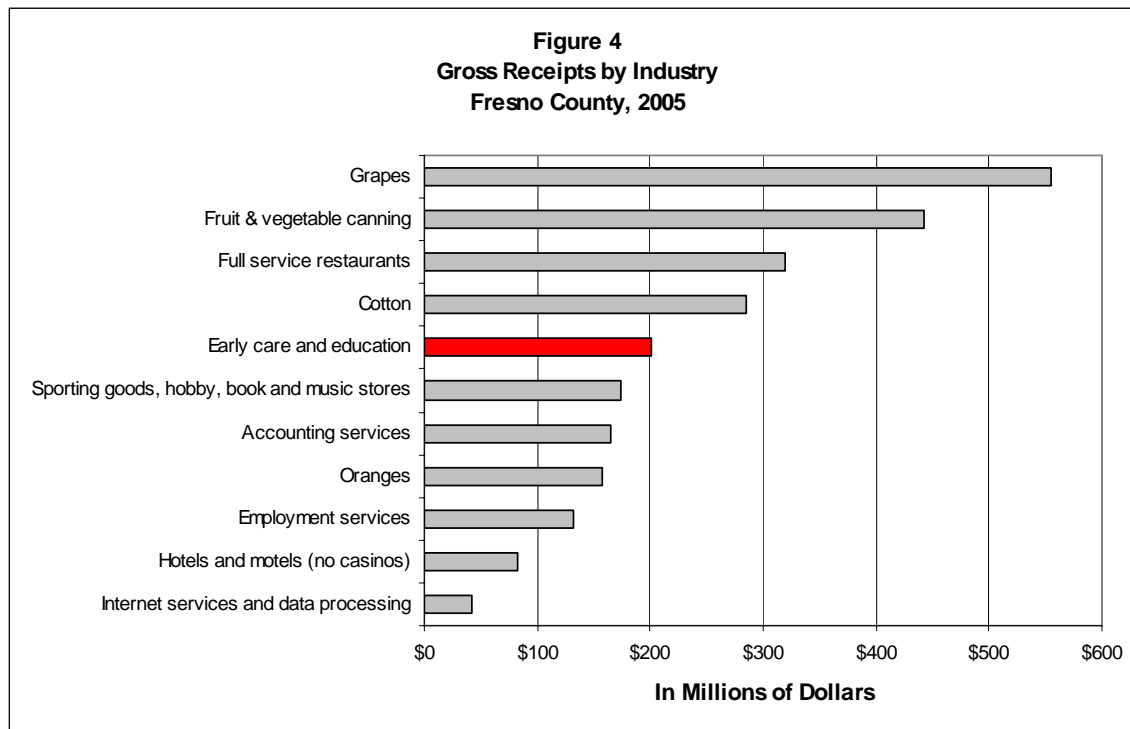
¹⁵⁶ ASES/21st Century numbers represent funding for fiscal year 2005-2006. Once Proposition 49 is fully implemented, this number will increase significantly.

¹⁵⁷ Of the \$87 million in gross receipts for licensed care centers, over \$33.2 million are public investments from publicly funded programs like CDE-CDD-funded programs (e.g., state pre-school).

million), hotels and motels (\$83.0 million), and internet service providers (\$42.6 million, see Figure 4).¹⁵⁸

ECE is also similar in size to other industries in the county, such as sporting goods, book and music stores (\$174.6 million); accounting and bookkeeping services (\$165.7 million); and oranges (\$157.2 million).¹⁵⁹ It also generates 45 percent as many gross receipts as fruit and vegetable canning (\$442.1 million) and 36 percent as many as grapes (\$555 million; see Figure 4).¹⁶⁰

The ECE industry generates 36 percent as many gross receipts as grapes.



Source: U.S. Census Bureau, 2002 and County of Fresno, Department of Agriculture, 2005.

DIRECT EMPLOYMENT

Direct employment for ECE in 2005 in Fresno County is estimated to be 8,594 full-time equivalent jobs (FTEs) including:¹⁶¹

- 2,752 FTEs for licensed child care centers, including CDE-CDD funded programs and excluding Head Start

The ECE industry directly supports 8,594 full-time equivalent jobs.

¹⁵⁸ Based on the U. S. Census Bureau's 2002 Economic Census, and adjusted to 2005 values using the Consumer Price Index (CPI).

¹⁵⁹ Fresno County's agricultural sales in 2005 totaled \$4.6 billion.

¹⁶⁰ County of Fresno Department of Agriculture. (2005). *2005 Fresno County Agricultural Crop and Livestock Report*. Retrieved November 1, 2006 from: <http://www.co.fresno.ca.us/4010/agproto/reports/crop05/2005CropRetrospect.pdf>

¹⁶¹ Full-time equivalent employees include those who work at least 40 hours per week.

- 682 FTEs for Head Start, Early Head Start, Migrant Head Start and Native American Head Start programs
- 1,215 FTEs for licensed family child care homes (small and large)
- 3,354 FTEs for license-exempt providers who receive voucher payments
- 537 FTEs for ASES and 21st Century license-exempt before- and after-school programs in public schools
- 5 FTEs for license-exempt substance abuse centers
- 49 FTEs for license-exempt child care centers in high schools

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 (for specific staff-to-child ratios please refer to Table 2 in Appendix C). Direct employment figures for all Head Start programs were derived by estimates from administrators from the various programs (please see Appendix C for a detailed methodology).

The total number of people working in the ECE industry is most likely higher because so many ECE professionals work part-time.¹⁶² Also, some ECE operators choose to maintain higher staff-to-child ratios than required by state law in order to improve program quality or to achieve specific quality goals that increase their business' competitiveness.

DIRECT EMPLOYMENT COMPARED WITH OTHER INDUSTRIES

To put employment findings in context, the number of FTEs in ECE is compared to employment in other industries. The number of FTEs in ECE is 66 percent of the number of employees in hospitals (12,868 jobs), and similar to finance and insurance (10,397 jobs; see Figure 5).¹⁶³¹⁶⁴

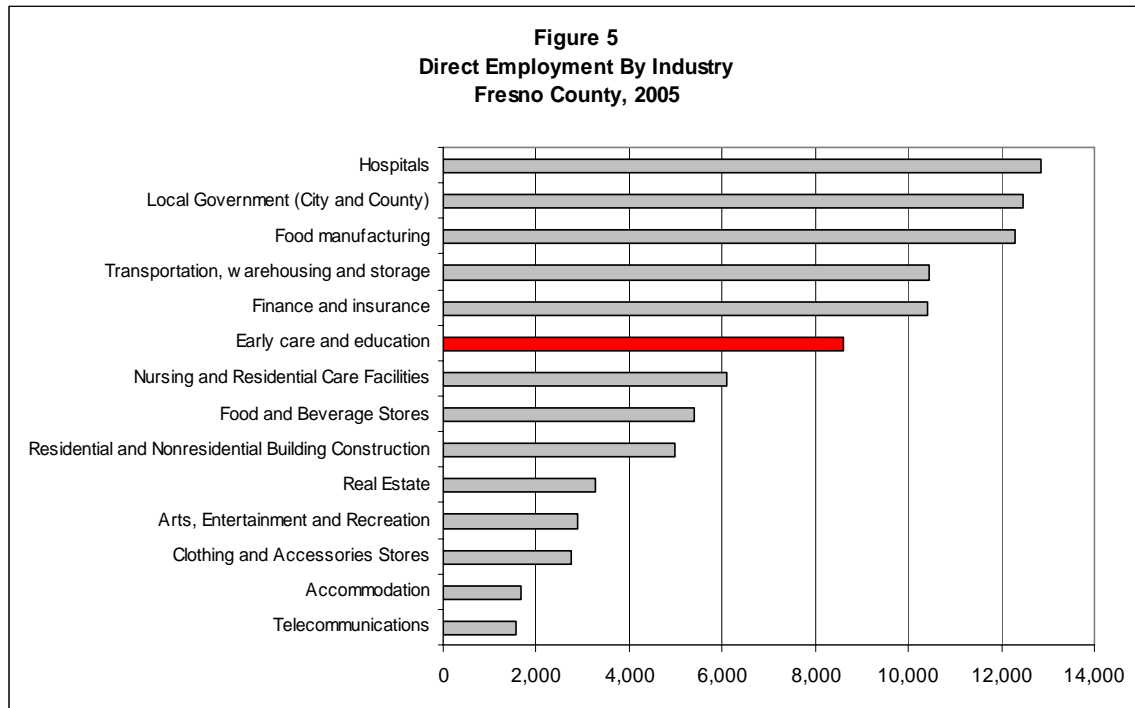
There are more FTEs in ECE in Fresno County than there are workers in residential construction (3,277 jobs), real estate (3,275 jobs), and clothing and accessory stores (2,748 jobs; see Figure 5).¹⁶⁵

¹⁶² Whitebook, M. et al, (2003). *The California Child Care Workforce Study: 2001 Preliminary Results and Future Plans*. This study analyzed the workforce of seven counties in California (Alameda, Kern, Monterey, San Francisco, San Mateo, Santa Clara, and Santa Cruz). The survey found that only a slight majority of assistant teachers work full-time (48 percent to 65 percent) and the percentage of teachers who work full-time ranged from (72 percent to 78 percent).

¹⁶³ Bureau of Labor Statistics. (2005). *Quarterly Census of Employment and Wages*. Retrieved October 2006 from <http://data.bls.gov>

¹⁶⁴ NAICS code 311 for Food Manufacturing is defined as follows: Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate for final consumption. The industry groups are distinguished by raw materials (generally of animal or vegetable origin) processed into food products. The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included. U.S. Census Bureau. (2002). *Economic Census*. Retrieved from <http://www.census.gov/econ/census02/naics/sector31/311.htm>

¹⁶⁵ Bureau of Labor Statistics. (2005). *Quarterly Census of Employment and Wages*. Retrieved October 2006 from <http://data.bls.gov>



Source: Bureau of Labor Statistics, 2005.

LOCAL, STATE AND FEDERAL PUBLIC INVESTMENTS

Public investments in young children enable Fresno County's families to work, improve the quality of care and education for Fresno County's children, and help make Fresno County an attractive place for businesses and skilled workers.

The availability of federal, state and local ECE investments plays an important role in supporting local economic development and the sustained employment of low-income families. Fresno County is in a unique situation where local government and citizens have recognized the importance of using local resources to support families with children.

Public investments are provided in three basic forms:

- Vouchers—including Alternative Payment (AP), which enable families to choose their own licensed or license-exempt child care provider
- State and federal direct contracts with child care centers and other providers based on the number of low-income children they serve and the number of days of care provided
- Investments to improve ECE capacity, accessibility and quality, as well as investments to improve the quality and stability of ECE teachers and providers

Vouchers for Early Care and Education

While CalWORKS (California Work Opportunity and Responsibility to Kids) is the single largest voucher subsidy program, there are several other ECE voucher programs available to low-income families. Combined, these voucher programs provide parental choice and flexibility for a large number of low-income families or families with special circumstances. Low-income families in Fresno County benefit from \$55 million ECE vouchers (see Table 2).¹⁶⁶

Table 2 Early Care and Education Vouchers, Fresno County, 2006	
Agency	Voucher Amount
Supportive Services, Inc.	\$18,764,647
Children's Services Network	\$3,602,027
Professional Association for Childhood Education (PACE) Alternative Payment Program	\$416,554
County of Fresno CalWORKs Stage 1	\$17,291,585
County of Fresno Alternative Payment Program	\$15,009,671
Total Vouchers	\$55,084,484

Direct Contract Subsidized Early Care and Education

ECE subsidies are public investments that enable parents to work and obtain further training. The federally funded comprehensive child development programs of Head Start make up a significant portion of public funding for ECE. Head Start, Early Head Start, Migrant Head Start and Native American Head Start programs serve children from birth to age five, pregnant women and their families in child-focused programs designed to increase school readiness of young children in low-income families. In FY 2005, Fresno County spent more than \$31.8 million in federal funding for all Head Start programs.

The California Department of Education Child Development Division (CDE-CDD) supports a number of ECE and development programs throughout the county. The CDE-CDD funds state pre-schools, general child development centers, and latchkey programs. In FY 2004-2005, the CDE-CDD invested \$33.1 million for programs in Fresno County.¹⁶⁷

Federal funding for the 21st Century programs and state funding through the After School Education and Safety (ASES) programs also support a number of license-exempt programs throughout Fresno County. In FY 2004-2005, 21st Century and ASES programs represented \$15.3 million in investments in Fresno County's ECE system.

¹⁶⁶ Data provided by Children's Services Network. These numbers are 2006 estimates based on data from 2004-2006.

¹⁶⁷ California Department of Education, Child Development Division. *Combined Contract Report*. Retrieved June 1, 2005.

Capacity Building and Quality Enhancement Investment

Investments in the local ECE infrastructure improve the supply of ECE facilities, the quality of the ECE workforce and the overall quality of ECE programs. First 5 Fresno County is “an independent, public organization created to enhance the lives of children ages birth through age 5.”¹⁶⁸ Its mission is to be “a catalyst for creating an accessible and effective network of quality services for young children (0-5) and their families.”¹⁶⁹ In 2005-2006, First 5 Fresno County invested more than \$5.1 million in projects related to ECE: (Investments greater than \$150,000 are summarized here, please see Appendix D for a complete list of Fresno County investments made in 2005).¹⁷⁰

- Central Valley Children’s Services Network: \$1.2 million to provide technical assistance and support for ECE providers seeking mini-grants.
- Central Valley Children’s Services Network/Family Connections Malaga-Calwa: \$285,000 to provide home visitation services and encourage parents/caregivers to nurture their children’s development.
- Community Medical Centers: \$161,000 to support intensive case management including well child care, home visits, child development informational materials, and health checkups.
- Comprehensive Youth Services: \$174,000 to provide a comprehensive early childhood education program designed to meet the needs of children ages 0-5.
- Fresno Unified School District/Addams School Readiness: \$340,000 to support a comprehensive early childhood education program designed to meet the needs of children ages 0-5.
- Golden Plains Unified School District: \$191,000 to support a comprehensive early childhood education program designed to meet the needs of children ages 0-5.
- Kings Canyon Unified School District/Family Connections Kings Canyon: \$188,000 to provide home visitation services and encourage parents/caregivers to nurture their children’s development.
- Madera County Community Action Program/Family Connections Parlier/Selma: \$224,000 to provide home visitation services and encourage parents/caregivers to nurture their children’s development.

Summary of Investments

In 2004-2005, approximately \$138.3 million were invested in Fresno County through federal, state and local ECE funds (several investment examples are included in Appendix D).

¹⁶⁸ First 5 Fresno County. (2006). *First 5 Fresno County*. Retrieved November 1, 2006 from <http://www.first5fresno.org/index.php?n=1&id=1>

¹⁶⁹ First 5 Fresno County. (2006).

¹⁷⁰ Investment information provided by First 5 Fresno.

Child Care Food Program

In 2005, Fresno County investments from the California Child Care Food Program totaled \$4.9 million.¹⁷¹ The Child Care Food Program provides meals for income-eligible children in licensed child care centers and licensed family child care homes throughout the county.

ECE subsidies benefit Fresno County in several ways. First, they are an important part of workforce development and enable many people to work who would otherwise have to look after their own children or leave them in an unsafe setting, such as self-care, to join the labor force. Second, subsidies bring tax dollars back to the local economy, which then circulate through various service sectors and stimulate other economic activity. Third, high quality ECE programs generate high future public savings in criminal justice, remedial education, and other areas. Please see Section 4 for a more detailed analysis of the public savings stemming from quality ECE.

In 2005, Fresno County invested approximately \$138.3 million in federal, state and local child care investments.

The Centralized Eligibility List (CEL) is a list that determines which families should be served first based on factors such as income and family size, when funding is available. In 2007, there were roughly 1,176 families and 2,087 income-eligible children on waiting lists for subsidized ECE services.¹⁷²

In 2007, there were 2,087 children on waiting lists for subsidized ECE, which means that the parents of these 2,087 children struggle to provide quality ECE for their children.

SECTION SUMMARY

The diversity of the ECE system is a vital feature in its ability to meet the needs of families in Fresno County but makes it difficult to analyze and measure. However, using data maintained by organizations that administer programs and track the supply, market price, and licensure of ECE facilities, an estimate of its composite size can be derived. This overall size, measured in terms of gross receipts and employment, is comparable to many other more easily recognizable industries in Fresno County.

The substantial size of the ECE industry means that it not only supports the economy by allowing parents to work and preparing children for future academic and economic success, but also contributes to the economy's vitality by employing significant numbers of workers, generating gross receipts, and purchasing goods and services from many other industry sectors. The industry also supports the economy by garnering significant levels of federal, state and local funds available to support quality improvement and to provide ECE 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. Efforts to improve the accessibility, affordability, and quality of ECE programs will ensure that the ECE industry can meet the needs of the Fresno County economy.

¹⁷¹ California Department of Education, Nutrition Services Division. (2005). *Federal FY 2004-05 County Profile for California Child and Adult Care Food Program-Child Care and Adult Care Components, Fresno County*. Retrieved January 19, 2007 from <http://www.cde.ca.gov/ds/sh/sn/documents/coprochild0405.pdf>

¹⁷² Data as of January 18, 2007, courtesy of Children's Services Network.

Section Five

Maximizing Benefits of Early Care and Education

Despite its current strength, the Early Care and Education (ECE) industry faces a number of challenges in meeting the needs of families, children and employers in the county. In the Fresno Metropolitan Statistical Area (composed of Fresno and Madera Counties), ECE jobs are expected to grow by 27 percent from 2002 to 2012, which is faster than the MSA-wide rate of growth for all occupations—19 percent.¹⁷³ 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, and ECE providers alone cannot meet these challenges. If Fresno County addresses these challenges and works to strengthen the current system, it can increase bottom-line returns for Fresno County employers and public returns on government investments. These challenges include but are not limited to:

- A shortage of high-quality ECE facilities¹⁷⁴
- An insufficient number of qualified ECE teachers, administrators and providers to meet Fresno County's increasing demand for high-quality ECE
- A shortage of transportation options

A SHORTAGE OF HIGH-QUALITY EARLY CARE AND EDUCATION FACILITIES

Research has found that children need an appropriate physical environment in order to develop optimally.¹⁷⁵ Children must be comfortable with, and secure in, their physical environment in order to move freely in space, respond to their senses, act independently and develop their identity.¹⁷⁶ Spaces that create these opportunities for children provide the basis for their intellectual development. Although there are no studies specifically linking ECE facilities and education outcomes, school-based studies of K-12 education facilities provide evidence of the importance of this issue. Researchers report that, "Early studies correlated student achievement with better building quality, newer school

¹⁷³ California Employment Development Department. (2006d). *Occupational Projections, Fresno County*. Retrieved October 2006 from <http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/?PageID=145>

¹⁷⁴ For the purposes of this report the term facility is meant to refer to the physical environment of a particular child care program (the building and the materials within).

¹⁷⁵ Gallagher, S. (1993). *The Power of Place: How Our Surrounding Shape Our Thoughts, Emotions and Actions*. New York: Simon and Schuster; Moore, G and Hart, R., Eds. (1989) *Child Care Environments: Policy, Research, Design*.

¹⁷⁶ Olds, A.R. (1989). *Psychological and Physiological Harmony in Child Care Center Design*. Children's Environments.

buildings, better lighting, better thermal comfort and air quality, and more advanced laboratories and libraries."¹⁷⁷

To help families identify high-quality programs, the National Association for the Education of Young Children (NAEYC) established a voluntary set of professional standards for ECE programs where local programs can measure themselves against a national set of standards in areas such as child-to-staff ratios and program development.¹⁷⁸ While there are over 1,300 licensed ECE programs in Fresno County, there are only 16 NAEYC accredited programs in the county.¹⁷⁹

In 1988, The National Association for Family Child Care (NAFCC) established a nationally recognized accreditation system for family child care providers. Goals of the accreditation program include increasing providers' professionalism and self-esteem, improving quality of care, and developing leadership skills.¹⁸⁰ While there are over 1,000 licensed family child care homes in Fresno County, there are only 24 NAFCC accredited programs.¹⁸¹

The Association of Christian Schools International (ACSI) created an accreditation program that is designed to assist member schools in achieving a higher standard of excellence and to encourage members to participate in a continuous process of assessment and ongoing institutional development.¹⁸² Currently, there are 2 ACSI accredited schools in Fresno County.¹⁸³

Although ECE 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 economy. These activities include city and county workforce development, transportation planning, and business development.

The Federal Reserve Bank of New York highlights the following barriers that may hinder ECE programs from accessing loans to build facilities:

- Limited equity because many providers lease or rent their facilities;
- A reliance on vouchers as a revenue source;
- A shortage of financial expertise;
- Political risk associated with government subsidies; and
- Limited ability to raise parental fees.¹⁸⁴

¹⁷⁷ M. Schneider. (2002). *Do School Facilities Affect Academic Outcomes?* National Clearinghouse for Educational Facilities.

¹⁷⁸ The National Association for the Education of Young Children. (2006). *Accredited programs in California*. Retrieved October 2006 from <http://www.naeyc.org/accreditation/search/state.asp?state=CA>

¹⁷⁹ The National Association for the Education of Young Children. (2006).

¹⁸⁰ National Association for Family Child Care. (2006). *NAFCC Accreditation Program*. Retrieved November 2006 from <http://www.nafcc.org/accreditation/background.asp>

¹⁸¹ National Association for Family Child Care. (2006).

¹⁸² Association of Christian Schools International. (2006) *ACSI School Accreditation*. Retrieved December 14, 2006 from <http://www.acsi.org>

¹⁸³ Association of Christian Schools International. (2006).

¹⁸⁴ N. Fitzpatrick. (2002). "Financing Child-care Centers in New Jersey: Innovative Investment Partnerships. Federal Reserve Bank of New York, Office of Regional and Community Affairs, New York.

In 2001 the Building Child Care Project produced a report for the California Legislature entitled, *Child Care Facilities Development and Financing: Barriers and Recommendations*. The report highlights the three major barriers to facility development and financing:

1. *Regulatory and Systemic Barriers:* Local requirements applied to larger ECE facilities, vary greatly from jurisdiction to jurisdiction, and in some jurisdictions undue barriers are placed on the development of ECE services. For example, conditional use permit fees for large family child care homes vary significantly throughout the county. In Clovis a conditional use permit fee is \$4,000 and in other parts of the county the conditional use permit is free. These regulatory and systemic barriers exist for three reasons: 1) ECE has not been written in as a priority in city and county general plans.; 2) there is a very high element of risk involved in obtaining early development approvals; 3) Outdoor play space, which is vital for the healthy development of children, and required by licensing, poses additional challenges to both existing facilities and those in development.
2. *The Limited Real Estate and Finance Capacity of the ECE Sector:* ECE providers tend not to have extensive experience in the field of finance and real estate, and as a result the ECE sector faces a number of barriers related to these issues.
3. *Economic Challenges:* The pressures of competing demands for limited resources financing is a major barrier to the sector.
 - ❖ Revenues generated by ECE are often meager, resulting in limited cash flow to repay loans.
 - ❖ ECE providers often present fairly weak collateral.
 - ❖ Investing in ECE facilities and incurring related debt may not be a priority for ECE programs.
 - ❖ Providers often need to find multiple funding sources for any one project and combine loans with grants or equity from public and private sources, each with their own expectations or requirements.

Leonard Routt of Wells Fargo, a local expert in facility development financing, has worked extensively with ECE providers who were seeking to expand their facilities and services. He found that most providers experienced the greatest problems with local permit and approval processes.

Even though many had secured funding for their projects, delays in approval added cost and frustration to the projects. Since approval often took longer than expected, "They [providers] grew tired of the process long before the projects could get off the ground." Additional investments of time and money could discourage ECE providers from conducting business in Fresno County.¹⁸⁵

¹⁸⁵ Routt, Leonard. Phone interview with Melissa Ramos, 2 November 2006.

Citing limitations to current licensing requirements, the State of California, Legislative Analyst's Office (LAO) recently recommended implementing a system of safety and quality ratings for the state's ECE facilities. According to the LAO, a license only measures whether or not a provider meets the licensing standards, so it cannot be used to compare several licensed providers or evaluate the quality of the learning environment or the qualifications of the teachers.¹⁸⁶ To address these limitations, the Legislative Analyst's Office recommended a continuum of options to improve the dissemination of information about ECE quality, including improving visibility of existing licensing information; creating a ratings system that summarizes licensing compliance; and developing a ratings system for elements associated with the quality of care (e.g., staff-to-child ratios and staff qualifications).¹⁸⁷

A SHORTAGE OF QUALIFIED EARLY CARE AND EDUCATION TEACHERS, ADMINISTRATORS AND PROVIDERS

To improve quality, increasing the educational credentials of the ECE workforce is critical (see Appendix E: Child Care Licensing Requirements, State of California for a comprehensive description of current requirements). Three key indicators for a quality ECE workforce are education, wages, and longevity of care. 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 2005, the average hourly wage of someone classified as a "child care worker" in Fresno County was just \$9.11.¹⁸⁸ If that ECE teacher worked full-time, he/she would earn an annual wage of just \$18,964.¹⁸⁹ Likewise, "preschool teachers" earned just \$12.89 per hour or \$26,813 annually. Annual earnings for child care workers and preschool teachers are in the same range as the annual earnings for dishwashers (\$16,266); nursing aides (\$22,507); janitors (\$22,555); and school bus drivers (\$25,251). In comparison, postal service clerks earn an annual wage of \$48,165, and kindergarten teachers earn a median wage of \$58,601 per year (see Figure 1).¹⁹⁰

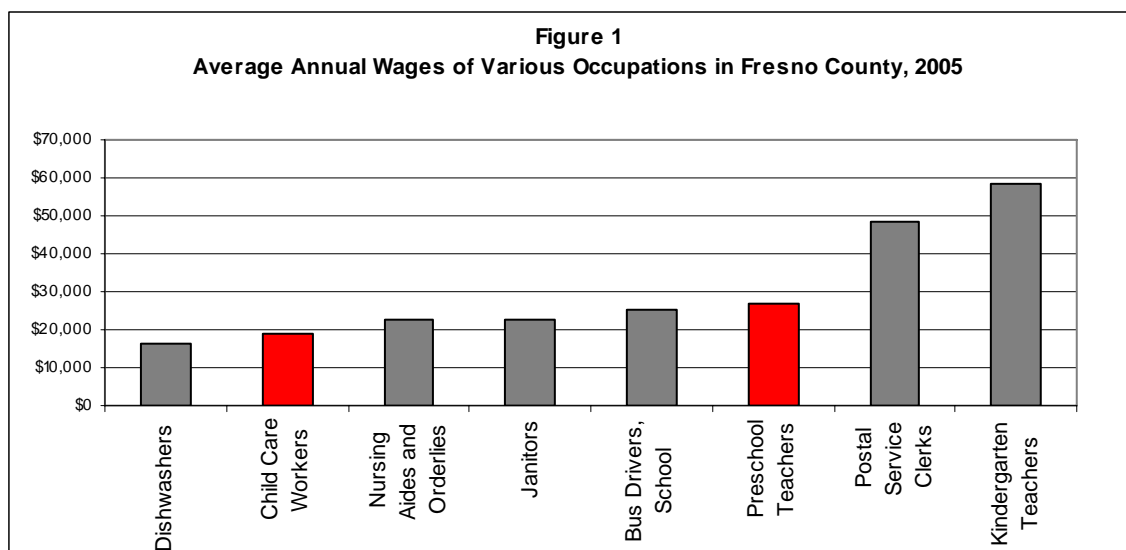
¹⁸⁶ Hill, E. (2007). *Issues and Options: Developing Safety and Quality Ratings for Child Care*. Retrieved January 5, 2007 from <http://www.lao.ca.gov/2007/childcare/childcare.pdf>

¹⁸⁷ Hill, E. (2007).

¹⁸⁸ California Employment Development Department. (2006d). *Occupational Employment and Wages Data*. Wages data based on 2006, 1st Quarter. Wages defined for "child care worker." **Child care workers are defined as those who "attend to children at schools, businesses, and institutions. Perform variety of tasks such as dressing, feeding, bathing, and overseeing play. Exclude preschool teachers and teacher aides."** A preschool teacher is defined as one who "instructs children in activities designed to promote social, physical, and intellectual growth needed for primary school in preschool, day care center, or other child development facility. Plans individual and group activities to stimulate growth in language, social, and motor skills, such as learning to listen to instructions, playing with others, and using play equipment. May be required to have certification from state." Source: ONET. *Child Care Worker*. Retrieved February 27, 2007 from <http://www.occupationalinfo.org/onet/68038.html>

¹⁸⁹ California Employment Development Department. (2006d).

¹⁹⁰ California Employment Development Department. (2006d).



Source: California Employment Development Department, 2006

In a survey of the ECE workforce in California in 2006, annual turnover for child care center teachers was 22 percent statewide. However this turnover rate is double the turnover rate for K-12 education statewide—11 percent.¹⁹¹

The same survey also assessed the educational attainment of the workforce. Approximately 30 percent of licensed family child care providers in Central California had a high school diploma or less, and only 10 percent had a bachelor's degree or higher.¹⁹² Among center-based teachers in Central California, only 18 percent had a bachelor's degree or higher, compared to a statewide average of 25 percent.¹⁹³

Recent research on brain development during the early years has emphasized the importance of well-qualified teachers who are familiar with appropriate instructional strategies for very young children.¹⁹⁴ Assessing the quality of Fresno County's diverse ECE workforce is difficult. However, there are tangible indicators that can be used to measure the quality of an ECE workforce. These include on-the-job experience, specialized training in early childhood, peer mentoring, turnover and higher educational attainment. There are also intangible indicators for the quality of an ECE workforce. These include a passion for teaching children, cultural and linguistic capacity, strong interpersonal skills, etc. A number of studies demonstrate that teachers with higher levels of education are more likely to teach ECE in a qualified manner. In 2003, Marcy Whitebook, director of the Center for Child Care Employment, reviewed a number of national studies on the impact of ECE teacher educational attainment on child

¹⁹¹ Center for the Study of Child Care Employment and the California Child Care Resource and Referral Network. (2006). *California Early Education Workforce Study: Licensed Child Care Centers and Family Child Care Providers*. Retrieved October 2006 from <http://www.iir.berkeley.edu/cscce/>

¹⁹² Center for the Study of Child Care Employment and the California Child Care Resource and Referral Network. (2006).

¹⁹³ Center for the Study of Child Care Employment and the California Child Care Resource and Referral Network. (2006).

¹⁹⁴ New Jersey Professional Development Center for Early Care and Education. (2001). *Core Knowledge Areas and Competency Levels*. NJPDC, Kean University, Union, N.J.

development. She found that especially for preschool-age children, children in settings with teachers who have bachelor's degrees have distinct advantage over children with similar backgrounds whose teachers do not have bachelor's degrees.¹⁹⁵

When creating a professional development system to ensure that there are a sufficient number of qualified ECE teachers to meet the growing ECE demands of Fresno County's children, it is important to keep in mind that educational attainment is not the only method of preparing qualified teachers. Qualified teachers also require effective training and peer mentoring.

Qualified Administrators & Providers

Research shows that there is an increasing demand in the ECE field for information about financial planning. ECE owners and directors require specific knowledge about financial management and budgets, debt capacity and business planning to run financially sustainable small businesses. Understanding these basic financial tools helps providers become more familiar with financing packages and enables them to measure their capacity to take on debt. These skills are also important for securing financing and making a current business more successful, viable and fiscally solvent. Turnover of establishments from poor business management clearly affects the ability of the industry to meet the needs of Fresno County's employers.¹⁹⁶

With state AB212 funding, the Fresno County Child Care and Development Local Planning Council developed the Fresno County Staff Retention Program, AB212, to provide annual incentives in the form of cash stipends to qualified ECE professionals. The mission is to improve the quality of programs for young children by promoting the retention of ECE professionals who have made a commitment to their careers through education and continuing professional growth and development. Stipends are awarded according to individual education levels and continuing professional growth and development. Stipends are available for ECE providers in CDE-CDD funded programs. Family child care providers and providers in other center-based ECE programs do not have access to these stipends, and leaders in the field note that a similar incentive program for these providers would significantly increase the number of providers who are attending higher education programs for early childhood educators.

In seeking additional education opportunities, ECE practitioners often struggle with issues such as scheduling conflicts, required time commitments, course content, bridging theory and practice, and cost.¹⁹⁷ To address these concerns, the Child, Family & Consumer Sciences department at California State University, Fresno offers an alternative bachelor's degree program for career professionals in ECE. CSU Fresno faculty created a program to respond to the needs of nontraditional students who needed professional training at the Baccalaureate level in order to meet new

¹⁹⁵ Whitebook, M. (2003). *Bachelor's Degrees Are Best: Higher Qualifications for Pre-Kindergarten Teachers Lead to Better Learning Environments for Children.*

¹⁹⁶ National Economic Development and Law Center. (2000). *Child Care Financial Planning and Facilities Development Manual.*

¹⁹⁷ Jones, M. (2006). *Child Development Practitioner Option...* Presentation at the Innovative Approaches to Advancing High-quality Early Education conference on October 25, 2006 in Oakland, CA.

employment requirements.¹⁹⁸ The program's mission is to prepare well-educated, highly skilled, reflective ECE practitioners who will provide programs of the highest quality to children and families, and leadership to the field.¹⁹⁹ Through seminar-style courses and project-based learning, the program curriculum is aligned with National Association for the Education of Young Children (NAEYC) standards and incorporates field work at the students' work sites.²⁰⁰

In addition to the ECE program at CSU Fresno, Fresno Pacific University also offers a bachelor's degree program in early childhood development. Fresno Pacific University is the only accredited Christian university in the Central Valley. The program offers a strong foundation in theory and practice through a holistic approach that addresses the diversity and special needs of a young child. Courses requirements are based upon categories identified by the California Commission on Teacher Credentialing.²⁰¹

Transportation

ECE and transportation are both critical elements of a strong economic infrastructure, and both enable families to work and access services. Barriers to transportation or ECE limit economic and educational opportunities for Fresno County's residents. Transportation (including roads, pedestrian routes, and public transit) is part of a community's infrastructure.²⁰² Integrating ECE issues into transportation planning is an emerging issue among city and regional planners. Lack of access to reliable transportation, including public transit, can affect a parent's access to employment and ECE services.

In 2005, the mean travel time to work for Fresno County residents was 21 minutes.²⁰³ While more research is needed on the ECE preferences of commuting parents, some prefer ECE options close to where they work, increasing the demand for ECE options in downtown Fresno. One reason why some commuters may choose to have ECE close to where they work is that they want to be close to their children, especially in the event of an earthquake or other emergency. Citing reasons such as higher costs, other parents prefer ECE options that are closer to home, so their children develop relationships that are closer to the home.

Local public transportation is not accommodating to families commuting with small children. Specifically, few public transportation options exist that are friendly for children in strollers, especially infant carriers. Transit with level boarding options will improve accessibility to families. The Women's Foundation of California recognizes the importance of transit options for women and children. As they write, "Transit agencies should...consider the extra physical space that women need in order to travel with their

¹⁹⁸ Jones, M. (2006).

¹⁹⁹ Jones, M. (2006).

²⁰⁰ Jones, M. (2006).

²⁰¹ Fresno Pacific University. (2007). *Early Childhood Development*. Retrieved January 18, 2007 from http://fresno.edu/schools/education/program_details.asp?getProgram=13

²⁰² Anderson, K. (2006, September 28). *Early Childhood Finance Learning Community Conference Call Linking Child Care and Regional Transportation Planning*. Sponsored by Smart Start's National Technical Assistance Center and the Linking Economic Development and Child Care Project.

²⁰³ U.S. Census Bureau. (2005). Fresno County, California, 2005: Selected Economic Characteristics. Retrieved November 2, 2006 from <http://factfinder.census.gov>

children close at hand and to stow packages securely and within reach.”²⁰⁴ The Foundation also recognizes the importance of locating ECE, health care and affordable housing at transit hubs.

In some rural areas, buses may run only once per day in each direction and the buses stop running at 6:00 p.m., adding an additional burden in areas where employment and ECE options are already limited. Parents with limited transportation options may be forced to choose lower-quality jobs or lower-quality ECE, or they may not be able to work at all.²⁰⁵ According to Kristen Anderson, a child care planner for the Local Investment in Child Care Project, “Juggling child care and transportation is most difficult for parents with no care, single parents, those with multiple children, and those who live in rural areas.”²⁰⁶ Working closely with local planners and policymakers to develop strategies that address the transportation needs of families is critical to overcoming this challenge.

SECTION SUMMARY

Meeting the challenges of shortages in high-quality ECE facilities, qualified ECE providers, and transportation options will ensure that the ECE industry can meet the needs of families and support Fresno County’s overall economic growth. To maximize the economic benefits of high-quality ECE, a comprehensive workforce development strategy that includes a plan for the financing of ECE facilities must be developed. In addition, essential components of a systems approach to raising the quality of ECE must also include increasing the pool of qualified ECE professionals. Any successful professional development system for ECE workers should include comparable salaries/benefits for employees. This cohesive, inclusive and accessible system needs to include various stakeholders from government, businesses, for-profit and nonprofit providers.

²⁰⁴ The Women’s Foundation of California. (2004). *Women In Transit: Analyzing Gender and Transportation Justice*. Retrieved from <http://www.womensfoundca.org>

²⁰⁵ Anderson, K. (2006).

²⁰⁶ Anderson, K. (2006).

Section Six

Conclusion and Recommendations

The findings in this report are clear: high-quality Early Care and Education (ECE) programs in Fresno County play a pivotal role in supporting current and future economic growth by:

- Increasing school readiness and improving K-12 outcomes
- Enabling parents to work and/or update their skills
- Directly generating significant jobs and revenue

The term “Early Care and Education” or “ECE” reflects the variety of education and care programs which parents typically access for children ages 0 through 12. These programs are also commonly referred to as “child care,” “early childhood education programs,” “after-school” and “latchkey” programs, and “out-of-school time programs.”

Fresno County’s present and future economy benefits when children participate in high-quality ECE. When parents have access to high-quality, reliable ECE, workplace productivity is increased, absenteeism is reduced, and turnover is cut. Children in high-quality programs are better prepared for kindergarten and more likely to become life-long learners who are ready to meet the demands of the future global economy. Children participating in high-quality programs also have reduced likelihood of negative outcomes, which saves the government money and increases the quality of life for all the county’s residents. Demographic and economic trends indicate continued patterns of growth. By the year 2020, the population of children served by ECE programs is expected to increase by 25 percent.²⁰⁷ Growing diversity among the county’s children indicates a growing need for culturally and linguistically appropriate ECE programs and workforce, and to meet the growing demand, investments in the ECE industry are needed. Projected population increases in Fresno County will strain existing ECE services. To meet the ECE of just one-third of all projected children from 2005 to 2020, Fresno County will have to add 3 spaces per day over the next 15 years. In addition, growth in lower wage jobs during non-traditional hours highlights the need for an ECE system that is financially accessible to low- and middle-income families.

By the year 2020, the population of children in Fresno County will grow by 25 percent. To meet the ECE of just one-third of these new children, the county will have to add 3 spaces per day over the next 15 years.

²⁰⁷ State of California, Department of Finance. (2004c). *Population Projections by Race/Ethnicity, Gender and Age for California and Its Counties 2000-2050*. Retrieved from <http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/ReportsPapers.asp>

The ECE industry in Fresno County plays an important role in economic development. It generates \$201.1 million in gross receipts annually and provides 8,594 full-time equivalent jobs. This puts it on par with other significant Fresno County industries such as nursing and residential care facilities as well as finance and insurance. In addition, the ECE industry attracts federal and state investments.

Three main challenges constrain the ECE industry from growing and maximizing the impact of investments by families, employers, and federal, state, and local governments:

- A shortage of high-quality ECE facilities
- A shortage of qualified ECE teachers, administrators and providers
- Transportation

The role and importance of ECE as a vital component of Fresno County's short and long term economy must be recognized. Government, business, the ECE industry, and the general public have the ability to maximize the economic contributions of ECE in Fresno County. Understanding the links between ECE, working parents and the economy, stakeholders should work in partnership to ensure that:

- ECE is a vital part of the county's economic development, workforce development and overall education system
- High-quality ECE programs and services are affordable and accessible to all families who want and need them
- Local businesses are effectively engaged and educated about the return on investment from high-quality, affordable ECE. It is also time to advocate for a high-quality ECE system and explore cost-effective, family-supportive benefit options that address the ECE needs of their employees.

Recommendation Number 1:

Make the ECE industry a vital part of the county's economic development, workforce development and overall education system.

Public Sector Strategies:

- Streamline existing licensing and permitting processes including standardizing fee systems and revising regulations to make them less intimidating
- Encourage coordination among local planning agencies and encourage integration of ECE language into public documents such as city and county general plans and the Fresno Regional Jobs Initiative
- Provide incentives for developers (e.g., tax incentives, fee waivers, density waivers, etc.) to include ECE into their plans including market-rate and

affordable housing, commercial and retail centers, educational institutions, senior centers, parks and recreational facilities, and transit hubs

- Increase financial support of college and university Child Development Centers to increase access for students, staff and the public

Business Strategies:

- Include ECE representatives in economic development and business community planning efforts and activities, such as those of local Chambers of Commerce
- Encourage business developers to create space for ECE in existing and future development projects (e.g., housing, schools, industrial parks, and shopping malls)
- Provide loan products specifically designed for ECE providers

ECE Strategies:

- Build an integrated professional development system to ensure that all early childhood teachers, assistant teachers and staff members are well-trained and ensure an on-going pipeline of qualified practitioners to meet the demands of program expansion
- Participate in public hearings for city and county general plans and advocate for the inclusion of language about ECE into these documents
- Incorporate business skills training in all ECE activities and provider trainings
- Develop a toolkit of best practices and a mentoring program for new ECE providers

Recommendation Number 2:

Ensure that high-quality ECE programs are affordable and accessible to all families who want and need them.

Public Sector Strategies:

- Create economic incentives for businesses offering licensed infant and toddler care including subsidies and/or free or reduced rent for ECE facilities
- Increase state reimbursement rates for subsidized ECE
- Expand public transportation options for working parents with young children

Business Strategies:

- Offer ECE benefits to employees. Three options include reimbursements or direct payments to nearby or onsite establishments, back-up child care benefits, and/or pre-tax flexible spending accounts that include ECE as an option. (see Family Friendly Options for Employers on page 19 for more examples)
- Invite local resource and referral agencies to share information about their services that can help employees with children find ECE services
- For employers that operate during nontraditional hours, replicate models of quality, accessible after-hours care. (see description of St. Agnes Medical Center on pages 16-17)

ECE Industry Strategies:

- Form a trade association to purchase goods and services, including healthcare benefits, at economies of scale
- Educate parents about existing ECE programs and what to expect/demand from quality care
- Work with providers to increase the supply of ECE that offers full-day programs, flexibility, and/or availability during non-traditional hours

Recommendation Number 3:

Ensure that local businesses are effectively engaged and educated about the return on investment from high-quality, affordable ECE. It is also time to advocate for a high-quality ECE system and explore cost-effective, family-supportive benefits that address the ECE needs of employees.

Public Sector Strategies:

- Create a roundtable of key leaders in the fields of government, education, business, and child care to discuss issues related to quality ECE programs
- Educate businesses about how to leverage existing public sector resources to provide ECE benefits at the most efficient cost
- Create tax incentives for businesses that offer ECE benefits, invest in the local ECE infrastructure, and/or offer below-market value rent to ECE programs
- Work with the Fresno County Workforce Investment Board to develop a comprehensive strategy for small business development

Business Strategies:

- Advocate and influence public policy at the local, state and national levels to ensure a comprehensive and integrated ECE learning system that provides high-quality ECE for children ages birth through age 12, showing a commitment to a strong educational system at all levels
- Advocate at the local, state and national levels to ensure a comprehensive and integrated high-quality ECE system, including increased public investment in ECE workforce development (e.g., increasing access to the AB212/ C.A.R.E.S. stipend program)
- Lead by example and offer cost-effective, family-supportive policies and practices for employees (e.g., back-up child care, resource and referral services, on- or near-site ECE programs, reimbursement for ECE expenses, flexible schedules, etc.)
- Underwrite the cost of developing a communication strategy (with funds or in-kind donations of time and expertise) for the ECE industry to better engage and educate the business community about the economic benefits of ECE

ECE Industry Strategies:

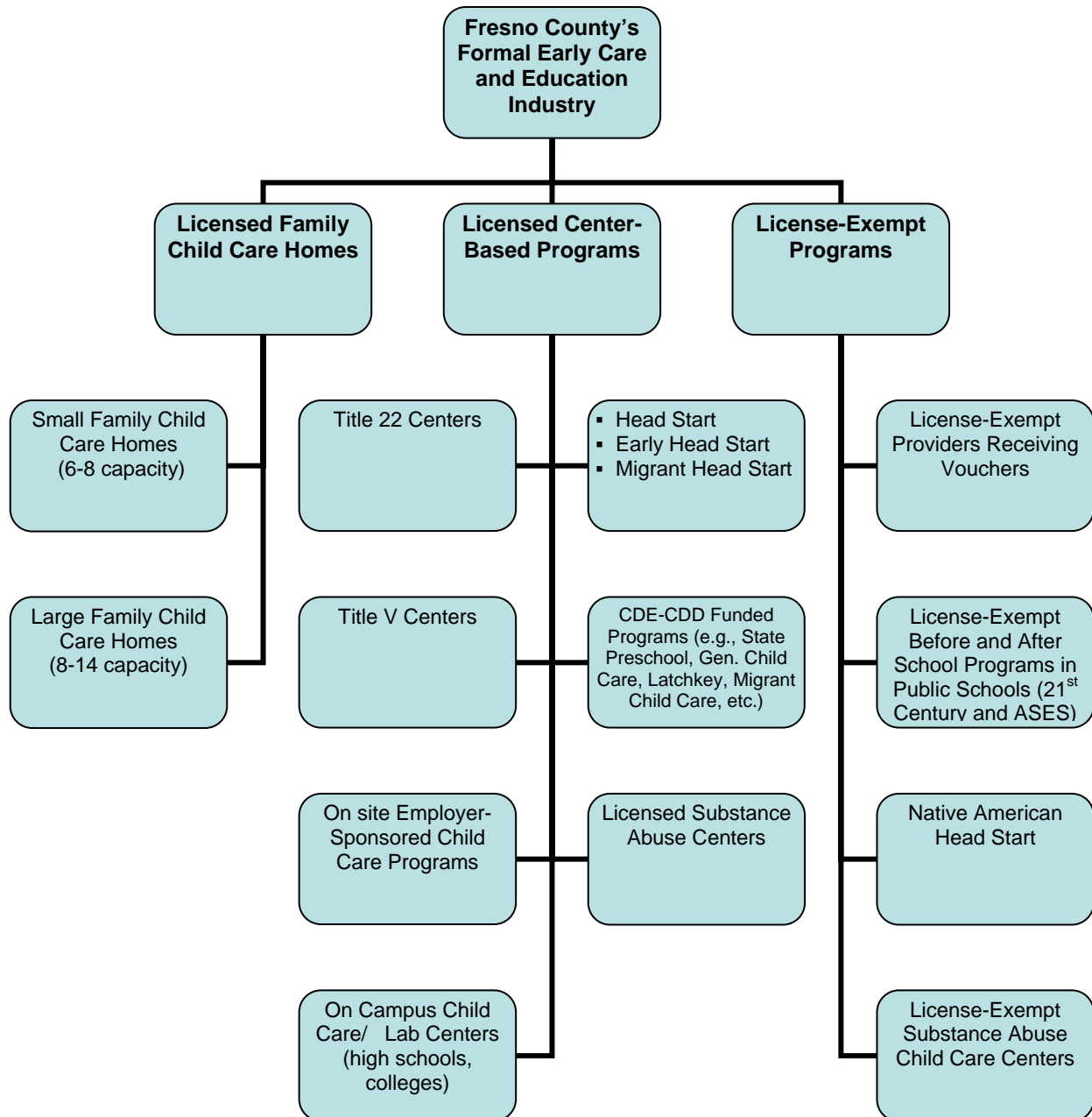
- Develop a clear communication and outreach strategy that educates and engages business leaders and other stakeholders about the return on investment (ROI) from high-quality affordable ECE
- Create a clearinghouse of information about how to develop employer-sponsored ECE and other family-supportive practices and benefits
- Publicly recognize businesses that are champions of ECE
- Create a toolkit of ECE options and existing resources for employers to share with their working families

SECTION SUMMARY

Ultimately, Fresno County's future economic productivity depends upon investment in quality ECE as a critical industry. The short term economic benefits to working families and their employers are apparent. Equally important are the long term benefits in human capital—children, their school readiness, and the productivity of our future workforce. Fresno County can maximize the economic benefits from its ECE industry by promoting and implementing these strategies and recommendations. By partnering, the ECE industry stakeholders, including businesses, the public sector and the ECE industry itself will find solutions to address the systemic barriers to high-quality, affordable, accessible ECE for Fresno County.

Appendix A

Fresno County's Formal Early Care and Education Industry



Appendix B

The Self-Sufficiency Standard, Fresno County, 2003

Table 1
The Self-Sufficiency Standard for Fresno County, 2003²⁰⁸

Monthly Costs	Adult	Adult + Infant	Adult + Preschooler	Adult + Infant + Preschooler	Adult + Schoolager +Teenager	Adult + Infant + Preschooler +Schoolager	2 Adult + Infant + Preschooler	2 Adults + Preschooler + Schoolager
Housing	\$504	\$603	\$603	\$603	\$603	\$840	\$603	\$603
Child Care	\$0	\$563	\$500	\$1,063	\$300	\$1,363	\$1,063	\$800
Food	\$182	\$266	\$273	\$358	\$473	\$481	\$515	\$565
Transportation	\$245	\$251	\$251	\$251	\$251	\$251	\$481	\$481
Health Care	\$67	\$182	\$194	\$201	\$232	\$220	\$239	\$250
Miscellaneous	\$100	\$186	\$182	\$248	\$186	\$315	\$290	\$270
Taxes	\$173	\$227	\$210	\$311	\$159	\$526	\$363	\$293
Earned Income Tax Credit (-)	\$0	-\$67	-\$79	-\$19	-\$201	\$0	\$0	\$0
Child Care Tax Credit (-)	\$0	-\$75	-\$75	-\$130	-\$51	-\$100	-\$110	-\$117
Child Care Tax Credit (-)	\$0	-\$83	-\$83	-\$167	-\$98	-\$250	-\$167	-\$167
Self- Sufficiency Wage								
Hourly	\$7.22	\$11.66	\$11.24	\$15.45	\$10.53	\$20.72	*\$9.31	*\$8.46
Monthly	\$1,271	\$2,052	\$1,977	\$2,719	\$1,854	\$3,647	\$3,276	\$2,979
Annually	\$15,254	\$24,627	\$23,730	\$32,623	\$22,249	\$43,759	\$39,318	\$35,746
							*Per Adult	*Per Adult

²⁰⁸ Pearce, D. (2003). *The Self-Sufficiency Standard for California 2003*. Retrieved July 2006 from <http://www.sixstrategies.org/files/2003%20CA%20Full%20Report%20with%20Map.pdf>

Appendix C

Methodology for Calculating Gross Receipts and Direct Employment

The economic contribution of the Early Care and Education (ECE) industry is significantly undercounted in traditional economic accounting tools and alternate methodologies for collecting data are necessary.

FRESNO COUNTY'S EARLY CARE AND EDUCATION UNIVERSE

The economic analyses in this report (e.g., gross receipts and direct employment) focus on the County's formal ECE industry as defined below. The following programs are included in this report:

- Licensed child care centers (including all Head Start and CDE-CDD funded programs)
- Licensed family child care homes (large and small)
- ASES and 21st Century license-exempt after-school programs in public schools
- License-exempt substance abuse centers
- License-exempt child care centers in public high schools
- License-exempt in-home and relative care providers receiving vouchers

All of the licensed programs in the county's formal ECE industry are either a) required by law to meet minimum health and safety standards set by the state legislature and regulated by the California Department of Social Services, through the Community Care Licensing Division, or b) legally license-exempt. All of these programs also have data that are tracked and updated regularly (see Appendix A for a flow chart depicting the formal ECE industry).

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 Fresno County's formal ECE industry because enrollment and costs are difficult to measure for the informal care and education sector. Adding these informal arrangements would increase gross receipts and direct employment figures. For a detailed description of the child care arrangements that are not included in the analyses of this report, please see page 5 in Section 1.

GROSS RECEIPTS

Licensed Child Care Centers (excluding Head Start and CDE-CDD-funded programs) and Licensed Family Child Care Homes

Gross receipts estimates for licensed child care centers (excluding all CDE-CDD funded and Head Start programs) and licensed family child care homes, are based on this calculation:

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

Full-time equivalent enrollment numbers for licensed child care centers are derived from the Central Valley Children's Services Network, Fresno County's Resource and Referral Agency, which surveyed centers in 2006 to track capacity, vacancy and other information by children's age groups (infant, toddler, preschooler, and school-age child).

For licensed child care centers, full-time equivalent enrollment was calculated as total capacity (not including all Head Start and CDE-CDD programs) less reported vacancies.

Full-time equivalent enrollment for licensed family child care homes was derived from the 2006 Children's Services Network survey.

To determine average annual cost per year, monthly averages from the California Department of Education, Child Development Division's 2005 Market Survey were used. Monthly averages were used to develop an annual average by multiplying by a factor of 12. Average annual cost information was broken down by age of child and program type (see Table 1 for a range of county average rates).

Table 1 Average Annual Unsubsidized Cost for Early Care and Education, Based on 2005 Market Rate Survey, Fresno County			
Type of Early Care and Education Arrangement	Infant and Toddler	Preschool Age	School Age
Licensed Child Care Center	\$9,477	\$6,432	\$5,253
Licensed Family Child Care Home	\$6,081	\$5,588	\$5,068

Publicly Funded Programs

Gross receipts for the following publicly funded programs equal the total budget spending in either 2005 or 2006:

- CDE-CDD funded programs (e.g., state preschool, latchkey and general child care)
- Head Start Programs (Head Start, Early Head Start, Migrant Head Start and Native American Head Start)
- ASES and 21st Century license-exempt after-school programs in public schools
- License-exempt substance abuse centers
- License-exempt child care centers in public high schools
- License-exempt care providers who provide care with government funding (e.g., relatives)

DIRECT EMPLOYMENT

Direct employment is an estimate of the total number of jobs in the ECE industry.

The number of people working in licensed family child care homes was calculated based on enrollment using licensing requirements. See below for the equation used to estimate full-time equivalent enrollment

$$\begin{array}{ll} \text{Family Child Care Homes licensed for 6-8} & = 1 \text{ FTE Employee} \\ \text{Family Child Care Homes licensed for 12-14} & = 2 \text{ FTE Employees} \end{array}$$

For licensed child care centers (excluding Head Start programs but including CDE-CDD funded programs), licensing ratios were also used, according to Table 2. These were applied to licensed capacity. For the 103 licensed centers with a capacity of more than 50 children at any one time, we assumed that there were five additional non-teaching staff at the centers. Furthermore, we assumed that for every two CDE-CDD funded programs there was one family resource worker.

Table 2 Staff to Child Ratios Used to Generate Employment Estimates, By Program, Fresno County			
Program	Infant	Preschool-age child	School-age child
Title 22 Centers (not funded directly by CDE-CDD)	1:4	1:12	1:15
Title V Centers (funded directly by CDE-CDD)	1:3	1:8	1:14

Full-time equivalent employment estimates for the following publicly funded programs was based on reports from the various agencies that oversee the programs:

- Head Start Programs (Head Start, Early Head Start, Migrant Head Start and Native American Head Start)
- ASES and 21st Century license-exempt after-school programs in public schools
- License-exempt substance abuse centers
- License-exempt child care centers in public high schools
- License-exempt in-home and relative care providers receiving vouchers

Appendix D

Fresno County Investments in Early Care and Education

For 2005, First 5 Fresno County investments are listed below:

- Aquarius Aquarium: \$32,000 to provide outreach and education to preschool programs about tide pool inhabitants.
- California Reach Out and Read: \$129,000 to promote literacy through pediatric primary care.
- Central Valley Children's Services Network: \$27,900 for the Family Reformer Center in Malaga and the Reading Readiness Program.²⁰⁹
- Central Valley Children's Services Network: \$1.2 million to provide technical assistance and support for child care providers seeking mini-grants.
- Central Valley Children's Services Network: \$400 to support the Zero to Three Better Baby Care Campaign.
- Central Valley Children's Services Network /Family Connections Malaga-Calwa: \$285,000 to provide home visitation services and encourage parents/caregivers to nurture their children's development.
- Centro La Familia Advocacy Services: \$121,000 to support a home visitation and parent-child educational support program.
- Community Medical Centers: \$161,000 to support intensive case management including well child care, home visits, child development informational materials, and health checkups.
- Community Youth Ministries: \$74,000 to support a learning center that enables young parents to receive ECE, improve parenting skills, and strengthen the relationship between parent and child.
- Comprehensive Youth Services: \$174,000 to provide a comprehensive early childhood education program designed to meet the needs of children ages 0-5.
- Fresno Center for New Americans: \$5,300 to increase knowledge in the Hmong community in Fresno about what constitutes quality ECE.
- Fresno County Public Library: \$49,000 for a mobile parenting, early literacy and learning resource center serving families in Western Fresno County.
- Fresno County Economic Opportunities Commission: \$46,000 to support a comprehensive early childhood education program designed to meet the needs of children ages 0-5.

²⁰⁹ Investment information provided by First 5 Fresno.

- Fresno County Economic Opportunities Commission/Westside Family Connections: \$138,000 to provide home visitation services and encourage parents/caregivers to nurture their children's development.
- Fresno Interdenominational Refugee Ministries: \$108,000 to support a home-based literacy and parenting program emphasizing parent-child verbal interaction.
- Fresno Interdenominational Refugee Ministries: \$127,000 to support a comprehensive early childhood education program designed to meet the needs of children ages 0-5.
- Fresno Unified School District/Addams School Readiness: \$340,000 to support a comprehensive early childhood education program designed to meet the needs of children ages 0-5.
- Fresno Unified School District/Greenberg School Readiness: \$128,000 to support a comprehensive early childhood education program designed to meet the needs of children ages 0-5.
- Fresno Unified School District/Homan School Readiness: \$125,000 to support a comprehensive early childhood education program designed to meet the needs of children ages 0-5.
- Fresno Unified School District/Kindergarten Camp: \$37,000 to support summer classes that better prepare children for kindergarten.
- Fresno Unified School District/Lowell School Readiness: \$131,000 to support a comprehensive early childhood education program designed to meet the needs of children ages 0-5.
- Fresno Unified School District/Mayfair School Readiness: \$142,000 to support a comprehensive early childhood education program designed to meet the needs of children ages 0-5.
- Golden Plains Unified School District: \$191,000 to support a comprehensive early childhood education program designed to meet the needs of children ages 0-5.
- Kings Canyon Unified School District/Family Connections Kings Canyon: \$188,000 to provide home visitation services and encourage parents/caregivers to nurture their children's development.
- Madera County Community Action Agency: \$119,000 to support a comprehensive early childhood education program designed to meet the needs of children ages 0-5 in the city of Firebaugh.
- Madera County Community Action Agency /Family Connections Parlier/Selma: \$224,000 to provide home visitation services and encourage parents/caregivers to nurture their children's development.
- Raisin City School District: \$80,000 to support a comprehensive early childhood education program designed to meet the needs of children ages 0-5.
- Sanger Unified School District/Del Rey Infant Toddler School Readiness: \$141,000 to support a comprehensive early childhood education program designed to meet the needs of children ages 0-5.

- Sanger Unified School District/Family Connections: \$138,000 to provide home visitation services and encourage parents/caregivers to nurture their children's development.
- Sanger Unified School District/Lincoln Even Start: \$77,000 for a capital campaign to construct an Even Start building and increase program capacity.
- Stone Soup/Home Safety Education: \$24,000 to provide home safety assessments and education for Southeast Asian families.
- Stone Soup/New Connections: \$119,000 to support early learning activities for Hmong preschoolers and home visitation for Hmong families to encourage parental involvement in early learning.
- West Hills Community College/Family Connections: \$73,000 to provide home visitation services and encourage parents/caregivers to nurture their children's development.

A summary of Fresno County investments by private foundations as well as state and federal agencies is listed below.²¹⁰

- 2005 California Child Care Food Program: \$4.9 million²¹¹
- California Department of Education: \$19,300
- David and Lucile Packard Foundation: \$18,000
- Foundation for California Community Colleges: \$200,000
- U.S. Department of Education: \$380,000

²¹⁰ 2005 Investment information provided by Children's Services Network.

²¹¹ California Department of Education, Nutrition Services Division. (2005). *Federal FY 2004-05 County Profile for California Child and Adult Care Food Program-Child Care and Adult Care Components, Fresno County*. Retrieved January 19, 2007 from <http://www.cde.ca.gov/ds/sh/sn/documents/coprochild0405.pdf>

Appendix E

Child Care Licensing Requirements, State of California

Table 1: Community Care Licensing Requirements²¹²	
Licensed Child Care Centers	
<i>Position</i>	<i>Qualifications and Duties</i>
Teacher Aide	<p>Centers may use aides who are less than 18 years old provided they are either:</p> <ul style="list-style-type: none"> (1) High school graduates. (2) Currently participating in an occupational program conducted by an accredited high school or college. <p>An aide assisting a fully qualified teacher in the supervision of up to 18 preschool-age children pursuant shall meet the following requirements:</p> <ul style="list-style-type: none"> (1) Completion of six postsecondary semester or equivalent quarter units in early childhood education or child development, or (2) Completion of at least two postsecondary semester units or equivalent quarter units in early childhood education or child development each semester or quarter following initial employment, and (3) Continuation in the educational program each semester or quarter until six units have been completed. <p>An aide shall work only under the direct supervision of a teacher.</p> <ul style="list-style-type: none"> (1) An aide who is 18 years of age or older, and who meets the requirements of this section may escort and/or assist children in going to the bathroom, and may supervise napping children without being under the direct supervision of a teacher.
Teacher	<p>Prior to employment, a teacher shall meet the requirements below:</p> <ul style="list-style-type: none"> (1) A teacher shall have completed, with passing grades, at least six postsecondary semester or equivalent quarter units of the education requirement; or shall have obtained a Child Development Assistant Permit issued by the California Commission on Teacher Credentialing. <p>After employment, a teacher hired shall complete, with passing grades, at least two units each semester or quarter until the education requirement specified is met.</p> <p>Notwithstanding any other educational requirements, a person may be hired as a teacher in a day care center if he or she satisfies all of the following conditions:</p> <ul style="list-style-type: none"> (1) Is 18 years of age or older. (2) Possesses a regional occupation program certificate of training in child care occupations issued by a regional occupational program which is accredited by the Western Association of Schools and Colleges.

²¹² Daycare.com. (2007). *Worker Qualifications*. Retrieved March 1, 2007 from <http://www.daycare.com/california/>

	<p>(3) Has completed at least 95 hours of classroom instruction in child care and development and child care occupations and at least 150 hours in supervised field experience in a licensed day care center or comparable group child care program.</p> <p>(b) Subsequent to being hired, a teacher shall make satisfactory progress towards meeting the educational requirement for a fully qualified teacher, as specified in departmental regulations. Six of the required semester or equivalent number of quarter units of early childhood education from an accredited university or college shall be completed during the next two consecutive regular semesters or equivalent quarters.</p> <p>(c) A teacher hired shall not be exempt from satisfying any other noneducation requirements imposed by law on teachers in day care centers and shall have on-site supervision by a fully qualified teacher until six of the units are completed.</p>
Family Child Care Homes	
Small Family Child Care Home	<p>The capacity specified on the license shall be the maximum number of children for whom care can be provided.</p> <p>For a small family child care home, the maximum number of children for whom care shall be provided, including children under age 10 who live in the licensee's home, shall be one of the following:</p> <p>(1) Four infants; or</p> <p>(2) Six children, no more than three of whom may be infants; or</p> <p>A small family day care home may provide care for more than six and up to eight children, without an additional adult attendant, if all of the following conditions are met:</p> <p>(A) At least two of the children are at least six years of age.</p> <p>(B) No more than two infants are cared for during any time when more than six children are cared for.</p> <p>(C) The licensee notifies each parent that the facility is caring for two additional school age children and that there may be up to seven or eight children in the home at one time.</p> <p>(D) The licensee obtains the written consent of the property owner when the family day care home is operated on property that is leased or rented.</p>
Large Family Child Care Home	<p>For a large family child care home, the maximum number of children for whom care shall be provided when there is an assistant provider in the home, including children under age 10 who live in the licensee's home and the assistant provider's children under age 10, shall be either:</p> <p>(1) Twelve children, no more than four of whom may be infants; or</p> <p>A large family day care home may provide care for more than 12 children and up to and including 14 children, if all of the following conditions are met:</p> <p>(A) At least two of the children are at least six years of age.</p> <p>(B) No more than three infants are cared for during any time when more than 12 children are being cared for.</p> <p>(C) The licensee notifies a parent that the facility is caring for two additional school age children and that there may be up to 13 or 14 children in the home at one time.</p> <p>(D) The licensee obtains the written consent of the property owner when the family day care home is operated on property that is leased or rented.</p>

<p>Criminal Records Clearance for All Family Child Care Homes</p>	<p>Prior to the Department issuing a license, the applicant(s) and all adults residing in the home shall obtain a California criminal record clearance or exemption.</p> <p>An applicant and any person specified in subdivision (b) shall submit a second set of fingerprints to the Department of Justice, for the purpose of searching the records of the Federal Bureau of Investigation.</p> <p>PERSONNEL REQUIREMENTS</p> <p>(a) The licensee shall provide each employee with a copy of the Notice of Employee Rights.</p> <p>(b) A claim by the employee alleging the violation by the licensee shall be presented to the licensee within 45 days after the action as to which complaint is made and presented to the Division of Labor Standards Enforcement not later than 90 days after the action as to which complaint is made.</p> <p>(c) The licensee and other personnel as specified shall complete training on preventive health practices, including pediatric cardiopulmonary resuscitation and pediatric first aid.</p>
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Appendix F

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