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The Economic Impact of the Early Care and Education Industry in Amador and Calaveras Counties

June 2008

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The Insight Center for Community Economic Development is a national research, consulting and legal organization dedicated to building economic health and opportunity in vulnerable communities.

We work in collaboration with foundations, nonprofits, educational institutions and businesses to develop, strengthen and promote programs and public policy that:

- Lead to good jobs—jobs that pay enough to support a family, offer benefits and the opportunity to advance
- Strengthen early care and education systems so that children can thrive and parents can work or go to school
- Enable people and communities to build financial and educational assets

The Insight Center was formerly known as the National Economic Development and Law Center.

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Section One

Introduction

The formal early care and education (ECE) industry in Amador and Calaveras Counties encompasses the range of programs designed to nurture, support, enrich, and educate children from birth through age 12 outside of traditional K – 12 education. The industry has two main functions, both of which have changed significantly over time.

The first function of the ECE industry is to enable parents to maintain employment or get additional training or education. In traditional American childrearing models, parents were solely responsible for the care and education of their own young children during the workday. Families with a single, working parent and families with two working parents were rare. In those families who did have two working parents or a single working parent, care and education were generally entrusted to relatives, neighbors, and friends.

The early care and education industry serves two main functions. It:

- Enables parents to maintain employment and/or obtain education and training
- Provides age appropriate child development learning opportunities that support healthy children who are ready to learn

The other major function of the ECE industry is to provide developmentally appropriate learning opportunities for children. The research and public will surrounding the education and developmental needs of young children have increased dramatically over the last two decades. Many more parents now require early education and out-of-school-time programs as part of their children’s education. For children from birth through age five, quality programs help them to develop core skills and competencies that prepare them for future success in traditional K to 12 education. For children ages 6 through 12, before- and after-school programs ensure children’s safety while often also providing enriching educational activities outside of the traditional school curriculum and enabling participants to develop much-needed leadership skills.

As a result of the demand for ECE services, the industry has become a significant component of the economic infrastructure of both counties and 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.¹ 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.² 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 K-12 education, criminal justice and welfare assistance, which result in a 12 percent rate of public return on investment.³

¹ Shonkoff, J. and Phillips, D. Eds. (2000).

² 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.

³ Rolnick, A. and Grunewald, R. (2003). *Early Childhood Development: Economic Development with a High Public*

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.⁴
3. **ECE is a major industry in the counties in its own right.** Research presented in this report demonstrates that ECE programs generate an estimated \$4.9 million in gross receipts in Amador County and \$6.2 million in Calaveras County. This compares to other significant industries in each county. It is also a job-creating industry, employing approximately 217 full-time equivalent jobs in Amador County and approximately 169 full-time equivalent jobs in Calaveras County.

Understanding the relationships among an affordable, accessible, quality early care and education (ECE) system, economic growth and the efficiency of investments in the ECE industry increases economic competitiveness in Amador and Calaveras counties.

Defining the Formal Early Care and Education Industry

All of the establishments captured in the formal ECE industry for this report 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 before- and after-school programs. For the purposes of this report, formal ECE establishments include: all full-day and part-day private licensed child care centers, Head Start and Early Head Start programs, child development centers funded by the California Department of Education (state pre-schools, latchkey programs, federal block grant child care centers, general child development centers), licensed family child care homes and license-exempt before- and after-school programs.⁵ There are approximately 134 formal child care facilities in Amador and Calaveras Counties, including:

- 76 licensed family child care homes
 - 38 in Amador County and 38 in Calaveras County
- 13 licensed child care centers operated for profit, nonprofit, and/or sectarian
 - 8 in Amador County and 5 in Calaveras County
- 18 Head Start and Early Head Start programs
 - 8 in Amador County and 10 in Calaveras County
- 16 child development programs funded by the California Department of Education
 - 5 in Amador County and 11 in Calaveras County
- 11 license-exempt before- and after-school programs⁶
 - 6 in Amador County and 5 in Calaveras County

Return. Fedgazette. Minneapolis, Minn., Federal Reserve Bank of Minneapolis. Analysis was based on the High/Scope Perry Preschool Project in Michigan.

⁴ 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.

⁵ For a flow chart depicting the formal early care and education industry in Amador and Calaveras County's, please refer to Appendix A

⁶ Data provided by HRC Child Care Resources and the Amador Child Care Council.

Early Care and Education Arrangements That Are Not Included in this Report

There are types of care and education that are not included as part of the “formal ECE industry” for this report. These arrangements are either unregulated, such as care outside the child’s home in a relative’s home or care that is provided by a nanny or babysitter, or lack accurate data about the cost, enrollment, and staff. Although these ECE arrangements are widely used, and also add much to the economy, it is difficult to ascertain their impact. The formal ECE industry is easier to capture economically (e.g., the sector is subject to taxes, state regulations, credentials, etc.), therefore this report focuses primarily on formal ECE. By including only formal ECE arrangements, this report’s findings are conservative estimates of the total impact that ECE has on the economy.

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.

Outline of the Report

Following this introduction, Section Two describes the demographic and economic profile of the counties and the implications for the ECE industry. Section Three explores the links among ECE, business, and economic development. Section Four analyzes the overall economic effects of the ECE industry as measured by industry earnings, employment and current levels of government investment. Finally, Section Five considers future implications for the local economy, and makes conclusions and recommendations.

Section Two

Demographic and Economic Trends

Amador and Calaveras counties' demographic and economic trends have significant implications for the ECE industry. This section gives a brief overview of these trends including population shifts, labor force characteristics, employment demands, and the cost of ECE. It discusses the implications of these trends for the ECE industry.

Geographic Diversity

Amador County

Amador County is located in the western foothills of California's Sierra Nevada range. Amador is the smallest rural county in California covering almost 605 square miles of varying types of geography, ranging from mountainous peaks almost 8,000 feet above sea level to lower, gently rolling hills. Many parents are forced to commute outside of the County to find well-paid employment.

The county has five incorporated cities: Jackson, Sutter Creek, Lone, Amador City and Plymouth. All other areas are unincorporated.

Calaveras County

The geography in Calaveras County also has dramatic variations, from near sea level in the west to 8,000 feet altitude in the east.⁷ Many Calaveras residents live in rural towns and travel miles of winding roads to work. Calaveras' rural population faces a number of unique barriers to ECE including 20-mile-long car trips to child care, sometimes in the opposite direction from 30-mile-long commutes to work.⁸

Furthermore, low population density, financing difficulties, and transportation barriers often make more typical ECE business models impractical in these small rural counties.

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

Population Size and Characteristics

Amador County

Within Amador County, the largest population centers are found in the cities of Lone with 7,129 residents, Jackson with 3,989 residents and Sutter Creek with 2,303 residents, but the vast majority of residents live in unincorporated areas.⁹

⁷ Calaveras Child Care Council, Calaveras County Child Care Needs Assessment, 2003

⁸ Constructing Connections of Amador and Calaveras, Child Care Needs Assessment, 2006

The total population of Amador County in 2003 was 37,273 residents, according to the U.S. Census Bureau. One challenging aspect of estimating the county's population is the presence of Mule Creek State Prison and other smaller institutions, the population of which hovers around 5,000 annually. The total residential population excluding persons in institutional settings in was 25,333 in 1990 and 29,595 in the year 2000, representing a 17 percent increase, higher than the statewide population growth of 12 percent in the same time period.¹⁰ Amador County's population change is almost equal to valley counties and faster than Alpine and Tuolumne counties (see Table 1).

The County's residents are predominately white/Caucasian, representing 82.4 percent of the population. However, the Hispanic/Latino population has increased significantly in recent years, and it is estimated that one in ten residents in Amador County was Hispanic in 2005.

Calaveras County

In the year 2000, the total population in Calaveras County was 40,554 residents, an increase of 27 percent since 1990, more than double the 12 percent increase statewide over the same time period (see Table 1).¹¹ The population change of Calaveras County is greater than neighboring valley and foothill counties.¹² Demographically, Calaveras County has no one central hub where residents from around the county are brought together. Instead, a number of communities containing populations between 500 and 4,000 people are scattered around the county.

The County's population is expected to grow at an annual compounded rate of 2.2 percent. Calaveras County is therefore projected to reach a population of 55,744 residents by the year 2012. Children ages 0-14 are projected to increase by 11.7 percent by the year 2020. Net migration is also forecast to average 719 persons per year.¹³

Implications for Early Care and Education

ECE is one factor that families consider when deciding where to live. Improvements in the affordability and quality of ECE programs may help attract and retain families with children.

¹⁰ California Employment Development Department

¹¹ U.S. Census Bureau. (2000).

¹² U.S. Census Bureau. (2000).

¹³ ¹³ State of California Department of Finance. County Population Projections, July 1, 2000-2050.

Table 1: Population Percentage Changes (1990-2000)

Geographic Area	Population Percentage Change (1990-2000)
California	14%
Alpine County	9%
Amador County	17%
Calaveras County	27%
El Dorado County	24%
Sacramento County	18%
San Joaquin County	17%
Tuolumne County	12%

Implications for Early Care and Education

The population in Amador and Calaveras Counties is growing faster than the state's overall population. Investments in all economic development infrastructures including transportation, housing, and early care and education are needed to attract and retain businesses and young working families to the counties.

The Children of Amador and Calaveras Counties

Amador County

The 2005 California Child Care Portfolio estimates that there were 3,354 families with children under the age of 18 in Amador County.¹⁴ Of those families, 31 percent were single-parent families.

Children under five years of age represent 4.2 percent of the total residential population, or approximately 1,478 children. Children ages 19 and under represent 23.4 percent of the population, or approximately 8,204 children.

Table 2 illustrates the total number of children living in Amador County by age group, according to the 2000 Census.

Table 2: Children in Amador County, 2000

Age Breakdown	Number of Children	Percent of the total Population
Under 5 years	1,478	4.2%
5 – 9 years	1,848	5.3%
10 – 14 years	2,189	6.2%
15 – 19 years	2,689	7.7%
Total	8,204	23.4%

¹⁴ California Child Care Resource & Referral Network. (2005). *The 2005 California Child Care Portfolio*. Retrieved from <http://www.rrnetwork.org>

Calaveras County

In Calaveras County, children under five years of age represent 4.4 percent of the total residential population, or approximately 1,791 children. Children under 14 years of age represent 18.3 percent of the population, or approximately 7,425 children.¹⁵

As of 2000, there were 4,928 households with children 18 years of age or younger in Calaveras County. Of those, 70 percent (3,436 households) were families of married couples, and 29 percent (1,415 households) were single-parent households.¹⁶ According to the 2005 California Child Care Portfolio, "Calaveras County's percentage increase of women in the workforce is the 3rd highest in the state and it is one of the counties with the greatest percentage of child care requests from parents looking for work."¹⁷

Table 3 below shows the total number of children living in Calaveras County by age group.

Table 3: Children in Calaveras County, 2000

Age Breakdown	Number of Children	Percent of the total Population
Under 5 years	1,791	4.4%
5 – 9 years	2,527	6.2%
10 – 14 years	3,107	7.7%
15 – 19 years	2,660	6.6%
Total	10,085	24.9%

Implications for Early Care and Education

The industry already experiences shortages in the following areas:

- Affordable early care and education
- Early care and education for infants and toddlers
- Early care and education in rural and outlying areas
- Quality early care and education
- Early care and education that occurs outside the traditional workday

The trend for population increases presents an ideal opportunity for the stakeholders in the counties to invest in initiatives that improve the quality, affordability, and accessibility of existing early care and education programs. The children in both counties will need quality early care and education opportunities to enter the traditional K-12 education system ready to learn.

¹⁵ U.S. Census Bureau. (2000).

¹⁶ U.S. Census Bureau. (2000).

¹⁷ California Child Care Resource & Referral Network. (2005).

Housing Development

Amador County

Data obtained from the planning department in Amador County show a total of more than 5,000 planned new housing units, mostly in the cities of Jackson, Sutter Creek, Lone and Plymouth, over the next several years. These new homes and the families they attract will have a significant impact on the demand for ECE in the coming years.

Calaveras County

Calaveras County could experience unprecedented growth over the next 30 years. *The Sacramento Bee* published an article in May of 2006 on Calaveras County growth, particularly on plans in Copperopolis for 16,000 new homes that could increase the population of Copperopolis from 3,000 to 40,000 residents in 30 years.¹⁸ In the Valley Springs area, the area of most rapid growth, there are plans for an additional 1,100 units in the next five years.¹⁹

It is believed that many homes being built in the county will be second homes and for those retiring with discretionary income. However, the housing boom is likely to bring new families who come for new jobs that result from a housing boom.

Employment

Amador County

Over 14,000 Amador County residents participate in the labor force.²⁰ Between 1990 and 2000, the Amador County labor force grew by approximately 25 percent, adding nearly 3,000 workers.²¹ Three industries dominate the local economy: government employs approximately 41 percent of the county's workers; retail trade employs 14 percent of workers; and educational and health services employs 10 percent of Amador County workers (see Figure 1).²²

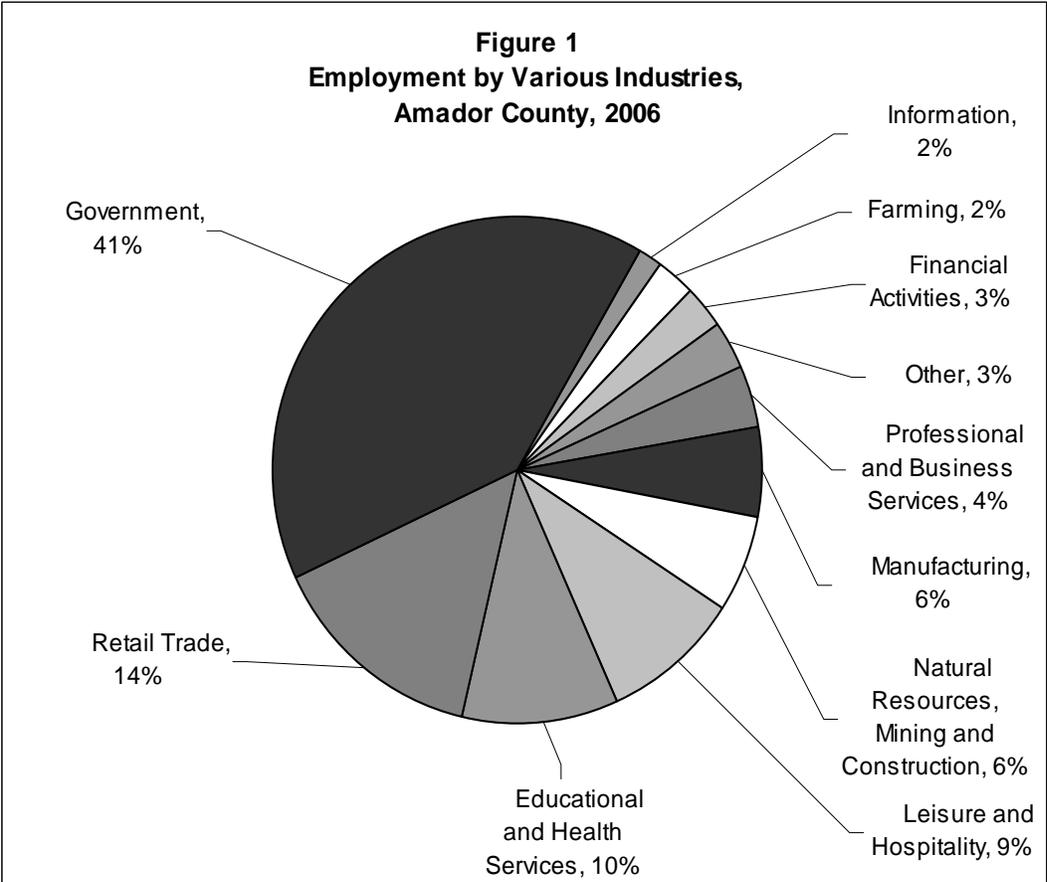
¹⁸ Sacramento Bee, In Calaveras, Development Outleaps Jumping Frogs, May 1, 2006
<http://www.sacbee.com/content/news/story/14250051p-15066871c.html>

¹⁹ Calaveras County, Calaveras Community Development Department, 2006

²⁰ U.S. Census Bureau. (2000).

²¹ U.S. Census Bureau. (2000).

²² California Employment Development Department. (2007). *Industry Employment & Labor Force—by Annual Average*. Retrieved from <http://www.labormarketinfo.edd.ca.gov/>



Source: California Employment Development Department, 2007

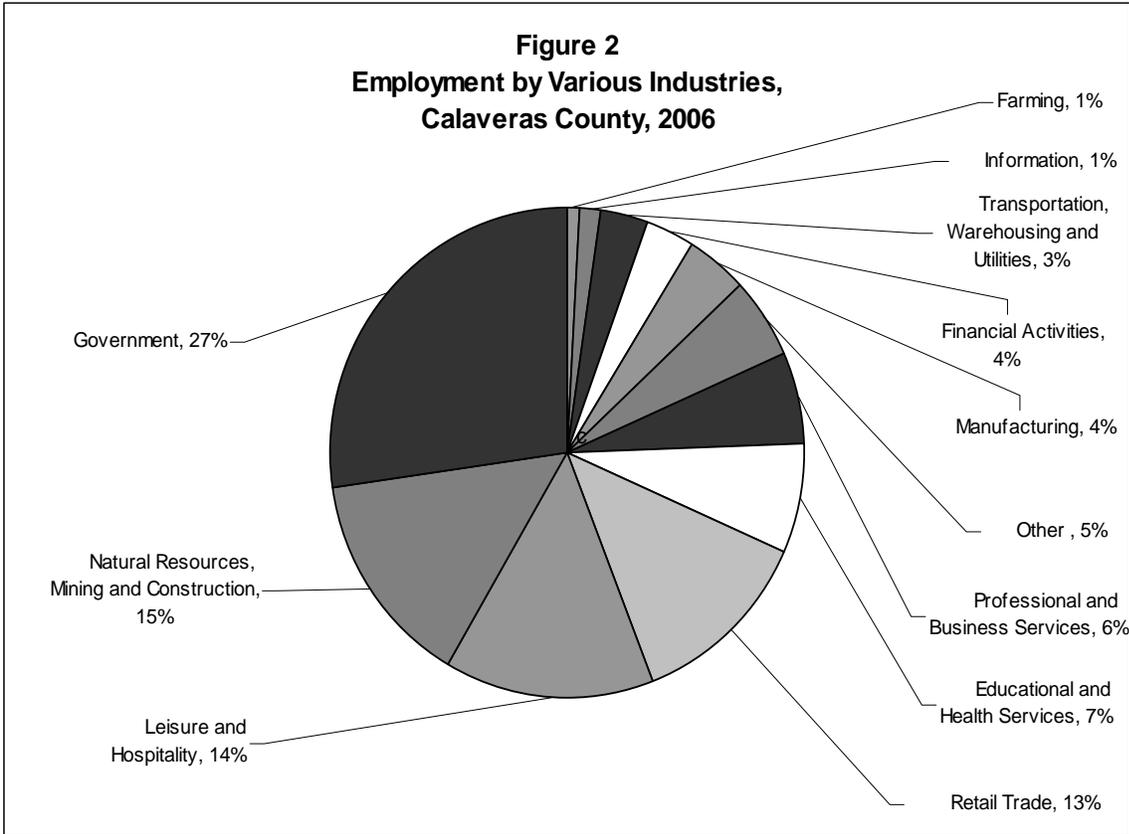
Calaveras County

The county experienced a seasonally adjusted unemployment rate of 5.3 percent in 2007.²³ During the years from 2002 to 2006, industry employment totals increased 6.3 percent. Natural resources, mining and the construction industry showed the highest growth, adding 240 jobs. Trade, transportation and utilities recorded the next highest growth followed by leisure and hospitality.²⁴ This has resulted in 2006 employment distributions in which the three industries which dominate the local economy are: government, 27 percent; Natural Resources, Mining, and Construction, 15 percent; and Leisure and Hospitality, 14 percent (see Figure 2).²⁵

²³ California Employment Development Department. (2007). *Civilian Labor Force, Employment and Unemployment*. Retrieved from <http://www.labormarketinfo.edd.ca.gov/>

²⁴ California Employment Development Department. (2007).

²⁵ California Employment Development Department. (2007). *Industry Employment & Labor Force—by Annual Average*. Retrieved from <http://www.labormarketinfo.edd.ca.gov/>



Source: California Employment Development Department, 2007

Non-farm Wage and Salary Employment, which accounts for 89 percent of total employment, is expected to grow 1.1 percent annually for the next ten years in the Mother Lode Region. Six out of ten new jobs are forecasted to occur in Government (1,130 jobs), Education and Health Services (920 jobs), and Leisure and Hospitality (880 jobs).

Occupations

For the Mother Lode region, occupational projections for the period 2004 to 2014 forecast include:

- Almost 4,800 new jobs from industry growth
- About 11,900 net job openings from replacements
- A combined total of approximately 16,700 jobs²⁶

The top 50 occupations with the most job openings will generate over 58 percent of all job openings in the Mother Lode Region during the 2004-2014 period.²⁷ These occupations are expected to generate almost 9,700 total job openings.²⁸ Many of the occupations with the most job openings are low-paying, entry-level occupations such as Cashiers, Retail Salespersons, and Waiters and Waitresses.

Implications for Early Care and Education

A shortage of early care and education options for residents in rural Amador and Calaveras counties limits economic prosperity. The following are some innovative rural early care and education strategies:

- Improving recruitment and training efforts to increase the supply of licensed and license-exempt care along transportation routes
- Offering technical assistance for small rural employers in creating cost efficient early care and education solutions for their employees
- Supplying early care and education in schools, and faith-based and community facilities

Employment Status of Parents

Amador County

The majority of Amador County's children live in households where all parents work (see Figure 3).²⁹ In particular, an overall average of over 67 percent of children (including 60 percent of children ages 0 through 5 and 72 percent of children ages 5 through 12) live in households where all parents participate in the workforce.³⁰ These data account for single parents who work, as well as dual parent families where both parents participate in the labor force. However, these data do not account for parents who are in school.

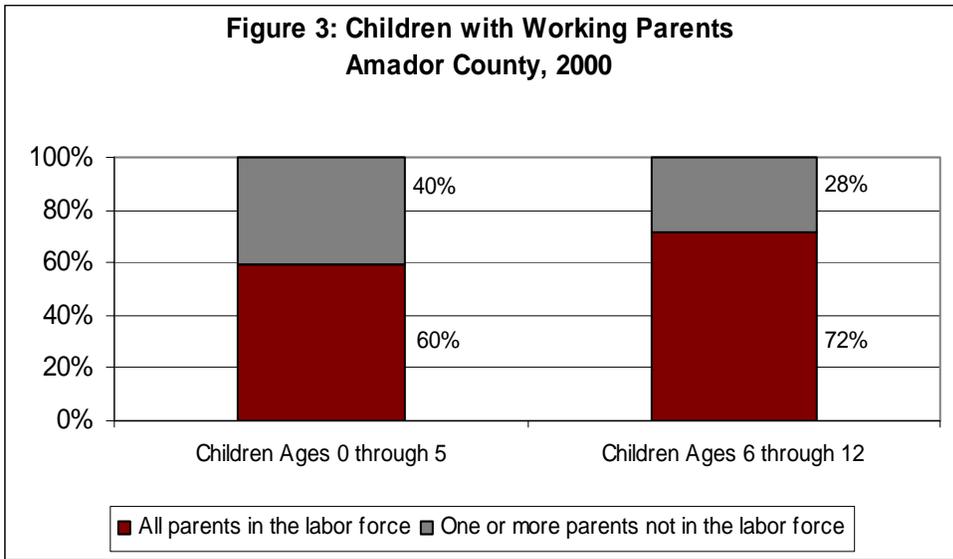
²⁶ Mother Lode region includes Alpine, Amador, Calaveras, Inyo, Mono, Tuolumne and Mariposa counties. Mother Lode Region Projection Highlights, Employment Development Department Projections of Employment by Industry and Occupation, 2007

²⁷ California Employment Development Department, 2007.

²⁸ California Employment Development Department, 2007.

²⁹ U.S. Census Bureau. (2000).

³⁰ U.S. Census Bureau. (2000).



Source: U.S. Census Bureau, 2000

Calaveras County

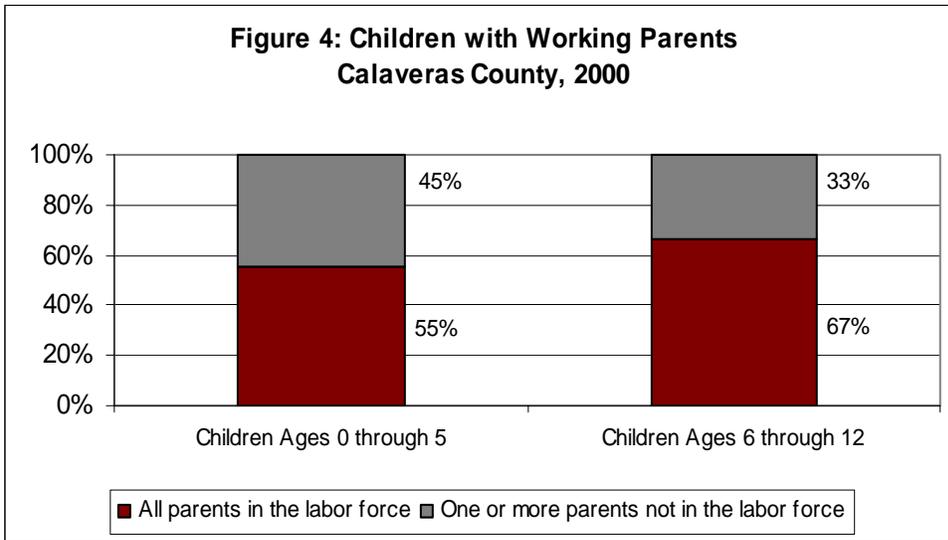
Many children in Calaveras County live in families where all parents work. In particular, an overall average of nearly 61 percent of children (including 55 percent of children ages 0 through 5 and 67 percent of children ages 5 through 12) live in households where all parents participate in the workforce (see Figure 4).³¹ These data account for single parents who work, as well as dual parent families where both parents participate in the labor force. However, these data do not account for parents who are in school.

A shortage of affordable and high-quality ECE arrangements may inhibit labor force participation. Female labor force participation, an indicator of ECE need and accessibility, is at 49 percent. While slightly lower than the national average of 59 percent, the percentage of women in the labor force has increased from 5,597 in 1990 to 8,023 in 2000, a 43 percent increase.³² Furthermore, in Calaveras County 57 percent of women with a child under the age of six participate in the labor force.³³

³¹ U.S. Census Bureau. (2000).

³² U.S. Census Bureau. (2000).

³³ California Resource and Referral Network, 2005 California Child Care Portfolio, 2000 U.S. Census



Source: U.S. Census Bureau, 2000

Not all families use formal ECE programs. 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. For parents who must use ECE services, investing in the county's ECE infrastructure gives these parents affordable, high-quality options.

Section Summary

The shifting economic and demographic landscape of Amador and Calaveras counties creates a challenge for its ECE industry. Changing and evolving economic and social conditions—population shifts, growing diversity, increased labor force participation by parents, and continuing welfare reform—fuel continued need for accessible, affordable and quality ECE programs.

Section Three

Linking Early Care and Education, Business, and the Current Economy

This section describes the role that 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 Amador and Calaveras Counties' 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, decreasing turnover and absenteeism, and increasing the pool of potential new employees.

ECE Supports the Current Workforce

The ECE industry plays an important role in supporting Amador and Calaveras Counties' existing labor force. It:

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

ECE Sustains Labor Force Participation

ECE and Economic Output

ECE, like other economic infrastructures, builds the local economy and improves the quality of life in the counties. Greater economic health reduces crime, enables individuals and families to live better and more fully, and increases governments' budgets to provide better services for residents. Public and private investments in ECE infrastructure contribute to Amador and Calaveras Counties' overall productivity and economic competitiveness by:

- Expanding local labor force participation by enabling people to work
- Contributing to increased output, greater personal income, more business formation, and higher revenues from local taxes
- Increasing productivity and retention of employees in businesses in the counties
- Ensuring future public savings on social needs by lowering drop-out and crime rates, and decreasing special education and welfare costs
- Cultivating Amador and Calaveras Counties' future workforce by improving the cognitive skills and emotional well-being of children, and ensuring that they enter the traditional K-12 school system ready to learn
- Fueling local economic expansion with federal and state child care subsidies
- Improving the quality of life in Amador and Calaveras Counties
- Capturing more federal and state child care subsidies, which make ECE more affordable for workers in Amador and Calaveras Counties

Amador County

Working families make up a noticeable share of the total labor force at any one time. In Amador County, nearly 18 percent of the total labor force (over 14,000 workers) live in households with children under the age of thirteen where all parents work.³⁴ In total, these families earn over \$101.3 million annually in Amador County.³⁵

Calaveras County

Approximately 18 percent of the labor force (over 17,500 workers) live in households with children under the age of thirteen and where all parents work.³⁶ In total, these families earn over \$135.5 million annually in Calaveras County.³⁷

ECE Promotes Career Development and Educational Advancement

A shortage of highly skilled and educated workers in Amador and Calaveras Counties undermines the region's ability to attract new businesses with higher paying jobs and thus impedes the region's long-term economic prosperity. 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.

Strengthening ECE allows working parents to sustain employment and achieve higher education, which benefits the economy.

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

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.³⁸

³⁴ U.S. Census Bureau. (2000). This number was developed by the Insight Center using data from the 2000 U.S. Census on children, income.

³⁵ U.S. Census Bureau. (2000).

³⁶ U.S. Census Bureau. (2000).

³⁷ U.S. Census Bureau. (2000)..

³⁸ 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.

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).³⁹

Future Labor Force

In addition to strengthening the current workforce, ECE is an essential component of the education system that cultivates the future workforce and offers a significant public financial return.

ECE Prepares Children for Success in School and Beyond

While no ECE program can guarantee lifelong success for its participants, quality ECE can increase children's ability to enter traditional K-12 schooling ready to continue learning, which better prepares them for future opportunities.⁴⁰ 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.

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 issues⁴¹

High-Quality Early Care and Education's Significant Public Return

While no long-term studies have specifically focused on the children of Amador and Calaveras Counties, there are three long-term studies from other parts of the country that provide evidence of the potential long-term benefits of quality ECE in Amador and Calaveras.

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

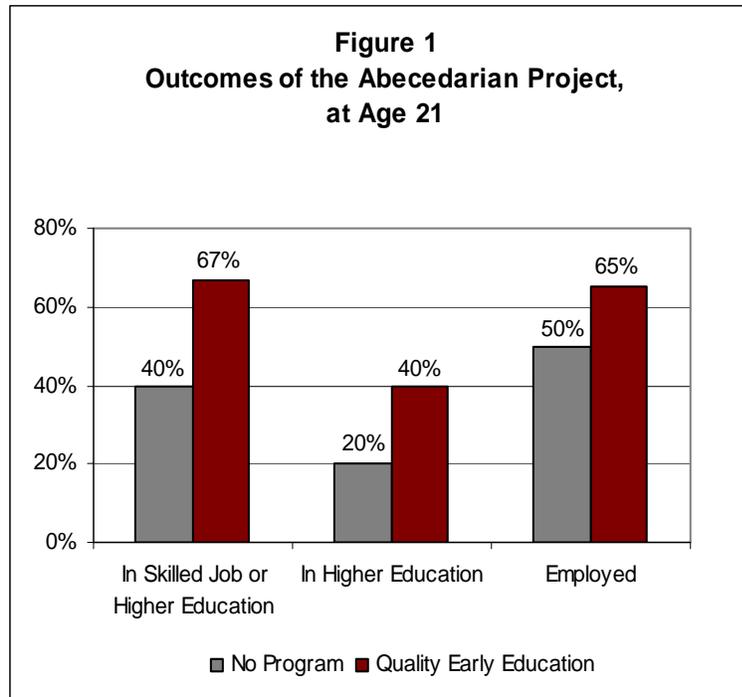
³⁹ U.S. Department of Labor, Bureau of Labor Statistics. (2006). *Household Data Annual Averages*. Retrieved July 2006 from <http://www.bls.gov>

⁴⁰ Brooks-Gunn, J. (2003). Do You Believe in Magic? What We Can Expect from Early Childhood Intervention Programs. *Social Policy Report*. 17 (1).

⁴¹ 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.

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.⁴²

In the Abecedarian Study, a group of low-income children was randomly assigned to an early intervention program that lasted from birth through age four, while 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).⁴³



Source: The Frank Porter Graham Child Development Institute

In a study of Chicago Child-Parent Centers (CPCs), 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.⁴⁴ 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 than those children who did.⁴⁵

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 of adults who had received early childhood education instruction earned more money, were more likely to have a

⁴² 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.

⁴³ 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/>

⁴⁴ 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.

⁴⁵ 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>

savings account, and were less likely to be repeat criminal offenders than their peers who were not randomly assigned to the program as children.

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).⁴⁶

Table 1
Summary of Costs and Benefits per Participant in 2002 Dollars for
Three Early Care and Education Programs

	Ages of Children in Program	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	3 through 9	2	\$4,856	\$7,384	\$74,981
Perry Preschool Project	3 and 4	2	\$9,759	\$15,844	\$138,486
Abecedarian Project	0 through 4	5	\$13,900	\$35,864	\$135,546

Source: Reynolds, A.J. and Temple, J.A., 2006.⁴⁷

ECE Increases School Readiness 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.⁴⁸ A third of middle-income children and a fourth of upper-middle-income children lack “key pre-literacy skills” when they enter kindergarten.⁴⁹ These findings provide evidence that high-quality early education 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.”⁵⁰

In a recent rigorous evaluation of the Arkansas Better Chance Program (ABC), a state-funded preschool program, researchers found that ABC has significantly increased school readiness

Reynolds, A.J. et al. (2006). Reynolds, A.J. and Temple, J.A. (2006). “Economic Returns of Investments in Preschool Education.” *A Vision for Universal Preschool Education*; pp 37-68. The Chicago CPC and the Perry Preschool Project were both half-day programs. The Abecedarian was a full-day project. Values are in constant dollars and based on a 3 percent discount rate.

⁴⁷ Children frequently did not attend the program for the intended number of years, so the total cost of program per child did not equal the number of years in the program multiplied by the average annual cost of the program per child.

⁴⁸ 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*.

⁴⁹ Coley, R.J.

⁵⁰ Barnett, W.S. (2004). Preschool-for-all Hearing, Sacramento, CA.

indicators, including early language, literacy and mathematical development.⁵¹ These findings are consistent with findings from rigorous evaluations of state-funded preschool programs in other states, including New Jersey's Abbott Preschool Program and Oklahoma's Early Childhood Four-Year-Old Program.^{52,53}

Other studies have noted a connection between a lack of school readiness and school dropout rates. A study by Melissa Roderick of the University of Chicago found that repeating a grade between kindergarten and sixth grade substantially increased the odds of dropping out of school during middle school and high school.⁵⁴ In one cohort of public school youths, nearly 80 percent of students who repeated a grade dropped out of school, compared to only 27 percent of students who had never repeated a grade.⁵⁵

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.⁵⁶ 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."⁵⁷ These studies 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 of 7 percent (see Figure 2).⁵⁸

⁵¹ Hustedt, J.T. et al. (2007). *The Effects of the Arkansas Better Chance Program on Young Children's School Readiness*. Retrieved on February 15, 2007 from: <http://nieer.org/resources/research/ArkansasYear1.pdf>.

⁵² Lamy, C. et al. (2005). *Giant Steps for the Littlest Children: Progress in the Sixth Year of the Abbott Preschool Program. Year Three Initial Update, 2004-2005. Early Learning Improvement Consortium*. Available at <http://www.nj.gov/njded/ece/abbott/giantsteps/>.

⁵³ Barnett, W.S. et al. (2005). *The Effects of State Prekindergarten Programs on Young Children's School Readiness in Five States*. Retrieved on February 20, 2007 from: <http://nieer.org/resources/research/multistate/fullreport.pdf>

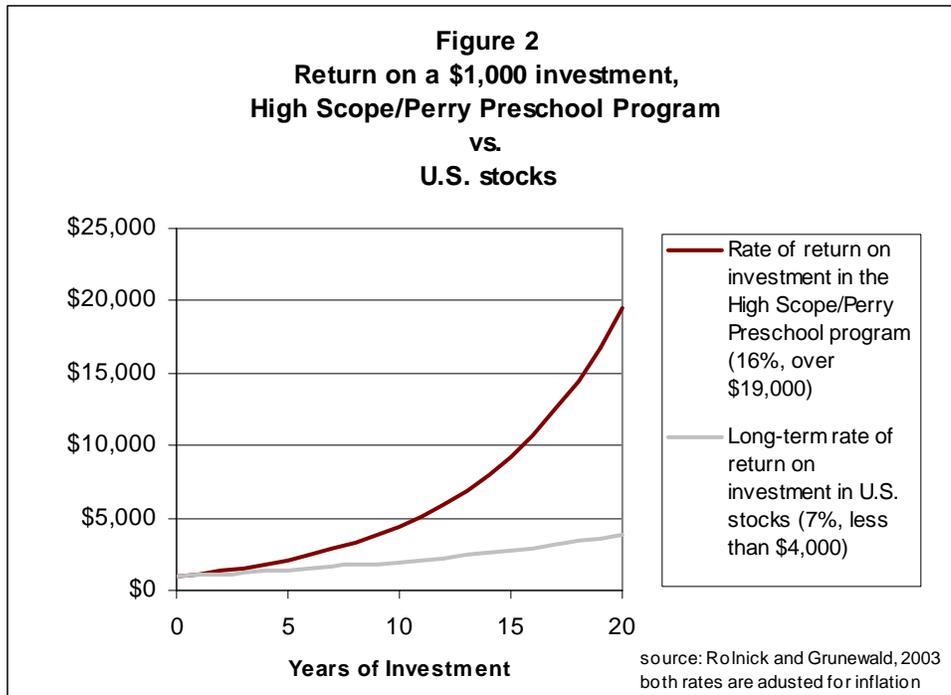
⁵⁴ Roderick, M. (1994). *Grade Retention and School Dropout: Investigating the Association. American Educational Research Journal*. 31(4): 729-759.

⁵⁵ Roderick, M. (1994).

⁵⁶ Rolnick, A and Grunewald, R. (2003). *Early Childhood Development: Economic Development with a High Public Return. Fedgazette*. Minneapolis, MN: Federal Reserve Bank of Minneapolis.

⁵⁷ Rolnick, A and Grunewald, R. (2003).

⁵⁸ Rolnick, A and Grunewald, R. (2003).



According to Ben Bernanke, Chairman of the Federal Reserve Board, “Although education and the acquisition of skills is a lifelong process, starting early in life is crucial. Recent research...has documented the high returns that early childhood programs can pay in terms of subsequent educational attainment and in lower rates of social problems, such as teenage pregnancy and welfare dependency. The most successful early childhood programs appear to be those that cultivate cognitive and noncognitive skills and that engage families in stimulating learning at home.”⁵⁹

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.⁶⁰ A cost-benefit analysis found that financial benefits from improved school performance, increased compensation, decreased juvenile and adult criminal activity, and reduced welfare costs outweighed the costs of increased attendance at school and the cost of programs.⁶¹

Quality of life is affected by after-school programs as well. At least 50 percent of youth crime occurs in the hours after school.⁶² 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

⁵⁹ Bernanke, B. (2007). *The Level and Distribution of Economic Well-Being*. Speech before the Greater Omaha Chamber of Commerce on February 6, 2007. Retrieved from <http://www.federalreserve.gov/BoardDocs/Speeches/2007/20070206/default.htm>

⁶⁰ Rolnick, A. and Grunewald, R. (2003).

⁶¹ 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.

⁶² U.S. Department of Justice (1997) as cited by the Massachusetts Executive Office of Public Safety. Cops & Kids Fact Sheet, 2000.

use drugs.⁶³ Risk behaviors during adolescence predict a future of increased criminal behavior and health problems in adulthood. 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.”⁶⁴

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.”⁶⁵

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.⁶⁶ 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 participants⁶⁷

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.”⁶⁸

⁶³ D. A. Farbman. (2003). *The Forgotten Eighty Percent: The Case for Making the Most out of Children's Time out of School*, Boston.

⁶⁴ Fight Crime, Invest in Kids. (1999). *Poll of Police Chiefs conducted by George Mason University Professors Stephen D. Mastrofski and Scott Keeter*.

⁶⁵ 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

⁶⁶ 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.

⁶⁷ 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.

⁶⁸ Federal Reserve Bank of San Francisco. (2006). *Economic Inequality in the United States*. Retrieved from <http://frbsf.org/news/speeches/2006/1106.html>

Section Summary

The Early Care and Education industry is critically linked in many ways with the future economic success of Amador and Calaveras counties. Investments in building and maintaining a high-quality ECE system reduces future public expenditures and helps Amador and Calaveras Counties 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 state's economic development. Investing in quality ECE becomes a catalyst for the economic success of Amador and Calaveras Counties:

- 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 enhances 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 state's future workforce and their future employees

Section Four

Economic Profile of the Early Care and Education Industry

To assess the economic characteristics of the ECE industry in Amador and Calaveras Counties, this section quantifies:

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

The section also addresses factors in increasing the industry's capacity to meet the needs of Amador and Calaveras counties' children, families, and economy. It should be emphasized that the economic analysis covers the formal ECE industry. Thus, the findings in this report underestimate the full economic impact of ECE. In addition, the analyses in this section do not include revenue and employment in indirect support services through the child care infrastructure, including research, oversight, administration, and training activities at government, non-profit, and for-profit establishments. As a result, this is a conservative estimate of the ECE industry's impact on the counties' economies.

The Early Care and Education Universe in Amador and Calaveras Counties

The economic analyses in this report (e.g., gross receipts and direct employment) focus on the counties' 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)
- License-exempt after-school programs in public schools
- License-exempt care providers who provide care with government funding (e.g., friends and relatives)

All of the programs in the counties' 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 diagram of various components of the ECE industry).

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
 - with capacity totaling 223 in Amador County
 - with capacity totaling 265 in Calaveras County

- Head Start and Early Head Start
 - with a desired capacity of 160 in Amador County
 - with a desired capacity of 281 in Calaveras County
- Before- and after-school programs run by private providers in public school facilities with capacity totaling 154 in Calaveras County
- California Department of Education, Child Development Division-funded child development programs, such as State Preschool with capacity totaling 96 in Amador County

Licensed Family Child Care Homes

Small family child care homes are independent small businesses that provide care for no more than 8 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. There are 314 family child care home slots in Amador County and 288 family child care home slots in Calaveras County.

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,

- After-school programs with capacity of 316 in Amador County
- An employer-sponsored, license-exempt program for toddlers through school age, serving 353 children in Amador County
- Before and after school programs on school sites with a capacity of 155 in Calaveras County
- After School Education and Safety programs (ASES) with a capacity of 143 in Calaveras County

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

Care provided by friends, neighbors and relatives who do not receive vouchers is not regulated in Amador and Calaveras Counties 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. 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. **By excluding these types of ECE programs, this report's findings are conservative estimates of the total impact that ECE has on the economy.**

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.⁶⁹ This study uses a more accurate method of measuring the size of the ECE industry, primarily relying upon data from the HRC Child Care Resources and the Amador Child Care Council.

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 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).

Amador County

The total economic value of the ECE industry in Amador County in 2006 was \$4.9 million. The breakdown by category is as follows:

- \$1.2 million for licensed family child care homes
- \$1.0 million for licensed private for-profit and non-profit child care centers (excluding Head Start and CDE-CDD funded programs)
- \$1.6 million for Head Start programs
- \$370,000 for license-exempt after-school programs
- \$340,000 for the State Preschool program funded by the California Department of Education, Child Development Division
- \$270,000 for license-exempt employer-supported child care center

The ECE industry generates \$4.9 million in gross receipts in Amador County.

Many of the dollars generated are from private-pay parent fees, but others are from both federal and state dollars, through government-funded programs such as State Preschool and Head Start, and from direct tuition assistance to income-eligible parents.

⁶⁹ 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.

As noted above, this is a conservative estimate of the dollars generated by the industry as it does not include funding for ECE programs from First 5 Amador, nor does it include funding for the Child Care Council or the CARES training program.

Calaveras County

Based on the methodology briefly described above, the estimated value of annual gross receipts for the formal ECE industry in Calaveras County is \$6.2 million:

- \$995,000 for licensed family child care homes
- \$662,000 for private, licensed for profit, nonprofit and sectarian child care centers (excluding Head Start and CDE-CDD funded programs)
- \$404,000 for all child development programs funded by the California Department of Education
- \$2.4 million for Head Start and Early Head Start programs
- \$246,000 for license-exempt relative and in-home care providers receiving vouchers
- \$1.5 million license exempt before- and after-school programs

The ECE industry generates \$6.2 million in gross receipts in Calaveras County.

The ECE industry generates \$6.2 million in gross receipts in Calaveras County. The majority of gross receipts are paid by parents, but a significant portion are paid by government assistance programs that make ECE programs affordable for low-income families. This gross receipts value includes any subsidies from employers to parents, since they would make up a portion of the consumer price paid towards ECE programs the parents purchase for their children. This analysis does not include any employer monies invested in a program outside of consumer price. For example, if a company made a grant to an on-site or near-by establishment which enabled the establishment to offer services at a lower cost to parents, only the cost to parents would be captured. This discrepancy results in an underestimate of the total dollars going into the industry.

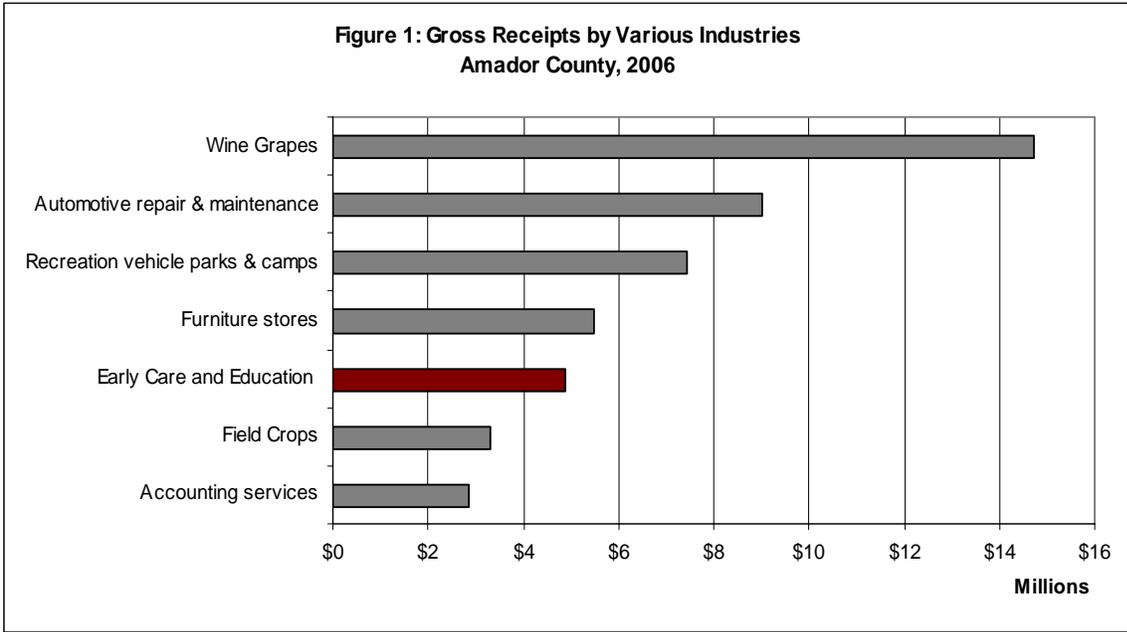
Gross Receipts Compared with Other Industries

In the previous section, we described the total impact of the ECE industry in terms of dollars generated. It will be more instructive to show the impact of the industry by comparing it to other industries.

Amador County

The ECE industry ranks above accounting services (\$2.8 million) and field crops (\$3.3 million). It ranks close to total revenues from furniture stores, and is below RV parks, auto repair, and wine grape production (see Figure 1).⁷⁰

⁷⁰ Based on the U.S. Census Bureau's 2002 Economic Census and adjusted to 2006 using the Consumer Price Index. Amador County Department of Agriculture. (2007). *2006 Agricultural Crop & Livestock Report*. Retrieved from <http://www.co.amador.ca.us/depts/agriculture/documents/CR2006.pdf>

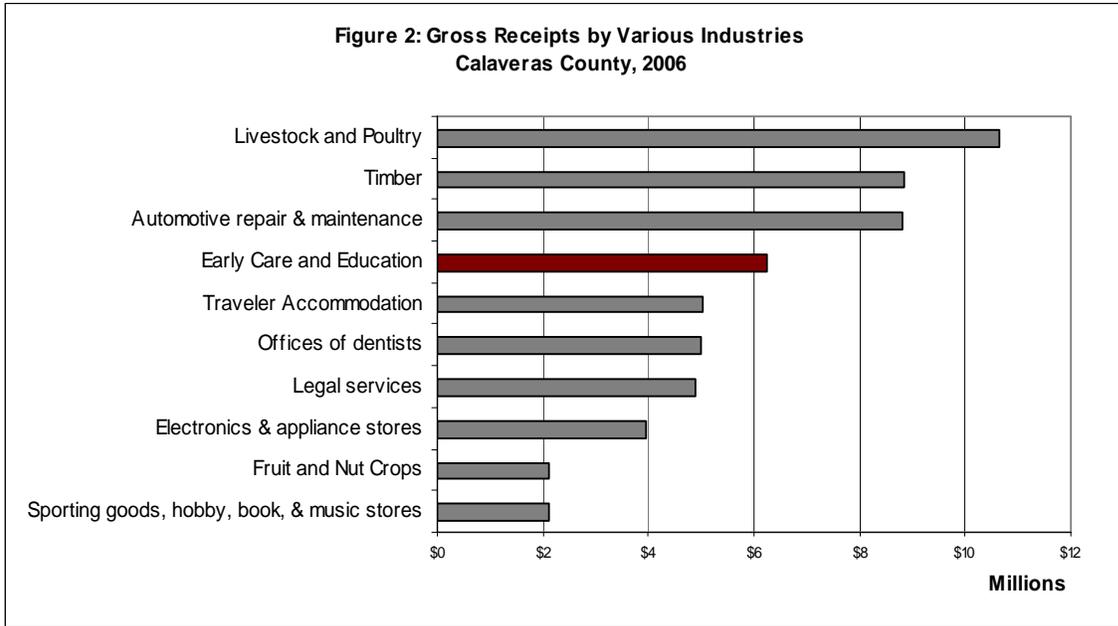


Source: U.S. Census Bureau, 2002 and Amador County Department of Agriculture, 2007

Calaveras County

Comparing the ECE industry’s gross receipts with other industries in the state puts the gross receipts calculation into context. Calaveras County industries range widely in size, from \$2.1 million for sporting goods, hobby, book & music stores to more than \$10 million for livestock and poultry.⁷¹ Comparing the ECE industry with Calaveras County’s other industry sectors indicates that ECE generates more gross receipts than traveler accommodations, offices of dentists, and legal services (\$5 million) and fruit and nut crops (\$2.1 million; see Figure 2). The gross receipts of ECE are similar to traveler accommodations and offices of dentists in Calaveras County.

⁷¹ Based on the U.S. Census Bureau’s 2002 Economic Census and adjusted to 2006 using the Consumer Price Index. Calaveras County Environmental Management Agency. (2007). *2006 Annual Crop Report*. Retrieved from www.co.calaveras.ca.us/departments/agriculture/2006_crop.pdf



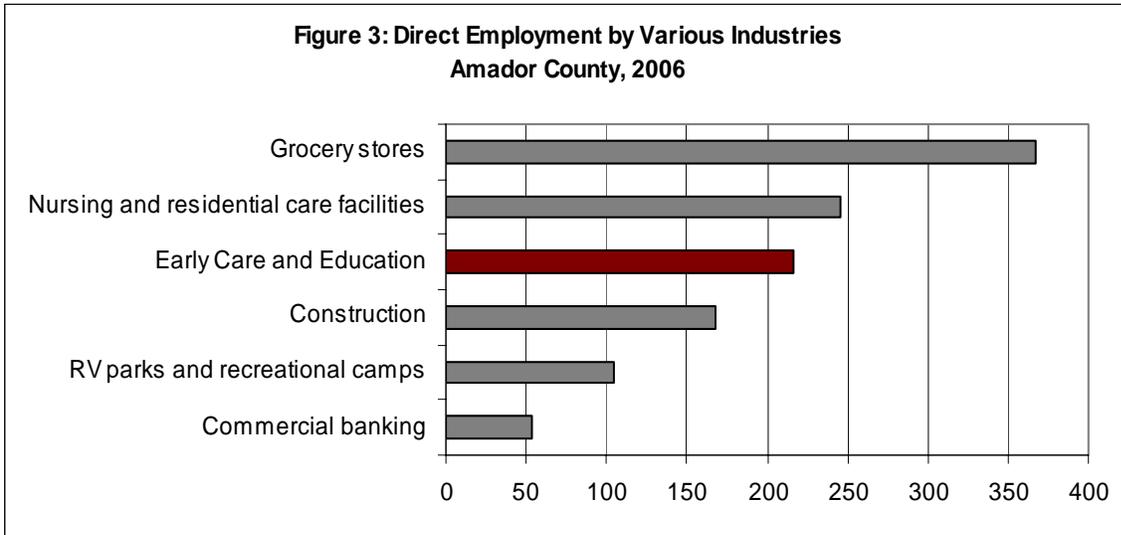
Source: U.S. Census Bureau, 2002 and Calaveras County Environmental Management Agency, 2007

Direct Employment Compared with Other Industries

It is also instructive to look at the numbers of workers in the ECE industry as compared to other industries in the counties, by looking at Full-Time Equivalent jobs (FTEs).

Amador County

In 2006, there were more workers employed in ECE (217 FTEs) in Amador than in commercial banking, RV parks, or construction (see Figure 3). By comparison, residential care facilities and grocery stores employed more workers.



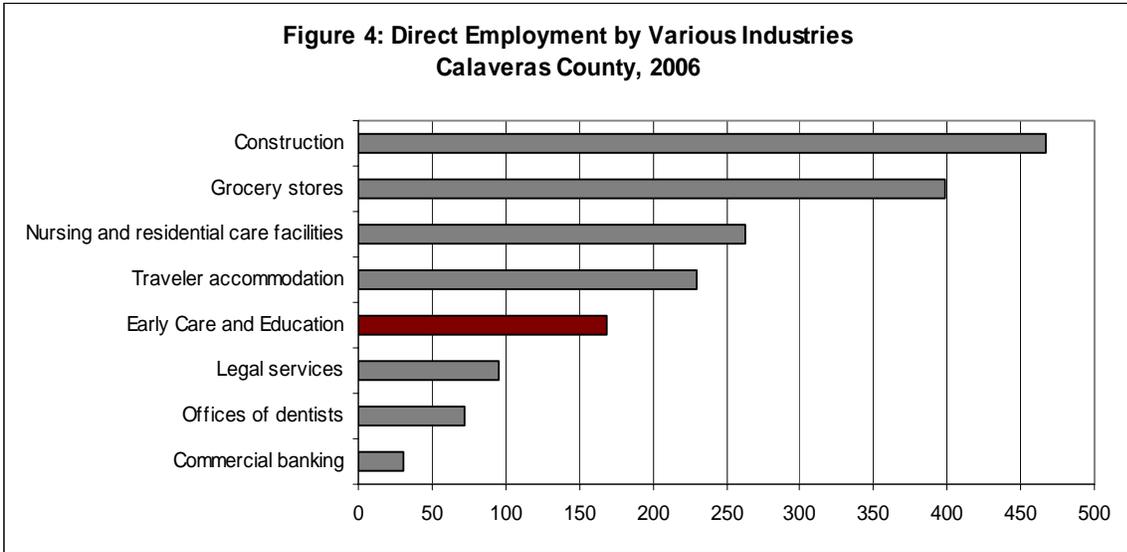
Source: U.S. Department of Labor, Bureau of Labor Statistics, 2006

Calaveras County

The ECE industry has 169 FTEs in Calaveras County. The number of FTEs in ECE is 33 percent of the number of employees in construction (467 jobs), and similar to finance and insurance (10,397 jobs; see Figure 4).⁷² There are more FTEs in ECE in Calaveras County than there are workers in legal services (95 jobs), offices of dentists (72 jobs), and commercial banking (30 jobs; see Figure 4).⁷³

⁷² Bureau of Labor Statistics. (2005). *Quarterly Census of Employment and Wages*. Retrieved October 2006 from <http://data.bls.gov>

⁷³ Bureau of Labor Statistics. (2005). *Quarterly Census of Employment and Wages*. Retrieved October 2006 from <http://data.bls.gov>



Source: U.S. Department of Labor, Bureau of Labor Statistics, 2006

Capture of Federal and State Subsidies

The state and federal governments provide support for ECE by funding child care assistance for low-income families and by directly funding child development programs. The availability of federal and state child care investments plays an important role in supporting local economic development and the sustained employment of low-income families. Furthermore, these funds promote the development of Amador and Calaveras Counties’ low-income children for economic success in the future. There are a number of programs that provide direct services in local communities. They are described here with the most recent funding information available.

Subsidies are provided in three basic forms: direct contracts with child care centers based on the number of low-income children they serve and the number of days of care provided, an “Alternative Payment” (AP) program which enables families to choose their own licensed or license-exempt child care provider, and direct payments to providers to improve child care quality.

HRC Child Care Resources provides subsidized child care assistance available to low income families. HRC supports a portion of the cost of child care services to assist parents who are maintaining employment or attending education/training classes that lead to

CalWORKs ECE at a Glance

Stage One: CalWORKs families become eligible when the parent starts work or work-related activities and there is no other adult family member to provide care. The child’s age, the cost of care, and the provider chosen sometimes limits eligibility. Centers, licensed family day care, or license-exempt providers provide care based on the parent’s choice. Families who cannot transfer to Stage Two continue to receive subsidies through Stage One under Stage Two rules and limits.

Stage Two: Once work activity is stable or parents transition off aid, parents or caretakers are eligible for child care subsidies for up to two years from the date they leave assistance if they are engaged in an approved activity, have a need for child care to continue this activity, and meet all other child care eligibility factors.

Stage Three: When a funded space is available, a family whose income is at or below 75 percent of the state median income, and who have exhausted their 24-month maximum for Stage Two care, enters Stage Three.

employment. Families may choose their own licensed or license-exempt provider.

Subsidized child care assistance, both at the federal and state levels, increased substantially following sweeping reforms to the federal welfare system in 1996 (the Personal Responsibility and Work Opportunities Act). California created its own version of welfare to comply with the new federal system, called CalWORKs (California Work Opportunity and Responsibility to Kids). CalWORKs replaced separate welfare-related child care systems with an integrated three-stage child care system, coordinated by two state agencies. "Stage One" child care services are administered by the California Department of Social Services (CDSS) through county welfare departments. Stages Two and Three child care services are administered by local agencies under contract with the California Department of Education (CDE). In SFY 2006, low - income families in Amador and Calaveras counties received a total of more than \$1.9 million in CalWORKs and AP payments for child care.⁷⁴

The comprehensive child development programs of Head Start and Early Head Start make up another significant portion of public funding for ECE. Head Start and Early Head Start programs serve children from birth to age 5, pregnant women and their families in child-focused programs designed to increase school readiness of young children in low-income families.⁷⁵ In 2006, Calaveras County spent more than \$2.4 million in federal and state funds for Head Start and Early Head Start programs.⁷⁶ Amador County's expenditures for Head Start in the same year totaled more than \$1.6 million.⁷⁷

The California Department of Education supports a number of child development programs throughout the county. For example, the California Department of Education funds state pre-schools, general child development centers, latchkey centers, and federal block grant centers. In SFY 2006, the California Department of Education spent a total of \$340,000 on child development programs in Amador County and \$404,000 in Calaveras County.⁷⁸

The United States Department of Agriculture contracts with multiple local sponsors to operate a child care food program, which contributes dollars to the local economy in the amount of \$98,000 in Amador County and \$134,850 for Calaveras County in FY 2004-2005.⁷⁹ These funds enable providers to supply nutritious meals for children from low-income families.

⁷⁴ Data provided by HRC Child Care Resources and the Amador Child Care Council.

⁷⁵ Data provided by HRC Child Care Resources and the Amador Child Care Council.

⁷⁶ Data provided by HRC Child Care Resources and the Amador Child Care Council.

⁷⁷ Data provided by HRC Child Care Resources and the Amador Child Care Council.

⁷⁸ Data provided by HRC Child Care Resources and the Amador Child Care Council.

⁷⁹ 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*. Retrieved from <http://www.cde.ca.gov/ds/sh/sn/documents/coprochild0405.pdf>

Early Care and Education and the Family Budget

Early care and education programs are a significant expense for families in most income brackets. The average annual cost for full-time licensed home-based child care for an infant is \$6,505 in Amador and \$6,400 in Calaveras. Full-time center-based care for preschoolers and school age children costs \$6,852 in Amador County and \$6,755 in Calaveras County.⁸⁰ Full-time unsubsidized ECE costs for infants, preschoolers, and school-age children cost more than the undergraduate fees, books and supplies for California residents at a California State University (\$3,330 for fees two semesters and \$1,386 for books and supplies).⁸¹ The cost of licensed ECE remains a significant challenge as families search for care that accommodates their schedules and other needs, according to the Portfolio. Early care and education expenses for a preschooler in a licensed child care center, represents 21 percent of the income for a family with both parents earning minimum wage. If the same family also had an infant in a family child care home, their child care expenses would increase to 44 percent of their income. If you combine housing and child care for an infant, a family earning \$15,600 would be spending 98 percent of their pre-tax salary, leaving little for other needs such as food, clothing, utilities, and transportation.⁸²

Full-time, unsubsidized ECE for infants, preschoolers and school-age children costs more than the undergraduate fees, books and supplies for California residents at a California State University.

Families are likely to have fewer resources when parents and children are young, thus increasing the ECE burden for families when they need it. Programs that reduce ECE costs for low-income families are critical to sustaining parents' participation in the workforce. In SFY 2006, the families of 474 children in Calaveras County were receiving ECE subsidies, and in November 2007, there were 163 children on the eligibility list for subsidized ECE. Additionally, there are many low and moderate-income families who are ineligible for ECE assistance, but still struggle to meet ECE costs. As families continue to transition from welfare to work, there will be an additional demand for affordable ECE that can meet the needs of families earning just enough income to be ineligible for ECE assistance and not enough income to afford ECE, an essential component of their sustained employment.

The *Self-Sufficiency Standard* measures the amount of income needed for a family to adequately meet its needs without government assistance.⁸³ Amador County's self-sufficiency wage is \$34,851 Calaveras County's is \$34,843 for an adult with two young children (for more scenarios please see Appendix B).⁸⁴ While both counties' self-sufficiency index is low compared to more affluent counties in California, the percentage of jobs whose full-time yearly pay is below this standard is high. The median hourly wage for all occupations in Calaveras County, for example, is \$14.60—significantly lower than the self-sufficiency wage for a single adult with two young children (\$16.50/hour).⁸⁵ Of the top ten jobs with the greatest absolute projected growth in Calaveras County from 2004 to 2014, only 3 pay an hourly self-sufficiency wage.⁸⁶

⁸⁰ California Resource and Referral Network Portfolio. (2007).

⁸¹ California State University, Stanislaus. (2007). Campus Cost of Attendance 2007-08. Retrieved from www.calstate.edu/SAS/fa_coa.shtml

⁸² California Resource and Referral Network Portfolio. (2007).

⁸³ Pearce, D. (2003). *The Self-Sufficiency Standard for California 2003*. Retrieved from <http://www.sixstrategies.org/files/2003%20CA%20Full%20Report%20with%20Map.pdf>

⁸⁴ Pearce, D. (2003).

⁸⁵ U.S. Department of Labor, Bureau of Labor Statistics.

⁸⁶ U.S. Department of Labor, Bureau of Labor Statistics.

Section Summary

The diversity of the ECE system is a vital feature in its ability to meet the needs of families in Amador and Calaveras Counties 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.

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 local economy.

Section Five

Conclusion and Recommendations

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

1. A shortage of high-quality ECE facilities
2. A shortage of financing and real estate options, which inhibits facilities development
3. A shortage of qualified ECE teachers, administrators and providers

The role and importance of ECE as a vital component of Amador and Calaveras Counties' 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 Amador and Calaveras counties.

Recommendation #1

Make the ECE industry a vital part of Amador and Calaveras counties' future development, including economic development, land use planning, and overall education system.

Public Sector Strategies:

- Streamline existing licensing and permitting processes including standardized 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
- Provide incentives for developers (fee exemptions, density bonuses, fast track permitting process, etc.) to include ECE into their plans including market rate and affordable housing, commercial and retail centers, educational institutions, family resource centers, senior centers, parks and recreational facilities, and transit hubs

Business Sector Strategies

- Include ECE representatives in economic development and business community planning efforts and activities, such as those of local Chambers of Commerce and Economic Development Corporations
- Encourage commercial and housing developers to create space for ECE in existing and future development projects (e.g. housing, schools, industrial parks, and shopping centers)
- Provide loan products specifically designed for ECE providers including favorable lending fees and interest rates

- Support expansion of existing ECE college courses at the local level

ECE Sector Strategies:

- Build an integrated professional development system in the counties 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 relevant ECE activities and provider trainings
- Support mentoring program and best practices for new ECE providers
- Develop resources of best practices for new ECE providers

Recommendation #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 business offering licensed infant and toddler care including subsidies and/or free or reduced rent for ECE facilities
- Encourage the development of ECE facilities in or near existing and new housing developments

Business Sector Strategies:

- Offer ECE benefits to employees which include, but are not limited to, reimbursements or direct payments to local on-site establishments, back-up ECE benefits, pre-tax flexible spending accounts that include ECE as an option, and/or flexible working schedules
- Invite local resource and referral agencies to share information about their services that can help employees with children find ECE services
- Support employee access to facilities that operate during nontraditional hours that replicate models of quality, accessible after hours care

ECE Industry Strategies:

- Form partnerships among providers to purchase goods and services collectively and more cheaply, such as food, supplies, and even some benefits, if appropriate

- 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 #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 tax incentives for businesses that offer ECE benefits, invest in the local ECE infrastructure, and/or offer below-market value rent to ECE programs

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:

- Continue to convene Child Care Planning Councils and Constructing Connections Collaborative meetings to discuss issues related to quality ECE programs and facility development
- 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

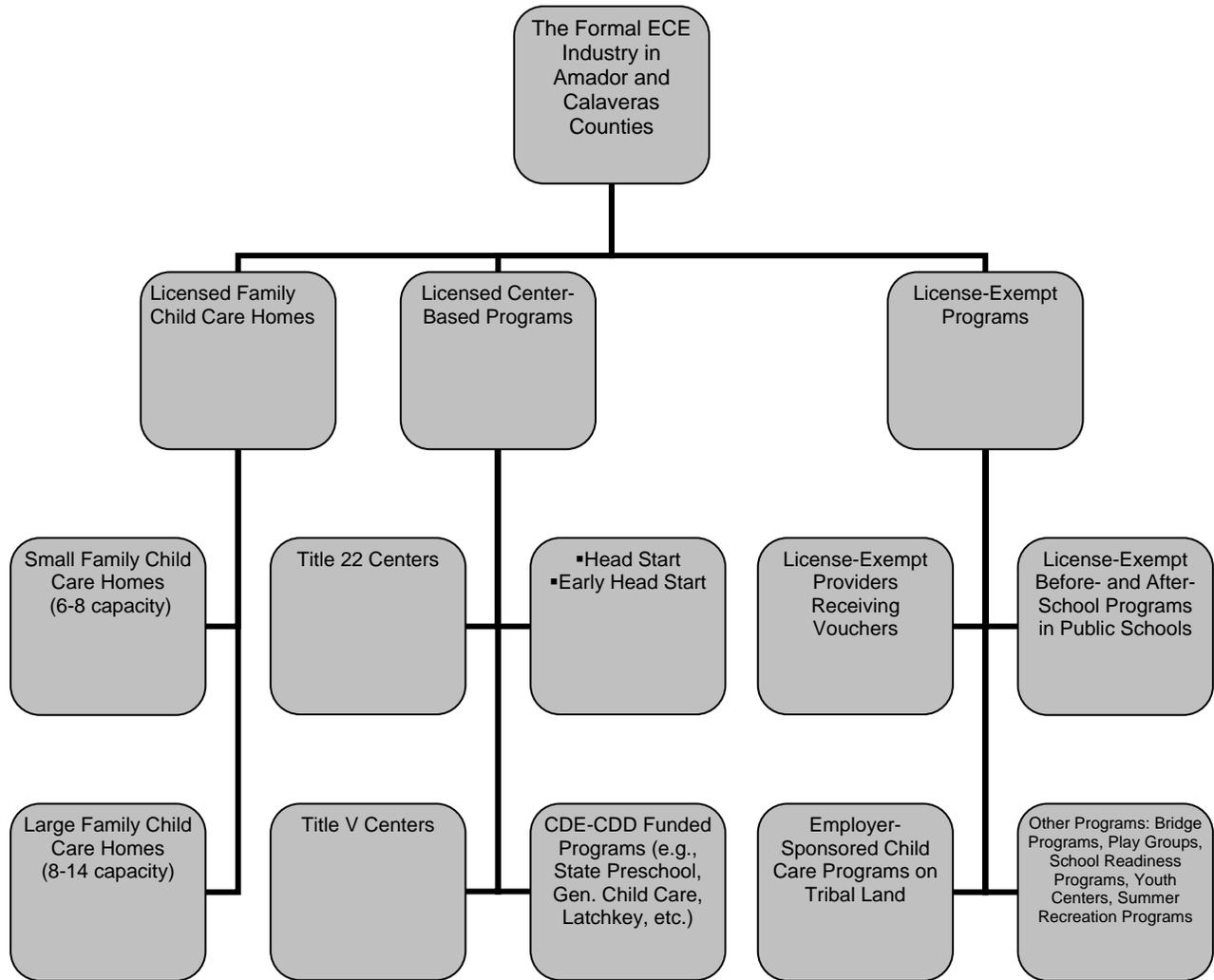
- Publicly recognize businesses that are champions of ECE
- Create a toolkit of ECE options and existing resources for employers to share with their working families

Conclusion

Ultimately, Amador and Calaveras counties' future economic productivity depends upon investment in quality Early Care and Education 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. Amador and Calaveras counties 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 Amador and Calaveras counties.

Appendix A

The Formal Early Care and Education Industry in Amador and Calaveras Counties



Appendix B

The Self-Sufficiency Standard in Amador and Calaveras Counties

Table 1
The Self-Sufficiency Standard for Amador County, 2003⁸⁷

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	518	692	692	692	692	963	692	692
Child Care	0	485	490	975	286	1261	975	776
Food	182	266	276	358	473	481	515	565
Transportation	245	251	251	251	251	251	481	481
Health Care	89	286	298	305	324	324	343	354
Miscellaneous	103	198	201	258	328	328	301	287
Taxes	186	277	288	357	587	587	419	348
Earned Income Tax Credit (-)	0	-33	-25	0	-150	0	0	0
Child Care Tax Credit (-)	0	-70	-70	-125	-73	-100	-105	-115
Child Care Tax Credit (-)	0	-83	-83	-167	-122	-250	-167	-167
Self- Sufficiency Wage								
Hourly	\$7.52	\$12.89	\$13.16	\$16.50	\$11.90	\$21.85	\$9.81	\$9.15
Monthly	\$1,323	\$2,269	\$2,317	\$2,904	\$2,094	\$3,845	\$3,453	\$3,222
Annually	\$15,881	\$27,226	\$27,801	\$34,851	\$25,133	\$46,141	\$41,437	\$38,659
							*Per Adult	*Per Adult

⁸⁷ Pearce, D. (2003). *The Self-Sufficiency Standard for California 2003*. Retrieved from <http://www.sixstrategies.org/files/2003%20CA%20Full%20Report%20with%20Map.pdf>

Table 2
The Self-Sufficiency Standard for Calaveras County, 2003⁸⁸

Monthly Costs	Adult	Adult + Infant	Adult + Preschooler	Adult + Infant + Preschooler	Adult + Schoolager +Teenager	Adult + Infant + Schoolager	2 Adult + Infant + Preschooler	2 Adults + Preschooler + Schoolager
Housing	477	635	635	635	635	885	635	635
Child Care	0	542	490	1032	286	1318	1032	776
Food	182	266	276	358	473	481	515	565
Transportation	245	251	251	251	251	251	481	481
Health Care	89	286	298	305	336	324	343	453
Miscellaneous	99	198	195	258	198	326	301	281
Taxes	170	277	264	357	176	577	418	329
Earned Income Tax Credit (-)	0	-33	-42	0	-169	0	0	0
Child Care Tax Credit (-)	0	-70	-73	-125	-66	-100	-105	-115
Child Care Tax Credit (-)	0	-83	-83	-167	-133	-250	-167	-167
Self- Sufficiency Wage								
Hourly	\$7.18	\$12.89	\$12.56	\$16.50	\$11.40	\$21.66	\$9.81	\$8.92
Monthly	\$1,263	\$2,268	\$2,210	\$2,904	\$2,006	\$3,812	\$3,452	\$3,140
Annually	\$15,158	\$27,215	\$26,518	\$34,843	\$24,077	\$45,740	\$41,429	\$37,683
							*Per Adult	*Per Adult

⁸⁸ Pearce, D. (2003). *The Self-Sufficiency Standard for California 2003*. Retrieved 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.

The Early Care and Education Universe in Amador and Calaveras Counties

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

- Licensed child care centers (including all Head Start and CDE-CDE funded programs)
- Licensed family child care homes (large and small)
- 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 Amador and Calaveras Counties' 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.

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:

Full-time Equivalent Enrollment x Average Cost/Child/Year = Gross Receipts

Full-time equivalent enrollment numbers for licensed child care centers are derived from data supplied by HRC Child Care Resources and the Amador Child Care Council.

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.

To determine average annual cost per year, monthly averages from the California Department of Education, Child Development Division's 2005 Market Survey were used.⁸⁹ 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 Tables 1 and 2 for a range of average rates by county).

Table 1 Average Annual Unsubsidized Cost for Early Care and Education, Based on 2005 Market Rate Survey, Amador County			
Type of Early Care and Education Arrangement	Infant and Toddler	Preschool Age	School Age
Licensed Child Care Center	\$9,360	\$6,300	\$5,080
Licensed Family Child Care Home	\$5,976	\$5,602	\$4,944

Table 2 Average Annual Unsubsidized Cost for Early Care and Education, Based on 2005 Market Rate Survey, Calaveras County			
Type of Early Care and Education Arrangement	Infant and Toddler	Preschool Age	School Age
Licensed Child Care Center	\$9,511	\$6,238	\$5,260
Licensed Family Child Care Home	\$5,932	\$5,500	\$4,876

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

⁸⁹ California Department of Education. (2005). *Reimbursement Ceilings for Subsidized Child Care*. Retrieved from <http://www.cde.ca.gov/fg/aa/cd/ap/index.aspx>

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

Family Child Care Homes licensed for 6-8 = 1 FTE Employee
Family Child Care Homes licensed for 12-14 = 2 FTE Employees

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 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.

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)
- License-exempt in-home and relative care providers receiving vouchers