



**INSIGHT**  
CENTER FOR COMMUNITY  
ECONOMIC DEVELOPMENT

# The Economic Impact of the Early Care and Education Industry in Los Angeles County

January 2008

In partnership with  
County of Los Angeles, Child Care Planning Committee  
Los Angeles Universal Preschool  
City of Los Angeles, Workforce Investment Board

# BACKGROUND

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## THE ECONOMIC IMPACT OF THE EARLY CARE AND EDUCATION INDUSTRY IN LOS ANGELES COUNTY

**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.

This report was commissioned by a unique partnership of three agencies in Los Angeles: the County of Los Angeles, Child Care Planning Committee; Los Angeles Universal Preschool; and the City of Los Angeles Workforce Investment Board. Together, these agencies appointed an 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.

Los Angeles County Advisory Board Members:

- Bruce Ackerman, Economic Alliance of the San Fernando Valley
- Cristina Alvarado, Child Care Information Services
- Dr. Sandra Burud, Berger Institute for Work, Family, and Children
- Maricela Carlos, Low Income Investment Fund
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We are indebted to our partners: County of Los Angeles, Child Care Planning Committee (represented by Laura Escobedo); Los Angeles Universal Preschool (represented by Lupita Tannatt and Randi Wolfe); and the City of Los Angeles, Workforce Investment Board (represented by Gregory Irish and Kimberly Hlaing).

The mission of County of Los Angeles, Child Care Planning Committee is to engage parents, child care providers, allied organizations, community, and public agencies in collaborative planning efforts to improve the overall child care infrastructure of the County of Los Angeles, including the quality and continuity, affordability, and accessibility of child care and development services for all families.

Los Angeles Universal Preschool's goal is to make voluntary, high-quality preschool available to every 4-year-old in Los Angeles County, regardless of their family's income, by 2014.

The work of the City of Los Angeles Workforce Investment Board (WIB) is to develop, in concert with the Mayor and City Council, policy and strategy to ensure that business has access to a trained workforce and workers have access to quality jobs.

Our partners appointed the Los Angeles County Technical Advisory 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.

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- Tim Bower, LAUSD/Beyond the Bell
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For a copy of the executive summary of this report, please visit [www.childcare.lacounty.gov](http://www.childcare.lacounty.gov)

# THE ECONOMIC IMPACT OF THE EARLY CARE AND EDUCATION INDUSTRY IN LOS ANGELES COUNTY

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## Section One Introduction

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The formal early care and education (ECE) industry in Los Angeles County encompasses a range of service options designed to nurture, support, enrich and educate children from birth through age 12, outside of traditional K-12 education.

A previous economic impact report in 1999 demonstrated that ECE is a critical component for any comprehensive plan for sustained economic development of Los Angeles County.<sup>1</sup> This new report aims to bridge the gap between current economic development planning and ECE by demonstrating that ECE remains a critical component of Los Angeles 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 Los Angeles County. Despite its importance in the county's economy, ECE is often left out of these discussions and plans. To complement the work of existing ECE stakeholders in Los Angeles County (including school districts throughout the county; local workforce investment boards; resource and referral networks; colleges and universities; Los Angeles Universal Preschool; First 5 LA; the County of Los Angeles, Child Care Planning Committee; parents; and members of the ECE workforce), this report shows that nontraditional stakeholders have a vested interest in ensuring that there is a high-quality and affordable ECE system in Los Angeles County.

This report uses the term "early care and education" throughout this report to reflect the variety of education and care service options which parents typically access. These service options include child care and child development programs and licensed home providers for children under age 12, preschool programs, after-school, latchkey, and other out-of-school time programs.

The county's ECE service options can be broken down into three main categories: licensed family child care programs, licensed child care centers and license-exempt service options and providers. Service options include licensed child care centers (e.g., infant/toddler, preschool and school-age service options in private for-profit and non-profit licensed child care centers, including Head Start programs), public Pre-K programs, and license-exempt before- and after-school service options for children ages 6 to 12 (e.g., 21<sup>st</sup> Century and After School Education and Safety programs). These service options 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 service options (as defined by each study's authors) that have yielded positive long-term outcomes and have generated significantly higher economic benefits than their initial costs. Early care and education literature generally focuses on three factors which can help determine program quality. First is the quality of the teacher (e.g., experience, training and educational attainment), second is the quality of the facility and third is the involvement of parents. Local ECE leaders note that the quality of ECE in Los Angeles County varies, but voluntary efforts to assess the quality of ECE are currently underway at the local level (see Section Five).

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<sup>1</sup> National Economic Development and Law Center. (1999). *Economic Impact of the Child Care Industry in Los Angeles County*.

## 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 enables parents to maintain employment and/or access education and training that lead to employment advancement. Today, the majority of children in Los Angeles County live in families in which all parents work. **Together, these working families with children ages birth through 12 earn nearly \$22.3 billion annually in the county.**<sup>2</sup>
2. High-quality ECE also 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 service options help them develop core skills and competencies that prepare them for future success in traditional K-12 classrooms.<sup>3</sup> For children ages 5 through 13, before- and after-school service options ensure children's safety while providing enriching educational activities that support the traditional school curriculum.<sup>4</sup>

As a result of the demand for ECE services, the industry has become a part of the county's "economic infrastructure," and as an economic driver, it provides financial benefits in three main ways:

### The early care and education industry serves two main purposes:

- Provides stimulating, age-appropriate early 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

1. **Quality ECE service options 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.<sup>5</sup> The quality of early education opportunities is linked to positive outcomes in school for children in all income brackets though most studies have shown particularly striking findings in children from low-income families.<sup>6</sup> Three separate longitudinal studies of targeted, intensive intervention service options 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 results in a 12

<sup>2</sup> This number was developed by the Insight Center using data from the 2005 American Community Survey on children and income.

<sup>3</sup> Shonkoff, J. and Phillips, D. Eds. (2000). *From Neurons to Neighborhoods: The Science of Early Childhood Development*. Washington, D.C., National Academies Press.

<sup>4</sup> National Institute on Out-of-School Time. (2005). *Making the Case: A Fact Sheet on Children and Youth in Out-of-School Time*. Center for Research on Women at Wellesley Centers for Women, Wellesley College, Wellesley, Mass.

<sup>5</sup> Shonkoff, J. and Phillips, D. Eds. (2000).

<sup>6</sup> 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.

percent rate of public return on investment.<sup>7</sup>

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.<sup>8</sup>
3. **ECE is a major industry in the county in its own right.** Research presented in this report demonstrates that ECE service options generate an estimated \$1.9 billion in gross receipts. This compares to other significant industries in the county. It is also a job-creating industry, employing over 65,000 full-time equivalent jobs.

**As an “economic driver,” the early care and education industry:**

- 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

## LOS ANGELES 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. The formal ECE industry includes business owners—many of whom are women and/or people of color—who provide an important service to the community. The formal service options that are included in this report include:

- Licensed child care centers
- Licensed family child care homes (large and small)
- License-exempt care providers who provide care with government funding (e.g., relatives)
- License-exempt before- and after-school service options

All of the service options 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. These formal service options also have data that are tracked and updated regularly (see Appendix A).

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<sup>7</sup> 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.

<sup>8</sup> 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.

### *Licensed Child Care Centers*

A variety of center-based ECE service options 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 and Early Head Start programs
- Before- and after-school service options run by private providers in public school facilities
- Faith-based programs
- Employer-sponsored centers and back-up care
- On-campus college early care and education centers
- California Department of Education, Child Development Division-funded child development programs, such as State Preschool
- Service options located and/or funded by school districts
- Los Angeles Universal Preschool (LAUP) 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, while large family child care homes are those that 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. Some family child care service options operate Los Angeles Universal Preschool (LAUP) programs.

### *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 Programs*

While many license-exempt before- and after-school service options do not collect accurate funding and usage data, three options for serving school-age children outside of the regular school day are publicly-funded, and therefore their funding information can be captured. They are included in this report:

- 21<sup>st</sup> Century programs
- After School Education and Safety service options (ASES)
- Beyond the Bell<sup>9</sup>

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<sup>9</sup> Beyond the Bell is a program of the Los Angeles Unified School District.

### *ECE Providers and Service Options NOT INCLUDED in this Report*

Care provided by friends, neighbors and relatives who do not receive vouchers is not regulated in Los Angeles 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. Although these ECE 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 is available.

Park and Recreation license-exempt before- and after-school programs, and some license-exempt before- and after-school service options in public schools (not 21<sup>st</sup> Century, ASES and Beyond the Bell) have been excluded because data aren't available about their comprehensive economic impacts. 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 service options 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 Los Angeles County's economy.

## Section Two

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

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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 Los Angeles 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, and increasing the pool of potential new employees. This section presents a variety of cost-effective ECE strategies for employers.

### ECE SUPPORTS THE CURRENT WORKFORCE

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

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

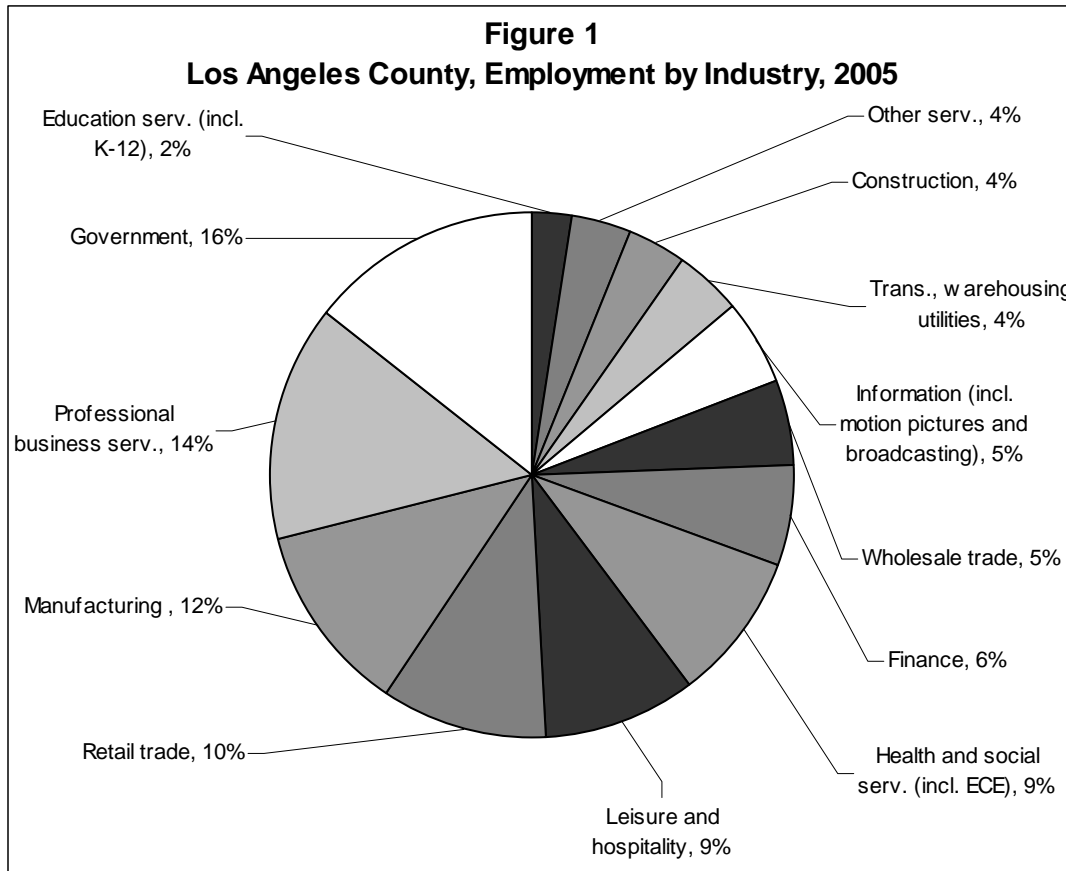
Before exploring the ways in which the ECE industry is linked to the current workforce, understanding the characteristics of the county's workforce is key.<sup>10</sup> Currently, the public sector employs 16 percent of the county's workforce, followed by professional and business services (14 percent); manufacturing (12 percent); and retail trade (10 percent; see Figure 1).<sup>11</sup> The health and social services industry, which includes data about ECE, employs 9 percent of the county's workforce (see Figure 1).<sup>12</sup>

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<sup>10</sup> Industry employment data is based upon information from the California Employment Development Department. A brief summary of each industry is summarized here. For more detailed definitions, please visit the California Employment Development Department (<http://www.labormarketinfo.edd.ca.gov/>) or the North American Industry Classification System website (<http://www.census.gov/epcd/www/naics.html>). Construction includes industries such as residential and nonresidential building construction and specialty contracting. Manufacturing includes creation of durable goods such as computers and furniture, as well as nondurable goods such as food and apparel. Trade, Transportation and Utilities includes air and ground transportation. Information includes publishing, motion picture and sound recording, radio and television broadcasting, and internet service provision. Professional and Business services includes legal services, accounting, and scientific research. Education and health services includes elementary and secondary schools as well as colleges and universities. Health and Social Services includes hospitals, residential care facilities, and child day care services. Leisure and Hospitality includes performing arts, and accommodation and food services. Finance includes credit intermediation and insurance carriers. Other services includes repair and maintenance and religious organizations. Government includes federal, state and local agencies.

<sup>11</sup> California Employment Development Department. (2006a). *Industry Employment and Labor Force—By Annual Average, March 2005 Benchmark*. Retrieved February 2, 2007 from <http://www.labormarketinfo.edd.ca.gov/>

<sup>12</sup> California Employment Development Department. (2006a).



Source: California Employment Development Department, 2005

An estimated 4.7 million Los Angeles County residents participate in the labor force.<sup>13</sup> In fact, Los Angeles County workers account for more than one in four of California's workers.<sup>14</sup> Between 1990 and 2005, Los Angeles County's labor force grew by nearly 7 percent, adding more than 297,000 people.<sup>15</sup> By the year 2020, the number of Los Angeles County residents between the ages of 20 and 64 (the age group that makes up the majority of the labor force) is expected to be more than 6.4 million strong, an increase of 13 percent since 2000.<sup>16</sup> In 2005, the county's average annual seasonally adjusted unemployment rate was 5.3 percent, similar to the statewide average of 5.4 percent.<sup>17</sup> Although the manufacturing industry employs more than 470,000 people, it is clear that Los Angeles County is still in the midst of an economic shift from a manufacturing economy to a knowledge-based economy.<sup>18</sup> Jobs in the manufacturing industry have decreased more than 23

<sup>13</sup> U.S. Census Bureau. (2006). *2005 American Community Survey*. Retrieved January 25, 2007 from <http://factfinder.census.gov>. The labor force includes those who are employed and those seeking employment.

<sup>14</sup> California Budget Project. (2006). *Left Behind: Workers and Their Families in a Changing Los Angeles*. Retrieved April 23, 2007 from [http://www.cbp.org/pdfs/2006/0609\\_lareport.pdf](http://www.cbp.org/pdfs/2006/0609_lareport.pdf)

<sup>15</sup> California Employment Development Department. (2006a).

<sup>16</sup> State of California, Department of Finance. (2004). *Population Projections by Race/Ethnicity, Gender and Age for California and Its Counties 2000-2050*. Retrieved February 2, 2007 from <http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/Projections/P3/P3.asp>

<sup>17</sup> California Employment Development Department. (2006d). *Unemployment Rates (Labor Force)*. Retrieved February 2, 2007 from <http://www.labormarketinfo.edd.ca.gov>

<sup>18</sup> California Employment Development Department. (2006a).

percent since 2000, representing a loss of more than 140,000 manufacturing jobs.<sup>19</sup> Education services (98,000 employees), health and social services (371,700 employees), and construction (148,200 employees), have been among the county's fastest growing industries, increasing more than 10 percent per industry between 2000 and 2005.<sup>20</sup>

A 2006 study by the California Budget Project (CBP) found that "workers tend to have lower wages, families tend to have lower incomes, and residents have a higher rate of poverty in Los Angeles than in the rest of the state."<sup>21</sup> According to CBP, job growth in the county has lagged behind the rest of the state, and the gap between the wages earned by Los Angeles County workers and workers in the rest of the state has widened.<sup>22</sup> In addition to shifting away from the county's traditional manufacturing base, the composition of the labor force has changed dramatically.<sup>23</sup> A 2007 report by United Way of Greater Los Angeles found similar conclusions. Additionally, the United Way of Greater Los Angeles found that Los Angeles County has the most undereducated workforce in the country.<sup>24</sup>

### *The Underground Economy*

The fastest-growing segment of the Los Angeles economy is its underground economy.<sup>25</sup> According to the Economic Roundtable, informal jobs in 2004 accounted for 15 percent of all jobs in Los Angeles County and 16 percent in the City of Los Angeles, or approximately 679,000 informal workers in the county and 303,800 informal workers in the city.<sup>26</sup> Employees in the underground economy are clustered in the following industries: domestic labor, restaurants, construction, independent artists, landscaping and apparel manufacturing.<sup>27</sup>

#### Implications for Early Care and Education

Many industries in the underground economy require workers during nontraditional hours; therefore, these workers need ECE service options during nontraditional hours.

### *ECE Sustains Labor Force Participation*

Many children in Los Angeles County live in families where all parents work. In particular, an overall average of nearly 51 percent of children (i.e., nearly 47 percent of infants, 50 percent of toddlers, and 52 percent of school-age children) live in households where all parents participate in the workforce (see Figure 2).<sup>28</sup> This data accounts for single parents who work, as well as dual parent families where both parents participate in the labor force. However, this data does 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

<sup>19</sup> California Employment Development Department. (2006a).

<sup>20</sup> California Employment Development Department. (2006a).

<sup>21</sup> California Budget Project. (2006).

<sup>22</sup> California Budget Project. (2006).

<sup>23</sup> California Budget Project. (2006).

<sup>24</sup> United Way of Greater Los Angeles. (2007). *Quality of Life in Los Angeles: 2007 State of the County Report*. Retrieved April 26, 2007 from <http://www.unitedwayla.org>

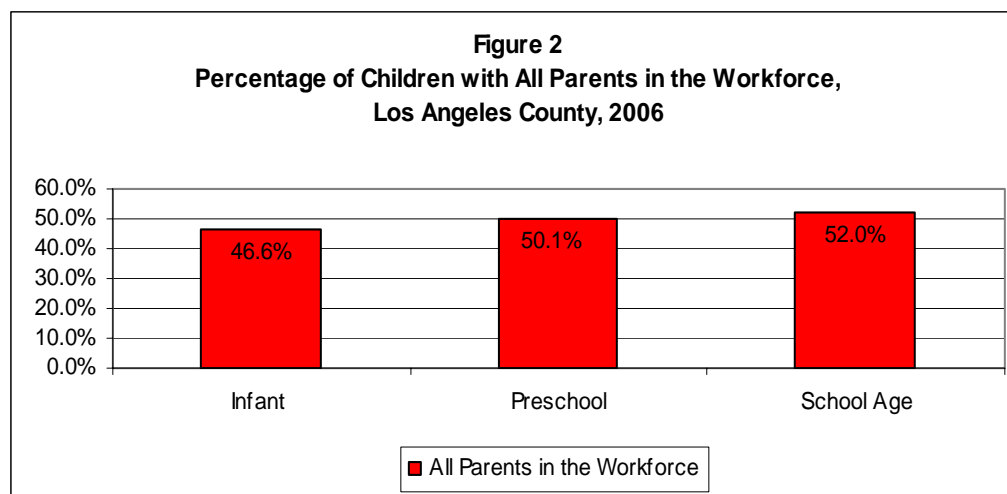
<sup>25</sup> Flaming, D. et al. (2005). *Hopeful Workers, Marginal Jobs: LA's Off-The-Books Labor Force*. Retrieved March 19, 2007 from [http://www.economicrt.org/pub/hopeful\\_workers\\_marginal\\_jobs/hopeful\\_workers\\_marginal\\_jobs.pdf](http://www.economicrt.org/pub/hopeful_workers_marginal_jobs/hopeful_workers_marginal_jobs.pdf)

<sup>26</sup> Flaming, D. et al. (2005).

<sup>27</sup> Flaming, D. et al. (2005).

<sup>28</sup> County of Los Angeles, Office of Child Care, within the Service Integration Branch of the Chief Administrative Office. (2006). *2006 Child Care Needs Assessment Reporting Tool*. Retrieved March 19, 2007 from <http://gismap.co.la.ca.us/childcare/>

ECE need and accessibility, is on par with the statewide average. Approximately 56 percent of women in Los Angeles County and the state of California participate in the labor force.<sup>29</sup>



Source: County of Los Angeles, Office of Child Care, Service Integration Branch, 2006

Working families make up a noticeable share of the total labor force at any one time. Approximately 15 percent of the labor force (or approximately 729,000 workers) live in households with children under the age of thirteen and where all parents work.<sup>30</sup> In total, these families earn nearly \$22.3 billion annually in Los Angeles County.<sup>31</sup>

Not all families use formal ECE. Some may arrange work schedules so that one parent is home with children. Others may place children in informal care arrangements. For example, nearly 300,000 grandparents in Los Angeles County live in the same households as their grandchildren, and many help take care of their grandchildren.<sup>32</sup> Furthermore, technology advances have enabled more people to work from home, expanding ECE options for families, and approximately 4 percent (over 168,000 individuals) of the labor force work from home in Los Angeles County.<sup>33</sup> For parents who must use ECE services, investing in the county's ECE infrastructure gives these parents affordable, high-quality options.

### *ECE and the Family Budget*

ECE is a significant expense for families in most income brackets. In Los Angeles County, the average annual cost for full-time, licensed, center-based ECE is \$10,327 for an infant; \$7,226 for a preschooler; and \$5,781 for a school age child (for a complete breakdown of ECE costs, see Table

<sup>29</sup> U.S. Census Bureau. (2006).

<sup>30</sup> This number was developed by the Insight Center using data from the 2005 American Community Survey on children, income.

<sup>31</sup> This number was developed by the Insight Center using data from the 2005 American Community Survey on children, income.

<sup>32</sup> U.S. Census Bureau. (2006).

<sup>33</sup> U.S. Census Bureau. (2005).

1).<sup>34</sup> Full-time, unsubsidized ECE costs significantly more than undergraduate tuition at California State University, Los Angeles (\$3,773 for the 2007-2008 academic year).<sup>35</sup> For a family earning the county's median income of \$48,248 in 2005, ECE for one infant in a licensed child care center accounts for more than 21 percent of the household expenses.<sup>36</sup>

<b>Table 1</b>			
<b>Average Annual Unsubsidized Cost for Early Care and Education</b>			
<b>Based on 2005 Market Rate Survey, Los Angeles County</b>			
Type of ECE Service Option	Infants and Toddlers (0-2)	Preschool Age (2-5)	School Age (5-12)
Licensed Child Care Center	\$10,327	\$7,226	\$5,781
Licensed Family Child Care Home	\$7,292	\$6,776	\$5,934

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. In a study of long-term employment after welfare, researchers found that two factors determined a working mother's ability to sustain employment after leaving welfare: job quality and the availability of ECE.<sup>37</sup> 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 be stably employed two years after leaving welfare.<sup>38</sup>

Similar barriers to employment were found at the local level. A 2002 survey by the Economic Roundtable sought to learn directly from working welfare parents and other poor families in Los Angeles about the problems they face and the kinds of help they need to become self-sufficient.<sup>39</sup> Researchers found that a lack of ECE access and affordability stood out as the most significant barrier to employment for CalWORKs recipients; in fact, 44 percent of survey respondents stated a lack of ECE during the day or night as a barrier to employment.<sup>40</sup> According to the study, "...for all mothers, regardless of whether they are in one- or two-parent households, whether or not they have strong labor force connections, and whether or not they have any college education, lack of child care is by far the most frequent barrier to employment."<sup>41</sup> Although ECE enables parents to access further education or participate in the workforce, the availability of subsidized ECE is not sufficient to meet the need. A 2003 study by the Economic Roundtable found that access to CalWORKs-subsidized ECE is associated with earnings progress.<sup>42</sup> The researchers also found, however, that

<sup>34</sup> California Department of Education. (2006d). *Reimbursement Ceilings for Subsidized Child Care: Average Rate in This County*. Retrieved January 26, 2007 from <http://www.cde.ca.gov/fg/aa/cd/ap/index.aspx>

<sup>35</sup> California State University, Los Angeles. (2007). *Schedule of Fees: 2007-2008*. Retrieved August 13, 2007 from [http://catalog.calstatela.edu/NXT/gateway.dll?f=templates\\$fn=default.htm\\$3.0\\$vid=calstate:current](http://catalog.calstatela.edu/NXT/gateway.dll?f=templates$fn=default.htm$3.0$vid=calstate:current)

<sup>36</sup> U.S. Census Bureau. (2006). Analysis based on a median household income of \$48,248, with ECE expenses of \$10,327.

<sup>37</sup> 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](http://www.epinet.org/content.cfm/briefingpapers_bp128)

<sup>38</sup> Boushey, H. (2004).

<sup>39</sup> Flaming, D. et al. (2002). *Running Out of Time: Voices of Parents Struggling to Move from Welfare to Work*. Retrieved February 9, 2007 from [www.economicrt.org](http://www.economicrt.org)

<sup>40</sup> Flaming, D. et al. (2002).

<sup>41</sup> Flaming, D. et al. (2002).

<sup>42</sup> Burns, P. et al. (2003). *Prisoners of Hope: Welfare to Work in Los Angeles*. Retrieved February 9, 2007 from [www.economicrt.org](http://www.economicrt.org)

each month, approximately 30,000 welfare families in Los Angeles County receive ECE assistance, but this represented as little as one in fourteen families that needed assistance.<sup>43</sup>

An evaluation of Early Head Start (EHS), a child development program that serves low-income infants and toddlers and their families, suggests that these service options 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 non-participants. Also, 87 percent of EHS parents were employed at some time during the first 26 months compared to 83 percent of parents not participating in EHS (unless randomly assigned).<sup>44</sup>

The Self-Sufficiency Standard measures the amount of income needed for a family to adequately meet its needs without government assistance. In Los Angeles County, an adult with two young children needs \$46,670 to meet the family's most basic needs (for more family types, please see Appendix B).<sup>45</sup> Working full-time at minimum wage offers an annual salary of \$14,040—less than one-third of the self-sufficiency wage.<sup>46</sup>

Los Angeles County residents are increasingly challenged by the shrinking supply of affordable housing.<sup>47</sup> As of December 2006, the median price of a home in Los Angeles County was \$522,000, compared to a statewide median price of \$474,000.<sup>48</sup> Although the number of housing sales fell in 2006, housing costs continue to rise, increasing nearly 6.5 percent since December 2005.<sup>49</sup> More than half of first-time homebuyers in the United States can afford to purchase a local median-priced home and 24 percent of California first-time buyers can afford to purchase a median-priced home, but fewer 20 percent Los Angeles County first-time buyers can afford a median-priced home.<sup>50</sup>

The high cost of housing leaves families with less money for early care and education costs.

According to the State of California, Department of Housing and Community Development, renters face the greatest affordability challenges.<sup>51</sup> More than half of Los Angeles County's households are renter households, and Fair Market Rent for a two-bedroom apartment was approximately \$1,269 in 2006, compared to the statewide average of approximately \$1,189 for a comparable unit.<sup>52</sup> In fact, fair market rents for a two-bedroom apartment in the county have increased nearly 60 percent since 2000.<sup>53</sup> Due to the high housing costs, the overall cost of living is increasingly cumbersome, particularly on low-income families. In Los Angeles County, a full-time worker must earn \$24.40 per

<sup>43</sup> Burns, P. et al. (2003).

<sup>44</sup> 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.

<sup>45</sup> Pearce, D. (2003). *The Self-Sufficiency Wage for California 2003*. Retrieved January 22, 2007 from <http://www.sixstrategies.org/files/2003%20CA%20Full%20Report%20with%20Map.pdf>

<sup>46</sup> California Child Care Resource & Referral Network. (2005). *The 2005 California Child Care Portfolio*. Retrieved January 25, 2007 from <http://www.rrnetwork.org>

<sup>47</sup> According to the National Low Income Housing Coalition, affordable housing represents the generally accepted standard of spending no more than 30% of one's income on housing.

<sup>48</sup> DataQuick Information Systems. (2007). *California December Home Sales*. Retrieved January 25, 2007 from <http://www.dqnews.com> and Haddad, A. (2007, January 16). Home Prices Climb in County. *Los Angeles Times*.

<sup>49</sup> Haddad, A. (2007, January 16). Home Prices Climb in County. *Los Angeles Times*.

<sup>50</sup> California Association of Realtors. (2007). *Housing Affordability at 24 Percent for First-Time Buyers in California*. CAR defines the affordability index as the percentage of households that can afford to purchase a median-priced home.

<sup>51</sup> State of California, Department of Housing and Community Development. (2006). *California's Deepening Housing Crisis*. Retrieved from [www.hcd.ca.gov/hpd/hc021506.pdf](http://www.hcd.ca.gov/hpd/hc021506.pdf)

<sup>52</sup> National Low Income Housing Coalition. (2006) *Out of Reach 2006*. Retrieved January 22, 2007 from <http://www.nlihc.org/oor/oor2006/?CFID=7228480&CFTOKEN=66759624>

<sup>53</sup> National Low Income Housing Coalition. (2006)

hour (\$50,760 annually) in order to afford a fair market rate, two-bedroom apartment, more than triple the minimum wage.<sup>54</sup>

### *ECE Promotes Career Development and Educational Advancement*

A shortage of highly skilled and educated workers in Los Angeles 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 25 percent of county residents do not have high school diplomas and fewer than 28 percent have college degrees.<sup>55</sup> Statewide, approximately 20 percent of residents lack high school diplomas, and approximately 30 percent have a bachelor's degree or higher.<sup>56</sup> 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 that pay higher wages and offer greater benefits. Challenged by factors including an under-skilled labor force, Los Angeles County businesses are limited in their growth and are losing ground to high-skill and high-wage business clusters in Orange and Ventura counties.<sup>57</sup> Los Angeles County's ability to foster entrepreneurial growth through development of the workforce is critical to future economic growth.<sup>58</sup>

Subsidized on-campus early care and education service options enable working parents to update their skills.

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 their 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.<sup>59</sup>

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

<sup>54</sup> National Low Income Housing Coalition. (2006). As of January 1, 2007, the state minimum wage increased to \$7.50 per hour from \$6.75 per hour.

<sup>55</sup> U.S. Census Bureau. (2006).

<sup>56</sup> U.S. Census Bureau. (2006).

<sup>57</sup> Klowden, K. et al. (2005). *Los Angeles Economy Project: Executive Summary and Recommendations*. Retrieved February 23, 2007 from [http://www.laeconomyproject.com/laep\\_exec\\_summary.pdf](http://www.laeconomyproject.com/laep_exec_summary.pdf)

<sup>58</sup> Klowden, K. et al. (2005).

<sup>59</sup> 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.

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).<sup>60</sup>

In addition to private, nonprofit, and public sector programs that support family members who need training and education, subsidized ECE on college and university campuses 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:

- Have higher grade point averages
- Are more likely to remain in school and graduate in fewer years
- Have higher graduation rates than student parents who do not have access to affordable and high-quality ECE service options<sup>61</sup>

Similarly, student parents indicate that the availability of ECE is critical to their decision to enroll in college.<sup>62</sup> Limited capacity in ECE service options offered during non-traditional hours prevents parents from enrolling in classes or service options that are offered outside of the traditional workday.

#### The Child Development Center at Los Angeles Valley College

A number of community colleges and universities in the county have on-campus ECE service options. The Child Development Center at Los Angeles Valley College serves more than 100 preschool and school-age children, who are primarily the children of student parents. For student parents attend classes in the evenings and may work during the day, the college offers services for school age children during non-traditional hours. By providing convenient, affordable and high-quality care, the college offer student parents the opportunity to accomplish their academic goals. Without this service, many parents would not be able to attend classes (personal correspondence with Terry Teplin, Director, March 6, 2007).

## ECE 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

<sup>60</sup> U.S. Department of Labor, Bureau of Labor Statistics. (2006). *Household Data Annual Averages*. Retrieved July 2006 from <http://www.bls.gov>

<sup>61</sup> The National Coalition for Campus Children's Centers (1999). *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*.

<sup>62</sup> 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*.

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

### *ECE Increases Employee Retention*

Particularly for companies that rely on highly skilled workers or staff with specialized training, 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 feel that their workplaces offer a balance between work and home obligations are less likely to have unscheduled absences or leave their jobs.<sup>63</sup> 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 on-site child care to their employees found that turnover was nearly 50 percent lower for those who used the center when compared to other workers.<sup>64</sup> 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.<sup>65</sup> Another national survey found that 19 percent of employees at companies with ECE service options indicated that they have turned down other job opportunities rather than lose work-site ECE.<sup>66</sup>

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."<sup>67</sup> 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.<sup>68</sup>

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.<sup>69</sup> For salaried employees, costs are at least 150 percent of the base salary, and increase for higher-paid and more valued staff.<sup>70</sup>

Representing nearly 50,000 workers in Los Angeles County, SEIU Local 721 is the result of the merger of seven separate unions. Members include county public employees (covered by a contract negotiated under SEIU Local 660). Recognizing challenges with recruitment and retention, union leaders negotiated changes to existing dependent care accounts (also known as flexible spending accounts). Union leaders focused on dependent care accounts because single women

<sup>63</sup>Blue 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>.

<sup>64</sup>Bright Horizons Family Solutions. (2003). *The Real Savings from Employer-sponsored Child Care: Investment Impact Study Results*. Boston, MA: Bright Horizons.

<sup>65</sup>Bright Horizons Family Solutions. (2003).

<sup>66</sup>Simmons College. (1997). *Benefits of Work-Site Child Care* as cited by Bright Horizons Family Solutions.

<sup>67</sup>U.S. Chamber of Commerce, Center for Workforce Preparation. (2001). *Keeping Competitive: Hiring, Training, and Retaining Qualified Workers*.

<sup>68</sup>Merk. (1999). Using Benefits to Attract and Retain Employees. As cited on <http://www.probenefits.com>.

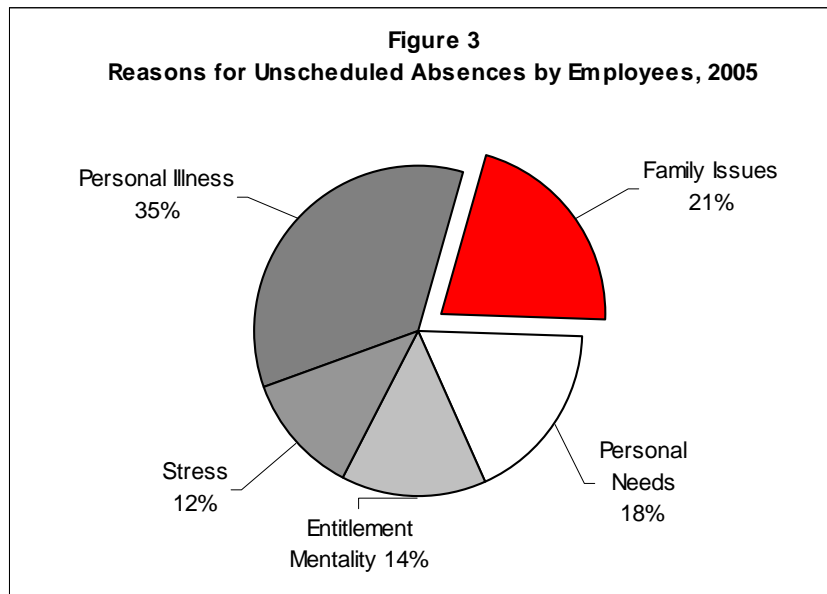
<sup>69</sup>Sasha Corporation. (2003). *Turnover Costs in 15 Different Studies*. Retrieved from <http://www.sashacorp.com>.

<sup>70</sup>Bliss, W. (1999). *The Business Cost and Impact of Employee Turnover*. Retrieved from <http://blissassociates.com>.

with children and employees with aging parents made up a significant portion of union members, and dependent care accounts provided maximum flexibility. With the support of its members, the union was able to negotiate favorable terms with employers, so based on a sliding scale, the County now make contributions to the dependent care accounts of many county employees. County employers hope that these enhanced benefits will help them recruit and retain the most qualified and dedicated workers (personal phone conversation with Lilian Coral, Research Associate, April 26, 2007).

### *ECE Reduces Absenteeism*

Nationally, unscheduled absenteeism in 2005 cost businesses an average of \$660 per employee, costing large employers up to \$1 million per year.<sup>71</sup> More than one-fifth of all unscheduled absences are due to family issues, which include ECE breakdowns (see Figure 3). On-site ECE and emergency back-up ECE are among the most effective work-life programs that reduce unscheduled absenteeism.<sup>72</sup>



Source: CCH Incorporated, 2006.

Nationwide, approximately 16 percent of major employers offer sick or emergency back-up ECE to reduce employee absenteeism.<sup>73</sup> These programs have 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.<sup>74</sup>

<sup>71</sup> CCH Incorporated. (2005). *2005 CCH Unscheduled Absence Survey*. Retrieved July 2006 from <http://www.cch.com/press/news/2005/200510121h.asp>

<sup>72</sup> CCH Incorporated. (2005).

<sup>73</sup> Hewitt Associates. (2001). *Hewitt Study Shows Work/Life Benefits Continue to Grow Despite Slowing Economy*. Retrieved from <http://www.was.hewitt.com>

<sup>74</sup> Bright Horizons Family Solutions. (2003b). *Return on Investment*. Presentation.

## *ECE Enhances Recruitment*

The accessibility of quality, affordable ECE, on site 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. 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.<sup>75</sup> These challenges are due to work-related pressures, including extended work hours, dire staffing shortages, and frequent overtime.<sup>76</sup> 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.<sup>77</sup> Among health care centers that offer on-site 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.<sup>78</sup>

Childrens Hospital Los Angeles offers an on-site child development center. The center's programs are designed to accommodate the busy schedules of staff members, and parents are encouraged to attend the center's special events and lunchtime seminars.<sup>79</sup>

"Having an on-site facility makes working at CHLA [Childrens Hospital Los Angeles] a much more attractive option for many parents."

*Dr. Anita Britt, Executive Director,  
Child Development Center, CHLA*

In addition to offering on-site services, Childrens Hospital Los Angeles encourages employees to establish Dependent Care Reimbursement Accounts (also commonly known as Flexible Spending Accounts), which allow employees to use pre-tax dollars on dependent care expenses.<sup>80</sup> The funds set aside in these accounts are exempt from federal, state and social security taxes, so using the plans decreases the employer's payroll taxes and the employee's taxable income. In addition to attracting employees with young children, these accounts allow employers to offer ECE solutions without increasing salary expenses.

## *ECE Increases Productivity*

Working parents who know their children are in high-quality care and education 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.<sup>81</sup>

<sup>75</sup> 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>

<sup>76</sup> Bright Horizons Family Solutions. (2003a).

<sup>77</sup> Bright Horizons Family Solutions. (2003a).

<sup>78</sup> Bright Horizons Family Solutions. (2003a).

<sup>79</sup> Children's Hospital Los Angeles. (1998). *Child Development Center at Childrens Hospital Los Angeles Wins National Child-Care Award from Parents Magazine*. Retrieved March 14, 2007 from <http://www.childrenshospitalla.org>

<sup>80</sup> Childrens Hospital Los Angeles. (2007). *Reimbursement Programs*. Retrieved March 14, 2007 from <http://www.childrenshospital la.org>

<sup>81</sup> Brown, J. (2002). *How Does High-quality Child Care Benefit Business and the Local Economy*. Seattle: Economic Policy Institute.

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.<sup>82</sup>

The Van Nuys Civic Center Child Development Program is the first Los Angeles County-supported facility to be built from the ground up. Supported by the Superior Court and several county departments (Children and Family Services, District Attorney, Probation, Public Defender, and Public Social Services), the center serves approximately 70 children, ages six weeks to six years. In addition to supporting the center's operations, these county departments also established a scholarship fund to ensure that services are accessible to a broad spectrum of families. Zev Yaroslavsky, County of Los Angeles Supervisor representing the Third District, believes that this project promotes school readiness among participating children; boosts the workplace productivity of their parents; and supports the count's commitment to service excellence.<sup>83</sup>

Business leaders throughout the state are realizing the tangible benefits of ECE. With a consortium of other businesses, Gap Inc. offers on-site ECE at its San Francisco headquarters. In addition to helping employees with young children address their ECE needs, on-site 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).

### *Early Care and Education Options for Businesses of All Sizes*

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.<sup>84</sup> 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.<sup>85</sup>

In Los Angeles County, approximately one-half of employees work for companies that employ fewer than 100 people.<sup>86</sup> 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 smaller employers can support the ECE needs of their employees. Smaller businesses have access to a number of innovative strategies that rely on their

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<sup>82</sup> The Community, Families & Work Program. (2004). *Parental After-School Stress Project*.

<sup>83</sup> (2004). *Van Nuys Child Care Update*. Retrieved March 21, 2007 from <http://cao.lacounty.gov/ccp/pdf/Van%20Nuys%20Newsletter%20-%20Dec.%202004.pdf>

<sup>84</sup> 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>

<sup>85</sup> Center for Work Life Policy. (2006).

<sup>86</sup> California Employment Development Department. (2005). *Number of Employees by Size Category, Classified by County for California, Third Quarter, 2005*. Retrieved January 2007 from <http://www.labormarketinfo.edd.ca.gov/>

ability to be flexible and help every employee solve his or her ECE issues individually.<sup>87</sup> For example, in a 2005 survey of employers, small employers (those with fewer than 100 employees), were significantly more likely to offer a range of benefits related to improved work flexibility than employers with more than 100 employees. For example, 66 percent of small employers allow employees to return to work gradually after child birth, in comparison to just 49 percent of large employers.<sup>88</sup>

#### Family-Friendly Options for Employers<sup>89</sup>

- 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

Bank of America addresses the ECE needs of their employees by offering all employees flexible spending accounts for ECE expenses as well as access to resource and referral services. Additionally, Bank of America subsidizes income-eligible employees up to \$175 per month per child for ECE expenses.<sup>90</sup>

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.<sup>91</sup>

According to Dr. Sandra Burud, co-author of the book, *Leveraging the New Human Capital: Adaptive Strategies, Results Achieved, and Stories of Transformation*, the business environment has undergone significant structural changes, including reliance upon “dual focus” workers who manage work and significant personal responsibilities simultaneously.<sup>92</sup> In this new era,

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<sup>87</sup> Susan Smith Hendrickson. (2006). *Helping employees with child care isn't hopelessly expensive*. San Francisco Business Times.

<sup>88</sup> Bond, et al. (2005). *National Study of Employers*. Families and Work Institute.

<sup>89</sup> United Way of the Bay Area and One Small Step. (2002). *Choosing Care: An Employers Guide to Child Care Options*.

<sup>90</sup> Bank of America. (2006). Retrieved from on November, 10, 2006 from [http://www.bankofamerica.com/careers/index.cfm?template=bw\\_w\\_programs](http://www.bankofamerica.com/careers/index.cfm?template=bw_w_programs)

<sup>91</sup> Burud, S. (2002). As cited by the United Way of the Bay Area and One Small Step in *Choosing Care: An Employers' Guide to Child Care Options*.

<sup>92</sup> Casey J. and Corday, K. (2005). Leveraging the New Human Capital: An Interview with Sandra Burud. *The Network News*. Volume 7(12). Retrieved February 23, 2007 from [http://wfnetwork.bc.edu/The\\_Network\\_News/18/The\\_Network\\_News\\_Interview18.pdf](http://wfnetwork.bc.edu/The_Network_News/18/The_Network_News_Interview18.pdf)

customization, flexibility, and versatility in managing employees drive business success, “So, varied work schedules, virtual work, and customized people practices bring better *business* results.”<sup>93</sup>

## SECTION SUMMARY

Innovative ECE solutions not only meet the needs of working families, but they also support productivity and profitability among businesses. Throughout Los Angeles 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.

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<sup>93</sup> Casey, J. and Corday, K. (2005).

## Section Three

# High-Quality Early Care and Education Cultivates Los Angeles County's Future Workforce

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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.

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 Los Angeles County's K-12 system by better preparing children to start school. Advocacy efforts have focused around the critical importance of preschool in this effort.

Research by James Heckman, Nobel Laureate in Economics, confirms that a child's early years provide the foundation for a full range of human competencies including cognitive, linguistic, social and emotional.<sup>94</sup>

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."<sup>95</sup>

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 for seeing, hearing, speech production and receptive language are formed, but by the age of three, 90 percent of these connections are developed.<sup>96</sup> These findings indicate that quality ECE is a critical step in developing skills for successful adult outcomes.<sup>97</sup>

### ECE PREPARES CHILDREN FOR SUCCESS IN SCHOOL AND BEYOND

In Los Angeles County, 28 percent of second grade students scored "below basic" or "far below basic" on the California Standards Test in English-Language Arts, and 21 percent of second grade students scored "below basic" or "far below basic" in mathematics.<sup>98</sup> In addition, only 30 percent of third grade students were reading at or above the national average.<sup>99</sup> While no ECE program can guarantee lifelong success for its participants, quality early care and education can increase children's ability to enter traditional K-12 schooling ready to continue learning, which better prepares them for future opportunities.<sup>100</sup> Decades of research have sought to understand the effects of ECE on young children. A number of large surveys and long-term studies have

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<sup>94</sup> Heckman, J. (2006). *The Technology and Neuroscience of Skill Formation*. PowerPoint presentation for the Invest in Kids Working Group.

<sup>95</sup> Heckman, J. (2006).

<sup>96</sup> Madrid, O. (2006). *Brain Network Forms Early, Research Says*. The Arizona Republic.

<sup>97</sup> Heckman, J. (2006).

<sup>98</sup> California Department of Education. (2006b). *California Standardized Testing and Reporting*. Retrieved February 2, 2007 from <http://star.cde.ca.gov>

<sup>99</sup> United Way of Greater Los Angeles. (2007).

<sup>100</sup> Brooks-Gunn, J. (2003). Do You Believe in Magic? What We Can Expect from Early Childhood Intervention Programs. *Social Policy Report*. 17 (1).

consistently found that high-quality ECE service options 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 service options had the following characteristics through elementary school:

- Improved math and language ability
- Enhanced cognitive and social skills
- Fewer behavioral issues<sup>101</sup>

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."<sup>102</sup> 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."<sup>103</sup>

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.<sup>104</sup>

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

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<sup>101</sup> 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.

<sup>102</sup> Shonkoff, J. and Phillips, D.A., Eds. (2000). *From Neurons to Neighborhoods: The Science of Early Childhood Development*. Washington, D.C.: National Academies Press, 307.

<sup>103</sup> 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.

<sup>104</sup> Committee for Economic Development. (2004). As cited from *Exceptional Returns* by the Economic Policy Institute.

academic success of our children directly contributes to the overall economic health of our nation.”<sup>105</sup>

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

While no long-term studies have specifically focused on the children of Los Angeles, 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 Los Angeles.

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.<sup>106</sup>

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 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).<sup>107</sup>

“In a city as diverse as Los Angeles, quality preschool helps level the playing field so that when children enter kindergarten, they are ready to learn.”

*Los Angeles Area Chamber of Commerce*

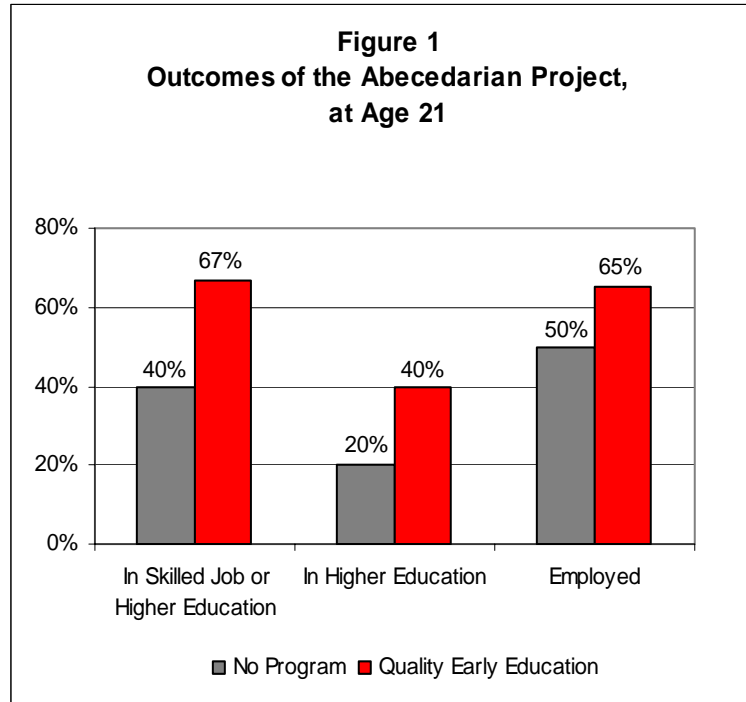
In 2006, the Los Angeles Area Chamber of Commerce endorsed Proposition 82, which would have funded a program of voluntary, high-quality preschool for every four-year-old in California. Although the proposition did not pass, the Chamber was clear in its support for ECE. In addition to recognizing the importance of high-quality ECE for improving school readiness, the Chamber also recognized the long term benefits of investments in ECE, “We can continue to pay the high costs of remedial education, high school dropouts, and juvenile crime—or we can make an investment in preventing those problems before they start.”<sup>108</sup>

<sup>105</sup> As quoted in Committee for Economic Development. (2006). *The Economic Promise of Investing in High-Quality Preschool*. Retrieved April 2007 from [http://www.ced.org/docs/report/report\\_prek\\_econpromise.pdf](http://www.ced.org/docs/report/report_prek_econpromise.pdf)

<sup>106</sup> 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.

<sup>107</sup> 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/>

<sup>108</sup> Los Angeles Area Chamber of Commerce. (2006). *Yes on 82 P-12 for a Stronger California*. Retrieved April 26, 2007 from <http://www.wliinc2.com/cgi/foxweb.dll/wlx/cs/wlxnews?cc=LOSANG&action=DISPLISTDET&docid=225>



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.<sup>109</sup> 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.<sup>110</sup>

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 savings account, and were less likely to be repeat criminal offenders than their peers who were not randomly assigned to the program as children. Cost-benefit analyses of these differences reveal that the high-quality service options returned as much as \$17 for every \$1 spent in early childhood.<sup>111</sup>

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).<sup>112</sup>

<sup>109</sup> 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.

<sup>110</sup> 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>

<sup>111</sup> 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.

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% discount rate.

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.<sup>113</sup>

### *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.<sup>114</sup> A third of middle-income children and a fourth of upper-middle-income children lack “key pre-literacy skills” when they enter kindergarten.<sup>115</sup> These findings provide evidence that high-quality early education service options 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.”<sup>116</sup>

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 indicators, including early language, literacy and mathematical development.<sup>117</sup> These findings are consistent with findings from rigorous evaluations of state-funded preschool service options in other states, including New Jersey’s Abbott Preschool Program and Oklahoma’s Early Childhood Four-Year-Old Program.<sup>118-119</sup>

<sup>113</sup> 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.

<sup>114</sup> 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*.

<sup>115</sup> Coley, R.J.

<sup>116</sup> Barnett, W.S. (2004). Preschool-for-all Hearing, Sacramento, CA.

<sup>117</sup> 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>.

<sup>118</sup> 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/>.

<sup>119</sup> 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>

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.<sup>120</sup> 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.<sup>121</sup> The Los Angeles Unified School District has struggled to find ways to keep students in school. According to the Los Angeles Times, “Although the Los Angeles Unified School District has ramped up its efforts to keep students in school...thousands are still skipping class routinely...and students typically begin skipping school sporadically before dropping out altogether.”<sup>122</sup>

### *High-Quality Early Care and Education for Los Angeles County’s Diverse Populations*

Studies indicate that rates of enrollment and the quality of center-based ECE vary by ethnicity.<sup>123</sup> Evidence suggests that increases in Latino and African-American enrollment in high-quality preschool has the potential to decrease existing school readiness gaps.<sup>124</sup> Additionally, approximately 46 percent of kindergarten students in Los Angeles County public schools are English language learners, compared to approximately 40 percent of kindergarten students statewide.<sup>125</sup> The vast majority of Los Angeles’s English language learners speak Spanish (89 percent), and many of the others speak Cantonese, Korean, and Armenian.<sup>126</sup>

Continued success in school varies by race and ethnicity. Disparities in academic achievement become clear in analyzing the 2006 results for the California High School Exit Exam. While 78 percent of white/non-Hispanic students passed the math portion of the exam, only 48 percent of Hispanic/Latino students and 38 percent of African-American/Black students passed the math section.<sup>127</sup> 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 service options can help close the achievement gap.<sup>128</sup>

### *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 service

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<sup>120</sup> Roderick, M. (1994). Grade Retention and School Dropout: Investigating the Association. *American Educational Research Journal*. 31(4): 729-759.

<sup>121</sup> Roderick, M. (1994).

<sup>122</sup> Landsberg, M. (2007). *LAUSD Grapples with Dropout Rate*. Retrieved March 20, 2007 from <http://www.latimes.com>

<sup>123</sup> 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.

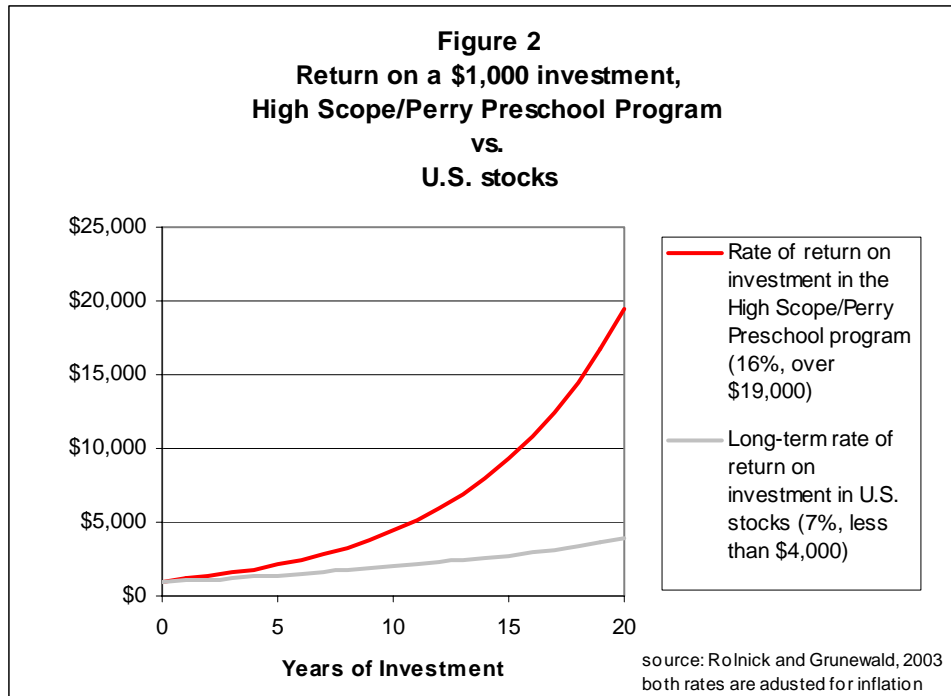
<sup>124</sup> Magnuson, K.A. and J. Waldfogel. (2005).

<sup>125</sup> California Department of Education. (2006c). *Number of English Language Learners by Language and County Enrollment by Grade*. Retrieved February 2, 2007 from <http://data1.cde.ca.gov/dataquest>

<sup>126</sup> California Department of Education. (2006c).

<sup>127</sup> California Department of Education. (2006a). *California High School Exit Exam (CAHSEE) Results*. Retrieved February 2, 2007 from <http://cahsee.cde.ca.gov>

<sup>128</sup> 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*. Vol. 15, No. 1.



options for low-income children generate a 16 percent rate of return on investment, 12 percent of which is a public rate of return.<sup>129</sup> 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.”<sup>130</sup> 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).<sup>131</sup>

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.”<sup>132</sup>

After-school service options for school-age children also save public sector dollars. A review of multiple research studies to evaluate the effects of after-school service options showed significant gains to school engagement, school attendance, academic performance and positive youth development.<sup>133</sup> A cost-benefit analysis found that financial benefits from improved school

<sup>129</sup> Rolnick, A and Grunewald, R. (2003). Early Childhood Development: Economic Development with a High Public Return. *Fedgazette*. Minneapolis, MN: Federal Reserve Bank of Minneapolis.

<sup>130</sup> Rolnick, A and Grunewald, R. (2003).

<sup>131</sup> Rolnick, A and Grunewald, R. (2003).

<sup>132</sup> 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>

<sup>133</sup> Rolnick, A. and Grunewald, R. (2003).

performance, increased compensation, reduced juvenile and adult criminal activity, and reduced welfare costs outweighed the costs of increased attendance at school and the cost of programs.<sup>134</sup>

Quality of life is affected by after-school service options as well. At least 50 percent of youth crime occurs in the hours after school.<sup>135</sup> 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.<sup>136</sup> 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.”<sup>137</sup>

Seventy-three percent of publicly-funded preschool service options in Los Angeles County have waiting lists.<sup>138</sup> In response to this statistic, Los Angeles County Sheriff Leroy Baca said, “Keeping kids waiting in line for preschool multiplies the likelihood that I will see them in a police line-up later in life. The research shows quality preschool programs really work to keep kids from becoming criminals—and that saves money and saves lives. It’s just common sense that eliminating these long preschool waiting lists will lead to a safer California.”<sup>139</sup>

“Keeping kids waiting in line for preschool multiplies the likelihood that I will see them in a police line-up later in life.”

*Leroy Baca, Los Angeles County Sheriff*

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.”<sup>140</sup>

### *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.<sup>141</sup> 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:

<sup>134</sup> 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.

<sup>135</sup> U.S. Department of Justice (1997) as cited by the Massachusetts Executive Office of Public Safety. *Cops & Kids Fact Sheet*, 2000.

<sup>136</sup> D. A. Farbman. (2003). *The Forgotten Eighty Percent: The Case for Making the Most out of Children’s Time out of School*, Boston.

<sup>137</sup> Fight Crime, Invest in Kids. (1999). *Poll of Police Chiefs conducted by George Mason University Professors Stephen D. Mastrofski and Scott Keeter*.

<sup>138</sup> Fight Crime: Invest in Kids California. (2005). *Law Enforcement Report Finds: Los Angeles Preschool Shortage Threatens Public Safety*. Retrieved March 14, 2007 from <http://www.fightcrime.org/releases>

<sup>139</sup> Fight Crime: Invest in Kids California. (2005).

<sup>140</sup> 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](http://www.ced.org/docs/report/report_prek_econpromise.pdf)

<sup>141</sup> 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.

- Increasing cognitive development and reducing the number of children at-risk for developmental delays
- Improving language development
- Strengthening parenting skills of participants<sup>142</sup>

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."<sup>143</sup>

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.<sup>144</sup> 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 of children who were abused and neglected.<sup>145</sup> 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.<sup>146</sup>

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.<sup>147</sup>

<sup>142</sup> 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.

<sup>143</sup> Federal Reserve Bank of San Francisco. (2006). *Economic Inequality in the United States*. Retrieved from <http://frbsf.org/news/speeches/2006/1106.html>

<sup>144</sup> RAND Corporation. (2005). *Labor and Population: The Economics of Investing in Universal Preschool Education in California*. Retrieved from <http://www.rand.org>

<sup>145</sup> 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>

<sup>146</sup> RAND Corporation. (2005). *Labor and Population: The Economics of Investing in Universal Preschool Education in California*. Retrieved from <http://www.rand.org>

<sup>147</sup> RAND Corporation. (2005).

## SECTION SUMMARY

ECE and Los Angeles 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 Los Angeles 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 Los Angeles 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 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 county's future workforce and their future employees

## Section Four

# Economic Profile of the Early Care and Education Industry

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

- The size and characteristics of the ECE market
  - ❖ Supply
  - ❖ Parental Need
  - ❖ Demand
  - ❖ Los Angeles County's children
- 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*

Part- and full-time ECE service options offer approximately 230,000 spaces at one time.<sup>148</sup> There are 13,796 licensed ECE establishments in Los Angeles County, including:

- 7,631 small licensed family child care homes
- 3,633 large licensed family child care homes
- 2,532 licensed child care centers<sup>149</sup>

Additionally, there are over 3,595 license-exempt in-home and relative providers receiving vouchers in Los Angeles County, and these providers serve more than 11,900 children.<sup>150</sup>

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<sup>148</sup> California Child Care Resource & Referral Network. (2005). *The 2005 California Child Care Portfolio*. Retrieved April 10, 2007 from <http://www.rrnetwork.org/publications/2005-portfolio-losangeles-data.pdf>. The number of children served is greater than the number of spaces because service options may serve different children in the morning and in the afternoon.

<sup>149</sup> Data provided by the State of California, Community Care Licensing Division.

<sup>150</sup> Data provided by Child Care Alliance of Los Angeles.

## Demand

Demand for the industry relies on these key factors:<sup>151</sup>

- **Parental 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. In Los Angeles County, there are more than one million children ages 0 to 12 with all parents in the labor force, but, as mentioned, only 230,000 licensed ECE spaces.<sup>152,153</sup> That means licensed ECE is only available for approximately 22 percent of children with all parents in the labor force—slightly higher than the statewide average of 20 percent.<sup>154,155</sup>
- **Quality:** Parental demand for quality increases as more parents understand its educational importance and how to identify quality service options. The provision of quality ECE is a function of several interrelated factors including caregiver qualifications and experience, market demand, wages, leadership, business management, parent relations, and the physical plant in which care is provided. Ultimately though, both the availability and quality of ECE hinge on two key factors: qualified nurturing caregivers and a healthy, safe, and developmentally stimulating physical environment. Simply put, you need the people and the place.
- **Affordability:** Demographic and economic trends indicate that more families will be challenged by affording the service options 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 service options all affect parents' ability to use formal ECE.

In Los Angeles County, spaces for infants and toddlers represent just 6 percent of all licensed ECE center spaces, but infants and toddlers account for 23 percent of the county's population of children ages zero through twelve.

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 reasons 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.<sup>156</sup>

In Los Angeles County's ECE centers, preschool spaces represent approximately 75 percent of all ECE center spaces and infant spaces represent just 6 percent of all center spaces.<sup>157</sup> However, infants and toddlers account for 23 percent of the county's population of children from birth through

<sup>151</sup> Smith, E. (2004). *Understanding Child Care Supply and Demand in the Community*, Columbia, Md., The Enterprise Foundation.

<sup>152</sup> County of Los Angeles, Office of Child Care, within the Service Integration Branch of the Chief Administrative Office. (2006). All parents in the labor force accounts for single parents who are working and dual parent households where both parents are in the workforce.

<sup>153</sup> California Child Care Resource & Referral Network (2005).

<sup>154</sup> County of Los Angeles, Office of Child Care, within the Service Integration Branch of the Chief Administrative Office. (2006)

<sup>155</sup> California Child Care Resource & Referral Network. (2005).

<sup>156</sup> 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*.

<sup>157</sup> California Child Care Resource & Referral Network, (2005).

age 12, and the California Child Care Resource & Referral Network notes that parental requests for information about infant care represent one-third of all information requests.<sup>158,159</sup> As discussed in Section Two, many infants and toddlers live in households where all parents work; for example, in 2006 nearly 47 percent of infants and toddlers live in households where all parents work.<sup>160</sup> While there is already a shortage of ECE services for infants, demographers estimate that births in Los Angeles County will increase by approximately 3 percent between 2005 and 2015, further straining service provision.<sup>161</sup>

### *Los Angeles County's Children*

ECE service options 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 2 through 5); and school-age (ages 5 through 12). In 2004, there were over 2 million children from birth through age 12 in Los Angeles County, representing nearly 20 percent of the county's population (see Figure 1).<sup>162</sup>

Population projections indicate that the number of residents in Los Angeles County will remain virtually stagnant. By 2020, Los Angeles County's overall population is projected to grow to nearly 10.9 million residents, an increase of only 7 percent since 2004.<sup>163</sup> Over the same period, the population of children in the age range served by ECE service options is projected to decrease slightly to 1.9 million, a 3 percent decrease since 2004.<sup>164</sup> While the population served by ECE is projected to decline, there is already a considerable gap between need and capacity, and the population decrease will not be sufficient to cover the gap. According to a series of needs assessments conducted by the County of Los Angeles, Office of Child Care, Service Integration Branch, the number of children with working parents has actually increased. For example, the number of infants and toddlers living in households where all parents work increased nearly 10 percent between 2004 and 2006.<sup>165</sup>

#### *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 service options may help attract and retain families with children.

Although Los Angeles County has been the dominant county in the region (defined by the Southern California Association of Governments as Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties), the lack of developable land in Los Angeles County and rapid development in surrounding counties has contributed to relatively stagnant population growth in Los

<sup>158</sup> 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>

<sup>159</sup> California Child Care Resource & Referral Network, (2005).

<sup>160</sup> County of Los Angeles, Office of Child Care, Service Integration Branch, (2006).

<sup>161</sup> State of California, Department of Finance, Demographic Research Unit. (2006). *Historical and Projected Births By County, 1990-2015 with Actual and Projected State Births and Fertility Rates by Mother's Age and Race/Ethnicity*. Retrieved April 11, 2007 from <http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/ReportsPapers.asp>

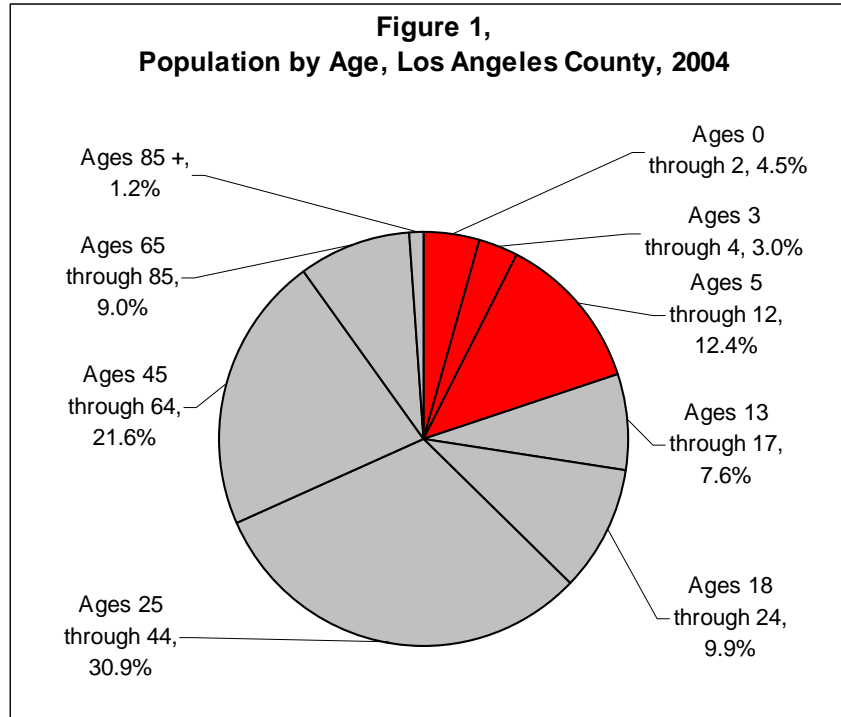
<sup>162</sup> State of California, Department of Finance. (2004a).

<sup>163</sup> State of California, Department of Finance. (2004b). *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>

<sup>164</sup> State of California, Department of Finance. (2004b).

<sup>165</sup> County of Los Angeles, Office of Child Care, Service Integration Branch. (2006).

Angeles County.<sup>166</sup> While Los Angeles County is still projected to be the most populous county in the region, the county's percentage of the total regional population "will continue to edge downward."<sup>167</sup>



Source: State of California, Department of Finance, 2006

According to the Public Policy Institute of California, Los Angeles County has one of the most diverse populations in the world.<sup>168</sup> Demographics indicate a continuing increase in racial and ethnic diversity, particularly for young children (see Figure 2). For example, approximately 62 percent of the 760,000 children between birth and age four are Hispanic/Latino, compared to the countywide Hispanic/Latino population of 46 percent.<sup>169</sup>

*Implications for Early Care and Education*

The increasing diversity of Los Angeles County's child population requires ECE service options to have staff that are culturally and linguistically competent. In addition, ECE service options that involve parental engagement are critical in serving English language learners.

Studies have found that Hispanic/Latino children start kindergarten well behind non-Hispanic/white students in reading and math skills.<sup>170</sup> The National Task Force on Early Childhood Education for

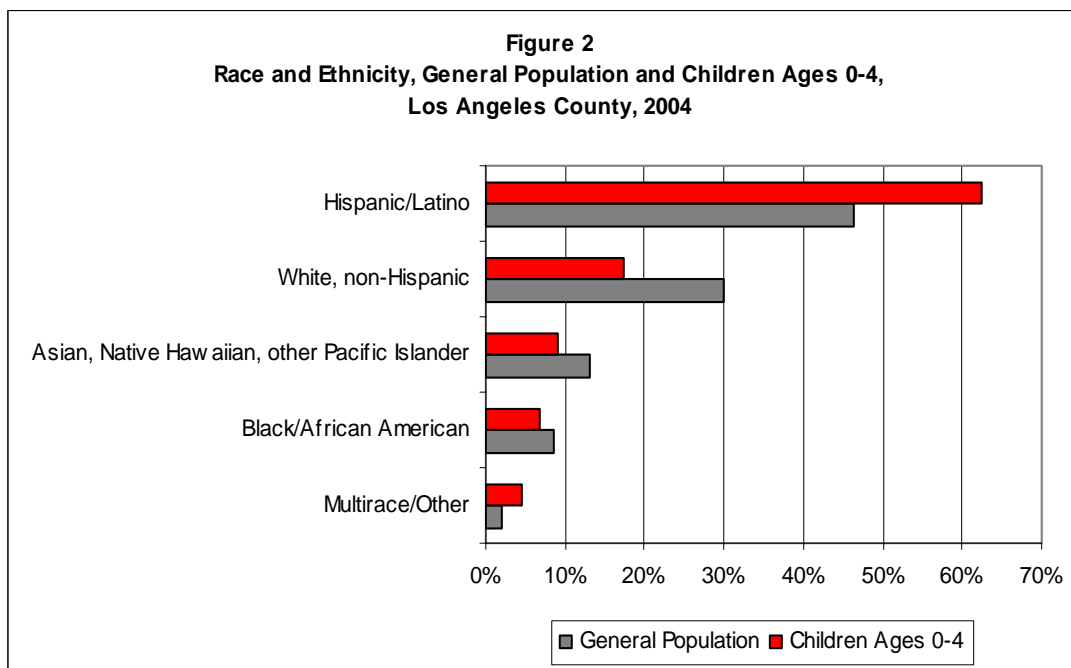
<sup>166</sup> Southern California Association of Governments. (n.d.) *Population Growth in the SCAG Region, 1950-2025*. Retrieved April 12, 2007 from [www.scag.ca.gov/livable/download/pdf/GV1950\\_2025.pdf](http://www.scag.ca.gov/livable/download/pdf/GV1950_2025.pdf)

<sup>167</sup> Southern California Association of Governments. (n.d.)

<sup>168</sup> Public Policy Institute of California. (2005). *Just the Facts: Los Angeles County*. Retrieved April 16, 2007 from [http://www.ppic.org/content/pubs/jtf/JTF\\_LACountyJTF.pdf](http://www.ppic.org/content/pubs/jtf/JTF_LACountyJTF.pdf)

<sup>169</sup> State of California, Department of Finance. (2004b).

Hispanics brings together policymakers, business and community leaders, early childhood educators, and researchers to develop recommendations for expanding and improving early education for Hispanic children.<sup>171</sup> To close this achievement gap, this task force recommends increasing access to infant/toddler, prekindergarten, and after-school service options for Hispanic/Latino children, especially those with from low-income families and/or those who are English language learners.<sup>172</sup>



Source: State of California, Department of Finance, 2006

## 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, service options run by religious or social organizations, and not-for-profit and for-profit small businesses and chains.<sup>173</sup> This study uses a more accurate method of measuring the size of the ECE industry, primarily relying upon data from the Child Care Planning Committee of Los Angeles County, Child Care Alliance of Los Angeles, and the 2006 California Early Care and Education Workforce Study by Marcy Whitebook et al.

<sup>170</sup> National Task Force on Early Childhood Education for Hispanics. (2007). *Para Nuestros Niños: Expanding and Improving Early Education for Hispanics, Executive Report*. Retrieved March 2007 from [http://www.ecehispanic.org/work/expand\\_ExecReport.pdf](http://www.ecehispanic.org/work/expand_ExecReport.pdf)

<sup>171</sup> National Task Force on Early Childhood Education for Hispanics. (2007).

<sup>172</sup> National Task Force on Early Childhood Education for Hispanics. (2007).

<sup>173</sup> 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.

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 care homes and child care centers, full-time equivalent enrollment was estimated by directly surveying providers.<sup>174</sup> 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 and Early Head Start), all classrooms that are funded by the CDE-CDD, (e.g., state preschool, general child development, and latchkey service options) 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 Los Angeles County is \$1.9 billion:

- \$1.1 billion for licensed child care centers, including CDE-CDD funded service options and excluding Head-Start-funded service options
- \$198.8 million for Head Start and Early Head Start
- \$366.6 million for licensed family child care homes (small and large)
- \$45.9 million for license-exempt providers who receive voucher payments
- \$267.6 million for After School Education and Safety (ASES) service options, 21<sup>st</sup> Century, and Beyond the Bell license-exempt before- and after-school service options in public schools<sup>175</sup>

The ECE industry generates \$1.9 billion in gross receipts in Los Angeles County.

A previous child care economic impact report in 1999 found that the child care industry generated \$1.38 billion in gross receipts.<sup>176</sup> Although it is difficult to determine the exact cause of the nearly 43 percent increase, potential factors include: a change in the methodology which now captures more facets of the industry, an increase in ECE costs, the impact of welfare reform, and investments related to Proposition 10 (e.g., Los Angeles Universal Preschool) and Proposition 49 (e.g., license-exempt before and after-school programs).

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<sup>174</sup> We used the Whitebook et al. 2006 ECE workforce study to estimate enrollment in family child care. A separate survey (sent out by the County of Los Angeles, Office of Child care) will be used to estimate enrollment in licensed child care centers.

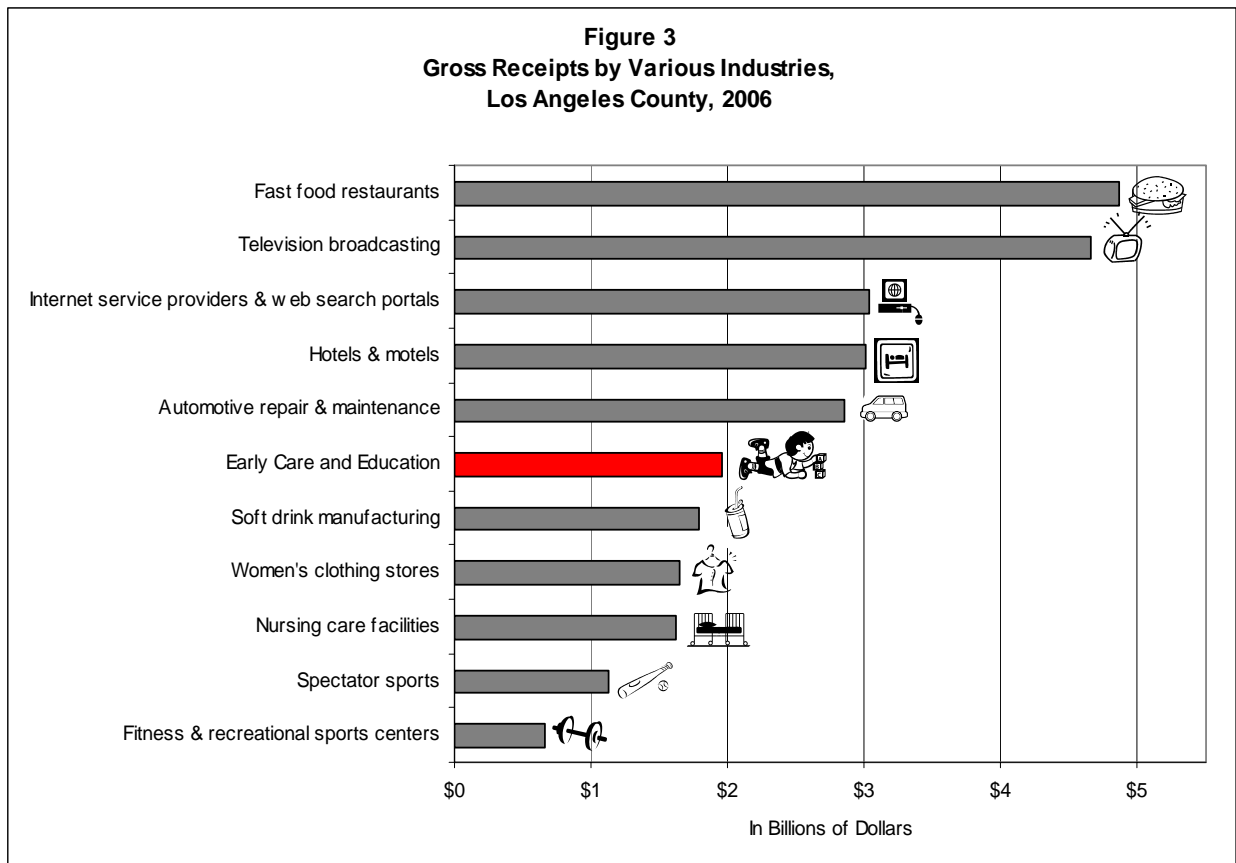
<sup>175</sup> ASES/21<sup>st</sup> Century numbers represent funding for fiscal year 2005-2006. Once Proposition 49 is fully implemented, this number will increase significantly.

<sup>176</sup> National Economic Development and Law Center. (1999).

## GROSS RECEIPTS COMPARED WITH OTHER INDUSTRIES

The ECE industry plays a key role in Los Angeles County's economy, and to demonstrate its significance, the following section compares ECE to other key industries in the county (see Figure 3). The ECE industry generates approximately 36 percent as many gross receipts as the fast food industry (\$4.9 billion), 38 percent of television broadcasting, and it generates approximately the same amount as soft drink manufacturing (\$1.8 billion). The ECE industry generates more gross receipts than fitness and recreational sports centers (\$666.6 million) and nursing homes (\$1.6 billion).<sup>177</sup>

The ECE industry generates approximately 38 percent as many gross receipts as television broadcasting.



Source: U.S. Census Bureau, 2002

<sup>177</sup> Based on the U. S. Census Bureau's 2002 Economic Census, and adjusted to 2005 values using the Consumer Price Index (CPI).

## DIRECT EMPLOYMENT

Direct employment for ECE in 2005 in Los Angeles County is estimated to be 65,139 full-time equivalent jobs (FTEs) including:<sup>178</sup>

- 33,544 FTEs for licensed child care centers, including CDE-CDD funded service options and excluding Head Start
- 2,827 FTEs for Head Start and Early Head Start
- 21,058 FTEs for licensed family child care homes (small and large)
- 3,595 FTEs for license-exempt providers who receive voucher payments
- 4,115 FTEs for 21<sup>st</sup> Century, ASES, and Beyond the Bell license-exempt before- and after-school service options in public schools

The ECE industry directly supports 65,139 full-time equivalent jobs.

A previous economic impact study in 1999 found that the ECE industry generated approximately 34,700 jobs.<sup>179</sup> Although it is difficult to determine the exact cause of the 88 percent increase, similar to the increase in gross receipts, potential factors include: a change in the methodology which now captures more facets of the industry, the impact of welfare reform, and the investments related to Propositions 10 and 49.

The direct employment estimate is derived from the number of children in different types of service options, 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 service options were derived by estimates from administrators from the various service options. Based on typical staffing patterns, for the licensed centers with a capacity of more than 50 children at any one time, we assumed that there were four additional non-teaching staff at the centers (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.<sup>180</sup> 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.

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<sup>178</sup> Full-time equivalent employees include those who work at least 40 hours per week.

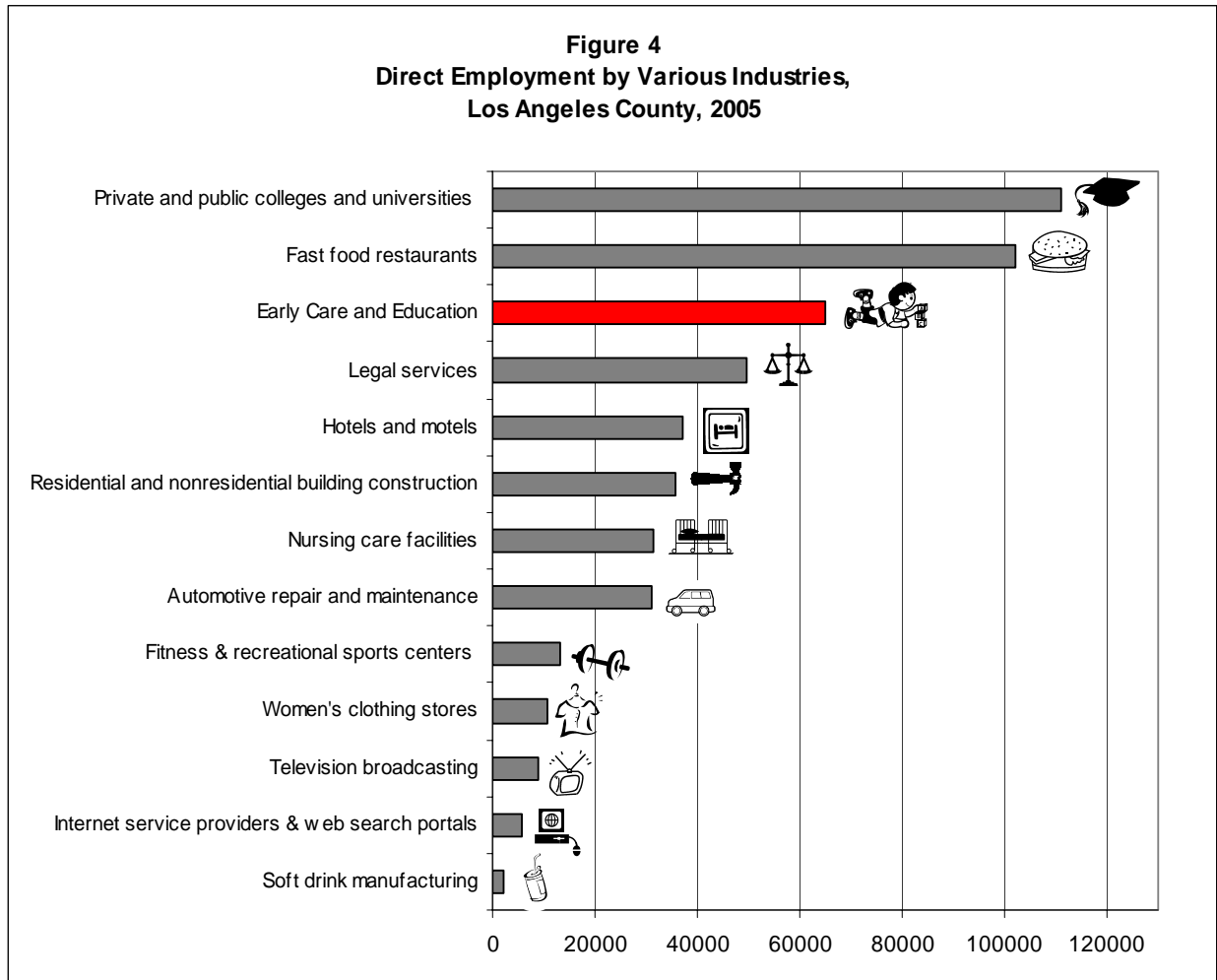
<sup>179</sup> National Economic Development and Law Center. (1999).

<sup>180</sup> 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).

## 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 (see Figure 4). The number of FTEs in ECE is 61 percent of the number of employees in fast food restaurants, and there are more FTEs in ECE as there are lawyers in Los Angeles County (45,488 employees).<sup>181</sup>

There are more FTEs in ECE in Los Angeles County than there are workers in television broadcasting (8,832 employees) and hotels and motels (37,085 employees).<sup>182</sup>



Source: U.S. Department of Labor, Bureau of Labor Statistics, 2005

<sup>181</sup> U.S. Department of Labor, Bureau of Labor Statistics. (2005). *Quarterly Census of Employment and Wages*. Retrieved April 2007 from <http://data.bls.gov>

<sup>182</sup> U.S. Department of Labor, Bureau of Labor Statistics. (2005).

## LOCAL, STATE AND FEDERAL PUBLIC INVESTMENTS

Public investments in young children enable Los Angeles County's families to work, improve the quality of care and education for Los Angeles County's children, and help make Los Angeles 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. Los Angeles 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 ECE provider
- State and federal direct contracts with ECE establishments 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 workplace 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 service options available to low-income families. Combined, these voucher service options provide parental choice and flexibility for a large number of low-income families or families with special circumstances. Low-income families in Los Angeles County benefit from \$45.9 million in ECE vouchers.<sup>183</sup>

### *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 service options of Head Start make up a significant portion of public funding for ECE. Head Start and Early Head Start service options serve children from birth to age five, pregnant women and their families in child-focused service options designed to increase school readiness of young children in low-income families. In FY 2005, Los Angeles County spent more than \$198.8 million in federal funding for all Head Start service options.<sup>184</sup>

The California Department of Education Child Development Division (CDE-CDD) supports a number of ECE and development service options throughout the county. CDE-CDD funds state pre-schools, general child development centers, and latchkey service options. In FY 2006-2007, CDE-CDD invested \$348.4 million for service options in Los Angeles County.<sup>185</sup>

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<sup>183</sup> Data provided by Child Care Alliance of Los Angeles.

<sup>184</sup> Data provided by the Los Angeles County Office of Education.

<sup>185</sup> Data provided by the County of Los Angeles, Office of Child Care within the Service Integration Branch of the Chief Administrative office

Federal funding for the 21<sup>st</sup> Century service options and state funding through the After School Education and Safety (ASES) service options also support a number of license-exempt service options throughout Los Angeles County. In FY 2004-2005, 21<sup>st</sup> Century, ASES and Beyond the Bell service options represented \$267.6 million in investments in Los Angeles County's ECE system.<sup>186</sup>

### *Child Care Food Program*

In 2005, Los Angeles County investments from the California Child Care Food Program totaled \$57.7 million.<sup>187</sup> 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.

### *Summary of Investments*

In 2004-2005, approximately \$918.4 million were invested in Los Angeles County through federal, state and local ECE funds.

In 2005, Los Angeles County invested approximately \$918.4 million in federal, state and local ECE investments.

ECE subsidies benefit Los Angeles County in several ways. First, they are an important part of workforce development and enable many people to work who would otherwise have to stay home to care for their own children or leave their children in unsafe settings, such as self-care, so they can 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 service options generate high future public savings in criminal justice, remedial education, and other areas. Please see Section Three for a more detailed analysis of the public savings stemming from quality ECE.

The Centralized Eligibility List (CEL) is a list that determines which assistance-eligible families should be served first based on factors such as income and family size, when funding is available. In April 2007, there were more than 56,000 income-eligible children on waiting lists for subsidized ECE services.<sup>188</sup>

In April 2007, there were 56,000 children on waiting lists for subsidized ECE, which means that the parents of these 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 Los Angeles County but makes it difficult to analyze and measure. However, using data maintained by organizations that administer service options 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 Los Angeles County.

<sup>186</sup> Data provided by the County of Los Angeles, Office of Child Care within the Service Integration Branch of the Chief Administrative office

<sup>187</sup> 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, Los Angeles County*. Retrieved April 12, 2007 from <http://www.cde.ca.gov/ds/sh/sn/documents/coprochild0405.pdf>

<sup>188</sup> Data provided by the County of Los Angeles, Child Care Planning Committee.

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 service options will ensure that the ECE industry can meet the needs of the Los Angeles County economy even more effectively.

## Section Five

# Maximizing the Benefits of Early Care and Education

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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 Los Angeles-Long Beach Metropolitan Statistical Area, the number of jobs for “child care workers” is expected to increase by 37 percent between 2006 and 2016, and the number of jobs for “preschool teachers” is projected to increase by 36 percent over the same time period.<sup>189</sup> 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 service options, and ECE providers alone cannot meet these challenges. If Los Angeles County stakeholders address these challenges and work to strengthen the current system, they can increase bottom-line returns for Los Angeles County employers and public returns on government investments. These challenges include but are not limited to:

- A shortage of high-quality, affordable and accessible ECE service options
- A shortage of qualified ECE teachers, administrators and providers to meet Los Angeles County’s demand for high-quality ECE
- A shortage of high-quality ECE facilities<sup>190</sup>

Between 2003 and 2006, over \$27.8 million in CDE-CDD funds allocated to Los Angeles County were unspent.<sup>191</sup> As a result, these funds were returned to the state. Although ECE providers desperately needed these funds, they were unable to use them due to insufficient numbers of qualified staff and long start-up periods for new or expanded facilities. Providers also cited difficulty enrolling income-eligible children. Although there are more than 56,000 children on waiting lists for subsidized ECE, state-funded service options may be concentrated in certain neighborhoods making it difficult for families outside of these communities to access care.

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<sup>189</sup> Economic Modeling Specialists, Inc. (2007). *Regional Staffing Patterns*. Retrieved from <http://www.economicmodeling.com>

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 April 10, 2007 from <http://www.occupationalinfo.org/onet/68038.html>

<sup>190</sup> 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).

<sup>191</sup> Data provided by the County of Los Angeles, Office of Child Care, Service Integration Branch.

## A SHORTAGE OF HIGH-QUALITY, AFFORDABLE AND ACCESSIBLE ECE SERVICE OPTIONS

The ECE industry is not currently meeting the demand for high-quality, affordable, accessible ECE in the county, and the demand is growing. Welfare reform and the rising proportion of low-wage jobs in Los Angeles County dramatically increased the need for subsidized ECE. Unlike many other industries, the costs cannot typically be passed on to consumers. As families struggle with the cost of basic needs, high-quality ECE becomes cost-prohibitive for families in many income brackets, so relying on parents to pay the full cost of high-quality ECE is not realistic.

From kindergarten to twelfth grades, any parent can choose a local-, state- and federal-government-funded education programs, and in the higher education system, institutional funding and low- or delayed-interest loans help offset costs, but the ECE system lacks significant supports for families. Although government spending to support the ECE needs of low-income families has risen dramatically since welfare reform in 1996, many families who are eligible for assistance do not receive it, and subsidy levels do not reflect the cost to the establishment. As a result, program quality suffers and investments do not have the maximum returns. In addition, economic investments that attract and retain a skilled labor force and educate the future workforce deserve greater business involvement. While some businesses offer family-friendly benefits to their employees and some business groups have publicly supported policy advancements in ECE, greater involvement from business leaders is critical to increasing the supply of high-quality, affordable and accessible ECE.

Two factors—the number of jobs during nontraditional hours and limited transportation options—further strain ECE service provision. According to the California Child Care Resource & Referral Network, 20 percent of Los Angeles County employees work during nontraditional hours.<sup>192</sup> These nontraditional work arrangements, including “evenings, nights, rotating shifts and employer-arranged irregular schedules” are more common among low-income workers.<sup>193</sup> Parents who work during nontraditional hours struggle to find high-quality service options for their children. Although the majority of family child care homes in Los Angeles County offer care during nontraditional hours, only 6 percent of child care centers offer these services.<sup>194</sup>

Furthermore, ECE service options and transportation are both critical elements of a strong economic infrastructure, and both enable families to work and access services. Covering more than 4,700 square miles, the sheer size of Los Angeles County poses a barrier to effective service delivery.<sup>195</sup> Long commutes increase the amount of time children spend with ECE providers and increase the demand for care during nontraditional hours. In 2005, the average commute time for Southern California residents was 82 minutes round trip, and these commuters typically travel approximately 40 miles round trip each workday.<sup>196</sup> In 2000, an estimated 440,000 workers commuted to Los Angeles County from the surrounding counties, and approximately 280,000 Los

<sup>192</sup> Child Care Resource & Referral Network. (2005).

<sup>193</sup> National Women’s Law Center. (2003). *Raising Work Requirements to 40 Hours a Week Will Result in a Greater Child Care Burden for TANF and Low-Income Working Families*. Retrieved May 31, 2007 from <http://www.nwlc.org/pdf/WorkHoursFactSheet2003.pdf>

<sup>194</sup> Child Care Resource & Referral Network. (2005).

<sup>195</sup> Los Angeles County Economic Development Corporation. (2006). *Los Angeles County Profile*. Retrieved April 16, 2007 from <http://www.laedc.org/reports/LACounty.pdf>

<sup>196</sup> Southern California Association of Governments. (2006). *State of the Commute Report 2006*. Retrieved April 12, 2007 from [www.scag.ca.gov/publications/pdf/2007/2006\\_StateoftheCommute\\_Report.pdf](http://www.scag.ca.gov/publications/pdf/2007/2006_StateoftheCommute_Report.pdf)

Angeles County residents commuted to jobs outside the county.<sup>197</sup> 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.<sup>198</sup> Women in Southern California are more likely to use public transportation than men, 11 percent compared to 5 percent.<sup>199</sup> Lack of access to ECE providers in close proximity to transit corridors and bus lines places additional strain on commuting parents. In many cases, the daily commute from home to ECE provider to job and back again is either impossible, extremely time consuming, or otherwise very difficult using public transportation.<sup>200</sup> While more research is needed on the ECE preferences of commuting parents, it is clear that some prefer ECE options close to where they work rather than near home, increasing the demand for ECE options near business centers. Commuters may choose to have ECE close to where they work because they want to be close to their children, especially in the event of an earthquake or other emergency. Other commuting parents need ECE options that are close to existing transportation corridors, so they can easily integrate ECE into their daily commutes.

Despite substantial local, state and federal investments in ECE in Los Angeles County, much of the ECE industry lacks the resources to expand capacity and improve the quality of their programs. While businesses in many industries face difficult trade-offs between price and quality, those in ECE feel particular pressures. With few exceptions outside of public sector service options, even the most prosperous, business-savvy ECE establishments persistently operate on tight margins, with the difference between their revenues and their costs small at best.

## 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. Three key indicators for a quality ECE workforce are education, wages, and tenure in the field. 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 the first quarter of 2006, the average hourly wage of someone classified as a “child care worker” in Los Angeles County was just \$10.05.<sup>201</sup> If that ECE teacher worked full-time, he/she would earn an annual wage of just \$20,905.<sup>202</sup> Likewise, “preschool teachers” earned just \$13.50 per hour or \$28,082 annually. Annual earnings for child care workers and preschool teachers are in the same range as the mean

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<sup>197</sup> California Employment Development Department. (2006b). *Los Angeles County to County Commuting*. Retrieved April 13, 2007 from <http://www.calmis.ca.gov/commute-maps/LACommute.pdf>

<sup>198</sup> The Women’s Foundation of California. (2004). *Women In Transit: Analyzing Gender and Transportation Justice*. Retrieved from <http://www.womensfoundca.org>

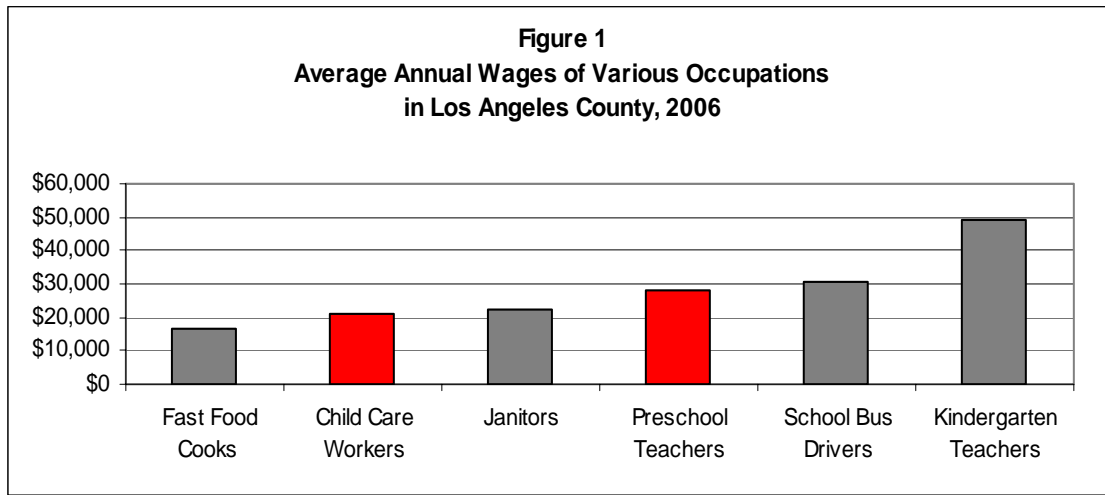
<sup>199</sup> Southern California Association of Governments. (2006).

<sup>200</sup> National Economic Development and Law Center. (2007). *Low-Income Car Ownership Programs – 2006 Survey*. Retrieved June 14, 2007 from <http://www.nedlc.org>

<sup>201</sup> California Employment Development Department. (2006c). *Occupational Employment (May 2005) & Wage (2006 - 1st Quarter) Data*. Retrieved April 10, 2007 from <http://www.labormarketinfo.edd.ca.gov/cgi/career/?PageID=3&SubID=152>. Wages data based on 2006, 1<sup>st</sup> 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 April 10, 2007 from <http://www.occupationalinfo.org/onet/68038.html>

<sup>202</sup> California Employment Development Department. (2006c).

annual earnings for fast food cooks (\$16,875); janitors (\$22,278); and school bus drivers (\$30,540). In comparison, kindergarten teachers earn an average wage of \$49,250 per year (see Figure 1).<sup>203</sup>



Source: California Employment Development Department, 2006

In a 2006 study of California's ECE workforce, annual turnover for child care center teachers was 23 percent statewide. However this turnover rate is double the turnover rate for K-12 education statewide—11 percent.<sup>204</sup>

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.<sup>205</sup> Assessing the quality of Los Angeles 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 the ECE workforce. These include a passion for teaching children, cultural and linguistic capacity, and strong interpersonal skills. A number of studies demonstrate that teachers with higher levels of education are more likely to teach ECE in 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 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.<sup>206</sup>

The 2006 workforce study also assessed the educational attainment of the local ECE workforce. Approximately 32 percent of licensed family child care providers in Los Angeles County had a high school diploma or less, and only 13.9 percent had a bachelor's degree or higher.<sup>207</sup> Among center-

<sup>203</sup> California Employment Development Department. (2006c).

<sup>204</sup> Whitebook et al. (2006a). *California Early Education Workforce Study: Licensed Family Child Care Providers, Los Angeles County 2006*. Retrieved April 2007 from <http://www.iir.berkeley.edu/cscce/>

<sup>205</sup> New Jersey Professional Development Center for Early Care and Education. (2001). *Core Knowledge Areas and Competency Levels*. NJPDC, Kean University, Union, N.J.

<sup>206</sup> Whitebook, M. (2003a). *Bachelor's Degrees Are Best: Higher Qualifications for Pre-Kindergarten Teachers Lead to Better Learning Environments for Children*.

<sup>207</sup> Whitebook et al. (2006a).

based teachers in Los Angeles County, approximately 26 percent had a bachelor's degree or higher.<sup>208</sup>

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 Los Angeles 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 and support.

In a 2006 study, *Roots of Decline: How Government Policy Has De-Educated Teachers of Young Children*, authors Dan Bellm and Marcy Whitebook found that the ECE field nearly tripled in size since the late 1970s, but the ECE industry lacked the infrastructure to support this growth.<sup>209</sup> The sudden demand for new personnel resulted in difficulty in recruiting and retaining staff, but the shortage did not result in significant wage increases.<sup>210</sup> According to the authors, "...the available labor pool for ECE programs has shifted steadily from degree holders to relatively untrained and less educated workers, many of them living in poverty, and many of them recent immigrants to this country, whether educated or not."<sup>211</sup>

Another study, *Chutes or Ladders? Support Services for Early Childhood Students in Higher Education*, found that ECE students enrolled in higher education lack the support systems necessary to pursue their academic careers.<sup>212</sup> Many ECE students in college and university programs are working full-time, and many experience challenges with college-level coursework in English.<sup>213</sup> In response to these challenges, ECE advocates, in partnership with public officials, have worked to support ECE students in accessing higher education and to expand the scope of ECE coursework in colleges and universities.<sup>214</sup>

#### *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 Los Angeles County's employers.<sup>215</sup>

With state AB212 funding, Los Angeles County enhanced its efforts to retain ECE staff through the *Investing in Early Educators Retention Plan*. The program includes stipends for early childhood educators to enable them to pursue educational opportunities; additional training for

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<sup>208</sup> Whitebook et al. (2006b). *California Early Education Workforce Study: Licensed Child Care Providers, Los Angeles County 2006*. Retrieved October 2006 from <http://www.iir.berkeley.edu/cscce/>

<sup>209</sup> Bellm, D. and Whitebook, M. (2006). *Roots of Decline: How Government Policy Has De-Educated Teachers of Young Children*. Retrieved June 2007 from <http://www.iir.berkeley.edu/cscce/index.html>

<sup>210</sup> Bellm, D. and Whitebook, M. (2006)

<sup>211</sup> Bellm, D. and Whitebook, M. (2006), 6.

<sup>212</sup> Dukakis, K. et al. (2007). *Chutes or Ladders? Support Services for Early Childhood Students in Higher Education*. Retrieved June 2007 from <http://www.iir.berkeley.edu/cscce/index.html>

<sup>213</sup> Dukakis, K. et al. (2007)

<sup>214</sup> Dukakis, K. et al. (2007)

<sup>215</sup> National Economic Development and Law Center. (2000). *Child Care Financial Planning and Facilities Development Manual*.

supervisory/management staff; data collection and policy development; and collaboration with local workforce initiatives as well as staff/faculty of local community colleges.<sup>216</sup>

## A SHORTAGE OF HIGH-QUALITY EARLY CARE AND EDUCATION FACILITIES

In addition to the overwhelming need for a greater **supply** of child care facilities, there has been growing recognition about the importance of the physical environment to the **quality** of child care. The impact of the physical environment on the quality of care was documented in a 1995 four-state comparative study: *Cost, Quality and Child Outcomes in Child Care Centers*, which determined that there is a high correlation between the physical environment and quality of care provided.<sup>217</sup> The adequacy of the facility for care giving and child development, whether home or center-based, is both immediately apparent and more subtle in its impacts. Immediately apparent is how much space is provided per child, the presence of outdoor space for gross motor skill development, the physical condition of the facility in terms of maintenance and upkeep, or the presence or absence of any hazards for children, staff and families. These baseline requirements for space can be enhanced greatly in terms of quality if there is an ability to develop the space specifically for the task of providing ECE, especially for the age group of children to be served and the staff who will educate them. Quality design features, which may have a less immediate but tangible impact, include:

- Bathrooms and food prep areas off the classroom with clear sight lines
- Windows and other features designed specifically for children at their height
- Play spaces immediately off the classroom
- Teacher break and preparation areas
- Space for the provision of one-on-one and group services to children and families including health, mental health and family support services

These design features can enhance the experiences of children and their development greatly, as well as the day to day experiences and success of staff in their work.

A more recent study, *Constructing Early Childhood Facilities: What States Can Do to Build Supply and Promote Quality*, highlights how the quality of the facility affects the quality of the program. The authors argue that a quality facility promotes parental involvement in their child's early education experience. Additionally, the ECE industry faces significant levels of staff turnover, which negatively affect the quality of programs. The aforementioned study recognizes that quality facilities can promote staff retention by "creating physically and psychologically comfortable workplaces, and facilitating professionally rewarding interactions with young children, parents and coworkers."<sup>218</sup>

Research has found that children need an appropriate physical environment in order to develop optimally.<sup>219</sup> 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.<sup>220</sup> Spaces that create these opportunities for children provide the basis for their intellectual

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<sup>216</sup> Information provided by the County of Los Angeles, Office of Child Care.

<sup>217</sup> Cost, Quality, and Child Outcomes Study Team (1995). *Cost, Quality, and Child Outcomes in Child Care Centers Public Report*. Denver: Economics Department, University of Colorado-Denver.

<sup>218</sup> Sussman, C. and Gillman, A. *Constructing Early Childhood Facilities: What States Can Do to Build Supply and Promote Quality*. Retrieved on May 2, 2007 from: <http://nieer.org/resources/research/Facilities.pdf>

<sup>219</sup> 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*.

<sup>220</sup> Olds, A.R. (1989). *Psychological and Physiological Harmony in Child Care Center Design*. Children's Environments.

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 buildings, better lighting, better thermal comfort and air quality, and more advanced laboratories and libraries."<sup>221</sup>

To help families identify high-quality service options, the National Association for the Education of Young Children (NAEYC) established a voluntary set of professional standards for ECE service options where local service options can measure themselves against a national set of standards in both program and facility areas such as child-to-staff ratios and program development.<sup>222</sup> While there are nearly 2,500 licensed centers in Los Angeles County, only 175 are NAEYC accredited.<sup>223, 224</sup>

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.<sup>225</sup> While there are approximately 5,000 licensed family child care homes in Los Angeles County, fewer than 50 of them are NAFCC accredited.<sup>226</sup>

Although ECE service options 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.

To mitigate the increasing demand for ECE service options, the city of Santa Monica recently imposed child care linkage fees for commercial and residential developments to fund the creation of new ECE spaces.

The Federal Reserve Bank of New York highlights the following barriers that may hinder ECE service options 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

<sup>221</sup> Schneider, M. (2002). *Do School Facilities Affect Academic Outcomes?* National Clearinghouse for Educational Facilities.

<sup>222</sup> The National Association for the Education of Young Children. (2007). *Accredited programs in California*. Retrieved April 2007 from <http://www.naeyc.org/accreditation/search/state.asp?state=CA>

<sup>223</sup> State of California, Department of Social Services, Community Care Licensing Division. (2007). *Information for Parents*. Retrieved April 30, 2007 from [http://www.cclid.ca.gov/docs/cclid\\_search/cclid\\_search.aspx](http://www.cclid.ca.gov/docs/cclid_search/cclid_search.aspx)

<sup>224</sup> The National Association for the Education of Young Children. (2007). NAEYC does not collect data by county. The number of NAEYC accredited service options in Los Angeles County was generated by searching for service options within a 36 mile radius of zip code 91214.

<sup>225</sup> National Association for Family Child Care. (2007). *NAFCC Accreditation Program*. Retrieved April 2007 from <http://www.nafcc.org/accreditation/background.asp>

<sup>226</sup> National Association for Family Child Care. (2007). NAFCC does not collect data by county. The number of NAFCC accredited service options in Los Angeles County was generated by searching area codes 323, 213, 818, and 310.

- Limited ability to raise parental fees<sup>227</sup>

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. 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 service options.
  - ❖ 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.

### *Measuring Quality*

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.<sup>228</sup> 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).<sup>229</sup>

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<sup>227</sup> Fitzpatrick, F. (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.

<sup>228</sup> 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>

<sup>229</sup> Hill, E. (2007).

Similar efforts are underway on a local level. The Los Angeles County Policy Roundtable for Child Care was established in 2003 to design a voluntary child care rating system for licensed child care centers and family child care homes. The Steps to Excellence Program bases high quality ratings on six components: regulatory compliance; teacher/child relationships; learning environment; identification and inclusion of children with special needs; qualifications and working conditions; and family and community relationships.<sup>230</sup> Implementing this rating system would inform parents, stakeholders, and policymakers about the quality service options in Los Angeles County.

## 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 Los Angeles County's overall economic growth. To maximize the economic benefits of high-quality ECE, a comprehensive workforce development strategy that increase the pool of qualified ECE professionals and a plan for the financing of quality ECE facilities must be developed. Any successful professional development system for ECE workers should include comparable salaries/benefits for employees. Efforts to build a cohesive, inclusive and accessible system need to include various stakeholders from government, businesses, for-profit and nonprofit providers.

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<sup>230</sup> Office of Child Care, within the Service Integration Branch of the Chief Administrative Office. (n.d.) *Steps to Excellence Program: Los Angeles County Quality Rating System for Child Care Programs*. Retrieved April 18, 2007 from <http://cao.lacounty.gov/ccp/step.htm>

## Section Six

# Conclusion and Recommendations

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The findings in this report are clear: high-quality early care and education (ECE) service options in Los Angeles 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 service options which parents typically access for children ages birth through 12. These service options include child care and child development programs and licensed home providers, preschool programs, after-school, latchkey, and other out-of-school time programs.

Los Angeles 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 service options 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 service options also have reduced likelihood of negative outcomes, which saves the government money and increases the quality of life for all the county’s residents.

Growing diversity among the county’s children indicates a need for culturally and linguistically competent ECE service options and investments in the ECE industry to meet the increased demand. 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.

The ECE industry in Los Angeles County plays an important role in economic development. It generates \$1.9 billion in gross receipts annually and provides over 65,000 full-time equivalent jobs. This puts it on par with other significant Los Angeles County industries such as women’s clothing stores and nursing care facilities. 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 qualified ECE teachers, administrators and providers
- A shortage of affordable and accessible ECE service options
- A shortage of high-quality ECE facilities

The role and importance of ECE as a vital component of Los Angeles 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 Los Angeles County. By

understanding the links between ECE, working parents and the economy, stakeholders can work in partnership to strengthen the industry to:

- Enhance the affordability and accessibility of quality ECE so that children receive the full benefit of a quality early education experience and so that parents can obtain and maintain employment
- Develop and implement an industry-wide workforce development agenda
- Increase the supply of quality ECE facilities

Within each of these broad recommendations, there are specific action steps, both short- and long-term, that the public sector, the private sector, and the ECE industry can take to move Los Angeles County forward.<sup>231</sup>

## AFFORDABILITY/ACCESSIBILITY

**Recommendation Number 1: Enhance the affordability and accessibility of quality ECE so that children receive the full benefit of a quality early education experience and so that parents can obtain and maintain employment.**

### Recommendations for Action by the Public Sector:

#### Short-Term Recommendations

- Lead by example and offer family-supportive policies, benefits, and other supports that help pay for employees' ECE costs
- Encourage unions whose membership includes parents of young children to negotiate ECE benefits that help reduce the cost of market rate care for members
- Encourage the regional and local planning agencies (e.g., Southern California Association of Governments, Community Redevelopment Agencies, etc.) to incorporate ECE issues into their agenda

#### Long-Term Recommendations

- Offer tax incentives to property owners who offer below-market rent to ECE providers which helps reduce the cost of care for consumers/parents
- Provide incentives for developers to include ECE into their future development plans, including housing, schools, industrial parks, and/or shopping malls
- Increase public investment to expand and improve ECE service options for low-income families
- Encourage the City of Los Angeles, Workforce Investment Board to offer ECE to support those using the WIB-sponsored job training programs

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<sup>231</sup> As defined by the Advisory Board and Technical Advisory Committee, short-term recommendations include timelines of a few months to three years. Long-term recommendations include timelines of five to ten years.

### Recommendations for Action by the Business Community:

#### Short-Term Recommendations

- Establish and promote ECE benefits, such as on-site care facilities, child care subsidies and supports, back-up child care, flexible spending accounts, or other benefits appropriate to the specific workforce
- Establish leave policies and employment practices that do not exacerbate the need for scarce ECE services (e.g., permit the use of paid sick leave to care for a sick child)
- Match employees' flexible spending account contributions
- Encourage small employers to join group Flexible Spending Accounts, which reduces costs by providing an economy of scale, and promote the use of these accounts by parents who pay for ECE
- Provide leadership through groups such as Chambers of Commerce to educate employers and the public about the provision of and access to ECE as an important public policy issue

#### Long-Term Recommendations

- Advocate for increased public investment in a comprehensive ECE system that provides high-quality care and education for children ages 0 to 12 in accessible settings that families can afford regardless of income

### Recommendations for Action by the Early Care and Education Community:

#### Short-Term Recommendations

- Expand availability of ECE during non-traditional hours
- Create a public education campaign for businesses about the “business case” for ECE service options. Bring ECE to the table with businesses
- Advocate for ECE at a local level, so that local officials can advocate for more public investment at all levels of government
- Encourage families to advocate for early childhood investment and increased quality and service availability
- Create a speakers' bureau to present the economic benefits of ECE to various business and community groups in order to build public support for greater investment

#### Long-Term Recommendations

- Connect new ECE service options to existing transit corridors, so that parents can easily access ECE using existing transit services

## WORKFORCE DEVELOPMENT

### **Recommendation Number 2: Incorporate ECE into the overall workforce development agenda for Los Angeles County.**

#### Recommendations for Action by the Public Sector:

##### Short-Term Recommendations

- Develop a comprehensive strategy for the county's Workforce Investment Boards that supports career development and small business development within the ECE industry, including job training and apprenticeship programs for ECE employers, employees and potential employees
- Incorporate information about the California Child Development Permit Matrix into training programs. The Permit Matrix outlines professional requirements for subsidized service options and voluntary standards for unsubsidized service options

##### Long-Term Recommendations

- Create and implement professional development supports that provide equitable access to training and higher education opportunities for individuals at all levels within the ECE workforce
- Support activities that promote articulation agreements among training programs, community colleges and 4-year colleges to facilitate clearer career paths and reduce duplication of coursework
- Develop small learning communities in public high schools with ECE learning themes. Develop these learning communities in partnership with community colleges and universities in order to promote and recruit high school students into the ECE workforce
- Offer loan forgiveness programs for ECE providers and teachers committed to working in the ECE field upon graduation from college regardless of auspice of employment or age of children served
- Create a college credit-based Infant-Toddler credential by identifying and/or adapting existing courses; articulate this credential with the Permit Matrix and with ECE degree programs
- Centralize information and access to training programs, college programs and access to other technical assistance opportunities that target the potential and existing ECE workforce

#### Recommendations for Action by the Business Community:

##### Short-Term Recommendations

- Invite leaders in the private sector to be speakers and/or audience participants at briefings about these findings and distribute information about the economic impact of the ECE industry in Los Angeles County

## Long-Term Recommendations

- Advocate for more public investment in a comprehensive ECE system that provides high-quality care and education for children from birth to age 12 and provides a variety of job opportunities to thousands of county residents

### Recommendations for Action by the Early Care and Education Community:

## Short-Term Recommendations

- Disseminate information related to ECE careers, including requirements
- Work with key organizations, such as Resource and Referral programs, LAUP, and others, to raise awareness of training and resources that seek to improve the business skills of ECE providers
- Raise awareness of local efforts to train providers on business skills (e.g., LAUP training programs)
- Promote the existing compensation model as a means to link education and training with fair compensation and infuse this into all workforce development efforts
- Establish policies and procedures that enable staff in ECE settings to take advantage of workforce incentive and professional development programs
- Write and publish articles about the current and future need for an increased ECE workforce
- Represent ECE on Workforce Investment Boards
- Work with the Los Angeles County Workforce Investment Boards and Chambers of Commerce to present the results of the economic impact study and the career pathways report to workforce development system leaders

## Long-Term Recommendations

- Revise wage scales and personnel policies in alignment with the development of a career and wage lattice
- Align and articulate ECE training systems so that workers can move along a career pathway as they gain education and work experience
- Encourage license-exempt service options to become licensed
- Expand existing efforts to provide license-exempt providers with specialized training in early childhood development
- Ensure that professionals working with infants and toddlers, in family child care homes and in license-exempt settings are included in professional development efforts related to increasing ECE quality
- Focus workforce development strategies on skill/knowledge development, as well as on formal education and the attainment of units/degrees

## FACILITIES

### Recommendation Number 3: Increase the supply of quality ECE facilities.

#### Recommendations for Action by the Public Sector:

##### Short-Term Recommendations

- Offer business development trainings to, or connect such trainings with, ECE business owners and family child care home operators through agencies such as the Small Business Administration and Small Business Development Centers
- Ensure that there is specific language that encourages and facilitates the development of ECE services in the general plans of the county and each city
- Provide financial incentives for existing ECE programs to add space or make other modifications to meet licensing requirements to serve infants and toddlers
- Identify available, appropriate land or buildings, including underutilized public property that could be designated for development of ECE
- Partner with park and recreation departments to fully utilize available space
- Hold a seminar for real estate agents about the requirements for ECE facilities to increase their knowledge and skill in assisting individuals and groups seeking space in which to create licensed facilities
- Build on existing systems and link with other public, private and nonprofit agencies to expand and increase the supply of ECE facilities

##### Long-Term Recommendations

- Encourage mixed use of bond funds or in drafting language for new bond measures, include language that would allow for comparable uses. For example, if local demographics change, bonds for park & recreation improvements could be used to develop ECE service options
- Provide encouragement and incentives to developers of affordable housing to include ECE facilities by reducing fees, fast tracking approval processes, and waiving parking requirements
- Educate developers about the need/demand for ECE and work with them to include ECE in new developments or pay into a ECE fund to be used for facility development and renovation
- Expedite development projects that include ECE
- Reduce traffic impact fees for commercial developments that include or are associated with ECE
- Explore reductions in fees for businesses that offer ECE
- Identify all potential public and private funding options in the county and make this information available to the public
- Allow ECE providers to rent safe, vacant, government-owned buildings for ECE facilities at a reduced rate. Provide funding for renovations necessary to meet licensing requirements

### Recommendations for Action by the Business Community:

#### Short-Term Recommendations

- Include ECE facilities in mixed-use developments
- Assist in the development of additional ECE facilities by providing space or low-cost leases to ECE providers, including ECE facilities in mixed-use developments, and modifying lease agreements to allow rental tenants to offer family child care

#### Long-Term Recommendations

- Provide loan products specifically designed for ECE providers and developers through financial institutions and banks
- Make cluster benefits available when providers purchase goods and services (e.g., supplies, payroll, etc.)
- Reduce traffic impact fees for commercial development that include or are associated with ECE services

### Recommendations for Action by the Early Care and Education Community:

#### Short-Term Recommendations

- Disseminate information about state and local efforts designed to increase the supply of quality ECE facilities through the provision of technical assistance and/or funding (e.g., Constructing Connections, Building Child Care, Child Care Facilities Revolving Loan Fund, etc.) through technical assistance and or funding
- Educate real estate developers about the need/demand for ECE and work with them to include ECE in new developments

#### Long-Term Recommendations

- Advocate for local government to provide incentives for affordable housing developers to include ECE into their development projects
- Develop partnerships with the Community Redevelopment Agency to explore ways in which redevelopment projects can include and support ECE

### Recommendations for Broad-based Action at the County level:

- Convene a county-wide workforce development task force comprised of ECE providers, stakeholders, public entities, business, and institutions of higher education to create a comprehensive strategy that will:
  - Establish a career and wage lattice for ECE
  - Standardize job titles, minimum education and experience requirements, and wages as a means of accurately tracking industry growth and opportunity and to support ECE workforce development
  - Enable the alignment and articulation among and between ECE training and education systems
  - Encourage recruitment efforts to increase the supply of qualified and culturally/linguistically competent teachers, administrators, and providers
  - Facilitate adequate educational opportunities in the public higher education system to ensure an appropriately-sized and educated workforce reflective of the languages and

cultures of Los Angeles County children, recognizing that the field of ECE serves children from birth to school age

- Focus workforce development on both skill development as well as formal education
- Convene a summit of Los Angeles County planners to provide education on the need and demand for ECE services and to elicit suggestions for ways in which ECE service options can be incorporated into communities throughout Los Angeles County

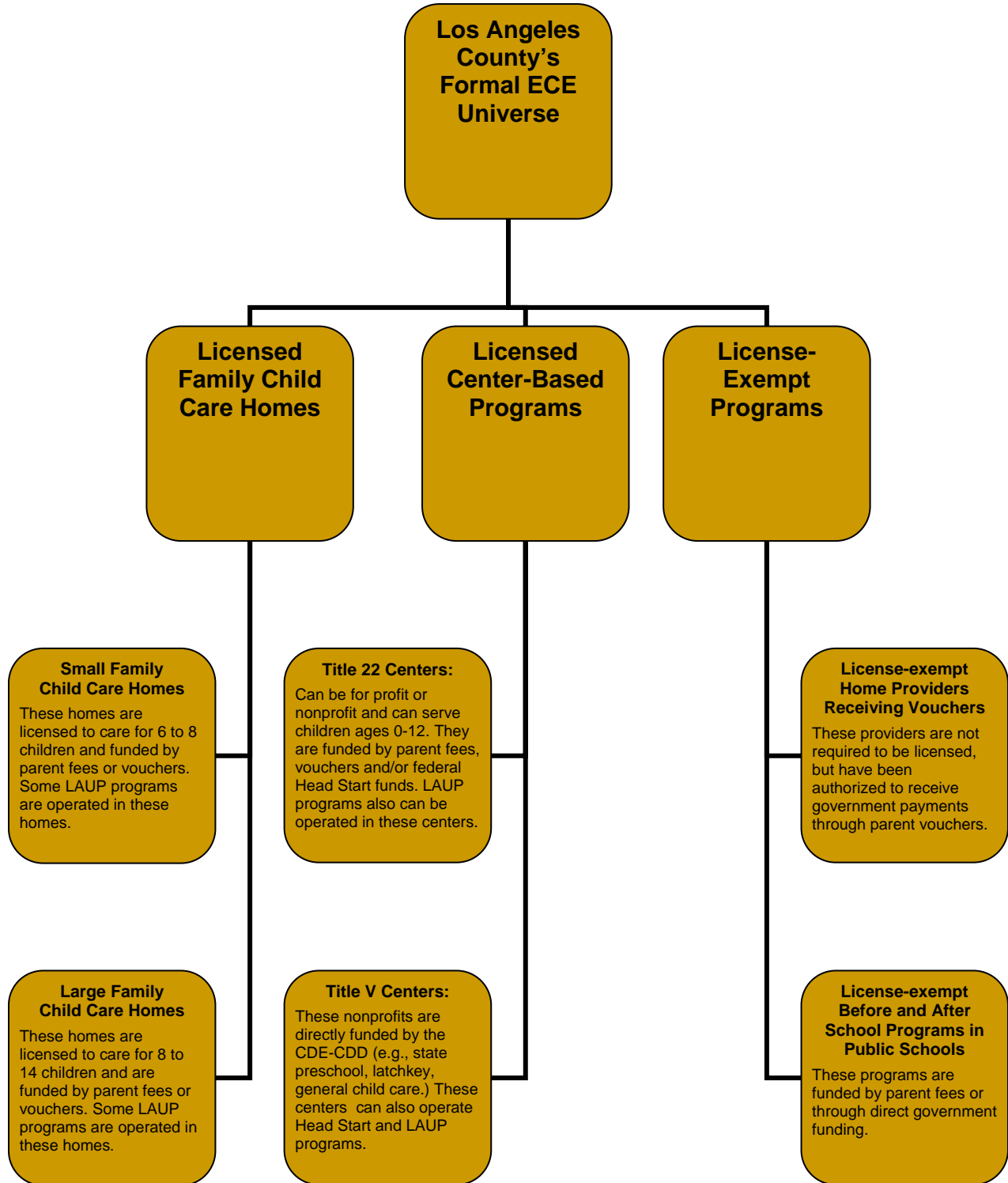
## SECTION SUMMARY

Ultimately, Los Angeles 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. Los Angeles County can maximize the economic benefits from its ECE industry by promoting and implementing these strategies and recommendations. Through building partnerships, stakeholders including businesses, the public sector and the ECE industry itself will facilitate the development of the ECE industry and workforce to meet the needs of working families and their children and find solutions to address the systemic barriers to high-quality, affordable and accessible ECE in Los Angeles County.

# Appendix A

## Los Angeles County's Formal Early Care and Education Industry

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## Appendix B

### The Self-Sufficiency Standard, Los Angeles, 2003

**Table 1**  
**The Self-Sufficiency Standard for Los Angeles County, 2003<sup>232</sup>**

Monthly Costs	Adult	Adult + Infant	Adult + Preschooler	Adult + Infant + Preschooler	Adult + Schoolager +Teenager	Adult + Infant + Preschooler +Schoolager	2 Adults + Infant + Preschooler	2 Adults + Preschooler + Schoolager
Housing	\$807	\$1,021	\$1,021	\$1,021	\$1,021	\$1,378	\$1,021	\$1,021
Child Care	\$0	\$671	\$672	\$1,343	\$384	\$1,727	\$1,343	\$1,056
Food	\$182	\$266	\$276	\$358	\$473	\$481	\$515	\$565
Transportation	\$242	\$248	\$248	\$248	\$248	\$248	\$475	\$475
Health Care	\$72	\$207	\$219	\$227	\$248	\$246	\$265	\$276
Miscellaneous	\$130	\$241	\$244	\$320	\$238	\$408	\$362	\$339
Taxes	\$295	\$453	\$462	\$640	\$354	\$1,046	\$683	\$583
Earned Income Tax Credit (-)	0	0	0	0	-\$17	0	0	0
Child Care Tax Credit (-)	0	-\$60	-\$60	-\$100	-\$65	-\$100	-\$100	-\$100
Child Care Tax Credit (-)	0	-\$83	-\$83	-\$167	-\$167	-\$250	-\$167	-\$167
<b>Self- Sufficiency Wage</b>								
Hourly	\$9.83	\$16.84	\$17.03	\$22.10	\$15.49	\$29.45	\$12.49*	\$11.50*
Monthly	\$1,729	\$2,964	\$2,998	\$3,889	\$2,726	\$6,183	\$4,396	\$4,049
Annually	\$20,751	\$35,567	\$35,977	\$46,670	\$32,713	\$62,199	\$52,756	\$48,590
							*Per Adult	*Per Adult

<sup>232</sup> Pearce, D. (2003). *The Self-Sufficiency Standard for California 2003*. Retrieved January 22, 2007 from <http://www.sixstrategies.org/files/2003%20CA%20Full%20Report%20with%20Map.pdf>

## Appendix C

# Methodology for Calculating Gross Receipts and Direct Employment

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

### LOS ANGELES 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 early care and education 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)
- ASES, 21<sup>st</sup> Century and Beyond the Bell license-exempt after-school programs in public 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 are tracked and updated regularly (see Appendix A for a flow chart depicting the formal early care and education 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 Los Angeles County's formal early care and education 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 ECE arrangements that are not included in the analyses of this report, please see page 5 in Section One.

### 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 a Spring 2007 survey conducted by the County of Los Angeles, Office of Child Care, within the Service Integration Branch of the Chief Executive Office.

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 CDE-CDD's 2005 Market Survey were used.<sup>233</sup> Monthly averages were used to develop an annual average by multiplying by 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).

<b>Table 1 Average Annual Unsubsidized Cost for Early Care and Education, Based on 2005 Market Rate Survey, Los Angeles County</b>			
Type of ECE Arrangement	Infant and Toddler	Preschool Age	School Age
Licensed Child Care Center	\$10,326	\$7,226	\$5,781
Licensed Family Child Care Home	\$7,292	\$6,775	\$5,934

### *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 and general child care)
- Head Start Programs (Head Start and Early Head Start)
- ASES, 21<sup>st</sup> Century, and Beyond the Bell license-exempt after-school programs in public schools
- License-exempt in-home and relative care providers receiving vouchers

<sup>233</sup> California Department of Education, Child Development Division. (2005). *Reimbursement Ceilings for Subsidized Child Care*. Retrieved January 26, 2007 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 used, according to Table 2. These were applied to licensed capacity. Based on typical staffing patterns, for the licensed centers with a capacity of more than 50 children at any one time, we assumed that there were four 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)
- ASES, 21<sup>st</sup> Century, and Beyond the Bell license-exempt after-school programs in public schools
- License-exempt in-home and relative care providers receiving vouchers

## Appendix D

# Indirect and Induced Effects of the Early Care and Education Industry

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

The estimates for the impact of early care and education on indirect and induced effects are based on the Economic Modeling module of Economic Modeling Specialists, Inc. (EMSI). To create its Input-Output (IO) model, EMSI starts with the national Input-Output or "A" Matrix that is comprised of the industry "Use" and "Make" matrices provided by the U.S. Bureau of Economic Analysis. They combine this with the national Total Gross Output (TGO), regional jobs and sales data (which constitutes regional TGO), the land area of the subject region, regional Dividends, Interest, Rent and Transfers (DIRT) data, and regional in/out commuter patterns. They then calculate regional requirements, imports, and exports. This gives them an estimate of what goods and services are purchased in the region. This information is useful because the less import dependence a region has, the more money remains within the region and, subsequently, the more beneficial the ripple effects of adding jobs in various industries.

Once they have this information, they employ matrix algebra to calculate the regional multiplier. When a user enters new jobs into the tool, the IO model converts those jobs into sales using regional sales-per-worker ratios. The sales vector is then multiplied by the regional multiplier matrix, or "B Matrix." The resulting vector is then converted back to jobs or earnings.<sup>234</sup>

The multiplier effect estimates the links between an industry and other areas of the economy. For this analysis, Type II multipliers, which exclude government spending are used (see Table 1). Estimates for the impact of ECE on the economy are based on three primary types of multipliers:

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

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<sup>234</sup> Economic Modeling Specialists, Inc. (2007). *ESMI Input-Output Model Data*. Retrieved from <http://www.economicmodeling.com>

<b>Table 1: Early Care and Education Industry Type II Multipliers Los Angeles County</b>	
	Type II Multiplier
Sales	2.05
Jobs	1.16
Earnings	1.62

Source: Economic Modeling Specialists, Inc., 2007

These multipliers may be used to assess indirect and induced effects of these economic indicators. Based on a direct employment estimate of 65,139 full-time equivalent jobs in early care and education, 9,510 indirect jobs are sustained by licensed early care and education (see Table 2). These jobs include retail trade (1,402 jobs); food service and drinking places (1,044 jobs); and real estate (577 jobs).

<b>Table 2: Industries with Greatest Job Effects from ECE, Los Angeles County (i.e., 65,139 Early Care and Education jobs create jobs in the following industries)</b>	
<b>Industry</b>	<b>Jobs Created</b>
Retail trade	1,402
Food Services and Drinking Places	1,044
Real Estate	577
Wholesale Trade	565
Employment Services	397
Offices of Physicians, Dentists, and other Health Practitioners	385
Local Government	348
Hospitals	285
Construction	234

Source: Economic Modeling Specialists, Inc., 2007

## Appendix E

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