The Economic Impact of the Child Care Industry in San Diego County

Report to the San Diego County Child Care and Development Planning Council

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San Diego County Child Care and Development Planning Council

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Executive Summary

Introduction

The San Diego County Child Care and Development Planning Council commissioned this study to

- assess the importance of child care in San Diego County's economy and
- establish child care as a key component of the region's sustainable economic development.

Purposes of the document

The report is intended as a tool in understanding the child care industry in the context of countywide economic development and a step in facilitating discussion, planning, and action around strategies that support and strengthen the child care industry.

It will be used to help build local partnerships aimed at increasing the industry's ability to respond to the changing child care needs of San Diego's children and families.

Findings

The findings in this study demonstrate that the child care industry is crucial to San Diego County's overall economic health and vitality. Child care is critically important to San Diego County's economy for three main reasons:

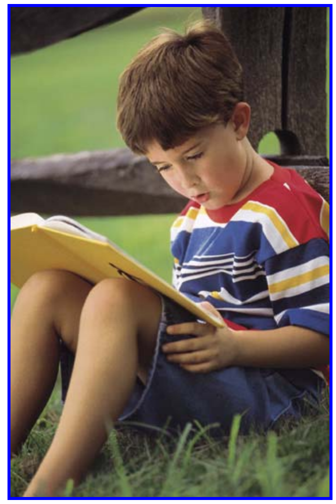
Child care generates income

The child care industry generates substantial income and employs workers in numbers similar to those in other major industries such as legal services and communications.

> ***Licensed child care employs more than 11,000 workers in San Diego County and brings in $460 million in gross receipts.***

- Licensed child care directly generates approximately $460 million in annual gross receipts and employs 11,347 full-time-equivalent workers.
- Based on further ripple effects, this industry contributes an estimated $829 million each year to the local economy and creates an additional 6,787 local jobs outside the child care industry.
- Federal and State direct and indirect subsidies create affordable child care and provide direct economic stimulus to the local economy of almost $300 million per year in San Diego County.

Child care lets parents work



Child care supports labor force participation by allowing parents enter and remain in the workforce. As more parents join the workforce, the child care industry experiences an increase in demand for high quality care. Like convenient transportation and affordable housing, working parents need accessible, affordable child care services to maintain employment and make significant contributions to San Diego County's overall economy.[1]

- In San Diego County, over half of children under age six and more than six in ten children between ages 6 and 13 have two working parents.[2]
- Based on estimates that three-fourths of demand for child care is job-related, there are currently 92,556 child in San Diego County whose parents are able to work because their children receive child care.
- Working parents using child care services earn approximately $3.2 billion annually.

Quality child care develops needed worker skills

Quality child care helps ensure a future skilled workforce by developing skills needed for later learning, thus strengthening the county's long-range economic outlook. Long-term research demonstrates that good quality child care and early childhood education decreases future public sector costs in areas including the justice system and public assistance.[3]

- High quality child care increases future workforce participation and reduces public sector spending by contributing significantly to a child's overall well-being and school readiness.
- Each dollar invested in after school care for at-risk children provides an investment return of $8.92 to $12.90.

1. *NEDLC and Butte County Children and Families Commission, Economic Impact Report, 2002.*
2. *California Child Care Resource & Referral Network, CCCRRN, 2001.*
3. *Ibid*

Child care pays poorly and has high turnover

Despite strong growth and high demand, average wages and benefits in child care are typically low compared with other industries both nationally and locally. According to the Bureau of Labor Statistics' Occupational Employment and Wage Estimates, the average wage of direct employment in San Diego County's licensed child care establishments is $19,980 or $9.60 per hour for child care workers.[1]

Child care provider wages are comparable to parking lot attendant wages and substantially below secretary and bus driver

Nationally, the average wages of child care providers are comparable to wages within service industries such as parking lot attendant and is substantially lower than secretary or bus driver.[2]

Low wages, poor benefits, and limited career advancement are a few of the challenges child care workers currently face. In San Diego County, as in other California counties, these barriers increase turnover rates, which undermine child care quality.

Studies[3] [4] in counties comparable to San Diego have reported annual turnover rates as high as 45% to 56%. The San Diego CARES Program Impact Survey found that low wages were the most significant reason for leaving.[5]

Conclusion

The need for affordable, accessible, high quality child care is increasing rapidly in San Diego County. The child care industry is a significant sector of the local economy and needs support to expand at a rate sufficient to meet the growing need for child care services. Local investments and interventions to increase child care supply are crucial for the overall San Diego economy to thrive.

Strengthening the child care industry will strengthen the San Diego economy as a whole.

Strategies to address child care affordability, sustainability, and supply-building that have proven effective in other regions across the nation include:

1. *Bureau of Labor Statistics, Occupational Employment and Wage Estimates, 2001.*
2. *Center for the Child Care Workforce, Current Data on Child Care Salaries and Benefits in the United States, March 2002.*
3. *Center for the Child Care Workforce (CCW), Current Data on Child Care Salaries and Benefits in the United States, March 2002.*
4. *CCW, Then and Now: Changes in Child Care Staffing, 1994-2000, April 2001.*
5. *Betty Z. Bassoff, James Tatlow, Brian Kuck, Maureen Kuck, Jennifer Tucker-Tatlow, San Diego CARES Program Impact Survey: Family Child Care Homes, Evaluation Report to the YMCA Childcare Resource Service, February 2003.*

- Building child care infrastructure into the region's long- and short-range economic development plans.
- Creating long-term public-private partnerships in the child care industry.
- Establishing loan programs and other financial assistance for child care businesses.

Coordinated planning in both public and private sectors creates more affordable, better quality child care, while building and maintaining child care supply to support overall economic growth. Strengthening the child care industry will strengthen the San Diego economy as a whole.

Section 1: Introduction

Purpose of this document

The San Diego County Child Care and Development Planning Council commissioned this study to assess the importance of child care in San Diego County's local economy and to establish the child care industry as a key component of the region's sustainable economic development. The study found compelling evidence that investments in child care infrastructure have direct and positive effects on San Diego's economy and can serve as a bridge between local economic development planning and child advocacy.

Tasks of this report

In this report, we will:

- Outline the economic profile of San Diego County; suggesting implications for the child care industry;
- Quantify economic effects of the region's licensed child care industry by measuring size of the industry in terms of both gross receipts and employment. The methodology used in measurement, and assesses other aspects of the child care industry that affect its overall size and performance is also discussed.
- Assess the extent to which child care contributes to the economic performance of San Diego County; and
- Discuss other economic benefits of child care, local economic effects of the licensed child care industry in San Diego County, including public sector savings and effect on the future skilled labor force.

Growth of the child care market

According to the U.S. Department of Treasury, the nation has witnessed significant growth in the child care market, fueled partly by the rise in labor force participation of mothers entering the workforce and returning to work more quickly after childbirth. In 1996, 51 million working Americans, representing 38% of the labor force, had children under age 18. More than half of the 10 million preschoolers whose mothers were employed received care from someone outside the family.[1] In 1999, only 23% of all families with children younger than six years of age had one parent working and one parent who stayed at home. In most single-parent families, work is the only option. In each case, parents need child care services. In the majority of two parent families, both parents worked out of financial necessity.[2]

Purpose of child care: social or educational?

Historically, business leaders and policy makers viewed child care as a social and educational service and a private responsibility. As an increasing numbers of parents move from using friends and relatives as child care providers to engaging paid, skilled, licensed caregivers, child care has become a formal part of the economy. Despite the growing realiza-

1. *U.S. Department of the Treasury (undated), Investing in Child Care, Challenges Facing Working Parents and the Private Sector Response.*
2. *Children's Defense Fund, Child Care Basics, April 2001.*

tion of its crucial importance to a community's economy, child care often has been ignored and excluded from economic planning, development, and analysis.[1]

Extent of child care in San Diego County

The child care industry is crucial to San Diego County's overall economic health and vitality. At the time of this study, the industry was made up of more than 5,000 family child care homes and child care centers. Thus, the region's child care industry currently has the ability to serve over 86,000 children and their families, and contributes significant economic activity by creating jobs, generating income and tax dollars, and stimulating other local industries through purchase of goods and services. In addition to helping sustain and stimulate other local industries, child care supports increased labor force participation by giving parents the opportunity to work, thereby increasing overall economic output.

The child care industry represents a critical investment in San Diego County's current and future workforce. Stable, high-quality child care increases overall employee productivity, development, and retention, reducing turnover and absenteeism. Research strongly suggests that effective early childhood education improves a child's chance of becoming a thriving and productive adult while at the same time reducing public sector spending for welfare support and other public assistance, remedial education, and involvement in criminal justice and dependency court systems.

Barriers to stable growth of child care

Despite documented strength and contribution to the economy, the child care industry continues to experience a number of barriers to continued stable growth. These barriers will be discussed in Section 2 as we look at the demographic of San Diego County.

Defining Child Care

Estimating the size and economic impact of the child care industry requires a definition of child care. The next section suggests a definition and discusses various categories of child care services offered throughout the region.

Child care services are offered by a range of providers and include programs such as infant toddler, preschool and school-age care and education, full- or part-time child development programs, State Preschools, Head Start, after-school programs, and summer and other school break programs. These programs nurture, support, and educate children when their parent(s) or custodial guardian(s) are working or otherwise occupied.

1. *National Economic Development and Law Center (NEDLC), A Methodology Guide: Creating an Economic Impact Report for the Child Care Industry. Local Investment in Child Care (LINCC) Project, April 2001.*

Licensed care

Child care may be *licensed* or *license-exempt*. *Licensed* child care meets minimum health and safety standards and staff-to-child ratios set by the State Legislature and regulated by the Community Care Licensing Division of the California Department of Social Services. The State requires that "every person must obtain a license before providing care and supervision to children, with the exception of an individual caring for their own relative's children or children of only one unrelated family in his or her home."[1]

Licensed family care

Licensed providers include most child care centers and many family child care homes, licensed as "small" or "large" depending on the number and ages of children served. Small and large family child care homes can serve a maximum of 8 and 14 children, respectively, of different ages. Licensed child care funded by the State must meet State criteria for quality.

License-exempt care

License-exempt or *unlicensed* child care includes certain formal and informal programs and care arrangements that are not required to obtain State-issued licenses and are not governed by specific child care standards. License-exempt care services include nannies, baby-sitters, parent cooperatives, relative care, and home-based care arrangements in which children of no more than one other family receive care. Although such child care arrangements are widely used their economic impact is difficult to assess because no repository exists of information concerning related earnings and outputs.

Some license-exempt programs, such as after-school programs for school-age children and certain public recreation programs report enrollment figures, employment figures, and program budgets to their sponsoring agencies or jurisdictions. Some of these programs also report information to YMCA Childcare Resource Service (YMCA CRS), San Diego County's child care resource and referral program. These programs can be quantified and are included in the finding of this report.[2]

Subsidized care

Child care may also be *subsidized* or *non-subsidized*. Subsidized child care is paid in full or in part by Federal, State, or local public funds. In San Diego County, specific subsidy programs include Head Start, Migrant Head Start, Even Start, State Preschools, CalWORKs, and Alternative Payment Programs. Non-subsidized child care is fully paid for by private funds, mainly by parents. In some cases, employers may provide some portion of child care funding as an employee benefit.[3]

1. *California Department of Social Services, http://ccld.ca.gov/docs/childcare/Provider/fcclp.htm, accessed 05/19/2003.*
2. *NEDLC, The Economic Impact of the Child Care Industry in Orange County, 2002.*
3. *Ibid.*

The Center for Childcare Workforce (CCW) classifies child care providers into different categories as seen in Table 1.

TABLE 1. Child care provider category matrix

Paid Providers (licensed and license-exempt)	Unpaid Providers (license-exempt or non-licensed)
Center-Based Staff: Teachers, assistant teachers, and directors working in child care centers, such as infant toddler, preschool, and School-Age programs.	**Center-Based Providers:** Volunteers (often parents) not considered part of regular classroom staff and not counted for regulatory purposes.
Family Child care Providers: Non-relative paid providers and assistants offering child care in their own homes.	**Relatives:** Unpaid relatives, other than parents, providing child care on a regular basis, in or away from child's home.
Paid Relatives: Family members who are paid (private or subsidized) who offer child care in their own homes or in child's home.	**Non-relatives:** Unpaid non-relatives providing child care on a regular basis, in or away from child's home.
Other-Home-Based Caregivers: Paid, non-relative providers, such as nannies or baby-sitters, offering child care in the child's home.	

Source: Center for Child Care Workforce, 2002; San Diego County Child Care and Development Planning Council, 2003

NOTE This report follows research guidelines and methodology developed by the National Economic Development and Law Center (NEDLC), and Local Investment in Child Care (LINCC) Project. The LINCC project was launched in 1997 with support from the David and Lucille Packard Foundation[1] and was designed specifically to incorporate child care into local economic planning and development.

This economic impact report frames the child care industry in economic development terms, and each is meant as a tool to facilitate further discussion among the child care sector, business leaders, and local policy makers.[2]

1. *NEDLC, The Economic Impact of the Child Care Industry in Ventura County, 1997.*
2. *Ibid.*

Section 2: Economic Profile of San Diego County

San Diego County is a dominant economic force in California and the nation. Its economy currently ranks 35*th* in the world, comparable in size to Israel, Venezuela, and Indonesia. Industries such as military, defense, tourism, telecommunications, electronics, computer software, and biotechnology contribute to San Diego's vibrant economic climate. Visitors to San Diego spent a reported $5 billion in 2000. Despite recent national economic downturn, San Diego's economic growth has exceeded forecasts, at 2.4% (adjusted for inflation). Additionally a change in the demographics of the population of San Diego County has occurred as the County has experienced rapid population growth in the last 10 years.[1] The economic and demographic climate specific to San Diego has, and will continue to impact the role of the child care industry within the County.

Population

Countywide demographic data plays an important contextual role in examining the impact of child care on the San Diego economy. San Diego County's demographics are marked by rapid and continuous population growth and a high numbers of families with children.

Growth

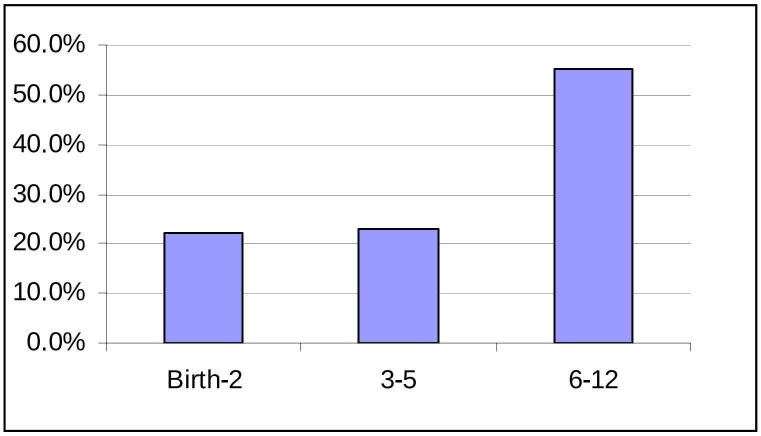
- San Diego County has the fifth largest population of all U.S. counties.
- From 2000 to 2001, there were 54,974 births in San Diego County.
- From 2000 to 2001, San Diego County's population grew to 2.8 million, an expansion of 1.7%.
- Continual growth in 2003, sent the County's population to over 2.9 million.
- By 2020, an estimated one million more residents are expected to move here, bringing population to approximately 4 million.

Demographics

- Nearly 50% of San Diego population is part of the civilian labor force, either employed or actively looking for work. The remaining 50% of the population is either younger than age 18 or older than 65, unemployed students, full-time homemakers, retirees, or those not seeking employment.
- San Diego County has the highest concentration of military personnel and military base operations of any county in the nation.
- Married-couples and single parents with children under age 18 make up 66.7% of all San Diego County households.
- Parents made up 53.2% of all employees in San Diego County's civilian labor force.
- Children age 14 and under make up 21.8% (611,119) of San Diego County population (see Figure 1). Of the 14 and under population:
  - 33% (199,669) are between 10 and 14 years old;
  - 34% (212,829) are between 5 and 9 years old;
  - 33% (198,621) are younger than 5 years old.

1. *San Diego Regional Chamber of Commerce, San Diego DataBook, 2002.*

FIGURE 1. Age distribution of San Diego County children



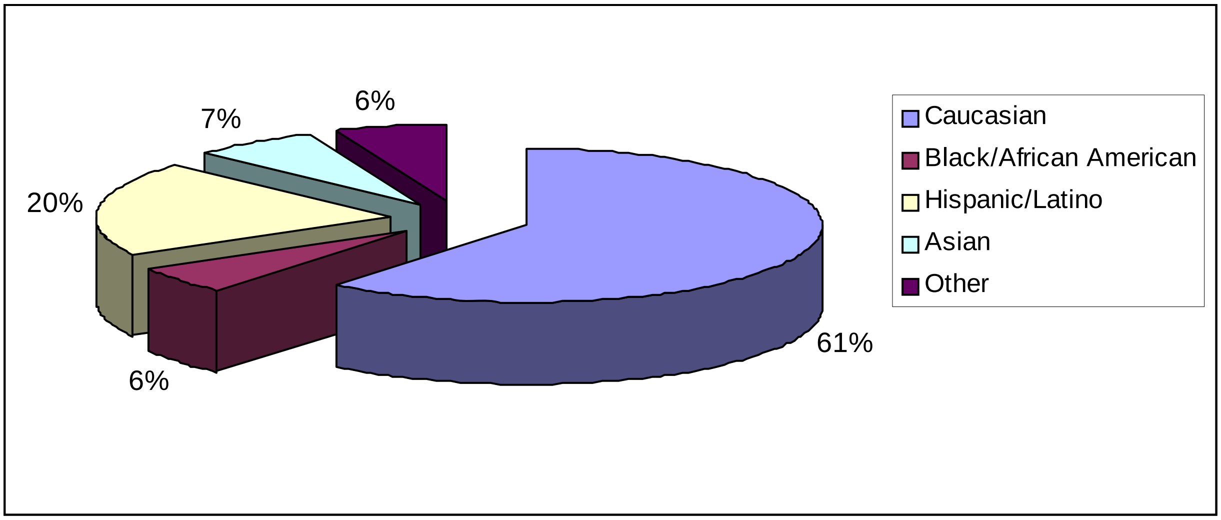
Diversity [1, 2, 3]

Appropriate data on the diversity of San Diego's population sets a framework for discussion of and action around child care that is culturally, ethnically, and linguistically relevant to the children and families receiving services in San Diego County.

- San Diego is one of the most ethnically diverse regions in the nation, with 26.7% Hispanic or Latino; 9.4% Asian and Pacific Islander; 5.7% Black or African American; and 13% mixed race or other (see Figure 2).
- San Diego County has 18 Native American tribal reservations, more than any other U.S. county.
- An estimated 15,000 to 18,000 people immigrate to San Diego annually; the majority from Mexico, Philippines, Vietnam, and China. Significant numbers of these people also come from Central and South America, Somalia, Iraq, Russia, and Japan.
- Of San Diego County's population, 21.5% are born outside of the U.S., and 33% of the population identifies their first language as a language other than English.
- The four largest non-English language groups in San Diego County remain Spanish, Tagalog, Vietnamese, and other Asian languages.

1. SANDAG, *San Diego Region Demographics and Economic Characteristics*, March-April 1999.
2. San Diego Regional Chamber of Commerce, *San Diego DataBook*, 2002.
3. U.S. Census Bureau, *Health care and Social Assistance-Geographic Area Series*, September 1999.

FIGURE 2. Ethnic distribution of children 0-14 years, San Diego County



Employment and Labor Market

Strong potential for future growth among the region's largest industries and employers suggest that employment and labor market demographic forces will strongly impact the child care industry. [1,2,3]

At the beginning of 2002:

- San Diego County's employed civilian labor force was 1,469,000; the unemployed civilian labor force was 63,000, and grew to 66,000 by the end of 2003.
- Fifty-six percent (56%) of working families had children ages 0 to 13.
- Median earnings for full-time male workers in San Diego County were $36,952; median earnings for female full-time workers were $30,356.
- The top three types of positions for civilian employees in San Diego County were management and professional occupations (37.7%); sales and office occupations (27.2%); and education, health, and social services (19.3%).
- High-cluster employment industries in San Diego County included: visitor industry services, defense contracting, business services, med-

1. *U.S. Census Bureau, DP-3 Profile of Selected Economic Characteristics, San Diego County, 2000.*
2. *U.S. Department of Labor, Bureau of Labor Statistics, National Occupational Employment and Wage Estimates, 2001.*
3. *SANDAG, San Diego County Industry Economic Report, June 2001.*

ical services, computer and electronics manufacturing, and biotechnology and pharmaceuticals.

- Manufacturing was San Diego County's largest sector in terms of total dollars generated from 3,950 companies. Exports of manufacturing products accounted for more than a third of the region's $25.2 billion manufacturing dollars.
- Retail trade or service industry employed 45% of San Diego County's workforce.
- 90% of San Diego businesses had 12 or fewer employees.
- The annual unemployment rate in San Diego County reached an average of 4.3% and was forecast to rise in 2003 to an average of 4.4%. San Diego's unemployment rate, however, remained much lower than California's 6.4%, and the U.S. average of 6.0%.

In 2002 San Diego's gross regional product (GRP) grew by 2.4%, outperforming both California and the nation. San Diego County's inflation rate was an estimated 4.6% in 2001, lower than San Francisco's 6.2% for the same year. Although businesses and government have shed many jobs, both added approximately 12,000 workers in 2003, a 1% increase from 2002.

Cost of Living

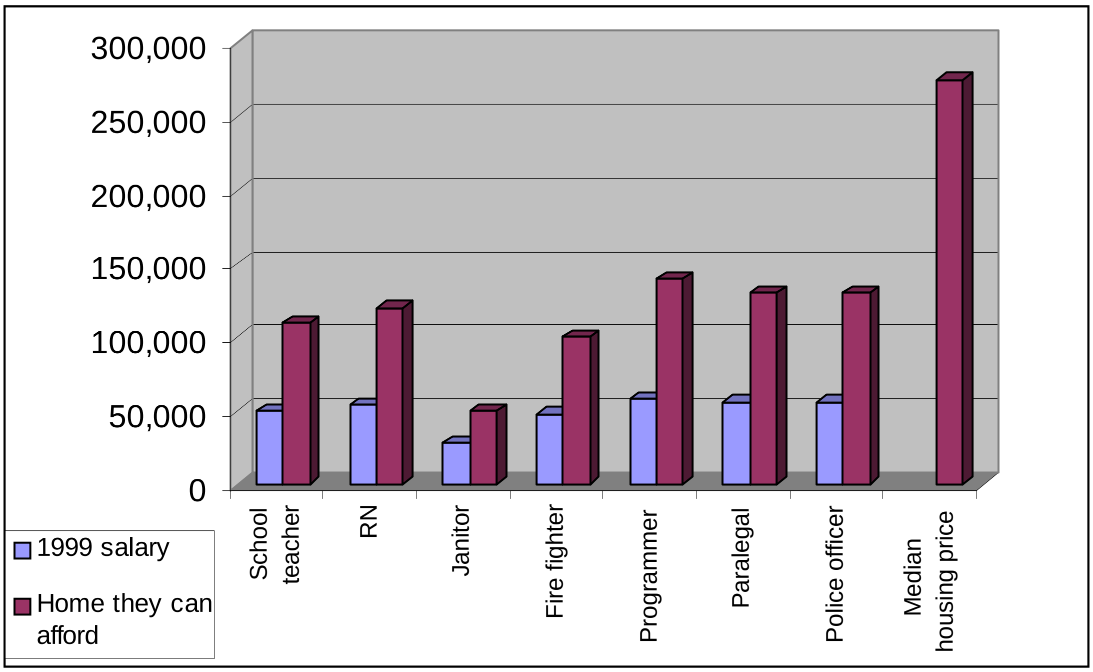
[1,2]Strong demographic forces influence San Diego families' ability to afford child care. The following statistics describe San Diego's generally high cost of living, mainly in terms of demographic forces such as household income, hourly wage, and median home prices.

- In 2001, San Diego had the 6th highest cost of living of 23 major metropolitan areas with populations over 1.7 million.
- In 2003, the average income per household in San Diego was $49,649, higher than the national average of $42,409.
- In 1999, San Diego's household income average was 16.9% higher than the national average, but expenditures were 22% higher. Housing costs accounted for the largest portion of household expenditures.
- In 2001, average monthly rent for a two-bedroom apartment in San Diego was $1,050, or $12,600 annually. The hourly wage needed to afford a two-bedroom apartment is approximately $20.00 per hour, or $42,000 per year.
- In 2002, the average price of a new single-family detached home in San Diego was $365,000.
- In 2002, the rate of home ownership was 59.1% in San Diego, compared with the national average of 67.4%.

1. *SANDAG, Solving the San Diego Region's Housing Crisis, undated.*
2. *U.S. Census Bureau, DP-3 Profile of Selected Economic Characteristics, San Diego County, 2000.*

- In 2002, home values in San Diego County increased by 13.6%. Between 1990 and 2000, the median costs of resale homes increased 44%, and the median costs of new homes increased 57%. During this same period, the median household income increased by only 33%.
- Since 1996, the average rental rate has increased 47%.
- In 2001, the average annual cost of full-time, licensed child care in a center for an infant in San Diego County was $8,470. Child care for an infant accounted for 20% of median income; care for two children accounted for 33% of median income.

FIGURE 3. Price of home San Diegans can afford at different income levels



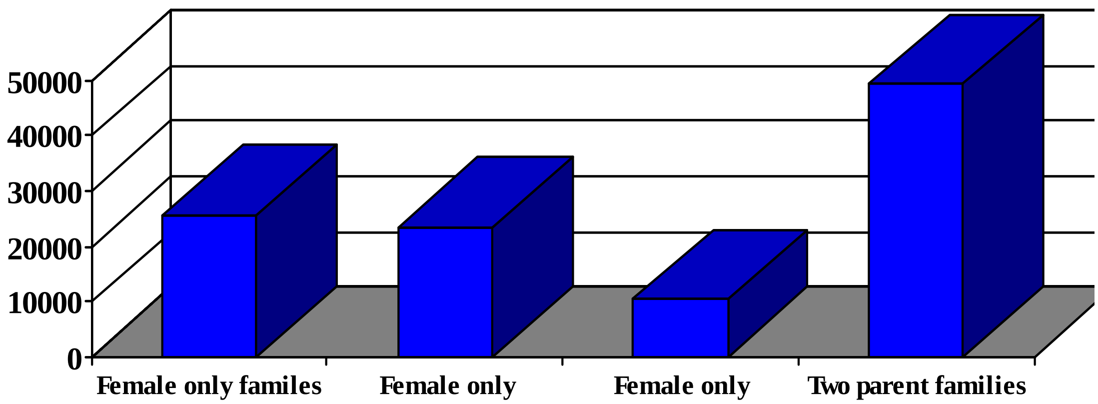
Low-Income Families

San Diego County's low-income families are especially affected by the cost of living within the County. The following demographics are particularly germane to discussions of ways to effectively meet increasing need for affordable and accessible child care.[1,2]

- Very low-income families earning less than 50% of median income and paying more than 50% of their income for rent often live in severely substandard housing.
- In 2000 24.3% of all households in San Diego County had incomes of $24,999 or less and almost 9% of San Diego County families lived below the Federal poverty level.

- Of those families below poverty level, 16% had children under age 5.
- 22.8% families below the poverty level were single parent households. Of those households, 40% had children under age 5 (see 4).

FIGURE 4. Number of families in poverty in San Diego County



1. *U.S. Census Bureau, Summary Statistics for Firms Subject to Federal Income Tax for Metropolitan Areas, 1997*
2. *U.S. Census Bureau, Table DP-3. Profile of Selected Economic Characteristics: 2000.*

Implications of the Economic Profile on Child Care in San Diego County

San Diego county's challenging demographic and economic conditions, including rapidly growing population, increased diversity, and projected long-term growth fuel demand for child care services.[1] High numbers of workers in lower paying industries, such as retail and service industries, foster a continued demand for more affordable child care for low- and middle- income families. A stronger child care sector not only will provide incentives for more skilled workers and businesses to move to San Diego, but also contribute to production and consumption of San Diego's goods and services.

Growth in demand for child care, especially with customized needs

- San Diego County's population is projected to grow rapidly, creating a continuing demand for high quality child care for children of all ages.
- As San Diego County continues to grow in the diversity of its population, demand for linguistically appropriate and culturally sensitive care will continue to increase.
- Demand for skilled child care workers who speak Spanish, Tagalog, or Vietnamese is strong.
- Larger numbers of new mothers in the workforce creates a continuous demand for child care, especially for infants and toddlers.
- As the retail trade and service industries grow within the County, demand for non-traditional child care hours, such as evenings and weekends, for this population increases.
- Workers who live and/or work in rural areas also require non-traditional child care hours.

Challenges of low-income families

- Although research shows that child density is greater in lower income areas, those areas have less child care capacity.
- The high cost of child care imposes financial hardships on many working families with young children.
- San Diego County's high number of children living in poverty creates a continued demand for subsidized child care.
- The working poor have difficulties accessing subsidized child care.

Influence of cost of housing

- High costs of housing and utilities in San Diego reduce the dollars that families can afford to spend on child care.
- With San Diego County's high cost of housing, child care providers may find it difficult to live and work here; many are forced to relocate to more affordable communities and find better-paid employment. As a result, the County's high cost of living threatens stability and recruitment of child care workers.
- High cost of real estate in San Diego impedes construction of new child care centers.

1. *NEDLC, The Economic Impact of the Child Care Industry in Orange County, 2002.*

Section 3: The Economic Impact of the Child Care Industry

In order to fully grasp the economic impact of child care to the local San Diego economy, we must first assess the quantitative impact of the child care industry. This section looks at the San Diego economy and discusses it using both traditional economic accounting tools as well as alternate tools that maybe better equipped to interpret the available data. The shortcomings of traditional economic methods in accurately capturing the impact of the child care industry are also discussed.

Using Federal, State and local data we will evaluate the size of the child care industry and its overall economic effects on San Diego County's economy as measured by output or gross receipts and direct employment. We will also measure the extent of the industry's local economic integration through study of the impact of the child care industry on indirect employment. Finally, we will review the occupational characteristics of child care workers and the impact of these characteristics on the local economy.

This economic impact analysis focuses on the formal licensed child care sector and subsidized license-exempt programs for which pertinent data was available. Informal and license-exempt child care providers are not included in the formal economic impact analysis. A discussion of economic contributions of the license-exempt child care industry is included later in this section.

Accounting for the Child Care Industry

Economists use a number of different methods to analyze the impacts of specific business sectors on local, regional, state, and national economies. Much of the data for these analyses comes from surveys conducted by the U.S. Department of Commerce, Bureau of Economic Analysis, and the U.S. Department of Labor.

The Department of Commerce monitors economic activity, as measured by gross receipts, by county and sector, assigning North American Industry Classification System (NAICS) codes to industries with similar products and services. NAICS assigns six-digit codes to specific industries, and then aggregates those industries into different groups, larger subsectors, and even larger industry sectors.[1]

Department of Labor methodology is similar to Department of Commerce's approach, but focuses on employment and wages, rather than gross receipts.[2] The Department of Labor Bureau of Labor Statistics uses survey results developed by the Covered Employment and Wages Program, also known as the ES-2002 Program. Department of Labor methodology uses the Standard Industrial Classification System (SIC), which NEDLC determined to be outdated.

1. *Ibid.*

2. *Steven Moss, The Economic Impact of the Child Care Industry in California, 2001.*

Challenges of available data sources

Child care sector output is difficult to quantify accurately using available Department of Commerce and Department of Labor data, since government methodology fails to capture the wide variety of child care settings and rapid changes that occur within the child care sector.

- Both the Department of Commerce and Department of Labor categories for "Child Day Care Services" (SIC, 8351) exclude licensed family child care homes, which make up approximately 35% of licensed child care slots in San Diego County.[1]
- The Department of Labor category also excludes centers and programs operated by public schools, likewise significant since 40% of State-subsidized child development centers, State preschools, and Head Start programs are operated by school districts and the California Department of Education.[2]

As a result, Department of Commerce and Department of Labor categories for the child care sector substantially undercount the licensed child care industry and, therefore, do not accurately measure the licensed child care industry as a whole.[3]

Local estimates

Local estimates of the child care sector's economic activity are more accurate and comprehensive than Department of Labor or Department of Commerce based estimates.

YMCA Childcare Resource Service (YMCA CRS) maintains current databases on San Diego County's

- child care programs, allowing the agency to provide current information and referrals to child care consumers.
- licensed child care providers, including vacancy rates and licensed capacity, categorized by age groups and type of care as well as current license child care capacity, cost, service and enrollment data.[4]
- license-exempt centers receiving subsidies; this data will be utilized in the discussion of license-exempt care later in this section.

1. *California Child Care Resource & Referral Network, The California Child Care Portfolio, 2001.*
2. *Betty Bassoff, Monica Brown, Meeting the Child Care Needs of San Diego Families, A Report to the San Diego County Child Care and Development Planning Council, 1999.*
3. *NEDLC, The Economic Impact of the Child Care Industry in Santa Clara County, 2002.*
4. *NEDLC, The Economic Impact of the Child Care Industry in Ventura County, 1997.*

Measuring Child Care Industry Output or Gross Receipts in San Diego County

What is included in gross receipts?

Output or gross receipts measures size of an industry in terms of annual goods and services produced. For the child care sector, gross receipts are equivalent to total dollars spent on licensed child care in the form of parent fees, public and private subsidies, vouchers, charitable contributions, or some combination of these.

Gross receipts in San Diego

In San Diego County licensed child care facilities care for approximately 77,000 children and have capacity to care for over 86,000 children. Based on LINCC methodology, which uses enrollment data and market rates of care, estimated gross receipts in San Diego County's licensed child care industry are approximately $460 million, including $144 million for family child care homes and $316 million for child care centers (see Appendix A for detailed methodology).

Indirect receipts

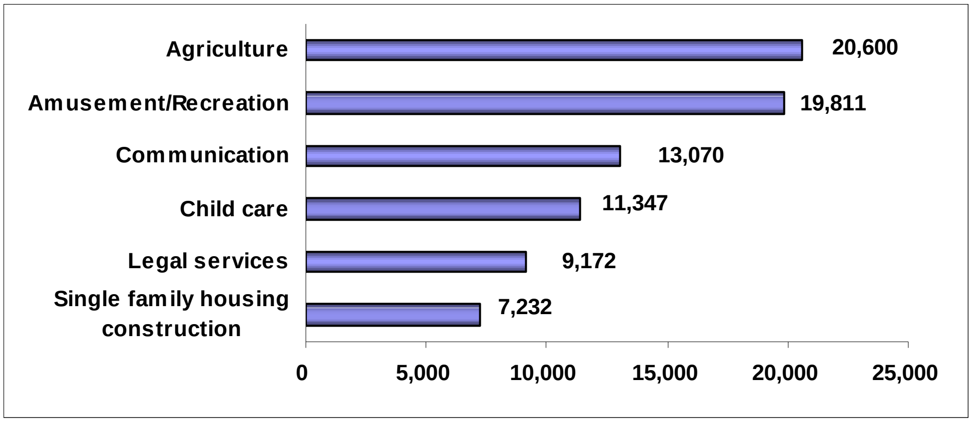
In addition to gross receipts generated directly, the licensed child care industry in San Diego County generates indirect and induced gross receipts in other industries supported by the local child care industry. Indirect employment refers to jobs created in these other business sectors because of the child care industry, which also generates induced employment, reflecting goods and services consumed by local businesses and suppliers who directly and indirectly earn income from the child care industry. For example, a child care business supports jobs related to food preparation, toy manufacturing, office/instructional supplies, and financial and real estate services [1,2]

IMPLAN Input/Output Model for measuring multipliers

This study utilizes the IMPLAN Input/Output Model (See Appendix B) to attempt to measure the specific multipliers that link the child care sector to other industries. A further discussion of the impact of the multiplier effect is had later in this section.

1. *NEDLC, The Economic Impact of the Child Care Industry in Orange County, 2002.*
2. Mildred Warner, Rosaria Ribeiro, Amy Erica Smith, *Addressing the Affordability Gap: Framing Child Care as Economic Development*, 2003.

FIGURE 5. Number of jobs in different San Diego County industries



Direct Employment

This report relies on local estimates of direct employment. As with output or gross receipts, the local estimate also understates total child care economic activity since it includes only formal child care facilities, and excludes informal, license-exempt care.

Local Estimates of Direct Employment

In 2002 direct, full-time equivalent employment in San Diego County's licensed child care industry was 11,347. This figure is derived from actual child care inventory and number of children in different types of care in San Diego County, assuming compliance with minimum staffing requirements imposed by California State licensing laws for different age groups. Although estimates are calculated based on State-mandated minimum staff-child ratios, child care providers often choose to maintain higher ratios in order to improve program quality or increase business competitiveness.[1]

Additionally, constant fluctuation in enrollment does not always allow child care providers to maintain the exact minimum number of employees, especially given the high rate of turnover for child care workers.[2]

Direct Employment Compared to Other Industries

In 1997 the "Services" sector, in which the child care industry is grouped (a four-digit SIC category), accounted for a total of 333,564 employees in San Diego County.[3] The region's child care industry (11,347 employees) represents 3.4% of all jobs in the Services sector. When compared to other service industries, the child care sector in is similar in size to doctor's offices, auto repair services, and communications. Figure 5 compares direct child care employment with employment in other industries in San Diego County.

1. NEDLC, *The Economic Impact of the Child Care Industry in Santa Clara County*, 2002.
2. NEDLC, *Economic Impact of the Child Care Industry, Los Angeles County*, 1999.
3. California Trade and Commerce, Office of Economics Research, *Establishments, Employment, and Wages, ES-202*, 1997.

Indirect and Induced Employment

In an effort to estimate indirect and induced employment, this report uses employment multipliers specific to the licensed child care sector. Multipliers are generated from the Impact Analysis for Planning (IMPLAN) Input-Output model and used as tools to measure the number of jobs sustained in other industries by licensed child care. The multipliers calculate the "ripple effect" in the economy arising from every dollar spent in the child care industry (Appendix B).

Excluding unlicensed child care, total child care expenditures in San Diego County result in approximately 11,347 jobs. Based on this direct employment estimate, an additional 2,177 indirect and 4,610 induced jobs are created in San Diego County. **As a result, a total of 18,134 jobs are supported by the child care industry in San Diego County.**

Child Care Industry Federal and State Subsidies

Reason for subsidies

In an effort to allow parents to participate in work, training, or educational activities, Federal and State governments provide child care subsidies to aid CalWORKs and low-income families, increasing workforce development and the overall labor force. Child care subsidies at Federal and State levels increased significantly after major Federal welfare system reform in 1996 (Personal Responsibility and Work Opportunities Act).

The new money brought to the local economies by CalWORKs and other child care subsidies then circulates through various service sectors and stimulates additional economic activity.

How the money flows

These subsidies are provided either as direct contracts with child care centers based on the number of low-income children served and number of days of care provided, or as "alternative payment" (AP) programs, which allow families to choose their own licensed or license-exempt child care provider.[1]

California created its own version of welfare-to-work, CalWORKs, to comply with the new Federal system. CalWORKs replaced separate welfare-related early care and education systems, with an integrated three-stage child care system, coordinated by two State agencies. The California Department of Social Services (CDSS) administers Stage One of the CalWORKs program through county welfare departments. Under contract with the California Department of Education (CDE), local agencies administer Stage Two and Stage Three child care services.[2]

1. *NEDLC, The Economic Impact of the Child Care Industry in Santa Clara County, 2002.*

2. *Ibid.*

Three Stages of CalWORKs Child Care

Stage 1: Child care assistance begins when a family enters the CalWORKs program. Job seekers or those starting employment are eligible for child care subsidies. Parenting teens in CalLEARN Program are also eligible to participate while in school. Families are served a minimum of two months, unless a situation remains unstable or there are insufficient Stage 2 funds. CalLEARN teens remain in Stage 1 until they transition to Welfare-to-Work

Stage 2: Alternative Payment Program (APP) contractors (in San Diego these include HHSA, YMCA CRS, and Child Development Associates) administer Stage 2 and Stage 3, a CDE voucher program. Stage 2 child care serves stable families transitioning from aid. Families are served in Stages 2 and 3 if income-eligible and have a need (working, looking for work, or training for work) after going off aid, with a two-year time limit

Stage 3: Stage 3 includes only former CalWORKs recipients who are off cash assistance for more than 24 continuous months. Families are served if income-eligible, have need, children within age limits of program, and funding is available. Families may be required to pay family fee after earning at least 50% of State median income.

Source: County of San Diego, Health and Human Services Agency, CalWORKs Child Care Subsidy Fact Sheet, September 2002.

Subsidy Intent and effects

The State and Federal child care subsidy dollars that flow into San Diego County have varied intentions and effects.

- In San Diego County 25,166 people are enrolled in CalWORKs. Child care is a side effect of the welfare to work program.
- Federally funded programs such as Head Start and Early Head Start, designed to increase school readiness in low-income children, also receive a significant portion of child care subsidies. Neighborhood House Association in San Diego, for example, operates a Head Start program serving children ages six weeks to five years.
- CDE administers the U.S. Department of Agriculture Child Care Food Program, providing meals to eligible low-income children.[1]
- Construction of child care facilities is also supported by a limited amount of Federal and State resources, such as low-interest loans for capital costs.
- Child care facility construction is also eligible for Federal funds to enhance community economic development, such as Community Development Block Grants (CDBGs) and Empowerment Zones.[2]

1. *California Department of Education, CDE, Child Care Food Program, http://www.cde.ca.gov/nsd/ccfp/index.html.*
2. *NEDLC, The Economic Impact of the Child Care Industry in Orange County, 2002.*

Subsidy amounts

Between July 2002 and June 2003, San Diego County drew almost $300 million in child care-related subsidies (see Table 2). Availability of Federal and State child care subsidies is increasingly important in supporting local economic development. Targeted local investments in child care help San Diego County capture a larger share of subsidies, thus maximizing the local economic stimulus of Federal and State funds.

Subsidy multipliers

Total economic impact of Federal and State child care subsidies in San Diego County is approximately $537 million.

Using output multipliers applied to the $298 million of direct Federal and State subsidies received in San Diego County, the total economic impact of these subsidies can be calculated.

The indirect effects from subsidized facilities and suppliers making purchases are approximately $127 million, and the induced effect from child care workers spending wages amounts to approximately $114 million.

Total economic impact of Federal and State child care subsidies in San Diego County is approximately $539 million.

TABLE 2. Subsidies for child care in San Diego County, 2002-2003

Parental Choice Subsidy Funding	
Parental Choice Subsidy, Federal and State of CA funding	$121,817,075
Parental Choice Subsidy, by Cities and County	$ 145,000
Parental Choice Subsidy, Private (Nongovernmental) Financial	$ 1,002,208
Contracts to Child Care Service Providers	
Contracts, Federal and State funding (Other than Head Start)	$ 80,972,940
Contracts, Federal Head Start program	$ 87,272,000
Contracts By Cities and the County	$ 7,600,000
Contracts By School Districts	$ 67,000
Total Parental Choice and Contracts Funding	**$ 298,876,223**

Paid and Unpaid License-Exempt Child Care

Many families in San Diego County are served by license-exempt and informal child care services, such as in-home and out-of-home child care provided by relatives, neighbors, friends, *au pairs* or nannies, sometimes with little or no formal financial transactions involved. Additional arrangements that do not require a license and are considered license-exempt include the following:[1]

- Any care and supervision of persons by a relative or guardian;
- Certain public and private schools that operate before and/or after school programs for school-age children;
- Certain public and private recreation programs;
- Certain before and after school programs funded by the Federal government and run by local non-profit agencies
- Cooperative arrangements between parents that involve no formal monetary transaction; and
- Child care on Federal lands.

Unpaid license-exempt care

Unpaid license-exempt child care providers make a significant contribution to the U.S. economy by enabling parents to work, thereby contributing indirectly to a region's economic development. Unpaid child care providers, however, incur *opportunity costs* since they offer care without pay; forgo wages, pension contributions, etc., that would normally be earned from participation in the paid labor force, and making a direct contribution to the local economy.[2] An interesting, ancillary effect of the substantial increase in number of women in the workforce is that the number of female relatives and friends available to provide informal, unpaid child care is reduced.[3]

Measuring unpaid child care

Unpaid child care service has long been difficult to accurately assess and measure. In 2002 the Center for Child care Workforce (CCW), using the NHES-99 survey estimated that total U.S. care-giving population includes 2.4 million people who provide unpaid child care at any single-point during the week,[4] 93%) of whom are relatives, 5% are non-relatives, and 2% are center-based volunteers. Additionally, the CCW estimated that approximately 2.3 million child care providers are paid to care for children ages 0-5 in the U.S., for a total of 4.7 million child care givers. Based on the estimate of unpaid child care providers, one could

1. *NEDLC, The Economic Impact of the Child Care Industry in Orange County, 2002.*
2. *Center for Child Care Workforce, Estimating the Size and Components of the U.S. Child Care Workforce and Caregiving Population, May 2002.*
3. *Wyndham Child Care Association, The Economic Impact of Vermont's Child Care Industry, June 2002.*
4. *Center for Child Care Workforce, May 2002.*

extrapolate that 50% of the total child care giving population in San Diego County is unpaid. It should be noted, however, that the CCW did not categorize paid child care providers as licensed or licensed exempt. Using this estimated percentage, **the extrapolated unpaid child care provider population in San Diego is approximately 16,235 caregivers**. **The total care giving population in San Diego County, which includes licensed, license-exempt, and unpaid child care provider is approximately 33,000.** The CCW classified child care providers into different categories, using the definitions in Table 1 on page 5.

Difficulties in measuring license-exempt care

An assessment of the economic impact of the child care sector should evaluate license-exempt programs since licensed child care represents only one of many options for parents who seek supervised child care services.[1] It is difficult, however, to determine and accurately assess the number of children in different types of child care arrangements, since only licensed child care facilities are routinely regulated and monitored. As a result, only economic impact of the licensed child care sector, a formal part of the economy, is quantifiable.

A precise accounting of all license-exempt providers, child care centers, number of children enrolled at these facilities, and number of supervisory staff would require at minimum a comprehensive, rigorous, standardized survey of all agencies, organizations, and homes that might offer license-exempt care.[2]

Statistics not tracked

Bassoff emphasized the need for local agencies and programs to develop a complete listing of all child care programs and services, such as before- and after-school programs in each community of the county, by school district. [3] Such a database has not been compiled or distributed in San Diego County and would serve as a key component of any proposed survey methodology. The survey results of the number of children served in license-exempt facilities would be an estimate, at best, since many programs routinely accept children on a drop-in basis. Many are part-time, before and after school, or weekend programs. Additionally, many programs are transient in nature because of funding issues.

Due to time constraints, survey research was not conducted for this report. This limitation precluded determining the exact size and economic impact of San Diego County's license-exempt child care sector. The informal nature of this sector, and significant data gaps in current research, make it difficult to obtain a detailed and accurate accounting of the region's license-exempt population.

1. *Policy Analysis for California Education (PACE), Child Care Demand and Supply under CalWORKs: The Early Impacts of Welfare Reform for California's Children, October 2002.*

2. *Ibid.*

3. *Betty Bassoff, Monica Brown, Meeting the Child Care Needs of San Diego Families, A Report to the San Diego County Child Care Development and Planning Council, 1999.*

License-exempt subsidies and CalWORKs

Given study limitations, it remains possible to *estimate* the size and impact of the license-exempt population by measuring the amount of public dollars supporting license-exempt care. Using data provided by the three Alternative Payment agencies, it is possible to enumerate the number of license-exempt providers and centers that receive subsidy reimbursement through the child care Alternative Payment Program (AP) and CalWORKs. Many CalWORKs clients choose license-exempt care rather than licensed child care centers or family day care homes due to cost, unavailability of convenient, licensed child care slots, or a strong preference for having a relative provide child care. In families with mothers employed in shift work (the primary mode of employment for many CalWORKs families), 51% use child care provided by a relative, compared to 18% of families using organized child care.[1]

San Diego Alternative Payment Program agencies

In San Diego County, vouchers are provided to eligible parents through local agencies approved to administer the AP program, YMCA Childcare Resource Service (CRS), Child Development Associates (CDA), and County of San Diego Health and Human Services Agency (HHSA). Each of these agencies track payments to license-exempt providers and centers. In 2002 AP program payments in San Diego County totaled at least $6.4 million, about 5% of the approximately $123 million in AP payments to all the region's licensed and license-exempt providers. While this is only a portion of the total economic impact of the license-exempt child care sector, external revenues generated as a result of this subsidized population have a significant impact on the local economy. Table 3 shows a breakdown of the subsidized license-exempt child care providers in San Diego County.

TABLE 3. Number of subsidized license-exempt facilities and children enrolled, San Diego County, 2002–2003

Reporting Agency	Number of Subsidized License-exempt Providers	Number of Subsidized License-exempt Centers	Number of Children Enrolled
YMCA Childcare Resource Service	439	63	1,173 Centers: 228 Homes: 945
Child Development Associates	599	44	1,398 Centers: 284 Homes: 1,114
San Diego County Health and Human Services Agency	1,668	73	3,897 Centers: 261 Homes: 3,636
Total	2,685	180	6,468

Source: YMCA CRS 2003; Child Development Associates, 2003; San Diego County, Health and Human Services Agency, 2002-2003

1. *The Urban Institute, Child Care Patterns of School-Age Children with Employed Mothers, 2000.*

Projections cannot be made for number of additional employees in license-exempt child care services or for the number of indirect and induced jobs that may be supported by license- exempt care, since license-exempt care settings have no staffing requirements. Since license-exempt care is less formalized, and caregivers are less likely than licensed care facilities to pay additional property or payroll taxes and may not report income from child care for tax purposes,[1]the ripple effects of dollars flowing through the license-exempt care sector may not be as far-reaching into the local economy as dollars flowing through the licensed sector.

Number of license-exempt providers

Although CDA, HHSA, and YMCA CRS track some license-exempt programs, the percentage of total license-exempt population tracked by local San Diego agencies is difficult to ascertain because no single repository agency maintains standardized data on subsidized license-exempt population, without overlap or discrepancies. Similarly, total number of license-exempt providers, child care facilities, numbers of children enrolled, and numbers of employed staff remain unknown. The three local agencies reported overlap in data about this particular population. License-exempt providers may offer part-time care to several different children. These providers may be documented as working with different agencies providing subsidies, thus contributing to the overlap. Consequently, data from these three agencies used to quantify the license-exempt population may, in fact, overestimate the population's size and economic impact.

Total gross receipts of licensed and license-exempt child care industries combined results directly in an estimated $510 million dollar industry.

Despite these challenges, our research shows that at least 6,400 children are cared for by subsidized, license-exempt child care facilities in San Diego, about 8% of the 77,000 children enrolled in licensed child care. Using NEDLC methodology for calculating gross receipts (see Appendix A), estimated 2002 total gross receipts for the subsidized license-exempt industry (including family day care homes and centers) in San Diego County was approximately $50 million. Total gross receipts of licensed and license-exempt child care industries combined results directly in an estimated $510 million dollar industry.

Another method of estimating the size of the unsubsidized license-exempt child care sector is to compare the number of children enrolled in licensed care in San Diego County with U.S. Census data on the number of children living in households where both parents are in the labor force. This indicated a need for some type of child care, even self-care by the child. With 77,000 enrolled in licensed care, and approximately 325,000 children 0-13 living in households with parents working, 248,000

1. *NEDLC, The Economic Impact of the Child Care Industry in Orange County, 2002.*

children were either looking after themselves or receiving child care in a non-licensed setting. Subtracting the number of children served by subsidized, license-exempt child care (about 6,000, rounded from Table 3) from 248,000 children results in 242,000 (74%) children who received unsubsidized, license-exempt care (including self-care). This is a substantial but unrecognized contribution to the economy of San Diego.

School-Aged Care

To estimate the economic impact of license-exempt after-school programs in San Diego, we obtained data from three major license-exempt programs within the County. The first was City of San Diego's "6 to 6" Extended School Day Program which operates in cooperation with San Diego-area school districts to provide enrichment programs before and after school to children of all public elementary and middle school sites within the city limits, and in some private schools.[1] The second program was The Boys & Girls Clubs of Greater San Diego, which offers similar after school programs and activities for children and adolescents in San Diego County at 12 sites: 9 schools and 3 public housing sites.[2] The third program was City of San Diego Parks and Recreation. These three particular license-exempt programs serve over 35,000 children, representing the vast majority of school-age child care services.[3]

Gross receipts generated by these three license-exempt school-age programs amounted to $12.1 million for 2002. Indirect and induced effects are calculated at $5.1 million and $9.7 million, respectively. The total economic impact of these three after-school programs is approximately $27 million, substantially expanding the estimated measurable impact of the region's license-exempt child care services.

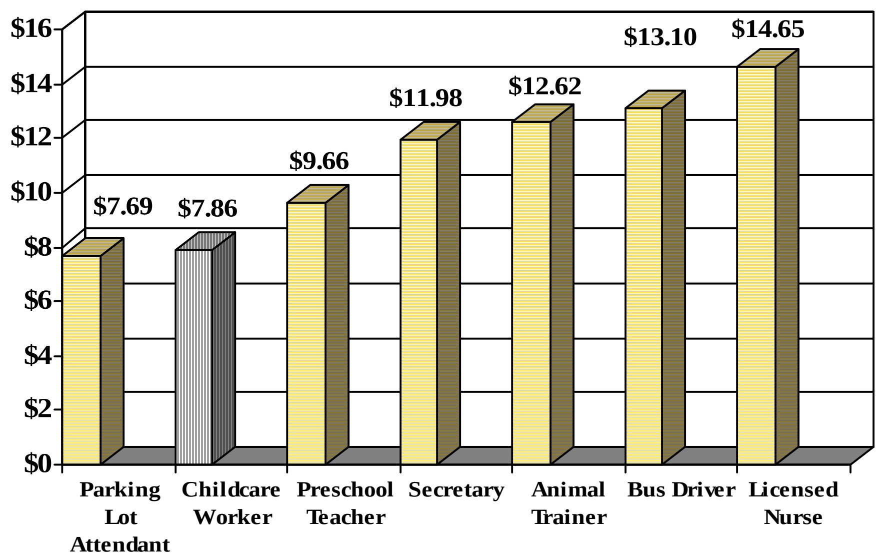
Occupational Characteristics

Strong growth, high demand, and many employment opportunities have characterized the child care industry in the past 10 years. Average wages and benefits in child care, however, typically rank lower compared with other industries at both the national and local levels. According to the Bureau of Labor Statistics' Occupational Employment and Wage Estimates, the average wage of direct employment in San Diego County's licensed child care establishments is $19,980 or $9.60 per hour for child care workers.[4] Although this annual wage is 13% higher than the California statewide average of $17,420 or $9.07 per hour, and 19% higher than the U.S. average of $7.86 per hour or $15,091 annually, it remains in the lower tier of service industries.[5] Child care workers are at

1. *City of San Diego, 2003, www.sandiego.gov/6to6/general/index.shtml, 05/23/2003.*
2. *Boys and Girls Club, Email Communication, Michelle Regan, 05/19/2003 and 5/23/2003.*
3. *YMCA CRS, Licensed Child Care Home and Centers Enrollments by Zip Code, 3/13/2003.*
4. *Bureau of Labor Statistics, Occupational Employment and Wage Estimates, 2001.*
5. *Center for the Child Care Workforce, Current Data on Child Care Salaries and Benefits in the United States, March 2002.*

the low end of the wage range for all occupations surveyed by the 2000 Occupational and Employment Statistics program (OES). According to OES, only 18 occupations reported having lower mean wages than child care workers. Those who earn higher wages than child care workers include service station attendants, tree trimmers, crossing guards, and bicycle repairers. Nationally, the average wages of child care providers (see Figure 6) are comparable to wages in service-oriented industries such as parking lot attendant and is substantially lower than secretary or bus driver.[1]

FIGURE 6. Comparison of mean hourly wages of child care workers and other occupations



Low wages, poor benefits, and limited career advancement are a few of the challenges child care workers currently face. In San Diego County, as in other California counties, these barriers increase turnover rates, which undermine child care quality. The San Diego CARES Program Impact Survey evaluated turnover rates in San Diego County and found that 18.5% of child care providers left their position in 2002, with low wages reported as the most significant reason for leaving.[2] In a larger study conducted by the Center for Child Care Workforce (CCW) in 2001, Orange County (of comparable size and demographics to San Diego County) reported turnover rates as high as 45%.[3] In that same study, more than half of all child care centers reported an average 56% turnover

1. *Ibid.*
2. *Betty Z. Bassoff, James Tatlow, Brian Kuck, Maureen Kuck, Jennifer Tucker-Tatlow, San Diego CARES Program Impact Survey: Family Child Care Homes, Evaluation Report to the YMCA Childcare Resource Service, February 2003.*
3. *Center for the Child Care Workforce (CCW), Current Data on Child Care Salaries and Benefits in the United States, March 2002.*

rate.[1] In 2001 the CCW also conducted a large-scale longitudinal study of child care centers,[2] reporting that the child care workforce is "alarmingly unstable," even in high-quality programs. Of all teaching staff employed in child care centers in 1996, 76% left their positions by the year 2000. The study revealed average turnover rates of 30% between the years 1999 and 2000 for all child care providers. The study also found that wages for child care providers, when adjusted for inflation, decreased 6% for teachers and 2% for assistants. The small number of providers remaining employed between 1996 and 2000 received only a 2% wage increase after cost of living adjustments.

Stagnant low wages for child care workers is an unfortunate reality, contributing significantly to the current child care staffing crisis. A 2003 study entitled *Addressing the Affordability Gap: Framing Child Care as Economic Development*[3], discussed some reasons for these low wages, suggesting that since child care is a labor-intensive business, a child care provider's expenses consist primarily of wages. Child care providers cannot reduce costs by reducing personnel due to state-mandated child-staff ratios. Since child care fees are already 25% or more of family income, higher than most families can afford, providers cannot always raise fees to keep up with the increasing rate of inflation and cost-of-living.

Section Summary

The variety of child care options available to San Diego's working parents complicates the process of quantify the direct economic impact of the child care industry. By tracking supply, cost, and capacity of licensed child care, and reviewing employment data and information on gross receipts, we can assess that the size of the child care industry is comparable to other major industries in San Diego County such as the legal or communications industries. The significant size of the child care industry within the County not only directly supports economic development by allowing parents to work, it also provides further indirect and induced stimulus.

The child care industry also brings both State and Federal dollars into the County through child care subsidies for low-income families. These child care subsidies are add to the dollars flowing into the local economy and help fuel San Diego County's economic growth.[4] Despite the field's significant contribution to the local economy, child care providers suffer low wages and poor benefits. Low wages and poor benefits among child care providers increases turnover rates, thereby lowering the continuity and quality of the care of children and creating economic instability. The stability of the child care workforce would support the growth of the local economy.

1. *CCW, Then and Now: Changes in Child Care Staffing, 1994-2000, April 2001.*
2. *Ibid.*
3. *Mildred Warner, Rosaria Ribeiro, Amy Erica Smith, Addressing the Affordability Gap: Framing Child Care as Economic Development, 2003.*
4. *NEDLC, The Economic Impact of the Child Care Industry in Orange County, 2002.*

Section 4: Child Care and Local Economic Development

The child care industry is a vital part of a social infrastructure that contributes directly to San Diego's overall economic health and development. High quality child care makes many contributions to overall labor and economic productivity, including:[1]

- Increased local labor force participation (measured by number of jobs and quantity of hours worked), by enabling both parents to work.
- Contribution to increased output (maintaining job skills and continuous employment), greater personal income, more business formation, and higher revenues from local taxes.
- Increased employee retention, lower absenteeism and turnover rates, combined with increased employee morale and commitment.
- Improved quality of life by attracting businesses and providing services businesses need to function smoothly and profitably.
- Reduced local expenditures to address social problems by lowering school dropout and crime rates, and decreasing special education costs.
- Improved future economic status for each child and improved future workforce by developing children's cognitive skills, enhancing their emotional well being, and ensuring school readiness.
- Bolstered the local economy with the flow of new dollars from Federal and State child care subsidies.

Impact of Child Care on Economic Competitiveness

Offering child care helps retain employees

Communities with crucial services, such as child care, are essential for strong businesses as they attract and retain high quality employees. Just as transportation, tourism, education, and affordable housing contribute substantially to San Diego's economic infrastructure, the child care industry contributes to overall productivity through allowing workforce participation of parents. As a result of a robust child care industry, businesses can attract and retain employees, which attracts more capital investment and business formation.[2] Communities also value and support businesses that address the needs of their employees; one national survey found that 85% of employers that offered child care programs had more positive public relations with the community at large.[3]

Increase in number of working parents

Over the next decade, 85% of the workforce will be made up of working parents and quality child care services will be absolutely essential to

1. *NEDLC, The Economic Impact of the Child Care Industry in Orange County, 2002.*
2. *Ibid.*
3. *National Child Care Information Center, NCCIC, It's Good Business to Invest in Child Care, 2003.*

maintain San Diego's skilled labor pool.[1] Research also reveals that in most two-parent families, both parents are in the workforce. Additionally, over 75% of women with school age children and 65% of mothers with preschool children are employed. With welfare reform, low-income single parents must be employed, further increasing the demand for quality child care.

Offering child care helps businesses recruit employees

These changing workforce demographics create new challenges for many employers. As a result, businesses are increasingly concerned about the economic impact of child care and potential advantages of providing employee child care benefits.[2] According to the 1998 Business Work-Life study, two-thirds of employers find it difficult to fill vacancies for highly skilled jobs, and two-fifths have difficulty filling entry-level jobs, many of these employers attribute this difficulty to employee inability to find stable, affordable, high quality child care for their children. Convenient and affordable child care positively impacts the quality of life of a county's businesses, families, and communities, as well as overall economic competitiveness and well being.[3,4]

Increased Economic Productivity

Child care influence on productivity

Child care enables parents to participate in the labor force, increasing the available labor pool and a community's economic vitality based on increased productivity among its employees. Based on estimates that three-fourths of demand for child care is job-related, there are currently 92,556 children in San Diego County whose parents are able to work because their children receive child care. Increased labor participation due to the availability of child care contributes significantly to economic productivity.

Parents who have confidence in their child care arrangements are more productive, absent less, and stay at a job longer

Productivity, defined as increased output given the same level of inputs, is influenced by many variables including quality of infrastructure components such as roads, power lines, and waterways.[5] Child care contributes to overall productivity by increasing labor force participation, allowing parents to retain their jobs and advance in their careers. Parents

1. *Ibid.*
2. *Ibid.*
3. *National Child Care Information Center, It's Good Business to Invest in Child Care, 2003.*
4. *NEDLC and Butte County Children and Families Commission, Economic Impact Report, 2002.*
5. *Steven Moss, The Economic Impact of the Child Care Industry in California, 2001.*

who have confidence in their child care arrangements are more productive, absent less, and stay at a job longer than their colleagues who do not have access to quality child care programs.[1]

Lack of child care a deterrent to working

Lack of affordable and high quality child care is a deterrent for many parents who want to reenter the workforce, and a disincentive for productive and valued employees who want to retain their jobs. A skilled workforce is reduced by a lack of stable, quality child care. This directly and indirectly increases hiring and training costs for businesses substantially and translates into reduced overall worker productivity. A University of Michigan study reported that working women with young children are at higher risk of being fired or dismissed due to lower attendance, often attributed to lack of consistent and reliable child care. Mothers were also more than twice as likely to exit their jobs when their employer offered inadequate or non-existent child care.[2] Burud and Associates (1988) found that approximately two-thirds of employers providing child care services reduced turnover by 37% to 60%, depending on type of program offered.[3]

A 2002 study discovered that almost 30% of workers knew employees who exited their jobs because of inadequate child care.[4] A San Diego survey by the United Way[5] found that 29% of respondents with children age 12 and under needing child care reported being unable to obtain all the child care they need. A Harris Poll recently conducted found that 52% of parents surveyed reported that the problems of finding child care affected their ability to do their job well.[6]

Costs of absenteeism

Researchers have estimated that absenteeism, high turnover, and low productivity have cost American businesses a staggering $3 billion dollars.[7] In 1996, Cannon Consulting Group conducted a survey of 300 CEOs and found that 72% reported a decrease in absenteeism if their company offered on-site or emergency back-up child care services.[8]

1. *The Metropolitan Council on Child Care at Mid-America Regional Council, MARC, The Status of Early Learning in the Greater Kansas City Area, 2003.*
2. *S. Hofferth, N. Collins, Child Care and Employment Turnover, Population Research and Policy Review, 19: 357-395.*
3. *National Child Care Information Center, It's Good Business to Invest in Child Care, 2003.*
4. *Economic Opportunity Institute, How Does High Quality Child Care Benefit Business and the Local Economy, July 2002.*
5. *United Way of San Diego County, Outcomes and Community Impact Program: Child Care, 2001*
6. *NEDLC and Butte County Children and Families Commission, Economic Impact Report, 2002.*
7. *Economic Opportunity Institute, 2002.*
8. *U.S. Department of Treasury (undated), Investing in Child Care, Challenges Facing Working Parents and the Private Sector Response*

Reducing absenteeism by providing child care

Given the high costs of reduced employee productivity and retention, many companies now emphasize the importance of stable and affordable child care. Absenteeism at Johnson & Johnson was 50% less among employees who used flexible work options and family leave policies than the workforce as a whole. They also reported a savings of more than $4 for every $1 invested in its work and family programs, including child care resource and referral information.[1] At Aetna Insurance, Inc., employee retention after maternity leave improved from 77% to 88% when the company initiated six months of maternity leave and a flexible return-to-work option.[2] Cisco Systems, Inc. offered its employees a number of family-friendly programs, such as on-site child care, flexible work hours, and a family services website. They found that these services not only helped with employee retention but also boosted productivity and morale among all employees.[3] In a survey of 1,109 companies, researchers found that more than two-thirds of employers reported that benefits from child care programs were greater than cost or cost-neutral.[4]

Paying enough to afford child care

Much of the research highlights advantages and benefits of employer-supported child care. Smaller businesses, however, such as those in service and retail sectors, frequently cannot afford wages that are high enough to cover costs of purchasing child care, and cannot afford to provide employer-financed child care services. Publicly funded child care subsidies can help these employees recruit and retain workers, and play a vital role in stimulating the local economy.[5] For example, the State of Florida recently approved the Child Care Partnership Act, which encourages businesses to help low-income families pay child care expenses. This legislation requires the State government to financially match funds contributed by employers to subsidize employees' child care needs.[6]

Increased Economic Output

The child care industry enables parents to work and contribute to the economy. Moss (2001) developed a strategy to estimate the contribution of child care to economic output by calculating amount of wages parents

1. *Ibid.*
2. *Foundation for Enterprise Development, 1997.*
3. *Cisco Systems, Inc. Cisco is Recognized by Working Mother Magazine for Excellence in Supporting Working Parents. News@Cisco. http://newsroom.cisco.com/dlls/hd_101702.html.*
4. *Children's Defense, Business Investment in Child Care. http://www.childrensdefence.org/cc_partnerships.htm.*
5. *Mid-America Regional Council, Investing in the Child Care Industry, An Economic Development Strategy for Kansas, April 2003*
6. *Mildred Warner, Rosaria Ribeiro, Amy Erica Smith, Addressing the Affordability Gap: Framing Child Care as Economic Development, 2003.*

earn from their jobs and the output they contribute to the economy when their children are in child care.[1] Without the child care sector, parents would be forced to remain at home with their children and be unable to maintain employment. Therefore, according to Moss, the economic output of the child care industry is the extra earnings parents generate for their families, after child care costs are netted out.

Earnings of working families

Based on 2002 U.S. Census Bureau data, there are 118,445 married couples and 32,515 female-only households with children under six years in San Diego County. To estimate the wage earnings of these working families, median incomes by household type for San Diego County were used ($36,952 for family households, and $30,356 for female-only households). Total earnings for San Diego County parents (excluding single-father families) who were able to work because they had formal child care services, with wages of caregivers netted out, is estimated to be $3.2 billion annually, with further linkage effects. These earnings represent wages and salaries that parents are able to produce because the licensed child care sector enables them to work. Additionally, parents who join the labor force with the help of child care subsidies such as CalWORKs earn $308 million (this value is included in the total earnings for San Diego working parents).[2]

Enabling workforce development

Child care plays a crucial role in workforce development. Parents frequently need child care services as they prepare to enter the workforce by enrolling in training classes and pursuing further education. As a result, many colleges and universities now have on-site child care facilities to accommodate parents pursuing undergraduate and graduate degrees.

Options increase as local businesses and communities become more invested in ensuring access to available and affordable child care.[3] A body of ongoing and growing research highlights the importance of accessible child care options and availability in order to maintain employee retention, quality of life, and worker productivity. As many as 1,942 children are enrolled at 17 documented employer-assisted licensed child care centers, as reported by the City of San Diego Community and Economic Development Department.[4] A few San Diego employers provide licensed centers for their employees, for example Cox Cable, County Office of Education, City of San Diego, Children's Hospital, and Naval Regional Medical Center.

1. *Steven Moss, The Economic Impact of the Child Care Industry in California, 2001.*
2. *Mid-America Regional Council, 2003.*
3. *NEDLC and Butte County Children and Families Commission, Economic Impact Report, 2002.*
4. *City of San Diego, Community and Economic Development Department, Community Services Division, Fax Communication, 05/02/2003.*

Developing the Future Workforce

The overall quality of child care plays a pivotal role in developing the future workforce where businesses require educated and highly skilled employees. As the baby boomer generation reaches retirement age, an increasingly short supply of skilled workers exists in the U.S. job market. At a time when many American business provide remedial education for its employees by teaching basic reading, writing, and math skills, the need for continued investments in quality child care and development cannot be over emphasized.[1]

How child care affects the future workforce

Many longitudinal studies are clear and compelling about the importance of investing in early care and education programs. Numerous evaluations of the impact of early care and education programs demonstrated that benefits of investments in high-quality child care programs include:[2]

- Increased school readiness
- Enhanced literacy, math and language skills
- Improved social skills
- Fewer behavioral problems
- Stronger parent-child relationships
- Higher overall school achievement

Abecedarian Project

One of the most notable studies, the Abecedarian Project (see Figure 7 on page 36), conducted a randomized, controlled longitudinal study following infants from low-income families who either received early intervention in a high quality child care setting, or did not receive intervention (non-treated control group).

The treated children received full-time educational intervention from infancy through age 5. Children in the intervention program of quality child care had significantly higher mental health test scores and reading achievement scores than their peers, from toddlerhood through age 21. Additionally, about 35% of young adults in the intervention group had either graduated from or were still attending a four-year college or university, as compared with 14% of young adults in the control group. Employment rates were also higher, at 65% for the treatment group as compared with the control group at 50%. The Abecedarian study provides clear, empirical evidence that quality early childhood education improves overall success, and greatly contributes to the preparation of qualified, skilled, and educated adults entering the labor force.[3]

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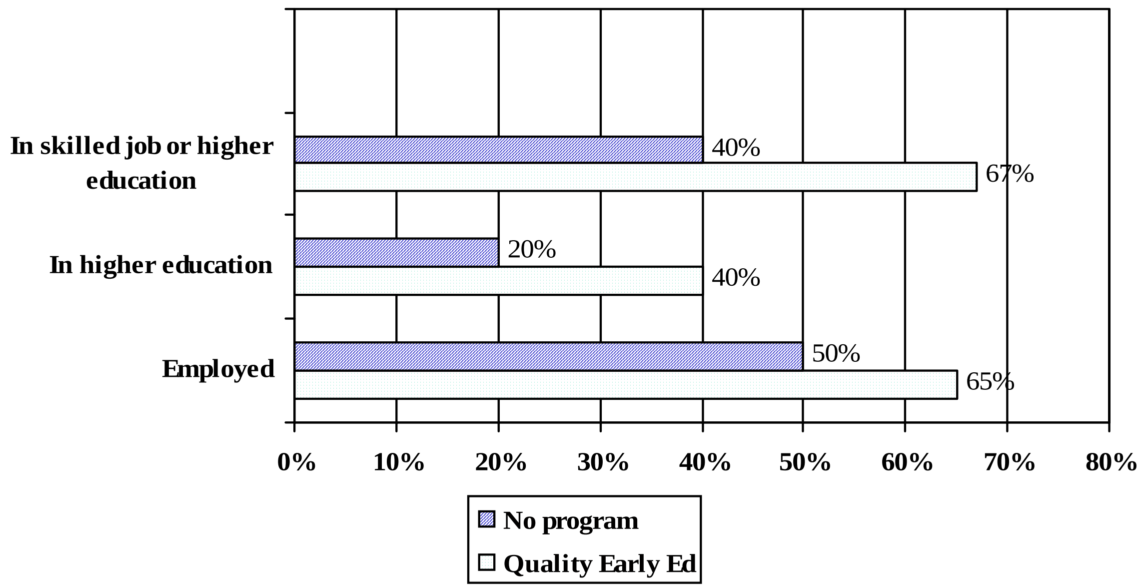
1. *Economic Opportunity Institute, How Does High Quality Child Care Benefit Business and the Local Economy? July 2002.*
2. *The Metropolitan Council on Child Care at Mid-America Regional Council, The Status of Early Learning in the Greater Kansas City Area, 2003.*
3. *Campbell et al. Early Learning, Later Success, The Carolina Abecedarian Study, 2002.*

FIGURE 7. Outcomes of children in Abecedarian Project at Age 21.



Reducing Future Public Spending

Effects of high quality child care on other public spending

Early care and education has long been considered the most cost-effective means of reducing the number of unskilled adults in the future. When children and young adults seize opportunities for higher education, they are more likely to experience greater economic productivity, have lower dropout and delinquency rates, have better physical and mental health, and are much less likely to depend on welfare and other forms of public assistance.[1]

There is overwhelming evidence that high quality child care helps to ensure a child's success in school and further evidence exists that quality child care significantly improves a child's chance of thriving into adulthood. In addition, children who experienced high-quality child care have a better opportunity to become more productive members of the labor force, and less likely to require public spending on basic needs subsidies and criminal justice system involvement. Children experiencing poor outcomes in the early years such as poor cognitive development, and undeveloped social skills contribute to future public sector spending for chronic health conditions, child welfare and foster care, special education, juvenile delinquency, crime and adult corrections, and adult welfare.[2]

1. *Economic Opportunity Institute, How Does High Quality Child Care Benefit Business and the Local Economy? July 2002.*
2. *Charles Bruner, A Stitch in Time, Calculating the Costs of School Unreadiness, undated.*

Studies on reduced societal costs

> ***For each dollar invested in the preschool program, $7.16 was saved in spending on criminal justice, education, welfare, and other expenditures.***

Another study[1] followed 123 low-income Michigan children over 22 years, half of whom had participated in a high quality preschool program. The study demonstrated that for each dollar invested in the preschool program, $7.16 was saved in spending on criminal justice, education, welfare, and other expenditures. Children who had not attended the program were five times more likely to become chronic lawbreakers as adults. Children who attended the program demonstrated higher intelligence, better literacy rates, better high school graduation rates, and greater earnings as adults.

Steven W. Barnett also reviewed 36 long-term studies of early care and education programs, and suggested that if a child failed to experience at least two years of early childhood education, national public sector costs could be as high as $400 billion.[2] Another longitudinal study of low-income children in Chicago showed societal benefits, such as increased tax revenue from the participants as they became adults with higher earnings and reduced societal costs for remedial education and crime.[3]

One study reported that society as a whole derives significant benefits from helping an "at-risk" youth. Researchers have estimated that the average at-risk youth who becomes a career criminal induces societal costs between $1.4 to $1.7 million over a lifetime. Even if an average student drops out of high school, and does not participate in criminal activity, societal costs can range from $268,133 to $428,130, as compared to an at-risk youth who successfully completes high school. Another staggering example is the average drug abuser who costs society an estimated $408,268 to $1 million. An expenditure of approximately $10,000 for an after school program for the 1st through the 9th grades, for each of the many children in California after-school programs, produces benefits from approximately $89,522 to $129,465 per participating child. In other words, **each dollar invested in after school care for at-risk children provides an investment return of $8.92 to $12.90**.[4]

1. *Economic Opportunity Institute, 2002.*
2. *Steven W. Barnett, Long-Term Effects of Early Childhood Programs on Cognitive and School Outcomes, in The Future of Children: Long-Term Outcomes of Early Childhood Programs, 1995.*
3. *Mildred Warner, Rosaria Ribeiro, Amy Erica Smith, Addressing the Affordability Gap: Framing Child Care as Economic Development, 2003.*
4. *William O. Brown, Steven B. Frates, Ian S. Rudge, and Richard L. Tradewell, The Costs and Benefits of After school Programs: The Estimated Effects of the After School Education and Safety Program Act of 2002, 2002.*

Child Care For School-Age Children

Quality before- and after-school programs are key components in promoting school readiness by providing a safe and nurturing environment for school-age children. Nationwide, approximately seven million children ages 6 to 14 are home alone after school, when juvenile crime typically reaches its peak.[1] The University of California Irvine and California Department of Education evaluated a state-funded program serving 95,000 students in an after-school program. They discovered children in the after-school program during years 2000 and 2001 improved reading scores by 4.2%, more than twice the statewide average of 1.9%.[2] Additionally, after-school programs serve as an effective crime prevention activity, thus saving public sector dollars.

Children in the after-school program ...improved reading scores by ...more than twice the statewide average.

Section Summary

Early care and education is vital to individual and collective community well being, requiring continued and ongoing public support. Similar to other economic infrastructures, the child care industry enables greater productivity for working parents and provides a substantial economic stimulus that allows local businesses to flourish and thrive. Both business and government benefit from investing in child care. These investments develop and invigorate the future workforce, while at the same time reducing substantial future societal spending in the form of welfare support, justice system involvement, and remedial education.

1. *NEDLC and Butte County Children and Families Commission, Economic Impact Report, 2002.*
2. *Children Now, California Report Card, Children's Critical Years, 2002.*

Section 5: Conclusion

The child care industry is an income-generating, job-creating industry that is critical to San Diego County's economic vitality and quality of life. The child care industry helps sustain and stimulate other industries by enabling parents to enter and remain in the workforce and be more productive on the job. This support of labor force participation also serves to increase output, personal income, and business formation. Child care contributes to the county's economic productivity by employing workers, paying taxes, bringing State and Federal subsidy dollars into the County, purchasing good and services from other industry sectors, and reducing future spending on social services. Moreover, it provides an early investment in the development of San Diego County's future workforce.

Factors in assessing the economic impact of child care

A number of key factors should be considered in assessing the economic impact of San Diego's child care system:

- Productive employees who are also parents need dependable child care.
- Quality child care lowers public sector costs by averting social problems.
- The high cost of living in San Diego County significantly reduces the amount of available income for child care services in low- and moderate-income families.
- Given the current San Diego County demographic and economic trends, the need for affordable, accessible, quality child care is increasing rapidly.
- The high cost of living, coupled with low child care wages, continually threatens child care workforce retention and growth.
- Employer assisted child care support employee retention.

1. The analysis presented here is intended as a resource in policy discussions involving child care as an important component of San Diego County's economic infrastructure. A stronger child care infrastructure benefits not only the child care industry but also financial institutions, local government, and business communities.

Child Care Terms

Child Care Term	Definition
Alternative Payment Program (AP)	A subsidized program designed to aid low-income families by offering parents a choice of child care options, including in-home care, family child care, or center care.
CalWORKs	California Work Opportunity and Responsibility to Kids program. California's welfare-to-work program, which replaced Aid to Families with Dependent Children (AFDC) in 1997. CalWORKs requires parents who are receiving welfare to obtain training and find employment and provides child care subsidies to enable parents to work. The subsidies can be used to pay for licensed and license-exempt care.
Child Care Center	A licensed facility providing care of infants, toddlers, preschoolers, and/or school-age children all or part of the day. Centers range in size from large to small, and can be operated independently or by a school, non-profit, church, or other organization.
Child Care Provider	Defined by the Bureau of Labor Statistics as someone who attends to children at child care centers, schools, businesses, or institutions and performs a variety of functions including dressing, feeding, bathing, and overseeing children at play.
Family Child Care Home	Care offered in the home of the provider. Small family child care homes usually care for up to eight children, depending on the age of children. Large homes have at least two adults and can care for up to fourteen children, depending on the ages of children. Homes are licensed by Department of Social Services (DSS).
Head Start	A comprehensive preschool program that combines skills development with health, nutrition, social services, and parental involvement. It primarily serves low-income families and is administered by the US Department of Health and Human Services.
Licensed Child Care	Child care programs in a center or provider's home which follow State regulations for staff-to-child ratios, facilities and other health and safety requirements.
License-Exempt Child Care	Child care which under State law does not require a license.
Licensing	Minimum health and safety standards set by the State of CA for child care centers and family day care homes
Slot	Space for one child in a licensed family child care home or center

State Preschool	Funded by California Department of Education, Child Development Division, and the Federal government to offer a comprehensive child care service. These programs are administered through school districts, colleges, community action agencies, and private non-profit agencies.
Subsidy (includes Alternative Payment Programs)	Financial assistance for child care to families who meet income and other eligibility requirements. Available for care received from licensed centers, family child care homes, and certain license-exempt caregivers.
Subsidy Capture Rate	Percent of income-eligible children who actually receive subsidized child care or early childhood education.
Unlicensed Non-Exempt Child care	Child care providers that operate without a required license to avoid regulation.

Economic Terms

Economic Term	Definition
Civilian Employment	Number of individuals working in non-military jobs.
Civilian Labor Force	Working-aged population looking for work or working
Direct Employment	Employment created by an industry in that industry.
Employment Multiplier Effect	Show total jobs—direct and indirect—created by $1 million in final demand for an industry
Final Demand	Purchases of final products in an industry category
Indirect Employment	Employment created by one industry in related or supporting industries through the purchase of goods and/or services
Inflation	Change in general price level
Labor Force (also Work Force) Participation Rate	Civilian labor force divided by working-aged population.
Output (Gross Receipts)	Total value of goods and services produced
Unemployment Rate	Number of employed divided by civilian labor force

APPENDIX A: Methodology for Calculating Gross Receipts and Employment for Licensed Child Care

The NEDLC, in conjunction with the LINCC project, created a methodology for measuring direct employment and gross receipts for the licensed child care industry. This methodology uses current statistics on licensed child care facilities maintained by the YMCA CRS. Local R&Rs are required by California law to maintain data on licensed child care capacity and vacancy rates which are used to determine enrollment.

The NEDLC methodology, outlined below, generates the most current estimates of employment and gross receipts. These economic variables of employment and gross receipts are derived from the most recent information representing all forms of licensed child care. YMCA CRS maintains data on capacity, enrollment, and average cost of care, all based on age group, and full- and part-time care. For this report, analyses were derived from 2003 data. The NEDLC also adopted another methodology to capture the economic impact of certain license-exempt programs that are part of the formal economy. This method uses locally derived data, such as capacity, budgets and employment to determine the gross receipts and employment of these license-exempt programs, such as City of San Diego 6 to 6, Boys and Girls Clubs, and other license-exempt programs.

Gross Receipts

For both family and center-based care, estimates of gross receipts represent a "snapshot" of the industry at a particular time. Gross receipts were evaluated using the formal LINCC methodology for licensed care only.

Family child care homes

- Licensed Capacity ×Vacancy Rate = Vacant Slots
- Licensed Capacity – Vacant Slots = Enrollment
- Enrollment × Average Cost/Child/Year = Gross Receipts

Centers

"Center-based care" includes nonprofit, school-affiliated, and for-profit child care centers. For child care centers, there are three separate enrollment calculations for 1) infants and toddlers, 2) preschool and kindergarten children, and 3) school-age children.

Non-subsidized Centers

- Licensed Capacity × Vacancy Rate = Vacant Slots
- Licensed Capacity – Vacant Slots = Enrollment
- Enrollment × Average Cost/Child/Year = Gross Receipts

Subsidized Centers

- Child Days of Enrollment × Daily Rate = Total Gross Receipts

License-exempt Centers

- Program and Administrative Budgets = Gross Receipts

Direct Employment in Licensed Child care

Family child care homes

- Family Child care Homes licensed for 8 = 1 Employee
- Family Child care Homes licensed for 14 = 2 Employees

Centers

Teaching staff: These figures are calculated based on number of hours a center remains open, number and ages of children for which a center is licensed, and state-required ratio of staff-to-children under that license. In general, infants require a lower staff-to-child ratio; a center that cares for 12 infants will require 3-4 adults to care for those infants, whereas a center that cares for 12 school-aged children requires only one adult to care for those children.

Multiply the average "Full Time Equivalent (FTE) for Staff" by the number of staff required by licensing:

- # Hours open for 8 hours = FTE for Staff

Center-based infant care:

- Title V= (1 employee for every 3 children) × (FTE for staff)
- Title 22= (1 employee for every 4 children) × (FTE for staff)

Center-based preschool care:

- Title V= (1 employee for every 8 children) × (FTE for staff)
- Title 22= (1 employee for every 14 children) × (FTE for staff)

Center-based school age care:

- Title V/Title 22= (1 employee for every 14 children) × (FTE for staff)

Non-teaching staff: ***Custodians/Cooks/Receptionists*****:** At many centers teaching staff are required to fill these functions. Large centers tend to have separate employees in these roles. Consistent estimates for non-teaching staff in San Diego County are not available, and therefore, have not been incorporated into the calculation.

APPENDIX B: Explanation of IMPLAN Input-Output Model

The basic model

Estimates of the impact of child care services on indirect and induced earnings and other productivity effects are based on application of the San Diego County, California module of the IMPLAN (Impact Analysis for PLANning) Input-Output (I-O) model. Input-output accounting describes the commodity flows from producers to intermediate and final consumers. This model was initially developed for use by the U.S. Forest Service to assist in land and resource management planning; it is now used in many other fields. It relies on the same basic model structure and underlying economic data as the U.S. Department of Commerce Bureau of Economic Analysis, Regional Impact Modeling System (RIMS).

Types of data used

I-O models use area-specific data on industrial and commercial activity to trace how a dollar of investment moves through a specified economy. IMPLAN is based on a table of direct requirement coefficients, which indicate the inputs of goods and services required to produce a dollar's worth of output. Standard economic "production functions" — the capital, labor, and technology needed to purchase a given set of goods — determine how changes in demand for goods and services ultimately affect demand for inputs to these services. For example, producing a ton of steel may require three workers and a particular set of equipment; the three workers and equipment would not be required if the steel were no longer in demand. Similarly, child care programs must purchase goods such as educational materials, tax services, and facilities to maintain their businesses.

SIC

IMPLAN analyzes more than 500 economic sectors and uses economic census data to compile county-level wage and salary information at the four-digit industrial code (SIC) level. National data are adjusted for industrial and trading patterns for specific regions. Based on this structure, IMPLAN estimates the regional economic impact that would result from a dollar change in the output of local industries delivered to final demand (that is, to ultimate purchasers, such as consumers outside the region).

Primary multipliers

Estimates of the impact of child care on the economy are based on three primary multipliers, which are as follows:

Direct effects Effects introduced into the economy as a result of spending on child care services.

Indirect effects Effects reflecting spending by workers and local vendors generated by the direct effects. These effects result from a change in money spent by individuals or firms that incur direct impacts.

Induced effects

Effects of consumption of primarily retail goods and services consumed by households directly and indirectly earning income from child care services. These effects reflect changes in the economy caused by changes in spending patterns as a result of direct and indirect activity.

Type II multiplier

The multiplier effect, identified as "Type II" in the IMPLAN model, estimates how many times a given dollar of investment will be spent as it works its way through the economy. Multipliers can be applied to various categories. For example, income multipliers —-additional spending associated with every dollar of income — tend to be less than one. This is because not all income is spent; some is saved, invested, or used to pay debt. Employment multipliers — the numbers of jobs created per million dollars of investment — can range from 5 to 65, depending on the activity. Alternatively, employment multipliers can relate to the number of indirect and induced jobs that result from a dollar of investment in direct employment.

For more information on the activities of the San Diego County Child Care & Development Planning Council, please contact the Council Coordinator at:

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