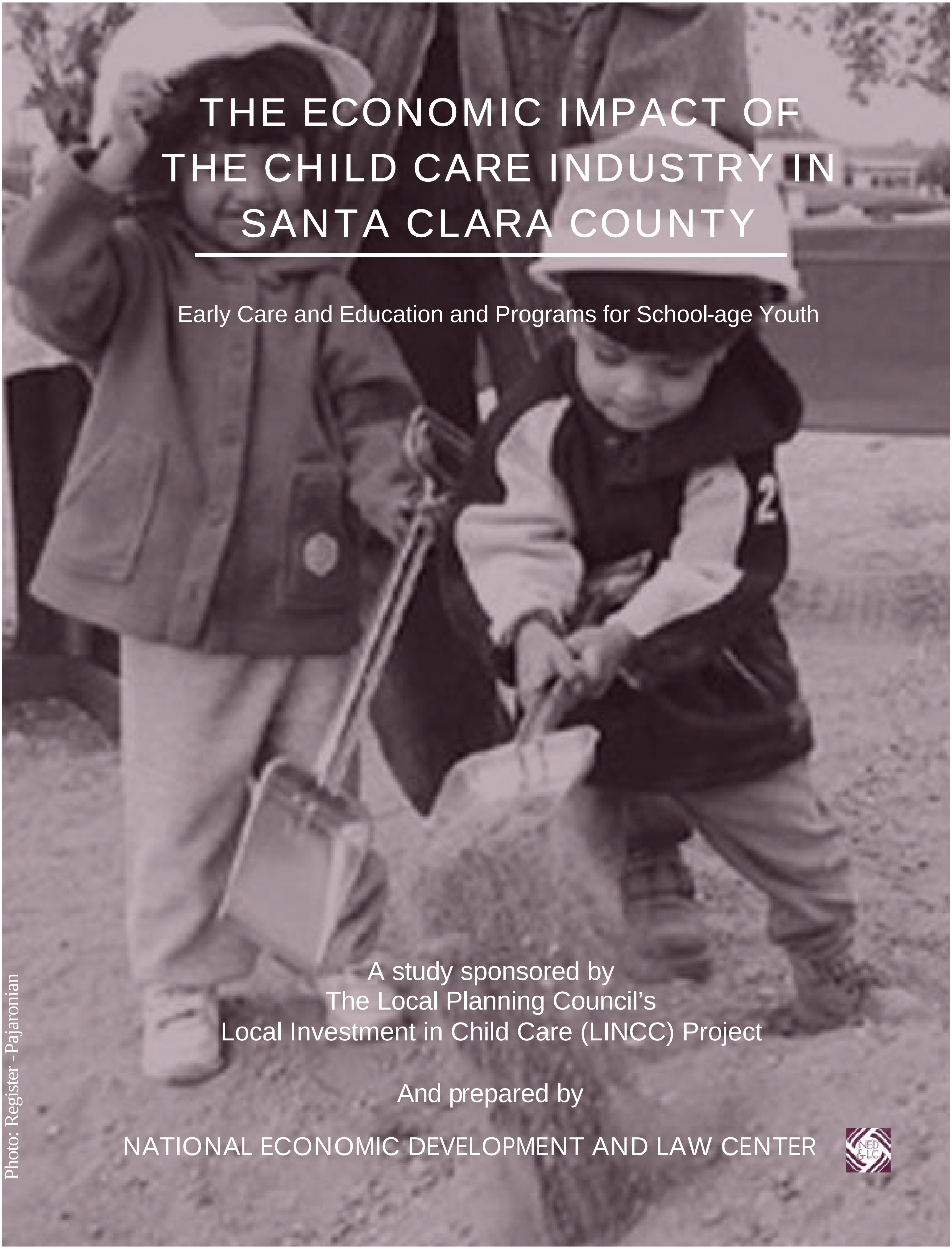


Photo: Register -Pajaronian

THE ECONOMIC IMPACT OF THE CHILD CARE INDUSTRY IN SANTA CLARA COUNTY

Early Care and Education and Programs for School-age Youth

A study sponsored by
The Local Planning Council's
Local Investment in Child Care (LINCC) Project

And prepared by

NATIONAL ECONOMIC DEVELOPMENT AND LAW CENTER

BACKGROUND

This report is based on a series of reports originally produced by the Local Investment in Child Care (LINCC) Project, launched in 1997 with support from the David and Lucile Packard Foundation, and designed to incorporate child care into local economic development planning. As part of the LINCC project, the National Economic Development and Law Center (NEDLC) produced Economic Impact Reports for eight counties, including Santa Clara County in 1999. The reports articulate child care in economic development terms and quantify the ways in which the child care industry is critical to the local economy. The reports also help to build local partnerships aimed at increasing the child care industry's capacity to respond to shifting child care needs. The Local Child Care Planning Council of Santa Clara County's LINCC project contracted NEDLC to create this report, (an update to the original report published in 1999) quantifying the economic impact of the child care industry in Santa Clara County in 2002.

ACKNOWLEDGMENTS

Without the support of the David and Lucile Packard Foundation, the Local Investment in Child Care (LINCC) project would not have been possible. We gratefully acknowledge their support. Special thanks to Choices for Children and the volunteers of the Local Planning Council for giving time so generously to the LINCC Project throughout the 2001-2003 grant cycle.

ADVISORY BOARD

Cathy Boettcher
Local Planning Council
Linda Cochran
Local Planning Council
Evelyn de la Cruz
Department of Social Services
Araceli DeAngelo
Choices for Children
Ty Durekas
Children's Creative Learning Centers
Fred Ferrer
Co-chair, Local Planning Council
Doris Fredericks
Choices for Children
Yolanda Garcia
Co-chair, Local Planning Council
Jim Hopper
Community Care Licensing Division
Collette Kudumu
Resource and Referral Director
Martha McNulty
Mentor Graphics Early Learning Center
Debra Petersen
LINCC Coordinator, Santa Clara County
Martin Selznick
Local Planning Council

NATIONAL ECONOMIC DEVELOPMENT AND LAW CENTER

Brentt Brown
Program Specialist, Child Care
Carolyn Hayden
Vice-President
Dionne Hayden
Intern, Child Care
James W. Head
President
Saskia Traill
Senior Program Specialist, Child Care
Jen Wohl
Program Manager, Child Care

National Economic Development and Law Center
2201 Broadway, Suite 815 Oakland, CA 94612
Ph: (510) 251-2600 Fax: (510) 251-0600 www.nedlc.org

THE ECONOMIC IMPACT OF THE CHILD CARE INDUSTRY IN SANTA CLARA COUNTY

Early Care and Education and Programs for School-age Youth

NATIONAL ECONOMIC DEVELOPMENT AND LAW CENTER

TABLE OF CONTENTS

Section 1
Introduction

Santa Clara County's licensed child care industry supports 6,614 local jobs and generates approximately $331 million per year in gross receipts.

This report provides a tool to bridge the gap between economic development planning and advocacy for child care. A previous economic impact report in 1999 demonstrated that child care is a critical component for any comprehensive plan for sustained local economic development in Santa Clara County.[1] Policy makers, business leaders, urban planners, and a host of other community leaders are already discussing ways to improve the economic vitality and quality of life for families in Santa Clara County. Although some gains have been made in supporting the child care industry in the county, child care is still often left out of economic planning and analysis, although it is a critically important aspect of the county's economy for several main reasons.

First, the licensed child care industry, which includes early care and education as well as programs for school-age youth, is a major industry in Santa Clara County in its own right. Research presented in this report demonstrates that licensed child care is a significant income-generating, job-creating, industry sector, on par with major industries in the county such as hotels and electronics stores. Santa Clara County's licensed child care industry supports 6,614 full-time equivalent local jobs directly and another 3,238 through indirect and induced economic effects. Child care generates approximately $331 million per year in gross receipts.[2] The child care industry strains to meet the increasing need for affordable, quality child care services, and faces a number of barriers including high land and development costs and low reimbursement rates for publicly subsidized services. In addition, low wages and high turnover in the child care industry create an unstable early care and education workforce.

Child care enables parents to work.

Over 87,000 children in Santa Clara County have all parents in the workforce.

Second, child care is essential in enabling parents to work, and in building today's workforce in Santa Clara County. The nature of working America has changed, and child care has changed with it. Individuals with primary responsibility for child-rearing are joining the labor force in record high numbers and are also returning to work more quickly following the birth of each child. In Santa Clara County, over 87,000 children under 6 years of age and 172,000 children between 6 and 17 years old have all parents in the workforce.[3] Similar to transportation

[1] National Economic Development and Law Center. Economic Impact of the Child Care Industry in Santa Clara County. January, 1999.
[2] See Section 3 for further discussion of results and methodology.
[3] U.S. Census Bureau, Census 2000.

and housing, without available and affordable child care services, parents are unable to effectively participate in the workforce.

Third, high-quality early care and education programs fuel a strong future economy. Historically, early care and education has been perceived primarily as a social service or, at best, an educational service for parents who want (and can afford) to provide their children with early learning experiences. Long-term studies of quality child care programs indicate that, far from being a luxury, quality child care is a vital service, improving children's health, school readiness, and future contribution to society. The value added from quality child care and early education decreases future public sector spending in such areas as grade repetition and special education in the public education system, as well as in the criminal justice system and welfare programs.

This report, an update to the 1999 Economic Impact Report for Santa Clara County, presents a wide range of compelling evidence showing that investments in the child care infrastructure have direct, positive effects on the ability of a local economy to experience growth and vitality. The report also argues that an intimate understanding of the interaction between child care supply and economic growth improves the efficiency of investments in child care, and therefore saves both private and public expenditures, directly and indirectly. To cast child care in the light of economic development, the report:

- Quantifies the local economic effects of the licensed child care industry in Santa Clara County;
- Assesses the extent to which child care currently supports the economic performance of Santa Clara County;
- Discusses other economic benefits of child care, including public sector savings, that result from investments in quality child care; and
- Evaluates issues in the supply and demand for child care in Santa Clara County that could affect the future performance of the county's economy.

Child care includes programs for school-age youth as well as early care and education for young children.

Defining Child Care

Child care includes a range of services that educate and nurture children, while at the same time, enable parents to work or attend school. While child care needs may be most concentrated for children age 0 to 5, before- and after-school programs and summer programs for school-age youth also are part of the child care system. For the purposes of this report, child care includes full- and part-day child development programs for young and school-age children, such as family child care homes, Head Start, after-school programs, and state pre-school, as they are all part of the system of care, which parents rely on during working hours.

Child care may be licensed or unlicensed. *Licensed child care* meets minimum health and safety standards and staff-child ratios set by the state legislature and regulated by the Community Care Licensing Division of the California Department of Social Services. Licensed establishments include most child care centers and many home-based providers, or "family child care homes." Family child care homes are 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 eight and fourteen children, respectively, of varying ages).[4]

The economic impact of child care is only accurately quantifiable for licensed child care, excluding babysitters, nannies, and relatives who care for children.

Licensed child care establishments, especially child care centers, must make capital investments in buildings and equipment to provide high-quality care. They must also invest in employee salaries and benefits to attract and retain educated, credentialed staff. In short, licensed child care must meet state criteria for quality while maintaining a viable business.

In contrast, *unlicensed, or license-exempt, child care* generally is not regulated by the state and is not governed by any specific child care standards. Non-licensed child care services include nannies, parent cooperatives, relative care, some home-based care arrangements (where care for no more than one other person's children is taking place), and babysitters. In addition, certain before- or after-school programs for school-age children in public and private schools can be exempt, as well as certain public and private recreation programs.

Because licensed child care is a formal part of the economy (i.e., the sector is subject to taxes, state regulations, etc), its economic impact is more easily quantified. Although unlicensed child care arrangements are widely used, and thus also add much to the economy, it is more difficult to ascertain their impact. Therefore this report focuses primarily on licensed care. We include information about license-exempt care, particularly in license-exempt child care centers, wherever possible.

The Local Investment in Child Care Project

This report is based on a series of reports originally produced by the Local Investment in Child Care (LINCC) Project, launched in 1997 with support from the David and Lucile Packard Foundation. The project is designed to incorporate child care into local economic development planning. It is currently operating in Alameda, Kern, Los Angeles,

[4] See Section 3 for further methodology.

Monterey, Orange, San Mateo, Santa Clara, Santa Cruz, and Ventura Counties. The Economic Impact Reports developed for each of these counties articulate child care in economic development terms and facilitate dialogue between the child care sector and local policymakers, business leaders, and private lenders. In addition, the reports help build local partnerships aimed at increasing the child care industry's capacity to respond to the shifting child care needs of California families. The Santa Clara County Child Care Local Planning Council's Local Investment in Child Care (LINCC) project contracted the National Economic Development and Law Center to produce the current report.

Outline of the Report

Following the introduction presented in **Section 1**, **Section 2** reviews recent economic and demographic trends in Santa Clara County, then suggests the implications these trends have on the county's child care industry.

Section 3 measures the overall economic effects of child care by the size of the industry in terms of both output and employment, discusses the methodology behind the measurement, and assesses several other features of the child care industry that affect its size and performance.

Section 4 analyzes the impact child care has on economic competitiveness and worker productivity. It discusses other economic benefits of quality early care and education, including public sector savings that can result from investments in quality child care, the impact of child care on school readiness and academic success, and the development of the future workforce.

The report concludes with **Section 5**, which provides recommendations based upon the concepts articulated in this report. It suggests key areas for Santa Clara County's policymakers, business and civic leaders, economic development planners, and child care advocates to consider when planning for local urban and economic development activities.

Section 2
Economic Profile of Santa Clara County

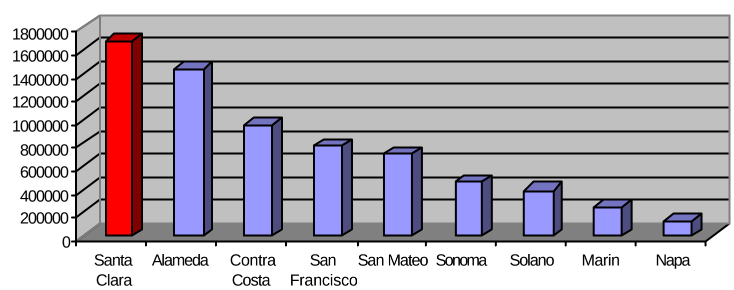
Santa Clara County has seen remarkable changes, demographically and economically, in the last ten years. And, despite recent slowdowns in the economy, it is likely to see more striking changes in the next decade as well. As the most populated county in the Bay Area, Santa Clara County continues to grow rapidly. Santa Clara County is also becoming more diverse, with the fastest growing segments of the population being Asian / Pacific Islanders and Latinos. Santa Clara County's demographic and economic characteristics have significant implications for projecting the future of the child care industry.

Santa Clara County is currently the most populated county in the Bay Area and one of the twenty most populated counties in the nation.

Population

- From 1990 to 2000, the population in Santa Clara County increased by 12.6%, adding over 185,000 residents.[5]
- Santa Clara County is currently the most heavily populated county in the Bay Area with an estimated 1,668,309 residents in 2001 (see Figure 1).[6]

Figure 1
Population of San Francisco Bay Area Counties



- According to the U.S. Census Bureau, Santa Clara County is currently one of the nation's twenty most populated counties.
- With 55% of the total population, San Jose is Santa Clara County's most populated city. San Jose is seven times larger than Sunnyvale, which is the county's second largest city.[7]

---

[5] California State Department of Finance, County Population Projections with Age, Sex and Race/Ethnic Detail July 1, 1990-2040 in 10 Year Increments.
[6] California State Department of Finance, Demographic Research Unit, Interim County population Projections, California, 2000.
[7] California Department of Finance, Demographic Research Unit, California State Data Center, Census 2000, Table One, Population Change 1990-2000, cities by county.

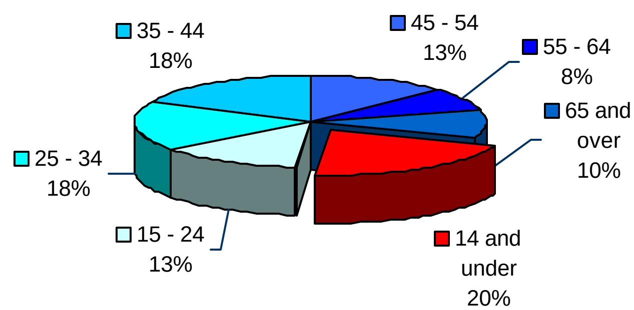
Santa Clara County is projected to grow by 15% over the next ten years, totaling over 2 million residents by 2020, including over 450,000 children.

Twenty per cent of the county's population is children 14 and under.

There are more children 14 and under than senior citizens in Santa Clara County.

- Over the next ten years, Santa Clara County's population is projected to grow by 15%, totaling over 2 million residents by 2020, including over 160,000 children under five years old, and over 450,000 children under 14.[8]
- From 2000 to 2001, over 34,000 babies were born to Santa Clara County residents, while over 60,000 Santa Clara County residents moved out of the county.[9]
- Over the last year Santa Clara County has had a slight decline in population. This change is small given the population increase of the last 10 years.
- Children ages 14 and under comprise one-fifth of the population in Santa Clara County. Adults age 65 and older comprise only 9.6% of the population in Santa Clara County (see Figure 2).[10]
- Within the 20% of the Santa Clara County population that is under 14 years old, 7% are under 5, 7% are 5 to 9 years old, and 6% are between 10 and 14 years of age.

Figure 2
Age in Santa Clara County



- While 20% of Santa Clara County residents are under 14, 13% are between 15 and 24, 18% are between 25 and 34, 18% are between 35 and 44, 13% are between 45 and 54, 8% are between 55 to 64, and 10% are over 65 years of age (see Figure 2).

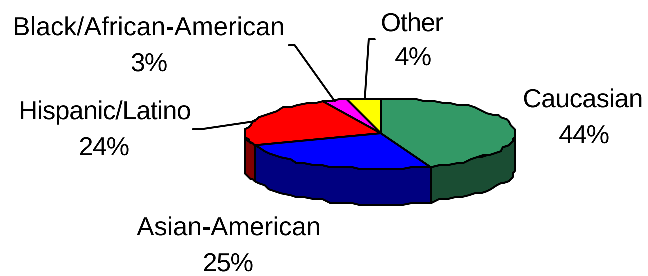
[8] California State Department of Finance, Demographic Research Unit, Interim County population Projections, California, 2000.
[9] U.S. Census Bureau. California Components of Population Change: April 1, 2000 to July 1, 2001.
[10] Ibid.

Compared to the general population of Santa Clara County, younger ages groups are increasingly diverse.

Diversity

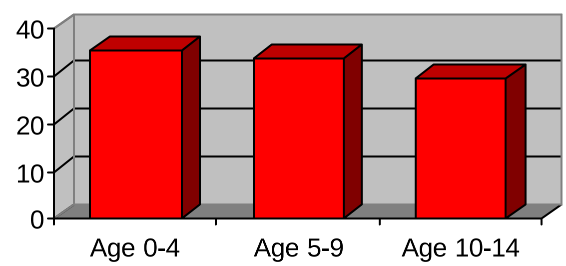
- Santa Clara County is becoming increasingly diverse each year. Currently, Latino and Asian / Pacific Islander residents comprise 25% and 24% of the population, respectively, together outnumbering the 44% of the population who are Caucasian (see Figure 3).[11]

Figure 3
Race and Ethnicity in Santa Clara County



- While Latinos represent 24% of the county's overall population, they represent a larger share of the population of children. The proportion of Hispanic or Latino children increases as the age of children gets younger. Latino children comprise almost 33% of the child population ages 14 and under (see Figure 4).[12]

Figure 4
Percentage of Children in Santa Clara County who are Latino, by age

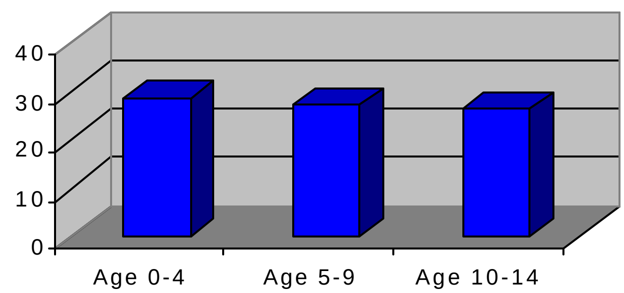


[11] Association of Bay Area Governments (Abag), Bay Area Census, Santa Clara County, California, 2001.
[12] California State Department of Finance, County Population Projections with Age, Sex and Race/Ethnic Detail July 1, 1990-2040 in 10 Year Increments.

The leading industry in Santa Clara County is the service industry, which incorporates much of the licensed child care industry.

- While Asian-Americans represent 25% of the county's overall population, they represent a larger share of the population of children. The proportion of Asian-American children increases for younger age groups (see Figure 5).

Figure 5
Percentage of Children in Santa Clara County who are Asian-American, by age

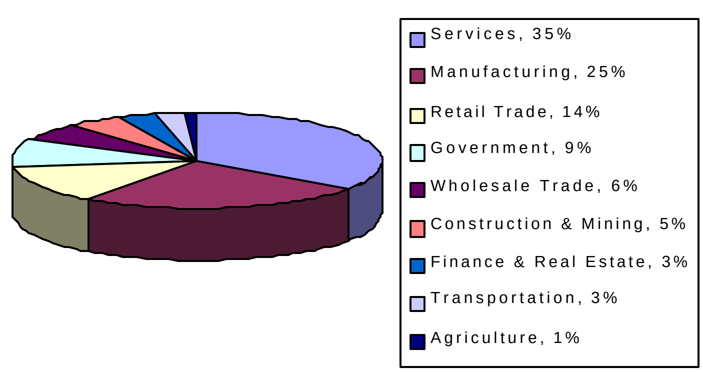


- Over 28% of children age 0 to 4, 27% of children ages 5 to 9, and 26% ages 10 to 14 are Asian-American.[13]

Labor Market

- Santa Clara County's civilian 2000 annual average labor force was just over 1 million, a 4% growth from the previous year.[14]
- Santa Clara County's leading industry is the service industry, which currently includes most of the licensed child care industry classification, with over one-third of total employment (see Figure 6).[15]

Figure 6
Employment by Industry in Santa Clara County



[13] California State Department of Finance, County Population Projections with Age, Sex and Race/Ethnic Detail July 1, 1990-2040 in 10 Year Increments.
[14] California Employment Development Department, Labor Market Information Division, County Snapshot, Santa Clara County, 2001.
[15] Ibid.

For Silicon Valley, the rate of job growth from 2000 to 2010 is projected at 13 percent.

The hourly wage needed to afford a two-bedroom apartment is over $30.

The annual cost of child care for an infant is almost $13,000 per year in Santa Clara County.

- Other leading industries include manufacturing, with over 25% of total employment, and retail trade, with 14% of total employment.
- For Silicon Valley, the rate of job growth from 2000 to 2010 is projected at 13 percent. Despite the current slowdown, the Association of Bay Area Governments predicts that "the long-term forecast shows another 183,000 new jobs by 2010. Many of these new jobs will be in northwest Santa Clara County, San Jose, and Milpitas. [16]
- Job growth is predicted to outpace growth in available housing in the next decade, at 13% to 8%, suggesting that the number of people commuting into Silicon Valley and Santa Clara County will increase over the next decade.[17]

Cost of Living

- In Santa Clara County, the median household income is $74,335.[18]
- The median price of a home in Santa Clara County in May 2002 was $461,000. The median price of a home increased almost 3% between May 2001 and May 2002.[19]
- In Santa Clara County, there was nearly a 7% increase in the number of renter households in the county, from 212,856 in 1990 to 227,202 in 2000.[20]
- The fair market rate for renting a two-bedroom apartment is $1,592 per month, or $19,104 annually. The hourly wage to afford a two-bedroom apartment is $30.62, or $63,689 annually.[21]
- The median earnings for one female, full-time, year-round worker is $40,574.[22]
- The average annual cost of child care for an infant in a child care center in Santa Clara County is currently estimated at $12,948.[23]
- The true cost of child care, including wages for child care workers that are comparable to similarly credentialed staff in the public education system, curriculum and facilities development,

[16] The Association of Bay Area Governments. *Silicon Valley Projections 2000*. Prepared for the Silicon Valley Manufacturing Group.
[17] Ibid.
[18] US Census Bureau, Census 2000.
[19] DataQuick Information Systems, www.DQNews.com
[20] National Low Income Housing Coalition. *Out of Reach: America's growing wage-rent disparity*. National Low Income Housing Coalition, 2001.
[21] Ibid. Hourly wage is based on the assumption that rent is 30% of total income.
[22] Ibid.
[23] Based on current survey from the Santa Clara County Child Care Resource & Referral Network, 2002.

and programmatic costs, is an estimated $1,525 per month per child, twice that of the cost that families struggle to meet today.[24]

- Center-based child care for an infant and a toddler in Santa Clara County has an annual cost of over $21,000. For a family at median family income, these child care costs are over 25% of the total annual income.

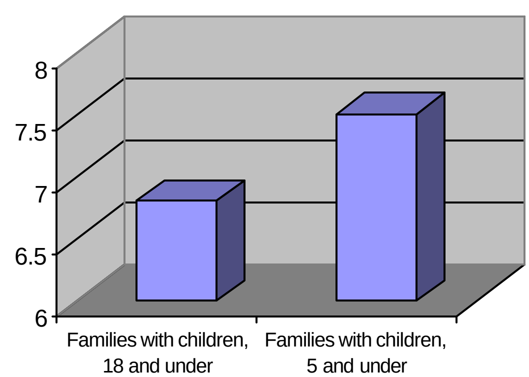
Nearly 40% of all jobs pay too little to keep a single parent and child out of poverty.

50% of Silicon Valley jobs pay less than $10 per hour for entry level positions.

Low-income families

- While the median household income in Santa Clara County is over $75,000, approximately 13% of all Santa Clara County households earn an annual income less than $25,000, suggesting a noticeable disparity of incomes in the county.[25]
- An estimated 19% of all area jobs pay less than living wage ($11-17 per hour) for a single adult. Nearly 40% of all jobs pay too little to keep a single parent and child out of poverty.
- 50% of Santa Clara County area jobs pay less than $10/hour for entry-level positions.[26]
- In Santa Clara County, 124,470 residents live below the poverty line – over 7% of the total population.[27]
- The likelihood that children are living in poverty increases for younger children. While 6.8% of families with children 18 and under live in poverty, almost 8% of families with children aged 5 and under live in poverty (see Figure 7).[28]

Figure 7
Percentage of Families in Poverty in Santa Clara County

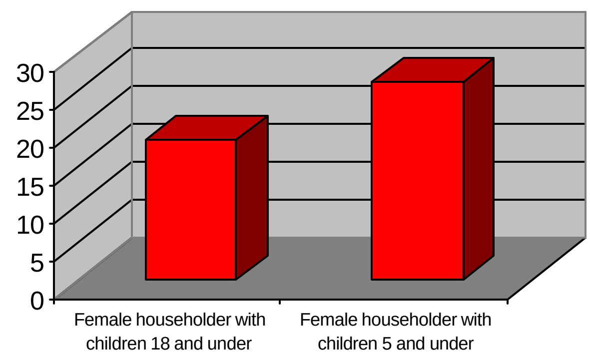


[24] International Child Resource Institute. *The True Cost of Quality Child Care*. San Jose: Local Child Care Planning Council of Santa Clara County Local Investment in Child Care (LINCC) Project, 2002.
[25] US Census Bureau, Table DP-3. Profile of Selected Economic Characteristic:2000.
[26] California Employment Development Department, Labor Market Information Division, County Snapshot, Santa Clara County, 2001.
[27] US Census Bureau, Table DP-3. Profile of Selected Economic Characteristic:2000.

In Santa Clara County, over one-fourth of single-mother families with children under 5 live below the poverty line.

- The occurrence of children living in poverty increases for children living with a single female caregiver. Over 26% of all families in Santa Clara County run by a female parent alone with children age 5 and under live in poverty (see Figure 8).[29]

Figure 8
Percentage of Female-householder Families Living in Poverty in Santa Clara County



- Santa Clara County has the second largest number of children and infants receiving WIC of all California counties.[30]
- Almost 30% of Santa Clara County children classify as low-income.[31]
- Santa Clara County has one of the highest costs of living in California, with one of the top ten highest Self-Sufficiency Wages of all the California counties.[32]
- In California, Santa Clara County is one of the most expensive counties for child care. It has the highest cost of child care for infants, second highest cost of care for pre-school children, and third highest cost of care for school aged children.[33]

In California, Santa Clara County is one of the most expensive counties for child care. It has the highest cost of child care for infants, second highest cost of care for pre-school children, and third highest cost of care for school aged children.

Implications for Child Care

Santa Clara County's shifting economic and demographic landscape creates a challenge to its child care industry. Despite the current short-

[28] U.S. Census Bureau, Census 2000.

[29] U.S. Census Bureau, Census 2000.
[30] Children Now, , *The Children of Santa Clara County.* California County Data Book, 2001.
[31] Ibid.
[32] The Self-Sufficiency Standard for California, Wider Opportunities for Women, http://www.wowonline.org.
[33] California Department of Education, DataQuest, The State Of Our Children, 2000, County Data Table.

term economic slump, population and job growth are projected to continue growing in the county. These and other changing and evolving economic and social conditions--a greater number of low-paying jobs, natural population increase, escalating housing prices, and welfare reform--fuel continued growth in need for affordable, quality child care services in the county. These conditions have a number of implications for the county's child care industry.

The increasing diversity in Santa Clara County will demand more culturally appropriate child care services, including dual- or multi-lingual staff and programs, and culturally sensitive curricula and care.

The county's strong service and retail sectors contribute to a greater demand for child care during hours outside of the traditional 8am – 6pm child care schedule.

Population

- Although there has been a slight population decline recently, the number of births has not declined, and Santa Clara County's population is projected to continue to grow aggressively. This creates a demand for the entire education system, including children of traditional ages for schooling and for children aged 0 to 5 as well.
- With an increasing number of children in the traditional education system, the importance of school readiness will intensify over the next decade, and early education experiences will be crucial to success in Kindergarten through senior year and beyond.

Diversity

- The growing diversity in Santa Clara County requires more culturally appropriate child care services, including dual- or multi-lingual staff and programs, and culturally sensitive curricula and care.
- The demand in all sectors for skilled Spanish speakers creates an increased demand for Spanish-speaking child care professionals as well.

Labor Market

- The county's strong service and retail sectors contribute to a greater need for child care during hours outside of the traditional 8am – 6pm child care schedule.
- Although there is currently high unemployment, predictions for the next ten years indicate a continued increase in jobs in Santa Clara County. It appears that this increase will not be met by an equal number of housing units. Thus lack of housing increases commutes from out of the county, clogging transportation systems and lowering quality of life for Santa Clara County residents. While transportation is impaired, the distance from home to work to child care becomes increasingly important.
- In addition, a strong child care infrastructure in the county provides incentives for families to continue living in the county in the face of slowed transportation and increased housing costs.

High rental and housing costs will also continue to shrink the portion of a family's income that is available to pay for child care.

The low- to medium-wage nature of jobs in the services and retail sectors contribute to the number of individuals who cannot afford the high cost of living in Santa Clara County, jeopardizing the economic vitality of those sectors in Santa Clara County.

- Expansion plans for child care facilities are more difficult because, due to the county's low wage rate for child care workers, providers must devote much of their time to recruiting and retaining qualified staff.

Cost of Living

- Santa Clara County's cost of child care is one of the highest in the state, which imposes financial hardship on families with incomes ranging from very low to middle income. High rental and housing costs also continues to shrink the portion of a family's income that is available to pay for child care.
- The county's high cost of living threatens the stability and continued growth of the licensed child care industry. Child care center workers and self-employed family child care providers cannot afford to live and work in Santa Clara County. To date, many have been forced to relocate to more affordable counties.
- Child care workers are unlikely to commute long distances to work in Santa Clara County because comparable employment is available outside the county. While the shortage may not currently affect the economy, when the economy picks up, the child care infrastructure may not be in place to support increased need.
- Families, government, and the private sector struggle to pay for quality child care services currently, while the true cost for providing child care is twice the amount paid today. The true cost includes workforce development costs for the child care workforce, facilities development at market rates, and programmatic and curriculum costs.
- With Santa Clara County's high cost of housing and projected transportation problems, the recruitment of trained professionals in all sectors becomes increasingly difficult, and the growing need for a skilled workforce once the economy strengthens will not be met without additional incentives to move to Santa Clara County, such as affordable, accessible child care.

Low-income families

- The increasing number of people in low-income occupations will impair their ability to afford child care. Because of the high number of children in poverty in Santa Clara County, child care programs experience continued demand for subsidized slots.

Implementation of the state's CalWORKs program will contribute to the need for more subsidized child care, as parents receiving aid are required to work or participate in training programs.

- Implementation of the state's CalWORKs program contributes to the need for more subsidized child care, as parents receiving aid are required to work or participate in training programs.

Conclusion

The county needs to expand its supply of affordable quality child care to provide an adequate social infrastructure, enabling more families and single parents to go to work and increasing the county's supply of labor. In addition, a strong child care infrastructure will provide incentive for skilled workers to move to the county despite high housing costs and transportation issues. This added workforce is essential to satisfy production and consumption of the community's needed goods and services.

Section 3
The Economic Impact of the Child Care Industry

The following analysis covers primarily the licensed child care industry, which excludes a significant portion and variety of child care services which support both child development and parental employment (as discussed in Section 1). The analysis includes early care and education as well as programs for school-age youth.

Measuring Child Care Industry Output or Gross Receipts

Output, also known as gross receipts, measures the size of an industry in terms of the overall value of the goods and services produced by that industry over the course of a given year. For child care services, gross receipts are equal to the total amount of dollars flowing into the sector in the form of payments for care, including both parent fees and private and public subsidies.

The Departments of Labor and Commerce significantly underestimate the impact of child care in the economy.

Economists typically analyze industries and their impacts based on a set of definitions and tools developed by the U.S. Department of Commerce (DOC) or by survey results developed by the U.S. Department of Labor (DOL). Both the DOC and DOL categories for "Child Day Care Services" significantly undercount the licensed child care industry. [34] Neither categorization explicitly includes licensed family child care homes. In Santa Clara County, 23% of the licensed child care slots are in family child care homes. In addition, the DOL category includes privately operated child centers, nursery schools, after-school programs, and preschool centers, but does not include centers or programs operated by public schools. This omission is significant since 40% of state-subsidized child development centers, State Preschools, and Head Start programs in California are operated by school districts and county Offices of Education.[35]

A more accurate method of measuring the size of the child care industry relies upon data from Santa Clara County's local child care Resource and Referral (R&R) agency, which is charged by the state to collect current, accurate data from providers about their capacity and enrollment so that the R&R can help parents find available services. These locally derived estimates are much more reliable than those the DOC or DOL generate because they use current data on cost and enrollment and cover the

[34] The U.S. Department of Commerce uses a categorization system called the North American Industry Classification System (NAICS) and the Department of Labor uses the Standard Industry Classification (SIC) "Child Day Care Services are NAICS code 624410 and for the SIC code 8351.

[35] National Economic Development and Law Center, "Child Care and Head Start *Financing Early Childhood Facilities*, January 1996.

entire scope of licensed child care services.

Although the R&R data is more comprehensive than the data from the DOC or DOL, it also underestimates the impact of the child care industry on the economy. The R&R relies on survey data from providers, many of whom may not need to list themselves on the R&R network database because they have full enrollment or can fill vacancies using only word of mouth. Licensing data from Santa Clara County indicate that there are currently 9,000 more slots available than those listed on the R&R database.[36] Although some of these licenses are not being actively used, the discrepancy indicates that there are likely many more children being served by the licensed child care industry than is being captured by the R&R. We rely on the R&R survey data in this report as a conservative estimate.

There are currently 1,333 family child care homes and approximately 575 centers in Santa Clara County.

The gross receipts of the child care industry in Santa Clara County is calculated in Santa Clara County by multiplying the number of children enrolled in each type of care (i.e. infant care, part-time, state-subsidized) by the average rate for that type of care (please see Appendix A for detailed methodology). There are 1,908 licensed child care facilities in Santa Clara County (1,333 family child care homes and approximately 575 centers) that care for 44,933 children. Based on the methodology briefly described above, the estimated annual gross receipts for licensed child care in Santa Clara County is $330,929,924, including $273.4 million for child care centers and $57.5 million for family child care homes (see Table 1). This corresponds to $5,228,657 in indirect business taxes annually.[37]

The estimated annual gross receipts for licensed child care in Santa Clara County is $330.9 million, including $273.4 million for child care centers and $57.5 million for family child care homes.

Table 1
Licensed Child Care Industry Estimates, Santa Clara County 2002

Methodology	Gross Receipts	Direct Employment
Local Resource & Referral Data	$330,929,924	6,614

The licensed child care industry generates over $5 million in indirect business taxes every year.

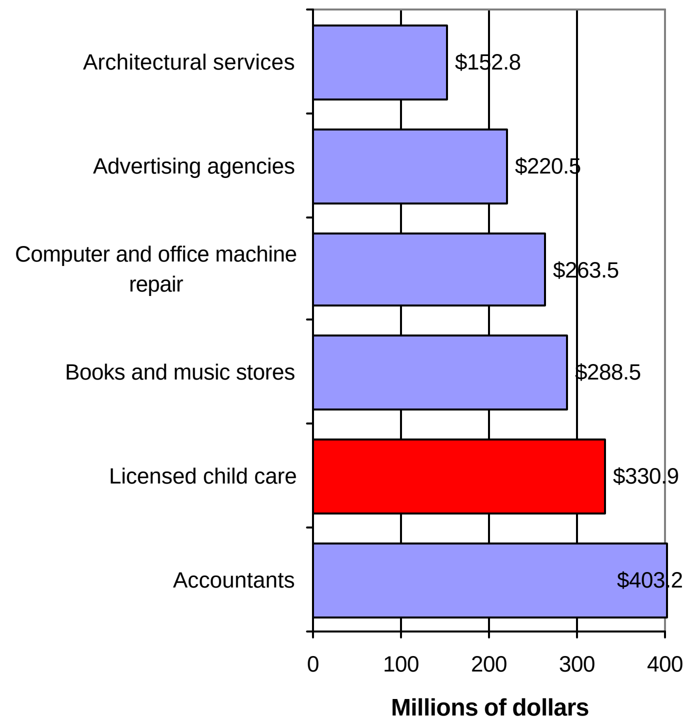
Gross Receipts Compared with Other Industries

When compared in size to other industry groupings in Santa Clara County, the child care industry is larger than architectural services, advertising agencies, or computer and office equipment repair. Licensed

[36] Community Care Licensing data, Santa Clara County, 2002.
[37] Indirect business taxes derived from the IMPLAN model (see Appendix B). Indirect business taxes includes property taxes, fees, licenses, and sales tax, but does not include taxes on profit or income.

child care is on par with books and music stores and accounting in the county (see Figure 1).

Figure 1
Gross Receipts Comparisons between Santa Clara County Industries, in millions



All gross receipts values besides the child care industry data are from the 1997 Economic Census, adjusted to 2002.

Measuring Child Care Industry Direct Employment

The DOC and DOL also underestimate employment as they do not explicitly include licensed family child care homes, and the DOL does not include centers operated by public schools. Using local data about licensed child care, direct, full-time equivalent employment in 2002 in Santa Clara County's licensed child care industry is 6,614. This figure is derived from the actual child care inventory and the number of children in different types of care, assuming compliance with minimum staffing requirements imposed by licensing laws for different age groups (please see Appendix A for a more detailed description).

Direct, full-time equivalent employment in Santa Clara County's licensed child care industry is 6,614.

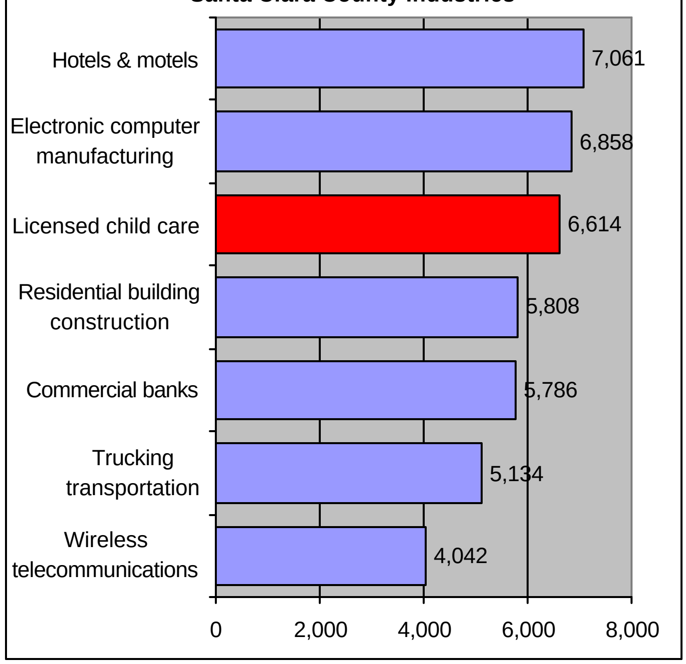
Of course, even the local estimate understates total child care employment because it only counts licensed child care establishments, and excludes informal, individual care provided by nannies, babysitters, relatives, and neighbors. In addition, the estimates are calculated based on the minimum staff-child ratio required by state law, and some child care operators choose to maintain higher ratios in order to improve program quality. Providers may also elect to employ more than the regulatory minimum to achieve specific quality goals to increase their business' competitiveness.

Direct Employment Compared with Other Industries

When compared with direct employment of several other industry groupings in Santa Clara County, licensed child care is found to be similar in size to electronic computer manufacturing and residential building construction. The number of people employed in the child care industry is much higher than the number of people employed in trucking or in wireless telecommunications industries in the county (see Figure 2).[38]

Estimates for gross receipts and direct FTE employment of the child care industry do not capture the majority of license-exempt care giving, which would significantly add to the impact of child care on Santa Clara County.

Figure 2
Employment Comparisons between Santa Clara County Industries



Employment comparisons are from the Census Bureau, *County Business Patterns, Santa Clara County, 2000*, and were adjusted to 2002.

The number of people employed in the child care industry is much higher than the number of people employed in trucking or in wireless telecommunications industries in the county.

Although child care professionals represent a significant labor sector in the local Santa Clara County economy, wages and benefits are poor. In a recent survey of workers in licensed family child care homes, 68% of

[38] Employment comparisons are from the Census Bureau, *County Business Patterns, Santa Clara County, 2000*, and were adjusted to 2002.

respondents said they do not offer any health benefits to their employees and 40% say they would like better insurance benefits.[39]

Based on a direct employment estimate of 6,614 jobs in licensed child care, an additional 3,238 indirect and induced jobs are created in the county.

Measuring Indirect and Induced Employment

Licensed child care, like most other industries, generates indirect employment in other areas of the economy through its purchase of goods and services. Indirect employment refers to jobs that exist in other sectors because of the industry in question. Without the child care industry, these indirect jobs would not exist. Business services (due to bookkeeping needs), tax compliance and audits, agriculture (due to food purchases), and other vendors are used by child care programs. Induced employment refers to the ways that these economic effects ripple through the economy.

The IMPLAN input-output modeling system (see Appendix B for an explanation of this widely used model) traces how dollars move throughout the economy. Using data tables specific to Santa Clara County and separated into more than 500 industry classifications, IMPLAN collects data to create industry multipliers; that is, how much a part of the economy is affected by a $1 investment in that industry. Using IMPLAN, we can trace how a dollar invested in Santa Clara County child care moves throughout the local economy in terms of direct employment, indirect employment, and induced effects. The indirect and induced employment multipliers provide a tool to measure the number of jobs in other industries that are sustained by the licensed child care field. Based on a direct employment estimate of 6,614 jobs in licensed child care, an additional 3,238 indirect and induced jobs (981 indirect and 2,257 induced) are created in the county. Thus, the child care industry adds 9,852 FTE jobs to the Santa Clara County economy. This employment estimate is low because the DOL undercounts the child care industry, and thus its effects on other industries.

The federal and state governments provide subsidies for child care primarily to aid low-income families in paying for child care so they can participate in the workforce or in training or educational activities.

Capture of Federal and State Subsidies

Federal and state governments provide subsidies for child care primarily to aid low-income families in paying for child care so parent(s) can participate in work, training, or educational activities. These subsidies are provided in two basic forms: direct contracts with child care centers based on the number of low-income children they serve and the number of days of care provided, and an "Alternative Payment" (AP) program which enables families to choose their own licensed or license-exempt child care provider.

[39] Provider Outreach Campaign and Survey. Local Planning Council's Local Investment in Child Care Project, 2002.

Child care subsidies, both at the federal and state levels, increased substantially following sweeping reforms to the federal welfare system in 1996 (the Personal Responsibility and Work Opportunities Act). California created its own version of welfare to comply with the new federal system, called CalWORKs (California Work Opportunity and Responsibility to Kids). CalWORKs replaced separate welfare-related early care and education systems with an integrated, three-stage child care system, coordinated by two state agencies. "Stage One" child care services are administered by the California Department of Social Services (CDSS) through county welfare departments. Stages Two and Three child care services are administered by local agencies under contract with the California Department of Education (CDE). Funding for each of the three stages of child care assistance is determined annually through the budget process.

CalWORKs Child Care at a Glance

Stage One: Child care assistance eligibility begins when the parent or caretaker enters into the CalWORKs cash assistance program. To qualify for child care, parents must be in receipt of cash assistance, participate in an approved Welfare-to-Work activity, and have a need for child care to enable them to begin or to continue to participate in the activity. Participants are served in Stage One for up to six months or until their activity is stable. If their situation remains unstable, they may continue in Stage One child care.

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

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

Another significant portion of child care subsidies are awarded via the federally-funded Head Start and Early Head Start programs, designed to increase school readiness in low-income children. In addition, the California Department of Education administers the US Department of Agriculture's Child Care Food Program, providing meals to low-income eligible children.[40]

Child care subsidies benefit Santa Clara County in several ways. First, since they are tied to participation in job training and work activities,

[40] California Department of Education, Nutrition Services Division website at www.cde.ca.gov/nsd/.

In 2001, Santa Clara County drew down almost $72 million in child care-related subsidies from federal and state funds.

they are an important part of workforce development, and enable many people (who would otherwise have to look after their own children or leave them in an unsafe setting such as self-care) to join the labor force. Second, they bring in new dollars to the local economy, which then circulate through various service sectors and stimulate other economic activity.

In 2001, Santa Clara County drew down almost $72 million in child care-related subsidies (see Table 2 for breakdown). Most of these funds were distributed through licensed child care facilities; however, a significant proportion of child care vouchers were redeemed by license-exempt child care providers (see explanation of license-exempt care later in this section).

Table 2

Sources of Subsidies for Child Care in Santa Clara County, 2001

Direct Services	
Head Start[1]	$19,000,000
USDA Child Care Food Program[2]	$5,849,638
Vouchers	
CalWORKs Stage 1[3]	$11,206,847
CalWORKs Stage 2	$14,955,015
CalWORKs Stage 3	$15,102,131
General Alternative Payment	$5,607,838
Total:	**$71,721,469**

[1]Head Start budget Santa Clara and San Benito Counties, FY01-02.

[2]FY 99-00, from the website of the Nutrition Services Division of the California Department of Education at http://www.cde.ca.gov/nsd/.

[3]Stage 1 FY 00-01, Stages 2 and 3, and Alternative Payment FY 01-02. CalWORKs subsidy payment information was obtained through Choices for Children, Santa Clara County.

Because lower-wage occupations lead much of Santa Clara County's projected job growth, the availability of federal and state child care subsidies plays an increasingly important role in supporting local economic development. Targeted local investments in child care help the county garner a larger share of child care subsidies and, in turn, maximize the local economic effects of those federal and state funds.

Total federal and state expenditures on child care are still well below the amount needed to serve all of California's low-income households, and California counties have not benefited equally from the capture of them. The percentage of income-eligible 2-5 year old children who are served by subsidized child care varies widely; enrollment rates in 1995 varied

Total federal and state expenditures on child care are still well below the amount needed to serve all of California's low-income households.

The availability of federal and state child care subsidies plays an increasingly important role in supporting local economic development.

The substantial size of the child care industry means that it contributes to the economy by employing significant numbers of workers, increasing tax revenue, and enabling the purchasing of goods and services from many other industry sectors.

from 28% in Orange County to 39% in Los Angeles and 81% in San Francisco.[41]

Section Summary

The diversity of the child care system is a vital feature in its ability to meet the demand of working parents, but also makes it very difficult to analyze and measure. However, using data maintained by organizations charged by the State of California with tracking the supply, cost and licensure of child care facilities, an estimate of its composite size can be derived. This overall size, measured in terms of gross receipts and employment, is comparable to many other major industry groupings in Santa Clara County, such as hotels and motels and electronics stores. The substantial size of the child care industry means that it not only supports the economy by allowing parents to work, but also contributes to its vitality by employing significant numbers of workers, increasing tax revenue, and enabling the purchasing of goods and services from many other industry sectors.

The child care field also supports the local economy by drawing down significant levels of federal and state subsidies available to low-income families. These families represent a substantial portion of the existing and potential workforce, and are vital to the continued growth of the retail and services sector. These government funds, in turn, supports the growth of more larger and more revenue-generating sectors of the economy. Federal and state child care subsidies represent new dollars flowing into the local economy, and help fuel Santa Clara County's continued economic growth.

[41] Lapkoff and Gobalet Demographic Research, "California's Child Care Gap," *Financing Early Childhood Facilities*, National Economic Development and Law Center, January 1996, Table 18.

Section 4
Child Care, Businesses, and Quality of Life

This section provides a general framework for the discussion of child care capacity as an economic development activity, and details specific ways the local economy is affected by the health of the child care infrastructure.

Local policies and investments aimed at bolstering the child care infrastructure contribute to Santa Clara County's overall productivity and economic competitiveness by:

- Expanding local labor force participation by enabling people to work. This contributes to increased output, greater personal income, more business formation, and higher revenues from local property sales taxes;
- Increasing productivity and retention of employees in businesses in the county;
- Reducing future, local expenditures on social needs by lowering drop-out and crime rates, and decreasing special education and welfare costs;
- Cultivating Santa Clara County's future workforce by improving the cognitive skills and emotional well-being of children and ensuring that they enter school ready to learn; and
- Capturing more federal and state child care subsidies, which in addition to bringing new dollars into the local economy, make child care more affordable for Santa Clara County workers.

Like transportation, education, public works, and affordable housing, child care is a necessary and vital part of the economic infrastructure.

The Impact of Child Care on Economic Competitiveness

Investing in the child care infrastructure of Santa Clara County has direct positive benefits for the county's overall economic competitiveness. Like transportation, public works, and affordable housing, child care is a necessary and vital part of the economic infrastructure. Just as a sophisticated highway system makes it possible for Santa Clara County to bring in a skilled workforce for its technology sector, a healthy child care industry enables businesses to attract and retain the best employees and the county to attract and retain the best businesses. While traffic congestion and the high cost of housing lowers quality of life and compels residences and businesses to leave Santa Clara County, convenient and affordable child care services provides incentives for residences or businesses to remain in Santa Clara County, and attracts new businesses to the area. In the same way that local

By the year 2010, it is estimated that 85 % of the labor force will consist of parents with young children needing child care.

Three-fourths of the demand for licensed child care is work-related. There are currently 33,699 children in Santa Clara County whose parents are able to work because their children are in licensed child care.

The supply of licensed child care is a crucial variable in the capacity of a local area to experience economic growth.

government and the private sector collaborate to increase the availability of affordable housing in order to attract a skilled workforce, they benefit from investing together in the child care infrastructure.

By the year 2010, it is estimated that 85% of the labor force will consist of parents with young children needing child care.[42] These changing workforce demographics, as well as current economic trends, have made businesses more concerned about child care and the potential advantages of providing child care benefits to their employees. The licensed child care industry supports Santa Clara County's productivity, enabling businesses to increase output given the same level of input. Licensed child care contributes to productivity by increasing labor force participation, encouraging parents to advance in their positions and achieve higher wages, and by lowering absenteeism and turnover rates.

Increasing employee participation

Child care enables parents to participate in the labor force. In a survey of the child care needs of working parents, 43% of parents indicate that a lack of acceptable child care prevents either them or their spouse from taking a job they want.[43]

Based on estimates that three-fourths of the demand for child care is work-related,[44] there are currently 33,699 children in Santa Clara County whose parents are able to work because their children are in licensed early care and education programs.[45] Other Santa Clara County parents are able to work because they use unlicensed child care, a nanny, or a relative to care for their children. Choosing child care is a complicated process for many working parents, and involves factors such as availability and affordability. In some cases child care is used because a parent chooses to pursue a profession or supplement the household income; in many other cases, it is an economic necessity. In the latter case, affordable child care is vital for a family's economic self-sufficiency. In either case, the provision of child care services increases the available labor pool. While licensed child care is not necessary for all parents who choose to work, it is the only answer for some. The supply of licensed child care is a crucial variable in the capacity of a local area to experience economic growth. There are more than 87,000 children in

[42] US Census Bureau, *Current Population Reports*, P20-514, 1999.
[43] The Harris Poll survey, January 14-18 1998, cited in *Polls Indicate Widespread Support for Investments in Child Care*, the Children's Defense Fund, www.childrensdefense.org/cc_polls.htm.
[44] California Child Care Resource and Referral Network, *1997 California Child Care Portfolio*, cited in Summary.
[45] This figure represents three-fourths of the number of children 0-13 currently enrolled in licensed child care in Santa Clara County.

Nationwide, worker absenteeism due to problems with child care cost U.S. businesses $3 billion per year in lost productivity.

Fifty-two percent of parents surveyed in a poll reported that the problems of finding child care affected their ability to do their job well.

American Express found that a newly created back-up child care service recovered 105 days in worker productivity.

Santa Clara County with all parents in the workforce, indicating an opportunity to expand licensed child care and increase the productivity of working parents.

Increasing Productivity

In addition to enabling parents to enter the workforce, child care also allows parents to be more productive in their jobs. Licensed child care contributes to a stable and productive workforce by lowering absenteeism and turnover rates, which increases productivity for companies. Nationwide, it is estimated that worker absenteeism due directly to child care problems cost U.S. businesses $3 billion per year.[46] In a survey conducted by Parents Magazine, working mothers reported missing two full days and six partial days every six months due to child care problems; working fathers reported missing one full day and four partial days every six months.[47] The same survey highlights the lack of security many parents have in their child care arrangements: only 40% of families surveyed were confident that their current child care arrangements would be in place six months from the date of the survey. This instability translates directly to reduced productivity in the workplace. Fifty-two percent of parents surveyed by the Harris Poll reported that the problems of finding child care affected their ability to do their job well.[48]

Numerous studies point to the importance of child care in retaining employees and improving productivity. Employees using a Nationsbank's child care subsidy program had one third the turnover of non-participants in similar jobs.[49] American Express Financial Advisors found that a newly created back-up child care service recovered 105 days of productivity.[50] As George Lucas, the Chairman of Lucasfilm, Ltd. said, "…managers can't ignore the reality that their employees work hard for

[46] "Many working men and women with children under age 12 experience child care breakdowns, which are linked to higher absenteeism and tardiness. Nationwide, businesses lose $3 billion annually because of child care-related absenteeism, turnover and lost productivity." From *Building Blocks: A Legislator's Guide to Child Care Policy*, National Conference of State Legislatures, 1997, p. vii.

[47] Parents Magazine survey, August 1997, cited by the Children's Defense Fund, *Polls Indicate Widespread Support For Investments In Child Care,* www.childrensdefense.org/cc_polls.htm.

[48] The Harris Poll Survey, January 14-18, 1998, cited by the Children's Defense Fund, *Polls Indicate Widespread Support For Investments In Child Care,* www.childrensdefense.org/cc_polls.htm.

[49] Sandra Burud, citing Rodgers and Associates study in *Evidence That Child Care and Work-Life Initiatives Will Impact Business Goals*, Claremont Graduate University, 1999.

[50] Sandra Burud, *Evidence That Child Care and Work-Life Initiatives Will Impact Business Goals*, Claremont Graduate University, 1999.

them and then go home to work hard for their families. Acknowledging this and assisting in the process wins a loyal and productive staff."[51]

Santa Clara County companies have recognized this need, and responded accordingly--Cisco Systems in San Jose has a full on-site child care facilities serving over 400 children.[52] Mentor Graphics Corporation in San Jose subsidizes a near-site child care facility for their employees, offers a dependent care subsidy program and resource and referral assistance to find convenient, affordable, quality child care.[53]

Two thirds of employers report that benefits of child care programs exceed costs or that the programs are cost neutral.

Increasing productivity by providing child care benefits saves businesses money. A study by the Families and Work Institute found that:

- Two-thirds of employers report that benefits of child care programs exceed costs or that the programs are cost-neutral;
- Three-quarters of employers who offer flexible work schedules find that benefits exceed costs or that the programs are cost-neutral; and
- Of those employers with family leave policies, three-quarters find that benefits exceed costs or that the programs are cost-neutral.[54]

There are a wide range of benefits that businesses can provide to their employees at low or no cost.

There are a range of work/life strategies that businesses can implement to support child care for their employees and thereby increase productivity. During an economic downturn, strategies that boost morale and employee output, but that are cost-neutral, may be particularly advantageous. As Paul Orfalea, the founder of Kinko's put it, "wise business leaders know their biggest asset is morale. In a tight economy, it's all the more important to strengthen your business, and [55] Some strategies include:

- Creating supportive programs for employees, such as flexible schedules, parenting seminars, or lactation rooms;
- Supporting and using community programs, such as local child care networks or resource and referral agencies;
- Encouraging public policy improvements or local projects aimed at increasing supply, affordability, and quality of child care;

---

[51] One Small Step. *Taking Care: An Employer's Guide to Child Care Options.* San Francisco: One Small Step, 2002.
[52] Opinion. *Cisco boldly breaks ground on 21st-century child care.* San Jose Mercury News, December 1, 1999.
[53] Mentor Graphics, as cited on http://www.mentor.com
[54] Ellen Galinsky and James T. Bond, *The 1998 Business Work-Life Study: A Sourcebook*, New York, NY: Work and Families Institute, 1998.
[55] Paul Orfalea. Interview, the National Economic Development and Law Center, 2002.

There are currently over 19,000 married-couple, almost 1,800 single-father, and over 2,900 single-mother families using licensed child care in Santa Clara County to work.

The total earnings for Santa Clara County parents enabled to work from licensed child care, adjusted to 2002, is estimated to be almost $1.07 billion

- Expanding benefits, such as a dependent care assistance plan, emergency back-up child care monies, or family leave plans; and
- Providing early care and education services near-by or on-site.[56]

Increasing Economic Output

To calculate the earnings of primary caregivers who work because of licensed child care, U.S. Census Bureau data on working families with children in the county were used. In Santa Clara County, there are an estimated 39,917 married-couple, 3,743 single-father, and 6,054 single-mother families with children under 6 for whom all parents are in the labor force.[57] Previous surveys estimate that center and family-based care account for 48% of care provided to young children.[58] Thus, we estimate that 19,160 married-couple, 1,797 single-father, and 2,906 single-mother families use licensed child care in Santa Clara County to work.

To estimate the wage earnings of these families, median incomes by household type for Santa Clara County were used. In the case of married-couple families, it was assumed that if child care were not available, only one parent would not work. To estimate these earnings, the 2000 Census median income for females living alone, ages 15 to 64, was used ($45,777). The median income for working single-parent households with children ($47,972 for male parents and $35,375 for female parents) were taken directly from Census 2000.[59] The total earnings for Santa Clara County parents enabled to work from licensed child care, adjusted to 2002, is estimated to be almost $1.07 billion.[60]

The extra wages parents earn after the cost of care is netted out, as well as the gross receipts they generate from the work they do across the county's industries, can be traced as the money ripples through the economy in the form of indirect and induced earnings and other economic benefits.[61] These analyses indicate that the increased economic output from licensed child care:

[56] Chicago Metropolis 2020. *Childcare Solutions for your Employees*. A Best Practice Handbook from Chicago Metropolis 2020, released Summer 2001.
[57] U.S. Census Bureau, Census 2000.
[58] Capizzano, J., Adams, G., and Sonenstein, F. *Child Care Arrangements for Children Under Five: Variation across States*. From The New Federalism: National Survey of America's Families. Washington, D.C.: The Urban Institute, March 2000.
[59] California Employment Development Department, Labor Market Information. *Occupational Employment (2000) and Wage Data (2001), Santa Clara County*.
[60] See Appendix C for detailed methodology.
[61] Steven Moss, MPP, Partner, M. Cubed Consulting, *The Economic Impact of the Child Care Industry in California*, sponsored by the National Economic Development and Law Center, Fall 2001.

- Increases county industry output by $7.22 billion;
- Contributes $4.50 billion value added to the gross product in the county;
- Creates $2.97 billion in total direct, indirect and induced income in Santa Clara County;
- Generates $309 million in indirect county tax revenues; [62]
- Provides for $1.22 billion in property income; and
- Supports approximately 45,900 FTE jobs in the county (see Table 1).

Table 1
Economic Output of Working Parents using Licensed Child Care in Santa Clara County

Economic variable	Contribution to Santa Clara County Economy[63]
Industry Output	$7.22 billion
Value Added to Gross Product	$4.50 billion
Labor Income	$2.97 billion
Property Income	$1.22 billion
Indirect Tax Revenues	$309 million
Employment	45,892 FTE jobs

In studies tracking the success of welfare-to-work programs, child care and transportation were identified as the top two barriers for welfare clients in obtaining and maintaining jobs.

Enabling workforce development

Child care is also a critical component of workforce development. Child care services are needed during various activities, such as education and training, necessary to prepare individuals to enter the workforce. In recognition of this, many universities have developed on-site child care facilities to accommodate parents pursuing both undergraduate and graduate degrees.

[62] Indirect Business Taxes, as reported by IMPLAN, which exclude taxes on profit and income and include taxes such as excise taxes, property taxes, sales taxes paid by businesses, and sales and use taxes paid by individuals to enterprises in the normal course of business.

[63] Please see Appendix B for an explanation of the IMPLAN model.

Mothers whose children participate in a high-quality program achieve higher educational and employment status than mothers whose children are not in high-quality programs.

Forty-six percent of Kindergarten teachers report that half of their class or more have specific problems with entry into Kindergarten.

Children in high-quality child care show greater language development, mathematical ability, greater thinking and attention skills, and fewer behavioral problems in school than children in informal care settings.

Businesses and communities take advantage of available federal subsidies when hiring former welfare recipients and have a special stake in ensuring the availability of affordable child care. In studies tracking the success of welfare-to-work programs, child care and transportation were identified as the top two barriers for welfare clients in obtaining and maintaining jobs. In transportation plans of all nine counties in the Bay Area, including Santa Clara County, getting to and from child care facilities and children's schools was listed as a major transportation barrier to work.[64] On-site or near-by child care options are crucial to enabling employees to get to their jobs.

High-quality child care supports workforce development more substantially than average quality child care. One particular study found that mothers whose children participated in a high-quality program achieved higher educational and employment status than mothers whose children were not in the high-quality program.[65]

Developing the future workforce

In addition to developing the current workforce, child care is a crucial component in developing the future workforce. Schools and universities receive many public investments because their role in educating and preparing children for the future labor market is clear. While recent research demonstrates the importance of child care for school readiness, the concept of cultivating the future workforce in the child care classrooms of America has not yet been well established.

High-quality child care programs improve children's readiness to learn once they enter the public school system, but are not widely available. Consequently, many children enter school with various barriers to learning. Polls administered in research journals about early childhood document this: 46% of Kindergarten teachers report that half of their class or more have specific problems with entry into Kindergarten (such as lack of academic skills and difficulty following directions).[66] Conversely, a number of large-scale, long-term studies have documented that children in high-quality child care are better able to learn and thrive. A University of North Carolina study found that children in high-quality child care showed greater language development, mathematical ability, and attention skills, and fewer behavioral problems in school than

[64] *Regional welfare-to-work transportation plan*. Prepared by Moore, Iacofano, Goltsman, Inc. Oakland, CA: Metropolitan Transportation Commission, 2001.
[65] Discussion of results of *The Abecedarian Study*, as cited on www.fpg.unc.edu/~abc/.
[66] S.E. Rimm-Kaufman, R.C. Pianta, and M.J. Cox, *Kindergarten Teachers Perceive Difficulties in Transitions to School*, Early Childhood Research Quarterly, Vol. 15. no. 2, November 2000.

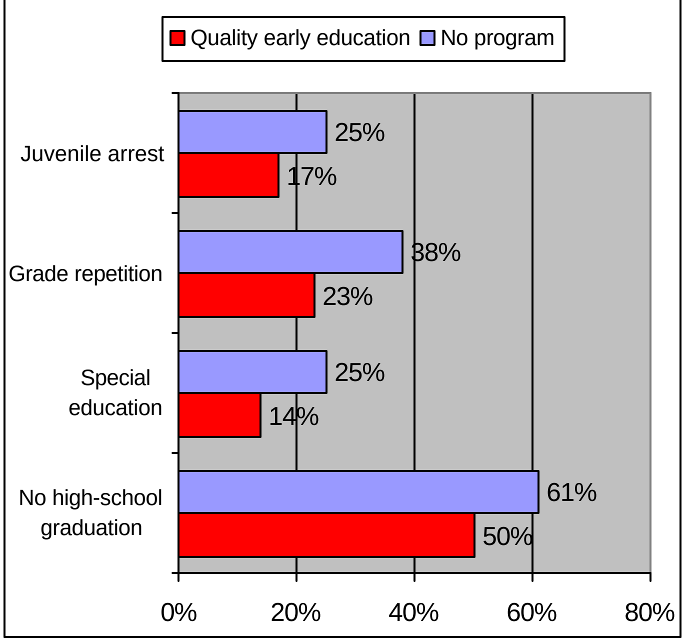
Children in high-quality child care are less likely to repeat a grade or need special education services once they enter the traditional K-12 school system.

children in informal care settings.[67] Another well-known preschool study, known as the Abecedarian Project, concluded that children who participated in an early intervention program that delivers high-quality child care, had higher cognitive test scores than their peers, from toddler years through elementary school.[68]

Reducing future public spending

Not only does high-quality child care better a child's success in Kindergarten and elementary school, but it significantly improves a child's chance of thriving as an adult. Long-term studies following high risk children from pre-school through their adult years document the effects of high-quality child care in adulthood. A study of low-income children in Chicago found significant differences at the end of high school between children in a high-quality child care program and their peers who were not offered the program, in a number of key areas (see Figure 1).[69]

Figure 1
Outcomes, at school exit, of children in Chicago pre-school study



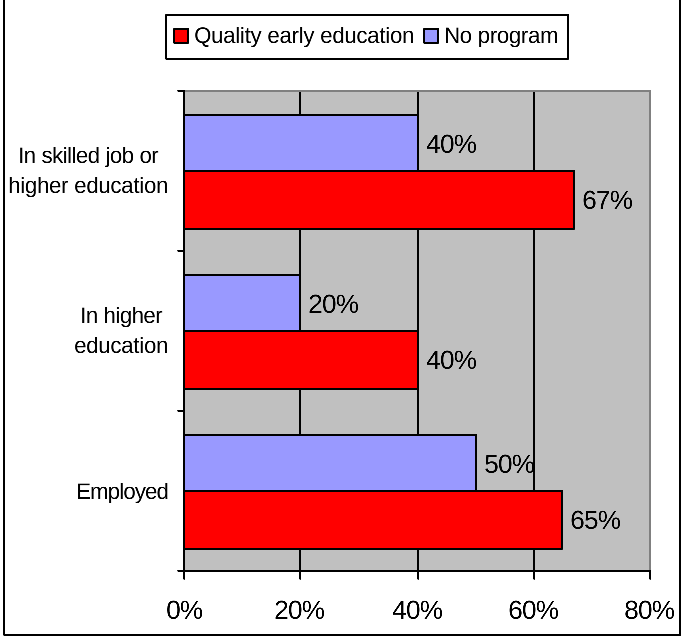
[67] Ellen S. Peisner-Feinberg, et al, *The Children of the Cost, Quality and Outcomes Study Go To School,* Chapel Hill, NC: University of North Carolina, June 1999.
[68] www.fpg.unc.edu/~abc/.
[69] Reynolds, A. J., Temple, J. A., Robertson, D. L., Mann, E. A. Long-term effects of an early childhood intervention on educational achievement and juvenile arrest- A 15-year follow-up of low-income children in public schools. *Journal of American Medical Association,* May 19, 2001, v. 285, no. 18, pages 2239-2346. All values in Figure 1 are statistically significant.

At age 21, individuals who were in high-quality child care programs as children are more likely to be in higher education or in a high-skilled job than similar individuals not in high-quality child care programs as children.

The children in the quality child care program were better achievers throughout traditional school years, less likely to have been in special education or to have repeated a grade, and more likely to have graduated from high school than their peers who were not in the program. In addition, the children in the high-quality child care saved government spending, as they were less likely to have been arrested as juveniles.

The long-term Abecedarian Project followed children through age 21. The study found that, at Kindergarten, the children who participated in an early intervention, quality pre-school program had higher cognitive test scores than their peers in their toddler years. In addition, the study found that, at age 21, children who attend a in the high-quality child care program were more likely to have attended a four-year college, more likely to be currently employed, and more likely to be in a high-skilled job or in higher education at age 21 (see Figure 2).[70]

Figure 2
Outcomes of children
in Abecedarian project, at age 21

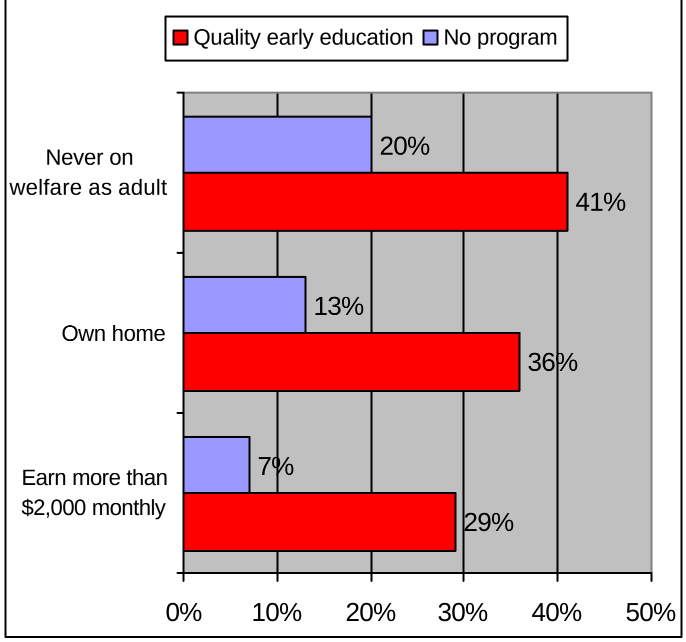


[70] www.fpg.unc.edu/~abc/. All the values in Figure 2 are statistically significant.

Another long-term study of low-income African-American children showed similar benefits of high-quality child care in their economic well-being of the children as adults. The children who attended the child care project, at age 27, earned more money, were more likely to own their own home, and were less likely to be on welfare than their peers who were not offered the program (see Figure 3).[71]

As adults, individuals who were in high-quality child care programs are more likely to own their own homes and less likely ever to have participated in welfare programs.

Figure 3
Outcomes of children
in Perry pre-school study, at age 27



This collection of separate, long-term research establishes a demonstrable link between quality child care and the preparation of qualified, skilled individuals entering the labor force. Cost-benefit analyses of spending on child care show, across all of these long-term studies, that there are significant future savings when money is spent on high-quality child care (see Figure 4).[72]

[71] Schweinwart, L. J., Barnes, H.V., Weikart, D. P. Significant benefits: The High/Scope Perry preschool study through age 27 (Monographs of the High/Scope Educational Research Foundation, 10). Ypsilanti, MI: High/Scope Press, 1993. All the values in Figure 3 are statistically significant.

[72] Reynolds, Arthur J., Temple, Judy A., Robertson, Dylan L., Mann, Emily A. Age 21 Cost-Benefit Analysis of the Title I Chicago Child-Parent Center Program: Executive Summary, 2001. Barnett, Steven, W. *Lives in the Balance: Age 27 benefit-cost analysis of the High/Scope Perry Preschool Program*. Ypsilanti, MI: High/Scope Press, 1996 and *Some simple economics of preschool education*. Presented at the Early Childhood Municipal Leadership Academy, sponsored by the Institute for Youth, Education, and Families, National League of Cities, Alexandria, VA, April, 2002.

Cost-benefit analyses across three long-term studies indicate that every dollar spent on child care saves as much as seven dollars in future public spending.

Nearly 7 million children ages 6 to 14 spend the afternoon after school alone, when juvenile crime peaks.

Ninety-one percent of Police Chiefs agree that "If America does not make greater investments in after-school and educational child care programs to help children and youth now, we will pay more later in crime, welfare, and other costs."

Figure 4
Economic benefits of investing in child care

	Cost	Benefit
Chicago CPC study	$7,000	$48,000
Perry pre-school project	$12,000	$108,000
Abecedarian project	$33,000	$123,000

Across the three studies, every dollar spent on quality child care resulted in as much as seven dollars in future public savings in welfare and the criminal justice system. Government will reduce future public expenditures and save money by investing in quality child care now.

Child care for school-age children

After-school programs for school-age children also serve as an effective crime prevention activity and save public sector dollars. Nationally, nearly 7 million children ages 6 to14 (18% of the children in this age group) are home alone after school each week during the afternoon hours, when juvenile crime peaks.[73] In California, 2% of 6 to 9 year olds are reported to be in self-care as their primary child care arrangement, and another 4% spend some of their time each week in self-care.[74] In the 10 to12 year old age category, 1 in 7 are in self-care as their primary child care arrangement and 1 in 3 spend some of their week in self-care. These figures work out to be slightly lower than the national average. In a 1990 study, eighth graders left home alone after school reported greater use of cigarettes, alcohol, and marijuana than those who were in adult-supervised settings.[75] Risk behaviors in adolescence predict a future of increased criminal behavior and health problems in adulthood. In a George Mason University study, 91% of Police Chiefs surveyed agreed that "If America does not make greater investments in after-school and educational child care programs to help children and youth now, we will pay more later in crime, welfare, and other costs." [76]

---

[73] K. Smith, *Who's Minding the Kids? Child Care Arrangements: Fall 1995.* Current Population Reports P70-70, Washington, DC: US Census Bureau.

[74] Kathleen Snyder and Gina Adams, *State Child Care Profile for Children With Employed Mothers: California*, Assessing the New Federalism, An Urban Institute Program to Assess Changing Social Policies, February 2001.

[75] K.M. Dwyer, et al, *Characteristics of Eighth Grade Students Who Initiate Self-Care in Elementary and Junior High School,* Pediatrics, Vol. 86, No. 3, 1990.

[76] Fight Crime, Invest in Kids, *Poll of Police Chiefs conducted by George Mason University Professors Stephen D. Mastrofski and Scott Keeter.* Washington, DC, November 1, 1999.

Conclusion

Like other economic infrastructures, investments in child care lead to greater productivity and a healthier Santa Clara County economy. Government and businesses benefit from investing in child care. Businesses that provide child care benefits increase company loyalty and productivity, and reduce costs from employee turnover, absenteeism, and low morale. Government benefits from enticing new businesses to Santa Clara County and preparing young children for Kindergarten. Spending $1 on child care today saves an average of almost $7 on future public spending on basic needs subsidies and criminal justice costs[77]. Child care is also a crucial component of workforce development and welfare-to-work strategies for the county.

[77] Barnett, Steven W. *Some simple economics of preschool education.* Presented at the Early Childhood Municipal Leadership Academy, sponsored by the Institute for Youth, Education, and Families, National League of Cities, Alexandria, VA, April, 2002.

Section 5
Conclusion

The licensed child care industry supports an estimated 6,614 local jobs directly and generates about $331 million dollars per year in gross receipts.

Santa Clara County's child care industry is critical to its overall economic vitality and quality of life. The licensed child care industry currently supports an estimated 6,614 local jobs directly and generates about $331 million dollars per year in gross receipts. Annually, $71.7 million is brought into the county through federal and state subsidies for licensed and license-exempt care for low-income families.

The child care industry helps sustain the county's growing workforce by enabling parents to enter the workforce or return to it sooner, thereby increasing overall economic output in the county. In addition, stable, quality child care improves worker productivity and expands the ability of parents to advance in their careers and earnings.

High-quality early child care and education increases school readiness and enables the development of the future workforce. Investing in early care and education improves the success of children in the traditional K-12 public education system, raises test scores and high-school graduation, and lowers grade repetition and special education needs. Every dollar spent on quality care and education saves as much as seven dollars in future public spending.

The demographic and economic profile of Santa Clara County indicates that despite a current downturn in the economy, there is an increasing need for affordable, accessible, quality child care across the county. On its own, the child care industry is unable to expand at a rate adequate to meet this growing need for child care services. Without local long-term planning with a collaboration of stakeholders to address barriers to child care affordability, sustainability, and supply-building, the Santa Clara County child care industry and the county economy as a whole will not grow as quickly as possible in the next few years.

The child care infrastructure, particularly the portion offering subsidized child care, is incapable of meeting residents' needs.

Local Constraints on Child Care Growth in Santa Clara County

Despite record growth of the child care industry in recent years, there remain significant barriers to meeting child care needs. The following factors should be considered in assessing the need to invest more in the child care system:

- Both children and parents suffer from inadequate investments in child care. Parents cannot be reliable, productive workers without dependable child care. Children who do not receive quality child care face increased difficulty succeeding in school.

Economic development planning must include child care to be successful in Santa Clara County.

Child care workforce retention and growth are threatened by the increasing gulf between the low wages of the child care industry and Santa Clara County's cost of living.

Investing in Santa Clara County's child care infrastructure will greatly benefit the county's economy.

- Neither parents nor child care providers can solve the challenge of high child care costs. The federal government, states, local communities, and the private sector must all play a larger role in helping families afford quality child care and in creating enough child care to support economic growth.
- Child care is becoming increasingly less affordable in relation to the cost of living in Santa Clara County. Escalating housing costs consume a more and more disproportionate share of the household income of low- and moderate-income families.
- Welfare reform and the increase of low-wage jobs in Santa Clara County dramatically increase the need for subsidized child care. The current supply does not meet the demand for affordable, quality child care in the county, and, the demand is growing.
- Child care workforce retention and growth are threatened by the increasing gulf between the low wages of the child care industry and Santa Clara County's cost of living. Child care wages are not adequate to encourage long commutes from more affordable housing markets to child care centers in more affluent communities.
- Just as transportation problems will make it harder to get to and from work, they will make it harder to get to and from child care facilities as well.

Recommendations

Child care is part of the economic infrastructure of Santa Clara County, and needs to be incorporated into both short- and long-term economic development planning. Financial institutions, businesses, government leaders, and those working directly in the child care industry must plan together to ensure that the needs of Santa Clara County's parents are met.

Incorporating child care into economic development planning and investment takes concerted time and effort and a collaboration between all stakeholders of the child care industry: financial institutions, businesses, governments, child care providers, and communities. Many jurisdictions across the country realize the value of child care to their economy and community well-being, and bring new partners to the table to tackle the child care shortage. While every community faces different obstacles in the delivery of child care services, a number of strategies have proven effective in more deeply integrating child care into the

Efforts to strengthen the child care infrastructure benefit the child care industry, financing institutions, local government, and the business community alike.

economic development planning process. The following are examples of efforts in California communities to strengthen the child care infrastructure:

- The City of Milpitas in Santa Clara County adopted a Child Care Master Plan developed by a community task force. The Plan incorporates meaningful child care language into the City's Consolidated Plan 2005. It also establishes a policy of fast-tracking the planning and permitting process for child care facilities, and updates the zoning ordinance to establish a Use Permit process for large family child care homes. Child care is rated as a high priority.
- The City of Sunnyvale has a Child Care Manager who is implementing several initiatives that are supported by the City. For example, the City is coordinating a workshop series for family child care providers and formally recognizing family and center based child care providers who are committed to enhancing the quality of child care they provide by attending professional development courses.
- The City of San Jose drafted a strategic plan "Investing in Our Future," developed with community input, as a blueprint for addressing the city's child care needs. The San Jose Child Care Commission and the Office of Child Care will work together to develop a new master plan for child care for the city based on the strategic plan.
- Child care, for the first time, is a traffic mitigation measure in San Mateo County. The City/County Association of Governments for San Mateo County (C/CAG) adopted child care as a mitigation measure and incentive in the C/CAG Transportation Demand Management Program. The measure applies to all new large developments throughout the county.
- The Santa Cruz Community Credit Union tripled the size of its loan fund for child care providers over the past two years. The Credit Union now has $150,000 in loan funds, continues operating with an extremely low default rate, and is pursuing new funding sources between $300,000 and $500,000.
- The Kern County Local Investment in Child Care Project provides training workshops in both Spanish and English to assist child care providers in understanding fundamental business principles. To date, over 400 participants have been trained in bookkeeping, understanding taxes, and marketing a child care business. These trainings are held in collaboration with the Small Business Development Center.

All of these examples are the result of a collaboration or partnership between financial institutions, businesses, government leaders, and the child care industry to strengthen the child care economic infrastructure. By combining the expertise of these different areas, the child care industry can meet Santa Clara County's needs. There are a number of specific areas in which various stakeholders can support child care.

Financial institutions recommendations

Financial institutions have often perceived child care businesses as high-risk, and child care providers have often not thought of themselves as businesses that can carry debt. Programs that have developed loan funds for child care providers with business training, however, have been very successful.

- Develop loan products, such as micro-loans or low-interest loan programs, with alternative payment structures for child care businesses.
- Provide business plan, marketing, and loan application assistance.

Business recommendations

There are a wide range of options that businesses can choose to ensure that Santa Clara County has an adequate child care infrastructure for their employees.

- Become a partner in long-term planning and strategizing about strengthening the child care infrastructure.
- Help create innovative public/private partnerships to purchase property, develop facilities, and/or strengthen existing child care enterprises.
- Work with City Council representatives and Chambers of Commerce to get child care issues on the policy agenda.
- Include child care facilities as part of commercial and industrial developments, to benefit the company, its employees, and children alike.
- Provide child care benefits to employees, ranging from flexible work hours or emergency back-up care support to pre-tax "cafeteria" plans that include child care options or building a child care center on-site.

Government recommendations

Like transportation, housing, public works, and other economic infrastructures, the child care needs of Santa Clara County residents will not be met without government support and planning.

- Hire a child care coordinator in each city.

- Streamline and coordinate the permitting and planning process to alleviate conflicting requirements from different government agencies, restrictive zoning regulations, and lengthy, costly, and complex approval processes.
- Incorporate language that supports child care development into the General Plan of the County and every city.
- Develop strategies for sustained funding that provide workforce development for child care professionals, including recruitment, training, and compensation.
- Identify and secure suitable land for the development of new facilities or expansion of existing ones. Find vacant buildings and develop a non-profit child care business.
- Develop strategies to make child care affordable for low-income families in Santa Clara County.

Efforts to strengthen the child care infrastructure benefit the child care industry, financing institutions, local government, and the business community alike.

Efforts to strengthen the child care infrastructure benefit the child care industry, financing institutions, local government, and the business community alike. The collaborations developed between entities previously disengaged from child care issues serve to educate all of the stakeholders about the importance of a healthy child care infrastructure, and help to develop cost-effective solutions to local shortages in the supply of child care.

The lack of complete data available on the child care industry makes it difficult to assess its size and contribution to the local economy. As a result, its significance to the health of the local economy is largely unrecognized. The methodologies in this report represent the first serious effort at making such economic assessments of the child care industry. Although more and better data on child care is needed, the analysis presented here demonstrates that child care is not merely a supportive social service, but also an established industry that helps fuel Santa Clara County's overall economic growth. The work presented in this report was made possible by a generous grant from the David and Lucile Packard Foundation. The Santa Clara County LINCC project will lose funding in March, 2002 and seeks community support to continue this great work. The Early Care and Education Industry is an essential part of the Santa Clara County economic infrastructure. Efforts to strengthen this industry will result in a strengthening of the economy as a whole.

To get involved, please contact Martin Selznick of the Local Planning Council at (408) 453-6649 to learn how you can support efforts to help improve this important industry.

Appendix A

Methodology for Calculating Gross Receipts and Employment for Licensed Child Care

Because of the inaccuracy of traditional economic accounting tools that apply to child care, NEDLC and the four original LINCC counties created a sound methodology for measuring direct employment and gross receipts for the licensed child care field. This methodology utilizes up-to-date statistics on licensed child care facilities maintained by local Resource and Referral (R&R) Agencies. R&R's are required by California law to maintain data on licensed child care capacity, and most record data on vacancies, from which enrollment can be derived.

The NEDLC methodology outlined below generates the most accurate estimates of employment and gross receipts because it utilizes up-to-date information representing all forms of licensed child care. The data is derived from local child care resource and referral agency data on capacity, enrollment, and average tuition rates, based on age group and full- and part-time care.

Gross Receipts

For both family and center-based care, the estimates of gross receipts represent a "snapshot" of the industry taken at a particular time. It is important to note that counties capture gross receipts primarily for licensed care only; adding all unlicensed care would significantly increase the gross receipts figures.

Family Child Care Homes

Licensed Capacity - Vacant Slots = Enrollment[78]

Enrollment x Average Cost/Child/Year = Gross Receipts

Centers

"Center-based care" in this case includes Head Start and State Preschool, nonprofit, school-affiliated, and proprietary centers.

Licensed Capacity - Vacant Slots = Enrollment

Enrollment x Average Cost/Child/Year = 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

[78] Actual enrollment may be different from the number of licensed slots due to children sharing slots. For example, in Santa Cruz County, there are 8,213 licensed slots serving 9,064 children. Because most counties do not have access to actual enrollment figures, this methodology was developed to approximate them

Centers
Teaching Staff:
These figures are calculated based on the number and ages of children for which a center is licensed, and the state-required ratio of staff to children under that license. In general, younger children require a lower staff-to-child ratio, so 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 will require only one adult to care for those children.

Multiply the average "FTE for Staff" by the number of staff required by licensing:
 # hours open/8 hours = FTE for Staff

1. Center-based infant care:
   Accredited or Title 5 = (1 employee for every 3 children) x (FTE for staff)
   Title 22 = (1 employee for every 4 children) x (FTE for staff)
2. Center-based preschool care:
   Title 5 = (1 employee for every 8 children) x (FTE for staff)
   Title 22 = (1 employee for every 12 children) x (FTE for staff)
3. Programs for school-age youth
   Title 5/Title 22 = (1 employee for every 14 children) x (FTE for staff)

Non-Teaching Staff:
*Custodians/Cooks/Receptionist*s: Many centers fill these positions with teaching staff. Larger centers tend to have separate employees in these roles. Counties are the best judges of the general practices in their area. The following are suggested guidelines counties can utilize to maintain consistent estimates. Each slot except "Family Worker" can be considered full time.

*Custodian*s: Typical practice is to have one custodian for every center over 80 children. Therefore, the formula is: **# of centers with slots for more than 80 children = # of custodians**

Cooks: Typical practice is that state- funded centers and larger centers have cooks:
# of state-funded centers + number of non-state funded centers with over 80 children = # of cooks

Receptionists: Typical practice is to have one receptionist for every center over 80 Children: **# of centers with slots for more than 80 children = # of receptionists**

Non-teaching supervisory staff (directors): Typical practice is to have one director for every 80 children: **# of licensed slots / 80 = # of supervisory staff**

Family workers: Typical practice is that they are employed part-time (average 50% time) at state-funded centers: **# of state-funded centers / 2 = # of family workers**

Administrative (off site): Typical practice is for larger centers to have off-site as well as on-site administrators: **# of centers with slots for over 80 children = # of administrators.**

Appendix B
Explanation of IMPLAN Input-Output Model

Estimates for the impact of child care services on indirect and induced earnings and other productivity effects are based on application of the Santa Clara County module of the IMPLAN Input-Output (I-O) model. Initially developed for use by the U.S. Forest Service, IMPLAN is now used in many fields. It relies on the same basic model structure and underlying economic data as the U.S. Department of Commerce Bureau of Economic Analysis Regional Impact Modeling System (RIMS), the model that was used in the LINCC counties' analyses.

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 indicates 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 the demand for the inputs to these services. For example, producing a ton of steel may require three workers and a particular set of equipment, which would not be required if the steel were no longer needed. Likewise, child care programs must purchase educational materials, facilities, and professional staff services.

IMPLAN contains more than five hundred economic sectors, and uses economic census data to compile county-level wage and salary information at the four-digit standard industrial code (SIC) level. National data are adjusted for the industrial and trading patterns for the subject region—in this case, California. 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).

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

- Direct effects: Effects introduced into the state's 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 (for example, an increase) 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 the project. These effects reflect changes in the state's economy caused by changes (for instance, increases) in spending patterns as a result of the direct and indirect activity.

The multiplier effect, identified as Social Account Matrix "SAM" 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, or used to pay debt. Employment multipliers—the number of jobs created per million dollars of investment—can range from five to sixty-five, depending on the activity. Alternatively, employment multipliers can relate to the number of indirect and induced jobs engendered by a dollar of investment in direct employment.

Appendix C

Methodology for Calculating Productivity for Licensed Child Care

To calculate the earnings of primary caregivers who can get to work because of licensed child care, U.S. Census Bureau data on working families with children in the county were used. Assuming that families with all parents working have, on average, the same number of children as those who have a parent at home, in Santa Clara County, there are an estimated 39,917 married-couple, 3,743 single-father, and 6,054 single-mother families with children under 6 for whom all parents are in the labor force.[79] Previous studies estimate that center and family-based care account for 48 per cent of care provided to children aged five and under.[80] We estimate, then, that, 19,160 married couple, 1,797 single-father, and 2,906 single-mother families use licensed child care in Santa Clara County to work.

To estimate the wage earnings of these families, median income by household type for Santa Clara County were used. In the case of married-couple families, it was assumed that if child care were not available, only one parent would not work, and to estimate these earning, the median income for females living alone, age 15 to 64, was used ($45,777). The median income for working single-parent households with children ($47,972 for males and $35,375 for females) were taken directly form the 2000 Census.[81] Thus, the total earnings for Santa Clara County parents enabled to work from licensed child care is estimated to be $1.07 billion.

Using IMPLAN (see Appendix B), we then estimated how much $1.07 billion of labor income affects the gross receipts for all industries of the county. Assuming that parents work in even proportions across all Santa Clara County industries (there are no data measuring which industries employ more parents than others), we estimated the direct effects of their work in each sector, which produces gross receipts of $2.61 billion for Santa Clara County. Using the IMPLAN economic model for the county, we can analyze how an output of this amount ripples through the economy with indirect and induced effects. Finally, the dollar amounts were adjusted to 2002 using the average consumer price index (CPI).

---

[79] U.S. Census Bureau, Census 2000.

[80] Capizzano, J., Adams, G., and Sonenstein, F. *Child Care Arrangements for Children Under Five: Variation across States*. From The New Federalism: National Survey of America's Families. Washington, D.C.: The Urban Institute, March 2000.

[81] California Employment Development Department, Labor Market Information. *Occupational Employment (2000) and Wage Data (2001), Santa Clara County*.