CLPP working paper

FROM SERVANTS TO ENGINEERS: MEXICAN IMMIGRATION AND LABOR MARKETS IN THE SAN FRANCISCO BAY AREA

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January 1997

A Publication of the
Chicano/Latino Policy Project

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CLPP Working Paper
California Policy Seminar
Volume 4•Number 3•1997

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The Chicano/Latino Policy Project is an affiliated research program of the Institute for the Study of Social Change at the University of California at Berkeley. The Policy Project coordinates and develops research on public policy issues related to Latinos in the United States and serves as a component unit of a multi-campus Latino policy studies program of the University of California system. The Policy Project's current priority research areas are immigration, education, health care, political participation and labor mobility with an emphasis on the impact of urban and working poverty.

The Institute for the Study of Social Change is an organized research unit at the University of California at Berkeley devoted to studies that will increase understanding of the mechanisms of social change for the general improvement of social life. It has a particular mandate to conduct research and to provide research training on matters of social stratification and differentiation, including the condition of both economically and politically depressed minorities as well as the more privileged strata.

Author's Note: I was able to conduct this research project thanks to the financial support of the Chicano/Latino Policy Project and the Inter-University Program for Latino Research. Although, I am solely responsible for the content of this paper, I am indebted to Alex Saragoza, Luis Guarnizo and Jesus Martinez for their comments and ideas. UC Data granted me access to its census database and Jon Styles provided valuable technical assistance.

The Working Paper Series is supported through a grant from the UC Committee on Latino Research administered through the University of California Office of the President. The research was supported by a Research Center Development grant to the Policy Project from the Inter-University Program (IUP) for Latino Research. The views and opinions expressed in this working paper are those of the author and do not necessarily represent those of the Chicano/Latino Policy Project, the Institute for the Study of Social Change, the California Policy Seminar, the Regents of the University of California or those of the funding agency.

TABLE OF CONTENTS

ABSTRACT

This working paper examines the relationship between the transformation of labor markets and the role of immigrant workers in a regional context. It analyzes the participation of Mexican immigrants in the labor markets of the San Francisco Bay Area during the 1980s, using data from the Bureau of the Census (Public Use Microdata Samples). In order to analyze employment trends, the paper compares the performance of three groups: native-born, Asian immigrants, and Mexican immigrants.

The study focuses on two Bay Area counties that experienced a very high influx of immigrants during the 1980s: Santa Clara and Contra Costa counties. Santa Clara County is home to the Silicon Valley, the most successful high-technology region in the world. The labor demands of Silicon Valley have attracted both highly educated and unskilled immigrants. Contra Costa County, with a history of using Mexican-origin agricultural labor, has recently seen the rapid growth of such sectors as finance, insurance, and real estate that have produced new labor demands.

The results suggest that the constant demand for immigrant labor, the formation of "daughter communities", and the implementation of immigration policies have led to the consolidation of the Bay Area as an ensemble of fragmented ethnic communities that have secured access to distinct niches in the labor market. Asian immigrants, who seem to follow the employment patterns of native-born workers, find jobs in the most dynamic sectors of the regional economy, while most Mexican immigrants obtain jobs in more traditional sectors such as construction, agriculture, and personal services. Some highly educated Mexican immigrants have also responded to the labor demands created by the development of the high technology sector in Silicon Valley.

I. INTRODUCTION

The 1980s were the decade of immigration for the United States as an unprecedented number of immigrants entered the country. Between 1982 and 1991, approximately 8.6 million immigrants were granted permanent residency, a figure approaching the highest level of admissions—10.1 million in the period 1905-1914 (Immigration and Naturalization Service, 1992: 18). What was true for the United States as a whole was especially true for California. While California's native-born population increased by 16 percent during this decade, its foreign-born population grew by 80 percent. By 1990, one in every five California residents was an immigrant.

Most of the newcomers to the United States during the 1980s were legal immigrants, but many undocumented workers entered the country during the same period. Nearly three million such persons who presumably already resided in the United States became legal residents after Congress passed the Immigration Reform and Control Act (IRCA), in 1986. IRCA offered amnesty for undocumented immigrants already residing in the United States. The Immigration and Naturalization Service (INS) has estimated that as of October 1992 there were 3.4 million undocumented persons in the United States. The largest portion of them—1.4 million, 43 percent of the total—were living in California; of these, the largest number, 786,000, were Mexican, followed by 205,000 Salvadorians, 88,000 Guatemalans and 60,000 Filipinos, among others (Warren 1994).

Although historically most Mexican migrants in California have worked temporarily or seasonally, a large portion of this population has settled permanently. Mexican immigrants have traditionally concentrated in the Los Angeles metropolitan area, in other smaller cities, and in rural areas, where they have formed Chicano and Mexican enclaves, or "colonias." These settlements are the result of the large influx of Chicanos and Mexican immigrants combined with the decrease in the number of white people (Palerm 1991, Rochin and Castillo 1995). More recently, Mexican immigrants have begun to move into some suburbs, the nontraditional receiving areas that are characterized by high percentages of an affluent, nonminority population. This movement reflects the new labor requirements brought about by the "suburbanization of jobs" and the emergence of a new structure of consumption that is occurring in many regions of the United States.

These new trends have brought to the forefront an important issue that is the subject of heated debate: the job competition between native and immigrant workers. According to Valenzuela (1993), three theories have been proposed to explain the effects of immigration on U.S. labor markets: displacement, segmentation, and "queuing" theories. The neoclassical displacement theory argues that an increased supply of foreign workers further pushes domestic wages down by expanding the labor supply in the face of a stable demand for labor. Immigrants displace native-born workers because the former are assumed to be perfect lower cost substitutes for the latter. According to segmentation theory, the U.S. labor market is sufficiently divided between immigrant and nonimmigrant jobs so that domestic workers are insulated from

direct displacement effects of employing immigrants. Although native workers may be employed in unskilled jobs, they are nevertheless protected from competition because their jobs may be covered by union contracts. The queuing theory, which is a variant of segmentation theory, argues that immigrants take jobs that native workers no longer want; that is, a job ladder, or queue, for immigrant workers exists. Over time, native-born labor moves on to better occupations, vacating "lower-rung" and less desirable jobs that various groups of newcomers then take. In connection with the queuing theory of labor markets, Waldinger (1987) found that in New York, the shift from goods to services was accompanied by the decline in the availability of white workers creating a replacement demand for nonwhite workers. Scott (1988: 226) has argued that labor markets in American metropolises require the continual replenishment of pools of cheap, malleable labor suitable for employment in labor-intensive manufacturing and service industries.

An important component of urban and regional economies is self-employment. As immigration to the United States has grown rapidly in the last two decades, immigrant-owned businesses have also expanded rapidly in metropolitan areas such as New York, Los Angeles, and Miami, and in smaller cities as well. Cultural theories have not explained the propensity of certain ethnic groups, such as the Chinese, Japanese, Koreans, Italians, and Cubans, to have high levels of self-employment (Guarnizo 1992). More recently, analysis of the immigrant economy has centered on the debate over the use of the concept of ethnic enclave.

Wilson and Portes (1980) created the concept when they demonstrated that Cuban refugees who arrived in the early 1970s not only worked for coethnics in great numbers but also were doing better than those employed in white-owned secondary sector firms. The term "ethnic enclave" implies that ethnic solidarity modifies class relations within the enclave. Waldinger (1993) argues that thinking of the ethnic economy as an enclave elevates spatial concentration as a defining characteristic; for this reason, he proposes to drop the term "enclave" and simply refer to ethnic economies.

The immigrant economy is closely related to the emergence of the informal economy and the casualization of work in developed countries. Although the informal economy has been conceived as a remnant of old relationships of production, it is growing in highly institutionalized economies at the expense of formalized work relationships. The question posed by Sassen (1989: 60) remains: Is the informal economy in advanced industrialized countries the consequence of advanced capitalism or rather the result of Third World immigration?

In this paper I examine the relationship between the transformation of labor markets and the role of immigration in a regional context. To this end, I analyze the participation of Mexican immigrants in the labor markets of the San Francisco Bay Area during the 1980s, using primarily data from the Bureau of the Census (Public Use Microdata Samples (PUMS) and from the California Employment Development

Department. Using the PUMS, I compare three groups (native-borns, Asian immigrants, and Mexican immigrants) in order to analyze employment trends.[1]

The study focuses on two Bay Area counties that experienced a very high influx of immigrants during the 1980s: Santa Clara and Contra Costa counties. Santa Clara County, encompassing the San Jose metropolitan area, is home to the Silicon Valley, the most successful high-technology region in the world. I use the term "high technology" to refer to the sector that encompasses the following industries: computing and office equipment, communications equipment, electronic components, guided missiles and space vehicles, instruments, and software and data processing (see Saxenian 1994).[2] The labor demands of Silicon Valley have attracted both highly educated and unskilled immigrants. Although Contra Costa County has a history of using agricultural labor of Mexican origin, more recently the county has experienced the rapid growth of such sectors as finance, insurance, and real estate that have produced new labor demands.

The paper is divided into four sections. The first section offers an overview of the most relevant demographic and economic trends that took place in the Bay Area during the 1980s. The second and third sections focus successively on Santa Clara and Contra Costa counties to examine the employment patterns of Mexican immigrants. The final section discusses the main conclusions of the study.

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[1] The PUMS of the 1990 Census of Population and Housing used in this paper contain records representing 5 percent of the housing units and their occupants. The PUMS allow native and foreign-born persons to be identified by place of birth.

[2] I use the definition of the high-technology sector proposed by Saxenian (1994: 209). The industries included in this sector are identified by the following Standard Industrial Codes (SIC): Computer and Office Equipment (SIC 357), Communications Equipment (SIC 366), Electronic Components and Accessories (SIC 367), Guided Missiles and Space Vehicles and Parts (SIC 376), Instruments (SIC 38), and Computer Programming and Data Processing (SIC 737).

II. THE SAN FRANCISCO BAY AREA: DEMOGRAPHIC AND ECONOMIC TRENDS (1980-1990)

The San Francisco Bay Area is a singular region that stands out in the world economy.[3] In addition to its physical grandeur, the region has become a center of technological and cultural innovation. The Bay Area is the wealthiest metropolitan area in the United States and, according to Walker (1995), is also the capital of "Yuppie America" because of the disproportionate concentration of technicians, professionals, and managers who enjoy high incomes. This cosmopolitan metropolis also lodges a polyglot working class that includes large numbers of Asian and Latin American immigrants. Nine counties form the Bay Area: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma. In 1990, this region had over five million inhabitants.

Since the 1970s the Bay Area's economy has been shaped by the role of San Francisco as a West Coast financial center and the consolidation of Santa Clara County as a major high-technology center (Walker, 1990; Kroll, 1986). The regional economy has also been affected by two trends that have taken place at the state level: 1) increased dependence on service sectors (with emphasis on advanced business service) and high-technology manufacturing; and, 2) deindustrialization in "smokestack" durable-goods industries. While the high-technology industries boomed in the period 1974 -1987, the traditional unionized durable-goods manufacturing sectors (primary and fabricated metals and motor vehicles) stagnated or declined, as did their supplier industries (glass, rubber, and automobile parts) (Teitz and Shapira, 1989).

During the 1970s, population in the Bay Area grew at a more moderate pace than in other parts of California and in the United States as a whole. Large segments of the population continued to move from the older cities to the suburbs. As a result, the region's fast growing counties were located at its periphery: Santa Clara, Contra Costa, and Sonoma. Thus, while San Francisco and Oakland lost population, newer cities located in the suburbs, such as Concord in Contra Costa County and San Jose in Santa Clara County, grew rapidly. During the 1980s, there was a surge of population growth in almost every county of the region. Santa Clara and Contra Costa continued leading population growth, adding nearly 450,000 new residents. The counties of Alameda, San Mateo and San Francisco, which grew very slowly or lost population in the 1970s, grew significantly during the 1980s. For this reason, some central cities grew again, in some cases more rapidly than the suburbs. Only Marin and Napa counties did not grow during the decade (Landis, 1993; Kroll, 1986).

Landis (1993) notes that the Bay Area cities that experienced the most rapid growth in the period 1970-1990 are located along one of the major highway corridors—U.S. 101, Interstate 880, 680, and 80. These cities were also developed in the post-World War II era, have moderate population density, contain significant amounts of multi-family housing, and are located near new suburban employment centers.

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[3] For a fine review of the political economy of the San Francisco Bay Area, see Walker (1990).

In the period 1970-1990, California experienced tremendous job growth. During the 1970s and early 1980s, the Bay Area followed California's employment growth patterns: First, there was an average annual growth rate of around 4 percent and then a slower growth rate of 2 percent, reflecting the nationwide recession of the early 1980s. Much of the employment growth in recent years has occurred in some of the newly developing suburban areas. Over 40 percent of the region's job growth occurred in Santa Clara County between 1972 and 1985. The city of Fremont in Alameda County also benefited by the spreading wave of growth from Silicon Valley.

Similarly, the shift of employment in banking, finance, business and other services, distribution and retailing from the older, central cities of San Francisco and Oakland increased the number of jobs in new suburban areas. While Napa, Sonoma, and Solano counties experienced relatively rapid job growth in services and in trade, finance, insurance, and real estate, office square footage in suburban Alameda and Contra Costa (the 680 corridor) increased very rapidly through the relocation of back offices of major banks and corporations (Landis, 1993: Kroll, 1986).

The Bay Area epitomizes the United States as a federation of fragmented ethnic communities that have been created by real estate promotion, residential exclusion, immigration policies, and social networking along ethnic lines. Walker (1990), in his geography of ethnic and class segregation in the Bay Area, argues that the white non-Hispanic population concentrates in the wealthy areas of Pacific Heights in San Francisco, Piedmont, Marin County, and in the suburbs of Santa Clara, Contra Costa, and Solano counties. Blacks are heavily concentrated in the flatlands of the East Bay from Oakland to Richmond and in Hunters Point in San Francisco. Most of the black residential districts are located in old, decaying industrial zones that date to World War II. The Asian population concentrates mainly in Santa Clara, San Francisco, and Alameda counties. San Francisco's Chinatown is the focus of the Chinese community, although the better-off immigrants and U.S.-born Chinese have been expanding into the city's Richmond and Sunset districts. The Filipinos have followed the tracks of an earlier working class expansion from the Mission District into Daly City and South San Francisco. The wealthier Vietnamese, who entered the United States after the fall of Saigon, live in East San Jose, but the most recent immigrants from Indochina, who are much poorer and include the Khmers and the Kmung, have settled mainly in the Tenderloin in San Francisco and in the Chinatowns of Oakland and San Francisco. Finally, Walker (1990) has found that the communities of Mexican-origin people have grown in places were Mexican farm workers and cannery laborers began toiling in the 1920s. For this reason, the largest concentration is located in East San Jose, with other important communities in the former agricultural towns of Fruitvale (now a district in East Oakland), Hayward, Union City, Fremont, and Brentwood.

In the early 1980s, Mexican immigrants continued to concentrate in a few places in the Bay Area. Santa Clara County contained by far the largest Mexican community. A large number lived in San Francisco's Mission District, which also accommodates the largest concentration of Central Americans. There were also large numbers of Mexicans living in San Mateo, South San Francisco, Burlingame, Union

City, and Newark. Smaller groups lived in Richmond, Martinez, and Vallejo, and there were farm workers in Solano, Sonoma, and Napa counties (Cornelius et al., 1982).

Cornelius and his associates (1982: 24) also found that certain industries were heavily dependent on Mexican labor. For instance, employers in nurseries in southern Alameda County depended almost entirely on Mexican workers. In Santa Clara County, 44 percent of the factory operatives in nondurable-goods manufacturing and 52 percent of construction laborers were Latinos. Finally, nondurable-goods factories in San Mateo County showed a high concentration of Latinos.

In my own research I have found that the development of social networks has been essential to connecting communities in Mexico with employers in the Bay Area. For instance, a large number of immigrants from Chavinda, Michoacán, work in a major restaurant of the East Bay, where they are employed as dishwashers, cooks' helpers, cooks, meat cutters, and janitors. Of the approximately 250 employees who worked the restaurant's three shifts in the early 1980s, some 100 were from Chavinda. The connection began in the early 1970s when a *campesino* from Chavinda took a job in the restaurant as helper to the headwaiter. After a few years he himself became headwaiter, and the restaurant owner helped him arrange permanent residency for himself and his family. His position gave him the opportunity to offer work to friends, relatives, and many more people from Chavinda (Massey et al, 1987).

In the southern part of the Bay Area there are close to 40 families from the community of Tlacuitapa in the Los Altos de Jalisco region. This concentration began at the start of the 1970s as Tlacuitapeño families that had previously settled near Sacramento gradually moved. Their principal reason for moving was a desire to leave agricultural jobs to seek urban employment that was more permanent and higher paying. Some of the Tlacuitapeños tried to get jobs in the General Motors plant in Fremont. By 1988, these migrants had found employment in the region. Most of the men work in restaurants and hotels and in janitorial work. A few—especially those who already were legal residents—work in a salt factory, for companies that build chain link fences, or in construction. Others work in a mattress factory or as farm workers in flower growing and nurseries. Women, besides doing farm work in the flower industry, work in dry cleaning, hotels, and restaurants, or clean private homes and provide child care at home (Alarcón 1995).

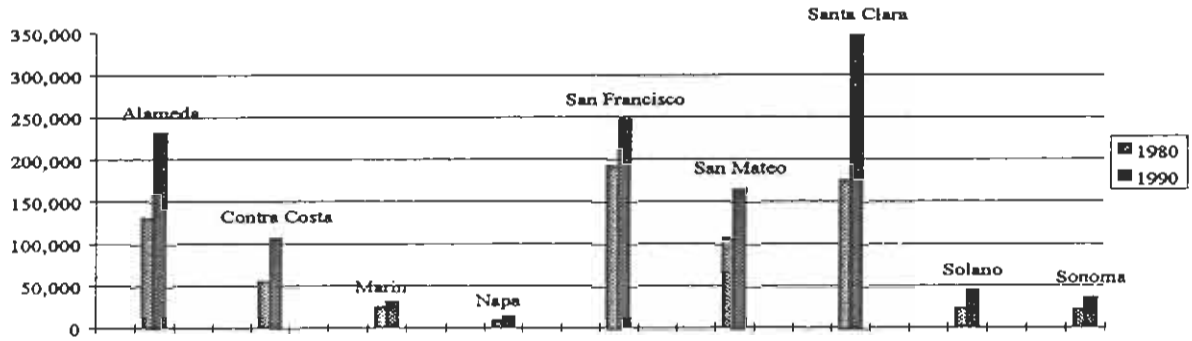
Finally, most of the workers who are employed in the cafes surrounding the University of California at Berkeley campus are from Tepatitlán, a small city also in the Los Altos de Jalisco region. These workers seem to play a key role in improving the academic performance and the quality of life of faculty and students of this university.

Figure 1 shows three important aspects of international migration to the San Francisco Bay Area. First, Santa Clara, Solano, and Contra Costa counties (in descending order) had the highest growth rates in foreign-born population during the 1980s. Interestingly, these counties, which nearly doubled their immigrant populations in the period, also underwent rapid growth in general population and employment during the decade. Second, Santa Clara County, which has created most of the jobs in the region,

surpassed San Francisco as the county with the largest number of immigrants in 1990. Third, except in wealthy Marin and the already ethnically diverse San Francisco, the foreign-born population throughout the Bay Area grew substantially during the period. San Francisco, San Mateo, and Santa Clara counties have a disproportionate share of the immigrant population, with percentages above the state's share (see Appendix A).

Figure 1

Foreign Born Population in San Francisco Bay Area Counties, 1980-1990



III. SANTA CLARA COUNTY: NEW AND OLD IMMIGRANTS IN A HIGH-TECHNOLOGY REGION

In 1990, population in the San Jose metropolitan area, which includes all of Santa Clara County, reached one and a half million. This metropolitan area is divided between South County and North County. The former has retained more of the agricultural base that once extended throughout the entire area. In contrast, North County is densely populated, extensively urbanized, and heavily industrialized, and includes the core of Silicon Valley (California Employment Development Department, 1994a).[4]

In 1990 Santa Clara County became the home of the largest number of immigrants in the San Francisco Bay Area. Between 1980 and 1990, while total population in the county grew 16 percent, the foreign-born population increased 97 percent (see Appendix A). The population of Santa Clara County in 1990 was 58 percent white, 4 percent black, 17 percent Asian, and 21 percent Hispanic During this period, whites increased 0.4 percent, blacks 29 percent, Asians 157 percent, and Hispanics 36 percent. The five contributors of the largest numbers of legal immigrants to this metropolitan area in 1991 were Mexico, Vietnam, the Philippines, India, and China (Immigration and Naturalization Service, 1992).

Data on the number of Limited English Proficient (LEP) K-12 students is a good proxy with which to analyze the arrival of immigrant families. The data on Santa Clara County reveal that the two largest groups in the county are Spanish-speaking and Vietnamese-speaking children. They grew 150 and 109 percent respectively between 1982 and 1994, and constituted nearly 75 percent of all the LEP students in the county in 1994. (see Appendix B).

During the 1980s, the cities of San Jose, Gilroy, Mountain View, Sunnyvale, and Milpitas received the bulk of the Latin American immigration, most of it from Mexico. On the other hand, the Latino population grew very slowly in the cities with the highest household incomes, such as Los Gatos, Los Altos, and Saratoga (see Appendix C).

Saxenian (1985) has observed that the explosive growth of the microelectronics firms led to a segmentation of labor markets and social spaces in the county. While professionals and highly educated workers responded to the demand for scientists and engineers, the demand for production workers attracted displaced Latinos and Filipino American agricultural workers from California and the Southwest, Mexican and Filipino immigrants, and a small number of blacks and Native Americans. Scientists and engineers tended to settle in exclusive areas such as Palo Alto, while the sprawling city of San Jose became the home of less-skilled immigrants.

Since the 1970s, the high-technology sector has been recognized as a fundamental engine of regional economic development. In particular, Silicon Valley has attracted worldwide attention as a leading

[4] Landis (1993: 34) defines Silicon Valley as being formed by parts of the cities of Menlo Park, Palo Alto, Mountain View, Campbell, Sunnyvale, Santa Clara, San Jose, Milpitas, Fremont in Alameda County, and Scotts Valley in Santa Cruz County.

center of innovation and rapid economic growth. Silicon Valley is home to one-third of the 100 largest high technology companies created in the United States since 1965. In addition, firms in the valley created some 150,000 new high technology-related jobs between 1975 and 1990 (Saxenian, 1994).

Table 1 shows that durable-goods manufacturing, composed mainly of high-technology industries (89 percent), was the largest employer in 1990. However, this sector lost many jobs between 1983 and 1990, while jobs in wholesale trade and services increased rapidly.[5]

Table 1
Employment by industry in Santa Clara County, 1983-1990

Year	1983	1990	Absolute Change	Percent Change
Industry				
Agriculture	4,900	4,900	0	0
Construction	24,000	29,500	5,500	22.9
Manufacturing				
Nondurable Goods	26,900	27,200	300	1.1
Durable Goods	236,300	231,100	-5,200	-2.2
Transportation and Public Utilities	21,100	22,200	1,100	5.2
Wholesale Trade	34,500	52,900	18,400	53.3
Retail Trade	98,300	116,100	17,800	18.1
Finance, Insurance, Real Estate	29,300	31,600	2,300	7.8
Services	167,300	214,400	47,100	28.2
Government	77,300	89,400	12,100	15.7
Total Employment	719,900	819,300	99,400	13.8

Source: California Employment Development Department, 1994a.

Both unskilled and highly educated immigrants have played a very important role in the development of Silicon Valley. Keller (1981) found that, during the first years of the electronics industry, its labor force was made up predominantly of white males, but in the early sixties large numbers of women were hired for production jobs. In his analysis of the 1961–1972 hiring patterns of Fairchild Semiconductor, Keller (1983) observed that employment of the older immigrant groups (Japanese, Italians, and others) declined and employment of recent immigrants (Filipinos, Koreans, Chinese, Indians, and Portuguese) increased, and that around 1965 there was a surge in hiring of Latino and black workers.

[5] This estimate is based on data for 1990 from the California Employment Development Department (1994a). The industries included are Computer and Office Equipment; Communications Equipment, Electronic Components and Accessories; Aircraft, Guided Missiles, Space Vehicles and Parts, and Instruments.

Harrison (1994) argues that the profitability of some industrial districts like Silicon Valley is based on the exploitation of immigrants and women in low-wage labor markets situated inside and outside the region. In fact, assembly work in Silicon Valley, one of the lowest-paid categories in the high-tech industries, has the highest concentration of workers who are "small, foreign and female" (Hossfeld, 1992; Siegel, 1993). Similarly, research conducted by Zlolniski (1994) in the Silicon Valley's janitorial industry describes how, in the past, the janitors for high-tech firms were in-house workers. More recently, however, in order to reduce wages, these firms began to subcontract this service to small janitorial companies that rely almost exclusively on Mexican immigrant labor. These janitors, who experience hard working conditions, have formed a very strong union in San Jose. Striking janitors at Apple Computer were supported by a large array of Latino organizations (Martinez,1993).

With regard to the scientists and engineers who work in Silicon Valley, the popular imagery depicts white males as the creators of innovative products that are changing all aspects of life. More recently Indian engineers have caught international attention as global programmers. India and Taiwan are the source of the largest number of engineers and computer scientists for firms in the United States (Kanjanapan, 1995). Some estimate that there are as many as 5,000 Indian engineers in Silicon Valley (Lakha, 1992). Immigrants from India played a prominent role in the founding of firms such as Sun Microsystems, which employs more than 13,000 workers worldwide.

However, little is known about a growing number of highly educated Mexican immigrants who work in high-technology firms and have formed the *Asociación de Profesionistas Mexicanos en Silicon Valley*. Thanks to the presence of these Mexican engineers in the region, high-technology Mexican firms are expanding their operations to Silicon Valley, one of them being a telecommunications company that sells equipment and services to businesses in developing countries.

There are three kinds of foreign-born engineers in Silicon Valley: former students at U.S. universities, children of immigrant families, and "high-tech Braceros." The first are foreign-born persons who come to the United States as adults to study in a U.S. university. These immigrants are recruited by high-tech companies when they obtain their degrees and get permanent residency thanks to the immigration law provisions that favor skilled persons. The second group comprises immigrants who come to the United States usually as young children with their families. They then go through the U.S. educational system, which helps them land a job in a company in Silicon Valley. Finally, the "high-tech Braceros," like the Mexican Braceros in the past, work in the United States temporarily.[6] Most of these professionals hold H-1B visas that allow them a six-year stay in the United States. The H-1B program allows an annual cap of 65,000 nonimmigrant persons employed in "specialty occupations." Some Indian computer companies that

[6] In 1942, because of the diversion of manpower for World War II, the governments of Mexico and the United States enacted the Bracero Program, which granted temporary work contracts for Mexican farm workers, and which remained in effect until 1964

are involved in the practice of "body-shopping" use this program intensively because they provide Indian engineers to foreign firms for a fee (Lakha, 1992).

Table 2 suggests that Asian immigrants rely heavily on jobs in high-technology industries, since nearly one-third of males and one-fifth of females are employed in this sector. On the other hand, the percentage of Mexican men and women working in this sector is very low. Siegel (1993) has found that Chinese and Filipino workers are disproportionally represented in the Silicon Valley high-tech workforce compared to Hispanics—especially Mexicans, who constitute the largest group. He argues that employers consider Filipinos and Vietnamese more docile than Mexican or black workers.

Table 2
Employment in High-Technology Industries in Santa Clara County by Immigration Status and Gender. Persons 16 years and over, 1990.

	Native		Mexican		Asian	
	Males	Females	Males	Females	Males	Females
Computers and Related Equipment	1,386	985	36	32	515	289
Radio, TV and Communication Equipment	277	151	5	4	81	38
Electrical Machinery, Equipment & Supplies	965	714	42	41	486	385
Guided Missiles, Space Vehicles, and Parts	810	291	4	5	60	20
Scientific and Controlling Instruments	169	120	3	2	50	21
Computer and Data Processing Services	386	248	7	3	98	55
Total in High Technology	3,993	2,509	97	87	1,290	808
Total in All Industries	20,897	21,336	1,839	1,391	4,272	4,243
Percentage in High Technology	19.1	11.8	5.3	6.3	30.2	19.0

Source: Bureau of the Census, 1992. (PUMS, 1990).

Table 3 reveals that Asian immigrants and natives have similar employment patterns. Fifty percent of native males and 60 percent of Asian immigrant males concentrate in three economic realms: durable-goods manufacturing, professional services, and retail trade. Most native-born and Asian females also concentrate in these three industries.

Mexican immigrants in Silicon Valley are heavily concentrated in low-wage jobs. Males work in retail trade, durable goods, construction, and agriculture. Nearly one-third of Mexican women appear not to be in the labor force, even surpassing the percentage of Asian females. Working Mexican women are employed in durable goods, professional and related services, and retail trade. Data in Table 3 suggest that a large number of women work as house-cleaners and baby-sitters; they make up the highest percentage of

persons who work in personal services. It can hypothesized that many of the women who consider themselves out of the labor force in fact work at home taking care of children for a remuneration. Many women do not define this activity as "work" because they have to do it anyway.

Table 3
Employment by Industry in Santa Clara County by Immigration Status and Gender. Persons 16 years and over, 1990. (%)

	Native		Mexican		Asian	
	Males	Females	Males	Females	Males	Females
Industry						
Agriculture, Forestry, and Fisheries	1.4	0.6	11.0	3.3	1.0	0.4
Mining	0.1	0	0.1	0	0	0
Construction	8.3	1.0	14.0	0.6	2.0	0.4
Manufacturing						
Nondurable Goods	3.5	2.7	5.8	8.0	2.4	2.0
Durable Goods	25.2	14.3	15.9	13.7	39.8	26.8
Transportation and Public Utilities	5.9	3.0	3.0	0.9	3.4	2.0
Wholesale Trade	4.9	2.8	3.7	3.1	4.4	2.3
Retail Trade	12.5	12.8	17.9	11.6	11.6	10.0
Finance, Insurance, Real Estate	3.8	5.8	0.9	1.2	2.6	3.7
Services						
Business and Repair Services	6.4	4.8	10.3	5.1	5.6	2.8
Personal Services	1.2	2.5	2.2	6.3	1.5	2.8
Entertainment and Recreation Services	1.4	1.3	0.8	0.6	0.7	0.6
Professional and Related Services	12.3	24.4	3.4	12.7	9.2	15.9
Government	2.8	2.1	0.7	1.0	1.4	1.3
Unemployed	0.1	0.1	0.2	0.2	0.2	0.2
Military	1.0	0.2	0	0	0.4	0.1
Not in the Labor Force	9.3	21.5	10.1	31.7	13.8	28.6
Total	100.1	99.9	100.0	100.0	100.0	99.9
Number	20,897	21,336	1,839	1,391	4,272	4,243

Source: Bureau of the Census, 1992 (PUMS, 1990).

Recent trends in employment have increased the demand for foreign-born professionals. In 1993 three important changes were apparent: (1) services overtook manufacturing to become the largest employment sector in the county, with most of the job growth in business and health services; (2) the manufacturing share of total nonagricultural employment declined noticeably. The industries with the largest absolute employment declines were semiconductor manufacturing and defense-related production;

and (3) emphasis within the high-technology sector shifted from manufacturing to information management, software development, and bioscience (California Employment Development Department 1994a).

The demand for foreign-born software engineers stems from the fact that software is a complex, labor-intensive, and expensive process that depends on talent. Castells (1989) notes that the software industry is the ultimate expression of scientific labor-intensive activity because it sells pure knowledge with fabrication being reduced to the minimum material expression. Cusumano (1992) argues that software factories have emerged as an attempt to push forward the state of programming practice from its loosely organized craft mode of operation. However, the result has not been conventional mass production nor scale economies but flexible design and production systems aimed at scope economies which are achieved by managing multiple projects systematically.

Software engineering is a booming industry that is growing faster than other industries. The United States still controls half the world software market (Schware 1992). In this context, high-technology firms in the U.S. have argued that they are competing in a global economy and therefore must have access to the best and brightest workers of the world. These companies have very successfully pushed for immigration policies that favor the permanent and temporary migration of foreign-born engineers and scientists. It is estimated that 40 percent of the H-1B visas are given for high-tech jobs. Recently, however, there has been a growing opposition toward this program and toward the employment-based immigration policy in general. In June 1995, the Commission on Immigration Reform proposed, unsuccessfully, to reduce the annual number of skilled immigrants from 140,000 to 100, 000.

IV. CONTRA COSTA COUNTY: NEW IMMIGRANTS IN "EDGE CITIES"

Contra Costa County is located at the eastern periphery of the Bay Area. It is bounded by San Francisco and San Pablo bays, the Sacramento River delta and Alameda County. The western portion (El Cerrito, Richmond, San Pablo, Pinole, and Hercules) contains much of the county's heavy industry. The central section (Walnut Creek, Clayton, Concord, Pleasant Hill, Martinez, Lafayette, Moraga, Orinda, Danville, and San Ramon) is rapidly developing from a suburban area into a major commercial and financial headquarters center. Finally, the eastern part (Antioch, Pittsburg, and Brentwood), a traditional agricultural area with a relatively large Latino population, is becoming suburbanized (California Employment Development Department, 1994b).

McGovern (1993) contends that Contra Costa County contains four "edge cities" (Walnut Creek, Concord, San Ramon, and the area adjacent to the Pleasant Hill Bay Area Rapid Transit station) that underwent massive suburban residential growth in the 1960s and 1970s, but more recently have become centers of high-rent office space accommodating professional and corporate uses such as headquarters and major back-office operations. In addition to residential and employment growth, these cities provide regional retail centers as well as cultural, medical, and educational institutions. These developments challenge traditional suburban and metropolitan planning theory.

Contra Costa, with a population of 803, 732 in 1990, is predominantly a white county (76 percent). During the 1980s an unprecedented number of Asian and Latin American immigrants arrived. While total population in the county grew 22 percent, the foreign-born population increased 90 percent during the period (see Appendix A). The white and the black populations grew slowly, 13 and 24 percent respectively, while the Asian and Hispanic population increased very rapidly, 144 percent and 61 percent respectively. The Philippines is the source of the largest number of recent legal immigrants, followed, by Mexico, China, India, and Vietnam (Newcomer Information Clearinghouse, 1994).[7]

The increase in the number of Limited English Proficient (LEP) K-12 students in Contra Costa County depicts the rapid growth of Latin American immigration to the county: The number of Spanish-speaking children grew 266 percent in the period 1982–1994. Filipinos constituted the second-largest LEP group in the county, but with a far smaller total number than the Spanish-speaking children (see Appendix B). During the 1980s the Latino population increased rapidly in the cities of Concord, Pittsburg, Richmond, Antioch, and San Pablo. Although there were Latino settlements in all these cities, the fast growth of the Latino population in Concord suggests that Latino immigrants are forming communities in places that were reserved for the nonminority population (see Appendix C).

In comparison with California as a whole, Contra Costa County has a greater concentration of jobs in retail trade, finance, insurance, real estate, construction, and mining. As in the state as a whole, services

[7] For a detailed summary of statistics on immigration to Contra Costa County, see Newcomer Information Clearinghouse (1994).

constitute the county's largest employment sector. The county's major manufacturing industries are petroleum and chemicals and are located in the western portion of the county. Nondurable-goods manufacturing accounts for approximately two-thirds of the manufacturing jobs (California Employment Development Department, 1994b) (see Table 4).

The finance, insurance, and real-estate sector employed more than 27, 000 workers in 1990 and is concentrated primarily in the central section of the county. This area, the 680 corridor, has become the location of major back offices for firms such as Chevron, AT&T, Pacific Bell, Bank of America, and Wells Fargo Bank. Between 1975 and 1985, the square footage of office space increased from about five million to 18 million (Kroll 1986). Nelson (1986) defines the back office as a consolidation of corporate internal services that requires little face-to-face contact with either the corporate personnel they support or the customers. Some of these internal services are computer operations, accounting, payroll, billing, credit card services, centralized word processing, and certain technical and research activities.

In her locational study of back offices, Nelson constructed demographic profiles of the residents within a 10-mile radius of six potential back-office sites: Two of these sites were in the 680 corridor near the cities of Walnut Creek and Concord and in and around San Ramon; two were in the older central cities of Oakland and San Francisco; and two were in the older, inner suburban areas of Marin and San Mateo counties. She found that the area that has attracted the most office development to date, central Contra Costa County, was also the place that ranked high on the following indicators: percentage of the white non-Hispanic population, percentage of native English speakers, mean family income, percentage of owner-occupied housing, percentage of women over 15 who are wives and mothers, and percentage of high school graduates among women over 16.

Nelson (1986) contends that suburban areas of new single-family housing are now the best source of female labor for back offices because these women are relatively well educated and are more similar in race and class to employers than are women in central cities. From the point of view of the managers, employing these women significantly reduces turnover, shortens training time, increases productivity, and reduces the chance of unionization. Table 4 shows that between 1983 and 1990 the finance, insurance, and real-estate sector, which appears to employ these women, experienced the most rapid growth among industries in Contra Costa County.

Table 4
Employment by Industry in Contra Costa County, 1983–1990.

Year	1983	1990	Absolute Change	Percent Change
Industry:				
Agriculture	1,700	2,800	1,100	64.7
Construction	13,500	21,400	7,900	58.5
Manufacturing				
Nondurable Goods	14,700	20,800	6,100	41.5
Durable Goods	12,400	10,900	-1,500	-12.1
Transportation and Public Utilities	11,800	20,000	8,200	69.5
Wholesale Trade	8,600	11,100	2,500	29.1
Retail Trade	43,800	61,600	17,800	40.6
Finance-Insurance-Real Estate	11,900	27,300	15,400	129.4
Services	39,500	77,300	37,800	95.7
Government	39,600	43,700	4,100	10.4
Total Employment	**197,900**	**296,900**	**99,000**	**50.0**

Source: California Employment Development Department, 1994b.

An analysis of employment by immigration status in Contra Costa County in 1990 suggests again that, in general terms, the employment patterns of Asian immigrants are similar to those of native-born workers. A substantial portion of males in both groups concentrates in retail trade, professional services, and transportation and public utilities. High percentages of native-born and Asian women work in finance, insurance, and real estate, the fastest-growing sector in the county. These numbers support Nelson's argument that this sector depends on female workers. Many native and Asian women also work in professional services.

Mexicans, on the other hand, concentrate in different industries. Fifty percent of men work in construction, agriculture, and retail trade. As in the case of Santa Clara County, Mexican women make up the highest percentage of persons who are not in the labor force. Working Mexican women are employed in retail trade and professional services, and a high proportion (10.7 percent) work in personal services (see Table 5).

Table 5
Employment by Industry in Contra Costa County by Immigration Status and Gender. Persons 16 years and over, 1990. (%)

Industry	Native		Mexican		Asian	
	Males	Females	Males	Females	Males	Females
Agriculture, Forestry, and Fisheries	1.6	0.7	17.3	6.7	1.4	0.3
Mining	0.7	0.3	0.6	0.3	0.3	0.3
Construction	11.3	1.6	18.8	0.5	4.7	0.7
Manufacturing						
Nondurable Goods	6.1	3.0	6.5	4.8	4.9	4.4
Durable Goods	6.8	2.2	7.6	2.7	7.2	3.8
Transportation and Public Utilities	9.0	4.3	6.5	1.9	8.9	5.6
Wholesale Trade	5.1	2.4	3.0	1.1	4.1	1.7
Retail Trade	13.6	14.3	14.8	15.5	19.4	12.6
Finance-Insurance-Real Estate	7.1	10.0	1.5	4.0	8.4	11.5
Services						
Business and Repair Services	5.4	4.1	5.9	5.6	4.9	3.7
Personal Services	1.2	3.1	1.1	10.7	2.0	3.8
Entertainment and Recreation Services	1.3	1.2	0.8	0.3	0.5	0.4
Professional and Related Services	13.2	25.0	4.4	9.6	13.3	20.3
Government	4.6	3.1	1.1	2.4	5.7	2.5
Unemployed	0.1	0.1	0.2	0.3	0.3	0.1
Military	1.0	0.1	0	0	0.7	0
Not in the Labor Force	11.9	24.6	9.9	33.7	13.2	28.1
Total	**100.0**	**100.1**	**100.0**	**100.1**	**99.9**	**99.8**
Number	**12,404**	**13,489**	**474**	**374**	**1,091**	**1,230**

Source: Bureau of the Census, 1992 (PUMS, 1990).

Farm work has been a traditional occupation for Mexicans in agricultural areas such as Pittsburg since at least the period of the Bracero Program. In addition, the rapid growth of the finance, insurance, and real estate sector in Concord seems to have created a corresponding demand for janitorial work, gardening, office maintenance tasks that Mexicans are filling. Mexican women seem to do baby-sitting and house-cleaning for families of professionals and of women who work in the back offices of corporations.

V. CONCLUSIONS

This study has shown that employers in the San Francisco Bay Area have had access to an international labor force that ranges from highly educated to unskilled workers. In the context of the suburbanization of jobs, Mexican immigrants have responded to the labor demand created by the emergence of two related social structures: a "milieu of innovation" and a new structure of consumption. Castells (1989) argues that the development of information-technology industries requires the establishment of a "milieu of innovation" that includes access to innovative information in leading universities and research and development centers, access to scientific and technical labor, and availability of venture capital. In addition to becoming production workers, Mexicans have responded, although in small numbers, to the demand for highly educated workers. Mexican professionals add to the large number of engineers from India, Taiwan, and other countries who work in Silicon Valley. The arrival of these immigrants reflects the existence of an international class of "symbolic analysts" who participate in a global labor market (Reich 1992). Network theory is a useful tool for understanding the migration experience of these workers. In most cases, the Mexican professionals were able to find jobs in Silicon Valley because they had already established contacts with companies through employment with subsidiaries in Mexico or through work experience in the company's projects. This process calls into question the existence of an "open" global labor market and the notion that Mexican immigrants are only unskilled.

With regard to the emergence of a new structure of consumption, Sassen (1988) has observed that, when the number of high-income workers reaches a critical mass in major urban centers, the consumption structure is reorganized in a way that generates a demand for labor-intensive services performed by low-wage workers. When educated women are employed in high-paying professional jobs that require extensive time commitments, poor and immigrant women do their housework (Susser 1991). Mexican immigrant women are providing the crucial labor-intensive services required by high-income families of professionals and working women: baby-sitting and house-cleaning. Given these new labor demands, Mexican women are finding employment more easily than Mexican men. The men are increasingly working as janitors, gardeners, and employees in restaurants, bars, and cafes, improving the quality of life of the workers involved in the production of innovative products and to support the Yuppie culture in general. Rouse (1988) has described immigrants from the town of Aguililla, Michoacán, to Redwood City (not far from San Jose) as "proletarian servants in the paragon of post-industrial society," since they work as janitors, dishwashers, gardeners, hotel workers, and house-cleaners. It is likely that the services provided by Mexican immigrants in the formal and informal economies lower the costs of living and doing business in a region in which these costs are very high.

Current migration patterns have seen the growing immigration of women and professionals from Mexico. Cornelius (1992) has argued that immigration from Mexico since the 1980s has become more permanent and heterogeneous because of four principal factors: changes in the U.S. economy that have

affected the demand for Mexican immigrant labor; the long-running economic crisis in Mexico, the legalization of undocumented persons under IRCA, and the maturation of transnational migrant networks.

This study has also shown that the Bay Area has established global linkages through labor immigration. Immigrant families from many different regions in the world have concentrated in particular neighborhoods creating "daughter communities". Immigrants in these "daughter communities" keep strong economic and social ties with people in the parent communities through active circulation of people, money, information and goods (Rouse, 1988). The emergence of established communities in the United States is a crucial step in the maturation of the migrant networks. As these "daughter communities" develop, the social infrastructure linking them to the parent communities becomes more directed and the network becomes self-perpetuating. Migrants move to specific places because that is where the networks lead and is where the social structure affords them the greatest opportunities for success (Massey et al, 1987: 153).

Several villages in Mexico maintain a close relationship with the Bay Area. Most of these villages are located in Western Mexico, especially in the states of Jalisco, Michoacán, Guanajuato, and Nayarit. Chavinda and Aguililla, located in Michoacán, have two of the largest Mexican "daughter communities" in the Bay Area. Aguilenses are concentrate in Redwood City and Chavindeños live in Oakland and Berkeley. Because of the large concentration of Chavindeño teenagers in this area, one of the high schools is known among Latinos as "UC Chavinda". There is also a large community from Amatlán de Cañas, Nayarit which resides in Oakland. The cities of Berkeley, Oakland, Union City and Fremont are home to many communities from the Los Altos de Jalisco region, such as Tepatitlán, Jalostotitlán and Tlacuitapa. (Alarcón 1992, 1995; Rouse, 1992).

U.S. immigration policy has been a crucial factor in shaping the characteristics of immigration to the Bay Area and to the United States in general. Santa Clara and Contra Costa counties have two distinct groups of immigrants: mostly unskilled Latin American workers and more-educated Asian immigrants who resemble the native population in employment patterns. The history of immigration policy in the United States reveals that while Asians have been subjected to a more stringent selection process, Mexicans have been "pulled" by U.S. employers and opportunistic politicians like Governor Wilson who in the past supported the immigration of temporary agricultural workers.

From the turn of the century to the mid-1960s, U.S. immigration policy encouraged temporary Mexican labor migration; this was the overall intention despite the deportations of the 1930s and 1950s. Until the Great Depression, the United States implemented an informal "open border" and an active process of recruitment toward Mexico. Prior to 1880, Asia had deployed abundant labor for employers on the West Coast; however, a surge of nativist sentiment cut off this source: In 1882 Congress passed the Chinese Exclusion Act and in 1907 the "Gentlemen's Agreement" with the Japanese government. Later, the U.S. government implemented several migration policies to further attract Mexican workers. Mexicans were exempted from the literacy requirement of the 1917 Immigration Act, and between 1917 and 1922 the U.S. government unilaterally launched a guest-worker program to compensate for the labor shortages

created by World War I. Mexicans also were exempted from the National Origins Acts of 1921 and 1924 that made it especially difficult for Asians and Africans to migrate to the United States. The entry of the United States into World War II revitalized the massive recruitment of Mexican labor. In 1942 the governments of Mexico and the United States established the Bracero Program, which lasted until 1964. By the end of the program some 4.5 million contracts had been issued.

The 1965 Immigration and Nationality Act that abolished the national origins quota system established in the 1920s gave rise to a more diversified pool of legal immigrants on the basis of family reunification and occupational qualifications. Portes and Rumbaut (1990) contend that unlike Europeans and some Latin Americans (such as the Mexicans), Asians and Africans could not use family reunification to enter the United States; hence, the only path open to them was the use of occupational skills. This explains the high average levels of education of most Asian immigrants. Current immigration flows have also been molded by a less discriminatory Refugee Act of 1980 and the immigration Reform and Control Act of 1986 whose amnesty program legalized nearly three million persons the majority being Mexican. However, the Immigration Reform Act of 1990 has favored the immigration of professionals by emphasizing the human capital characteristics of new immigrants instead of family reunification considerations (Alarcón, 1994, Bilateral Commission, 1989).

The constant demand for immigrant labor, the formation of "daughter communities", and the implementation of immigration policies have led to the consolidation of the Bay Area as an ensemble of fragmented ethnic communities that have secured access to distinct niches in the labor market. Asian immigrants, who seem to follow the employment patterns of native-born workers, find jobs in the most dynamic sectors of the regional economy, while most Mexican immigrants get jobs in more traditional sectors such as construction, agriculture, and personal services. In addition to this, there is income inequality within the ethnic groups and among them. Siegel (1993) using an analysis of the workforce divided by ethnic ancestry without regard for place of birth, has found that in all industries of Silicon Valley, men earn much more than women within their own ethnic groups. Japanese-American, white, and Chinese-American men (in order of importance) had the highest mean per capita incomes in 1989. On the other end, Mexican-American women received the lowest income. In Contra Costa County, whites earned higher per capita incomes than the median. For all the other groups, per capita incomes were below the median in 1989 (Newcomer Information Clearinghouse, 1994).

Are Mexican immigrants displacing native workers? The findings of this study suggest that since Mexicans are concentrated in traditional industries, only the unskilled workers—probably the less educated black workers—are negatively affected. Ong and Valenzuela (1995) discovered that in Los Angeles County the immigration of Latinos with low education increases joblessness among African Americans. They also found that many African Americans are insulated from job competition with immigrants because of their concentration in public sector jobs.

Job displacement by immigrants was a very important assumption behind passage of Proposition 187, the "Save our State" initiative, in 1994. Its supporters were very successful in using questionable data to portray immigrants as public service consumers. Although defeated in many Bay Area counties, like Santa Clara County, the proposition was passed by an overwhelming majority of California voters. It prohibits the provision of publicly funded social services to undocumented persons. Although enforcement of its measures regarding education and other social services has been stopped, the success of this initiative reflects the consolidation of a new political landscape in regions of California that require a wide variety of workers from servants to engineers.

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Appendix A
Native and Foreign-Born Populations in California and San Francisco Bay Area Counties, 1980 - 1990.

		1980	1990	% Change	FB in 1980	FB in 1990
California	Native	20,087,869	23,301,196	16.0		
	Foreign Born	3,580,033	6,458,825	80.4		
	Total	23,667,902	29,760,021	25.7	15.1%	21.7%
Alameda	Native	974,409	1,048,807	7.6		
	Foreign Born	130,970	230,375	75.9		
	Total	1,105,379	1,279,182	15.7	11.8%	18.0%
Contra Costa	Native	600,182	696,672	16.1		
	Foreign Born	56,198	107,060	90.5		
	Total	656,380	803,732	22.4	8.6%	13.3%
Marin	Native	198,420	199,607	0.6		
	Foreign Born	24,148	30,489	26.3		
	Total	222,568	230,096	3.4	10.8%	13.3%
Napa	Native	91,398	97,800	7.0		
	Foreign Born	7,801	12,965	66.2		
	Total	99,199	110,765	11.7	7.9%	11.7%
San Francisco	Native	486,770	477,925	-1.8		
	Foreign Born	192,204	246,034	28.0		
	Total	678,974	723,959	6.6	28.3%	34.0%
San Mateo	Native	481,497	484,856	0.7		
	Foreign Born	105,832	164,767	55.7		
	Total	587,329	649,623	10.6	18.0%	25.4%
Santa Clara	Native	1,119,238	1,150,376	2.8		
	Foreign Born	175,833	347,201	97.5		
	Total	1,295,071	1,497,577	15.6	13.6%	23.2%
Solano	Native	212,238	296,191	39.6		
	Foreign Born	22,965	44,230	92.6		
	Total	235,203	340,421	44.7	9.8%	13.0%
Sonoma	Native	278,164	352,802	26.8		
	Foreign Born	21,517	35,420	64.6		
	Total	299,681	388,222	29.5	7.2%	9.1%

Source: Census of Population and Housing, 1980 and 1990.

Appendix B
Limited English-Proficient Students (K-12) in Santa Clara and Contra Costa Counties, 1982-1994.

	1982	1994	% Change
Santa Clara County			
Spanish	10,507	26,242	149.8
Vietnamese	4,848	10,170	109.8
Pilipino (Tagalog)	1,059	2,571	142.8
Cantonese .	812	1,458	79.6
Cambodian (Khmer)	329	1,104	235.6
Mandarin (Putonghua)	245	1,068	335.9
Korean	503	860	71.0
Japanese	178	478	168.5
Farsi (Persian)	63	248	293.7
Russian	n/d	240	
Lao	413	169	-59.1
Arabic	69	151	118.8
Mien (Yao)	n/d	52	
Armenian	1	26	2500.0
Hmong	20	19	-5.0
Portuguese	550	n/d	
Samoan	168	n/d	
Other non-English	1,379	4,048	193.5
Total	21,144	48,904	131.3
Contra Costa County			
Spanish	1,993	7,299	266.2
Pilipino (Tagalog)	187	628	235.8
Vietnamese	345	581	68.4
Mien (Yao)	n/d	566	
Lao	267	413	54.7
Cantonese	96	287	199.0
Farsi (Persian)	66	274	315.2
Korean	71	143	101.4
Mandarin (Putonghua)	143	141	-1.4
Arabic	17	85	400.0
Russian	n/d	70	
Japanese	51	63	23.5
Cambodian (Khmer)	5	35	600.0
Hmong	27	19	-29.6
Armenian	3	3	0.0
Portuguese	49	n/d	
Samoan	7	n/d	
Other non-English	448	1,103	146.2
Total	3,327	10,607	218.8

Source: California Department of Education, Spring 1994.

Appendix C
Hispanic-Origin Population in Cities of Contra Costa and Santa Clara Counties, 1980-1990.

	Total Population			Hispanic Population		
	1980	1990	% Change	Abs. Change	% Change	MH* Income 1990
California	23,667,902	29,760,016	25.7	3,016,250	66.4	35,798
Contra Costa County	656,380	803,732	22.4	34,102	60.7	45,087
Concord	103,255	111,348	7.8	5,367	72.4	41,675
Pittsburg	33,465	47,564	42.1	4,968	81.5	38,532
Richmond	74,676	87,425	17.1	4,123	51.7	32,165
Antioch	42,683	62,195	45.7	4,104	69.2	40,936
San Pablo	19,750	25,158	27.4	3,036	89.3	25,479
Martinez	22,582	31,808	40.9	1,024	59.0	45,964
Walnut Creek	53,643	60,569	12.9	1,003	56.6	45,529
San Ramon	20,511	35,303	72.1	769	65.3	63,607
Pleasant Hill	25,124	31,585	25.7	698	48.0	46,885
Pinole	14,253	17,460	22.5	637	58.0	45,820
Danville	26,143	31,306	19.7	390	44.6	74,472
Lafayette	20,837	23,501	12.8	295	53.6	64,806
El Cerrito	22,731	22,869	0.6	240	23.5	39,538
Moraga	15,014	15,852	5.6	151	34.4	69,767
Orinda	no data	16,642	no data	-258	-45.2	80,968
Santa Clara County	1,295,071	1,497,577	15.6	80,725	35.7	48,115
San Jose	629,442	782,225	24.3	63,694	45.4	46,206
Gilroy	21,641	31,487	45.5	5,029	51.7	40,955
Mountain View	58,655	67,460	15.0	3,914	58.1	42,431
Sunnyvale	106,618	117,229	10.0	2,685	21.7	46,403
Milpitas	37,820	50,686	34.0	2,250	33.8	55,730
Morgan Hill	17,060	23,928	40.3	1,363	33.0	53,480
Campbell	27,067	36,048	33.2	1,158	51.7	42,489
Palo Alto	55,225	55,900	1.2	742	34.3	55,333
Santa Clara	87,746	93,613	6.7	731	5.7	44,707
Cupertino	34,015	40,263	18.4	464	31.5	64,587
Saratoga	29,261	28,061	-4.1	141	19.0	86,674
Los Altos	25,769	26,303	2.1	129	19.7	79,579
Los Gatos	26,906	27,357	1.7	127	11.0	57,815

Source: Missouri State Census Data Center. Census of Population and Housing, 1980 and 1990.

* Median Household Income in 1990.