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ASSESSING THE REEMERGING
CALIFORNIA ECONOMY

By

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Robert Edelstein Cynthia Kroll

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#### ASSESSING THE REEMERGING CALIFORNIA ECONOMY

by

Robert H. Edelstein Cynthia A. Kroll

Fisher Center for Real Estate and Urban Economics, University of California at Berkeley

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#### ASSESSING THE REEMERGING CALIFORNIA ECONOMY

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#### **ABSTRACT**

This paper describes restructuring of the California economy following its recovery from the 1991-1993 recession and the condition of the real estate market in the economic recovery and expansion periods. Employment in California has now surpassed its previous peak in 1990 and is growing more quickly than job growth nationwide. This turn-around has happened despite continued job losses in defense manufacturing, at military bases, and in finance and insurance sectors. Growth has spanned many sectors. Services account for most of the jobs added, with growth also appearing in high-tech manufacturing sectors, in apparel manufacturing, in movie production, in construction, and in trade. Growth has also been spread to most of the state's regions. Jobs lost before the recession have been fully restored in all major urban areas except San Francisco and Los Angeles, and both of these metropolitan areas have begun to recover lost jobs. Recovery in real estate activity has been unusually slow, even taking the length of the recession into account, and is not evenly distributed geographically. The housing market has been a lagging rather than leading indicator of recovery. Stronger sales, a modest uptick in building activity, and steadying home prices in 1996 suggest that recovery is now underway, but at a slow pace compared to earlier upturns. Nonresidential real estate is also showing slow improvements statewide, but prices of most products remain below their 1990 levels. The strongest signs of both residential and nonresidential real estate recovery are in the San Francisco Bay Area, and in particular in Santa Clara County, where the economic boom is reflected in rising home prices and falling office and industrial vacancy rates. Over the long term, we are optimistic about California's economic outlook. Strong employment growth should, over time, lead to significant recovery and revival of California's residential and nonresidential real estate markets.

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#### ASSESSING THE REEMERGING CALIFORNIA ECONOMY

#### **Prologue**

For the first time since 1990, California's employment is growing faster than the nation's. By the end of 1995, California had replaced all of the jobs lost in the long drawn-out recession of 1991-1993. With these two important recovery milestones, California can once again lay claim to a growing, diversified economy, but growth has not resolved all of the issues that emerged in the recession. Unemployment levels remain above the national rate, and some key urban areas are still well below their pre-recession peak in employment. The factors driving growth differ from those of the 1980s, and questions remain about the economy's long term stability, the types of employment, and real estate opportunities to be engendered by new growth.

Several elements distinguish the reviving California economy from the period of expansion in the 1980s. First, recovery has come without a turnaround in defense-related sectors and despite continuing weakness in finance industries. Jobs continue to be lost in defense-related manufacturing, at military bases, and in depository institutions. While some of these losses may trough soon, the state is no longer dependent on these sectors to spur growth. Second, the state has yet to recover from recession driven wealth declines, and California's high per capita income level has eroded relative to the nation since 1990. Third, high levels of foreign immigration throughout the 1980s and continuing into the 1990s, combined with a significant outflow of population from the state to other parts of the nation in the 1990s have changed the demographic base, which in turn will affect household formation, labor force characteristics, and entrepreneurial and foreign trade opportunities. Fourth, the housing market has not played an important role in the recovery. While housing construction is usually a leading indicator of emergence from a recession, in California housing activity lagged behind job growth in 1994 and 1995. Fifth, California is far more dependent on foreign trade than it was in the early 1980s, leading to changing opportunities, but also changing sources of risk.

Despite these differences, some characteristics of current expansion in California look familiar. First, even with job losses in defense sectors, the state continues to have a strong

technological base, with growth occurring in familiar high tech sectors such as computers and electronics as well as in more recently defined "clusters" such as multi-media and biotechnology. Second, services dominate the recovery, with business and professional services playing a strong role in the state's employment growth. Third, despite slow activity in the housing market, construction employment is playing a significant role in new job growth, as some types of nonresidential building expand. Fourth, California often has had uneven patterns of growth among metropolitan areas. As in the period preceding 1990, expansion is stronger in suburban and outlying areas than in the two metropolitan areas that historically dominated California--San Francisco and Los Angeles.

This article examines the issues surrounding California's reviving economy. We explore whether the recession of the early 1990s will leave a permanent imprint on California's economy, and the degree to which changes in California's economy may be unique vis-à-vis the national economy. We discuss the implications for employment growth and real estate markets in the state, and the factors that distinguish different subregions of California.

#### A Profile of the Recession

California's employment loss during the recession is reported to be between half and three quarters of a million jobs. California had a pre-recession peak of 12.6 million employed in wage and salary jobs in December 1990, and a trough of 11.9 million reached in January 1994. Annual average employment peaked at 12.5 million in 1990, and hit a low of slightly above 12 million in 1993. On an annual average basis, the overall drop in employment during the three year period was 455,000, while the peak-to-trough measure, unadjusted for seasonal variations, was over 700,000.

Output and income changes in California during the early 1990s explain, in part, the prolonged period of job loss and stagnation. At the national level, the GDP decline lasted 4 quarters; within 2 quarters of the renewed upturn, GDP was growing at a rate above 2%.<sup>2</sup> The duration of California's Gross State Product (GSP) loss or stagnation was much longer than that

of the national economy (Exhibit 1). In California, after a loss of 2% in 1991, a very modest increase of 1.5% in 1992 was followed by slower growth, 0.3% in 1993. In contrast, national real GDP grew by 2.3% in 1992 and by 3.1% in 1993. Income also fared poorly in California from 1990 through 1993. Total personal income (adjusted for inflation) diminished by 1.3% in 1991, recovered slightly in 1992 (a 1.5% increase), but dropped again, by 0.3%, in 1993. Rough estimates of more current GSP growth show California output expanding strongly (3.4%) in 1994 and continuing to grow in 1995 at close to 3%. Total personal income growth, however, was only 1.4% in 1994, finally showing strong growth in 1995 (4.3%, adjusting for inflation).<sup>3</sup>

#### **Sectoral and Geographic Impacts**

The largest job losses between 1990 and 1993 occurred in defense related sectors and construction. Transportation equipment (primarily aerospace in California), instruments, and electronics lost over 160,000 jobs during this period, accounting for 35.7% of California's net lost jobs. Simultaneously, construction employment declined by 166,000, the equivalent of 25.5% of net job loss. An additional 100,000 jobs were lost in other manufacturing sectors (largely those linked either to construction or to the defense sectors). Job losses also occurred in wholesale trade, retail trade, and finance, insurance and real estate, while the services sector added about 120,000 jobs during the recession (see Exhibit 2).

The recession was far from uniform across the state. From 1990 to 1993, (using annual average figures), five Southern California counties (Los Angeles, Orange, San Diego, Santa Barbara and Ventura) had the most severe economic declines, losing more than 500,000 jobs. This was 12% more than the net jobs lost statewide during this period. (Growth in other parts of the state counteracted some of this job loss.) Los Angeles alone lost more than 10 percent of its wage and salary jobs.

During the same period, the three largest metropolitan areas in the San Francisco Bay Area, including Alameda/Contra Costa, San Francisco, and Santa Clara, lost 62,700 jobs. San Francisco lost 39,000 jobs, or 4.1 percent of its employment base. In contrast, much of the rest

of the state experienced job growth. The Riverside/San Bernardino, Sonoma and Solano/Napa metropolitan areas, added jobs for much of the recession, as did many Central Valley locales.

In general, smaller metropolitan and nonmetropolitan areas have shown the greatest strength since 1990. Areas outside of Southern California, the San Francisco Bay Area, and the five largest Central Valley MSAs added 74,000 jobs from 1990 to 1993, counterbalancing some of the jobs lost in the larger MSAs. This experience contrasts sharply with earlier recessions. In 1982, for example, job losses were high in many of the state's timber-dependent nonmetropolitan counties.

#### Effects of the Recession on Income and Wealth

The recession had a dramatic effect on income and wealth in the state, especially in comparison to national trends. In 1990, per capita personal income in California was 10.8% greater than per capita personal income nationwide. By 1994, the differential was only 3% (Exhibit 3). The share of income in the state coming from assets (through dividends, interest and rent) has dropped from 16.9% to 14.9% since 1990. Income from assets has also become a lower proportion of total personal income nationwide. As with income, California's losses have been greater than nationwide. On a per capita basis, Californian's income from assets was 5.4% greater than the US level in 1990, but by 1994, the state's per capita level of asset income lagged the US by 2.4%.

An absolute loss in California real estate wealth has occurred for many owners. Housing prices in Southern California declined from the outset of the recession, while Northern and Central California prices continued to rise for 2, 4, or even 6 quarters. In Southern California, home prices dropped by 19.5% regionwide between April 1990 and April 1996, by 24.3% in Los Angeles County, and by as much as 35% in higher priced areas such as Santa Monica. In Northern California, overall losses in home value were relatively moderate—only 8.8% for the Northern California region overall between 1990 and April 1996 (the trough in prices for the region). The most severe losses were in higher priced areas, such as San Francisco, where

housing values declined by 16.2% by October 1993, and have risen slightly since, and San Mateo County (down 16.5% in October 1993). Areas dependent on defense spending also bore the brunt of housing value declines--Santa Clara County homes dropped by 14.7% in the first 3 years of the recession. Southern California home prices continued to drop in 1995, while home prices had stabilized or were rising in many northern California markets by 1995 (Exhibit 4). For the state as a whole, the California Association of Realtors estimates that over one fourth of owners who purchased homes between 1991 and 1994 had zero or negative home equity by the end of 1995.<sup>5</sup>

Nonresidential California real estate and apartments experienced even larger declines in value during the recession. Nationwide, price per square foot of office space dropped by one fourth between second quarter 1990 and second quarter 1994, when prices once again began to rise. By first quarter 1996, nominal office building values remained 18 percent below their pre-recession peak. California experienced a much sharper nominal drop in office building values. The peak to trough loss in price per square foot for California office space was almost 36 percent, while 1995 prices were still one third below their 1990 peak.

Similar differences between losses at the national and state level are seen for other commercial and industrial real estate sectors (Exhibit 5). First quarter 1996 values for retail space were 12 percent below 1990 values nationwide, while the comparable loss in value was 22 percent in California. For warehouse space, a 9 percent loss in value nationwide compares to a 31 percent loss in value in California. Apartment buildings, which dropped in value nationwide through 1992, rebounded earlier than other commercial products, and by early 1996 apartment values were 8 percent above the 1990 level (before accounting for inflation). California apartment buildings began a price recovery in 1994, but, by first quarter 1996, are still 14 percent below their fourth quarter 1990 levels.

#### The Changing Population Base of California

Losses in jobs, losses in wealth, and continuing foreign immigration have led to discernible demographic shifts in California. Economic recovery and expansion may bring further changes.

#### A Reversal in Migration Streams

The state's population grew rapidly in the 1980s. Growth accelerated from a rate of 2.1 percent annually at the outset of the decade to a rate of 2.7 percent annually by 1989. Natural increase and foreign immigration accounted for the largest components of growth, as shown in Exhibit 6, but the acceleration of the rate of growth was due largely to increased domestic inmigration (i.e. from other parts of the US). By the late 1980s, domestic inmigration exceeded outmigration by over 180,000 annually. This pattern reversed drastically in the 1990s. The California Department of Finance estimates that net in-migration dwindled to less than 5,000 by 1991, shifted to net outmigration by 1992, and reached an annual net outflow of over 300,000 in 1993, 1994 and 1995. With this shift in migration patterns, the rate of population growth dropped below 1 percent annually by 1994. This was less than half the rate of population growth during the 1982 recession.<sup>6</sup>

#### Shifting Age and Ethnic Mix

International and domestic migration patterns affect California's age profile and ethnic mix. Between 1980 and 1990, California's Asian/Pacific Islander population more than doubled, rising from 5 percent of the state's population to almost 10 percent. The state's Hispanic population grew by two-thirds, increasing its share of total state population from 19 percent to over 25 percent. These shifts represent immigration from Asia and Central and South America as well as relatively high rates of natural increase among these population groups. By 1990, 22 percent of California's population was foreign born, and half of this group had entered the US during the 1980s. Six of the ten US cities with the highest shares of foreign born population are in California, including three of the state's four largest cities. In Los Angeles (second nationwide only to Miami and Santa Ana, CA), 38% of the population is foreign born, and half the city's residents speak a language other than English at home. The share of foreign born population is

34% in San Francisco, 27% in San Jose, and 21% in San Diego (the cities are fourth, seventh and thirteenth nationwide).<sup>7</sup>

There has been a significant shift in the movement of people by age category. The state once had a net outflow of people only in their retirement years (65 and older), while employed workers of all ages were drawn to the state. Skilled workers who had lost their jobs often stayed in the state to seek new employment opportunities. In contrast, 1993 to 1995 period saw a strong net outflow of people over 30 years old, implying that a significant share of the workforce that has been displaced during the recession has chosen to leave the state rather than to seek new employment or open a business in the state.<sup>8</sup>

#### **Household Formation Slows**

The prolonged recession combined with the changing population base has affected the rate of household formation in the 1990s. Households were forming at a rate of over 2% annually in the second half of the 1980s; the rate of household formation came close to matching the rate of population growth in California in this period. However, the household formation rate dropped even more quickly than the rate of population growth in the early 1990s. Since 1992, the number of households has grown less than 1 percent yearly.

The very low levels of household formation reflect a number of factors beyond the slowing rate of population growth. Much of the population growth has come from natural increase (adding children) or from population groups that tend to have larger households (e.g. foreign immigrants, with multi-generation households). For example, the household formation rate among Hispanics is about 20% less than among the White (non-Hispanic) population while household size is larger. <sup>10</sup> Economic uncertainty has also contributed to slower household growth. Young wage earners are less likely to form new households under these conditions, and older primary wage earners are more likely to be moving out-of-state than into California. <sup>11</sup>

#### California's Recovery and Expansion--Revival or a New Show?

California's current economic growth indicates that reports of the state's economic demise were exaggerated and premature. The state's economy bears some scars from

restructuring but shows strength in sectors that have required innovation and technical skills to remain competitive. The state has the resources to compete strongly in the global economy, where expanding linkages have provided new markets, new sources of inputs, but also new competitors for California firms.

#### Job Formation

Services and trade are California's leading job formation sectors. A portion of this growth replaces jobs lost during the recession, while some growth comes in sectors that added jobs throughout the recession. Business services employment has increased by 124 thousand jobs since 1993, but the sector also added 45 thousand jobs between 1991 and 1993. Health services had job loss despite many changes occurring in health delivery systems during the past few years and, in fact, has added over 50,000 jobs since 1991. The motion picture industry had a brief period of job loss but has added 40,000 jobs since 1992. In terms of percentage change, the motion picture industry has been one of the fastest growing industries in the state, expanding at close to 10 percent annually over the past three years. Within manufacturing, only the apparel industry continued to growth throughout the recession (adding almost 20,000 jobs since 1991). Other sectors where fall 1995 employment exceeded pre-recession peaks include amusement and recreation places, trucking and warehousing, and state and local government.

A number of other sectors have played a significant role in job formation since 1993, but remain well below their pre-recession peak employment levels. Construction industry employment has increased by more than 40,000 jobs since 1993, but by 1995 remained over 70,000 jobs below the pre-recession peak. Since 1993, wholesale and retail trade employment grew by 115 thousand since 1993, but is still more than 70,000 below pre-recession levels. Within manufacturing, key growth can be observed in sectors such as electronics. Yet 11,000 new jobs in electronics account for less than one fourth of jobs lost in the sector since the late 1980s.

Despite economic recovery statewide, a few sectors continue to lose jobs. Defense sectors and portions of the finance industry are experiencing long term declines and have not recovered with the rest of the economy. From 1993 to 1995, transportation equipment

manufacturing lost an additional 36.4 thousand jobs, instruments manufacturing lost 19.4 thousand jobs, and employment at military bases was cut back by 19.3 thousand jobs. First quarter 1996 data show employment stabilizing in instruments manufacturing but continuing to drop in both transportation equipment manufacturing and at military bases. <sup>12</sup> The finance industry lost over 37,000 jobs between 1993 and 1995, but appears to be stabilizing in 1996.

#### California Economic Restructuring

There are indicators other than job growth of California's economic restructuring. Foreign trade is playing an increasingly large role in California's economy, with the state benefiting from proximity to the Pacific Rim and from an emphasis on export-producing rather than importproducing industries. California's role in foreign trade involves both the transshipment of goods and the export of goods produced locally. As Pacific Rim countries grow in importance as trading partners with the US, California port activity increases. The share of US foreign trade merchandise moving through California ports has risen from 12% in 1980 to almost 20% in 1993. We estimate production of goods and services produced for export to account directly for over 12% of output and over 14% of employment in California. Output "displaced" by imports is in the range of 9% to 11% of GSP, while jobs potentially displaced by imports are on the order of 84% to 97% of the jobs gained from exports. 13 Unlike the US as a whole, California appears to have a net positive international trade balance. This is the result if several diverse forces; the state is a producer of many key export items, from electronics and computers to agricultural products and services, and it is a relatively small producer of the two largest import items for the US. automotive products and petroleum. A number of other major import sectors (e.g. computers, apparel, electronic equipment) are also important export sectors for California. For many of these sectors, imports and exports are integrated and grow together, as imported inputs are used in the production of export products. The growing integration of California's economy with foreign markets will be a factor shaping which industries continue to produce or expand in the state and the form taken by their production or growth. California is likely to benefit from the strong potential for expansion of many Pacific Rim economies. However, at the same time,

integration with these economies and competition with Pacific Rim producers may affect the stability of employment and the types of jobs that are produced in California.

#### A Future of Lower Wages?

Concern that new growth in the state would be at lower wages is not borne out by recent recovery statistics. The number of newly emerging industrial clusters in California's economy shows that the state's technological base remains strong. Economic growth forecasts point to sectors such as telecommunications, multimedia, and biotechnology/health sciences as fields where innovations may lead to substantial new growth in the future. California has both a research and employment base in each of these sectors, suggesting that the emerging restructured economy, although less dependent on high-tech defense sectors, will still have a significant technological component.

Nevertheless, even a strong technological base may not be enough to recover the state's prior income advantage over other parts of the US. Some of the growth that has contributed to the state's recovery has been in lower wage sectors such as tourism, which is also a major component of California's economy. Tourism jobs in California now account for almost 5 percent of state employment. The tourism sector lost jobs during the recession, but began its recovery as early as 1992, and had regained all employment lost by the end of 1994. The tourism cluster includes both high wage (e.g. air transportation) and low wage sectors (e.g. eating and drinking places). Almost half of all tourism jobs in California are in food and restaurant related sectors, where annual payroll earnings per employee (before tips) average 74% below earnings in manufacturing.<sup>14</sup>

#### **Geographic Shifts Accompany Structural Change**

The economic recovery is widespread. All parts of the state are experiencing job growth at some level. However, within this overall picture of employment health, the experience varies considerably, with some of the larger metropolitan areas still in "recovery" (i.e. still below their prerecession peaks) and with the strongest expansion occurring at the outskirts of the coastal areas and in less urbanized in-land areas.

While Southern California jobs recovered at a pace similar to the Bay Area in the 1993 to 1995 period, employment in Southern California in 1995 remained at least 300,000 below the 1990 peak. (This occurred because job losses were so high in Southern California during the recession). Within Southern California, the rate of job growth was strongest in outlying areas, such as Riverside, San Bernardino, and Ventura (Exhibit 7). Strong signs of economic restructuring are apparent within the Los Angeles MSA economy, where sectors tend to show either strong job gains or large losses. For example, between 1993 and 1995 Los Angeles added a total of 55,000 nonagricultural jobs. During that period, the MSA lost 19,500 jobs in transportation equipment manufacturing and 25,500 jobs in finance, insurance and real estate; but gained 15,000 jobs in apparel manufacturing, 26,900 jobs in motion pictures and 33,400 jobs in business services.

The Bay Area had a pace of growth slightly slower than Southern California from 1993 to 1995, but has shown more rapid growth in 1996. By December of 1995, the region had more than replaced the 55,000 jobs lost during the recession. The strongest expansion can be seen in the Silicon Valley and in the Santa Rosa area, towards the north. Between 1993 and the first half of 1996, the Bay Area added 100,000 jobs, with more than half of the new jobs found in Santa Clara County. Job growth in Santa Clara County is attributed in large part to high tech sectors, and particularly to a strong comeback of semiconductor manufacturers, but many of the new jobs added are in nonmanufacturing sectors. Growth in business services alone accounted for two thirds of the job growth in Santa Clara County between 1993 and 1995; for every job added in electronics during this period, the business services sector added seven jobs (though not necessarily linked to electronics). In San Francisco, business services played a much smaller role in the recovery, with most job growth coming in retail trade and in other types of services such as engineering and management. East Bay growth also relied heavily on services, but with only half of the growth in services employment coming from business services.

The pace of growth during the recovery period varied widely among Central Valley places. With the exception of the Bakersfield area, the largest Central Valley metropolitan areas

are all well above their prerecession peaks in employment. Sacramento and Fresno also experienced growth during the recovery period that exceeded the statewide average. The areas that had grown primarily from coastal metropolitan pressures, however, have shown more modest recoveries. The Stockton and Modesto areas grew more slowly than the state as a whole in 1993 to 1995, (2.7 percent and 2.5 percent, compared to a two year increase of 3.2 percent statewide) while the Bakersfield area grew by only 1.5 percent for the two year period. With much of the previous expansion in these areas a sign of overflow from coastal areas, they may have had excess capacity during the recession that is now being reabsorbed.

As during the recession, smaller metropolitan areas and nonmetropolitan areas in Central and Northern California were among the fastest growing areas in the state. These areas accounted for one fourth of jobs added during the recovery period. With the economy improving in many of the state's larger urban areas, growth pressures on the suburban and rural areas in the state are likely to increase.

#### Household Formation Lags the Job Recovery

Population growth and household formation have been slowest to recover in metropolitan areas where jobs remain well below their prerecession peaks. Both Los Angeles and San Francisco counties each grew in population by only 0.5 percent in 1995, and households in these two counties grew by only 0.1 percent. Los Angeles County, which grew in population by almost 90,000 between January 1994 and January 1996, added just over 10,000 households in the same time period. San Francisco added fewer than 600 households and close to 3200 people during this time period. <sup>15</sup>

Despite slow growth in Los Angeles County, other parts of Southern California have seen relatively strong household growth compared to the rest of the state. Orange County added 16,000 households in the two year recovery period (January 1994 to January 1996), more than any other county in the state. San Diego County was the next largest producer of new households, growing by about 12,500 households in the two year period. Riverside County was

the fastest growing of the large metropolitan areas, with households expanding by 2.6 percent between 1994 and 1996, adding 11,700 new households.

Among Bay Area counties, Santa Clara and Contra Costa counties added the largest numbers of new households between 1994 and 1996 (over 6,000 in each county). The rate of growth was strongest in the north bay counties of Solano and Sonoma. Solano added close to 2800 households and Sonoma over 3800, with the household base in each county increasing by over 2 percent in the recovery period.

The large Central Valley counties outperformed Bay Area counties in number of new households. Sacramento added over 8000 new households in the recovery period (increasing its household base by 1.9%, compared to 1.4% for the state over the same period). Fresno grew by over 7500 households, adding 3.2% to its household base. Smaller Central Valley metropolitan counties, such as San Joaquin and Stanislaus, showed patterns of growth similar to the counties at the northern edge of the Bay Area. San Joaquin added 3900 households in the recovery period, an increase of 2.3 percent, and Stanislaus grew by 2900 households, and increase of 2.1 percent.

While the overall lag in household growth statewide in most apparent in a few large counties, even the fastest growing counties are seeing household growth at rates slower than in 1990. If this slower rate of growth continues for the rest of the decade, it will affect the growth of housing demand throughout the state. However, there are some signs that new household formation is still delayed in California, rather than no longer expected. An unusually large gap existed between rates of population growth and household growth in the first part of the 1990s. Despite the modest recovery in growth rates of 1995, it is likely that pent-up demand remains from the earlier recession period.

#### A Stalled California Housing Market: Whiffs of Recovery.

Unlike most previous recessions, the housing market has not led the recovery for the state. Residential building permit activity remained at recession levels in 1995, while home prices showed signs of bottoming out in late 1994 in Northern California and in spring 1996 in

Southern California. Slow household formation, employment uncertainty, lowered expectations for income, and diminishing expectations for house price appreciation all contribute to the prolonged weakness of the housing markets.

Only 85,263 residential building permits were filed in California in 1995, compared to 84,656 at the trough of the recession in 1993, to 97,047 in 1994, and to 237,747 in 1989 (Exhibit 8). The recovery of residential building activity has been very slow, even taking into account the length of the recession. In the early 1980s recession, the decline in building activity was similar, down from 244,658 in 1978 to 85,656 in 1982. Between 1982 and 1983, permits rebounded sharply, doubling in a single year.

In contrast, housing turnaround in the 1990s has been slow in coming and weak. In 1996, 5 years after the employment losses began, signs of recovery have appeared, but the rate of growth is modest, with permits rising 15.5 percent from 1995 levels in the first half of the year. Multifamily permits are showing a stronger recovery than the single family market, with permits rising 20.5 percent in the first half of the year, compared to a rise of 14.3 percent for single family permits. However, this increase is still quite modest, when seen in the light of historic levels. Multifamily permits diminished far more sharply than single family permits in the 1991-93 recession, and permits were at less than half of the 1982 levels in 1993 and again in 1995, as shown in Exhibit 8. Single family permits have remained above 1982 levels throughout the recession.

The San Francisco Bay Area has led the pace of recovery, although the largest number of residential permits continue to be in Southern California. Single family permits are up 23.3 percent in the Bay Area, and multifamily permits up 101.1 percent. Weakest recovery is seen in some Central Valley places--Fresno, for example, has seen a drop in apartment permits and only a very modest increase in single family permits. However, Central Valley losses in some areas are offset by strong growth in others. In Sacramento, single family permits are up by 26.7 percent, and multifamily permits have more than tripled.

Housing price indicators also suggest that the worst impacts of the recession on the housing market have passed, but that an era of rapid appreciation has not returned. The Real

Estate Research Council home price indices, discussed earlier, are appearing to stabilize. These indices track the price of specific homes, and are indicators of how home values are changing. Data from the California Association of Realtors, which tracks median sales price (an indicator of what people are paying for homes overall, without adjusting for the mix of homes bought) also shows sales prices stabilizing in the state as a whole, and beginning to rise in several markets. Areas with particularly strong price increases in spring of 1996 include the San Francisco Bay Area (prices up 8.4 percent in May from the previous year), Ventura County (up 9.4 percent), Santa Barbara (12.4 percent in May, after a weak March and April), and the high desert area (up 25 percent).

Despite significant signs of housing price recovery in some markets, prices statewide remain flat. The weak performance statewide of home prices and the slow recovery of residential building activity are among the factors that have led to questions about the long term strength and direction of California's housing market. A complex set of factors leave the future of California's housing market open to question. Slower household growth and slower income growth have weakened the demand for housing in the short run. If California's income advantage over the rest of the country dissipates further or fails to improve, then housing demand is likely to remain weaker than it had been in the 1980s. However, if job growth continues at a rate above 2 percent annually, especially in the face of slowing growth elsewhere in the nation, then a reversal of migration patterns is likely, bringing with it an increase in household formation. Other questions remain over the mix of ownership patterns. Multi-family permits are currently at a very low level as a share of total residential building permit activity, accounting for only 19.5 percent of total permits in 1995. Yet this trend may shift. Homeownership levels have been dropping nationwide in recent years for adults under 65, suggesting that demand for rental and multifamily may increase more rapidly than demand for single family housing.18

#### A Scattered Recovery for Nonresidential Markets

Total nonresidential building activity did not recover more quickly than residential building, although some individual sectors have behaved strongly since 1993. The value of nonresidential permits grew by only 3 percent annually in 1994 and 1995, before accounting for inflation. The annual growth rate for the first half of 1996, at 11 percent, is below the rate of growth for residential building for the year. Nonresidential sectors that recovered more quickly grew unevenly over time and across geographic areas. Economic growth has helped spur recovery in selected product types and areas, but new building activity is being delayed in areas that were overbuilt in earlier periods and still have high vacancy rates.

Of the three major nonresidential sectors, industrial building activity has rebounded most strongly, increasing in value (before adjusting for inflation) by 32.1% in 1994, by 13 percent in 1995, and at an annual rate of 45 percent in the first half of 1996 (Exhibit 9). Office activity has been the most uneven. Office building permits were still declining in 1994, rose in value by 29 percent in 1995, but have shown a slight decrease of 2 percent in the first half of 1996. Periods of fairly high percentage growth in both of industrial and office sectors should be seen in the context of the very low levels of activity reached in 1993 or 1994. In contrast, retail building activity, which declined far less during the recession, was flat in 1994 and 1995 and grew by 10 percent in the first half of 1996. Of all of the major nonresidential sectors in California, retail has undergone the most severe restructuring, with the weakening role of traditional department store anchors, the expansion of new product types such as power centers, and the redefinition of the role of entertainment activities within regional malls. This redistribution of retail activity is likely to continue in California, challenging older urban and suburban retail areas.

The San Francisco Bay Area has led the state in growth in value of nonresidential building since 1993. Nonresidential permit value in the Bay Area grew by 8.6 percent in 1994, by 13.0 percent in 1995 and at an annual rate of 34.1 percent in the first half of 1996. The area's recovery in building activity is facilitate not only by its strong recovery but also because space was not as heavily overbuilt in the region prior to the recession. Far less overbuilt than either Southern California or parts of the Central Valley, the San Francisco Bay Area office vacancies

have dropped below 10% in San Francisco, San Mateo and central Contra Costa counties (Exhibit 10). Industrial vacancies are below 10% in most of the region. Expansion of building activity is occurring throughout the region in 1996, with industrial permits up most strongly in Silicon Valley, retail permits showing the strongest growth in the San Francisco metropolitan area, and office permits up in the East Bay.

Southern California markets continue to have vacancies above 15% in office. Industrial vacancies have fallen below 10% only in San Diego and Ventura counties. Regionwide, nonresidential permits are only 3.5 percent above 1993 values. However, these low aggregate percentages mask some significant building activity throughout the region. Office, industrial and retail building permits were all up regionwide in both 1995 and the first half of 1996 (while activity in other nonresidential product types and in alterations and additions dropped). Nevertheless, none of the Southern California markets show the steady increase of building activity apparent in the Bay Area.

Central Valley building permit numbers further underline the sense of excess capacity in much of the region. For the five largest Central Valley markets, nonresidential permit value was up 4 percent in 1994, down 5 percent in 1995, and up at an annual rate of 1.8 percent in the first half of 1996. Even Sacramento, the largest Central Valley market, with strong employment growth, has shown uncertain responses in building activity. Office vacancies in Sacramento have dropped to close to 10 percent in the past year, but building permits were down by one third in the first half of 1996. Industrial vacancies are relatively high, at 12 percent, but permit activity was up 71.5 percent. The hesitancy apparent in Central Valley places is a sign that excess capacity remains in these places. However, if strong growth continues, this excess is likely to be absorbed in the next two years, pointing growth pressures towards these areas again.

#### California Real Estate Markets Confront an Uncertain Economic Future

California's economic performance for the past 18 months is a sign of long term economic strength. The lag in response from the building community to take part in this revival

perhaps shows that lessons have been learned from the last boom. Caution may be well founded, as the recent growth has not brought back all of the characteristics of the 1980s boom, and real estate capitalization rates for nonresidential income properties remain above 9 percent in most California markets, well above their pre-1990 levels.

Several factors make California's current expansion different from previous ones. While high income sectors are expanding in the state, lower wage sectors are also playing an important role in growth, leading to concerns that income gaps may widen. The unemployment rate, while dropping, remains close to 2 percent above US unemployment rates, suggesting that the recovery is elusive for part of the labor force, and that job security may continue to be a concern. Much of the loss in wealth of the recession has not been recovered, as real estate prices remain low, and California's income advantage has not been regained. Finally, as California becomes more integrated with the worldwide economy, it also may become more vulnerable to political events and to shifts in factors such as foreign exchange rates.

Despite these concerns, the state's expansion appears promising. Growth is occurring in a diversified set of sectors, many of which are on the leading edge of industrial innovation and expansion. The flexibility and skills of the state's labor force are apparent in the ability to recovery lost jobs while still losing employment in defense sectors.

Characteristics of this new growth are likely to shape the recovery of real estate markets. The hesitancy in both residential and nonresidential markets reflects both the uncertainties in new job growth and preexisting excess capacity. The residential sector may be on the precipice of burgeoning growth in demand. However, the magnitude and composition of that demand is still uncertain. Single family permits have dominated recent building activity, but multifamily permits may begin to take a larger share of building activity, as housing demand expands. Even within single family homes, shifts in patterns of ownership, especially among younger households, may affect the types of space being built and bought.

For office and industrial markets, the characteristics of new users may come in conflict with the lessons learned from the last round of expansion and expansion. Current building activity is fostered largely by build-to-suit activity, and where spec space is under construction, it

is often self-financed. Lenders are understandably reluctant to consider any other arrangement in the construction of new space. Yet the nature of many of the expanding industrial and office tenants make spec space a very attractive alternative for the user. The flexibility required by the production process may cause firm structure to change with each new product. Under these conditions, flexibility in space would be desirable, and many growing firms may be reluctant to wait for build-to-suit space. Tenant firms, brokers, builders and lenders may need to find new ways of communicating and planning for needs to meet the demands of growing industrial and service businesses in the state.

In our opinion, retail firms and builders face the greatest immediate challenges in the state. Growth of population translates into growth of demand for retail space, but competition for retail dollars is strong. Opportunities exist in underserved central city markets, but the risks of overbuilding are probably greatest at the edges of the expanding suburban areas.

#### A Prospective Assessment of the California Economy and its Real Estate Markets

In the early 1990's, California suffered an unexpected, almost traumatic, decline in its economic activity. The economic downturn was extremely pronounced and wide-spread, and accompanied by a barrage of natural and man-made disasters that seemed to only echo and reinforce Californian's "economic crisis". This unanticipated economic demise had momentous effects upon how Californians, and others, view the economic vitality of the state and its real estate markets. It appeared to usher in an era of economic Weltschmerz! While delayed and perhaps frail compared to historical patterns, California's recovery has occurred, until recently almost unnoticed. At this point, the California economy is growing faster in general than the United States economy. There are indicators that California has climbed out of the abyss it had allegedly fallen into, and, in fact, we believe, is being poised for significant, relatively robust economic growth.

This repositioning and restructuring of the California economy has been a necessary precursor to a new realm for enhanced economic prosperity. If our reading of the California economy is correct, and since real estate is a derived demand based upon economic activity, the

now under-anticipated future growth of California's economy will lead ultimately to renewed prosperity in the real estate markets.

Our bullishness on California is generated by a combination of events and forces that we believe will lead inevitably to revived economic activity. California has a skilled labor force and adaptive entrepreneurs who have shown they can work together to down-size, reorganize and restructure to compete nationally and internationally. The out-migration that was supposed to be an overture to a California swan song of inward spiraling decline has reversed itself; and, in retrospect, given the size of the California labor market pool, was a "trickle-out," not a flood of job out-migration. The mix of industries in California that are prospering since the early 1990's mirror the future of innovative, internationally competitive growth industries such as computers, electronics, bio-tech, entertainment, and trade-based sectors. (Of course, the other side of this prosperity has been the major downsizing of defense related industries, financial services, and real estate construction.) California will also prosper as it grows internally because of its sheer market size. It is the premier consumer market for both domestic and foreign producers. California's location on the Pacific Rim engenders a special economic vista within the United States. It borders on the fastest growing economic region (the Pacific) in the world, and California represents the most stable economic-political system in that arena. Moreover, though NAFTA has been a mixed blessing to date, an adaptive California economy stands ready to be the engineer to benefit from its geographic position when the NAFTA becomes a locomotive of wealth generation for Mexico.

In brief, we believe that an innovative California has the necessary resources, tools, and conditions to be poised for substantial future growth. Obviously, necessary conditions are not sufficient for "guarantees" of California's economic re-emergence. In the near future, the growth is likely to continue to be modest and gradual, with California's economy continuing to be restructured. However, it is likely that California is a good "long-term" bet (i.e., high probability) to be a growth region for the United States; and in the near term will be a high growth region relative to other parts of the United States as it has in the past. In the longer run, this should

lead to significant recovery and revival of California's real estate markets for both residential and non-residential products.

<sup>&</sup>lt;sup>1</sup> Data reported for employment is from the California Employment Development Department and US Bureau of Labor Statistics figures for nonagricultural wage and salary jobs.

<sup>&</sup>lt;sup>2</sup> US data on GDP and income is drawn from information published in the *Survey of Current Business*.

<sup>&</sup>lt;sup>3</sup> California GSP and income data discussed in this paper is from figures published in the California Statistical Abstract and from unpublished estimates provided by the California Department of Finance.

<sup>&</sup>lt;sup>4</sup> As calculated from data published by the Real Estate Research Council in April 1996.

<sup>&</sup>lt;sup>5</sup> Unpublished graphic prepared by the Research Department of the California Association of Realtors; recent data as of September 1996 suggests that some of the equity loss has been restored by recent price gains.

<sup>&</sup>lt;sup>6</sup> Figures are calculated from data provided by the California Department of Finance; estimates are current as of July 1996.

<sup>&</sup>lt;sup>7</sup> US Census of Population, 1990.

<sup>&</sup>lt;sup>8</sup> Estimates of domestic migration by age category and origin and destination come from records of California driver's license registrations, as reported by the California Department of Motor Vehicles.

<sup>&</sup>lt;sup>9</sup> As estimated using spring 1996 data from the California Department of Finance.

<sup>&</sup>lt;sup>10</sup> As reported in Smith-Heimer, Guhathakurta and Landis, "California Housing Markets During the 1990s," <u>Quarterly Report</u>, Center for Real Estate and Urban Economics, University of California, Berkeley, October 1994.

<sup>&</sup>lt;sup>11</sup> This is discussed further in Kroll and Keyser, "The Bay Area's Housing: Structural or Cyclical Changes?" in The Bay Area Economic Pulse, Volume 1, Issue 3, 1996.

These trends are consistent with earlier more detailed analyses on the defense sector which showed that rebounds in the private sector would have only very small effects on employment in aerospace (the primary defense related manufacturing area) (Kroll, Corley and Weare, <u>Defense Spending, California Employment and the State's Future</u>, Center for Real Estate and Urban Economics, Working Paper No. 93-218, University of California, Berkeley, October 1993).

<sup>&</sup>lt;sup>13</sup> This is demonstrated in Bardhan, Kroll and Jaffee, <u>The Growing Role of Foreign Trade in California's Economy</u>, Fisher Center for Real Estate and Urban Economics, Working Paper No. 95-239, University of California, Berkeley, October 1995.

<sup>&</sup>lt;sup>14</sup> Calculated from the annual payroll per capita for manufacturing and for eating and drinking places, as reported in County Business Patterns 1993, on-line data base from the US Department of Commerce, Bureau of the Census.

<sup>&</sup>lt;sup>15</sup> Calculated from California Department of Finance January 1996 estimates.

<sup>&</sup>lt;sup>16</sup> Permits actually peaked at 314,569 in 1986, but the precipitous drop-off that signals an approaching recession came from 1989 to 1990.

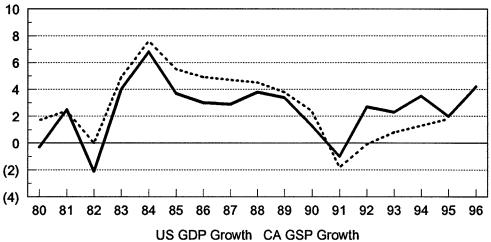
<sup>&</sup>lt;sup>17</sup> Estimates from Construction Industry Research Board data for January through June 1996.

<sup>&</sup>lt;sup>18</sup> Kroll and Keyser, 1996.

<sup>&</sup>lt;sup>19</sup> Vacancy rates discussed in these sections come from data published by CB Commercial and from unpublished data provided by Grubb and Ellis, Cushman and Wakefield, and the San Mateo County Economic Development Association.



Percent Change
10



Source: US Dept. of Commerce, Bureau of Economic Analysis, California Dept. of Finance, UCLA Business

Forecasting Project.

Exhibit 2: Shifts in California's Employment Base

Sector	Employment	Share of Total Employment	Employment	Empl	Employment Change	ande
	1st half 1996 (1000s)	1990	1st half 1996	1990-1993	1993-1995	1st half 1995- 1993-1995 1st half 1996
Total Nonfarm	12622.3	100.0%	100.0%	-454.5	388.5	309.6
Construction	492.3	4.5%	3.9%	-116.1		
Manufacturing	1799.7	16.6%	14.3%	-263.6	-14.7	26.8
Durable	1100.4	10.9%	8.7%	-247.8		
Nondurable	699.3	5.7%	5.5%	-15.9		
TCU	629.3	4.9%	2.0%	-1.6		
Wholesale		6.2%	%0.9	-82.2		
Retail		17.8%	17.5%	-98.7		
FIRE		6.5%	5.8%	-14.5		
Finance		3.1%	2.8%	-5.9		
Insurance		1.8%	1.6%	-0.2		
Real Estate		1.6%	1.5%	-8.5		
Services		26.7%	30.5%	119.3		
Hotels		1.5%	1.5%	-15.0		
Business		5.7%	7.3%	44.8		
Motion Pictures		1.0%	1.3%	10.0		
Amusement/Re		1.2%	1.5%	11.4		
Engineering/Mgt		3.1%	3.2%	-9.3		
Government		16.6%	16.9%	5.8		
DOD	89.9	1.0%	0.7%	-15.7		

Source: CREUE from unpublished BLS data.

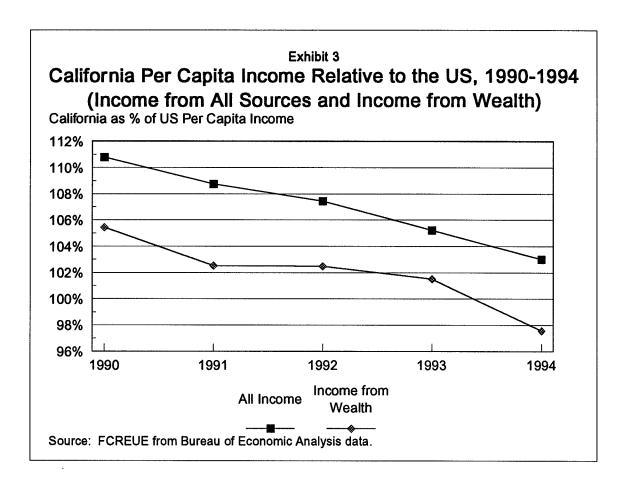


Exhibit 4: Home Price Indices, Selected California Locations, 1990-1996 (April figures, 1990 index = 100)

Area	1990	1991	1992	1993	1994	1995	1996
Southern California (7 Counties)	100	26	92	90.1	84.7	82.1	80.5
Los Angeles	100	94.7	92.3	86.1	80.2	77.3	75.7
Orange *	9	92.6	95.8	90.2	84.3	83.1	81.6
Riverside/San Bernardino	100	99.3	97	94.5	86.9	82.5	80
San Diego	9	100.5	66	94.6	91.7	90.3	89.2
Santa Barbara/Ventura*	100	6'96	92.9	88.4	85.4	84	83.4
Northern California (11 Counties)	100	100.9	8.66	96.2	93.3	93.3	91.8
Alameda	100	2.66	9.66	97.9	96.7	98.2	95.8
Contra Costa	100	104.8	104	6.66	96.7	94.5	91.3
Marin	100	98.8	97.5	94.6	93.3	94.9	93.5
Sacramento	100	116.3	120.4	116.6	105	104	98.1
San Francisco	100	95.8	93.4	68	83.8	84.4	84.4
San Mateo	100	92.9	90.3	84.9	84.8	85.6	85.7
Santa Clara	100	93.8	89.3	86.4	86.6	87.1	89.6
Solano & Napa	100	109.3	109.4	105.9	102.3	2.66	97.7

Note: Peaks indicated by **bold** print, troughs by *italics*. *Monterey and Santa Cruz counties also included in Northern California index.*\* Orange County and Santa Barbara/Ventura Prices Peaked in 1989
Source: Semi-Annual Home Price Surveys, Real Estate Research Council, Southern California and Northern California

Exhibit 5: Commercial Real Estate Price Trends, US and California 1990-1996, Office, Retail, Apartment and Warehouse, \$/Square Foot)

<sup>\*</sup> For U.S. apartments, the "peak" is the pre-trough peak, as compared to the 2nd quarter 1995 value, which is higher than any other quarter in the period covered.

Source: National Real Estate Index, <u>Market Monitor</u>, 1990-1996.

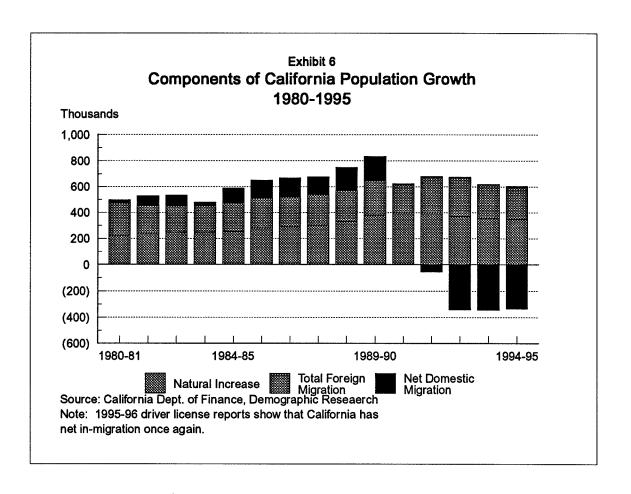
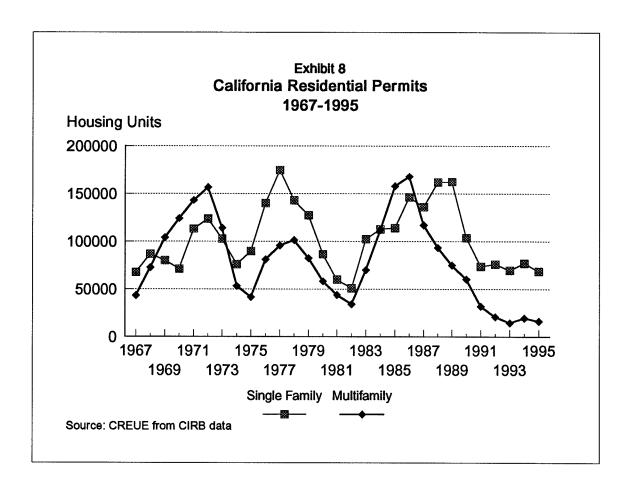


Exhibit 7: Employment Change in California's MSAs

Metropolitan Area	Employment (1000s) 1990 1996*	( <u>(1000s)</u> 1996*	Employment Change 93-95 95-96**	ent Change 95-96**	Per 1990-93	Percent Change 1993-95 95	95-96**
California	12499.9	12622.3	388.5	309.6	-3.6%	3.2%	2.5%
Southern California	7363.5	7153.1	170.8	178.9	<b>%9</b> :9-	2.5%	2.6%
Los Angeles	4133.3	3821.3	55.0	81.5	-10.3%	1.5%	2.2%
Orange	1172.4	1167.4	33.3	25.1	-4.9%	3.0%	2.2%
Riverside/San Bern	712.6	790.6	42.0	16.8	3.0%	5.7%	2.2%
San Diego	9.996	986.1	27.7	48.7	-2.0%	2.9%	5.2%
Santa Barbara	148.3	146.1	1.1	1.9	-3.3%	0.7%	1.3%
Ventura	230.3	241.6	11.7	4.9	-1.4%	5.2%	2.1%
San Francisco Bay Area	2918.3	2971.6	8.99	72.2	-1.9%	2.3%	2.5%
Alameda/Contra Costa	879.2	903.9	22.2	13.9	-0.7%	2.5%	1.6%
San Francisco	947.3	916.7	5.9	10.8	-4.1%	%9.0	1.2%
Santa Clara	814.5	855.2	31.4	40.0	-2.2%	3.9%	4.9%
Solano/Napa	138	142.4	1.2	2.0	2.0%	%6.0	1.4%
Sonoma	139.3	153.4	6.1	5.5	3.4%	4.2%	3.7%
Central Valley (largest MSAs)		1320.9	54.5	28.2	1.4%	4.3%	2.2%
Fresno	243.2	262.7	9.7	<del>د</del> .	4.9%	3.8%	0.5%
Kern	170.7	174	2.57	2.0	-0.5%	1.5%	1.2%
Modesto	117.5	124	3.2	3.2	3.5%	2.7%	2.6%
Sacramento	555.9	600.3	35.1	19.1	-0.3%	6.3%	3.3%
San Joaquin	152.7	159.9	3.9	2.6	2.4%	2.5%	1.7%
Rest of State	978.1	1176.7	96.4	30.3	7.4%	9.2%	2.6%

<sup>\*</sup> Average, first 6 months \*\* Year over year change, using data from the first 6 months of each year Source: CREUE from BLS unpublished data.



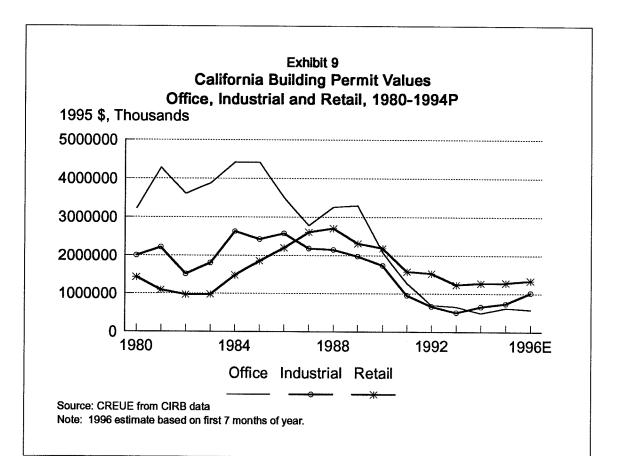


Exhibit 10: Office Vacancy Rates in Major California Markets, 1990-1996 Second Quarter Figures

		Downtown	uwc			Suburban	ban	
Location	Jun-90	Jun-94 Jun-95	Jun-95	Jun-96	Sep-90*	Jun-94 Jun-95	Jun-95	96-unf
Southern California								
Los Angeles	15.3%	23.6%	18.7%	21.8%	17.9%	19.2%	20.1%	18.1%
Orange County					21.8%	16.7%	15.8%	14.7%
San Diego	15.2%	23.2%	21.5%	18.8%	21.8%	18.7%	17.7%	15.4%
Northern California								
Oakland/East Bay	12.8%	12.0%	16.3%	12.2%	18.6%	12.6%	12.1%	9.8%
San Francisco	11.8%	8.6%	10.0%	6.2%	20.2%	10.0%	86.6	6.5%
San Jose	20.2%	17.3%	15.6%	12.5%	12.0%	13.5%	13.7%	7.7%
Central California								
Bakersfield	31.2%	17.8%	15.7%	15.2%	18.2%	13.8%	13.6%	13.4%
Fresno	38.4%	36.6%	22.7%	19.0%	13.1%	12.1%	10.5%	11.0%
Sacramento	10.1%	11.6%	9.1%	7.6%	17.1%	13.3%	14.0%	10.8%
National	15.3%	16.6%	15.3%	14.6%	21.0%	16.3%	14.7%	13.1%

<sup>\*</sup> Suburban data series begins September 1990; San Mateo County is reported as suburban San Francisco, and Contra Costa County in the suburban statistics for Oakland/East Bay.

Source: CB Commercial Office Vacancy Index.