Title
The Bay Area Housing Market - Is it Ready for New Growth?

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The Bay Area Housing Market—Is it Ready for New Growth?

While the Bay Area economy continues to cope with the tail end of a recession and the impacts of base closures, a look beyond the immediate crises shows a region with a strong economic base. Many of California's leading edge industries, especially in high-tech and bio-tech sectors, are located in the region. Yet as the structure of production becomes more influenced by global linkages, the question arises of how much of the expansion of these industries will occur in the Bay Area, and what factors will affect this. As we look at competitive factors within the Bay Area, housing costs emerge as one of the factors that may influence whether industries expand within the region or take advantage of broader linkages to move portions of production beyond the region. This article examines the Bay Area's position relative to California and U.S. housing markets.

A High Cost Market

By any measure, housing costs in California far exceed those of most major U.S. metropolitan areas, and housing costs in the San Francisco Bay Area generally exceed those of the rest of California. A quick review of the last decennial census sets the context for the San Francisco Bay Area housing market. In 1990, the region had 2,365,000 housing units and an average 2.68 persons per household. (California household size was 2.79 and the U.S. 2.63). Self-reported home prices averaged $251,700, a level 22% above California's average, and 69% above the U.S. average. Rental differences were substantially less, with Bay Area rents averaging $627, 11% higher than California's average and 29% higher than the U.S.

Homeownership rates in the San Francisco Bay Area were 53% of all households, compared to 56% for California as a whole, and 64% for the U.S.

(Continued on page 2)

FIGURE 1
Vacancy Rates in Comparative Metro Areas, 1994

<table>
<thead>
<tr>
<th>Homeowner</th>
<th>Rental</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>Kansas City</td>
</tr>
<tr>
<td>San Diego</td>
<td>Oakland MSA</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>Los Angeles</td>
</tr>
<tr>
<td>SF MSA</td>
<td>Houston</td>
</tr>
<tr>
<td>NATIONAL</td>
<td>Seattle</td>
</tr>
<tr>
<td>Chicago</td>
<td>Chicago</td>
</tr>
<tr>
<td>Oakland MSA</td>
<td>NATIONAL</td>
</tr>
<tr>
<td>San Jose MSA</td>
<td>San Diego</td>
</tr>
<tr>
<td>Boston</td>
<td>Phoenix</td>
</tr>
<tr>
<td>Phoenix</td>
<td>Boston</td>
</tr>
<tr>
<td>Denver</td>
<td>New York</td>
</tr>
<tr>
<td>Houston</td>
<td>Portland</td>
</tr>
<tr>
<td>Kansas City</td>
<td>Denver</td>
</tr>
<tr>
<td>Salt Lake City</td>
<td>Salt Lake City</td>
</tr>
<tr>
<td>Seattle</td>
<td></td>
</tr>
<tr>
<td>Portland</td>
<td></td>
</tr>
</tbody>
</table>

Housing Market...

(Continued from page 1)

Trends since 1990 have decreased Bay Area housing prices relative to the U.S. slightly (and perhaps temporarily) and may have increased the price relative to other parts of California. We track several factors, including growth of supply, growth of households and changing prices to illustrate these changes.

How Great is the Supply-Demand Imbalance?

In the 1980s, housing units were added to the San Francisco Bay Area at a pace similar to the growth in population and in households. While a small number of places had an imbalance in growth, with households or population growing more quickly than housing units, the great majority of places in the region do not appear to have diminished the balance of housing over the decade of the 1980s (see Table 1). Housing was not necessarily added where the job growth occurred, however. For example, Santa Clara County added 22% of the housing growth in the Bay Area between 1980 and 1990 but 28% of new jobs, while the Vallejo-Napa-Fairfield metro area (in the North Bay) added 14% of housing and only 5% of jobs.

Since 1990, the growth pattern appears to have increased the im-

| TABLE 1 | California and Bay Area Housing Demand-Supply Balance |
|-----------------|-----------------|-----------------|-----------------|
|                | 1980-1990 Annual Rate of Growth | 1990-1995 Annual Rate of Growth |
| Area           | Population      | Units | Households | Population | Units | Households |
| California     | 2.3%            | 1.9%  | 1.9%        | 1.6%        | 0.92%  | 0.85%       |
| Bay Area       | 1.5%            | 1.4%  | 1.3%        | 1.5%        | 0.68%  | 0.72%       |
| Alameda        | 1.5%            | 1.3%  | 1.2%        | 1.3%        | 0.4%   | 0.4%        |
| Contra Costa   | 2.1%            | 2.3%  | 2.2%        | 1.9%        | 1.2%   | 1.3%        |
| Marin          | 0.3%            | 0.7%  | 0.7%        | 1.3%        | 0.5%   | 0.5%        |
| Napa           | 1.1%            | 1.0%  | 1.2%        | 1.7%        | 1.1%   | 1.3%        |
| San Francisco  | 0.6%            | 0.4%  | 0.2%        | 1.1%        | 0.3%   | 0.3%        |
| San Mateo      | 1.0%            | 0.8%  | 0.7%        | 1.4%        | 0.3%   | 0.4%        |
| Santa Clara    | 1.5%            | 1.3%  | 1.3%        | 1.5%        | 0.7%   | 0.7%        |
| Solano         | 3.8%            | 3.6%  | 3.5%        | 1.8%        | 1.2%   | 1.2%        |
| Sonoma         | 2.6%            | 2.6%  | 2.7%        | 2.2%        | 1.4%   | 1.5%        |

balance between demand and supply of housing in all parts of the region. While population growth slowed statewide in the first half of the nineties, population growth in the Bay Area continued at the same rate as in the 1980s. Yet Bay Area household growth dropped from a rate of 1.4% annually in the 1980s to just over 0.7% annually in the 1990s. Housing units have been added at a similar pace, just under 0.7% annually. Population per household has increased steadily in the Bay Area, rising from 2.63 persons per household in 1980 to a ratio of 2.71 in 1990. The trends of lagging household growth and increased household size indicate pent-up housing demand. During the early 1990s, individuals postponed forming new households and seeking new housing for a number of reasons, including job instability, slow or no income growth, and a tightening housing market.

**Vacancy Rates Remain Low in the 1990s**

Slower household formation was matched by even slower building activity, keeping vacancy rates low in the San Francisco Bay Area. The California Department of Finance measure of overall housing vacancy shows the Bay Area with vacancies at 7.09%, lower than the statewide rate of 7.35%. While vacancies statewide rose from 1991 to 1995, most Bay Area counties showed no change or a decline in the percent of units vacant, as shown in Table 2. A comparison with other places in the U.S. shows that the situation is more severe for rental than for homeowner markets (see Figure 1). The portions of the Bay Area with the highest rents continue to have the lowest rates of vacancy in the rental market.

### TABLE 2

San Francisco Bay Area Vacancy Rates

<table>
<thead>
<tr>
<th>Area</th>
<th>1991</th>
<th>1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>7.09</td>
<td>7.35</td>
</tr>
<tr>
<td>Alameda</td>
<td>4.91</td>
<td>4.71</td>
</tr>
<tr>
<td>Contra Costa</td>
<td>4.70</td>
<td>4.46</td>
</tr>
<tr>
<td>Marin</td>
<td>4.68</td>
<td>4.69</td>
</tr>
<tr>
<td>Napa</td>
<td>6.59</td>
<td>6.08</td>
</tr>
<tr>
<td>San Francisco</td>
<td>6.98</td>
<td>6.72</td>
</tr>
<tr>
<td>San Mateo</td>
<td>3.93</td>
<td>3.58</td>
</tr>
<tr>
<td>Santa Clara</td>
<td>3.71</td>
<td>3.70</td>
</tr>
<tr>
<td>Solano</td>
<td>4.90</td>
<td>5.20</td>
</tr>
<tr>
<td>Sonoma</td>
<td>7.15</td>
<td>6.77</td>
</tr>
</tbody>
</table>


### Is the Region’s Housing Cost Premium Declining?

A tightening housing market is not a prescription for easing prices. Nevertheless, some of the price premiums in the Bay Area show signs of weakening. Figure 2 shows the range of median prices of owner-occupied housing and median rents in the Bay Area counties, as reported in the 1990 U.S. Census, along with the median prices and rents for the U.S. and California. While it is not surprising to note a difference between median home prices and rents for the Bay Area, California and the U.S., the contrast between median home values and rents is important. The cost premium for

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owning rather than renting a home was less than $100 nationwide in 1990, or close to 20%. In California, the monthly price difference between owning and renting a unit of housing was greater than 40%, while in San Mateo and Marin Counties the difference was greater than 60%.

In terms of relative costs in the Bay Area, the less densely populated North Bay counties of Napa and Solano provide the most affordable owner-occupied housing, followed by Sonoma, Contra Costa and Alameda. The most costly owner-occupied housing is in the coastal counties of Marin, San Francisco and San Mateo, with Santa Clara one of the costliest inland Bay Area counties. Apartment rents vary somewhat differently. The North Bay and Alameda counties have the lower median rents, while the coastal counties, Santa Clara and Contra Costa are more expensive. The spread in costs among areas is much greater for owned units than for rental units.

The 1990-1992 recession began to reduce the Bay Area premiums for housing prices and apartment rents. The effect has been most pronounced for the homeowner market. CPI figures show that in the mid to late 1980s, both rents and home prices were growing much more rapidly in the San Francisco Bay Area than nationwide (see Figure 3). Since 1990, the rental CPI change has been very similar for the Bay Area and the United States. In contrast, the homeownership CPI for the Bay Area has grown more slowly than for the U.S. since 1990.

<table>
<thead>
<tr>
<th>TABLE 3</th>
<th>Index of Market Prices of Existing Single Family Homes</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 County Area</td>
<td>100.0</td>
</tr>
<tr>
<td>Alameda</td>
<td>100.0</td>
</tr>
<tr>
<td>Contra Costa</td>
<td>100.0</td>
</tr>
<tr>
<td>Marin</td>
<td>100.0</td>
</tr>
<tr>
<td>San Francisco</td>
<td>100.0</td>
</tr>
<tr>
<td>San Mateo</td>
<td>100.0</td>
</tr>
<tr>
<td>Santa Clara</td>
<td>100.0</td>
</tr>
<tr>
<td>Solano &amp; Napa</td>
<td>100.0</td>
</tr>
<tr>
<td>So. California</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* Bold indicates recovery period. 
Source: Real Estate Research Councils of Northern and Southern California.
The home price index published by the Real Estate Research Council of Northern California (RERC) suggests that prices may have actually dropped, despite the slow increase in overall costs indicated by the CPI (see Table 3). According to the RERC index, home prices have dropped by almost 7% in Northern California markets since 1990. San Francisco, San Mateo and Santa Clara show the most severe price drops, indicating that high-priced markets and those most heavily dependent on defense spending have suffered the greatest losses. Most Bay Area counties showed some signs of recovery, beginning in April or October 1994, but levels remain well below the peak in most cases. While the RERC and CPI figures suggest that the gap between the U.S. and the Bay Area’s housing costs has narrowed since 1990, the Bay Area’s competitive position relative to other parts of California may have worsened. The Bay Area’s price drops have been less severe than in Southern California, which experienced a 17.9% decrease in the RERC index between April 1990 and April 1995.

For the rental apartment market, sources of data other than the CPI suggest that price differentials between the Bay Area and the U.S. may be increasing rather than decreasing in some portions of the market. The National Real Estate Index ranks apartment rents in investment properties as shown in Figure 4. According to this data source, rents in Bay Area places are substantially higher (per square foot) than for the U.S. as a whole, and the differential in average rents increased from about $4.00 a square foot in the late 1980s and early 1990s to almost $5.50 by the end of 1993. Because the homeowner differential for California compared to the U.S. has been so much greater than the rental differential in the past 15 years, the trends since 1990 suggest an overall reduction in the Bay Area housing cost premium compared to U.S. markets overall. Despite this positive trend, price differentials between the Bay Area and other U.S. metropolitan areas remain high, as shown in Figure 5. Furthermore, because Bay Area prices dropped far less than in

### TABLE 4

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of Homes Affordable</th>
<th>Share of County Total</th>
<th>Regional Share Affordable Homes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alameda</td>
<td>84,603</td>
<td>39%</td>
<td>26%</td>
</tr>
<tr>
<td>Contra Costa</td>
<td>77,620</td>
<td>45%</td>
<td>24%</td>
</tr>
<tr>
<td>Solano</td>
<td>48,566</td>
<td>79%</td>
<td>15%</td>
</tr>
<tr>
<td>Santa Clara</td>
<td>42,597</td>
<td>16%</td>
<td>13%</td>
</tr>
<tr>
<td>Sonoma</td>
<td>36,506</td>
<td>49%</td>
<td>11%</td>
</tr>
<tr>
<td>Napa</td>
<td>11,897</td>
<td>59%</td>
<td>4%</td>
</tr>
<tr>
<td>San Mateo</td>
<td>11,896</td>
<td>10%</td>
<td>4%</td>
</tr>
<tr>
<td>San Francisco</td>
<td>11,694</td>
<td>16%</td>
<td>4%</td>
</tr>
<tr>
<td>Marin</td>
<td>4,641</td>
<td>9%</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>330,020</strong></td>
<td><strong>31%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*All owner-occupied housing.
Source: 1990 Census self-reported home values.

### FIGURE 5

**Median Housing Price, Selected U.S. Metro Areas First Quarter 1995**

Source: National Association of Home Builders, Housing Economics.

(Continued on page 6)
Southern California, the Bay Area premium over Southern California has worsened, rather than improved in recent years.

**Measures of Affordability**

The National Association of Homebuilders calculates an affordability index that reflects the share of homes on the market that a household with a median income could purchase at current finance rates. Figure 6 uses this index to compare housing affordability for Bay Area metro areas with selected metro areas elsewhere in the U.S., for 1991 and 1995. The gap between the San Francisco metro areas and many other U.S. places has decreased considerably over the last four years, yet Bay Area MSAs still remain far less affordable than the U.S. overall.

As the Bay Area’s economy once again expands, another relevant question is whether and where new employees in the region can afford a home. To gain a sense of the amount and location of affordable homes, we calculated affordability based on assumptions about the potential household income for workers in the Bay Area’s emerging industries. Given a certain income, where could these workers live? We define affordable housing as housing for which the purchase cost is no more than 30% of a household’s annual income. Interest rates, the amount of the down payment, and the loan term are other factors that influence affordability.

Table 4 shows the share and number of owner-occupied homes in the Bay Area which would be affordable to households with an annual income of $52,500. Other assumptions included:

- An interest rate of 8.75%.
- A maximum of 30% of annual household income is allowed for the purchase of housing.
- A 30-year mortgage term.
- Down payment of 20% of the price.

<table>
<thead>
<tr>
<th>Area</th>
<th>1994 Living Area (Square feet)</th>
<th>'91-'94 Change in Living Area (Square feet)</th>
<th>% Change Price per Square feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>1,840</td>
<td>-60</td>
<td>-2.0%</td>
</tr>
<tr>
<td>Bay Area Avg.</td>
<td>1,878</td>
<td>-87</td>
<td>-3.4%</td>
</tr>
<tr>
<td>Alameda</td>
<td>1,930</td>
<td>-185</td>
<td>-6.4%</td>
</tr>
<tr>
<td>Contra Costa</td>
<td>1,970</td>
<td>-160</td>
<td>-5.3%</td>
</tr>
<tr>
<td>Marin</td>
<td>2,355</td>
<td>155</td>
<td>-1.3%</td>
</tr>
<tr>
<td>Napa</td>
<td>1,835</td>
<td>-330</td>
<td>6.0%</td>
</tr>
<tr>
<td>San Francisco</td>
<td>1,170</td>
<td>-80</td>
<td>-3.3%</td>
</tr>
<tr>
<td>San Mateo</td>
<td>1,960</td>
<td>270</td>
<td>-8.3%</td>
</tr>
<tr>
<td>Santa Clara</td>
<td>1,810</td>
<td>-220</td>
<td>-3.2%</td>
</tr>
<tr>
<td>Solano</td>
<td>1,965</td>
<td>-145</td>
<td>-10.1%</td>
</tr>
<tr>
<td>Sonoma</td>
<td>1,906</td>
<td>-90</td>
<td>3.9%</td>
</tr>
</tbody>
</table>


**FIGURE 6**

Affordability Index in Selected U.S. Metro Areas First Quarter 1995

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Potential Units</td>
</tr>
<tr>
<td>Regional Total</td>
<td>247,400</td>
<td>266,028</td>
<td>545,788</td>
<td>619,530</td>
</tr>
<tr>
<td>Oakland PMSA</td>
<td>105,200</td>
<td>99,534</td>
<td>210,184</td>
<td>268,380</td>
</tr>
<tr>
<td>San Francisco PMSA</td>
<td>marginal</td>
<td>43,676</td>
<td>87,066</td>
<td>94,870</td>
</tr>
<tr>
<td>San Jose PMSA</td>
<td>87,800</td>
<td>55,830</td>
<td>109,420</td>
<td>120,570</td>
</tr>
<tr>
<td>Santa Rosa-Petaluma PMSA</td>
<td>25,000</td>
<td>28,929</td>
<td>59,859</td>
<td>56,190</td>
</tr>
<tr>
<td>Vallejo-Fairfield-Napa PMSA</td>
<td>29,400</td>
<td>38,059</td>
<td>79,259</td>
<td>79,520</td>
</tr>
</tbody>
</table>


Taxes and insurance represent 2% of annual principal and interest payments.

According to these calculations, the largest shares of affordable homes are available in the East Bay and North Bay. The San Francisco metro area (Marin, San Mateo and San Francisco) has the smallest share of affordable homes, with affordable housing also scarce in the San Jose metro area.

A number of issues become readily apparent when viewing housing affordability from this perspective. Interest rates and the allowable income for housing can affect the size of the market for different household incomes. A 2% drop in interest rates, (assuming a fixed rate), increases the price this household can afford by $40,000 (from $200,000 to $240,000). Likewise, if lenders allowed a larger share of income for housing, say 33%, along with a lower interest rate, the same household can afford a home valued at $265,000. Even with this potential for “raising” the number of affordable homes, the low shares of affordable housing in two of the three largest employment centers in the region raises questions about the types of businesses that can afford to expand in the region and where expansion might occur.

New Supply Adjusts in Size and Price

Trends in the new home market, as reported by the Construction Industry Research Board, also give evidence of a moderation in housing costs in the San Francisco Bay Area. In response to a changing market and changing economic conditions in California, new home builders have been building smaller, less expensive homes (Table 5). In contrast to existing home sales, the response with new homes may be more severe in the Bay Area than in other parts of the state. The average price per square foot of new homes in California has dropped by 2% since 1990, while the drop has been 3.4% in the San Francisco Bay Area. The average size of homes built has dropped 4.6% region-wide, with the largest drops occurring in Napa (18%), Santa Clara (12%) and Alameda (9.6%) counties.

This scaling down of size and cost of newly built homes, in conjunction with price decreases in existing home sales, should help to increase the availability of affordable housing to a Bay Area workforce, as long as builders are willing and able to construct homes in the affordable range.

Meeting Future Demand

Will the affordability of housing in the Bay Area continue to improve? Several factors will influence the outcome for the housing market in coming years. These include the pace at which demand for housing grows, the demographics of housing growth (size, age and family characteristics of households), the pace of growth of new supply, and the characteristics of new supply (size of homes, quality, location).

Two sets of projections for future housing demand based on population projections for the San Francisco Bay Area, are shown in Table 6. The first set provided by the Association of Bay Area Governments, (ABAG) is based on general population and employment forecasts. The second set by John Landis, Subhraraj Guhathakurta and Michael Smith-Heimer, from a study for the California Mortgage Bankers Association (CMBB), was part of a statewide forecast of household growth that also accounted for household formation rates by ethnic composition of an area’s population.

Household growth for the decade of the 1990s is forecast by ABAG at

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da rate of 1.13% annually, while the
CMBA forecast is at a 1.05% annual
rate. These are both significantly less
than growth in the 1980s but higher
than the rates actually observed in the
first half of the 1990s. Over the
longer term, ABAG forecasts growth of
households from 2000 to 2010 at
the rate of 1.06% annually. Thus, ABAG forecasts a total of about
545,800 new households over the
two-decade period.

ABAG also analyzes local government
policies to assess the potential
for increasing the supply of housing
over the 20-year period, as shown in
the final two columns of Table 6.
This assessment shows that the
region as a whole has enough land set
aside for new residential development,
although the supply of land is
more readily available in the East
Bay than in the West and South Bay,
and there appears to be a potential
shortage of residential units in the
North Bay.

Land supply alone is not enough to
maintain an affordable base of hous-
ing. Even where land is planned for
residential use, variables such as high
land costs, community resistance to
new housing, and infrastructure costs
have limited new development in the
recent past. In addition, where de-
velopment does occur, growing fees
affect the type and cost of housing
added to the region. A 1991 survey of
planning, building and public works
departments of cities in Northern
California by the Building Industry
Association of Northern California
(BIA-NC) found that the average
development fees charged by a city
(and/or district) for a new single fami-
illy dwelling had increased over 233%
from 1981 to 1991, from $4,264 to
$13,763, with costs substantially
higher in some communities. These
higher fees will make it more diffi-
cult to shift in the long term to more
affordable housing.

Matching total demand with exist-
ing land use policies appears to be an
attainable goal for the Bay Area, over-
all. Matching the needs of house-
holds in the more moderate income
ranges is likely to be more difficult.
Critical to meeting future demand
generated by economic and income
growth in the region will be careful
attention to the institutional and com-
munity setting in which housing is
built.

Housing Affordability
Continues To Be At Risk

A high-priced housing market is a
luxury found in areas with strong in-
comes and job growth, or with un-
ique characteristics that draw a high
income population despite limited
jobs. As California’s economy has
weakened, its housing market has
begun to adjust to a slower growth en-
vironment with fewer income ad-
vantages. Nevertheless, the housing
market continues to appear tight com-
pared to other parts of the state and
country. Large differentials remain in
home prices, and vacancy rates are
lower than in surrounding areas.
While a significant amount of new
construction is in the affordable
range, total construction levels
remain low compared to historic
levels and compared to population
growth. Attention to the housing
stock and growth in demand will be
needed as the Bay Area’s economy
continues to restructure and recover.

Mary M. Corley
Facility Technics
Cynthia A. Kroll
FCREUE

The research for this paper was com-
missioned by the Bay Area Defense Con-
version Action Team, as part of an effort
to assess the infrastructure capacity of
the San Francisco Bay Area.

FOOTNOTES

1 Assumes a 30-year mortgage, with 20%
donw and an annual interest rate of
8.75%.
2 Source’s data excludes Sonoma County.
3 This income represents an approximate
average of the various area median in-
comes for the Bay Area which HUD
prescribes for housing programs it funds.
Monthly payments affordable for house-
holds earning $52,500 would be about
$1,575 based on assumptions provided
here.
4 The survey included growing cities in
Monterey, San Benito, San Joaquin,
Santa Cruz and Stanislaus. Fees were
based on a planned development with
100 single family detached homes with
three bedrooms, two baths, and 1,500
square feet of living space on a 6,000
square foot lot.

The Fisher Center for Real Estate and Urban
Economics, founded in 1950, promotes research
in real estate finance and construction, land use,
and urban and regional development. It serves
as a practical forum for academics, government
officials, and business leaders and sponsors
creative and thoughtful academic research and
executive education programs with the goal of
promoting understanding and encouraging
innovation in the field of real estate. There were
no contractors or subcontractors used in the
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