A PERIODIC REVIEW OF THE HOUSING TRUST FUNDS OF THE CITY AND COUNTY OF SACRAMENTO: ECONOMIC NEXUS BETWEEN EMPLOYMENT-GENERATED DEMAND AND HOUSING AFFORDABILITY

This report will investigate and update the relationship between economic growth, employment income, and the demand for affordable housing. For over 10 years, commercial projects developed within the City and County of Sacramento contributed fees to housing trust funds, special funds established by the City and County to support and enable the creation of affordable housing targeted to lower wage employees. The Housing Trust Fund (HTF) ordinances of the City and the County were adopted in 1989 and 1990, respectively, to collect fees on non-residential development for affordable housing near employment centers. [1]

The HTF ordinances require developers of commercial space to pay a fee that is based on the square footage of the project. Commercial projects include offices, manufacturing facilities, hotels, warehouses, and shopping centers. The fees are deposited into the housing trust funds and are used to leverage the development of housing at sales prices and rents that are affordable to low- and very low-income households.

This report contains two major sections:

- *Confirmation of the economic nexus, including*
    - *A general discussion of the NEXUS concept and enabling ordinances;*
    - *Overview of regional economic conditions, including analysis of jobs created by regional economic activity from 1990 to 2003;*
    - *Discussion of real estate market conditions and affordability;*
    - *Analysis of very low and low-income households formed as a result of new employment in the study period; and*
    - *Affordability gap analysis.*
- *Review of Trust Fund Performance, including*
    - *Discussion of revenues and production attributable to Housing Trust Fund efforts; and*
    - *Spatial analysis of the relationship between housing trust fund fee payments, lower income households and projects constructed to address the County's continuing need for affordable housing.*

[1] On February 27, 2001, the City Council eliminated the North Natomas Housing Trust Fund as a separate fund and redirected its revenues to the citywide fund, where they could be used to support housing for low- and very low-income households throughout the city, including North Natomas. Previously the North Natomas Fund could only be used to fund infill projects in the North Sacramento Community Plan Area.

Income targeting. The City's HTF benefits both very low- and low-income households; the County's benefits very low-income households exclusively. Using the definitions and amounts published annually by the U.S. Department of Housing and Urban Development, "very low-income households" are those who earn less than 50 percent of the area median income ($29,900 for a 4-person household, adjusted for household size); "low-income households" earn less than 80 percent of the area median income ($47,850 for a 4-person household, adjusted for household size). A project is considered to meet the minimum income-targeting requirement for housing trust fund financing if the percentage of very low- or low-income occupants equals at least the percentage of trust fund contribution to the total development cost. For reference purposes. Table 7 charts income by household size for various categories.

The Nexus Concept

Judicial precedent established the requirement that a "rational nexus" be shown between the impact associated with a public action and the remedy offered in law. The requirement that public decision makers identify a reasonable connection between fund sources and uses was initially mandated by the US Supreme Court (1988)[2] and subsequently voted into the Government Code (Section 66001) by the California State Legislature (AB 1600) in 1989[3].

The language as described by the League of California Cities requires that jurisdictions "establish a reasonable relationship between a development project or class of development project, and the public improvement for which the developer fee is charged and to segregate and account for the money separate from general fund monies".

Local jurisdictions must demonstrate the "reasonable nexus" as described in the relevant sections of Section 66001 shown below:

> *(1) Determine how there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed.*
>
> *(2) Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed.*[4]

The research question analyzed investigates whether a reasonable relationship between the development of non-residential facilities and an appropriate fee collected to fund the

[2] *Pacific Legal Foundation took the Nollan case up to the United States Supreme Court which ruled in a landmark decision that government entities may not use their permitting authority as a means to extract property concessions from landowners. The Court held that a land exaction imposed as a permit condition may constitute a taking unless there is a "nexus" between an adverse impact caused by the permitted activity and the permit condition imposed. That is, if the development in question creates a public need or imposes a burden on the public, then the government may impose a condition to meet the public need or alleviate the burden. In the Nollans' case, however, there was no nexus. Although the new development might block the view from the highway, the easement across the Nollans' property would in no way mitigate that view shed loss. Thus, the imposition of the easement as a condition for the building permit constituted a "taking" of the Nollans' private property.*

[3] *Relevant text of AB1600 appears in appendix of report..*

[4] *Section 66001 of the California Government Code, January 1989*

development of affordable housing continues to exist within the City and County of Sacramento.

Previous studies discussed the Nexus question in abstract and specific terms. Keyser Marstons Associates generated an important fundamental analysis for Sacramento's Housing Trust Fund ordinance in April and September of 1990[5]. A basic methodology and required conclusions were offered to implement the funding source. The following section summarizes assumptions and considerations developed in this research.

Non Residential Construction and Economic Growth

The economic argument to assess a fee upon the development of new non-residential construction rests on the concept that such construction represents a regional response to and requirement of economic growth which creates demand for additional housing development. A fee on non-residential development subsidizes the development cost for affordable units, creating more supply, and thus reducing the negative externalities on the housing stock (increased demand) created by commercial development.

In order for housing trust fund revenues to accumulate, some measure of regional growth must occur. Job growth increases household income, causes household formation and, importantly, can increase employment-driven migration into the Sacramento region. It is this migration, and related regional household formation that creates the "economic nexus" for a housing trust fund solution to employment-based demands upon the housing stock.

In the Sacramento region, economic growth is directly tied to expansion of the area's predominant State Government sector. Historically, this expansion has been positive (with the exception of 1992-1993) and relatively predictable. This predictability makes the region attractive to developers of commercial buildings. High-tech manufacturing and related information-oriented business also chose locations within the region before and during the information boom of the late 1990's, all of which fueled demand and development of non-residential space.

Employment Growth

The mix of new industries both moving into the region and expanding from within the region is critically important to the determination of housing needs. Table 1 shows current employment, employment change since 1990, percent change in employment and a calculation of the annual rate of change by sector.

Table 1 shows that over 186,500 new jobs (Totals, All Industries), an increase of 33 percent, were created between 1990 and 2003 with 89 percent of those jobs created in the services sector. State and local government was the leading industrial sector in terms of job creation (52,200 jobs) with the professional and business services sectors contributing 38,300 jobs. Goods producing industries, in the regional case referring to technology employment, generated 22,650 jobs by contrast. The Sacramento Metropolitan Statistical Area (Sacramento, Placer and El Dorado Counties) regional

[5] *Economic Nexus Analysis, Housing Linkage Fee, City and County of Sacramento, Keyser Marston Associates, Inc. April 1990.*

economy demonstrated the expected promise of information industry/service sector job growth, reaffirming its dependence upon government employment and the information development impact that government expansion encourages.

Table 1
REGIONAL EMPLOYMENT TRENDS
SACRAMENTO MSA 1990-2003

TITLE	2,003	Change 1990-2003	Percent Change	Annual Change	Annual Rate of Change
Civilian Labor Force	878,675	200,375	29.5%	15,413	2.01%
Civilian Employment	830,850	183,050	28.3%	14,081	1.93%
Civilian Unemployment	47,833	17,333	56.8%	1,333	3.52%
Total, All Industries	746,567	186,467	33.3%	14,344	2.23%
Total Farm	2,725	-1,475	-35.1%	(113)	-3.30%
Total Nonfarm	743,842	187,842	33.8%	14,449	2.26%
Total Private	549,200	154,600	39.2%	11,892	2.58%
Goods Producing	96,350	22,650	30.7%	1,742	2.08%
Construction	57,783	19,083	49.3%	1,468	3.13%
Construction of Buildings	11,400	1,500	15.2%	115	1.08%
Specialty Trade Contractors	40,100	17,400	76.7%	1,338	4.47%
Building Foundation and Exterior Contractors	10,767	5,667	111.1%	436	5.90%
Building Equipment Contractors	12,567	4,667	59.1%	359	3.62%
Building Finishing Contractors	12,967	5,967	85.2%	459	4.85%
Other Specialty Trade Contract	3,800	1,100	40.7%	85	2.63%
Manufacturing	37,967	3,467	10.0%	267	0.74%
Durable Goods	26,817	7,717	40.4%	594	2.64%
Computer and Electronic Product Manufacturing	10,583	2,983	39.3%	229	2.57%
Computer and Peripheral Equipment Manufacturing	3,650	650	21.7%	50	1.49%
Semiconductor and Electronic Component Manufacturing	4,692	2,092	80.4%	161	4.62%
Residual-Communications Equipment Manufacturing	2,242	342	18.0%	26	1.23%
Nondurable Goods	11,150	-4,150	-27.1%	(319)	-2.41%
Food Manufacturing	3,725	-1,475	-28.4%	(113)	-2.56%
Residual-Beverage and Tobacco Product Mfg	7,425	-2,775	-27.2%	(213)	-2.42%
Service Providing	647,492	165,292	34.3%	12,715	2.29%
Trade, Transportation and Utilities	121,858	21,858	21.9%	1,681	1.53%
Wholesale Trade	20,908	4,208	25.2%	324	1.74%
Retail Trade	86,142	15,642	22.2%	1,203	1.55%
Transportation, Warehousing and Utilities	14,808	2,008	15.7%	154	1.12%
Information	19,958	5,358	36.7%	412	2.43%
Financial Activities	53,733	15,633	41.0%	1,203	2.68%
Real Estate and Rental and Leasing	12,908	2,508	24.1%	193	1.67%
Professional and Business Services	88,267	38,267	76.5%	2,944	4.47%
Management of Companies and Enterprises	8,583	3,283	61.9%	253	3.76%
Administrative and Support and Waste Services	42,617	21,817	104.9%	1,678	5.67%
Waste Management and Remediation Services	1,508	708	88.5%	54	4.90%
Educational and Health Services	74,192	24,592	49.6%	1,892	3.14%
Leisure and Hospitality	68,850	20,250	41.7%	1,558	2.71%
Other Services	25,992	5,792	28.7%	446	1.95%
Government	194,642	33,342	20.7%	2,565	1.46%
Federal Government	10,417	-18,983	-64.6%	(1,460)	-7.68%
State and Local Government	184,225	52,225	39.6%	4,017	2.60%
State Government	85,450	16,650	24.2%	1,281	1.68%
State Government Education	5,975	875	17.2%	67	1.21%
Other State Government	79,475	15,675	24.6%	1,206	1.70%
Local Government	98,775	35,675	56.5%	2,744	3.51%

Source: Labor Market Information Division, EDD

Considering the percentage change among sectors, information industries showed the highest percent gains in employment. Examples include business and professional services (76.5 percent), finance and insurance (41 percent), education and health services (49.6 percent) and other services (28.7 percent). Employment in the local government sector increased 56.5 percent. Construction employment showed a 49.3 percent increase in response to the need for additional office space and housing required to accommodate an expanding work force.

Non-durable manufacturing lost employment, as did the federal government sector.

New Demand vs. Existing Needs

The requirement of the Nollan decision was that public sector exactions or fees be assigned to a specific problem, and that the problem be a result of the taxed activity, in this case the employment growth of the region. The data show that the Sacramento MSA grew 33 percent during current implementation of the Housing Trust Fund Fee. Of that growth a certain percentage of new job hires will come from the lower income strata of the labor force. Sacramento's economic development advocates promote the availability and lower relative cost of local labor resources, which is true in comparison to the wage levels in the Bay Area, still a source of much of the so-called "spill-over" information industry job growth.

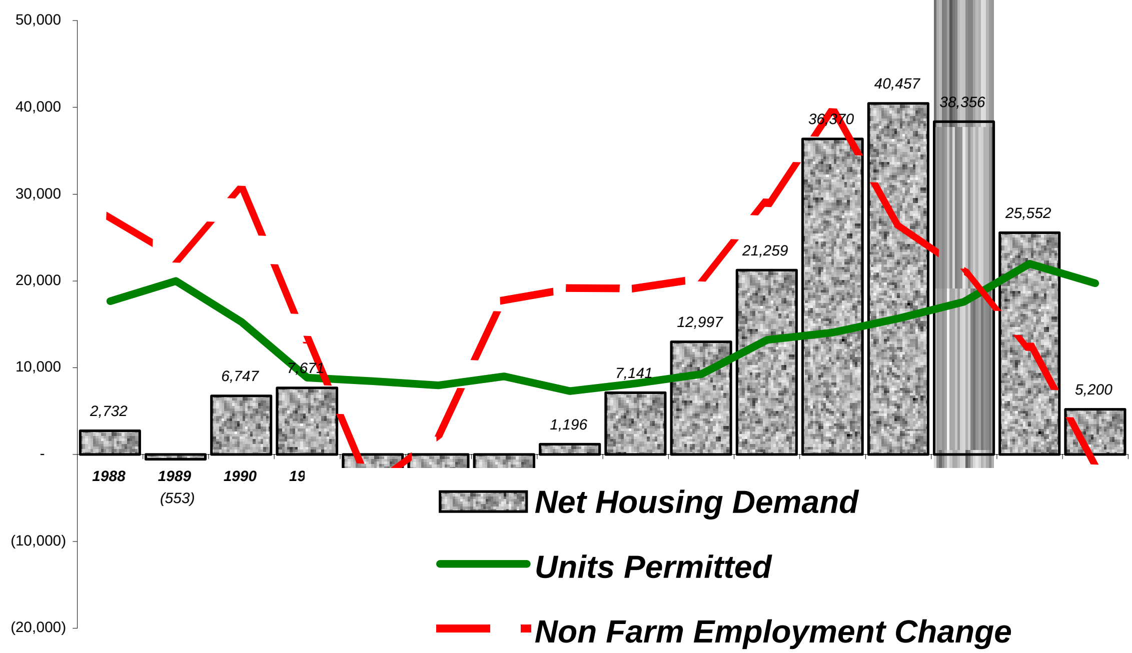
New residential development addressed some of the housing demand in the region, but not all local households can afford or directly benefit from the construction of new homes. This is especially problematic when many buyers of new housing are equity-rich employment-driven transfers from the Bay Area and Southern California, where housing prices are higher than those in the Sacramento region.

Analysis of housing unit production and changes in non farm wage and salary employment for the Sacramento MSA shows that new housing supplied did not pace housing demanded when calculated on the basis of 1.3 jobs per additional housing unit demanded. Figure 1 shows this relationship and assumes that the vacancy rate among the housing stock is low, requiring the construction of additional units.

Net housing demand shown on Figure 1 refers to the difference between housing demanded, measured at 1.3 jobs per unit demanded, and housing supplied as identified by number of permits issued. Permits issued assumes that housing is actually constructed, and serves as a readily-available proxy for units actually completed and put into service.

Figure 1

NET HOUSING DEMAND
SACRAMENTO MSA NON-FARM EMPLOYMENT COMPARED TO NUMBER OF NEW UNITS PERMITTED



Source: Labor Market Information Division, Employment Development Department
Construction Industry Research Board

Direct vs. Indirect Employment

Regional analysts frequently divide employment into two factions, the so-called direct employment sectors and the indirect employment sectors. Simply put, the direct sector causes economic growth and the indirect sector expansions result from growth. They are related in outcome but not in sequence. A more refined analysis of construction trends would divide non-residential construction into the two economic development categories. That level of detail is beyond the scope of the following analysis other than to suggest that longer-term direct economic forces are at work in the regional economy. Analysis of the incremental employment changes showed that much of the region's growth resulted from changes in government employment, a direct impact. Closer analysis of the relevant sectors can show that government employment is causal in the number of jobs in education and health services, as examples. Real Estate Analytics will only consider the 13-year increment of employment change with the understanding that certain sectors within that larger group represent more growth inducing activities than others.

Growth Inducing vs. Population Serving

Economic base analysis would require a division of employment between growth-inducing vs. population serving. Growth inducing would be equivalent to direct employment while indirect could be considered population serving. Real Estate Analytics will not attempt to divide employment groups into these basic and non-basic categories. In reviewing the employment change of the past thirteen years, all that is required is a measure of change that will include direct and indirect employment, and measures of growth inducing (basic) and population serving employment (non-basic).

Low-income Households and Assistance Needs

Lower income households will respond to economic conditions. One outcome requires lower income households to pay higher housing costs (fees, rents, security deposits, etc.). Other charges include the implied cost of overcrowding that occurs as housing markets tighten. In addition, lower income households can and will pay the higher costs of commuting longer distances. This situation lowers earned income even more as lower income workers pay the “opportunity cost” and direct costs of longer commutes. On the regional level, the society pays a higher burden in the levels of environmental degradation that results from higher commutes.

Changes in Median Household Income

During the past ten years median household incomes increased at rates slightly greater than the rate of inflation, demonstrating real income change among Sacramento area households. In other words, real incomes and purchasing power within the County of Sacramento increased slightly, at rates greater than the rate of inflation, as shown in Table 2.

Table 2

Changes in Median Income Measures
1990-2000

	Census 2000	Census 1990	Percent Change	Rate
Median Household Income	$ 43,816	$ 32,297	35.7%	3.09%
Median Family income	$ 50,717	$ 37,841	34.0%	2.97%
Per Capita Income	$ 21,142	$ 15,265	38.5%	3.30%
CPI Western Urban NSA	173.70	129.60	34.0%	2.29%

Source: US Bureau of the Census, 1990-2000

Summary

The preceding discussion showed that regional employment growth was positive, even though Sacramento suffered greatly during the base closure episodes of the 1990’s. The incremental data show that employment growth averaged approximately 2.23

percent per year, and population growth amounted to 476,900 persons or 36,000 additional residents per annum. Overall, households in the region became more prosperous, averaging a 3.09 per annual rate of increase in median household income. Per capita income also increased at a rate greater than population, yielding an annual average of 3.30 percent, also out pacing the rate of inflation for the period. The expansion can be characterized as a structural transition toward an information-based economy. The foregoing sets the tone for the following analysis in retrospect of the Housing Trust Fund program. One of the impacts of economic growth is the affect on housing affordability, to which we now turn.

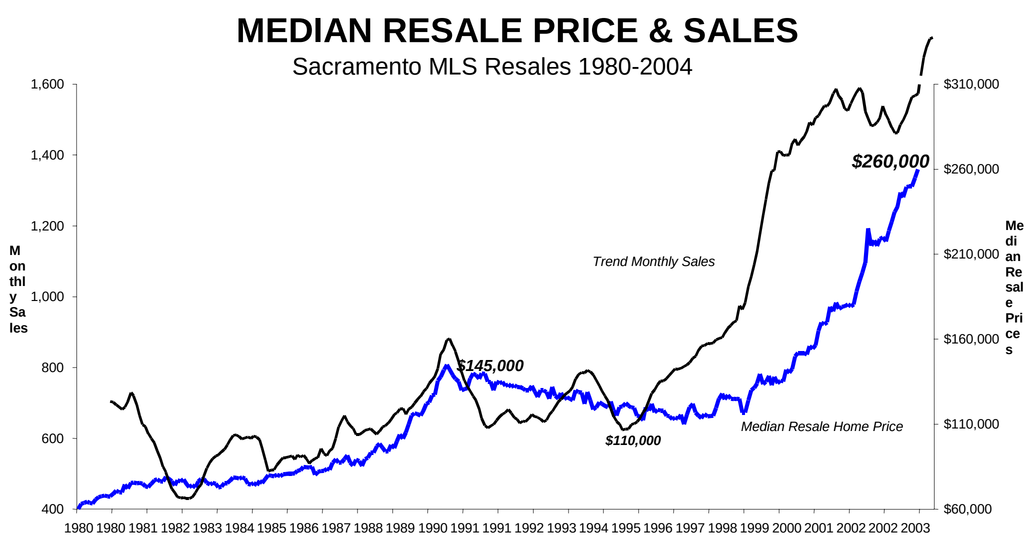
AFFORDABILITY GAP AND HOUSING MARKET CONDITIONS

The research concluded that 186,500 jobs were created by a transitioning Sacramento regional economy. During the study period, 1990-2003, regional population increased by 477,000 persons. Estimated at three persons per household, approximately 160,000 households were formed. Sacramento's housing market reflected the inevitable economic adjustments to changes in demand and supply.

Median Housing Prices

Recent moves in the median price of resale housing increased the pressure on regional housing affordability. Figure 2 shows price trends since 1980.

Figure 2



Source: Metrolist, Sacramento Association of Realtors, Real Estate Analytics

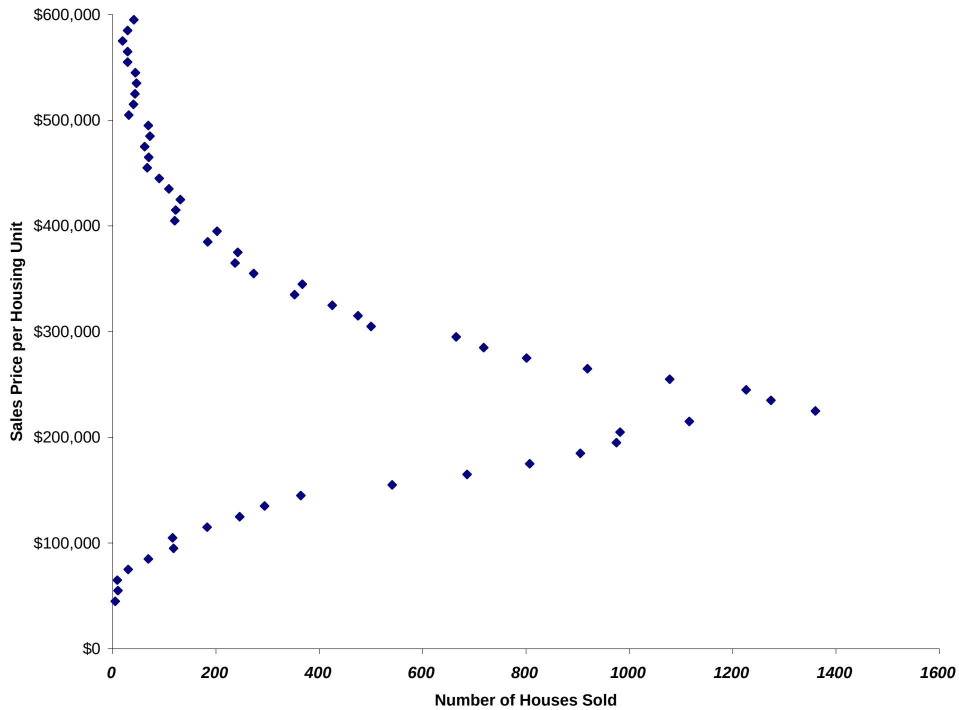
The figure shows median resale home prices equaling $145,000 in 1990 and increasing to $260,000 in 2004, an 80 percent increase and well above the 36 percent change in median household income presented earlier.

The recent escalation in Sacramento area home prices began in 1998 and appears similar to the price escalation that occurred in the late 1980's as evidenced by the darker line that reports price trends in Figure 2. In the early 1990's sales activity ranged near 1,000 sales per month. In year 2003, unit sales volume among resales equaled 1,500 per month, indicating continuing pressure on prices, as was evidenced in March 2004, when the median resale price rose to a record $265,000.

Figure 3 shows the relative distribution of resale housing prices for year 2003. Approximately 20,800 homes were sold through the Multiple Listing Service (MLS) service for the year. (New homes typically do not appear in the MLS listings.) The data show that the median price (mid point) and most frequent or modal price were above $200,000 for the sample year.

Figure 3

DISTRIBUTION OF RESALE HOME PRICES
2003 SACRAMENTO COUNTY



Source: Real Estate Analytics, Sacramento MLS

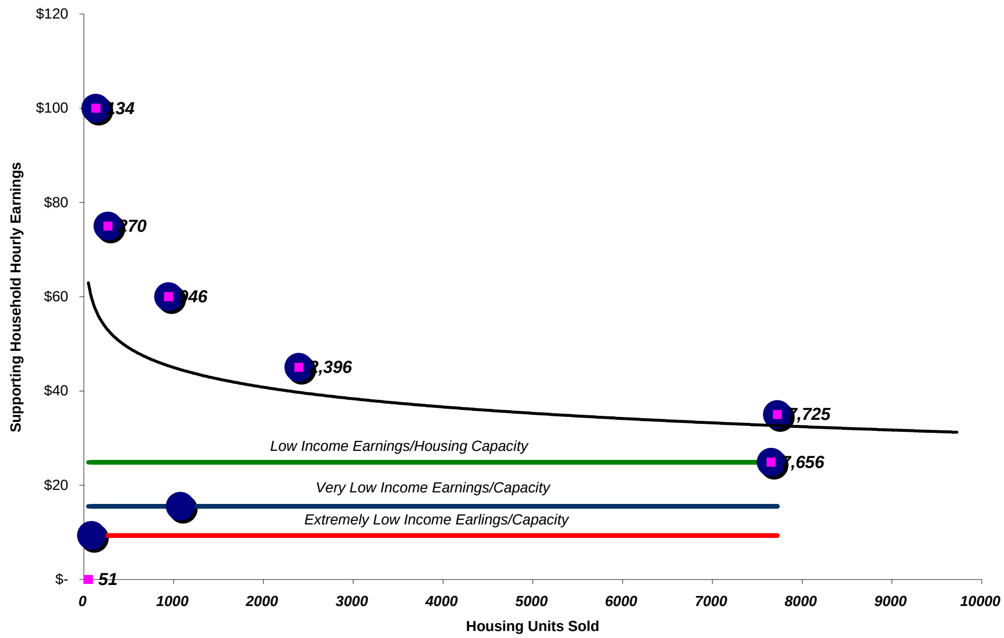
Only 1.3 percent of homes sold in 2003 did so at prices below $100,000, vastly limiting the supply of housing opportunities to lower income households. The problem with affordability and purchasing capacity can be dramatically shown when home prices are adjusted back to household earnings per hour as shown in Figure 4.

The capacity to afford prices of 2003 resale housing units is demonstrated for the three categories of targeted income groups; extremely low-income (less than $17,950 per year, very low-income ($17,950 - $29,900) and low-income ($29,900-$47,850), the red line, the blue line and green lines, respectively, using the median income of four-person household size for each income group.

The chart shows the imbalance between homes sold and those income groups that require affordable housing choices, which is especially evident at the extremely low-income range where only 50 homes were transacted. Similarly, at the very low-income purchasing range, 1,000 homes were transacted. For these groups, rental options are the primary option. For low-income households, a somewhat brighter picture appears on the chart.

Figure 4

HOUSEHOLD EARNINGS PER HOUR COMPARED TO NUMBER OF RESALE HOUSING UNITS SOLD
2003 SACRAMENTO COUNTY

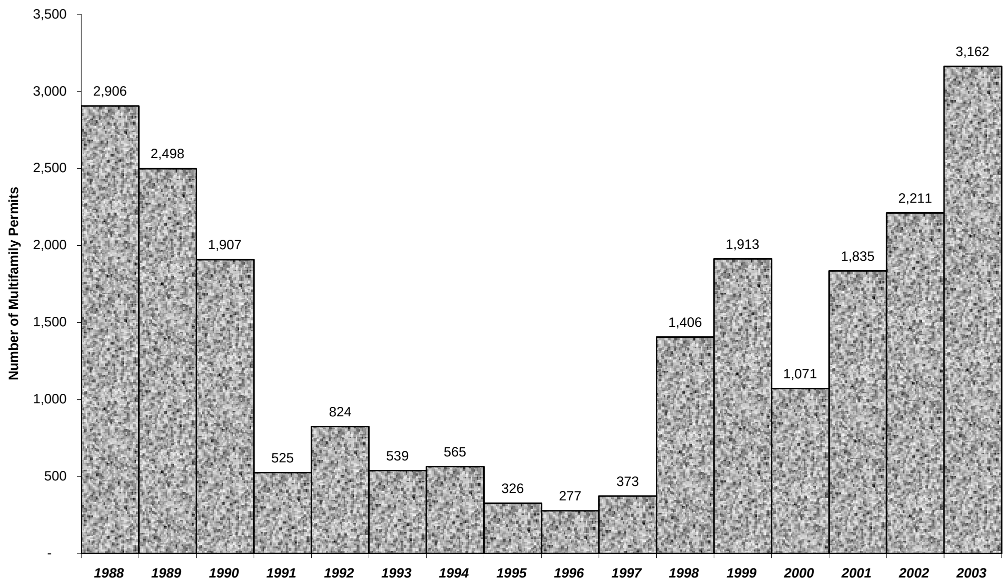


Source: *Real Estate Analytics, Sacramento MLS*

Rental housing was subject to the same forces of supply and demand as shown in the trends for home sales over the thirteen-year period under review. As Figure 1 showed, new construction permits did not keep pace with net housing demands caused by employment growth.

As shown in Figure 5, multifamily housing production during 2003 approached rates of development adequate to accommodate increasing demand for housing. However, the chart dramatically shows that the amount of construction during previous years can only be described as inadequate. The economic result of increased prices, overcrowding, and shortage followed.

Figure 5
Multi Family Units Permitted
Sacramento County 1990-2003



Source: RAND Corporation, Real Estate Analytics

Sacramento's rental rates accelerated rapidly from 2000 through 2002, following significant employment growth. Vacancy rates, which fell below 3 percent in early 2001, did not soften until multifamily construction accelerated. The average asking rent in the Sacramento metropolitan area rose from $870 in the first quarter of 2003 to $893 in the fourth quarter, the twenty-sixth consecutive quarter of rising rents.[6]

Rental increases affected all apartment classifications. CBRE market information in 2002, for example, showed Type A apartment rents increasing from $788 to $1,071; Type B apartments from $625 to $833; and Type C apartments from $548 to $706 in the same period. One factor contributing to pressures on the rental market came from fewer low-income renter households being able to compete in the first-time homebuyer market because of the rapidly rising sales prices of single family homes.

Prior to this acceleration in rental rates, the 2000 census reported affordability gaps among the 189,000 renter households in Sacramento. Approximately 71,000 households in the county reported paying more than 30 percent of their income for rent, a situation referred to as a rent-burdened household. Assuming a base rent of $822 per month from a proto-typical development schedule, Table 3 calculates a deficit of $25,5 million per month or $306 million per year.

[6] CB Richard Ellis (CBRE), Sacramento Area Apartment Market Index Brief, 4th Quarter 2003.

Table 3

CENSUS ESTIMATE OF RENTAL GAP AND BURDENED HOUSEHOLDS - SACRAMENTO COUNTY

Income	Burdened Households		Rent	GAP		Subsidy
Less than $10,000:	21,619	$	250	**($572)**	$	(12,363,773)
$10,000 to $19,999:	29,905	$	438	**($384)**	$	(11,495,298)
$20,000 to $34,999:	21,788	$	688	**($134)**	$	(2,928,173)
$35,000 to $49,999:	3,426	$	1,063	**$241**	$	824,317
$50,000 to $74,999:	556	$	1,563	**$741**	$	411,777
$75,000 to $99,999:	38	$	2,188	**$1,366**	$	51,893
				Monthly	**$**	**(25,499,257)**
				Annual	**$**	**(305,991,081)**

Source: US Census, Real Estate Analytics

Summary

The economic growth that generated 186,500 jobs from 1990 to 2003 also produced an 80 percent increase in resale home prices and a 70 percent increase in rental rates (Census 1990 compared to CBRE report). The income created by these jobs, and the housing that wage earners could purchase, is the next step in an analysis of housing affordability.

THE NEXUS NUMERICAL ANALYSIS

To estimate the number of low and very low-income households formed in Sacramento County as a result of new employment from 1990 to 2003, Real Estate Analytics followed procedures developed in earlier approaches to the NEXUS problem. The following section will briefly discuss assumptions, data-sources and calculation procedures.

Estimate the Total New Employees

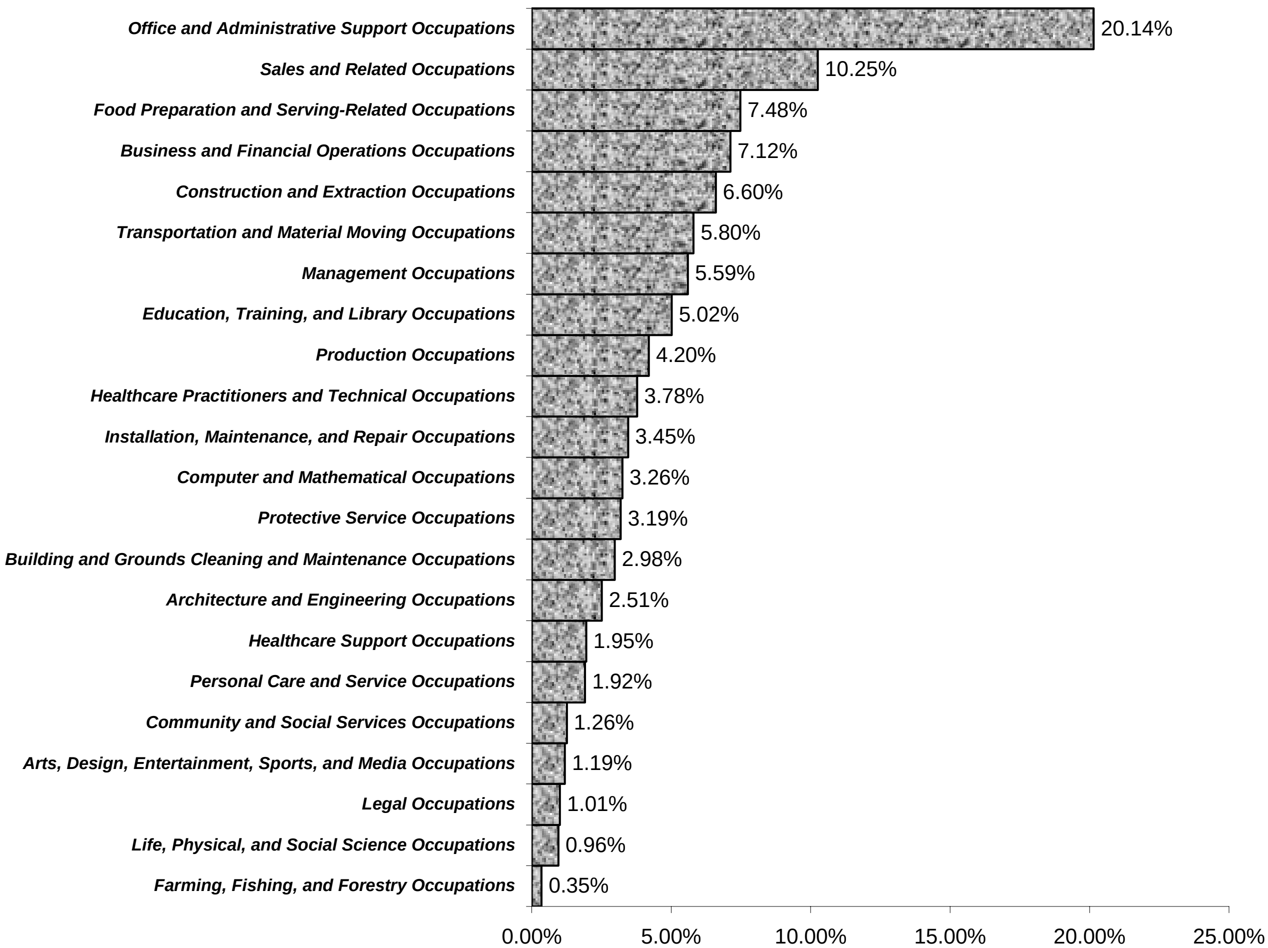
Using data collected from the Labor Market Information Division of the Employment Development Department, an increment of increased job growth was obtained. These data appear previously in Table 1. For analysis purposes the change in "Total All Industry Wage and Salary Employment" equaled 186,500 jobs for the Sacramento MSA which includes Sacramento, El Dorado and Placer Counties. As mentioned not all sectors grew at similar rates as the regional economy transitioned into a more information-based economy.

Breakdown of Employees by Occupation

To estimate the number of employees by occupation, a statistical analysis of California staffing patterns by industry was related to EDD wage by occupation patterns. The increase in employment, determined above, was compared to California's mix of staffing patterns for new jobs in the region. Appendix 1 lists occupations, wage rates and increase in jobs by income target group. Table 1 summarizes the occupational mix for the Sacramento region. Note that office, sales and food service occupations comprised approximately 40 percent of the labor skill needed by employment growth in the region.

Figure 6

Occupations as Percent of Sacramento, MSA Workforce



Source: Labor Market Information Division, EDD

Employees by Occupation Meeting Low-income and Very Low-income Definition

To determine the number of employees in the very low and low-income household groups, REA queried the Sacramento MSA database of wage scales by occupation provided by the Employment Development Department. Using income limits identified by HUD and included Table 4, the queried returned and summed all those employees within the target ranges. Of the 186,500 new jobs in the Sacramento MSA, 120,509 paid very low and low-income wages.

Table 4

INCOME DEFINITIONS BY HOUSEHOLD SIZE

INCOME GROUP	Persons in Household								
	1	2	3	4	5	6	7	8	Median
Extremely Low	$ 12,550	$ 14,350	$ 16,150	$ 17,950	$ 19,400	$ 20,800	$ 22,250	$ 23,700	$ 18,675
Very Low Income	$ 20,950	$ 23,900	$ 26,900	$ 29,900	$ 32,300	$ 34,700	$ 37,100	$ 39,450	$ 31,100
Lower Income	$ 33,500	$ 38,250	$ 43,050	$ 47,850	$ 51,650	$ 55,500	$ 59,300	$ 63,150	$ 49,750
Median Income	$ 41,850	$ 47,850	$ 53,800	$ 59,800	$ 64,600	$ 69,350	$ 74,150	$ 78,950	$ 62,200
Moderate Income	$ 50,250	$ 57,400	$ 64,600	$ 71,750	$ 77,500	$ 83,250	$ 88,950	$ 94,700	$ 74,625

Source: HUD website

Percentage of Employees in Jobs in Other Counties in the Region

The next step estimates, from the total new jobs in the region, the percentage of new jobs located in Sacramento County. Using data on total non farm employment by county from EDD, Table 5 shows that 59 percent of the new jobs from 1990 to 2002 were located in Sacramento County.   Applying this percentage to the 186,500 new jobs in the region, 110,035 new jobs were located Sacramento County, and of the estimated 120,509 low and very income jobs, 71,100 were in Sacramento County.

Table 5

	1990	2000	2002	Change 1990-2002	Percent of New Jobs
El Dorado	30,100	43,700	46,900	16,800	8.9%
Placer	60,700	111,100	120,200	59,500	31.7%
Sacramento	465,100	554,900	576,600	111,500	59.4%
TOTAL	**555,900**	**709,700**	**743,700**	**187,800**	

Source: Labor Market Information Division, Employment Development Department, State of California 2004

Estimate the Number of New Households

To estimate the number of households formed as the result of economic expansion, a ratio of 1.3 from the 2000 Census was utilized. The lower the jobs household ratio the greater the housing need. Over time due to increased housing production costs and supply constraints, this jobs household ratio is expected to increase as home prices escalate.

Applying the 1.3 workers per household standard, of the 110,035 total estimated new jobs in Sacramento County, 84,642 new households were formed from these jobs. Of the 71,100 low and very low-income jobs in Sacramento County, 54,692 new very low and low-income households were formed.

Estimate Employees Living in Sacramento County

The final step is to adjust for employees working in Sacramento County but commuting to homes outside the County. Census records suggested that the number of employees commuting into Sacramento County was consistent with past analyses. The 1987 and the 1990 analyses used figures in the 1980 Census when 89 percent of those who worked in Sacramento lived in Sacramento. The 2000 census shows that 88.15 percent of those who worked in Sacramento lived in Sacramento. Therefore, of the 54,692 very low-income and low-income new households formed in connection with jobs in Sacramento County, it is estimated that 48,675 also live in Sacramento County.

Table 6 summarizes the steps described above. In addition, the table shows estimated hourly wages and annual wages for MSA employees in the impacted groups.

Table 6

SUMMARY OF NEXUS NUMERICAL ANALYSIS

	Hourly Wage	***Annual Wage***	***Change in Jobs***
Very Low-income	$10.54	$21,853	67,637
Low-income	$15.55	$32,274	52,872
TOTAL VLI and LI			**120,509**
New Jobs in Sacramento County			**71,100**
New Households From New Jobs			**54,692**
Those Households Living in Sacramento County			**48,675**

Source: Labor Market Information Division, EDD
Real Estate Analytics

AFFORDABILITY GAP

The previous section confirms the nexus between new employment and very low and low-income household formation. The linkage in the nexus analysis that has most clearly changed is the cost to mitigate the impact, or the cost of delivering housing units affordable to very low-income and low-income households of varying sizes.

The affordability analysis has two major components- the costs of developing the housing and the determination of the rent-paying or mortgage-paying capability based on income. This affordability gap analysis is conducted for a fairly minimal standard apartment rental unit, using figures on the lower side of the cost range. Affordability is analyzed for rental housing for very low-income and low-income households and for ownership housing for low-income households.

Table 7 shows an estimate of prototypical multifamily construction costs in Sacramento County. The assumptions were based on a modest product, two-story woodframe construction. In 1990, the cost of developing a minimum two-bedroom apartment was estimated at $55,360. The same unit today has a development cost of approximately $110,000.

Table 7

PROTOTYPICAL MULTIFAMILY DEVELOPMENT COSTS
Sacramento County 2003

			1 BR	2 BR	3 BR
Bedrooms			**1 BR**	**2 BR**	**3 BR**
Unit Size			**650**	**850**	**1000**
Estimated Construction Costs					
	Land		$10,000	$10,000	$10,000
	On & Off Sites ($18.5/sf)		$12,000	$15,000	$18,000
	Building ($60/sf)		$39,000	$51,000	$60,000
	Fees/Permits		$11,000	$14,000	$16,000
	Other (incl. ($24/sf)		$16,000	$20,000	$24,000
	Total		$88,000	$110,000	$128,000
Mortage Support			($556)	($695)	($809)
Interest Rate		7.0%			
Terms		360			
Loan to Value		95.0%			
Unit Management Expenses			$ (167)	$ (209)	$ (243)
Rental Rate			($723)	($904)	($1,052)
Requisite Income			**$ 28,922**	**$ 36,153**	**$ 42,068**

Source: Sacramento Housing and Redevelopment Agency

Using the HUD incomes for very low and low-income, Tables 8 through 10 show the relationship between ability to pay and development cost of units appropriate for the family size using several affordability scenarios. The rental analysis adjusts cash flow per unit by including utility allowances, deductions for vacancy, and unit maintenance expenses yielding an estimate of net operating income. Supportable investment is then calculated using a finance rate of seven and one-half percent. On the right side of the tables, development costs are compared to the investment amount supported by very low-income households, yielding a required subsidy by size of unit.

For the VLI target market (Table 8), requisite subsidies range from $46,390 to $71,989. In 1990, the three-person very low-income household (at 50% of median) in a two bedroom apartment produced an affordability gap of $33,131. Today the same size very low-income household affordability gap has nearly doubled to $60,077.

For the low-income households at 60% of area median, requisite subsidies for a rental units (Table 9) range from $31,375 to $53,228. Table 10 shows the affordability gap for low-income households at 80% of area median purchasing a resale home. Using the median resale price of $268,000, a four-person household at 80% of area median has a gap of over $100,000.

Table 8

VERY LOW-INCOME SUBSIDY REQUIREMENT (affordable to 50% of area median, rent)

INCOME				EXPENSES						
Family Size	**Maximum Income**	**Gross Monthly Payment**	**Net Monthly Payment**	**Less 5% Vacancy**	**Less $225 Op. Cost**	**Yearly NOI**	**Income Avail. For Debt Service**	**Supportable Investment**	**Cost of Unit**	**Subsidy Req./Unit**
1	$22,450	$561	$512	$487	$262	$3,140	$2,730	$(32,244)	$ 88,000	$ 55,756
2	$25,650	$641	$592	$563	$338	$4,052	$3,523	$(41,610)	$ 88,000	$ 46,390
3	$28,850	$721	$663	$630	$405	$4,861	$4,227	$(49,923)	$ 110,000	$ 60,077
4	$32,050	$801	$715	$679	$454	$5,454	$4,742	$(56,011)	$ 128,000	$ 71,989
5	$34,600	$865	$779	$740	$515	$6,181	$5,374	$(63,474)	$ 128,000	$ 64,526

Table 9

LOW-INCOME SUBSIDY REQUIREMENT (affordable to 60% of area median, rent)

INCOME				EXPENSES						
Family Size	**Maximum Income**	**Gross Monthly Payment**	**Net Monthly Payment**	**Less 5% Vacancy**	**Less $225 Op. Cost**	**Yearly NOI**	**Income Avail. For Debt Service**	**Supportable Investment**	**Cost of Unit**	**Subsidy Req./Unit**
1	$26,940	$674	$625	$593	$368	$4,419	$3,843	$(45,386)	$88,000	$42,614
2	$30,780	$770	$721	$684	$459	$5,514	$4,795	$(56,625)	$88,000	$31,375
3	$34,620	$866	$808	$767	$542	$6,506	$5,657	$(66,811)	$110,000	$43,189
4	$38,460	$962	$876	$832	$607	$7,281	$6,331	$(74,772)	$128,000	$53,228
5	$41,520	$1,038	$952	$904	$679	$8,153	$7,089	$(83,728)	$128,000	$44,272

Assumptions:
1 and 2 person families are housed in one BR units; 3 person families in two BR units; 4 and 5 person families in three BR units
Utility allowances are $49, $58, and $86 respectively for 1, 2 and 3 bedroom units
Lender is requiring a 1.15 debt coverage ratio, and is lending at 6.5% for 30 years

Table 10

LOW-INCOME SUBSIDY REQUIREMENT
(affordable to 80% of median, ownership)

Family Size	Unit Size	Affordable Monthly Payment	Net Monthly Payment	Principle & Interest	Affordable Sales Price	Median Resale Price	Gap
3	2	$1,154	$1,096	$852			
4	3	$1,293	$1,197	$946	$166,136	$268,000	$101,864
5	4	$1,385	$1,299	$1,022	$179,354	$268,000	$88,646

Assumptions

Interest Rate	6%	Taxes	1.25%
Loan Term	30	Insurance	.0001%
Downpayment	5%	Flood Insurance	.0001%
Mortgage Ins.	0.01%	Income to Housing	30%

Conclusion

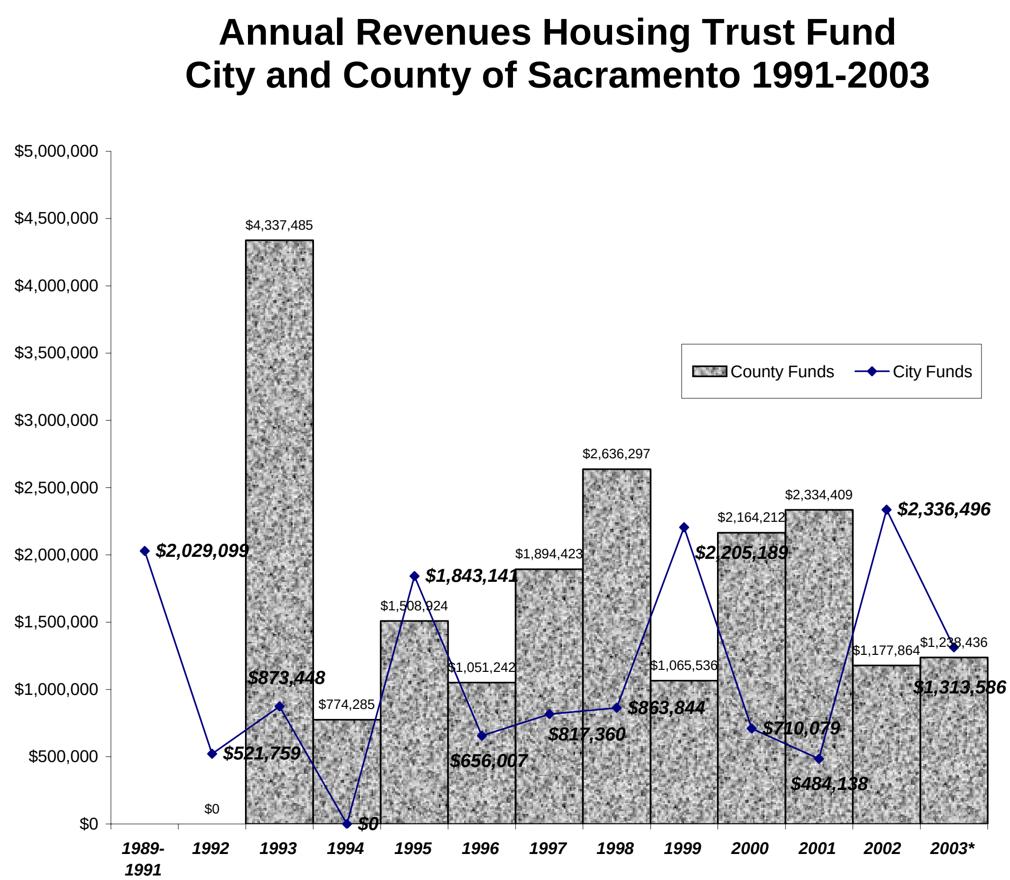
The relationship or nexus between economic development and the provision of adequate housing remains strong and very important. The analysis points out that many of the newer jobs created rank among the lower wage rates as the economy transitions into a service sector economy. Housing faces many supply constraints such as land availability, environmental hurdles, institutional barriers, and the obvious financial feasibility limitations. The impact of the increased affordability gap is a substantially increased housing nexus cost.

REVENUES AND PRODUCTION

Housing Trust Fund Collections

Housing trust fund collections, since the inception of the funds through 2003, total $14,654,146 in the City fund, including the North Natomas fund, and $20,183,113 in the County (total $34,837,259). Figure 7 shows the irregular nature, based upon non-non-residential construction starts, of those collections. The City/Natomas fund represents 42 percent and the County 58 percent of revenues obtained from the non-residential fees.

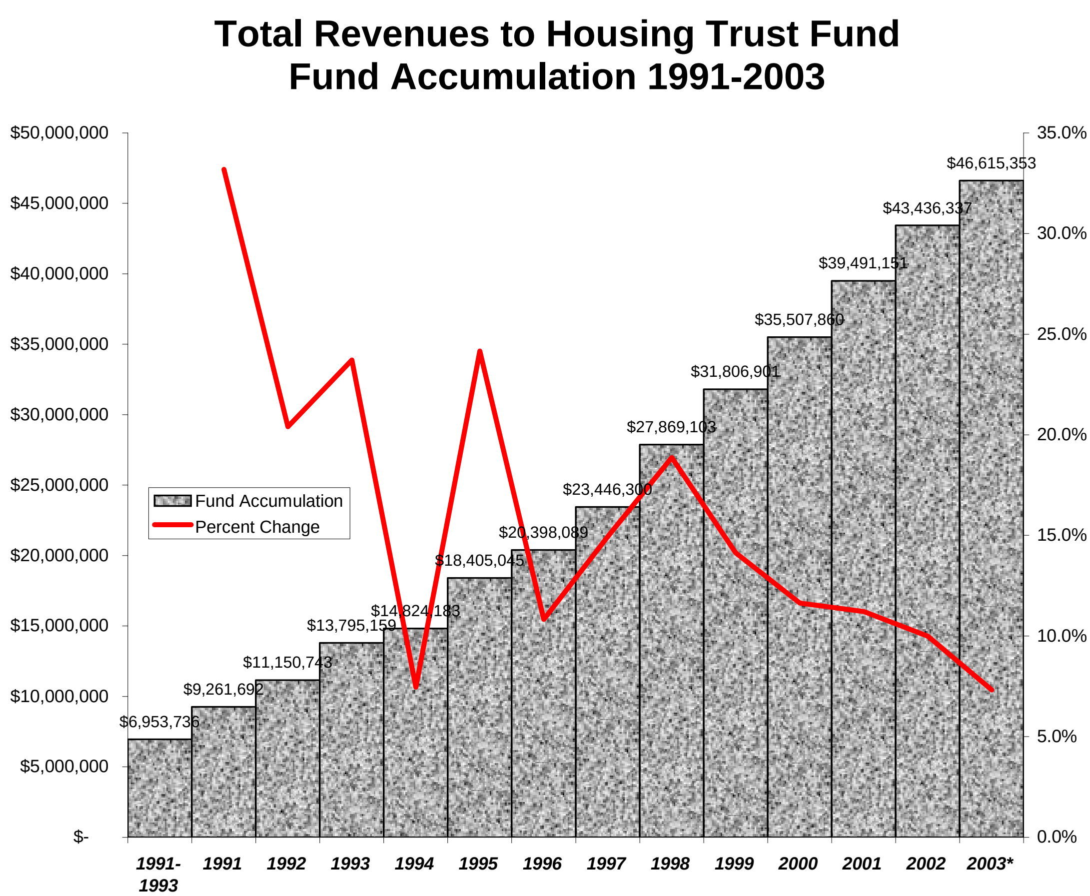
Figure 7



Source: Sacramento Housing & Redevelopment Agency

Figure 8 shows the combined city/county annual collections plus additional income through interest and repayments since 1991 as a fund accumulation. The percent change in fund value is indicated on the right axis of the chart.

Figure 8

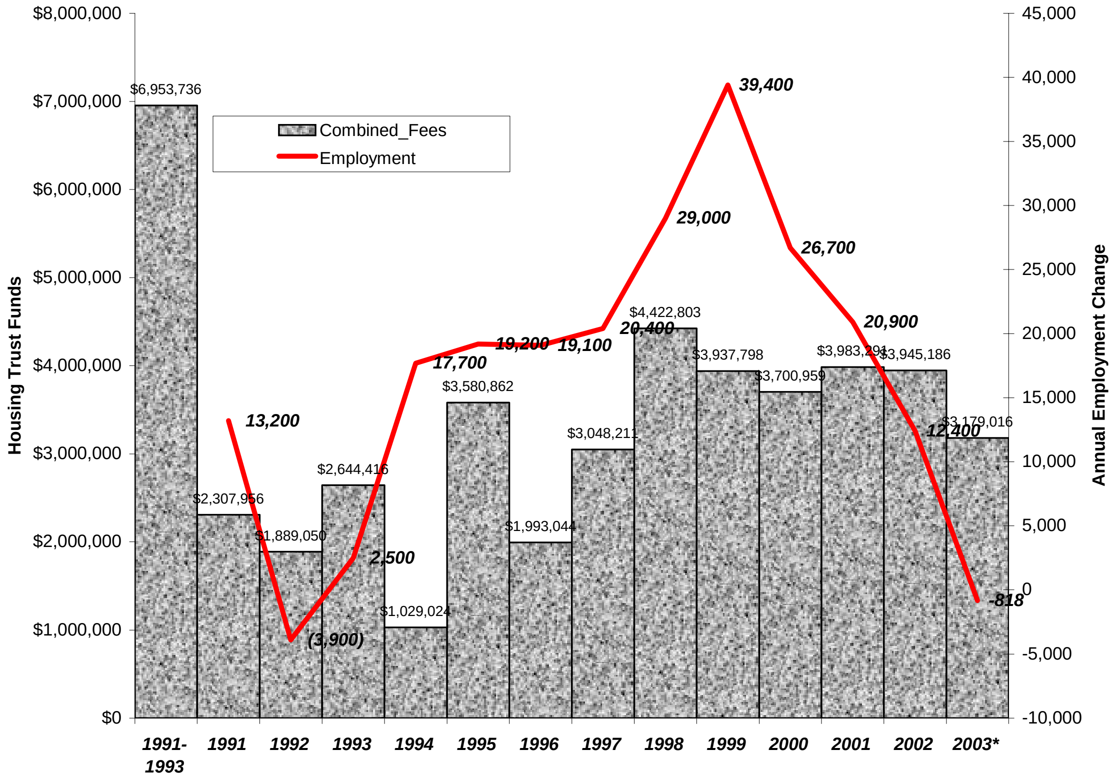


Source: Sacramento Housing & Redevelopment Agency

Figure 9 shows total annual revenues to the Housing Trust Fund (fees, interest, loan repayments) as compared to changes in regional wage and salary employment. Non-residential construction starts, the source of housing trust fund monies, can be considered leading indicators of employment change. Cursory inspection of the chart demonstrates this relationship to a degree.

Figure 9

Change in Total Wage and Salary Employment Compared to Additions to the Housing Trust Fund



Source: Sacramento Housing & Redevelopment Agency
Labor Market Information Division, EDD

These HTF collections are not correct. 1998 total collections (fees plus interest & payments) was $4,422,803.

Chart needs label box.

Summary of City and County Housing Trust Fund Production

Financial details of housing trust fund production appear in Tables 11 and 12. To date, 2,950 units have been assisted by the City and County housing trust funds, with total production of 3,394 units (assisted and non-assisted units). The developments contributed a value of $407 million to the jurisdictions' housing stock. The average housing trust fund subsidy per unit was $11,197, while the total per unit development cost averaged $119,983.

City Housing Trust Fund Production

By February 2004, $13.97 million in City and Natomas housing trust funds were committed to the development of 1,525 homes and apartments, of which 1,226 were affordable to very low-income, low-income, and moderate-income households. Fifty-six percent of the assisted units are affordable to very low-income households, 42 percent affordable to low-income persons, and 2 percent to moderate-income households. (Moderate-income units were funded by redevelopment tax increment funds.)

The homeownership developments financed with housing trust funds included six larger projects - from the “new town” of Del Paso Nuevo to a 13-unit new urbanist condominium development in Southside Park. Fourteen homeownership units were also created under the Sacramento Housing and Redevelopment Agency’s Boarded/Vacant Program, where single family homes are rehabilitated and sold to owner-occupants. The balance of 14 developments, and the majority of affordable units, were multifamily rental property.

Table 11

AFFORDABLE HOUSING PROJECTS
CITY OF SACRAMENTO

Project	Assisted Units	Total Units		Housing Trust Funds		HTF/Unit		Development Cost
18th & L Mixed-Use Development	45	176	$	2,000,000	$	11,364	$	33,745,377
Atrium Court Apartments	179	224	$	550,000	$	2,455	$	26,658,083
Del Paso Nuevo	40	77	$	1,498,391	$	19,460	$	26,448,734
Terracina Gold, Village 1 And 3	120	160	$	610,000	$	3,813	$	19,158,328
Terracina Meadows Apartments	120	156	$	1,000,000	$	6,410	$	17,483,378
Terracina Gold, Village 2	92	120	$	1,000,000	$	8,333	$	12,269,610
Victory Townhomes/Evergreen Estates	76	76	$	476,000	$	6,263	$	11,171,754
St Anton Building	18	65	$	385,000	$	5,923	$	10,380,001
Land Park Woods	75	75	$	1,916,420	$	25,552	$	10,271,749
Kennedy Estates Apartments	98	98	$	950,000	$	9,694	$	6,591,456
Pensione K Apartments	137	137	$	512,583	$	3,741	$	6,466,255
10th And T	6	13	$	339,000	$	26,077	$	2,940,161
BEGIN	28	28	$	38,160	$	1,363	$	2,846,005
Morrison Point Subdivision	22	22	$	190,000	$	8,636	$	2,005,000
Evergreen Estates	56	56	$	100,000	$	1,786	$	1,695,000
1500 Q Street	4	6	$	119,810	$	19,968	$	920,050
Meadowview Preapprentice Program	8	8	$	500,000	$	62,500	$	800,000
Demolition Lexington Apartments	-	-	$	780,283	$	-	$	780,283
Habitat for Humanity	6	6	$	129,000	$	21,500	$	369,000
1100 Harris Avenue	1	1	$	15,000	$	15,000	$	159,950
3836 Dayton St.	1	1	$	10,000	$	10,000	$	140,000
63 Butterworth Ave.	1	1	$	10,000	$	10,000	$	95,000
1048 Jean Avenue	1	1	$	10,000	$	10,000	$	92,000
2151 68th Avenue	1	1	$	10,000	$	10,000	$	89,000
7445 Carella Drive	1	1	$	10,000	$	10,000	$	86,000
2761 Utah Street	1	1	$	10,000	$	10,000	$	86,000
7588 Red Willow Street	1	1	$	10,000	$	10,000	$	85,000
7672 Manorside Drive	1	1	$	10,000	$	10,000	$	82,650
No Ave Land Purchase	8	80	$	81,806	$	1,023	$	81,806
2221 63rd Avenue	1	1	$	10,000	$	10,000	$	79,000
7860 Deerhaven Way	1	1	$	10,000	$	10,000	$	75,000
1221 Rivera Drive	1	1	$	10,000	$	10,000	$	70,000
1440 Rene Avenue	1	1	$	15,000	$	15,000	$	67,000
729 Morrison Avenue	1	1	$	10,000	$	10,000	$	63,500
Phoenix Park (not entire project)	4	4	$	200,000	$	556	$	-
TOTALS	**1504**	**1957**	**$**	**13,526,453**	**$**	**6,912**	**$**	**194,352,130**

Source: Sacramento Housing and Redevelopment Agency

Totals: 1226 asst., 1525 total units, $13,969,647, $11,394 HTF/du; $210,653,948
No. Avenue - 80 asst.; HTF $525,000; $6,563 HTF/du; $15,554,000 dev. cost
Phoenix Park 4 units asst and total. $50,000 HTF/du; $829,624 dev. cost.

City trust fund expenditures will ultimately leverage a total capital investment of $210.65 million in the city, producing a leverage ratio of 1:15. The average City housing trust fund subsidy therefore equaled 6.7 percent of total development cost. The average per unit development cost was $138,134, of which an average of $11,394 in City housing trust funds was spent per assisted unit (1,226). One-third of the developments assisted with housing trust funds also received other sources of city funding, primarily redevelopment tax increment funds or federal HOME funds.

County Housing Trust Fund Production

By February 2004, $18.97 million in county housing trust funds were committed to the development of 1,869 homes and apartments, of which 1,724 were affordable to very low-income and low-income households.

Table 12

AFFORDABLE HOUSING PROJECTS COUNTY OF SACRAMENTO

Project	Assisted Units	Total Units	Housing Trust Funds	HTF/Unit	Development Cost
Churchill Downs Apartments	163	204	$750,000	$3,676	$26,116,830
Village Crossings Apartments	100	196	$1,000,000	$5,102	$18,259,488
Park Meadows Apartments	183	183	$1,380,000	$7,541	$14,135,460
Arlington Creek Apartments	148	148	$2,000,000	$13,514	$16,537,460
Acacia Meadows Apartments	139	140	$1,000,000	$7,143	$22,901,387
Danbury Park	140	140	$676,000	$4,829	$13,016,200
Terracina Laguna	136	136	$1,679,550	$12,350	$11,371,840
Auberry Park	111	112	$315,000	$2,813	$9,816,473
Los Robles (Sky Parkway)	80	80	$867,000	$10,838	$8,808,256
Florin Woods	70	70	$495,151	$7,074	$7,605,327
Olivewood Apartments	68	68	$188,000	$2,765	$3,987,317
Terracina Vineyard	64	64	$495,000	$7,734	$6,148,912
Saybrook	56	61	$1,600,000	$26,230	$9,785,813
Mather Transitional Housing (Phase II)	55	55	$3,200,000	$58,182	$4,300,000
Greenway Village	53	54	$499,963	$9,259	$5,570,541
Walnut Grove	50	50	$162,000	$3,240	$6,712,000
Sac Veterans Resource Center	32	32	$250,000	$7,813	$1,625,000
Sunnyslope Apartments	31	31	$1,361,000	$43,903	$4,987,000
Fleming Place	30	30	$275,000	$9,167	$2,440,245
Fleming Phase II	15	15	$771,774	$51,452	$2,442,074
TOTAL	**1,724**	**1,869**	**$18,965,438**	**$10,147**	**$196,567,623**
PRODUCTION TOTALS	**3,361**	**3,881**	**$32,610,085**	**$8,402**	**$474,497,768**

Source: Sacramento Housing and Redevelopment Agency
Need to add Walnut Grove subdivision, 50 units, all assisted, $162,000 HTF funds, $3,240/unit, dev. cost $6,712,000.
New Totals: 1724, 1869, 18,965,438, $11,001, $196,567,623

County trust fund expenditures will ultimately leverage a total capital investment of $196.6 million in the unincorporated county, creating a leverage ratio of 1:10.4. The average housing trust fund subsidy therefore equaled 9.6 percent of the total development cost. The average per unit development cost was $105,173, of which an average of $11,394 in housing trust funds were spent per assisted unit (1,724). Nine of the 20 HTF-assisted developments received other County funds from the federal HOME program, redevelopment tax increment, and the Community Development Block Grant program.

Characteristics of Housing Trust Fund Developments

The housing produced with HTF revenues is characterized most by its diversity. Auberry Park, Terracina Meadows, Churchill Downs, and Acacia Meadows are new apartments near high employment centers in new growth areas. The Sacramento Veterans Resource Center, probably the most unusual HTF-funded development, is a transitional housing and employment program for homeless veterans. It has provided a successful vehicle to permanent jobs and self-sufficiency.

On the other hand, Greenway Village, Cordova Meadows, and Land Park Woods took boarded, vacant and deteriorated multifamily properties that had been major neighborhood problems, and turned them into attractive and safe residences with community-based tenant services. Housing trust funds also reconstructed a boarded and vacant derelict motel into permanent supportive housing for formerly homeless families working themselves back into employment and self-sufficiency. The developers (and owners) of housing trust fund projects are both nonprofit and for-profit entities.

Most multifamily developments financed with City and County housing trust funds obtained the equity capital needed for affordability through the 9 percent and 4 percent Low-income Housing Tax Credit program. As a result, more than half of the units in HTF-funded developments serve very low-income households (62 percent in the county and 56 percent in the city). City projects reflect the diverse goals of city policy: downtown revitalization through ownership and mixed-income development, boarded/vacant homes turned into homeownership, and new apartments in new growth areas in satisfaction of the city's Mixed Income housing program.

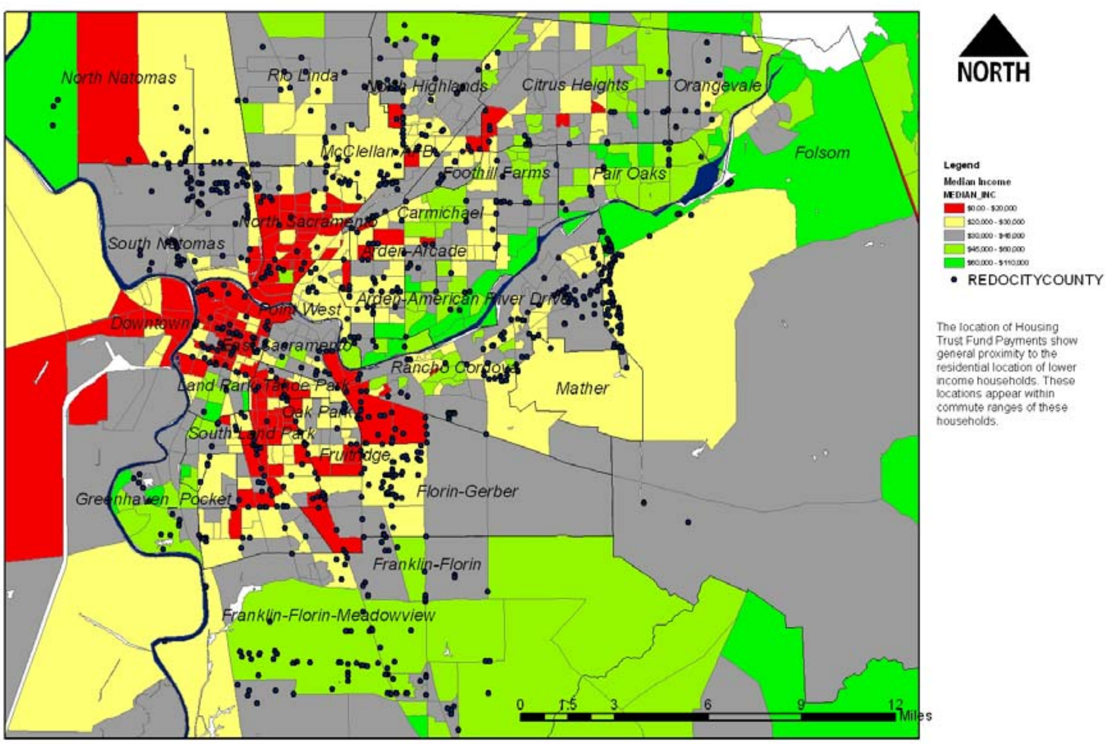
Surveys of housing trust fund developments confirm that their residents are working people in many different employment sectors and/or participants in formal employment training programs.

SPATIAL ANALYSIS OF HOUSING TRUST FUND PERMITS

The Housing Trust Fund ordinances of the City and County of Sacramento established criteria to ensure a reasonable geographic linkage between the non-residential construction subject to the ordinance (new job sites) and the housing developed with trust fund revenues. The ordinance established a 7-mile radius around non-residential construction sites as one of the criteria used to determine a reasonable commuting distance for HTF-assisted housing. To discuss this geographic relationship between the collection of Housing Trust Fund fees and the affordable housing produced by the program, researchers at Real Estate Analytics performed a spatial analysis of permit and project information. This section compares the locations of non-residential permits on which HTF fees were collected with the location of HTF-assisted housing, analyzes the reasonable commuting distances achieved through the Housing Trust Fund program, and describes the economic impact of a commuting wage ("manifest wage rate").

Map 1

HOUSING TRUST FUND PAYMENTS AND HOUSEHOLD MEDIAN INCOME



Source: Real Estate Analytics, December 2003

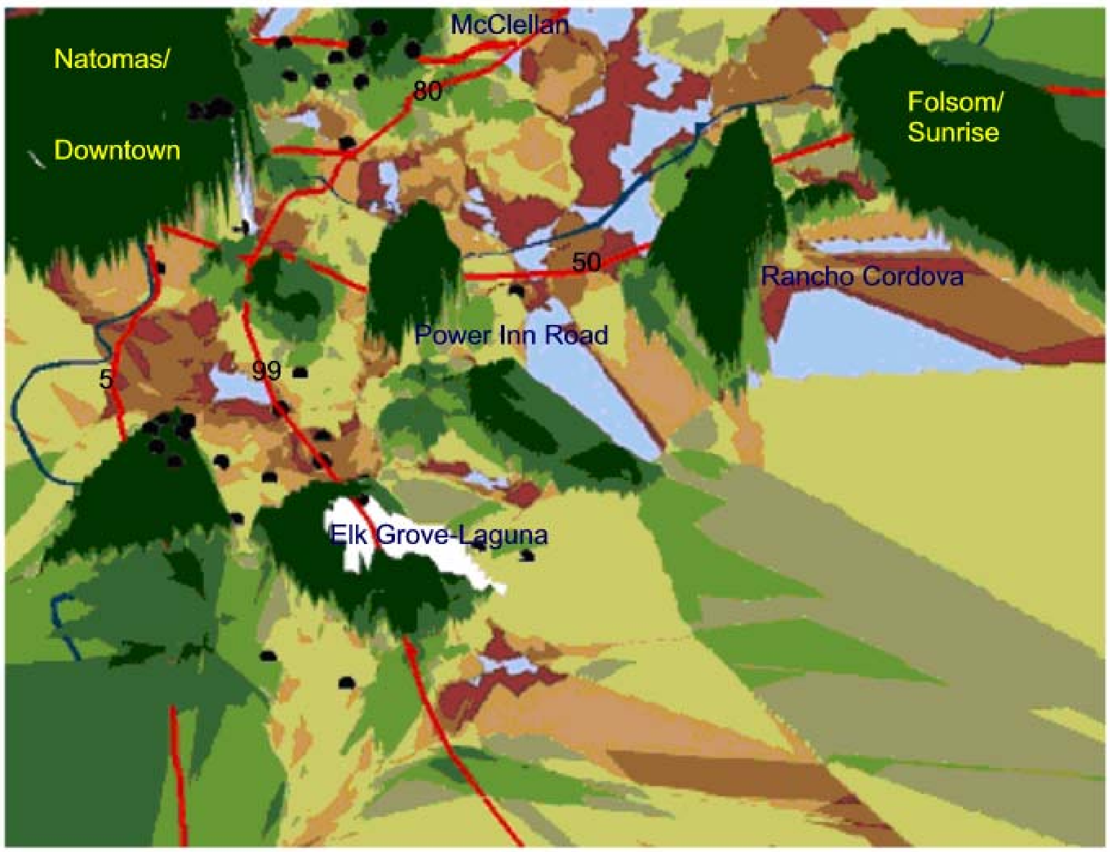
Source: Real Estate Analytics
US Census Year 2000

The distribution of housing trust fund revenues (shown as dots) appears dispersed into five general areas: Natomas, Downtown-Oak Park and North Sacramento, Rancho Cordova, Elk Grove-Laguna, and Arden Arcade-Carmichael.

GIS technology enables a three dimensional view of economic and demographic variables. The following map presents images offered to demonstrate the spatial incidence of the housing trust fund fee collections based upon the amounts collected.

Map 2

CONCENTRATION OF HOUSING TRUST FUND REVENUE



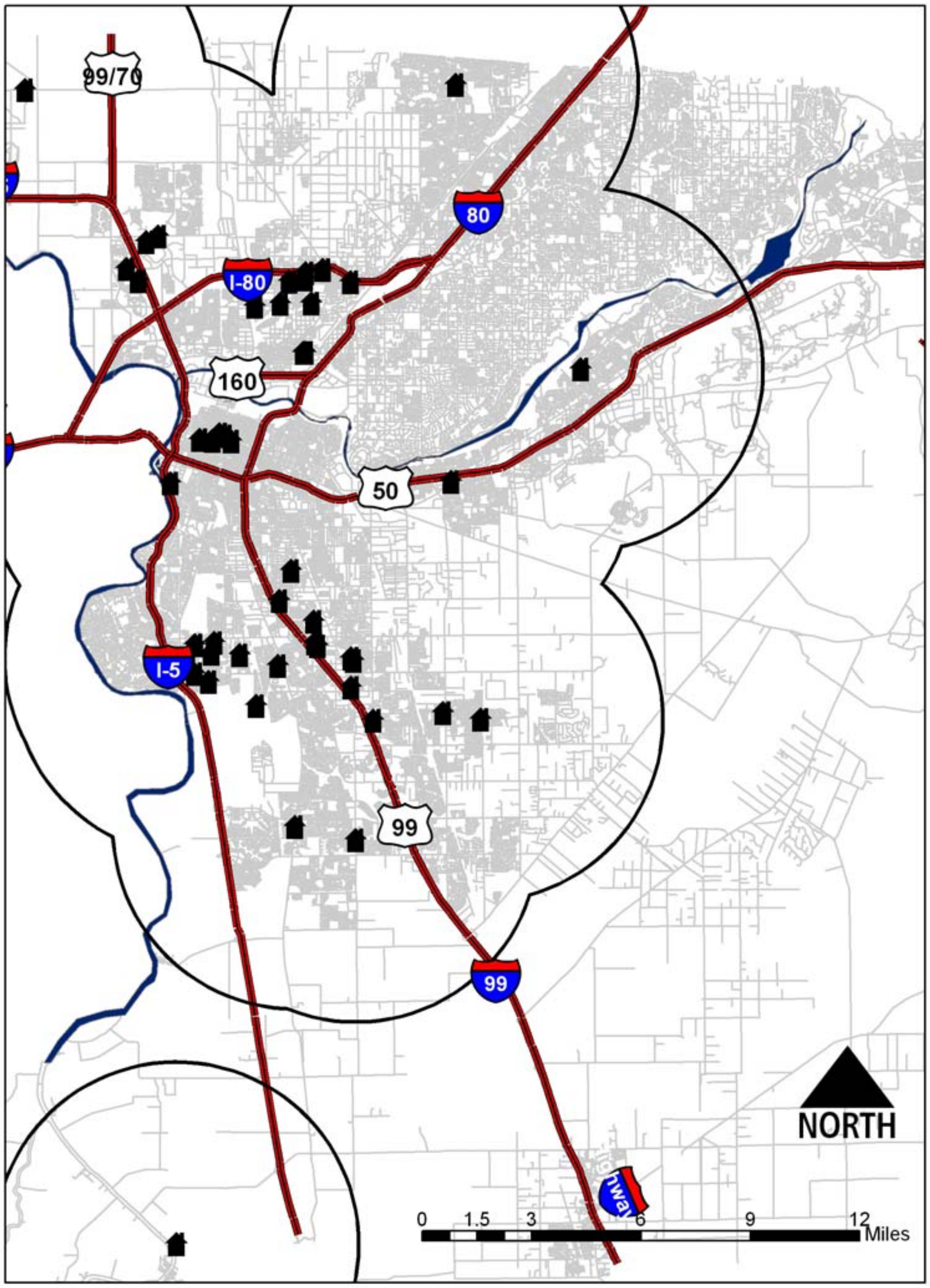
Source: Real Estate Analytics

Taller ridges or extrusions represent greater dollar volumes of HTF fee payments. Areas in Natomas, Downtown, Power Inn Road, Elk Grove-Laguna, Rancho Cordova and eastern Sacramento County contributed large shares of funds to the housing program.

Map 7 shows the location of sited projects constructed with HTF assistance. Encircling each project is a three-mile radius showing the project-permit spatial relationship. The developments financed with city housing trust funds range from North Natomas to Meadowview, and from Interstate 5 to 65th Street Parkway. The highest concentration of projects is in the central city, reflecting a purposeful redevelopment effort to increase residential life downtown.

Map 3

HOUSING TRUST FUND PROJECTS



Source: Sacramento Housing & Redevelopment Agency, January 2004

As a result of the city's Mixed Income Housing Ordinance, which established an inclusionary housing program in new growth areas, more developments were sited those areas, creating single family and multifamily housing near new employment centers in North Natomas.

To specifically calculate the relationship between permit and project, Real Estate Analytics conducted a distance analysis using GIS software. Table 13 shows the amount of housing trust fund revenues and total reported valuation of the non-residential construction project. On the far right column, a measure of cumulative percentage is shown. The comparison is between project and permits and the table reads, "how many permits are located within x miles of a HTF funded project?"

Permits collected in both the city and county were analyzed for years 1997-2003, the only years available for analysis in electronic form. Approximately, 27 percent of permits were located within one mile of the affordable housing projects that were planned, funded or constructed. Consistent with Map 7, 88 percent of housing trust fund projects were sited within a three-mile radius of permits included in the study sample. Approximately 99 percent of all permits were located within seven miles of a HTF assisted project developed to meet Sacramento's unmet housing demand.

Table 13

DISTANCE BETWEEN SELECTED HTF PROJECTS AND FUNDING PERMITS 1997-2003

	Cumulative Housing Trust Fund	Cumulative Reported Valuation	Cumulative Percent
One Mile	$ 4,006,008	$ 411,616,484	27%
Two Mile	$ 8,999,398	$ 842,940,772	62%
Three Miles	$ 12,841,290	$ 1,205,994,199	88%
Four Miles	$ 13,682,034	$ 1,311,940,619	94%
Five Miles	$ 14,307,095	$ 1,353,087,564	98%
Six Miles	$ 14,366,096	$ 1,359,808,458	98%
Seven Miles	$ 14,527,345	$ 1,376,170,841	99%
Eight Miles	$ 14,550,547	$ 1,377,960,841	100%
Nine Miles	$ 14,619,428	$ 1,383,842,233	100%

Source: Real Estate Analytics

The "reasonable" nexus in this spatial analysis relies on the notion that commuting represents a cost to employees. Higher commute costs effectively lower wages, yielding a "manifest wage rate." In order to determine an employee's "manifest wage rate," a simple calculation of hours spent away from home is divided into wage for the work period, i.e. eight-hour day. For example, assume an employee earns $10 per hour for an eight-hour workday. Daily wages with no commute equals $80 or $10 per hour. Now assume the employee commutes two hours per day: one hour to work and another home from work. The employee has contributed 10 hours to the work day and earned the same $80, or $8 per hour, representing a twenty five percent reduction in actual time- adjusted wage. Shorter commute times increase manifest wages to the employee and enable employers to reduce payroll costs. Taken to an extreme, these shortened commute times can even allow additional workers to be hired. Short commutes, then, benefit not only the environment, but also the worker.

To summarize, the spatial analyses suggest a proximate relationship between the collection of Housing Trust Fund fees and the locations of HTF-funded affordable housing. Ninety-nine (99) percent of the fees where within seven miles of a related Housing Trust Fund assisted project.