

Overview and Outlook: Good news for the next few quarters

The leisure time Bay Area residents may have had over the last few years has largely disappeared. The economy has surged forward into a full recover over the past year. With job growth on the rise in many important sectors, wages and salaries rebounding sharply, and companies in the region pulling in record revenues, there is not much idle time and not much to lament. The non-residential markets have seen some gains, and rents are on the rise again, albeit slowly. With exports increasing once more, international demand will continue to help the bottom line of Bay region firms with an international bent.

The good news is likely to continue for the next few quarters. Katrina and Rita may have monopolized the newspapers, but they will have little impact positive or negative on the California economy. Gas prices are already on their way back down. Demand is softening as the year moves into the winter season and refining capacity is coming back online. With pockets flush again, expect a solid holiday season for retailers in the area.

But there are storm clouds on the horizon that are being generated by yet another low-pressure system building up -- our housing markets. Prices have continued their truly meteoric rise, as has the pace of building. But there are signs the market is starting to lose its oomph. Market activity in the Bay Area has started to slow sharply, and inventories are on the rise. If this is indeed the beginning of the end (the jury is still out, but evidence is mounting) we can expect this to begin to take a lot of drive out of the economy starting at the end of 2006. Expect the East Bay to add 2% to 2.5% to its payroll workforce (annualized) over the next year, with San Francisco and San Jose not far behind at 1.5% to 2% each. Taxable sales will be equally strong, but expect cooling after this year.

The Big Picture: Solid growth nationwide, ongoing recovery in the Bay

The US economy has been taking a number of body blows recently -- hurricanes, energy and other commodity prices, the ongoing turmoil in the Middle East and worries about inflation. Yet the GDP numbers haven't shown any signs of stress so far. The second quarter's growth was 3.3%, the ninth consecutive quarter of above average growth for the economy. Growth was across the board, as spending on fixed investment, consumption, exports and public services all contributed to expanding output. Some of this increase in spending was offset by falling inventories, but at the moment there is no significant source of weakness on the demand side of the US economy.

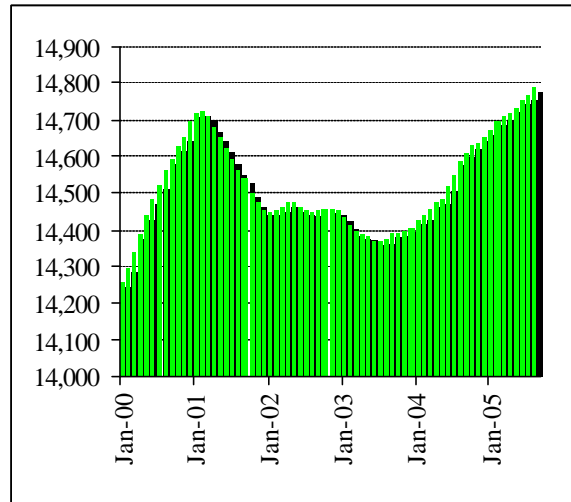
Good news abounds. Despite inflation worries the 10-year bond remains at slightly above 4%, a very low level. The labor markets continue to churn out new jobs, and unemployment remains low as well. While the spike in energy prices and the impacts of hurricanes Katrina and Rita will certainly reduce growth somewhat in the third quarter of this year, preliminary numbers indicate that growth will still be substantially positive. The current UCLA Anderson Forecast for the nation is for solid but slowing growth for the rest of 2005.

There is good news for California and the Bay area as well. Taxable sales growth has remained strong across the state, indicative of continued consumer spending here. The state's revenue picture is looking bright through the first quarter of the 2005-06 fiscal year. Revenues have already exceeded forecasts by 6%, led by better than expected returns in income and corporate taxes. While tax revenues seem a perverse thing to laud, bear in mind that these numbers are some of the best indicators that the pace of business is continuing to increase—business people don't pay taxes if they don't have to! And while non-residential construction continues to inch along, residential permits continue to boom. The state is on pace to hit 220,000 units this year alone.

The second quarter of 2005 was a milestone for the California economy. Payroll employment finally caught up and passed the previous peak hit in 2001 prior to the tech

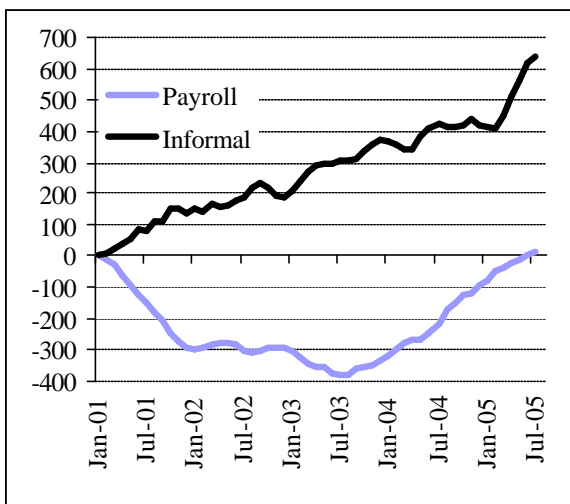
bust, and total employment is now at 14.8 million. The first half of this year was also the first time that every major economy inside the state, including the previously languishing San Jose economy, began to add jobs. In the East Bay, employment growth reached an annualized rate of 3.5% in the third quarter, and has averaged 2% since the start of the year. Total workplace incomes also continue to rise at a 6% to 7% rate.

California Non-Farm Payroll Employment
(SA, 000's, smoothed)



While the payroll numbers are looking better for the state than they have for a while, they are still not very robust. One of the oddities of this recovery is that despite anemic payroll job growth over the past two years (1.7% per year) unemployment has fallen to almost 5%, a level not seen since 1990 prior to the aerospace crash and the national recession. Part of this growth gap between the two measures is due to a known problem with the

Cumulative Changes in Employment
(SA, 000's, smoothed)



payroll survey that leads to undercounting in a growing economy. It is likely that next year's new employment benchmark will make the current growth that much stronger. But the largest reason for these different trends is of course the continued expansion of the informal sector—those jobs that appear to be in the state according to the employment survey conducted at households, but are nowhere to be

seen in the payroll data. While the state has finally recovered the 300,000 payroll jobs lost during the tech bust, it has added over 600,000 new informal jobs.

Employment is good, and these jobs are a positive sign of strength in the underlying California economy. While some of these jobs may truly reflect employment that will not normally show up on the payroll data (i.e., the self-employed) the sheer quantity implies that there is something more going on. The state currently has 1.9 million non-payroll jobs according to the numbers, 12.4% of the normal workforce, twice the rate of any other state. This should be an ongoing concern for policy makers, as little is known about what these folks do, the type of benefits they may or may not have, and of course whether or not they pay taxes. In short, while more employment is better than less, not all jobs are created equal.

These concerns, however, are long run issues. Of much greater concern are the types of jobs the economy has been adding over the past 25 months since the recovery began in earnest. To highlight what has been happening, the annualized change in jobs for the past two years are compared to the 25 months of recovery after the 1990 downturn bottomed out. The various sectors are then ranked according to the relative difference between these two periods.

Overall the economy added 260,000 jobs from 1993 through 1995, while this past downturn has seen a slower recovery, with only 210,000 jobs added. Between 1993 and 1995 the gains in employment were largely across the board, with the exception of finance which had been hit hard by the movement of bank headquarters out of many parts of the state.

This time, however, many sectors have yet to see a recovery in employment or indeed continue to lose jobs. Jobs in government, manufacturing, information and management of companies have all remained weak this time relative to the previous job creation period.

On the other hand, the most improved sectors are finance and construction, each sector adding approximately 32,000 more jobs during this recovery than the last one. Unfortunately, this indicates what has been driving the state's job formation is a real estate boom and that boom is getting ready to go bust (see next section). Also up are leisure and retail trade—sectors driven by residents' wealth (particularly housing) and income.

California Job Gains During Recovery
(annualized gains 25 months after employment trough.)

	93 to 95	03 to 05	Diff.
Total, All Industries	261,200	208,400	-52,800
Finance	-22,600	10,400	33,000
Construction	26,700	57,700	31,000
Leisure	34,500	41,300	6,700
Retail Trade	21,600	27,900	6,300
Real Estate	100	4,200	4,100
Edu. & Health	22,400	24,000	1,600
Professional Svcs.	16,700	16,300	-400
Wholesale Trade	10,300	6,000	-4,300
Transport	11,300	3,400	-8,000
Other Svcs.	13,100	4,400	-8,700
Information	16,400	6,300	-10,000
Durable Goods	17,600	5,600	-12,000
Mgmt of Companies	8,400	-8,900	-17,300
Nondurable Goods	14,500	-2,800	-17,300
Administrative	54,300	32,000	-22,300
Government	10,500	-19,000	-29,500

Hence we see both the direct and indirect influence of the bubble on the economy in these numbers. When you think about where jobs and income are heading over the next couple years—think real estate.



Along with the continued expansion of the US economy, the Bay Area has pulled itself back onto solid economic footing over the past two quarters. The East Bay has led this resurgence with 3.5% growth in the third quarter of 2005 (quarter over quarter, Seasonally Adjusted Annualized Rate [SAAR]), while the tally for the two neighboring MSA's was 1.5%. This put overall growth for the region at 2.2%,

the best number seen since the last quarter of 2000. The numbers were even more impressive on the household survey side of the equation where overall job growth was 5.6% in the third quarter led again by the East Bay with a 6.3% growth rate (SAAR). The labor force in the region expanded at nearly the same rate, as workers have begun to enter the workplace again in large numbers—a very good signal that recovery is well on the way. However, because these workers were not previously listed as unemployed, there was not that much decline in the unemployment rate despite the strong job growth numbers. During this period the unemployment rate fell to 4.7% in the East Bay from 4.9%, while it remained steady at 4.8% and 5.4% in San Francisco and San Jose respectively.

In terms of the distribution of job growth across sectors, again the results look very favorable. The East Bay has been recording positive growth in most sectors, with weakness only showing up in durable manufacturing, wholesale trade, leisure and management of enterprises. Durable manufacturing remains a weak point in all three economies, but the overall pace of job loss has slowed tremendously. In San Jose this very important sector actually saw positive growth over the past two quarters. Information, financial activities and professional services also saw limited growth in San Jose and San Francisco, in contrast to the gains in the East Bay. Still, the lack of job losses in these categories represents a substantial improvement for the two economies in the nation that were worst hit after the 2001 downturn.

Bay Area Employment and Growth by Payroll Sector

Feb 2005 to Aug 2005, Seasonally Adjusted Annualized Rates (Thousands)

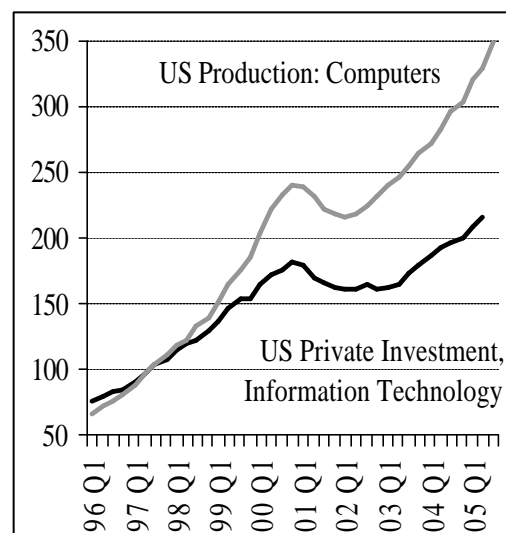
	East Bay		San Francisco		San Jose	
Total Non-farm	1037	2.6%	947.8	1.0%	859.5	1.4%
Construction	73.4	5.4%	44.4	4.7%	41.4	4.5%
Durables Mfg.	63.3	-0.6%	22.2	-1.8%	158.1	0.4%
Non-durables Mfg.	36.7	3.4%	22.9	5.5%	12.3	6.8%
Wholesale	48.6	0.4%	26.7	0.8%	35.1	2.9%
Retail	110.6	2.4%	94.0	1.1%	82.5	4.3%
Transportation	34.7	2.9%	44.6	-0.4%	13.1	-3.0%
Information	30.8	4.7%	42.3	-7.6%	34.0	0.6%
Financial	70.9	6.8%	90.0	0.0%	35.2	-2.8%
Professional / Technical	70.3	2.0%	99.4	0.4%	95.3	0.2%
Mgmt. of Companies	21.1	0.0%	21.2	-5.4%	14.3	-10%
Administrative Support	56.9	2.9%	56.3	5.2%	54.3	2.6%
Education / Health	122.5	1.8%	102.4	4.0%	96.3	1.7%
Leisure	81.9	-0.5%	117.2	3.1%	68.0	1.8%
Other	36.9	2.2%	37.2	5.0%	24.9	-0.8%
Public	177.4	2.8%	126.8	-2.9%	94.5	1.5%

While the recovery on the job side has been slow, the underlying fundamentals of the region have remained relatively robust. In large part this is due to the high skill and high tech nature of the workforce. The information technology industry remains a strong driver within the region, and while it has been going through a necessary period of consolidation and restructuring, the demand for information technology products in the US has remained strong, as has overall domestic production. Overall real private investment in information

technology products is up by 20% over the pre-2001 downturn peak, while production of computers and related products is up by 46% over the previous peak (in real terms). California information technology products remain the number one good exported from the state at slightly less than 40% of the total by value, and they are on pace to show their second straight year of growth.

Indexes of Real Output and Spending

1997=100, SA data, Sources: Federal Reserve and Bureau of Economic Analysis



Median Household Income by County and Rank, 2004

	Income	CA	US
Santa Clara	\$74,509	1	10
San Mateo	\$68,782	2	21
Contra Costa	\$67,823	3	26
Placer	\$65,130	5	34
Sonoma	\$62,206	7	42
San Francisco	\$60,031	9	53
Alameda	\$59,325	10	56
Solano	\$57,334	11	62
Monterey	\$50,127	15	100
Sacramento	\$49,632	16	103

With the loss of jobs and the crash of the tech bubble, regional incomes also took a large hit. Total household income in the East Bay fell by 10% in real terms between 2000 and 2004. In San Francisco and San Jose the declines were 15% and 20% respectively according to recently released statistics. The loss for the US overall was 5.5%. Contributing to the decline in the Bay

Area's regional income were both the extent of the job loss and the downward wage adjustment of inflated wages stemming from the late 1990's tech rush.

Still, the overall strength of the region is reflected by the fact that median household incomes in the region remain very high. Santa Clara still has the highest median income in the state, and is the 10th highest in the nation. Contra Costa ranks 3rd and 26th respectively, while Alameda tallies in at 10th and 56th. The high level of income reflects the high concentration of highly skilled people in the area due to heavy public sector

Average Wage by Sector, 4th Quarter 2004 (Quarterly Census of Employment and Wages)

	Alameda		Contra Costa		San Francisco		Santa Clara	
	Q4 04	Ch.	Q4 04	Ch.	Q4 04	Ch.	Q4 04	Ch.
Construction	57,125	4.5%	60,106	7.6%	61,368	0.9%	56,199	2.8%
Manufacturing	71,289	4.0%	72,360	7.4%	43,017	5.6%	108,013	1.3%
Wholesale trade	61,568	4.1%	71,603	4.5%	68,716	3.0%	85,189	4.3%
Retail trade	32,810	4.4%	30,691	4.3%	36,788	8.2%	34,716	3.0%
Transportation	52,336	3.4%	49,789	2.2%	71,460	23.5%	43,947	17.8%
Information	93,505	14.3%	90,707	29.0%	81,735	3.9%	204,683	54.1%
Finance and insurance	68,385	12.8%	80,777	11.6%	163,575	17.5%	101,622	9.3%
Real estate and rental	46,847	7.5%	51,907	10.3%	58,920	4.0%	56,364	4.4%
Professional / technical	88,723	11.0%	83,738	8.7%	104,068	7.9%	111,094	3.3%
Management of companies	106,317	31.0%	71,657	13.3%	94,234	7.9%	180,972	104.2%
Administrative services	33,992	10.1%	39,513	12.3%	49,731	13.9%	38,667	13.9%
Educational services	30,737	0.2%	31,595	21.7%	38,404	5.0%	61,941	1.8%
Health care and social	50,968	8.5%	54,150	10.9%	50,540	8.5%	54,925	8.9%
Entertainment / recreation	53,708	1.7%	23,189	1.1%	42,278	5.4%	37,655	-24.2%
Accommodation and food	16,920	5.1%	16,949	4.3%	24,133	6.2%	17,839	2.3%
Other services	29,298	2.8%	36,771	3.4%	28,430	0.8%	27,639	-2.5%
Government	57,982	6.3%	46,569	2.7%	64,373	2.9%	56,489	2.7%
Total, all industries	54,906	7.7%	52,518	8.8%	66,269	8.2%	75,921	9.5%

investment in research and development as well as local investment in key growth industries such as information technology and biotechnology.

Better news for local incomes came as of the end of 2004. Earnings data for the fourth quarter of 2004 are now available for the region through the QCEW (Quarterly Census of Employment and Wages), and the numbers are impressive. Compared to the prior year, fourth quarter growth rates ranged from 7.7% to 9.5% on a per worker basis, while average incomes (annualized rates) ranged from \$52,000 in Contra Costa to \$76,000 in Santa Clara. To put this in perspective, the US average was \$42,000 for the fourth quarter after growing by 5.5% over 2003. Information, finance, and professional services all saw some of the largest increases. Employees in the information sector in San Jose received an average pay of over \$200,000, up 50% from the same point last year as end-of-the-year bonuses reflected the strong profits of the year.

The non-residential statistics are also looking more positive, showing some basic stabilization. Office vacancy rates have been declining in all three economies over the past year, although the

level of vacancy is still very high—currently 17.5% in the East Bay, 19% in San Francisco and 22.5% in San Jose.

Rent per square foot has also stabilized at about \$22 in the East Bay and \$25 in San Jose and San Francisco.

Industrial property has also stabilized. One

result of this has been a general upswing in non-residential building permits in the region.

Alameda continues on an upward path with positive growth statistics in 2004 and 2005.

Non-Residential Property Statistics

Source: Portfolio and Property Research

	2000 Q2		2004 Q2		2005 Q2	
Office	Vac	Rent	Vac	Rent	Vac	Rent
East Bay	7.4%	\$32.6	17.6%	\$21.9	17.6%	\$21.8
San Francisco	4.4%	\$59.0	22.4%	\$24.3	19.1%	\$24.9
San Jose	5.0%	\$61.0	24.0%	\$24.8	22.4%	\$24.5
	2000 Q2		2004 Q2		2005 Q2	
Retail	Vac	Rent	Vac	Rent	Vac	Rent
East Bay	5.7%	\$23.4	5.3%	\$23.3	3.9%	\$24.0
San Francisco	2.5%	\$26.4	6.9%	\$24.5	5.8%	\$25.5
San Jose	1.2%	\$23.5	13.1%	\$21.9	12.5%	\$22.4
	2000 Q2		2004 Q2		2005 Q2	
Warehouse	Vac	Rent	Vac	Rent	Vac	Rent
East Bay	6.4%	\$5.5	10.5%	\$4.4	10.1%	\$4.4
San Francisco	3.1%	\$10.4	8.4%	\$8.0	7.4%	\$8.0
San Jose	4.6%	\$6.8	12.9%	\$4.8	12.3%	\$4.8

While San Francisco and Santa Clara counties saw large declines in new building construction after the 2001 tech bust, both are on pace to see large increases in new building construction in 2005, although the overall level of investment is still below what was seen in 1999 and 2000.

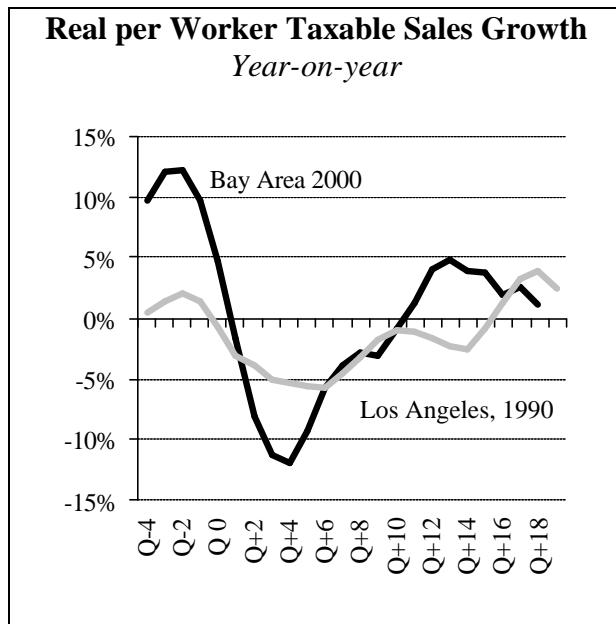
The one solid non-residential property type has been retail, particularly in the East Bay. Here rents are actually higher than they were in 2000, and vacancy rates lower. This has

Non-Residential Investment (\$000's)

	New Structures		Renovation			New Structures		Renovation	
	05 Est	Gr.	05 Est	Gr.		05 Est	Gr.	05 Est	Gr.
Santa Clara	\$807.1	35%	\$546.7	73%	Contra Costa	\$154.4	-17%	\$238.2	27%
Alameda	\$381.9	9%	\$376.9	6%	Placer	\$148.1	56%	\$238.4	1%
Sacramento	\$264.8	3%	\$421.2	6%	Sonoma	\$88.4	8%	\$122.9	-23%
San Francisco	\$436.4	3%	\$170.8	186%	Napa	\$32.1	-10%	\$129.8	105%
Solano	\$60.2	3%	\$463.6	284%	Yolo	\$46.8	41%	\$71.5	-1%
San Mateo	\$212.0	6%	\$244.0	28%	El Dorado	\$14.3	-26%	\$84.3	14%
San Joaquin	\$122.4	37%	\$323.1	11%	Marin	\$28.5	-38%	\$40.2	-15%

not been true in the other two economies, but even there, the overall increase in vacancy rates or decrease in rental prices is nowhere near that seen in the office markets.

This fits with the overall pace of taxable sales in the region which recovered prior to overall employment growth. Preliminary sales numbers are now available for the first half of 2005, and the numbers remain impressive. Real growth ranged from 2.3% in the East Bay to 3% in San Jose, year-on-year rates, reflecting solid local spending. During the early 1990's downturn in Southern California,



overall per worker taxable sales growth did not become positive until four years after the employment peak. The Bay Area, despite losing more jobs on a percentage basis, saw per worker taxable sales growth return to a very strong pace in less than three years.

While it is hard to recognize within the turmoil of the area, once job losses are accounted for, it can be seen that Bay Area residents are as much on a spending binge as the rest of the nation. This can be seen not just in the taxable sales statistics, but also in the residential building statistics. In the Los Angeles area residential permit valuations (including both new homes and permits for expanding or improving existing structures) fell by two-thirds over the four years following the start of the early 1990's recession. In the Bay Area, spending fell initially by 14%, but then immediately began to grow again. By 2004 investments in housing had increased by 14% from the 2000 peak. Part of the difference is due to the large-scale over-building that occurred in Los Angeles in the late 1980's. Still, even with this taken into account, the pace of spending on residential construction in the area is largely out of alignment with what might have been expected given the economic problems in the area.

As with the state and much of the nation, the frenetic pace of consumer spending can of course be linked in large part to the wealth being generated by residential real estate appreciation. Unfortunately, that driver of economic growth appears ready to cool off over the next year, as will be discussed further on in this report. When this does happen, it will take much of the wind out of the recovery that is currently underway. Before we get to the specific outlook for the region, however, several other issues need to be discussed.

Hurricane Season: What does it all mean?

The hurricanes that slammed into the gulf coast a number of weeks ago still remain the center of attention, both for the damage inflicted as well as for the obvious flaws that showed up in the slow start of the rescue and relief operations. Fortunately, many of the dire predictions about the true level of damage were more hysterical rants than reality. After Katrina, FEMA ordered 25,000 body bags, and the Mayor of New Orleans

predicted 10,000 deaths in his city alone. Of course, the total death toll is now just creeping past 1000 for the entire region, still tragic but a much more moderate figure. Claims were made that it might take months to pump out the flooded areas, but in fact, the Army Corps of engineers has already completed the job. Overall, Rita also turned out to be far less damaging than anticipated.

How much damage? And what will it mean for the national and California economy? First let's have a close look at what the affected economies look like relative to the national economy. The area

of greatest impact was, of course, the City of New Orleans itself, home to 450,000 people. Workplace earnings in the city are not a bad proxy for the overall contribution of the city to the US GDP. All in all, earnings in the area make up just

Areas Affected by Katrina

	New Orleans City	Balance of New Orleans MSA	Biloxi MSA
Population	444,515	869,179	363,966
Households	180,382	335,180	145,395
% of US	0.16%	0.30%	0.13%
Mean Earnings	47,822	59,472	49,523
Percent of US	0.13%	0.31%	0.11%

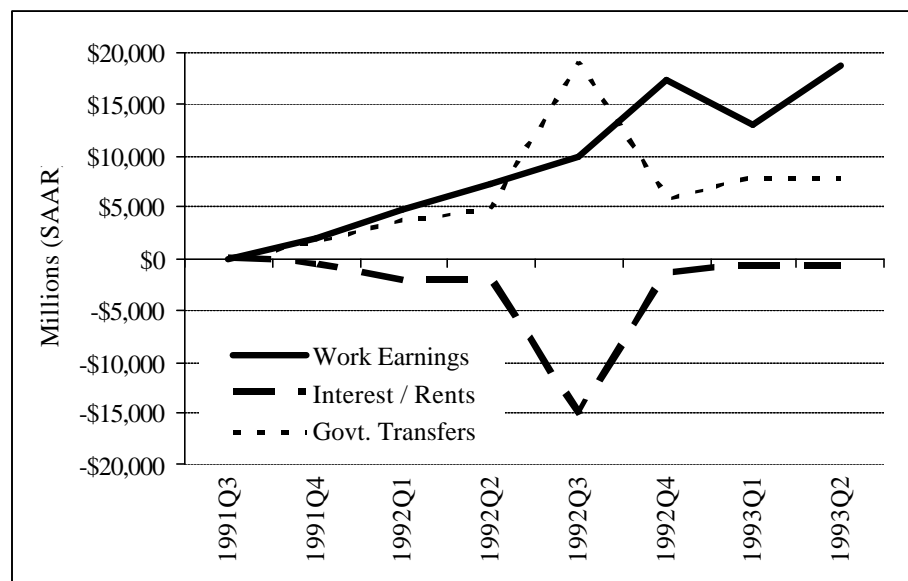
.13% of total national earnings, a fairly small amount relative to the US economy overall. If this output disappeared completely, it would result in a one time hit to economic growth of about one half of one percent (annualized).

Of course, the true loss will be less than that. As already mentioned, many people are heading back to the city to begin the rebuilding process, and many parts of the city, including important tourism centers, were on high enough ground to avoid major flood damage. And others who were forced to move to other locations are already beginning to find work, hence contributing to the economy from their new locations. The City of New Orleans' primary external sector is, of course, tourism. While the City will find itself hard hit due to the loss of these dollars, this money will end up flowing to other portions of the nation, since a conference or vacation not held in one place will likely be held in some other place.

Finally, some of the more important industrial areas were protected by their own set of levees, including a number of refineries in the area. And while New Orleans has an important port that carried \$22 billion of goods into and out of the nation in 2004, it is but one of five in the region. Houston's close-by port carried \$66 billion in 2004 while the other three ports in Louisiana (Morgan City, Baton Rouge and Lake Charles) carried a combined total of \$27 billion. While all these ports have been affected they are all operational. In short, goods will still be able to move into and out of the region without much problem. These factors will tend to mitigate secondary impacts to the overall US economy.

As for the other heavily affected areas, namely the balance of the New Orleans MSA and the Biloxi MSA, these will also see some short-run loss of economic output, but the impact will be relatively mild and brief. Consider the impact of Hurricane Andrew on the Florida economy. The figure below shows the cumulative changes in three components of personal income in the state starting in Q3, 1991. The hurricane's primary impact was

GR 1: Trends in Florida Personal Income around Hurricane Andrew
Cumulative growth, SAAR



on rental income—due to, of course, the large number of destroyed homes. The loss to the state was something on the order of \$15 billion (annualized). The losses in rents were almost completely offset by the increased inflows in government funds into the region.

Earnings by place of work were not influenced at all during the hurricane—largely due to the fact that such short run disturbances do not cause business to be cancelled, only delayed. This is the one difference between a disaster and a true recession causing shock to an economy. Both are large, unexpected and rapid. But disasters hit and then are finished. To cause a local or national recession the shock must be sustained. Indeed there was some acceleration in income growth in the quarter following the disaster as the recovery process stimulated the economy. In short, there may be some small disturbance to the economy due to losses in the economy outside and around the city of New Orleans, but the numbers are small and will quickly reverse themselves.

As to the process of rebuilding, the Red Cross has claimed that 200,000 homes have been destroyed, with slightly less than half occurring outside the city of New Orleans proper. The US currently produces something on the order 2.1 million new homes per year. If all these homes were rebuilt over the next two years this would increase overall housing starts by something on the order of 5%, not an enormous number, but enough to be seen. Yet even here the numbers are liable to be smaller. Many of the people who were forced to flee have begun to take up residence elsewhere.

This process is being eased by the fact that the South is currently experiencing a record level of vacancies due to the building boom the nation is currently experiencing. According to Census statistics, in the second quarter of this year 11.8% of all apartments and 2.2% of all single-family homes are currently vacant. These rates are half again as large as they were a decade ago, and represent something on the order of one million units. Overall the number of vacant units for sale and for rent in the US has gone up by almost 1.2 million units between 2000 and 2005. In short, the people forced to flee New Orleans should be able to find housing elsewhere. And, if and when they do, the vacancy rates will still remain higher than their historical averages. Given all the vacant units, the

pace of rebuilding over the next few years will not be enough to even come close to making much of an impact on the national housing market.

Many have asked what it all might mean for California. The short answer is ‘not much’. As can be seen, the impacts on the national economy are going to be

negligible, so there is little likelihood that California will be hit by a decline in national demand. Indeed the process of rebuilding may provide some contracts for California businesses that may have some minor stimulative effects, as might the diversion of conferences and tourists to the Golden State. The overall impact on building prices is likely to be negligible as well, as a general cooling in US housing markets will likely reduce the pace of building elsewhere by a level that more than offsets new building in the region.

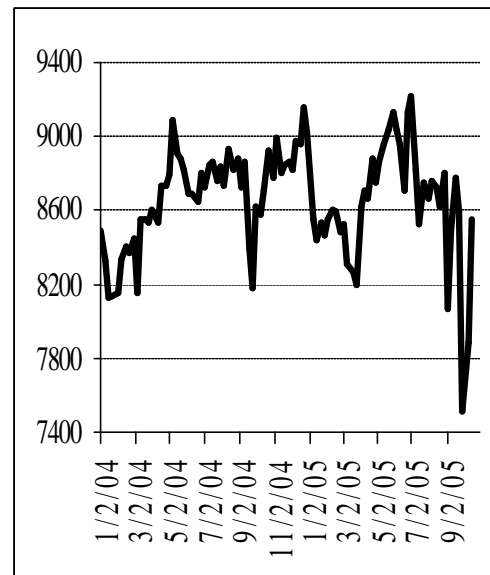
The primary impact is through the price of gasoline. Already on the rise, the hit on the many refineries in the region caused gas prices to spike again. During the week of September 5th, the average price of a gallon of gasoline on the East coast went up by \$.90, an astonishing rise. In fact for the first time in a long time gas prices in the East were actually higher than on the West Coast, where, due to its geographic

US Housing Markets (000's)		
Type	Q2 05	Q2 00
All housing units	123,732	119,481
Occupied	107,850	105,296
Owner occupied	73,974	70,758
Renter occupied	33,876	34,538
Total Vacant	15,882	14,185
For rent / sale Vacant	6,163	4,997

Retail Gasoline Prices

	1-Aug	5-Sep	17-Oct
East Coast	\$2.26	\$3.16	\$2.78
Midwest	\$2.21	\$3.03	\$2.57
Gulf Coast	\$2.18	\$2.89	\$2.71
Rocky Mountain	\$2.28	\$2.98	\$2.78
West Coast	\$2.46	\$2.95	\$2.82

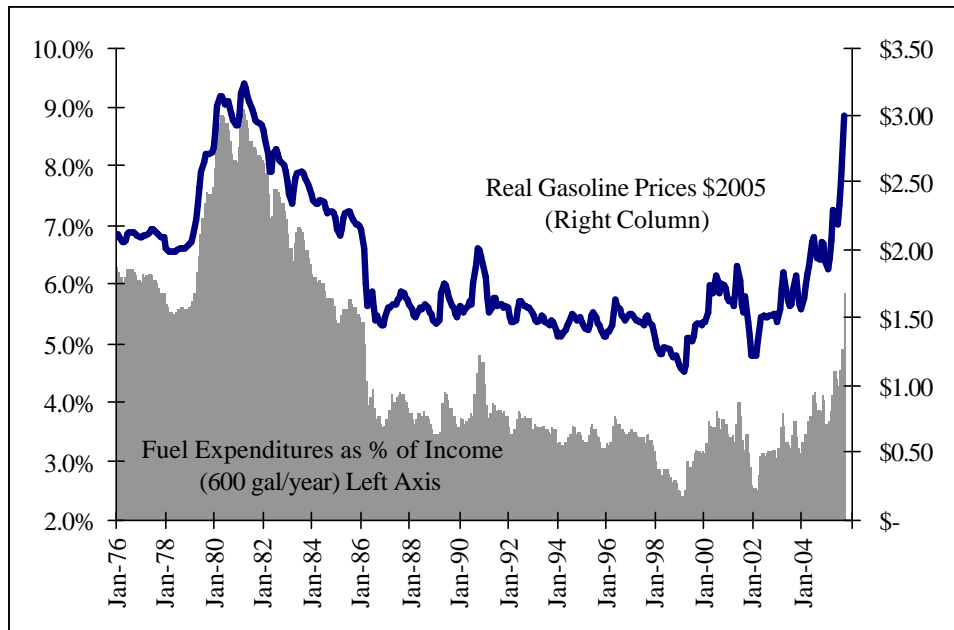
US Domestic Gasoline Production



separation gas prices rose only \$.50. Gasoline at \$3.00 a gallon has finally hit the inflation-adjusted price of the early 80's.

Yet it's too early to think that this will have an impact on the economy. For one thing, a person buying 600 gallons of gasoline per year (directly and indirectly) today will spend approximately 6% of their income on fueling up the car. In the early 1980's this same 600 gallons would have cost 8 to 9% of total income, and it would not have gotten you as

GR2: Real Gasoline Prices and Estimated Expenditures as Percent of Income
Expenditures based on purchase of 600 gallons per person per year



far—well at least if you are not one of those families who decided to buy a Hummer.

Furthermore, the shock to retail sales that might occur due to the diversion of funds to the gas pump depends critically on how long prices remain at this high level. During the previous oil shock, prices began to rise sharply in mid-1979 and didn't fall back to their earlier level for almost five years. In this particular case domestic gasoline production is quickly getting back on line. Gulf Coast refining fell from 3.7 million barrels per day in the last week of August to 2.9 million in the following week. This represents a decline of about 10% on a national basis. Economists often put the demand elasticity of gasoline at

around -.3, hence we would expect an increase in prices of about 30% to offset this shortage—slightly more than what actually happened but definitely in the ballpark. Refining declined again at the end of September due to Rita closing many facilities down. This also served to keep prices high.

However, the extent of damage to the refineries was not as great as initially feared and production is already back to something close to normal levels, and prices are continuing to fall, albeit slowly, as a result. Don't expect prices to drop back too far though. Strong world demand has caused the majority of price increases seen over the past couple years, and these global conditions will not be changing anytime soon. As long as Americans have the time to adjust to the new realities, we don't expect much in the way of secondary effects. After all, remember that Europeans and Japanese have been paying much higher prices than Americans for years.

Real Estate: Is the party coming to an end?

As has been discussed in this and past reports, the primary driver of the California economy, including the Bay Area and the East Bay, has been the residential real estate boom. The pace of construction continues to accelerate, and California is now starting to build at a pace of over 200,000 units annually. The Bay Area is on pace to come close to 12,000 new units this year on top of the 30,000 put into place over the past two years. All this new construction has been creating many of the new jobs in the state including those in finance companies working to extend credit. And while we lack direct evidence, it appears that consumer spending is being fueled largely by the wealth being generated within the economy by the massive rate of appreciation. In the Bay Area, despite the massive economic problems the region has suffered, the median price of an existing single family home has increased by 75% since 2000, ranging from a high of 143% in Napa to a low of 50% in Santa Clara, where 20% of the workforce was laid off.

The attached graph shows the annualized change in real per worker earnings in California as compared to real increases in housing prices (based on Office of Federal Housing Enterprise Oversight [OFHEO] statistics). Housing prices are highly cyclical, lagging

behind real income growth by between two quarters and two years. The primary exception to this general rule occurred in 2000, when earnings began to fall in the midst of the tech bust, but housing appreciation in the state (and indeed in the entire nation) continued to be robust unlike any business

Median Housing Prices: Bay Region

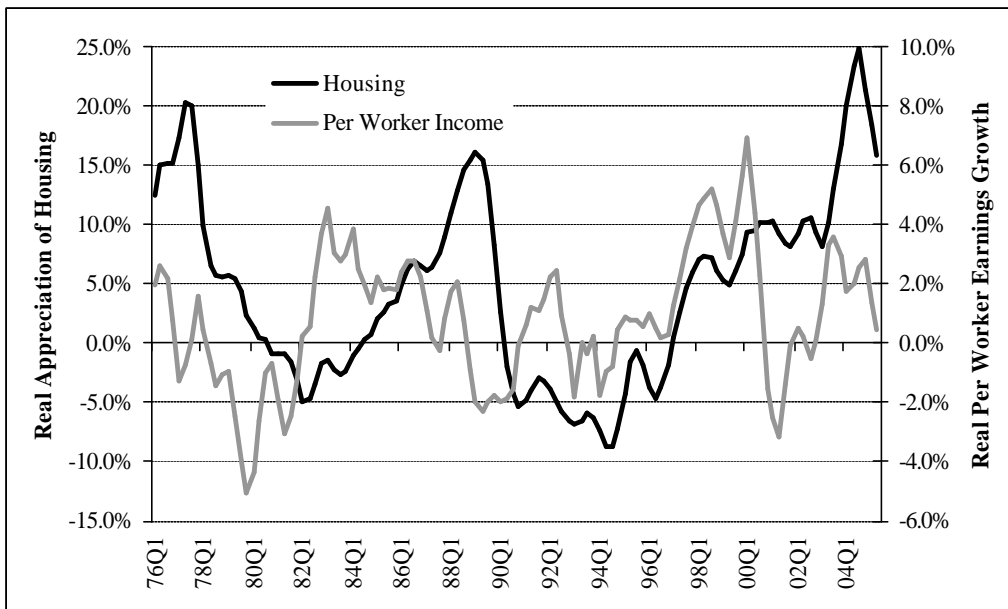
Existing Single Family

	Sep-00	Sep-04	Sep-05
Alameda	\$340,000	\$516,000	\$616,000
Contra Costa	\$267,000	\$475,000	\$580,000
Marin	\$562,000	\$777,000	\$899,000
Napa	\$263,000	\$499,000	\$641,500
San Francisco	\$480,000	\$687,000	\$757,500
San Mateo	\$502,000	\$675,000	\$816,500
Santa Clara	\$469,500	\$595,000	\$705,000
Solano	\$192,000	\$385,000	\$451,500
Sonoma	\$319,000	\$490,000	\$599,000

cycle we have had in the past. Then when income growth did return in 2003 it caused the market to accelerate to a pace of real appreciation never experienced before (at least not during periods of time for which the data is reliable).

Growth in Real Housing Prices (OFHEO) and per Worker Workplace Earnings

SAAR, Smoothed



We have discussed our reasons for the belief that this is a bubble in many previous reports. The simple answer is that a house is an asset, and these assets have a fundamental price based on the potential for future rental growth in a region and the mortgage rate. Since 2003 mortgage rates have come up slightly (remember that the mortgage *level* plays no role in price determination when it is constant. Only a change in the mortgage rate affects prices) and the rental markets are just now starting to show some signs of life, with real rents starting to increase.

In short, housing prices should have basically gone flat as of Q4 2002, and instead they have grown at an unprecedented pace. While there is some room for debate on this issue, I put the starting date of the downturn in ‘per worker income’ at Q4 2002. On this basis, we can guesstimate that property in California is now overvalued by something close to 35 or 40%.

There are many housing bulls out there offering all sorts of reasons why they believe this view is wrong—that the market is fine and prices are in a stable position. One reason offered is that we have a housing shortage in California. However, the current pace of building is at about 1.7 new homes per new worker in California, almost twice the long run national pace of .9 new homes per worker. The US overall is currently building 2.2 new homes per new worker. Since 2001 the six-county region around the Bay has built 32,000 more units than the number of new households, and vacancy rates continue to rise.

New Housing, Bay Region

Building Permits	2001	2002	2003	2004	2005 (est.)
Alameda	3,236	3,572	4,520	5,691	3,944
Contra Costa	5,136	5,805	6,895	5,483	5,621
Marin	375	440	712	1,027	381
San Francisco	1,819	1,330	1,582	2,368	1,322
San Mateo	1,441	1,423	1,304	1,111	472
Santa Clara	5,960	4,513	7,490	5,505	9,428
<i>Total</i>	<i>12,007</i>	<i>12,570</i>	<i>15,013</i>	<i>15,680</i>	<i>11,851</i>
New Households	15,835	5,609	(3,624)	8,231	9,000
<i>Difference</i>	<i>(3,828)</i>	<i>6,961</i>	<i>18,637</i>	<i>7,449</i>	<i>2,851</i>

In any case, if the housing shortage story were true, we would see it in rents first and housing prices second. Instead, rental rates have been

functionally flat for almost five years now, certainly not indicative of a housing shortage. Many bulls respond that the rental markets cannot be used as a basis for discussing housing since there is an intrinsic value to owning that we callous economists can't possibly fathom. I agree that there is an intrinsic value, but has it increased by \$200,000 in 3 years? Most other explanations for the current level of prices fall similarly flat when examined by any objective standard.

We do indeed have a housing shortage in California, but it is for low-income apartments.

This need is not being met due to the high fixed costs of building residential units in the state. The building boom in California added something on the order of 600,000 new units between 2000 and 2004. Yet the number of vacant units during that time actually rose slightly, from 825,000 units to 832,000 units. While California's vacancy rate is lower than the US average, 6.5% vacancy is hardly a rate reflective of a terrible shortage. Moreover, the crowded housing problem in California has been reduced somewhat through a trickle down effect. The number of residences with more than one occupant per room fell from 11% in 2000 to 8.3% in 2004 (this includes rented and owned units), although this is still well over twice the US average of 3.1%.

Vacancies and Overcrowding

	2000	2004
Balance of US		
Total Units	103,690,092	109,867,032
Vacant	10,260,458	11,937,100
%	9.9%	10.9%
Overcrowded	3,115,354	2,393,190
%	4.2%	3.1%
California		
Total Units	12,214,549	12,804,702
Vacant	825,181	832,544
%	6.8%	6.5%
Overcrowded	1,251,515	997,490
%	11.0%	8.3%

Of course when this real estate boom does come to an end, as it inevitably must, the economy is going to feel the impact directly and indirectly in almost every sector. In many ways the forecast for California is dominated by this one question: when is the party going to end?

One of the common misperceptions is that it will take an interest rate hike to slow the market down. This wasn't the case in 1989 when the last real estate boom came to a sudden halt, and led the economy into the deep downturn of the early 1990's. Remember how these bubbles work. Price increases cause people to raise their expectations of future appreciation, causing new buyers to enter the market, causing prices to rise yet again and so on and so forth. However this cycle of self-fulfilling prophecies can only continue as long as there are new entrants into the market and this depends largely on available credit. What happened in the late 1980's was credit tightening by the banking system due to the growing problems in the S&L system. Mortgage rates were steady right through the slowdown.

The market is still red hot of course. Price appreciation and market activity continue at a record pace. Nevertheless, right now the bubble is clearly starting to lose steam. Prices have risen so much relative to incomes that for new buyers to get into the market, quite often they have to rely on various degrees of high risk financing—namely variable rate, interest only loans. This represents a market starting to reach a breaking point.

The best indicator that the party is starting to end will be a decline in overall market activity—slowing of total unit sales and build up of inventories. When inventories rise and sales start to fall this will spill over into price appreciation and construction within three to six quarters, and this is when the overall economy will begin to feel the pinch. Right now the market appears to be at a crossroads. According to the latest numbers available, market inventories in the state have almost doubled over the past six months and overall market activity has been flat albeit at a very high pace. What this hides is that some markets are still hot, but others are starting to show signs of weakness. San Diego, ahead

Changes in Sales and Prices Q3 04 to Q3 05

Based on July / August numbers

County	Unit Sales	Price App.
Ventura	20.4%	15.3%
Orange County	14.0%	14.0%
Riverside	5.7%	16.9%
Solano	1.2%	23.7%
Los Angeles	0.5%	20.8%
San Bernardino	-0.6%	29.7%
Sonoma	-4.2%	19.7%
Napa	-5.7%	17.0%
Contra Costa	-5.9%	22.2%
Santa Clara	-7.9%	20.4%
Alameda	-9.1%	16.6%
San Diego	-9.7%	3.6%
San Mateo	-10.0%	18.3%
Marin	-11.9%	12.8%
San Francisco	-15.7%	15.4%

of the home price curve relative to the rest of the state, has seen unit sales drop by 10% and price appreciation slow to 3.5%. Much of the Bay Area, while still showing strong appreciation has seen total sales falling off.

Of course this isn't necessarily the end of the line. If the Fed decides to slow tightening due to Katrina or if more uncertainty in the stock markets caused bonds to rally, the mortgage rate might fall yet again giving the market a few new months of prosperity. But things are clearly at a tipping point. And remember, while it is unlikely that nominal home prices will fall rapidly, that does not mean a cooling market will do little damage to the economy. A cooling market is characterized by a large drop in new building units, market activity, and refinancing activity, not to mention heightened foreclosure activity. A lot of the new jobs in those areas will suddenly start to disappear. And don't forget those wealth effects. When consumers realize they can no longer expect that appreciation bonus to subsidize their consumption habits, they will very likely pull back on spending. Keep an eye out.