

EastBay

Q2 **06**



ECONOMIC OUTLOOK



**Created for the San Francisco East Bay's
Economic Development Alliance for Business
and the Contra Costa Council**

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Overview

The Bay is booming. Job growth in the East Bay accelerated to over 3% in the first quarter of this year, and worker incomes are growing faster than almost anywhere else in the state. San Francisco and San Jose are not growing as fast, but the last vestiges of the painful correction of a few years ago are rapidly fading. Even as the state government is enjoying unexpected increases in revenues, local governments are enjoying increases in their take as well. Things are good.

That cloud discussed in past reports has not gone away, however. Indeed the storm is coming upon us now. The housing boom that has been such a driving force in the California and U.S. economies has peaked and is starting to soften. Unit sales and new residential permits are starting to fall, and housing appreciation is slowing. Things are still hot, but the trend is clear. The only debate now is how hard the landing will be and what it will mean for the general economy. The good news is that the non-housing driven portions of the economy are starting to do better. Jobs in professional services are growing strongly, and while manufacturing is not adding many jobs, output continues to rise. Corporate profits are solid, and business spending is still strong. And a cooling housing market, a drop in retail sales and an associated softening of the exchange rate could be good news for California exports.

Still the external economy will not be enough to make up for the 200,000 jobs California is likely to lose in the construction sector as residential construction and remodeling slow markedly. The East Bay will experience a loss of something less than 10% of this number, not to mention real estate and mortgage banking which will also take hits. Reduced home appreciation will slow taxable sales growth as well. The State budget for '06-'07, already tight, looks to go under water by the early part of next year, and with it much of the infrastructure dreams of the current administration. Still, there will only be a slowdown in revenue growth, not the substantial losses seen in 2001 and 2002. Look for employment and income growth to stay strong for 2006, but slow over the following two years, led by a weak construction industry.

Was that a ‘POP’ I heard?

Imagine that once upon a time you were a venture capitalist in the late nineties. You made a good living for a number of years starting up dot.com’s and spinning off IPO’s. Unfortunately, the collapse of the tech sector brought that income stream to a halt. With state employment and income in decline, a shattered Bay Area tech sector, not to mention the State’s terrible fiscal problem, you decide to take a few years off until things get a little better and jump into the cryogenic sleep chamber you picked up as a free gift at one of those tech conferences. You set the wake-up alarm for 2006, when you figure the slump will have ended. Your one major worry—what will happen to the price of your house given the economic mess the state is in? Surely it will fall after the strong growth seen over the last few years. ‘Ah well, as long as it’s still standing’ you think as the ice crystals form.

Waking up in 2006, you immediately notice your neighbor’s house for sale. You casually ask what they are selling it for, only to learn that it is listed for twice the price they paid for it back in 2001. Your immediate thought would be that the Fed had gone on an Argentinean-like bender and had been printing money like mad over the past few years causing a huge spike in inflation. But no, when you look in the paper the Fed has been worried about *deflation*, not inflation, and overall prices had been stable. How has this happened? You feel the hairs on the back of your neck rise and you expect Rod Serling to come out of the house and announce that you are in... (do you hear that annoying music?) the bubble zone.

This sounds like an implausible story—but that is indeed what has been happening. The state has seen one of the most impressive increases in real housing prices during a period of time when the economy has only gone from bad to moderate to okay. This lack of synchronization is unprecedented in U.S. or California history. Typically a hot housing market accompanies a hot economy and vice-versa, but not this time. The numbers are truly astonishing. In real (GDP deflated) terms the run up in real estate in the 70’s saw prices rise 73% from the bottom to the top of the market. After the peak, prices fell by 8% over the next 5 years. The late eighties saw prices rise by 58% from the bottom to the top of the market. This time the crash was hard and prices fell by 25% between 1990 and 1997. Since 1997 prices have risen 155%, with two thirds

of this increase coming since the 2001 downturn began.

Now there were some legitimate reasons for the increases in prices. The late nineties saw a sharp rise in rental rates around the state, caused by a growing gap between production and demand. The late nineties saw the removal of tax liability on the sale of a home within a certain amount. Then there was the large drop in mortgage rates between 2001 and 2003. But since 2003 there has been little reason to believe the price increases we have seen are legitimate. Mortgage rates are rising slowly, rents are just now starting to recover and with the state permitting over 200,000 units over the last two years those housing shortages seem to be a thing of the past.

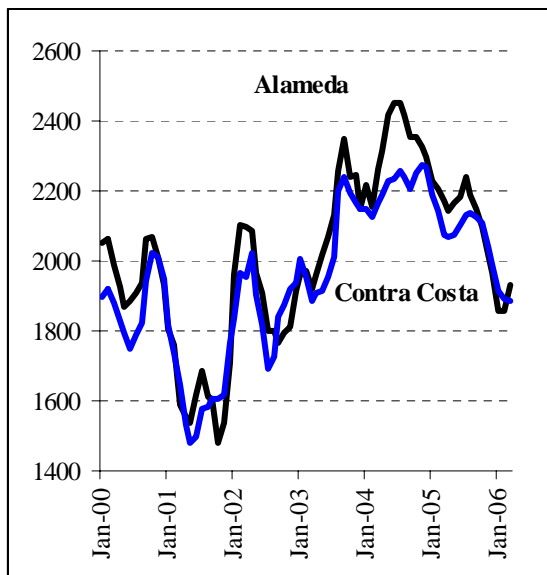
A bubble is when the market price of an asset becomes misaligned with what the fundamentals say the asset should be worth. Bubbles form because of buyers who concentrate on trends, not fundamentals. Property prices may have risen for legitimate reasons in the past, but this past performance is being taken as a sign of things to come, even though the drivers of the market point in a different direction. But the force of people rushing into the market to collect what they see as ‘free money’ may be enough to drive up prices all on their own. This self-fulfilling prophesy cannot last forever though. Eventually the harsh reality will settle in, and the markets

will come to a halt. It is just a matter of time. The irrationality of the market makes it tough to predict the when, only the eventual direction is known for sure.

Residential Units Sales

New and Existing Homes

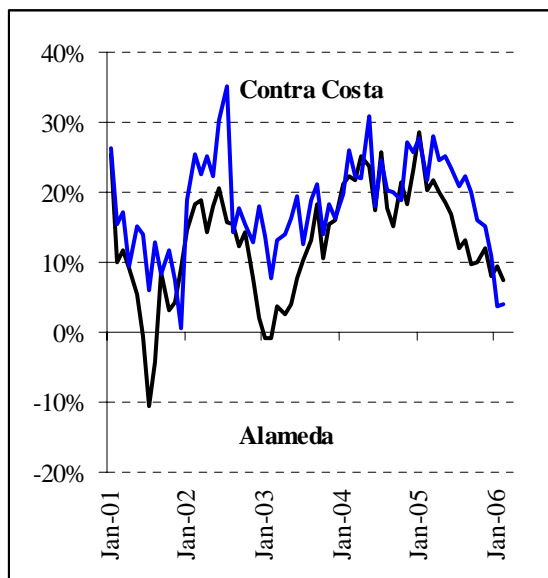
Source: Dataquick



The best leading indicator of a cooling real estate bubble is unit sales. The frenzy that characterizes the rush to get some of that free money is best characterized by a run up in units being bought and sold. Unit sales of existing homes in the state have fallen from 140,000 to 110,000 (seasonally adjusted). In the East Bay monthly sales have fallen to about 1900 units, still high but the downtrend

continues. New permits for residential structures have also fallen to below 200,000 units for the state, although they remain solid in the East Bay at slightly over 10,000 new units annually. Inventory levels are on the rise in all the major markets according to data from the California Association of Realtors. Make no mistake, all the numbers still reflect a hot market, and are considerably above where they were as recently as 3 years ago. But these markets are very trend sensitive. The slowing of the market feeds on itself, not unlike the acceleration did. When the market was hot, it caused people to rush in to get a piece of the action, causing it to get hotter. Now as it cools, it will cause more people to think twice before buying, causing it to cool more.

East Bay Price Appreciation



Going by past trends this slow decline will continue for the first half of this year, and then the bottom will truly begin to drop out.

As for prices, they are still rising. Much has been made of this, and discussions about how unusual it is are common in the press. The real estate community claims it is indicative of a ‘soft-landing’ scenario. Let me be perfectly clear, there is absolutely nothing unusual about the current pattern of slowing in the market. Prices always lag sales activity on the order of six months to a year. With the markets starting to slow as of late 2005 we would expect price appreciation

to slow and come to a halt somewhere towards the end of 2006. This is exactly what we are starting to see. From the 25% pace, appreciation has fallen below 10% as of March of this year. Expect it to continue downward.

So is this the time to sell your house and move in with your parents? Only if you happen to be a masochist, and even then it might end up being too painful. Housing bubbles do not pop on the price side, unless there is a substantial loss of employment in the local economy—the kind of employment losses typically associated with a wider recession. And even under those

circumstances the price declines tend to be slow. If you need a good example to go by, the breaking of the late seventies bubble would be a good start. While the US economy was

Residential Market Forecasts
California

	<i>Unit Sales Annual</i>	<i>Median Price Q4</i>
2005	532,231	\$454,000
2006	434,819	\$481,000
2007	388,509	\$481,000

dramatically hurt by the deep recession in 1983 and the shallow one in 1981, only in one year—1982, did California actually see a decline in its workforce. As a result prices stayed relatively stable, falling in value only slightly.

Given the current momentum in the general economy, the forecast for real estate is general cooling. Appreciation will slow to a mere 6% (nominal) by the end of this year and will be flat in 2007. Yet the ‘soft landing’ scenario being predicted by the industry is clearly overly optimistic. We predict that sales of existing homes at the state level will fall from 530,000 units sold in 2005 to 390,000 in 2007 and even lower in 2008. New units being built will drop below 150,000 units by 2008. The impact on the real estate and mortgage industries will be substantial.

What risk does the State have? In 2005 brokerage commission fees nationally tallied in at something close to \$100 billion. California’s share of this is probably at least 15%, or \$15 billion or more. If the average broker pays 7.5% state income tax on this, this suggests that the drop in sales of homes will cause a \$1 billion hit to the state in proprietors income alone. Throw in taxes paid by mortgage brokers and residential developers and you can see the revenue problems that will start to accumulate in the latter part of this year. The spillover to the rest of the economy will be noticeable. State employment growth will slow to 1%, and taxable sales growth will slow to 4%. With taxable sales slowing along with income, the state will start feeling the pinch. Do not expect the dramatic collapse we saw in 2001, but then again we have less room to spare.

Of course the industry that has the greatest degree of risk is construction. It seems doubtful that non-residential construction will be able to pick up the slack in the wake of the slowdown in residential units. We expect residential permits in the state to fall by over a third in the next few years. The decline will be larger in the places that have been building at an incredibly high pace, namely Sacramento, Contra Costa and of course the Inland Empire. Expect new permits to fall

by close to 40% in these areas. There will also be a distinct shift in the type of construction, away from pricey higher end units towards entry level units. Local governments interested in promoting the development of affordable housing will find it much easier to get builders to buy into various programs when demand is slack.

The value of non-residential permits have been growing over the past two years, but only due to the increasing cost of construction. In real terms the amount being built has been flat since bottoming out in 2003. Commercial space still has a high vacancy rate, and demand for new space will remain tepid there for a number of years. Retail and industrial space are tight, but these are being driven in part by the high degree of consumer spending on imports. Weaker spending growth will cool demand for these sectors as well. Construction employment will lose 200,000 jobs statewide over the next three years, with an additional unknown number of jobs lost in the informal sector. In the East Bay this will likely translate into the loss of 17,000 construction jobs in three years.

Is there a possibility of a worse outcome? Certainly. Other shocks to the economy, or a rapid closing of the current account deficit could cause a major recession. This would worsen the outlook substantially. But there is no evidence of this secondary possibility at this point in time. So we see the housing crunch as a force that will slow growth, not stop it. Look for weak growth starting beginning the end of this year or early next year and lasting for up to two years. What is clear is that the downside risks are larger than the upside.

Bay Area Labor Markets

At the beginning of each year, economists wait eagerly for the new employment benchmark to be released. The reason is that the sample used to calculate local area employment becomes substantially degraded over the course of the year due to the loss of many small firms to bankruptcy, with no replacements put into place. At the start of each year new firms are put into the sample, and the sample itself is re-weighted according to updated statistics from the large but highly lagged Quarterly Census of Employment and Wages (formerly ES-202) data. This allows us to get a better idea of what is happening locally. Economists will spend a lot of time thinking

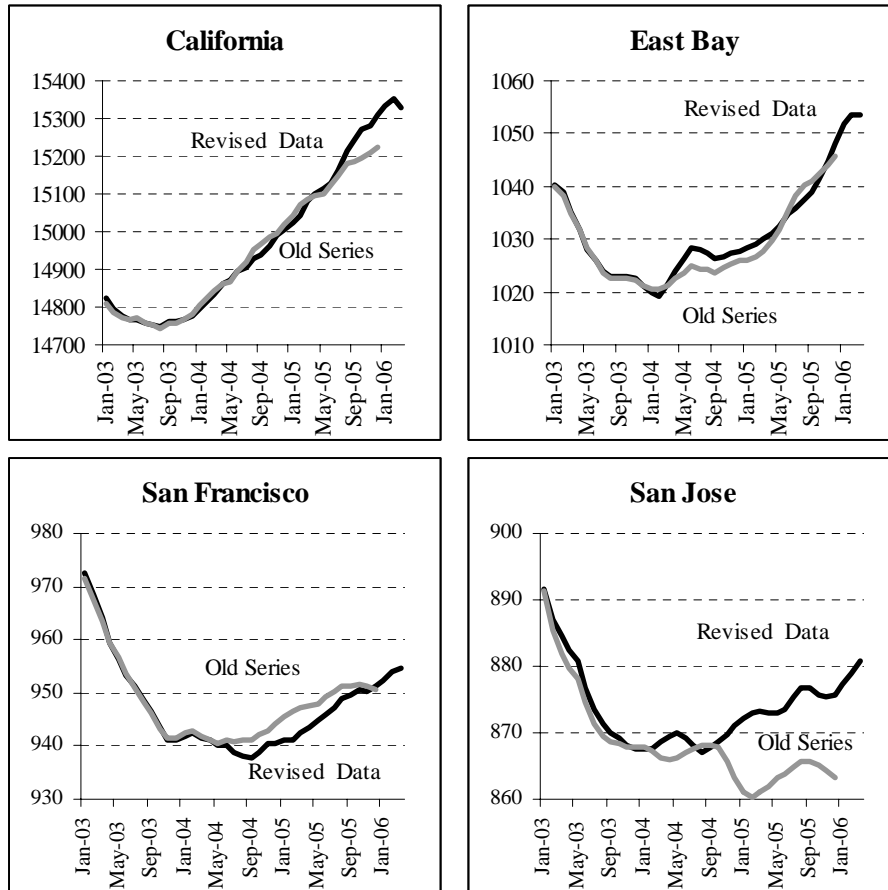
about how the data might be adjusted and what it implies for the economy. We may even place bets on which local economy will be upgraded and which will be downgraded. This is one of the reasons economists are often avoided at holiday cocktail parties.

The recent revisions to the state's employment numbers substantially increased the overall 2005 growth rate from 1.3% to slightly less than 2.0% (fourth quarter to fourth quarter). Most of this upward adjustment occurred between August and the end of the year. What originally appeared to be a slowdown in employment growth now looks to be a continuation of existing trends. In comparison to other states, this puts California as the 19th fastest growing economy in percentage terms, and the 2nd largest in absolute terms with 300,000 new payroll jobs, behind only Florida, that distant land of blue seas and blue hair. While the growth rates are not as impressive as they were in the late nineties, nevertheless the labor markets look to be quite tight. Unemployment in the state dipped below 5% in January of this year. This is lower than at any time during the past two decades with the exception of 2000, when the labor markets were in a very overheated state due to that little tech bubble issue we had (for those of you who may have forgotten).

The Bay region also saw some serious revisions to their payroll employment data. The East Bay and San Francisco didn't see any change in the level of their fourth quarter employment, but the histories of each changed, altering their current growth path. For the East Bay, like California, the path of growth last year was steadier, and the slowdown in growth initially seen in last year's data now appears to be an acceleration which continued into the start of this year. For San Francisco the change pushed job losses into the end of 2004, and now shows steady growth since this trough. San Jose saw the most substantial revision, with 4th quarter 2005 employment increased by whopping 1.5%. As opposed to losing jobs over the past year, it is now seeing steady, if slow, growth since the end of 2004.

While the total number of payroll jobs in the East Bay remained steady, the distribution of jobs across sectors did change. Manufacturing and healthcare both saw substantial downward revisions, on the order of 5% for each sector. Manufacturing is now less than 10% of the total employment base in the East Bay, an all time record low. Healthcare also saw a sharp downward revision in the 4th quarter. This is not much of a surprise, as this sector has seen similar

Payroll Employment, Seasonally Adjusted Data
Original and Revised Estimates



downward revisions almost every year. It still represents one of the fastest growing sectors of the East Bay economy. The downward revisions in manufacturing and healthcare were offset by upward revisions in construction, retail, professional services, and in government.

More important than the revisions has been the increase in the rate of growth for the Bay region. Over the course of 2005 the East Bay saw employment growth accelerate from less than a percent to something over 2%. First quarter growth in 2006 was very good for the East Bay, tallying in at a 3.5% annualized rate, and it remains the center of growth for the area. San Francisco and San Jose grew at 1.5% and 1.6% respectively, the same rate they experienced at the end of 2005. Growth in the East Bay continues to be led by construction, which added 3,300 jobs to the economy. In total construction now employs 80,000 payroll employees, and likely more in the informal sector. This is twice the number employed not even a decade ago. Retail

**East Bay Payroll Revisions by Sector
and 1st quarter growth**

** Annualized, seasonally adjusted*

	<i>Total Q106</i>	<i>Q405 Rev.</i>	<i>Q106 Gr*.</i>
Total Payroll	1053.6	0.0%	3.5%
Construction	80.4	2.9%	17%
Durable Manu	60.1	-4.6%	1.6%
Non-Durable Manu	35.2	-6.3%	-0.4%
Wholesale	48.7	-0.4%	7.1%
Retail	114.6	2.0%	5.5%
Transport	34.5	-0.7%	1.6%
Information	29.8	-1.5%	0.4%
Financial Activities	72.6	0.8%	3.6%
Professional Tech.	72.7	3.0%	1.5%
Mgmt Companies	21.9	-1.2%	16%
Admin Support	59.2	3.5%	4.9%
Education / Health	120.6	-4.2%	1.8%
Leisure	85.2	-0.3%	5.8%
Other Services	35.7	-1.4%	-2.6%
Government	179.5	2.2%	-1.5%

and leisure each added another 1500. Durable goods grew at a 1.6% pace, but after the revision, overall numbers are still very low. The public sector also saw negative growth rates. Overall the patterns of growth are largely balanced, with the exception, of course, of the distended construction sector.

Lastly there is the issue of the lack of a recovery in manufacturing employment. The state has lost over 20,000 jobs over the past two years, even as the economy has bounced back. As noted, the share of jobs in manufacturing in the East Bay is at an all time

low. Add in losses in informal employment and the numbers become even larger, something on the order of 100,000. The losses on the payroll side have been led by the apparel and printing industries, but all in all the losses are fairly widespread. Even in sectors where California has a strong strategic advantage—namely computers, electrical equipment and other high tech sectors—job growth, if not negative, has been negligible.

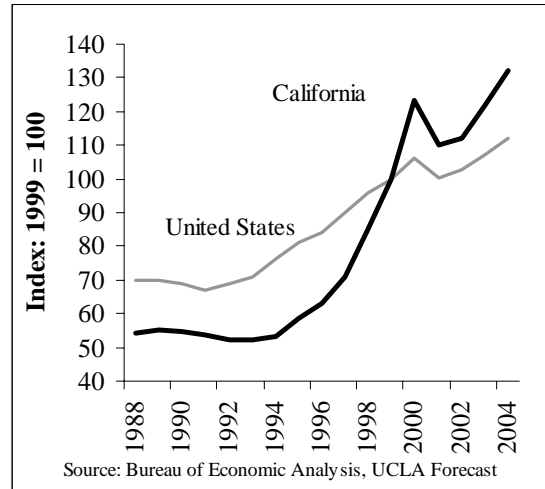
While manufacturing employment remains flat in California, in fact, manufacturing here seems to be doing better than elsewhere in the US. The next figure shows real manufacturing output for California and the U.S. overall since 1988, as calculated in the Gross State Product statistics. While jobs may not be forming, real output in manufacturing in the state in 2004 was at an all time high, even larger than the previous peak hit in 2000. Manufacturing from the production side is doing better than ever. Similarly international exports from the state continue to grow at a solid pace. In 2005 estimates are that \$116 billion in manufactured exports were shipped out of the state, led by computer and transportation equipment and machinery.

So why has there been a distinct lack of a recovery in factory employment? One reason is the ongoing shift in manufacturing employment from labor intensive sectors such as textiles or

apparel towards more capital intensive sectors such as chemicals and computer chips due to competitive trade with China and other developing economies. Another is the rapid increase in capital deepening in these industries due to the continued fall in the cost of information technology. Think of the IT revolution. What this really means is an incredible decline in the cost of business investments, allowing unprecedented increases in productivity in the overall business sector, but particularly in manufacturing. Silicon now does what carbon used to do. Both reasons imply that future job growth in the state is going to be driven by the service sector, a sector in which human capital is of utmost importance in determining success. The well-paying, low skilled jobs of manufacturing simply aren't growing anymore.

Real Manufacturing Output

From the Gross State Product Statistics



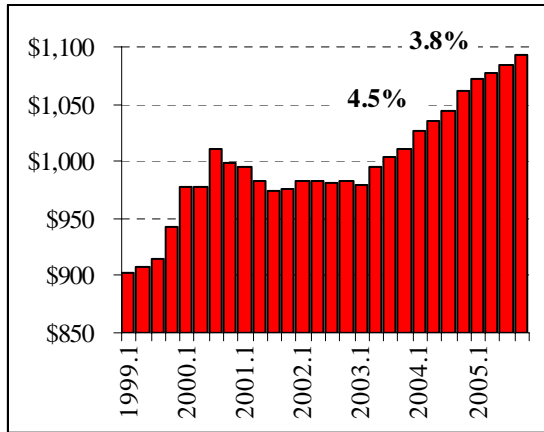
California Exports

Nominal, \$Mil Source: Wisner

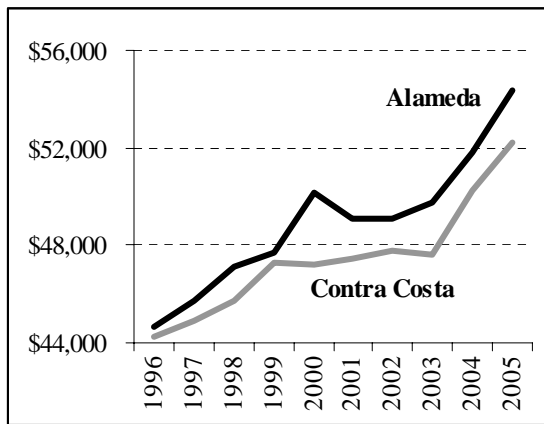
	2003	2004	2005
Total	\$93,995	\$109,968	\$116,819
Computer Eq.	\$36,715	\$42,247	\$41,752
Transport Eq	\$8,644	\$11,759	\$13,325
Machinery	\$9,434	\$12,593	\$13,131
Chemicals	\$5,964	\$6,644	\$7,212
Misc.	\$4,884	\$5,641	\$6,425
Agriculture	\$4,784	\$5,204	\$6,048
Foodstuffs	\$4,168	\$4,159	\$4,627
Electrical Eq.	\$2,936	\$3,440	\$3,721

With lots of new jobs, income also continued to grow at a solid pace in the state. For the second year in a row earnings by place of work grew in nominal terms by about 7.3%.¹ This was about a half percentage point higher than the balance of the US. In real terms growth slowed from 4.5% to 3.8%, due primarily to the rising costs of energy. Income in the Bay Area rose faster than for the state overall despite the fact that it has been adding jobs at a slower pace. In the East Bay income rose something on the order on 6% in real terms in 2005. On a per worker basis incomes in Alameda County rose by 5% to \$54,400 and in Contra Costa County, 4% to \$52,250. San Francisco incomes grew slower, while in San Jose they grew slightly faster. While average

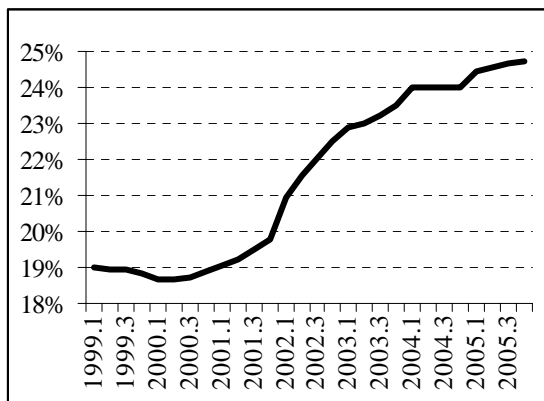
California Earnings by Place of Work
 Seasonally Adjusted, Annual Rates
 Real Values, \$2005 Billions



Average Worker Income
 Real Values, \$2005



Benefit Costs as % of Workplace Earnings in California



incomes remain higher in San Francisco and San Jose, the East Bay continues to close the gap.

While total income has been growing well, workers have not been enjoying all the fruits of their labors. While worker incomes in the East Bay have been rising at a solid pace, the rate of growth of take home pay has been slowed by the cost of worker benefits—health and other forms of insurance, pension plans, workers’ compensation insurance and other public social insurance payments. The cost of these benefits have been growing in real terms at well over twice the pace of overall payroll earnings. When benefit costs rise, there has to be an offsetting mechanism to keep the supply of labor equal to the current level of demand—as we all learned in our first day of economics class there simply is no free lunch. This offsetting adjustment is slower growth in take-home (after benefits) pay. Benefit payments now cost firms one quarter of worker pay, up from 19% in 1999. In short—here is our business climate problem.

This is hardly surprising. Healthcare

¹ Workplace earnings include payrolls, employer payments for worker benefits and proprietors’ (self-employed) income. It is distinguished from total personal income which includes government transfers, both negative (payroll taxes) and positive (social support payments) along with financial returns and real estate rents.

US Health Care Expenditures
Per Capita, \$2004 GDP Deflator

	2004	1994	1984
Health Exp.	\$6,280	\$4,353	\$2,721
Income	\$32,486	\$26,350	\$22,101
Share	19.3%	16.5%	12.3%

spending is on a double digit growth path yet again. A recent report from the Centers for Medicare & Medicaid Services showed that spending hit a new high in 2004, reaching a level of \$6,280 per person in the US, about 20% of

personal income. This is driving up health insurance costs and the cost of any other insurance package such as workers' compensation insurance. To put this in perspective, this is 60% more on a person-by-person basis than Switzerland—a nation that spends the second most on healthcare per person in the world. Oh, by the way, they are on average older than we are and live longer than we do. Now admittedly walking up and down those hills all day will keep you in good shape, but it still makes you think. As a nation we spend more money per capita on publicly provided healthcare than Canada. And before you point at the pharmaceutical companies that have become the favorite scapegoat in this debate, keep in mind that the sale of these products remains at about 10% of the total health bill, exactly what it was a decade ago.

Most of the debate on the issue seems to focus on who is going to pay, but this misses the point. No matter who is paying, we all pay. If insurance pays, premiums rise. If employers pay, take home pay goes down. If the government pays, taxes go up. The issue in the U.S. is that we have a wasteful system that encourages consumption that isn't effective from a cost-benefit viewpoint. Until this fundamental issue is understood, nothing much will change. With little in the way of government effort to control health insurance expenditures—public or private—there is little reason to believe this is going to change anytime in the near future.

Nevertheless, rising incomes have added to the revenue streams flowing into State coffers. There have been other unanticipated source of revenue as well. Company profits have been growing at a very solid pace. Proprietors' income grew by 20% over the two years up until the 3rd quarter of last year, the most recent data available. Corporate profits are similarly on the rise. While we don't have state statistics for corporate profits within California, profits nationally have increased something on the order of \$200 billion over the last two years as of the 4th quarter of last year. This suggests an increase in California corporate profits of roughly \$25 to \$30 billion. The State's tax receipts from those profits, after staying stagnant at about \$6 billion since the mid-

Current General Fund Budget

Based on January Figures

Source: Department of Finance

	2005-06	2006-07	
Reserves	\$9,634	\$7,031	
Revenues	\$87,691	\$91,545	4.4%
Expenditure	\$90,294	\$97,902	8.4%
Remaining	\$7,031	\$674	-90.4%

nineties, have suddenly surged to almost \$10 billion.² It is expected that these profit numbers, both at the local and national level, will continue to grow strongly through 2006.

Taxable sales receipts and the real estate frenzy have also been adding to State and

local coffers. This source of income for the State is nearly as large as personal income taxes, and has been growing strongly. This represents about 35% of general fund receipts and is riding on the back of very solid gains in taxable sales spending in the state. Growth in taxable sales has been up by 7.5% per year for the last two fiscal years, despite relatively slow gains in real take home pay. If the year-to-date numbers for sales and use receipts follow past trends, taxable sales growth will increase by 9% this year over last by the time we reach June. This will add another \$3 billion to the State's coffers.

These numbers are really quite dramatic. Even a simple simulation shows that they aren't being driven by employment and income. Neither is sufficient to drive this type of growth. What is? The answer is, of course, real estate. A basic simulation which takes property price growth and reduces it to a reasonable 5% level since 2003, leaving employment and income the same (if that is possible) reduces sales and usage revenues by \$1 billion per year. Not a large amount for the State, but in the State's current fiscal situation, it may be the difference between a budget that works and one that doesn't.

General fund revenues have grown to something on the order of \$87 billion (seasonally adjusted annual rate) over the past few quarters. This has been driven largely by expected tax payments, those pre-payments the self-employed are expected to make. This has prompted the Governor to raise the revenue forecast for the next fiscal year by \$4.5 billion. This seems eminently reasonable, as it doesn't presume that the recent growth rates will continue, but rather assumes things will settle down to a more normal pace of growth. Growth for next year is expected to be a

² Actually this alone cannot explain the total increase in corporate payments to the state. Another idea supplied by the LAO is that many tax shelters have begun to run out of steam, exposing more real profits to taxation.

very moderate 4.4%.

Unfortunately it still leaves the State in a fiscal hole, with current expenditures and expected spending next year still above expected revenues and even more distressingly growing at a faster pace. As such, the current budget does little to help pay down the debt the State has been accruing over the past few years since the 2001 collapse in revenues. The plan is to cover the current shortfall with reserves left over from the previous bond issue. If all goes according to plan, by the end of the 2006-07 fiscal year, the \$9.6 billion in reserves the State started with in the 2005-06 fiscal year will be whittled down to a mere \$674 million. Unfortunately it may not. Take away that extra billion in housing-wealth driven spending and we are already in a hole. Local governments are similarly at risk. Many are enjoying the benefits of record increases in property taxes along with sales taxes. But with the markets already showing signs of slowing, these growth rates should be considered anomalies, not new growth trends.

Informal Employment, Commuting and Infrastructure in the Bay Area

While payroll employment was revised up, at the same time employment for the state based on the household survey was revised down by something slightly less than 1%. Even with this change jobs estimated from the household survey still grew at a faster pace than payroll employment, 2.3% compared to 2%. One of the reasons that unemployment is so low in the state is the very strong increase in what we have labeled ‘informal’ employment in the state.³ For the East Bay the revision was down approximately 1.8%, with a similar decline in San Francisco. San Jose’s employment, as measured by the household survey, remained steady. Of course the labor force was also revised downwards, and therefore unemployment remains low in the region.⁴ As for the first quarter of this year the unemployment rate in the East Bay was 4.3%,

³ The informal workforce is made up of those workers with jobs who are not covered by unemployment insurance for whatever reason, whether they are self-employed, illegal or simply work for an employer who doesn’t want to pay the premiums. We call them informal to be distinguished from the ‘underground’ jobs that exist in industries that the state has judged to be illegal, such as prostitution or drug dealing, where workers also tend not to have unemployment insurance and pension plans.

⁴ The revisions to employment estimates from the household survey are not due to changes in the sample itself, as with the payroll numbers, but rather due to changes to the population weights by which the Census adjusts the sample numbers to reflect an entire population. Since both the labor force and the household survey employment

compared to 4.1% in San Francisco and 4.7% in San Jose.

The number of informal workers in California is now at 1.6 million, up half a million since 2000. The informal workforce is now slightly over 10% the size of total payroll employment, larger than in any other state (other states with large informal sectors include Arizona, Texas and Florida). To put this in perspective, the informal workforce in California is about the same size as the *entire* workforce of Oklahoma, Iowa, Kansas or Nevada not to mention larger than the 19 other smaller states.

Where are these informal jobs that are revealed in the household survey? It is difficult to say exactly. Part of the reason is that the sample size is considerably smaller than the payroll numbers -- only about 4,000 to 5,000 workers are polled in all of California on any given month. Another problem is that 'industry' is a self-selected characteristic and most of those polled don't understand the relatively arcane way by which payroll numbers are classified—by the primary task engaged in by the owners of the enterprise. For example many school teachers would naturally think that they are in the education sector, when in fact they work in the government sector. Similarly a worker employed in a temporary accounting job in a mortgage company might assume that they are in the financial industry when in fact they are in temporary employment in business services. We know that the jobs are in many sectors of the economy.

We also know that while a large immigrant population drives the sheer number of informal jobs, they have not been the only force behind the major expansion in the number of these jobs over the past few years. Instead the numbers have been driven in large part by the housing bubble, not unlike the overall economy. Financial activities now have the largest share of informal jobs, almost 20%. This is up by a whopping 130,000 new jobs over the last two years. This category, of course, holds real estate agents and mortgage brokers. If you were wondering where the record number of people who have obtained real estate licenses over the last few years were ending up in the statistics—well, here it is.

figure are based on the same weights, changing the weights doesn't tend to alter the estimate of the unemployment rate.

Construction and other services (including domestic help) together account for just slightly less, as does transport. All of these sectors seem to have added quite a few jobs over the last two years. It may be that the increase in international trade is playing a big role in the increase of jobs in transport. Informal jobs in manufacturing and information, on the other hand, have been declining over the past few years, not too mention agriculture. The potential pay increase for workers who shift from sewing garments and picking fruit to working in the hot building industry is pulling a lot of workers out of these two sectors. If this makes you think that the unemployment rate is likely to start getting worse as real estate cools--well, you are right on target.

The gap between employment calculated by the household survey and payroll employment in the Bay Area is slightly less than six percent. Given the number of people who commute into the region from outside counties, this is likely to be an undercount of the true level of informal employment. This is because commuters from outside the region will count in local payroll employment, but will NOT be reflected in the household survey, which captures informal employment, since it is only conducted at local residences.

How many people commute into the Bay region? Indeed-how many people commute around the Bay region? Unfortunately the patterns of work movements are not regularly tracked. The federal government does a number of annual transport surveys, but they are not large enough to create viable local estimates of commute patterns within the Bay region. The last solid information was based on the 2000 census. While much has happened over the past 6 years, this can nonetheless give us some measure of the inter-linkages of the local economies. The following table shows the percentage breakdown of where the workforce in six Bay Area counties lived in 2000. For

Commuting Patterns in the Bay Region
Based on information from the 2000 census

<i>Residence Workplace</i>	<i>Ala- meda</i>	<i>Contra Costa</i>	<i>Marin</i>	<i>San Fran</i>	<i>San Mateo</i>	<i>Santa Clara</i>	<i>All Others</i>
Alameda	66.7%	14.1%	0.7%	3.1%	2.2%	5.4%	7.8%
Contra Costa	10.6%	75.8%	0.8%	1.4%	0.5%	0.8%	10.1%
Marin	3.1%	5.6%	64.8%	5.3%	0.8%	0.5%	19.9%
San Francisco	12.4%	8.5%	5.3%	55.3%	12.3%	1.4%	4.9%
San Mateo	9.6%	2.6%	0.7%	12.4%	58.8%	11.6%	4.2%
Santa Clara	7.4%	1.1%	0.1%	1.7%	5.9%	77.3%	6.6%

example, only two thirds of the employed workforce in Alameda actually resided there in 2000. Contra Costa residents accounted for 14% of those employed in Alameda while the balance was split among the other five counties and beyond.

Workers from Alameda also made up 10.6% of the workforce in Contra Costa and 12.4% of the workforce in San Francisco. Workers from San Francisco only made up 3% of the Alameda workforce, however. Still, with this degree of interaction, it is hardly any surprise that the Census decided to officially merge the East Bay with San Francisco when it reclassified the MSA's in 2004. Solano was the single largest source of workers living outside the three major metropolitan areas. About a quarter of those who commute in live there. Sonoma, San Joaquin and Santa Cruz account collectively for another half. In all, the three major metro areas import about 5% of their workforce from the surrounding areas. This suggests that the informal workforce runs about 10% to 11% -- on par with the state average, considerably higher than the national average, but lower than the Los Angeles region.

Residential Permits Total, 2000 to present	
SANTA CLARA	37,945
SAN JOAQUIN	37,346
CONTRA COSTA	36,331
ALAMEDA	26,854
SOLANO	15,914
SAN FRANCISCO	14,684
SONOMA	14,529
SAN MATEO	8,605
SANTA CRUZ	5,104
NAPA	5,072
MARIN	3,727

Of course, these numbers are somewhat old. How have things changed over the past five years? During the boom years of the late nineties the economy was creating jobs faster than it could build homes. One result was that many folks were forced to live outside the region. With the cooling of the economy and the loss of many jobs, particularly in the San Jose region, this has reduced the total amount of commuting from outside the region. On the other hand, these outlying areas have been building record levels of new houses. Sonoma built nearly as many new units as San Francisco. San Joaquin amazingly built more than Contra Costa. In short, people are going to be drawn to these outlying areas regardless, due to the availability of housing.

This, of course, brings us to the Governor's infrastructure plan for California. After a number of serious defeats last year, the administration has logically moved to find a topic of conversation on which practically all Californians can agree—finding a solution for the worsening traffic

problems in the state. According to statistics from the Texas Transportation Institute, Los Angeles / Orange County has the worst congestion in the nation, while San Francisco and the East Bay is third. While many pundits will claim that infrastructure is an economic issue—that if the state does not expand its network of roads and highways we are in danger of causing business to leave the state. This may be true in some cases, but congestion is the price of success, not the cause of failure. California’s location, climate and vast array of assets have attracted more people than ever to the state. The population here continues to grow faster than the US overall. This is one major reason that the highways are so crowded. And where people are, businesses will be.

Congestion by Urban Metropolis

Source: Texas Transportation Institute, 2003 figures
 Ranking based on 39 largest metropolises

	Pop.	Congestion Index		Highway Drive Miles Per Cap.		Highway Lane Miles Per 1000	
		Value	Rank	Cap.	Rank	1000	Rank
Los Angeles-Orange	12,500	1.75	1	10.9	15	0.47	29
Chicago	8,125	1.57	2	6.4	34	0.33	39
San Fran-East Bay	4,125	1.54	3	11.9	9	0.59	21
Washington DC	4,270	1.51	4	8.9	21	0.48	27
Atlanta	3,005	1.46	5	14.5	1	0.76	5
Houston	3,750	1.42	6	12.4	5	0.66	14
Miami	5,100	1.42	7	7.2	31	0.38	36
San Diego	2,870	1.41	8	12.6	3	0.65	15
Denver	2,050	1.40	9	8.8	22	0.56	23
New York	17,700	1.39	10	6.4	35	0.41	34

This is not to say that traffic is not an issue—it certainly is. Our quality of life and the price we pay for the products we buy are certainly affected by congestion. To this extent, making attempts to fix the issue is important because in the end it

is we the people who benefit. Also understand that traffic plays the role of pressure valve on the economy, and loosening this valve will lead to faster growth, something that many long-term residents in the state might prefer to avoid. The initial infrastructure bond plan that was floated by the Governor proposed \$107 billion in spending over ten years for transportation and air quality programs. Much of this spending was already in the works, new spending is only a fraction of the total.

The question we need to ask, however, is if building and expanding roads is in fact the right way to deal with the problem. The East Bay/San Francisco metropolitan region is ‘highway poor’ in

Regression Analysis

Dependent Variable: Change in TTI Congestion Index, 1993-2003

Sample Size: 69

<i>Variable</i>	<i>Coef.</i>	<i>t-Stat</i>
Change in Highway Miles Driven per Capita	0.238	4.66
Change in Highway Lane Miles per Capita	-0.278	-5.50
Total Population Growth	0.133	3.07
Log Population Density	0.035	2.80
Intercept	-0.262	-2.64
R-squared	0.486	

as much as the number of highway lane miles per capita ranks 21st out of the 39 major cities tracked by the Institute. That still gives it more miles of road per capita than many places which have less traffic congestions though, including Washington DC, the Inland Empire, Los Angeles or even San Jose. The issue is that people in the East Bay and San Francisco metropolitan region drive a lot. On a per capita basis, East Bay/ San Francisco residents

commuted almost 12 miles per day in 2003, even when the economy was not doing so well. You might not think this is a lot, but remember that this is per capita, not per commuter. Since only 50% of the population works, this is 24 miles per worker. Then throw in the fact that 11% in The East Bay and 18% in San Francisco use public transportation to commute, and the number approaches 30 miles per driver per day. The reason for so many miles being driven is the highly diffuse population base more characteristic of the East Bay—urban sprawl.

In thinking about how to fix the traffic issue, we have to realize that there are two solutions, the first is to build new roads, and the second is to use the existing roads more sparingly. A basic empirical relationship exists between the change in miles driven, lane miles in place in a city and overall traffic congestion. (Empirically looking at changes in congestion across US cities can help us get a better idea of the elasticities involved.) The regression analysis table shows us how much traffic congestion, as measured by the TTI Congestion Index, is affected by changes in lane miles per capita (infrastructure) and changes in miles driven per capita (behavior).

In short what the table says is that increasing the number of lane miles per person by 10% reduces congestion by 2.8%. Similarly, reducing the number of miles driven by people by 10% would reduce congestion by 2.4%.

This is hardly a complete in-depth analysis, but it does make the point that there are multiple ways of handling the congestion issue. The cost of the first option, building more roads, is

clearly enormous, in terms of land, and materials and also due to the fact that it is politically difficult. Yet it has to be done. But there should also be a greater focus on reducing the number of miles driven by commuters in the Bay Area. Expanding public transportation and increasing inducements to get people to use it would help considerably. Infill development would also help, but it should be noted that the table also indicates that increased density actually increases congestion somewhat, it doesn't reduce it.

So the tradeoff between density and driving distances is unclear, but the net effect is likely to be positive. On the other hand, higher density does make public transit more efficient and more attractive. Encouraging people to live closer to their workplace would also be helpful, although what policy options are available to do this are unclear. One way might be to allow businesses to move closer to workers through more favorable zoning options. Of course traffic problems are one of the best ways to limit the commuting patterns of individuals. After all, the number one reason for giving up the suburban dream to move to a central city is the hassle of the drive. The problem with this approach, however, is the negative spillovers on the business community that must use the road for deliveries and supplies. Traffic may drive some transport dependent businesses out of an area, and it may discourage new businesses from moving in.