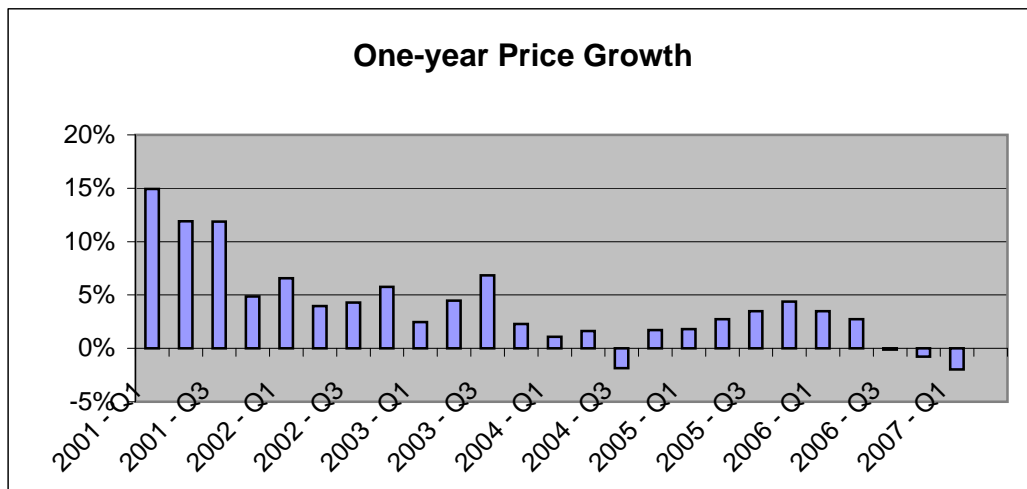


## Price Analysis for the Denver Metro Region

October 2007

Home prices in the Greater Denver-Aurora Metro Region have not encountered a price boom other than back at the turn of the century. Prices have been essentially unchanged in recent quarters. Home prices are relatively affordable compared with the other major Western markets. With job gains coming around strongly, home price increases will likely pick up. A sharp reduction in new home construction will also help control the overall inventory situation. Resetting loans and a rising number of foreclosures related to the subprime fallout are clearly a negative factors, but the impact will be offset by the fundamentals of the healthy local economy.



Despite some media reports of the worst housing market conditions since the early 1990s or since the Great Depression, the recent home price declines have been negligible at the local level. Unlike past local housing downturns, which were accompanied with severe job cuts, the local economy continues to add jobs. Apartment rents have been rising at the highest pace in five years, which will begin to encourage some renters to seriously consider ownership. Mortgage rates have also been falling recently and stood near a historic low of 6.5% for prime borrowers. Rates could be even more favorable in upcoming months as the Federal Reserve cuts the fed funds rate in late 2007 and in 2008 as there are clear signs of contained inflation. A revival in FHA loans, which had lost substantial market share to the risky subprime market, will provide funding for low-to-moderate income households at much more attractive mortgage rates. If a modernization of FHA loans is implemented including lower initial payment requirements, higher loan limits, and risk-based pricing then there could be a surge in FHA loan usage.

The outlook looks positive. Homebuilders having drastically cut production will help minimize prolonged oversupply conditions. Further production cuts by builders, which is encouraged, will help the market to more quickly return to a healthy state. On the demand side, job gains have added to the number of potential homebuyers. Historical relationships imply roughly one additional homeowner for every two additional new jobs. Since the peak of the housing market two years ago, the local market added 44,300 net new jobs (August 2007 vs August 2005). A rise in home sales and a strengthening in home prices appear imminent.

**Summary of Activity**

	<b>Denver</b>	<b>U.S. Average</b>
<b>Price Activity</b>		
1-year Appreciation (2007 Q2)	0.0%	-1.1%
3-year Appreciation (2007 Q2)	5.5%	15.4%
3-year Housing Equity Gain	\$13,400	\$29,900
<b>Affordability</b>		
Current Mortgage Servicing Cost to Income	16%	22%
Historical Local Average	20%	22%
<b>Home Sales and Mortgages</b>		
State Existing Home Sales (2007 Q2)	-4.8%	-10.8%
* Single-Family Housing Permits (2007 August)	-39.8%	-27.3%
Share of Second Home Loans (2005)	11.2%	15.0%
Rise in Second Home Loans (2000 to 2005)	116%	215%
**Share of High-Interest Rate Loans (2005)	30%	28%
State Foreclosure Rate (2007 Q2)	1.6%	1.4%
State Prime Loan Foreclosure Rate (2007 Q2)	0.6%	0.6%
State Subprime Foreclosure rate (2001 Q2)	6.3%	5.5%
<b>Local Fundamentals</b>		
1-year Job Additions (2007 August)	17,900	Not Comparable
3-year Job Additions (2007 August)	66,000	Not Comparable
1-year Job Growth Rate	1.5%	1.3%
3-year Job Growth Rate	5.6%	5.0%
1-year Job Gain to New Single-Family Homes	1.9	1.5
3-year Job Gain to New Single-Family Homes	1.6	1.7

\*Rolling 12-month sum vs a year ago

\*\* Based on HMDA data which indicated 3% point higher interest rate loan above the market rate

**Price Forecast Scenarios**

The home price forecast in the local region will vary depending upon alternative assumptions regarding mortgage rates and the sustainability of mortgage debt levels. Prices could climb 5.7% in 2008 (Path 1) if mortgage rates remain relatively stable at around the current 6.4% in 2008. The price increase largely comes due to the rise in income (assumed to rise at the same pace as in 2006) while mortgage rates remain stable. The current mortgage debt servicing capacity is assumed to remain at the current manageable level given continued job gains. If jobs are cut, then one of the assumptions to consider would have been for falling mortgage debt servicing capacity - but this case is not considered here.

If debt servicing capacity was to return steadily to the historic average level then prices are expected to rise at a much faster pace (Path 2). The next two scenarios show outcomes based on whether mortgage rates turn more or less favorable. Prices will still rise by 2% in 2008 if mortgage rates rise to 7.5% next year from the current 6.5%. This again assumes debt service capacity rising back to historical average levels. Such price increases are not likely to happen, but they illustrate the current affordable price in relation to its historic capacity.

**Alternative Price Forecasts**

	Mortgage Rate in 2007	Mortgage Rate in 2008	Debt Service Capacity*	Comment	Price Growth in 2008
<b>Path 1</b>	6.5%	6.4%	16.1%	2006 debt levels were higher than normal, but can be sustained due to job gains and housing shortage	5.7%
<b>Path 2</b>	6.5%	6.4%	19.6%	Debt level returns to historic average level	11.0%
<b>Path 3</b>	4.6%	6.0%	19.6%	Same as above but at more attractive mortgage rates	14.6%
<b>Path 4</b>	4.6%	7.5%	19.6%	Same as above but at less attractive mortgage rates	2.5%

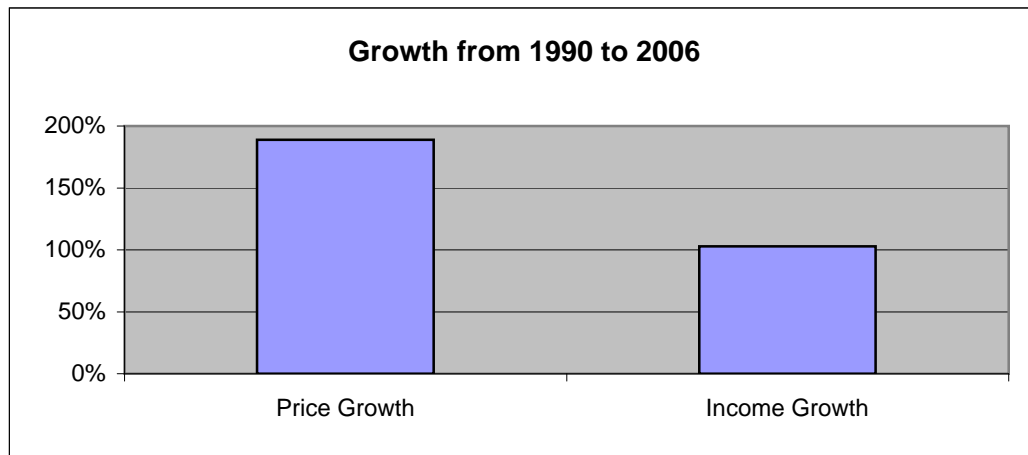
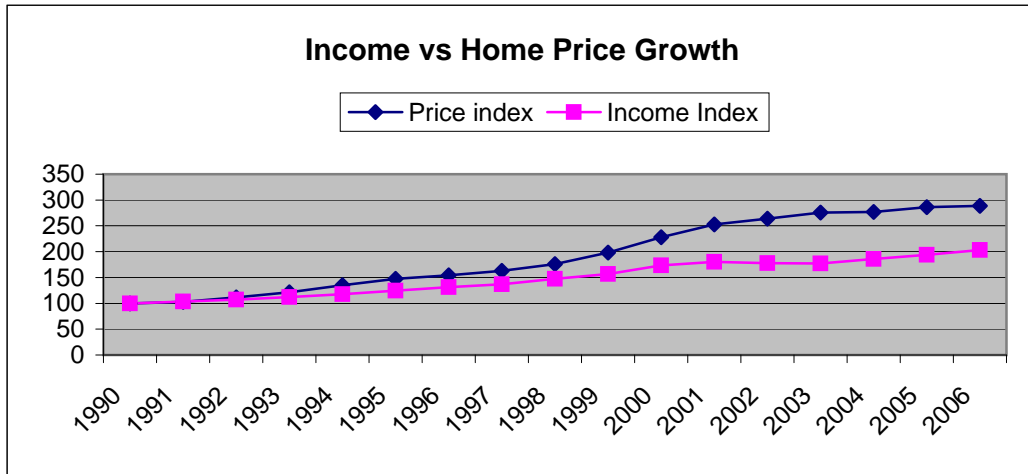
The above mortgage rate forecasts are well within the range of credible Wall Street and government economic forecasts. As to the mortgage debt capacity, it would be unreasonably pessimistic to say that local households have already stretched to the maximum in the past year - and now need to fall greatly from the historic average levels.

There is always a possibility, however small, that the economy could suddenly turn for the worse. Oil prices - assumed to remain at around \$70 per barrel for most of the next two years - are always a wild card. The weakening of the dollar or changes in foreigners' appetite for holding onto dollar-backed assets, including mortgage-backed securities, could suddenly and measurably push interest rates much higher. Also, homebuyers' confidence could remain weak despite solid gains in jobs, income, and wealth. In such cases, home prices could weaken measurably from what is assumed in the above cases.

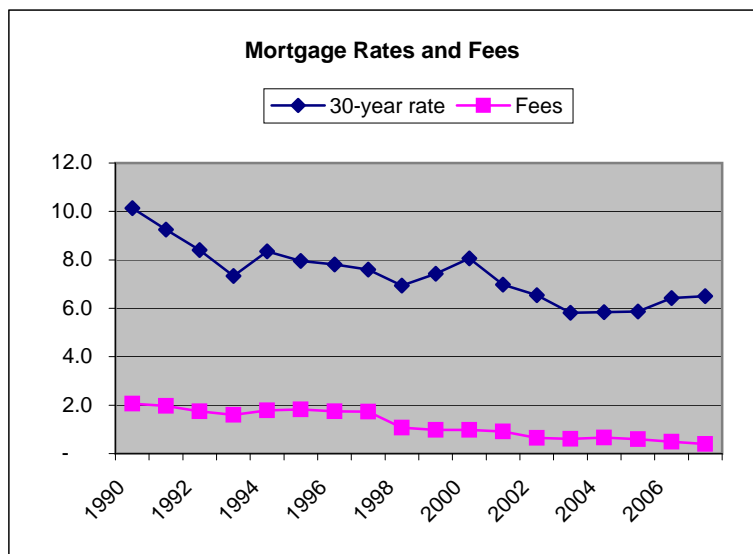
\* Debt capacity is the mortgage payment amount at the prevailing mortgage rate as a percentage of income. Income is assumed to rise at the same rate as in the most recent past year. It is based on 100% financing and does not include property tax and other homeownership costs. Because this definition is the same for all periods, what is relevant in the analysis is the relative position of the debt capacity and not its absolute level. That is, using 80% LTV financing would not have changed the price forecast.

### Price Activity

Many analysts who have called for a major housing market correction often point to the disconnect between income and home price growth in recent years. Some gap developed between income and price as can be seen in the below chart.

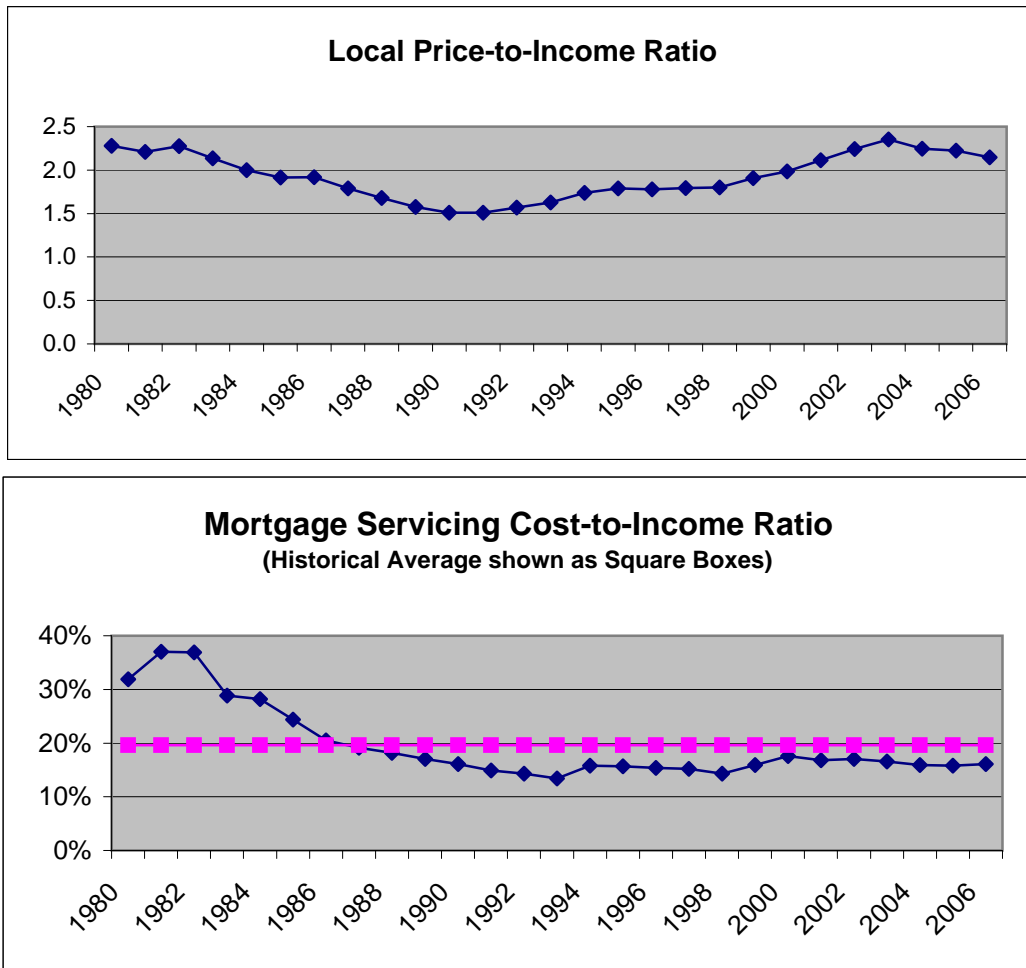


However, such a reliance solely on price and income growth is inappropriate. For a homebuyer, what is relevant is not home price in relation to income, but rather the mortgage payment in relation to income. Since 1990, interest rates have generally trended down, thereby permitting more purchasing power with the same level of income. Furthermore, the fees associated with taking out a mortgage have fallen from about 2% to less than 0.5%. As such, any home price analysis needs to taken into account the lower overall mortgage borrowing costs.

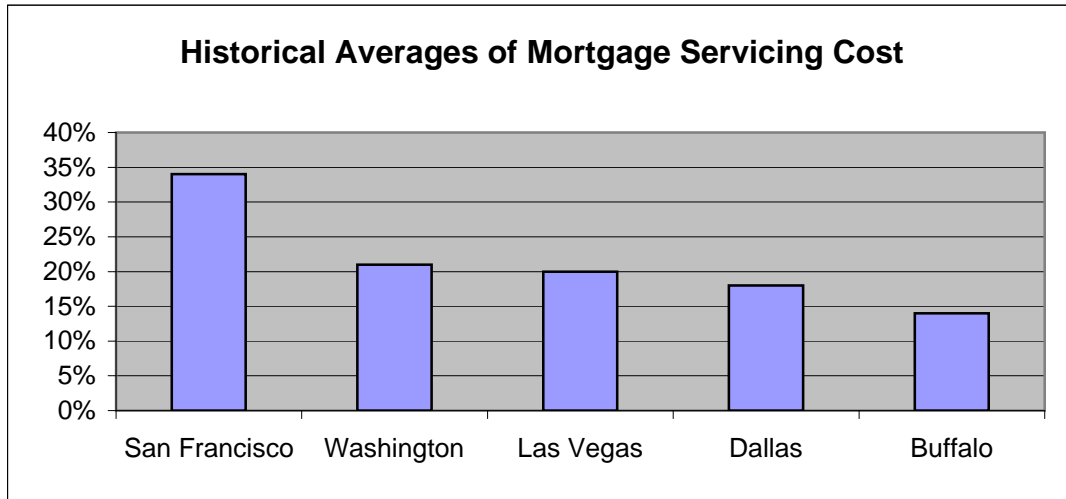


## Affordability

A more important factor for assessing the risk of a home price bubble is the median mortgage servicing cost relative to median income. As shown below, mortgage servicing costs have been trending below the historic average. Such a condition implies a manageable financial mortgage debt load for homeowners in the region on average.



Another key question for this local market is whether or not the current debt servicing cost can be sustained or if it will trend higher over time. Perhaps, due to the fast changing nature of the local market, in terms of job growth, land prices, the dwindling supply of developable land, international buyers, or even the less tangible "vibrancy" factor, the mortgage servicing cost now should be higher than the historic average. The local area offers many cultural performances and is close to many outdoor recreational activities. The sustainable debt servicing cost could, over time, reach to a level comparable to that of San Francisco, for instance (see next chart). In such a case, prices could make a significant gain over the next decade.



Price differentials among local markets can exist for prolonged periods due to many factors (including those difficult to measure). Measurable factors like income, housing shortage, job growth, and foreclosures certainly play a role. But, intangible (non-measurable) factors like the quality of life, water views, city vibrancy or quietness, cultural amenities and zoning laws also impact home prices. San Francisco has always been one of the priciest markets in the country. As such, it also has a higher debt servicing cost capacity. It would be naive, therefore, to categorize San Francisco as overvalued based solely on side-by-side comparisons with other markets. It is more appropriate, in our view, to take higher-than-average debt capacity for markets like San Francisco as a fact of life. What matters is how that debt capacity changes in relation to its historic average and not in relation to other markets. Though not shown here, top international cities like London, Paris, and Tokyo have cost burdens higher than nearly any U.S. city.

The question for the local market is whether or not the city should be commanding a higher premium for the higher debt capacity than in the past. If so, then home prices could increase strongly. If not, then the local debt service cost could just revert back to its historic norm, in which case, home price growth will still be solid over the next few years.

Another reasoning to help understand whether a higher premium is justified, we look at the local fundamentals in order to determine if excess housing demand is present. If housing demand exceeds housing supply then there are even more reasons for higher prices and higher sustainable debt servicing costs.

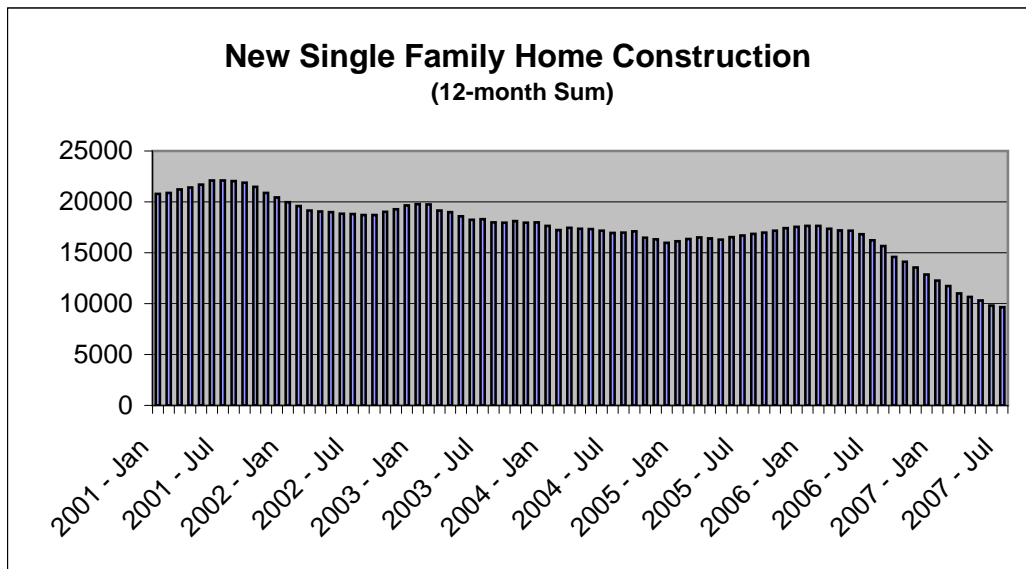
### Local Fundamentals

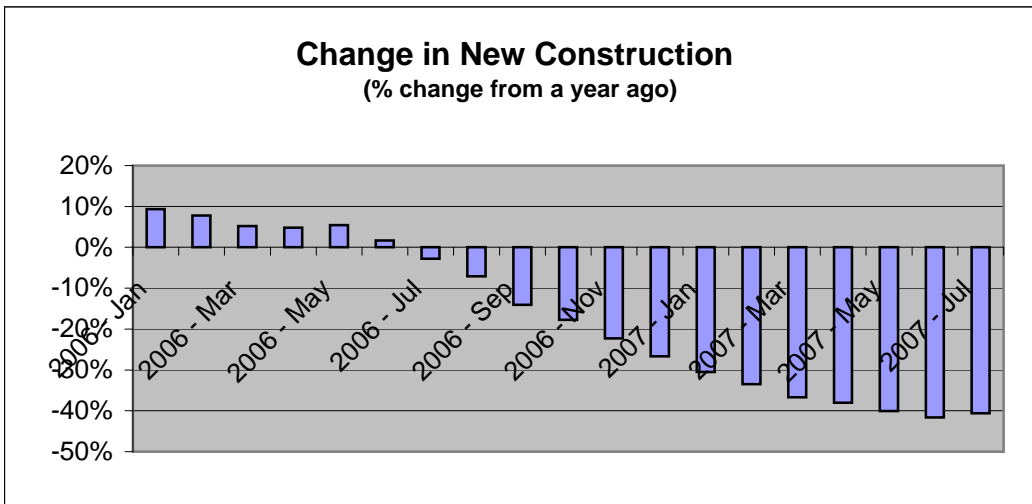
The local job market is very important in supporting housing demand. At the same time, changes in housing supply can quickly upset the market balance. It is, therefore, critical to monitor the housing demand and housing supply factors to assess if the local market is trending to a tighter or looser condition.

Fortunately, job gains have continued. In the past 12 months, nearly 18,000 payroll jobs were added to the local economy. Such a job growth will provide a better underlying support for housing in the local area.

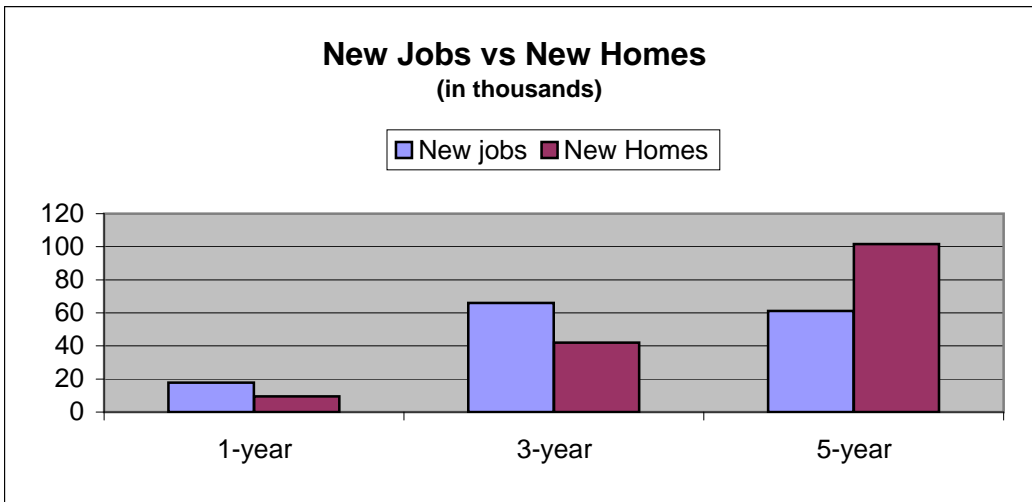


On the supply side, there has been a marked reduction in new home construction in the past year. A drop in new housing supply helps prevent prolonged oversupply conditions. The below chart illustrates the declining trend in the past two years.



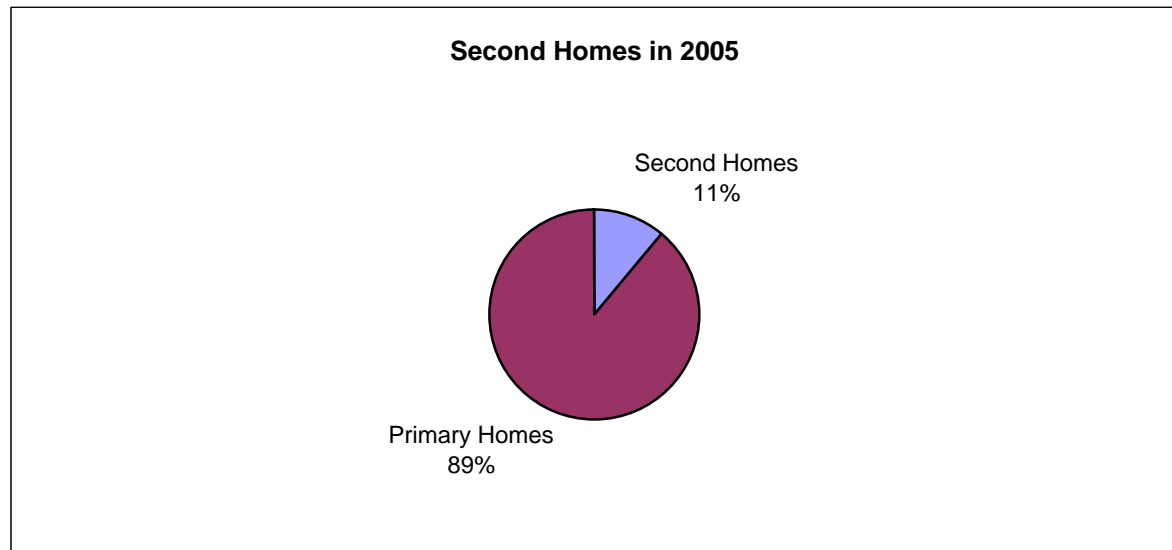
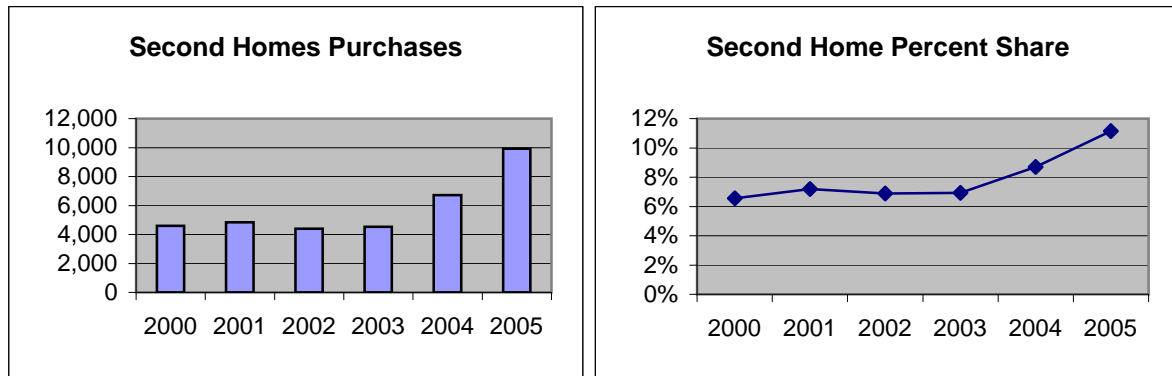


As can be seen above, zooming-in on construction activity from January 2006 to current shows a significant supply reduction. Also it can be seen in the charts below that slightly more jobs were added than new single-family homes were constructed in the past 12 months. Such conditions bode well for strengthening home prices. Over a 5-year span, there is an oversupply of new homes because of the job cuts in the early part of the decade.



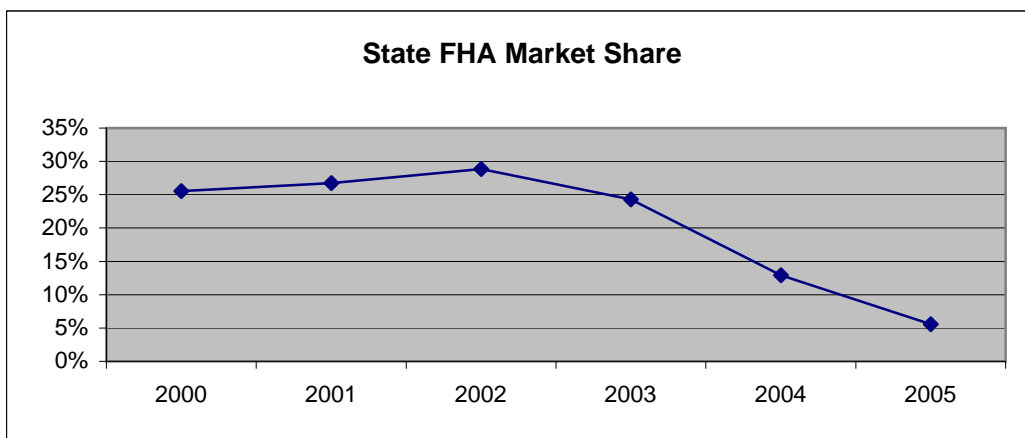
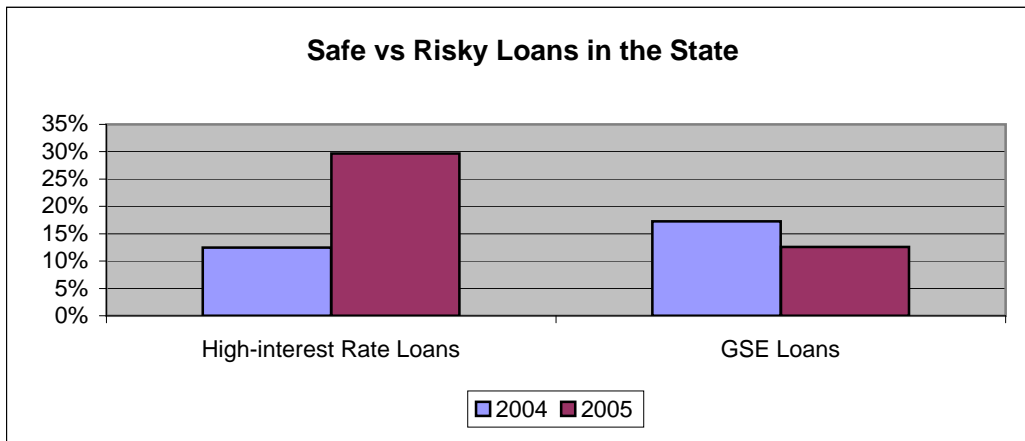
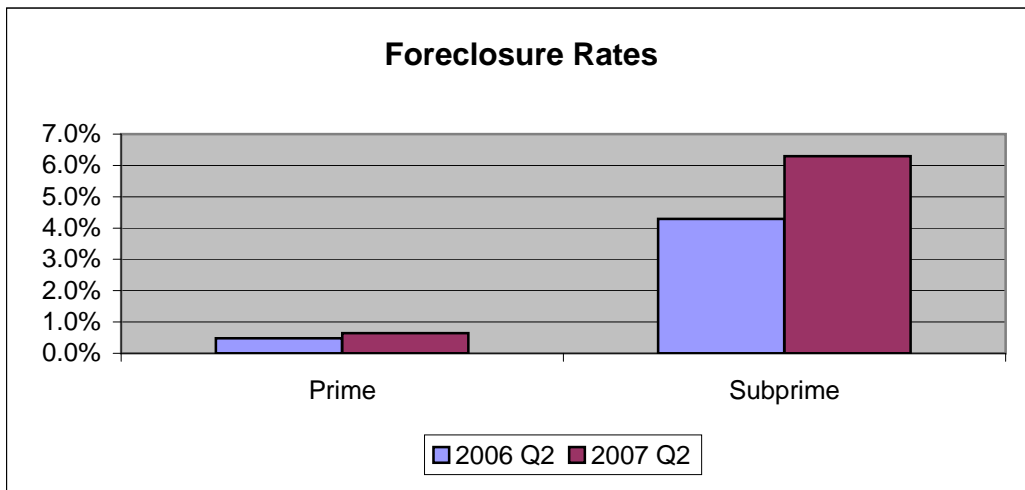
## Second Homes and Investor Demand

One area of weakness to consider is the short-term oversupply of existing homes on the market. The local market was fueled partly by exceptionally strong second-home buying activity. Undoubtedly, at the height of the market boom - with prices rising at a double-digit pace, sometimes in a span of only a few months - many speculators entered the market. Based upon mortgage data (HMDA), loans taken out for vacation and investment properties soared in 2004 and 2005. As home prices moderate, investors unable to pay the mortgage carrying cost are evidently pulling out. As a result, this component of demand fell in 2006 and 2007. At the same time the supply was "artificially" elevated as investors put properties on the market.



## Mortgage Market Conditions

Foreclosure rates have been rather steady for prime loans, but rising for subprime loans from an already very high levels. The prevalence of subprime loans (those loans with rates at least 3 percentage points higher than the market rate) soared in 2005. The data for 2006 is not yet available, but it is likely that similar mortgage origination activity took place last year. The recent cleansing of bad lenders will hold back homebuying, but it will be good for healthy market conditions over the long run. The market shares for GSE and FHA loans will surely rise as a result.



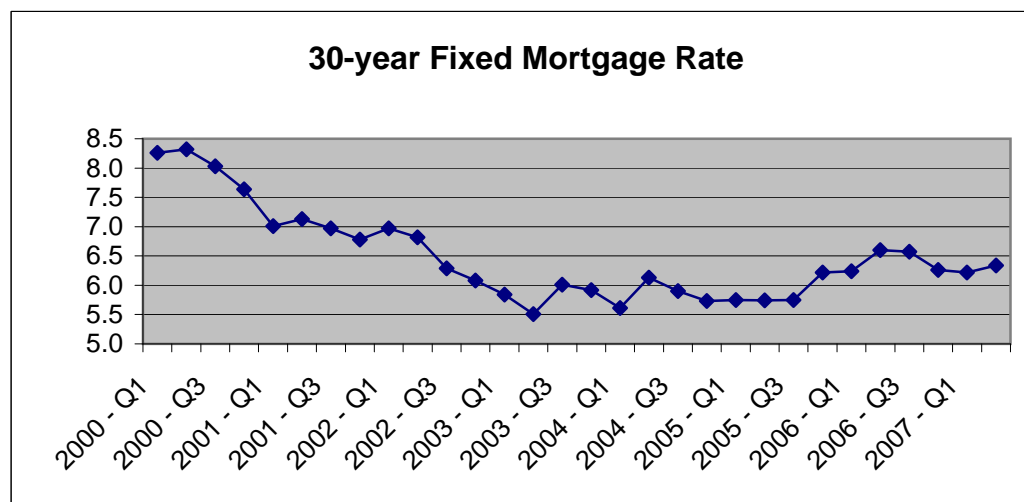
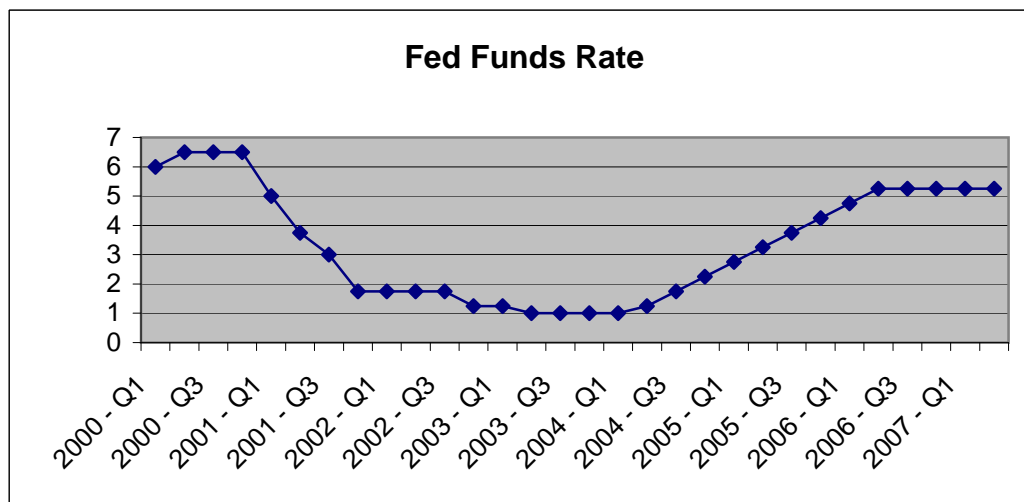
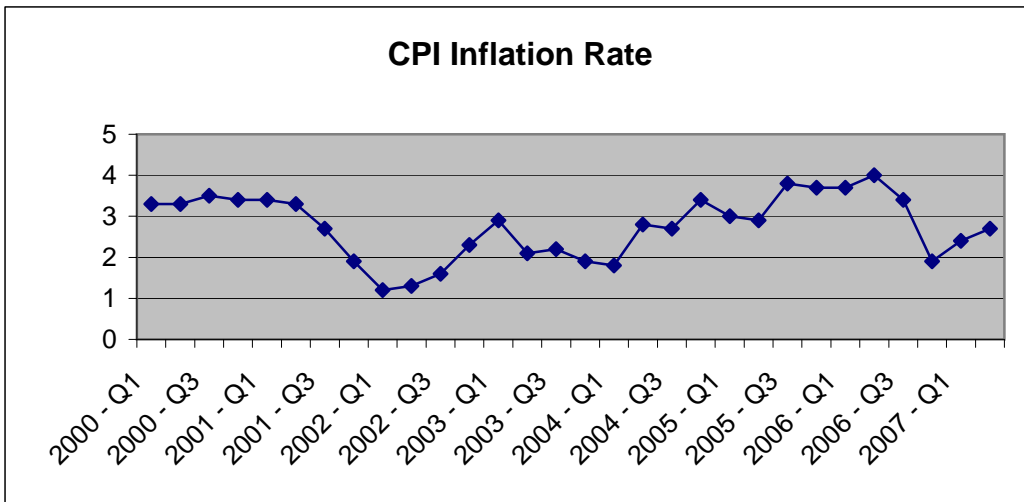
## Summary

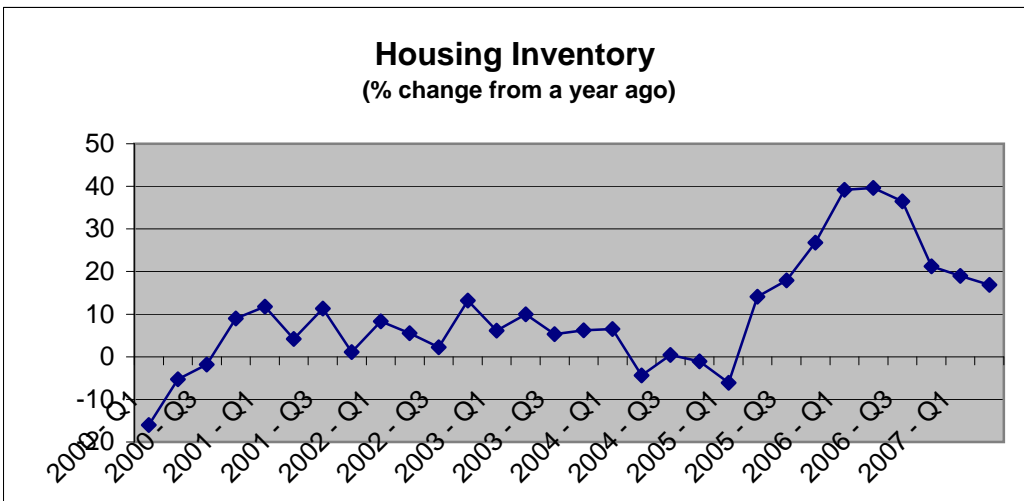
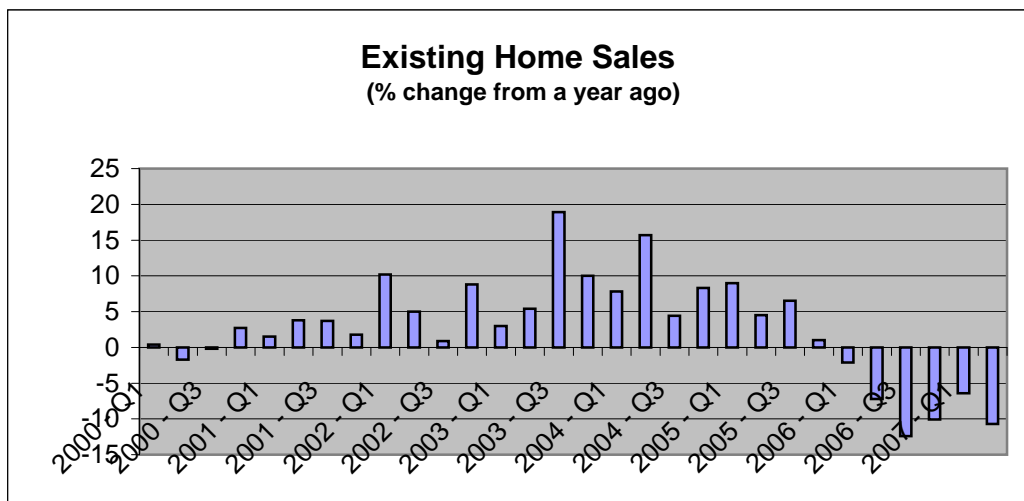
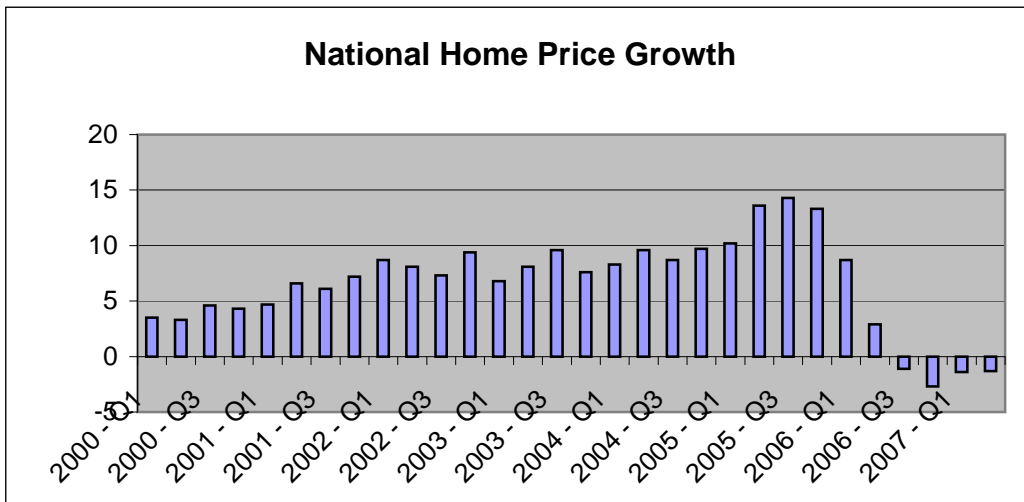
Sales activity as well as home prices have been holding steady in the Denver area. The local economy is fundamentally sound generating jobs at a good pace. The national economy is also fundamentally sound due to rising exports and business spending. Consumer spending will be a bit weaker because of stagnant home price and its accompanying wealth impact. One interesting observation is that the continuing low mortgage rates have not led to more buyers - implying that there is an issue of confidence, or lack thereof - in the homebuying decision. Also, the recent subprime fallout is a concern, though the shakeout will be good for the housing market over the long-run as the market eliminate bad mortgage lenders.

Inflation appears to be contained. Both the headline and the core consumer price index decelerated to 2.8% and 2.1%, respectively, over the past 12 months to September. Better yet, most economists anticipate a further deceleration of inflation in 2007. Such an outcome could well lead the Federal Reserve to cut the federal funds and prime rates down the road. A federal funds rate cut is no guarantee of a fall in mortgage rates, but the signal that inflation is contained will force bond buyers to demand lower inflation premium, and hence, lead to lower mortgage rates as well.

With job additions continuing (possibly at a faster clip going forward) and mortgages rates hovering at about 6.4% as of early October 2007, the housing market is poised to climb back. With home prices so affordable it is possible to get a spurt. If, however, mortgage rates were to rise to 7.5% or higher, then the housing market would continue to limp along with the possibility that home prices and overall housing wealth could fall. If rates were to move lower, then the market will recover at even an quicker pace.

**Additional Informative Charts**







## **NAR Research**

NAR Research produces the premier measurement of residential real estate activity – the existing-home sales series – and analyzes how changes in the U.S. and international economies can impact the real estate business. It also examines trends in real estate practices, and how NAR members are adapting technology in their business operations. NAR Research evaluates regulatory and legislative policy proposals for their impact on REALTORS® and their clients, America's property owners.

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