

Washington Alliance for a Competitive Economy

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Typos corrected 10/11

FASTEN YOUR SEATBELTS

THE BOTTOM LINE

Even if the state does skirt recession, the mortgage meltdown and its contagion to other credit markets will have fiscal consequences for the state.

For the last five years, the U.S. economy has been powered to a great extent by low mortgage interest rates, which drove house prices higher and fueled a boom in home construction. The pace of growth has slowed in recent months.

Problems in the home mortgage market began to emerge early in the year, as home price declines hit many parts of the country. Over the course of the summer the situation turned dramatically worse, as the market came to realize default was likely on certain mortgage-backed securities that had been marketed to investors as low risk. The reaction has been a flight to quality, making it much more difficult for many potential borrowers to obtain home mortgage loans. This is putting further downward pressure on house prices making matters worse, in a classic vicious cycle. The crunch is now spreading into other credit markets.

For now, the housing-market problems appear to be less severe in Washington than in other parts of the country, and the state employment security department continues to report strong gains in overall employment. Nevertheless, the risks of a downturn in the state's economy are higher than they have been anytime in the last five years. Be prepared for a bumpy ride.

WASHINGTON VERSUS THE U.S. OVERALL

By the National Bureau of Economic Research's reckoning, the last national recession began in March 2001. The recession's trigger was a drop in business investment tied to the dot-com collapse. Although the recovery began eight months later, in November, it was initially a jobless recovery. National employment did not turn up until the late summer of 2003.

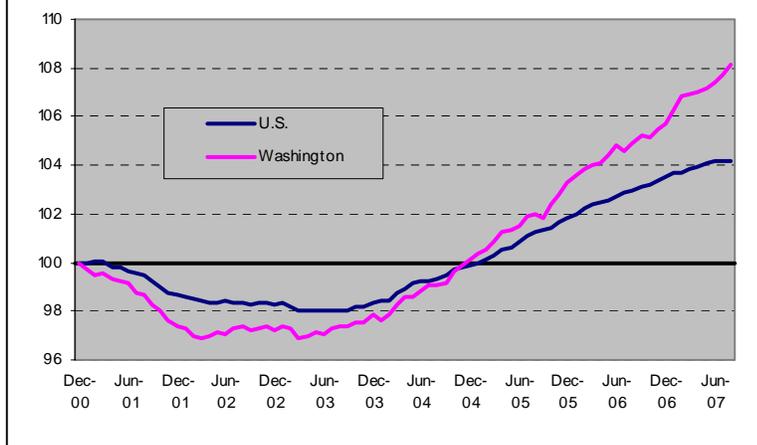
Gauged by employment, Washington entered recession several months before the nation as a whole. The drop in employment was steeper here, 3 percent versus 2 percent, but the upturn began about six months earlier.

Over the last three years, employment growth has been considerably stronger for Washington than for the nation as a whole, 2.6 percent per year on average versus 1.6 percent. By August 2007 Washington's em-

ployment stood 8 percent above the pre-recession peak while the nation was up only 4 percent. (See Chart 1.)

National job growth has slowed dramatically in recent months. For July, August and September, the average monthly gain in jobs is less than 100,000. A similar deceleration is not yet visible in Washington jobs,

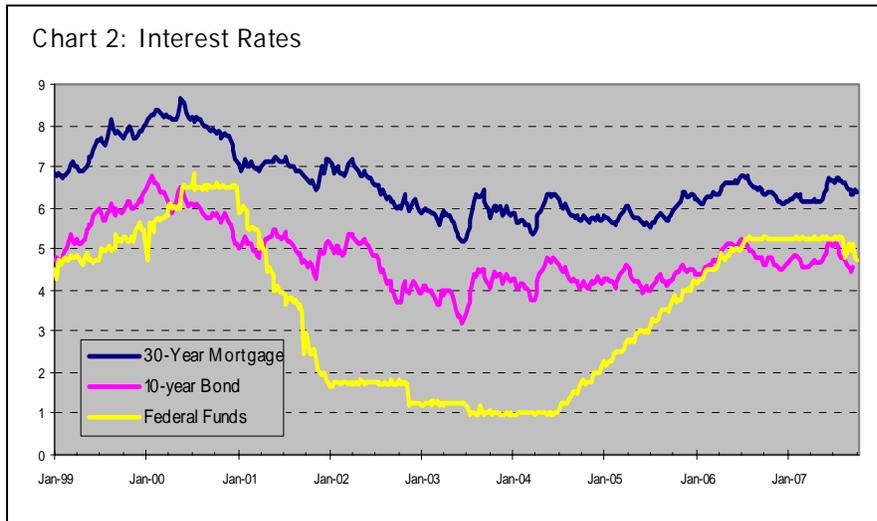
Chart 1: Washington Employment vs U.S. Employment



which were up 10,400 in August. It is important to remember, though, that initial job figures can be subject to significant revisions, particularly at turning points in the business cycle.

INTEREST RATES

Interest rates have provided the dominant story of the expansion. Chart 2 shows the recent history of rates for federal funds, ten-year U.S. Treasury notes and thirty-year conforming mortgages. The federal funds rate is the rate banks pay to other banks when borrowing reserves on deposit at the



Federal Reserve Bank. The federal fund rate is the interest rate most directly under the control of the Federal Reserve Board. Conforming mortgages are mortgages that qualify to be packaged for resale by the government-sponsored enterprises Freddie Mac and Fannie Mae.

Intermediate-term interest rates, as represented by the rate on ten-year Treasury notes, hit a cyclical peak of 6.7 percent in January 2000, more than a year before the recession began. The decline from that point took the rate to 3.2 per-

cent in June 2003, a level not seen since 1958. Since 2003, long-term rates have moved up somewhat, touching 5.2 percent in June 2006 and again in June 2007. Since last June, the ten-year rate has fallen back below 5 percent.

The Federal Reserve did not start to lower the federal funds rate until January 2001, well after the rate on the ten-year note began its decline. The Fed's target rate reached 1 percent in July 2003 and remained at that level for a year. Beginning in July 2004, the Fed raised the rate in a series of $\frac{1}{4}$ percent steps, reaching 5.25 percent in June 2006. On September 18, the Federal Open Market Committee announced it had cut the target for Federal Funds to 4.75 percent, and the markets anticipate that there will be further cuts in the months ahead.

Mortgage rates followed a path parallel to the ten-year Treasury rate and by late 2002 were at levels unseen since the mid-1960s. These low mortgage rates had a powerful impact on the economy. The ability of many homeowners to lower monthly payments by refinancing their existing mortgages propped up consumer spending, while low rates also spurred home construction and remodeling. Unlike the typical pattern, residential investment's share of GDP did not fall during the 2001 recession. Construction has been one of the leading sectors nationwide in the current expansion.

Residential investment's share of GDP reached a peak of 6.3 percent in the final quarter of 2005, a level last reached in 1951. Since then, builders have cut back housing starts and residential investment's share of GDP has fallen. Residential investment was 4.8 percent of GDP in the second quarter of 2007, and it is sure to fall further in upcoming quarters.

Low rates were only part of the story behind the residential construction boom. Innovations in the capital market provided unprecedented access to

credit for lower quality borrowers. Mortgages from sub-prime borrowers were packaged in complex securities that rating agencies deemed to be high quality. It is now clear that in many cases these ratings were not justified. The resulting turbulence, which is currently playing out in the credit markets, threatens to throw the economy into recession.

Since the full force of the storm hit the credit markets in early August, interest rates on U.S. government debt have fallen, as investors have sought safety. The ten-year Treasury note was at 4.8 percent at the beginning of August. After dipping to 4.3 percent, it is now at 4.6 percent. The rate on one-month Treasury Bills has fallen from 5.0 percent to 3.9 percent. The rate on thirty-year conventional mortgages (as reported by Freddie Mac) was at 6.7 percent, it is now at 6.3 percent. But as these rates have fallen, it has also become much harder for risky borrowers to obtain credit. The sub-prime mortgage market has collapsed. The spread between the rates for conforming thirty-year mortgages and prime thirty-year jumbo mortgages (where the loan exceeds \$417,000 and therefore cannot be sold through Fannie Mae or Freddie Mac) has expanded from two-tenths of a percent to nearly a full percent. The crunch shows signs of spreading to

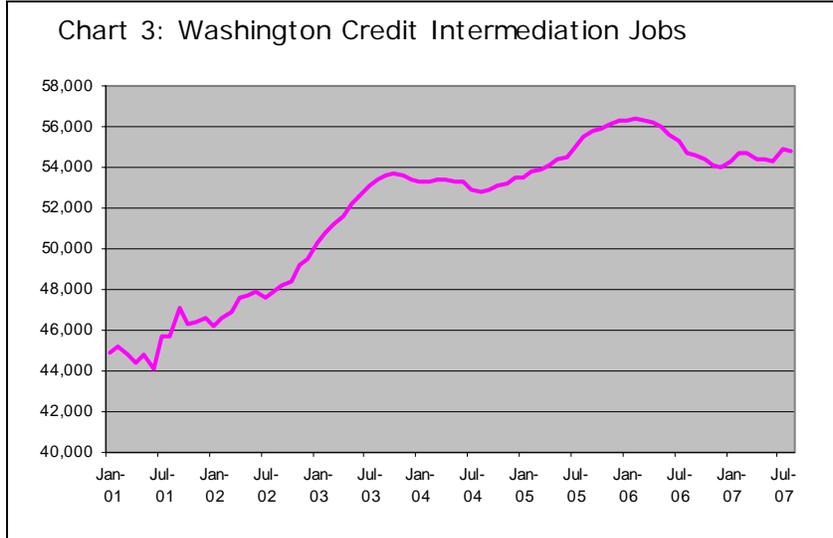
other credit markets, including commercial real estate, asset-backed commercial paper, and leveraged buyouts.

The impact of low mortgage rates can be seen in Chart 3, which shows Washington employment in the credit intermediation sector since the beginning of 2001. (The credit intermediation sector includes commercial banks, savings institutions, credit unions, mortgage originators and brokers, and other credit intermediaries.) The chart shows two upward moves. Employment in this sector grew from 44,100 in May 2001 to 53,700 in October 2003, a

gain of 20.9 percent over a time period when overall state non-farm employment was down 1.8 percent. This was the great mortgage refinancing boom. The rates on conforming mortgages fell from 8.6 percent in May 2000 to 5.25 percent in June 2003.

The second, more modest, upward move occurred from August 2004 to February 2006, when the sector added 2,100 jobs, a gain of 6.8 percent while the economy-wide gain was 4.8 percent. In February 2006, with mortgage rates moving higher, a cooling housing market brought the end of the mortgage boom. That month Washington Mutual announced that it was cutting 2,500 jobs in its home-loan business. From February 2006 to July 2007, just before the sub-prime meltdown, the sector lost 1,700 jobs. More losses are inevitable in upcoming months, as the industry restructures. On August 2, American Home Mortgage announced it would lay off 6,250 workers. On September 7, Countrywide Financial, a leading player in the sub-prime market, announced that it would lay off up to 12,000 employees nationwide. On September 13, Washington Mutual announced that it would lay off 1,000 people as it exits the business of purchasing mortgages originated by others, while it would add 1,000 loan-consultants as it expands its direct retail-lending business.

Chart 3: Washington Credit Intermediation Jobs



Low mortgage rates had a powerful impact on house prices. The S&P/Case-Shiller national home price index shot up 90 percent from the first quarter of 2000 to the second quarter of 2006. Individual metropolitan areas saw even greater increases: Between January 2000 and June 2006, for example, S&P/Case-Shiller indexes show prices increased by 173 percent in Los Angeles, by 149 percent in San Diego, and by 118 percent in San Francisco. Through the “wealth effect,” this run-up in house prices boosted personal consumption expenditures and thereby economic activity in general.

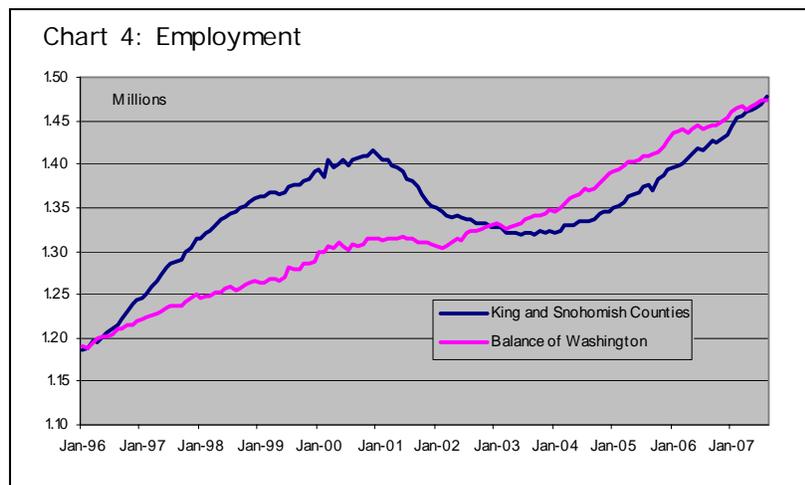
House prices, however, have begun to move in the other direction. S&P/Case-Shiller National index is down 3 percent over the last year. And prices are down over the last year in 15 of the 20 metro areas for which S&P publishes Case-Shiller indexes. Alan Greenspan recently said that he would not be surprised if housing prices fell by “double digits.”

Because the 2001 recession was more severe in the Seattle area than in many other parts of the country, Seattle housing prices have lagged behind most other areas. The S&P/Case-Shiller price index for the Seattle area (defined as King, Pierce and Snohomish Counties) was up by “only” 78 percent from January 2000 to June 2006. However, prices have continued to rise here while they turn down elsewhere. Seattle prices were up 7.9 percent from June 2006 to June 2007. This is the largest gain among 20 metro areas S&P/Case-Shiller covers.

Seattle is not the only area in Washington State where house prices have been strong recently. The Office of Federal Housing Enterprise Oversight (OFHEO) produces quarterly house price indexes for 287 U.S. metro areas. OFHEO’s most recent data indicate that five Washington state metro areas are in the top 20 nationwide in house-price growth over the last year: Wenatchee was 1st; Longview was 6th; Seattle-Bellevue-Everett was 17th; Tacoma was 19th; and Spokane was 20th.

Reflecting this strength, the Mortgage Bankers Association reported that Washington ranked 47th in delinquencies and 49th in foreclosures in the April–June quarter.

The big question is whether Washington’s housing prices are on a fundamentally different path from prices in the rest of the country—or on the same path, just a year behind.



JOB GROWTH: METRO SEATTLE VERSUS THE REST OF WASHINGTON

Washington State is not a single economy but rather a collection of local economies, which are linked in varying degrees to each other and to the nation as a whole. The largest of the state’s local economies is centered on the city of Seattle and encompassed by King and Snohomish Counties. Together the two counties have 50

percent of the state’s jobs and 39 percent of the state’s population.

The degree of disconnect between the King-Snohomish economy and the rest of the state is shown by Chart 4, which compares the path of King-Snohomish employment to the rest of the state. Averaged over the whole

period from January 1996 to August 2007, the annual growth rates for King-Snohomish and the rest of the state were almost identical, 1.90 percent and 1.84 percent respectively. Within various sub periods, however, employment growth rates for the two areas diverged significantly.

The Seattle area was one of the hubs of dot-com activity, and employment bounded ahead by 19.4 percent from the beginning of 1996 to the end of 2000. The collapse of the market for commercial jetliners following the 9/11 terror attacks reinforced the deflation of the dot-com bubble to make the Seattle area one of the hardest hit by the 2001 recession. Employment dropped by 6.9 percent from December 2000 to June 2003. From that low point, employment increased by 11.4 percent through July 2007.

Three industries have driven the recent expansion in the Seattle area, aerospace—led by the Boeing Company, software—led by Microsoft and construction—led by residential housing. Those three industries, which provided 13.0 percent of King-Snohomish jobs (seasonally adjusted) in January 2004, directly accounted for 33.6 percent of King-Snohomish job growth from January 2004 to July 2007. Allowing for the multiplier effect, the industries accounted for about 70 percent of job growth.

For the balance of the state, taken as a whole, employment growth was 10.4 percent from January 1996 to December 2000, 1.4 percent from December 2000 to June 2003, and 10.8 percent from June 2003 to July 2007. The recession is barely visible, with employment down by 0.9 percent from June 2001 to February 2002. Of course the smoothness of employment growth is in part an artifact of the fact that this grouping is an amalgam of separate economies with only weak linkages to each other and to the King-Snohomish economy. The idiosyncrasies tend to cancel out.

In Whatcom County, professional and business services as well as the hospitality industry have shown strong gains, and the fall of the U.S. dollar against the “loonie” has drawn a greater flow of Canadian shoppers. Employment at the Hanford vitrification plant increased by 40 percent from June 2006 to July 2007. Clark County continued to be the hottest of the Portland suburbs.

A general rise in commodity prices has been welcome news to Washington farmers. For example, wheat prices have reversed a decade long downward trend. In Whitman County farmers this summer saw prices as high as \$7.60 per bushel, more than double the price from two years ago. Factors contributing to the spike in wheat prices include drought and disappointing

harvests in Europe, Australia, and Canada, and a shift by some Midwest farmers to bio-fuel crops like corn.

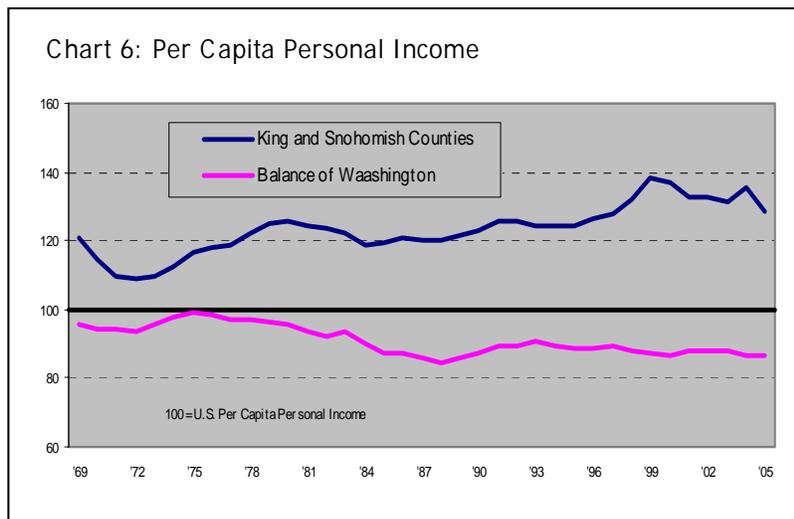
The one industry that has driven growth across the state is construction. In January 2004, construction provided 6.2 percent of the jobs in Washington outside of King and Snohomish counties; from that point to July 2007, it directly accounted for 20.8 percent of job growth. Including the multiplier, the share of job growth due to construction exceeds 40 percent.

Chart 5: Washington Sawmill/Wood Preservation Jobs



The national boom and bust in housing has whipsawed the state's traditional wood products manufacturing industries. As the housing boom expanded the demand for lumber, Washington's sawmill/wood preservation sector added about 1,000 jobs in 2004. (See Chart 5.) Since the beginning of 2007, we have given back about half of those gains. The Western Wood Products Association reports that for the first 7 months of 2007, lumber production in the western U.S. was down by 12.9 percent compared to the same period in 2006. More job cuts are coming. The Seattle PI quoted a Weyerhaeuser filing with the Securities and Exchange Commission that noted downturn in housing will require the company "to balance supply with demand through closures, curtailments and restricted operating postures."

PERSONAL INCOME



In 1989, Washington personal income per capita was \$18,558—almost exactly equal to the national average. By 1999 the state per capita income had grown to \$30,037 and was 7½ percent above the national average.

The extraordinary growth in personal income was concentrated in the Seattle area. Chart 6 shows per capita personal income for King and Snohomish Counties and for the rest of the state as percentages of national per capita personal income for the years 1969 to 2005. (2005 is the most recent year for which Bureau of Economic Analysis has published county level personal

incomes.) For the whole period, Seattle per capita personal income exceeded the national average. The low year was 1972, when Seattle was at 109.3 percent of national per capita personal income; the high year was 1999, when Washington was at 138.6 percent. By 2005 Seattle's per capita personal income had fallen back relatively to 128.9 percent of the national average.

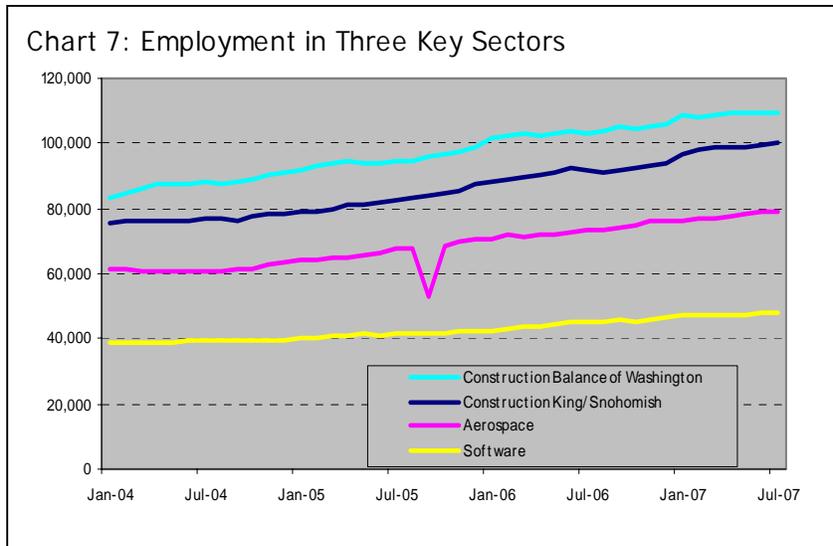
Microsoft stock options fueled the run up to the 1999 peak. Microsoft's stock price collapsed in 2000, and King-Snohomish per capita personal income was actually lower in 2000 than in 1999. The peak in 2004 relates to the large special dividend that Microsoft paid out in December of that year. King-Snohomish per capita personal income was lower in 2005 than in 2004.

For the full 1969 to 2005 period, per capita personal income for the rest of the state as a whole was below the national average. The best year was 1975, when per capita personal income was 99.1 percent of the national average. The worst year was 1988 when it was 84.6 percent. For 2005 it stood at 86.3 percent.

SOFTWARE, AEROSPACE AND CONSTRUCTION

As we have noted, three industries have provided major impetus to Washington's recovery: software, aerospace, and construction. The first two industries are concentrated in the Seattle area and are dominated by two large employers, Microsoft and Boeing. Construction activity, on the other

hand, is spread across the state and is not dominated by any one firm. The



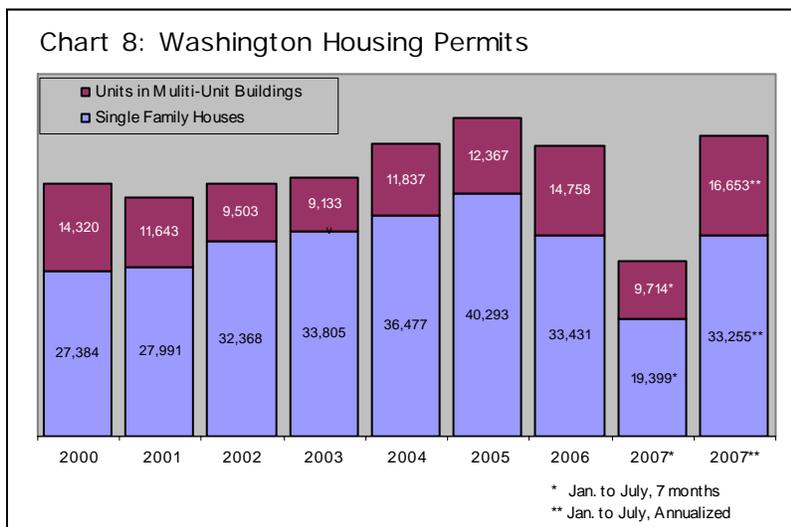
conventional wisdom among local economic prognosticators is that, while a slowdown in construction will reduce the growth in Washington employment from the 3 percent rate we have enjoyed over the last year, continuing strength at Microsoft and Boeing will allow employment in the state to continue to expand at a healthy pace. But of course, the conventional wisdom has been known to be wrong.

Software. Microsoft’s employment is largely decoupled from the business cycle. Microsoft’s *Office* and *Windows* products generate a strong revenue stream that the company

has plowed back into research and development. What is key for the Washington economy is that the company continue to increase its spending on research and development and that it continue to carry out a substantial fraction of this activity here.

In fiscal 2007 (July 2006 through June 2007), Microsoft added 7,400 employees worldwide. About 2,200 of these employees were added in the Puget Sound area. This was down considerably from the 3,900 employees added in the Puget Sound area in FY 2006. Press reports suggest that employment growth will continue, but that the rate of growth seen in FY 2006 is unlikely.

Aerospace. Boeing is sitting on a record backlog, and airlines worldwide have warmly embraced the new 787 “Dreamliner.” Since early 2006 Boeing has added an average of 500 employees per month. This growth will continue for a bit longer as the 787 moves into production and then plateau. State economists project that aerospace employment will increase by about 5,000 from mid-2007 to mid-2008, and then will hold steady at about 81,000.



But the outlook for Boeing is not without risks. The 787 has yet to fly. The first flight has been pushed back to November, leaving little margin for error in meeting the company’s promise to deliver the first plane in May. The new manufacturing system, with global partners building major pieces that Boeing will “snap together,” has yet to be put to the test at the planned production rates.

Construction. Statewide, the construction industry added 13,400 average monthly jobs in 2005 and 17,600 jobs in 2006. This year, through the month of July, employment has averaged 15,100 higher than the same month in 2006.

Unemployment insurance tax records indicate that in 2006 residential construction provided one-half of all wage and salary construction jobs in

Washington state. (The unemployment insurance tax records, however, miss those persons who work as independent contractors in construction.) Factors discussed earlier point to a downturn in residential construction. The optimistic scenario sees an expansion in non-residential construction backfilling the residential losses.

Housing permits are a leading indicator for employment in residential construction. Chart 8 shows residential building permits issued in the years 2000 to 2006 and for the first seven months of 2007. The 2001 recession had no discernable impact on single-family housing permits in Washington State, which grew each year from 2000 to 2005, when 40,293 permits were issued. Since peaking in 2005, single-family permits have trended downward. In 2006, 33,431 were issued. From January through July 2007 19,399 single family permits were issued, which corresponds to a 32,386 permit annual rate. It is likely that this overestimates the number of permits that will actually be issued this year, as the current turbulence in the mortgage market is likely to further reduce building activity.

The story with multi-family units is somewhat different. In this case, the number of units permitted did fall during the recession, from 14,320 in 2000 to a low of 9,133 in 2003. From that point, multi-family activity has grown considerably, with 11,839 units permitted in 2004, 12,367 in 2005 and 14,758 in 2006. In the first 7 months of 2007 another 9,714 multi-family units were permitted; were permits to continue to be issued at this rate, the multi-family total for the year would be 16,653. But with financing now more difficult to obtain, it is unlikely that we will reach that level. For apartments, vacancy rates are down and rents are up, which is a positive. The condominium market is another matter. The mortgage meltdown will impact the condo market. The experience in other cities demonstrates that condo developers often overestimate demand. Projects currently in the pipeline should provide for strong multi-family construction activity over the next year, but beyond that horizon the outlook is less clear.

August permit numbers for the state as a whole will not be released by the Census Bureau until September 27. However, the Clark County Department of Community Development reports it issued just 98 permits for the month, the smallest August number since 1985.

Commercial-office is another construction sector with the potential to offset weakness in single-family. In the Seattle area, particularly in the Seattle and Bellevue central business districts, vacancy rates are down and rental rates are up. This should be bullish for office construction.

The market for office buildings as investments has been very strong, with Blackstone's buyout of Equity Office (which included a number of Seattle properties, including Columbia Tower) the most notable transaction. The high prices investors have been willing to pay for buildings would be expected to stimulate further development. There are signs that investor demand is cooling, however. The National Association of Real Estate Investment Trusts' reports (through September 20) the year-to-date return for office REITs to be negative 10.5 percent. This return includes dividends, so office REIT prices are down more than this. In addition, the turmoil in the home mortgage market is likely to spread to commercial mortgages, at least to some extent.

DISCUSSION

These are tricky times. In recent months, the national economy, weighed down by the turmoil in home mortgages, has slowed, but it still appears to

be growing. The Washington economy continues to look strong with employment up more than 3 percent year-over-year.

Economists and other professional worriers are quick to point out that one rarely knows the economy has gone into recession until at least 6 months after the fact (witness 2001).

If the national economy does slip into recession, a case can be made that Washington's will continue to grow, albeit at a reduced rate. The recent strength in the state's economy rests on three legs, software, aerospace and construction. The construction leg is shaky, but the other two appear strong. Recall, however, that in summer 2001, Washington's economy was thought to be in good health. Then, too, it was conventional wisdom that strength in Microsoft and Boeing would shield the state from a possible national recession.

Today, an additional source of strength for the state is the decline of the U.S. dollar. Since January 2002, the dollar has fallen by 34 percent, on average against the currencies of our major trading partners; and it continues to fall. Washington is one of the nation's most trade dependent states. In 2006, the state ranked fourth in the total value of international exports and first in exports per capita. The lower dollar makes Washington-made goods less expensive to foreign buyers and will stimulate sales.

Even if the state does skirt recession, the mortgage meltdown and its contagion to other credit markets will have fiscal consequences for the state. While general fund revenue growth was solid in the most recent monthly collections report (up 7 percent year-over-year), growth is slowing. The state's revenue system is inordinately sensitive to the levels of construction and real estate activity. Washington's 6.5 percent state sales tax rates ties with Minnesota and Nevada for fifth highest, and unlike most states, Washington collects sales tax on construction labor in addition to materials. Construction activity therefore has a powerful influence on state revenues (WRC 2007a). The state's 1.28 percent state real estate excise tax is also one of the nation's highest. With the real estate boom REET has grown to be nearly 6 percent of general fund revenues for the current biennium.

Last April, in a brief examining the competing budgets passed by the house and senate, the Washington Research Council warned: "At this stage of the economic cycle, a 5 percent reserve, \$1,670 million, would be prudent." (WRC 2007b) While legislators left Olympia with much less in reserve, the last two forecast revisions have boosted reserves up to \$1,516 million. We may soon find out whether 5 percent is truly enough.

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