

**Whatcom County**  
**Personal Income and Taxable Retail Sales**  
**Forecast to 2001**

**Prepared**

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The Center for Economic and Business Research  
College of Business and Economics  
Western Washington University  
Bellingham, Washington

## **THE WHATCOM COUNTY ECONOMIC OUTLOOK 2000-2001**

The personal income and taxable retail sales forecast for the Whatcom County economy was prepared using an econometric model developed at the Center for Economic and Business Research in the College of Business and Economics at Western Washington University. The forecast assumptions were developed by professors David Merrifield and Paul Storer from a variety of sources including statistical releases from the U.S. Department of Commerce, the *Washington Economic and Revenue Forecast* from the Washington State Revenue and Forecast Council, and the *British Columbia Economic Review and Outlook* from the Province of British Columbia Ministry of Finance and Corporate Relations.

### **Outside Impacts and Forecast Assumptions**

The direct impacts of external activity on Whatcom County come in part through changes in interest rates, manufacturing and service “exports” to outside the county, retail sales to outsiders, resource based income, population growth, state and federal government payrolls, rental, interest and dividend income, and government transfer payments to residents. The preparation of the regional forecast requires the input of assumptions regarding prospective developments in these areas. Several assumptions are based on anticipated developments in the national economy and other business cycle fundamentals (for example, U.S. GDP growth, interest rates, and the Can/U.S. exchange rate). Some assumptions are based on forecasted trends at the state level (for example, wealth-related income and government transfer income). Others are based on historical levels (for example, resource based income). As is the case for all forecasting efforts, the assumptions and regional outlook are subjective, and are subject to change as new information develops. The current forecast assumptions are detailed on the accompanying table.

### **Traditional Business Cycles and the U.S. Economy in the Late 1990s**

Business cycle statistics for the last few years suggest that the U.S. economy has been operating near what has traditionally been considered full-employment (or non-inflationary potential output). Historically, activity above full-employment (or potential output) has often resulted in inflationary pressure, higher interest rates, and eventually a slowdown of the economy. Alternatively, when aggregate demand is below potential output, there is less pressure on both prices and interest rates. Since full-employment is in itself a somewhat fuzzy measure and also can change over time (due to age of the workforce, and job search and finding time, for example), market observers typically focus on two primary issues. First, the strength of growth of the components of aggregate demand in the economy (for example, consumer spending, housing starts and other investment, government outlays, and net exports). Second is whether anticipated spending growth will outpace (or lag) growth of the level of potential output which is determined over time by the size of the labor force, capital stocks, and the given state of technology. Given the perceived closeness to full-employment and potential output, financial markets have been quick to react to the release of new information on possible inflation or slowdowns, and likely interest rate changes.

The U.S. economy did show strong performance both in 1998 and 1999. During this period, consumption spending, investment in plant, equipment and residential housing, and output and employment levels continued to grow at strong rates. In addition, despite the recent volatility, the stock market has risen to new highs, with the Dow Jones average topping 11,000 for the first time.

The interesting phenomenon in the U.S. economy is that despite surprisingly strong growth in recent years, inflation has remained quite low. Up until more recently, this has resulted in very low short-term and long-term interest rates, and the accompanying strength in consumer spending, durable goods, investment

spending (plant and equipment) and housing starts. Although several tightening moves have been made this year, the Federal Reserve Open Market Committee has for the most part taken a relatively light-touch approach throughout the post-1990 growth period. The Fed's stance has been based on the fact that excessive pressure on productive capacity in the U.S. economy has not been readily apparent.

Overall, what factors explain the recent decade of high-growth low-inflation behavior of the U.S. economy? In short, despite worldwide events, we can attribute the strong demand growth primarily on the U.S. consumer and on investment expenditures (especially equipment). This spending occurred due to strong employment and income growth, modest inflation and low interest rates. The high stock market also added to consumer spending, and also to firm expansion. The low inflation performance in the U.S. economy is likely based on four factors. 1. Increases in productivity and accompanying increases in non-inflationary potential output. 2. Depressed foreign economies that have limited domestic firms' ability to raise prices. 3. Increased information technologies that make price comparison easier. 4. Low commodity prices. With these factors in place, and in the absence of adverse price shocks or changes in inflationary expectations, non-inflationary growth may conceivably continue for some time.

### **Recent Events and the Outlook for the Short-term**

In recent months, there has been heightened awareness about tight labor markets and potential for wage pressure. Concern has also been given to recent increases in commodity prices (for example, oil). Both of these concerns have been reflected by the increase in long-term interest rates over the past year. The current 30- year mortgage rate is about 7.85%. This is a full point increase from a year ago. While current inflation remains modest, long-term financial markets appear to have been building in an inflation premium over the last year. Unless the economy cools, given current pressures, we should anticipate that rates will remain at these higher levels. We note, however, that these long-term rates can react quite quickly to a more substantial slowdown or speed-up in the U.S. economy for example, and also to changes in expected inflation.

This suggests that some slowing is likely to be felt in the upcoming year. Like many forecasters, we would not expect a major slowdown to occur, but growth in the 2000-2001 period is not expected at the high levels as seen in 1998 and 1999. This anticipated slowing is attributed to the fact that while the stock market will remain at relatively high levels and that consumption spending will remain strong, given higher interest rates, high rates of stock price growth and spending growth are not likely to be sustained.

Overall, we assume that a modest slowdown will occur over the 2000-2001 period. Offsetting this to a limited degree will be increases in export demand as recovery in Europe and possibly Asia takes place. Inflation overall should be modest, however there is likely to be some carry-over pressure from the rapid demand growth in the recent past and from higher commodity prices. With regard to the Whatcom County model, these considerations are reflected in our assumptions for a continuation of the generally higher mortgage rates seen recently, for a modest slowing in the growth in U.S. expenditures on durables and non-durables consumption, and for a slower rate of growth of regional wealth-related income.

Some additional issues relating to outside forces affecting the local economy are given below.

## Other Assumptions Important to the Region

- Continued uncertainty with lumber prices. While lumber prices were down about 3% on average in 1998, prices are up about the same percentage amount in 1999. The outlook, however, is uncertain due to continuing conflicting forces on prices. On one hand, any slowing of the stock market growth and higher long-term interest rates may dampen housing starts and lumber prices in the U.S. for at least the near term. Increased growth in the Asian economies, on the other hand, will likely have a positive offsetting effect on lumber prices. Current lumber futures contracts show that a very slight decline in lumber prices is expected for the most part of 2000. For the forecast, we assume a small price decrease for lumber prices for 2000, and then a modest increase for 2001.
- A slight rise in aluminum prices. Aluminum prices were up about 8% in 1997. In 1998, however, aluminum prices weakened (down about 15% from 1997). Aluminum prices are of course quite volatile and present considerable difficulty in forming anticipated values (as much as 80% price changes in a single year have been experienced historically). Aluminum prices have been rising for the first eight months of 1999, however prices are still generally below 1998 levels. Based on positive growth in many parts of the world, it is likely that aluminum prices will show a slight increase over the forecast period.
- Some slowing of the rate of the growth of regional wealth income. Gains in financial markets in 1998 and 1999 have undoubtedly added to regional wealth. This is counted in regional personal income as part of rents, dividends, and interest income. Not all of this, however, becomes immediate spendable income as the measure includes gains to pension plans and also implied rents to owner-occupied housing. Despite this, additions to long-term wealth can influence spending decisions today, and can lead to increased expenditures on housing, durable goods such as automobiles, and other expenditures. Thus, these wealth increases will continue to have a positive impact on the local economy. For 2000 and 2001, we assume that as the stock market slows, there will be some slowing of the rate of the growth of wealth income at both the national and regional level.
- Transfer payments growing at general long-run trend rates. Another large source of personal income in Whatcom County is transfer payments. This includes payments from Social Security and other forms of social assistance, unemployment insurance, and GI Bill type education benefits for example. For the forecast period, we assume that outside income in terms of transfer payments will grow close to long-term average growth rates.
- A small increase in the value of the Canadian dollar. Lower interest rates in Canada over the last few years have pushed the Canadian dollar down to about \$.675 U.S. (December 1999). More recently, there have been some signs of this trend reversing. Recent data releases show that the unemployment rate in Canada has dropped to about 6.9 % (December 1999). Although this is high relative to the U.S., is it historically low for Canada. Like the U.S., there is a pronounced edge towards tightening at the Canadian central bank at this time. Thus, authorities in Canada appear prepared to implement tightened monetary policies as a precautionary anti-inflation step if necessary. Such a move (relative to the U.S.) would boost Canadian interest rates and increase the value of the Canadian dollar. Preliminary forecasts from a number of sources show the Canadian Dollar in the \$.68 to \$.72 range for the next year, although this has been tempered recently. There is also upward pressure on the Canadian dollar due to increases in Canada-based commodity prices. Our outlook for the Canadian dollar is for a possible movement above \$.70 U.S. in the 2000-2001 period.

We note that border crossings into Whatcom County continue to follow the U.S./Canada exchange quite closely. If the Canadian dollar does show a modest increase in the forecast period, border crossings will likely increase and, outside of tax and immigration issues, will have a stimulating influence on retail sales for Whatcom County.

- Outside government-related payroll income to the region will continue to grow over the forecast period as a result of increased enrollments and support activity at Western Washington University.
- Uncertainty also persists in the outlook for regional fishing, agricultural, and mining income. In general, these sectors are subject to considerable volatility. The future picture is also clouded by the recent placing of certain Pacific Northwest salmon species on the Endangered Species list. Given the unforeseen forces that influence the abundance or scarcity of this resource, and also the possible regulatory effects, outside driven income in these sectors is assumed at best to hold at near recent levels over the forecast period.
- Whatcom County population is assumed to grow at approximately 2.1% per year over the forecast period. This is very close to long-run average population growth in the region, although a bit slower than in recent periods.

### **Forecast Overview**

We expect Whatcom County total personal income to grow at a moderate rate throughout the 2000-2001 forecast period. Over this period, real (adjusted for inflation) total personal income is projected to grow at an annual rate of around 2.4% to 2.5%. Real Non-farm earned income (payroll) income will grow at a rate averaging about 2.7% per year. Real per capita income will generally stay at near current levels.

The growth projection for real personal income in 2000 and 2001 for Whatcom County is smaller than the growth expected for Washington State as a whole. Recent forecasts predict Washington State real personal income growth for 1999 at 5 % (Preliminary Washington State Economic and Revenue Forecast, November 1999). For 2000-01, the Washington economy is expected to show about 2.8% to 2.9% real growth. For this same period, our Whatcom County forecast shows personal income growth just less than that expected for the state. Other conclusions from the Whatcom County forecast are:

- Because the U.S. economy is expected to exhibit some slowing in the forecast period, we anticipate that regional manufacturing growth will be relatively modest (not counting an unforeseen influx of new firms or sudden changes in product prices for example, or for other reasons outside business cycle activity).
- Some modest slowing in the construction sector. This is due to a continuation of the higher mortgage rates seen in the past year. Higher rates generally slow construction demand, and also slow the gains of homeowner refinancing.
- As in the past, the service sectors will likely show the largest gains due to local growth, growth in activity at Western Washington University for example, and the inflow of outside wealth and transfer income. The faster income growth sectors for the local economy for the 2000-01 period are expected to be business services; other services; and finance, insurance and real estate.

- Modest increases in the retail sales sector. We note that real taxable retail sales in Whatcom County declined overall from 1992 to 1995. Since then, sales have shown a return to growth more in line with general trends within the county. The turnaround appears to have been based for the most part on general growth in the region, inflows of wealth-related and transfer income, and the relative stabilizing of the Canadian dollar. Some gains may be expected for the forecast period, coming in part due to a possible uptick in the Canadian dollar. Given the increased dependence of sales on local factors, growth in real terms of taxable retail sales is expected to match more closely overall regional trends.

The accompanying material shows the detailed forecasts in tabular and graphical form.

## Whatcom County Personal Income and Taxable Retail Sales Forecast

### Forecast Assumptions

	1998	1999	2000	2001
U.S. Implicit Price Deflator (1996 = 1.00)	1.03	1.04	1.06	1.08
% Change	0.95%	1.50%	2.10%	1.80%
Mortgage Rate %	6.95	7.46	7.70	7.45
3-Month T-Bill Rate %	4.82	4.61	4.99	4.98
U.S. Expend. on Non-durables (bill 1996\$ )	\$1,685	\$1,765	\$1,803	\$1,841
% Change	4.04%	4.70%	2.20%	2.10%
U.S. Expend. on Durables (bill 1996\$)	\$732	\$805	\$826	\$845
% Change	11.28%	10.00%	2.70%	2.30%
Price Index Lumber and Wood (1982=100)	179.11	182.51	184.88	187.10
% Change	-2.53%	1.90%	1.30%	1.20%
Price Aluminum (cents per lb.)	65.57	60.98	61.83	62.82
% Change	-14.92%	-7.00%	1.40%	1.60%
U.S./CAN Exchange Rate (cents U.S.)	67.4	67.6	68.8	70.1
Regional Population (1000 persons)	159.32	162.51	165.92	169.41
% Change	2.00%	2.00%	2.10%	2.10%
Reg. Rents, Dividends, & Int. (thous 1996\$)	\$699,625	\$712,722	\$728,777	\$735,936
% Change	2.03%	1.87%	2.25%	0.98%
Reg. Transfer Payments (thous 1996\$)	\$567,030	\$580,438	\$595,787	\$613,930
% Change	2.92%	2.36%	2.64%	3.05%
Reg. Government Income (thous 1996\$)	\$296,295	\$301,550	\$305,685	\$310,789
% Change	1.44%	1.77%	1.37%	1.67%
Reg. Mining Income (thous 1996\$)	\$5,032	\$5,132	\$5,202	\$5,294
% Change	2.43%	1.97%	1.37%	1.77%
Reg. Farm Income (thous 1996\$)	\$56,919	\$57,648	\$57,873	\$58,271
% Change	-0.94%	1.28%	0.39%	0.69%
Reg. Fishing Income (thous 1996\$)	\$22,924	\$22,924	\$22,901	\$22,946
% Change	-1.93%	0.00%	-0.10%	0.20%

## Whatcom County Personal Income and Taxable Retail Sales Forecast

### Forecast in Real Terms (\$1000 1996\$)

SECTOR	1998	1999	2000	2001
Ag. Related Services Income	\$11,206	\$11,413	\$11,602	\$11,798
% Change	1.47%	1.85%	1.66%	1.68%
Construction Income	\$257,999	\$264,602	\$270,350	\$277,655
% Change	4.68%	2.56%	2.17%	2.70%
Durables Manufacturing Income	\$199,435	\$208,395	\$215,496	\$221,562
% Change	4.23%	4.49%	3.41%	2.81%
Non-dur Manufacturing Income	\$215,281	\$223,072	\$230,316	\$237,100
% Change	3.39%	3.62%	3.25%	2.95%
Wholesaling Income	\$113,872	\$117,884	\$121,558	\$125,003
% Change	3.46%	3.52%	3.12%	2.83%
Trans., Comm., P.U. Income	\$114,777	\$118,721	\$122,377	\$125,940
% Change	3.70%	3.44%	3.08%	2.91%
Business Services Income	\$68,876	\$71,913	\$74,758	\$77,806
% Change	4.71%	4.41%	3.96%	4.08%
Health Services Income	\$169,344	\$173,582	\$177,425	\$181,246
% Change	3.24%	2.50%	2.21%	2.15%
Other Services Income	\$294,939	\$305,609	\$315,427	\$326,272
% Change	4.41%	3.62%	3.21%	3.44%
F.I.R.E. Income*	\$111,563	\$116,292	\$120,675	\$125,193
% Change	5.12%	4.24%	3.77%	3.74%
Retail Income	\$263,830	\$267,299	\$273,659	\$282,071
% Change	-0.23%	1.31%	2.38%	3.07%
Taxable Retail Sales	\$986,335	\$1,015,455	\$1,051,022	\$1,091,158
% Change	-2.37%	2.95%	3.50%	3.82%
Total Non-farm Earned Income	\$2,145,369	\$2,208,382	\$2,267,423	\$2,330,673
% Change	3.09%	2.94%	2.67%	2.79%
Total Personal Income	\$3,333,969	\$3,419,788	\$3,506,239	\$3,590,748
% Change	2.74%	2.57%	2.53%	2.41%
Total Income Less Transfers	\$2,766,938	\$2,839,349	\$2,910,451	\$2,976,817
% Change	2.70%	2.62%	2.50%	2.28%
Income Per Capita**	\$20,926	\$21,043	\$21,132	\$21,196
% Change	0.73%	0.56%	0.42%	0.30%

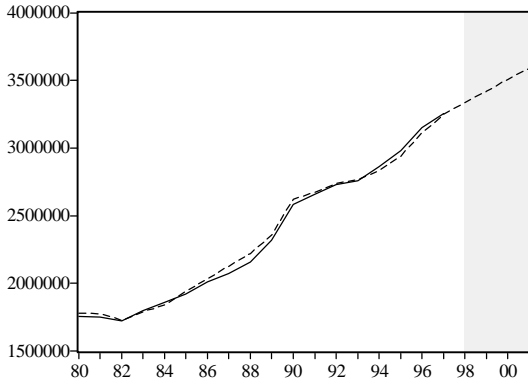
\* Finance, Insurance, and Real Estate

\*\* Dollars per person

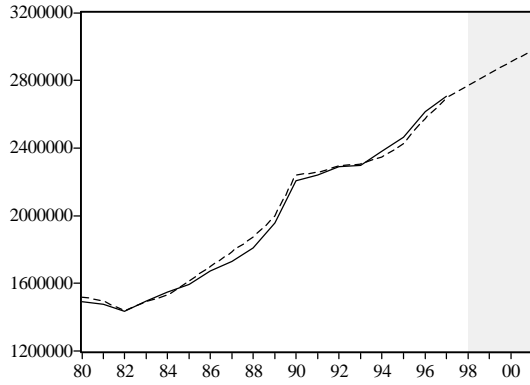
# Whatcom County Real Personal Income and Taxable Retail Sales Forecast

## Comparison of Actual to Predicted Levels in 1996 Dollars

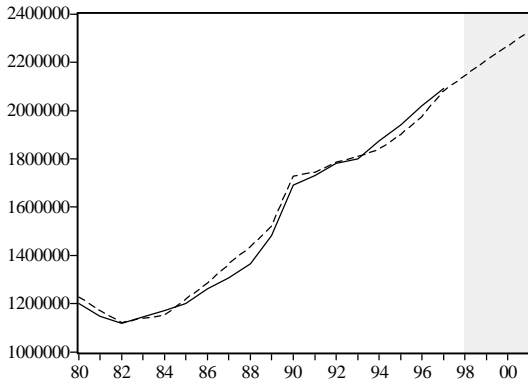
Real Total Personal Income  
Actual and Predicted \$1000 (1996)



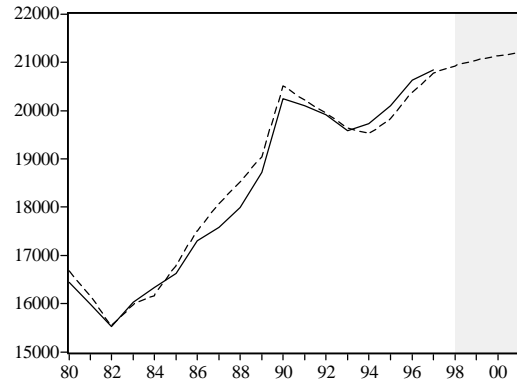
Real Total Personal Income Less Transfer Payments  
Actual and Predicted \$1000 (1996)



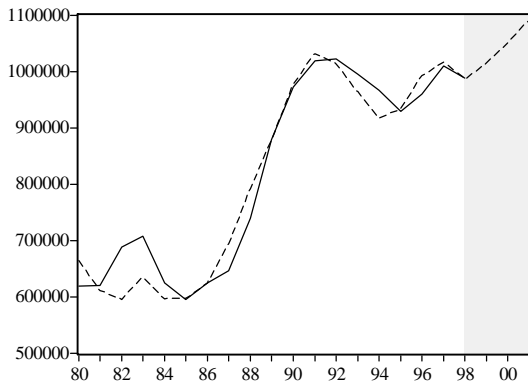
Real Total Non-Farm Earned Income  
Actual and Predicted \$1000 (1996)



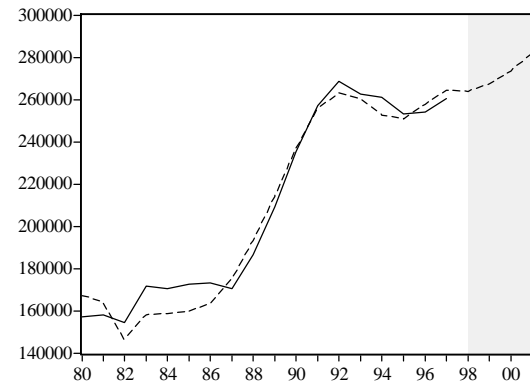
Real Per Capita Personal Income  
Actual and Predicted - dollars per person (\$1996)



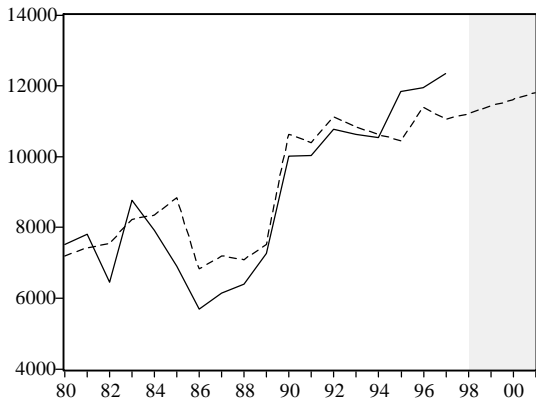
Real Taxable Sales (Retail Portion)  
Actual and Predicted \$1000 (1996)



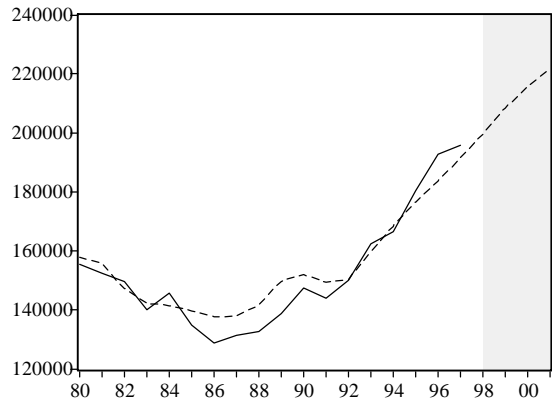
Real Retail Income  
Actual and Predicted \$1000 (1996)



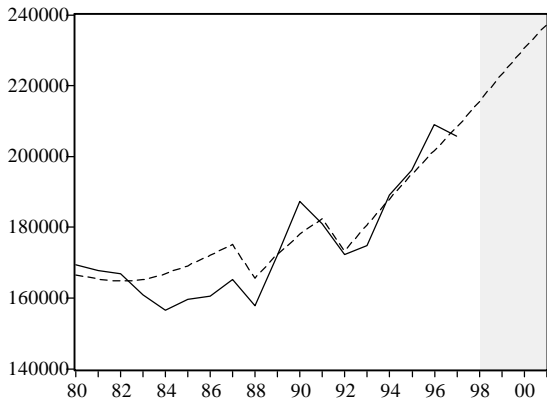
Real Non-Farm Agricultural Services Income  
Actual and Predicted \$1000 (1996)



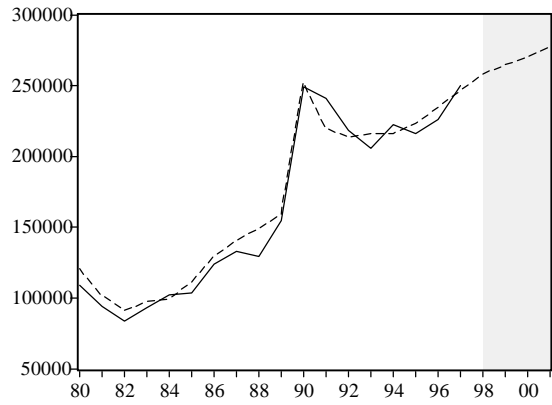
Real Durables Manufacturing Income  
Actual and Predicted \$1000 (1996)



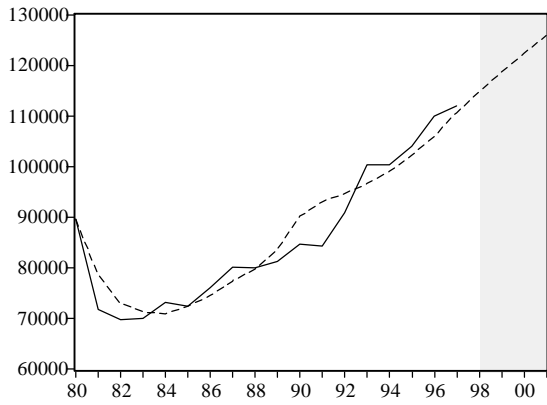
Real Non-Durables Manufacturing Income  
Actual and Predicted \$1000 (1996)



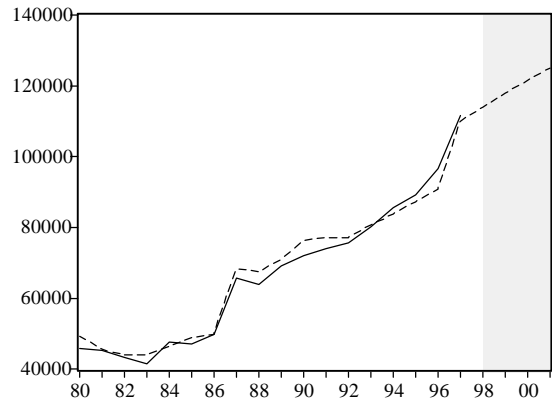
Real Construction Income  
Actual and Predicted \$1000 (1996)



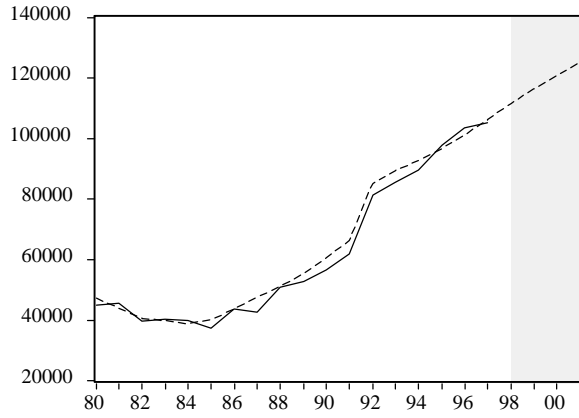
Real Transportation, Communications, and Public Utilities Income  
Actual and Predicted \$1000 (1996)



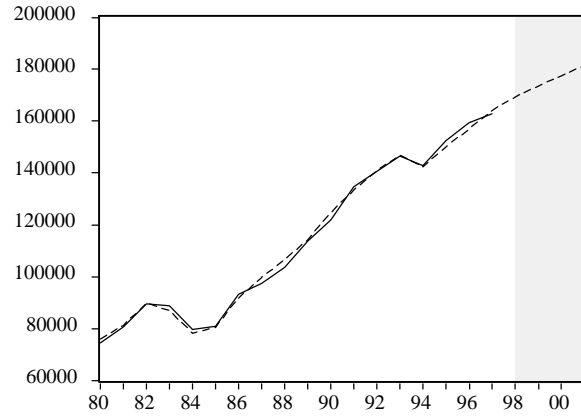
Real Wholesaling Income  
Actual and Predicted \$1000 (1996)



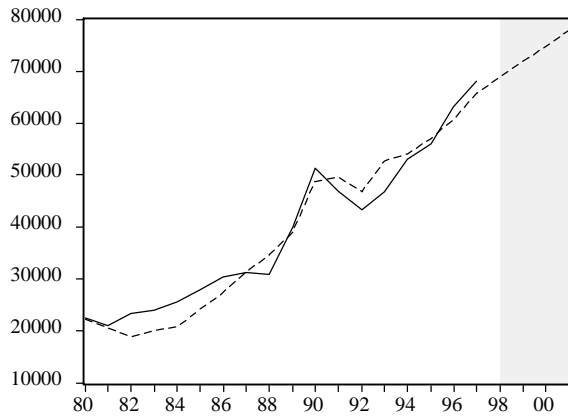
Real Finance, Insurance, and Real Estate Income  
Actual and Predicted \$1000 (1996)



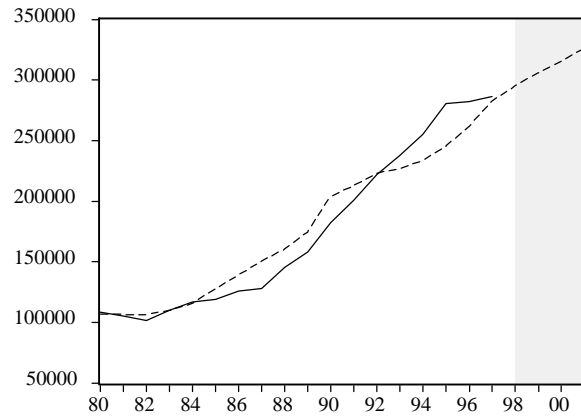
Real Health Services Income  
Actual and Predicted \$1000 (1996)



Real Business Services Income  
Actual and Predicted \$1000 (1996)

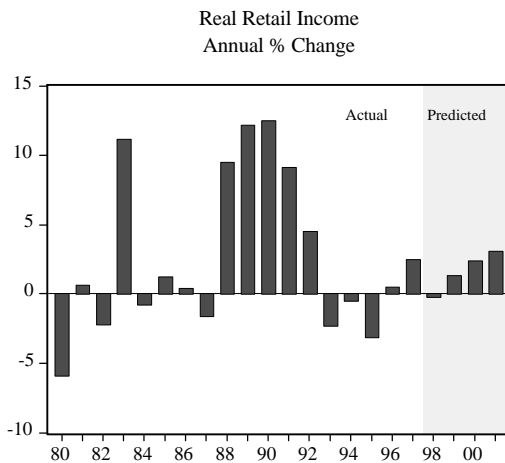
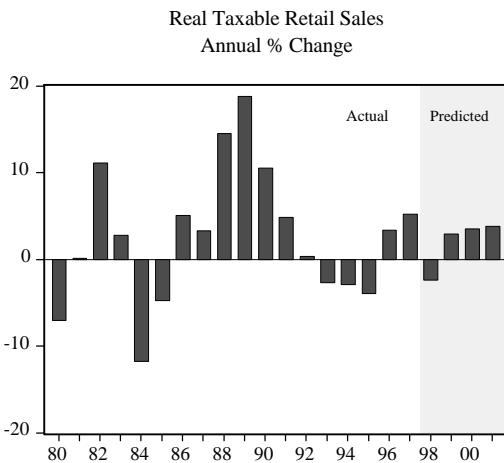
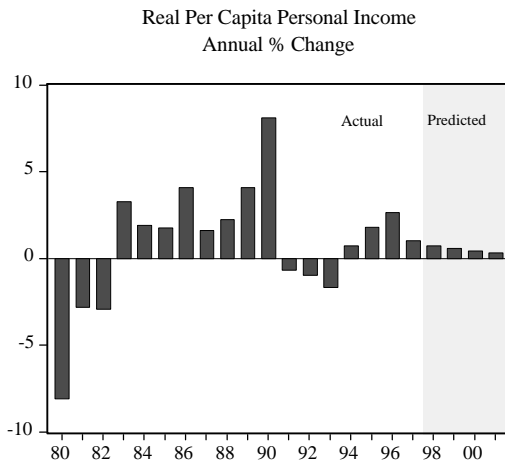
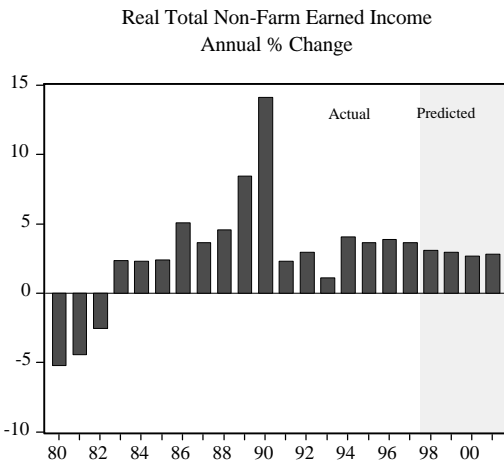
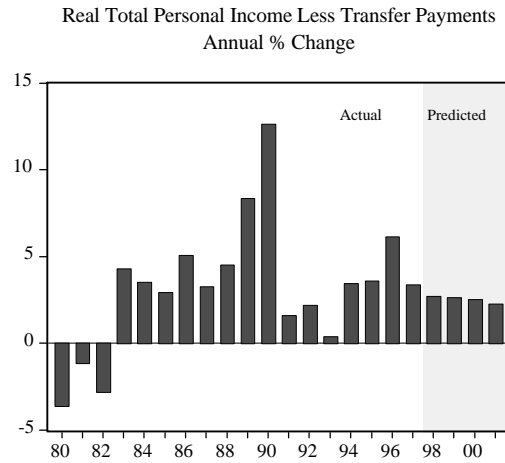
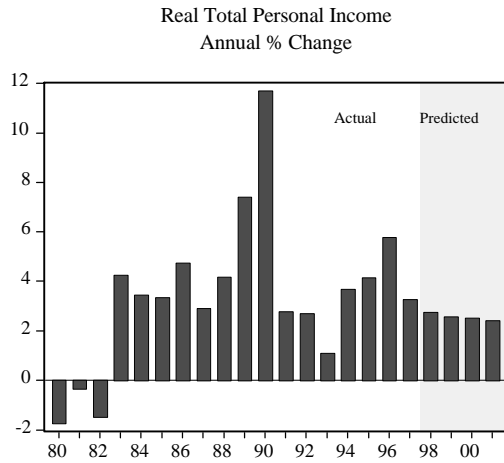


Real Other Services Income  
Actual and Predicted \$1000 (1996)

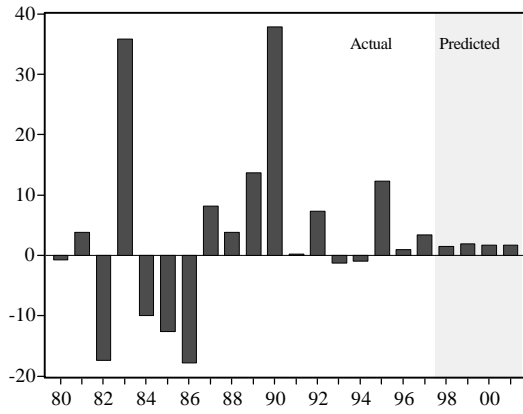


# Whatcom County Real Personal Income and Taxable Retail Sales Forecast - Annual Percent Changes

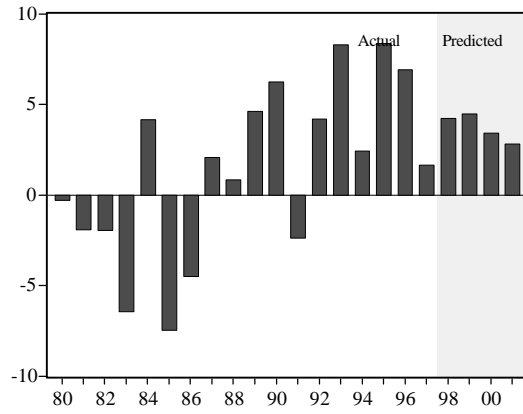
## Actual Past Rates of Change and Predicted Rates of Change



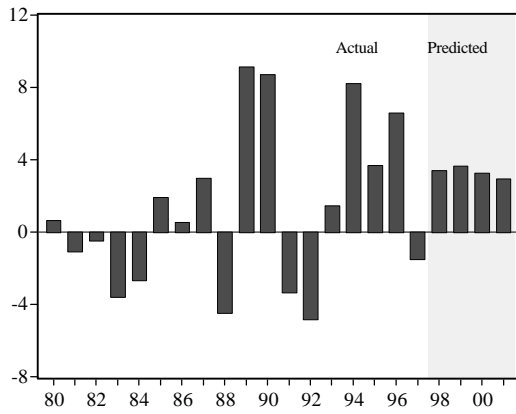
Real Non-Farm Agricultural Services Income  
Annual % Change



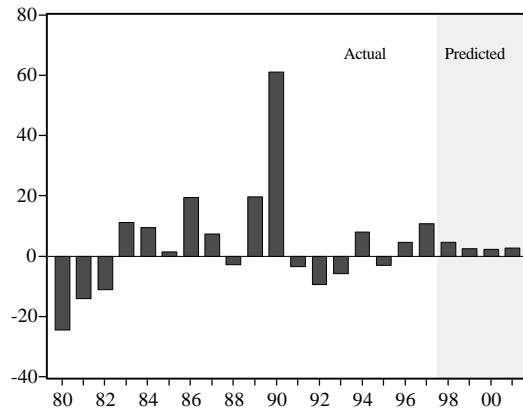
Real Durables Manufacturing Income  
Annual % Change



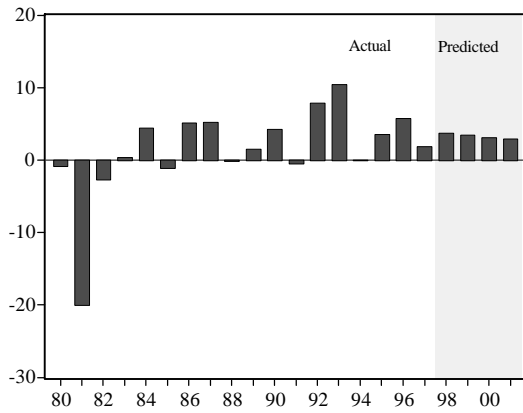
Real Non-Durables Manufacturing Income  
Annual % Change



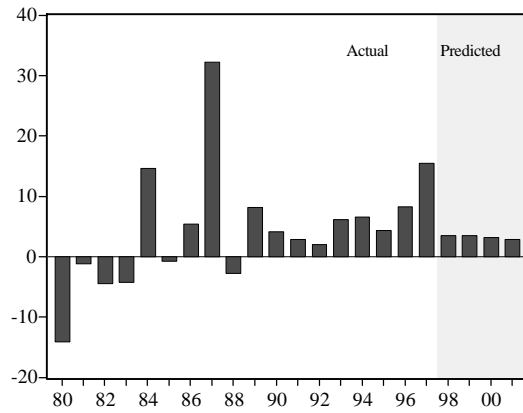
Real Construction Income  
Annual % Change



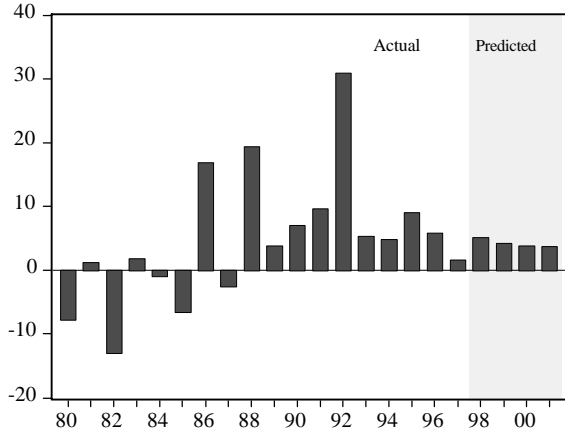
Real Transportation, Communication, and Public Utilities Income  
Annual % Change



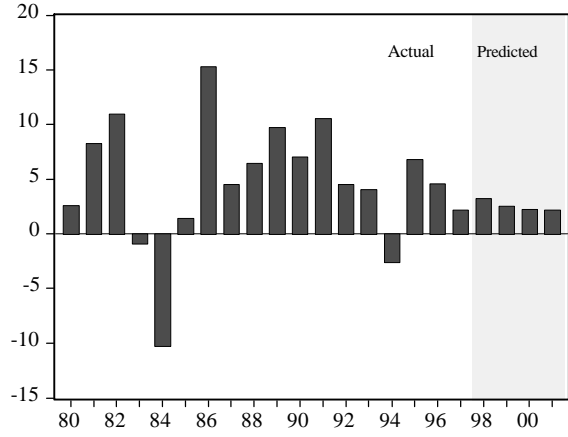
Real Wholesaling Income  
Annual % Change



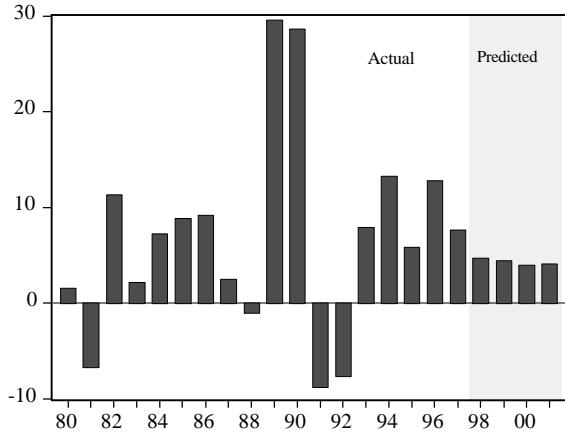
Real Finance, Insurance, and Real Estate Income  
Annual % Change



Real Health Services Income  
Annual % Change



Real Business Services Income  
Annual % Change



Other Services Income  
Annual % Change

