

The background of the cover is a photograph of the Washington State Capitol building. The building is a large, classical-style structure with a prominent central dome and a portico supported by several columns. The scene is framed by the branches of cherry blossom trees in full bloom, with white and light pink flowers scattered across the frame. The sky is a clear, pale blue.

Washington State Economic and Revenue Forecast

September 2015
Volume XXXVIII, No. 3



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Washington State Economic and Revenue Forecast

Prepared by the
Economic and Revenue Forecast Council

September 2015
Volume XXXVIII, No. 3

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Preface

ERFC forecasting structure and schedule

The Economic and Revenue Forecast Council is required by Chapter 231, Section 34, Laws of 1992 (RCW 82.33.020) to prepare a quarterly state economic and revenue forecast and submit it to the Forecast Council. This report presents the state's economic and General Fund-State revenue forecast. It is issued four times a year. The Washington State GF-S revenue forecast is prepared quarterly in conjunction with the state economic forecast for the Economic and Revenue Forecast Council. The Council consists of six members, two appointed by the Governor and four appointed by the Legislature – one from each caucus of the Senate and House of Representatives. Current members of the Economic and Revenue Forecast Council are listed inside the front cover of this publication. The GF-S revenue forecast is updated four times per year: March (February in even-numbered years), June, September, and November. The staff of the Economic and Revenue Forecast Council is responsible for the preparation of the state's economic forecast and the forecast of the Department of Revenue's GF-S revenue sources as well as GF-S revenue from fines and forfeitures collected by the Administrative Office of the Courts. The staff is also responsible for review and coordination of the revenue forecasts of other agencies that collect relatively large amounts of GF-S revenue. These are the Department of Licensing, the Office of the Insurance Commissioner, the Lottery Commission, the State Treasurer, the Liquor Control Board and the Office of Financial Management. The Office of Financial Management is responsible for summarizing the forecasts of all other state agencies that collect relatively smaller amounts of GF-S revenue.

Forecast Procedure

For each quarterly update, the staff of the Economic and Revenue Forecast Council, under the direction of the Executive Director, reviews (and if warranted, modifies) a national economic forecast prepared by Global Insight, Inc. A state economic forecast is then prepared using an econometric model that links Washington's economy to the national economy. After review by forecast workgroups; the Governor's Council of Economic Advisors; and the Economic and Revenue Forecast Council in public; this state economic forecast (updated for newly released data) is used to prepare a baseline revenue forecast for GF-S and the related funds. The forecasts are based on current law and administrative practices and do not reflect pending legal challenges to GF-S receipts until they are resolved. Additionally, at least two alternative forecasts are prepared for all GF-S and related fund sources and presented to the Forecast Council for approval. Once the Council approves the forecast, it becomes the official forecast of GF-S and related fund revenues.

Data in this publication are accurate through September 30, 2015.

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Table of Contents

Preface	iii
List of Tables	vii
List of Figures	viii
Executive Summary	1
U.S. Economic Forecast.....	2
Washington Economic Forecast	3
Revenue Forecast.....	3
Washington State Gross Domestic Product.	4
Chapter 1: U.S. Economy – Current Conditions and Forecast	5
Current Conditions	5
Forecast.....	13
Risks to the Forecast	19
Chapter 2: Washington Economy – Current Conditions and Forecast	25
Current Conditions	25
Washington State Forecast	29
Washington Payroll Employment	30
Washington Personal Income	32
Washington Building Permits	33
Seattle Consumer Price Index	33
Alternative Scenarios	34
Chapter 3: Washington State Revenue Forecast Summary	49
Overview.....	49
Recent Collection Experience	51
Non-Economic Changes to the Forecast.....	53
Revenue Forecasts by Source	54
Department of Revenue	54
Forecasted Revenue from Cannabis-Related Sales	58
Department of Licensing	59
The Office of Financial Management (Other Agencies)	59
State Treasurer.....	60
Insurance Commissioner	60
Liquor and Cannabis Board.....	60
Lottery Commission.....	61
Administrative Office of the Courts	61
Track Record for the 2013-15 Biennium	62
Track Record for the 2015-17 Biennium	62
The Relationship between the Cash and GAAP GF-S Revenue Forecasts	62
Budgetary Balance Sheet for the 2013-15 Biennium	63
Alternative Forecasts for the 2013-15 and 2015-17 Biennia.....	63
Near General Fund Forecasts for the 2011-13 - 2015-17 Biennia.....	63
Chapter 4: Special Report - Washington GDP by Industry, 1997 - 2014	81
State GDP	81
Appendix	93
Glossary	131

List of Tables

Chapter 1: U.S. Economy – Current Conditions and Forecast

Table 1.1	U.S. Economic Forecast Summary	21
Table 1.2	Forecast Analysis	22
Table 1.3	Comparison of Forecasts for 2015-17	23
Table 1.4	Forecast Comparison, 2015 to 2019	24

Chapter 2: Washington Economy – Current Conditions and Forecast

Table 2.1	Washington Economic Forecast Summary.....	37
Table 2.2	Comparison of Alternative Forecasts	38
Table 2.3	Governor’s Council of Economic Advisor’s Forecast	39
Table 2.4	Forecast Analysis, 2013-15.....	40
Table 2.5	Forecast Analysis, 2015-17.....	41
Table 2.6	Forecast Comparison, 2015 to 2019	42

Chapter 3: Washington State Revenue Forecast Summary

Table 3.1	Revisions to the General Fund-State Forecast	50
Table 3.2	Collection Variance of Major General Fund-State Taxes by Agency.....	51
Table 3.3	General Fund-State Collections	65
Table 3.4	Taxable Retail Sales	66
Table 3.5	General Fund-State forecast by agency, 2013-15 biennium, Cash	67
Table 3.6	General Fund-State forecast by agency, 2013-15 biennium, GAAP.....	68
Table 3.7	General Fund-State forecast by agency, 2015-17 biennium, Cash	69
Table 3.8	General Fund-State forecast by agency, 2015-17 biennium, GAAP.....	70
Table 3.9	September 2015 General Fund-State Forecast	71
Table 3.10	Track Record for the 2013-15 General Fund-State Cash Forecast	72
Table 3.11	Track Record for the 2015-17 General Fund-State Cash Forecast	73
Table 3.12	2013-15 and 2015-17 Enacted Budget Balance Sheet.....	74
Table 3.13	Alternative Forecasts Compared to the Baseline Forecast, 2015-17	75
Table 3.14	Alternative Forecasts Compared to the Baseline Forecast, 2017-19	76
Table 3.15	Lottery Transfers by Fund, Cash.....	77
Table 3.16	Lottery Transfers by Fund, GAAP.....	77
Table 3.17	GF-S, ELTA and OPA: History and Forecast of Components.....	78
Table 3.18	Forecasted Distribution of Excise Tax & License Fees from Cannabis Sales..	79
Table 3.19	Legislation from 2015 special sessions with revenue impacts	80

Chapter 4: Special Report - Changes in employment during and after a recession

Table 4.1	Washington and U.S. Gross Domestic Product.....	85
Table 4.2	Washington Gross Domestic Product by Industry.....	86
Table 4.3	Washington Gross Domestic Product by Industry, Chained 2009 Dollars.....	88
Table 4.4	Washington Gross Domestic Product by Component	90

Appendix: Detail Components of the State Economic and Revenue Forecast

Table A1.1	U.S. Economic Forecast Summary, Annual	95
Table A1.2	U.S. Economic Forecast Summary, Quarterly	96
Table A1.3	Washington Economic Forecast Summary, Annual	99
Table A1.4	Washington Economic Forecast Summary, Quarterly	100
Table A2.1	U.S. Nonagricultural Employment by Industry, Annual	103
Table A2.2	U.S. Nonagricultural Employment by Industry, Quarterly.....	104
Table A2.3	Washington Nonagricultural Employment by Industry, Annual.....	107

List of Tables (continued)

Table A2.4	Washington Nonagricultural Employment by Industry, Quarterly	108
Table A3.1	U.S. Personal Income by Component, Annual	111
Table A3.2	U.S. Personal Income by Component, Quarterly	112
Table A3.3	Washington Personal Income by Component, Annual	115
Table A3.4	Washington Personal Income by Component, Quarterly	116
Table A4.1	Selected Inflation Indicators	119
Table A4.2	Chain-Weighted Price Indices.....	120
Table A5.1	Washington Resident Population and Components of Change	121
Table A5.2	Washington Population.....	122
Table A6.1	Summary of National and State Indicators	123
Table A6.2	Washington Business Indicators	124

List of Figures

Chapter 1: U.S. Economy – Current Conditions and Forecast

Figure 1.1	Percentage Change in Real Wages by Occupation	7
Figure 1.2	United States Job Openings and Hires, SA	8
Figure 1.3	S&P 500 Closing Price, 2015	9
Figure 1.4	U.S. Months of Recovery after Reaching Previous Peak in Employment	14
Figure 1.5	Average Price of Crude Oil	14
Figure 1.6	Chinese GDP Forecast	18

Chapter 2: Washington Economy – Current Conditions and Forecast

Figure 2.1	Initial Claims for Unemployment Insurance	26
Figure 2.2	ISM-WW Index	27
Figure 2.3	Gross Domestic Product Growth	28
Figure 2.4	Nonfarm Payroll Employment.....	30
Figure 2.5	Software Employment.....	31
Figure 2.6	Washington Personal Income	33
Figure 2.7	Comparison of Washington and U.S. Economic Forecasts	43
Figure 2.8	Comparison of Alternative U.S. Economic Forecasts	46
Figure 2.9	Comparison of Alternative Washington Economic Forecasts	47

Chapter 3: Washington State Revenue Forecast Summary

Figure 3.1	GF-S Revenue as Percentage of State Personal Income	50
Figure 3.2	Revenue Act Collections	52
Figure 3.3	Taxable Real Estate Excise Activity	53
Figure 3.4	Taxable Sales as a Percentage of State Personal Income	55

Chapter 4: Special Report - Washington Gross Domestic Product by Industry, 1997 - 2014

Figure 4.1	GDP by State (Billions of 2009 dollars).....	82
Figure 4.2	Washington real GDP by Industry, 2014.....	83
Figure 4.3	Washington GDP by Component, 1980 vs. 2013.....	83

Appendix:

Detail Components of the Washington State Economic and Revenue Forecast

Figure A7.1	Washington State Economic Indicators.....	125
Figure A7.2	Washington State Leading Indicators	126
Figure A7.3	Other State Economic Indicators	127
Figure A7.4	Other Economic Indicators	128

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Executive Summary

- **The national economy has continued to expand at a solid pace. After growing just 0.6% (SAAR) in the first quarter of the year, Real Gross Domestic Product (GDP) rebounded, growing at a 3.9% rate in the second quarter.**
- **Employment growth has been weaker this year, averaging 212,000 net new jobs per month. Last year the economy added 260,000 jobs per month.**
- **Weak foreign GDP growth remains a threat to the U.S. economy.**
- **The Blue Chip Consensus GDP forecast calls for real GDP growth of 2.5% in 2015, unchanged from the previous forecast. After increasing to 2.7% in 2016 and 2017, we expect growth to moderate as the recovery matures.**
- **Washington has been outpacing the nation in GDP and personal income growth.**
- **Washington exports and manufacturing activity have weakened.**
- **The forecast for Washington employment is slightly higher than assumed in June.**
- **The 2015 Washington personal income forecast is also higher than assumed in June but growth in 2016 through 2019 is slower.**
- **While revenue collections since the June forecast have come in \$164 million over the forecasted amount, the economic outlook for the rest of this biennium is slightly weaker.**
- **The preliminary tally of final General Fund-State (GF-S) revenue for the 2013-15 biennium, which ended June 30th, was \$13 million more than forecasted.**
- **Most of the forecast changes for the 2015-17 and 2017-19 biennia stemmed from budgetary changes and new legislation from the 2015 special sessions. These changes are expected to add \$193 million in revenue for the 2015-17 biennium and \$286 million in the 2017-19 biennium.**
- **The forecast of GF-S revenue for the 2015-17 biennium was increased by \$333 million and the forecast for the 2017-19 biennium was increased by \$338 million.**
- **The Bureau of Economic Analysis (BEA) released new estimates of 2013 Gross Domestic Product by state for major industrial sectors in June 2015.**
- **The BEA also included advance 2014 statistics.**
- **In 2014, Washington ranked 14th with a real GDP of \$390 billion, the same rank it has held since 1990.**

U.S. Economic Forecast

The national economy has continued to expand at a solid pace

The national economy has continued to expand at a solid pace. After growing just 0.6% (SAAR) in the first quarter of the year, real GDP rebounded, growing at a 3.9% rate in the second quarter. Job gains have continued, but have been at a slower pace so far this year than in 2014. Unemployment continues to fall and is approaching pre-recession levels. The housing market continues to improve at a slow pace. Erratic stock price movements and global economic developments are the latest threat to a continued recovery. As the current recovery has reached five years in the making, the duration alone has caused skepticism as to whether the recovery will continue. Despite the uncertainty, the underlying trend in the economic recovery remains solid.

GDP growth is slightly lower than anticipated in June

Real GDP rose 3.9% (SAAR) in the second quarter of 2015 after growing 0.6% (SAAR) in the first quarter. The weak first quarter growth was due in large part to a number of temporary factors. For the first half of the year, the economy grew at about a 2.3% pace, slightly weaker than the 2.4% growth for all of last year. The Blue Chip Consensus GDP forecast now calls for real GDP growth of 2.5% in 2015, unchanged from the previous forecast. Real GDP growth is expected to be 2.7% (SAAR) in 2016, down slightly from the 2.8% (SAAR) growth expected in the June forecast. We expect growth to moderate as the recovery matures. The forecast calls for growth of 2.7%, 2.6%, and 2.4% in 2017 through 2019, unchanged from the previous forecast.

The forecast for employment growth is only minimally changed

The forecast for employment is only minimally changed since the June forecast. Growth in payrolls is expected to be 2.1% this year after growing 1.9% in 2014. We expect employment growth to slow to 1.7% in 2016 as the economy nears full employment. The forecast then calls for job growth to trend down through 2019, reaching 0.6% as labor force growth slows due to retiring baby boomers. As a result of the steady job growth, we expect the unemployment rate to drop to 5.3% in 2015 from 6.2% the year before. We expect the unemployment rate to average 5.1% for the rest of the forecast.

The global economy is weakening

Economic growth of major foreign economies remains modest. Canada is in a technical recession after two consecutive quarters of contraction in GDP. Much of the recent weakness has been attributed to low oil prices. European growth has turned positive but remains weak. China, which is our largest export market outside of North America, continues to slow. Weak export demand from China has added to the struggle the Chinese have had transitioning to a more domestic consumer driven economy. The Japanese economy remains weak resulting in Standard and Poor's cutting Japan's long-term credit rating.

Washington Economic Forecast

The Washington economy is expanding at a solid pace

The Washington economy is expanding at a solid pace. In recent months Washington employment has performed as expected in the June forecast but historical estimates were revised higher. Washington has been outpacing the nation in personal income and GDP growth but Washington exports and manufacturing activity have weakened. As expected, housing construction activity returned to a more sustainable level after a huge spike earlier this year. Seattle area consumer price inflation remains moderate thanks mainly to lower energy costs but shelter costs are rising rapidly.

The September Washington forecast is similar to June's

Overall, our September forecast for Washington State is similar to the June forecast. Washington employment is expected to grow 3.0% this year compared to 2.6% expected in the June forecast. The upward revision to growth in 2015 is due to revisions in the historical employment data. The September forecast for average annual employment growth from 2016 through 2019 is 1.5% per year, slightly less than the 1.6% average growth rate in the June forecast. Our September forecast for nominal personal income growth this year of 5.1% is slightly higher than the 4.9% in the June forecast, however, our new forecast for nominal personal income growth from 2016 through 2019 averages 5.3% per year, down slightly from 5.6% in the June forecast. We expect total housing units authorized by building permits to rise 19.7% to 40,600 units in 2015 due to first quarter surge. We expect a 3.7% decline in 2016 to 39,100 followed by growth of 9.1% to 42,600 units in 2017, 3.2% to 44,000 in 2018, and 1.3% to 44,600 in 2019. Thanks to the drop in oil prices compared to last year, we expect the all-items Seattle CPI to rise only 1.3% this year, down from 1.8% in 2014. We expect all-items Seattle area inflation rates of 2.0% in 2016, 2.1% in 2017, 2.2% in 2018, and 2.1% in 2019.

Revenue Forecast

The main changes to the forecast were increases stemming from new legislation

Revenue collections since the June forecast came in \$164 million higher than expected. The surplus was roughly split between Revenue Act taxes (retail sales and use, business and occupation, public utility, and tobacco taxes) and real estate excise taxes. As the real estate market has been performing above expectations, forecasted real estate excise tax collections have been increased. While the economic forecast is very similar to June's, it does include slightly weaker residential building activity and lower personal income growth. These changes would have normally resulted in a decrease in forecasted Revenue Act taxes. During the 2015 special sessions, however, legislation was passed that is expected to increase forecasted revenue from several sources. As a result, projected revenue for the 2015-17 and 2017-19 biennia is higher than forecasted in June, but by just less than one percent per biennium.

*GF-S forecast
change by
biennium
(millions):*

13-15: +\$13
15-17: +\$333
17-19: +\$338

The 2013-15 biennium came to an end on June 30th. The preliminary estimate of total revenue for the biennium was \$33,666.0 million, \$13.2 million higher than projected by the June forecast. Of this amount, \$8.4 million came from fund transfers enacted in the special legislative sessions subsequent to the release of the forecast. From July 1st through September 10th, the start of the 2015-17 biennium, revenue sources that are tracked monthly came in \$165.9 million higher than forecasted. Expected revenue from legislative and budget-driven changes enacted after the June forecast added a further \$193.4 million to the forecast. Changes to the economic forecast, however, resulted in a slight \$26.4 million decrease to projected collections for the rest of the biennium. The total of these three components was a \$332.9 million increase in projected revenue for the 2015-17 biennium. The forecast for the 2017-19 biennium has been increased by \$337.8 million, with \$51.7 million due to economic changes and \$286 million from legislative and budget-driven changes. GF-S revenue is now forecasted to total \$37,091.0 million in the 2015-17 biennium and \$40,537.9 million in the 2017-19 biennium.

Washington State Gross Domestic Product

*The BEA
released new
estimates in
June*

In June 2015, the Bureau of Economic Analysis (BEA) released new estimates of 2013 Gross Domestic Product (GDP) by state for major industrial sectors. This year's annual revision includes revised statistics beginning with 1997, though most notable revisions are generally limited to the period beginning with 2011. These source data also include advance statistics of GDP by state for 2014. The 2014 data are less complete and more subject to further revision than are the data for earlier periods. Estimates for the years 2010 – 2014 are presented in this chapter. Estimates for years not included in this report are available from the BEA (www.bea.gov).

*Washington has
been ranked
14th since 1990*

California once again had the highest real GDP of all the states with \$2.1 trillion while Vermont had the lowest at \$27 billion. Washington ranked 14th with a real GDP of \$390 billion, the same rank it has held since 1990.



Chapter 1: U.S. Economy – Current Conditions and Forecast

- **The national economy has continued to expand at a solid pace. After growing just 0.6% (SAAR) in the first quarter of the year, Real Gross Domestic Product (GDP) rebounded, growing at a 3.9% rate in the second quarter.**
- **Employment growth has been weaker this year, averaging 212,000 net new jobs per month. Last year the economy added 260,000 jobs per month.**
- **Wage growth remains disappointing, although the labor market continues to tighten.**
- **The modest housing market recovery has continued and is starting to approach more “normal” levels.**
- **Monetary policy remains accommodative, but rate increases are expected this year.**
- **Weak foreign GDP growth remains a threat to the U.S. economy.**
- **The Blue Chip Consensus GDP forecast calls for real GDP growth of 2.5% in 2015, unchanged from the previous forecast. After increasing to 2.7% in 2016 and 2017, we expect growth to moderate as the recovery matures.**
- **A more robust recovery in housing remains the most significant upside risk. A slowdown in global growth is the major downside risk.**

Current Conditions

The national economy has continued to expand at a solid pace

The national economy has continued to expand at a solid pace. After growing just 0.6% (SAAR) in the first quarter of the year, real GDP rebounded, growing at a 3.9% rate in the second quarter. Job gains have continued, but have been at a slower pace so far this year than in 2014. Unemployment continues to fall and is approaching pre-recession levels. The housing market continues to improve at a slow pace. Erratic stock price movements and global economic developments are the latest threat to a continued recovery. As the current recovery has reached five years in the making, the duration alone has caused skepticism as to whether the recovery will continue. Despite the uncertainty, the underlying trend in the economic recovery remains solid.

U.S. real GDP rose 3.9% (SAAR) in the second quarter

U.S. real GDP rose 3.9% (SAAR) in the second quarter of 2015 after growing 0.6% (SAAR) in the first quarter. The weak first quarter growth was due in large part to a number of temporary factors. Severe winter weather, the now-settled West Coast port strike, and fallout from the decline in oil prices all negatively affected growth. For the first half of the year, the economy grew at about a 2.3% pace, slightly weaker than the 2.4% growth for all of last year. Consumer spending made the largest contribution to growth in the second quarter, increasing 3.6% (SAAR) and adding 2.4 percentage points to overall GDP growth. Most of the increase in consumer spending was due to purchases of durable goods. Fixed investment grew 5.2% (SAAR) as residential construction led the way with 9.3% (SAAR) growth. Fixed investment added 0.85 percentage points to overall GDP growth. Inventory investment was flat, adding just 0.02 percentage points after adding 0.9 in the first quarter. Net exports added to overall growth by 0.2 percentage points as exports grew 5.1% and imports grew 3.0%. Government spending turned positive in the second quarter, growing 2.6% (SAAR) and adding 0.5 percentage points to GDP growth. Federal government was flat, while state and local government increased 4.3% (SAAR). This was the strongest growth in state and local government spending in over a decade.

Spending growth has been inconsistent but may be starting to pick up

Rising personal income is essential for consumer spending to continue to improve. Personal income growth slowed to 3.8% (SAAR) in August after growing 5.1% (SAAR) in July. Personal income is now up 4.2% from a year ago. Income growth was led by dividends, which increased 5.9% (SAAR) in August. Rental income was also strong, growing 5.3% (SAAR). Wage growth increased 5.1% (SAAR) in August led by 5.4% (SAAR) growth in the private sector. Wages and salaries are now up 4.1% year over year. Real disposable personal income growth (income after taxes and adjusted for inflation) was again solid in August, growing 3.9% (SAAR) after 4.4% (SAAR) growth in July. Real disposable income is now up 3.2% over the year. With real income growth remaining relatively strong over the last few months, spending growth has picked up. Consumption increased 5.0% (SAAR) in August following a 3.2% (SAAR) increase in July. Spending on goods was up 8.8% (SAAR) while spending on services was up 3.1% (SAAR). The personal saving rate fell to 4.6% from 4.7% in July. Retail sales growth slowed in August to 2.1% (SAAR) and is now up 2.2% over the year. Weighing down growth were declines in gasoline stations, building materials, and home furnishings. Motor vehicles, grocery stores, and food and drinking places all had strong growth.

Employment growth has slowed

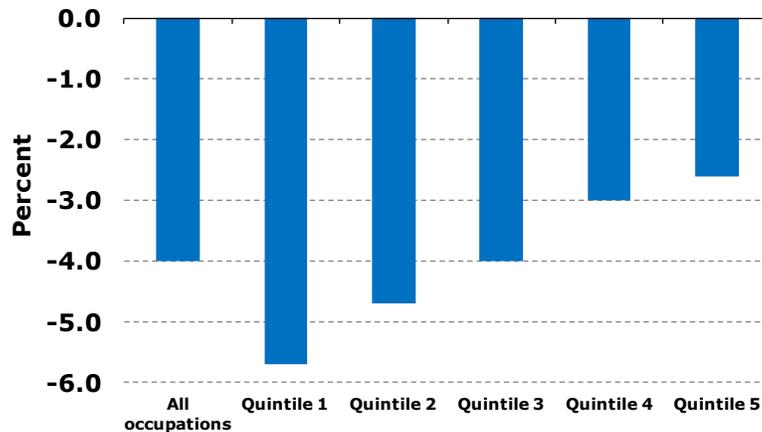
Employment growth has been weaker this year than in 2014, averaging 212,000 net new jobs per month. Last year, the average net employment gain per month was 260,000. Employment growth was disappointing in August, with employers adding only 173,000 new jobs. The private sector added 140,000 jobs in August and government payrolls gained 33,000. Energy-

related industries continue to cut back with a 10,000 job decline in natural resources and mining. Export-dependent industries have also been struggling due to the strong dollar. The manufacturing sector in particular lost 17,000 jobs over the month. Construction was weak, gaining just 3,000 jobs, as the housing recovery remains stuck in modest growth. Private services-providing industries gained 164,000 jobs in August. Most of the gains were in health care and social assistance (+56,000) and professional and business services (+33,000). Information (-7,000) and other services (-4,000) both declined in August.

Real wages have declined over the past 5 years

While the economy continues to add jobs, wages have not shown significant growth. When adjusted for inflation, wages across all occupations from 2009 to 2014 declined 4.0% according to the National Employment Law Project. This decline has occurred across all wage levels. When broken into quintiles based on 2014 wages, real wages declined in each of them (see Figure 1.1). Occupations in the bottom quintile declined the most, contracting by 5.7% over the period. The magnitude of the decline lessens the higher the pay becomes, with the highest quintile declining 2.6% from 2009 through 2014.

Figure 1.1: Percentage Change in Real Wages by Occupation, 2009-2014



Source: National Employment Law Project, data brief, Sept. 2015

The labor market is improving

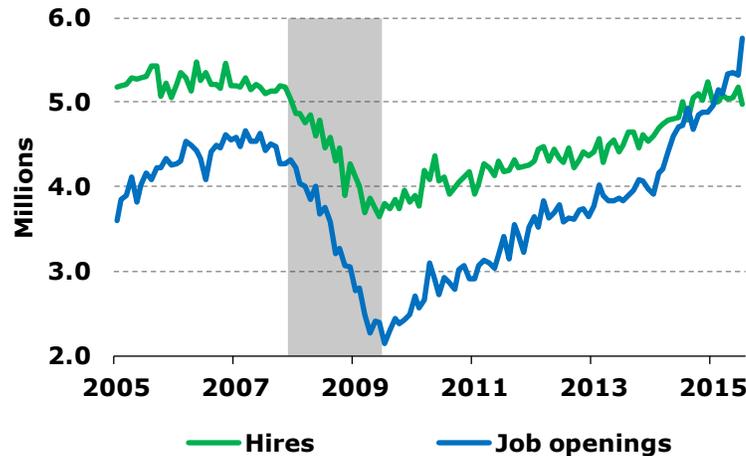
The ongoing labor market recovery is absorbing unemployed workers and bringing some new entrants into the labor force. The unemployment rate has fallen from 6.1% in August 2014 to 5.1% in August 2015. During this time, the labor force increased by 1.05 million people although the labor force participation rate has continued to slowly trend downward. Labor force participation for August was 62.6%, unchanged from July but down from 62.9% a year ago. Previously discouraged workers are re-entering the labor force now that they believe they have a chance at employment. Joblessness, while still elevated at 8.0

million people, has dropped by 1.54 million people since last year. The most comprehensive measure of underemployment, which includes those marginally attached to the labor force plus workers employed part time for economic reasons, has declined from 12.0% to 10.3% since last year.

Job openings are now outpacing new hires

The number of job openings has been steadily increasing and reached its highest level in July since tracking started in 2000. The number of openings rose to 5.75 million from 5.32 million in June. Employers hired 4.98 million workers in July, the fewest since August 2014, suggesting that companies are having a hard time filling positions. The gap between hiring and job openings started in February of this year and has been growing over the past six months, reaching 770,000 (see Figure 1.2). This growing gap indicates a tightening labor market and is a good indication that wage pressures are building.

Figure 1.2: United States Job Openings and Hires, SA



Source: U.S. Bureau of Labor Statistics, data through July 2015

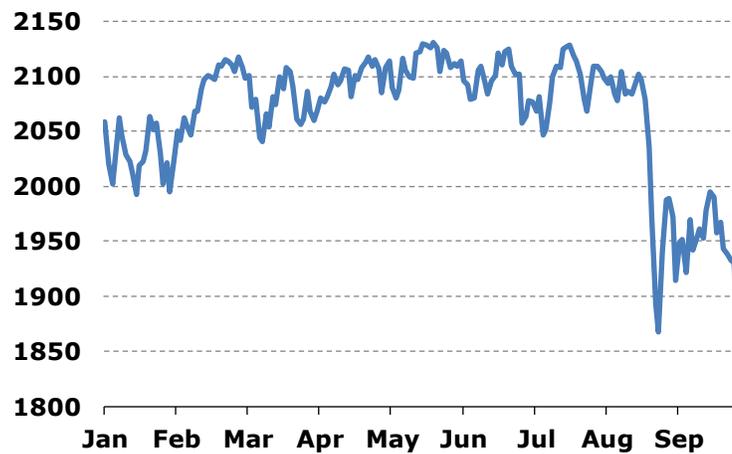
Consumer attitudes are diverging

Consumer attitudes have been shrouded in uncertainty recently. Two of the most prominent measures of confidence have given diverging indications the past few months. The University of Michigan Consumer Sentiment Index fell 4.7 points to 87.2 in September. This was the third consecutive month of decline and puts the index at its lowest reading of the year. Both the current conditions and expectations components fell. Financial market conditions have weighed on confidence as the stock market has hovered around its lows for the year. The Conference Board Consumer Confidence measure indicates much different consumer attitudes. This index rose 1.7 points to 103.0 in September, the highest reading since January. Improved labor market conditions and optimism about the availability of jobs contributed to the increase. Low gas prices and a falling unemployment rate also gave shoppers confidence in the recovery.

Financial market worries have affected consumer confidence

Financial market volatility has had an impact on consumer confidence recently, even though only about half of Americans own stock. The conditions in the stock market over the past month have fed fears about the sustainability of the economic recovery. After hovering around 2,100 for most of the year, the S&P 500 Index dropped 11% in a one week period (see Figure 1.3). Worries that a slowdown in China could slow the world economy and have a large impact in the U.S. contributed to the decline. While economic problems in China could have severe impacts on neighboring countries, the U.S. impact is likely to be relatively small. Chinese direct investment in the U.S. is minimal and U.S. exports to China are only about 1% of U.S. GDP.

Figure 1.3: S&P 500 Closing Price, 2015



Source: Yahoo! Finance, data through September 28, 2015

Small business confidence remains weak

Small business confidence has deteriorated since the beginning of the year. After reaching a post-recession high of 100.4 in December 2014, the National Federation of Independent Business (NFIB) small business optimism index has trended down. The August reading increased slightly to 95.9 but remains below the average for the year of 96.9. The index still remains consistent with a slowly expanding economy as opposed to the recessionary readings of a year ago. In August, more firms planned on expanding employment while more firms also had a job opening that was hard to fill. Expectations about the economy weakened, possibly due to the impact of the recent stock market drop. Low quality of labor is now emerging as an issue, cited by 14% of respondents as the most important problem they face. Taxes and government regulation remain the most concerning problems cited by a plurality of small businesses. Poor sales continue to be a concern facing businesses, cited by 14% of respondents as their most important issue.

Oil prices remain low

Oil prices have fallen in recent months, reaching new post-recession lows in August. With weak global demand, oil prices dropped by over half since last summer. West Texas Intermediate (WTI) was \$45 per barrel for the week ending September 18th while the Brent price was \$47 per barrel. In response to the low prices, U.S. oil production has fallen by about 500,000 barrels per day since peaking in June. U.S. crude production is on pace to fall below the 9.0 million barrel per day mark later this year or early next year. The strong U.S. dollar has also kept oil prices contained. Internationally, OPEC won't fight the drop in prices in hopes that some of the more expensive drilling techniques being deployed in the U.S. will no longer be profitable and shut down. Amidst the recent drop in energy prices, geopolitical conflict has continued. Even with the conflict in the Middle East intensifying, energy markets have been able to digest the turmoil. Disruptions related to the unrest have been viewed as temporary and are no longer causing large price swings. Although Islamic militants have kept their grip on Northern and Western Iraq, their actions have had very little impact on the country's production and exports since major oil operations are in the south. Russia's intervention into Ukraine has continued as well, but this too has done little to raise prices. An agreement between the U.S. and Iran regarding Iran's nuclear capabilities has the potential to boost Iranian oil production, putting further downward pressure on prices.

Inflation remains low

Headline inflation has been virtually nonexistent the past year as energy prices have fallen and remained low. In August the year-over-year change in the Consumer Price Index (CPI) remained at 0.2%. Energy prices are responsible for the weakness, dropping another 2.0% in August, and are now down 15.1% from a year ago. Gasoline prices again declined, falling 4.1% in August. Fuel oil once again dropped sharply, down 8.1% from the prior month. Food prices crept up in August, increasing 0.2% and are now up 1.6% year over year. Egg prices, while accounting for only 1% of overall food costs, have increased dramatically over the year (+35.3%) due to the severe outbreak of bird flu. Shelter costs increased 0.2% in August and are now up 3.1% year over year. Core inflation, which excludes food and energy, was 0.1% in August and 1.8% since last year.

The modest housing recovery has continued

The modest housing market recovery has continued and is starting to approach more "normal" levels. Recent data have generally been positive and there remains a great deal of upside in the housing recovery. The excess stock of distressed properties has largely been worked through and fewer are available for sale at deep discounts. Distressed sales made up only 7% of the market of existing home sales in August. While the trend in home sales has generally been positive, the recovery remains uneven. Sales of existing homes declined 4.8% in August to 5.31 million units (SAAR). Single-family home sales decreased 5.3% while condo and co-op sales decreased 1.6%. The market for existing homes remains tight. Total inventory in

January rose 1.3% to 2.29 million but remains 1.7% lower than a year ago. Inventory is at a 5.2 month supply at the current sales pace, up from 4.9 in July. New home sales are trending up again after slumping in the second quarter. The number of new home sales increased in August by 5.7% to 552,000 units (SAAR). The supply of new homes remains tight at 4.7 months. Mortgage rates remain at historically low levels, and have even edged down since summer. The rate for a conventional 30-year mortgage in August was 3.91%, down from 4.05% in July.

New construction is improving but remains weak

Home construction continues to slowly trend upward but remains at levels normally only seen in recession. Housing starts declined in August to 1.126 million units (SAAR) from 1.161 million units (SAAR) in July. Total housing starts for calendar year 2014 were 1.001 million units, up 7.8% from 2013. This ended six consecutive years where housing starts were fewer than 1.0 million units annually. Prior to the recession, the number of housing starts were never fewer than 1.0 million units annually in the post World War II era. The decline in August came from both the single and multi family segments, with each declining 3.0% over the month. Housing permits show a similar trend to starts over the past year, although were much better in August increasing 12.5%. Single family permits increased 8.7% while multi-family permits increased 18.6%. The steadily improving housing market has helped improve homebuilder confidence recently. The National Association of Homebuilders (NAHB) housing market index, which measures confidence of homebuilders, indicates that homebuilders are feeling more confident than any time since the end of the housing bubble in 2005. In August, the composite index was 61, up one point from the month before (readings above 50 indicate a positive view of conditions).

Home price appreciated has ceased

Home prices appear to have reached a peak and are no longer increasing. The seasonally adjusted Case-Shiller 20-city home price index declined 0.2% over-the-month in July, the third consecutive decline. Even with the recent declines, home prices remain 5.0% higher than a year ago. The decline in home prices the last few months has been small and is likely to be temporary. Home prices appear to be settling into a more sustainable growth pattern. Prices have increased 26.7% since the trough of the recession, but remain 13.7% below their previous peak. Any prolonged decline in prices would be damaging for the overall housing market. Rising prices over the past couple years have encouraged new construction and are enabling previously underwater homeowners to sell their homes and trade up for more expensive houses. Housing remains relatively affordable by historic standards, although affordability is down sharply from the past two years. Stronger wage growth and easier access to credit will help growth going forward.

The manufacturing sector has slowed

The manufacturing sector continues to improve, but the pace is slowing. The Institute of Supply Management (ISM) Report on Business indicated that activity in the manufacturing sector expanded again in August. The ISM index declined to 51.1 from 52.7 the month before, but still indicated growth (index levels above 50 indicate expansion). Details from the report were generally negative in comparison to the month before. New orders declined 4.8 points to 51.7 and production fell 2.4 points to 53.6. The employment component remained in positive territory in May, declining 1.5 points to 51.2. Respondents to the survey indicated a positive impact from lower raw materials prices, but also growing concern over export growth. The latest G-17 report from the Federal Reserve, which measures manufacturing output, indicated a decline in August of 0.5% after increasing 0.9% in July. The decline was due to a drop in durable goods manufacturing while nondurable goods manufacturing remains unchanged. Most of the drop in durable goods was due to a sharp decline in the output of motor vehicles and parts. Even with the decline in August, manufacturing output is 1.1% above last year. New orders for core capital goods (nondefense capital goods excluding aircraft) have been strong the past two months, growing 2.1% in July after a 1.5% gain in June. Even with the recent growth, however, new orders remain 3.4% below year ago levels.

The Federal Reserve is setting the stage for rate increases

Monetary policy remains accommodative, but the nontraditional policies of the last few years employed by the Federal Reserve have essentially come to an end. Policymakers are now shifting their focus to determining when the fed funds rate should be raised. Even with inflation hovering around 1%, it is very likely that rates will be raised soon. At the September meeting, the Federal Reserve kept the fund funds rate unchanged. They noted the recent global economic weakness and volatility in financial markets. There are concerns about the impacts these developments could have on U.S. growth and inflation. They also lowered their projection for GDP growth and inflation. The Fed still believes the risks to the outlook for the U.S. economy are nearly balanced.

Weak global growth remains a threat

Weakness in economic growth abroad remains a threat to the U.S. recovery. Economic activity in China has continued to weaken, threatening U.S. exports. Last year Chinese year-over-year GDP was 7.4%, the slowest in 24 years. It is believed that China will likely lower its growth target to the 6.5% to 7.0% range. The slowdown has had a larger impact on China's neighbors and countries that export large amounts of raw materials to China. The Japanese economy continues to languish. Prime Minister Shinzo Abe recently unveiled a new economic growth target and a plan to halt Japan's population decline. The plan included increased support for families with children and help for those who care for elderly relatives. European economies remain weak as well. Greece continues to struggle and a Eurozone exit remains possible. The European economy has

experienced weak growth since emerging from a recession that started at the end of 2011. Real GDP in the Eurozone is still lower than in 2008. Real GDP in the Eurozone increased at a 0.1% annualized rate in the second quarter of 2015, down from a 0.9% rate the previous quarter. Some member countries continue to experience negative growth, including France and Italy.

Forecast

Our forecast is based on the May Blue Chip Consensus forecast

The economic forecast was based on a modified version of Global Insight's September 2015 Control forecast for the U.S. economy. Consistent with our standard practice, the U.S. real GDP forecast was adjusted to match the September Blue Chip Consensus GDP forecasts for 2015 and 2016. We also incorporated the latest long term Blue Chip GDP forecast for 2017 through 2019. Our oil price forecast was adjusted to incorporate futures prices for both Brent crude oil and for West Texas Intermediate crude.

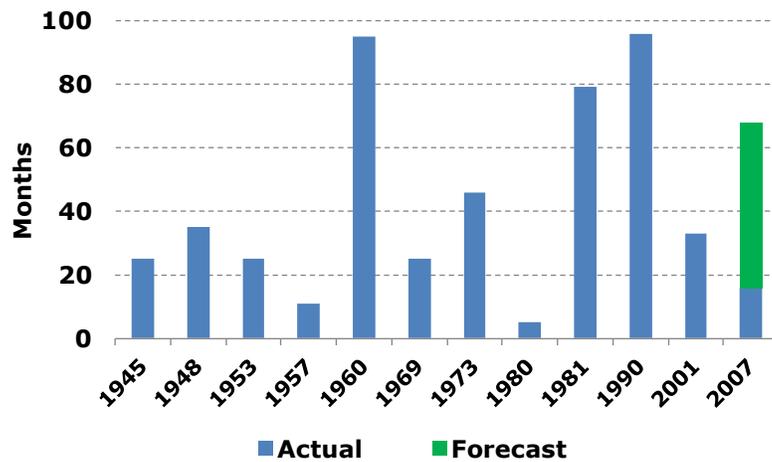
Real GDP growth is slightly lower

The Blue Chip Consensus GDP forecast, our starting point each forecast cycle, calls for real GDP growth of 2.5% in 2015, unchanged from the previous forecast. GDP growth is expected to slow from the second quarter growth of 3.9% (SAAR) to 2.4% (SAAR) and 2.7% (SAAR) in the third and fourth quarters. Real GDP growth is expected to be 2.7% (SAAR) in 2016, down slightly from the 2.8% (SAAR) growth expected in the June forecast. We expect growth to moderate as the recovery matures. The forecast calls for growth of 2.7%, 2.6%, and 2.4% in 2017 through 2019, unchanged from the previous forecast.

This recovery will be the longest on record

The positive GDP growth throughout the forecast will make the recovery from the 2007-09 recession the longest on record. From the second quarter of 2009 through the end of our forecast in 2019, the recovery is forecasted to be at least 126 months. Prior to this, the longest recovery was from the 1990-91 recession, lasting 120 months. The primary reason for the exceptional length of the current recovery has been the depth of the recession. Despite positive GDP growth, the labor market remained weak for an extended period. It took 75 months of recovery just to reach the previous peak in employment. When comparing recoveries in the duration since reaching the previous employment peak, this expansion appears more in line with other post war expansionary periods (see Figure 1.4). The average post war expansion has had 43 months of additional employment growth since reaching its previous peak. In the current recovery, the economy has experienced 16 months of additional employment growth since reaching the previous employment peak in April 2014. We expect growth to continue throughout the end of the forecast in 2019, which would result in 68 months of additional employment gains.

Figure 1.4: U.S. Months of Recovery after Reaching Previous Peak in Employment

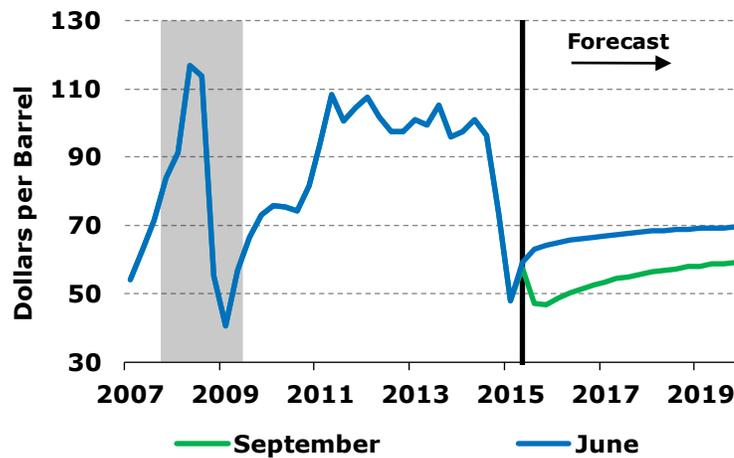


Source: NBER, ERFC September 2015 forecast; historical data through August 2015

Oil prices remain low

The forecast for oil prices is the biggest change since the June forecast. Near-term prices have decreased since the June forecast. Brent crude prices have steadily declined to \$47 per barrel in August after temporarily peaking at \$64 per barrel in May. This remains well below the \$100 per barrel average of the past few years. WTI crude oil has followed a similar pattern over the same period. The refiner's acquisition price of crude oil in the second half of 2015 is now expected to average \$47 per barrel compared to \$63 in the June forecast (see Figure 1.5). While oil prices are expected to rise starting in 2016, they will remain well below the level assumed in the June forecast. By the end of 2019, the refiner's acquisition price is expected to increase to

Figure 1.5: Average Price of Crude Oil



Source: DOE, ERFC September 2015 forecast; historical data through 2015Q2

\$59 compared to the \$69 assumed in June. Oil prices have come in lower than predicted in June, but we expect slower growth throughout the forecast. Low oil prices continue to affect U.S. oil production. After steadily increasing for years, domestic oil production has started to fall. U.S. oil production has fallen by 500,000 barrels per day from its peak. Weak economic growth in China and Europe has lowered the demand for oil. The strong dollar has kept downward pressure on oil prices recently. With low oil prices, inflation (as measured by the implicit price deflator) is forecasted to be just 0.4% in 2015. We then expect low inflation throughout the forecast ranging from 1.4% to 1.8%.

Spending growth has been revised lower

Real consumer spending was slightly weaker in the second quarter than expected resulting in a slight downward revision to the forecast for 2015. We now expect real consumer spending to grow 3.0% this year compared to 3.1% in the June forecast. Low energy prices will continue to help consumers' purchasing power. Consumers remain much more optimistic than earlier in the recovery and there are indications that wage growth may be on the verge of increasing. Unemployment continues to fall and more part-time workers are finding full-time jobs. Equity markets continue to increase and home values are rising. We expect real spending growth to continue to outpace overall real GDP growth the next two years. We expect consumption growth to slow from the 3.0% growth this year reaching 2.5% in 2018 and 2019. We expect consumer spending to contribute 2.1 percentage points to real GDP growth this year followed by a 1.9 percentage point contribution on average for each year of the forecast through 2019.

Personal income growth will pick up

Real disposable personal income growth rebounded to 2.7% in 2014 after declining 1.4% in 2013. Lower energy prices will keep inflation low this year, providing a boost to real incomes. We expect growth to accelerate to 3.3% in 2015 and 2016. Growth is then expected to increase further to 3.5% in 2018 before slowing to 3.1% in 2019. Nominal disposable income is expected to grow 3.6% this year, led by strong growth in dividend income of 6.3% and proprietors' income of 5.1%. Wages and salaries are expected to grow 4.1% this year after increasing 5.1% in 2014. The forecast then calls for growth in wages and salaries to average 4.8% per year for the remainder of the forecast. Wage growth will continue to be led by the private sector, with growth of 4.4% this year and averaging 5.1% annually for the remainder of the forecast. Income will also be boosted in the latter part of the forecast by interest income as interest rates rise and return to pre-recession rates.

The outlook for employment is essentially unchanged

The forecast for employment is only minimally changed since the June forecast. Growth in payrolls is expected to be 2.1% this year after growing 1.9% in 2014. We expect employment growth to slow to 1.7% in 2016. The forecast then calls for job growth to trend down through 2019, reaching 0.6% as the economy nears

full employment. As a result of the steady job growth, we expect the unemployment rate to drop to 5.3% in 2015 from 6.2% the year before. We expect the unemployment rate to average 5.1% for the rest of the forecast. The continued strengthening of the labor market and corresponding fall in the unemployment rate will create an incentive for more and more marginally attached workers to begin looking for a job. Older people are also staying in the workforce longer. These two factors will push the labor force participation rate up from a trough of 61.4% in 2014 to 61.9% in 2019.

Private sector hiring will continue to outpace public sector hiring

Employment growth in nonfarm payrolls has been led by private sector hiring throughout the recovery as the public sector has been weighed down by budget concerns. While state and local governments have largely worked through their budgetary issues and have started hiring again, the federal government continues to shed jobs. We expect the drag from weak government job growth to continue through 2017. Private sector employment is estimated to have reached 116.0 million in the first quarter of last year, making up all of the jobs lost during the recession. We do not expect the job losses in the public sector to be made up until the end of 2019. Federal government employment will continue to decline throughout the forecast, but this will be more than offset by modest gains in state and local government employment. The forecast calls for total government employment to increase 0.3% this year after virtually no growth in 2014. Government payrolls are expected to increase another 0.3% in 2016. We then expect growth in overall government employment to average 0.9% through 2019. We expect private sector job growth of 2.5% this year, which would mark the fastest growth since 1999. The forecast calls for private sector job growth to gradually slow throughout the remainder of the forecast to just 0.6% in 2019.

Business investment will be slower this year

Business investment continues to grow despite lingering headwinds. The drop in oil prices, which is good for overall growth, lowers the incentive for additional investment by energy companies. The weak economic outlook abroad has also given businesses pause. On the plus side, vacancy rates for office buildings fell to 13.5% in the first quarter, from 13.9% for the first quarter, the lowest since 2008. Companies still have a high level of cash on hand and borrowing rates remain low. We expect real nonresidential construction to remain flat this year, after growing 8.1% in 2014. The slowdown is due to a decline in mining and petroleum structures caused by the recent plunge in oil prices. The forecast calls for growth to rebound to 6.5% in 2016 as the drag of low oil prices diminishes. The forecast then calls for growth to average 3.4% per year through 2019. Equipment investment is expected to have strong growth throughout the forecast as businesses expand and improve productivity. Although we do not expect to see the double-digit growth experienced early in the recovery, we do expect capital equipment to remain an important driver of GDP growth.

Investment in equipment and software is expected to grow 3.7% this year. The forecast then calls for growth to reach 7.2% in 2016 before gradually declining to 3.7% in 2019. We expect overall real nonresidential fixed investment to grow 4.0% this year and accelerate to 6.7% in 2016. We then expect growth to gradually moderate throughout the forecast and reach 3.8% in 2019.

The modest housing recovery will continue

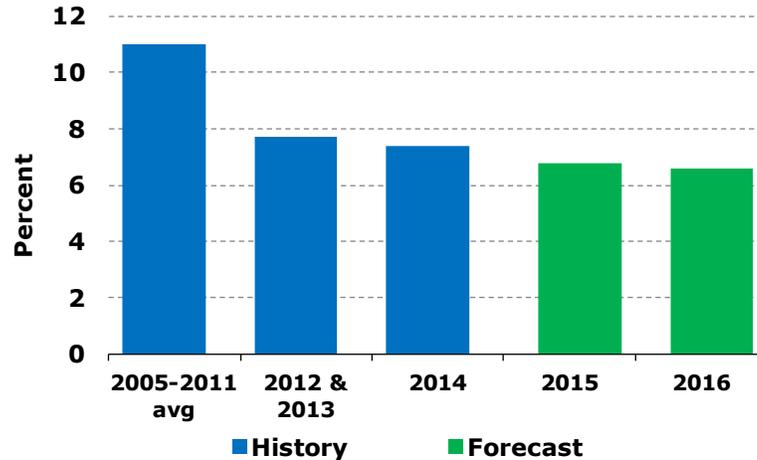
The housing recovery so far has been modest, although we expect growth to pick up throughout the forecast. Some of the barriers facing the housing sector have receded. Lending standards for homebuyers and developers continue to ease. Much of the surplus of distressed properties caused by the recession has been worked through. Continued improvement in the housing market remains dependent on job growth and access to financing. The forecast calls for growth in housing starts of 13.1% for this year, up from 7.8% in 2014. The forecast expects the robust growth in housing starts to continue over the next two years of 15.6% and 12.2%. Growth in single-family starts is expected to be 10.1% this year, up from 4.3% in 2014. Growth will accelerate to 19.6% in 2016 and 18.6% in 2017. The forecast then calls for single family housing growth to slow in 2018 and 2019 at 4.7% and 1.9%. The forecast calls for this year to be the end of exceptional growth in the multi-family housing segment after growing at double-digit rates in each of the past four years. We expect 18.6% growth this year and then another solid year of growth in 2016 at 9.0%. We expect the multi-family segment to grow 0.3%, 2.8%, and 5.4% in 2017 through 2019. The housing market will continue to improve, particularly while interest rates remain low and inventories are lean. Mortgage rates for a conventional 30-year fixed rate mortgage are expected to gradually rise from 3.9% this year to 5.5% in 2019. Population remains on an upward trend and employment continues to increase at a solid pace. The number of housing units remains at a historically low level and there is considerable pent-up demand created by the recent lack of household formation. The forecast calls for total housing starts to reach 1.57 million in 2019, still 24% below the peak in 2005.

Weak foreign demand has weighed down export growth

Economic growth of major foreign economies remains modest. Canada is in a technical recession after two consecutive quarters of contraction in GDP. Much of the recent weakness has been attributed to low oil prices. European growth has turned positive but remains weak. The latest Blue Chip forecast calls for 1.4% (SAAR) growth this year for the Eurozone followed by 1.8% (SAAR) growth in 2016. China, which is our largest export market outside of North America, continues to slow. Weak export demand from China has added to the struggle the Chinese have had transitioning to a more domestic consumer driven economy. Chinese GDP growth in 2014 was 7.3% (SAAR), well below the 2005-11 average of 11%. The most recent Blue Chip forecast calls for Chinese growth to slow further, with growth of 6.8% (SAAR) this year and 6.6% (SAAR) in 2016 (see Figure 1.6). The

Japanese economy remains weak resulting in Standard and Poor's cutting Japan's long-term credit rating. The most recent Blue Chip forecasts expect slow growth in the near term of 0.8% this year followed by 1.5% in 2016.

Figure 1.6: Chinese GDP Forecast



Source: Blue Chip Economic Indicators; historical data through 2014

Export growth will remain positive, but will be outweighed by import growth

Due to the modest economic growth of U.S. trading partners, foreign trade is not likely to provide a substantial boost to the U.S. economy. GDP growth in U.S. trading partners is expected to increase, but not at a rate sufficient to lift the U.S. economy in the near term. After growing 2.6% in 2014, the forecast calls for GDP growth in U.S. trading partners to slow to 2.3% this year and in 2016. The forecast then calls for GDP growth in U.S. trading partners to grow 2.8%, 2.9%, and 3.2% in 2017 through 2019. We expect real U.S. export growth of just 1.8% this year due both to weak economic growth abroad and a strong U.S. dollar. The forecast calls for real export growth to rebound in 2016 to 4.1% and then to 4.5% in 2017. We then expect real export growth to moderate to 3.5% and 4.3% in 2018 and 2019. Export growth is more than offset by increased imports in each year of the forecast. Net exports are expected to reduce overall GDP growth by 0.7 percentage points this year. Beyond 2015, net exports are expected to reduce GDP growth by 0.3 percentage points on average through 2019.

Fiscal policy uncertainty remains low

Uncertainty surrounding fiscal policy remains low without any real push for dramatic deficit reduction or spending in the near term. After peaking at \$1,329 billion in 2010, the federal budget deficit has shrunk each year. The forecast calls for 2015 to be the trough in the deficit at \$589 billion. We expect the decline in real defense spending that started in 2011 to end this year with another \$7.6 billion reduction. The forecast then calls for minimal growth through 2018 before reaching a plateau. Real nondefense purchases are expected to grow this year and next

before declining slowly through 2019. Combined, federal government spending will remain mostly flat throughout the forecast. State and local governments, having worked through the majority of their budget constraints, will offset the decline at the federal level. The forecast assumes 2014 was the trough in total real government purchases. We expect total real government spending growth to average 0.7% per year from 2015 through 2019.

The Fed is normalizing its monetary policy

The Federal Reserve is now moving to normalize monetary policy after years of measures aimed at supporting the economy. With recent stock market volatility and international headwinds, the forecast now calls for the Federal Reserve to begin increasing the federal funds rate in December. Each of the past two forecasts has assumed a rate hike was coming in the next quarter. Recent data also indicate the Federal Reserve failed to achieve its price stability mandate as inflation remains below the target rate of 2%. Federal Reserve policymakers remain data driven, and there are a number of risks that could delay the rise in rates. They have avoided committing to any particular timing or pace of rate increases in order to maintain as much flexibility as possible. While the forecast still assumes inflation will be low, it is still anticipated that the Fed will be comfortable raising rates. We expect rates to rise gradually before leveling off at the end of 2017.

Table 1.1 provides a fiscal year summary of the U.S. economic indicators. For calendar year tables, see the appendix.

Risks to the Forecast

Downside outweigh upside risks

Our view of the risks to the forecast is slightly more negative than in the June forecast. The recovery is forecasted to be the longest on record, creating some angst. The outlook for Chinese economic growth continues to be revised down and other U.S. trading partners continue to have weak or negative growth. The level of uncertainty in the baseline remains elevated, and downside risks once again outweigh upside risks.

Downside Risks

- Chinese economy experiences a “hard landing” (annual growth under 5%); growth is weaker in emerging market economies
- Weaker than expected employment growth
- Real wage growth stagnates, leading to slower consumer spending
- Slower household formation
- Budget stalemate and government shutdown; failure to reach an agreement on the debt ceiling
- Breakdown in Greek debt, budget negotiations leads to default and exit from Eurozone

- Increasing geopolitical tensions negatively impact consumer confidence

Upside Risks

- The housing sector improves faster than anticipated
- Oil prices decline further than expected
- Labor productivity returns to higher levels seen in 1995-2005
- Employment growth expands faster than in the baseline
- China successfully transitions to a more consumption based economy
- European and emerging market economies grow faster than expected

Table 1.1
U.S. Economic Forecast Summary
 Forecast 2016 to 2019

Fiscal Years

	2012	2013	2014	2015	2016	2017	2018	2019
Real National Income Accounts (Billions of Chained 2009 Dollars)								
Real Gross Domestic Product	15,216.2	15,430.6	15,750.6	16,180.5	16,583.7	17,036.5	17,486.9	17,921.0
% Ch	2.0	1.4	2.1	2.7	2.5	2.7	2.6	2.5
Real Consumption	10,343.7	10,487.4	10,710.1	11,049.9	11,371.0	11,685.6	11,988.6	12,288.1
% Ch	1.7	1.4	2.1	3.2	2.9	2.8	2.6	2.5
Real Nonresidential Fixed Investment	1,908.9	1,987.8	2,081.3	2,187.7	2,311.2	2,443.5	2,564.7	2,678.8
% Ch	10.6	4.1	4.7	5.1	5.6	5.7	5.0	4.4
Real Residential Fixed Investment	408.3	461.8	479.7	505.8	554.7	610.1	659.7	673.8
% Ch	9.1	13.1	3.9	5.4	9.7	10.0	8.1	2.1
Real Personal Income	12,878.9	13,123.5	13,241.5	13,739.2	14,220.2	14,689.6	15,160.1	15,641.6
% Ch	2.7	1.9	0.9	3.8	3.5	3.3	3.2	3.2
Real Per Capita Income (\$/Person)	41,064	41,535	41,601	42,847	44,000	45,085	46,157	47,245
% Ch	2.0	1.1	0.2	3.0	2.7	2.5	2.4	2.4
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.052	1.069	1.084	1.092	1.102	1.119	1.139	1.159
% Ch	2.4	1.5	1.4	0.8	0.9	1.5	1.8	1.7
U.S. Consumer Price Index (1982-84=1.0)	2.276	2.314	2.350	2.367	2.393	2.435	2.489	2.540
% Ch	2.9	1.7	1.6	0.7	1.1	1.7	2.2	2.0
Employment Cost Index (Dec. 2005=1.0)	1.150	1.171	1.193	1.221	1.246	1.278	1.313	1.351
% Ch	1.7	1.8	1.9	2.3	2.1	2.6	2.7	2.9
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	15,867.1	16,373.2	16,984.9	17,672.3	18,417.6	19,259.2	20,161.7	21,035.2
% Ch	4.1	3.2	3.7	4.0	4.2	4.6	4.7	4.3
Personal Income	13,555.6	14,025.1	14,350.8	15,007.9	15,677.1	16,439.1	17,273.0	18,130.6
% Ch	5.2	3.5	2.3	4.6	4.5	4.9	5.1	5.0
Employment (Millions)								
U.S. Civilian Labor Force	154.3	155.3	155.5	156.6	158.5	160.7	162.8	164.5
Total U.S. Employment	141.2	143.3	145.0	147.7	150.3	152.5	154.4	156.0
Unemployment Rate (%)	8.53	7.77	6.76	5.68	5.14	5.09	5.11	5.08
Nonfarm Payroll Employment	133.00	135.18	137.60	140.56	143.27	145.44	147.25	148.57
% Ch	1.6	1.6	1.8	2.1	1.9	1.5	1.2	0.9
Manufacturing	11.83	11.98	12.09	12.28	12.41	12.54	12.65	12.74
% Ch	1.8	1.2	0.9	1.6	1.0	1.0	0.9	0.7
Durable Manufacturing	7.38	7.51	7.60	7.77	7.83	7.93	8.04	8.11
% Ch	3.1	1.7	1.2	2.2	0.8	1.3	1.4	0.9
Nondurable Manufacturing	4.45	4.47	4.49	4.51	4.58	4.60	4.61	4.63
% Ch	-0.2	0.4	0.5	0.6	1.5	0.5	0.0	0.5
Construction	5.60	5.74	5.99	6.28	6.56	7.00	7.36	7.65
% Ch	2.0	2.4	4.4	4.8	4.5	6.7	5.1	3.9
Service-Providing	114.74	116.61	118.65	121.11	123.49	125.10	126.41	127.34
% Ch	1.5	1.6	1.7	2.1	2.0	1.3	1.0	0.7
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	95.0	92.3	101.2	69.2	47.9	52.4	55.6	57.9
Personal Saving/Disposable Income (%)	6.5	6.5	4.8	4.9	5.1	5.7	6.4	7.1
Auto Sales (Millions)	6.6	7.4	7.6	7.6	7.7	8.2	8.4	8.4
% Ch	11.7	11.8	2.2	0.6	0.5	6.3	3.6	-1.1
Housing Starts (Millions)	0.684	0.877	0.953	1.054	1.227	1.405	1.505	1.547
% Ch	20.1	28.1	8.7	10.6	16.3	14.5	7.1	2.8
Federal Budget Surplus (Billions)	-1,159.0	-866.9	-624.1	-612.4	-605.8	-609.7	-646.0	-723.3
Net Exports (Billions)	-591.5	-531.0	-509.3	-532.2	-459.3	-488.5	-544.1	-572.0
3-Month Treasury Bill Rate (%)	0.05	0.08	0.04	0.02	0.37	1.32	2.32	3.00
10-Year Treasury Note Yield (%)	2.08	1.82	2.71	2.23	2.48	2.74	3.00	3.45
Bond Index of 20 G.O. Munis. (%)	3.97	3.75	4.54	3.83	4.11	4.52	4.71	5.00
30-Year Fixed Mortgage Rate (%)	4.01	3.53	4.33	3.92	4.18	4.57	4.89	5.43

Table 1.2

Forecast Analysis

Comparison of Forecasts for 2013-15

U.S.	Average Annual Rate of Growth (Percent) 2015:2-2017:2		Average Rate (Percent) 2013:3 to 2015:2	
	Real GDP	Implicit Price Deflator	3 Month T-Bill Rate	Mortgage Rate
2012				
February	2.9	2.1	0.27	5.17
June	3.0	2.2	0.50	4.97
September	3.0	1.9	0.17	4.45
November	2.9	1.7	0.16	4.16
2013				
March	2.9	1.7	0.12	3.99
June	2.9	1.5	0.08	4.15
September	2.8	1.5	0.09	4.63
November	2.7	1.5	0.07	4.56
2014				
February	3.0	1.3	0.06	4.61
June	2.7	1.6	0.07	4.48
September	2.7	1.4	0.06	4.40
November	2.8	1.3	0.08	4.33
2015				
February	2.9	0.9	0.07	4.13
June	2.6	0.9	0.04	4.12
September	2.6	1.0	0.03	4.12

Table 1.3
Forecast Analysis
 Comparison of Forecasts for 2015-17

U.S.	Average Annual Rate of Growth (Percent) 2015:2-2017:2		Average Rate (Percent) 2015:3 to 2017:2	
	Real GDP	Implicit Price Deflator	3 Month T-Bill Rate	Mortgage Rate
2012				
September	2.9	1.9	2.17	5.92
November	2.9	1.6	2.56	6.08
2013				
March	2.9	1.6	1.71	5.68
June	2.8	1.5	1.98	5.63
September	2.9	1.5	2.13	5.66
November	2.7	1.5	2.12	5.67
2014				
February	2.7	1.3	2.13	5.75
June	2.8	1.4	2.13	5.78
September	2.8	1.5	1.96	5.59
November	2.8	1.6	1.72	5.48
2015				
February	2.8	1.7	1.69	5.19
June	2.8	1.7	1.29	4.73
September	2.7	1.5	0.84	4.38

Table 1.4

Fiscal Years

Forecast Comparison

Forecast 2015 to 2019

	2013	2014	2015	2016	2017	2018	2019
U.S.							
Real GDP							
September Baseline	15430.6	15750.6	16180.5	16583.7	17036.5	17486.9	17921.0
% Ch	1.4	2.1	2.7	2.5	2.7	2.6	2.5
June Baseline	15502.5	15884.6	16306.2	16720.6	17180.7	17635.0	18078.6
% Ch	2.0	2.5	2.7	2.5	2.8	2.6	2.5
Implicit Price Deflator							
September Baseline	1.069	1.084	1.092	1.102	1.119	1.139	1.159
% Ch	1.5	1.4	0.8	0.9	1.5	1.8	1.7
June Baseline	1.067	1.081	1.089	1.102	1.121	1.142	1.162
% Ch	1.4	1.3	0.8	1.1	1.8	1.8	1.7
Unemployment Rate							
September Baseline	7.77	6.76	5.68	5.14	5.09	5.11	5.08
June Baseline	7.77	6.76	5.67	5.12	4.92	4.91	5.01
Mortgage Rate							
September Baseline	3.53	4.33	3.92	4.18	4.57	4.89	5.43
June Baseline	3.53	4.33	3.90	4.33	5.13	5.75	5.76
3 Month T-Bill Rate							
September Baseline	0.08	0.04	0.02	0.37	1.32	2.32	3.00
June Baseline	0.08	0.04	0.03	0.64	1.94	3.43	3.53



Chapter 2: Washington Economy – Current Conditions and Forecast

- **The Washington economy continues to expand at a solid pace.**
- **Employment growth since the June forecast was on target but historical estimates were revised higher.**
- **Washington has been outpacing the nation in GDP and personal income growth.**
- **Washington exports and manufacturing activity have weakened.**
- **The forecast for Washington employment is slightly higher than assumed in June.**
- **The 2015 Washington personal income forecast is also higher than assumed in June but growth in 2016 through 2019 is slower.**
- **We expect the Washington economy to continue to outperform the U.S. economy.**

Current Conditions

The Washington economy is expanding at a solid pace

The Washington economy is expanding at a solid pace. In recent months Washington employment has performed as expected in the June forecast but historical estimates were revised higher. Washington has been outpacing the nation in personal income and GDP growth but Washington exports and manufacturing activity have weakened. As expected, housing construction activity returned to a more sustainable level after a huge spike earlier this year. Seattle area consumer price inflation remains moderate thanks mainly to lower energy costs but shelter costs are rising rapidly.

Employment growth has been very close to the forecast

We have four months of new Washington employment data since the June forecast was released. Total nonfarm payroll employment rose 23,900 (seasonally adjusted) from April through August, 100 more than the 23,800 expected in the June forecast. As is usually the case, most of the jobs created in the last four months were in private, service-providing sectors which added 22,000 jobs. The construction sector added 700 jobs in but the manufacturing sector lost 1,400 jobs of which 700 were

in aerospace. Government payrolls expanded by 2,700 jobs in the last four months.

Historical employment estimates were revised up

We have also incorporated another quarter of benchmark employment data from the Quarterly Census of Employment and Wages (QCEW). The new QCEW data and other revisions raised the estimated level of total employment in April 2015 by 9,500 jobs. As a result of the upward revision to history and slightly stronger-than-expected growth, the total effect is also 9,500 (0.3%) more jobs in August 2015 than expected in the June forecast.

Initial claims are up from earlier this year

Initial claims for unemployment insurance reached new post-recession lows in early 2015 but have moved higher since then. The four-week moving average edged up to 7,794 in the week ending September 19 from 7,704 in the previous week. While slightly higher than earlier this year, claims have fallen more than 53% since the peak and remain lower than before the onset of the recession (see Figure 2.1).

Initial claims have stabilized at a low rate

Figure 2.1: Initial Claims for Unemployment Insurance



Source: WA State Employment Security Department; data through September 19, 2015

Average weekly hours are flat but earnings are up over the year

Recent hours and earnings data for Washington are mixed but show an overall improvement. Private sector average hourly earnings in the twelve months ending in August 2015 were up 3.9% over the previous twelve month period. A year ago the comparable rate of increase was only 2.1%. Average weekly hours were unchanged in the most recent twelve month period. A year ago average weekly hours declined 0.2%. As a result of the improvement in average hourly earnings growth and slight improvement in hours, average weekly earnings growth improved to 4.0% compared to 1.9% a year ago.

Second quarter exports were down 0.4% over the year in spite of an 11.4% increase in transportation equipment exports

Exports are down on strong dollar and weak global growth

(mostly Boeing planes). Exports other than transportation equipment were 17.0% lower than a year ago. The drop likely reflects the negative influence of a stronger dollar and weak growth abroad.

Multi-family housing permits came back to earth in the second quarter of 2015

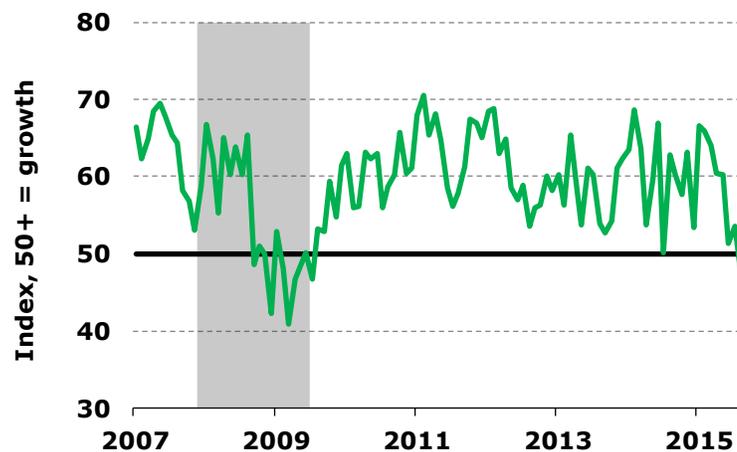
As expected in the June forecast, Washington housing permits declined sharply from an eight-year-high 53,600 units (SAAR) in the first quarter of 2015 to a more sustainable 36,800 units in the second quarter. The June forecast projected 37,400 units in the second quarter. In the June forecast we viewed the first quarter surge in permits with skepticism both because the weather was unseasonably mild and because the strength was in the volatile multi-family segment. This view appears to be validated by the recent data. Single-family permits totaled 18,900 units in the second quarter compared to the forecast of 19,200 units and 17,900 multi-family units were permitted compared to the forecast of 18,200 units. Permits are little changed so far in the third quarter. Permits averaged 37,100 units (SAAR) in July and August consisting of 19,600 single-family units and 17,500 multi-family units.

Seattle-area home prices are up 35.1% since the trough

Seattle home prices have flattened in recent months. According to the S&P/Case-Shiller Home Price Indices, seasonally adjusted Seattle area home prices declined 0.1% in July following a 0.1% increase in June and a 0.1% decline in May. Seattle home prices are still up 7.3% over the year and are 35.1% higher than the November 2011 trough. Seattle area home prices have recovered to where they are just 6.2% below the May 2007 peak.

The ISM-WW index was below 50 in August for the first time since July 2009

Figure 2.2: ISM-WW Index



Source: Institute of Supply Management - Western Washington; data through August, 2015

The Institute of Supply Management - Western Washington Index (ISM-WW) signaled contraction in the manufacturing

Manufacturing activity declined in August

sector in August for the first time since July 2009 (see Figure 2.2). The index declined from 53.6 in July to 48.0 in August (index values above 50 indicate positive growth while values below 50 indicate contractions). The production, orders, and inventory components all worsened in August while the employment and deliveries components were unchanged.

Car and truck sales are still strong

Washington car and truck sales retreated in August from a post-recession high in July. Washington new vehicle registrations declined 4.2% in August to 297,900 (SAAR) following a 4.0% increase in June and a 3.5% increase in July. Car and truck sales are still up 3.3% over the year.

Washington GSP growth ranks eighth in the nation in 2014; personal income growth, third

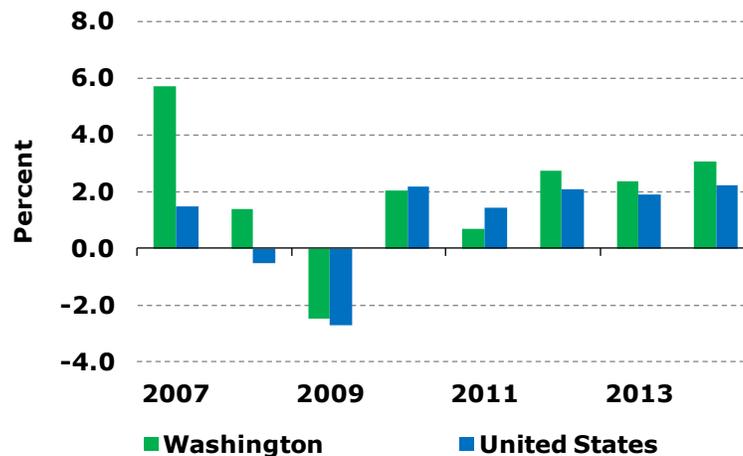
In June the Bureau of Economic Analysis (BEA) released estimates of annual gross domestic product by state through 2014. Washington's real GDP grew 3.0% in 2014 which ranked eighth among the states and District of Columbia and was well above the U.S. rate of 2.2% (see Figure 2.3). In September, the BEA released revised annual state personal income estimates through 2014. Washington personal income grew 5.8% in 2014 which ranked third among the states and District of Columbia and was also well above the U.S. rate of 4.4%.

Second quarter personal income growth was boosted by earnings

The September BEA release also included estimates of quarterly state personal income through the second quarter of 2015. Washington personal income grew at a 6.1% rate (SAAR) in the second quarter which ranked first among the states (including the District of Columbia). The national average personal income growth rate was 3.8%. Washington's higher-than-average income growth in the second quarter was mostly due to strong earnings growth in a wide range of sectors.

Figure 2.3: Gross Domestic Product Growth

Washington GDP is growing faster than the national average



Source: Bureau of Economic Analysis; data through 2014

Seattle shelter costs are rising rapidly

Seattle area consumer price inflation remains tame thanks mainly to falling energy costs. Over the last year, from August 2014 to August 2015, consumer prices in the Seattle area rose 1.8% compared to 0.2% for the U.S. city average. Core prices, which exclude food and energy, were up 2.9% in Seattle compared to 1.8% for the nation. The higher Seattle inflation is largely due to more rapid growth in shelter costs, but other prices are also rising more rapidly here. During the year, shelter costs in Seattle rose 5.4% compared to 3.1% for the nation but even with shelter excluded, Seattle inflation was -0.1% compared to -1.1 % for the nation.

Washington State Forecast

The September Washington forecast reflects a new U.S. forecast

The September Washington State forecast is based on a new national forecast that is very similar to the forecast adopted in June. The new forecast for GDP growth in 2015 is 2.5%, the same rate as predicted in June. Our new forecast calls for real GDP growth of 2.7% in 2016, down slightly from 2.8% expected in June. Growth in 2017 through 2019 is unchanged at 2.7%, 2.6%, and 2.4%. As in June, employment is expected to grow at a 1.4% average annual rate in 2015 through 2019. Real personal income growth averages 3.3% per year in the September forecast which is slightly lower than the 3.4% rate assumed in the June forecast. Personal consumption expenditure inflation averages 1.3% per year, also slightly less than the 1.5% average in the June forecast. These relatively minor revisions in the national forecast feed through to the state economic forecast.

The September Washington forecast is similar to June's

Overall, our September forecast for Washington State is similar to the June forecast. Washington employment is expected to grow 3.0% this year compared to 2.6% expected in the June forecast. The upward revision to growth in 2015 is due to revisions in the historical employment data. The September forecast for average annual employment growth from 2016 through 2019 is 1.5% per year, slightly less than the 1.6% average growth rate in the June forecast. Our September forecast for nominal personal income growth this year of 5.1% is slightly higher than the 4.9% in the June forecast, however, our new forecast for nominal personal income growth from 2016 through 2019 averages 5.3% per year, down slightly from 5.6% in the June forecast. We expect total housing units authorized by building permits to rise 19.7% to 40,600 units in 2015 due to first quarter surge. We expect a 3.7% decline in 2016 to 39,100 followed by growth of 9.1% to 42,600 units in 2017, 3.2% to 44,000 in 2018, and 1.3% to 44,600 in 2019. Thanks to the drop in oil prices compared to last year, we expect the all-items Seattle CPI to rise only 1.3% this year, down from 1.8% in 2014. We expect all-items Seattle area inflation rates of 2.0% in 2016, 2.1% in 2017, 2.2% in 2018, and 2.1% in 2019.

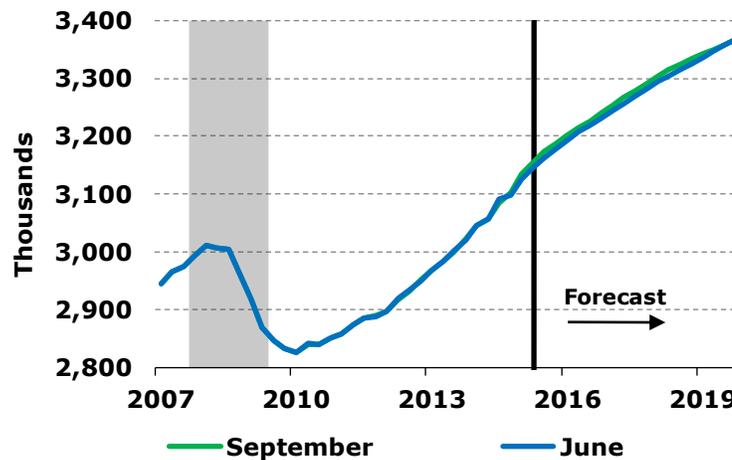
Washington Payroll Employment

Washington employment is expected to grow 3.0% this year, the strongest annual growth since 1998

Our September forecast for 2015 Washington employment is slightly higher than assumed in June due mainly to an upward revision in historical estimates (see Figure 2.4). We now expect Washington employment to grow 3.0% this year compared to the 2.6% growth rate we assumed in the June forecast. If so, growth in 2015 will be the strongest since 1998. As in the June forecast we expect growth to continue but gradually slow down as the recovery matures. We expect employment to grow 1.8% in 2016, 1.6% in 2017, 1.4% in 2018, and 1.1% in 2019.

Washington employment is slightly higher than assumed in June

Figure 2.4: Nonfarm Payroll Employment



Source: Bureau of Labor Statistics, ERFC September 2015 Forecast; historical data through 2015Q2

Aerospace employment is slowly declining

As in June, we assume a gradual decline in aerospace employment throughout the forecast. We continue to believe that this downturn will be relatively mild due to the large and increasing backlog of orders. The current reductions are due to improvements in productivity and restructuring rather than reductions in production. On an annual average basis, we expect aerospace employment to decline 2.0% in 2015, 2.9% in 2016, 2.5% in 2017, 2.2% in 2018, and 2.0% in 2019.

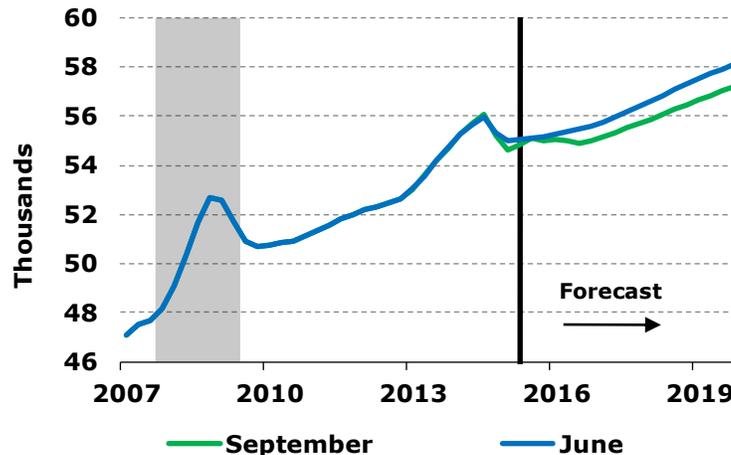
More software layoffs are coming but they should be minimal

The Microsoft layoffs first announced in July 2014 were completed by the end of December 2014. The June forecast had assumed that there would be no further major layoffs in the near future. However, in July 2015 Microsoft announced further cuts of up to 7,800 company-wide, mostly related to its phone business. This is much smaller than last year's announcement of 18,000 company-wide. As was the case last year, we expect most of the cuts will be outside of Washington State. As a result of the latest announcement, we expect software employment to decline by 200 between the third quarter of this year and the third quarter of 2016. In June we expected an increase of 400 jobs (see Figure

2.5). Software employment rose 3.2% in 2014 which was the highest growth rate since 2008. We expect a 1.2% decline in 2015 mainly as a result of the 2014 layoffs. Growth is expected to remain barely positive in 2016 at 0.1% before recovering to 0.8% in 2017, 1.3% in 2018, and 1.4% in 2019.

Figure 2.5: Software Employment

The software employment forecast is lower than in June



Source: Bureau of Labor Statistics, ERFC September 2015 Forecast; historical data through 2015Q2

Construction employment growth has slowed

Construction employment grew 6.9% in 2014, down slightly from 7.1% in 2013 but still very strong. Construction employment growth was very strong from June 2014 through January 2015 but has slowed down sharply since January. The result of this monthly pattern is that annual average employment growth should still be very strong in 2015 but relatively weak in 2016. We expect construction employment growth rates of 9.5% in 2015 but only 2.1% in 2016. We expect growth to pick up to 4.1% in 2017, 4.2% in 2018, and 3.0% in 2019. Even with these impressive growth rates, construction employment will still be 8,800 below its previous peak at the end of 2019.

Financial activities employment will decline in 2016-19

Credit intermediation has not recovered at all since the recession but other financial sectors have improved, particularly insurance carriers and related activities. On a calendar year basis, financial activities employment grew 0.2% in 2011, 2.4% in 2012, 3.9% in 2013, and 0.6% in 2014. We expect growth of 2.7% this year based on monthly data through August. Going forward, we expect a declining trend in financial activities employment due to productivity growth and outsourcing. Employment will decline 0.6% in 2016, 1.5% in 2017, 1.8% in 2018, and 1.2% in 2019.

Retail trade employment is benefitting from strong growth in electronic shopping

Washington retail trade employment growth has been much stronger than the national average during the recovery thanks to our outsized and rapidly growing electronic shopping sector. Retail trade employment grew 1.5% in 2011, 2.1% in 2012, and 3.4% in 2013 and 2014 following declines of 0.2%, 5.5%, and

0.4% in 2008, 2009, and 2010. Growth this year is also expected to be strong, at 4.7%. The forecast assumes weaker growth in the next four years as the recovery matures. We expect growth rates of 1.3% and 0.1%, and 0.2% in 2016, 2017, and 2018 with employment declining 0.2% in 2019.

Employment services and IT are driving professional and business services growth

As is typical during recoveries, professional and business services is one of Washington's fastest growing sectors. During a recovery, growth in this sector is boosted by gains in employment services, mainly temporary help services. As businesses gauge whether the increase in demand will continue, they typically hire temporary staff before they hire permanent employees. Employment services employment has grown 50% since the recession ended. IT employment growth has also been very strong during the recovery. Computer systems design and related services employment grew 56% since the end of the recession. We expect growth to remain very strong in this sector in 2015 through 2017 with growth rates of 5.3% in 2015 and 2016 and 4.3% in 2017. We expect professional and business services employment growth to slow to 2.8% and 1.7% in 2018 and 2019.

State and local government employment will grow moderately

State and local government employment was a drag on the overall jobs recovery long after most other sectors turned around. State and local government employment peaked in the fourth quarter of 2008 and declined through the first quarter of 2012. Since then, employment levels have risen steadily but slowly. State and local government employment finally passed its pre-recession peak in the third quarter of 2014. On an annual average basis, state and local government employment rose 0.8% in calendar 2013 and 1.7% in 2014 following three years of decline. We expect moderate employment growth in the next five years with growth rates of 1.7% in 2015, 1.2% in 2016, 1.6% in 2017, 1.7% in 2018, and 1.4% in 2019.

Washington Personal Income

Washington personal income is very close to the June assumption

In June, the Bureau of Economic Analysis (BEA) released estimates for state personal income through the first quarter of 2015. We have incorporated the new BEA estimates as well as additional Washington Quarterly Census of Employment and Wages and other wage data also through the first quarter. Our current estimate of Washington personal income in the first quarter of 2015 is \$362.7 billion which is \$0.2 billion (0.1%) lower than assumed in the June forecast.

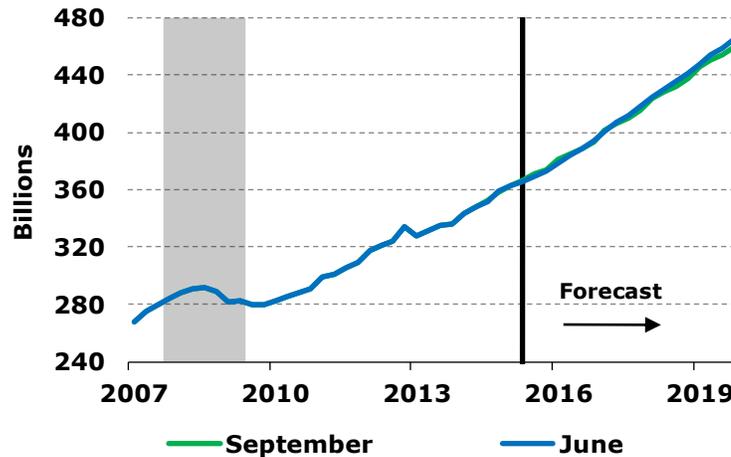
Near-term income growth is higher than assumed in June

Our September forecast for nominal personal income growth this year of 5.1% is slightly higher than the 4.9% in the June forecast, however, our new forecast for nominal personal income growth from 2016 through 2019 averages 5.3% per year, down slightly from 5.6% in the June forecast (see Figure 2.6). The upward revision to growth this year is due to much stronger

growth of property income (dividends, interest, and rent) partially offset by weaker than previously expected wage growth. The lower growth from 2016 through 2019 reflects both weaker wage growth and weaker property income growth than assumed in June.

Personal income is initially higher than assumed in June but grows less through 2019

Figure 2.6: Washington Personal Income



Source: Bureau of Economic Analysis, ERFC June 2015 Forecast; historical data through 2015Q2

Washington Building Permits

Single-family construction will continue to strengthen

The housing recovery to date has been mostly in the multi-family segment. Multi-family housing recovered from a low of only 4,000 units in 2009 to 16,000 in 2014. We believe multi-family permits will peak at 21,500 in 2015, driven by the spike that occurred in the first quarter, then decline to 17,000 in 2016. We do not expect much change from this already high level during the remainder of the forecast. The recovery in single-family construction has been much less robust, from 13,000 units in 2009 to 17,900 in 2014. We expect single-family construction to continue to strengthen with the number of units rising from 19,000 this year to 27,800 in 2019. We expect total housing units authorized by building permits to rise 19.7% to 40,600 units in 2015 due to first quarter surge. We expect a 3.7% decline in 2016 to 39,100 followed by growth of 9.1% to 42,600 units in 2017, 3.2% to 44,000 in 2018, and 1.3% to 44,600 in 2019.

Seattle Consumer Price Index

Energy costs temporarily reduce headline inflation

Thanks to the drop in oil prices compared to last year, we expect the all-items Seattle CPI to rise only 1.3% this year, down from 1.8% in 2014. Nationally we expect only 0.2% headline inflation in 2015. The main reason Seattle inflation is so much higher than

the national average in 2015 is much higher-than-average shelter cost inflation in Seattle. While the drop in energy costs reduces inflation in 2015 and 2016, rising energy costs add to inflation in 2017 through 2019. We expect all-items Seattle area inflation rates of 2.0% in 2016, 2.1% in 2017, 2.2% in 2018, and 2.1% in 2019.

Rents are driving Seattle core inflation higher

Core inflation (excluding food and energy) in Seattle increased to 2.0% in 2014 from 1.5% in 2013 while national core inflation slowed from 1.8% to 1.7%. The reason for the divergence is shelter costs which were rising much faster in Seattle. Recent data suggest that while shelter costs continue to rise much faster in Seattle than in the U.S. city average, other prices are also rising faster. We expect Seattle core inflation to rise to 2.6% in 2015 compared to 1.9% for the nation. We expect core Seattle CPI inflation to decline to 2.2% in 2016 and 2.0% per year in 2017, 2018, and 2019.

Table 2.1 provides a fiscal year summary of the state economic indicators. For calendar year tables, see the appendix.

Alternative Scenarios

Alternate forecasts are prepared in accordance with state law

In accordance with state law, the Washington State Economic and Revenue Forecast Council adopted a forecast based on optimistic assumptions and a forecast based on pessimistic assumptions.

Optimistic

The optimistic scenario features stronger foreign growth, an increase in household formation, and higher productivity growth

With the help of the European Central Bank's quantitative easing and significant structural reforms, foreign growth strengthens. With higher global growth and concern that U.S. monetary policy normalization could slow the economy, the dollar initially weakens. But, as the U.S. economy picks up steam, the dollar strengthens again. As a result of high household formation, housing starts continue to rise rapidly, reaching 1.3 million units (annual rate) by the end of 2015. As credit conditions ease, nonresidential fixed investment rises 4.0% in 2015 and 8.3% in 2016. Equity markets recover faster in the optimistic scenario and both consumer and business confidence rise sharply. The labor market continues to heat up, and by the second half of 2016 the economy is adding more than 300,000 jobs per month. The unemployment rate drops below 5% by 2016 and reaches 4% in late 2017. With the help of sustained improvement in the labor market as productivity accelerates, the Fed decides to increase the pace of rate increases. The Fed's tightening helps to keep inflation benign.

In addition to reflecting the impact of the stronger U.S. forecast on the state economy, the optimistic Washington forecast

The optimistic scenario also assumes a much stronger Washington economy

assumes that aerospace employment falls much less than in the baseline through mid-2016 and rises in 2017 and 2018 rather than continuing to fall as in the baseline. Software employment growth is also much stronger than in the baseline forecast. In the optimistic scenario, the stronger regional economy drives Seattle consumer price inflation above the baseline. Washington average wage growth is higher in the optimistic scenario than in the baseline. The strong local economy also drives population growth higher. The recovery in construction employment is much stronger than in the baseline forecast with employment in the sector exceeding the previous peak in the first quarter of 2018. By the end of 2019, Washington nonfarm payroll employment is higher by 165,500 jobs than in the baseline forecast and Washington personal income is \$46.0 billion higher.

Pessimistic

Global growth slows in the pessimistic scenario

In the pessimistic scenario, the recent panic in global equity markets triggers a sharp downturn in the U.S. stock market comparable in magnitude to the "dot-com" bust of 2000-01. Consumer confidence declines in reaction and remains pessimistic. Meanwhile, volatility in international markets causes risk-averse investors to seek security in U.S. assets, pushing up the value of the dollar, and in turn decreasing the competitiveness of U.S. exports. Young people, burdened by debt and wary of an economy that never seems to recover, choose not to move out and form new single-family households. New single-family home sales stagnate in 2016, increasing to just 0.50 million. The economy stagnates and real GDP increases just 0.3% (annualized) in the first quarter of 2016. Cautious employers scale back on hiring. Nonfarm payroll employment rises by only 50,000 per month on average in 2016. Unemployment rates over 6% become a "new normal." There is no help to be had from fiscal policy, as the final quarters of the Obama administration and the successive administration are marked by political paralysis and austerity remains the congressional watchword.

This scenario also assumes a weaker local economy

In addition to reflecting the impact of the weaker U.S. forecast on the state economy, aerospace employment declines much more rapidly in 2013 through 2019 than assumed in the baseline forecast. Software employment continues to decline after the scheduled layoffs rather than turning positive as in the baseline forecast. Population growth is also weaker than in the baseline forecast as migration into Washington drops. Construction employment drifts lower in 2016 through 2019 in the pessimistic alternative rather than rising as in the baseline. The Seattle CPI is lower than in the baseline forecast, as are Washington wage rates, further depressing personal income. By the end of 2019, Washington nonfarm payroll employment is 167,800 lower than in the baseline forecast and Washington personal income is \$41.1 billion lower.

Table 2.2 compares the optimistic and pessimistic forecasts with the baseline forecast.

Governor’s Council of Economic Advisors (GCEA)

In the GCEA scenario, the U.S. and state forecasts were adjusted to match the average view of the Council members.

The Governor’s Council members expect weaker output growth but higher inflation

At the national level, the GCEA outlook for real GDP growth is slightly lower than the baseline forecast in each year. Real consumer spending growth is also lower in each year of the forecast in the Governor’s Council scenario. However, the Governor’s Council members expect higher inflation than predicted in the baseline forecast. As a result of the higher inflation assumption, nominal consumption growth in the Governor’s Council scenario is very close to the baseline forecast. The GCEA oil price forecast is slightly lower than the baseline in each year. The Council members’ mortgage rate forecast is higher than the baseline forecast except in 2019 when it is slightly lower.

The GCEA members expect slightly weaker Washington income growth

The GCEA scenario for Washington is also very similar to the baseline forecast. Their real personal income growth forecast averages 3.6% per year in 2015 through 2019 compared to the baseline forecast of 3.8% but, because they expect higher inflation, their annual average nominal personal income growth forecast is the same (5.2%). At an average rate of 1.8% per year, the Council members’ forecast for total employment growth over the five-year period is also the same as the baseline forecast. The GCEA forecast for construction employment growth is also the same as the baseline over the five-year period at an average rate of 4.6% per year but their manufacturing forecast is slightly stronger at an average rate of 0.5% per year compared to 0.2% in the baseline. The Council members’ housing permit forecast is slightly lower, averaging 41,900 units per year through 2019 compared to 42,200 in the baseline forecast. At the end of 2019, the GCEA forecast for Washington nonfarm payroll employment is 9,700 higher than in the baseline forecast but Washington personal income is \$2.1 billion lower.

Table 2.3 compares the GCEA forecast with the baseline forecast.

Table 2.1
Washington Economic Forecast Summary
 Forecast 2016 to 2019

Fiscal Years

	2012	2013	2014	2015	2016	2017	2018	2019
Real Income (Billions of Chained 2009 Dollars)								
Real Personal Income	297.972	308.267	314.404	329.722	342.600	354.951	367.904	381.079
% Ch	3.8	3.5	2.0	4.9	3.9	3.6	3.6	3.6
Real Wage and Salary Disb.	151.422	156.491	161.741	170.453	176.530	182.775	188.584	194.968
% Ch	2.7	3.3	3.4	5.4	3.6	3.5	3.2	3.4
Real Nonwage Income	146.550	151.776	152.662	159.269	166.071	172.176	179.320	186.111
% Ch	4.9	3.6	0.6	4.3	4.3	3.7	4.1	3.8
Real Per Capita Income (\$/Person)	43,381	44,389	44,731	46,304	47,457	48,510	49,646	50,788
% Ch	2.6	2.3	0.8	3.5	2.5	2.2	2.3	2.3
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.052	1.069	1.084	1.092	1.102	1.119	1.139	1.159
% Ch	2.4	1.5	1.4	0.8	0.9	1.5	1.8	1.7
Seattle Cons. Price Index (1982-84=1.0)	2.360	2.404	2.437	2.473	2.520	2.569	2.626	2.682
% Ch	3.1	1.8	1.4	1.5	1.9	1.9	2.2	2.1
Average Nonfarm Annual Wage	52,724	54,133	55,506	57,438	58,675	60,708	62,820	65,303
% Ch	3.7	2.7	2.5	3.5	2.2	3.5	3.5	4.0
Avg. Hourly Earnings-Mfg. (\$/Hour)	24.04	24.19	24.75	25.28	25.89	26.47	27.09	27.78
% Ch	1.2	0.6	2.3	2.1	2.4	2.2	2.4	2.5
Current Dollar Income (Billions of Dollars)								
Personal Income	313.633	329.448	340.738	360.156	377.700	397.231	419.187	441.726
% Ch	6.3	5.0	3.4	5.7	4.9	5.2	5.5	5.4
Disposable Personal Income	279.454	291.842	300.022	315.408	329.902	347.017	366.640	386.977
% Ch	5.8	4.4	2.8	5.1	4.6	5.2	5.7	5.5
Per Capita Income (\$/Person)	45,660	47,438	48,477	50,578	52,318	54,287	56,565	58,869
% Ch	5.1	3.9	2.2	4.3	3.4	3.8	4.2	4.1
Employment (Thousands)								
Washington Civilian Labor Force	3,458.9	3,456.9	3,463.3	3,525.7	3,569.2	3,635.3	3,698.6	3,756.5
Total Washington Employment	3,160.2	3,201.0	3,237.7	3,313.7	3,382.3	3,444.9	3,504.0	3,560.1
Unemployment Rate (%)	8.63	7.40	6.52	6.02	5.24	5.24	5.26	5.23
Nonfarm Payroll Employment	2,896.4	2,957.9	3,030.5	3,118.8	3,194.2	3,246.7	3,297.7	3,338.2
% Ch	1.4	2.1	2.5	2.9	2.4	1.6	1.6	1.2
Manufacturing	274.7	284.9	287.6	288.6	287.1	288.3	289.5	291.0
% Ch	4.8	3.7	0.9	0.4	-0.5	0.4	0.4	0.5
Durable Manufacturing	199.1	208.6	209.4	209.4	206.8	207.0	207.8	208.6
% Ch	6.2	4.7	0.4	0.0	-1.2	0.1	0.4	0.4
Aerospace	90.8	96.4	94.7	93.3	90.7	88.3	86.1	84.4
% Ch	10.0	6.2	-1.8	-1.4	-2.9	-2.6	-2.4	-2.0
Nondurable Manufacturing	75.6	76.3	78.1	79.2	80.3	81.2	81.6	82.4
% Ch	1.5	1.0	2.4	1.3	1.4	1.2	0.5	1.0
Construction	136.6	144.0	153.8	168.0	176.0	181.3	189.8	195.9
% Ch	-1.1	5.4	6.8	9.2	4.8	3.0	4.7	3.2
Service-Providing	2,479.1	2,522.9	2,583.0	2,656.0	2,724.8	2,771.0	2,812.0	2,844.7
% Ch	1.2	1.8	2.4	2.8	2.6	1.7	1.5	1.2
Software Publishers	52.1	52.9	55.0	55.2	55.0	55.1	55.8	56.6
% Ch	1.7	1.6	3.8	0.5	-0.3	0.1	1.2	1.4
Nonfarm Payroll Employment, EOP*	2,917.6	2,982.7	3,055.7	3,155.3	3,213.7	3,267.5	3,315.2	3,351.0
% Ch*	1.6	2.2	2.4	3.3	1.9	1.7	1.5	1.1
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	23.887	31.402	33.057	39.788	36.921	41.235	43.454	44.305
% Ch	15.5	31.5	5.3	20.4	-7.2	11.7	5.4	2.0
Single-Family	14.152	18.552	17.398	18.593	20.150	24.297	26.881	27.590
% Ch	4.9	31.1	-6.2	6.9	8.4	20.6	10.6	2.6
Multi-Family	9.736	12.850	15.659	21.195	16.770	16.938	16.573	16.715
% Ch	35.2	32.0	21.9	35.4	-20.9	1.0	-2.2	0.9
30-Year Fixed Mortgage Rate (%)	4.01	3.53	4.33	3.92	4.18	4.57	4.89	5.43

*End of Period, for use in the Budget Stabilization Account calculation

Table 2.2
Comparison of Alternative Forecasts

Fiscal Years

	2014	2015	2016	2017	2018	2019
U.S.						
Real GDP, Percent Change						
Optimistic	2.1	2.7	3.2	4.2	3.4	2.9
Baseline	2.1	2.7	2.5	2.7	2.6	2.5
Pessimistic	2.1	2.7	1.6	1.5	2.2	1.8
Implicit Price Deflator, Percent Change						
Optimistic	1.4	0.8	1.2	1.9	1.5	1.7
Baseline	1.4	0.8	0.9	1.5	1.8	1.7
Pessimistic	1.4	0.8	0.4	1.2	2.2	2.5
Mortgage Rate, Percent						
Optimistic	4.33	3.92	4.46	5.58	6.21	6.49
Baseline	4.33	3.92	4.18	4.57	4.89	5.43
Pessimistic	4.33	3.92	3.92	3.84	3.94	5.28
3 Month T-Bill Rate, Percent						
Optimistic	0.04	0.02	0.81	2.42	3.42	3.83
Baseline	0.04	0.02	0.37	1.32	2.32	3.00
Pessimistic	0.04	0.02	-0.04	-0.01	0.23	1.81
Washington						
Real Personal Income, Percent Change						
Optimistic	2.0	4.9	5.7	5.9	6.5	5.3
Baseline	2.0	4.9	3.9	3.6	3.6	3.6
Pessimistic	2.0	4.9	2.1	0.8	0.8	1.3
Personal Income, Percent Change						
Optimistic	3.4	5.7	6.9	7.9	8.2	7.1
Baseline	3.4	5.7	4.9	5.2	5.5	5.4
Pessimistic	3.4	5.7	2.5	2.0	3.0	3.8
Employment, Percent Change						
Optimistic	2.5	2.9	3.0	3.0	2.9	2.2
Baseline	2.5	2.9	2.4	1.6	1.6	1.2
Pessimistic	2.5	2.9	1.7	0.3	0.4	0.2
Housing Permits, Thousands of Authorized Units						
Optimistic	33.1	39.8	39.2	44.9	49.0	51.2
Baseline	33.1	39.8	36.9	41.2	43.5	44.3
Pessimistic	33.1	39.8	35.2	36.6	36.9	36.0

Table 2.3

Calendar Years

Governor's Council of Economic Advisor's Forecast

	2015	2016	2017	2018	2019
U.S.					
Real GDP					
<i>Growth</i>					
ERFC	2.5	2.7	2.7	2.6	2.4
GCEA Average	2.4	2.6	2.5	2.3	2.1
Real Consumption					
<i>Growth</i>					
ERFC	3.0	2.9	2.7	2.5	2.5
GCEA Average	2.9	2.6	2.5	2.2	2.1
Implicit Price Deflator, PCE					
<i>Growth</i>					
ERFC	0.4	1.4	1.7	1.8	1.7
GCEA Average	0.6	1.6	1.7	1.7	1.8
Mortgage Rate					
<i>Percent</i>					
ERFC	3.9	4.4	4.7	5.2	5.5
GCEA Average	4.1	4.7	5.2	5.5	5.4
Oil Price (Brent)					
<i>Dollars per barrel</i>					
ERFC	54.9	55.0	59.5	62.3	63.9
GCEA Average	50.0	52.3	55.5	58.4	60.3
Washington State					
Real Personal Income					
<i>Growth</i>					
ERFC	4.7	3.6	3.7	3.6	3.4
GCEA Average	4.6	3.7	3.5	3.3	3.0
Wage and Salary Employment					
<i>Growth</i>					
ERFC	3.0	1.8	1.6	1.4	1.1
GCEA Average	2.9	2.0	1.7	1.4	1.2
Manufacturing Employment					
<i>Growth</i>					
ERFC	-0.1	-0.1	0.4	0.5	0.4
GCEA Average	0.5	0.5	0.5	0.4	0.4
Construction Employment					
<i>Growth</i>					
ERFC	9.5	2.1	4.1	4.2	3.0
GCEA Average	9.4	3.7	4.0	3.5	2.2
Housing Permits					
<i>Thousands of authorized units</i>					
ERFC	40.6	39.1	42.6	44.0	44.6
GCEA Average	39.3	40.3	43.1	43.5	43.4
Washington Average Annual Wage					
<i>Growth</i>					
ERFC	2.5	3.0	3.5	3.7	4.1
GCEA Average	2.5	3.0	3.1	3.1	3.1

Table 2.4

Forecast Analysis

Comparison of Forecasts for 2013-15

Washington	Average Annual Rate of Growth (Percent) 2013:2-2015:2			Average Annual Rate (Thousands) 2015:3 to 2017:2
	Employment	Personal Income	Real Personal Income	Housing Units Authorized
2012				
February	1.8	5.6	3.4	32.1
June	1.8	5.5	3.3	30.9
September	2.1	5.6	3.7	31.8
November	2.1	5.3	3.6	32.2
2013				
March	1.9	5.4	3.6	35.1
June	1.8	5.2	3.6	36.3
September	1.8	5.2	3.7	34.5
November	1.8	5.1	3.6	33.0
2014				
February	2.1	4.9	3.6	33.5
June	2.2	4.8	3.2	33.9
September	2.4	4.8	3.3	34.1
November	2.6	4.6	3.3	33.9
2015				
February	2.8	4.6	3.7	33.6
June	2.7	5.0	4.0	36.2
September	2.9	5.3	4.2	36.4

Table 2.5

Forecast Analysis

Comparison of Forecasts for 2015-17

Washington	Average Annual Rate of Growth (Percent) 2015:2-2017:2			Average Annual Rate (Thousands) 2015:3 to 2017:2
	Employment	Personal Income	Real Personal Income	Housing Units Authorized
2012				
September	1.7	5.1	3.1	38.5
November	1.7	4.9	3.2	38.4
2013				
March	1.7	5.1	3.5	41.6
June	1.7	5.0	3.5	42.2
September	1.6	5.1	3.5	40.6
November	1.7	5.1	3.6	40.6
2014				
February	1.8	5.2	3.9	40.8
June	1.7	5.7	4.3	40.5
September	1.7	5.9	4.3	40.4
November	1.8	6.1	4.4	38.8
2015				
February	2.0	6.1	4.2	38.8
June	1.8	5.5	3.7	40.2
September	1.8	5.2	3.6	39.1

Table 2.6
Forecast Comparison
 Forecast 2015 to 2019

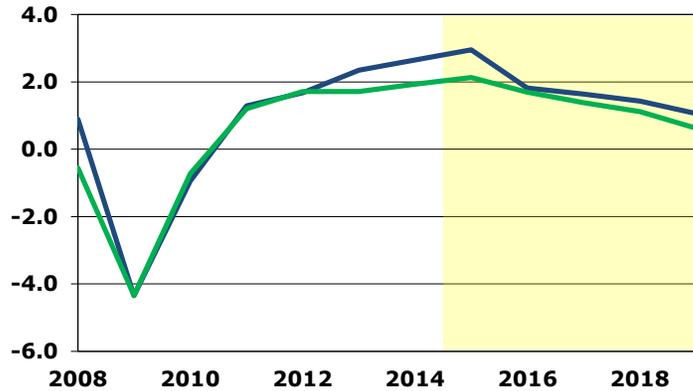
Fiscal Years

	2013	2014	2015	2016	2017	2018	2019
Washington							
Real Personal Income							
September Baseline	308.267	314.404	329.722	342.600	354.951	367.904	381.079
% Ch	3.5	2.0	4.9	3.9	3.6	3.6	3.6
June Baseline	308.689	315.248	330.309	341.592	354.435	368.950	382.859
% Ch	3.6	2.1	4.8	3.4	3.8	4.1	3.8
Personal Income							
September Baseline	329.448	340.738	360.156	377.700	397.231	419.187	441.726
% Ch	5.0	3.4	5.7	4.9	5.2	5.5	5.4
June Baseline	329.448	340.671	359.755	376.285	397.514	421.217	444.716
% Ch	5.0	3.4	5.6	4.6	5.6	6.0	5.6
Employment							
September Baseline	2957.9	3030.5	3118.8	3194.2	3246.7	3297.7	3338.2
% Ch	2.1	2.5	2.9	2.4	1.6	1.6	1.2
June Baseline	2957.9	3030.6	3114.5	3184.9	3237.8	3287.2	3331.4
% Ch	2.1	2.5	2.8	2.3	1.7	1.5	1.3
Housing Permits							
September Baseline	31.402	33.057	39.788	36.921	41.235	43.454	44.305
% Ch	31.5	5.3	20.4	-7.2	11.7	5.4	2.0
June Baseline	31.402	32.772	39.648	38.429	42.027	43.818	44.619
% Ch	31.5	4.4	21.0	-3.1	9.4	4.3	1.8

Figure 2.7: Comparison of Washington and U.S. Economic Forecasts
(Percent change)

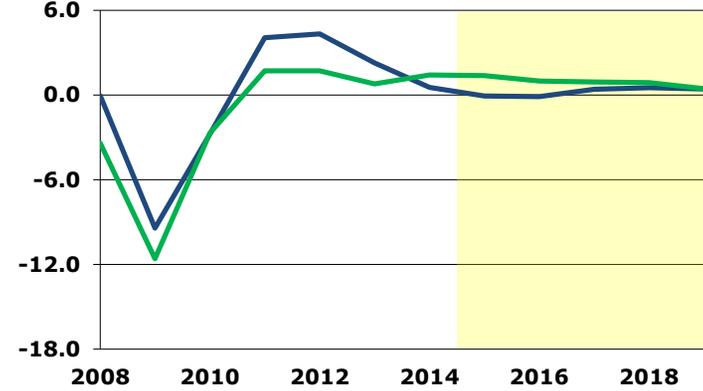
Forecast

Total nonfarm payroll employment



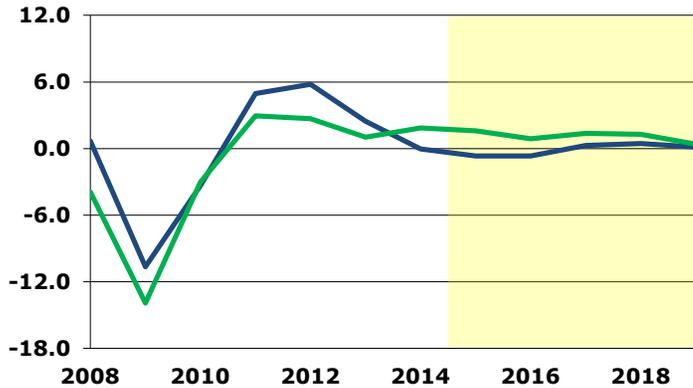
Source: WA State Employment Security Dept. 2014, ERFC 2019

Manufacturing employment



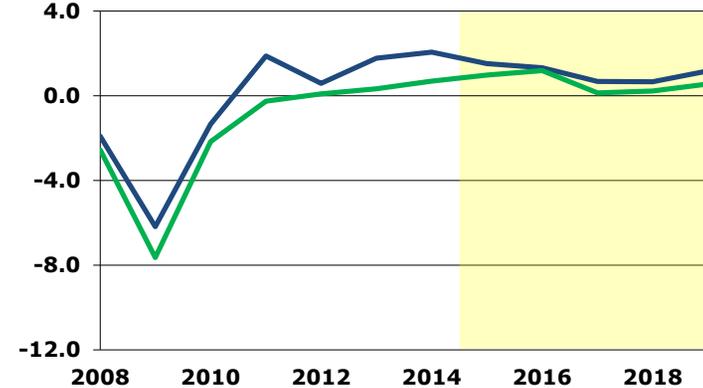
Source: WA State Employment Security Dept. 2014, ERFC 2019

Durable manufacturing employment



Source: WA State Employment Security Dept. 2014, ERFC 2019

Nondurable manufacturing employment



Source: WA State Employment Security Dept. 2014, ERFC 2019

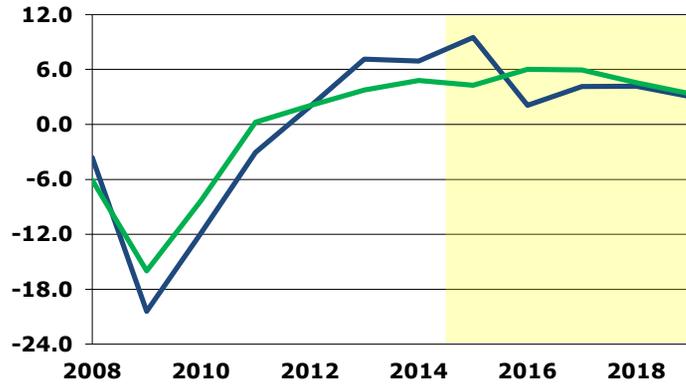
Washington

U.S.

Figure 2.7: Comparison of Washington and U.S. Economic Forecasts (continued)
 (Percent change)

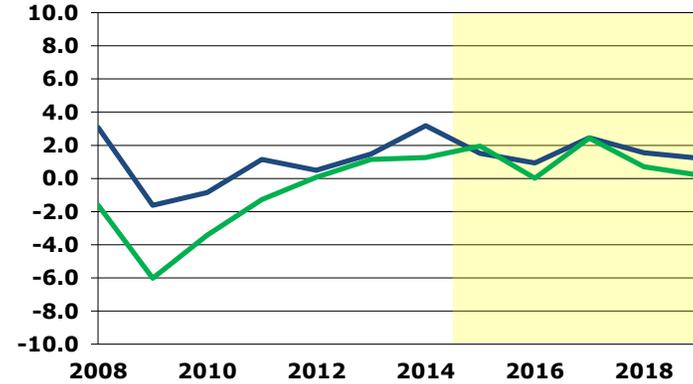
Forecast

Construction employment



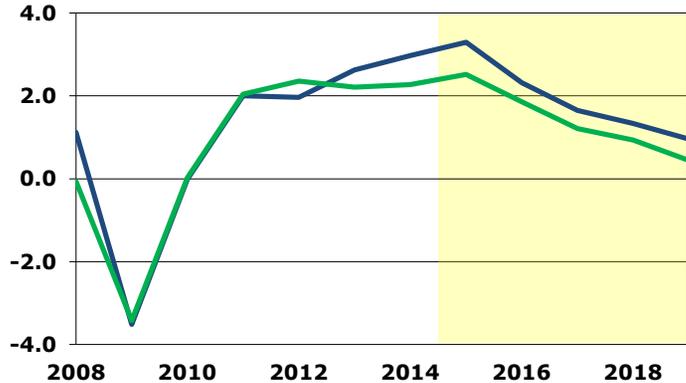
Source: WA State Employment Security Dept. 2014, ERFC 2019

Information employment



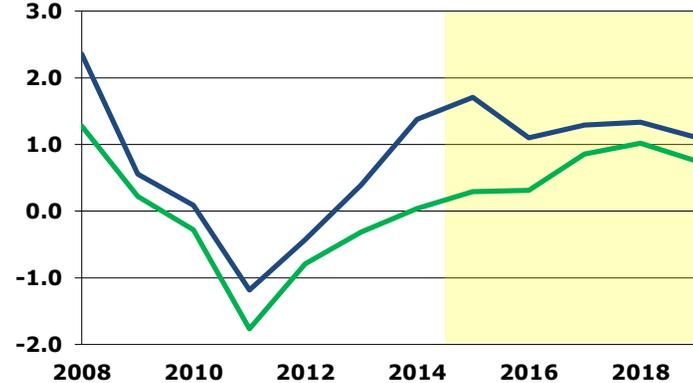
Source: WA State Employment Security Dept. 2014, ERFC 2019

Other private employment



Source: WA State Employment Security Dept. 2014, ERFC 2019

Government employment



Source: WA State Employment Security Dept. 2014, ERFC 2019

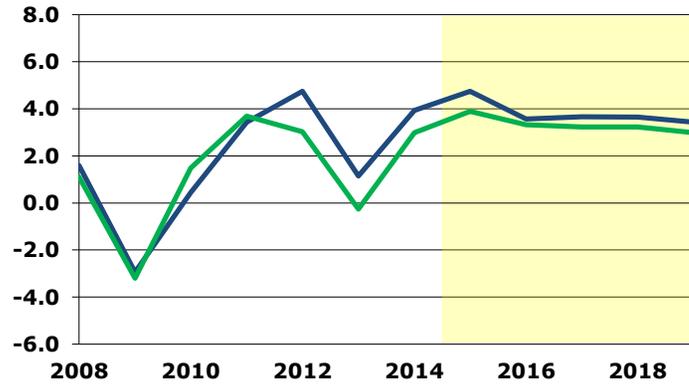
Washington

U.S.

Figure 2.7: Comparison of Washington and U.S. Economic Forecasts (continued)
 (Percent change)

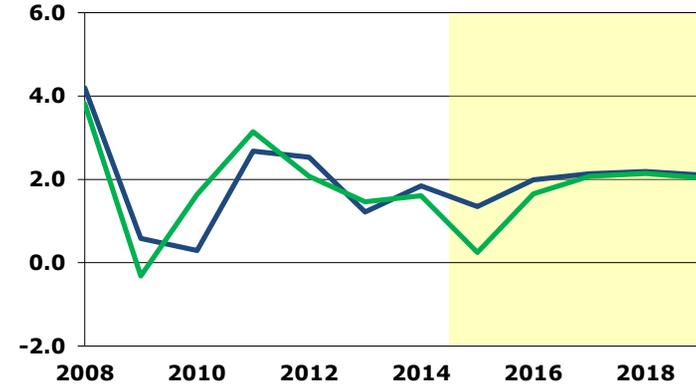
Forecast

Real personal income



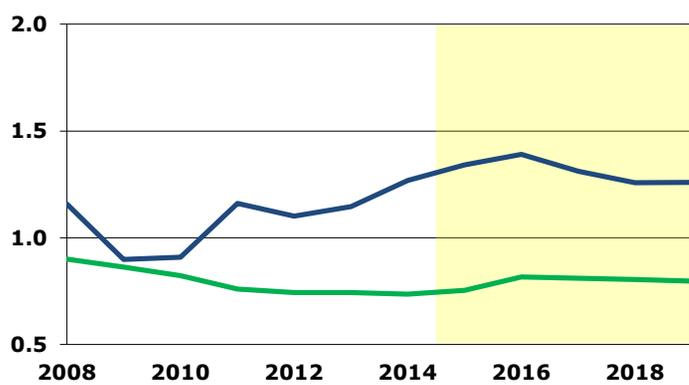
Source: Bureau of Economic Analysis 2013, ERFC 2019

Consumer price indices



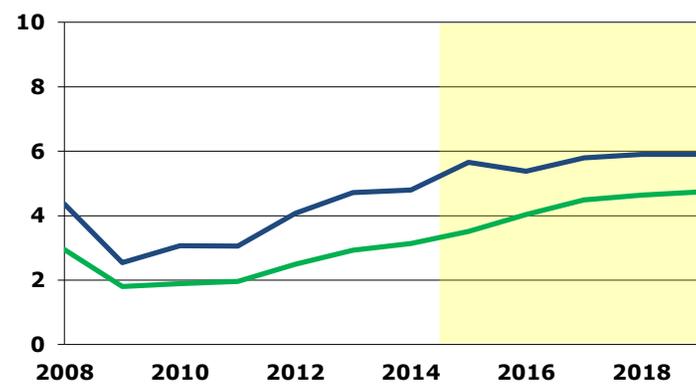
Source: Bureau of Labor Statistics 2014, ERFC 2019

Population



Source: Office of Financial Management/Census Bureau 2014, ERFC 2019

New Housing Units Per 1,000 population (level)



Source: Census Bureau 2014, ERFC 2019

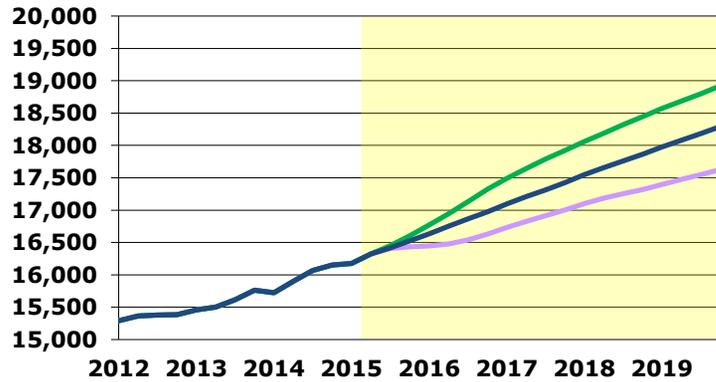
Washington

U.S.

Figure 2.8: Comparison of Alternative U.S. Economic Forecasts

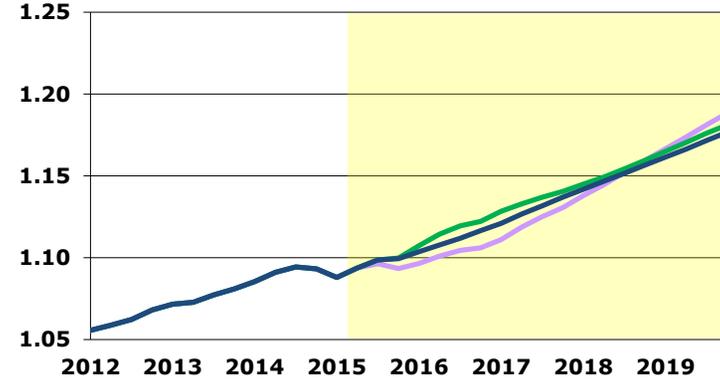
Forecast

Real GDP, billions of chained 2009 dollars



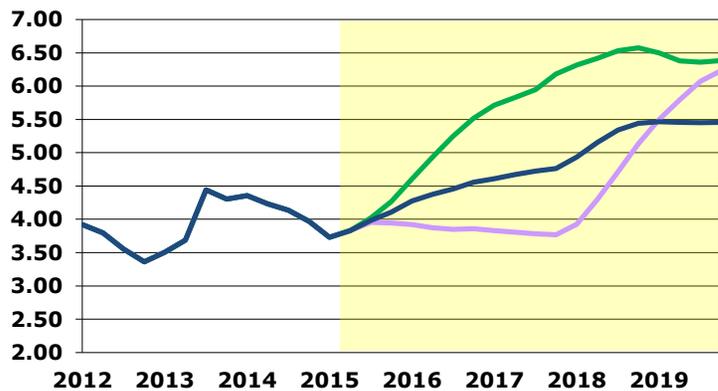
Source: Bureau of Economic Analysis 2015 Q1, ERFC 2019

Implicit price deflator, index 2009 = 1.0



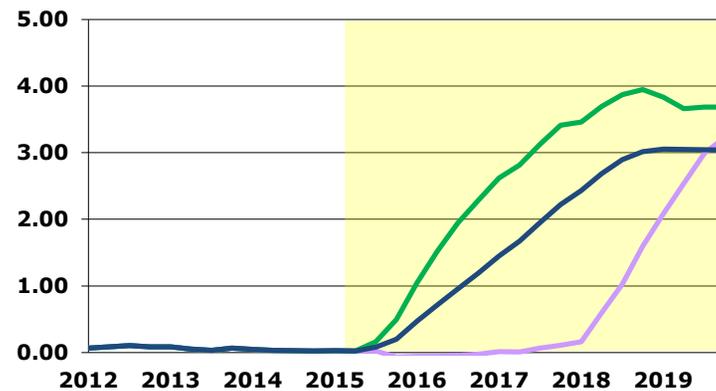
Source: Bureau of Economic Analysis 2015 Q1, ERFC 2019

Mortgage rate, percent



Source: Freddie Mac 2015 Q1, ERFC 2019

Three month T-bill rate, percent



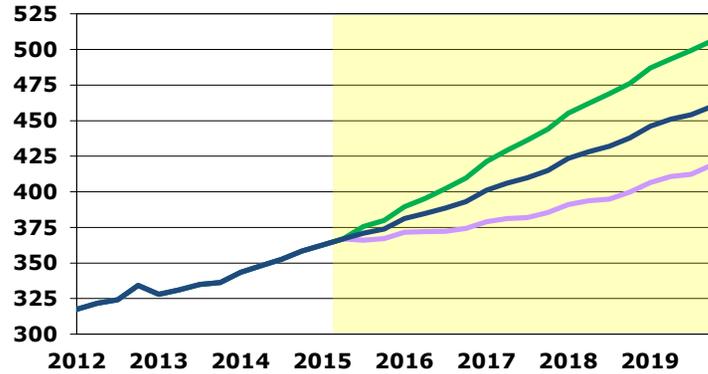
Source: Federal Reserve Board 2015 Q1, ERFC 2019

■ Baseline ■ Optimistic ■ Pessimistic

Figure 2.9: Comparison of Alternative Washington Economic Forecasts

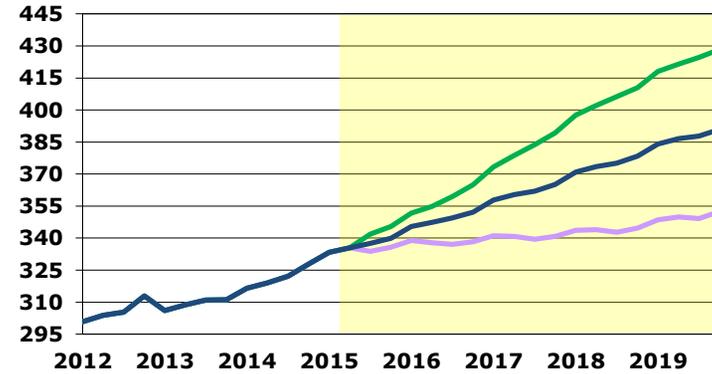
Forecast

Personal income, billions of dollars



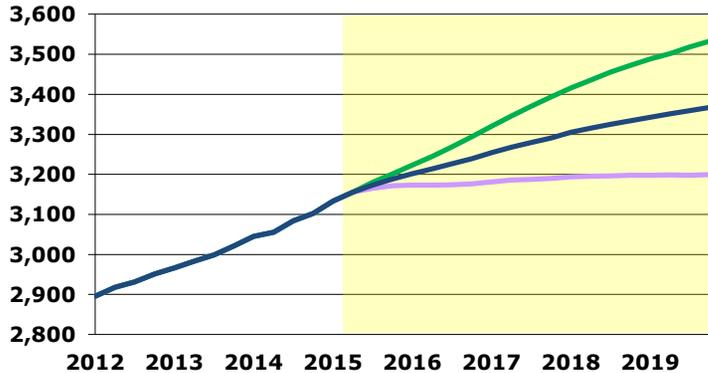
Source: Bureau of Economic Analysis 2013 Q4, ERFC 2019

Real personal income, billions of chained 2009 dollars



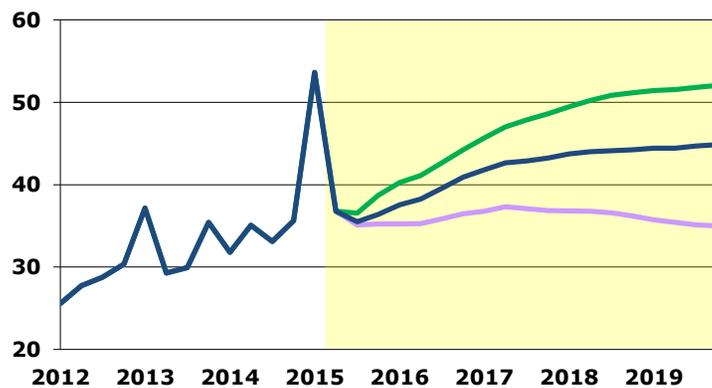
Source: Bureau of Economic Analysis 2013 Q4, ERFC 2019

Total nonfarm payroll employment, thousands



Source: WA State Employment Security 2015 Q1, ERFC 2019

Housing permits, thousands



Source: Census Bureau 2015 Q1, ERFC 2019

■ Baseline ■ Optimistic ■ Pessimistic

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Chapter 3: Washington State Revenue Forecast Summary

- **While revenue collections since the June forecast have come in \$164 million over the forecasted amount, the economic outlook for the rest of this biennium is slightly weaker.**
- **The preliminary tally of final General Fund-State (GF-S) revenue for the 2013-15 biennium, which ended June 30th, was \$13 million more than forecasted.**
- **Most of the forecast changes for the 2015-17 and 2017-19 biennia stemmed from budgetary changes and new legislation from the 2015 special sessions. These changes are expected to add \$193 million in revenue for the 2015-17 biennium and \$286 million in the 2017-19 biennium.**
- **The forecast of GF-S revenue for the 2015-17 biennium was increased by \$333 million and the forecast for the 2017-19 biennium was increased by \$338 million.**

Overview

The main changes to the forecast were increases stemming from new legislation

Revenue collections since the June forecast came in \$164 million higher than expected. The surplus was roughly split between Revenue Act taxes (retail sales and use, business and occupation, public utility, and tobacco taxes) and real estate excise taxes. As the real estate market has been performing above expectations, forecasted real estate excise tax collections have been increased. While the economic forecast is very similar to June's, it does include slightly weaker residential building activity and lower personal income growth. These changes would have normally resulted in a decrease in forecasted Revenue Act taxes. During the 2015 special sessions, however, legislation was passed that is expected to increase forecasted revenue from several sources. As a result, projected revenue for the 2015-17 and 2017-19 biennia is higher than forecasted in June, but by just less than one percent per biennium.

Table 3.1 summarizes the changes to the forecasts of GF-S revenue for the 2013-15 through 2017-19 biennia. The 2013-15 biennium came to an end on June 30th. The preliminary estimate of total revenue for the biennium was \$33,666.0 million, \$13.2 million higher than projected by the June forecast. Of this

GF-S forecast change by biennium (millions):

13-15: +\$13
 15-17: +\$333
 17-19: +\$338

amount, \$8.4 million came from fund transfers enacted in the special legislative sessions subsequent to the release of the forecast. From July 1st through September 10th, the start of the 2015-17 biennium, revenue sources that are tracked monthly came in \$165.9 million higher than forecasted. Expected revenue from legislative and budget-driven changes enacted after the June forecast added a further \$193.4 million to the forecast. Changes to the economic forecast, however, resulted in a slight \$26.4 million decrease to projected collections for the rest of the biennium. The total of these three components was a \$332.9 million increase in projected revenue for the 2015-17 biennium. The forecast for the 2017-19 biennium has been increased by \$337.8 million, with \$51.7 million due to economic changes and \$286 million from legislative and budget-driven changes. GF-S revenue is now forecasted to total \$37,091.0 million in the 2015-17 biennium and \$40,537.9 million in the 2017-19 biennium.

GF-S forecast (\$millions):

2013-15:
 \$33,666

2015-17:
 \$37,091

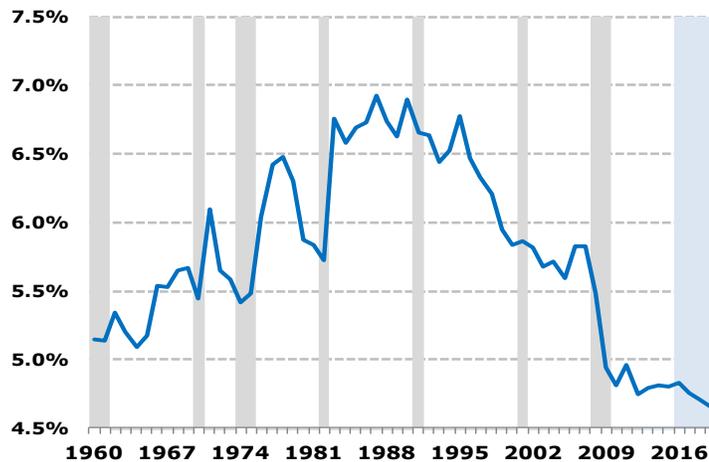
2017-19:
 \$40,538

Table 3.1: Revisions to the General Fund-State forecast (cash basis, millions of dollars)

	2013-15 Biennium	2015-17 Biennium	2017-19 Biennium
Collection Experience	\$4.8	\$165.9	NA
Non-Economic Change	\$8.4	\$193.4	\$286.0
Forecast Change	NA	(\$26.4)	\$51.7
Total Change	\$13.2	\$332.9	\$337.8

Figure 3.1: GF-S Revenue (Current Definition) as a Percentage of State Personal Income (Fiscal Years)

GF-S revenue relative to state personal income has been on a declining trend since 1995



Source: ERFC, data through fiscal year 2015

As can be seen in Figure 3.1, the amount of GF-S revenue that is collected relative to state personal income is forecasted to reach

The ratio of collections to income is at historical lows

its lowest levels in ERFC records. The ratio of revenue to income has been on a downward trend since 1995, broken only by the housing boom that raised the ratio from 2005 to mid-2008, and by temporary taxes and transfers of funds from non-GF-S sources into the GF-S that again boosted the ratio in fiscal years 2011 and 2013. The ratio for FY 2014 is slightly higher than that of FY 2013, but the increase was due mainly to slow income growth in that fiscal year. The current personal income estimate indicates the FY 2015 ratio declined just slightly. The forecast, as shown in the light blue shaded area, has the ratio increasing in FY 2016 due to the revenue increases resulting from new legislation but then trending downward through the end of the forecast period in FY 2019. In FY 2019, GF-S revenues are projected to be 4.65% of personal income.

Forecast details are at the end of the chapter

The history of nominal and real GF-S revenue by biennium can be found in Table 3.3. GF-S forecast changes by agency and major revenue classification for the 2013-15 biennium can be found in Table 3.5 (cash) and Table 3.6 (GAAP). Forecast changes for the 2015-17 biennium can be found in Table 3.7 (cash) and Table 3.8 (GAAP). The GF-S forecast by fiscal year and major source category through FY 2019 can be found in Table 3.9.

Recent Collection Experience

Cumulative receipts from major sources that are tracked monthly were \$164 million (2.8%) more than the June forecast

Revenue collections from the Department of Revenue (DOR), Department of Licensing, and Administrative Office of the Courts are tracked monthly. In the period since the June forecast (which was released on May 18th), total revenue from the above sources came in \$163.6 million (2.8%) higher than expected (see Table 3.2). Revenue Act collections reported by the DOR were \$88.8 million (2.0%) above the forecast. Revenue from other DOR tax sources from May through August was \$72.9 million (4.7%) above the forecast.

Table 3.2: Pre-Forecast Collection Variance of Major General Fund-State Taxes by Agency (relative to the June 2015 forecast, cash basis, millions of dollars)

<u>Agency/Source</u>	<u>Collection Variance</u>	<u>Percent of Estimate</u>
Department of Revenue		
Revenue Act	\$88.8	2.0%
Non Revenue Act	\$72.9	4.7%
Subtotal	\$161.7	2.7%
Department of Licensing		
Administrative Office of the Courts	\$1.8	6.8%
Total*	\$163.6	2.8%

* Detail may not add to total due to rounding.

Source: ERFC; Period: May 11 - September 10, 2015

Real estate excise taxes once again came in much higher than forecasted

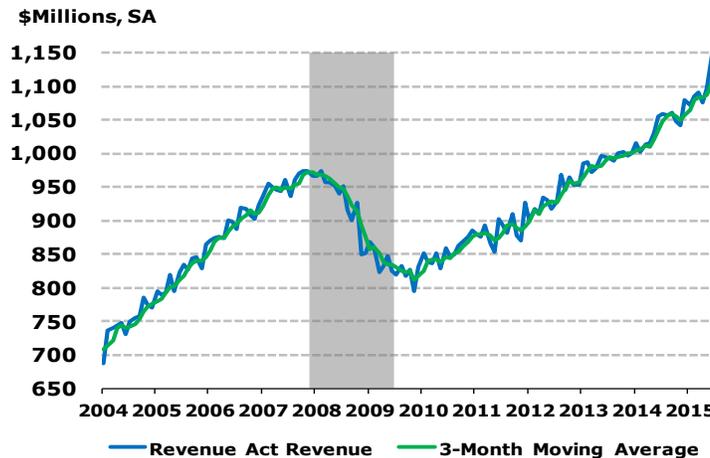
Most of the positive variance in DOR taxes came from real estate excise taxes (REET), which came in \$70.4 million (27.8%) higher than forecasted. Cigarette tax receipts came in \$5.2 million (3.8%) higher than forecasted and property tax receipts came in \$6.4 million (0.7%) higher than forecasted. Net refunds of unclaimed property were \$12.8 million higher than forecasted, and liquor sales and liter tax receipts came in \$24,000 (0.0%) lower than forecasted. All other DOR revenue sources came in \$3.7 million (3.7%) higher than forecasted. Revenue from the Department of Licensing was \$56,000 (0.4%) higher than forecasted and revenue from the Administrative Office of the Courts was \$1.8 million (6.8%) higher than forecasted.

Adjusted Revenue Act collections were up 6.4% year over year in the most recent collection period and up 10.9% in the previous period

Figure 3.2 shows seasonally adjusted Revenue Act receipts excluding payments received under the tax amnesty program in early 2011 and other large payments. It is also adjusted for some changes in payment patterns. As shown in the figure, collections have been on an upward trend since November 2009. Growth was aided by a temporary increase in the business and occupation tax rate paid by service industries that took effect in May 2010. This temporary increase expired on July 1, 2013. As can be seen in the chart, collections spiked in the July 11 – August 10 collection period, with year-over-year growth of 10.9% after adjustment for large payments and refunds. This spike brought adjusted growth for second quarter activity (May 11 – August 10 collections) to 7.3% year over year, the same as first quarter growth. Year-over-year collections growth for the August 11 – September 10 collection period, which mainly represents July activity, slowed to 6.4%.

Figure 3.2: Revenue Act Collections*

Growth in seasonally adjusted Revenue Act collections has been strong in recent months



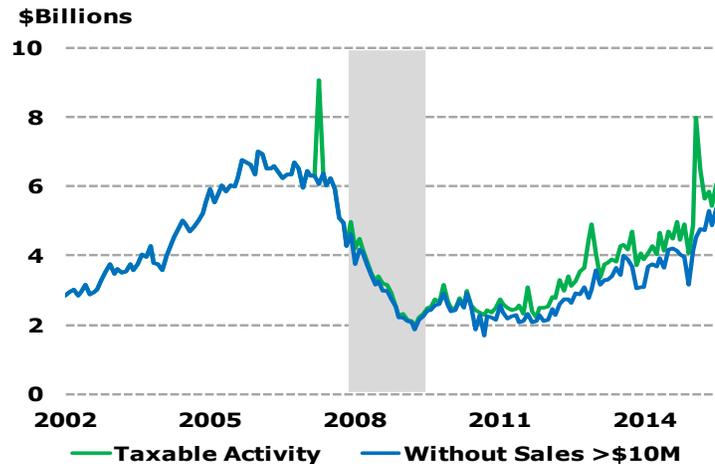
Source: ERFC; Data through September 10, 2015 preliminary allocation
 *Adjusted for large payments/refunds and payment pattern change

REET collections were once again elevated by sales of large commercial properties

Much of the large positive variance in REET collections was once again due to strong sales of commercial property. Sales of property worth \$10 million or more totaled \$5.2 billion in the four months since the last forecast, generating \$36.8 million in GF-S REET. Residential sales were also higher than forecasted. Large commercial sales have been responsible for much of the increase in taxable activity since November 2012 (see Figure 3.3). The most recent spike in February 2015 was due mainly to large transfers of controlling interest resulting from a corporate merger, but activity since has remained elevated.

Figure 3.3: Taxable Real Estate Excise Activity, SA

Large commercial sales have caused spikes in activity since November 2012



Source: ERFC; data through August 2015

Non-Economic Changes to the Forecast

Non-economic forecast increases resulted from new legislation and budgetary changes

Legislation from the 2015 special sessions resulted in legislative and budget-driven changes in three biennia. Revenue for the 2013-15 biennium was increased by \$8.4 million due to a legislated transfer of some non GF-S revenue into the GF-S before the close of the biennium on June 30. Legislative and budgetary changes increased the forecasts for the 2015-17 and 2017-19 biennia by \$193.4 million and \$286.0 million respectively. These legislative changes are summarized in Table 3.19.

Most of the legislative forecast increases stemmed from ESSB 6138

Most of the legislative forecast increases stemmed from ESSB 6138. This bill establishes that out-of-state wholesalers that have more than \$276,000 in in-state sales are subject to wholesaling business and occupation (B&O) taxes. The bill also establishes that online sales from out-of-state retailers that are hosted by in-state websites are subject to retail sales tax and increased the B&O tax rate on royalty income. In addition, the bill increases penalties for late tax payments and removed the sales tax exemption for sales of certain manufacturing equipment.

New legislation changed the taxation of recreational and medicinal cannabis

During the 2015 regular legislative session, legislation was passed that brought medical marijuana dispensaries into the same regulatory regime as licensed recreational cannabis outlets. During the second special session, the tax structure for cannabis sales was altered by 2E2SHB 2136. Under the bill, the previous 25 percent tax that was applied to growers, processors, and retailers separately was replaced by a single 37 percent excise tax on retail sales. The bill also made some changes to the distribution of the excise tax after it was collected by the renamed Liquor and Cannabis Board (LCB). The forecasted increase from this legislation in Table 3.19 is the net impact, as the old 25 percent tax was structured to be part of the sales price at each level of sales, and hence generated more B&O and retail sales taxes than the new 37 percent tax.

ESSB 6057 extended certain exemptions and credits, lowering revenue

The other major piece of legislation passed during the special sessions was ESSB 6057. This bill extended some tax credits and exemptions that were scheduled to expire at the end of FY 2015, which reduced forecasted revenue. The transportation budget bill, 2ESSB 5987, is not listed in Table 3.19 because its net impact on GF-S revenue is zero. While the bill extends B&O and public utility tax credits for commute trip reduction programs and partially extends tax exemptions for certain alternatively fueled vehicles and infrastructure, revenue lost to these programs is restored to the GF-S by transfers from the state Multimodal Transportation account. The bill thus slightly lowers forecasted B&O, public utility, and retail sales taxes, but is offset by increases in forecasted transfers from the OFM's "Other Agency" accounts.

Budgeted funds for enhanced cigarette tax enforcement are expected to increase collections.

The newly passed budget for the 2015-17 biennium also contained some provisions that are expected to increase revenue. The largest of these was extra funding to the LCB for enhanced enforcement of cigarette tax collections. This funding is expected to bring in \$5 million more in tax revenue in FY 2016 and \$20 million in FY 2017. Though the budget for the 2017-19 biennium has yet to be written, the enhanced collections were assumed to continue during that period. An increase in the base levels of traffic infraction fines by the Administrative Office of the Courts, which is expected to increase collections by \$2.3 million per fiscal year, is also included in the "Budget Driven Revenue" line in Table 3.19.

Revenue Forecasts by Source

Department of Revenue

Taxes collected by DOR are most of GF-S taxes

The Department of Revenue (DOR) collects and administers the majority of Washington's GF-S revenue, accounting for 95% of total GF-S revenue in FY 2015. The largest tax sources administered by the DOR are the retail sales tax, business and

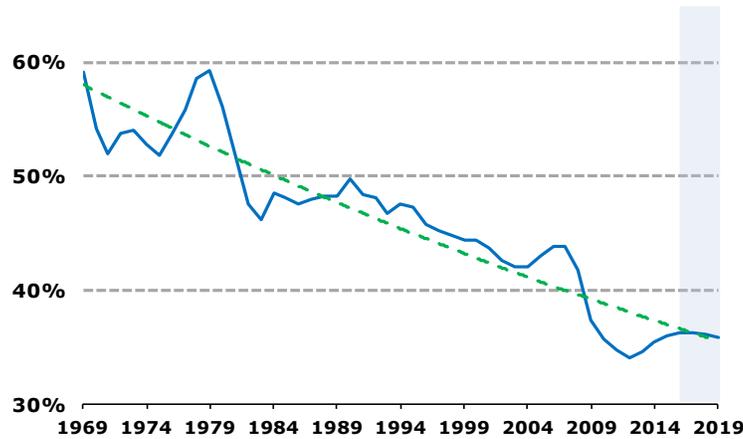
occupation tax, property tax, use tax, cigarette tax and real estate excise tax. The revenue forecasts discussed below can be found in Tables 3.5-3.8.

Retail sales taxes are the largest source of GF-S revenue

The retail sales tax is the largest source of GF-S revenue, accounting for 47.5% of GF-S revenue in FY 2015. The state's share of the tax is 6.5% of the sales price. While construction labor, repair services, and some other services are taxed, the tax does not apply to most services. Taxable sales as a share of personal income have been declining. Their share fell sharply during the recession and continued to fall through FY 2012. In that year, 34.0% of personal income was spent on taxable items, the lowest percentage on record. Increased spending on construction and autos caused the share to grow through FY 2015, reaching an estimated 36.0% of personal income. Recent legislative changes that will tax some online sales and eliminate some exemptions are expected to increase taxable sales' share of personal income to 36.3% in FY 2016 before declining through FY 2019, reaching 35.8% in that year. The historical and forecasted relationship between taxable sales and income is illustrated in Figure 3.4.

Figure 3.4: Taxable Sales* as Percentage of State Personal Income

The ratio of taxable sales to state personal income is on a declining trend



*Past tax base adjusted to represent current base. Shaded area indicates forecast

Source: ERFC; forecast through FY 2019

Retail sales tax receipt growth forecast:

FY16: 6.7%
 FY17: 4.6%
 FY18: 5.2%
 FY19: 4.7%

The growth rate of taxable retail activity improved from 4.1% in FY 2012 to 6.7% in FY 2013, due mainly to increasing construction activity. Continued growth in construction, along with the newly-revoked sales tax exemption on wired home phone lines, brought growth in taxable activity of 6.4% in FY 2014. Construction and auto sales brought growth to an estimated 7.6% in FY 2015. Despite the legislative changes outlined above that will bring in additional tax revenue, growth in FY 2016 taxable activity is forecasted to slow to 5.8% due to slowing growth in construction and auto sales. The slowdown of

growth continues through the end of the forecast period, reaching 4.6% growth in FY 2019 (see Table 3.4). Due to the lag between taxable activity and collections and the presence of tax deferrals, credits, refunds, and payments of past due taxes, the growth in actual collections differs from the growth in taxable activity. Growth in collections for FY 2015 was 6.9%. Forecasted FY 2016 growth is 6.7%. Growth is forecasted at 4.6% in FY 2017, 5.2% in FY 2018 and 4.7% in FY 2019.

Business and Occupation taxes are the second largest source of GF-S revenue

The business and occupation (B&O) tax is the second largest source of GF-S revenue, accounting for 19.6% of GF-S revenue in FY 2015. It is a tax on the gross receipts of all businesses operating in Washington. The state portion of the tax applies ten different rates according to various classifications of business activities. In FY 2014, the largest contributor to total state B&O tax was the services sector, which had a gross tax rate of 1.5% and represented an estimated 41% of B&O taxes due. The next largest sector was retailing, which is taxed at 0.471% and represented an estimated 23% of taxes due, followed by the wholesaling sector, which is taxed at 0.484% and represented an estimated 20% of taxes due. FY 2015 percentages by sector will be available in November.

B&O tax growth forecast:

*FY16: 7.6%
FY17: 5.5%
FY18: 6.0%
FY19: 5.5%*

In FY 2013, B&O tax receipts grew by 5.8%. The expiration of a temporary increase in the B&O service tax rate on July 1, 2013, in addition to several large refunds, caused receipts to shrink by 1.8% in FY 2014. Growth in FY 2015, also affected by large refunds, was 4.1%. Growth in FY 2016 is forecasted at 7.6%, due largely to the legislative changes outlined above. Growth is then forecasted to decrease to 5.5% in FY 2017, 6.0% in FY 2018 and 5.5% in FY 2019.

State property taxes are the third largest source of GF-S revenue

The state property tax levy is the third largest source of GF-S revenue, accounting for 11.6% of total revenue in FY 2015. Though the tax goes into the GF-S, it is dedicated to the funding of basic education. By law, the total state tax levy on existing property can only increase by the lesser of 1% per year or the rate of inflation as measured by the year-over-year change in the U.S. Implicit Price Deflator in the second quarter of the year preceding the levy, unless a greater increase is approved by the voters. The year-to-year growth in the total amount levied, however, can exceed the aforementioned limits due to the value of new construction, property improvements, and other additions to real property assessed by the state. Collections can also grow faster or slower than the rate of assessment growth due to the payment of past due taxes or nonpayment of current taxes.

Property tax growth forecast:

*FY16: 2.2%
FY17: 2.2%
FY18: 2.4%
FY19: 2.5%*

Property tax collections grew by 2.3% in FY 2015. Forecasted second quarter 2015 year-over-year inflation of less than 1% restrains the growth rate of the calendar year 2016 levy, keeping forecasted collections growth at a low 2.2% in FY 2016 and FY 2017 despite healthy forecasted levels of new construction.

Property tax receipts are forecasted to grow by 2.4% in FY 2018 and 2.5% in FY 2019.

REET was the fourth largest GF-S source in FY 2015

The real estate excise tax (REET) was the fourth largest DOR source of GF-S revenue in FY 2015, accounting for 4.3% of total revenue. The state portion of REET is 1.28% of the sales price. The tax is divided between the GF-S (92.3%), a fund for local public works (2.0%), a fund for assistance of cities and counties (1.6%) and, as of July 1, 2013, the Education Legacy Trust Account (4.1%). The tax is applied to both residential and commercial real estate, including purchases of vacant land.

REET growth forecast:

*FY16: 1.7%
FY17: -4.9%
FY18: 4.1%
FY19: 3.0%*

Due to a high number of large sales of commercial property, REET receipts grew by 34.0% in FY 2013. FY 2014 receipts were also boosted by large commercial sales, resulting in growth of 15.2%. Even higher commercial sales coupled with strengthening residential sales boosted FY 2015 growth to 20.4%. Further strengthening in residential sales is expected to allow FY 2016 sales to grow another 1.7% despite lower commercial sales. Commercial sales are expected to decline to more normal levels in FY 2017, resulting in a 4.9% decrease in collections despite continued but slowing residential sales growth. Growth is forecasted at 4.1% in FY 2018 and 3.0% in FY 2019.

Use tax was the fifth largest GF-S source in FY 2015

The state use tax was the fifth largest GF-S revenue source in FY 2015 at 3.4% of total receipts. The state portion of the tax is 6.5% of the purchase price for items used in the state that were not subject to the state retail sales tax. Examples of items subject to the state use tax are goods purchased out-of-state; online and mail-order purchases, where sales tax was not collected; or purchases of used vehicles from private individuals.

Use tax growth forecast:

*FY16: 2.7%
FY17: 4.6%
FY18: 6.0%
FY19: 5.2%*

Use tax receipts grew by 7.8% in FY 2014, boosted by strong sales of used vehicles and a temporary increase in payments from the manufacturing sector in the 4th quarter of 2013. Another temporary increase in the 3rd quarter of 2014, coupled with continued strong growth in construction and used vehicle sales brought growth to 6.4% in FY 2015. The temporary increase in collections from the manufacturing sector is expected to diminish in FY 2016, slowing growth to 2.7%. Growth is then forecasted to return to a more normal pace in FY 2017, 2018 and 2019 with rates of 4.6%, 6.0% and 5.2% respectively.

The cigarette tax was the sixth largest GF-S source in FY 2015

The state tax on cigarettes was the sixth largest DOR GF-S revenue source in FY 2014 at 2.3% of total receipts. Prior to FY 2010, the tax made up a much smaller portion of GF-S revenue because much of the tax was dedicated to non-GF-S accounts. In FY 2010, all of the tax except the portion dedicated to the Education Legacy Trust account was redirected to the GF-S, and in FY 2011 all of the cigarette tax was redirected to the GF-S.

The current tax rate, which took effect May 1, 2010, is \$3.025 per pack of 20 cigarettes.

Cigarette tax growth forecast:

*FY16: -5.2%
FY17: 0.0%
FY18: -3.0%
FY19: -2.8%*

The total number of taxed cigarettes has been on a downward trend due to a continuing decline in the number of smokers. Recently, the rate of decline has been increasing further due to increased consumption of e-cigarettes, which are not subject to the cigarette tax but are subject to retail sales taxes. FY 2014 receipts decreased by 3.6%. The decline in collections paused in FY 2015, bringing revenues to a level 1.7% above that of FY 2014. Despite the planned increase in tax enforcement that was one of the non-economic changes described above, collections are expected to decrease by 5.2% in FY 2016. Further ramp-up of the enforcement efforts in FY 2017 is forecasted to suspend the long-term decline in growth, leading to 0.0% growth in that year. Collections are then forecasted to decline by 3.0% in FY 2018 and 2.8% in FY 2019.

Public utility taxes were the seventh largest GF-S source in FY 2015

Public utility taxes were the seventh largest DOR source of GF-S revenue in FY 2015, bringing in 2.2% of total receipts. The tax applies to the gross income of sales to consumers by public and privately owned utilities and is in lieu of the B&O tax. The largest source of public utility taxes is the 3.873% tax on the distribution and generation of electrical power, followed by the 3.852% tax on the distribution of natural gas.

Growth forecast:

*FY16: 2.2%
FY17: 3.5%
FY18: 6.0%
FY19: 4.7%*

Public utility tax receipts decreased by 3.2% in FY 2015 due to low and declining natural gas and electricity prices and moderate weather. Continued low utility prices are forecasted to be partially offset by increased housing construction to produce growth rates of 2.2% in FY 2016 and 3.5% in FY 2017. Increases in projected utility prices bring expected growth of 6.0% in FY 2018 and 4.7% in FY 2019.

Forecasted Revenue from Cannabis-Related Sales

Sales of cannabis products in state-licensed stores began in July 2014

Initiative 502, approved by voters in the November 2012 election, legalized the sale and use of recreational cannabis and cannabis products in Washington. The first legal sales of cannabis products in state-licensed stores occurred in July 2014. During the 2015 regular and special sessions, legislation was passed that substantially altered the market rules set up by the initiative. 2SSB 5052, passed during the regular session, brought previously unregulated medical marijuana dispensaries into the same regulatory regime as licensed recreational cannabis outlets. This legislation was outlined in our June forecast publication. Subsequent to the June forecast, 2E2SHB 2136, passed in the second special session, changed the cannabis excise tax from a 25 percent tax collected from growers, processors and retailers to a 37 percent tax on retail sales only. The law also made changes to the distribution of tax and fee revenue. Cannabis taxes and license fees are still collected by the Liquor and

Cannabis Board and placed into a dedicated fund and appropriated annually.

Change in GF-S forecast of total cannabis-related revenue by biennium (millions):
13-15: +\$6.9
15-17: +\$57.5
17-19: +\$106.0

Most of the forecast change was due to the effects of new legislation

Most of the changes to the forecast of distribution of cannabis excise taxes and fees into the GF-S were the result of the legislative changes to the tax and its distributions. Distributions of cannabis excise taxes to the GF-S totaled \$15.3 million in the 2013-15 biennium, \$6.9 million more than expected in the June forecast. Forecasted GF-S distributions and fees for the 2015-17 biennium are now expected to total \$125.3 million, \$57.5 million more than forecasted in June. \$48.6 million of this change was due to 2E2SHB 2136 and \$8.9 million stemmed from forecasted changes in underlying sales. GF-S distributions are forecasted at \$233.7 million in the 2017-19 biennium, an increase of \$106.0 million from the June forecast. \$104.4 million of the increase stemmed from 2E2SHB 2136. Details of the forecasted distributions from the account can be found in Table 3.18.

Department of Licensing

Forecast change by biennium (millions):

13-15: \$1.0
15-17: \$0.5
17-19: \$0.5

The majority of GF-S revenue collected by the Department of Licensing is from firearm and event licenses, watercraft excise tax, and boat registration fees. The preliminary tally of GF-S revenue for the 2013-15 biennium is \$36.5 million, \$1.0 million more than expected in June. The department's forecast for the 2015-17 biennium has been increased \$0.5 million to \$36.1 million and the forecast of revenue for the 2017-19 biennium has been increased \$0.5 million to \$36.8 million.

The Office of Financial Management (Other Agencies)

Forecast change by biennium (millions):

13-15: \$4.2
15-17: \$23.5
17-19: \$10.7

The Office of Financial Management (OFM) is responsible for preparing General Fund-State revenue and transfer forecasts for all agencies excluding the Department of Revenue, the Department of Licensing, the Liquor and Cannabis Board, the Insurance Commissioner, the Washington State Lottery, and the State Treasurer. The office's preliminary estimate of revenue for the 2013-15 biennium is \$223.0 million, an increase of \$4.2 million from the June forecast. The office's forecast for the 2015-17 biennium was increased \$23.5 million to \$201.2 million. \$15.5 million of the forecast increase was due to legislative changes stemming from 2ESSB 5987, which directs the treasurer to transfer funds from the state Multimodal Transportation account to the GF-S to compensate for the extension of certain transportation-related tax credits. The forecast for the 2017-19 biennium was increased \$10.7 million to \$195.5 million. Legislative changes increased the forecast by \$0.8 million in the biennium, as the continued transfer from the Multimodal account was offset by a legislated transfer of \$30 million to local governments that allow sales of cannabis. Non-legislative forecast increases for both biennia were mainly the result of

higher expected revenue from corporate licenses and fees collected by the Office of the Secretary of State.

State Treasurer

*Forecast
change by
biennium
(millions):*

13-15: \$1.2
15-17: \$5.4
17-19: \$4.7

The Office of the State Treasurer generates GF-S revenue by investing state short-term cash reserves. The office's preliminary estimate of earnings from the 2013-15 biennium is negative \$0.7 million, \$1.2 million more than forecasted in June. The biennial revenue was negative because the average daily balance of accounts that earn interest that goes into the GF-S was negative. When this occurs, the GF-S effectively pays interest to the other funds managed by the office. The forecast for the 2015-17 biennium has been increased \$5.4 million to \$13.0 million and the forecast for the 2017-19 biennium has been increased \$4.7 million to \$46.9 million. The forecast increases in both biennia were due to higher expected average daily balances.

Insurance Commissioner

*Forecast
change by
biennium
(millions):*

13-15: \$0.3
15-17: \$13.1
17-19: \$11.8

The Office of the Insurance Commissioner collects premium taxes on most classes of insurance sold in Washington State. These taxes are distributed to the GF-S and various accounts in support of fire services. The office's preliminary tally of GF-S revenue for the 2013-15 biennium is \$985.9 million, \$0.3 million more than forecasted in June. The forecast of revenue for the 2015-17 biennium has been increased \$13.1 million to \$1,096.9 million and the forecast for the 2017-19 biennium has been increased \$11.8 million to \$1,183.3 million.

Liquor and Cannabis Board

*Forecast
change by
biennium
(millions):*

13-15: \$9.6
15-17: \$63.7
17-19: \$113.7

The recently renamed Liquor and Cannabis Board (LCB) collects fees from distributors and retailers on sales of spirits and surtaxes on sales of beer and wine (sales and liter taxes on spirits are collected by the DOR). The LCB is also responsible for the collection of excise taxes and fees associated with the legalized sale and use of recreational and medicinal cannabis. The preliminary estimate of total GF-S revenue collected by the LCB for the 2013-15 biennium is \$275.0 million, \$9.6 million more than was forecasted in June. Of this amount, \$8.4 million was due to legislative transfers of funds from LCB accounts. The forecast of LCB GF-S revenue for the 2015-17 biennium has been increased \$63.7 million to \$348.6 million. \$48.6 million of the forecasted increase was due to the effects of 2E2SHB 2136 outlined above. The forecast of revenue for the 2017-19 biennium has been increased \$113.7 million to \$476.4 million. \$104.4 million of the forecasted increase came from the effects of 2E2SHB 2136.

Lottery Commission

*GF-S forecast
change by
biennium
(millions):*

13-15: \$0.0
15-17: \$3.2
17-19: \$8.9

While most of the proceeds from sales of lottery games go to the Washington Opportunity Pathways Account (OPA), distributions are also made to programs such as Problem Gambling, Economic Development and the Stadium/Exhibition Center. Details of the forecast of the distribution of Lottery earnings can be found in Table 3.15 on a cash basis and Table 3.16 on a GAAP basis. When total profits from all Washington-only games plus the Powerball game exceed \$102 million per year, the amount above \$102 million gets transferred to the GF-S. In FY 2013, large Powerball jackpots pushed sales above the threshold, resulting in a \$9.3 million payment to the GF-S in FY 2014. Profits just exceeded the threshold again in FY 2014, resulting in a total GF-S transfer of \$9.9 million for the 2013-15 biennium. GF-S transfers totaling \$9.4 million are forecasted for the 2015-17 biennium, an increase of \$3.2 million from the June forecast, and \$24.7 million for the 2017-19 biennium, an increase of \$8.9 million.

*Washington
Opportunities
Pathways
Account
forecast
change by
biennium
(millions):*

13-15: \$5.0
15-17: \$39.1
17-19: \$23.9

The OPA receives all profits (excluding statutory transfers) from Washington-only lottery games plus all profits from the Mega Millions game. The preliminary tally of transfers for the 2013-15 biennium is \$233.9 million, \$3.2 million less than the June forecast. The forecast for the 2015-17 biennium has been increased \$39.1 million to \$276.7 million. \$26.3 million of this increase was due to legislative and budgetary changes which decreased Lottery expenditures and transferred some unclaimed prize money to the OPA (see Table 3.19). The forecast for the 2017-19 biennium has been increased \$23.9 million to \$261.6 million. \$26.3 million in legislative transfers are also expected in the biennium, without which forecasted transfers would have decreased slightly.

Administrative Office of the Courts

*Forecast
change by
biennium
(millions):*

13-15: \$1.3
15-17: \$5.3
17-19: \$4.7

The Administrative Office of the Courts collects surcharges on certain filing fees, fines, and infraction penalties and transfers this revenue to the GF-S on a monthly basis. The preliminary estimate of transfers to the GF-S for the 2013-15 biennium is \$170.0 million, \$1.3 million more than the June forecast. The forecast for the 2015-17 biennium has been increased \$5.3 million to \$169.2 million. \$4.6 million of the increase stemmed from an increase in base penalties for traffic violations. The forecast of transfers for the 2017-19 biennium has been increased \$4.7 million to \$179.3 million, also reflecting a \$4.6 million increase in base penalties.

Track Record for the 2013-15 Biennium

The September 2015 forecast is \$1.2 billion (3.8%) higher than the initial February 2012 forecast

Table 3.10 summarizes the historical changes to the GF-S revenue forecast for the 2013-15 biennium. The February 2012 forecast was the initial forecast for the biennium. The September 2015 preliminary revenue estimate for the biennium is \$1.24 billion (3.8%) higher than the initial forecast. Non-economic changes have increased the forecast by \$386 million (1.2%). Excluding non-economic changes, the current forecast is \$851 million (2.6%) higher than the initial forecast. The current forecast is \$881 million (2.7%) higher than the sum of the June 2013 forecast and the \$123 million in legislated revenue increases from the June 2013 second special session that were the basis of the initial budget for the 2013-15 biennium.

Track Record for the 2015-17 Biennium

The forecast is \$1.6 billion (4.4%) higher than the initial September 2012 forecast

Table 3.11 summarizes the historical changes to the GF-S revenue forecast for the 2015-17 biennium. The September 2012 forecast was the initial forecast for the biennium. The September 2015 forecast for the biennium is \$1.57 billion (4.4%) higher than the initial forecast. Non-economic changes have increased the forecast by \$489 million (1.4%). Excluding non-economic changes, the current forecast is \$1.08 billion (3.1%) higher than the initial forecast. The June 2015 forecast, coupled with the \$193 million in legislative and budget-driven revenue changes passed in the 2015 special legislative sessions, was the basis for the initial budget for the 2015-17 biennium.

The Relationship between the Cash and GAAP General Fund-State Revenue Forecasts

GAAP forecasts are based on the period in which the revenue is earned rather than received

Legislation enacted in 1987 requires that the state's biennial budget be in conformance with Generally Accepted Accounting Principles (GAAP). It also requires a GF-S revenue forecast on both a cash and GAAP basis. The GAAP forecasts of GF-S revenue for the 2013-15 and 2015-17 biennia are presented in Tables 3.6 and 3.8 and the GAAP forecast of Lottery revenue transfers for both biennia is in Table 3.15. The primary difference between the cash and GAAP forecasts is the timing of the receipt of revenue. On a GAAP basis, revenue is credited to the biennium in which it is earned even though it may not have been received. The cash forecast, on the other hand, reflects expected cash receipts during a fiscal period. The forecast on a GAAP, or accrual, basis is primarily used for financial reporting. The cash forecast is used for cash flow management and revenue tracking. The cash forecast is also the forecast used in the state's budgetary balance sheet, which is the principal tool for assessing the General Fund's current surplus or deficit position. References to the GF-S forecast in the text of this chapter refer to the cash forecast unless otherwise noted. Likewise, figures from revenue

tables other than Tables 3.6, 3.8 and 3.16 are projected on a cash basis.

Budgetary Balance Sheet for the 2013-15 and 2015-17 Biennia

The forecast implies GF-S reserves of \$1.40 billion at the end of the 2015-17 biennium and \$1.44 billion in reserves for GF-S, ELTA and OPA

Table 3.12 shows the budgetary balance sheet for the 2013-15 and 2015-17 biennia as prepared by the Office of Financial Management and the House and Senate fiscal committees. The balance sheet shows not only projected GF-S spending and resources but also total projected spending and resources for the GF-S plus the other main non-transportation state-funded accounts: the Education Legacy Trust Account (ELTA) and the Washington Opportunity Pathways Account (OPA). As shown in the table, the preliminary estimate of the GF-S ending fund balance for the 2013-15 biennium is \$899.6 million and the total estimated balance for GF-S, ELTA and OPA is \$926.1 million. Based on the September 2015 revenue forecast and currently enacted budgets, unrestricted GF-S reserves are projected to be \$503.0 million at the end of the 2015-17 biennium. In addition, the Budget Stabilization Account is projected to have a balance of \$894.2 million, bringing total projected GF-S reserves to \$1,397.3 million. Projected combined reserves for the ELTA and OPA are \$37.9 million, for total projected reserves of \$1,435.2 million for GF-S, ELTA and OPA at the end of the 2015-17 biennium.

Alternative Forecasts for the 2015-17 and 2017-19 Biennia

Optimistic scenario (billions):

*15-17: +\$2.1
17-19: +\$4.3*

Pessimistic scenario:

*15-17: -\$2.0
17-19: -\$4.1*

Chapter 2 outlines optimistic and pessimistic economic scenarios relative to the baseline economic forecast. The forecast assigns a probability of 55% to the baseline forecast, 15% to a scenario based on the upside risks and 30% to a scenario based on the downside risks. The revenue implications of these alternative scenarios for the 2015-17 biennium are shown in Table 3.13 and those of the 2017-19 biennium are shown in Table 3.14. For the 2015-17 biennium, the optimistic forecast generates \$39,187.2 million in GF-S revenue, \$2,096.1 million (5.7%) more than the baseline scenario, while the pessimistic forecast produces \$35,042.8 million in revenue, \$2,048.2 million (5.5%) less than the baseline. For the 2017-19 biennium, the optimistic forecast generates \$44,796.0 million in GF-S revenue, \$4,258.1 million (10.5%) more than the baseline scenario, while the pessimistic forecast produces \$36,424.6 million in revenue, \$4,113.2 million (10.1%) less than the baseline.

Near General Fund Forecasts for the 2013-15 - 2017-19 Biennia

“Near General Fund” accounts are those included in the GF-S plus the Education Legacy Trust Account (ELTA). The ELTA was previously funded by a portion of the state tax on cigarettes and

*Near General
Fund
Forecast
(millions):*

*2013-15:
\$34,070.8*

*2015-17:
\$37,537.6*

*2017-19:
\$41,041.1*

a tax on estates of over \$2 million. Legislation from the 2011 session, however, requires the cigarette taxes that formerly went into the account to instead be deposited into the GF-S. The preliminary estimate of Near General Fund revenue for the 2013-15 biennium is \$34,070.8 million, \$27.5 million more than the June forecast. The forecast for the 2015-17 biennium is \$37,537.6 million, \$324.1 million more than the June forecast. The forecast of Near General Fund revenue for the 2017-19 biennium is \$41,041.1 million, \$340.6 million more than the June forecast. The Near General Fund forecast and recent history by fiscal year are presented in Table 3.17. The table also includes projected revenue for the OPA and the sum of Near General Fund plus OPA revenues by fiscal year.

Table 3.3
General Fund-State collections*
(millions of dollars, cash basis)

Biennium	Current Dollars	Percent Change	2009	
			Chained Dollars	Percent Change
1961-63	\$817.1		\$4,300.0	
1963-65	866.2	6.0%	4,439.3	3.2%
1965-67	1,128.6	30.3%	5,565.5	25.4%
1967-69	1,440.5	27.6%	6,658.6	19.6%
1969-71	1,732.7	20.3%	7,767.2	16.6%
1971-73	1,922.1	10.9%	7,971.8	2.6%
1973-75	2,372.4	23.4%	8,500.2	6.6%
1975-77	3,395.0	43.1%	10,580.8	24.5%
1977-79	4,490.0	32.3%	12,284.4	16.1%
1979-81	5,356.4	19.3%	12,197.3	-0.7%
1981-83	6,801.4	27.0%	13,492.7	10.6%
1983-85	8,202.4	20.6%	15,008.4	11.2%
1985-87	9,574.6	16.7%	16,528.2	10.1%
1987-89	10,934.1	14.2%	17,618.6	6.6%
1989-91	13,309.0	21.7%	19,772.8	12.2%
1991-93	14,862.2	11.7%	20,789.0	5.1%
1993-95	16,564.6	11.5%	22,140.3	6.5%
1995-97	17,637.7	6.5%	22,629.9	2.2%
1997-99	19,620.1	11.2%	24,520.3	8.4%
1999-01	21,262.1	8.4%	25,587.4	4.4%
2001-03	21,140.7	-0.6%	24,595.4	-3.9%
2003-05	23,388.5	10.6%	26,077.7	6.0%
2005-07	27,772.0	18.7%	29,316.2	12.4%
2007-09	27,703.0	-0.2%	27,888.3	-4.9%
2009-11	28,218.1	1.9%	27,704.7	-0.7%
2011-13	30,657.0	8.6%	28,905.6	4.3%
2013-15 ^E	33,666.0	9.8%	30,942.6	7.0%
2015-17 ^F	37,091.0	10.2%	33,393.3	7.9%
2017-19 ^F	40,537.9	9.3%	35,274.8	5.6%

^E September 2015 Preliminary Estimate

^F September 2015 Forecast

*Total General Fund-State revenue and transfers. Cash basis; includes rate base and administrative changes. Modified cash basis: 1985-87 and prior; pure cash basis: 1987-89 and after. May not be comparable because the collection totals include the impact of rate, base and administrative changes.

Source: Department of Revenue, the Office of Financial Management and the Economic and Revenue Forecast Council 's September 2015 forecast.

Table 3.4
Taxable retail sales*
(millions of dollars)

Fiscal Year	Amount	Percent Change
1979	22,309	5.6%
1980	24,057	7.8%
1981	25,197	4.7%
1982	26,097	3.6%
1983	29,368	12.5%
1984	29,156	-0.7%
1985	30,687	5.3%
1986	32,158	4.8%
1987	34,647	7.7%
1988	37,452	8.1%
1989	41,429	10.6%
1990	47,183	13.9%
1991	49,812	5.6%
1992	53,189	6.8%
1993	55,319	4.0%
1994	59,009	6.7%
1995	61,927	4.9%
1996	62,817	1.4%
1997	66,748	6.3%
1998	72,059	8.0%
1999	77,197	7.1%
2000	83,335	8.0%
2001	85,633	2.8%
2002	84,418	-1.4%
2003	86,165	2.1%
2004	90,139	4.6%
2005	97,253	7.9%
2006	107,071	10.1%
2007	115,527	7.9%
2008	118,676	2.7%
2009	106,379	-10.4%
2010	99,983	-6.0%
2011	101,825	1.8%
2012	106,036	4.1%
2013	113,173	6.7%
2014	120,453	6.4%
2015 ^F	129,563	7.6%
2016 ^F	137,040	5.8%
2017 ^F	143,770	4.9%
2018 ^F	151,201	5.2%
2019 ^F	158,192	4.6%

^F September 2015 forecast

Source: ERFC

* Actual Base. Includes statutory and administrative changes to the tax base. Historical fiscal year data are from quarterly taxable sales reported by taxpayers on the state's Combined Excise tax return. Reported totals affected by enacted legislation. Major base changes include: exemption of off-premises food, beginning 1978:3 (fiscal 1979); extension of the sales tax base to off premises food (1982:2 to 1983:2); food again exempt 1983:3 (fiscal 1984); extension of the sales tax base to candy, gum and bottled water (June 1 - December 2, 2010); elimination of sales tax exemption for residential phone service (July 1, 2013).

Table 3.5

Comparison of the General Fund-State forecast by agency

2013-15 biennium; cash basis

(millions of dollars)

Forecast by Agency	June 2015 Forecast¹	Non- Economic Changes	Forecast Revision	Sept. 2015 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$15,914.3	\$0.0	(\$27.0)	\$15,887.2	(\$27.0)
Business & Occupation	6,606.2	0.0	21.3	6,627.5	21.3
Use	1,161.0	0.0	(9.0)	1,152.0	(9.0)
Public Utility	780.2	0.0	(1.1)	779.1	(1.1)
Liquor Sales/Liter	500.1	0.0	(0.8)	499.3	(0.8)
Cigarette	787.1	0.0	4.0	791.1	4.0
Property (State Levy)	3,957.3	0.0	5.8	3,963.1	5.8
Real Estate Excise	1,329.2	0.0	27.6	1,356.9	27.6
Timber Excise	5.3	0.0	(0.3)	5.1	(0.3)
Other	930.0	0.0	(24.8)	905.2	(24.8)
Subtotal	31,970.7	0.0	(4.3)	31,966.4	(4.3)
Department of Licensing					
Boat excise, licenses, fees & other	35.5	0.0	1.0	36.5	1.0
Insurance Commissioner					
Insurance Premiums	985.5	0.0	0.3	985.9	0.3
Liquor Control Board					
Fees, Cannabis Excise Tax	209.8	8.4	0.6	218.8	9.0
Beer & Wine Surtax	55.6	0.0	0.6	56.1	0.6
Lottery Commission					
Lottery Revenue	9.9	0.0	0.0	9.9	0.0
State Treasurer					
Interest Earnings	(1.8)	0.0	1.2	(0.7)	1.2
Office of Financial Management					
Other	218.7	0.0	4.2	223.0	4.2
Administrative Office of the Courts					
Fines and Forfeitures	168.8	0.0	1.3	170.0	1.3
Total General Fund-State *	\$33,652.8	\$8.4	\$4.8	\$33,666.0	\$13.2

¹ Forecast for the 2013-15 biennium adopted by the Economic and Revenue Forecast Council May 18, 2015.² Preliminary estimate for the 2013-15 biennium, adopted September 14, 2015.

*Detail may not add to totals because of rounding.

Source: ERFC, Department of Licensing, Insurance Commissioner, Lottery Commission, Office of the State Treasurer, Liquor Control Board, Office of Financial Management

Table 3.6

Comparison of the General Fund-State forecast by agency

2013-15 biennium; GAAP basis

(millions of dollars)

Forecast by Agency	June 2015 Forecast¹	Non- Economic Changes	Forecast Revision	Sept. 2015 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$15,992.4	\$0.0	(\$90.8)	\$15,901.6	(\$90.8)
Business & Occupation Use	6,599.2	0.0	(2.0)	6,597.2	(2.0)
Public Utility	1,168.3	0.0	(13.4)	1,154.9	(13.4)
Liquor Sales/Liter	781.6	0.0	(3.9)	777.7	(3.9)
Cigarette	499.7	0.0	(1.3)	498.4	(1.3)
Property (State Levy)	784.2	0.0	(23.9)	760.2	(23.9)
Real Estate Excise	3,958.9	0.0	(15.9)	3,943.0	(15.9)
Timber Excise	1,322.8	0.0	31.5	1,354.3	31.5
Other	5.5	0.0	(0.4)	5.1	(0.4)
Subtotal	928.4	0.0	(27.3)	901.0	(27.3)
	32,041.0	0.0	(147.5)	31,893.4	(147.5)
Department of Licensing					
Boat excise, licenses, fees & other	35.5	0.0	1.0	36.5	1.0
Insurance Commissioner					
Insurance Premiums	985.5	0.0	0.3	985.9	0.3
Liquor Control Board					
Fees, Cannabis Excise Tax	209.8	8.4	0.6	218.8	9.0
Beer & Wine Surtax	55.6	0.0	0.6	56.1	0.6
Lottery Commission					
Lottery Revenue	2.1	0.0	(1.5)	0.6	(1.5)
State Treasurer					
Interest Earnings	(1.6)	0.0	0.6	(1.0)	0.6
Office of Financial Management					
Other	214.7	0.0	6.2	221.0	6.2
Administrative Office of the Courts					
Fines and Forfeitures	168.8	0.0	1.3	170.0	1.3
Total General Fund-State *	\$33,711.4	\$8.4	(\$138.4)	\$33,581.4	(\$130.0)

¹ Forecast for the 2013-15 biennium adopted by the Economic and Revenue Forecast Council May 18, 2015.² Preliminary estimate for the 2013-15 biennium, adopted September 14, 2015.

*Detail may not add to totals because of rounding.

Source: ERFC, Department of Licensing, Insurance Commissioner, Lottery Commission, Office of the State Treasurer, Liquor Control Board, Office of Financial Management

Table 3.7

Comparison of the General Fund-State forecast by agency

2015-17 biennium; cash basis

(millions of dollars)

Forecast by Agency	June 2015 Forecast¹	Non- Economic Changes	Forecast Revision	Sept. 2015 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$17,867.2	\$14.0	\$37.6	\$17,918.8	\$51.6
Business & Occupation	7,436.0	60.1	(21.1)	7,475.0	39.1
Use	1,227.0	26.3	(4.9)	1,248.3	21.4
Public Utility	811.0	(11.4)	(2.4)	797.2	(13.8)
Liquor Sales/Liter	501.9	0.0	(1.3)	500.6	(1.3)
Cigarette	731.6	25.0	(0.3)	756.3	24.7
Property (State Levy)	4,129.4	0.0	9.6	4,139.0	9.6
Real Estate Excise	1,372.1	0.0	98.1	1,470.2	98.1
Timber Excise	6.6	0.0	(0.7)	6.0	(0.7)
Other	915.8	24.2	(34.8)	905.2	(10.6)
Subtotal	34,998.6	138.2	79.9	35,216.7	218.1
Department of Licensing					
Boat excise, licenses, fees & other	35.6	0.04	0.5	36.1	0.5
Insurance Commissioner					
Insurance Premiums	1,083.8	0.0	13.1	1,096.9	13.1
Liquor Control Board					
Fees, Cannabis Excise Tax	230.2	35.0	27.9	293.1	63.0
Beer & Wine Surtax	54.6	0.0	0.8	55.4	0.8
Lottery Commission					
Lottery Revenue	6.1	0.0	3.2	9.4	3.2
State Treasurer					
Interest Earnings	7.6	0.0	5.4	13.0	5.4
Office of Financial Management					
Other Agencies	177.7	15.5	8.0	201.2	23.5
Administrative Office of the Courts					
Fines and Forfeitures	163.8	4.6	0.7	169.2	5.3
Total General Fund-State *	\$36,758.1	\$193.4	\$139.5	\$37,091.0	\$332.9

¹ Forecast for the 2015-17 biennium adopted by the Economic and Revenue Forecast Council May 18, 2015.² Forecast for the 2015-17 biennium, adopted September 14, 2015.

*Detail may not add to totals because of rounding.

Source: ERFC, Department of Licensing, Insurance Commissioner, Lottery Commission, Office of the State Treasurer, Liquor Control Board, Office of Financial Management

Table 3.8

Comparison of the General Fund-State forecast by agency

2015-17 biennium; GAAP basis

(millions of dollars)

Forecast by Agency	June 2015 Forecast¹	Non- Economic Changes	Forecast Revision	Sept. 2015 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$17,867.2	\$14.0	\$37.6	\$17,918.8	\$51.6
Business & Occupation Use	7,436.0	60.1	(21.1)	7,475.0	39.1
Public Utility	1,227.0	26.3	(4.9)	1,248.3	21.4
Liquor Sales/Liter	811.0	(11.4)	(2.4)	797.2	(13.8)
Cigarette	501.9	0.0	(1.3)	500.6	(1.3)
Property (State Levy)	731.6	25.0	(0.3)	756.3	24.7
Real Estate Excise	4,129.4	0.0	6.7	4,136.1	6.7
Timber Excise	1,372.1	0.0	98.1	1,470.2	98.1
Other	6.7	0.0	(0.7)	6.1	(0.7)
Subtotal	915.8	24.2	(34.8)	905.2	(10.6)
	34,998.7	138.2	77.0	35,213.9	215.2
Department of Licensing					
Boat excise, licenses, fees & other	35.6	0.04	0.5	36.1	0.5
Insurance Commissioner					
Insurance Premiums	1,083.8	0.0	13.1	1,096.9	13.1
Liquor Control Board					
Fees, Cannabis Excise Tax	230.2	35.0	27.9	293.1	63.0
Beer & Wine Surtax	54.6	0.0	0.8	55.4	0.8
Lottery Commission					
Lottery Revenue	11.1	0.0	7.8	18.9	7.8
State Treasurer					
Interest Earnings	8.2	0.0	4.8	13.0	4.8
Office of Financial Management					
Other	177.7	15.5	8.0	201.2	23.5
Administrative Office of the Courts					
Fines and Forfeitures	163.8	4.6	0.7	169.2	5.3
Total General Fund-State *	\$36,763.8	\$193.4	\$140.5	\$37,097.7	\$333.9

¹ Forecast for the 2015-17 biennium adopted by the Economic and Revenue Forecast Council May 18, 2015.² Forecast for the 2015-17 biennium, adopted September 14, 2015.

*Detail may not add to totals because of rounding.

Source: ERFC, Department of Licensing, Insurance Commissioner, Lottery Commission, Office of the State Treasurer, Liquor Control Board, Office of Financial Management

Table 3.9

**September 2015 General Fund-State forecast
2013-15 to 2017-19 biennia; cash basis**

(Millions of Dollars)

Forecast by Source	Fiscal 2014	Fiscal 2015	2013-15 Biennium	Fiscal 2016	Fiscal 2017	2015-17 Biennium	Fiscal 2018	Fiscal 2019	2017-19 Biennium
State Taxes									
Retail sales**	\$7,678.6	\$8,208.6	\$15,887.2	\$8,758.6	\$9,160.2	\$17,918.8	\$9,638.8	\$10,089.5	\$19,728.4
Business & occupation Use**	3,246.4	3,381.0	6,627.5	3,637.3	3,837.7	7,475.0	4,068.4	4,293.3	8,361.7
Public Utility	558.3	593.7	1,152.0	610.0	638.3	1,248.3	676.8	711.7	1,388.5
Liquor sales/liter	395.9	383.1	779.1	391.7	405.5	797.2	429.7	450.1	879.8
Beer & wine surtax	246.3	253.0	499.3	247.6	253.0	500.6	259.2	265.9	525.1
Cigarette	27.7	28.5	56.1	27.8	27.6	55.4	27.7	27.7	55.4
Tobacco products	400.5	406.9	807.4	386.3	386.3	772.5	375.0	364.8	739.8
Cannabis Excise Taxes	46.5	46.9	93.4	47.6	47.7	95.3	48.2	48.6	96.8
Property (state school levy)	0.0	14.3	14.3	42.8	78.2	121.1	106.6	123.0	229.6
Leasehold Excise Tax	1,958.9	2,004.3	3,963.1	2,047.4	2,091.6	4,139.0	2,142.8	2,197.0	4,339.8
Public utility district	27.7	28.6	56.3	30.3	30.5	60.8	30.9	31.3	62.1
Brokered Natural Gas	49.3	50.9	100.3	52.0	53.0	105.0	54.0	55.1	109.2
Real estate excise***	34.4	28.1	62.5	28.7	29.1	57.8	29.6	30.4	60.0
Timber excise	615.6	741.2	1,356.9	753.7	716.6	1,470.2	745.9	768.2	1,514.1
Estate/inheritance	2.7	2.4	5.1	2.8	3.1	6.0	3.3	3.5	6.8
Boat excise	0.4	(0.8)	(0.4)	0.1	0.0	0.1	0.0	0.0	0.0
Insurance premiums	13.0	13.7	26.7	13.0	13.0	26.1	13.0	13.0	26.1
Penalties and interest on past due taxes	456.7	529.2	985.9	538.9	558.0	1,096.9	579.5	603.8	1,183.3
Other	133.8	120.5	254.3	135.7	141.2	276.9	146.6	152.3	298.9
Total Taxes	72.3	74.2	146.5	57.0	58.0	115.0	59.2	38.9	98.1
Total Taxes	15,965.1	16,908.3	32,873.4	17,809.2	18,528.7	36,337.9	19,435.3	20,268.2	39,703.5
State Non-Tax Sources									
Licenses, permits, fees	127.9	137.3	265.2	139.4	143.9	283.2	145.5	147.1	292.6
Liquor & Cannabis fees	123.0	81.6	204.6	82.8	89.2	172.1	93.3	98.1	191.4
Earnings on investments	(3.0)	2.4	(0.7)	3.9	9.1	13.0	21.2	25.7	46.9
Administrative Office of the Courts	85.6	84.4	170.0	83.7	85.5	169.2	88.2	91.0	179.3
Transfers of unclaimed property	60.5	56.4	116.9	55.8	57.1	112.9	58.2	59.3	117.5
Other revenue & transfers	23.5	13.1	36.6	(3.1)	5.8	2.7	(0.4)	7.1	6.7
Total Non-Tax	417.4	375.2	792.6	362.6	390.6	753.1	405.9	428.4	834.4
Total General Fund-State *	\$16,382.5	\$17,283.4	\$33,666.0	\$18,171.8	\$18,919.3	\$37,091.0	\$19,841.2	\$20,696.7	\$40,537.9

* Detail may not add to totals due to rounding

**GFS portion after Initiative 900 transfer

***Includes penalties and interest

Table 3.10

Track Record for the 2013-15 General Fund-State Cash Forecast

February 2012 through September 2015

Cash Basis - Millions of Dollars

<u>Date of Forecast</u>	<u>Department of Revenue*</u>	<u>Other Agencies</u>	<u>Subtotal*</u>	<u>Non-Economic Changes**</u>	<u>Total Change</u>	<u>Total General Fund-State Cash Basis#</u>
February 2012 #	\$31,110	\$1,319				\$32,428
Changes to Forecast						
June 2012	(120)	(13)	(133)	330 #1	197	32,626
September 2012	39	(15)	23	0	23	32,649
November 2012	(113)	25	(88)	0	(88)	32,561
March 2013	(38)	18	(19)	0	(19)	32,541
June 2013	156	20	176	(55) #2	121	32,662
September 2013	224	(2)	222	123 #3	345	33,007
November 2013	(22)	27	6	(30) #4	(25)	32,982
February 2014	21	10	30	0	30	33,013
June 2014	160	(5)	156	1 #5	157	33,169
September 2014	144	19	163	0	163	33,332
November 2014	111	(3)	108	0	108	33,440
February 2015	65	10	75	31 #6	107	33,547
June 2015	83	46	129	(23) #7	106	33,653
September 2015	(4)	9	5	8 #8	13	33,666
Total change***:						
From February 2012	705	147	851	386	1,238	
Percent change	2.3	11.1	2.6	1.2	3.8	

* Excludes legislative, judicial, statutorily required or other major non-economic changes.

** Includes legislative, judicial, statutorily required or other major non-economic changes.

*** Detail may not add to total due to rounding.

First official forecast for the 2011-13 biennium.

#1 Effects of legislation from 2012 special sessions subsequent to February forecast

#2 Expected refunds: -\$55 million; effects of legislation from 2013 regular and first special sessions: -\$29,000

#3 Legislative and budget-driven revenue changes from 2013 second special session

#4 Reclassification of biennial recoveries of prior expenditures from revenue to non-revenue resources, MSA arbitration payment

#5 Sum of legislative and budget-driven revenue changes from the 2014 regular legislative session

#6 Payment from legal settlement plus expected large audit payment

#7 Large expected refunds

#8 Legislative and budget driven revenue changes from 2015 special legislative sessions

Table 3.11

Track Record for the 2015-17 General Fund-State Cash Forecast

September 2012 through September 2015

Cash Basis - Millions of Dollars

<u>Date of Forecast</u>	<u>Department of Revenue*</u>	<u>Other Agencies</u>	<u>Subtotal*</u>	<u>Non-Economic Changes**</u>	<u>Total Change</u>	<u>Total General Fund-State Cash Basis</u>
September 2012[#]	\$34,102	\$1,416				\$35,518
Changes to Forecast						
November 2012	(196)	33	(163)	0	(163)	35,355
March 2013	(92)	44	(49)	0	(49)	35,306
June 2013	56	2	58	(7) ^{#1}	51	35,357
September 2013	95	(2)	93	249 ^{#2}	342	35,699
November 2013	(47)	3	(44)	(41) ^{#3}	(85)	35,615
February 2014	5	26	31	51 ^{#4}	82	35,697
June 2014	194	40	233	5 ^{#5}	238	35,935
September 2014	168	(25)	143	0	143	36,078
November 2014	239	3	241	0	241	36,319
February 2015	108	22	129	0	129	36,449
June 2015	201	70	270	39 ^{#6}	309	36,758
September 2015	80	60	139	193 ^{#7}	333	37,091
Total change***:						
From September 2012	810	274	1,083	489	1,573	
Percent change	2.4	19.3	3.1	1.4	4.4	

* Excludes legislative, judicial, statutorily required or other major non-economic changes.

** Includes legislative, judicial, statutorily required or other major non-economic changes.

*** Detail may not add to total due to rounding.

[#] First official forecast for the 2015-17 biennium.^{#1} Transfer of GF-S funds to Child and Family Reinvestment Account^{#2} Legislative and budget-driven revenue changes from 2013 second special session^{#3} Re-classification of prior period adjustments as non-revenue resources^{#4} Cannabis excise taxes and fees plus retail sales and B&O taxes on cannabis production and sales resulting from Initiative 502^{#5} Sum of legislative and budget-driven revenue changes from the 2014 regular legislative session^{#6} Legislative revenue changes from 2015 regular legislative session^{#7} Legislative and budget driven revenue changes from 2015 special legislative sessions

Table 3.12

2013-15 with Enacted Supplementals and 2015-17 Enacted Budget Balance Sheet
General Fund-State (GFS), Education Legacy Trust Account (ELTA), Washington Opportunity Pathways Account (OPA)
and Budget Stabilization Account
Dollars in Millions

	2013-15			2015-17		
	GFS	ELTA and OPA	TOTAL	GFS	ELTA and OPA	TOTAL
RESOURCES						
Beginning Fund Balance	167.5	(11.1)	156.4	899.6	26.5	926.1
June 2015 Forecast (Presented on May 18, 2015)	33,652.8	627.6	34,280.4	36,758.1	693.0	37,451.1
Revenue Legislation and Budget Driven Revenue (since 2015 June forecast)	8.4	(0.5)	7.9	193.4	26.3	219.7
September 2015 Revenue Update (Economic Changes)	4.8	11.6	16.4	139.5	4.0	143.5
Current Revenue Totals	33,666.0	638.7	34,304.7	37,091.0	723.3	37,814.3
Transfer to Budget Stabilization Account (BSA)	(318.5)		(318.5)	(371.6)		(371.6)
Previously Enacted Fund Transfers	135.0	293.3	428.3	-	-	-
Prior Period Adjustments and Alignments	12.8	-	12.8	40.8	-	40.8
2015 Legislative Sessions						
Extraordinary Revenue Growth transfer to BSA	(37.9)		(37.9)	(4.7)		(4.7)
Transfer back from BSA	37.9		37.9	4.7		4.7
Newly Enacted Fund Transfers	1.9	-	1.9	178.0	-	178.0
Total Resources (including beginning fund balance)	33,664.8	921.0	34,585.7	37,837.8	749.8	38,587.6
EXPENDITURES						
Enacted Budgets						
Enacted 2013-15 Budgets and Legislation (pre 2015 Session)	32,868.6	925.5	33,794.1	-	-	-
Enacted 2015 Supplementals	26.8	(31.1)	(4.3)	-	-	-
Enacted 2015-17 Budget			-	37,507.5	711.9	38,219.4
Lapses and Governor's Vetoes	109.9	-	109.9	(0.2)	-	(0.2)
Actual and Assumed Reversions	(240.1)		(240.1)	(172.5)		(172.5)
Total Expenditures	32,765.2	894.4	33,659.6	37,334.8	711.9	38,046.7
RESERVES						
Projected Ending GFS, ELTA & OPA Balances	899.6	26.5	926.1	503.0	37.9	541.0
Budget Stabilization Account						
Budget Stabilization Account Beginning Balance	269.7		269.7	513.0		513.0
Transfer from General Fund and Interest Earnings	358.5		358.5	385.9		385.9
Transfer to General Fund	(37.9)		(37.9)	(4.7)		(4.7)
Less Expenditures in Enacted 2015 Early Supplemental	(77.2)		(77.2)	-		-
Projected Budget Stabilization Account Ending Balance	513.0		513.0	894.2		894.2
Total Reserves (Including Budget Stabilization)	1,412.6	26.5	1,439.1	1,397.3	37.9	1,435.2

Table 3.13

**Alternative forecasts compared to the baseline forecast
2015-17 biennium**

(cash basis, millions of dollars)

Forecast by Source	Optimistic Forecast	Baseline Forecast	Pessimistic Forecast
Department of Revenue			
Retail Sales	\$19,112.5	\$17,918.8	\$16,799.4
Business & Occupation Use	7,968.0	7,475.0	7,016.3
Public Utility	1,341.1	1,248.3	1,166.8
Property (school levy)	841.7	797.2	755.9
Real Estate Excise	4,162.4	4,139.0	4,111.0
Other	1,640.2	1,470.2	1,305.7
Subtotal	2,164.4	2,168.1	2,087.4
	37,230.3	35,216.7	33,242.5
Department of Licensing			
	36.9	36.1	35.4
Insurance Commissioner¹			
	1,124.3	1,096.9	1,069.5
Lottery Commission			
	9.8	9.4	8.9
State Treasurer - Interest earnings			
	35.5	13.0	0.3
Liquor and Cannabis Surtaxes & Fees²			
	364.3	348.6	332.2
Office of Financial Management			
Other agencies	211.3	201.2	191.2
Administrative Office of the Courts			
Fines and Forfeitures	174.7	169.2	162.9
Total General Fund - State*	\$39,187.2	\$37,091.0	\$35,042.8
Difference from September 2015 Baseline	\$2,096.1		(\$2,048.2)

1 Insurance premiums, General Fund-State portion.

2 Includes beer and wine surtax, cannabis excise tax, distributor fees, retailer fees, licensing fees.

* Detail may not add to total due to rounding.

Source: ERFC, Department of Licensing, Insurance Commissioner, Lottery Commission, Office of the State Treasurer, Liquor Control Board, Office of Financial Management

Table 3.14

**Alternative forecasts compared to the baseline forecast
2017-19 biennium**

(cash basis, millions of dollars)

Forecast by Source	Optimistic Forecast	Baseline Forecast	Pessimistic Forecast
Department of Revenue			
Retail Sales	\$22,267.7	\$19,728.4	\$17,398.4
Business & Occupation Use	9,385.3	8,361.7	7,495.2
Public Utility	1,525.0	1,388.5	1,246.1
Property (school levy)	953.1	879.8	809.2
Real Estate Excise	4,374.5	4,339.8	4,287.6
Other	1,727.5	1,514.1	1,166.5
Subtotal	2,284.1	2,182.8	2,006.1
	42,517.3	38,395.1	34,409.1
Department of Licensing			
	37.5	36.8	36.0
Insurance Commissioner¹			
	1,212.9	1,183.3	1,153.7
Lottery Commission			
	25.9	24.7	23.5
State Treasurer - Interest earnings			
	95.9	46.9	6.6
Liquor and Cannabis Surtaxes & Fees²			
	507.6	476.4	445.2
Office of Financial Management			
Other agencies	205.2	195.5	185.7
Administrative Office of the Courts			
Fines and Forfeitures	193.8	179.3	164.7
Total General Fund - State*	\$44,796.0	\$40,537.9	\$36,424.6
Difference from September 2015 Baseline	\$4,258.1		(\$4,113.2)

1 Insurance premiums, General Fund-State portion.

2 Includes beer and wine surtax, cannabis excise tax, distributor fees, retailer fees, licensing fees.

* Detail may not add to total due to rounding.

Source: ERFC, Department of Licensing, Insurance Commissioner, Lottery Commission, Office of the State Treasurer, Liquor Control Board, Office of Financial Management

Table 3.15

Lottery transfers by fund

September 2015 Forecast

(cash basis, millions of dollars)

	Lottery: Total Transfers:*	General Fund	Mariners Stadium	Exhibition Center & Stadium	Student Achievement Account	School Construction Account	Problem Gambling Account	Economic Development Account	Opportunity Pathways Account	Veteran's VIP Account	Education Legacy Trust Account
2008	124.1	0.0	4.7	8.5	0.0	106.9	0.3	3.7	0.0	0.0	0.0
2009	122.2	11.1	4.9	8.9	0.0	94.4	0.2	2.7	0.0	0.0	0.0
2007-09 Biennium	246.4	11.1	9.6	17.4	0.0	201.3	0.5	6.4	0.0	0.0	0.0
2010	126.4	12.9	5.1	9.2	0.0	95.6	0.3	3.3	0.0	0.0	0.0
2011	137.2	8.6	5.3	9.6	0.0	9.4	0.3	4.5	99.5	0.0	0.0
2009-11 Biennium	263.6	21.5	10.4	18.8	0.0	105.0	0.5	7.9	99.5	0.0	0.0
2012	135.1	0.0	2.7	10.0	0.0	0.0	0.3	3.3	118.5	0.2	0.0
2013	139.7	0.0	0.0	10.4	0.0	0.0	0.3	3.5	125.5	0.0	0.0
2011-13 Biennium	274.8	0.0	2.7	20.4	0.0	0.0	0.6	6.9	244.0	0.2	0.0
2014	147.9	9.3	0.0	10.8	0.0	0.0	0.3	3.7	113.7	0.0	10.1
2015	143.1	0.6	0.0	11.2	0.0	0.0	0.3	4.7	120.2	0.0	6.1
2013-15 Biennium	291.0	9.9	0.0	22.0	0.0	0.0	0.6	8.4	233.9	0.0	16.1
2016	159.4	0.0	0.0	11.7	0.0	0.0	0.3	3.9	143.0	0.0	0.0
2017	159.8	9.4	0.0	12.2	0.0	0.0	0.3	3.8	133.7	0.0	0.0
2015-17 Biennium	319.3	9.4	0.0	23.8	0.0	0.0	0.6	7.7	276.7	0.0	0.0
2018	156.2	9.5	0.0	12.6	0.0	0.0	0.3	3.8	129.4	0.0	0.0
2019	164.2	15.2	0.0	12.2	0.0	0.0	0.3	3.8	132.2	0.0	0.0
2017-19 Biennium	320.4	24.7	0.0	24.8	0.0	0.0	0.7	7.6	261.6	0.0	0.0

Table 3.16

Lottery transfers by fund

September 2015 Forecast

(GAAP basis, millions of dollars)

	Lottery: Total Transfers:*	General Fund	Mariners Stadium	Exhibition Center & Stadium	Student Achievement Account	School Construction Account	Problem Gambling Account	Economic Development Account	Opportunity Pathways Account	Veteran's VIP Account	Education Legacy Trust Account
2008	124.1	0.0	4.7	8.5	0.0	106.9	0.3	3.7	0.0	0.0	0.0
2009	122.2	11.1	4.9	8.9	0.0	94.4	0.2	2.7	0.0	0.0	0.0
2007-09 Biennium	246.4	11.1	9.6	17.4	0.0	201.3	0.5	6.4	0.0	0.0	0.0
2010	129.4	12.9	5.1	9.2	0.0	97.4	0.3	4.6	0.0	0.0	0.0
2011	138.2	7.0	5.3	9.6	0.0	0.0	0.3	3.7	112.3	0.0	0.0
2009-11 Biennium	267.6	19.9	10.4	18.8	0.0	97.4	0.5	8.3	112.3	0.0	0.0
2012	138.0	0.0	2.7	10.0	0.0	0.0	0.3	3.0	121.8	0.2	0.0
2013	139.2	9.3	0.0	10.4	0.0	0.0	0.3	3.6	115.5	0.0	0.0
2011-13 Biennium	277.2	9.3	2.7	20.4	0.0	0.0	0.6	6.6	237.4	0.2	0.0
2014	147.7	0.6	0.0	10.8	0.0	0.0	0.3	4.0	121.9	0.0	10.1
2015	141.3	0.0	0.0	11.2	0.0	0.0	0.3	4.7	119.0	0.0	6.1
2013-15 Biennium	288.9	0.6	0.0	22.0	0.0	0.0	0.6	8.7	240.9	0.0	16.1
2016	157.1	9.4	0.0	11.7	0.0	0.0	0.3	3.8	131.4	0.0	0.0
2017	160.0	9.5	0.0	12.2	0.0	0.0	0.3	3.8	133.7	0.0	0.0
2015-17 Biennium	317.0	18.9	0.0	23.8	0.0	0.0	0.6	7.6	265.1	0.0	0.0
2018	161.9	15.2	0.0	12.6	0.0	0.0	0.3	3.8	129.4	0.0	0.0
2019	164.3	15.3	0.0	12.2	0.0	0.0	0.3	3.8	132.2	0.0	0.0
2017-19 Biennium	326.2	30.5	0.0	24.8	0.0	0.0	0.7	7.6	261.6	0.0	0.0

* Total Transfers are equal to total sales less total expenses (prizes, cost of sales, administration etc.)

Source: Lottery Commission, ERFC

Table 3.17

General Fund-State, Education Legacy Trust Account and Opportunity Pathways Account

History and Forecast by Fiscal Year (Cash basis)

September 2015 - Millions of Dollars

	General Fund-State (GF-S) (current definition)		Education Legacy Trust Fund* (ELTA)		Total GF-S plus ELTA		WA Opportunity Pathways Account (OPA)		Total GF-S plus ELTA and OPA	
	Level	% Chg.	Level	% Chg.	Level	% Chg.	Level	% Chg.	Level	% Chg.
History:										
FY 1995	\$8,799				\$8,799				\$8,799	
FY 1996	\$8,934	1.5%			\$8,934	1.5%			\$8,934	1.5%
FY 1997	\$9,449	5.8%			\$9,449	5.8%			\$9,449	5.8%
FY 1998	\$10,057	6.4%			\$10,057	6.4%			\$10,057	6.4%
FY 1999	\$10,414	3.6%			\$10,414	3.6%			\$10,414	3.6%
FY 2000	\$11,068	6.3%			\$11,068	6.3%			\$11,068	6.3%
FY 2001	\$11,560	4.4%			\$11,560	4.4%			\$11,560	4.4%
FY 2002	\$11,632	0.6%			\$11,632	0.6%			\$11,632	0.6%
FY 2003	\$11,721	0.8%			\$11,721	0.8%			\$11,721	0.8%
FY 2004	\$12,358	5.4%			\$12,358	5.4%			\$12,358	5.4%
FY 2005	\$13,036	5.5%			\$13,036	5.5%			\$13,036	5.5%
FY 2006	\$14,318	9.8%	\$115		\$14,432	10.7%			\$14,432	10.7%
FY 2007	\$15,467	8.0%	\$266	132.2%	\$15,734	9.0%			\$15,734	9.0%
FY 2008	\$15,659	1.2%	\$213	-20.1%	\$15,872	0.9%			\$15,872	0.9%
FY 2009	\$14,158	-9.6%	\$224	5.4%	\$14,382	-9.4%			\$14,382	-9.4%
FY 2010	\$13,571	-4.1%	\$157	-29.9%	\$13,728	-4.6%			\$13,728	-4.6%
FY 2011	\$14,648	7.9%	\$112	-29.0%	\$14,759	7.5%	\$99		\$14,859	8.2%
FY 2012	\$14,874	1.5%	\$114	2.3%	\$14,988	1.6%	\$118	19.1%	\$15,107	1.7%
FY 2013	\$15,783	6.1%	\$101	-11.5%	\$15,884	6.0%	\$126	5.9%	\$16,009	6.0%
FY 2014	\$16,383	3.8%	\$197	95.3%	\$16,580	4.4%	\$114	-9.4%	\$16,694	4.3%
FY 2015	\$17,283	5.5%	\$207	5.0%	\$17,491	5.5%	\$120	5.7%	\$17,611	5.5%
Forecast:										
FY 2016	\$18,172	5.1%	\$214	3.4%	\$18,386	5.1%	\$143	19.0%	\$18,529	5.2%
FY 2017	\$18,919	4.1%	\$232	8.3%	\$19,151	4.2%	\$134	-6.5%	\$19,285	4.1%
FY 2018	\$19,841	4.9%	\$238	2.5%	\$20,079	4.8%	\$129	-3.2%	\$20,209	4.8%
FY 2019	\$20,697	4.3%	\$265	11.4%	\$20,962	4.4%	\$132	2.2%	\$21,094	4.4%
Biennial Totals										
03-05 Biennium	\$25,395	8.7%	\$0	NA	\$25,395	8.7%	\$0	NA	\$25,395	8.7%
05-07 Biennium	\$29,785	17.3%	\$381	NA	\$30,166	18.8%	\$0	NA	\$30,166	18.8%
07-09 Biennium	\$29,817	0.1%	\$437	14.8%	\$30,254	0.3%	\$0	NA	\$30,254	0.3%
09-11 Biennium	\$28,218	-5.4%	\$269	-38.5%	\$28,487	-5.8%	\$99	NA	\$28,586	-5.5%
11-13 Biennium	\$30,657	8.6%	\$215	-19.9%	\$30,872	8.4%	\$244	145.2%	\$31,116	8.8%
13-15 Biennium	\$33,666	9.8%	\$405	88.0%	\$34,071	10.4%	\$234	-4.1%	\$34,305	10.2%
15-17 Biennium	\$37,091	10.2%	\$447	10.3%	\$37,538	10.2%	\$277	18.3%	\$37,814	10.2%
17-19 Biennium	\$40,538	9.3%	\$503	12.7%	\$41,041	9.3%	\$262	-5.4%	\$41,303	9.2%

*Education legacy trust fund excluding FY 14 and FY 15 lottery fund transfers. Includes pension stabilization fund interest in FY 08 and FY 09.

Table 3.18

Forecasted distribution of excise tax and license fees from cannabis sales

Thousands of dollars

Biennium	Total of Cannabis Excise Taxes plus License Fees	Total Pre-Distribution Allotments	Total to Distribute	Forecasted Distribution of Remaining Funds						General Fund-State
				DSHS Substance Abuse Program	Dept. of Health Cannabis Education Program	UW/WSU Research	Basic Health Plan Trust Account	Health Care Authority Community Health Centers	OSPI Dropout Prevention	
2013-15	\$53,897	\$7,350	\$46,547	\$5,166	\$1,000	\$0	\$22,706	\$2,271	\$135	\$15,269
2015-17	\$421,783	\$16,723	\$405,060	\$40,550	\$15,000	\$690	\$202,530	\$20,253	\$762	\$125,275
2017-19	\$703,140	\$17,082	\$686,058	\$51,072	\$19,500	\$3,404	\$343,029	\$34,303	\$1,022	\$233,728

Table 3.19

Legislation from 2015 special sessions with General Fund-State and Opportunity Pathways Account revenue impacts

Millions of dollars

Bill ID	Description	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	2013-15 Biennium	2015-17 Biennium	2017-19 Biennium
ESHB 2128	Dept of agriculture fees	-	(0.002)	(0.002)	(0.002)	(0.002)	-	(0.004)	(0.004)
2E2SHB 2136	Marijuana Market Reforms	6.878	(2.171)	17.000	16.110	25.225	6.878	14.829	41.334
ESB 6013	Charity supporter tax relief	-	(0.005)	(0.005)	(0.015)	(0.015)	-	(0.010)	(0.030)
ESSB 6057	Tax preferences & admin., economic development	-	(14.986)	(20.420)	(28.921)	(37.735)	-	(35.406)	(66.656)
ESSB 6138	Tax preference elimination and compliance	-	73.838	111.419	126.221	140.581	-	185.257	266.802
Budget-driven revenue changes to GF-S (continued into 17-19)		1.525	6.925	21.761	22.300	22.300	1.525	28.686	44.600
Total GF-S Revenue Impact		8.403	63.599	129.753	135.693	150.354	8.403	193.352	286.047

Bill ID	Description	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	2013-15 Biennium	2015-17 Biennium	2017-19 Biennium
2ESSB 5681	State lottery accounts (to OPA)	-	7.600	7.600	7.600	7.600	-	15.200	15.200
Budget-driven revenue changes to OPA (continued into 17-19)		(0.538)	5.574	5.547	5.547	5.547	(0.538)	11.121	11.094
Total Opportunity Pathways Account Revenue Impact		(0.538)	13.174	13.147	13.147	13.147	(0.538)	26.321	26.294

Source: Office of Financial Management, September 2015



Chapter 4: Special Report– Washington Gross Domestic Product by Industry, 1997 - 2014

- **The Bureau of Economic Analysis (BEA) released new estimates of 2013 Gross Domestic Product by state for major industrial sectors in June 2015.**
- **The BEA also included advance 2014 statistics.**
- **In 2014, Washington ranked 14th with a real GDP of \$390 billion, the same rank it has held since 1990.**

State GDP

The BEA released new estimates in June

In June 2015, the Bureau of Economic Analysis (BEA) released new estimates of 2013 Gross Domestic Product (GDP) by state for major industrial sectors. This year's annual revision includes revised statistics beginning with 1997, though most notable revisions are generally limited to the period beginning with 2011. These source data also include advance statistics of GDP by state for 2014. The 2014 data are less complete and more subject to further revision than are the data for earlier periods. Estimates for the years 2010 – 2014 are presented in this chapter. Estimates for years not included in this report are available from the BEA (www.bea.gov).

The estimate of GDP for each state is derived as the sum of the GDP from all industries in the state

The estimate of GDP for each state is derived as the sum of the GDP from all industries in the state. In concept, an industry's GDP, or its value added, is also equal to its gross output (sales or receipts and other operating income, commodity taxes, and inventory change) minus its intermediate inputs (consumption of goods and services purchased from other U.S. industries or imported). The GDP accounts provide data by industry and by state that are consistent with gross domestic product (GDP) in the national income and product accounts and with the national GDP-by-industry accounts.

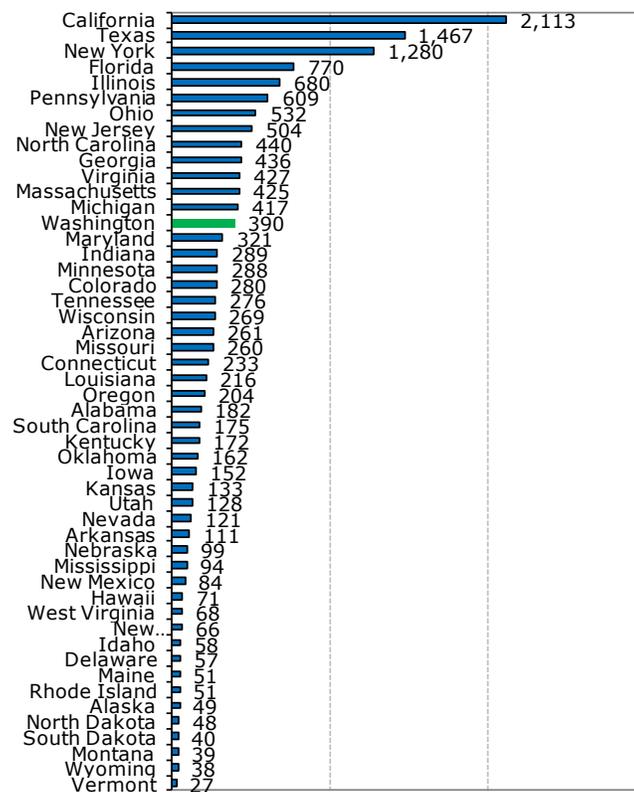
GDP can be broken down into 3 components

For each industry, GDP can be broken down into three components: taxes on production and imports, gross operating surplus and compensation of employees. "Taxes on production

and imports” is the sum of Federal excise taxes and customs duties and state and local government sales taxes, property taxes (including residential real estate taxes), motor vehicle licenses, severance taxes, other taxes and special assessments. It is presented here minus the value of government subsidies. “Gross operating surplus” is defined as the sum of corporate profits, proprietors’ income, rental income of persons, net interest, capital consumption allowances, business transfer payments, nontax payments and the current surplus of government enterprises. The third component, compensation of employees, is the sum of wage and salary accruals, employer contributions for government social insurance and employer contributions for employee pension and insurance funds. The three components less subsidies (which are removed from the tax component in the accompanying tables and figures) sum to total GDP. The most recent year for which these components are currently available is 2013.

Figure 4.1: 2014 GDP by State (Billions of 2009 dollars)

Washington has been ranked 14th since 1990



Source: Bureau of Economic Analysis, June 2015

California had the highest GDP of all the states with \$2.1 trillion

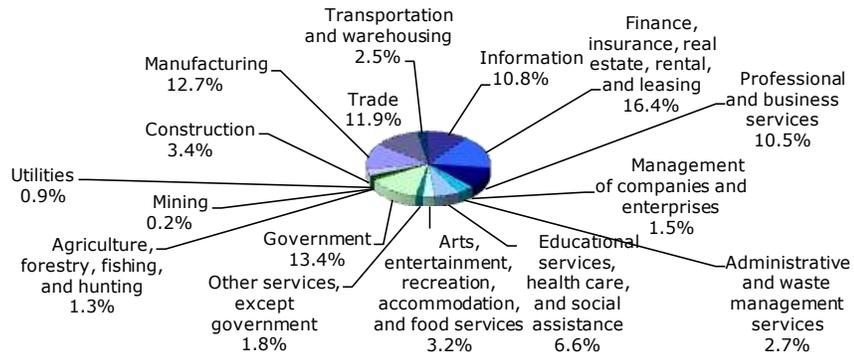
Figure 4.1 shows 2014 real GDP for each of the fifty states. California once again had the highest GDP of all the states with \$2.1 trillion while Vermont had the lowest at \$27 billion. Washington ranked 14th with a GDP of \$390 billion, the same rank it has held since 1990.

Financial activities made up the largest percentage at 16.4%

Figure 4.2 represents the industrial composition of Washington real GDP by industry in 2014. Once again financial activities made up the largest percentage at 16.4%, while government and manufacturing were the next two largest components at 13.4% and 12.7% respectively.

Figure 4.2: Washington real GDP by Industry, 2014

Manufacturing outpaced trade in recent statistics



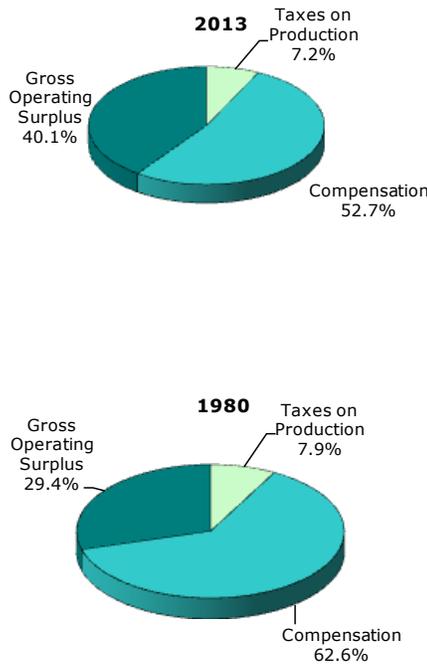
Source: Bureau of Economic Analysis, June 2015

Gross operating surplus grew

Figure 4.3 compares the component shares of Washington GDP in 1980 and 2013. During this period, the GDP share of compensation and taxes shrank while gross operating surplus grew.

Figure 4.3: Washington GDP by Component, 1980 vs. 2013

GDP share of compensation and taxes shrank



Source: Bureau of Economic Analysis, June 2015

Washington's percentage of the U.S. total has continued to steadily increase

Table 4.1 shows Washington and U.S. gross domestic product from 1976 to 2014, and Washington State GDP as a percentage of the U.S. total. During most of this time, Washington's average growth rate of GDP was higher than that of the U.S., which is reflected in its growing share of the total. Washington's share of U.S. GDP peaked at 2.33% in 1999 fueled by average annual growth of almost 10% from 1997-1999. The state's share of U.S. GDP then declined steadily until rebounding in 2005 due to strong growth in manufacturing and construction. Washington has continued to increase its share in each of the last three years, reaching 2.47% in 2014.

See tables 4.2 through 4.4 for additional details

Table 4.2 shows Washington GDP by industry from 2010 to 2014. Table 4.3 details real Washington GDP estimates by industry from 2010 to 2014, and Table 4.4 details components of GDP by industry in 2013.

Table 4.1

Washington and U.S. Gross Domestic Product (millions of dollars)

1976 through 2014

	Washington	U.S.	% of U.S. Economy
1976	\$31,679	\$1,779,570	1.78%
1977	\$36,276	\$1,986,138	1.83%
1978	\$42,229	\$2,243,638	1.88%
1979	\$48,389	\$2,491,428	1.94%
1980	\$52,158	\$2,719,134	1.92%
1981	\$58,003	\$3,064,552	1.89%
1982	\$61,572	\$3,217,617	1.91%
1983	\$66,765	\$3,451,340	1.93%
1984	\$72,596	\$3,872,847	1.87%
1985	\$75,870	\$4,155,029	1.83%
1986	\$81,932	\$4,364,279	1.88%
1987	\$87,712	\$4,663,282	1.88%
1988	\$96,240	\$5,067,453	1.90%
1989	\$105,057	\$5,385,776	1.95%
1990	\$115,650	\$5,674,013	2.04%
1991	\$122,657	\$5,857,335	2.09%
1992	\$131,148	\$6,174,369	2.12%
1993	\$138,834	\$6,453,455	2.15%
1994	\$146,726	\$6,865,513	2.14%
1995	\$151,338	\$7,232,722	2.09%
1996	\$161,760	\$7,659,651	2.11%
1997*	\$194,856	\$8,549,209	2.28%
1998	\$211,448	\$9,030,651	2.34%
1999	\$230,725	\$9,602,088	2.40%
2000	\$239,942	\$10,225,879	2.35%
2001	\$240,894	\$10,562,041	2.28%
2002	\$249,942	\$10,916,911	2.29%
2003	\$260,027	\$11,446,549	2.27%
2004	\$271,676	\$12,206,995	2.23%
2005	\$296,731	\$13,022,458	2.28%
2006	\$315,723	\$13,781,347	2.29%
2007	\$343,482	\$14,399,635	2.39%
2008	\$353,744	\$14,635,348	2.42%
2009	\$350,996	\$14,329,566	2.45%
2010	\$362,521	\$14,869,544	2.44%
2011	\$372,444	\$15,416,873	2.42%
2012	\$390,643	\$16,060,678	2.43%
2013	\$407,160	\$16,665,215	2.44%
2014	\$427,052	\$17,316,314	2.47%

Table 4.2

Washington Gross Domestic Product by Industry
 (Millions of Dollars)

	2010	2011	2012	2013	2014
All industry total	362,521	372,444	390,643	407,160	427,052
Private industries	307,718	317,330	333,177	348,501	367,148
Agriculture, forestry, fishing, and hunting	6,305	7,572	7,577	8,093	7,799
Farms	4,125	5,313	5,016	5,584	(NA)
Forestry, fishing, and related activities	2,180	2,259	2,560	2,508	(NA)
Mining	770	822	767	808	1,107
Oil and gas extraction	(L)	(L)	(L)	1	(NA)
Mining, except oil and gas	749	794	742	783	(NA)
Support activities for mining	21	27	25	24	(NA)
Utilities	3,677	3,782	3,433	3,663	3,716
Construction	13,197	12,850	13,701	14,736	15,779
Manufacturing	50,137	50,877	54,351	55,889	57,772
Durable goods manufacturing	37,881	39,124	42,910	44,372	46,050
Wood products manufacturing	1,033	1,030	1,114	1,297	(NA)
Nonmetallic mineral products manufacturing	869	829	938	966	(NA)
Primary metals manufacturing	629	795	794	864	(NA)
Fabricated metal products	1,544	1,698	1,937	2,011	(NA)
Machinery manufacturing	1,905	1,931	2,048	1,544	(NA)
Computer and electronic products manufacturing	3,730	3,616	4,182	4,525	(NA)
Electrical equipment, appliance, and components mar	405	395	490	472	(NA)
Motor vehicles, bodies and trailers, and parts manufa	638	532	557	578	(NA)
Other transportation equipment manufacturing	25,772	26,932	29,566	30,589	(NA)
Furniture and related products manufacturing	309	293	311	392	(NA)
Miscellaneous manufacturing	1,048	1,073	973	1,134	(NA)
Nondurable goods manufacturing	12,256	11,753	11,441	11,517	11,723
Food and beverage and tobacco products manufactur	3,572	3,536	3,724	4,036	(NA)
Textile mills and textile product mills	136	111	145	152	(NA)
Apparel and leather and allied products manufacturin	97	106	112	120	(NA)
Paper products manufacturing	1,425	1,274	1,154	1,346	(NA)
Printing and related support activities	609	532	446	412	(NA)
Petroleum and coal products manufacturing	4,505	3,565	3,640	3,297	(NA)
Chemical products manufacturing	1,219	1,942	1,539	1,395	(NA)
Plastics and rubber products manufacturing	693	687	681	758	(NA)
Wholesale trade	19,872	20,700	21,913	22,473	23,531
Retail trade	23,185	24,162	25,704	27,041	29,955
Transportation and warehousing	10,088	10,479	10,981	11,353	11,925
Air transportation	2,296	2,222	2,421	2,534	(NA)
Rail transportation	809	826	964	982	(NA)
Water transportation	729	739	743	803	(NA)
Truck transportation	2,089	2,173	2,221	2,303	(NA)
Transit and ground passenger transportation	456	470	461	479	(NA)
Pipeline transportation	48	43	47	49	(NA)
Other transportation and support activities	2,915	3,233	3,278	3,337	(NA)
Warehousing and storage	745	774	846	866	(NA)
Information	34,898	36,603	39,710	41,768	44,365
Publishing industries, except Internet (includes softwar	23,690	25,397	28,543	30,469	(NA)
Motion picture and sound recording industries	782	817	818	861	(NA)
Broadcasting and telecommunications	8,677	8,177	8,232	7,961	(NA)
Data processing, internet publishing, and other inform:	1,749	2,212	2,117	2,477	(NA)

Table 4.2 (continued)

	2010	2011	2012	2013	2014
Finance, insurance, real estate, rental, and leasing	63,550	64,844	66,658	70,222	73,402
Finance and insurance	13,915	13,891	14,455	15,736	16,173
Federal Reserve banks, credit intermediation, and reli	5,639	5,846	6,432	7,271	(NA)
Securities, commodity contracts, and investments	1,791	1,724	2,042	2,244	(NA)
Insurance carriers and related activities	5,929	5,804	5,544	5,898	(NA)
Funds, trusts, and other financial vehicles	556	517	437	324	(NA)
Real estate and rental and leasing	49,635	50,954	52,203	54,486	57,230
Real estate	46,885	48,256	49,459	51,685	(NA)
Rental and leasing services and lessors of intangible a	2,750	2,698	2,744	2,800	(NA)
Professional and business services	37,854	39,272	41,070	42,781	45,519
Professional, scientific, and technical services	22,930	23,849	24,820	25,746	27,612
Legal services	3,983	4,198	4,319	4,457	(NA)
Computer systems design and related services	4,799	4,934	5,427	5,948	(NA)
Miscellaneous professional, scientific, and technical se	14,148	14,717	15,073	15,340	(NA)
Management of companies and enterprises	4,595	4,796	5,353	5,758	6,081
Administrative and waste management services	10,329	10,627	10,897	11,277	11,826
Administrative and support services	7,423	8,097	8,630	8,970	(NA)
Waste management and remediation services	2,905	2,530	2,267	2,308	(NA)
Educational services, health care, and social assistance	24,945	25,471	26,214	27,795	29,333
Educational services	2,058	2,138	2,212	2,252	2,377
Health care and social assistance	22,887	23,332	24,002	25,542	26,956
Ambulatory health care services	12,049	12,259	12,619	12,976	(NA)
Hospitals and nursing and residential care facilities	8,641	8,988	9,273	9,591	(NA)
Social assistance	2,197	2,086	2,110	2,975	(NA)
Arts, entertainment, recreation, accommodation, and fo	11,950	12,341	13,158	13,641	14,323
Arts, entertainment, and recreation	2,844	2,851	2,930	3,185	3,474
Performing arts, spectator sports, museums, and rela	1,248	1,232	1,262	1,454	(NA)
Amusements, gambling, and recreation industries	1,595	1,618	1,669	1,731	(NA)
Accommodation and food services	9,106	9,491	10,227	10,456	10,850
Accommodation	2,224	2,390	2,511	2,665	(NA)
Food services and drinking places	6,882	7,101	7,716	7,791	(NA)
Other services, except government	7,291	7,555	7,941	8,238	8,620
Government	54,802	55,114	57,465	58,660	59,904
Federal civilian	9,120	9,636	9,820	9,640	(NA)
Federal military	8,181	8,273	8,573	8,449	(NA)
State and local	37,501	37,204	39,072	40,571	(NA)

Note-- NAICS Industry detail is based on the 2007 North American Industry Classification System (NAICS).

(L) Less than \$500,000 in nominal or real GDP by state.

(NA) Not available.

Note-- Per capita real GDP statistics for 1997-2014 reflect Census Bureau mid-year population estimates available as of Dec
Last updated: June 10, 2015 - advance statistics for 2014 and revised statistics for 1997-2013.

Table 4.3
Washington Gross Domestic Product by Industry
(Millions of Chained 2009 Dollars)

	2010	2011	2012	2013	2014
All industry total	358,120	360,625	370,374	379,014	390,489
Private industries	304,841	308,062	316,361	324,750	335,993
Agriculture, forestry, fishing, and hunting	5,598	5,436	5,332	5,524	5,287
Farms	3,544	3,378	3,098	3,313	(NA)
Forestry, fishing, and related activities	2,057	2,076	2,354	2,281	(NA)
Mining	699	678	638	699	968
Oil and gas extraction	(L)	(L)	(L)	(L)	(NA)
Mining, except oil and gas	678	653	616	677	(NA)
Support activities for mining	21	26	23	22	(NA)
Utilities	3,779	3,863	3,623	3,732	3,588
Construction	13,440	12,897	13,332	13,824	13,967
Manufacturing	49,396	48,317	50,103	50,797	51,980
Durable goods manufacturing	38,131	39,335	42,274	42,631	43,149
Wood products manufacturing	999	1,090	1,106	1,106	(NA)
Nonmetallic mineral products manufacturing	897	886	962	939	(NA)
Primary metals manufacturing	498	549	626	771	(NA)
Fabricated metal products	1,659	1,831	1,987	2,005	(NA)
Machinery manufacturing	1,994	2,041	2,072	1,500	(NA)
Computer and electronic products manufacturing	3,832	3,848	4,504	4,848	(NA)
Electrical equipment, appliance, and components manufacturing	415	411	480	454	(NA)
Motor vehicles, bodies and trailers, and parts manufacturing	686	610	612	627	(NA)
Other transportation equipment manufacturing	25,801	26,688	28,662	28,894	(NA)
Furniture and related products manufacturing	323	307	313	394	(NA)
Miscellaneous manufacturing	1,057	1,081	962	1,103	(NA)
Nondurable goods manufacturing	11,299	9,362	8,556	8,853	9,450
Food and beverage and tobacco products manufacturing	3,627	3,677	3,526	3,776	(NA)
Textile mills and textile product mills	136	99	134	142	(NA)
Apparel and leather and allied products manufacturing	100	108	114	121	(NA)
Paper products manufacturing	1,376	1,231	1,114	1,237	(NA)
Printing and related support activities	623	569	480	441	(NA)
Petroleum and coal products manufacturing	3,414	1,781	1,687	1,750	(NA)
Chemical products manufacturing	1,217	1,793	1,348	1,199	(NA)
Plastics and rubber products manufacturing	715	685	645	701	(NA)
Wholesale trade	19,411	19,760	20,279	20,428	21,096
Retail trade	23,008	23,507	24,306	25,133	27,488
Transportation and warehousing	9,893	10,110	10,222	10,288	10,343
Air transportation	2,231	2,063	2,079	2,132	(NA)
Rail transportation	795	768	833	807	(NA)
Water transportation	638	751	826	921	(NA)
Truck transportation	2,209	2,314	2,293	2,299	(NA)
Transit and ground passenger transportation	445	449	421	411	(NA)
Pipeline transportation	45	39	41	40	(NA)
Other transportation and support activities	2,772	2,907	2,819	2,745	(NA)
Warehousing and storage	770	838	955	1,011	(NA)
Information	35,246	36,957	39,991	41,673	44,041
Publishing industries, except Internet (includes software publishing)	23,973	25,602	28,657	30,235	(NA)
Motion picture and sound recording industries	782	816	813	853	(NA)
Broadcasting and telecommunications	8,721	8,279	8,333	7,994	(NA)
Data processing, internet publishing, and other information services	1,773	2,266	2,187	2,595	(NA)

Table 4.3 (continued)

	2010	2011	2012	2013	2014
Finance, insurance, real estate, rental, and leasing	63,330	63,916	64,125	65,958	67,144
Finance and insurance	13,412	13,123	13,099	13,895	13,902
Federal Reserve banks, credit intermediation, and reli	5,338	5,495	5,694	6,183	(NA)
Securities, commodity contracts, and investments	1,726	1,576	1,863	2,065	(NA)
Insurance carriers and related activities	5,839	5,569	5,204	5,436	(NA)
Funds, trusts, and other financial vehicles	514	484	337	232	(NA)
Real estate and rental and leasing	49,929	50,824	51,063	52,066	53,265
Real estate	47,169	48,138	48,360	49,338	(NA)
Rental and leasing services and lessors of intangible e	2,760	2,686	2,703	2,729	(NA)
Professional and business services	37,573	38,603	39,850	40,885	43,047
Professional, scientific, and technical services	22,678	23,288	23,870	24,355	25,761
Legal services	3,827	3,849	3,812	3,777	(NA)
Computer systems design and related services	4,879	5,018	5,541	6,047	(NA)
Miscellaneous professional, scientific, and technical se	13,982	14,437	14,561	14,611	(NA)
Management of companies and enterprises	4,558	4,739	5,249	5,597	6,068
Administrative and waste management services	10,341	10,580	10,737	10,943	11,229
Administrative and support services	7,507	8,171	8,627	8,853	(NA)
Waste management and remediation services	2,827	2,425	2,143	2,126	(NA)
Educational services, health care, and social assistance	24,386	24,555	24,766	25,886	26,939
Educational services	2,004	2,025	2,022	1,993	2,039
Health care and social assistance	22,382	22,530	22,744	23,899	24,909
Ambulatory health care services	11,758	11,843	12,018	12,293	(NA)
Hospitals and nursing and residential care facilities	8,480	8,705	8,764	8,895	(NA)
Social assistance	2,145	1,984	1,964	2,698	(NA)
Arts, entertainment, recreation, accommodation, and fo	11,965	12,378	12,704	12,849	13,125
Arts, entertainment, and recreation	2,859	2,865	2,858	3,060	3,268
Performing arts, spectator sports, museums, and rela	1,240	1,221	1,219	1,387	(NA)
Amusements, gambling, and recreation industries	1,619	1,645	1,640	1,673	(NA)
Accommodation and food services	9,106	9,513	9,845	9,792	9,864
Accommodation	2,244	2,377	2,414	2,510	(NA)
Food services and drinking places	6,862	7,136	7,432	7,282	(NA)
Other services, except government	7,105	7,194	7,346	7,391	7,544
Government	53,286	52,588	54,039	54,299	54,540
Federal civilian	8,790	9,069	9,237	8,866	(NA)
Federal military	7,971	7,934	8,111	7,983	(NA)
State and local	36,525	35,580	36,686	37,443	(NA)

Note-- NAICS Industry detail is based on the 2007 North American Industry Classification System (NAICS).

(L) Less than \$500,000 in nominal or real GDP by state.

(NA) Not available.

Note-- Per capita real GDP statistics for 1997-2014 reflect Census Bureau mid-year population estimates available as of Decem
Last updated: June 10, 2015 - advance statistics for 2014 and revised statistics for 1997-2013.

Table 4.4

Washington Gross Domestic Product by Component, 2013

(Millions of Dollars)

	Total	Compensation	Taxes on Production and Imports less Subsidies	Gross Operating Surplus
All industry total	407,160	214,394	29,483	163,284
Private industries	348,501	167,980	30,054	150,467
Agriculture, forestry, fishing, and hunting	8,093	3,293	(L)	4,801
Farms	5,584	1,928	(126)	3,782
Forestry, fishing, and related activities	2,508	1,365	125	1,019
Mining	808	170	30	608
Oil and gas extraction	1	(L)	(L)	(L)
Mining, except oil and gas	783	151	25	607
Support activities for mining	24	18	5	1
Utilities	3,663	575	1,229	1,860
Construction	14,736	10,256	418	4,062
Manufacturing	55,889	25,955	1,408	28,526
Durable goods mfg	44,372	20,863	714	22,795
Wood products mfg	1,297	796	28	474
Nonmetallic mineral products mfg	966	611	30	324
Primary metals mfg	864	456	38	370
Fabricated metal products	2,011	1,190	37	783
Machinery mfg	1,544	1,164	43	338
Computer and electronic products mfg	4,525	2,313	150	2,062
Electrical equipment, appliance, and components mfg	472	384	8	80
Motor vehicles, bodies and trailers, and parts mfg	578	(D)	17	(D)
Other transportation equipment mfg	30,589	(D)	311	(D)
Furniture and related products mfg	392	308	6	78
Miscellaneous mfg	1,134	836	45	252
Nondurable goods mfg	11,517	5,092	694	5,731
Food and beverage and tobacco products mfg	4,036	2,296	288	1,452
Textile mills and textile product mills	152	142	7	4
Apparel and leather and allied products mfg	120	92	3	26
Paper products mfg	1,346	757	46	543
Printing and related support activities	412	341	11	60
Petroleum and coal products mfg	3,297	440	85	2,771
Chemical products mfg	1,395	541	237	618
Plastics and rubber products mfg	758	483	18	257
Wholesale trade	22,473	10,325	5,642	6,506
Retail trade	27,041	14,322	6,601	6,118
Transportation and warehousing	11,353	6,131	854	4,368
Air transportation	2,534	1,094	544	895
Rail transportation	982	(D)	(L)	(D)
Water transportation	803	350	73	379
Truck transportation	2,303	1,335	125	843
Transit and ground passenger transportation	479	257	21	201
Pipeline transportation	49	(D)	14	(D)
Other transportation and support activities	3,337	1,930	67	1,339
Warehousing and storage	866	635	10	221

Table 4.4 (cont'd.)

	Total	Compensation	Taxes on Production and Imports less Subsidies	Gross Operating Surplus
Information	41,768	19,040	1,494	21,234
Publishing industries, except Internet (incls. software)	30,469	14,802	426	15,241
Motion picture and sound recording industries	861	189	53	619
Broadcasting and telecommunications	7,961	2,757	948	4,256
Data processing, internet publishing, and other info svcs	2,477	1,292	67	1,118
Finance, insurance, real estate, rental, and leasing	70,222	11,605	6,637	51,981
Finance and insurance	15,736	9,121	1,004	5,611
Federal Reserve banks, credit intermediation, and relat	7,271	(D)	259	(D)
Securities, commodity contracts, and investments	2,244	1,981	108	155
Insurance carriers and related activities	5,898	3,754	605	1,539
Funds, trusts, and other financial vehicles	324	(D)	33	(D)
Real estate and rental and leasing	54,486	2,484	5,632	46,369
Real estate	51,685	2,041	4,944	44,699
Rental and leasing svcs and lessors of intangible assets	2,800	443	688	1,670
Professional and business services	42,781	29,594	2,085	11,102
Professional, scientific, and technical services	25,746	16,987	1,255	7,503
Legal services	4,457	2,005	810	1,642
Computer systems design and related services	5,948	4,929	148	871
Miscellaneous professional, scientific, and tech svcs	15,340	10,053	298	4,990
Management of companies and enterprises	5,758	4,954	115	689
Administrative and waste management services	11,277	7,653	715	2,910
Administrative and support services	8,970	6,414	284	2,272
Waste management and remediation services	2,308	1,239	431	638
Educational services, health care, and social assistance	27,795	22,802	566	4,426
Educational services	2,252	1,965	120	168
Health care and social assistance	25,542	20,837	447	4,258
Ambulatory health care services	12,976	9,742	173	3,060
Hospitals and nursing and residential care facilities	9,591	8,493	222	876
Social assistance	2,975	2,602	51	322
Arts, entertainment, rec, accommodation, and food svc	13,641	8,014	2,500	3,126
Arts, entertainment, and recreation	3,185	1,716	433	1,035
Performing arts, spectator sports, museums, and related	1,454	768	73	613
Amusements, gambling, and recreation industries	1,731	948	360	423
Accommodation and food services	10,456	6,298	2,067	2,091
Accommodation	2,665	1,071	894	701
Food services and drinking places	7,791	5,228	1,173	1,390
Other services, except government	8,238	5,899	589	1,749
Government	58,660	46,413	(571)	12,817
Federal civilian	9,640	7,224	(81)	2,497
Federal military	8,449	6,198	0	2,251
State and local	40,571	32,992	(490)	8,070

Note-- NAICS Industry detail is based on the 2007 North American Industry Classification (D) Not shown in order to avoid the disclosure of confidential information; estimates are (L) Less than \$500,000 in nominal or real GDP by state.

Note-- Per capita real GDP statistics for 1997-2014 reflect Census Bureau mid-year

Last updated: June 10, 2015 - advance statistics for 2014 and revised statistics for 1997-

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Detail Components of the Washington State Economic and Revenue Forecast

Calendar Years

Note: The economic data discussed in these tables were current at the time the forecast was prepared. Many concepts have changed since then due to new releases and data revisions.

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Table A1.1
U.S. Economic Forecast Summary
Forecast 2015 to 2019

	2012	2013	2014	2015	2016	2017	2018	2019
Real National Income Accounts (Billions of Chained 2009 Dollars)								
Real Gross Domestic Product	15,354.6	15,583.3	15,961.7	16,362.2	16,806.8	17,260.6	17,709.4	18,134.4
% Ch	2.2	1.5	2.4	2.5	2.7	2.7	2.6	2.4
Real Consumption	10,413.2	10,590.4	10,875.7	11,206.4	11,529.0	11,840.1	12,135.9	12,438.9
% Ch	1.5	1.7	2.7	3.0	2.9	2.7	2.5	2.5
Real Nonresidential Fixed Investment	1,964.2	2,023.8	2,148.3	2,234.2	2,383.1	2,501.2	2,626.5	2,727.0
% Ch	9.0	3.0	6.2	4.0	6.7	5.0	5.0	3.8
Real Residential Fixed Investment	436.5	478.0	486.4	529.5	580.5	639.5	670.3	680.4
% Ch	13.5	9.5	1.8	8.9	9.6	10.2	4.8	1.5
Real Personal Income	13,111.8	13,077.9	13,467.6	13,991.3	14,455.5	14,922.5	15,404.0	15,863.6
% Ch	3.0	-0.3	3.0	3.9	3.3	3.2	3.2	3.0
Real Per Capita Income (\$/Person)	41,652	41,238	42,156	43,468	44,547	45,616	46,712	47,726
% Ch	2.3	-1.0	2.2	3.1	2.5	2.4	2.4	2.2
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.061	1.076	1.091	1.095	1.110	1.129	1.149	1.169
% Ch	1.9	1.4	1.4	0.4	1.4	1.7	1.8	1.7
U.S. Consumer Price Index (1982-84=1.0)	2.296	2.330	2.367	2.373	2.412	2.462	2.515	2.566
% Ch	2.1	1.5	1.6	0.2	1.7	2.1	2.1	2.0
Employment Cost Index (Dec. 2005=1.0)	1.160	1.182	1.206	1.232	1.262	1.295	1.332	1.370
% Ch	1.8	1.9	2.0	2.2	2.4	2.6	2.8	2.9
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	16,155.3	16,663.2	17,348.1	17,997.7	18,825.2	19,704.5	20,607.9	21,467.6
% Ch	4.1	3.1	4.1	3.7	4.6	4.7	4.6	4.2
Personal Income	13,915.1	14,068.4	14,694.2	15,320.6	16,046.4	16,850.2	17,703.2	18,546.0
% Ch	5.0	1.1	4.4	4.3	4.7	5.0	5.1	4.8
Employment (Millions)								
U.S. Civilian Labor Force	155.0	155.4	155.9	157.5	159.6	161.8	163.7	165.2
Total U.S. Employment	142.5	143.9	146.3	149.1	151.4	153.4	155.3	156.7
Unemployment Rate (%)	8.07	7.37	6.15	5.34	5.09	5.11	5.08	5.10
Nonfarm Payroll Employment	134.10	136.39	139.02	141.99	144.39	146.39	148.02	148.95
% Ch	1.7	1.7	1.9	2.1	1.7	1.4	1.1	0.6
Manufacturing	11.93	12.02	12.19	12.35	12.48	12.59	12.70	12.76
% Ch	1.7	0.8	1.4	1.4	1.0	0.9	0.9	0.4
Durable Manufacturing	7.47	7.55	7.69	7.81	7.88	7.98	8.09	8.12
% Ch	2.7	1.0	1.8	1.6	0.9	1.4	1.3	0.4
Nondurable Manufacturing	4.46	4.47	4.50	4.55	4.60	4.61	4.62	4.64
% Ch	0.1	0.3	0.7	1.0	1.2	0.1	0.2	0.5
Construction	5.65	5.86	6.14	6.40	6.78	7.19	7.52	7.77
% Ch	2.1	3.7	4.8	4.3	6.0	5.9	4.6	3.3
Service-Providing	115.68	117.66	119.80	122.39	124.33	125.80	126.97	127.58
% Ch	1.7	1.7	1.8	2.2	1.6	1.2	0.9	0.5
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	94.2	98.0	93.0	50.0	50.4	54.1	56.9	58.8
Personal Saving/Disposable Income (%)	7.6	4.8	4.8	5.0	5.4	6.0	6.9	7.3
Auto Sales (Millions)	7.2	7.6	7.7	7.5	7.9	8.4	8.4	8.4
% Ch	19.0	4.7	1.4	-2.2	5.4	5.5	0.3	0.2
Housing Starts (Millions)	0.784	0.928	1.001	1.131	1.308	1.468	1.529	1.575
% Ch	28.1	18.4	7.8	13.1	15.6	12.2	4.1	3.0
Federal Budget Surplus (Billions)	-1,090.1	-641.0	-631.5	-589.4	-612.3	-614.8	-689.9	-749.3
Net Exports (Billions)	-565.7	-508.4	-530.0	-503.1	-458.9	-519.4	-563.6	-569.9
3-Month Treasury Bill Rate (%)	0.09	0.06	0.03	0.08	0.83	1.82	2.76	3.05
10-Year Treasury Note Yield (%)	1.80	2.35	2.54	2.20	2.66	2.83	3.28	3.47
Bond Index of 20 G.O. Munis. (%)	3.73	4.26	4.25	3.73	4.40	4.59	4.89	5.01
30-Year Fixed Mortgage Rate (%)	3.66	3.98	4.17	3.91	4.42	4.69	5.22	5.46

Table A1.2
U.S. Economic Forecast Summary
Forecast 2015 to 2019

	2014:1	2014:2	2014:3	2014:4	2015:1	2015:2	2015:3	2015:4
Real National Income Accounts (Billions of Chained 2009 Dollars)								
Real Gross Domestic Product	15,724.9	15,901.5	16,068.8	16,151.4	16,177.3	16,324.3	16,419.8	16,527.5
% Ch , Annual Rate	-0.9	4.6	4.3	2.1	0.6	3.7	2.4	2.7
Real Consumption	10,724.7	10,826.3	10,918.6	11,033.3	11,081.2	11,166.4	11,247.0	11,331.0
% Ch , Annual Rate	1.3	3.8	3.5	4.3	1.8	3.1	2.9	3.0
Real Nonresidential Fixed Investment	2,106.9	2,129.8	2,176.3	2,180.0	2,188.6	2,205.7	2,249.4	2,293.2
% Ch , Annual Rate	8.3	4.4	9.0	0.7	1.6	3.2	8.2	8.0
Real Residential Fixed Investment	472.6	484.4	488.5	500.2	512.4	522.1	535.2	548.3
% Ch , Annual Rate	-2.7	10.4	3.4	9.9	10.1	7.8	10.4	10.1
Real Personal Income	13,297.9	13,391.9	13,500.2	13,680.4	13,860.7	13,915.5	14,027.2	14,161.8
% Ch , Annual Rate	4.4	2.9	3.3	5.4	5.4	1.6	3.3	3.9
Real Per Capita Income (\$/Person)	41,745	41,963	42,214	42,702	43,195	43,277	43,536	43,864
% Ch , Annual Rate	3.8	2.1	2.4	4.7	4.7	0.8	2.4	3.0
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.085	1.091	1.094	1.093	1.088	1.094	1.099	1.100
% Ch , Annual Rate	1.6	2.1	1.2	-0.4	-1.9	2.2	1.8	0.3
U.S. Consumer Price Index (1982-84=1.0)	2.354	2.368	2.375	2.370	2.352	2.369	2.385	2.385
% Ch , Annual Rate	2.1	2.4	1.2	-0.9	-3.1	3.0	2.8	-0.1
Employment Cost Index (Dec. 2005=1.0)	1.194	1.203	1.211	1.217	1.226	1.228	1.234	1.242
% Ch , Annual Rate	1.0	3.0	2.7	2.0	3.0	0.7	2.1	2.4
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	16,984.3	17,270.0	17,522.1	17,615.9	17,649.3	17,902.0	18,127.5	18,312.0
% Ch , Annual Rate	0.6	6.9	6.0	2.2	0.8	5.9	5.1	4.1
Personal Income	14,433.5	14,612.8	14,774.8	14,955.7	15,079.8	15,221.3	15,410.0	15,571.2
% Ch , Annual Rate	6.1	5.1	4.5	5.0	3.4	3.8	5.1	4.3
Employment (Millions)								
U.S. Civilian Labor Force	155.8	155.6	156.0	156.3	157.0	157.2	157.7	158.2
Total U.S. Employment	145.4	145.9	146.5	147.3	148.3	148.7	149.4	150.0
Unemployment Rate (%)	6.63	6.20	6.07	5.70	5.57	5.40	5.23	5.15
Nonfarm Payroll Employment	137.84	138.64	139.38	140.23	141.01	141.62	142.34	143.00
% Ch , Annual Rate	1.6	2.3	2.2	2.5	2.2	1.7	2.1	1.9
Manufacturing	12.12	12.16	12.20	12.27	12.32	12.33	12.37	12.39
% Ch , Annual Rate	1.7	1.3	1.5	2.3	1.6	0.3	1.2	0.8
Durable Manufacturing	7.61	7.66	7.71	7.76	7.80	7.80	7.81	7.82
% Ch , Annual Rate	1.6	2.4	2.5	3.0	1.9	0.0	0.4	0.8
Nondurable Manufacturing	4.51	4.50	4.50	4.51	4.52	4.53	4.56	4.57
% Ch , Annual Rate	2.0	-0.6	-0.2	1.2	1.1	0.8	2.7	0.7
Construction	6.03	6.11	6.17	6.24	6.33	6.37	6.42	6.48
% Ch , Annual Rate	6.7	5.4	3.8	4.3	6.4	2.6	2.8	3.9
Service-Providing	118.81	119.48	120.10	120.81	121.46	122.06	122.72	123.32
% Ch , Annual Rate	1.3	2.3	2.1	2.4	2.2	2.0	2.2	2.0
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	98.7	103.0	97.1	73.2	48.7	58.0	46.6	46.6
Personal Saving/Disposable Income (%)	5.0	4.8	4.7	4.7	5.2	4.8	4.8	5.0
Auto Sales (Millions)	7.4	7.8	7.8	7.8	7.4	7.5	7.6	7.6
% Ch , Annual Rate	-9.7	21.8	1.9	0.9	-19.2	6.5	3.2	-1.1
Housing Starts (Millions)	0.934	0.984	1.029	1.055	0.978	1.155	1.181	1.212
% Ch , Annual Rate	-27.3	23.2	19.6	10.6	-26.2	94.7	9.0	10.9
Federal Budget Surplus (Billions)	-619.2	-630.0	-650.1	-626.7	-579.3	-593.6	-590.7	-594.1
Net Exports (Billions)	-529.4	-530.9	-514.6	-545.2	-551.6	-517.5	-489.6	-453.5
3-Month Treasury Bill Rate (%)	0.05	0.03	0.03	0.02	0.03	0.02	0.08	0.20
10-Year Treasury Note Yield (%)	2.76	2.62	2.50	2.28	1.97	2.17	2.27	2.41
Bond Index of 20 G.O. Munis. (%)	4.49	4.33	4.24	3.95	3.48	3.66	3.80	3.98
30-Year Fixed Mortgage Rate (%)	4.36	4.23	4.14	3.97	3.73	3.83	3.98	4.11

Table A1.2 (continued)
U.S. Economic Forecast Summary
 Forecast 2015 to 2019

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Real National Income Accounts (Billions of Chained 2009 Dollars)								
Real Gross Domestic Product	16,635.5	16,752.1	16,865.2	16,974.7	17,097.9	17,208.1	17,312.1	17,424.4
% Ch , Annual Rate	2.6	2.8	2.7	2.6	2.9	2.6	2.4	2.6
Real Consumption	11,413.0	11,493.0	11,568.3	11,641.6	11,726.0	11,806.4	11,879.2	11,948.8
% Ch , Annual Rate	2.9	2.8	2.6	2.6	2.9	2.8	2.5	2.4
Real Nonresidential Fixed Investment	2,331.4	2,370.8	2,402.4	2,427.9	2,458.4	2,485.1	2,512.8	2,548.6
% Ch , Annual Rate	6.8	6.9	5.5	4.3	5.1	4.4	4.5	5.8
Real Residential Fixed Investment	561.9	573.6	584.9	601.6	619.5	634.5	647.3	656.5
% Ch , Annual Rate	10.3	8.6	8.1	12.0	12.4	10.1	8.3	5.8
Real Personal Income	14,294.4	14,397.6	14,511.5	14,618.7	14,759.2	14,869.0	14,976.3	15,085.5
% Ch , Annual Rate	3.8	2.9	3.2	3.0	3.9	3.0	2.9	2.9
Real Per Capita Income (\$/Person)	44,185	44,414	44,674	44,914	45,254	45,499	45,735	45,976
% Ch , Annual Rate	3.0	2.1	2.4	2.2	3.1	2.2	2.1	2.1
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.104	1.108	1.112	1.117	1.121	1.127	1.132	1.137
% Ch , Annual Rate	1.6	1.5	1.5	1.6	1.6	2.0	1.8	1.9
U.S. Consumer Price Index (1982-84=1.0)	2.397	2.406	2.417	2.429	2.440	2.455	2.469	2.483
% Ch , Annual Rate	2.0	1.5	1.8	2.0	1.9	2.5	2.3	2.3
Employment Cost Index (Dec. 2005=1.0)	1.249	1.258	1.266	1.274	1.282	1.290	1.299	1.308
% Ch , Annual Rate	2.5	2.8	2.6	2.5	2.6	2.7	2.7	2.8
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	18,513.3	18,717.8	18,927.9	19,142.0	19,373.4	19,593.7	19,809.8	20,040.9
% Ch , Annual Rate	4.5	4.5	4.6	4.6	4.9	4.6	4.5	4.7
Personal Income	15,777.8	15,949.3	16,136.4	16,322.2	16,545.9	16,752.0	16,950.3	17,152.4
% Ch , Annual Rate	5.4	4.4	4.8	4.7	5.6	5.1	4.8	4.9
Employment (Millions)								
U.S. Civilian Labor Force	158.8	159.3	159.9	160.5	161.0	161.5	162.1	162.6
Total U.S. Employment	150.6	151.1	151.7	152.2	152.7	153.2	153.7	154.1
Unemployment Rate (%)	5.10	5.09	5.08	5.09	5.08	5.09	5.12	5.14
Nonfarm Payroll Employment	143.60	144.15	144.65	145.18	145.73	146.20	146.62	147.00
% Ch , Annual Rate	1.7	1.5	1.4	1.5	1.5	1.3	1.2	1.0
Manufacturing	12.43	12.45	12.48	12.54	12.55	12.56	12.60	12.64
% Ch , Annual Rate	1.2	0.5	1.2	1.9	0.3	0.3	1.4	1.2
Durable Manufacturing	7.84	7.85	7.88	7.94	7.94	7.96	8.00	8.04
% Ch , Annual Rate	0.7	0.5	1.9	2.7	0.4	0.5	2.2	1.9
Nondurable Manufacturing	4.59	4.60	4.60	4.61	4.61	4.61	4.61	4.60
% Ch , Annual Rate	2.1	0.5	0.1	0.5	0.1	-0.2	0.0	-0.1
Construction	6.60	6.73	6.85	6.95	7.05	7.15	7.24	7.32
% Ch , Annual Rate	8.0	8.0	7.1	6.1	5.8	5.5	5.1	4.6
Service-Providing	123.76	124.17	124.52	124.88	125.32	125.68	125.97	126.22
% Ch , Annual Rate	1.4	1.3	1.1	1.2	1.4	1.1	0.9	0.8
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	48.5	50.1	51.0	52.0	52.9	53.7	54.5	55.4
Personal Saving/Disposable Income (%)	5.2	5.3	5.5	5.6	5.8	5.9	6.0	6.2
Auto Sales (Millions)	7.7	7.8	8.0	8.1	8.2	8.3	8.5	8.5
% Ch , Annual Rate	7.8	7.2	9.2	5.9	1.5	7.5	7.9	0.7
Housing Starts (Millions)	1.252	1.262	1.325	1.395	1.432	1.468	1.477	1.495
% Ch , Annual Rate	14.1	3.2	21.4	22.9	11.1	10.6	2.5	5.0
Federal Budget Surplus (Billions)	-621.5	-617.0	-608.4	-602.2	-618.4	-609.8	-609.8	-621.3
Net Exports (Billions)	-444.1	-449.8	-464.4	-477.3	-498.5	-513.7	-525.3	-539.9
3-Month Treasury Bill Rate (%)	0.47	0.71	0.96	1.19	1.45	1.67	1.95	2.22
10-Year Treasury Note Yield (%)	2.58	2.65	2.68	2.72	2.76	2.81	2.86	2.89
Bond Index of 20 G.O. Munis. (%)	4.25	4.41	4.46	4.50	4.54	4.58	4.61	4.64
30-Year Fixed Mortgage Rate (%)	4.27	4.37	4.46	4.56	4.61	4.67	4.73	4.76

Table A1.2 (continued)
U.S. Economic Forecast Summary
 Forecast 2015 to 2019

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Real National Income Accounts (Billions of Chained 2009 Dollars)								
Real Gross Domestic Product	17,551.1	17,659.8	17,762.4	17,864.3	17,976.2	18,081.2	18,186.4	18,293.9
% Ch , Annual Rate	2.9	2.5	2.3	2.3	2.5	2.4	2.3	2.4
Real Consumption	12,029.1	12,097.1	12,170.8	12,246.5	12,331.5	12,403.7	12,474.3	12,546.0
% Ch , Annual Rate	2.7	2.3	2.5	2.5	2.8	2.4	2.3	2.3
Real Nonresidential Fixed Investment	2,582.5	2,614.9	2,641.6	2,666.9	2,690.9	2,715.7	2,738.8	2,762.4
% Ch , Annual Rate	5.4	5.1	4.1	3.9	3.6	3.7	3.5	3.5
Real Residential Fixed Investment	664.4	670.5	673.3	673.1	672.4	676.4	683.4	689.2
% Ch , Annual Rate	4.9	3.7	1.6	-0.1	-0.4	2.4	4.2	3.4
Real Personal Income	15,229.3	15,349.3	15,462.8	15,574.9	15,711.4	15,817.6	15,914.7	16,011.0
% Ch , Annual Rate	3.9	3.2	3.0	2.9	3.6	2.7	2.5	2.4
Real Per Capita Income (\$/Person)	46,322	46,593	46,845	47,090	47,409	47,635	47,833	48,028
% Ch , Annual Rate	3.0	2.4	2.2	2.1	2.7	1.9	1.7	1.6
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.142	1.147	1.152	1.157	1.162	1.166	1.172	1.177
% Ch , Annual Rate	1.7	1.7	1.8	1.7	1.7	1.7	1.8	1.8
U.S. Consumer Price Index (1982-84=1.0)	2.496	2.508	2.521	2.534	2.547	2.559	2.573	2.586
% Ch , Annual Rate	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.0
Employment Cost Index (Dec. 2005=1.0)	1.317	1.327	1.336	1.346	1.356	1.365	1.375	1.385
% Ch , Annual Rate	2.9	2.9	2.9	2.9	2.9	3.0	2.9	2.8
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	20,287.0	20,508.9	20,715.3	20,920.3	21,146.1	21,358.9	21,573.0	21,792.5
% Ch , Annual Rate	5.0	4.4	4.1	4.0	4.4	4.1	4.1	4.1
Personal Income	17,389.0	17,600.3	17,808.4	18,014.9	18,249.0	18,450.2	18,645.2	18,839.7
% Ch , Annual Rate	5.6	4.9	4.8	4.7	5.3	4.5	4.3	4.2
Employment (Millions)								
U.S. Civilian Labor Force	163.0	163.4	163.9	164.3	164.7	165.0	165.4	165.7
Total U.S. Employment	154.6	155.1	155.5	155.9	156.2	156.5	156.8	157.1
Unemployment Rate (%)	5.11	5.07	5.06	5.07	5.08	5.10	5.12	5.12
Nonfarm Payroll Employment	147.46	147.90	148.24	148.49	148.70	148.87	149.04	149.21
% Ch, Annual Rate	1.2	1.2	0.9	0.7	0.6	0.5	0.5	0.5
Manufacturing	12.67	12.68	12.71	12.74	12.76	12.75	12.76	12.76
% Ch, Annual Rate	0.8	0.4	1.0	1.0	0.5	-0.2	0.2	-0.1
Durable Manufacturing	8.06	8.07	8.09	8.12	8.13	8.11	8.12	8.11
% Ch, Annual Rate	1.3	0.3	1.3	1.2	0.4	-0.6	0.1	-0.3
Nondurable Manufacturing	4.61	4.61	4.62	4.63	4.63	4.64	4.64	4.65
% Ch, Annual Rate	0.1	0.5	0.6	0.6	0.6	0.5	0.5	0.3
Construction	7.40	7.48	7.56	7.62	7.68	7.74	7.80	7.85
% Ch, Annual Rate	4.6	4.6	4.1	3.2	3.1	3.1	3.1	3.0
Service-Providing	126.56	126.90	127.13	127.28	127.42	127.53	127.63	127.75
% Ch, Annual Rate	1.1	1.1	0.7	0.5	0.4	0.4	0.3	0.4
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	56.0	56.6	57.2	57.7	58.2	58.6	59.0	59.4
Personal Saving/Disposable Income (%)	6.6	6.8	7.0	7.1	7.2	7.3	7.4	7.4
Auto Sales (Millions)	8.4	8.4	8.4	8.3	8.3	8.4	8.4	8.5
% Ch, Annual Rate	-2.4	-1.6	-1.9	-0.9	-0.2	2.4	2.2	1.0
Housing Starts (Millions)	1.520	1.526	1.530	1.540	1.554	1.563	1.583	1.599
% Ch, Annual Rate	6.7	1.6	1.1	2.6	3.6	2.4	5.4	3.9
Federal Budget Surplus (Billions)	-668.3	-684.7	-696.0	-710.8	-736.0	-750.5	-751.8	-758.9
Net Exports (Billions)	-548.9	-562.1	-569.6	-573.6	-572.2	-572.7	-567.8	-566.9
3-Month Treasury Bill Rate (%)	2.43	2.68	2.89	3.02	3.06	3.05	3.05	3.04
10-Year Treasury Note Yield (%)	3.04	3.23	3.39	3.47	3.48	3.47	3.47	3.47
Bond Index of 20 G.O. Munis. (%)	4.73	4.86	4.96	5.01	5.01	5.00	5.00	5.01
30-Year Fixed Mortgage Rate (%)	4.93	5.15	5.34	5.44	5.46	5.45	5.45	5.45

Table A1.3
Washington Economic Forecast Summary
Forecast 2015 to 2019

	2012	2013	2014	2015	2016	2017	2018	2019
Real Income (Billions of Chained 2009 Dollars)								
Real Personal Income	305.729	309.240	321.382	336.609	348.592	361.352	374.512	387.355
% Ch	4.7	1.1	3.9	4.7	3.6	3.7	3.6	3.4
Real Wage and Salary Disb.	154.425	158.768	165.606	173.744	179.655	185.604	191.712	198.242
% Ch	3.8	2.8	4.3	4.9	3.4	3.3	3.3	3.4
Real Nonwage Income	151.304	150.473	155.777	162.864	168.937	175.748	182.800	189.113
% Ch	5.7	-0.5	3.5	4.5	3.7	4.0	4.0	3.5
Real Per Capita Income (\$/Person)	44,267	44,269	45,431	46,954	47,958	49,070	50,225	51,302
% Ch	3.6	0.0	2.6	3.4	2.1	2.3	2.4	2.1
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.061	1.076	1.091	1.095	1.110	1.129	1.149	1.169
% Ch	1.9	1.4	1.4	0.4	1.4	1.7	1.8	1.7
Seattle Cons. Price Index (1982-84=1.0)	2.387	2.416	2.460	2.493	2.543	2.597	2.654	2.710
% Ch	2.5	1.2	1.8	1.3	2.0	2.1	2.2	2.1
Average Nonfarm Annual Wage	53,653	54,700	56,518	57,917	59,660	61,720	64,002	66,648
% Ch	3.8	2.0	3.3	2.5	3.0	3.5	3.7	4.1
Avg. Hourly Earnings-Mfg. (\$/Hour)	24.14	24.34	25.16	25.49	26.18	26.77	27.43	28.13
% Ch	0.7	0.8	3.4	1.3	2.7	2.2	2.5	2.6
Current Dollar Income (Billions of Dollars)								
Personal Income	324.458	332.655	350.645	368.582	386.954	408.028	430.407	452.851
% Ch	6.7	2.5	5.4	5.1	5.0	5.4	5.5	5.2
Disposable Personal Income	289.216	293.102	308.161	321.995	338.057	356.475	376.865	396.890
% Ch	6.9	1.3	5.1	4.5	5.0	5.4	5.7	5.3
Per Capita Income (\$/Person)	46,979	47,621	49,567	51,413	53,235	55,407	57,720	59,975
% Ch	5.6	1.4	4.1	3.7	3.5	4.1	4.2	3.9
Employment (Thousands)								
Washington Civilian Labor Force	3,462.6	3,456.5	3,486.7	3,549.4	3,602.4	3,667.8	3,727.9	3,784.4
Total Washington Employment	3,184.7	3,216.9	3,268.5	3,353.5	3,414.2	3,474.7	3,532.8	3,586.2
Unemployment Rate (%)	8.03	6.93	6.26	5.52	5.22	5.26	5.23	5.24
Nonfarm Payroll Employment	2,923.8	2,992.6	3,071.9	3,162.6	3,220.2	3,273.0	3,319.8	3,355.1
% Ch	1.7	2.4	2.7	3.0	1.8	1.6	1.4	1.1
Manufacturing	280.3	286.7	288.2	288.0	287.7	288.8	290.3	291.5
% Ch	4.3	2.3	0.5	-0.1	-0.1	0.4	0.5	0.4
Durable Manufacturing	204.5	209.6	209.5	208.1	206.8	207.4	208.3	208.6
% Ch	5.8	2.5	0.0	-0.7	-0.7	0.3	0.5	0.1
Aerospace	94.2	96.1	93.9	92.0	89.4	87.1	85.2	83.5
% Ch	8.8	2.0	-2.2	-2.0	-2.9	-2.5	-2.2	-2.0
Nondurable Manufacturing	75.7	77.1	78.7	79.9	80.9	81.4	82.0	82.9
% Ch	0.6	1.8	2.1	1.5	1.3	0.7	0.7	1.2
Construction	139.1	149.0	159.3	174.4	178.1	185.4	193.1	199.0
% Ch	2.0	7.1	6.9	9.5	2.1	4.1	4.2	3.0
Service-Providing	2,498.6	2,550.9	2,618.2	2,693.8	2,748.3	2,792.6	2,829.9	2,858.1
% Ch	1.4	2.1	2.6	2.9	2.0	1.6	1.3	1.0
Software Publishers	52.4	53.9	55.6	54.9	55.0	55.4	56.2	56.9
% Ch	1.4	2.8	3.2	-1.2	0.1	0.8	1.3	1.4
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	28.118	32.962	33.898	40.576	39.065	42.638	44.020	44.599
% Ch	34.8	17.2	2.8	19.7	-3.7	9.1	3.2	1.3
Single-Family	16.508	18.396	17.905	19.045	22.053	25.904	27.448	27.774
% Ch	25.5	11.4	-2.7	6.4	15.8	17.5	6.0	1.2
Multi-Family	11.610	14.566	15.993	21.531	17.012	16.734	16.572	16.824
% Ch	50.7	25.5	9.8	34.6	-21.0	-1.6	-1.0	1.5
30-Year Fixed Mortgage Rate (%)	3.66	3.98	4.17	3.91	4.42	4.69	5.22	5.46

Table A1.4
Washington Economic Forecast Summary
Forecast 2015 to 2019

	2014:1	2014:2	2014:3	2014:4	2015:1	2015:2	2015:3	2015:4
Real Income (Billions of Chained 2009 Dollars)								
Real Personal Income	316.472	319.040	322.195	327.823	333.402	335.469	337.583	339.982
% Ch, Annual Rate	7.0	3.3	4.0	7.2	7.0	2.5	2.5	2.9
Real Wage and Salary Disb.	163.507	163.628	165.824	169.464	173.040	173.485	173.830	174.622
% Ch, Annual Rate	7.8	0.3	5.5	9.1	8.7	1.0	0.8	1.8
Real Nonwage Income	152.965	155.412	156.371	158.359	160.362	161.983	163.753	165.359
% Ch, Annual Rate	6.2	6.6	2.5	5.2	5.2	4.1	4.4	4.0
Real Per Capita Income (\$/Person)	44,956	45,180	45,470	46,116	46,751	46,878	47,009	47,177
% Ch, Annual Rate	5.7	2.0	2.6	5.8	5.6	1.1	1.1	1.4
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.085	1.091	1.094	1.093	1.088	1.094	1.099	1.100
% Ch, Annual Rate	1.6	2.1	1.2	-0.4	-1.9	2.2	1.8	0.3
Seattle Cons. Price Index (1982-84=1.0)	2.440	2.463	2.465	2.472	2.467	2.488	2.506	2.512
% Ch, Annual Rate	2.4	3.8	0.3	1.1	-0.7	3.3	3.0	0.9
Average Nonfarm Annual Wage	55,949	56,106	56,543	57,475	57,833	57,902	57,941	57,993
% Ch, Annual Rate	6.4	1.1	3.2	6.8	2.5	0.5	0.3	0.4
Avg. Hourly Earnings-Mfg. (\$/Hour)	24.82	25.13	25.33	25.36	25.08	25.36	25.69	25.82
% Ch, Annual Rate	0.5	5.2	3.2	0.4	-4.2	4.4	5.4	2.0
Current Dollar Income (Billions of Dollars)								
Personal Income	343.489	348.116	352.602	358.371	362.714	366.938	370.861	373.818
% Ch, Annual Rate	8.7	5.5	5.3	6.7	4.9	4.7	4.3	3.2
Disposable Personal Income	302.176	306.328	309.833	314.307	317.013	320.479	323.942	326.545
% Ch, Annual Rate	8.2	5.6	4.7	5.9	3.5	4.4	4.4	3.3
Per Capita Income (\$/Person)	48,794	49,297	49,762	50,413	50,861	51,276	51,643	51,872
% Ch, Annual Rate	7.4	4.2	3.8	5.3	3.6	3.3	2.9	1.8
Employment (Thousands)								
Washington Civilian Labor Force	3,464.3	3,471.9	3,493.8	3,516.9	3,543.6	3,548.6	3,544.8	3,560.8
Total Washington Employment	3,244.0	3,257.6	3,277.4	3,295.1	3,325.1	3,357.1	3,357.4	3,374.3
Unemployment Rate (%)	6.36	6.17	6.19	6.31	6.17	5.40	5.29	5.24
Nonfarm Payroll Employment	3,045.5	3,055.7	3,084.4	3,102.2	3,133.5	3,155.3	3,173.4	3,188.2
% Ch, Annual Rate	3.2	1.3	3.8	2.3	4.1	2.8	2.3	1.9
Manufacturing	287.8	288.5	288.3	288.2	289.4	288.5	287.5	286.6
% Ch, Annual Rate	1.1	1.0	-0.3	-0.2	1.8	-1.3	-1.4	-1.3
Durable Manufacturing	209.4	209.4	209.8	209.5	209.7	208.6	207.7	206.6
% Ch, Annual Rate	0.3	-0.1	0.8	-0.5	0.4	-2.2	-1.8	-2.1
Aerospace	94.0	93.8	94.3	93.7	92.9	92.4	91.9	90.8
% Ch, Annual Rate	-3.2	-1.1	2.4	-2.5	-3.3	-2.1	-2.4	-4.5
Nondurable Manufacturing	78.4	79.2	78.5	78.6	79.7	79.9	79.8	80.0
% Ch, Annual Rate	3.3	4.1	-3.2	0.6	5.6	1.0	-0.4	0.8
Construction	156.1	156.2	159.8	165.1	172.5	174.5	175.0	175.6
% Ch, Annual Rate	9.7	0.1	9.5	14.0	19.3	4.6	1.2	1.2
Service-Providing	2,595.2	2,604.8	2,630.1	2,642.7	2,665.0	2,685.9	2,704.5	2,719.8
% Ch, Annual Rate	3.1	1.5	3.9	1.9	3.4	3.2	2.8	2.3
Software Publishers	55.3	55.7	56.1	55.2	54.6	54.9	55.1	55.0
% Ch, Annual Rate	4.2	3.2	3.0	-6.0	-4.2	1.6	1.6	-0.6
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	31,779	35,065	33,120	35,628	53,623	36,781	35,505	36,393
% Ch, Annual Rate	-35.4	48.2	-20.4	33.9	413.1	-77.9	-13.2	10.4
Single-Family	17,459	17,108	17,974	19,079	18,456	18,863	19,266	19,594
% Ch, Annual Rate	-7.1	-7.8	21.8	27.0	-12.4	9.1	8.8	7.0
Multi-Family	14,320	17,957	15,146	16,549	35,168	17,918	16,239	16,799
% Ch, Annual Rate	-56.8	147.3	-49.4	42.5	1,939.2	-93.3	-32.5	14.5
30-Year Fixed Mortgage Rate (%)	4.36	4.23	4.14	3.97	3.73	3.83	3.98	4.11

Table A1.4 (continued)
Washington Economic Forecast Summary
Forecast 2015 to 2019

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Real Income (Billions of Chained 2009 Dollars)								
Real Personal Income	345.429	347.407	349.440	352.093	357.878	360.391	362.060	365.078
% Ch, Annual Rate	6.6	2.3	2.4	3.1	6.7	2.8	1.9	3.4
Real Wage and Salary Disb.	178.390	179.276	179.846	181.108	184.737	185.409	185.431	186.839
% Ch, Annual Rate	8.9	2.0	1.3	2.8	8.3	1.5	0.0	3.1
Real Nonwage Income	167.039	168.131	169.595	170.985	173.141	174.982	176.629	178.239
% Ch, Annual Rate	4.1	2.6	3.5	3.3	5.1	4.3	3.8	3.7
Real Per Capita Income (\$/Person)	47,767	47,875	47,993	48,198	48,831	49,017	49,088	49,343
% Ch, Annual Rate	5.1	0.9	1.0	1.7	5.4	1.5	0.6	2.1
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.104	1.108	1.112	1.117	1.121	1.127	1.132	1.137
% Ch, Annual Rate	1.6	1.5	1.5	1.6	1.6	2.0	1.8	1.9
Seattle Cons. Price Index (1982-84=1.0)	2.525	2.536	2.548	2.561	2.574	2.590	2.605	2.620
% Ch, Annual Rate	2.1	1.8	1.9	2.1	2.0	2.4	2.3	2.3
Average Nonfarm Annual Wage	59,238	59,529	59,719	60,153	61,341	61,620	61,683	62,233
% Ch, Annual Rate	8.9	2.0	1.3	2.9	8.1	1.8	0.4	3.6
Avg. Hourly Earnings-Mfg. (\$/Hour)	25.95	26.11	26.25	26.39	26.53	26.68	26.84	27.00
% Ch, Annual Rate	2.1	2.4	2.2	2.1	2.2	2.3	2.4	2.4
Current Dollar Income (Billions of Dollars)								
Personal Income	381.276	384.848	388.570	393.121	401.202	406.031	409.781	415.100
% Ch, Annual Rate	8.2	3.8	3.9	4.8	8.5	4.9	3.7	5.3
Disposable Personal Income	332.997	336.125	339.590	343.515	350.406	354.559	358.055	362.879
% Ch, Annual Rate	8.1	3.8	4.2	4.7	8.3	4.8	4.0	5.5
Per Capita Income (\$/Person)	52,723	53,035	53,368	53,815	54,743	55,225	55,558	56,104
% Ch, Annual Rate	6.7	2.4	2.5	3.4	7.1	3.6	2.4	4.0
Employment (Thousands)								
Washington Civilian Labor Force	3,577.7	3,593.6	3,611.1	3,627.2	3,643.6	3,659.4	3,676.6	3,691.5
Total Washington Employment	3,391.5	3,406.2	3,422.4	3,436.9	3,452.8	3,467.5	3,482.6	3,496.1
Unemployment Rate (%)	5.21	5.22	5.22	5.25	5.24	5.25	5.28	5.29
Nonfarm Payroll Employment	3,201.5	3,213.7	3,226.1	3,239.4	3,253.9	3,267.5	3,279.4	3,291.2
% Ch, Annual Rate	1.7	1.5	1.5	1.7	1.8	1.7	1.5	1.4
Manufacturing	287.2	287.3	287.7	288.4	288.4	288.5	289.0	289.3
% Ch, Annual Rate	0.9	0.2	0.6	0.9	0.1	0.1	0.7	0.5
Durable Manufacturing	206.6	206.5	206.8	207.2	207.1	207.1	207.5	207.8
% Ch, Annual Rate	0.0	-0.1	0.5	0.7	-0.2	0.0	0.8	0.5
Aerospace	90.3	89.7	89.1	88.5	88.0	87.4	86.9	86.3
% Ch, Annual Rate	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5
Nondurable Manufacturing	80.6	80.8	80.9	81.2	81.4	81.4	81.5	81.5
% Ch, Annual Rate	3.1	1.1	0.7	1.4	0.7	0.1	0.4	0.3
Construction	176.4	176.9	178.5	180.4	182.0	184.2	186.3	189.0
% Ch, Annual Rate	1.9	1.3	3.6	4.2	3.8	4.8	4.7	5.8
Service-Providing	2,731.7	2,743.3	2,753.7	2,764.6	2,777.3	2,788.6	2,797.8	2,806.5
% Ch, Annual Rate	1.8	1.7	1.5	1.6	1.9	1.6	1.3	1.3
Software Publishers	55.0	55.0	54.9	55.0	55.2	55.3	55.5	55.7
% Ch, Annual Rate	0.3	-0.4	-0.7	0.8	1.2	1.2	1.3	1.2
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	37.547	38.238	39.544	40.933	41.817	42.645	42.874	43.216
% Ch, Annual Rate	13.3	7.6	14.4	14.8	8.9	8.2	2.2	3.2
Single-Family	20.403	21.338	22.528	23.945	24.969	25.744	26.233	26.671
% Ch, Annual Rate	17.6	19.6	24.2	27.6	18.2	13.0	7.8	6.8
Multi-Family	17.144	16.900	17.016	16.988	16.848	16.900	16.641	16.546
% Ch, Annual Rate	8.5	-5.6	2.8	-0.7	-3.3	1.3	-6.0	-2.3
30-Year Fixed Mortgage Rate (%)	4.27	4.37	4.46	4.56	4.61	4.67	4.73	4.76

Table A1.4 (continued)
Washington Economic Forecast Summary
Forecast 2015 to 2019

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Real Income (Billions of Chained 2009 Dollars)								
Real Personal Income	370.954	373.526	375.133	378.434	384.129	386.622	387.726	390.943
% Ch, Annual Rate	6.6	2.8	1.7	3.6	6.2	2.6	1.1	3.4
Real Wage and Salary Disb.	190.571	191.495	191.510	193.270	197.007	198.086	197.932	199.941
% Ch, Annual Rate	8.2	2.0	0.0	3.7	8.0	2.2	-0.3	4.1
Real Nonwage Income	180.383	182.031	183.622	185.164	187.122	188.536	189.793	191.001
% Ch, Annual Rate	4.9	3.7	3.5	3.4	4.3	3.1	2.7	2.6
Real Per Capita Income (\$/Person)	49,981	50,172	50,232	50,516	51,116	51,286	51,271	51,533
% Ch, Annual Rate	5.3	1.5	0.5	2.3	4.8	1.3	-0.1	2.1
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.142	1.147	1.152	1.157	1.162	1.166	1.172	1.177
% Ch, Annual Rate	1.7	1.7	1.8	1.7	1.7	1.7	1.8	1.8
Seattle Cons. Price Index (1982-84=1.0)	2.633	2.647	2.661	2.675	2.689	2.702	2.717	2.731
% Ch, Annual Rate	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1
Average Nonfarm Annual Wage	63,489	63,873	63,965	64,680	66,039	66,528	66,599	67,426
% Ch, Annual Rate	8.3	2.4	0.6	4.5	8.7	3.0	0.4	5.1
Avg. Hourly Earnings-Mfg. (\$/Hour)	27.17	27.34	27.52	27.69	27.86	28.05	28.22	28.39
% Ch, Annual Rate	2.5	2.6	2.6	2.5	2.6	2.6	2.5	2.5
Current Dollar Income (Billions of Dollars)								
Personal Income	423.562	428.304	432.038	437.723	446.172	450.970	454.250	460.011
% Ch, Annual Rate	8.4	4.6	3.5	5.4	7.9	4.4	2.9	5.2
Disposable Personal Income	370.661	374.966	378.389	383.446	390.865	395.207	398.176	403.311
% Ch, Annual Rate	8.9	4.7	3.7	5.5	8.0	4.5	3.0	5.3
Per Capita Income (\$/Person)	57,070	57,530	57,851	58,431	59,372	59,823	60,068	60,637
% Ch, Annual Rate	7.1	3.3	2.3	4.1	6.6	3.1	1.6	3.8
Employment (Thousands)								
Washington Civilian Labor Force	3,706.3	3,720.1	3,735.4	3,749.7	3,763.7	3,777.1	3,792.1	3,804.6
Total Washington Employment	3,511.7	3,525.6	3,540.4	3,553.6	3,566.9	3,579.3	3,593.1	3,605.4
Unemployment Rate (%)	5.25	5.23	5.22	5.23	5.23	5.24	5.25	5.24
Nonfarm Payroll Employment	3,304.9	3,315.2	3,325.0	3,334.0	3,342.8	3,351.0	3,359.2	3,367.5
% Ch, Annual Rate	1.7	1.3	1.2	1.1	1.1	1.0	1.0	1.0
Manufacturing	289.7	289.9	290.5	291.0	291.3	291.4	291.6	291.8
% Ch, Annual Rate	0.6	0.3	0.7	0.8	0.4	0.1	0.4	0.2
Durable Manufacturing	208.0	208.1	208.4	208.7	208.8	208.6	208.6	208.5
% Ch, Annual Rate	0.5	0.1	0.6	0.6	0.1	-0.4	0.0	-0.1
Aerospace	85.9	85.4	85.0	84.6	84.2	83.7	83.3	82.9
% Ch, Annual Rate	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Nondurable Manufacturing	81.7	81.9	82.1	82.3	82.6	82.8	83.1	83.3
% Ch, Annual Rate	0.6	1.1	1.0	1.1	1.3	1.2	1.2	1.0
Construction	191.6	192.2	193.6	195.1	196.7	198.2	199.8	201.2
% Ch, Annual Rate	5.5	1.3	2.9	3.2	3.3	3.2	3.1	2.9
Service-Providing	2,817.2	2,826.6	2,834.5	2,841.3	2,848.3	2,854.8	2,861.2	2,868.0
% Ch, Annual Rate	1.5	1.3	1.1	1.0	1.0	0.9	0.9	0.9
Software Publishers	55.9	56.1	56.3	56.5	56.7	56.8	57.0	57.2
% Ch, Annual Rate	1.3	1.4	1.5	1.5	1.3	1.3	1.3	1.3
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	43.740	43.986	44.126	44.227	44.422	44.444	44.693	44.836
% Ch, Annual Rate	4.9	2.3	1.3	0.9	1.8	0.2	2.3	1.3
Single-Family	27.145	27.474	27.550	27.623	27.542	27.646	27.896	28.013
% Ch, Annual Rate	7.3	4.9	1.1	1.1	-1.2	1.5	3.7	1.7
Multi-Family	16.595	16.512	16.576	16.605	16.880	16.797	16.797	16.822
% Ch, Annual Rate	1.2	-2.0	1.6	0.7	6.8	-1.9	0.0	0.6
30-Year Fixed Mortgage Rate (%)	4.93	5.15	5.34	5.44	5.46	5.45	5.45	5.45

Table A2.1

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2015 to 2019

	2012	2013	2014	2015	2016	2017	2018	2019
Nonfarm Payroll Employment	134.10	136.39	139.02	141.99	144.39	146.39	148.02	148.95
% Ch	1.7	1.7	1.9	2.1	1.7	1.4	1.1	0.6
Manufacturing	11.93	12.02	12.19	12.35	12.48	12.59	12.70	12.76
% Ch	1.7	0.8	1.4	1.4	1.0	0.9	0.9	0.4
Durable Manufacturing	7.47	7.55	7.69	7.81	7.88	7.98	8.09	8.12
% Ch	2.7	1.0	1.8	1.6	0.9	1.4	1.3	0.4
Wood Products	0.34	0.35	0.37	0.38	0.40	0.43	0.45	0.47
% Ch	0.7	4.2	5.3	1.2	5.0	8.9	5.1	3.4
Primary and Fabricated Metals	1.81	1.83	1.86	1.87	1.90	1.92	1.95	1.97
% Ch	4.3	0.8	1.6	1.0	1.1	1.5	1.5	0.9
Computer and Electronic Products	1.09	1.07	1.05	1.05	1.07	1.08	1.09	1.09
% Ch	-1.3	-2.2	-1.4	0.4	1.3	1.3	0.4	0.1
Machinery and Electrical Equipment	1.47	1.48	1.50	1.51	1.51	1.52	1.54	1.56
% Ch	3.5	0.5	1.7	0.3	0.3	0.5	1.6	1.0
Transportation Equipment	1.46	1.51	1.56	1.61	1.59	1.60	1.61	1.60
% Ch	5.8	3.3	3.6	2.9	-0.8	0.1	0.8	-0.7
Other Durables	1.30	1.31	1.34	1.39	1.41	1.43	1.44	1.43
% Ch	0.3	1.3	2.1	3.3	1.7	1.4	0.7	-0.5
Nondurable Manufacturing	4.46	4.47	4.50	4.55	4.60	4.61	4.62	4.64
% Ch	0.1	0.3	0.7	1.0	1.2	0.1	0.2	0.5
Food Manufacturing	1.47	1.47	1.48	1.50	1.53	1.55	1.57	1.59
% Ch	0.7	0.3	0.5	1.4	2.1	1.4	1.0	1.5
Paper and Paper Products	0.38	0.38	0.37	0.37	0.37	0.37	0.37	0.37
% Ch	-1.9	-0.5	-1.7	-1.2	0.9	-0.3	-0.1	0.2
Other Nondurables	2.61	2.62	2.65	2.68	2.70	2.68	2.68	2.68
% Ch	0.0	0.5	1.1	1.0	0.7	-0.5	-0.2	0.0
Natural Resources and Mining	0.85	0.86	0.90	0.85	0.80	0.82	0.84	0.85
% Ch	7.6	1.8	3.8	-5.6	-5.3	1.8	2.5	1.3
Construction	5.65	5.86	6.14	6.40	6.78	7.19	7.52	7.77
% Ch	2.1	3.7	4.8	4.3	6.0	5.9	4.6	3.3
Trade, Transportation, and Utilities	25.47	25.86	26.38	26.97	27.26	27.44	27.60	27.55
% Ch	1.6	1.5	2.0	2.2	1.1	0.6	0.6	-0.2
Wholesale Trade	5.67	5.73	5.83	5.92	5.99	6.10	6.19	6.25
% Ch	2.2	1.2	1.6	1.6	1.3	1.8	1.5	0.9
Retail Trade	14.84	15.07	15.36	15.71	15.79	15.71	15.66	15.53
% Ch	1.1	1.6	1.9	2.2	0.5	-0.5	-0.3	-0.8
Trans., Warehousing, and Utilities	4.97	5.05	5.19	5.34	5.48	5.63	5.74	5.77
% Ch	2.3	1.6	2.8	3.0	2.6	2.7	2.0	0.5
Information	2.68	2.71	2.74	2.79	2.79	2.86	2.88	2.89
% Ch	0.1	1.2	1.3	1.9	0.0	2.4	0.7	0.2
Publishing Industries	0.74	0.73	0.72	0.72	0.71	0.69	0.69	0.68
% Ch	-1.3	-0.9	-1.1	-0.8	-1.9	-1.7	-1.0	-0.9
Other Information	1.94	1.97	2.02	2.07	2.09	2.17	2.20	2.21
% Ch	0.6	1.9	2.1	2.9	0.7	3.8	1.3	0.6
Financial Activities	7.78	7.89	7.98	8.13	8.14	8.05	7.93	7.86
% Ch	1.1	1.3	1.2	1.9	0.1	-1.0	-1.5	-0.9
Professional and Business Services	17.93	18.52	19.09	19.77	20.73	21.53	22.03	22.25
% Ch	3.5	3.3	3.1	3.5	4.8	3.9	2.3	1.0
Education and Health Services	20.70	21.10	21.47	22.03	22.52	22.79	22.98	23.15
% Ch	2.3	1.9	1.8	2.6	2.3	1.2	0.9	0.7
Leisure and Hospitality	13.77	14.26	14.71	15.14	15.28	15.38	15.60	15.78
% Ch	3.2	3.5	3.2	2.9	1.0	0.6	1.4	1.1
Other Services	5.43	5.48	5.57	5.64	5.62	5.57	5.55	5.53
% Ch	1.3	1.0	1.6	1.2	-0.4	-0.9	-0.4	-0.3
Federal Government	2.82	2.77	2.73	2.73	2.72	2.68	2.64	2.60
% Ch	-1.3	-1.8	-1.6	0.3	-0.7	-1.5	-1.5	-1.3
State and Local Government	19.10	19.08	19.13	19.19	19.27	19.50	19.77	19.97
% Ch	-0.7	-0.1	0.3	0.3	0.5	1.2	1.4	1.0

Table A2.2

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2015 to 2019

	2014:1	2014:2	2014:3	2014:4	2015:1	2015:2	2015:3	2015:4
Nonfarm Payroll Employment	137.84	138.64	139.38	140.23	141.01	141.62	142.34	143.00
% Ch, Annual Rate	1.6	2.3	2.2	2.5	2.2	1.7	2.1	1.9
Manufacturing	12.12	12.16	12.20	12.27	12.32	12.33	12.37	12.39
% Ch, Annual Rate	1.7	1.3	1.5	2.3	1.6	0.3	1.2	0.8
Durable Manufacturing	7.61	7.66	7.71	7.76	7.80	7.80	7.81	7.82
% Ch, Annual Rate	1.6	2.4	2.5	3.0	1.9	0.0	0.4	0.8
Wood Products	0.37	0.37	0.37	0.38	0.38	0.38	0.38	0.37
% Ch, Annual Rate	6.6	5.7	4.0	2.4	2.3	-2.6	-0.3	-2.0
Primary and Fabricated Metals	1.84	1.85	1.86	1.87	1.88	1.87	1.87	1.87
% Ch, Annual Rate	1.5	1.4	1.9	3.4	1.8	-1.8	-0.1	0.4
Computer and Electronic Products	1.05	1.05	1.05	1.05	1.06	1.06	1.05	1.05
% Ch, Annual Rate	-2.3	-1.3	0.6	1.6	1.5	-0.3	-1.7	0.3
Machinery and Electrical Equipment	1.49	1.50	1.51	1.52	1.51	1.51	1.51	1.51
% Ch, Annual Rate	2.1	2.9	1.9	2.0	-0.4	-2.1	0.0	0.8
Transportation Equipment	1.54	1.55	1.57	1.59	1.60	1.61	1.61	1.62
% Ch, Annual Rate	2.8	4.7	4.7	3.5	3.1	1.8	1.2	1.8
Other Durables	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40
% Ch, Annual Rate	1.4	2.7	2.8	4.1	3.6	3.8	2.2	1.5
Nondurable Manufacturing	4.51	4.50	4.50	4.51	4.52	4.53	4.56	4.57
% Ch, Annual Rate	2.0	-0.6	-0.2	1.2	1.1	0.8	2.7	0.7
Food Manufacturing	1.49	1.48	1.47	1.48	1.49	1.49	1.51	1.51
% Ch, Annual Rate	2.9	-2.9	-1.5	1.3	3.7	0.5	3.3	1.0
Paper and Paper Products	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
% Ch, Annual Rate	-1.2	-1.4	-4.0	-1.7	-1.3	-1.0	1.0	2.4
Other Nondurables	2.64	2.65	2.65	2.66	2.66	2.67	2.69	2.69
% Ch, Annual Rate	2.0	0.8	1.1	1.6	0.0	1.2	2.7	0.3
Natural Resources and Mining	0.88	0.89	0.90	0.91	0.89	0.85	0.83	0.81
% Ch, Annual Rate	3.4	5.1	7.2	3.4	-8.5	-17.8	-9.0	-8.6
Construction	6.03	6.11	6.17	6.24	6.33	6.37	6.42	6.48
% Ch, Annual Rate	6.7	5.4	3.8	4.3	6.4	2.6	2.8	3.9
Trade, Transportation, and Utilities	26.16	26.31	26.44	26.60	26.75	26.86	27.05	27.21
% Ch, Annual Rate	1.3	2.2	2.0	2.5	2.2	1.8	2.9	2.4
Wholesale Trade	5.79	5.82	5.84	5.86	5.90	5.91	5.93	5.94
% Ch, Annual Rate	2.2	2.1	1.6	1.7	2.3	0.7	1.2	1.0
Retail Trade	15.25	15.33	15.39	15.48	15.56	15.63	15.76	15.87
% Ch, Annual Rate	0.7	2.0	1.6	2.3	2.1	1.9	3.4	2.8
Trans., Warehousing, and Utilities	5.12	5.16	5.21	5.26	5.29	5.32	5.36	5.40
% Ch, Annual Rate	2.2	3.2	3.5	4.2	2.4	2.4	3.2	2.7
Information	2.72	2.73	2.75	2.76	2.78	2.79	2.80	2.81
% Ch, Annual Rate	-0.3	0.9	3.2	1.6	2.4	1.7	1.3	2.0
Publishing Industries	0.73	0.73	0.72	0.72	0.72	0.72	0.72	0.72
% Ch, Annual Rate	-1.1	-1.1	-0.7	-1.2	-1.0	-0.6	0.6	-1.4
Other Information	1.99	2.00	2.03	2.04	2.06	2.07	2.08	2.09
% Ch, Annual Rate	0.0	1.7	4.6	2.6	3.6	2.5	1.6	3.2
Financial Activities	7.93	7.95	8.00	8.04	8.08	8.11	8.15	8.19
% Ch, Annual Rate	0.8	1.3	2.1	2.0	2.2	1.5	2.0	2.0
Professional and Business Services	18.83	19.01	19.18	19.36	19.50	19.68	19.86	20.05
% Ch, Annual Rate	2.5	3.9	3.6	3.8	3.0	3.7	3.6	3.9
Education and Health Services	21.28	21.40	21.54	21.67	21.81	21.97	22.10	22.21
% Ch, Annual Rate	1.2	2.4	2.6	2.3	2.8	3.0	2.3	2.0
Leisure and Hospitality	14.53	14.66	14.75	14.90	15.01	15.09	15.18	15.26
% Ch, Annual Rate	2.6	3.6	2.6	3.9	3.2	2.1	2.4	2.0
Other Services	5.54	5.57	5.58	5.60	5.62	5.64	5.65	5.65
% Ch, Annual Rate	1.9	2.0	0.8	1.6	1.5	1.3	0.9	-0.2
Federal Government	2.73	2.73	2.73	2.73	2.73	2.73	2.74	2.74
% Ch, Annual Rate	-1.9	-0.5	-0.1	0.2	0.5	0.5	0.6	-0.3
State and Local Government	19.09	19.12	19.14	19.17	19.17	19.18	19.19	19.20
% Ch, Annual Rate	0.0	0.6	0.5	0.5	0.2	0.1	0.2	0.3

Table A2.2 (continued)

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2015 to 2019

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Nonfarm Payroll Employment	143.60	144.15	144.65	145.18	145.73	146.20	146.62	147.00
% Ch, Annual Rate	1.7	1.5	1.4	1.5	1.5	1.3	1.2	1.0
Manufacturing	12.43	12.45	12.48	12.54	12.55	12.56	12.60	12.64
% Ch, Annual Rate	1.2	0.5	1.2	1.9	0.3	0.3	1.4	1.2
Durable Manufacturing	7.84	7.85	7.88	7.94	7.94	7.96	8.00	8.04
% Ch, Annual Rate	0.7	0.5	1.9	2.7	0.4	0.5	2.2	1.9
Wood Products	0.38	0.39	0.40	0.41	0.42	0.43	0.44	0.44
% Ch, Annual Rate	9.9	8.3	7.8	10.7	9.7	8.6	7.9	5.8
Primary and Fabricated Metals	1.88	1.89	1.90	1.91	1.92	1.92	1.93	1.94
% Ch, Annual Rate	2.4	0.8	1.6	3.6	0.8	0.4	1.8	2.2
Computer and Electronic Products	1.06	1.06	1.07	1.08	1.08	1.08	1.08	1.08
% Ch, Annual Rate	1.6	1.9	4.5	2.0	0.8	-0.1	0.7	0.1
Machinery and Electrical Equipment	1.51	1.51	1.51	1.51	1.51	1.52	1.52	1.53
% Ch, Annual Rate	1.5	-0.1	-0.4	-0.2	0.3	0.6	2.2	1.9
Transportation Equipment	1.59	1.58	1.59	1.61	1.59	1.59	1.60	1.61
% Ch, Annual Rate	-6.2	-2.1	2.9	3.3	-3.6	-1.5	2.9	2.3
Other Durables	1.41	1.41	1.41	1.42	1.42	1.43	1.43	1.44
% Ch, Annual Rate	2.8	0.4	0.1	2.5	1.9	1.1	1.3	1.3
Nondurable Manufacturing	4.59	4.60	4.60	4.61	4.61	4.61	4.61	4.60
% Ch, Annual Rate	2.1	0.5	0.1	0.5	0.1	-0.2	0.0	-0.1
Food Manufacturing	1.52	1.53	1.53	1.54	1.55	1.55	1.56	1.56
% Ch, Annual Rate	3.3	1.9	1.0	2.5	1.5	0.6	0.9	0.6
Paper and Paper Products	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
% Ch, Annual Rate	1.7	0.5	-0.4	-0.5	-0.3	-0.3	0.0	-0.3
Other Nondurables	2.70	2.70	2.70	2.69	2.69	2.68	2.68	2.68
% Ch, Annual Rate	1.5	-0.3	-0.3	-0.5	-0.7	-0.6	-0.5	-0.4
Natural Resources and Mining	0.80	0.80	0.80	0.80	0.81	0.81	0.82	0.82
% Ch, Annual Rate	-4.1	-2.4	1.1	1.3	2.4	2.3	3.3	2.5
Construction	6.60	6.73	6.85	6.95	7.05	7.15	7.24	7.32
% Ch, Annual Rate	8.0	8.0	7.1	6.1	5.8	5.5	5.1	4.6
Trade, Transportation, and Utilities	27.23	27.24	27.27	27.32	27.37	27.42	27.47	27.49
% Ch, Annual Rate	0.2	0.2	0.4	0.7	0.8	0.8	0.7	0.2
Wholesale Trade	5.95	5.98	6.01	6.03	6.06	6.09	6.12	6.14
% Ch, Annual Rate	0.9	2.0	1.7	1.8	1.9	1.9	1.6	1.4
Retail Trade	15.85	15.80	15.76	15.74	15.73	15.72	15.71	15.67
% Ch, Annual Rate	-0.7	-1.2	-0.9	-0.4	-0.4	-0.3	-0.3	-0.9
Trans., Warehousing, and Utilities	5.43	5.46	5.50	5.54	5.58	5.61	5.65	5.68
% Ch, Annual Rate	2.2	2.4	2.7	2.9	2.8	2.8	2.5	2.1
Information	2.79	2.81	2.80	2.78	2.83	2.87	2.87	2.87
% Ch, Annual Rate	-3.4	2.8	-0.6	-3.2	8.1	5.4	0.0	-0.1
Publishing Industries	0.71	0.71	0.71	0.70	0.70	0.69	0.69	0.69
% Ch, Annual Rate	-4.4	-0.6	-1.9	-2.8	-1.5	-1.6	-1.1	-1.4
Other Information	2.08	2.10	2.10	2.08	2.14	2.18	2.18	2.18
% Ch, Annual Rate	-3.1	4.0	-0.2	-3.3	11.5	7.7	0.3	0.4
Financial Activities	8.18	8.15	8.11	8.10	8.09	8.07	8.04	8.00
% Ch, Annual Rate	-0.3	-1.5	-2.1	-0.3	-0.4	-1.2	-1.4	-2.0
Professional and Business Services	20.32	20.60	20.87	21.12	21.33	21.48	21.59	21.72
% Ch, Annual Rate	5.6	5.5	5.3	4.9	4.1	2.7	2.2	2.5
Education and Health Services	22.35	22.51	22.59	22.65	22.71	22.78	22.80	22.85
% Ch, Annual Rate	2.4	3.0	1.4	1.1	1.1	1.3	0.3	0.8
Leisure and Hospitality	15.30	15.27	15.28	15.28	15.31	15.34	15.42	15.46
% Ch, Annual Rate	1.0	-0.6	0.2	0.1	0.6	0.8	2.0	1.2
Other Services	5.64	5.63	5.61	5.60	5.59	5.57	5.56	5.55
% Ch, Annual Rate	-0.6	-1.1	-1.1	-1.0	-0.7	-1.3	-0.7	-0.4
Federal Government	2.73	2.72	2.71	2.70	2.69	2.68	2.67	2.66
% Ch, Annual Rate	-0.6	-1.2	-1.7	-1.9	-1.3	-1.4	-1.6	-1.7
State and Local Government	19.22	19.24	19.29	19.34	19.40	19.46	19.54	19.61
% Ch, Annual Rate	0.4	0.5	0.9	1.1	1.1	1.4	1.6	1.5

Table A2.2 (continued)

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2015 to 2019

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Nonfarm Payroll Employment	147.46	147.90	148.24	148.49	148.70	148.87	149.04	149.21
% Ch, Annual Rate	1.2	1.2	0.9	0.7	0.6	0.5	0.5	0.5
Manufacturing	12.67	12.68	12.71	12.74	12.76	12.75	12.76	12.76
% Ch, Annual Rate	0.8	0.4	1.0	1.0	0.5	-0.2	0.2	-0.1
Durable Manufacturing	8.06	8.07	8.09	8.12	8.13	8.11	8.12	8.11
% Ch, Annual Rate	1.3	0.3	1.3	1.2	0.4	-0.6	0.1	-0.3
Wood Products	0.45	0.45	0.46	0.46	0.46	0.47	0.47	0.47
% Ch, Annual Rate	3.9	3.5	5.0	4.5	2.9	1.7	3.3	3.6
Primary and Fabricated Metals	1.95	1.95	1.96	1.96	1.97	1.97	1.97	1.97
% Ch, Annual Rate	1.9	0.5	1.5	1.3	1.2	0.1	0.8	0.3
Computer and Electronic Products	1.08	1.08	1.09	1.09	1.09	1.09	1.09	1.09
% Ch, Annual Rate	0.4	-0.1	0.8	1.2	-0.5	-0.6	0.2	0.5
Machinery and Electrical Equipment	1.54	1.54	1.55	1.55	1.56	1.56	1.56	1.56
% Ch, Annual Rate	2.0	0.7	1.3	1.4	1.1	0.7	0.9	0.4
Transportation Equipment	1.61	1.61	1.61	1.61	1.61	1.60	1.59	1.59
% Ch, Annual Rate	0.1	-0.5	0.8	0.2	-0.5	-1.9	-1.5	-2.4
Other Durables	1.44	1.44	1.44	1.44	1.44	1.43	1.43	1.43
% Ch, Annual Rate	0.7	-0.4	0.7	0.8	-0.2	-2.0	-1.2	-1.3
Nondurable Manufacturing	4.61	4.61	4.62	4.63	4.63	4.64	4.64	4.65
% Ch, Annual Rate	0.1	0.5	0.6	0.6	0.6	0.5	0.5	0.3
Food Manufacturing	1.56	1.57	1.57	1.58	1.58	1.59	1.60	1.60
% Ch, Annual Rate	0.9	1.4	1.4	1.5	1.5	1.6	1.6	1.4
Paper and Paper Products	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
% Ch, Annual Rate	-0.2	0.2	0.0	0.1	0.2	0.2	0.3	0.2
Other Nondurables	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68
% Ch, Annual Rate	-0.3	0.1	0.1	0.1	0.2	0.0	-0.1	-0.4
Natural Resources and Mining	0.83	0.83	0.84	0.84	0.84	0.84	0.85	0.85
% Ch, Annual Rate	2.0	2.7	2.7	1.5	0.8	0.1	1.6	1.4
Construction	7.40	7.48	7.56	7.62	7.68	7.74	7.80	7.85
% Ch, Annual Rate	4.6	4.6	4.1	3.2	3.1	3.1	3.1	3.0
Trade, Transportation, and Utilities	27.54	27.60	27.62	27.62	27.59	27.56	27.54	27.53
% Ch, Annual Rate	0.8	0.9	0.4	-0.1	-0.5	-0.4	-0.2	-0.3
Wholesale Trade	6.16	6.19	6.20	6.22	6.23	6.24	6.25	6.26
% Ch, Annual Rate	1.7	1.6	1.1	1.0	0.9	0.6	0.6	0.5
Retail Trade	15.67	15.67	15.66	15.64	15.58	15.55	15.52	15.49
% Ch, Annual Rate	-0.1	0.0	-0.1	-0.7	-1.3	-1.0	-0.7	-0.7
Trans., Warehousing, and Utilities	5.71	5.75	5.76	5.76	5.77	5.77	5.77	5.77
% Ch, Annual Rate	2.3	2.5	0.8	0.5	0.2	0.2	0.2	0.1
Information	2.88	2.88	2.89	2.89	2.89	2.89	2.89	2.89
% Ch, Annual Rate	0.6	0.7	0.9	0.1	-0.3	0.3	0.4	0.1
Publishing Industries	0.69	0.69	0.69	0.69	0.68	0.68	0.68	0.68
% Ch, Annual Rate	-1.1	-0.8	-0.5	-0.5	-1.2	-1.3	-1.0	-1.2
Other Information	2.19	2.19	2.20	2.20	2.20	2.21	2.21	2.21
% Ch, Annual Rate	1.1	1.2	1.4	0.3	-0.1	0.7	0.9	0.5
Financial Activities	7.98	7.95	7.92	7.88	7.87	7.86	7.86	7.85
% Ch, Annual Rate	-1.0	-1.5	-1.7	-1.6	-0.8	-0.3	-0.4	-0.4
Professional and Business Services	21.89	22.02	22.08	22.12	22.18	22.23	22.27	22.32
% Ch, Annual Rate	3.0	2.4	1.2	0.6	1.2	0.9	0.7	0.9
Education and Health Services	22.92	22.96	22.99	23.05	23.12	23.14	23.15	23.19
% Ch, Annual Rate	1.2	0.7	0.6	1.0	1.3	0.3	0.2	0.6
Leisure and Hospitality	15.49	15.57	15.65	15.71	15.72	15.76	15.80	15.83
% Ch, Annual Rate	0.6	2.1	2.1	1.6	0.2	1.1	0.9	0.8
Other Services	5.55	5.55	5.54	5.54	5.54	5.53	5.53	5.52
% Ch, Annual Rate	-0.1	-0.4	-0.2	-0.1	-0.2	-0.5	-0.3	-0.4
Federal Government	2.65	2.64	2.63	2.62	2.61	2.61	2.60	2.59
% Ch, Annual Rate	-1.4	-1.5	-1.3	-1.4	-1.2	-1.3	-1.3	-1.3
State and Local Government	19.68	19.74	19.80	19.85	19.90	19.95	20.00	20.03
% Ch, Annual Rate	1.3	1.3	1.2	1.1	1.0	1.0	0.9	0.7

Table A2.3

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2015 to 2019

	2012	2013	2014	2015	2016	2017	2018	2019
Nonfarm Payroll Employment	2,923.8	2,992.6	3,071.9	3,162.6	3,220.2	3,273.0	3,319.8	3,355.1
% Ch	1.7	2.4	2.7	3.0	1.8	1.6	1.4	1.1
Manufacturing	280.3	286.7	288.2	288.0	287.7	288.8	290.3	291.5
% Ch	4.3	2.3	0.5	-0.1	-0.1	0.4	0.5	0.4
Durable Manufacturing	204.5	209.6	209.5	208.1	206.8	207.4	208.3	208.6
% Ch	5.8	2.5	0.0	-0.7	-0.7	0.3	0.5	0.1
Wood Products	12.4	13.1	13.4	13.4	13.7	14.6	15.0	15.1
% Ch	-1.5	4.9	2.7	0.0	2.5	6.0	2.7	1.2
Primary and Fabricated Metals	24.2	25.0	25.5	25.6	25.7	26.2	26.9	27.2
% Ch	6.0	3.1	2.1	0.4	0.4	1.9	2.5	1.3
Computer and Electronic Products	20.2	20.2	20.0	19.8	20.2	20.8	21.1	21.3
% Ch	2.4	0.0	-1.0	-1.1	2.2	2.9	1.4	1.1
Machinery and Electrical Equipment	18.4	19.9	20.8	20.9	21.5	22.4	23.6	24.7
% Ch	6.5	7.7	4.8	0.3	3.1	3.9	5.5	4.8
Aerospace	94.2	96.1	93.9	92.0	89.4	87.1	85.2	83.5
% Ch	8.8	2.0	-2.2	-2.0	-2.9	-2.5	-2.2	-2.0
Other Transportation Equip.	10.0	9.7	9.6	9.5	9.1	8.7	8.5	8.4
% Ch	8.6	-3.0	-1.4	-0.8	-4.5	-4.0	-2.4	-2.0
Other Durables	25.0	25.7	26.3	26.9	27.1	27.5	28.0	28.3
% Ch	0.1	2.5	2.2	2.5	0.5	1.8	1.8	1.0
Nondurable Manufacturing	75.7	77.1	78.7	79.9	80.9	81.4	82.0	82.9
% Ch	0.6	1.8	2.1	1.5	1.3	0.7	0.7	1.2
Food Manufacturing	34.8	35.7	36.4	36.6	37.1	37.4	37.5	37.9
% Ch	0.5	2.4	2.1	0.5	1.4	0.7	0.3	1.0
Paper and Paper Products	8.2	8.1	8.1	8.2	8.3	8.2	8.1	8.0
% Ch	-8.7	-0.8	-0.8	1.7	0.7	-1.3	-1.1	-0.8
Other Nondurables	32.7	33.3	34.2	35.0	35.5	35.9	36.4	37.1
% Ch	3.3	1.7	2.7	2.5	1.4	1.0	1.4	1.8
Natural Resources and Mining	5.9	6.1	6.2	6.4	6.2	6.3	6.5	6.6
% Ch	-1.1	3.5	1.8	2.4	-3.3	1.9	3.1	1.5
Construction	139.1	149.0	159.3	174.4	178.1	185.4	193.1	199.0
% Ch	2.0	7.1	6.9	9.5	2.1	4.1	4.2	3.0
Trade, Transportation, and Utilities	536.0	551.0	569.4	591.8	600.1	605.1	610.1	611.8
% Ch	2.1	2.8	3.3	3.9	1.4	0.8	0.8	0.3
Wholesale Trade	124.0	126.9	130.5	134.0	135.6	138.1	140.5	142.2
% Ch	1.9	2.3	2.8	2.7	1.2	1.8	1.7	1.3
Retail Trade	319.3	330.1	341.2	357.1	361.8	362.1	363.0	362.2
% Ch	2.1	3.4	3.4	4.7	1.3	0.1	0.2	-0.2
Trans., Warehousing, and Utilities	92.7	94.0	97.8	100.6	102.7	104.9	106.7	107.3
% Ch	2.2	1.4	4.0	2.9	2.1	2.2	1.7	0.6
Information	104.7	106.2	109.6	111.3	112.3	115.1	116.9	118.3
% Ch	0.5	1.5	3.2	1.5	0.9	2.5	1.6	1.2
Software Publishers	52.4	53.9	55.6	54.9	55.0	55.4	56.2	56.9
% Ch	1.4	2.8	3.2	-1.2	0.1	0.8	1.3	1.4
Other Publishing Industries	7.5	6.9	6.6	6.4	6.1	5.7	5.5	5.2
% Ch	-4.4	-7.0	-4.8	-2.9	-5.2	-5.6	-4.7	-4.8
Other Information	44.8	45.4	47.5	50.0	51.3	53.9	55.2	56.1
% Ch	0.3	1.3	4.4	5.3	2.6	5.2	2.4	1.7
Financial Activities	144.9	150.6	151.5	155.6	154.8	152.5	149.7	148.0
% Ch	2.4	3.9	0.6	2.7	-0.6	-1.5	-1.8	-1.2
Professional and Business Services	350.0	361.1	372.8	392.6	413.5	431.5	443.7	451.4
% Ch	3.1	3.2	3.2	5.3	5.3	4.3	2.8	1.7
Education and Health Services	433.8	440.1	453.2	459.6	472.8	481.8	489.3	496.6
% Ch	0.6	1.5	3.0	1.4	2.9	1.9	1.6	1.5
Leisure and Hospitality	277.2	287.3	296.9	306.7	311.2	314.9	319.8	324.3
% Ch	2.4	3.6	3.4	3.3	1.5	1.2	1.6	1.4
Other Services	110.9	111.3	113.9	116.1	117.3	118.1	119.0	120.1
% Ch	2.2	0.4	2.4	1.9	1.1	0.7	0.8	0.9
Federal Government	73.1	71.6	71.3	72.4	72.7	72.1	71.4	70.9
% Ch	-1.1	-2.1	-0.5	1.5	0.4	-0.9	-0.9	-0.7
State and Local Government	468.0	471.6	479.4	487.8	493.6	501.6	509.8	516.8
% Ch	-0.3	0.8	1.7	1.7	1.2	1.6	1.7	1.4

Table A2.4

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2015 to 2019

	2014:1	2014:2	2014:3	2014:4	2015:1	2015:2	2015:3	2015:4
Nonfarm Payroll Employment	3,045.5	3,055.7	3,084.4	3,102.2	3,133.5	3,155.3	3,173.4	3,188.2
% Ch, Annual Rate	3.2	1.3	3.8	2.3	4.1	2.8	2.3	1.9
Manufacturing	287.8	288.5	288.3	288.2	289.4	288.5	287.5	286.6
% Ch, Annual Rate	1.1	1.0	-0.3	-0.2	1.8	-1.3	-1.4	-1.3
Durable Manufacturing	209.4	209.4	209.8	209.5	209.7	208.6	207.7	206.6
% Ch, Annual Rate	0.3	-0.1	0.8	-0.5	0.4	-2.2	-1.8	-2.1
Wood Products	13.4	13.5	13.4	13.4	13.6	13.4	13.4	13.2
% Ch, Annual Rate	4.2	1.4	-3.0	2.5	6.2	-6.8	-0.7	-3.7
Primary and Fabricated Metals	25.6	25.6	25.4	25.5	25.7	25.5	25.6	25.6
% Ch, Annual Rate	6.3	-0.4	-2.4	1.6	3.8	-3.1	0.8	0.0
Computer and Electronic Products	20.1	20.0	20.0	19.9	19.9	19.9	19.6	19.7
% Ch, Annual Rate	-2.0	-1.4	-0.5	-0.8	-0.5	-0.9	-4.9	1.3
Machinery and Electrical Equipment	20.5	20.8	21.0	21.0	20.9	20.8	20.8	21.0
% Ch, Annual Rate	3.4	6.1	4.4	0.8	-2.8	-1.7	0.3	4.2
Aerospace	94.0	93.8	94.3	93.7	92.9	92.4	91.9	90.8
% Ch, Annual Rate	-3.2	-1.1	2.4	-2.5	-3.3	-2.1	-2.4	-4.5
Other Transportation Equip.	9.8	9.7	9.4	9.5	9.7	9.6	9.5	9.3
% Ch, Annual Rate	8.8	-6.7	-9.0	1.1	10.2	-4.8	-4.3	-5.7
Other Durables	26.1	26.2	26.3	26.5	26.9	27.0	26.9	26.9
% Ch, Annual Rate	1.6	1.5	2.0	2.1	7.6	0.7	-1.0	-0.6
Nondurable Manufacturing	78.4	79.2	78.5	78.6	79.7	79.9	79.8	80.0
% Ch, Annual Rate	3.3	4.1	-3.2	0.6	5.6	1.0	-0.4	0.8
Food Manufacturing	35.9	36.7	36.4	36.6	36.5	36.7	36.6	36.6
% Ch, Annual Rate	0.8	9.3	-2.9	2.2	-1.2	1.5	-0.4	0.1
Paper and Paper Products	8.1	8.1	8.1	8.0	8.1	8.2	8.3	8.3
% Ch, Annual Rate	-1.9	2.4	0.2	-3.2	5.6	0.8	4.3	1.5
Other Nondurables	34.4	34.3	34.0	33.9	35.0	35.1	34.9	35.1
% Ch, Annual Rate	7.4	-0.8	-4.3	-0.2	13.4	0.5	-1.5	1.5
Natural Resources and Mining	6.3	6.2	6.2	6.2	6.5	6.4	6.4	6.3
% Ch, Annual Rate	2.6	-8.3	3.1	3.0	14.2	-3.9	-2.4	-5.4
Construction	156.1	156.2	159.8	165.1	172.5	174.5	175.0	175.6
% Ch, Annual Rate	9.7	0.1	9.5	14.0	19.3	4.6	1.2	1.2
Trade, Transportation, and Utilities	563.1	566.2	572.5	575.9	583.6	590.1	594.9	598.5
% Ch, Annual Rate	3.3	2.2	4.6	2.4	5.4	4.5	3.3	2.5
Wholesale Trade	128.9	129.0	131.9	132.1	132.9	134.2	134.3	134.6
% Ch, Annual Rate	2.5	0.2	9.3	0.8	2.5	3.9	0.3	1.0
Retail Trade	338.0	340.0	342.2	344.7	350.7	356.1	359.5	362.3
% Ch, Annual Rate	3.5	2.3	2.6	3.0	7.2	6.3	3.9	3.2
Trans., Warehousing, and Utilities	96.1	97.3	98.5	99.1	100.0	99.8	101.1	101.6
% Ch, Annual Rate	3.5	4.9	5.1	2.6	3.4	-0.7	5.4	1.9
Information	108.1	109.1	111.1	110.3	109.8	110.9	112.0	112.4
% Ch, Annual Rate	2.8	4.0	7.3	-2.9	-1.8	4.3	4.0	1.4
Software Publishers	55.3	55.7	56.1	55.2	54.6	54.9	55.1	55.0
% Ch, Annual Rate	4.2	3.2	3.0	-6.0	-4.2	1.6	1.6	-0.6
Other Publishing Industries	6.7	6.7	6.5	6.5	6.4	6.4	6.4	6.4
% Ch, Annual Rate	-7.0	-3.9	-8.9	-1.4	-4.2	1.0	-0.5	-4.8
Other Information	46.1	46.8	48.5	48.5	48.7	49.6	50.5	51.1
% Ch, Annual Rate	2.7	6.2	15.3	0.7	1.2	7.8	7.4	4.5
Financial Activities	152.5	152.6	150.0	150.9	154.6	155.3	156.0	156.7
% Ch, Annual Rate	1.6	0.3	-6.6	2.5	10.2	1.7	1.8	1.8
Professional and Business Services	366.6	368.4	375.9	380.4	385.9	390.6	394.9	399.2
% Ch, Annual Rate	2.4	2.0	8.4	5.0	5.8	5.0	4.5	4.4
Education and Health Services	449.8	451.0	455.6	456.5	454.9	458.0	461.1	464.2
% Ch, Annual Rate	3.8	1.1	4.1	0.8	-1.4	2.8	2.7	2.8
Leisure and Hospitality	295.4	295.5	297.3	299.4	304.0	305.9	307.7	309.2
% Ch, Annual Rate	5.8	0.1	2.5	2.8	6.3	2.5	2.4	2.0
Other Services	113.3	113.4	114.5	114.6	115.4	115.6	116.4	116.7
% Ch, Annual Rate	3.6	0.4	3.9	0.4	2.8	0.8	2.7	1.1
Federal Government	71.1	71.2	71.6	71.4	71.6	72.1	72.9	72.9
% Ch, Annual Rate	0.6	0.6	2.4	-1.0	1.0	3.0	4.1	0.2
State and Local Government	475.5	477.4	481.7	483.1	485.2	487.3	488.6	489.9
% Ch, Annual Rate	1.7	1.6	3.6	1.2	1.8	1.7	1.1	1.1

Table A2.4 (continued)

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2015 to 2019

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Nonfarm Payroll Employment	3,201.5	3,213.7	3,226.1	3,239.4	3,253.9	3,267.5	3,279.4	3,291.2
% Ch, Annual Rate	1.7	1.5	1.5	1.7	1.8	1.7	1.5	1.4
Manufacturing	287.2	287.3	287.7	288.4	288.4	288.5	289.0	289.3
% Ch, Annual Rate	0.9	0.2	0.6	0.9	0.1	0.1	0.7	0.5
Durable Manufacturing	206.6	206.5	206.8	207.2	207.1	207.1	207.5	207.8
% Ch, Annual Rate	0.0	-0.1	0.5	0.7	-0.2	0.0	0.8	0.5
Wood Products	13.5	13.6	13.8	14.1	14.3	14.5	14.7	14.8
% Ch, Annual Rate	6.8	5.4	5.0	7.5	6.7	5.7	5.1	3.3
Primary and Fabricated Metals	25.6	25.6	25.7	26.0	26.0	26.1	26.2	26.5
% Ch, Annual Rate	0.9	-0.8	1.2	4.4	0.9	0.7	3.0	3.8
Computer and Electronic Products	19.8	20.0	20.4	20.6	20.7	20.7	20.8	20.9
% Ch, Annual Rate	3.2	3.7	7.7	3.9	2.2	0.8	1.9	1.0
Machinery and Electrical Equipment	21.3	21.5	21.6	21.8	21.9	22.2	22.5	22.8
% Ch, Annual Rate	5.3	3.0	2.6	2.9	3.6	4.1	6.4	6.0
Aerospace	90.3	89.7	89.1	88.5	88.0	87.4	86.9	86.3
% Ch, Annual Rate	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5
Other Transportation Equip.	9.1	9.1	9.1	9.1	8.8	8.7	8.7	8.7
% Ch, Annual Rate	-10.6	0.8	2.4	-3.8	-11.9	-2.2	0.4	-2.7
Other Durables	27.0	27.0	27.1	27.2	27.4	27.5	27.6	27.7
% Ch, Annual Rate	1.8	0.5	0.5	2.1	2.4	1.8	1.9	2.1
Nondurable Manufacturing	80.6	80.8	80.9	81.2	81.4	81.4	81.5	81.5
% Ch, Annual Rate	3.1	1.1	0.7	1.4	0.7	0.1	0.4	0.3
Food Manufacturing	36.9	37.1	37.1	37.3	37.4	37.4	37.4	37.4
% Ch, Annual Rate	3.4	1.6	0.3	2.3	1.0	-0.3	0.1	-0.3
Paper and Paper Products	8.3	8.3	8.3	8.2	8.2	8.2	8.2	8.1
% Ch, Annual Rate	0.7	-0.5	-1.4	-1.5	-1.3	-1.3	-1.0	-1.4
Other Nondurables	35.4	35.5	35.6	35.7	35.8	35.8	35.9	36.0
% Ch, Annual Rate	3.5	0.9	1.5	1.1	0.9	0.8	1.1	1.3
Natural Resources and Mining	6.2	6.1	6.1	6.1	6.2	6.2	6.3	6.4
% Ch, Annual Rate	-2.3	-5.1	-2.5	1.6	3.4	4.1	3.8	3.2
Construction	176.4	176.9	178.5	180.4	182.0	184.2	186.3	189.0
% Ch, Annual Rate	1.9	1.3	3.6	4.2	3.8	4.8	4.7	5.8
Trade, Transportation, and Utilities	599.1	599.4	600.2	601.6	603.0	604.6	606.0	606.8
% Ch, Annual Rate	0.4	0.3	0.5	0.9	1.0	1.1	0.9	0.5
Wholesale Trade	134.8	135.3	135.8	136.4	137.1	137.8	138.4	139.0
% Ch, Annual Rate	0.5	1.4	1.6	1.8	1.9	2.0	1.9	1.9
Retail Trade	362.3	361.8	361.5	361.7	361.9	362.2	362.4	362.1
% Ch, Annual Rate	0.0	-0.6	-0.3	0.2	0.2	0.3	0.2	-0.3
Trans., Warehousing, and Utilities	102.0	102.4	102.9	103.5	104.1	104.7	105.2	105.7
% Ch, Annual Rate	1.6	1.7	2.1	2.2	2.3	2.3	2.0	1.8
Information	112.0	112.6	112.5	112.2	113.9	115.2	115.5	115.8
% Ch, Annual Rate	-1.4	2.0	-0.3	-1.2	6.3	4.5	1.1	1.0
Software Publishers	55.0	55.0	54.9	55.0	55.2	55.3	55.5	55.7
% Ch, Annual Rate	0.3	-0.4	-0.7	0.8	1.2	1.2	1.3	1.2
Other Publishing Industries	6.2	6.1	6.1	5.9	5.9	5.8	5.7	5.6
% Ch, Annual Rate	-9.5	-3.8	-5.8	-7.3	-5.3	-5.5	-4.7	-5.3
Other Information	50.8	51.4	51.6	51.2	52.9	54.1	54.2	54.4
% Ch, Annual Rate	-2.2	5.4	0.9	-2.5	13.4	9.3	1.4	1.5
Financial Activities	156.2	155.1	154.0	153.7	153.4	152.9	152.2	151.4
% Ch, Annual Rate	-1.2	-2.7	-2.9	-0.7	-0.8	-1.5	-1.7	-2.1
Professional and Business Services	405.0	410.8	416.5	421.9	426.6	430.1	433.0	436.2
% Ch, Annual Rate	6.0	5.8	5.7	5.2	4.6	3.3	2.8	3.0
Education and Health Services	467.9	472.0	474.5	476.7	478.9	481.3	482.7	484.5
% Ch, Annual Rate	3.2	3.6	2.2	1.8	1.9	2.0	1.1	1.5
Leisure and Hospitality	310.4	310.7	311.5	312.1	313.1	314.1	315.6	316.7
% Ch, Annual Rate	1.4	0.5	1.0	0.8	1.2	1.3	1.9	1.4
Other Services	117.0	117.2	117.4	117.6	117.9	118.0	118.2	118.4
% Ch, Annual Rate	1.0	0.7	0.7	0.7	0.7	0.5	0.7	0.8
Federal Government	72.9	72.8	72.6	72.4	72.3	72.2	72.0	71.8
% Ch, Annual Rate	0.0	-0.6	-0.9	-1.1	-0.7	-0.8	-0.9	-1.0
State and Local Government	491.2	492.6	494.3	496.3	498.2	500.4	502.7	504.9
% Ch, Annual Rate	1.1	1.1	1.4	1.6	1.6	1.7	1.9	1.8

Table A2.4 (continued)

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2015 to 2019

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Nonfarm Payroll Employment	3,304.9	3,315.2	3,325.0	3,334.0	3,342.8	3,351.0	3,359.2	3,367.5
% Ch, Annual Rate	1.7	1.3	1.2	1.1	1.1	1.0	1.0	1.0
Manufacturing	289.7	289.9	290.5	291.0	291.3	291.4	291.6	291.8
% Ch, Annual Rate	0.6	0.3	0.7	0.8	0.4	0.1	0.4	0.2
Durable Manufacturing	208.0	208.1	208.4	208.7	208.8	208.6	208.6	208.5
% Ch, Annual Rate	0.5	0.1	0.6	0.6	0.1	-0.4	0.0	-0.1
Wood Products	14.9	14.9	15.0	15.1	15.1	15.1	15.1	15.2
% Ch, Annual Rate	1.7	1.3	2.6	2.2	0.7	-0.3	1.1	1.4
Primary and Fabricated Metals	26.7	26.8	26.9	27.1	27.2	27.2	27.3	27.3
% Ch, Annual Rate	3.2	0.9	2.5	2.3	1.6	0.0	0.9	0.1
Computer and Electronic Products	21.0	21.0	21.1	21.3	21.3	21.3	21.3	21.4
% Ch, Annual Rate	1.5	0.7	2.2	2.8	0.1	0.0	1.3	1.7
Machinery and Electrical Equipment	23.2	23.4	23.7	24.0	24.3	24.6	24.9	25.1
% Ch, Annual Rate	6.1	4.3	5.2	5.3	4.9	4.3	4.7	4.0
Aerospace	85.9	85.4	85.0	84.6	84.2	83.7	83.3	82.9
% Ch, Annual Rate	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Other Transportation Equip.	8.5	8.5	8.5	8.5	8.4	8.4	8.3	8.2
% Ch, Annual Rate	-5.9	-0.3	-1.1	-1.7	-1.9	-2.4	-3.2	-3.6
Other Durables	27.9	28.0	28.1	28.2	28.3	28.3	28.3	28.4
% Ch, Annual Rate	2.2	1.2	1.4	1.5	1.1	0.4	0.6	0.5
Nondurable Manufacturing	81.7	81.9	82.1	82.3	82.6	82.8	83.1	83.3
% Ch, Annual Rate	0.6	1.1	1.0	1.1	1.3	1.2	1.2	1.0
Food Manufacturing	37.4	37.4	37.5	37.6	37.7	37.8	37.9	38.0
% Ch, Annual Rate	0.1	0.8	0.9	1.0	1.0	1.1	1.1	0.9
Paper and Paper Products	8.1	8.1	8.1	8.0	8.0	8.0	8.0	8.0
% Ch, Annual Rate	-1.3	-0.8	-1.0	-0.9	-0.9	-0.8	-0.7	-0.8
Other Nondurables	36.2	36.3	36.5	36.6	36.8	37.0	37.2	37.3
% Ch, Annual Rate	1.5	1.7	1.6	1.7	2.1	1.8	1.8	1.6
Natural Resources and Mining	6.4	6.4	6.5	6.5	6.5	6.6	6.6	6.6
% Ch, Annual Rate	3.0	3.0	3.0	1.8	0.8	1.1	1.4	1.2
Construction	191.6	192.2	193.6	195.1	196.7	198.2	199.8	201.2
% Ch, Annual Rate	5.5	1.3	2.9	3.2	3.3	3.2	3.1	2.9
Trade, Transportation, and Utilities	608.4	609.8	610.9	611.4	611.4	611.5	611.9	612.3
% Ch, Annual Rate	1.1	0.9	0.7	0.3	0.0	0.1	0.3	0.2
Wholesale Trade	139.8	140.2	140.7	141.2	141.7	142.1	142.4	142.8
% Ch, Annual Rate	2.1	1.3	1.3	1.4	1.4	1.1	1.1	1.0
Retail Trade	362.5	362.9	363.3	363.2	362.6	362.2	362.1	362.0
% Ch, Annual Rate	0.4	0.5	0.4	-0.1	-0.7	-0.4	-0.1	-0.1
Trans., Warehousing, and Utilities	106.2	106.7	106.9	107.0	107.2	107.3	107.4	107.5
% Ch, Annual Rate	2.0	1.9	0.7	0.6	0.5	0.4	0.4	0.3
Information	116.2	116.6	117.1	117.5	117.7	118.1	118.5	118.8
% Ch, Annual Rate	1.5	1.6	1.7	1.2	0.8	1.2	1.3	1.1
Software Publishers	55.9	56.1	56.3	56.5	56.7	56.8	57.0	57.2
% Ch, Annual Rate	1.3	1.4	1.5	1.5	1.3	1.3	1.3	1.3
Other Publishing Industries	5.6	5.5	5.4	5.4	5.3	5.2	5.2	5.1
% Ch, Annual Rate	-4.9	-4.4	-3.9	-4.0	-5.2	-5.5	-5.1	-5.4
Other Information	54.8	55.1	55.4	55.6	55.8	56.0	56.3	56.5
% Ch, Annual Rate	2.3	2.3	2.5	1.4	1.0	1.9	2.0	1.6
Financial Activities	151.0	150.1	149.3	148.6	148.2	148.1	147.9	147.7
% Ch, Annual Rate	-1.1	-2.3	-2.2	-1.9	-0.9	-0.4	-0.5	-0.5
Professional and Business Services	439.9	443.1	445.2	446.6	448.7	450.6	452.3	454.1
% Ch, Annual Rate	3.5	2.9	1.9	1.3	1.9	1.6	1.5	1.6
Education and Health Services	486.7	488.5	490.1	492.1	494.5	495.8	497.1	498.9
% Ch, Annual Rate	1.9	1.4	1.3	1.7	1.9	1.1	1.0	1.4
Leisure and Hospitality	317.6	319.1	320.6	322.0	322.7	323.8	324.9	325.8
% Ch, Annual Rate	1.1	1.9	2.0	1.7	0.9	1.4	1.3	1.2
Other Services	118.7	118.9	119.2	119.4	119.7	119.9	120.2	120.4
% Ch, Annual Rate	0.9	0.8	0.9	0.9	0.9	0.8	0.9	0.9
Federal Government	71.7	71.5	71.4	71.2	71.1	71.0	70.9	70.7
% Ch, Annual Rate	-0.8	-0.9	-0.7	-0.8	-0.7	-0.7	-0.7	-0.7
State and Local Government	507.0	509.0	510.8	512.6	514.3	516.0	517.6	519.1
% Ch, Annual Rate	1.6	1.6	1.5	1.4	1.3	1.3	1.3	1.1

Table A3.1

U.S. Personal Income by Component (Billions of Dollars)

Forecast 2015 to 2019

	2012	2013	2014	2015	2016	2017	2018	2019
Personal Income	13,915.1	14,068.4	14,694.2	15,320.6	16,046.4	16,850.2	17,703.2	18,546.0
% Ch	5.0	1.1	4.4	4.3	4.7	5.0	5.1	4.8
Total Wage and Salary Disbursements	6,930.3	7,114.4	7,477.8	7,783.5	8,163.6	8,557.2	8,972.4	9,402.9
% Ch	4.5	2.7	5.1	4.1	4.9	4.8	4.9	4.8
Nonwage Personal Income	6,984.9	6,954.0	7,216.5	7,537.1	7,882.8	8,293.0	8,730.8	9,143.2
% Ch	5.5	-0.4	3.8	4.4	4.6	5.2	5.3	4.7
Supplements to Wages and Salaries	1,679.6	1,725.3	1,771.2	1,827.1	1,903.7	1,995.0	2,080.7	2,166.6
% Ch	2.7	2.7	2.7	3.2	4.2	4.8	4.3	4.1
Proprietor's Income	1,241.4	1,285.1	1,346.7	1,394.2	1,485.3	1,555.3	1,621.1	1,684.9
% Ch	8.5	3.5	4.8	3.5	6.5	4.7	4.2	3.9
Farm	61.6	88.8	78.1	61.3	63.5	63.4	67.4	71.5
% Ch	...	...	...	...	...	...	...	...
Nonfarm	1,179.8	1,196.3	1,268.5	1,333.0	1,421.8	1,491.8	1,553.7	1,613.4
% Ch	10.5	1.4	6.0	5.1	6.7	4.9	4.1	3.8
Less: Contribution For Govt. Soc. Ins.	951.6	1,106.8	1,159.0	1,197.2	1,254.6	1,317.6	1,386.9	1,466.2
% Ch	3.7	16.3	4.7	3.3	4.8	5.0	5.3	5.7
Dividends/Int./Rent	2,649.1	2,623.8	2,728.4	2,845.3	2,948.7	3,135.1	3,365.8	3,560.5
% Ch	10.4	-1.0	4.0	4.3	3.6	6.3	7.4	5.8
Transfer Payments	2,366.4	2,426.7	2,529.2	2,667.6	2,799.7	2,925.3	3,050.2	3,197.3
% Ch	0.2	2.5	4.2	5.5	5.0	4.5	4.3	4.8

Table A3.2

U.S. Personal Income by Component (Billions of Dollars)

Forecast 2015 to 2019

	2014:1	2014:2	2014:3	2014:4	2015:1	2015:2	2015:3	2015:4
Personal Income	14,433.5	14,612.8	14,774.8	14,955.7	15,079.8	15,221.3	15,410.0	15,571.2
% Ch, Annual Rate	6.1	5.1	4.5	5.0	3.4	3.8	5.1	4.3
Total Wage and Salary Disbursements	7,350.0	7,414.5	7,513.9	7,632.6	7,682.4	7,730.1	7,818.3	7,903.2
% Ch, Annual Rate	7.2	3.6	5.5	6.5	2.6	2.5	4.6	4.4
Nonwage Personal Income	7,083.5	7,198.3	7,260.9	7,323.1	7,397.4	7,491.2	7,591.7	7,668.0
% Ch, Annual Rate	5.0	6.6	3.5	3.5	4.1	5.2	5.5	4.1
Supplements to Wages and Salaries	1,753.6	1,762.7	1,776.0	1,792.3	1,805.5	1,818.9	1,835.5	1,848.3
% Ch, Annual Rate	2.7	2.1	3.0	3.7	3.0	3.0	3.7	2.8
Proprietor's Income	1,304.7	1,346.3	1,357.8	1,377.8	1,369.4	1,376.8	1,400.3	1,430.5
% Ch, Annual Rate	6.5	13.4	3.5	6.0	-2.4	2.2	7.0	8.9
Farm	71.7	88.8	77.2	74.8	60.5	57.9	59.7	66.9
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,233.0	1,257.5	1,280.6	1,303.0	1,308.9	1,318.9	1,340.6	1,363.6
% Ch, Annual Rate	8.8	8.2	7.6	7.2	1.8	3.1	6.7	7.1
Less: Contribution For Govt. Soc. Ins.	1,144.5	1,151.2	1,162.9	1,177.2	1,185.8	1,190.6	1,201.6	1,210.7
% Ch, Annual Rate	8.3	2.4	4.1	5.0	3.0	1.6	3.8	3.1
Dividends/Int./Rent	2,693.7	2,727.4	2,733.3	2,759.0	2,782.6	2,832.7	2,874.2	2,891.9
% Ch, Annual Rate	7.4	5.1	0.9	3.8	3.5	7.4	6.0	2.5
Transfer Payments	2,476.0	2,513.1	2,556.5	2,571.0	2,625.8	2,653.2	2,683.3	2,708.0
% Ch, Annual Rate	4.9	6.1	7.1	2.3	8.8	4.2	4.6	3.7

Table A3.2 (continued)

U.S. Personal Income by Component (Billions of Dollars)

Forecast 2015 to 2019

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Personal Income	15,777.8	15,949.3	16,136.4	16,322.2	16,545.9	16,752.0	16,950.3	17,152.4
% Ch, Annual Rate	5.4	4.4	4.8	4.7	5.6	5.1	4.8	4.9
Total Wage and Salary Disbursements	8,011.9	8,112.8	8,214.9	8,314.7	8,415.7	8,508.5	8,603.3	8,701.3
% Ch, Annual Rate	5.6	5.1	5.1	4.9	4.9	4.5	4.5	4.6
Nonwage Personal Income	7,765.9	7,836.4	7,921.5	8,007.5	8,130.3	8,243.5	8,347.0	8,451.1
% Ch, Annual Rate	5.2	3.7	4.4	4.4	6.3	5.7	5.1	5.1
Supplements to Wages and Salaries	1,870.4	1,891.2	1,915.1	1,938.1	1,963.0	1,985.3	2,005.4	2,026.1
% Ch, Annual Rate	4.9	4.5	5.1	4.9	5.2	4.6	4.1	4.2
Proprietor's Income	1,453.8	1,480.4	1,494.7	1,512.4	1,531.1	1,548.7	1,561.6	1,579.6
% Ch, Annual Rate	6.7	7.5	3.9	4.8	5.0	4.7	3.4	4.7
Farm	65.3	63.8	62.5	62.3	62.7	61.9	63.3	65.8
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,388.5	1,416.6	1,432.2	1,450.1	1,468.4	1,486.8	1,498.3	1,513.8
% Ch, Annual Rate	7.5	8.4	4.5	5.1	5.2	5.1	3.1	4.2
Less: Contribution For Govt. Soc. Ins.	1,231.2	1,246.8	1,262.5	1,277.8	1,297.5	1,311.8	1,323.6	1,337.4
% Ch, Annual Rate	7.0	5.1	5.1	4.9	6.3	4.5	3.6	4.3
Dividends/Int./Rent	2,913.8	2,923.1	2,960.1	2,997.8	3,047.2	3,108.3	3,165.1	3,219.8
% Ch, Annual Rate	3.1	1.3	5.2	5.2	6.8	8.3	7.5	7.1
Transfer Payments	2,759.2	2,788.5	2,814.1	2,837.0	2,886.4	2,913.1	2,938.5	2,963.0
% Ch, Annual Rate	7.8	4.3	3.7	3.3	7.2	3.7	3.5	3.4

Table A3.2 (continued)

U.S. Personal Income by Component (Billions of Dollars)

Forecast 2015 to 2019

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Personal Income	17,389.0	17,600.3	17,808.4	18,014.9	18,249.0	18,450.2	18,645.2	18,839.7
% Ch, Annual Rate	5.6	4.9	4.8	4.7	5.3	4.5	4.3	4.2
Total Wage and Salary Disbursements	8,811.1	8,919.5	9,026.6	9,132.3	9,243.2	9,349.8	9,455.9	9,562.5
% Ch, Annual Rate	5.1	5.0	4.9	4.8	4.9	4.7	4.6	4.6
Nonwage Personal Income	8,578.0	8,680.8	8,781.8	8,882.7	9,005.8	9,100.4	9,189.4	9,277.2
% Ch, Annual Rate	6.1	4.9	4.7	4.7	5.7	4.3	4.0	3.9
Supplements to Wages and Salaries	2,052.5	2,071.7	2,089.6	2,108.7	2,138.5	2,157.0	2,175.5	2,195.5
% Ch, Annual Rate	5.3	3.8	3.5	3.7	5.8	3.5	3.5	3.7
Proprietor's Income	1,596.8	1,615.3	1,628.0	1,644.3	1,661.5	1,678.2	1,691.8	1,708.0
% Ch, Annual Rate	4.4	4.7	3.2	4.1	4.2	4.1	3.3	3.9
Farm	66.6	66.6	67.0	69.5	71.2	71.5	71.4	71.9
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,530.2	1,548.7	1,561.0	1,574.8	1,590.3	1,606.7	1,620.4	1,636.1
% Ch, Annual Rate	4.4	4.9	3.2	3.6	4.0	4.2	3.5	3.9
Less: Contribution For Govt. Soc. Ins.	1,365.8	1,380.0	1,393.5	1,408.5	1,445.2	1,459.2	1,472.5	1,487.8
% Ch, Annual Rate	8.7	4.2	4.0	4.4	10.8	3.9	3.7	4.2
Dividends/Int./Rent	3,277.1	3,336.5	3,397.2	3,452.4	3,499.0	3,543.0	3,582.4	3,617.8
% Ch, Annual Rate	7.3	7.4	7.5	6.7	5.5	5.1	4.5	4.0
Transfer Payments	3,017.3	3,037.2	3,060.5	3,085.8	3,152.1	3,181.3	3,212.2	3,243.7
% Ch, Annual Rate	7.5	2.7	3.1	3.4	8.9	3.8	3.9	4.0

Table A3.3

Washington Personal Income by Component (Billions of Dollars)

Forecast 2015 to 2019

	2012	2013	2014	2015	2016	2017	2018	2019
Personal Income	324.458	332.655	350.645	368.582	386.954	408.028	430.407	452.851
% Ch	6.7	2.5	5.4	5.1	5.0	5.4	5.5	5.2
Total Wage and Salary Disbursements	163.880	170.790	180.684	190.245	199.424	209.575	220.321	231.760
% Ch	5.8	4.2	5.8	5.3	4.8	5.1	5.1	5.2
Manufacturing	19.577	20.557	21.445	21.716	22.231	22.975	23.856	24.868
% Ch	6.3	5.0	4.3	1.3	2.4	3.3	3.8	4.2
Durable Manufacturing	15.716	16.600	17.381	17.579	17.907	18.469	19.147	19.900
% Ch	7.5	5.6	4.7	1.1	1.9	3.1	3.7	3.9
Nondurable Manufacturing	3.861	3.958	4.064	4.137	4.324	4.506	4.709	4.968
% Ch	1.9	2.5	2.7	1.8	4.5	4.2	4.5	5.5
Nonmanufacturing	137.300	143.144	152.189	161.453	169.889	179.039	188.621	198.750
% Ch	5.5	4.3	6.3	6.1	5.2	5.4	5.4	5.4
Other Private Wages	1.070	1.083	1.113	1.165	1.206	1.251	1.297	1.345
% Ch	10.5	1.2	2.8	4.7	3.5	3.7	3.7	3.7
Farm Wages	1.568	1.691	1.754	1.806	1.888	1.976	2.069	2.168
% Ch	40.4	7.9	3.7	3.0	4.5	4.7	4.7	4.8
Military Wages	4.365	4.314	4.183	4.104	4.210	4.335	4.479	4.629
% Ch	1.9	-1.2	-3.0	-1.9	2.6	3.0	3.3	3.4
Nonwage Personal Income	160.578	161.865	169.961	178.338	187.530	198.453	210.085	221.091
% Ch	7.7	0.8	5.0	4.9	5.2	5.8	5.9	5.2
Supplements to Wages and Salaries	40.184	41.638	43.568	45.332	47.295	49.696	51.977	54.345
% Ch	3.8	3.6	4.6	4.0	4.3	5.1	4.6	4.6
Proprietor's Income	24.073	25.279	26.503	27.440	29.545	31.105	32.463	33.760
% Ch	6.9	5.0	4.8	3.5	7.7	5.3	4.4	4.0
Farm	1.342	1.372	0.986	0.542	0.841	0.982	1.078	1.139
% Ch	...	...	...	...	...	...	...	...
Nonfarm	22.732	23.906	25.517	26.898	28.704	30.123	31.386	32.621
% Ch	10.2	5.2	6.7	5.4	6.7	4.9	4.2	3.9
Less: Contribution For Govt. Soc. Ins.	24.734	28.845	30.857	32.270	33.809	35.555	37.469	39.675
% Ch	3.0	16.6	7.0	4.6	4.8	5.2	5.4	5.9
Plus: Residence Adjustment	2.815	3.041	3.236	3.426	3.628	3.833	4.051	4.275
% Ch	0.4	8.0	6.4	5.8	5.9	5.7	5.7	5.5
Dividends/Int./Rent	68.242	69.758	72.210	75.300	78.480	83.859	90.439	96.117
% Ch	13.8	2.2	3.5	4.3	4.2	6.9	7.8	6.3
Transfer Payments	49.998	50.993	55.300	59.110	62.391	65.515	68.624	72.270
% Ch	1.9	2.0	8.4	6.9	5.6	5.0	4.7	5.3
State U.I. Benefits	2.374	1.720	1.093	0.967	0.930	0.951	0.930	0.931
% Ch	-23.3	-27.5	-36.5	-11.5	-3.9	2.2	-2.2	0.2
Other Transfers	47.625	49.273	54.207	58.142	61.461	64.565	67.695	71.339
% Ch	3.6	3.5	10.0	7.3	5.7	5.0	4.8	5.4

Table A3.4

Washington Personal Income by Component (Billions of Dollars)

Forecast 2015 to 2019

	2014:1	2014:2	2014:3	2014:4	2015:1	2015:2	2015:3	2015:4
Personal Income	343.489	348.116	352.602	358.371	362.714	366.938	370.861	373.818
% Ch, Annual Rate	8.7	5.5	5.3	6.7	4.9	4.7	4.3	3.2
Total Wage and Salary Disbursements	177.465	178.540	181.474	185.256	188.254	189.759	190.965	192.001
% Ch, Annual Rate	9.5	2.4	6.7	8.6	6.6	3.2	2.6	2.2
Manufacturing	22.046	21.536	20.975	21.222	21.793	21.662	21.689	21.721
% Ch, Annual Rate	29.5	-8.9	-10.0	4.8	11.2	-2.4	0.5	0.6
Durable Manufacturing	18.001	17.478	16.912	17.131	17.682	17.540	17.549	17.545
% Ch, Annual Rate	33.9	-11.1	-12.4	5.3	13.5	-3.2	0.2	-0.1
Nondurable Manufacturing	4.044	4.057	4.063	4.091	4.111	4.123	4.140	4.176
% Ch, Annual Rate	11.8	1.3	0.6	2.8	1.9	1.2	1.7	3.5
Nonmanufacturing	148.344	149.905	153.428	157.077	159.428	161.035	162.181	163.171
% Ch, Annual Rate	7.2	4.3	9.7	9.9	6.1	4.1	2.9	2.5
Other Private Wages	1.070	1.126	1.151	1.105	1.154	1.160	1.169	1.177
% Ch, Annual Rate	16.1	22.6	9.4	-15.2	19.0	2.1	3.1	2.8
Farm Wages	1.737	1.749	1.760	1.772	1.783	1.796	1.814	1.831
% Ch, Annual Rate	1.2	2.7	2.6	2.6	2.6	3.0	4.1	3.8
Military Wages	4.268	4.224	4.159	4.080	4.096	4.106	4.112	4.101
% Ch, Annual Rate	0.5	-4.0	-6.0	-7.5	1.6	1.0	0.6	-1.1
Nonwage Personal Income	166.024	169.576	171.128	173.116	174.460	177.178	179.895	181.816
% Ch, Annual Rate	7.9	8.8	3.7	4.7	3.1	6.4	6.3	4.3
Supplements to Wages and Salaries	43.068	43.277	43.534	44.394	44.701	45.153	45.592	45.882
% Ch, Annual Rate	8.9	2.0	2.4	8.1	2.8	4.1	4.0	2.6
Proprietor's Income	25.908	26.642	26.569	26.892	26.747	27.085	27.670	28.257
% Ch, Annual Rate	11.1	11.8	-1.1	5.0	-2.1	5.2	8.9	8.8
Farm	0.910	1.362	0.910	0.763	0.382	0.481	0.589	0.717
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	24.997	25.280	25.659	26.130	26.365	26.604	27.081	27.540
% Ch, Annual Rate	12.6	4.6	6.1	7.5	3.7	3.7	7.4	7.0
Less: Contribution For Govt. Soc. Ins.	30.375	30.582	30.851	31.620	31.897	32.110	32.428	32.645
% Ch, Annual Rate	15.2	2.8	3.6	10.3	3.6	2.7	4.0	2.7
Plus: Residence Adjustment	3.161	3.210	3.276	3.298	3.373	3.396	3.443	3.490
% Ch, Annual Rate	8.5	6.3	8.5	2.7	9.5	2.7	5.7	5.5
Dividends/Int./Rent	70.748	72.162	72.759	73.174	73.479	74.908	76.117	76.697
% Ch, Annual Rate	0.8	8.2	3.4	2.3	1.7	8.0	6.6	3.1
Transfer Payments	53.514	54.867	55.842	56.977	58.058	58.747	59.500	60.136
% Ch, Annual Rate	20.1	10.5	7.3	8.4	7.8	4.8	5.2	4.3
State U.I. Benefits	1.232	1.129	1.016	0.994	1.005	0.964	0.964	0.937
% Ch, Annual Rate	-48.6	-29.6	-34.4	-8.2	4.3	-15.3	0.0	-10.7
Other Transfers	52.282	53.739	54.826	55.983	57.053	57.783	58.536	59.199
% Ch, Annual Rate	22.8	11.6	8.3	8.7	7.9	5.2	5.3	4.6

Table A3.4 (continued)

Washington Personal Income by Component (Billions of Dollars)

Forecast 2015 to 2019

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Personal Income	381.276	384.848	388.570	393.121	401.202	406.031	409.781	415.100
% Ch, Annual Rate	8.2	3.8	3.9	4.8	8.5	4.9	3.7	5.3
Total Wage and Salary Disbursements	196.902	198.598	199.984	202.212	207.101	208.890	209.872	212.439
% Ch, Annual Rate	10.6	3.5	2.8	4.5	10.0	3.5	1.9	5.0
Manufacturing	21.935	22.118	22.328	22.542	22.701	22.862	23.064	23.272
% Ch, Annual Rate	4.0	3.4	3.9	3.9	2.9	2.9	3.6	3.7
Durable Manufacturing	17.686	17.819	17.981	18.140	18.256	18.380	18.538	18.701
% Ch, Annual Rate	3.3	3.0	3.7	3.6	2.6	2.7	3.5	3.6
Nondurable Manufacturing	4.249	4.299	4.347	4.402	4.445	4.483	4.525	4.570
% Ch, Annual Rate	7.1	4.8	4.6	5.1	4.0	3.4	3.9	4.0
Nonmanufacturing	167.716	169.192	170.329	172.321	176.900	178.484	179.221	181.549
% Ch, Annual Rate	11.6	3.6	2.7	4.8	11.1	3.6	1.7	5.3
Other Private Wages	1.189	1.200	1.212	1.223	1.235	1.246	1.256	1.267
% Ch, Annual Rate	4.2	3.8	3.9	3.7	4.1	3.5	3.3	3.5
Farm Wages	1.855	1.876	1.899	1.921	1.944	1.966	1.987	2.009
% Ch, Annual Rate	5.2	4.8	4.9	4.7	5.1	4.5	4.3	4.5
Military Wages	4.208	4.211	4.217	4.205	4.320	4.332	4.345	4.342
% Ch, Annual Rate	10.8	0.3	0.5	-1.1	11.4	1.1	1.2	-0.2
Nonwage Personal Income	184.373	186.251	188.585	190.909	194.101	197.142	199.909	202.661
% Ch, Annual Rate	5.7	4.1	5.1	5.0	6.9	6.4	5.7	5.6
Supplements to Wages and Salaries	46.452	46.977	47.584	48.168	48.857	49.454	49.962	50.510
% Ch, Annual Rate	5.1	4.6	5.3	5.0	5.8	5.0	4.2	4.5
Proprietor's Income	28.811	29.423	29.773	30.172	30.582	30.983	31.249	31.605
% Ch, Annual Rate	8.1	8.8	4.8	5.5	5.5	5.4	3.5	4.6
Farm	0.775	0.823	0.863	0.902	0.939	0.962	0.995	1.031
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	28.037	28.600	28.910	29.270	29.643	30.021	30.254	30.574
% Ch, Annual Rate	7.4	8.3	4.4	5.1	5.2	5.2	3.1	4.3
Less: Contribution For Govt. Soc. Ins.	33.189	33.598	34.020	34.431	34.993	35.400	35.719	36.107
% Ch, Annual Rate	6.8	5.0	5.1	4.9	6.7	4.7	3.7	4.4
Plus: Residence Adjustment	3.547	3.601	3.655	3.708	3.760	3.808	3.858	3.909
% Ch, Annual Rate	6.8	6.2	6.1	5.9	5.7	5.2	5.4	5.4
Dividends/Int./Rent	77.390	77.747	78.838	79.945	81.364	83.092	84.709	86.271
% Ch, Annual Rate	3.7	1.9	5.7	5.7	7.3	8.8	8.0	7.6
Transfer Payments	61.361	62.100	62.755	63.347	64.532	65.205	65.851	66.473
% Ch, Annual Rate	8.4	4.9	4.3	3.8	7.7	4.2	4.0	3.8
State U.I. Benefits	0.920	0.926	0.930	0.942	0.936	0.941	0.958	0.967
% Ch, Annual Rate	-7.0	2.6	1.8	5.2	-2.5	2.1	7.6	3.6
Other Transfers	60.441	61.174	61.825	62.405	63.596	64.264	64.893	65.507
% Ch, Annual Rate	8.7	4.9	4.3	3.8	7.8	4.3	4.0	3.8

Table A3.4 (continued)

Washington Personal Income by Component (Billions of Dollars)

Forecast 2015 to 2019

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Personal Income	423.562	428.304	432.038	437.723	446.172	450.970	454.250	460.011
% Ch, Annual Rate	8.4	4.6	3.5	5.4	7.9	4.4	2.9	5.2
Total Wage and Salary Disbursements	217.598	219.578	220.561	223.549	228.827	231.055	231.893	235.265
% Ch, Annual Rate	10.1	3.7	1.8	5.5	9.8	4.0	1.5	5.9
Manufacturing	23.496	23.718	23.971	24.238	24.493	24.738	24.995	25.244
% Ch, Annual Rate	3.9	3.8	4.4	4.5	4.3	4.1	4.2	4.0
Durable Manufacturing	18.875	19.040	19.235	19.438	19.627	19.804	19.993	20.176
% Ch, Annual Rate	3.8	3.5	4.2	4.3	3.9	3.6	3.9	3.7
Nondurable Manufacturing	4.620	4.678	4.737	4.800	4.866	4.934	5.002	5.068
% Ch, Annual Rate	4.5	5.1	5.2	5.4	5.7	5.7	5.6	5.4
Nonmanufacturing	186.326	188.037	188.716	191.405	196.266	198.197	198.725	201.812
% Ch, Annual Rate	10.9	3.7	1.5	5.8	10.6	4.0	1.1	6.4
Other Private Wages	1.280	1.291	1.302	1.314	1.327	1.339	1.351	1.363
% Ch, Annual Rate	4.2	3.5	3.6	3.5	4.0	3.7	3.6	3.5
Farm Wages	2.035	2.058	2.081	2.104	2.131	2.155	2.180	2.205
% Ch, Annual Rate	5.2	4.6	4.6	4.6	5.1	4.8	4.7	4.6
Military Wages	4.461	4.475	4.490	4.488	4.610	4.625	4.642	4.641
% Ch, Annual Rate	11.4	1.2	1.4	-0.2	11.3	1.3	1.4	-0.1
Nonwage Personal Income	205.964	208.726	211.477	214.174	217.346	219.915	222.357	224.746
% Ch, Annual Rate	6.7	5.5	5.4	5.2	6.1	4.8	4.5	4.4
Supplements to Wages and Salaries	51.266	51.739	52.200	52.703	53.565	54.083	54.593	55.140
% Ch, Annual Rate	6.1	3.7	3.6	3.9	6.7	3.9	3.8	4.1
Proprietor's Income	31.966	32.350	32.613	32.925	33.267	33.617	33.909	34.246
% Ch, Annual Rate	4.6	4.9	3.3	3.9	4.2	4.3	3.5	4.0
Farm	1.053	1.068	1.082	1.108	1.127	1.137	1.142	1.150
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	30.913	31.283	31.530	31.817	32.140	32.481	32.767	33.096
% Ch, Annual Rate	4.5	4.9	3.2	3.7	4.1	4.3	3.6	4.1
Less: Contribution For Govt. Soc. Ins.	36.907	37.277	37.640	38.052	39.081	39.479	39.857	40.284
% Ch, Annual Rate	9.2	4.1	4.0	4.4	11.3	4.1	3.9	4.4
Plus: Residence Adjustment	3.965	4.023	4.080	4.135	4.192	4.247	4.302	4.357
% Ch, Annual Rate	5.9	6.0	5.7	5.6	5.6	5.3	5.3	5.2
Dividends/Int./Rent	87.905	89.599	91.331	92.920	94.285	95.583	96.763	97.838
% Ch, Annual Rate	7.8	7.9	8.0	7.1	6.0	5.6	5.0	4.5
Transfer Payments	67.769	68.293	68.893	69.542	71.118	71.863	72.648	73.450
% Ch, Annual Rate	8.0	3.1	3.6	3.8	9.4	4.3	4.4	4.5
State U.I. Benefits	0.943	0.928	0.921	0.926	0.927	0.931	0.937	0.930
% Ch, Annual Rate	-9.6	-6.1	-2.9	2.2	0.3	1.6	2.6	-2.7
Other Transfers	66.826	67.364	67.972	68.616	70.191	70.932	71.711	72.520
% Ch, Annual Rate	8.3	3.3	3.7	3.8	9.5	4.3	4.5	4.6

Table A4.1
Selected Inflation Indicators
(Deflator 2009=1; CPI 1982-84=1)

	Price Deflator*		U.S. CPI#		Seattle CPI+	
	Index	Percent Change	Index	Percent Change	Index	Percent Change
1971	0.233	4.2	0.405	4.2	0.382	2.1
1972	0.241	3.4	0.418	3.3	0.393	2.9
1973	0.254	5.4	0.444	6.3	0.418	6.4
1974	0.280	10.4	0.493	11.0	0.464	11.0
1975	0.303	8.3	0.538	9.1	0.511	10.2
1976	0.320	5.5	0.569	5.8	0.540	5.5
1977	0.341	6.5	0.606	6.5	0.583	8.0
1978	0.365	7.0	0.652	7.6	0.640	9.9
1979	0.397	8.9	0.726	11.3	0.709	10.8
1980	0.440	10.7	0.824	13.5	0.827	16.7
1981	0.478	8.8	0.909	10.4	0.916	10.8
1982	0.505	5.5	0.965	6.2	0.978	6.7
1983	0.526	4.3	0.996	3.2	0.993	1.5
1984	0.546	3.8	1.039	4.4	1.030	3.8
1985	0.566	3.5	1.076	3.5	1.056	2.5
1986	0.578	2.2	1.097	1.9	1.066	1.0
1987	0.596	3.2	1.136	3.6	1.092	2.4
1988	0.620	3.9	1.183	4.1	1.128	3.3
1989	0.646	4.3	1.239	4.8	1.181	4.7
1990	0.674	4.3	1.307	5.4	1.268	7.3
1991	0.696	3.3	1.362	4.2	1.341	5.8
1992	0.715	2.6	1.403	3.0	1.390	3.7
1993	0.733	2.5	1.445	3.0	1.429	2.8
1994	0.748	2.1	1.482	2.6	1.478	3.4
1995	0.764	2.1	1.524	2.8	1.522	3.0
1996	0.780	2.1	1.569	2.9	1.575	3.4
1997	0.793	1.7	1.605	2.3	1.630	3.5
1998	0.799	0.8	1.630	1.5	1.677	2.9
1999	0.811	1.5	1.666	2.2	1.728	3.0
2000	0.831	2.5	1.722	3.4	1.792	3.7
2001	0.847	1.9	1.770	2.8	1.857	3.6
2002	0.859	1.3	1.799	1.6	1.893	2.0
2003	0.876	2.0	1.840	2.3	1.924	1.6
2004	0.897	2.4	1.889	2.7	1.947	1.2
2005	0.923	2.9	1.953	3.4	2.002	2.8
2006	0.947	2.7	2.016	3.2	2.076	3.7
2007	0.971	2.5	2.073	2.9	2.157	3.9
2008	1.001	3.1	2.153	3.8	2.247	4.2
2009	1.000	-0.1	2.146	-0.3	2.260	0.6
2010	1.016	1.7	2.181	1.6	2.267	0.3
2011	1.041	2.5	2.249	3.1	2.328	2.7
2012	1.061	1.9	2.296	2.1	2.387	2.5
2013	1.076	1.4	2.330	1.5	2.416	1.2
2014	1.091	1.4	2.367	1.6	2.460	1.8
Forecast						
2015	1.095	0.4	2.373	0.2	2.493	1.3
2016	1.110	1.4	2.412	1.7	2.543	2.0
2017	1.129	1.7	2.462	2.1	2.597	2.1
2018	1.149	1.8	2.515	2.1	2.654	2.2
2019	1.169	1.7	2.566	2.0	2.710	2.1

* Chain-Weight Implicit Price Deflator for Personal Consumption Expenditures
Consumer Price Index for all Urban Consumers
+ Consumer Price Index for the Seattle-Tacoma-Bremerton, WA CMSA
Consumer Price Index and Implicit Price Deflator values shown here are annual averages of seasonally adjusted quarterly data and may differ slightly from the annual values published by the Bureau of Labor Statistics and Bureau of Economic Analysis.

Table A4.2
Chain-Weighted Price Indices
(2009=100)

	Services		Food		Fuels		Gasoline	
	<u>Index</u>	<u>Percent Change</u>						
1971	17.9	5.5	22.8	2.3	7.4	6.4	14.0	0.7
1972	18.7	4.2	23.9	4.8	7.5	0.6	14.2	1.3
1973	19.6	4.8	26.9	12.7	8.6	14.6	15.5	9.6
1974	21.3	8.5	31.0	15.2	13.6	58.9	21.0	35.1
1975	23.1	8.6	33.3	7.5	14.8	8.5	22.4	6.7
1976	24.7	6.9	34.0	1.9	15.9	7.3	23.3	4.2
1977	26.6	7.5	36.0	5.9	17.9	13.2	24.7	5.8
1978	28.6	7.8	39.4	9.6	19.0	5.7	25.8	4.3
1979	31.0	8.4	43.3	9.8	26.2	37.9	34.5	34.0
1980	34.2	10.3	46.9	8.4	36.7	40.4	47.9	38.8
1981	37.7	10.2	50.3	7.1	44.9	22.3	53.3	11.3
1982	40.6	7.8	51.6	2.6	44.1	-1.9	50.6	-5.1
1983	43.2	6.2	52.2	1.1	40.6	-7.8	48.9	-3.3
1984	45.4	5.2	53.7	3.0	41.5	2.2	48.2	-1.5
1985	47.7	5.0	54.3	1.1	39.9	-3.9	48.6	0.8
1986	49.6	4.1	55.6	2.4	31.2	-21.7	38.2	-21.5
1987	51.1	2.9	57.4	3.2	32.1	2.6	39.6	3.8
1988	53.5	4.8	59.1	3.0	32.0	0.0	40.0	0.8
1989	56.0	4.6	62.2	5.3	34.0	6.0	43.7	9.2
1990	58.5	4.5	65.2	4.9	40.9	20.4	49.7	13.8
1991	60.7	3.8	67.3	3.1	38.9	-4.8	49.1	-1.3
1992	62.8	3.5	67.8	0.8	37.3	-4.1	48.9	-0.4
1993	65.0	3.5	68.7	1.4	37.1	-0.7	48.4	-1.0
1994	66.8	2.7	69.9	1.7	36.4	-1.8	48.6	0.5
1995	68.6	2.7	71.4	2.2	36.1	-0.9	49.4	1.6
1996	70.5	2.7	73.6	3.1	40.9	13.3	52.4	6.1
1997	72.4	2.8	75.0	1.9	41.0	0.2	52.4	0.0
1998	73.9	2.1	75.9	1.3	36.3	-11.4	45.6	-12.9
1999	75.4	2.0	77.2	1.6	36.9	1.7	49.6	8.9
2000	77.5	2.8	79.0	2.3	54.1	46.6	63.4	27.8
2001	79.9	3.1	81.3	2.9	53.1	-2.0	61.2	-3.6
2002	82.0	2.6	82.5	1.5	47.3	-10.8	57.5	-6.0
2003	84.5	3.1	84.1	1.9	57.2	20.9	67.0	16.5
2004	87.1	3.0	86.7	3.1	66.6	16.4	78.8	17.6
2005	89.9	3.3	88.2	1.7	88.6	33.0	95.8	21.6
2006	93.0	3.4	89.7	1.7	100.7	13.7	108.0	12.8
2007	96.0	3.2	93.2	3.9	107.7	6.9	117.1	8.4
2008	98.9	3.1	98.9	6.1	146.0	35.6	136.6	16.6
2009	100.0	1.1	100.0	1.2	100.0	-31.5	100.0	-26.8
2010	101.7	1.7	100.3	0.3	117.0	17.0	118.2	18.2
2011	103.5	1.8	104.3	4.0	148.8	27.2	149.3	26.3
2012	105.8	2.2	106.7	2.3	150.7	1.3	154.7	3.6
2013	108.3	2.3	107.8	1.0	149.0	-1.2	150.4	-2.7
2014	110.8	2.3	109.8	1.9	148.9	-0.1	144.7	-3.8

Forecast

2015	112.9	1.9	111.0	1.1	111.2	-25.3	108.8	-24.8
2016	115.2	2.1	112.8	1.6	110.3	-0.9	104.5	-3.9
2017	117.9	2.3	114.8	1.7	115.4	4.7	106.3	1.7
2018	120.7	2.3	116.7	1.7	120.1	4.1	109.9	3.4
2019	123.5	2.3	118.6	1.6	124.2	3.4	112.1	2.0

Table A5.1

Washington Resident Population and Components of Change*
 (Thousands)

	<u>Population</u>	<u>Change</u>	<u>Percent Change</u>	<u>Births</u>	<u>Deaths</u>	<u>Net Migration</u>
1970	3413.2	16.2	0.5	59.9	30.0	-13.7
1971	3436.3	23.1	0.7	60.0	29.8	-7.1
1972	3430.3	-6.0	-0.2	53.1	30.4	-28.7
1973	3444.3	14.0	0.4	47.7	30.4	-3.3
1974	3508.7	64.4	1.9	48.2	29.9	46.1
1975	3567.9	59.2	1.7	50.1	30.3	39.4
1976	3634.9	67.0	1.9	51.4	30.2	45.8
1977	3715.4	80.5	2.2	54.2	29.1	55.4
1978	3836.2	120.8	3.3	57.3	30.4	93.9
1979	3979.2	143.0	3.7	60.2	30.2	113.0
1980	4132.2	153.0	3.8	65.4	31.3	118.9
1981	4229.3	97.1	2.4	68.2	31.8	60.8
1982	4276.5	47.3	1.1	70.1	31.7	8.9
1983	4307.2	30.7	0.7	69.5	32.5	-6.2
1984	4354.1	46.8	1.1	68.5	33.2	11.6
1985	4415.8	61.7	1.4	69.1	34.0	26.6
1986	4462.2	46.4	1.1	70.2	34.0	10.2
1987	4527.1	64.9	1.5	69.3	34.4	30.0
1988	4616.9	89.8	2.0	71.0	36.0	54.8
1989	4728.1	111.2	2.4	73.0	36.0	74.2
1990	4866.7	138.6	2.9	76.4	36.2	98.5
1991	5021.3	154.6	3.2	79.1	36.6	112.1
1992	5141.2	119.8	2.4	80.2	37.2	76.8
1993	5265.7	124.5	2.4	79.1	39.4	84.8
1994	5364.3	98.7	1.9	78.2	39.5	60.0
1995	5470.1	105.8	2.0	77.5	40.0	68.3
1996	5567.8	97.7	1.8	77.0	41.2	61.8
1997	5663.8	96.0	1.7	78.0	42.6	60.6
1998	5750.0	86.3	1.5	78.8	41.6	49.0
1999	5830.8	80.8	1.4	79.8	43.1	44.2
2000	5894.1	63.3	1.1	79.9	43.7	27.2
2001	5970.3	76.2	1.3	80.7	43.9	39.4
2002	6059.3	89.0	1.5	79.3	44.9	54.6
2003	6126.9	67.6	1.1	79.1	44.7	33.2
2004	6208.5	81.6	1.3	81.0	46.0	46.7
2005	6298.8	90.3	1.5	81.8	45.6	54.1
2006	6420.3	121.4	1.9	83.2	45.3	83.5
2007	6525.1	104.8	1.6	87.8	46.2	63.2
2008	6608.2	83.2	1.3	89.6	47.9	41.5
2009	6672.2	63.9	1.0	89.8	48.1	22.2
2010	6724.5	52.4	0.8	88.4	47.7	11.6
2011	6767.9	43.4	0.6	86.4	48.8	5.8
2012	6817.8	49.9	0.7	87.1	49.2	12.0
2013	6882.4	64.6	0.9	87.3	51.1	28.5
2014	6968.2	85.8	1.2	87.7	51.6	49.7
Forecast						
2015	7054.8	86.6	1.2	88.2	52.1	50.5
2016	7142.2	87.4	1.2	89.2	53.0	51.3
2017	7227.5	85.3	1.2	89.9	54.0	49.4
2018	7308.9	81.3	1.1	91.5	55.0	44.8
2019	7383.5	74.6	1.0	92.1	58.9	41.3

* As of April 1 of Each Year

Source: Office of Financial Management

Table A5.2
Washington Population*
 (Thousands)

	<u>2010</u>	<u>2011</u>	Actual <u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	Forecast <u>2017</u>	<u>2018</u>	<u>2019</u>
Total Population	6724.5	6767.9	6817.8	6882.4	6968.2	7054.8	7142.2	7227.5	7308.9	7383.5
Percent Change	0.8	0.6	0.7	0.9	1.2	1.2	1.2	1.2	1.1	1.0
Age 17 and Under	1581.4	1574.8	1573.6	1578.7	1591.2	1603.9	1617.1	1629.7	1641.6	1653.2
Percent of Total	23.5	23.3	23.1	22.9	22.8	22.7	22.6	22.5	22.5	22.4
Age 6-18	1149.6	1142.5	1137.4	1141.0	1150.9	1160.9	1171.0	1179.9	1188.7	1196.0
Percent of Total	17.1	16.9	16.7	16.6	16.5	16.5	16.4	16.3	16.3	16.2
Age 18 and Over	5143.2	5193.1	5244.2	5303.7	5377.0	5450.9	5525.2	5597.8	5667.3	5730.3
Percent of Total	76.5	76.7	76.9	77.1	77.2	77.3	77.4	77.5	77.5	77.6
Age 21 and Over	4860.6	4910.6	4964.3	5027.8	5104.8	5180.0	5253.8	5324.7	5391.9	5453.6
Percent of Total	72.3	72.6	72.8	73.1	73.3	73.4	73.6	73.7	73.8	73.9
Age 20-34	1395.3	1403.5	1413.2	1427.0	1446.1	1456.2	1466.0	1473.7	1479.4	1485.5
Percent of Total	20.7	20.7	20.7	20.7	20.8	20.6	20.5	20.4	20.2	20.1
Age 18-64	4315.5	4341.7	4350.5	4367.2	4398.9	4428.9	4459.5	4486.6	4506.8	4523.0
Percent of Total	64.2	64.2	63.8	63.5	63.1	62.8	62.4	62.1	61.7	61.3
Age 65 and Over	827.7	851.4	893.7	936.5	978.1	1022.0	1065.7	1111.2	1160.5	1207.3
Percent of Total	12.3	12.6	13.1	13.6	14.0	14.5	14.9	15.4	15.9	16.4

* As of April 1 of Each Year

Source: Office of Financial Management

Table A6.1

Summary of National and State Indicators

Indicator	Latest Data	Indication*
U.S. Leading Index	August 2015	+
U.S. Real GDP Growth	2nd quarter 2015	+
U.S. ISM Index	August 2015	-
U.S. Employment YoY%Δ	August 2015	unchanged
U.S. Unemployment Rate	August 2015	+
U.S. Fed Funds Target	September 2015	unchanged
U.S. Consumer Confidence	September 2015	+
U.S. Consumer Sentiment	September 2015	-
U.S. Light Vehicle Sales	August 2015	+
U.S. CPI YoY%Δ	August 2015	unchanged
U.S. Home Prices	July 2015	-
S&P 500 Index	September 2015	-
WA Leading Index	August 2015	-
WA ISM-WW Index	August 2015	-
WA Employment YoY%Δ	August 2015	-
WA Aerospace Empl. YoY%Δ	August 2015	-
WA Unemployment Rate	August 2015	unchanged
WA Help Wanted Index	August 2015	-
WA Business Cycle Indicator	August 2015	-
WA Initial Unemploy. Claims	August 2015	+
WA Housing Permits	August 2015	+
WA Weekly Hours in Mfg.	August 2015	+
WA New Vehicle Registration	August 2015	-
WA In-Migration	August 2015	+
WA Exports-Total YoY%Δ	2nd quarter 2015	-
WA Exports- w/o Trans. Equip. YoY%Δ	2nd quarter 2015	+
Seattle CPI YoY%Δ	August 2015	-
Seattle Home Prices	July 2015	-
WA Construction Activity Index	August 2015	-

*Change from the previous reading

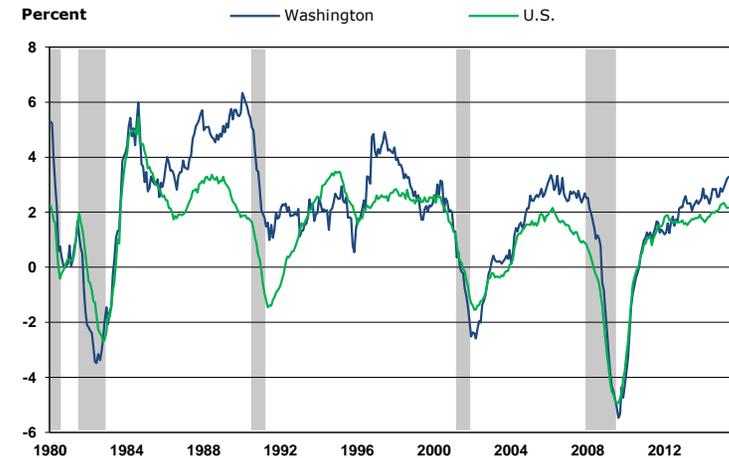
Table A6.2
Washington Business Indicators
 Historical Data

	WA Index of Leading Indicators	U.S. Index of Leading Indicators	WA State Business Cycle Indicator	WA State Construction Index	WA State Help Wanted Index	WA Purchasing Management Index	U.S. Purchasing Management Index
2012:01	108.4	106.6	24.8	81.4	107.0	68.5	52.8
2012:02	109.9	107.2	26.1	83.8	104.9	68.9	52.4
2012:03	111.1	107.7	28.0	91.3	110.0	62.9	53.0
2012:04	111.1	107.4	28.8	90.8	113.5	64.9	53.7
2012:05	111.0	107.5	29.6	91.3	111.2	58.5	53.2
2012:06	110.9	107.2	31.7	91.6	113.4	57.0	51.0
2012:07	111.4	107.5	30.7	91.7	114.8	58.8	50.6
2012:08	111.1	107.3	31.4	88.8	110.5	53.5	51.1
2012:09	112.5	107.8	33.4	93.2	116.6	56.0	52.2
2012:10	113.2	108.1	35.0	95.0	117.9	56.3	51.2
2012:11	112.9	108.1	37.4	90.9	120.6	60.1	49.5
2012:12	113.7	108.5	38.9	89.2	125.9	58.1	50.4
2013:01	114.7	109.1	39.8	94.2	128.7	60.2	52.3
2013:02	114.7	109.5	39.0	95.8	127.2	56.3	53.1
2013:03	114.1	109.2	39.3	95.9	118.8	65.4	51.5
2013:04	114.2	110.0	38.2	92.8	120.2	59.5	50.0
2013:05	114.3	110.2	39.4	93.1	120.0	53.7	50.0
2013:06	114.3	110.4	40.0	92.7	121.0	61.0	52.5
2013:07	114.5	110.8	41.8	96.3	118.6	60.3	54.9
2013:08	115.0	111.6	42.3	94.7	118.7	53.8	56.3
2013:09	115.1	112.5	41.6	92.4	116.6	52.7	56.0
2013:10	114.5	112.8	42.5	94.5	112.7	54.2	56.6
2013:11	116.2	113.8	42.0	93.8	118.2	61.1	57.0
2013:12	116.3	113.8	42.9	97.2	118.2	62.3	56.5
2014:01	116.0	113.7	44.0	95.6	118.2	63.5	51.8
2014:02	115.5	114.3	43.3	93.4	118.5	68.7	54.3
2014:03	116.5	115.4	43.9	94.9	118.6	63.6	54.4
2014:04	117.1	115.8	46.6	96.6	120.6	53.7	55.3
2014:05	117.3	116.5	47.3	95.8	118.7	59.6	55.6
2014:06	118.5	117.2	48.1	97.2	121.0	67.0	55.7
2014:07	118.7	118.4	49.7	97.5	121.3	50.1	56.4
2014:08	118.7	118.5	49.6	97.6	121.6	62.9	58.1
2014:09	118.3	119.2	49.5	96.9	114.3	60.3	56.1
2014:10	119.1	119.9	48.6	100.2	119.0	57.6	57.9
2014:11	119.8	120.5	49.3	100.3	128.0	63.1	57.6
2014:12	119.4	121.0	49.9	101.1	122.0	53.3	55.1
2015:01	119.4	121.2	51.8	98.5	127.6	66.6	53.5
2015:02	120.1	120.9	57.1	108.3	137.2	65.9	52.9
2015:03	119.9	121.5	57.1	101.0	138.8	64.1	51.5
2015:04	120.1	122.2	57.1	98.8	135.7	60.4	51.5
2015:05	120.5	122.9	57.6	98.7	139.0	60.3	52.8
2015:06	120.9	123.6	58.0	98.4	136.0	51.4	53.5
2015:07	120.4	123.6	60.0	98.3	141.0	53.6	52.7
2015:08	120.1	123.7	59.2	97.9	139.2	48.0	51.1

Figure A7.1: Washington State Economic Indicators

Year-over-Year Employment Growth

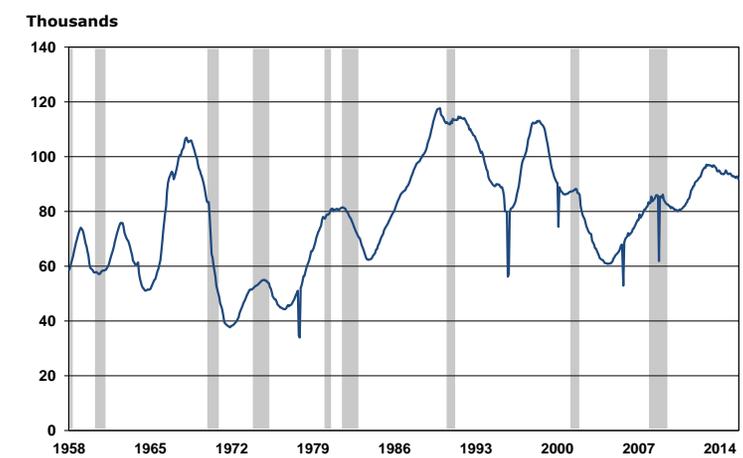
January 1980 to August 2015



* Bureau of Labor Statistics, WA State Employment Security, ERFC Kalman Filtered Data

Washington Aircraft and Parts Employment

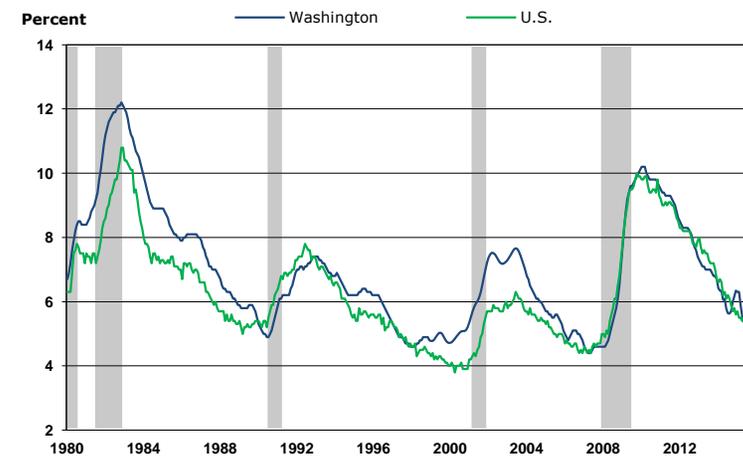
January 1958 to August 2015



* Source: Bureau of Labor Statistics, ERFC

Unemployment Rate, S.A.

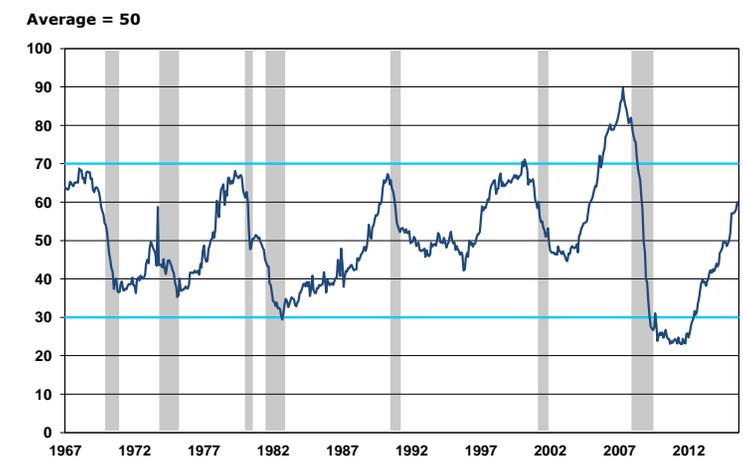
January 1980 to August 2015



* Source: Bureau of Labor Statistics

Washington Business Cycle Indicator

January 1968 to April 2015



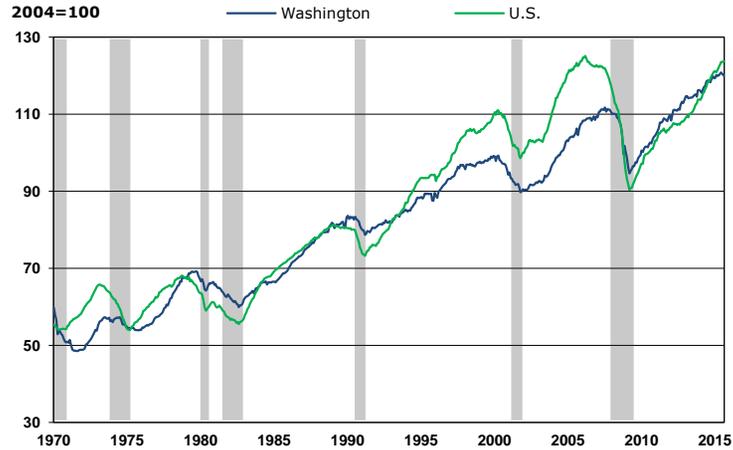
* Source: ERFC

* Shaded areas correspond with national recessions.
Appendix

Figure A7.2: Washington State Leading Indicators

The Washington and U.S. Indexes of Leading Indicators

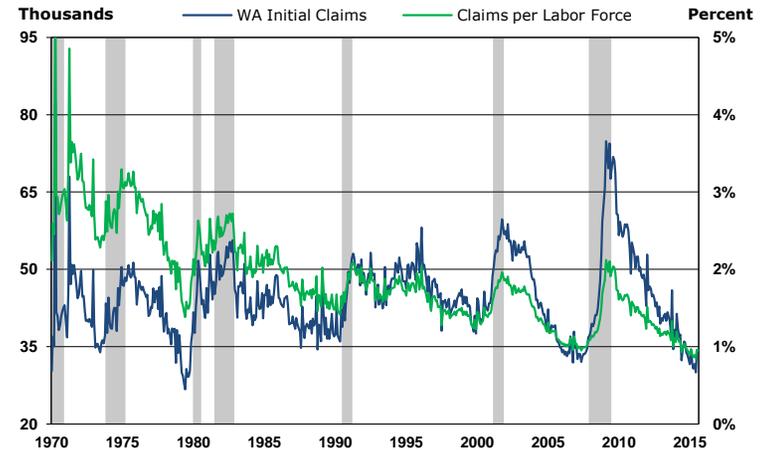
January 1970 to August 2015



* The Conference Board, ERFC

Washington Initial Claims for Unemployment Insurance

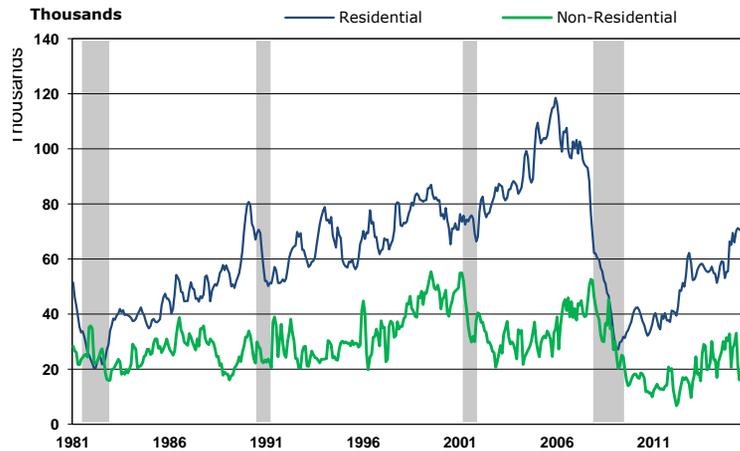
January 1970 to August 2015, S.A.



* Source: WA State Employment Security, ERFC

Square Footage of Construction Projects in WA State

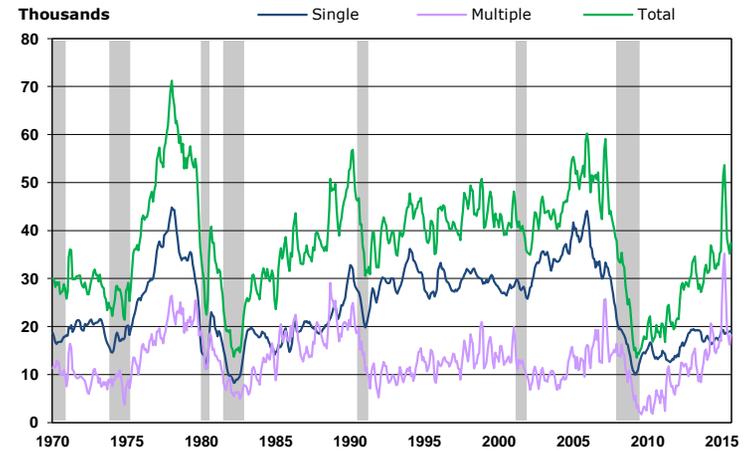
January 1981 to August 2015, 3mma, SAAR



* Source: McGraw-Hill Construction, ERFC

Housing Units Authorized in Washington State

January 1970 to August 2015, 3mma, SAAR



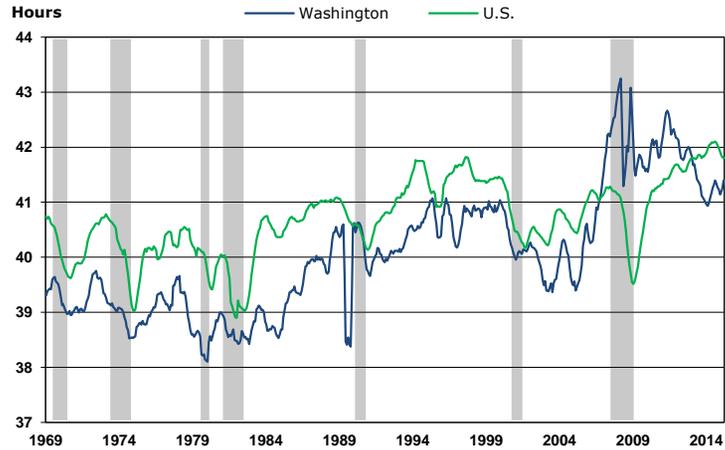
* Source: Census Bureau, ERFC

* Shaded areas correspond with national recessions.
Appendix

Figure A7.3: Other State Economic Indicators

Average Weekly Hours in Manufacturing

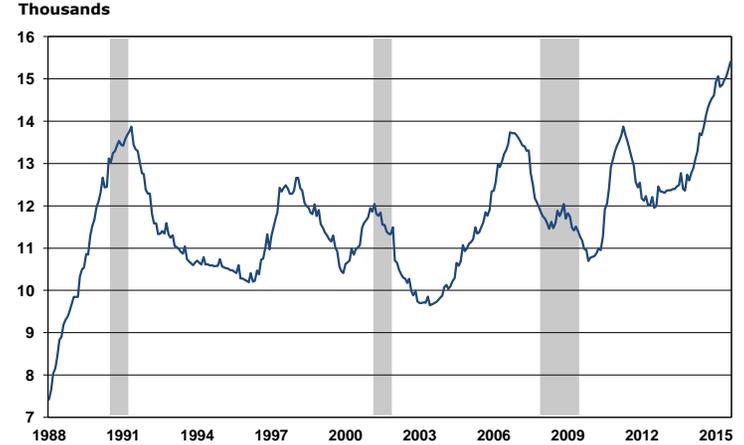
June 1969 to August 2015, 6-Mo. Moving Average, S.A.



* Bureau of Labor Statistics, ERFC

Washington Driver's License In-Migration

January 1988 to August 2015, 12-Month Moving Average



* Source: WA State Department of Licensing, ERFC

New Car and Truck Registrations in Washington

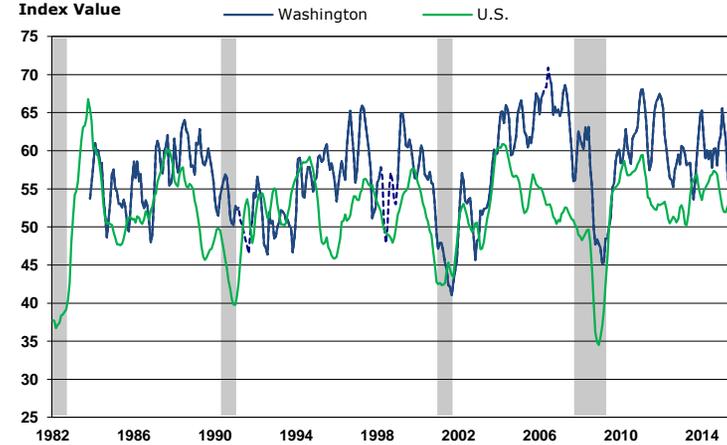
September 1970 to August 2015, 3-Month Moving Average, S.A.



* Source: WA State Department of Licensing, ERFC

Institute for Supply Management Index

March 1982 to August 2015, 3-Month Moving Average, S.A.



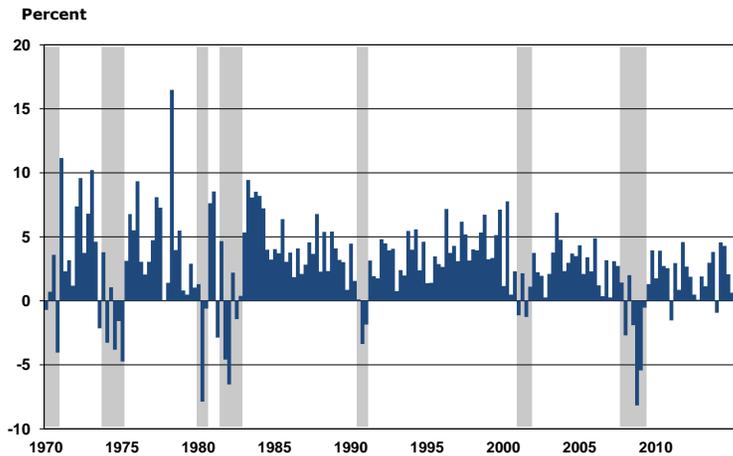
* Source: Institute for Supply Management, ISM-WW, ERFC

* Shaded areas correspond with national recessions.
Appendix

Figure A7.4: Other Economic Indicators

Quarterly U.S. Real GDP Growth

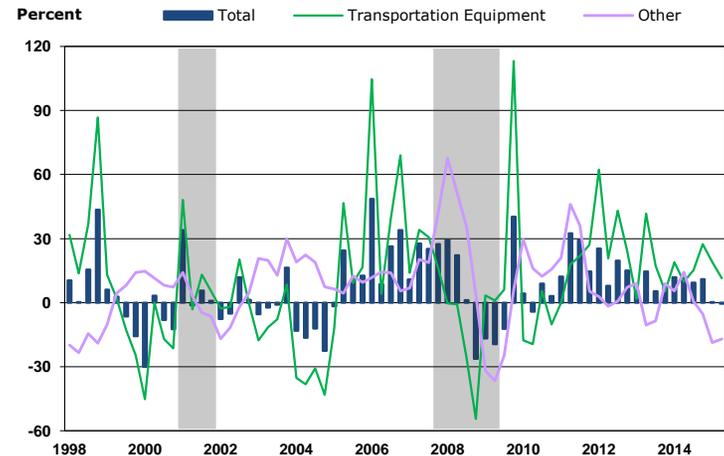
1970Q1 to 2015Q2, SAAR



* Source: Bureau of Economic Analysis

Washington State Export Composition

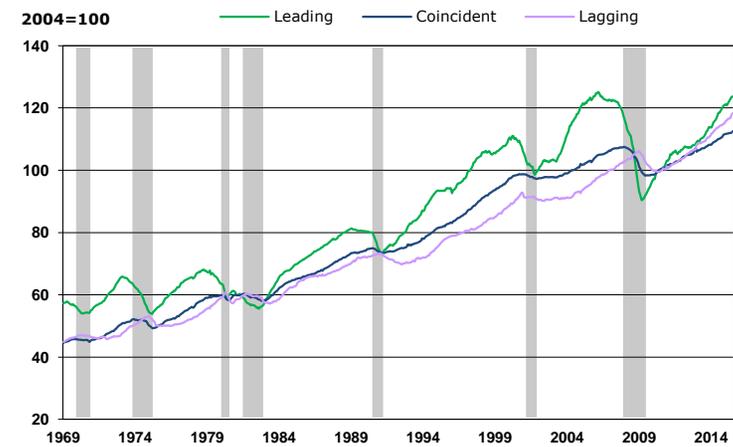
1998Q1 to 2015Q2, Year-over-year percent change



* Source: WISER

U.S. Economic Indicators

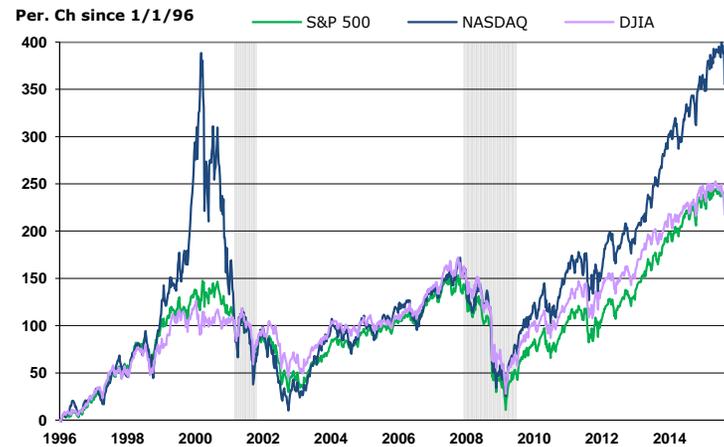
January 1969 to August 2015



* Source: The Conference Board

National Stock Indexes

January 1, 1996 to September 25, 2015



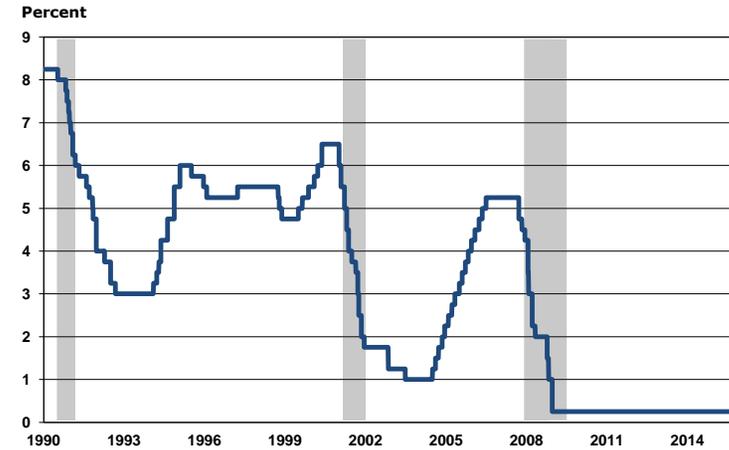
* Source: ERFC

* Shaded areas correspond with national recessions.
Appendix

Figure A7.4: Other Economic Indicators

Federal Funds Target Rate

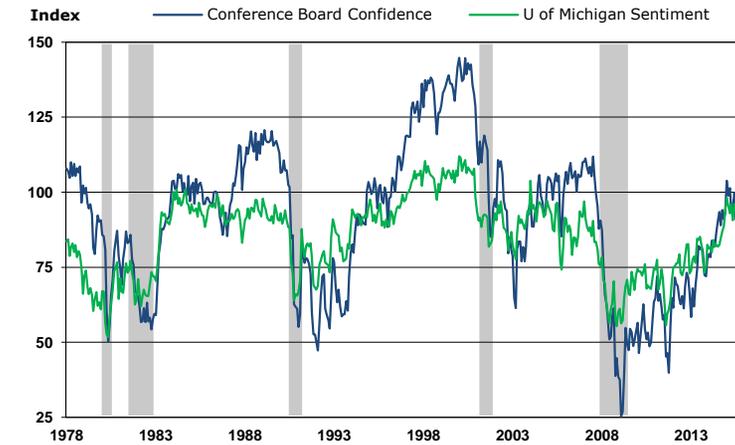
January 1, 1990 to September 30, 2015



* Federal Reserve

Consumer Confidence

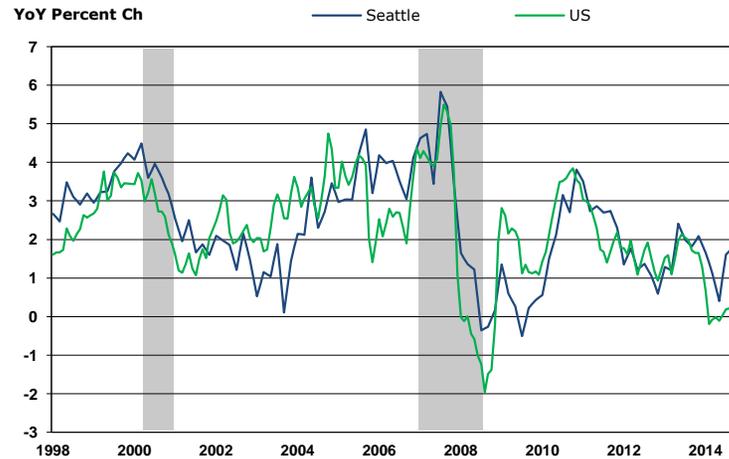
March 1978 to September 2015



* Source: The Conference Board, University of Michigan

Seattle vs U.S. CPI (All Urban Consumers)

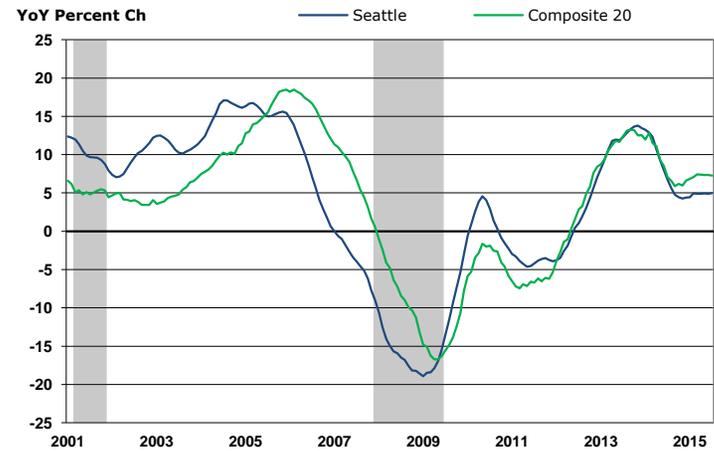
December 1998 to September 2015



* Source: Bureau of Labor Statistics

Case Shiller Home Price Index

January 2001 to August 2015, SA



* Source: Case Shiller, ERFC

* Shaded areas correspond with national recessions.
Appendix

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Glossary

Biennium: The state's two years budget cycle.

Cash Basis: Cash receipts received during a period. The Forecast Council forecasts revenues on a Cash and GAAP (Generally Accepted Accounting Principles) basis.

CPI: The Consumer Price Index for All Urban Consumers. The Bureau of Labor Statistics (BLS) updates the CPI monthly, surveying over 60,000 goods in 85 urban areas.

Tax Elasticity: A measure of how tax revenues respond to changes in personal income. If tax revenue elasticity is greater than one, a one percent change in personal income will be associated with more than a one percent increase in tax revenues. If elasticity is less than one, a one percent increase in personal income will be associated with less than a one percent increase in tax revenues.

Fiscal Year: The state's budget year. Washington State's fiscal year runs from July 1 through June 30. Fiscal year 2014, for example, ran from July 1, 2013 through June 30, 2014.

GAAP Basis: Generally Accepted Accounting Principles measure revenue in the period during which they accrue rather than the period in which they are received.
General Fund: Accounts for all financial resources and transactions not accounted for in another fund.

General Fund-State (GF-S) Revenue: Resources from state sources only, excludes federal monies. The general fund is the principal state fund supporting the operation of the state.

Implicit Price Deflator, PCE (IPD): The IPD for consumption is a by-product of the National Income and Product Accounts. It is derived by dividing current dollar (nominal) consumer expenditures by constant dollar (real) consumer expenditures.

Mortgage Rate: The average interest rate on 30 year conventional loan (as reported by Freddie Mac).

Near General Fund: All accounts included in the General Fund - State plus the Education Legacy Trust Account.

Non-Wage Income: Personal income other than from wages and salaries. The major components are: proprietor's income, transfer payments, and dividends, interest and rent.

Real GDP: Gross Domestic Production adjusted for the price level.

Revenue Act: Revenue Act taxes consist of the retail sales tax, use tax, business and occupation tax, public utility tax and tobacco products tax, plus penalty and interest payments associated with those taxes.

Personal Income: Income from wages and salaries; other labor income; proprietor's income; dividends, interest and rent; transfer payments; and a residence adjustment. It is reduced by employee contributions for social insurance.

Seasonally Adjusted: Adjusted for normal seasonal variations. Monthly statistics, such as the unemployment rate, are seasonally adjusted to make month-to-month comparisons possible.

Seasonally Adjusted Annual Rate: A rate for a given period that is typically less than one year, but that is computed as if the rate were for a full year and seasonally adjusted.

Nonfarm Payroll Employment: Civilian non-farm payroll employees. The self-employed, farm workers, members of the armed forces, private household employees, and workers on strike are excluded.