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# Oregon Economic and Revenue Forecast

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## *Foreword*

This document contains the Oregon economic and revenue forecasts. The Oregon economic forecast is published to provide information to planners and policy makers in state agencies and private organizations for use in their decision making processes. The Oregon revenue forecast is published to open the revenue forecasting process to public review. It is the basis for much of the budgeting in state government.

The report is issued four times a year; in March, June, September, and December.

The economic model assumptions and results are reviewed by the Department of Administrative Services Economic Advisory Committee and by the Governor's Council of Economic Advisors. The Department of Administrative Services Economic Advisory Committee consists of 15 economists employed by state agencies, while the Governor's Council of Economic Advisors is a group of 12 economists from academia, finance, utilities, and industry.

Members of the Economic Advisory Committee and the Governor's Council of Economic Advisors provide a two-way flow of information. The Department of Administrative Services makes preliminary forecasts and receives feedback on the reasonableness of such forecasts and assumptions employed. After the discussion of the preliminary forecast, the Department of Administrative Services makes a final forecast using the suggestions and comments made by the two reviewing committees.

The results from the economic model are in turn used to provide a preliminary forecast for state tax revenues. The preliminary results are reviewed by the Council of Revenue Forecast Advisors. The Council of Revenue Forecast Advisors consists of 15 specialists with backgrounds in accounting, financial planning, and economics. Members bring specific specialties in tax issues and represent private practices, accounting firms, corporations, government (Oregon Department of Revenue and Legislative Revenue Office), and the Governor's Council of Economic Advisors. After discussion of the preliminary revenue forecast, the Department of Administrative Services makes the final revenue forecast using the suggestions and comments made by the reviewing committee.

Readers who have questions or wish to submit suggestions may contact the Office of Economic Analysis by telephone at 503-378-3405.



Michael Jordan  
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## Executive Summary

### December 2013

Growth in Oregon's jobs, household income levels and tax revenues has accelerated in recent months in line with the baseline forecast. Going forward, the outlook calls for growth to stabilize around current rates for the remainder of the 2013-2015 budget period. Given Oregon's history of relatively strong economic recoveries, this outlook may prove to be overly pessimistic. Even though they are not discussed as frequently, upside risks to the outlook are now as prevalent as are darker scenarios.

Despite ebbs and flows, the nationwide economic recovery remains on track. Job growth is just strong enough to bring the unemployment rate down slowly. Wage gains are keeping up with the rate of inflation, although just barely. Also, economic output (Gross Domestic Product) and worker productivity are advancing at a positive, yet sluggish, pace. Given obvious weights on the economy, chiefly housing and government, many economists and forecasters have been calling for the pace of growth to pick up over the next year or so as these weights begin to lessen. Unfortunately, many analysts have been saying this will occur over the next year for each of the past three years. Is this time really different? Could stronger growth in 2014 and 2015 lie just around the corner?

It is difficult to pick winners and pinpoint a particular sector or industry that will strengthen and lead to stronger growth overall. However, it is possible that the answer for stronger growth lies not in any particular sector per se, but in geography, with more regions of the country sharing in the recovery. Here in Oregon, the pace of job growth has picked up in 2013 even as the Portland region's growth has held steady. Notably, the state's two hardest hit housing metros – Bend and Medford – have begun adding jobs again. Can Oregon's growth strengthen further as the recovery becomes more broadly based across the other regions of the state? Is this pattern replicable across the country?

Since 2011, the Northeast and Midwest regions have added jobs at rates comparable to or stronger than those at the peak of the housing boom – 2005 and 2006. Most western states, except California and Colorado, are still experiencing subdued rates of growth as is the South (due to Florida). As the housing market continues to rebound, along with the ancillary economic activity, expectations are for job growth in western cities and counties to pick up, much like it has in Oregon. If the other regions of the country can maintain their current pace of employment gains while the West improves, then overall growth in the country will accelerate.

In keeping with a stable economic outlook, expectations for General Fund revenue growth have remained largely unchanged since the September 2013 forecast, aside from the impact of tax reforms enacted during the October 2013 special legislative session. Along with underlying job growth, personal income taxes withheld out of paychecks have accelerated somewhat during the early months of the biennium. Although growth in tax withholdings remains middling from an historical perspective, growth rates have doubled relative to those seen during fiscal year 2013.

Although the revenue outlook remains on track, the 2013-15 biennium is still young, and therefore significant uncertainty remains. With 2012 personal income tax returns from filers who requested extensions (a group that includes many of Oregon's wealthiest households) having been processed this fall, the first large hurdle for the revenue outlook has been cleared. Nevertheless, two income tax filing seasons remain between now and the end of the biennium. As such, many risks to the outlook remain. On the upside, if asset markets maintain their recent gains or if Oregon's traditionally strong migration trends and labor force growth reappear, a short-term revenue boom remains possible during the 2013-15 budget period.

#### 2013-15 General Fund Forecast Summary

(Millions)	December 2013 Forecast	Change from Prior Forecast	Change from COS Forecast
<b>Structural Revenues</b>			
Personal Income Tax	\$13,716.1	\$112.6	\$157.9
Corporate Income Tax	\$1,030.5	\$18.5	-\$26.1
All Other Revenues	\$1,016.3	-\$16.4	-\$11.6
<b>Gross GF Revenues</b>	<b>\$15,762.8</b>	<b>\$114.6</b>	<b>\$120.2</b>
Offsets and Transfers	-\$67.5	\$32.7	\$53.3
Administrative Actions <sup>1</sup>	-\$13.6	\$0.0	\$4.7
Legislative Actions	-\$136.9	\$0.0	\$0.0
<b>Net Available Resources</b>	<b>\$16,006.9</b>	<b>\$136.4</b>	<b>\$96.7</b>
<b>Confidence Intervals</b>			
67% Confidence		+/- 7.5%	<b>\$1,182.5</b>
95% Confidence		+/- 15.0%	<b>\$2,365.1</b>

## ECONOMIC OUTLOOK

### *U.S. Economic Summary*

Economic forecasters, including the Federal Reserve, keep expecting growth to pick up over the next year. However these same forecasters have been saying this for each of the past three years. Is this time really different? Is stronger growth in 2014 and 2015 just around the corner? It is challenging for economists to pick a particular industry or sector to single out as the driver of this improved growth, particularly as American households need to save more over the extended horizon which will lessen the impact of consumer spending on growth. However, what if the answer to improved growth lies not in any particular sector or industry but rather in more cities and counties across the country sharing in the recovery?

Since 2011 the Northeast and Midwest regions have added jobs at rates comparable to (Northeast) and much stronger than (Midwest) the gains seen during 2005 and 2006 – the peak of the housing boom. The West, except California and Colorado, are still experiencing subdued rates of growth as is the South, due to Florida's subdued recovery. As the housing market continues to rebound, along with the ancillary economic activity, expectations are for job growth in western cities and counties to pick up, much like it has in Oregon. If the other regions of the country can maintain their current growth rates and pace of employment gains, as the West improves, then so too will overall growth in the country.

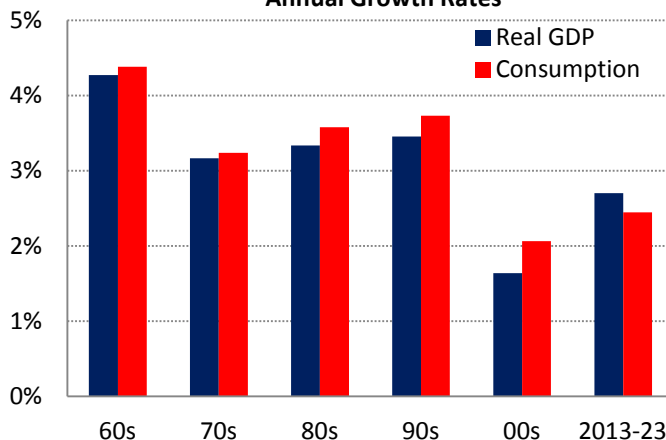
### *U.S. Economic Detail*

Despite ebbs and flows, the U.S. economic recovery, as slow as it is, remains on track. Job growth is just strong enough to bring the unemployment rate down slowly. Wage gains are keeping up with the rate of inflation, although just barely. Also, economic output (Gross Domestic Product) and worker productivity are advancing at a positive, yet sluggish, pace. Given obvious weights on the economy, chiefly housing and government, many economists and forecasters have been calling for the pace of growth to pick up over the next year or so as these weights begin to lessen. Unfortunately, many analysts have been saying this will occur over the next year for each of the past three years. However, this time may be different.

Housing, long a drag on the recovery, has turned into a driver both from a GDP perspective and now a jobs perspective. Public sector layoffs at the state and local level have largely abated and stabilized in the past year. Now, however, the federal government is weighing on growth due to tax increases and expenditure cuts. Mark Zandi, the chief economist of Moody's Analytics, estimates that federal fiscal austerity today is now larger than at any other time in the U.S. since the demobilization following World War II. So the question becomes, where will the acceleration in growth come from? Or is this subdued, steady growth the U.S. has experienced in recent years as good as it gets until the next recession hits?

Consumer spending has long been the predominant driver of economic growth in the U.S. However, spending has been dependent upon job growth, wage gains and increasingly over recent decades a falling savings rate. Moving forward, expectations are that American households will increase their savings rate following the financial crisis and housing bust that turned many household balance sheets upside down. While this narrative is likely correct over the longer run, it is most applicable to the younger generations today who are most impacted by the severity of the Great Recession. The Baby Boomers may not increase their savings rates substantially given their spending patterns and lifestyle decisions have largely been in place for decades now. Once the younger generations become a larger portion of the population and the

**What Will Drive Economic Growth?**  
Annual Growth Rates



workforce, then savings rates are more likely to rise relative to recent history – just as the children of the Great Depression saved more as they aged. The end result is that it is unlikely that a strong pick-up in economic growth will come from the consumer, barring additional jobs and more importantly, income gains.

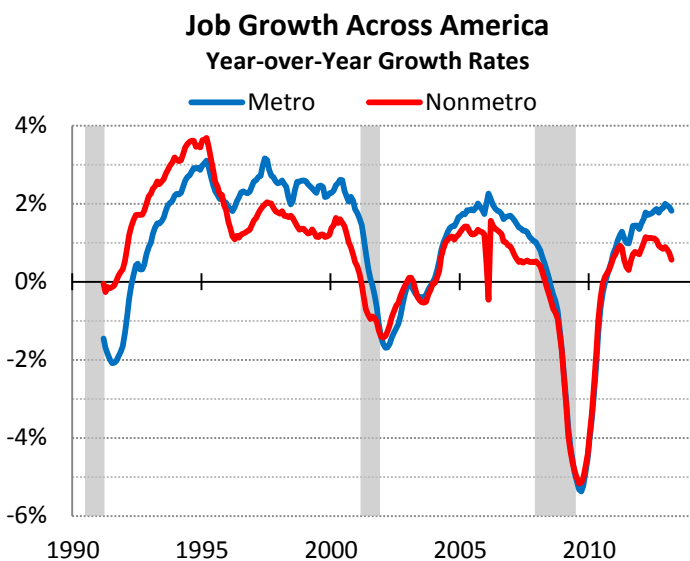
The combined impact of stable to slow growth for many state and local governments across the country and cutbacks at the federal level suggest the public sector will not support additional growth through increased spending on goods and services.

Exports, a large driver of growth following the technical end of the recession in mid-2009, have cooled off since the beginning of 2011. Exports (and more broadly manufacturing activity) remain at high levels historically, however, growth rates have slowed and the international sector overall (exports and imports) has contributed just under 5 percent of overall GDP growth since the beginning of 2011. To put it another way, from the first quarter of 2011 through the third quarter of 2013, real GDP has increased 6 percent with net exports contributing 0.3 percent points of that growth. Overall, exports are expected to pick up and help propel domestic growth along with an improving global economy, but likely not right away. The fundamentals underlying the mess in Europe remain unresolved and China's growth has slowed – at least temporarily – over the past year or so.

In searching where stronger growth will originate, one major sector is left: investment. Business investment spending has shown strong growth during the recovery and will likely remain a key driver of the economy moving forward. Since the end of the recession, business investment in equipment (including software) and intellectual property products (the relatively new Bureau of Economic Analysis category that includes expenditures for research and development, entertainment, literary and artistic originals) has grown strongly and accounted for approximately 25 percent of overall GDP growth. Moving forward, expectations call for firms to continue to invest in new technologies. However, investments in physical facilities (nonresidential structures) will likely continue to lag behind. One additional bright spot is residential fixed investment (largely new home construction) which has increased about 30 percent over the past two years. Even so, residential investment remains some 42 percent below its pre-recession peak. Given the severity of the housing boom and bust, residential investment will likely grow briskly for another couple of years before beginning to stabilize as a share of the economy more in line with historical patterns. Even so, residential investment is not likely to contribute more than 0.4 or 0.5 percentage points of growth to the economy, which were the rates seen during the housing boom.

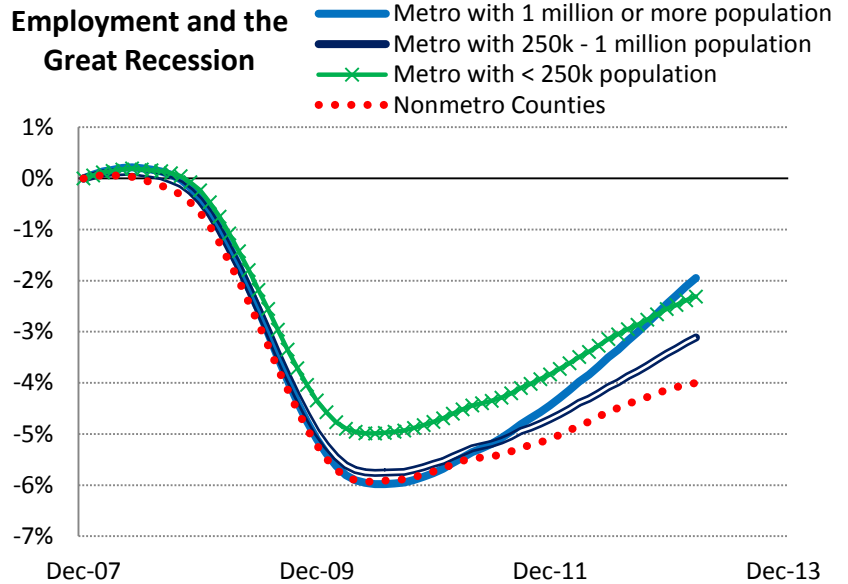
All said, it can be difficult to pinpoint a particular sector or industry that will strengthen and lead to stronger growth overall. However, what if the answer for stronger growth lies not in any particular sector per se but in geography, with more regions of the country sharing in the recovery? Here in Oregon the pace of job growth has picked up in 2013 as the state's two hardest hit housing metros – Bend and Medford – have begun adding jobs again, even as the Portland region's growth holds steady. Can Oregon's growth strengthen even more with stronger gains in the other regions of the state? Is this pattern replicable across the country?

Since 2011 about 82 percent of the nation's official metropolitan areas have added jobs while 73 percent of the individual metropolitan counties have. These figures indicate that most areas of the country are seeing growth and are fairly comparable to the peak housing boom years of 2005 and 2006 when 85 percent of all MSAs added jobs and 78 percent of individual counties were seeing gains. While the share of urban areas may be slightly less than during the mid-2000s, the rate of job growth and the number of jobs being created is nearly identical, with the strongest gains being made in the country's largest cities. Today, total nonfarm jobs are increasing in the metropolitan counties by 1.80



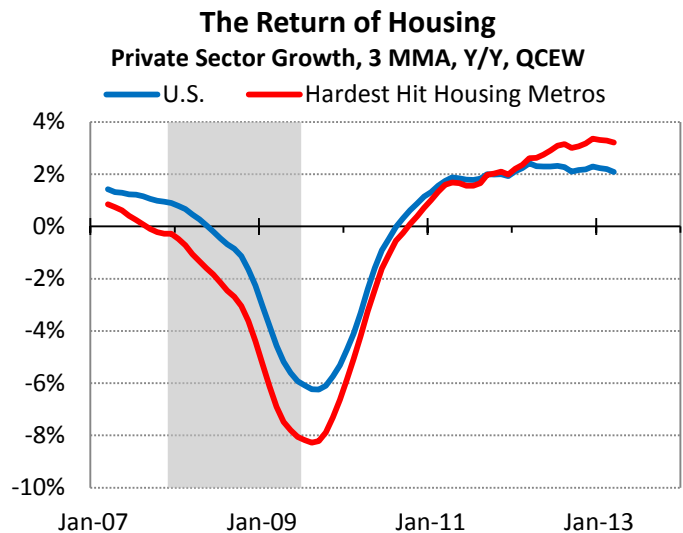
percent, creating 2.00 million jobs year-over-year. During the peak of the housing boom, the same metro counties grew at 1.84 percent, creating 2.05 million jobs per year in 2005 and 2006. Job growth has been positive and steady for the small and medium sized metros in the country since the labor market recovery began, however it has picked up in the largest MSAs, which also happened to turn around first in recovery<sup>1</sup>.

In terms of the rural portions of the country, today approximately 60 percent of the nonmetropolitan counties in the country are seeing job growth which is effectively the same as the 62 percent of rural counties during the mid-2000s expansion. Their combined growth rate of 0.95 percent is lower than the 1.15 percent rate seen in 2005 and 2006 while the net number of jobs created has decreased from the 194,000 annual pace then to a 152,000 annual pace today. Overall rural American continues to add jobs, however it has not seen an acceleration in growth like the largest cities.



Clearly there is some room for improvement, however the growth rates and actual number of jobs being created is much closer to the peak of the previous expansion than many realize. With that being said, it is still lackluster growth as the mid-2000s expansion was weak when compared with historical episodes, making it a low hurdle to clear. Additionally, given the severity of the Great Recession – which was three times as bad in terms of job loss compared with the 2001 recession – experiencing the same sort of growth rates is disappointing with not even a little bounce back following the end of the recession. (Other contributing factors that make today’s recovery feel worse are no real wage gains and the fact that job polarization means relatively fewer middle-wage jobs, to name two.) With all this being said, can the economy expect to see stronger growth based on a broader geographical recovery? Well, it depends.

What the steady growth rates and share of counties masks is the fact that different regions of the country are doing better or worse in terms of growth today and more importantly, relative to their mid-2000s rates. In particular the Northeast and Midwest regions of the country are performing just as well today, or better than in the Midwest’s case, as they did during the housing boom. Again, this is not a particularly high hurdle to clear, especially in the hard hit industrial Midwest, but nevertheless the gains today are comparable or better. The two regions of the country still seeing growth much lower than during 2005 and 2006 are the South and the West, with the exception of California and Colorado. Southern states not named Florida are adding jobs at a comparable pace to 2005 and 2006, however Florida so far is slowing the overall



<sup>1</sup> <http://oregoneconomicanalysis.com/2012/08/10/employment-by-metro/>



growth rate. In the West that means Alaska, Arizona, Idaho, Hawaii, Montana, New Mexico, Nevada, Oregon, Utah, and Washington are all expanding, yet experiencing growth rates and job gains significantly less than during the housing boom. Two primary reasons for this are housing (and related activities) and population growth. Western states (and the Sun Belt) have long benefited from stronger population growth, including domestic migrants from the Northeast and Midwest plus the outflow of Californians, which also fueled the demand and need for new home construction. These multi-decade trends and the fact most of these states experienced significant housing price bubbles as well, meant these states suffered worse local recessions than the country as a whole. Today, these states are improving and adding jobs, however not nearly as strong as back in 2005 and 2006. However, stronger gains are likely just around the corner for many of these areas. Just as in Oregon, where the two hardest hit housing metros have turned the corner and begun growing quickly again, the 50 worst housing metros in the country are now adding jobs at a faster rate than the nation overall. 33 of these 50 metros with the largest housing busts are located in the West, with an additional 13 in Florida alone, which bodes well for stronger regional growth moving forward provided the recovery remains intact and population growth picks up due to more births and more migration.

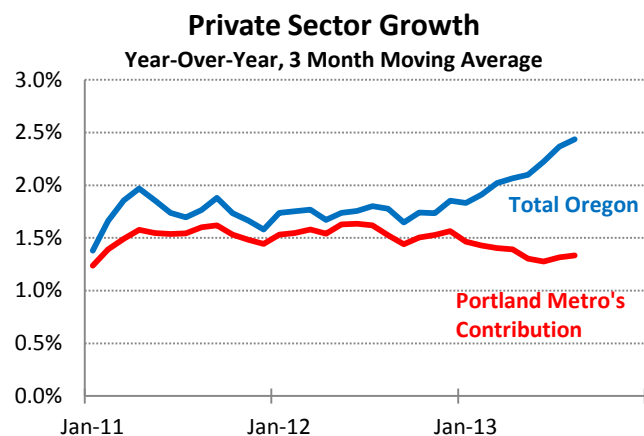
Should the economic expansion continue, and by all accounts it is expected to, it is likely that the West will see acceleration in employment growth over the next year or two, however for an improvement in the national rates the other regions of the country must maintain at least their current rates. If the other regions falter or slowdown then there may not be an improvement in the overall employment growth, due to the shifting composition of growth across the country.

### **Oregon Economy**

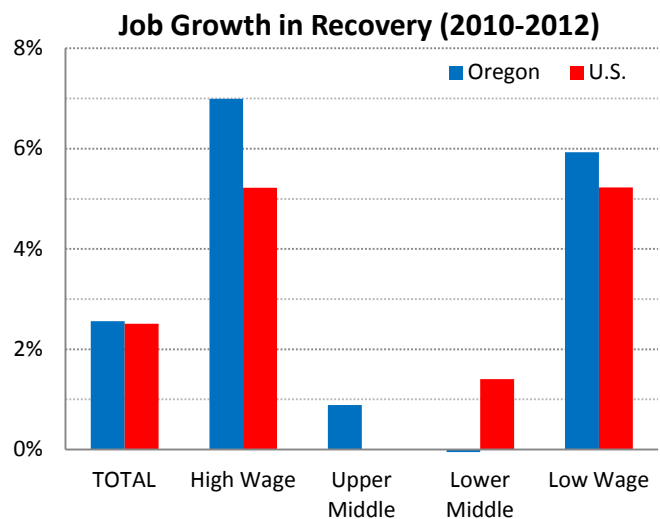
The acceleration in employment growth the state experienced in the first half of 2013 is holding and not slowing, which means job gains are spreading further across the state. In recent months approximately half of all private sector job gains have been in the Portland Metro and half elsewhere, whereas two years ago over 90 percent of the gains were in the Portland region. Given the strength in the gains, further upside risks do remain to the outlook, however the baseline forecasts call for the current rate of growth to hold steady for the couple of years before longer run demographic trends weigh on net job creation.

Given this outlook and the durability of the recovery to withstand turmoil both global in nature – Europe, the Middle East – and domestic – debt ceiling crises, tax increases and fiscal austerity – many are turning their focus away from the probability of a new recession and toward the quality of the jobs being created today. Two trends in particular are being monitored closely, one of which is certainly occurring – that of job polarization – and one of which may occur – more part-time employment.

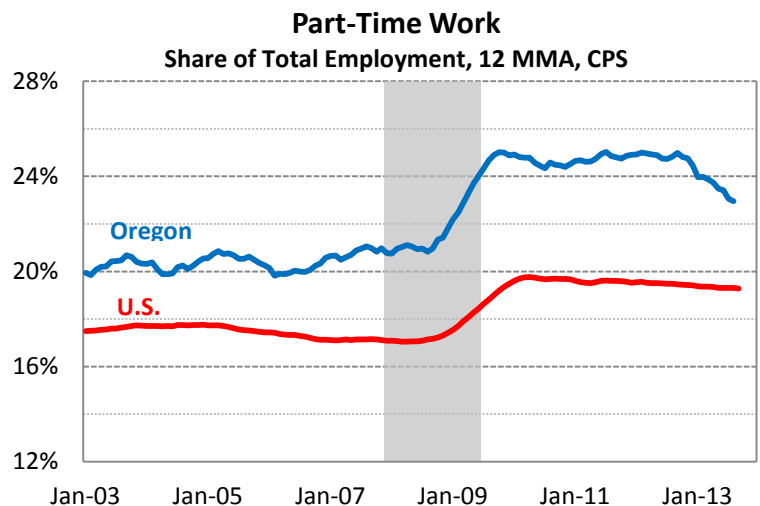
Job polarization is a key labor market development of the past thirty years and refers to the increasing concentration of jobs in occupations at both the high and low ends of the wage scale, with a relative shrinking share of middle-wage jobs. The primary reasons for this are technological advancement and globalization. Technological investments often involve the automation of what may be termed routine work, allowing each individual worker to be more productive and allowing firms to get by with fewer workers. Examples include bookkeeping, clerical work and repetitive manufacturing tasks. Relative to these routine occupations, jobs that require abstract thinking and decisions making and/or in-person interactions and dexterity are more difficult to replace and the demand for these skills is increasing. To make matters worse for these middle-wage jobs, where the majority of Americans and Oregonians continue to be employed, this job polarization process is exacerbated during recessions. Firms cutback on employees due to the poor economy and when they begin hiring again, they are hiring different types of workers than then ones who were laid off. During the Great Recession, 88 percent of



Oregon's job losses were in these middle-wage jobs, while so far in recovery none of them have been added back, at least on net. With that being said, Oregon's job gains in high-wage occupations has actually been stronger than the average state so far in recovery. Moving forward expectations are for these middle-wage jobs to increase with more workers being hired – particularly in construction and teachers – however the relative job opportunities are likely to be disproportionately concentrated in the high- and low-wage occupations. For much more on job polarization in Oregon over the past 30 years, please refer to the Oregon Office of Economic Analysis' recent research report<sup>2</sup>.



Part-time employment in Oregon, much like the U.S., increased substantially during the Great Recession as workers' hours were cut due to the poor economy. So far in recovery this share has come down slowly nationally but more progress is being made in Oregon based on the most recent data<sup>3</sup>. One reason this is an important aspect of the economy to follow is the potential impact due to the Patient Protection and Affordable Care Act, aka Obamacare. In particular, the new law does create two potential employment cliffs, if you will, one at the firm size of 50 employees and another at 30 hours worked per week per employee. The fear is that medium sized businesses will choose not to expand and add that 50th employee (or more) due to the employer mandate and/or businesses will cut back on the hours worked by their employees such that they do not work more than 30 hours per week. Fortunately so far in the data this does not appear to be happening, at least not on a large enough scale to detect. In fact, over 90 percent of all Oregon jobs created between 2009 and 2012 were full-time positions. Now, part-time work is not always a bad thing, as it does allow for more individual flexibility, particularly for those with childcare issues, for example, or provides a supplemental source of income for a household. However part-time work certainly is a bad outcome when workers are unable to find full-time when they would like it. While there are no major shifts in the labor market thus far, it is something to keep monitoring closely when discussing distortions and the quality of jobs being created. See here for more on part-time employment<sup>4</sup> in Oregon.



### Oregon Labor Market

The Office of Economic Analysis examines four main sources for jobs data: the monthly payroll employment survey, the monthly household survey, monthly withholding tax receipts and the quarterly census of employment and wages. Right now all four measures of the labor market are showing steady improvements with jobs being added, wages increasing and the unemployment rate declining, albeit at slower rates than customarily occurring at similar points in previous business cycles. Currently, wages in Oregon are increasing at approximately 4

<sup>2</sup> <http://oregoneconomicanalysis.com/2013/10/24/report-job-polarization-in-oregon/>

<sup>3</sup> These are preliminary figures and will be revised in 2014.

<sup>4</sup> <http://oregoneconomicanalysis.com/2013/11/06/part-time-employment/>

percent per year, while in the previous expansion the gains were 6 percent per year and in the 1990s the gains were 8 percent per year.

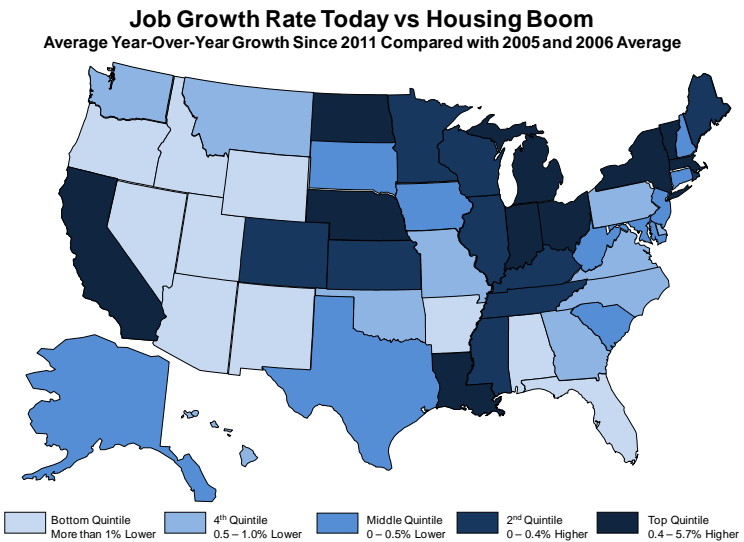
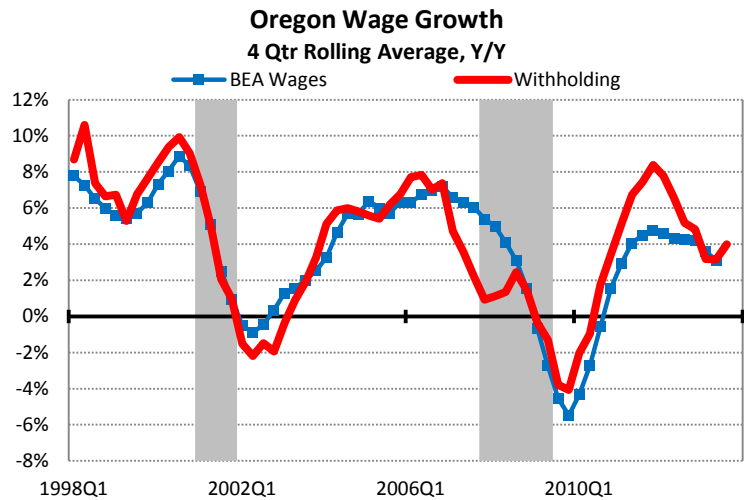
The most recent job growth rankings, published by Arizona State University's W.P. Carey School of Business, places Oregon 23<sup>rd</sup> in the nation for job growth in August. Over the past year the state has added 26,300 jobs, or an increase of 1.6 percent. Private sector growth has been even stronger and the total employment gains are being held down by public sector cuts. A year ago, Oregon ranked 24<sup>th</sup> fastest with growth of 1.4 percent.

Relative to most other states, Oregon's current employment growth rate is substantially below rates seen during the peak of the housing boom. In fact, Oregon ranks among the bottom 10 states when comparing current rates with growth during 2005 and 2006. While the West overall is the fastest growing region, it still has not reached the growth seen during the past expansion, unlike the Northeast and Midwest regions.

Overall, getting a handle of the health of Oregon's labor market is being somewhat complicated by technical issues within the underlying payroll jobs data. For this reason the employment data in our office's forecast is adjusted for two important technical purposes: seasonality at the detailed industry level and the upcoming benchmark revisions<sup>5</sup>.

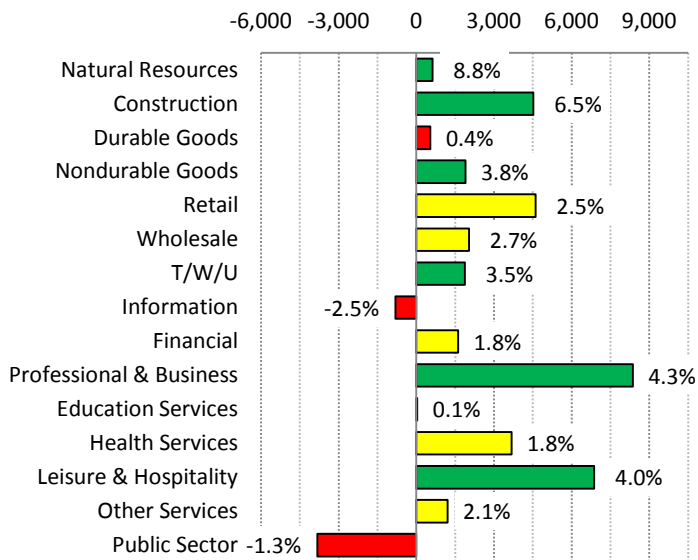
In the third quarter, total nonfarm employment increased 2.0 percent over the past year with the private sector growing at 2.7 percent and the public sector falling 1.3 percent. The graph

on the following page illustrates both the number of job gains by major industry by the length of the bar and the percentage increase these changes represent. The color of the bars follow a traffic signal pattern with green industries expanded at a faster rate than total employment (e.g. faster than 2.0 percent over the past year), while



<sup>5</sup> Each year the U.S. Bureau of Labor Statistics revise the employment data – a process known as benchmarking. The current establishment survey (CES), also known as the monthly payroll survey, is benchmarked against the quarterly census of employment and wages (QCEW), a series that contains all employees covered by unemployment insurance. The monthly CES is based on a sample of firms, whereas the QCEW contains approximately 96 percent of all employees, or nearly a complete count of employment in Oregon. The greatest benefit of the CES is the timeliness – monthly employment estimates are available with only a one month lag – and these estimates are reasonably accurate. However the further removed from the latest benchmark, the larger the errors. The QCEW is less timely as the data is released publically approximately 3-4 months following the end of the quarter. The greatest benefit of the QCEW is that is a near 100 percent count of statewide employment. For these reasons, the CES is usually used to discuss recent monthly employment trends, however once a year the data is revised to match the historical QCEW employment trends. The last month of official benchmark data is September 2012. The QCEW is currently available through March 2013, thus the preliminary benchmark used here covers the October 2012 – March 2013 period.

### Oregon Employment Growth 2013 Q3 over 2012 Q3



the Great Recession, it has not been completely immune to the business cycle. In the three years prior to the onset of recession, the industry gained jobs at a strong 3.1 percent rate, however in the three most recent years the industry has increased employment at a 1.7 percent rate. While stronger than most sectors, the recessionary slowdown, along with lower increases in health spending across the country has slowed the rate of job gains. Moving forward it is still an open question to what extent the Patient Protection and Affordable Care Act will have on net employment in the industry.

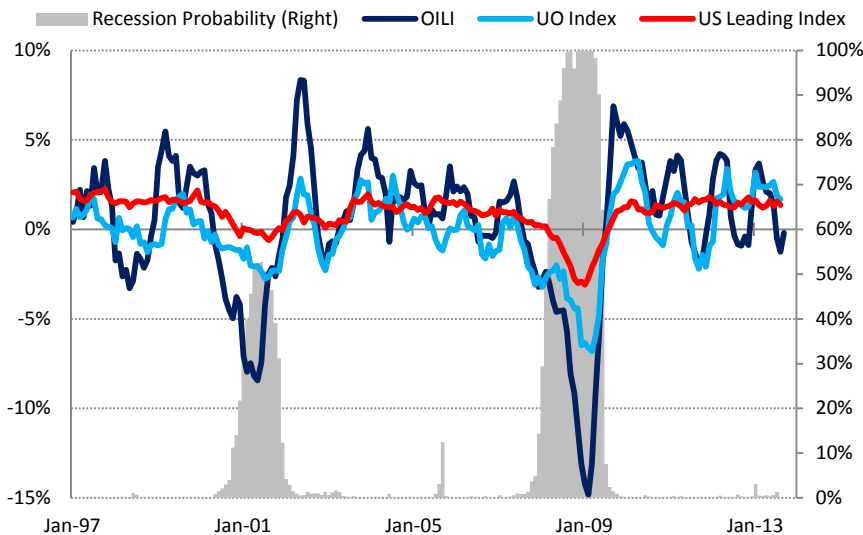
Other industries that are currently growing at above average rates are the majority of our goods producing ones: natural resources, construction and nondurable goods manufacturing. In particular natural resources and manufacturing have not been engines of growth in recent decades in both Oregon and the nation, however today they are. This is both a reflection of the depths of the recessionary losses and of the fact that the initial phase of economic recovery has largely been led by business investment and exports. Seeing increases in the number of loggers and production workers is encouraging, with construction workers now being added as activity increases. New home construction has now rebounded to the point where builders need to hire additional workers and the average hours worked in the industry has effectively returned to pre-recession levels.

yellow industries increased a rate approximately equal to the average and red indicates industries growing substantially slower than the average or outright job losses.

Both the Profession and Business Services and Leisure and Hospitality industries are leading growth in terms of outright job gains over the past year and have above average growth rates as well. These industries have gained over 8,000 and nearly 7,000 jobs, respectively and account for 46 percent of all job gains across the state. Furthermore, both industries have full regained all their recessionary losses and have been two of the state's strongest sectors for the past three years, along with Health Services.

While employment in Health Services has continued to increase before, during and after

### Leading Indicators



For additional information on the most recent quarter's employment forecast errors, please refer to Table A.1 in Appendix A.

### Leading Indicators

In August, both the University of Oregon index and the U.S. leading indicator were signaling continued economic growth. Our office's Oregon Index of Leading Indicators was down slightly over six months but remained above the recession threshold and signaled slow growth to come. In recent years, OILI has continued to advance on an annual basis, however there have been fluctuations on a six

month basis, which largely follow the uneven nature of the recovery thus far. While year-over-year GDP and employment growth have been steady overall, month to month and quarter to quarter fluctuations have been more pronounced.

In terms of individual indicators all of the University of Oregon ones are improving, while the majority of our office's indicators are as well. However only two indicators – Employment Services and Industrial Production – are currently showing strong, continuous improvement, while the others are moving in the right direction, albeit it fits and starts over the past year.

Three individual indicators are showing no signs of improvement recently. Air Freight Tonnage at the Port of Portland has effectively shown no growth since 2011, however this aggregate trend masks the underlying nature of this measure of business activity. The lackluster improvement in tonnage relative to pre-recession levels is predominately due to the loss of small carriers which tend to pop up for a few years and disappear only to be replaced by another one shortly thereafter. So far this has not occurred to the same degree post-recession as prior to it, as seen in the graph. Tonnage from UPS planes has fully regained their recessionary losses, however have not grown in the past 12 months. FedEx tonnage is stable but only regained approximately half of their recessionary losses.


























The Oregon Dollar Index continues to appreciate as global growth, particularly in the emerging markets, slows leaving the U.S. as the brightest economic spot in a dim-lit global field and strengthening our currency. As expected, as a currency appreciates, exports slow and both the U.S. and Oregon exports are growing less briskly than a year ago.

At the national level the Federal Reserve Bank of Philadelphia's leading index incorporates many of the same variables, in particular housing permits, new claims for unemployment insurance, the Institute of Supply Management survey and the interest rate spread. These indicators similarly point toward continued expansion for the U.S. Furthermore the most recent probability of recession<sup>6</sup>, calculated in real time by University of Oregon professor Jeremy Piger, is just 0.6 percent in August for the U.S. and 0.4 percent for Oregon.

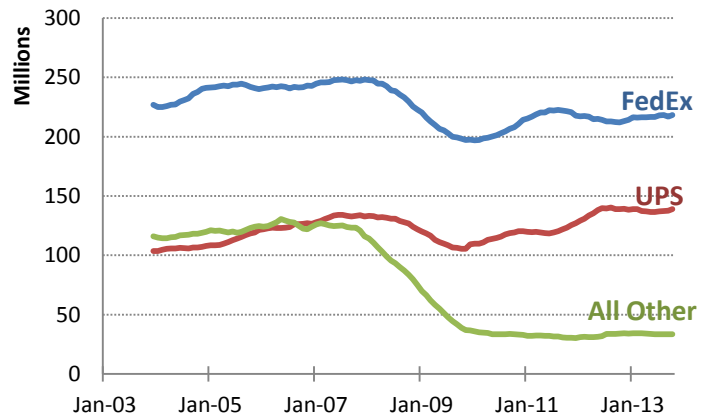
**Short-term Outlook**

The recent acceleration of private sector employment growth in Oregon is expected to hold steady over the next two to three years before longer-run demographic trends weigh on growth. There is the potential for a temporary slowdown in growth as another round of sequester cuts begin in 2014 or should the housing recovery falter due to higher interest rates and home prices, however expectations are even if this is the case, for growth to strengthen once again as the economy works through these temporary slowdowns. Public sector layoffs are projected to stop by the end of the year with only modest gains thereafter, approximately in-line with population growth. While this

**Individual Indicators**

<i>Sustained Improvement</i>		<b>OILI (OEA)</b>	
<i>Continued, Choppy Growth</i>		Industrial Production	
<i>Slowing or Slight Decline</i>		Initial Unemployment Claims	
<i>No Improvement</i>		Help Wanted Ads	
		Book-To-Bill Ratio	
		Consumer Sentiment	
<b>Univ Oregon Index</b>		Purchasing Mangers Index	
Employment Services		Withholding	
Housing Permits		Housing Permits	
Initial Unemployment Claims		Air Freight Tonnage	
Manufacturing Hrs Worked		Oregon Dollar Index	
Consumer Sentiment		New Incorporations	
Interest Rate Spread			
Weight Distance Tax			
Capital Goods Orders			

**Port of Portland Air Freight**  
Pounds, 12 Month Moving Sum



<sup>6</sup> [http://pages.uoregon.edu/jpiger/us\\_recession\\_probs.htm/](http://pages.uoregon.edu/jpiger/us_recession_probs.htm/)



represents stronger job growth than in the recent past, the unemployment rate will still decline slowly and it is not until 2015 that the unemployment rate will fall below 7 percent in Oregon.

Along with an improving labor market, stronger personal income gains will come. 2013 personal income is projected to increase at just a 2.6 percent pace, however, this largely reflects the pull-forward of investment-type income into 2012 due to the fiscal cliff. Personal income is expected to increase by 4.8 percent in 2014 and 5.3 percent in 2015.

As the economy continues to improve it will help drive up demand for new houses as household formation increases. Household formation has remained suppressed as individuals and families turned to rental markets and doubled-up during the recession. As these individuals find work in an improving economy, their desire to live on their own or away from their parents will lead to increased housing demand.

## Economic Forecast Summary

		Quarterly					Annual				
		2013:2	2013:3	2013:4	2014:1	2014:2	2012	2013	2014	2015	2016
<b>Personal Income, Nominal</b>	U.S.	4.1	3.6	4.1	6.1	4.4	4.2	2.8	4.7	4.9	5.2
<i>% change</i>	Oregon	4.4	4.6	2.8	6.3	4.6	4.6	2.6	4.8	5.3	5.6
<b>Wages and Salaries, Nominal</b>	U.S.	3.1	1.8	5.1	4.9	5.0	4.3	2.8	4.5	5.1	5.0
<i>% change</i>	Oregon	3.6	3.7	1.4	4.3	4.7	4.2	2.6	3.9	5.1	5.1
<b>Population</b>	U.S.	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.8	0.8	0.8
<i>% change</i>	Oregon	0.9	1.2	0.9	0.9	1.0	0.7	0.9	1.0	1.1	1.2
<b>Housing Starts</b>	U.S.	0.96	0.87	0.89	0.93	1.03	0.78	0.91	1.15	1.48	1.61
<i>U.S. millions, Oregon thousands</i>	Oregon	14.5	14.7	15.0	15.1	15.9	10.9	14.8	16.8	20.3	23.7
<b>Unemployment Rate</b>	U.S.	7.7	7.6	7.3	7.3	7.3	8.1	7.5	7.1	6.5	6.0
	Oregon	8.3	7.8	8.1	8.0	7.8	8.7	8.0	7.6	7.0	6.6
<b>Total Nonfarm Employment</b>	U.S.	1.7	1.3	1.7	2.0	1.9	1.7	1.6	1.7	1.8	1.8
<i>% change</i>	Oregon	2.2	0.9	1.7	2.5	2.7	1.2	1.9	2.1	2.2	2.1
<b>Private Sector Employment</b>	U.S.	2.1	1.7	1.9	2.0	2.1	2.2	2.0	2.0	2.0	2.1
<i>% change</i>	Oregon	3.0	1.1	1.9	2.8	3.1	1.8	2.6	2.5	2.4	2.3

Housing starts today in Oregon total nearly 15,000 at an annualized rate, which represents growth of over 80 percent from the recessionary lows of 2009 and 2010. A level of about 21,000 is the long-run average for the state prior to the housing bubble, and the forecast calls for strong growth in the coming few years with starts reaching 16,800 in 2014 and 20,300 in 2015. Over the extended horizon, starts are expected to average a little more than 23,000 per year to meet demand for a larger population and also, partially, to catch-up for the underbuilding that has occurred in recent years. As of today, new home construction is cumulatively about one year behind the stable growth levels of prior decades even after accounting for the overbuilding during the boom.

### Forecast Changes Relative to the Previous Outlook

Overall, the character of the outlook has no fundamental changes as the September outlook is tracking the recent data fairly well. The one large change applies to Oregon personal income and is due to technical revisions made by the U.S. Bureau of Economic Analysis. Estimates for 2012 personal income have been raised by over 1 percent as have the quarterly figures so far in 2013. Moving forward the underlying personal income forecast is also raised due to a slightly stronger outlook for nonwage income and a slightly higher inflation outlook.

The employment forecast is largely unchanged but revised lower by one tenth of one percent due to a slower growth outlook for both the private and public sectors, however these changes are nearly indistinguishable from the prior forecast. Nevertheless the composition of employment has been revised with durable goods manufacturing – in particular woods products and transportation equipment – being revised lower and nondurable goods manufacturing – primarily food processing – being revised higher. Retail trade and Leisure and Hospitality are also raised over the extended horizon, offsetting some downward revisions to Information and Health Services. The housing starts forecast is raised a few percent due to stronger than expected starts in recent

months, however the longer run outlook remains intact. The unemployment rate forecast is raised due to tracking in recent months when the rate ticked back up to over 8 percent in the late summer when the forecast had expected the slow decline in the unemployment rate to continue.

*A more complete summary of the Oregon economic outlook and forecast changes relative to the previous outlook – our office’s previous Table O.3 and O.4 – are available as Table A.2 and A.3 in Appendix A.*

### Forecast Comparison

Besides the Oregon Office of Economic Analysis, there are a number of other economic forecasters who produce an Oregon outlook. A comparison of these forecasts is provided below for employment growth and personal income growth. Arizona State University compiles these outlooks as part of the [Western Blue Chip](#)<sup>7</sup>, with the exception being IHS Global Insight.

Overall, each forecast expects the economic expansion to continue, with relatively slow rates of growth in 2013 before seeing improvement in 2014. The range of employment estimates for this year is tight, particularly as we are nearing year-end and much of the data is in the door at this point, however the range of growth in 2014 is significantly wider – between 2 and 3 percent. The effective differences in these outlooks are large. Growth of approximately 2 percent is just strong enough to lower the unemployment rate but makes no meaningful impact on the feel-good nature of the expansion, whereas if growth does reach 3 percent, it would represent a typical expansion year in Oregon, or a return to the relatively good old days. Even so, personal income growth is expected to remain relatively modest, topping out in the low 5 percent range. Previous expansions in Oregon saw growth routinely in the 6 to 8 percent range. Two contributing factors here is lower rates of inflation (the forecasts are nominal, not real) than in previous decades and lower wage gains for nearly all workers in the slack labor market.

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## Comparing Oregon Forecasts, October 2013

Forecaster	Employment			Personal Income		
	2013	2014	2015	2013	2014	2015
IHS Global Insight	1.7	2.2	2.2	2.6	5.0	4.9
Conerly Consulting	2.2	2.3		2.8	5.1	
Forefront Economics	1.9	2.7		4.1	4.5	
Portland General Electric	1.8	3.0		4.8	5.5	
Wells Fargo & Co.	2.0	2.2		4.6	4.8	
<b><i>Oregon Office of Economic Analysis</i></b>	<b><i>1.9</i></b>	<b><i>2.1</i></b>	<b><i>2.2</i></b>	<b><i>2.6</i></b>	<b><i>4.8</i></b>	<b><i>5.3</i></b>
Western Blue Chip Consensus	1.9	2.5		3.7	5.0	

### Forecast Risks

The economic and revenue outlook is never certain. Our office will continue to monitor and recognize the potential impacts of risk factors on the Oregon economy. Although far from comprehensive, we have identified several major risks now facing the Oregon economy in the list below:

- *Federal fiscal policy.* The federal sequestration went officially into effect in March, 2013. Outside of outright land ownership, Oregon has a relatively small physical presence of the federal government in the state. In terms of federal grants as a share of state revenue, Oregon ranks 29<sup>th</sup> highest. For federal procurement as a share of the economy, Oregon ranks 48<sup>th</sup> highest. Oregon ranks below average in terms of military-dependent industries as well. The one area that Oregon ranks above average is in terms of direct federal employment, ranking 19<sup>th</sup> highest among all states. However, even here the numbers are somewhat misleading as the nature of these positions may be less affected by the sequestration due to the concentration in hospitals, hydroelectric dams and the Bonneville Power Administration. Even so, to the

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<sup>7</sup> <http://wpcarey.asu.edu/bluechip/western/oregon.cfm>

extent that the national economy falters as the sequestration cuts hit harder, Oregon will be expected to slow down as well. The direct impact may be less than in other states but the impact will be felt nevertheless, particularly as our closest neighbors have large federal and military workforces.

- *Strength and durability of housing market recovery.* The housing market is growing briskly in terms of home sales and new construction. Inventory is not keeping up with demand and home prices are rising. These market movements are good for both the economy and underwater homeowners. However, even with these increases in activity, there remains much more room for improvements before the market reflects anything approaching normal activity. While foreclosures and long-term delinquency rates remain relatively high, when compared with pre-recession levels, the market has passed the peak of foreclosures and is working through the backlog of distressed properties. Oregon, with the rest of the nation, will see sizable improvements to construction activity in 2013 and 2014.
- *Ongoing European debt problems and potential financial market contagion or instability.* The European high debt, low growth, austerity cycle has continued, more or less, for the past three or four years. So long as Europe is able to continue to muddle through the process, the situation acts as a drag on domestic and global economic growth, however no more so than it already is. With that being said, the potential for another financial crisis unfortunately still looms large as a catastrophic scenario. Domestic credit markets are easing, but consumers and businesses still have difficulty getting loans. To the extent that credit markets take longer to come back to some sort of state of normalcy, the current recovery could be slower than projected or thrown off track. In such a scenario, Oregon will suffer the consequences along with the rest of the nation.
- *Commodity price inflation.* Prices for many major commodities are trending down, but remain atypically high from a historical perspective. Future commodity prices will be tied to growth. Should the global expansion pick up speed, a return to high rates of commodity inflation is possible. Always worrisome is the possibility of higher oil (and gasoline) prices. While consumer spending has held up pretty consistently in this recovery, anytime there is a surge in gas prices, it eats away at consumers' disposable income, leaving less income to spend on all other, non-energy related goods and services.
- *Federal timber payments.* With the temporary reinstatement over, the loss of these federal funds is impacting Oregon counties, particularly in the southern region of the state. It is clear that federal policymakers will not reinstate the program the same as before, however negotiations are ongoing for more sustainable timber harvests and related revenue. In the meantime, reductions in public employment and services are being felt in the impacted counties. For more information from a historical perspective, see two recent blog posts, [here](#) and [here](#)<sup>8</sup>.
- *Global Spillovers Both Up and Down.* The international list of risks seems to change by the day: sovereign debt problems in Europe, equity and property bubbles in places like South America and Asia, political unrest in the Middle East, and commodity price spikes and inflationary pressures in emerging markets. In particular, with China now a top destination for Oregon exports, the state of the Chinese economy has spillover effects to the Oregon economy. The recent economic slowdown across much of Asia is a growing threat to the Pacific Northwest's growth prospects.
- *Undoing the Federal Policy Used to Combat the Financial Crisis and Recession.* Bailouts, tax cuts, monetary quantitative easing, and other fiscal packages most likely prevented a more serious economic downturn. But the clean-up after the storm can have its own risks to the economy. Exit strategies will have to be carefully implemented to prevent premature tightening and choking off the recovery or acting too late to avoid an inflationary environment. All states, including Oregon, face the same risks.
- *Initiatives, referendums, and referrals.* Generally, the ballot box and legislative changes bring a number of unknowns that could have sweeping impacts on the Oregon economy and revenue picture.

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<sup>8</sup> <http://oregoneconomicanalysis.wordpress.com/2012/01/23/historical-look-at-oregons-wood-product-industry>  
<http://oregoneconomicanalysis.wordpress.com/2013/05/28/timber-counties/>

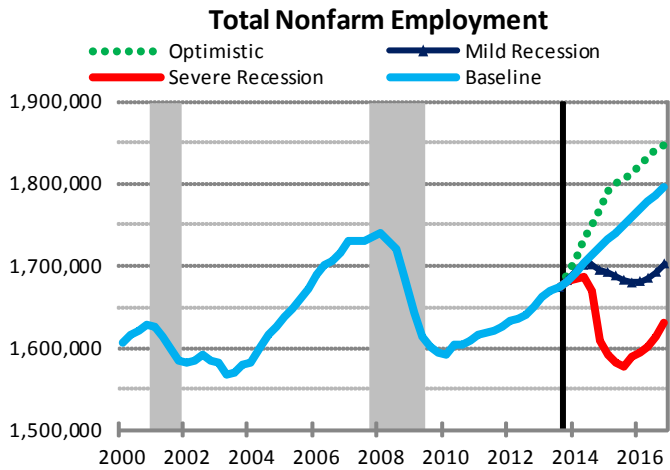


**Alternative Scenarios**

The baseline forecast is our projection of the most likely outcome for the Oregon economy. As with any forecast, however, many other scenarios are possible. In conjunction with the Legislative Revenue Office, this forecast provides three alternative scenarios, which are modeled on growth patterns over previous business cycles.

**Alternative Scenarios**

**December 2013**



	2013	2014	2015	2015
<b>Employment</b>				
Baseline	1.9%	2.1%	2.2%	2.1%
Optimistic	2.1%	3.9%	3.6%	1.8%
Mild Recession	2.0%	1.5%	-0.7%	0.3%
Severe Recession	1.9%	-0.6%	-4.7%	1.6%
<b>Personal Income</b>				
Baseline	2.6%	4.8%	5.3%	5.6%
Optimistic	3.2%	8.1%	6.7%	5.5%
Mild Recession	2.6%	4.2%	2.4%	4.5%
Severe Recession	2.6%	2.3%	-2.6%	5.9%

Optimistic Scenario: The recovery gathers steam and pulls the economy further away from recession and into a stronger cyclical expansion. The lackluster economic growth seen in recent years recedes into the rearview mirror of history and the U.S. economy builds momentum through the first of half of next year. With the housing recovery reignited as the spike in interest rates during the summer prove fleeting, the economy is soon firing on all cylinders. Economic growth is above potential in 2014 and 2015, resulting in stronger job and income gains. The federal spending sequester is reversed or mitigated in order to reduce the spending cuts, allowing for less fiscal austerity in the near term and supporting overall growth. This stronger growth leads to more consumer spending and more business investment.

In Oregon, job gains are broad based with strong growth in all private sector industries. The unemployment rate declines faster than under the baseline scenario as individuals are able to find employment more readily and income growth accelerates. The increase in employment and income support a self-sustaining economic expansion in which new income fuels increased consumer spending (and debt reduction) which begets further increases in employment. Such an expansion increases housing demand as newly employed households (and increasing income for existing households) find their own homes after doubling-up with family and friends during the recession. This results in working down the existing inventory overhang more quickly and new construction returns to normal levels by late 2014 or early 2015.

Mild Recession Scenario: The slow employment and GDP growth in recent years continues through into 2014, as the housing recovery stalls and the federal fiscal drag weighs heavily. While jobs are added over the year, by early to mid 2014 the economy slides slowly back into a recession. Job losses ensue in 2014 and into 2015 and while not severe -- about 15,000 jobs in Oregon, it takes a toll on business income, housing starts and personal income. The unemployment rate returns to nearly 9 percent and declines slowly into 2016. The net effect of the mild recession is an extended period of prolonged economic weakness, not unlike Japan's so-called Lost Decade(s). Although inflation is expected to remain positive, avoiding the deflationary cycle Japan has experienced, basically, since the early 1990s.

*Severe Recession Scenario*: The recently slow economic growth, coupled with a stalled housing recovery and larger-than-expected sequestration and federal austerity sends the economy into free-fall. While the catalyst may be different, the economic effect is similar to late 2008 and early 2009, although not quite as severe when the dust settles. This is little comfort when the unemployment spikes back to over 11 percent and more than 100,000 Oregonians lose their jobs in 2014-15. Besides the economic headwinds of the federal government, the likely culprit in this scenario is a meltdown of the financial markets sparked by the European sovereign debt crisis. Economic growth in the U.S., while fairly steady, is not nearly strong enough to withstand an external financial shock of this magnitude. Further economic effects of a recession this size are personal income losses of around 4.8 percent, about three-quarters the size of the Great Recession losses in Oregon. Housing starts plummet to near historical low levels of construction and home prices decline further. On the bright side, when construction does rebound, it will result in a surge of new home building that will rise above the state's long term average level of building due to pent-up demand for housing and the fact that the state will have under built housing during this time period.

### ***Extended Outlook***

IHS Global Insight projects Oregon's economy to fare well relative to the rest of the country in the coming years. The state's Real Gross State Product is projected to be the third strongest among all states in terms of growth with gains averaging 3.6 percent through 2018. Total employment is expected to be the tenth strongest among all states while manufacturing employment will lead the nation. Total personal income growth is expected to be seventeenth fastest among all states.

OEA is somewhat less bullish, but expects Oregon to maintain a growth advantage relative to other states. However, this advantage will be somewhat smaller than the state has enjoyed in past decades.

Oregon has typically benefitted from an influx of households from other states, including an ample supply of skilled workers. Households continue to move to Oregon even when local jobs are scarce, as long as the unemployment rate is equally bad elsewhere (particularly in California). Relative prices of housing also contribute to migration flows in and out of the state. For Oregon's recent history – data available from 1976 – the labor force in the state has both grown faster than the nation overall and the labor force participation rate has been higher. However three recent trends show potentially worrisome signs. First, the labor force participation rate has declined significantly during and after the Great Recession at both the national and state level. Second, since 2005, Oregon's labor force participation rate no longer exceeds the national rate as it had for the prior 30 years. Third, during the Great Recession and through the early stages of recovery, the number of individuals in Oregon's labor force held relatively steady, however in the past year that number is actually declining. All three of these labor force signals are potentially worrisome when it comes to Oregon's dynamic labor supply. However, how much is attributable to the severe nature of the business cycle, from which one could reasonably expect a rebound, and how much is a fundamental shift in Oregon's economy is unknown at this time.

In addition to its dynamic labor supply, Oregon also enjoys the long-term advantages of low electricity costs; a central location between the large markets of California, Vancouver and Asia; clean water; low business rents and living costs; and an increasingly diverse industrial base.

One primary long-run concern for policymakers, think tanks and Oregon's economy is that very little progress on raising per capita income is projected out to 2020. In and of itself, a higher per capita income level would better fund public services for citizens. The Oregon Employment Department has published a detailed look at Oregon's per capita personal income entitled *Why Oregon Trails the Nation*.<sup>9</sup>

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<sup>9</sup><http://olmis.emp.state.or.us/olmisj/PubReader?itemid=00007366>

## Oregon Exports

While the relative growth rates across the major global economies are somewhat of a mixed bag, according to the latest IHS Global Insight outlook, all except the Eurozone are expected to improve in 2014 relative to today's rates of growth. 2015 and beyond should be even better as the global economic expansion continues and gathers a little bit of steam. Both the underlying fundamentals to the mess in the Eurozone and the political and economic resolve remain, thus allowing the region to continue to muddle through with slow growth in the core and a deflationary recession, or worse, in the periphery. These facts are nothing new but important to watch moving forward, how, if at all the situation is corrected.

However, IHS Global Insight does cite two newer issues to monitor for the global economy. First, India avoids a currency crash for now at least. The Reserve Bank of India reduced borrowing rates and injected liquidity into the banking sector to protect the real economy from too sharp of a downturn. Second, the Japanese recovery and Abenomics, continues on its steady positive trajectory and after more than a decade of mostly deflation, inflation expectations in the country are now positive, marking a significant economic development to monitor.

Locally, Oregon exports largely follow the global economy, particularly our trading partners along the Pacific Rim. As such, exports are holding steady with no real gains over the past year, but at a level near historic highs, in dollar value. This applies to both Computer and Electronic Products – the state's largest export industry, accounting for 35 percent over the past 12 months – and all other industries.

In terms of country-specific exports, gains to Canada and China – our two largest trading partners – continue, however exports to most other countries languish. In fact, over the past year, exports to Canada and China increased nearly 9 percent while exports to all other countries fell 10 percent. The gains to China have been broad based across a number of industries with not only Computer and Electronic Products increasing but also Agriculture, Machinery, Forestry and Wood Products.

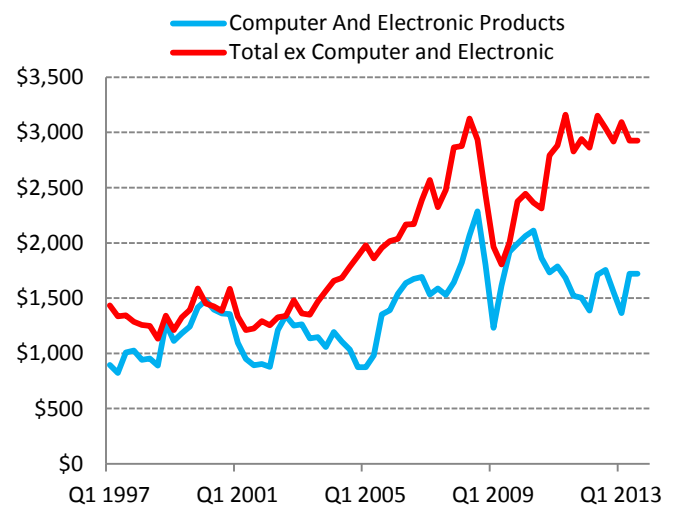
Gains to Canada, on the other hand, are heavily concentrated in Machinery – agriculture and construction machines – and Computer and Electronic Products.

## Projected Growth Rates of Real GDP

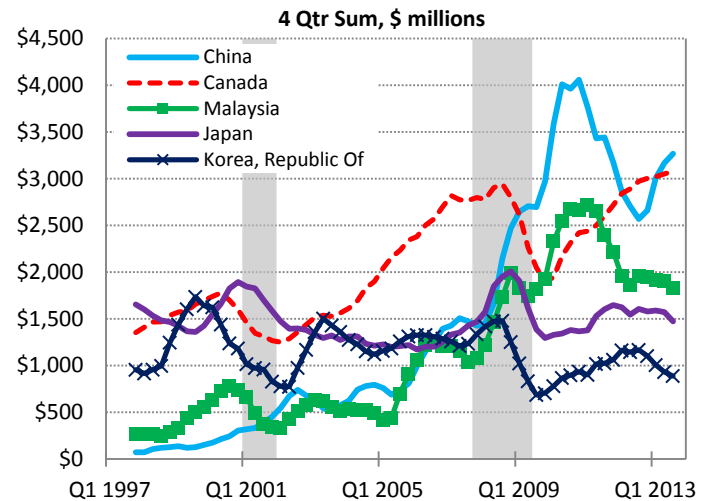
	2013	2014	2015-18
United States	1.5%	2.5%	3.1%
Canada	1.7%	2.4%	2.6%
Japan	1.9%	1.8%	1.2%
Eurozone	-0.5%	-0.7%	1.5%
Mexico	2.0%	4.1%	4.3%
South America	2.9%	3.4%	4.0%
Asia except Japan	5.8%	6.3%	6.5%
China	7.7%	7.9%	7.6%
World	2.5%	3.3%	3.9%

Source: Global Insight, October 2013

## Oregon Exports (\$ millions)



## Oregon Exports by Country



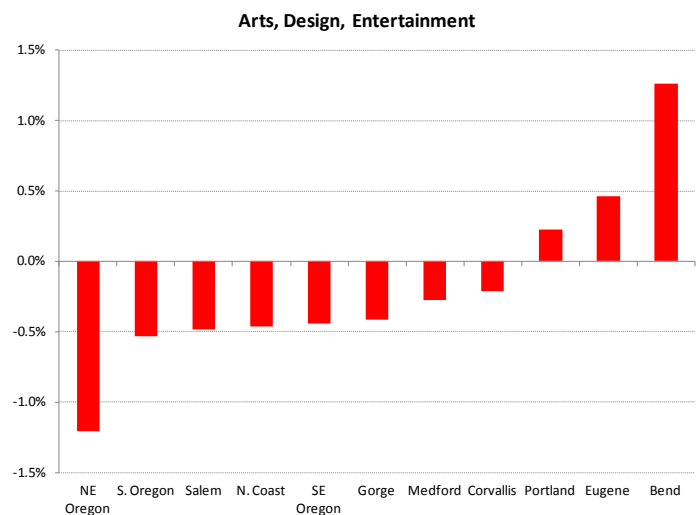
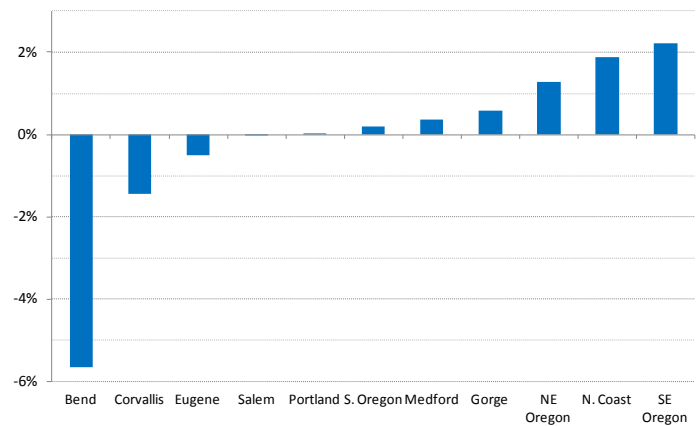
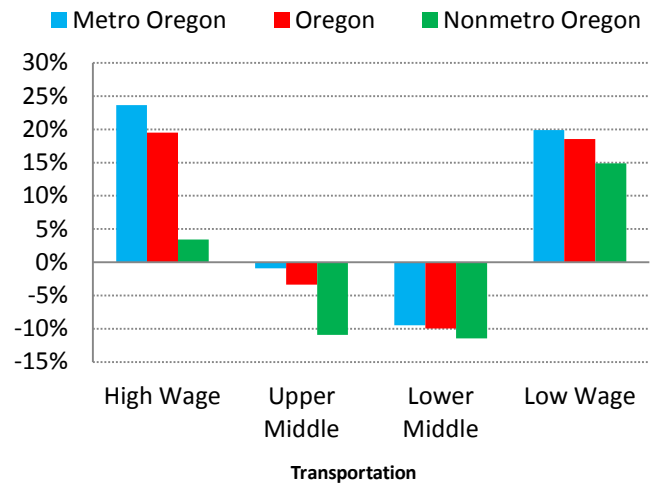
## Oregon Regional Trends

Just as job polarization has impacted the state's economy, it too is shaping the regions within Oregon. Since 2000, the metropolitan areas of the state – for these purposes, Corvallis, Eugene, Medford, Portland and Salem – have become more polarized overall than the nonmetro areas. However nearly all of the high-wage jobs created in the past 12 years have been in the metropolitan portions of the state. Rural Oregon as a whole has seen larger losses in middle-wage jobs, which are replaced predominately with low-wage ones. Even still, the nonmetro areas of Oregon have a larger relative share of these middle-wage jobs than the metro areas. This is partially due to having less high-wage jobs, which do tend to be increasingly located in larger cities, but also due to the relatively higher concentration of construction and teacher occupations. It is not so much that these areas have so many of these types of jobs – both middle-wage occupations – but rather that the local economies are not particularly diverse. With that being said, the regions within Oregon all still maintain some local comparative advantages depending upon education level, industrial mix and occupations.

Likely the fastest route to a high-wage job is to earn a 4 year degree (or more), however even as there is a strong correlation between educational attainment and wages, the relationship is not perfect. To reach the state's educational goals, much focus is applied to the community colleges and educational attainment beyond a high school diploma. As such, it is important to analyze employment patterns across the state for these individuals with at least some college education<sup>10</sup>. In doing so, distinct comparative advantages can be seen around the state.

Two examples are shown in the graphs on the right. This measures the relative share of local employment in a particular occupational group – transportation and arts, entertainment and design – compared with the statewide average. The higher the value the more employment is concentrated in these occupations than at the state level. For the transportation occupations, those regions along a major interstate, waterway or along the border have a higher concentration of these types of jobs. The exceptions being

### Oregon Job Polarization (2000-2012)



<sup>10</sup> Defined here based on the U.S. Census Bureau's American Community Survey, 2009-11 categories of schooling beyond high school but did not earn a bachelor's degree. This includes both those who earned an associate's degree and those who may have dropped out without completing a degree program.

some of the southern Willamette Valley areas, like Corvallis and Eugene, which may not have great access to Interstate 5 or are too close to the Portland Metro which is the largest market and hub in the state.

Arts, Entertainment and Design occupations are more concentrated in Bend, Eugene and Portland, which is likely to be expected. These portions of the state are more known for their arts and music scenes, however these occupations are generally clustered in larger cities as they include media – print and broadcast – athletes and designers.

Regional comparative advantages can be found across most other occupations and should be taken into account when designing education programs. The ultimate goal is not just to increase educational attainment for the sake of it, but to also match the workforce with the skills in demand from employers. Just as a career training program for blackjack dealers is better placed in Las Vegas than Salt Lake City, so too would truck driving programs be better placed along Interstate 84 than in, say, John Day which is hours from an interstate. It not that John Day and the surrounding areas do not need truck drivers or transportation access, but given limited resources for training programs, where the largest bang for the buck can be obtained should be taken into account.

*The Oregon Office of Economic Analysis is now publishing one page summaries on each region of the state on a rotation basis over the course of the year. This publication schedule will allow two or three regional summaries per quarter, with a planned schedule as follows:*

- *March forecast: South Coast, Southern Oregon*
- *June forecast: Central Oregon, Columbia Gorge, North Coast*
- *September forecast : Northeast Oregon, Southeast Oregon*
- *December forecast: Portland Metro, Willamette Valley*

**Portland Metro**

*Clackamas, Columbia, Multnomah, Washington, Yamhill*

The five counties that comprise the Oregon-portion of the Portland Metropolitan Statistical Area are home to 47 percent of Oregon residents and 53 percent of the statewide jobs and personal income. Thus making the area the state's largest and most vibrant economic region.

The Metro overall has a very diverse industrial basis compared with other large cities across the country and similar to the U.S. as a whole. Portland has a larger share of jobs in goods-producing industries like construction and manufacturing, plus wholesale trade, but relatively fewer in retail trade, education and health services and the public sector.

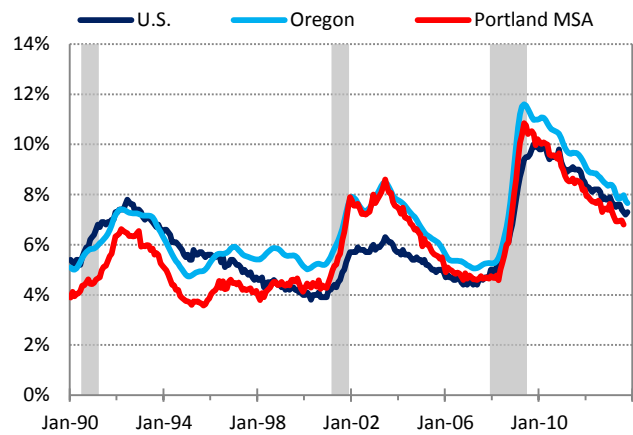
Over much of the past 30 years, the region has outperformed the state and national economies. The strong growth during the 1990s was largely due to the ramp-up of the high-tech sector and the influx of migrants to the region. The 2001 recession hit Portland much harder than Oregon overall due to the concentration of these same high-tech jobs and the regional unemployment rate remained high for years to come. The Portland Metro experienced the housing rollercoaster ride during the 2000s and lost 8 percent of its jobs during the Great Recession. So far in recovery, Portland has led Oregon's job growth and have nearly regained all of its lost jobs.

The region is also home to a relatively larger concentration of high-wage jobs than the state overall. Plus a lower relative share of low-wage jobs. These trends are part of the overall job polarization process, part of which is the creation of high-wage jobs predominately in metropolitan areas. While no region is immune to the loss of middle-wage jobs, larger cities do generally accrue the most positive parts of polarization, chiefly these newly created high-wage jobs.

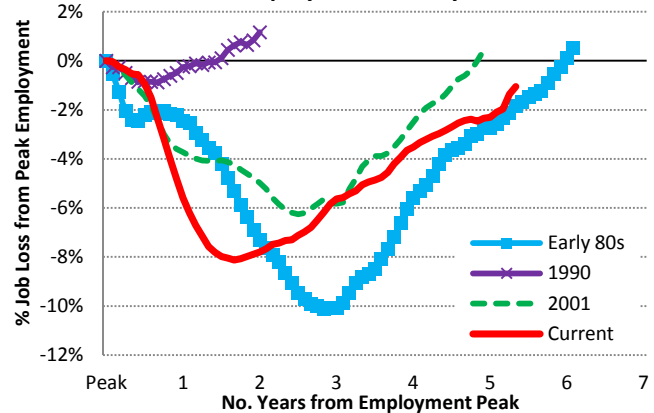
**Top 10 Industries by Location Quotient, 2012**

- 1) Air Transportation, NAICS 481
- 2) Petroleum & Coal Mfg, NAICS 324
- 3) Computer & Electronic Mfg, NAICS 334
- 4) Data Processing & Hosting, NAICS 518
- 5) Elec. Equipment Mfg, NAICS 335
- 6) Printing & Related Mfg, NAICS 323
- 7) Management of Companies, NAICS 55
- 8) Transportation Support, NAICS 488
- 9) Fabricated Metal Mfg, NAICS 332
- 10) Insurance, NAICS 524

**Unemployment Rate (SA)**

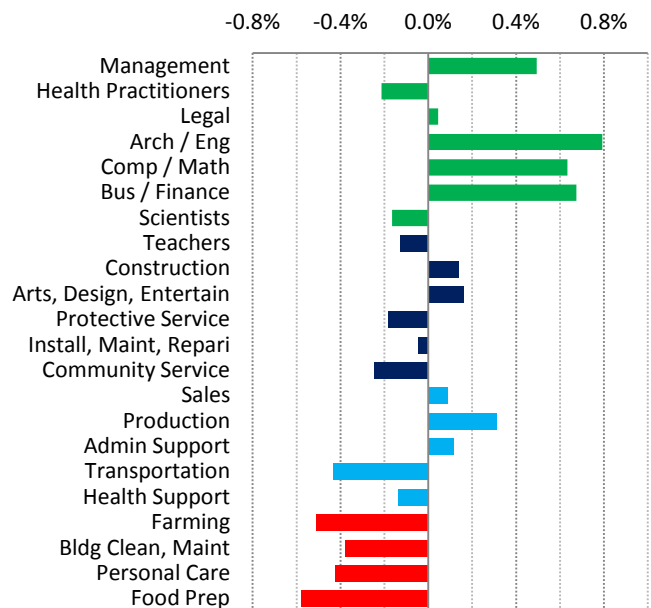


**Portland's Employment Loss by Recession**



**Portland Metro**

**Relative Share Difference to Statewide**





Willamette Valley

*Benton, Lane, Linn, Marion, Polk*

Home to a wide range of economic activities – from metropolitan cities to college towns, from farming to wood products and from the Cascades to the Pacific – the Willamette Valley is the bellwether region in the state. Overall trends in these five counties match the statewide figures in recent decades. This is at least partially due to the stability provided by the region’s large public sector, with the state capitol located in Salem and two major universities in Corvallis and Eugene.

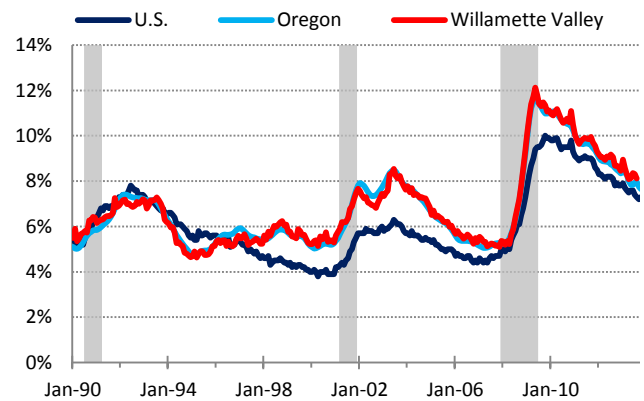
While the region’s dependence upon natural resource and goods producing industries has declined in recent decades, the Willamette Valley is still a key agricultural producer for the state. According to 2012 statistics, the Valley produced nearly 25 percent of all agriculture sales statewide, with key concentrations in grass seeds, small fruits and berries and poultry and eggs. Even as employment over the past decade is essentially flat, like many regions in the country given the severity of the Great Recession, the industrial mix has transformed with strong growth in service sector jobs. In particular the Valley has seen employment gains in professional and business, educational and health, and leisure and hospitality industries. It is important to keep in mind that not all of these are “bad” jobs and that not all aspects of job polarization are negative. The Willamette Valley has a pretty balanced occupational mix and seen strong growth in both high- and low-wage jobs. Furthermore from 2000 through 2012, Corvallis, Eugene and Salem combined outperformed the state in middle-wage jobs with small gains in Upper Middle jobs (+2%) and fewer losses among Lower Middle jobs (+6%).

Some concern is given to the slow recovery in the Valley in recent years. Employment growth has lagged, which is expected given the amount of public sector jobs. However population growth has been slower as well with gains of 1.2% from 2010-12 while the state gained 1.8%. These trends are important to monitor moving forward.

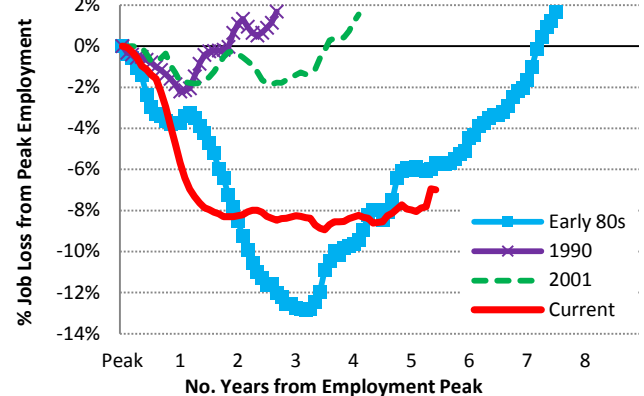
**Top 10 Industries by Location Quotient, 2012**

- 1) State Government
- 2) Agriculture & Forestry Support, NAICS 115
- 3) Chemical Mfg, NAICS 325
- 4) Warehousing & Storage, NAICS 493
- 5) Textile Mfg, NAICS 314
- 6) Crop Production, NAICS 111
- 7) Wood Product Mfg, NAICS 321
- 8) Food Mfg, NAICS 311
- 9) Misc Store Retailers, NAICS 453
- 10) Apparel Mfg, NAICS 315

**Unemployment Rate (SA)**

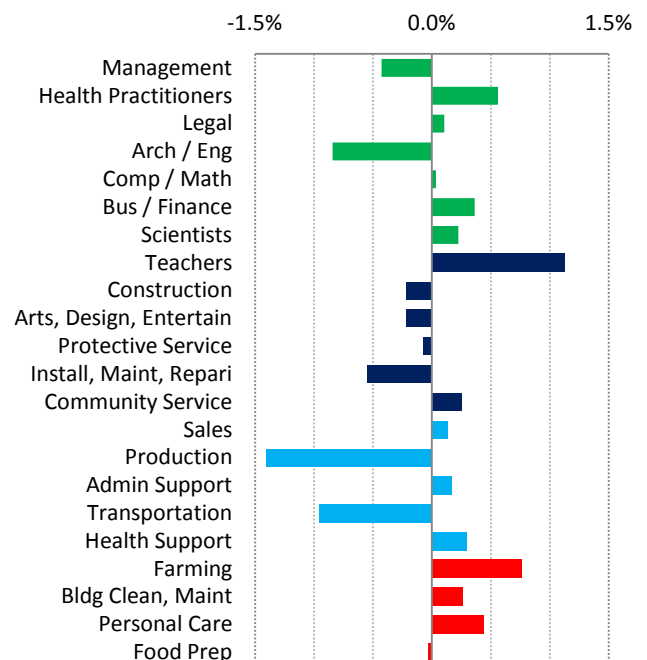


**The Valley's Employment Loss by Recession**



**Willamette Valley**

**Relative Share Difference to Statewide**

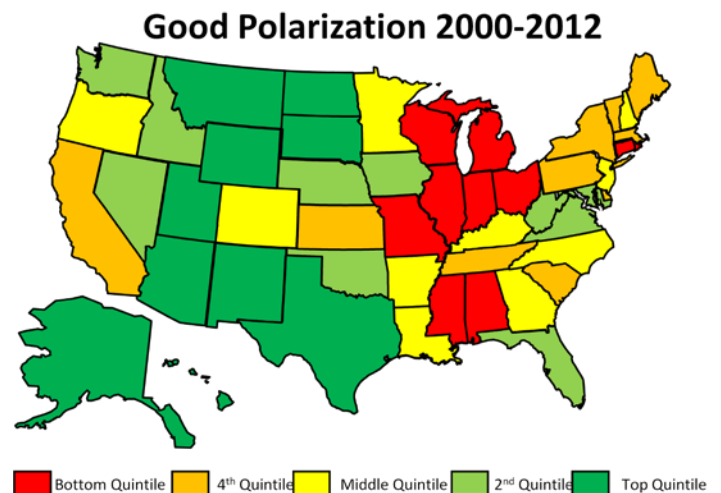
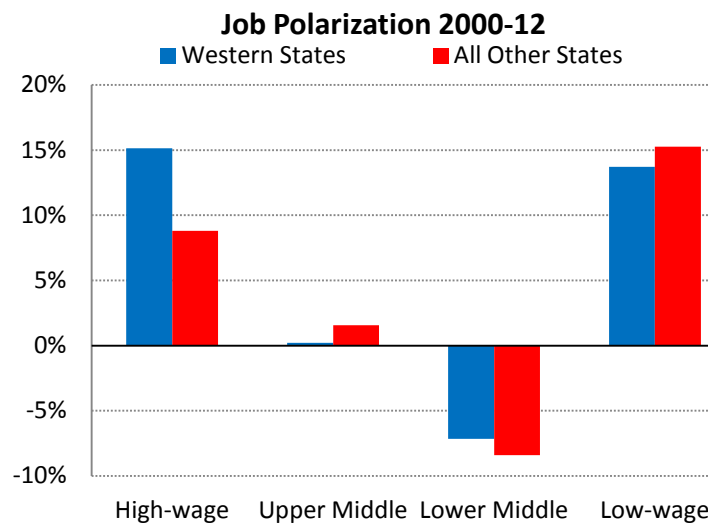
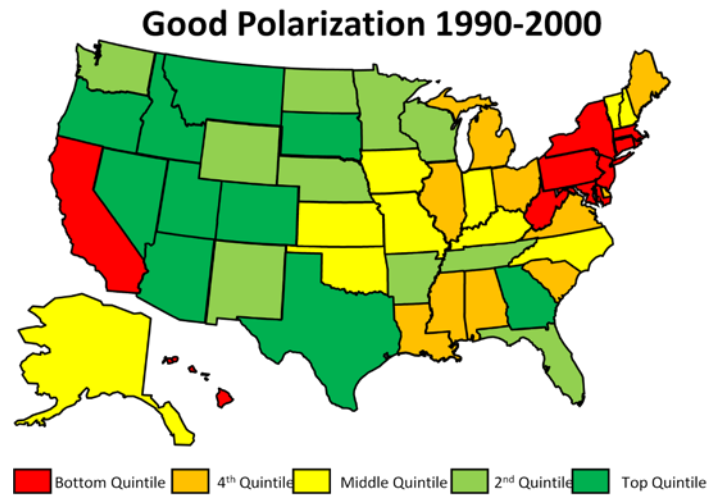


## State Comparisons

Job polarization has been shaping the labor market in every state across the country over the past 30 years. While job growth in high- and low-wage occupations has been strongest during this time overall, each decade has experienced relatively different polarization patterns. Additionally, each state has undergone polarization to a different degree based upon both local trends and industrial mix. Not all aspects of job polarization are negative, especially if the economy is just adding high-wage jobs, which would be a boon for local economic development. The downside to polarization is when a worker loses a middle-wage job and is only able to find a low-wage one in its place. This represents a step down in both earnings and quality of life. A simple measure to see if an economy is experiencing good versus bad polarization is to count the changes in high- and middle-wage jobs. With a relative shrinking of middle-wage jobs (generally a bad outcome), are the gains in high-wage jobs (good outcome) enough to offset these losses in the middle, or at least their slow growth?

The 1990s were a very good decade for the U.S. economy as a whole and a fantastic one for Oregon and many western states. As seen in the first map, all continental western states except California were among the top 20 states for good job polarization. These states managed strong gains for both middle- and high-wage occupations, thus muting the negative aspects of job polarization. One key driver of upper middle-wage jobs is population growth and western states have long had higher population growth due to both natural increases and strong domestic migration. Even with the high technology ramp up during the 1990s, California had a subpar decade primarily due to the 1990 recession hitting Southern California harder than nearly all other regions in the country.

Unfortunately many of the gains made during the 1990s were lost during the 2000s. Across the west overall, middle-wage jobs were lost and all net jobs were either high- or low-wage. Even as the relative composition of jobs was better in the west (more high-wage and less low-wage), middle-wage occupations were lost in large numbers. In terms of relative performance across the country, the intermountain west outperformed most states, while the west coast (California and Oregon) were a step below the national average.





## **REVENUE FORECAST**

### ***Revenue Forecast Summary***

Expectations for General Fund revenue growth have remained largely unchanged since the September 2013 quarterly forecast (aside from changes associated with tax reforms enacted during the October 2013 special legislative session). Along with underlying job growth, growth in personal income taxes withheld out of paychecks has accelerated somewhat during the early months of the 2013-15 biennium. Although growth in tax withholdings remains middling from an historical perspective, growth rates have doubled relative to those seen during fiscal year 2013.

Although labor market conditions have improved, overall revenue growth is expected to remain somewhat modest. Underlying job gains, while accelerating, will not match the pace seen during previous periods of economic expansion. Also, personal income taxes based on investment income will grow slowly in the near term.

Despite rising stock market and housing prices, the outlook for taxable investment income remains subdued in the near term. Many Oregonians cashed out capital gains in 2012 in anticipation of federal tax rate increases, leaving fewer gains to be realized for tax purposes going forward.

Although the revenue outlook remains on track, the 2013-15 biennium is still young, and therefore significant uncertainty remains. With 2012 personal income tax returns from filers who requested extensions (a group that includes many of Oregon's wealthiest households) having been processed this fall, the first large hurdle for the revenue outlook has been cleared. Nevertheless, two income tax filing seasons remain between now and the end of the biennium. As such, many risks to the outlook remain. On the upside, if asset markets maintain their recent gains or if Oregon's traditionally strong migration trends and labor force growth reappear, a short-term revenue boom remains possible during the 2013-15 budget period.

The primary downside risk facing the near-term revenue forecast is the uncertain future of the nationwide economic expansion. Should federal policy woes or economic weakness among our trading partners derail the U.S. economy, the expected growth in Oregon's tax collections will not come to pass. Future asset prices are also at risk as the Federal Reserve unwinds its accommodative monetary policies.

Revenue growth in Oregon and other states will face considerable downward pressure over the 10-year extended forecast horizon. As the baby boom population cohort works less and spends less, traditional state tax instruments such as personal income taxes and general sales taxes will become less effective, and revenue growth will fail to match the pace seen in the past.

### ***2013-15 General Fund Revenues***

Thus far in 2013-15, personal and corporate income tax collections have largely matched expectations. Increased income tax revenues in the December quarterly outlook are largely the result of legislative tax changes enacted during the October 2013 special session.

Although underlying economic growth will be stronger in 2013-15, General Fund revenue growth is not expected to match the pace seen during the last biennium. Personal income taxes flowing from labor income have accelerated. However, this improvement is expected to be offset by slower growth in taxable investment income such as capital gains.

Excluding legislative actions taken during the special session, the revenue outlook for the 2013-15 biennium is largely unchanged (-0.1%) relative to the September 2013 forecast. Including legislative changes, the forecast for General Fund revenues for 2013-15 is now \$15,763 million. This represents an increase of \$115 million (+0.7%) from the September 2013 forecast. Legislative changes have also reduced the required deposit from the corporate minimum tax into the Rainy Day Fund, which increases net revenues by an additional \$33 million.

The December forecast for the 2013-15 biennium is \$120 million (0.8%) above the Close of Session forecast. In addition to legislative changes, modest improvement in the outlook for personal income taxes was offset by an expected decline in corporate tax collections.

**Table R.1****2013-15 General Fund Forecast Summary**

(Millions)	2013 COS Forecast	September 2013 Forecast	December 2013 Forecast	Change from Prior Forecast	Change from COS Forecast
<b>Structural Revenues</b>					
Personal Income Tax	\$13,558.2	\$13,603.5	\$13,716.1	\$112.6	\$157.9
Corporate Income Tax	\$1,056.6	\$1,012.0	\$1,030.5	\$18.5	-\$26.1
All Other Revenues	\$1,027.9	\$1,032.7	\$1,016.3	-\$16.4	-\$11.6
<b>Gross GF Revenues</b>	<b>\$15,642.6</b>	<b>\$15,648.2</b>	<b>\$15,762.8</b>	<b>\$114.6</b>	<b>\$120.2</b>
Offsets and Transfers	-\$120.8	-\$100.3	-\$67.5	\$32.7	\$53.3
Administrative Actions <sup>1</sup>	-\$18.2	-\$13.6	-\$13.6	\$0.0	\$4.7
Legislative Actions	-\$136.9	-\$136.9	-\$136.9	\$0.0	\$0.0
<b>Net Available Resources</b>	<b>\$15,910.1</b>	<b>\$15,870.4</b>	<b>\$16,006.9</b>	<b>\$136.4</b>	<b>\$96.7</b>
<b>Confidence Intervals</b>					
67% Confidence	+/- 7.5%		<b>\$1,182.5</b>	<b>\$14.58B to \$16.95B</b>	
95% Confidence	+/- 15.0%		<b>\$2,365.1</b>	<b>\$13.40B to \$18.13B</b>	

<sup>1</sup> Reflects cost of cashflow management actions, exclusive of internal borrowing.

**Personal Income Tax**

Personal income tax collections were \$1,572 million for the first quarter of fiscal year 2014, \$13.5 million (-1.0%) below the latest forecast. Compared to the year-ago level, total personal income tax collections grew by 5.6% relative to a forecast that called for 6.5% growth. Appendix B presents a comparison of actual and projected personal income tax revenues for the July-September quarter.

Personal income tax collections posted healthy gains throughout the fall filing season for extended/amended returns. It appears that the large year-end tax payments that were collected in April did not significantly overstate filers' tax liability.

Going forward into the 2013-15 biennium, personal income tax collections are expected to grow at somewhat below average rates. Although growth in taxable wages is accelerating, growth in overall collections will be held back by slower growth in taxable investment income.

Excluding corporate excise taxes, the General Fund forecast is now \$148 million above the Close of Session forecast due to the impact of law changes. As such, we are now about halfway to the personal income tax kicker threshold.

**Corporate Excise Tax**

Corporate excise tax collections equaled \$110 million for the first quarter of fiscal year 2014, \$3.2 million below the September forecast. Compared to one year ago, net corporate receipts were down 2.9% with the forecast calling for a 0.1% decline.

Despite being no bigger than two years ago, corporate tax collections remain large from an historical perspective. Near-record corporate profits have yet to go away. Given that corporate tax collections and underlying profits are subject to boom-bust cycles, there is a considerable amount of downside risk to the outlook.

Nevertheless, strong growth is expected during the 2013-15 biennium, due to tax reform and continued economic growth. Oregon's economy is expected to continue to grow, and corporate tax collections are typically very

sensitive to the business cycle. However, these growth rates, while large, will remain less than half of what has been seen during recent profit booms.

Corporate income tax collections for 2013-15 are \$18.5 million higher than what was called for in the September forecast. Weak preliminary collections data for October and November partially offset the positive impact of tax law changes.

#### *Other Sources of Revenue*

All other General Fund revenues are expected to total \$1,016 million for the 2013-15 biennium, a decrease of \$16 million relative to the September forecast. The decline was driven by two revenue categories: state court fees and inheritance taxes.

#### **Extended General Fund Revenue Outlook**

Table R.2 exhibits the long-run forecast for General Fund revenues through the 2021-23 biennium. Users should note that the potential for error in the forecast increases substantially the further ahead we look.

General Fund revenues are expected to total \$17,460 million in 2015-17 biennium, an increase of 10.8% percent from the prior period, and \$86 million (+0.5%) above the September forecast. In 2017-19 biennium, revenue growth is expected to slow to 9.0%, followed by rates of around 10% in subsequent biennia. The slowdown in long-run revenue growth is largely due to the impact of demographic changes and changes in savings behavior. Table B.2 in Appendix presents a more detailed look at the long-term General Fund revenue forecast.

**Table R.2**

#### **General Fund Revenue Forecast Summary (Millions of Dollars, Current Law)**

Revenue Source	Forecast 2011-13		Forecast 2013-15		Forecast 2015-17		Forecast 2017-19		Forecast 2019-21		Forecast 2021-23	
	Biennium	% Chg	Biennium	% Chg	Biennium	% Chg	Biennium	% Chg	Biennium	% Chg	Biennium	% Chg
Personal Income Taxes	12,118.2	15.8%	13,716.1	13.2%	15,389.6	12.2%	16,929.0	10.0%	18,666.0	10.3%	20,512.6	9.9%
Corporate Income Taxes	883.9	6.8%	1,030.5	16.6%	1,069.0	3.7%	1,043.3	-2.4%	1,073.1	2.9%	1,167.2	8.8%
All Others	1,164.9	-5.0%	1,016.3	-12.8%	1,001.1	-1.5%	1,063.1	6.2%	1,142.7	7.5%	1,220.5	6.8%
<b>Gross General Fund</b>	<b>14,167.0</b>	<b>13.1%</b>	<b>15,762.8</b>	<b>11.3%</b>	<b>17,459.7</b>	<b>10.8%</b>	<b>19,035.4</b>	<b>9.0%</b>	<b>20,881.9</b>	<b>9.7%</b>	<b>22,900.3</b>	<b>9.7%</b>
<i>Offsets and Transfers</i>	<i>(12.0)</i>		<i>(67.5)</i>		<i>(85.6)</i>		<i>(94.5)</i>		<i>(57.0)</i>		<i>(61.0)</i>	
<b>Net Revenue</b>	<b>14,155.0</b>	<b>13.0%</b>	<b>15,695.3</b>	<b>10.9%</b>	<b>17,374.1</b>	<b>10.7%</b>	<b>18,940.9</b>	<b>9.0%</b>	<b>20,824.9</b>	<b>9.9%</b>	<b>22,839.3</b>	<b>9.7%</b>

Other taxes include General Fund portions of the Eastern Oregon Severance Tax, Western Oregon Severance Tax and Amusement Device Tax. Commercial Fish Licenses & Fees and Pari-mutual Receipts are included in Other Revenues

#### **Tax Law Assumptions**

The revenue forecast is based on existing law, including measures and actions signed into law during the 2013 Oregon Legislative Session and October Special Legislative Session. OEA makes routine adjustments to the forecast to account for legislative and other actions not factored into the personal and corporate income tax models. These adjustments can include expected kicker refunds, when applicable, as well as any tax law changes not yet present in the historical data. A summary of actions taken during the 2013 Legislative Session can be found in Appendix B Table B.3. For a detailed treatment of the components of the 2013 Legislatively Enacted Budget, see: [LFO 2013-15 Budget Summary](#). For summary of the revenue impacts for the October 2013 special session see: [LRO HB3601 Revenue Impact Statement](#).

The treatment of the corporate taxes represents an important current area of policy uncertainty. Policymakers and the court system are currently determining if firms can be asked to pay excise taxes based on a single sales apportionment factor. Depending on the future treatment of corporate tax liability, the outlook for collections could be lowered on the order of \$100 million per biennium.

Other recent tax law changes involve the treatment of court fees and criminal fines. These changes have significantly increased the amount of judicial related funds flowing into the General Fund, but the exact magnitude of the impact remains unclear.

Although based on current law, many of the tax policies that impact the revenue forecast are not set in stone. In particular, sunset dates for many large tax credits have been scheduled. As credits are allowed to disappear, considerable support is lent to the revenue outlook in the outer years of the forecast. To the extent that tax credits are extended and not allowed to expire when their sunset dates arrive, the outlook for revenue growth will be reduced. The current forecast relies on estimates taken from the Oregon Department of Revenue's 2013-15 Tax Expenditure Report.

### ***Alternative Scenarios***

The latest revenue forecast for the current biennium represents the most probable outcome given available information. OEA feels that it is important that anyone using this forecast for decision-making purposes recognize the potential for actual revenues to depart significantly from this projection.

Currently, the overwhelming downside risk facing the revenue outlook is the threat that the U.S. economy will slip back into recession in the near term. Such a scenario, however it played out, would result in drastic revenue losses.

Two recessionary scenarios are displayed in table R.2b. In a severe recession, biennial revenues could come in as much as \$2 billion lower than predicted.<sup>11</sup>

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<sup>11</sup> The methodology for computing alternative scenarios has recently been changed to reflect recent work done by the Legislative Revenue Office. Assumptions: Recessions begin in 2015 and return to baseline income by 2022. The moderate recession scenario assumes personal income growth will be reduced by one-half relative to the baseline in 2015 and 2016. The severe recession scenario assumes personal income will decline in 2015 by as much as it did in 2009. The percentage deviation in personal income taxes is 1.4 times the deviation in personal income. The percentage deviation in corporate income taxes is 2.0 times the deviation in personal income.

TABLE R2b

December 2013

## Alternative Cyclical Revenue Forecast (\$ millions)

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year
<b>Baseline Case</b>									
<b>Personal Income</b>									
Level	168.53	177.56	187.67	198.14	208.08	218.36	228.57	239.18	250.22
% change	5.2%	5.4%	5.7%	5.6%	5.0%	4.9%	4.7%	4.6%	4.6%
<b>Taxes</b>									
Personal Income	7,103	7,513	7,876	8,272	8,657	9,088	9,578	10,033	10,480
Corporate Excise & Income	549	540	529	523	520	527	546	576	591
Other General Fund	502	496	505	523	540	563	580	604	617
Total General Fund	8,154	8,549	8,910	9,319	9,717	10,178	10,703	11,213	11,687
% change	7.2%	4.8%	4.2%	4.6%	4.3%	4.8%	5.2%	4.8%	4.2%
	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year
<b>Moderate Recession</b>									
<b>Personal Income</b>									
Level	168.5	173.2	178.7	190.7	202.5	214.3	226.0	237.1	248.4
% change	5.2%	2.8%	3.1%	6.7%	6.2%	5.8%	5.5%	4.9%	4.8%
<b>Taxes</b>									
Personal Income	7,103	7,257	7,346	7,835	8,335	8,852	9,426	9,901	10,358
<i>Deviation from baseline</i>		-256	-530	-437	-322	-237	-151	-132	-122
Corporate Excise & Income	549	513	479	484	492	507	534	566	582
<i>Deviation from baseline</i>		-26	-51	-39	-28	-20	-12	-10	-9
Other General Fund	502	496	505	523	540	563	580	604	617
Total General Fund	8,154	8,267	8,330	8,842	9,367	9,922	10,540	11,071	11,557
% change	7.2%	1.4%	0.8%	6.2%	5.9%	5.9%	6.2%	5.0%	4.4%
<i>Deviation from baseline</i>		-283	-580	-476	-350	-256	-164	-142	-130
	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-2022	2020-21
	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year
<b>Severe Recession</b>									
<b>Personal Income</b>									
Level	168.5	161.8	169.4	183.4	197.2	211.0	224.8	235.8	247.1
% change	5.1%	-4.0%	4.7%	8.2%	7.5%	7.0%	6.6%	4.9%	4.8%
<b>Taxes</b>									
Personal Income	7,103	6,581	6,803	7,408	8,021	8,658	9,356	9,827	10,281
<i>Deviation from baseline</i>		-933	-1,073	-864	-636	-431	-221	-206	-199
Corporate Excise & Income	549	444	426	445	465	491	528	560	576
<i>Deviation from baseline</i>		-96	-103	-78	-55	-36	-18	-16	-15
Other General Fund	502	496	505	523	540	563	580	604	617
Total General Fund	8,154	7,521	7,734	8,376	9,026	9,712	10,464	10,991	11,474
% change	7.2%	-7.8%	2.8%	8.3%	7.8%	7.6%	7.7%	5.0%	4.4%
<i>Deviation from baseline</i>		-1,029	-1,176	-943	-691	-467	-239	-222	-213

**Lottery Earnings Forecast**

Table R.3 presents a summary of lottery earnings and distribution for the 2013-15 BN. Revenues and available resources from Lottery games and programs are projected to total \$1,058.4 million, a decrease of \$3.8 million from the September outlook and \$1.1 million below the Close of Session forecast. The decrease is primarily the result of slightly lower traditional game sales and a downgraded outlook for unclaimed prizes.

Overall, video lottery dominates total lottery earnings, accounting for approximately 85 percent of all lottery transfers in the past three years. Although growth has generally been slow in recent years, it has stabilized after declining substantially in the wake of the Great Recession and enactment of the smoking ban. In total, declines in video lottery sales approached 23 percent from pre-recession highs to the depths of the recession; the same magnitude of losses seen in slot machine revenues in Clark County, Nevada, home of Las Vegas. So far, Oregon video lottery sales have rebounded at approximately twice the rates seen at Clark County slot machines.

Moving beyond 2013 and into future years as the economic expansion continues and strengthens, so too do video lottery sales. Over the forecast horizon video lottery sales are projected to increase at a rate of growth that is just under the gains seen in overall personal income. Even with the video lottery sales increases in recent years, these gains have not been quite as strong as the underlying economic conditions. Consumers remain cautious with their disposable income and while their overall entertainment spending is increasing, the share of their budgets spent on these activities has not increased. This has not been the case in past years with gains in video lottery having outstripped spending on other items throughout the Lottery's history. Eventually as video games lose some of their novelty, sales growth will slow to more sustainable levels. For a more thorough look at Lottery revenues and consumer spending on gaming over the business cycle, please see [our office's research report available on our website](#)<sup>12</sup>.

Another major item affecting Lottery transfers for state revenue purposes is the capital replacement plan that Lottery will implement over the FY 2014-2017 time frame. During the next two biennia, Lottery will replace the 12,000 existing video lottery terminals throughout the state, some of which will be nine years old when they are replaced. Due to advancements in technology, like a lot of industries, the current machines are becoming obsolete in the marketplace. This replacement plan is expected to cost approximately \$215 million over four years, of which Lottery will self-fund \$85 million. The remaining \$130 million will be deducted from Lottery earnings prior to being transferred for general revenue purposes. The biennial impact of the replacement plan is \$71.2 million in 2013-15, or less than 7 percent of available revenue to be transferred, and \$59.2 million in 2015-17, or about 5 percent.

The full extended outlook for lottery earnings can be found in Table B.9 in Appendix B.

**Table R.3**

**2013-15 Lottery Fund Forecast Summary**

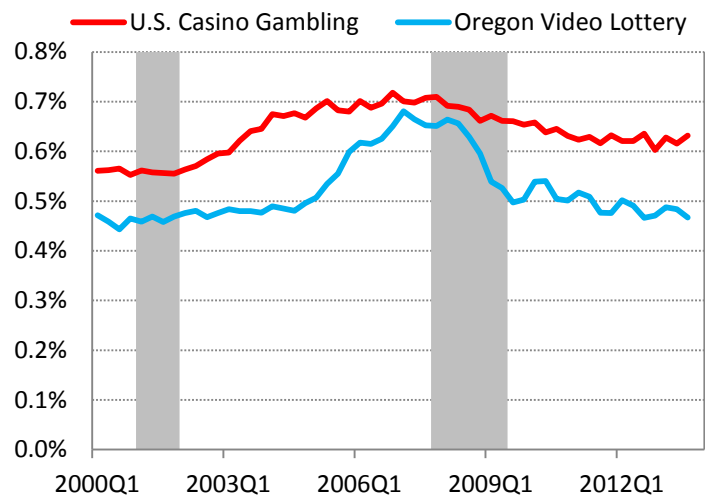
	Close of 2013 Session	Sept 2013 Forecast	Dec 2013 Forecast	Changes from:	
				Sept 2013 Forecast	COS 2013
<b>Transfers of Lottery Earnings</b>					
Traditional Games	\$122.7	\$129.5	\$124.5	-\$5.0	\$1.8
Video Lottery	\$1,002.9	\$998.9	\$1,000.3	\$1.4	-\$2.6
Administrative Actions	\$0.0	\$0.0	-\$0.1	-\$0.1	-\$0.1
Video Lottery Terminal Replacement	-\$71.0	-\$71.0	-\$71.2	-\$0.2	-\$0.2
<b>Total Transfers</b>	<b>\$1,054.6</b>	<b>\$1,057.3</b>	<b>\$1,053.5</b>	<b>-\$3.8</b>	<b>-\$1.1</b>
<b>Economic Development Fund</b>					
Beginning Balance	\$3.5	\$3.5	\$3.5	\$0.0	\$0.0
Transfers from Lottery	\$1,054.6	\$1,057.3	\$1,053.5	-\$3.8	-\$1.1
Other earnings <sup>1</sup>	\$1.4	\$1.4	\$1.4	\$0.0	\$0.0
<b>Total Available Resources</b>	<b>\$1,059.5</b>	<b>\$1,062.2</b>	<b>\$1,058.4</b>	<b>-\$3.8</b>	<b>-\$1.1</b>
<b>Dedicated Distributions<sup>2</sup></b>					
Dedicated Distributions <sup>2</sup>	\$404.1	\$405.0	\$403.7	-\$1.3	-\$0.4
Other Legislatively Adopted Allocations	\$640.4	\$640.4	\$640.4	\$0.0	\$0.0
<b>Total Distributions</b>	<b>\$1,044.5</b>	<b>\$1,045.4</b>	<b>\$1,044.1</b>	<b>-\$1.3</b>	<b>-\$0.4</b>
<b>Ending Balance</b>	<b>\$15.0</b>	<b>\$16.8</b>	<b>\$14.3</b>	<b>-\$2.6</b>	<b>-\$0.7</b>

Footnotes:

1. Includes interest earnings and reversions.

2. Includes Education Stability Fund(18%), Parks & Nat. Resources(15%), Sports Lottery(1%), Gambling Addiction(1%), County

**Gambling as a Share of Personal Income**



<sup>12</sup> <http://oregoneconomicanalysis.wordpress.com/2013/03/20/gaming-and-the-great-recession/>

## Overview of Budgetary Reserves

The state currently administers two general reserve accounts, the Oregon Rainy Day Fund (ORDF) and the Education Stability Fund (ESF). This section updates balances and recalculates the outlook for these funds based on the December revenue forecast.

Established by the 2007 Legislature, the ORDF is funded from ending balances each biennium, up to one percent of appropriations. The Legislature can deposit additional funds, as it did in first populating the ORDF with surplus corporate income tax revenues from the 2005-07 biennium. The ORDF also retains interest earnings. Withdrawals from the ORDF require one of three triggers, including a decline in employment, a projected budgetary shortfall, or declaration of a state of emergency, plus a three-fifths vote. Withdrawals are capped at two-thirds of the balance as of the beginning of the biennium in question. Fund balances are capped at 7.5 percent of General Fund revenues in the prior biennium.

The ESF gained its current reserve structure and mechanics via constitutional amendment in 2002. The ESF receives 18 percent of lottery earnings<sup>13</sup>, deposited on a quarterly basis. The ESF does not retain interest earnings. The ESF has similar triggers as the ORDF (in fact, the ORDF was modeled on the ESF), but does not have the two-thirds cap on withdrawals. The ESF balance is capped at five percent of General Fund revenues collected in the prior biennium.

### Budgetary Reserve Outlook

Table R.4 presents projected balances for the ORDF and ESF. The ORDF ended the 2011-13 biennium with a balance of \$61.8 million, while the ESF ended the biennium with a balance of \$7.6 million. Combined, these reserve funds total approximately one-half of one percent of the 2011-13 General Fund revenues.

As the accounting books for the 2011-13 biennium close out, per statute given the positive ending balance to the General Fund, one percent of appropriation will be deposited into the ORDF in the coming months. This deposit will be \$136.9 million. Additionally, at the end of the 2013-15 biennium, the corporate tax revenue due to the increases in the tax rate from Measure 67, however also adjusted during the most recent special session, will be deposited into the ORDF. The current estimate for the biennium is \$10 million.

In 2013-15, the ESF is expected to see deposits of \$170.5 million based on Lottery sales. There are no scheduled withdrawals out of the ESF and the ending balance is projected to be \$177.9 million at the end of the biennium.

B.10 in Appendix B provides more details for Oregon's budgetary reserves.

**Table R.4**  
Oregon's Budgetary Reserves

(Millions)	2011-13 Biennium	2013-15 Biennium	2015-17 Biennium
<b>Rainy Day Fund</b>			
Beginning Balance	\$10.4	\$61.9	\$210.6
Net Deposits <sup>3</sup>	\$50.8	\$146.9	\$167.9
Interest	\$0.6	\$1.9	\$18.7
<b>Ending Balance<sup>1</sup></b>	<b>\$61.8</b>	<b>\$210.6</b>	<b>\$397.2</b>
<b>Education Stability Fund</b>			
Beginning Balance	\$5.1	\$7.4	\$177.9
Net Deposits	\$184.8	\$170.5	\$185.8
Interest <sup>2</sup>	\$0.6	\$1.0	\$15.1
Withdrawals	-\$182.9	-\$1.0	-\$15.1
<b>Ending Balance</b>	<b>\$7.6</b>	<b>\$177.9</b>	<b>\$363.7</b>
<b>Total Reserves</b>	<b>\$69.4</b>	<b>\$388.5</b>	<b>\$760.9</b>
<b>Percent of General Fund Revenues</b>	<b>0.5%</b>	<b>2.5%</b>	<b>4.4%</b>

Footnotes:

1. Under current law, only 2/3rds of the beginning balance is available for withdrawal. Withdrawal subject to economic and financial triggers.
2. Education Stability Fund interest is distributed to the Oregon Education Fund (75%) and the State Scholarship Commission (25%).
3. Includes transfer of ending General Fund balances, up to 1% of budgeted appropriations, as well as private donations.

<sup>13</sup> Five percent of these transfers are deposited to the Oregon Growth sub-account. Due to the illiquid nature of this sub-account, only funds in the main account are included in the figures presented here.

## POPULATION FORECAST

Oregon's population count on April 1, 2010 was 3,831,074. Oregon gained 409,550 persons between the years 2000 and 2010. The population growth during the decade of 2000 to 2010 was 12.0 percent, down from 20.4 percent growth from the previous decade. Oregon's rankings in terms of decennial growth rate dropped from 11th between 1990-2000 to 18th between 2000 and 2010. Slow population growth during the most recent decade due to double recessions probably cost Oregon one additional seat in the U.S. House of Representatives. Actually, Oregon's decennial population growth rate during the most recent decade was the second lowest since 1900. The slowest, actually negative, growth was during the 1980s when Oregon was hit hard by another recession. As a result of recent economic downturn and sluggish recovery, Oregon's population is expected to continue a slow pace of growth in the near future. Based on the current forecast, Oregon's population will reach 4.25 million in the year 2020 with an annual rate of growth of 1.13 percent between 2012 and 2020.

Oregon's economic condition heavily influences the state's population growth. Its economy determines the ability to retain local work force as well as attract job seekers from national and international labor market. As Oregon's total fertility rate remains below the replacement level and deaths continue to rise due to ageing population, long-term growth comes mainly from net in-migration. Working-age adults come to Oregon as long as we have favorable economic and employment environments. During the 1980s, which included a major recession and a net loss of population, net migration contributed to 22 percent of the population change. On the other extreme, net migration accounted for 73 percent of the population change during the booming economy of 1990s. This share of migration to population change declined to 56 percent in 2002 and it was further down to 32 percent in 2010. As a sign of slow to modest economic gain, the ratio of net migration-to-population change will increase gradually and will reach 76 percent by the end of the forecast horizon. Although economy and employment situation in Oregon looked stagnant in the recent past, migration situation was not similar to the early 1980s pattern of negative net migration. Potential Oregon out-migrants had no better place to go since other states were also in the same boat in terms of economy and employment.

Age structure and its change affect employment, state revenue, and expenditure. Demographics are the major budget drivers, which are modified by policy choices on service coverage and delivery. Growth in many age groups will show the effects of the baby-boom and their echo generations during the period of 2012-2020. It will also reflect demographics impacted by the depression era birth cohort combined with diminished migration of the working age population and elderly retirees. After a period of slow growth during the 1990s and early 2000s, the elderly population (65+) has picked up a faster pace of growth and will surge as the baby-boom generation continue to enter this age group. The average annual growth of the elderly population will be 4.1 percent during the forecast period as the boomers continue to enter retirement age. However, the youngest elderly (aged 65-74) will grow at an extremely fast pace during the forecast period, averaging 4.9 percent annual rate of growth due to the direct impact of the baby-boom generation entering the retirement age and smaller pre-babyboom cohort exiting the 65-74 age group. Reversing several years of shrinking population, the elderly aged 75-84 started to show a positive growth as the effect of depression era birth-cohort will dissipate. A faster pace of growth of population in this age group will begin once the baby-boom generation starts to mature into 65-74 age group. The oldest elderly (aged 85+) will continue to grow at a moderately but steady rate due to the combination of cohort change, continued positive net migration, and improving longevity. The average annual rate of growth for this oldest elderly over the forecast horizon will be 1.3 percent.

As the baby-boom generation matures out of oldest working-age cohort combined with slowing net migration, the once fast-paced growth of population aged 45-64 has gradually tapered off to below zero percent rate of growth by 2012 and will remain at slow or below zero growth phase for several years. The size of this older working-age population will remain virtually unchanged at the beginning to the end of the forecast period. The 25-44 age group population is recovering from several years of declining and slow growing trend. The decline was mainly due to the exiting baby-boom cohort. This age group has seen positive growth starting in the year 2004 and will increase by 1.4 percent annual average rate during the forecast horizon. The young adult population (aged 18-24) will change only a little over the forecast period and remain virtually unchanged for most of the years into the future. Although the slow or stagnant growth of college-age population (age 18-24), in general, tend to ease the pressure



on public spending on higher education, college enrollment typically goes up during the time of high unemployment and scarcity of well-paying jobs when even the older people flock back to college to better position themselves in a tough job market. The growth in K-12 population (aged 5-17) will remain low which will translate into slow growth in school enrollments. This school-age population has actually declined in size in recent years and will grow in the future at well below the state average. The growth rate for children under the age of five will remain below zero percent in the near future and will see positive growth only after 2014. Although the number of children under the age of five will decline slightly in the near future, the demand for child care services and pre-Kindergarten program will be additionally determined by the labor force participation and poverty rates of the parents. Overall, elderly population over age 65 will increase rapidly whereas population groups under age 65 will experience slow growth in the coming years. Hence, based solely on demographics of Oregon, demand for public services geared towards children and young adults will likely to increase at a slower pace, whereas demand for elderly care and services will increase rapidly.

### **Procedure and Assumptions**

Population forecasts by age and sex are developed using the cohort-component projection procedure. The population by single year of age and sex is projected based on the specific assumptions of vital events and migrations. Oregon's estimated population of July 1, 2010 based on the most recent decennial census is the base for the forecast. To explain the cohort-component projection procedure very briefly, the forecasting model "survives" the initial population distribution by age and sex to the next age-sex category in the following year, and then applies age-sex-specific birth and migration rates to the mid-period population. Further iterations subject the in-and-out migrants to the same mortality and fertility rates.

Populations by age-sex detail for the years 2000 through 2009, called intercensal estimates, in the following tables are developed by OEA based on 2000 and 2010 censuses and postcensal totals from the Population Research Center, Portland State University. The numbers of births and deaths through 2009-12 are from Oregon's Center for Health Statistics. The total populations for the period 2013 to 2020 are generated as part of the economic and revenue forecast of OEA.

Annual numbers of births are determined from the age-specific fertility rates projected based on Oregon's past trends and past and projected national trends. Oregon's total fertility rate is assumed to remain below the replacement level of 2.1 children per woman during the forecast period, tracking at slightly lower than the national rate.

Life Table survival rates are developed for the year 2008. Male and female life expectancies for the 2010-2020 period are projected based on the past three decades of trends and national projected life expectancies. Gradual improvements in life expectancies are expected over the forecast period. At the same time, the difference between the male and female life expectancies will continue to shrink. The male life expectancy at births of 77.1 and the female life expectancy of 81.7 in 2010 are projected to improve to 78.2 years for males and 82.7 years for females by the year 2020.

Estimates and forecasts of the number of net migrations are based on the residuals from the difference between population change and natural increase (births minus deaths) in a given forecast period. The migration forecasting model uses Oregon's employment, unemployment rates, income/wage data from Oregon and other states, and past trends. Distribution of migrants by age and sex is based on detailed data from the American Community Survey. The annual net migration between 2012 and 2020 is expected to remain in the range of 22,100 to 39,500, averaging 33,730 persons annually. Slowdown in Oregon's economy in the recent years resulted in smaller net migration and slow population growth. Estimated population growth and net migration rates in 2010 and 2011 were the lowest in over two decades. This slow population growth, as a result of slow economy and high unemployment rate, is expected to continue in the near future. Migration is intrinsically related to economy and employment situation of the state. Still, high unemployment and job loss in the recent past have impacted net migration and population growth, but not to the extent in the early 1980s. Main reason for this is the fact that other states of potential destination for Oregon out-migrants were not faring any better either. Hence the potential out-migrants have very limited destination choices. As Oregon's economy gets better, net migration and population growth will increase. However, the growth will not look like high growth period of 1990s.

APPENDIX A: ECONOMIC FORECAST DETAIL

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Table A.1 – Employment Forecast Tracking

**Total Nonfarm Employment, 3rd quarter 2013**

(Employment in thousands, Annualized Percent Change)

	Preliminary Estimate		Forecast		Forecast Error		Y/Y Change
	level	% ch	level	% ch	level	%	% ch
<b>Total Nonfarm</b>	1,674.1	0.9	1,675.0	1.7	(0.9)	(0.1)	2.0
<b>Total Private</b>	1,387.2	1.1	1,387.4	1.9	(0.2)	(0.0)	2.7
<b>Natural Resources and Mining</b>	7.7	1.6	7.8	3.6	(0.0)	(0.4)	8.8
<b>Construction</b>	73.9	(4.0)	74.5	6.1	(0.5)	(0.7)	6.5
<b>Manufacturing</b>	174.7	0.0	174.7	(1.1)	0.0	0.0	1.4
<b>Durable Goods</b>	122.7	(0.3)	123.5	(1.5)	(0.8)	(0.7)	0.4
<b>Wood Product</b>	20.7	(2.2)	20.7	0.6	0.0	0.2	4.3
<b>Metals and Machinery</b>	35.8	3.0	35.7	2.2	0.2	0.5	3.0
<b>Computer and Electronic Product</b>	36.9	4.7	36.8	2.0	0.1	0.2	(0.9)
<b>Transportation Equipment</b>	10.4	(9.8)	11.0	0.4	(0.6)	(5.3)	(6.7)
<b>Other Durable Goods</b>	18.8	(7.5)	19.3	(16.5)	(0.6)	(2.9)	(1.5)
<b>Nondurable Goods</b>	52.1	0.7	51.2	(0.0)	0.9	1.7	3.8
<b>Food</b>	26.0	0.6	25.6	(3.5)	0.4	1.7	5.2
<b>Other Nondurable Goods</b>	26.1	0.7	25.6	3.6	0.4	1.7	2.4
<b>Trade, Transportation &amp; Utilities</b>	325.1	2.0	323.1	1.7	2.0	0.6	2.7
<b>Retail Trade</b>	191.9	1.0	191.1	1.6	0.8	0.4	2.5
<b>Wholesale Trade</b>	77.6	2.7	76.9	1.5	0.7	0.9	2.7
<b>Transportation, Warehousing &amp; Utilities</b>	55.7	4.5	55.1	2.3	0.5	1.0	3.5
<b>Information</b>	31.8	2.1	32.7	2.1	(0.9)	(2.7)	(2.5)
<b>Financial Activities</b>	92.1	(2.4)	92.6	0.8	(0.5)	(0.5)	1.8
<b>Professional &amp; Business Services</b>	203.6	2.5	202.4	2.3	1.3	0.6	4.3
<b>Educational &amp; Health Services</b>	242.3	0.7	243.1	1.6	(0.8)	(0.3)	1.6
<b>Educational Services</b>	34.3	(2.2)	34.2	(0.3)	0.1	0.3	0.1
<b>Health Services</b>	208.0	1.2	208.9	1.9	(0.9)	(0.4)	1.8
<b>Leisure and Hospitality</b>	177.4	3.5	177.9	3.0	(0.4)	(0.2)	4.0
<b>Other Services</b>	58.4	1.5	58.8	5.4	(0.4)	(0.7)	2.1
<b>Government</b>	286.9	(0.5)	287.6	0.5	(0.7)	(0.2)	(1.3)
<b>Federal</b>	27.1	(0.2)	27.8	4.4	(0.6)	(2.3)	(3.0)
<b>State</b>	80.5	(0.2)	80.5	0.1	(0.0)	(0.0)	0.5
<b>State Education</b>	31.7	(4.5)	32.2	0.2	(0.5)	(1.5)	(1.5)
<b>Local</b>	179.3	(0.7)	179.3	0.1	(0.0)	(0.0)	(1.8)
<b>Local Education</b>	93.9	(1.5)	92.7	(0.1)	1.2	1.3	(1.3)

Table A.2 – Short-term Oregon Economic Summary

## Oregon Forecast Summary

	Quarterly					Annual					
	2013:2	2013:3	2013:4	2014:1	2014:2	2011	2012	2013	2014	2015	2016
<b>Personal Income (\$ billions)</b>											
<b>Nominal Personal Income</b>	155.9	157.7	158.8	161.2	163.0	146.0	152.7	156.7	164.2	172.9	182.6
% change	4.4	4.6	2.8	6.3	4.6	6.1	4.6	2.6	4.8	5.3	5.6
<b>Real Personal Income (base year=2005)</b>	145.9	146.8	147.4	149.0	150.0	140.3	144.1	146.1	150.9	156.4	162.2
% change	4.5	2.5	1.5	4.5	2.9	3.6	2.7	1.4	3.3	3.6	3.8
<b>Nominal Wages and Salaries</b>	79.2	79.9	80.1	81.0	81.9	74.3	77.4	79.4	82.5	86.7	91.2
% change	3.6	3.7	1.4	4.3	4.7	4.8	4.2	2.6	3.9	5.1	5.1
<b>Other Indicators</b>											
<b>Per Capita Income (\$1,000)</b>	39.8	40.1	40.3	40.8	41.2	37.8	39.3	39.9	41.4	43.1	45.0
% change	3.5	3.4	1.8	5.3	3.5	5.5	3.9	1.7	3.7	4.1	4.4
<b>Average Wage rate (\$1,000)</b>	46.9	47.1	47.2	47.4	47.6	45.3	46.7	47.0	47.8	49.1	50.5
% change	1.4	1.9	0.5	1.6	1.8	3.6	3.1	0.6	1.7	2.8	2.9
<b>Population (Millions)</b>	3.9	3.9	3.9	3.9	4.0	3.86	3.89	3.92	3.96	4.01	4.06
% change	0.9	1.2	0.9	0.9	1.0	0.6	0.7	0.9	1.0	1.1	1.2
<b>Housing Starts (Thousands)</b>	14.7	15.0	15.1	15.9	16.5	8.0	10.9	14.8	16.8	20.3	23.7
% change	4.9	9.4	2.6	24.6	15.3	5.3	35.5	36.3	13.6	20.5	17.0
<b>Unemployment Rate</b>	7.8	8.1	8.0	7.8	7.7	9.6	8.7	8.0	7.6	7.0	6.6
Point Change	(0.5)	0.2	(0.1)	(0.2)	(0.1)	(1.1)	(0.9)	(0.7)	(0.5)	(0.6)	(0.4)
<b>Employment (Thousands)</b>											
<b>Total Nonfarm</b>	1,670.6	1,674.1	1,681.3	1,691.7	1,703.0	1,620.2	1,640.1	1,671.9	1,707.5	1,745.4	1,782.1
% change	2.2	0.9	1.7	2.5	2.7	1.1	1.2	1.9	2.1	2.2	2.1
<b>Private Nonfarm</b>	1,383.3	1,387.2	1,393.9	1,403.6	1,414.2	1,325.2	1,349.3	1,384.4	1,418.3	1,453.0	1,486.1
% change	3.0	1.1	1.9	2.8	3.1	1.8	1.8	2.6	2.5	2.4	2.3
<b>Construction</b>	74.7	73.9	74.9	75.5	76.1	68.6	69.8	73.9	76.4	79.2	82.5
% change	16.6	(4.0)	5.2	3.3	3.0	1.4	1.7	5.9	3.4	3.7	4.1
<b>Manufacturing</b>	174.7	174.7	175.1	176.8	178.4	168.1	171.8	174.7	178.8	183.8	187.4
% change	1.3	0.0	0.8	3.8	3.7	2.6	2.2	1.7	2.4	2.8	2.0
<b>Durable Manufacturing</b>	122.7	122.7	122.9	124.3	125.8	118.6	121.6	122.7	126.2	130.7	134.1
% change	0.1	(0.3)	0.6	4.8	4.8	3.2	2.5	1.0	2.8	3.6	2.6
Wood Product Manufacturing	20.9	20.7	20.2	20.5	21.0	19.2	19.8	20.6	21.1	22.8	23.9
% change	2.5	(2.2)	(10.9)	6.8	9.4	(3.7)	2.7	4.3	2.4	8.0	4.7
High Tech Manufacturing	36.4	36.9	37.3	37.9	38.4	36.4	37.0	36.8	38.4	39.4	39.9
% change	0.4	4.7	5.1	6.4	5.0	4.1	1.6	(0.6)	4.6	2.4	1.3
Transportation Equipment	10.7	10.4	10.4	10.5	10.5	10.7	11.1	10.7	10.6	10.9	11.3
% change	(12.5)	(9.8)	(0.8)	1.4	2.5	5.2	3.1	(3.7)	(0.9)	3.5	3.4
<b>Nondurable Manufacturing</b>	52.0	52.1	52.2	52.4	52.6	49.5	50.3	51.9	52.7	53.1	53.4
% change	4.2	0.7	1.4	1.5	1.2	1.2	1.5	3.4	1.4	0.8	0.6
<b>Private nonmanufacturing</b>	1,208.6	1,212.5	1,218.8	1,226.8	1,235.8	1,157.1	1,177.5	1,209.7	1,239.5	1,269.3	1,298.7
% change	3.3	1.3	2.1	2.7	3.0	1.6	1.8	2.7	2.5	2.4	2.3
Retail Trade	191.4	191.9	192.9	194.2	195.3	184.8	187.2	191.5	195.9	199.7	203.2
% change	3.7	1.0	2.0	2.9	2.3	0.9	1.3	2.2	2.3	1.9	1.8
Wholesale Trade	77.1	77.6	77.9	78.3	78.6	74.2	75.3	77.4	78.7	79.9	81.3
% change	0.5	2.7	1.5	2.0	1.8	1.3	1.5	2.7	1.8	1.4	1.8
<b>Information</b>	31.7	31.8	32.0	32.2	32.6	32.1	32.5	32.0	32.7	33.4	34.3
% change	(8.5)	2.1	2.2	3.3	4.2	(0.0)	1.2	(1.5)	2.4	2.2	2.6
<b>Professional and Business Services</b>	202.4	203.6	204.6	206.3	208.4	188.6	195.4	202.7	209.5	218.1	225.8
% change	4.8	2.5	1.9	3.4	4.1	3.5	3.6	3.7	3.4	4.1	3.5
<b>Health Services</b>	207.4	208.0	208.0	210.4	212.6	201.2	204.2	207.7	212.7	216.9	221.4
% change	0.2	1.2	0.1	4.6	4.2	2.1	1.5	1.7	2.4	2.0	2.1
<b>Leisure and Hospitality</b>	175.9	177.4	180.0	180.5	181.7	165.6	169.8	176.8	182.3	186.1	188.6
% change	4.4	3.5	6.1	1.0	2.8	2.0	2.5	4.2	3.1	2.1	1.4
<b>Government</b>	287.3	286.9	287.4	288.1	288.8	295.0	290.8	287.5	289.2	292.3	296.0
% change	(1.8)	(0.5)	0.6	1.1	0.9	(1.6)	(1.4)	(1.1)	0.6	1.1	1.3

Table A.3 – Oregon Economic Forecast Change

**Oregon Forecast Change (Current vs. Last)**

	Quarterly					Annual					
	2013:2	2013:3	2013:4	2014:1	2014:2	2011	2012	2013	2014	2015	2016
<b>Personal Income (\$ billions)</b>											
<b>Nominal Personal Income</b>	155.9	157.7	158.8	161.2	163.0	146.0	152.7	156.7	164.2	172.9	182.6
% change	1.6	1.9	1.5	1.4	1.3	0.5	1.0	1.6	1.4	1.6	1.8
<b>Real Personal Income (base year=2005)</b>	145.9	146.8	147.4	149.0	150.0	140.3	144.1	146.1	150.9	156.4	162.2
% change	2.9	2.8	2.4	2.5	2.5	1.2	2.0	2.8	2.5	2.8	3.2
<b>Nominal Wages and Salaries</b>	79.2	79.9	80.1	81.0	81.9	74.3	77.4	79.4	82.5	86.7	91.2
% change	0.4	0.4	(0.0)	(0.2)	(0.1)	(0.6)	(0.3)	0.3	(0.1)	0.1	0.3
<b>Other Indicators</b>											
<b>Per Capita Income (\$1,000)</b>	39.8	40.1	40.3	40.8	41.2	37.8	39.3	39.9	41.4	43.1	45.0
% change	1.6	1.9	1.5	1.4	1.3	0.5	1.0	1.6	1.4	1.6	1.8
<b>Average Wage rate (\$1,000)</b>	46.9	47.1	47.2	47.4	47.6	45.3	46.7	47.0	47.8	49.1	50.5
% change	0.4	0.3	0.2	0.0	0.0	(0.6)	(0.1)	0.3	0.0	0.2	0.4
<b>Population (Millions)</b>	3.92	3.93	3.94	3.9	4.0	3.86	3.89	3.92	3.96	4.01	4.06
% change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Housing Starts (Thousands)</b>	14.7	15.0	15.1	15.9	16.5	8.0	10.9	14.8	16.8	20.3	23.7
% change	(2.2)	(0.9)	(3.1)	1.8	1.8	0.0	0.0	(1.6)	2.0	2.1	7.4
<b>Unemployment Rate</b>	7.8	8.1	8.0	7.8	7.7	9.6	8.7	8.0	7.6	7.0	6.6
Point Change	(0.0)	0.3	0.3	0.3	0.3	0.0	0.0	0.1	0.3	0.1	0.0
<b>Employment (Thousands)</b>											
<b>Total Nonfarm</b>	1,670.6	1,674.1	1,681.3	1,691.7	1,703.0	1,620.2	1,640.1	1,671.9	1,707.5	1,745.4	1,782.1
% change	0.1	(0.1)	(0.1)	(0.1)	(0.1)	0.0	0.0	0.0	(0.1)	(0.1)	(0.2)
<b>Private Nonfarm</b>	1,383.3	1,387.2	1,393.9	1,403.6	1,414.2	1,325.2	1,349.3	1,384.4	1,418.3	1,453.0	1,486.1
% change	0.2	(0.0)	(0.1)	(0.1)	(0.0)	0.0	0.0	0.0	(0.0)	(0.1)	(0.2)
<b>Construction</b>	74.7	73.9	74.9	75.5	76.1	68.6	69.8	73.9	76.4	79.2	82.5
% change	1.8	(0.7)	(0.7)	(0.9)	(1.0)	0.0	0.0	0.1	(1.1)	(1.9)	(2.0)
<b>Manufacturing</b>	174.7	174.7	175.1	176.8	178.4	168.1	171.8	174.7	178.8	183.8	187.4
% change	(0.3)	0.0	(0.2)	0.1	0.3	0.0	(0.0)	(0.1)	0.2	0.1	(0.1)
<b>Durable Manufacturing</b>	122.7	122.7	122.9	124.3	125.8	118.6	121.6	122.7	126.2	130.7	134.1
% change	(1.0)	(0.7)	(1.1)	(0.6)	(0.3)	0.0	0.0	(0.7)	(0.4)	(0.5)	(0.7)
Wood Product Manufacturing	20.9	20.7	20.2	20.5	21.0	19.2	19.8	20.6	21.1	22.8	23.9
% change	0.9	0.2	(3.3)	(3.3)	(3.3)	0.0	0.0	(0.6)	(3.9)	(6.8)	(7.6)
High Tech Manufacturing	36.4	36.9	37.3	37.9	38.4	36.4	37.0	36.8	38.4	39.4	39.9
% change	(0.4)	0.2	1.0	2.0	2.7	0.0	(0.0)	0.2	2.7	3.2	2.9
Transportation Equipment	10.7	10.4	10.4	10.5	10.5	10.7	11.1	10.7	10.6	10.9	11.3
% change	(2.7)	(5.3)	(5.8)	(5.7)	(5.4)	0.0	0.0	(3.6)	(5.4)	(5.2)	(4.9)
<b>Nondurable Manufacturing</b>	52.0	52.1	52.2	52.4	52.6	49.5	50.3	51.9	52.7	53.1	53.4
% change	1.5	1.7	1.7	1.8	1.8	(0.0)	(0.0)	1.3	1.7	1.5	1.4
<b>Private nonmanufacturing</b>	1,208.6	1,212.5	1,218.8	1,226.8	1,235.8	1,157.1	1,177.5	1,209.7	1,239.5	1,269.3	1,298.7
% change	0.2	(0.0)	(0.0)	(0.1)	(0.1)	0.0	0.0	0.1	(0.1)	(0.1)	(0.2)
Retail Trade	191.4	191.9	192.9	194.2	195.3	184.8	187.2	191.5	195.9	199.7	203.2
% change	0.5	0.4	0.5	0.7	0.8	(0.0)	0.0	0.3	0.9	1.0	0.6
Wholesale Trade	77.1	77.6	77.9	78.3	78.6	74.2	75.3	77.4	78.7	79.9	81.3
% change	0.6	0.9	0.8	0.6	0.5	(0.0)	(0.0)	0.6	0.4	0.1	(0.0)
<b>Information</b>	31.7	31.8	32.0	32.2	32.6	32.1	32.5	32.0	32.7	33.4	34.3
% change	(2.7)	(2.7)	(2.7)	(2.2)	(1.6)	0.0	0.0	(2.1)	(1.4)	(1.1)	(0.9)
<b>Professional and Business Services</b>	202.4	203.6	204.6	206.3	208.4	188.6	195.4	202.7	209.5	218.1	225.8
% change	0.6	0.6	0.3	0.2	0.2	(0.0)	0.0	0.4	0.2	(0.1)	(0.2)
<b>Health Services</b>	207.4	208.0	208.0	210.4	212.6	201.2	204.2	207.7	212.7	216.9	221.4
% change	(0.3)	(0.4)	(0.8)	(0.5)	(0.4)	0.0	0.0	(0.3)	(0.4)	(0.5)	(0.6)
<b>Leisure and Hospitality</b>	175.9	177.4	180.0	180.5	181.7	165.6	169.8	176.8	182.3	186.1	188.6
% change	(0.4)	(0.2)	0.6	0.3	0.3	(0.0)	(0.0)	0.0	0.4	0.6	0.6
<b>Government</b>	287.3	286.9	287.4	288.1	288.8	295.0	290.8	287.5	289.2	292.3	296.0
% change	0.0	(0.2)	(0.3)	(0.2)	(0.2)	0.0	0.0	(0.1)	(0.2)	(0.2)	(0.2)

Table A.4 Annual Economic Forecast

**TABLE A.4****Dec 2013 - Personal Income****(Billions of Current Dollars)**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Total Personal Income*</b>												
Oregon	146.0	152.7	156.7	164.2	172.9	182.6	193.0	203.0	213.2	223.5	233.7	244.7
% Ch	6.1	4.6	2.6	4.8	5.3	5.6	5.7	5.2	5.0	4.8	4.6	4.7
U.S.	13,191.3	13,743.8	14,129.4	14,796.3	15,522.1	16,325.0	17,203.9	18,076.2	18,945.7	19,793.1	20,609.8	21,464.3
% Ch	6.1	4.2	2.8	4.7	4.9	5.2	5.4	5.1	4.8	4.5	4.1	4.1
<b>Wage and Salary</b>												
Oregon	74.3	77.4	79.4	82.5	86.7	91.2	95.7	100.1	104.4	108.8	113.2	117.6
% Ch	4.8	4.2	2.6	3.9	5.1	5.1	5.0	4.6	4.2	4.2	4.1	3.9
U.S.	6,638.7	6,926.8	7,119.8	7,438.8	7,815.9	8,207.5	8,602.5	8,991.6	9,387.3	9,777.6	10,152.9	10,538.7
% Ch	4.1	4.3	2.8	4.5	5.1	5.0	4.8	4.5	4.4	4.2	3.8	3.8
<b>Other Labor Income</b>												
Oregon	18.4	20.1	20.8	21.5	22.5	23.7	24.9	26.0	27.1	28.2	29.2	30.3
% Ch	3.6	9.1	3.6	3.3	4.8	5.0	5.1	4.7	4.2	4.0	3.7	3.5
U.S.	1,145.4	1,170.6	1,190.6	1,230.8	1,289.1	1,353.5	1,423.5	1,492.0	1,555.2	1,616.5	1,675.2	1,732.8
% Ch	2.2	2.2	1.7	3.4	4.7	5.0	5.2	4.8	4.2	3.9	3.6	3.4
<b>Nonfarm Proprietor's Income</b>												
Oregon	10.2	10.9	11.7	12.5	13.2	13.9	14.4	14.9	15.5	16.0	16.6	17.0
% Ch	4.2	6.8	7.0	6.5	5.9	5.3	3.6	3.6	4.0	3.6	3.5	2.6
U.S.	1,082.6	1,149.6	1,221.5	1,290.9	1,366.9	1,443.8	1,503.9	1,568.9	1,643.9	1,715.5	1,788.6	1,868.3
% Ch	9.7	6.2	6.3	5.7	5.9	5.6	4.2	4.3	4.8	4.4	4.3	4.5
<b>Dividend, Interest and Rent</b>												
Oregon	27.7	29.3	30.6	32.4	34.2	36.5	39.9	42.9	45.9	48.6	51.2	54.6
% Ch	9.7	5.9	4.5	5.9	5.4	6.7	9.3	7.7	6.9	6.0	5.3	6.6
U.S.	2,369.0	2,499.7	2,599.9	2,754.3	2,897.7	3,080.5	3,353.4	3,610.5	3,832.6	4,028.9	4,205.9	4,392.8
% Ch	10.6	5.5	4.0	5.9	5.2	6.3	8.9	7.7	6.2	5.1	4.4	4.4
<b>Transfer Payments</b>												
Oregon	29.3	29.8	31.0	32.8	34.4	36.5	38.2	39.7	41.9	44.4	46.9	49.4
% Ch	2.1	1.7	4.0	5.7	5.2	6.0	4.8	4.0	5.5	5.8	5.6	5.5
U.S.	2,274.3	2,329.2	2,406.1	2,538.3	2,645.9	2,772.3	2,888.5	3,018.7	3,176.8	3,349.8	3,522.5	3,708.2
% Ch	1.7	2.4	3.3	5.5	4.2	4.8	4.2	4.5	5.2	5.4	5.2	5.3
<b>Contributions for Social Security</b>												
Oregon	11.7	12.2	14.0	14.7	15.5	16.4	17.2	17.9	18.7	19.5	20.3	21.0
% Ch	(6.2)	3.6	15.1	4.6	5.8	5.6	4.9	4.3	4.4	4.2	4.0	3.4
U.S.	423.8	436.4	573.9	608.2	651.0	695.3	733.4	771.9	810.6	849.1	886.8	925.8
% Ch	(17.7)	3.0	31.5	6.0	7.0	6.8	5.5	5.2	5.0	4.8	4.4	4.4
<b>Residence Adjustment</b>												
Oregon	(2.6)	(3.0)	(3.1)	(3.2)	(3.3)	(3.4)	(3.5)	(3.6)	(3.7)	(3.8)	(3.9)	(4.0)
% Ch	11.0	18.6	2.1	2.1	3.1	3.3	3.3	3.0	2.6	2.7	2.7	2.1
<b>Farm Proprietor's Income</b>												
Oregon	0.4	0.3	0.2	0.4	0.6	0.6	0.7	0.8	0.8	0.8	0.8	0.7
% Ch	1,581.8	(5.5)	(39.5)	94.5	47.4	7.4	4.1	22.3	(0.4)	(2.0)	(2.2)	(4.9)
<b>Per Capita Income (Thousands of \$)</b>												
Oregon	37.8	39.3	39.9	41.4	43.1	45.0	47.0	48.8	50.7	52.5	54.2	56.0
% Ch	5.5	3.9	1.7	3.7	4.1	4.4	4.5	3.9	3.7	3.5	3.3	3.4
U.S.	42.2	43.7	44.6	46.3	48.2	50.3	52.6	54.9	57.1	59.2	61.2	63.2
% Ch	5.3	3.4	2.0	3.9	4.1	4.4	4.6	4.3	4.0	3.7	3.3	3.4

\* Personal Income includes all classes of income minus Contributions for Social Security

**TABLE A.4**

**Dec 2013 - Employment By Industry  
(Oregon - Thousands, U.S. - Millions)**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Total Nonfarm</b>												
Oregon	1,620.2	1,640.1	1,671.9	1,707.5	1,745.4	1,782.1	1,814.7	1,842.6	1,865.5	1,885.0	1,899.4	1,913.0
% Ch	1.1	1.2	1.9	2.1	2.2	2.1	1.8	1.5	1.2	1.0	0.8	0.7
U.S.	131.5	133.7	135.9	138.3	140.7	143.3	145.5	147.2	148.6	149.7	150.2	150.8
% Ch	1.2	1.7	1.6	1.7	1.8	1.8	1.6	1.2	0.9	0.7	0.4	0.4
<b>Private Nonfarm</b>												
Oregon	1,325.2	1,349.3	1,384.4	1,418.3	1,453.0	1,486.1	1,515.1	1,539.4	1,558.7	1,572.8	1,585.2	1,595.6
% Ch	1.8	1.8	2.6	2.5	2.4	2.3	2.0	1.6	1.3	0.9	0.8	0.7
U.S.	109.4	111.8	114.1	116.3	118.6	121.1	123.1	124.6	125.8	126.5	126.9	127.3
% Ch	1.9	2.2	2.0	2.0	2.0	2.1	1.7	1.2	0.9	0.6	0.4	0.3
<b>Natural Resources and Mining</b>												
Oregon	7.0	7.2	7.7	8.1	8.2	8.4	8.4	8.4	8.4	8.3	8.3	8.3
% Ch	4.6	3.1	7.0	4.2	1.8	1.8	0.5	(0.2)	(0.2)	(0.2)	(0.4)	(0.2)
U.S.	0.8	0.9	0.9	0.9	0.9	0.9	1.0	0.9	0.9	1.0	1.0	1.0
% Ch	11.8	8.0	3.0	3.0	1.2	2.9	1.3	(0.3)	0.1	1.2	1.2	0.2
<b>Construction</b>												
Oregon	68.6	69.8	73.9	76.4	79.2	82.5	84.6	86.2	87.5	88.3	88.9	89.6
% Ch	1.4	1.7	5.9	3.4	3.7	4.1	2.5	2.0	1.4	1.0	0.6	0.8
U.S.	5.5	5.6	5.8	6.0	6.6	7.2	7.7	7.9	8.0	8.0	8.1	8.2
% Ch	0.3	2.0	2.8	3.9	9.4	9.7	5.9	2.5	1.4	1.0	0.6	0.8
<b>Manufacturing</b>												
Oregon	168.1	171.8	174.7	178.8	183.8	187.4	189.0	190.2	190.8	191.1	191.0	190.9
% Ch	2.6	2.2	1.7	2.4	2.8	2.0	0.8	0.6	0.3	0.1	(0.1)	(0.0)
U.S.	11.7	11.9	12.0	12.2	12.5	12.6	12.7	12.7	12.7	12.7	12.6	12.5
% Ch	1.7	1.7	0.5	2.1	2.0	1.3	0.3	0.3	0.2	(0.3)	(0.6)	(0.8)
<b>Durable Manufacturing</b>												
Oregon	118.6	121.6	122.7	126.2	130.7	134.1	135.3	135.9	136.0	136.0	135.7	135.4
% Ch	3.2	2.5	1.0	2.8	3.6	2.6	0.9	0.5	0.1	(0.0)	(0.2)	(0.2)
U.S.	7.3	7.5	7.5	7.8	8.0	8.2	8.2	8.3	8.3	8.3	8.2	8.1
% Ch	3.0	2.6	0.7	3.2	3.3	2.3	0.5	0.1	0.3	(0.3)	(0.7)	(0.8)
<b>Wood Products</b>												
Oregon	19.2	19.8	20.6	21.1	22.8	23.9	23.7	23.8	23.7	23.5	23.2	23.0
% Ch	(3.7)	2.7	4.3	2.4	8.0	4.7	(0.9)	0.6	(0.7)	(0.9)	(1.1)	(1.0)
U.S.	0.3	0.3	0.3	0.4	0.5	0.6	0.5	0.5	0.6	0.6	0.5	0.5
% Ch	(1.5)	0.4	2.4	18.7	27.4	8.6	(3.3)	(1.4)	1.6	0.2	(2.2)	(2.6)
<b>Metal and Machinery</b>												
Oregon	33.3	34.6	35.7	36.5	37.3	38.0	38.3	38.4	38.4	38.4	38.4	38.5
% Ch	6.9	3.9	3.0	2.4	2.1	1.8	0.8	0.2	(0.0)	0.1	0.1	0.1
U.S.	2.8	2.9	2.9	3.0	3.1	3.2	3.3	3.3	3.3	3.3	3.3	3.3
% Ch	5.7	4.3	0.7	3.2	3.2	3.2	1.5	0.1	0.4	0.4	0.1	(0.1)
<b>Computer and Electronic Products</b>												
Oregon	36.4	37.0	36.8	38.4	39.4	39.9	40.3	40.4	40.5	40.6	40.7	40.7
% Ch	4.1	1.6	(0.6)	4.6	2.4	1.3	1.0	0.3	0.3	0.2	0.2	0.2
U.S.	1.1	1.1	1.1	1.1	1.1	1.0	1.1	1.1	1.1	1.1	1.1	1.1
% Ch	0.8	(0.9)	(0.8)	0.2	(2.0)	(2.0)	1.0	2.7	1.9	1.2	0.8	0.9
<b>Transportation Equipment</b>												
Oregon	10.7	11.1	10.7	10.6	10.9	11.3	11.7	11.7	11.6	11.4	11.1	10.9
% Ch	5.2	3.1	(3.7)	(0.9)	3.5	3.4	3.1	0.4	(0.7)	(1.7)	(2.5)	(2.5)
U.S.	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.4
% Ch	3.6	5.4	2.3	2.3	2.3	2.4	(0.2)	(0.9)	(1.1)	(2.7)	(2.9)	(3.5)
<b>Other Durables</b>												
Oregon	18.9	19.1	19.0	19.5	20.3	21.0	21.4	21.6	21.9	22.1	22.2	22.4
% Ch	1.6	1.2	(0.3)	2.6	3.8	3.5	1.9	1.2	1.3	0.9	0.6	0.7
U.S.	2.0	2.0	2.0	2.2	2.3	2.4	2.3	2.3	2.3	2.3	2.3	2.3
% Ch	0.0	0.3	2.1	5.5	6.3	3.0	(0.5)	(0.4)	0.3	(0.0)	(0.5)	(0.6)
<b>Nondurable Manufacturing</b>												
Oregon	49.5	50.3	51.9	52.7	53.1	53.4	53.8	54.3	54.8	55.1	55.3	55.4
% Ch	1.2	1.5	3.4	1.4	0.8	0.6	0.7	1.0	0.9	0.6	0.3	0.3
U.S.	4.5	4.5	4.5	4.5	4.5	4.4	4.4	4.5	4.5	4.5	4.4	4.4
% Ch	(0.2)	0.1	0.1	0.3	(0.4)	(0.5)	(0.1)	0.5	0.2	(0.3)	(0.6)	(0.8)
<b>Food Manufacturing</b>												
Oregon	24.2	24.7	25.9	25.9	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.6
% Ch	1.7	2.1	4.6	0.1	0.3	0.3	0.5	0.3	0.5	0.4	0.2	0.3
U.S.	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6
% Ch	0.5	0.7	0.3	2.0	0.9	0.6	0.8	1.4	1.0	0.7	0.4	0.1
<b>Other Nondurable</b>												
Oregon	25.3	25.5	26.1	26.8	27.1	27.3	27.6	28.0	28.4	28.6	28.7	28.8
% Ch	0.7	0.9	2.2	2.6	1.3	0.8	0.9	1.6	1.3	0.8	0.4	0.3
U.S.	3.0	3.0	3.0	3.0	3.0	2.9	2.9	2.9	2.9	2.9	2.8	2.8
% Ch	(0.6)	(0.2)	0.5	(0.7)	(1.0)	(0.8)	(0.6)	(0.4)	(0.6)	(0.8)	(0.9)	(1.1)
<b>Trade, Transportation, and Utilities</b>												
Oregon	312.4	316.6	324.1	331.3	337.7	344.5	351.1	356.5	359.4	359.7	359.7	359.5
% Ch	1.2	1.3	2.4	2.2	1.9	2.0	1.9	1.5	0.8	0.1	(0.0)	(0.1)
U.S.	25.1	25.5	26.0	26.3	26.6	27.0	27.3	27.6	27.6	27.6	27.6	27.4
% Ch	1.7	1.8	1.8	1.4	1.1	1.4	1.3	0.8	0.3	(0.0)	(0.3)	(0.4)

**TABLE A.4**

**Dec 2013 - Employment By Industry  
(Oregon - Thousands, U.S. - Millions)**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Retail Trade</b>												
Oregon	184.8	187.2	191.5	195.9	199.7	203.2	206.5	209.4	210.7	210.3	209.9	209.6
% Ch	0.9	1.3	2.2	2.3	1.9	1.8	1.6	1.4	0.6	(0.2)	(0.2)	(0.1)
U.S.	14.7	14.9	15.2	15.4	15.4	15.5	15.5	15.5	15.5	15.5	15.4	15.3
% Ch	1.6	1.4	2.1	1.3	0.2	0.4	0.4	0.0	(0.1)	(0.3)	(0.6)	(0.8)
<b>Wholesale Trade</b>												
Oregon	74.2	75.3	77.4	78.7	79.9	81.3	82.8	84.0	84.9	85.5	85.8	86.0
% Ch	1.3	1.5	2.7	1.8	1.4	1.8	1.8	1.4	1.1	0.6	0.4	0.2
U.S.	5.5	5.7	5.8	5.8	6.0	6.1	6.2	6.3	6.4	6.4	6.4	6.5
% Ch	1.7	2.4	1.5	1.5	1.8	2.3	2.1	1.5	1.0	0.5	0.4	0.3
<b>Transportation and Warehousing, and Utilities</b>												
Oregon	53.4	54.0	55.3	56.7	58.2	59.9	61.7	63.1	63.8	64.0	64.0	63.9
% Ch	2.3	1.2	2.4	2.4	2.6	3.0	3.0	2.2	1.1	0.3	0.0	(0.1)
U.S.	4.9	5.0	5.0	5.1	5.3	5.4	5.6	5.7	5.8	5.8	5.8	5.7
% Ch	2.3	2.4	1.1	1.7	3.0	3.3	3.0	2.1	0.7	0.1	(0.1)	(0.2)
<b>Information</b>												
Oregon	32.1	32.5	32.0	32.7	33.4	34.3	35.4	36.0	36.5	37.2	37.8	38.5
% Ch	(0.0)	1.2	(1.5)	2.4	2.2	2.6	3.1	1.7	1.6	1.8	1.7	1.7
U.S.	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.9	2.9	3.0	3.0	3.1
% Ch	(1.2)	0.1	0.3	0.2	0.1	2.7	2.3	1.2	1.7	1.9	1.8	1.8
<b>Financial Activities</b>												
Oregon	91.7	90.8	92.3	93.1	94.8	97.0	98.5	99.6	100.2	100.8	101.1	101.3
% Ch	(1.6)	(0.9)	1.6	0.9	1.8	2.3	1.6	1.0	0.7	0.5	0.3	0.2
U.S.	7.7	7.8	7.9	7.9	7.9	7.9	7.8	7.7	7.7	7.7	7.7	7.7
% Ch	0.0	1.2	1.4	0.4	(0.0)	(0.3)	(0.9)	(0.9)	(0.2)	(0.0)	(0.2)	(0.1)
<b>Professional and Business Services</b>												
Oregon	188.6	195.4	202.7	209.5	218.1	225.8	232.9	238.9	244.6	249.4	254.2	259.8
% Ch	3.5	3.6	3.7	3.4	4.1	3.5	3.1	2.6	2.4	2.0	1.9	2.2
U.S.	17.3	17.9	18.5	19.2	20.1	20.7	21.3	21.9	22.4	22.8	23.2	23.7
% Ch	3.6	3.5	3.3	3.8	4.3	3.2	3.0	2.5	2.3	1.9	1.9	2.1
<b>Education and Health Services</b>												
Oregon	234.3	238.2	241.9	246.7	251.1	255.9	261.2	266.6	271.8	276.4	280.9	283.9
% Ch	2.3	1.7	1.6	2.0	1.8	1.9	2.1	2.1	1.9	1.7	1.7	1.1
U.S.	19.9	20.3	20.7	21.0	21.3	21.7	22.2	22.6	22.9	23.0	23.1	23.2
% Ch	1.8	2.2	1.8	1.8	1.2	2.1	2.0	1.8	1.3	0.7	0.5	0.3
<b>Educational Services</b>												
Oregon	33.0	33.9	34.3	34.0	34.2	34.5	34.8	35.3	35.7	36.2	36.6	37.1
% Ch	3.8	2.8	0.9	(0.7)	0.6	0.8	1.0	1.3	1.3	1.3	1.1	1.4
U.S.	3.3	3.3	3.4	3.3	3.3	3.2	3.2	3.2	3.2	3.2	3.1	3.1
% Ch	3.1	3.0	0.7	(1.3)	(2.1)	(1.1)	0.1	0.5	(0.5)	(1.3)	(2.0)	(2.2)
<b>Health Care and Social Assistance</b>												
Oregon	201.2	204.2	207.7	212.7	216.9	221.4	226.4	231.4	236.0	240.1	244.3	246.8
% Ch	2.1	1.5	1.7	2.4	2.0	2.1	2.2	2.2	2.0	1.7	1.7	1.0
U.S.	16.6	17.0	17.3	17.7	18.0	18.5	19.0	19.3	19.6	19.8	20.0	20.1
% Ch	1.6	2.0	2.0	2.4	1.8	2.7	2.4	2.0	1.6	1.0	0.8	0.6
<b>Leisure and Hospitality</b>												
Oregon	165.6	169.8	176.8	182.3	186.1	188.6	191.0	193.0	194.6	196.0	197.1	197.4
% Ch	2.0	2.5	4.2	3.1	2.1	1.4	1.3	1.1	0.8	0.7	0.6	0.2
U.S.	13.4	13.7	14.2	14.4	14.6	14.7	14.9	15.1	15.2	15.2	15.2	15.2
% Ch	2.4	3.0	3.1	1.8	1.3	0.8	1.3	1.0	0.6	0.3	(0.0)	(0.2)
<b>Other Services</b>												
Oregon	56.8	57.3	58.3	59.3	60.5	61.8	63.1	64.0	64.9	65.5	66.1	66.4
% Ch	0.4	0.8	1.7	1.8	2.1	2.1	2.1	1.5	1.3	1.1	0.9	0.5
U.S.	5.4	5.4	5.5	5.5	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
% Ch	0.6	1.4	0.7	(0.1)	(0.6)	(0.4)	0.2	0.2	(0.4)	(0.4)	(0.4)	(0.4)
<b>Government</b>												
Oregon	295.0	290.8	287.5	289.2	292.3	296.0	299.6	303.2	306.8	312.2	314.2	317.5
% Ch	(1.6)	(1.4)	(1.1)	0.6	1.1	1.3	1.2	1.2	1.2	1.7	0.6	1.0
U.S.	22.1	21.9	21.8	22.0	22.1	22.2	22.4	22.6	22.8	23.2	23.3	23.5
% Ch	(1.8)	(0.8)	(0.3)	0.7	0.5	0.6	0.8	1.0	1.0	1.7	0.3	0.9
<b>Federal Government</b>												
Oregon	28.8	28.1	27.4	27.5	27.3	27.1	27.1	27.1	27.1	28.7	27.2	27.1
% Ch	(5.7)	(2.3)	(2.5)	0.3	(0.5)	(0.7)	(0.1)	(0.1)	(0.1)	5.8	(5.1)	(0.2)
U.S.	2.9	2.8	2.8	2.8	2.8	2.7	2.7	2.7	2.6	2.8	2.6	2.6
% Ch	(3.9)	(1.5)	(2.3)	1.9	(0.6)	(1.9)	(1.2)	(1.2)	(0.9)	5.1	(5.5)	(0.6)
<b>State Government, Oregon</b>												
State Total	80.6	80.0	80.4	81.0	81.5	82.1	83.0	84.0	85.0	85.9	86.9	87.8
% Ch	1.0	(0.7)	0.5	0.7	0.7	0.7	1.1	1.2	1.2	1.1	1.1	1.1
State Education	31.1	31.8	31.8	31.8	32.0	32.2	32.5	32.8	33.1	33.4	33.7	34.0
% Ch	4.5	2.1	0.1	(0.0)	0.7	0.6	0.9	0.9	0.9	0.9	0.9	0.8
<b>Local Government, Oregon</b>												
Local Total	185.6	182.7	179.8	180.8	183.5	186.8	189.5	192.1	194.8	197.6	200.1	202.5
% Ch	(2.1)	(1.6)	(1.6)	0.6	1.5	1.8	1.5	1.4	1.4	1.5	1.3	1.2
Local Education	97.0	95.4	94.1	93.6	95.5	97.7	99.5	101.1	102.6	104.1	105.5	107.0
% Ch	(3.3)	(1.6)	(1.4)	(0.6)	2.1	2.3	1.9	1.6	1.5	1.4	1.4	1.4



**TABLE A.4****Dec 2013 - Other Economic Indicators**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>GDP (Bil of 2009 \$),</b>												
Chain Weight (in billions of \$)	15,052.4	15,470.7	15,705.9	16,099.6	16,621.3	17,145.4	17,682.7	18,200.2	18,711.7	19,172.0	19,606.0	20,047.6
% Ch	1.8	2.8	1.5	2.5	3.2	3.2	3.1	2.9	2.8	2.5	2.3	2.3
<b>Price and Wage Indicators</b>												
<b>GDP Implicit Price Deflator,</b>												
Chain Weight U.S., 2009=100	103.2	105.0	106.5	108.4	110.2	112.1	114.0	115.9	117.7	119.8	121.9	124.0
% Ch	2.0	1.7	1.4	1.8	1.7	1.7	1.7	1.6	1.6	1.7	1.8	1.7
<b>Personal Consumption Deflator,</b>												
Chain Weight U.S., 2009=100	104.1	106.0	107.2	108.9	110.6	112.5	114.5	116.5	118.6	120.7	122.9	125.1
% Ch	2.4	1.8	1.2	1.5	1.6	1.8	1.8	1.8	1.7	1.8	1.8	1.8
<b>CPI, Urban Consumers, 1982-84=100</b>												
Portland-Salem, OR-WA	224.6	229.8	234.0	237.1	240.9	245.2	249.9	254.5	259.5	264.5	269.7	274.9
% Ch	2.9	2.3	1.8	1.4	1.6	1.8	1.9	1.8	2.0	1.9	2.0	1.9
U.S.	224.9	229.6	233.0	236.8	240.9	245.5	250.1	254.9	259.8	265.0	270.4	275.5
% Ch	3.1	2.1	1.5	1.6	1.7	1.9	1.9	1.9	1.9	2.0	2.0	1.9
<b>Oregon Average Wage</b>												
Rate (Thous \$)	45.3	46.7	47.0	47.8	49.1	50.5	52.1	53.7	55.2	57.0	58.8	60.7
% Ch	3.6	3.1	0.6	1.7	2.8	2.9	3.1	3.0	2.9	3.1	3.3	3.2
<b>U.S. Average Wage</b>												
Wage Rate (Thous \$)	50.5	51.8	52.4	53.8	55.5	57.3	59.1	61.1	63.2	65.3	67.6	69.9
% Ch	2.8	2.6	1.1	2.7	3.3	3.1	3.2	3.3	3.4	3.4	3.5	3.4
<b>Housing Indicators</b>												
<b>FHFA Oregon Housing Price Index</b>												
1980 Q1=100	350.3	349.6	377.7	404.1	412.0	420.2	430.1	443.7	459.7	478.1	497.5	517.2
% Ch	(6.7)	(0.2)	8.0	7.0	2.0	2.0	2.4	3.2	3.6	4.0	4.1	4.0
<b>FHFA National Housing Price Index</b>												
1980 Q1=100	313.1	313.0	333.5	363.2	373.8	377.9	386.0	390.7	395.3	402.5	411.6	425.3
% Ch	(3.6)	(0.0)	6.6	8.9	2.9	1.1	2.1	1.2	1.2	1.8	2.3	3.3
<b>Housing Starts</b>												
Oregon (Thous)	8.0	10.9	14.8	16.8	20.3	23.7	24.3	24.8	24.7	24.8	24.8	25.0
% Ch	5.3	35.5	36.3	13.6	20.5	17.0	2.5	1.9	(0.0)	0.2	0.0	0.6
U.S. (Millions)	0.6	0.8	0.9	1.2	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.5
% Ch	4.5	28.0	16.7	26.1	28.5	8.8	(0.4)	0.5	1.3	(1.2)	(3.0)	(1.5)
<b>Other Indicators</b>												
<b>Unemployment Rate (%)</b>												
Oregon	9.6	8.7	8.0	7.6	7.0	6.6	6.6	6.7	6.1	5.7	5.4	5.5
Point Change	(1.1)	(0.9)	(0.7)	(0.5)	(0.6)	(0.4)	(0.1)	0.1	(0.5)	(0.5)	(0.2)	0.1
U.S.	8.9	8.1	7.5	7.1	6.5	6.0	5.7	5.4	5.1	5.0	5.0	5.1
Point Change	(0.7)	(0.9)	(0.6)	(0.4)	(0.6)	(0.5)	(0.3)	(0.3)	(0.2)	(0.1)	(0.0)	0.0
<b>Industrial Production Index</b>												
U.S, 2002 = 100	93.6	97.0	99.4	102.4	105.7	108.8	111.9	115.0	118.3	121.2	124.0	126.9
% Ch	3.4	3.6	2.4	3.1	3.2	2.9	2.8	2.8	2.9	2.4	2.3	2.3
<b>Prime Rate (Percent)</b>												
	3.3	3.3	3.3	3.3	3.4	5.2	6.8	7.0	7.0	7.0	7.0	7.0
% Ch	0.0	0.0	0.0	0.0	5.3	50.7	32.5	2.5	0.0	0.0	0.0	0.0
<b>Population (Millions)</b>												
Oregon	3.86	3.89	3.92	3.96	4.01	4.06	4.11	4.16	4.21	4.26	4.31	4.37
% Ch	0.6	0.7	0.9	1.0	1.1	1.2	1.2	1.2	1.2	1.2	1.3	1.3
U.S.	312.3	314.6	317.0	319.5	321.9	324.4	326.9	329.4	332.0	334.5	337.0	339.5
% Ch	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7
<b>Timber Harvest (Mil Bd Ft)</b>												
Oregon	3,649.0	3,595.0	3,520.1	3,769.0	4,128.8	4,207.7	4,296.9	4,375.9	4,450.3	4,484.0	4,504.6	4,541.9
% Ch	13.1	(1.5)	(2.1)	7.1	9.5	1.9	2.1	1.8	1.7	0.8	0.5	0.8

APPENDIX B: REVENUE FORECAST DETAIL

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Table B.1 General Fund Revenue Statement - 2013-15

**Table B.1  
General Fund Revenue Statement -- 2013-15**

	Estimate at COS 2013	Forecasts Dated: 9/1/2013			Forecasts Dated: 12/1/2013			Difference	
		2013-14	2014-15	Total 2013-15	2013-14	2014-15	Total 2013-15	12/1/2013 Less 9/1/2013	12/1/2013 Less COS
<b>Taxes</b>									
Personal Income Taxes (Before Kicker)	13,558,172,000	6,535,377,000	7,068,127,000	13,603,504,000	6,612,980,000	7,103,117,000	13,716,097,000	112,593,000	157,925,000
Offsets and Transfers	(57,542,000)	(24,142,000)	(33,400,000)	(57,542,000)	(24,142,000)	(33,400,000)	(57,542,000)	0	0
Corporate Income Taxes (Before Kicker)	1,056,570,000	488,343,000	523,693,000	1,012,036,000	481,968,000	548,520,000	1,030,488,000	18,452,000	(26,082,000)
Offsets and Transfers	(63,298,000)	(20,890,000)	(21,856,000)	(42,746,000)	(5,000,000)	(5,000,000)	(10,000,000)	32,746,000	53,298,000
Insurance Taxes	107,754,000	51,324,000	56,215,000	107,539,000	49,803,000	56,299,000	106,102,000	(1,437,000)	(1,652,000)
Estate Taxes	207,982,000	104,091,000	108,871,000	212,962,000	96,091,000	107,871,000	203,962,000	(9,000,000)	(4,020,000)
Cigarette Taxes	69,049,000	35,272,000	33,777,000	69,049,000	37,365,000	38,027,000	75,392,000	6,343,000	6,343,000
Other Tobacco Products Taxes	59,366,000	29,273,000	30,093,000	59,366,000	29,273,000	30,093,000	59,366,000	0	0
Other Taxes	1,262,000	636,000	626,000	1,262,000	636,000	626,000	1,262,000	0	0
<b>Fines and Fees</b>									
State Court Fees	143,819,000	71,474,000	72,345,000	143,819,000	65,481,000	66,226,000	131,707,000	(12,112,000)	(12,112,000)
Secretary of State Fees	55,031,000	27,550,000	27,481,000	55,031,000	27,550,000	27,481,000	55,031,000	0	0
Criminal Fines & Assessments	46,578,000	24,646,000	20,855,000	45,501,000	24,738,000	20,932,000	45,670,000	169,000	(908,000)
Securities Fees	20,244,000	10,411,000	10,312,000	20,723,000	10,230,000	10,099,000	20,329,000	(394,000)	85,000
Central Service Charges	8,152,000	4,076,000	4,076,000	8,152,000	4,076,000	4,076,000	8,152,000	0	0
Liquor Apportionment	250,959,000	124,551,000	127,067,000	251,618,000	124,551,000	127,067,000	251,618,000	0	659,000
Interest Earnings	9,961,000	4,316,000	5,645,000	9,961,000	4,316,000	5,645,000	9,961,000	0	0
Miscellaneous Revenues	15,500,000	7,500,000	8,000,000	15,500,000	7,500,000	8,000,000	15,500,000	0	0
One-time Transfers	32,200,000	32,200,000	0	32,200,000	32,200,000	0	32,200,000	0	0
<b>Gross General Fund Revenues</b>	<b>15,642,599,000</b>	<b>7,551,040,000</b>	<b>8,097,183,000</b>	<b>15,648,223,000</b>	<b>7,608,758,000</b>	<b>8,154,079,000</b>	<b>15,762,837,000</b>	<b>114,614,000</b>	<b>120,238,000</b>
Offsets and Transfers Total	(120,840,000)	(45,032,000)	(55,256,000)	(100,288,000)	(29,142,000)	(38,400,000)	(67,542,000)	32,746,000	53,298,000
<b>Net General Fund Revenues</b>	<b>15,521,759,000</b>	<b>7,506,008,000</b>	<b>8,041,927,000</b>	<b>15,547,935,000</b>	<b>7,579,616,000</b>	<b>8,115,679,000</b>	<b>15,695,295,000</b>	<b>147,360,000</b>	<b>173,536,000</b>
Plus Beginning Balance	543,497,392			472,924,392			462,009,392	(10,915,000)	(81,488,000)
Less Anticipated Administrative Actions*	(18,222,166)			(13,551,000)			(13,551,000)	0	4,671,166
Plus Legislatively Adopted Actions**	(136,886,136)			(136,886,136)			(136,886,136)	0	0
<b>Available Resources</b>	<b>15,910,148,090</b>			<b>15,870,422,256</b>			<b>16,006,867,256</b>	<b>136,445,000</b>	<b>96,719,166</b>
Legislatively Adopted Budget	15,608,670,298			15,608,670,298			15,789,670,298	181,000,000	181,000,000
0									
Plus Administrative Actions							0	NA	0
<b>Projected Expenditures</b>	<b>15,608,670,298</b>			<b>15,608,670,298</b>			<b>15,789,670,298</b>	<b>NA</b>	<b>181,000,000</b>
<b>Estimated Ending Balance</b>	<b>301,477,792</b>			<b>261,751,958</b>			<b>217,196,958</b>	<b>(44,555,000)</b>	<b>(84,280,834)</b>

Notes: Corporate income tax figure includes Corporate Multistate taxes.  
 Other taxes include General Fund portions of the Eastern Oregon Severance Tax, Western Oregon Severance Tax and Amusement Device Tax.  
 Cigarette and Other Tobacco Taxes are gross tax receipts. Distributions, net of administrative costs, are reported in the Table B.6.  
 Detailed entries may not add to totals due to rounding.  
 \* Administrative Actions equal expenses associated with cashflow management, exclusive of internal borrowing.

Table B.2 General Fund Revenue Forecast by Fiscal Year

<b>General Fund Revenue Forecast</b>												<b>December 2013</b>
(\$Millions)												
	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>
<b>Fiscal Years</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>
<b>Taxes</b>												
Personal Income	5,850.6	6,267.6	6,613.0	7,103.1	7,513.5	7,876.1	8,272.0	8,657.0	9,088.5	9,577.5	10,032.9	10,479.7
Offsets and Transfers	0.0	(12.0)	(24.1)	(33.4)	(36.9)	(38.7)	(40.5)	0.0	0.0	0.0	0.0	0.0
Corporate Excise & Income	431.0	452.9	482.0	548.5	539.6	529.4	523.2	520.1	527.1	546.0	576.4	590.8
Offsets and Transfers	0.0	0.0	(5.0)	(5.0)	(5.0)	(5.0)	(27.0)	(27.0)	(28.5)	(28.5)	(30.5)	(30.5)
Insurance	49.4	47.3	49.8	56.3	57.2	59.9	62.7	65.2	67.4	69.0	70.3	72.2
Estate	101.8	101.9	96.1	107.9	111.1	118.1	123.1	131.3	137.8	144.6	151.9	159.6
Cigarette	37.9	37.0	37.4	38.0	34.1	29.7	27.9	25.4	23.6	21.3	19.5	16.8
Other Tobacco Products	28.1	30.5	29.3	30.1	30.9	31.8	32.7	33.6	34.5	35.5	36.5	37.5
Other Taxes	1.5	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
<b>Other Revenues</b>												
Licenses and Fees	140.0	137.1	128.0	124.7	128.7	126.3	130.8	128.4	133.1	130.9	140.8	138.7
Charges for Services	6.0	5.6	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Liquor Apportionment	110.2	115.4	124.6	127.1	114.5	117.9	121.5	125.1	128.9	132.7	136.7	140.8
Interest Earnings	9.8	6.3	4.3	5.6	7.0	8.0	11.8	17.5	24.4	32.7	35.0	38.0
Others	175.6	22.8	39.7	8.0	8.2	8.4	8.4	8.4	8.4	8.4	8.4	8.4
<b>Gross General Fund</b>	<b>6,941.9</b>	<b>7,225.0</b>	<b>7,608.8</b>	<b>8,154.1</b>	<b>8,549.5</b>	<b>8,910.2</b>	<b>9,318.7</b>	<b>9,716.7</b>	<b>10,178.4</b>	<b>10,703.4</b>	<b>11,213.0</b>	<b>11,687.3</b>
<b>Net General Fund</b>	<b>6,941.9</b>	<b>7,213.1</b>	<b>7,579.6</b>	<b>8,115.7</b>	<b>8,507.6</b>	<b>8,866.5</b>	<b>9,251.2</b>	<b>9,689.7</b>	<b>10,149.9</b>	<b>10,674.9</b>	<b>11,182.5</b>	<b>11,656.8</b>
	<b>2011-13</b>	<b>Percent</b>	<b>2013-15</b>	<b>Percent</b>	<b>2015-17</b>	<b>Percent</b>	<b>2017-19</b>	<b>Percent</b>	<b>2019-21</b>	<b>Percent</b>	<b>2021-23</b>	<b>Percent</b>
<b>Biennial Totals</b>	<b>Biennium</b>	<b>Change</b>	<b>Biennium</b>	<b>Change</b>	<b>Biennium</b>	<b>Change</b>	<b>Biennium</b>	<b>Change</b>	<b>Biennium</b>	<b>Change</b>	<b>Biennium</b>	<b>Change</b>
<b>Taxes</b>												
Personal Income	12,118.2	15.8%	13,716.1	13.2%	15,389.6	12.2%	16,929.0	10.0%	18,666.0	10.3%	20,512.6	9.9%
Corporate Excise & Income	883.9	6.8%	1,030.5	16.6%	1,069.0	3.7%	1,043.3	-2.4%	1,073.1	2.9%	1,167.2	8.8%
Insurance	96.7	6.9%	106.1	9.7%	117.1	10.4%	127.9	9.2%	136.4	6.7%	142.5	4.4%
Estate Taxes	203.6	20.6%	204.0	0.2%	229.1	12.3%	254.4	11.0%	282.4	11.0%	311.4	10.3%
Cigarette	75.0	-2.4%	75.4	0.6%	63.8	-15.4%	53.3	-16.5%	44.9	-15.7%	36.3	-19.1%
Other Tobacco Products	58.6	23.8%	59.4	1.3%	62.7	5.7%	66.3	5.7%	70.1	5.7%	74.0	5.7%
Other Taxes	2.2	-13.3%	1.3	-41.7%	1.2	-2.0%	1.2	-0.4%	1.2	0.0%	1.2	0.0%
<b>Other Revenues</b>												
Licenses and Fees	277.1	61.9%	252.7	-8.8%	255.0	0.9%	259.2	1.7%	264.0	1.9%	279.5	5.9%
Charges for Services	11.6	41.9%	8.2	-29.7%	8.2	0.0%	8.2	0.0%	8.2	0.0%	8.2	0.0%
Liquor Apportionment	225.6	13.8%	251.6	11.6%	232.4	-7.6%	246.6	6.1%	261.6	6.1%	277.5	6.1%
Interest Earnings	16.1	245.3%	10.0	-38.3%	14.9	50.0%	29.3	95.9%	57.1	95.1%	73.0	27.8%
Others	198.4	-56.7%	47.7	-76.0%	16.6	-65.2%	16.8	1.2%	16.8	0.0%	16.8	0.0%
<b>Gross General Fund</b>	<b>14,167.0</b>	<b>13.1%</b>	<b>15,762.8</b>	<b>11.3%</b>	<b>17,459.7</b>	<b>10.8%</b>	<b>19,035.4</b>	<b>9.0%</b>	<b>20,881.9</b>	<b>9.7%</b>	<b>22,900.3</b>	<b>9.7%</b>
<b>Net General Fund</b>	<b>14,155.0</b>	<b>13.0%</b>	<b>15,695.3</b>	<b>10.9%</b>	<b>17,374.1</b>	<b>10.7%</b>	<b>18,940.9</b>	<b>9.0%</b>	<b>20,824.9</b>	<b>9.9%</b>	<b>22,839.3</b>	<b>9.7%</b>

Note: Totals may not sum due to rounding. Other taxes include Eastern and Western Oregon Severance Taxes and Amusement Device Tax. Other revenues include Commercial Fish Licenses & Fees and Pari-mutual Receipts.

Table B.3 Summary of 2013 Legislative Session Adjustments

	13-15	15-17	Biennia			Staff Measure Summary	Revenue Impact Statement
			17-19	19-21	21-23		
<b>Personal Income Tax Impacts (Millions)</b>							
1099 Penalties – HB 2464	\$0.8	\$1.1	\$1.2	\$1.3	\$1.4	<a href="#">HB 2464</a>	<a href="#">HB 2464</a>
Federal Reconnect – HB 2494	-\$0.7	\$0.4	\$0.00	\$0.00	\$0.00	<a href="#">HB 2492</a>	<a href="#">HB 2492</a>
DOR Enforcement – SB 5538	\$33.1	\$0.0	\$0.0	\$0.0	\$0.0		<a href="#">SB 5538</a>
<i>Tax Credits - HB 3367</i>						<a href="#">HB 3367</a>	<a href="#">HB 3367</a>
Earned Income	-\$42.2	-\$75.2	-\$75.8	-\$37.5	\$0.0		
Medical Deduction	\$3.0	\$5.0	\$6.0	\$8.0	\$10.0		
Married-Filing Separate	\$4.0	\$5.0	\$5.0	\$6.0	\$6.0		
Political Contributions	-\$6.3	-\$15.5	-\$13.7	-\$5.6	\$0.0		
Cultural Trust	-\$3.3	-\$6.6	-\$6.8	-\$3.4	\$0.0		
Pension Income	-\$0.9	-\$1.7	-\$1.7	-\$0.9	\$0.0		
Rural Medical Provider	-\$1.0	-\$3.6	-\$2.9	-\$2.3	-\$1.9		
Rural EMT	-\$0.2	-\$0.3	-\$0.3	-\$0.2	\$0.0		
Employer Provider Scholar.	\$0.0	-\$0.1	-\$0.1	\$0.0	\$0.0		
Farmworkers Housing	\$0.0	-\$0.1	-\$0.2	-\$0.3	-\$0.2		
Mobile Home Closure	\$0.0	-\$0.1	-\$0.1	\$0.0	\$0.0		
Mobile Home Gains	\$0.0	-\$0.1	-\$0.1	\$0.0	\$0.0		
Film & Video Credit	-\$7.6	-\$7.6	-\$3.8	\$0.0	\$0.0		
<b>Personal Income Tax Total</b>	<b>-\$21.3</b>	<b>-\$100.2</b>	<b>-\$93.3</b>	<b>-\$34.9</b>	<b>\$15.3</b>		
<b>Corporate Income Tax Impacts (Millions)</b>							
Out of State Banks – HB 3477	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	<a href="#">HB 3477</a>	<a href="#">HB 3477</a>
1099 Penalties – HB 2464	\$0.2	\$0.1	\$0.1	\$0.1	\$0.1	<a href="#">HB 2464</a>	<a href="#">HB 2464</a>
Tax Havens – HB 2460	\$18.0	\$42.0	\$49.0	\$51.0	\$55.0	<a href="#">HB 2460</a>	<a href="#">HB 2460</a>
Fire Insurance – HB 2084	-\$1.4	-\$2.0	-\$2.2	-\$2.3	-\$2.4	<a href="#">HB 2084</a>	<a href="#">HB 2084</a>
<i>Tax Credits - HB 3367</i>						<a href="#">HB 3367</a>	<a href="#">HB 3367</a>
Farmworkers Housing.	-\$0.2	-\$0.5	-\$0.7	-\$0.9	-\$0.8		
Sunset Workers Comp	\$1.5	\$3.0	\$3.0	\$3.0	\$3.0		
<b>Corporate Income Tax Total</b>	<b>\$19.1</b>	<b>\$43.6</b>	<b>\$50.2</b>	<b>\$51.9</b>	<b>\$55.9</b>		
<b>Other Tax/Revenue Impacts (Millions)</b>							
Program Change Bill – HB 2322	\$47.5	\$0.0	\$0.0	\$0.0	\$0.0	<a href="#">HB 2322</a>	<a href="#">HB 2322</a>
Criminal Fines – HB 2562	-\$9.2	-\$9.4	-\$9.6	-\$9.8	-\$10.0	<a href="#">HB 2562</a>	<a href="#">HB 2562</a>
<b>Other Tax Total</b>	<b>\$38.3</b>	<b>-\$9.4</b>	<b>-\$9.6</b>	<b>-\$9.8</b>	<b>-\$10.0</b>		

Table B.4 Oregon Personal Income Tax Revenue Forecast

TABLE B.4	OREGON PERSONAL INCOME TAX REVENUE FORECAST - QUARTERLY COLLECTIONS									
	Thousands of Dollars - Not Seasonally Adjusted									
										December 2013
	2005:3	2005:4	2006:1	2006:2	FY 2006	2006:3	2006:4	2007:1	2007:2	FY 2007
WITHHOLDING	1,064,107	1,087,942	1,177,488	1,075,476	4,405,013	1,118,878	1,172,656	1,182,336	1,088,108	4,561,977
%CHYA	8.4%	6.4%	10.5%	6.0%	7.8%	5.1%	7.8%	0.4%	1.2%	3.6%
EST. PAYMENTS	194,848	186,648	224,403	270,754	876,653	231,720	177,026	267,345	363,055	1,039,146
%CHYA	22.4%	36.4%	11.4%	0.3%	14.2%	18.9%	-5.2%	19.1%	34.1%	18.5%
FINAL PAYMENTS	51,797	68,000	88,998	787,622	996,416	55,408	89,432	100,476	779,577	1,024,893
%CHYA	16.8%	27.6%	13.8%	49.4%	41.7%	7.0%	31.5%	12.9%	-1.0%	2.9%
REFUNDS	62,638	94,755	345,524	358,699	861,617	89,254	126,707	444,768	369,456	1,030,186
%CHYA	-9.4%	17.8%	0.7%	-1.4%	0.6%	42.5%	33.7%	28.7%	3.0%	19.6%
OTHER	(149,733)	-	-	176,911	27,178	(176,911)	-	-	177,781	870
TOTAL	1,098,381	1,247,835	1,145,365	1,952,063	5,443,644	1,139,841	1,312,406	1,105,388	2,039,066	5,596,701
%CHYA	10.9%	10.2%	14.3%	22.2%	15.3%	3.8%	5.2%	-3.5%	4.5%	2.8%
	2007:3	2007:4	2008:1	2008:2	FY 2008	2008:3	2008:4	2009:1	2009:2	FY 2009
WITHHOLDING	1,115,359	1,200,822	1,196,532	1,111,034	4,623,747	1,162,107	1,182,763	1,128,994	1,089,305	4,563,169
%CHYA	-0.3%	2.4%	1.2%	2.1%	1.4%	4.2%	-1.5%	-5.6%	-2.0%	-1.3%
EST. PAYMENTS	250,749	217,163	281,441	399,475	1,148,828	264,440	174,826	217,305	263,135	919,707
%CHYA	8.2%	22.7%	5.3%	10.0%	10.6%	5.5%	-19.5%	-22.8%	-34.1%	-19.9%
FINAL PAYMENTS	57,503	129,817	104,841	971,325	1,263,486	70,306	99,430	104,105	529,995	803,836
%CHYA	3.8%	45.2%	4.3%	24.6%	23.3%	22.3%	-23.4%	-0.7%	-45.4%	-36.4%
REFUNDS	71,372	155,912	389,876	365,908	983,068	92,063	180,329	447,706	404,229	1,124,327
%CHYA	-20.0%	23.0%	-12.3%	-1.0%	-4.6%	29.0%	15.7%	14.8%	10.5%	14.4%
OTHER	(177,781)	(1,084,201)	-	182,322	(1,079,660)	(182,322)	-	-	138,521	(43,801)
TOTAL	1,174,457	307,689	1,192,938	2,298,247	4,973,332	1,222,469	1,276,690	1,002,698	1,616,726	5,118,583
%CHYA	3.0%	-76.6%	7.9%	12.7%	-11.1%	4.1%	314.9%	-15.9%	-29.7%	2.9%
	2009:3	2009:4	2010:1	2010:2	FY 2010	2010:3	2010:4	2011:1	2011:2	FY 2011
WITHHOLDING	1,092,795	1,151,673	1,157,857	1,116,552	4,518,878	1,146,189	1,196,214	1,262,781	1,218,439	4,823,622
%CHYA	-6.0%	-2.6%	2.6%	2.5%	-1.0%	4.9%	3.9%	9.1%	9.1%	6.7%
EST. PAYMENTS	176,110	161,759	186,894	265,703	790,467	179,692	148,589	207,036	284,662	819,978
%CHYA	-33.4%	-7.5%	-14.0%	1.0%	-14.1%	2.0%	-8.1%	10.8%	7.1%	3.7%
FINAL PAYMENTS	63,363	77,013	105,745	515,262	761,383	62,259	81,728	114,877	607,592	866,456
%CHYA	-9.9%	-22.5%	1.6%	-2.8%	-5.3%	-1.7%	6.1%	8.6%	17.9%	13.8%
REFUNDS	96,477	188,704	459,550	380,459	1,125,190	92,291	151,515	432,478	340,652	1,016,937
%CHYA	4.8%	4.6%	2.6%	-5.9%	0.1%	-4.3%	-19.7%	-5.9%	-10.5%	-9.6%
OTHER	(138,521)	-	-	136,193	(2,328)	(136,193)	-	-	165,933	29,740
TOTAL	1,097,271	1,201,740	990,947	1,653,251	4,943,210	1,159,655	1,275,015	1,152,216	1,935,973	5,522,860
%CHYA	-10.2%	-5.9%	-1.2%	2.3%	-3.4%	5.7%	6.1%	16.3%	17.1%	11.7%
	2011:3	2011:4	2012:1	2012:2	FY 2012	2012:3	2012:4	2013:1	2013:2	FY 2013
WITHHOLDING	1,235,508	1,287,030	1,348,171	1,269,562	5,140,271	1,262,589	1,364,547	1,354,116	1,321,413	5,302,666
%CHYA	7.8%	7.6%	6.8%	4.2%	6.6%	2.2%	6.0%	0.4%	4.1%	3.2%
EST. PAYMENTS	194,674	185,239	199,238	299,646	878,797	205,533	159,104	278,341	321,896	964,874
%CHYA	8.3%	24.7%	-3.8%	5.3%	7.2%	5.6%	-14.1%	39.7%	7.4%	9.8%
FINAL PAYMENTS <sup>1</sup>	85,889	87,233	117,628	627,762	918,512	72,224	91,338	123,456	785,542	1,072,560
%CHYA	38.0%	6.7%	2.4%	3.3%	6.0%	-15.9%	4.7%	5.0%	25.1%	16.8%
REFUNDS	64,687	156,272	530,800	360,618	1,112,377	52,211	109,503	536,506	383,176	1,081,397
%CHYA	-29.9%	3.1%	22.7%	5.9%	9.4%	-19.3%	-29.9%	1.1%	6.3%	-2.8%
OTHER	(165,933)	-	-	193,614	27,681	(193,614)	-	-	201,367	7,753
TOTAL	1,285,451	1,403,230	1,134,237	2,029,966	5,852,884	1,294,521	1,505,486	1,219,407	2,247,042	6,266,457
%CHYA	10.8%	10.1%	-1.6%	4.9%	6.0%	0.7%	7.3%	7.5%	10.7%	7.1%

Note: "Other" includes kicker and federal pension refunds, as well as July withholding accrued to June. Tax law impacts are reflected in the collections numbers to produce more meaningful projections.

TABLE B.4

## OREGON PERSONAL INCOME TAX REVENUE FORECAST - QUARTERLY COLLECTIONS

	Thousands of Dollars - Not Seasonally Adjusted									December 2013
	2013:3	2013:4	2014:1	2014:2	FY 2014	2014:3	2014:4	2015:1	2015:2	FY 2015
WITHHOLDING	1,333,946	1,417,594	1,418,602	1,383,463	5,553,604	1,394,845	1,519,028	1,500,648	1,462,178	5,876,699
%CHYA	5.7%	3.9%	4.8%	4.7%	4.7%	4.6%	7.2%	5.8%	5.7%	5.8%
EST. PAYMENTS	221,695	172,920	322,175	371,229	1,088,019	255,671	228,253	370,196	395,236	1,249,355
%CHYA	7.9%	8.7%	15.7%	15.3%	12.8%	15.3%	32.0%	14.9%	6.5%	14.8%
FINAL PAYMENTS <sup>1</sup>	83,096	116,087	130,123	788,755	1,118,061	78,354	102,631	120,404	870,563	1,171,952
%CHYA	15.1%	27.1%	5.4%	0.4%	4.2%	-5.7%	-11.6%	-7.5%	10.4%	4.8%
REFUNDS	67,098	151,951	532,259	403,958	1,155,265	87,685	181,776	526,638	411,519	1,207,618
%CHYA	28.5%	38.8%	-0.8%	5.4%	6.8%	30.7%	19.6%	-1.1%	1.9%	4.5%
OTHER	(201,367)	-	-	209,928	8,561	(209,928)	-	-	222,657	12,729
TOTAL	1,370,272	1,554,650	1,338,641	2,349,417	6,612,980	1,431,256	1,668,136	1,464,610	2,539,115	7,103,117
%CHYA	5.9%	3.3%	9.8%	4.6%	5.5%	4.5%	7.3%	9.4%	8.1%	7.4%
	2015:3	2015:4	2016:1	2016:2	FY 2016	2016:3	2016:4	2017:1	2017:2	FY 2017
WITHHOLDING	1,474,086	1,611,108	1,584,600	1,542,704	6,212,499	1,555,321	1,699,891	1,657,349	1,610,883	6,523,444
%CHYA	5.7%	6.1%	5.6%	5.5%	5.7%	5.5%	5.5%	4.6%	4.4%	5.0%
EST. PAYMENTS	272,204	243,014	394,230	423,083	1,332,531	291,383	260,136	421,523	441,161	1,414,203
%CHYA	6.5%	6.5%	6.5%	7.0%	6.7%	7.0%	7.0%	6.9%	4.3%	6.1%
FINAL PAYMENTS <sup>1</sup>	76,335	104,424	120,889	954,601	1,256,249	83,101	113,425	128,552	1,009,505	1,334,583
%CHYA	-2.6%	1.7%	0.4%	9.7%	7.2%	8.9%	8.6%	6.3%	5.8%	6.2%
REFUNDS	95,730	187,106	545,513	471,698	1,300,047	105,325	207,848	580,409	512,977	1,406,558
%CHYA	9.2%	2.9%	3.6%	14.6%	7.7%	10.0%	11.1%	6.4%	8.8%	8.2%
OTHER	-222,657	0	0	234,926	12,269	-234,926	0	0	245,322	10,396
TOTAL	1,504,238	1,771,440	1,554,206	2,683,616	7,513,500	1,589,554	1,865,604	1,627,015	2,793,894	7,876,067
%CHYA	5.1%	6.2%	6.1%	5.7%	5.8%	5.7%	5.3%	4.7%	4.1%	4.8%
	2017:3	2017:4	2018:1	2018:2	FY 2018	2018:3	2018:4	2019:1	2019:2	FY 2019
WITHHOLDING	1,624,166	1,775,129	1,745,254	1,698,993	6,843,542	1,712,892	1,872,109	1,855,789	1,809,357	7,250,147
%CHYA	4.4%	4.4%	5.3%	5.5%	4.9%	5.5%	5.5%	6.3%	6.5%	5.9%
EST. PAYMENTS	303,834	271,251	439,431	457,506	1,472,022	315,091	281,301	455,709	474,386	1,526,487
%CHYA	4.3%	4.3%	4.2%	3.7%	4.1%	3.7%	3.7%	3.7%	3.7%	3.7%
FINAL PAYMENTS <sup>1</sup>	88,269	120,331	135,445	1,069,000	1,413,045	92,824	126,070	138,989	1,081,132	1,439,016
%CHYA	6.2%	6.1%	5.4%	5.9%	5.9%	5.2%	4.8%	2.6%	1.1%	1.8%
REFUNDS	111,824	219,312	604,525	534,361	1,470,022	117,112	229,142	652,327	576,856	1,575,436
%CHYA	6.2%	5.5%	4.2%	4.2%	4.5%	4.7%	4.5%	7.9%	8.0%	7.2%
OTHER	(245,322)	-	-	258,727	13,405	(258,727)	-	-	275,519	16,792
TOTAL	1,659,123	1,947,400	1,715,605	2,949,865	8,271,992	1,744,969	2,050,338	1,798,160	3,063,539	8,657,006
%CHYA	4.4%	4.4%	5.4%	5.6%	5.0%	5.2%	5.3%	4.8%	3.9%	4.7%
	2019:3	2019:4	2020:1	2020:2	FY 2020	2020:3	2020:4	2021:1	2021:2	FY 2021
WITHHOLDING	1,824,045	1,993,599	1,956,850	1,904,394	7,678,888	1,919,998	2,098,463	2,058,300	2,002,858	8,079,619
%CHYA	6.5%	6.5%	5.4%	5.3%	5.9%	5.3%	5.3%	5.2%	5.2%	5.2%
EST. PAYMENTS	329,717	294,680	475,601	496,788	1,596,786	343,079	306,609	495,191	523,332	1,668,211
%CHYA	4.6%	4.8%	4.4%	4.7%	4.6%	4.1%	4.0%	4.1%	5.3%	4.5%
FINAL PAYMENTS <sup>1</sup>	99,035	132,619	149,195	1,084,657	1,465,507	99,092	132,051	154,111	1,138,808	1,524,062
%CHYA	6.7%	5.2%	7.3%	0.3%	1.8%	0.1%	-0.4%	3.3%	5.0%	4.0%
REFUNDS	125,967	241,862	689,767	609,594	1,667,191	134,073	254,724	701,124	619,467	1,709,388
%CHYA	7.6%	5.6%	5.7%	5.7%	5.8%	6.4%	5.3%	1.6%	1.6%	2.5%
OTHER	-275,519	0	0	290,009	14,489	-290,009	0	0	305,004	14,996
TOTAL	1,851,310	2,179,037	1,891,880	3,166,252	9,088,479	1,938,086	2,282,400	2,006,478	3,350,536	9,577,500
%CHYA	6.1%	6.3%	5.2%	3.4%	5.0%	4.7%	4.7%	6.1%	5.8%	5.4%
	2021:3	2021:4	2022:1	2022:2	FY 2022	2022:3	2022:4	2023:1	2023:2	FY 2023
WITHHOLDING	2,019,280	2,206,973	2,159,709	2,100,619	8,486,581	2,117,881	2,314,737	2,262,363	2,199,955	8,894,936
%CHYA	5.2%	5.2%	4.9%	4.9%	5.0%	4.9%	4.9%	4.8%	4.7%	4.8%
EST. PAYMENTS	358,360	319,930	518,499	544,623	1,741,412	375,090	334,866	542,694	569,808	1,822,457
%CHYA	4.5%	4.3%	4.7%	4.1%	4.4%	4.7%	4.7%	4.7%	4.6%	4.7%
FINAL PAYMENTS <sup>1</sup>	102,952	137,985	154,368	1,190,612	1,585,917	103,167	140,017	157,253	1,245,111	1,645,548
%CHYA	3.9%	4.5%	0.2%	4.5%	4.1%	0.2%	1.5%	1.9%	4.6%	3.8%
REFUNDS	137,094	262,608	740,826	655,376	1,795,905	143,583	275,668	784,676	694,413	1,898,341
%CHYA	2.3%	3.1%	5.7%	5.8%	5.1%	4.7%	5.0%	5.9%	6.0%	5.7%
OTHER	-305,004	0	0	319,897	14,892	-319,897	0	0	335,027	15,130
TOTAL	2,038,494	2,402,280	2,091,750	3,500,375	10,032,898	2,132,658	2,513,952	2,177,634	3,655,487	10,479,730
%CHYA	5.2%	5.3%	4.2%	4.5%	4.8%	4.6%	4.6%	4.1%	4.4%	4.5%

Note: "Other" includes kicker and federal pension refunds, as well as July withholding accrued to June. Tax law impacts are reflected in the collections numbers to produce more meaningful projections.

Table B.5 Oregon Corporate Income Tax Revenue Forecast

TABLE B.5	OREGON CORPORATE INCOME TAX REVENUE FORECAST - QUARTERLY COLLECTIONS									
	Thousands of Dollars - Not Seasonally Adjusted									
	FY									December 2013
	2005:3	2005:4	2006:1	2006:2	2006	2006:3	2006:4	2007:1	2007:2	FY 2007
ADVANCE PAYMENTS	119,391	183,280	59,091	163,812	525,573	129,737	236,441	59,754	162,465	588,396
%CHYA	29.6%	27.8%	46.0%	12.1%	24.5%	8.7%	29.0%	1.1%	-0.8%	12.0%
FINAL PAYMENTS	14,985	17,619	24,327	39,526	96,457	19,718	17,154	25,440	65,628	127,941
%CHYA	-9.6%	7.0%	20.9%	-14.0%	-2.7%	31.6%	-2.6%	4.6%	66.0%	32.6%
REFUNDS	16,350	108,723	19,140	39,592	183,805	22,481	199,419	38,715	49,865	310,480
%CHYA	-12.2%	-16.6%	25.9%	17.4%	-7.1%	37.5%	83.4%	102.3%	25.9%	68.9%
TOTAL	118,026	92,177	64,278	163,745	438,225	126,975	54,176	46,478	178,228	405,857
%CHYA	31.1%	212.4%	41.6%	3.4%	35.6%	7.6%	-41.2%	-27.7%	8.8%	-7.4%
	2007:3	2007:4	2008:1	2008:2	FY 2008	2008:3	2008:4	2009:1	2009:2	FY 2009
ADVANCE PAYMENTS	133,408	205,375	64,256	155,284	558,323	100,589	145,285	63,802	97,368	407,044
%CHYA	2.8%	-13.1%	7.5%	-4.4%	-5.1%	-24.6%	-29.3%	-0.7%	-37.3%	-27.1%
FINAL PAYMENTS	23,631	45,064	35,076	52,143	155,912	23,501	26,721	22,314	21,822	94,357
%CHYA	19.8%	162.7%	37.9%	-20.5%	21.9%	-0.6%	-40.7%	-36.4%	-58.1%	-39.5%
REFUNDS	39,623	158,106	36,380	39,394	273,503	28,134	124,826	67,471	37,218	257,649
%CHYA	76.3%	-20.7%	-6.0%	-21.0%	-11.9%	-29.0%	-21.0%	85.5%	-5.5%	-5.8%
TOTAL	117,416	92,333	62,951	168,032	440,732	95,956	47,181	18,645	81,971	243,753
%CHYA	-7.5%	70.4%	35.4%	-5.7%	8.6%	-18.3%	-48.9%	-70.4%	-51.2%	-44.7%
	2009:3	2009:4	2010:1	2010:2	FY 2010	2010:3	2010:4	2011:1	2011:2	FY 2011
ADVANCE PAYMENTS	79,579	163,877	66,451	147,313	457,220	115,286	175,561	76,405	165,354	532,606
%CHYA	-20.9%	12.8%	4.2%	51.3%	12.3%	44.9%	7.1%	15.0%	12.2%	16.5%
FINAL PAYMENTS	20,404	24,009	38,412	45,714	128,539	21,781	21,206	35,770	40,805	119,562
%CHYA	-13.2%	-10.2%	72.1%	109.5%	36.2%	6.8%	-11.7%	-6.9%	-10.7%	-7.0%
REFUNDS	29,072	137,244	40,080	25,774	232,170	23,130	89,877	39,065	31,489	183,562
%CHYA	3.3%	9.9%	-40.6%	-30.7%	-9.9%	-20.4%	-34.5%	-2.5%	22.2%	-20.9%
TOTAL	70,910	50,642	64,784	167,254	353,589	113,936	106,890	73,111	174,670	468,606
%CHYA	-26.1%	7.3%	247.5%	104.0%	45.1%	60.7%	111.1%	12.9%	4.4%	32.5%
	2011:3	2011:4	2012:1	2012:2	FY 2012	2012:3	2012:4	2013:1	2013:2	FY 2013
ADVANCE PAYMENTS <sup>1</sup>	120,766	154,290	86,873	156,652	518,581	130,348	110,207	80,942	282,526	604,023
%CHYA	4.8%	-12.1%	13.7%	-5.3%	-2.6%	7.9%	-28.6%	-6.8%	80.4%	16.5%
FINAL PAYMENTS <sup>1</sup>	19,117	26,841	32,512	33,322	111,792	16,387	21,377	36,660	34,009	108,433
%CHYA	-12.2%	26.6%	-9.1%	-18.3%	-6.5%	-14.3%	-20.4%	12.8%	2.1%	-3.0%
REFUNDS	34,927	91,252	55,051	18,153	199,384	33,212	17,832	25,595	182,929	259,568
%CHYA	51.0%	1.5%	40.9%	-42.4%	8.6%	-4.9%	-80.5%	-53.5%	907.7%	30.2%
TOTAL <sup>1</sup>	104,955	89,878	64,335	171,820	430,989	113,524	113,751	92,007	133,606	452,888
%CHYA	-7.9%	-15.9%	-12.0%	-1.6%	-8.0%	8.2%	26.6%	43.0%	-22.2%	5.1%



TABLE B.5

## OREGON CORPORATE INCOME TAX REVENUE FORECAST - QUARTERLY COLLECTIONS

	Thousands of Dollars - Not Seasonally Adjusted									December 2013
	FY									FY
	2013:3	2013:4	2014:1	2014:2	2014	2014:3	2014:4	2015:1	2015:2	2015
ADVANCE PAYMENTS <sup>1</sup>	126,041	113,782	94,979	190,558	525,360	172,200	164,562	101,247	207,469	645,478
%CHYA	-3.3%	3.2%	17.3%	-32.6%	-13.0%	36.6%	44.6%	6.6%	8.9%	22.9%
FINAL PAYMENTS <sup>1</sup>	23,492	26,354	40,524	43,717	134,088	23,585	26,401	38,206	43,335	131,527
%CHYA	43.4%	23.3%	10.5%	28.5%	23.7%	0.4%	0.2%	-5.7%	-0.9%	-1.9%
REFUNDS	39,361	43,008	47,046	48,065	177,480	60,292	50,949	59,354	57,890	228,485
%CHYA	18.5%	141.2%	83.8%	-73.7%	-31.6%	53.2%	18.5%	26.2%	20.4%	28.7%
TOTAL <sup>1</sup>	110,172	97,128	88,457	186,210	481,968	135,494	140,014	80,099	192,914	548,520
%CHYA	-3.0%	-14.6%	-3.9%	39.4%	6.4%	23.0%	44.2%	-9.4%	3.6%	13.8%
					FY					FY
	2015:3	2015:4	2016:1	2016:2	2016	2016:3	2016:4	2017:1	2017:2	2017
ADVANCE PAYMENTS <sup>1</sup>	177,814	167,656	104,878	212,806	663,154	178,177	172,746	108,622	215,524	675,068
%CHYA	3.3%	1.9%	3.6%	2.6%	2.7%	0.2%	3.0%	3.6%	1.3%	1.8%
FINAL PAYMENTS <sup>1</sup>	22,080	26,836	40,126	43,087	132,130	21,240	25,690	38,722	42,348	128,000
%CHYA	-6.4%	1.6%	5.0%	-0.6%	0.5%	-3.8%	-4.3%	-3.5%	-1.7%	-3.1%
REFUNDS	64,713	59,612	68,008	63,339	255,672	71,728	64,485	70,508	66,961	273,682
%CHYA	7.3%	17.0%	14.6%	9.4%	11.9%	10.8%	8.2%	3.7%	5.7%	7.0%
TOTAL <sup>1</sup>	135,181	134,880	76,996	192,554	539,612	127,690	133,951	76,835	190,910	529,386
%CHYA	-0.2%	-3.7%	-3.9%	-0.2%	-1.6%	-5.5%	-0.7%	-0.2%	-0.9%	-1.9%
					FY					FY
	2017:3	2017:4	2018:1	2018:2	2018	2018:3	2018:4	2019:1	2019:2	2019
ADVANCE PAYMENTS <sup>1</sup>	180,003	173,268	110,368	220,785	684,423	181,868	175,830	112,514	221,772	691,984
%CHYA	1.0%	0.3%	1.6%	2.4%	1.4%	1.0%	1.5%	1.9%	0.4%	1.1%
FINAL PAYMENTS <sup>1</sup>	21,585	25,589	38,236	43,016	128,426	21,415	25,365	38,333	42,036	127,149
%CHYA	1.6%	-0.4%	-1.3%	1.6%	0.3%	-0.8%	-0.9%	0.3%	-2.3%	-1.0%
REFUNDS	77,450	67,399	73,310	71,492	289,651	80,277	70,931	75,853	71,998	299,059
%CHYA	8.0%	4.5%	4.0%	6.8%	5.8%	3.7%	5.2%	3.5%	0.7%	3.2%
TOTAL <sup>1</sup>	124,137	131,458	75,294	192,309	523,198	123,006	130,265	74,994	191,810	520,074
%CHYA	-2.8%	-1.9%	-2.0%	0.7%	-1.2%	-0.9%	-0.9%	-0.4%	-0.3%	-0.6%
					FY					FY
	2019:3	2019:4	2020:1	2020:2	2020	2020:3	2020:4	2021:1	2021:2	2021
ADVANCE PAYMENTS <sup>1</sup>	185,255	179,987	113,651	224,755	703,648	188,466	185,706	117,985	227,449	719,606
%CHYA	1.9%	2.4%	1.0%	1.3%	1.7%	1.7%	3.2%	3.8%	1.2%	2.3%
FINAL PAYMENTS <sup>1</sup>	21,485	25,580	38,510	43,382	128,956	22,239	26,462	39,511	44,079	132,291
%CHYA	0.3%	0.8%	0.5%	3.2%	1.4%	3.5%	3.4%	2.6%	1.6%	2.6%
REFUNDS	81,932	72,053	77,045	74,467	305,497	83,158	72,454	76,358	73,893	305,863
%CHYA	2.1%	1.6%	1.6%	3.4%	2.2%	1.5%	0.6%	-0.9%	-0.8%	0.1%
TOTAL <sup>1</sup>	124,808	133,513	75,116	193,670	527,107	127,547	139,714	81,138	197,635	546,034
%CHYA	1.5%	2.5%	0.2%	1.0%	1.4%	2.2%	4.6%	8.0%	2.0%	3.6%
					FY					FY
	2021:3	2021:4	2022:1	2022:2	2022	2022:3	2022:4	2023:1	2023:2	2023
ADVANCE PAYMENTS <sup>1</sup>	193,060	191,471	121,496	234,716	740,744	195,640	193,294	123,811	234,837	747,582
%CHYA	2.4%	3.1%	3.0%	3.2%	2.9%	1.3%	1.0%	1.9%	0.1%	0.9%
FINAL PAYMENTS <sup>1</sup>	23,951	27,631	40,873	47,025	139,479	25,940	29,603	42,723	47,197	145,463
%CHYA	7.7%	4.4%	3.4%	6.7%	5.4%	8.3%	7.1%	4.5%	0.4%	4.3%
REFUNDS	83,417	70,288	75,125	75,025	303,856	83,184	71,596	74,879	72,572	302,231
%CHYA	0.3%	-3.0%	-1.6%	1.5%	-0.7%	-0.3%	1.9%	-0.3%	-3.3%	-0.5%
TOTAL <sup>1</sup>	133,593	148,814	87,245	206,715	576,367	138,396	151,301	91,654	209,463	590,815
%CHYA	4.7%	6.5%	7.5%	4.6%	5.6%	3.6%	1.7%	5.1%	1.3%	2.5%

<sup>1</sup> Includes adjustments for changes in tax law.

Table B.6 Cigarette and Tobacco Tax Distribution

TABLE B.6 Cigarette & Tobacco Tax Distribution (Millions of \$)											December 2013	
	Cigarette Tax Distribution*							Other Tobacco Tax Distribution				
	General Fund	Health Plan	Tobacco Use Reduction	Mental Health	State Total	Cities, Counties & Public Transit	Total	General Fund	Health Plan	Tobacco Use Reduction	State Total	
<b>Distribution Forecast*</b>												
2011-12	37.938	147.855	5.898	-	191.691	11.795	203.487	28.087	21.670	2.410	52.167	
2012-13	37.018	144.267	5.755	-	187.039	11.509	198.548	30.522	23.549	2.619	56.690	
2011-13 Biennium	74.956	292.123	11.652	-	378.731	23.304	402.035	58.609	45.219	5.029	108.858	
2013-14	37.365	136.856	5.459	7.498	187.179	10.920	198.099	29.273	22.586	2.512	54.371	
2014-15	38.027	130.416	5.202	15.211	188.855	10.409	199.264	30.093	23.218	2.582	55.893	
2013-15 Biennium	75.392	267.272	10.661	22.709	376.034	21.329	397.363	59.366	45.804	5.094	110.264	
2015-16	34.075	123.716	4.935	17.093	179.819	9.872	189.691	30.936	23.868	2.655	57.458	
2016-17	29.711	115.794	4.619	18.907	169.031	9.238	178.269	31.802	24.537	2.729	59.067	
2015-17 Biennium	63.787	239.510	9.554	36.000	348.851	19.109	367.960	62.737	48.405	5.383	116.526	
2017-18	27.882	108.662	4.334	18.317	159.195	8.669	167.863	32.692	25.224	2.805	60.721	
2018-19	23.572	99.028	3.950	17.325	143.875	7.900	151.776	33.608	25.930	2.884	62.421	
2017-19 Biennium	51.454	207.690	8.284	35.642	303.070	16.569	319.639	66.300	51.153	5.689	123.142	
2019-20	23.572	91.867	3.664	16.072	135.176	7.329	142.505	34.549	26.656	2.965	64.169	
2020-21	21.345	83.188	3.318	14.553	122.404	6.636	129.041	35.516	27.402	3.048	65.966	
2019-21 Biennium	44.917	175.055	6.983	30.625	257.580	13.965	271.546	70.065	54.058	6.012	130.135	
2021-22	19.482	75.927	3.029	13.283	111.721	6.057	117.778	36.510	28.169	3.133	67.813	
2022-23	16.838	65.623	2.618	11.481	96.559	5.235	101.795	37.533	28.958	3.221	69.712	
2021-23 Biennium	36.320	141.550	5.646	24.764	208.280	11.292	219.573	74.043	57.128	6.354	137.524	

\* Prior to January 1, 2014 the cigarette tax per pack totaled \$1.18 with the following distribution. \$0.8574 to the Health Plan, \$0.22 to the state general fund, \$0.0342 to Tobacco Use Reduction and \$0.0684 to Cities, Counties and Public Transit. Following the passage of HB 3601 during the 2013 Special Session, the following changes were made to cigarette taxes. Beginning January 1, 2014 taxes per pack were raised \$0.13 to a total of \$1.31 per pack. Beginning January 1, 2016 taxes will increase an additional \$0.01 for a total of \$1.32 per pack with a further \$0.01 increase on January 1, 2018 for a total of \$1.33 per pack. The distribution of the \$0.13 increase beginning in 2014 is split \$0.10 to Mental Health, \$0.013 to the state general fund, \$0.002 to Tobacco Use Reduction and \$0.016 to the Health Plan. Beginning January 1, 2016 the full tax increase of \$0.14 per pack relative to pre-2014 tax rates, is dedicated to Mental Health. Similarly the full \$0.15 post January 1, 2018 is likewise dedicated to Mental Health.

Table B.7 Revenue Distribution to Local Governments

<b>TABLE B.7</b>									<b>December 2013</b>
<b>Liquor Apportionment and Revenue Distribution to Local Governments (Millions of \$)</b>									
	<b>Liquor Apportionment Distribution</b>				<b>City Revenue</b>			<b>Cigarette Tax Distribution<sup>2</sup></b>	
	<b>Total Liquor Revenue Available</b>	<b>General Fund (56%)</b>	<b>Mental Health<sup>1</sup></b>	<b>Oregon Wine Board</b>	<b>Revenue Sharing</b>	<b>Regular</b>	<b>Total</b>		<b>Counties</b>
<b>2011-12</b>	194.104	110.200	8.300	0.283	23.966	34.237	58.203	17.118	11.795
<b>2012-13</b>	202.612	115.364	8.051	0.282	25.109	35.870	60.980	17.935	11.509
<b>2011-13 Biennium</b>	396.716	225.564	16.351	0.565	49.075	70.107	119.183	35.054	23.304
<b>2013-14</b>	218.937	124.551	8.822	0.316	27.124	38.749	65.873	19.374	10.920
<b>2014-15</b>	223.359	127.067	9.001	0.322	27.672	39.532	67.204	19.766	10.409
<b>2013-15 Biennium</b>	442.296	251.619	17.823	0.638	54.796	78.280	133.076	39.140	21.329
<b>2015-16</b>	213.681	114.500	9.271	0.332	28.502	40.717	69.220	20.359	9.872
<b>2016-17</b>	220.092	117.935	9.549	0.342	29.357	41.939	71.296	20.970	9.238
<b>2015-17 Biennium</b>	433.773	232.435	18.819	0.674	57.860	82.656	140.516	41.328	19.109
<b>2017-18</b>	226.694	121.473	9.835	0.352	30.238	43.197	73.435	21.599	8.669
<b>2018-19</b>	233.495	125.118	10.130	0.363	31.145	44.493	75.638	22.247	7.900
<b>2017-19 Biennium</b>	460.190	246.591	19.966	0.715	61.383	87.690	149.073	43.845	16.569
<b>2019-20</b>	240.500	128.871	10.434	0.374	32.080	45.828	77.907	22.914	7.329
<b>2020-21</b>	247.715	132.737	10.747	0.385	33.042	47.203	80.245	23.601	6.636
<b>2019-21 Biennium</b>	488.215	261.608	21.181	0.759	65.121	93.030	158.152	46.515	13.965
<b>2021-22</b>	255.147	136.719	11.070	0.396	34.033	48.619	82.652	24.309	6.057
<b>2022-23</b>	262.801	140.821	11.402	0.408	35.054	50.077	85.131	25.039	5.235
<b>2021-23 Biennium</b>	517.948	277.540	22.471	0.805	69.087	98.696	167.783	49.348	11.292

<sup>1</sup> Mental Health Alcoholism and Drug Services Account, per ORS 471.810

<sup>2</sup> For details on cigarette revenues see TABLE B.6 on previous page

Table B.8 Track Record for the September 2013 Forecast

## Table B.8 Track Record for the September 2013 Forecast

(Quarter ending September 31, 2013)

<b>Personal Income Tax</b>				<b>Forecast Comparison</b>		<b>Year/Year Change</b>	
(Millions of dollars)	Actual Revenues	Latest Forecast	Percent Difference	Prior Year	Percent Change		
Withholding	\$1,333.9	\$1,347.5	-1.0%	\$1,262.6	5.7%		
Dollar difference		-\$13.6		\$71.4			
Estimated Payments	\$224.2	\$244.9	-8.4%	\$207.3	8.1%		
Dollar difference		\$74.5		\$16.9			
Final Payments	\$80.6	\$74.4	8.3%	\$70.4	14.4%		
Dollar difference		\$6.2		\$10.2			
Refunds	-\$67.1	-\$81.7	-17.9%	-\$52.2	28.5%		
Dollar difference		\$14.6		-\$14.9			
<b>Total Personal Income Tax</b>	<b>\$1,571.6</b>	<b>\$1,585.1</b>	<b>-0.8%</b>	<b>\$1,488.1</b>	<b>5.6%</b>		
Dollar difference		-\$13.5		\$83.5			
<b>Corporate Income Tax</b>				<b>Forecast Comparison</b>		<b>Year/Year Change</b>	
(Millions of dollars)	Actual Revenues	Latest Forecast	Percent Difference	Prior Year	Percent Change		
Advanced Payments	\$126.0	\$138.3	-8.8%	\$130.3	-3.3%		
Dollar difference		-\$12.2		-\$4.3			
Final Payments	\$23.5	\$22.9	2.5%	\$16.4	43.6%		
Dollar difference		\$0.6		\$7.1			
Refunds	-\$39.4	-\$47.8	-17.7%	-\$33.2	18.5%		
Dollar difference		\$8.5		-\$6.1			
<b>Total Corporate Income Tax</b>	<b>\$110.2</b>	<b>\$113.3</b>	<b>-2.8%</b>	<b>\$113.5</b>	<b>-2.9%</b>		
Dollar difference		-\$3.2		-\$3.3			
<b>Total Income Tax</b>				<b>Forecast Comparison</b>		<b>Year/Year Change</b>	
(Millions of dollars)	Actual Revenues	Latest Forecast	Percent Difference	Prior Year	Percent Change		
<b>Corporate and Personal Tax</b>	<b>\$1,681.8</b>	<b>\$1,698.4</b>	<b>-1.0%</b>	<b>\$1,601.6</b>	<b>5.0%</b>		
Dollar difference		-\$16.6		\$80.2			

Table B.9 Summary of Lottery Resources

TABLE B.9 Summary of Lottery Resources	Dec 2013 Forecast										
	2013-15			2015-17		2017-19		2019-21		2021-23	
(in millions of dollars)	Current Forecast	Change from Sep-13	Change from COS 2013	Current Forecast	Change from Sep-13	Current Forecast	Change from Sep-13	Current Forecast	Change from Sep-13	Current Forecast	Change from Sep-13
<b>LOTTERY EARNINGS</b>											
Traditional Lottery <sup>1</sup>	124.480	(4.984)	1.819	118.150	(3.154)	116.806	(3.066)	116.341	(3.054)	117.475	(3.042)
Video Lottery	1,000.289	1.418	(2.633)	1,088.272	0.542	1,193.597	0.698	1,313.050	0.768	1,446.433	0.844
Administrative Actions	(0.065)	(0.065)	(0.065)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Video Lottery Terminal Replacement	(71.200)	0.000	0.000	(59.200)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Total Available to Transfer</b>	<b>1,053.504</b>	<b>(3.831)</b>	<b>(1.079)</b>	<b>1,147.222</b>	<b>(2.612)</b>	<b>1,310.403</b>	<b>(2.368)</b>	<b>1,429.392</b>	<b>(2.286)</b>	<b>1,563.908</b>	<b>(2.198)</b>
<b>ECONOMIC DEVELOPMENT FUND</b>											
Beginning Balance	3.491	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Transfers from Lottery	1,053.504	(3.831)	(1.079)	1,147.222	(2.612)	1,310.403	(2.368)	1,429.392	(2.286)	1,563.908	(2.198)
Other Resources <sup>2</sup>	1.400	0.000	0.000	2.000	0.000	2.000	0.000	2.000	0.000	2.000	0.000
<b>Total Available Resources</b>	<b>1,058.395</b>	<b>(3.831)</b>	<b>(1.079)</b>	<b>1,149.222</b>	<b>(2.612)</b>	<b>1,312.403</b>	<b>(2.368)</b>	<b>1,431.392</b>	<b>(2.286)</b>	<b>1,565.908</b>	<b>(2.198)</b>
<b>ALLOCATION OF RESOURCES</b>											
County Economic Development	33.849	0.000	0.000	41.747	2.255	45.789	(0.015)	51.140	(0.016)	59.485	(0.018)
Education Stability Fund <sup>3</sup>	189.631	(0.690)	(0.194)	206.500	(0.470)	235.873	(0.426)	257.291	(0.412)	281.503	(0.396)
Parks and Natural Resources Fund <sup>4</sup>	158.026	(0.575)	(0.162)	172.083	(0.392)	196.561	(0.355)	214.409	(0.343)	234.586	(0.330)
OUS Sports Lottery Account <sup>5</sup>	8.000	0.000	0.000	11.472	(0.026)	13.104	(0.024)	14.294	(0.023)	15.639	(0.022)
Gambling Addiction <sup>5</sup>	10.546	0.000	0.000	11.472	(0.026)	13.104	(0.024)	14.294	(0.023)	15.639	(0.022)
County Fairs	3.669	0.000	0.000	3.648	0.000	3.648	0.000	3.648	0.000	3.648	0.000
Other Legislatively Adopted Allocations <sup>6</sup>	640.397	0.000	0.000	269.600	0.000	258.600	0.000	258.600	0.000	258.600	0.000
<b>Total Distributions</b>	<b>1,044.118</b>	<b>(1.264)</b>	<b>(0.356)</b>	<b>716.523</b>	<b>1.341</b>	<b>766.678</b>	<b>(0.843)</b>	<b>813.676</b>	<b>(0.816)</b>	<b>869.101</b>	<b>(0.79)</b>
<b>Ending Balance/Discretionary Resources</b>	<b>14.277</b>	<b>(2.567)</b>	<b>(0.723)</b>	<b>432.699</b>	<b>(3.953)</b>	<b>545.726</b>	<b>(1.525)</b>	<b>617.716</b>	<b>(1.470)</b>	<b>696.807</b>	<b>(1.411)</b>

Note: Some totals may not foot due to rounding.

1. Includes planned raffles throughout the forecast period.
2. Includes interest earnings on Economic Development Fund and reversions.
3. Eighteen percent of proceeds accrue to the Ed. Stability Fund, until the balance equals 5% of GF Revenues. Thereafter, 15% of proceeds accrue to the Oregon Capital Matching Account.
4. The Parks and Natural Resources Fund Constitutional amendment requires 15% of net proceeds be transferred to this fund.
5. One percent of net lottery proceeds are dedicated to Collegiate Athletics and Gambling Addiction programs, respectively. Certain limits are imposed by HB 5035 for 2011-13.
6. Includes Debt Service Allocations, Allocations to State School Fund and Other Agency Allocations

Table B.10 Budgetary Reserve Summary and Outlook

Table B.10: Budgetary Reserve Summary						December 2013
<b>Rainy Day Fund</b>						
(Millions)	<u>2011-13</u>	<u>2013-15</u>	<u>2015-17</u>	<u>2017-19</u>	<u>2019-21</u>	<u>2021-23</u>
Beginning Balance	\$10.4	\$61.9	\$210.6	\$397.2	\$668.8	\$983.4
Interest Earnings	\$0.6	\$1.9	\$18.7	\$45.5	\$70.0	\$98.5
Deposits <sup>1</sup>	\$50.8	\$146.9	\$167.9	\$226.2	\$244.5	\$267.1
<b>Ending Balance<sup>2</sup></b>	<b>\$61.9</b>	<b>\$210.6</b>	<b>\$397.2</b>	<b>\$668.8</b>	<b>\$983.4</b>	<b>\$1,349.0</b>
<b>Education Stability Fund<sup>3</sup></b>						
(Millions)	<u>2011-13</u>	<u>2013-15</u>	<u>2015-17</u>	<u>2017-19</u>	<u>2019-21</u>	<u>2021-23</u>
Beginning Balance	\$5.1	\$7.4	\$177.9	\$363.7	\$564.3	\$780.9
Interest Earnings <sup>4</sup>	\$0.6	\$1.0	\$15.1	\$38.9	\$56.6	\$35.5
Deposits <sup>5</sup>	\$184.8	\$170.5	\$185.8	\$200.6	\$216.5	\$108.5
Distributions	-\$182.9	-\$1.0	-\$15.1	-\$38.9	-\$56.6	-\$32.3
Oregon Education Fund	-\$0.5	-\$0.8	-\$11.4	-\$29.2	-\$42.5	-\$24.2
Oregon Student Access Comm.	-\$0.2	-\$0.3	-\$3.8	-\$9.7	-\$14.2	-\$8.1
Withdrawals	-\$182.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Ending Balance</b>	<b>\$7.6</b>	<b>\$177.9</b>	<b>\$363.7</b>	<b>\$564.3</b>	<b>\$780.9</b>	<b>\$892.5</b>
<b>Total Reserves</b>						
(Millions)	<u>2011-13</u>	<u>2013-15</u>	<u>2015-17</u>	<u>2017-19</u>	<u>2019-21</u>	<u>2019-21</u>
<b>Ending Balances</b>	<b>\$69.2</b>	<b>\$388.5</b>	<b>\$760.9</b>	<b>\$1,233.2</b>	<b>\$1,764.3</b>	<b>\$2,241.5</b>
<b>Percent of GF Revenues</b>	<b>0.5%</b>	<b>2.5%</b>	<b>4.4%</b>	<b>6.5%</b>	<b>8.5%</b>	<b>9.8%</b>

## Footnotes:

1. Includes transfer of ending General Fund balances, up to 1% of budgeted appropriations, as well as private donations. Assumes future appropriations equal to 98.75 percent of available resources. Starting with 2013-15, projected corporate income taxes above the rate of 6.6% for the biennium are deposited on or before June 30 of each odd-numbered year.
2. Available funds in a given biennium equal 2/3rds of the beginning balance under current law.
3. Excludes funds in the Oregon Growth and the Oregon Resource and Technology Development subaccounts.
4. Interest earnings are distributed to the Oregon Education Funds (75%) and the State Scholarship Fund (25%).
5. Contributions to the ESF are capped at 5% of the prior biennium's General Fund revenue total. Quarterly contributions are made until the balance exceeds the cap.

APPENDIX C: POPULATION FORECASTS BY AGE AND SEX

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Table C.1 Population Forecasts Component of Change 1980-2020

STATE OF OREGON  
POPULATION FORECASTS  
COMPONENTS OF CHANGE 1980 -2020

Year (July 1)	Population	Population Change		Births		Deaths		Natural Increase	Net Migration	
		Number	Percent	Number	Rate/1000	Number	Rate/1000		Number	Rate/1000
1980	2,641,200	---	---	---	---	---	---	---	---	---
1981	2,668,000	26,800	1.01	43,196	16.27	21,870	8.24	21,326	5,474	2.06
1982	2,664,900	-3,100	-0.12	42,261	15.85	21,548	8.08	20,713	-23,813	-8.93
1983	2,653,100	-11,800	-0.44	40,378	15.19	22,039	8.29	18,339	-30,139	-11.33
1984	2,666,600	13,500	0.51	39,611	14.89	22,702	8.54	16,909	-3,409	-1.28
1985	2,672,600	6,000	0.23	39,296	14.72	23,531	8.81	15,765	-9,765	-3.66
<b>1980-1985</b>		<b>31,400</b>		<b>204,742</b>		<b>111,690</b>		<b>93,052</b>	<b>-61,652</b>	
1986	2,683,500	10,900	0.41	39,332	14.69	23,403	8.74	15,929	-5,029	-1.88
1987	2,701,000	17,500	0.65	38,702	14.38	23,695	8.80	15,007	2,493	0.93
1988	2,741,300	40,300	1.49	39,120	14.38	24,752	9.10	14,368	25,932	9.53
1989	2,790,600	49,300	1.80	40,648	14.70	24,705	8.93	15,943	33,357	12.06
1990	2,860,400	69,800	2.50	42,008	14.87	24,763	8.76	17,245	52,555	18.60
<b>1985-1990</b>		<b>187,800</b>		<b>199,810</b>		<b>121,318</b>		<b>78,492</b>	<b>109,308</b>	
1991	2,928,500	68,100	2.38	42,682	14.75	24,944	8.62	17,738	50,362	17.40
1992	2,991,800	63,300	2.16	42,427	14.33	25,166	8.50	17,261	46,039	15.55
1993	3,060,400	68,600	2.29	41,442	13.69	26,543	8.77	14,899	53,701	17.75
1994	3,121,300	60,900	1.99	41,487	13.42	27,564	8.92	13,923	46,977	15.20
1995	3,184,400	63,100	2.02	42,426	13.46	27,552	8.74	14,874	48,226	15.30
<b>1990-1995</b>		<b>324,000</b>		<b>210,464</b>		<b>131,769</b>		<b>78,695</b>	<b>245,305</b>	
1996	3,247,100	62,700	1.97	43,196	13.43	28,768	8.95	14,428	48,272	15.01
1997	3,304,300	57,200	1.76	43,625	13.32	29,201	8.91	14,424	42,776	13.06
1998	3,352,400	48,100	1.46	44,696	13.43	28,705	8.62	15,991	32,109	9.65
1999	3,393,900	41,500	1.24	45,188	13.40	29,848	8.85	15,340	26,160	7.76
2000	3,431,100	37,200	1.10	45,534	13.34	28,909	8.47	16,625	20,575	6.03
<b>1995-2000</b>		<b>246,700</b>		<b>222,239</b>		<b>145,431</b>		<b>76,808</b>	<b>169,892</b>	
2001	3,470,400	39,300	1.15	45,536	13.20	29,934	8.67	15,602	23,698	6.87
2002	3,502,600	32,200	0.93	44,995	12.91	30,828	8.84	14,167	18,033	5.17
2003	3,538,600	36,000	1.03	45,686	12.98	30,604	8.69	15,082	20,918	5.94
2004	3,578,900	40,300	1.14	45,599	12.81	30,721	8.63	14,878	25,422	7.14
2005	3,626,900	48,000	1.34	45,892	12.74	30,717	8.53	15,175	32,825	9.11
<b>2000-2005</b>		<b>195,800</b>		<b>227,708</b>		<b>152,804</b>		<b>74,904</b>	<b>120,896</b>	
2006	3,685,200	58,300	1.61	46,946	12.84	30,771	8.42	16,175	42,125	11.52
2007	3,739,400	54,200	1.47	49,404	13.31	31,396	8.46	18,008	36,192	9.75
2008	3,784,200	44,800	1.20	49,659	13.20	32,008	8.51	17,651	27,149	7.22
2009	3,815,800	31,600	0.84	47,960	12.62	31,382	8.26	16,578	15,022	3.95
2010	3,837,300	21,500	0.56	46,256	12.09	31,689	8.28	14,567	6,933	1.81
<b>2005-2010</b>		<b>210,400</b>		<b>240,225</b>		<b>157,246</b>		<b>82,979</b>	<b>127,421</b>	
2011	3,857,625	20,325	0.53	45,381	11.80	32,437	8.43	12,944	7,381	1.92
2012	3,883,735	26,110	0.68	44,897	11.60	32,968	8.52	11,929	14,181	3.66
2013	3,917,800	34,066	0.88	45,286	11.61	33,318	8.54	11,968	22,098	5.67
2014	3,957,600	39,800	1.02	45,798	11.63	33,700	8.56	12,098	27,701	7.03
2015	4,001,600	43,999	1.11	46,373	11.65	34,146	8.58	12,227	31,772	7.98
<b>2010-2015</b>		<b>164,300</b>		<b>227,736</b>		<b>166,570</b>		<b>61,166</b>	<b>103,133</b>	
2016	4,048,800	47,200	1.18	47,002	11.68	34,654	8.61	12,349	34,851	8.66
2017	4,098,400	49,600	1.23	47,692	11.71	35,192	8.64	12,500	37,100	9.11
2018	4,149,100	50,700	1.24	48,368	11.73	35,765	8.67	12,602	38,098	9.24
2019	4,200,500	51,400	1.24	49,049	11.75	36,385	8.72	12,664	38,736	9.28
2020	4,252,600	52,100	1.24	49,711	11.76	37,090	8.78	12,621	39,479	9.34
<b>2015-2020</b>		<b>251,000</b>		<b>241,822</b>		<b>179,086</b>		<b>62,736</b>	<b>188,265</b>	
<b>1980-1990</b>		<b>219,200</b>		<b>404,552</b>		<b>233,008</b>		<b>171,544</b>	<b>47,656</b>	
<b>1990-2000</b>		<b>570,700</b>		<b>432,703</b>		<b>277,200</b>		<b>155,503</b>	<b>415,197</b>	41,520
<b>2000-2010</b>		<b>406,200</b>		<b>467,933</b>		<b>310,050</b>		<b>157,883</b>	<b>248,317</b>	24,832
<b>2010-2020</b>		<b>415,300</b>		<b>469,558</b>		<b>345,656</b>		<b>123,902</b>	<b>291,398</b>	29,140

Sources: 1980-1999 population - U.S. Census Bureau; 2000-2010 population - intercensal estimates by Office of Economic Analysis based on 2010 Census and post-censal estimates by Population Research Center, PSU; births and deaths 1980-12: Oregon Center for Health Statistics.





Table C.3 Population of Oregon: 1980-2020

Year (July 1)	Total Population	Change from previous year	
		Number	Percent
1990	2,860,400	-	-
1991	2,928,500	68,100	2.38%
1992	2,991,800	63,300	2.16%
1993	3,060,400	68,600	2.29%
1994	3,121,300	60,900	1.99%
1995	3,184,400	63,100	2.02%
1996	3,247,100	62,700	1.97%
1997	3,304,300	57,200	1.76%
1998	3,352,400	48,100	1.46%
1999	3,393,900	41,500	1.24%
2000	3,431,100	37,200	1.10%
2001	3,470,400	39,300	1.15%
2002	3,502,600	32,200	0.93%
2003	3,538,600	36,000	1.03%
2004	3,578,900	40,300	1.14%
2005	3,626,900	48,000	1.34%
2006	3,685,200	58,300	1.61%
2007	3,739,400	54,200	1.47%
2008	3,784,200	44,800	1.20%
2009	3,815,800	31,600	0.84%
2010	3,837,300	21,500	0.56%
2011	3,857,625	20,325	0.53%
2012	3,883,735	26,110	0.68%
2013	3,917,800	34,066	0.88%
2014	3,957,600	39,800	1.02%
2015	4,001,600	43,999	1.11%
2016	4,048,800	47,200	1.18%
2017	4,098,400	49,600	1.23%
2018	4,149,100	50,700	1.24%
2019	4,200,500	51,400	1.24%
2020	4,252,600	52,100	1.24%

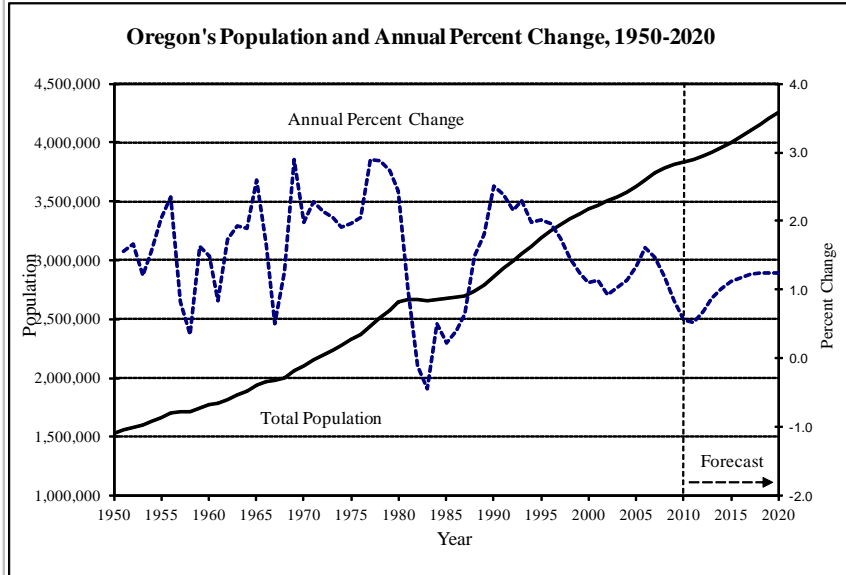


Table C.4 Children: Ages 0-4

Table C.5 School Age Population:  
Ages 5-17

Table C.6 Young Adult  
Population: Ages 18-24

Year (July 1)	% Change from previous decade/yr.			% Change from previous decade/yr.			% Change from previous decade/yr.		
	Population	Number	Percent	Population	Number	Percent	Population	Number	Percent
1980	199,525	---	---	524,446	---	---	329,407	---	---
1990	209,638	10,113	5.07%	532,727	8,281	1.58%	268,134	-61,273	-18.60%
2000	223,207	13,569	6.47%	624,316	91,589	17.19%	330,328	62,194	23.20%
2001	224,645	1,438	0.64%	624,675	358	0.06%	336,660	6,333	1.92%
2002	225,084	439	0.20%	624,611	-64	-0.01%	340,778	4,118	1.22%
2003	226,652	1,568	0.70%	624,349	-262	-0.04%	345,266	4,487	1.32%
2004	228,353	1,701	0.75%	625,461	1,112	0.18%	349,138	3,873	1.12%
2005	230,008	1,655	0.72%	628,326	2,865	0.46%	351,076	1,938	0.55%
2006	231,882	1,874	0.81%	633,646	5,320	0.85%	354,328	3,252	0.93%
2007	236,160	4,278	1.85%	635,720	2,074	0.33%	356,311	1,983	0.56%
2008	239,340	3,180	1.35%	635,372	-348	-0.05%	358,967	2,656	0.75%
2009	239,929	589	0.25%	633,575	-1,797	-0.28%	360,134	1,166	0.32%
2010	238,457	-1,472	-0.61%	630,741	-2,835	-0.45%	359,764	-370	-0.10%
2011	236,177	-2,280	-0.96%	628,350	-2,391	-0.38%	360,673	909	0.25%
2012	232,878	-3,299	-1.40%	628,673	324	0.05%	362,601	1,928	0.53%
2013	230,383	-2,494	-1.07%	629,997	1,324	0.21%	365,676	3,075	0.85%
2014	230,156	-228	-0.10%	631,123	1,126	0.18%	367,424	1,748	0.48%
2015	230,676	520	0.23%	631,853	730	0.12%	367,565	141	0.04%
2016	232,891	2,215	0.96%	632,316	462	0.07%	365,583	-1,982	-0.54%
2017	235,893	3,003	1.29%	633,196	880	0.14%	364,725	-858	-0.23%
2018	238,974	3,080	1.31%	633,608	412	0.07%	365,895	1,170	0.32%
2019	242,353	3,379	1.41%	634,819	1,211	0.19%	367,254	1,359	0.37%
2020	245,815	3,462	1.43%	637,587	2,768	0.44%	367,624	370	0.10%

Table C.7 Criminally At Risk Population (males): Ages 15-39

Table C.8 Prime Wage Earners: Ages 25-44

Table C.9 Older Wage Earners: Ages 45-64

Year (July 1)	% Change from previous decade/yr.			% Change from previous decade/yr.			% Change from previous decade/yr.		
	Population	Number	Percent	Population	Number	Percent	Population	Number	Percent
1980	561,931	---	---	790,750	---	---	491,249	---	---
1990	544,738	-17,193	-3.06%	926,326	135,576	17.15%	531,181	39,932	8.13%
2000	616,988	72,250	13.26%	996,500	70,174	7.58%	817,510	286,329	53.90%
2001	618,906	1,918	0.31%	994,587	-1,913	-0.19%	847,276	29,766	3.64%
2002	620,252	1,347	0.22%	989,996	-4,591	-0.46%	876,242	28,966	3.42%
2003	622,211	1,959	0.32%	987,755	-2,241	-0.23%	903,499	27,257	3.11%
2004	626,423	4,212	0.68%	988,932	1,177	0.12%	930,032	26,533	2.94%
2005	633,901	7,478	1.19%	994,575	5,644	0.57%	957,826	27,793	2.99%
2006	644,210	10,309	1.63%	1,004,110	9,535	0.96%	985,638	27,813	2.90%
2007	652,287	8,077	1.25%	1,014,565	10,455	1.04%	1,008,986	23,348	2.37%
2008	657,248	4,961	0.76%	1,022,060	7,495	0.74%	1,025,501	16,515	1.64%
2009	657,327	79	0.01%	1,024,971	2,911	0.28%	1,039,689	14,188	1.38%
2010	653,491	-3,836	-0.58%	1,026,126	1,155	0.11%	1,050,150	10,461	1.01%
2011	652,389	-1,102	-0.17%	1,030,430	4,304	0.42%	1,057,355	7,204	0.69%
2012	654,592	2,203	0.34%	1,037,176	6,747	0.65%	1,053,129	-4,226	-0.40%
2013	660,118	5,526	0.84%	1,046,809	9,633	0.93%	1,050,480	-2,648	-0.25%
2014	667,328	7,210	1.09%	1,057,647	10,838	1.04%	1,052,581	2,101	0.20%
2015	674,910	7,582	1.14%	1,068,930	11,283	1.07%	1,057,386	4,805	0.46%
2016	683,001	8,092	1.20%	1,083,876	14,946	1.40%	1,062,714	5,328	0.50%
2017	690,799	7,798	1.14%	1,102,358	18,482	1.71%	1,062,688	-26	0.00%
2018	697,760	6,961	1.01%	1,122,082	19,724	1.79%	1,059,175	-3,513	-0.33%
2019	706,022	8,261	1.18%	1,141,912	19,830	1.77%	1,055,179	-3,996	-0.38%
2020	711,778	5,757	0.82%	1,159,550	17,638	1.54%	1,053,325	-1,854	-0.18%

Table C.10 Elderly Population by Age Group

Year (July 1)	%Change from previous decade/yr.		%Change from previous decade/yr.		%Change from previous decade/yr.		%Change from previous decade/yr.	
	Ages 65+		Ages 65-74		Ages 75-84		Ages 85+	
1980	305,841	---	185,863	---	91,137	---	28,841	---
1990	392,369	28.29%	224,772	20.93%	128,813	41.34%	38,784	34.48%
2000	439,239	11.95%	218,997	-2.57%	162,187	25.91%	58,055	49.69%
2001	442,558	0.76%	218,838	-0.07%	163,878	1.04%	59,843	3.08%
2002	445,890	0.75%	219,614	0.35%	165,109	0.75%	61,167	2.21%
2003	451,080	1.16%	222,361	1.25%	165,669	0.34%	63,050	3.08%
2004	456,984	1.31%	226,373	1.80%	165,842	0.10%	64,769	2.73%
2005	465,089	1.77%	231,926	2.45%	166,077	0.14%	67,087	3.58%
2006	475,596	2.26%	239,931	3.45%	165,787	-0.17%	69,877	4.16%
2007	487,657	2.54%	250,131	4.25%	165,148	-0.39%	72,379	3.58%
2008	502,959	3.14%	264,201	5.63%	164,354	-0.48%	74,403	2.80%
2009	517,502	2.89%	277,606	5.07%	163,513	-0.51%	76,383	2.66%
2010	532,062	2.81%	289,645	4.34%	164,159	0.40%	78,258	2.45%
2011	544,641	2.36%	300,279	3.67%	164,326	0.10%	80,037	2.27%
2012	569,277	4.52%	322,232	7.31%	165,560	0.75%	81,486	1.81%
2013	594,454	4.42%	343,664	6.65%	168,049	1.50%	82,741	1.54%
2014	618,670	4.07%	363,026	5.63%	172,000	2.35%	83,643	1.09%
2015	645,189	4.29%	383,704	5.70%	176,804	2.79%	84,681	1.24%
2016	671,420	4.07%	403,027	5.04%	182,456	3.20%	85,937	1.48%
2017	699,539	4.19%	422,516	4.84%	190,047	4.16%	86,976	1.21%
2018	729,367	4.26%	440,334	4.22%	201,141	5.84%	87,892	1.05%
2019	758,983	4.06%	457,876	3.98%	212,463	5.63%	88,644	0.86%
2020	788,699	3.92%	475,822	3.92%	222,716	4.83%	90,161	1.71%