



Oregon Economic and Revenue Forecast

May 2015

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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.



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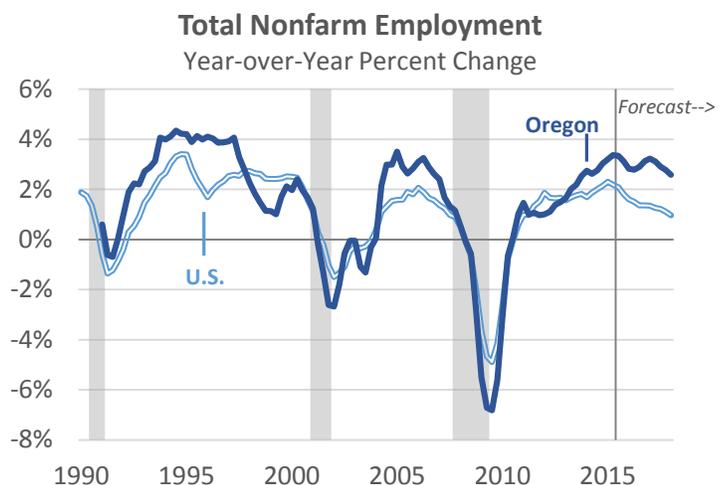
EXECUTIVE SUMMARY

May 2015

The national economy continues to strengthen, however for the first time in a while, not every economic indicator is rosy. In particular the manufacturing sector has clearly softened in recent months. Much of the slowdown can be directly attributed to the oil and gas industry, where substantially lower energy prices have reduced new investment and employment. While such impacts were expected in the near-term, weakness in consumer spending was not. To a large degree, consumers are saving much of their gasoline-related windfall, resulting in slower sales growth than expected.

Given the ongoing strengthening in the labor market, nascent signs of wage growth picking up and the recent weights on the economy being eliminated, this recent slowdown in consumer spending is expected to be mostly a timing issue. Moving forward consumers will not only have the financial wherewithal, but also the belief and confidence to increase their purchases to match the underlying improvement in the economy.

Unlike the nation that is growing at a modest pace, Oregon's economy is experiencing full-throttle growth today. Jobs and income are increasing as fast, if not faster than during the mid-2000s. Given demographic trends, such rates of growth are considered full throttle. As in past expansions, Oregon has regained its traditional growth advantage relative to other states. Much of this advantage can be attributed to the state's industrial structure and strong in-migration flows. More important are the indications that Oregon is seeing a deeper labor market recovery. Wages for the average Oregon worker are increasing quicker than in the typical state, and the labor force is growing.



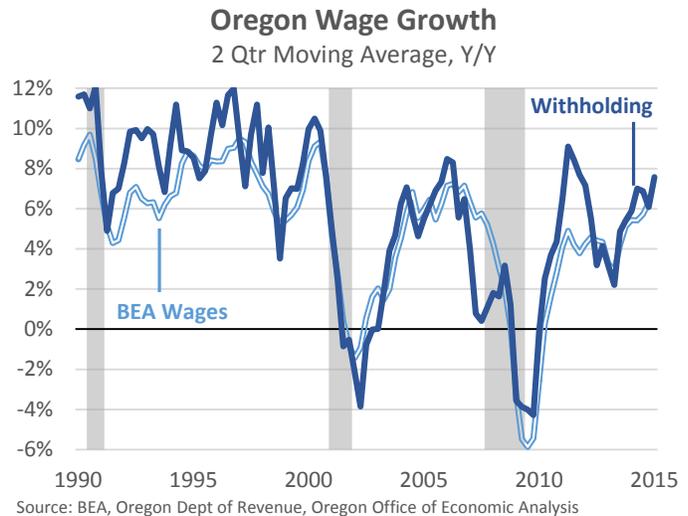
While growth rates, and the trajectory of the economy have improved considerably, Oregon is not yet fully healed from the Great Recession. The state's labor market is nearly two-thirds of the way back to pre-recession levels and should reach full employment over the course of the upcoming 2015-17 biennium. After which time, net growth rates are likely to slow significantly over the longer horizon as the Baby Boomers fully age into their retirement years.

Growth in Oregon's General Fund revenues has been very rapid this fiscal year, rivalling the gains seen during the technology and housing booms. Gains have been broad-based across Oregon's primary revenue instruments, due both to a healthy job market as well as to solid growth in taxable investments and business income. Even lottery sales, which have been relatively dormant for years, are now expanding at a solid clip.

As expected, the personal income tax filing season turned out to be a big one for revenue collections due to large gains in reported business profits and investment income. Realizations of capital gains nearly doubled on the year. While the big April filing season was expected, the full impact of Oregon's rapid job gains and wage growth was not. As a result of booming labor-related income tax collections, it is now highly likely that a personal income tax kicker payment will be triggered at the end of the biennium.

The May 2015 outlook assumes that revenues included in the personal income tax kicker base will exceed the kicker threshold by \$182 million at the end of the biennium. Should this outlook hold true, a personal income tax kicker of \$473 million will be generated. Due to actions taken by the 2011 Legislature, this potential kicker payment will take the form of a credit on 2015 tax returns rather than being issued as a check at the end of the year.

Despite the larger expected kicker payment, the May revenue outlook now calls for a significant increase in available resources for the upcoming biennium. Widespread optimism is now being voiced by a diverse chorus of local businesspeople and economic forecasters. This optimism has been translated into increased expectations for job growth and taxable wage gains. The March 2015 forecast was an aggressive one, calling for job gains over the upcoming biennium matching the best two years of the housing boom. Even so, business sentiment in Oregon has become so bullish that a strong majority among our office’s advisory group members pushed for significantly more growth to be added over and above what was assumed in the March forecast.



Although the May 2015 forecast provides more wiggle room for budget writers, none of the additional revenue called for in the outlook has come in the door to date. Business sentiment is fickle, and can sour overnight. With such a large amount of downside risk facing the near-term revenue outlook, well-stocked reserve funds are a must. Despite a few bad national indicators, it does not look as though the wheels are about to fall of the economic recovery anytime soon. If Oregon’s businesses and households are as confident about the future as they say they are, their combined hiring and spending should go a long way toward ensuring that their bullish expectations come true.

Oregon’s population growth has accelerated in recent years and 2014’s growth ranked 13th fastest in the nation. Based on the current forecast, Oregon’s population will reach 4.35 million in the year 2022 with an annual rate of growth of 1.16 percent between 2014 and 2022. Such growth rates are below historical expansions when Oregon’s population regularly increased closer to 2 percent, or more.

Oregon’s economic condition heavily influences the state’s population growth. Its economy determines the ability to retain the existing work force as well as attract job seekers from national and international labor markets.

As the baby-boom generation ages into retirement, the relative share of the Oregon population in their prime working years will continue to shrink. This important demographic group will continue to grow in number, but as a share it will erode, placing downward pressure on economic and revenue growth rates moving forward.

ECONOMIC OUTLOOK

U.S. Economic Summary

The national economy continues to strengthen, however for the first time in a while, not every economic indicator is rosy. In particular the manufacturing sector has clearly softened in recent months. Much of the slowdown can be directly attributed to the oil and gas industry, where substantially lower energy prices have reduced new investment and employment. While such impacts were expected in the near-term, weakness in consumer spending was not. To a large degree, consumers are saving much of their gasoline-related windfall, resulting in slower sales growth than expected.

Given the ongoing strengthening in the labor market, nascent signs of wage growth picking up and the recent weights on the economy being eliminated, this recent slowdown in consumer spending is expected to be mostly a timing issue. Moving forward consumers will not only have the financial wherewithal, but also the belief and confidence to increase their purchases to match the underlying improvement in the economy. Over the remainder of this year and into next, the consensus forecast calls for moderate acceleration including relatively strong labor market gains.

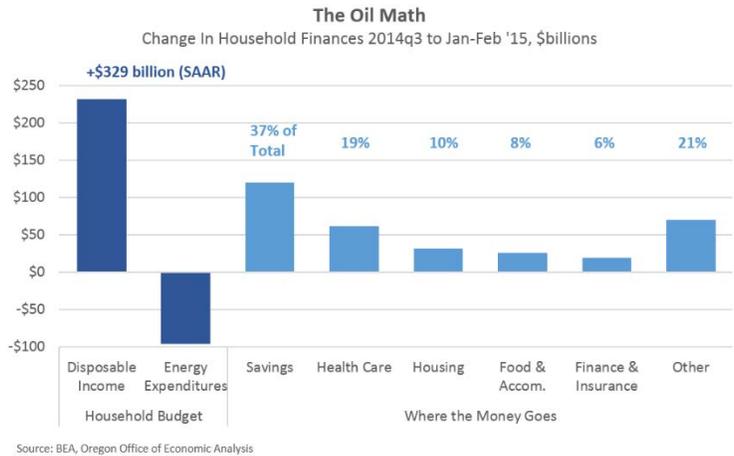
U.S. Economic Detail

While the underlying U.S. economic expansion remains intact, the data flow so far in 2015 has not been universally good unlike much of the previous two years. The relative weakness can largely be tied to the manufacturing sector – from industrial production to the pipeline of new orders for producers – but not all. Broader indicators, employment growth and consumer spending have all been lackluster to start the year. Many of which began slowing down prior to the spell of unseasonably bad weather on the East Coast, which undoubtable has impacted the national figures. Even so, the consensus of economists and forecasters is to “look through” the first quarter weakness and focus on the breadth of recovery and building momentum in some hard hit regions and sectors of the economy.

In fact, the manufacturing weakness was not unexpected. The plunge in oil prices at the end of 2014 significantly reduced the demand of and need for investment in the mining industry, particularly oil and gas exploration. Given the domestic boom in oil and gas production in the U.S. over the past decade, the industry accounted for a much larger share of capital expenditures, investment and industrial production than in the recent past. A slowdown within the industry impacted firms up and down the supply chain in relatively short order (a handful of months) and weighed on economic growth. The Federal Reserve Bank of Atlanta ran simulations in late 2014 to estimate the timing and impact of lower energy prices on the economy. Their results show that the costs associated with a slump in new investment were largely upfront and one-time hits, while the boost from increased consumer spending had a longer-term impact. So far the economy has seen and felt the first part of this calculus. Economists are hoping, but also expecting, to see the second part in the coming months.



Increased consumer spending would be a welcomed development, as the consumer has so far saved much of their savings at the pump. This result is likely both a timing issue and based on consumers' belief about the future price of gasoline. To the extent consumers believe the significantly lower prices are temporary, they will save a significant portion, pay down debt or spend on short-term items like going out to eat or on vacation. Should consumers believe prices are permanently lower, at least for a sustained period of time, then one would expect consumers to increase spending even further. To date, the economy has seen much of the former. Given the outlook for oil prices – rising modestly from around \$60 per barrel today to \$65-70 per barrel over the next two years – expectations are for the energy-related savings to translate into increased spending more broadly.



While the recent data has been lackluster, there is good reason to believe it is temporary, particularly given the ongoing growth in employment and income. However, one missing piece to the recovery so far has been the lack of wage growth for the typical worker. That may be changing. It would certainly signal a stronger economy as well.

Prior to the past few quarters, none of the most widely cited measures of national wage growth has shown any sustained uptick. However over the past three quarters the Employment Cost Index has accelerated. To the extent that a stronger and tighter labor market is increasing workers' bargaining power, this is good news for the economy. While this improved growth rate is so far in just one of the measures, it still remains considerably lower than growth rates seen during past expansions. Coupled with the fact that some industries and regions of the country are seeing higher wage growth themselves, Oregon included, these are encouraging trends regarding the health of the economy.



Also benefitting near-term economic growth is that the major weights on the economy in the aftermath of the Great Recession have lifted. Specifically household debt, relative to income, has fallen significantly from its peaks and has stabilized over the past two years. Today households are once again increasing their debt load, but not at a faster rate than their income is growing¹. With households less concerned with realigning their finances, this bodes well for future economic growth.

Additionally, the housing recovery continues and has turned from a drag to a driver. Housing and related employment is growing at approximately four percent annually today, right along the lines of past expansions. With the level of housing starts remaining significantly below longer-term averages, the housing recovery has long legs to run before worrying about the sustainability of the industry.

¹ Student loan debt is increasing faster, however this is offset by slower growth in other areas, like credit cards

All told, the economic recovery remains intact. The recent spell of moderate to bad news can largely be attributed to the decline in the oil and gas industry, and manufacturing more broadly. While certainly not a good development in terms of investment and growth, the impacts should largely be confined to specific sectors and regions of the country. Already the mining industry has lost some 50,000 jobs so far in 2015 and energy producing states like North Dakota and Texas are shedding jobs as well. Such costs are large, visible and as the Federal Reserve Bank of Atlanta’s research indicated, upfront.

However, not every state is an energy producer. All businesses and households across the country are energy consumers and their savings and improved bottom lines should shine through moving forward. As the stronger economy generates a tighter labor market, workers should see larger wage gains as well. As such, the feel good part of the recovery will become more prevalent than it has in recent years.

Oregon Economic Summary

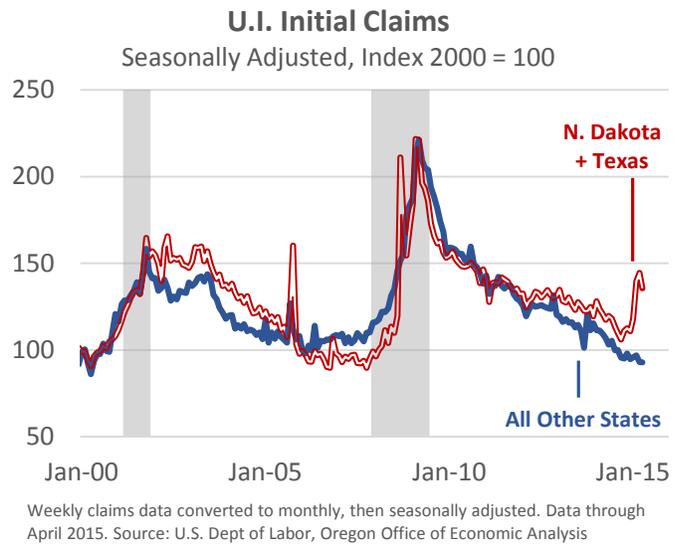
The Oregon economy is at full-throttle growth. Jobs and income are increasing as fast, if not faster than during the mid-2000s. Given demographic trends, such rates of growth are considered full-throttle. As in past expansions, Oregon has regained its traditional growth advantage relative to other states. Much of this advantage can be attributed to the state’s industrial structure and strong in-migration flows. More important are the indications that Oregon is seeing a deeper labor market recovery. Wages for the average Oregon worker are increasing quicker than in the typical state, and the labor force is growing.

While growth rates, and the trajectory of the economy have improved considerably, Oregon is not yet fully healed from the Great Recession. The state’s labor market is nearly two-thirds of the way back to pre-recession levels and should reach full employment over the course of the upcoming 2015-17 biennium. After which time, net growth rates are likely to slow significantly over the longer horizon as the Baby Boomers fully age into their retirement years.

Oregon Economic Detail

The pace of improvement in Oregon’s labor market is not only as strong as the expansion in the mid-2000s, it is also full throttle growth. Given the demographic trends --- with the labor force growing slowly, as Baby Boomers retire and Millennials are entering – job growth north of 3 percent is as strong as can be expected.

Furthermore, Oregon has regained its traditional advantage in growth relative to the nation. Today, Oregon’s job growth is about one percentage point faster than in the typical state. The state’s advantage is not necessarily attributable to short-term impacts like unseasonable warm weather in recent months, unlike much of New England. Rather, the advantage largely comes from the state’s underlying fundamentals like its industrial structure and strong in-migration flows. Both of these trends have long-lasting impacts on the Oregon economy and help drive the state’s more volatile swings over the course of the business cycle.



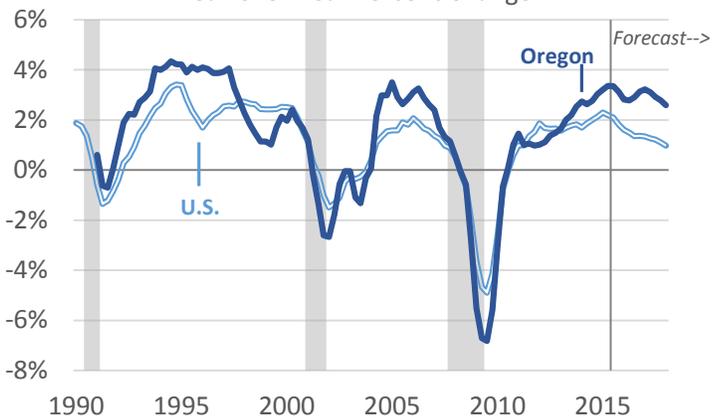
More encouragingly, since job growth accelerated in 2013, Oregon's economy has exhibited signs of normal labor market dynamics. More jobs reduce the ranks of the unemployed and provide more job opportunities for Oregonians. As such, the labor market tightens, providing workers with more bargaining power as firms have to compete more on price (wages) to attract and retain the best workers. Stronger wage growth entices even more Oregonians to search for one of the now more-plentiful and better-paying jobs. This process is currently occurring in Oregon and is likely to/hopefully will spread to the U.S. more broadly.

Another on-going development in the economy is job polarization. In much of the past 30 years, job opportunities are increasingly concentrated at both the high- and low-end of the wage spectrum. Middle-wage jobs – such as blue collar occupations like construction, transportation, or repair work plus white collar occupations like sales or office support – are seeing shrinking opportunities, at least as a share of all jobs.

In 2014 these general trends continued in Oregon and across the nation. However Oregon's growth in recent years has differed in that the state's low-wage job growth has been generally slower than the typical state, while Oregon's high-wage job growth has significantly outpaced the national average. Middle-wage jobs in Oregon are more of a mixed bag, however so far in recovery they have been slightly under the gains seen in the typical state. That being said, 2014 was the best year for middle-wage jobs since the onset of the Great Recession. As the housing rebound continued – adding construction jobs – and local government budgets improved – increased number of teachers – middle-wage jobs are slowly improving. Moving forward

there are two trends affecting middle-wage jobs more broadly. First, middle-wage jobs are forecasted to continue to increase in total, as both the population and the economy increase in size. Second, while there will be more middle-wage jobs, they are expected to continue to decline as a share of all jobs as both high- and low-

Total Nonfarm Employment
Year-over-Year Percent Change



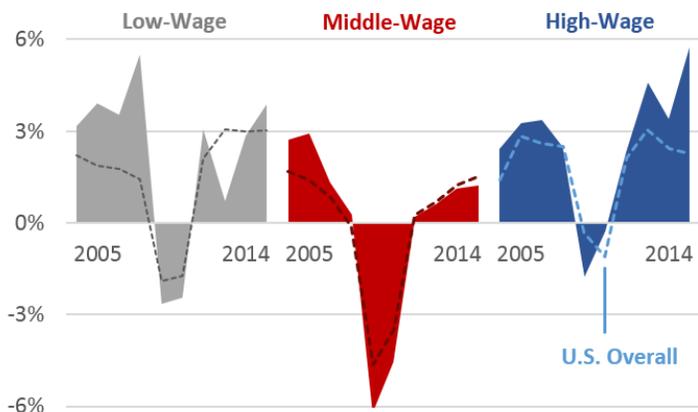
Returning to Normal

Oregon Labor Market Dynamics



Year-over-Year change, 6 month average. Wages are inflation-adjusted average QCEW wages. Source: BEA, OED, Oregon Office of Economic Analysis

Oregon Job Growth by Wage Group



Categories based on median wage for major occupational groups. Source: BLS, Oregon Office of Economic Analysis

wage jobs see stronger gains. For more on job polarization and the middle-wage outlook in Oregon, please see our office's website².

Total Employment Gap

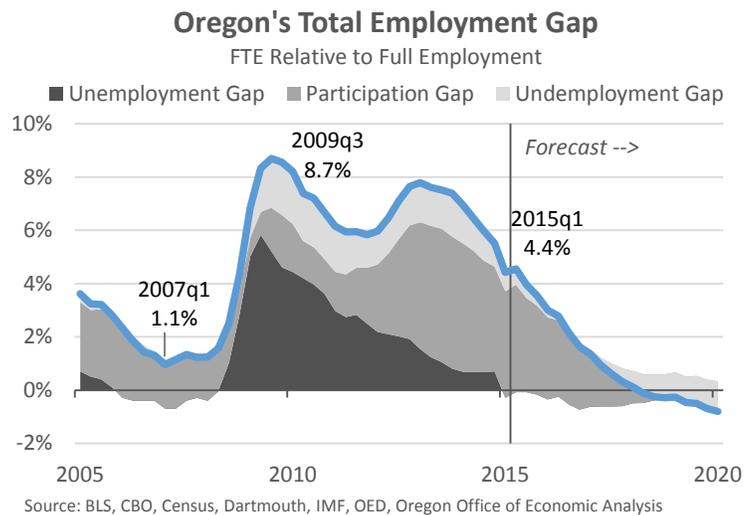
Today in Oregon, even as the total number of jobs is at an all-time high, the labor market more broadly is not fully healed, or back to full employment. Full employment occurs when all or nearly all persons willing and able to work can find a job. Two prominent measures that show ongoing labor market weaknesses are the labor force participation rate (LFPR) and the number of workers who would like full-time jobs but can only find part-time work. A new measure called the Total Employment Gap, first developed by the International Monetary Fund, tries to measure the amount of slack in the labor market by combining the LFPR, involuntary part-time workers and the standard unemployment rate. All told, Oregon's labor market is nearly two-thirds the back to full employment. Progress is clearly being made, however the economy has not fully healed.

While the headline unemployment rate in Oregon signals there is no cyclical unemployment left in the labor market, the other components clearly indicate slack remains. The labor force participation gap is by far the largest component today. This measure is derived by examining the differences between the state's actual LFPR and a demographically adjusted version that removes the impact of an aging population.

In general the LFPR is both an important economic measure and commonly misused or understood. Given that it includes all those aged 16 years and older, it is susceptible to being pushed around by big demographic changes, like the U.S. has seen with the Baby Boomers. From the 1970s through the 1990s the LFPR increased considerably. The Boomers were in their prime working years and not coincidentally a larger share of adults were in their prime working years as well. Today, as the Boomers age into their retirement years, the LFPR is and will fall due to demography.

However, the economy certainly impacts participation rates as well. The Great Recession was severe enough and the combination of massive job loss and lackluster job gains in the early years of recovery to see the LFPR decline above and beyond rates that can be fully explained by demographics alone. Many adults became discouraged and gave up looking for work, which pushes the LFPR down further. As stronger job and wage growth pulls more workers back into the labor market, the slack will diminish and the economy will move closer to full employment.

All told, by the end of the 2015-17 biennium the forecast calls for Oregon's economy to move from one growing at full throttle today to one that is at full employment and finally fully healed from the Great Recession, some 9 years later. Of course the economy today has more total jobs than it did back then, however the population has and continues to increase. With diminishing labor market slack, more full-time work, and higher wage growth,



² Report: <http://oregoneconomicanalysis.com/2013/10/24/report-job-polarization-in-oregon/>
Middle-wage Outlook: <http://oregoneconomicanalysis.com/2015/01/13/2015-outlook-middle-wage-jobs/>

the feel-good portion of the economic expansion is finally here, or at least is on the doorstep. The coming two years should bring the recovery full circle.

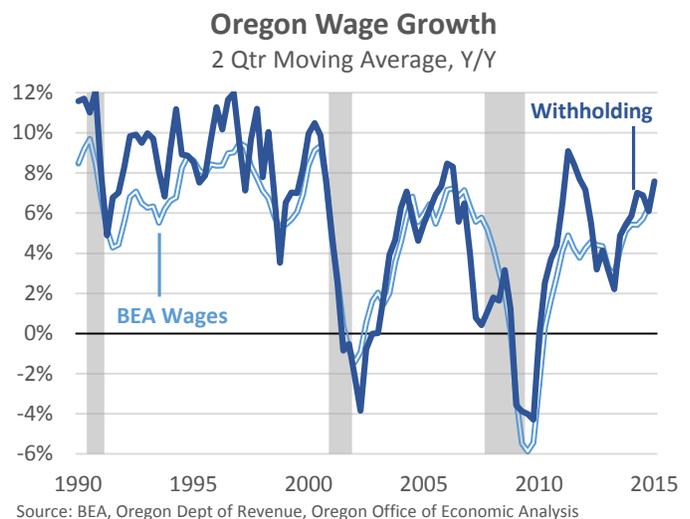
Oregon Labor Market

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 relatively strong improvements with jobs being added, wages increasing and the unemployment rate declining. At 5.4 percent in March, 2015 the unemployment rate may overstate the strength of the labor market today. In particular, if one digs into the underlying data in the so-called household survey, it shows that while employment is growing quickly, the number of unemployed Oregonians is dropping fast. Coupling these trends with a relatively flat labor force in recent months (still up over the year, but flat recently) drives the unemployment rate down sharply. In fact, the decline in the unemployment rate from December 2014 to March 2015 is the largest seen on record in Oregon, with reliable data going back to 1976. However, given the relatively small sample size (about 1,000 Oregon households) and noisy underlying data, once revisions are taken into account, it is possible that the recent months' pattern will differ when the dust settles. Nevertheless, there is no doubt that Oregon has seen considerable improvement in its underlying economy. The unemployment rate had been, and should continue to decline, and largely for the right reasons.

More importantly, wages in Oregon are increasing at nearly 8 percent per year, which is better than during the mid-2000s expansion but still a notch below the 1990s gains of 10 percent per year. Average wages per worker are currently increasing over 3 percent per year, which is slightly above the rate of inflation. However real wages have increased less than one half of one percent per year since 2000. As economic conditions continue to improve, expectations are that real average wages will pick up further as well, rising along the lines of 2 percent.

The most recent job growth rankings, published by Arizona State University's W.P. Carey School of Business³, places Oregon 5th in the nation for job growth in March. Over the past year the state has added 58,000 jobs, or an increase of 3.5 percent. For comparison and to show Oregon's acceleration over the past couple of years, in 2013 Oregon ranked 11th fastest with growth of just 2.1 percent.

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 revisions⁴.

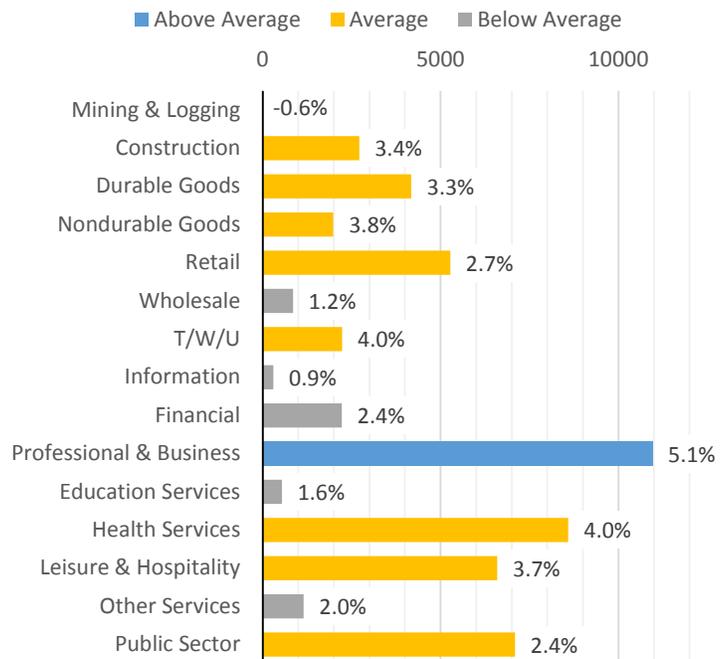


³ <http://research.wpcarey.asu.edu/seidman/current-state-rankings/>

⁴ 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

In the first quarter, total nonfarm employment increased 3.2 percent over the past year with the private sector growing at 3.4 percent and the public sector at 2.4 percent. These rates of growth are the best Oregon has experienced since 2006, or the height of the housing boom. The nearby graph illustrates the number of job gains by major industry by the length of the bar. The percentage increase these changes represent is noted as well. The bars are color coded by growth rate relative to total employment growth. Industries with blue colored bars are growing at rates much faster than total employment, yellow bars represent industries which are growing approximately in line with the average, while grey bar industries are growing at rates significantly less than the average.

Oregon Employment Growth
2014q1 to 2015q1



As has been the case in the recovery to date, jobs in the large service sector have led growth in terms of outright job gains and above-average growth rates. These include jobs in professional and business services, health services, and leisure and hospitality industries. These three industries have gained 26,100 jobs in the past year and account for 48 percent of all job gains across the state. The good news is in the past year and a half, this share is becoming smaller as other industries continue to strengthen.

In terms of illustrating how each industry has fared over the Great Recession and so far in recovery, the bottom graph shows both the depths of recessionary losses⁵ and where each industry stands today relative to pre-recession peak levels.

Currently, five major industries, which account for 40 percent of statewide jobs, are at all-time highs. Private sector education, health, and food manufacturing never really suffered recessionary losses – although their growth did slow during the recession. Professional and business services and leisure and hospitality have each regained all of their losses and are leading growth today.

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 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 2014. The QCEW is currently available through December 2014, thus the preliminary benchmark used here covers the October 2014 – December 2014 period.

⁵ Each industry’s pre-recession peak was allowed to vary as, for example, construction and housing-related industries began losing jobs earlier than other industries or the recession’s official start date per NBER.

With the Great Recession being characterized by a housing bubble, it is no surprise to see wood products, construction, mining and logging and financial services (losses are mostly real estate agents) among the hardest hit industries. These housing and related sectors are now beginning to recover, although they still have much ground to make up. Transportation equipment manufacturing suffered the worst job cuts and is likely a structural decline due to the RV industry's collapse⁶. With that being said, the subsectors tied to aerospace are doing well and the ship and boat building subsector is growing again. Metals and machinery manufacturing, along with mining and logging, have shown the largest improvements since the depths of the recession.

Coming off such a deep recession, and with a strong manufacturing cycle today, the goods-producing industries have and will exhibit stronger growth than in past cycles. Although, even with relatively strong manufacturing gains today, the industry is unlikely to fully regain all of its lost jobs. Oregon manufacturers typically outperform those in other states, in large part due to the local industry make-up. Oregon does not rely upon old auto makers or textile mills. The state's manufacturing industry is comprised of newer technologies like aerospace and semiconductors. Similarly Oregon's food processing industry continues to boom.

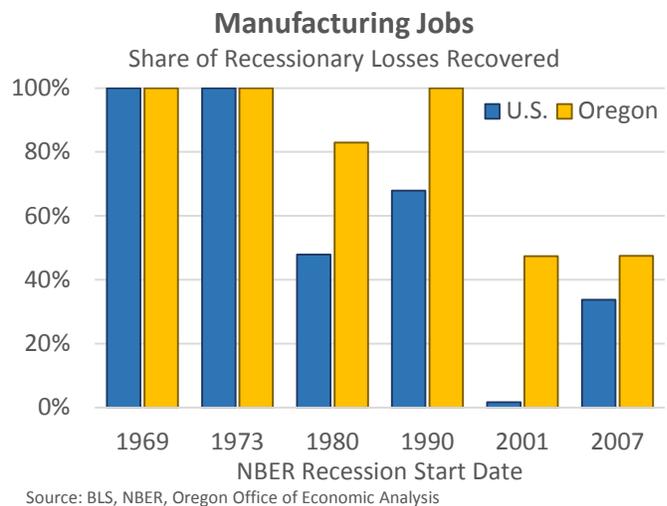
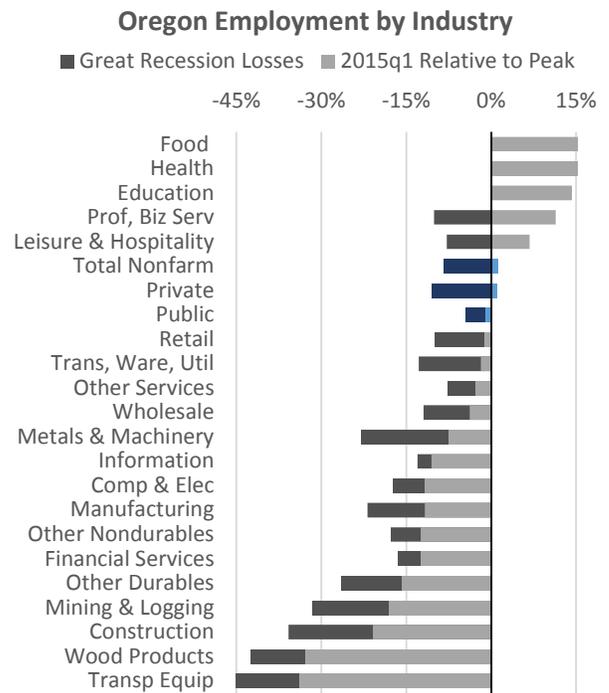
All told, each of Oregon's major industries has experienced some growth in recovery, albeit uneven. As the economy continues to recover there will be net winners and net losers when it comes to jobs, income and sales. Business cycles have a way of restructuring the economy.

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

Leading Indicators

Both of the Oregon-specific composite leading indicators, along with U.S. leading indicators, are signaling continued economic growth. Our office's Oregon Index of Leading Indicators (OILI) and the University of Oregon's Index of Economic Indicators have exhibited the same general pattern of fits and starts, but an upward trend nevertheless.

While the indicators have been mostly positive for five years now, a few have flipped directions recently. On the positive side, new business filings in Oregon continue to increase in recent months. After falling during the



⁶ <http://oregoneconomicanalysis.com/2012/07/10/rv-workers-and-reemployment/>

recession and stagnating through the early stages of recovery, the number of new filings has started to increase again in the past year and a half. Historically, innovation and new technologies have largely been driven by entrepreneurs and start-ups, although existing firms investing in research and development play a big role as well. Looking forward, having more new businesses in the state is a positive sign and seeing the decline in new business formation not only stop, but actually improve is a welcomed development. Hopefully some of these firms are working on developing and/or delivering new products and services that meet the needs of tomorrow in addition to today.

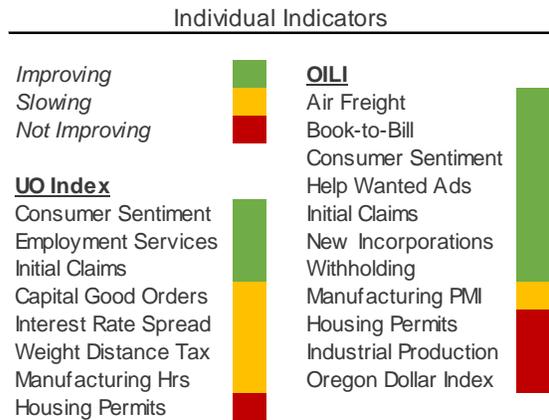
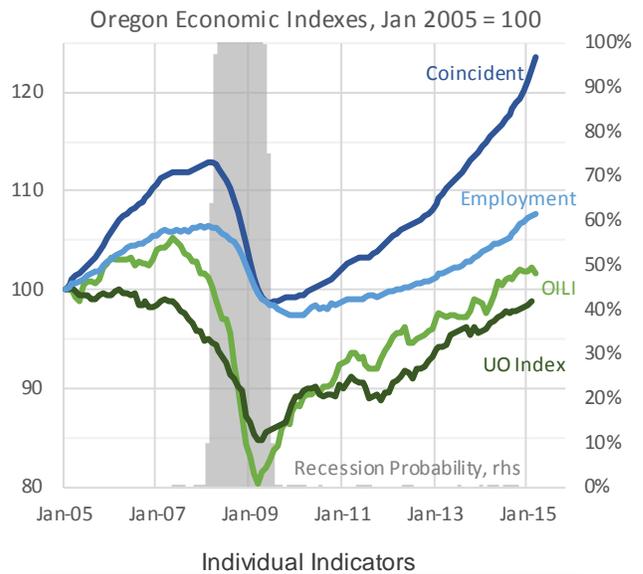
On the negative side, housing permits remain relatively flat in recent months. The improvement in new construction activity seen in recent years is holding steady, but not increasing further. Industrial production has fallen in recent months, largely due to oil and gas-related industries pulling back on new investment and output. The Oregon Dollar Index also continues to remain strong; appreciating against the basket of currencies of our major trading partners. This will weigh on exports moving forward.

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 recession⁷, calculated in real time by University of Oregon professor Jeremy Piger, is just 1.2 percent for the U.S.

Short-term Outlook

Job growth in Oregon continued to accelerate in recent months. Since the beginning of 2013, Oregon job growth has picked up from around 1.5 to 2.0 percent to nearly 3.5 percent today. The outlook calls for this growth to persist for another two years before longer-run demographic trends weigh on growth rates. The general character of the forecast remains the same as three months ago, however the employment outlook has been raised for 2015, 2016 and 2017. This upward revisions reflects the combination of strong actual growth and lower energy prices, which will boost consumer spending locally and help reinforce the expansion.

Should this outlook come to pass, it will be consist with full throttle growth, matching the equivalent of previous expansions in Oregon. Given demographic trends today, particularly the aging Baby Boomer cohort, job growth of 3 percent is considered full throttle. In decades past, growth of 4 or 5 percent was common during expansions in Oregon, however that time period also coincided with the Baby Boomers entering their prime working years. Today the opposite is occurring. Even so, demographic trends are not all bad, as the even larger cohort of



⁷ http://pages.uoregon.edu/jpiger/us_recession_probs.htm/

Millennials are currently entering their prime working years. The net effect is overall lower rates of labor force and economic growth, due to demographics.

Private sector growth, measured by the number of jobs created, will be dominated by the large, service sector industries like professional and business services, leisure and hospitality and health. Nevertheless, goods-producing industries, while smaller, are expected to grow at above-average rates. Job growth in mining and logging, construction and manufacturing – led by durable goods – will outpace the average industry in 2015, before growing at slower rates over the extended horizon.

Public sector employment at the local, county and state level for both education and non-education workers has recently begun growing in Oregon, as state and local revenues continue to grow along with an improving economy. Over the forecast horizon, government employment growth is expected to stay in line with population growth and increased demand for public services. One risk to the outlook is the recent Oregon Supreme Court decision which reversed earlier Public Employees Retirement System (PERS) changes enacted by the Legislature. The extent to which the court decision will impact hiring by local and state public entities is unknown, but is a risk to the outlook.

Along with an improving labor market, stronger personal income gains will come. 2013 personal income is estimated to have increased by just 2.3 percent. This largely reflects the pulling forward of investment-type income into 2012 in anticipation of increased federal tax rates in 2013. Personal income rebounded strongly in 2014, with gains of 5.7 percent. Continued strong growth is expected moving forward, along with a full throttle economic expansion, with income gains of 5.5 percent in 2015 and 6.1 percent in 2016.

As the economy continues to improve, household formation will increase, which will help drive up demand for new houses. 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. Much of the increase in young Oregonians living at home can be attributed to higher college enrollments. As the Millennials continue to age beyond their early 20s, demand for housing (both rental and ownership) will increase further.

Economic Forecast Summary

		Quarterly					Annual				
		2014:4	2015:1	2015:2	2015:3	2015:4	2014	2015	2016	2017	2018
Personal Income, Nominal	U.S.	4.0	4.1	3.1	3.5	4.0	4.0	3.9	4.5	5.3	5.1
<i>% change</i>	Oregon	5.2	5.5	5.0	5.4	5.9	5.7	5.5	6.1	6.8	6.1
Wages and Salaries, Nominal	U.S.	5.2	4.9	5.4	4.8	4.5	4.5	4.9	4.8	4.8	4.7
<i>% change</i>	Oregon	6.8	6.7	7.7	7.1	7.4	5.9	7.0	7.3	7.4	6.2
Population	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	1.1	1.0	1.2	1.4	1.1	1.2	1.2	1.2	1.2	1.2
Housing Starts	U.S.	1.06	1.00	1.10	1.17	1.22	1.00	1.12	1.31	1.46	1.51
<i>U.S. millions, Oregon thousands</i>	Oregon	17.0	14.9	15.5	16.0	16.4	15.6	15.7	18.6	21.4	22.4
Unemployment Rate	U.S.	5.7	5.6	5.5	5.4	5.4	6.2	5.5	5.2	5.2	5.3
	Oregon	6.8	5.8	6.0	6.0	5.9	7.0	5.9	5.6	5.4	5.6
Total Nonfarm Employment	U.S.	2.5	2.2	1.9	1.8	1.4	1.9	2.1	1.5	1.2	0.9
<i>% change</i>	Oregon	4.0	3.9	2.8	2.8	3.1	2.8	3.3	2.9	3.0	1.9
Private Sector Employment	U.S.	2.8	2.6	2.2	2.1	1.7	2.3	2.5	1.7	1.3	0.9
<i>% change</i>	Oregon	4.1	4.4	4.0	3.1	3.5	3.0	3.7	3.3	3.4	2.1

Housing starts in the fourth quarter totaled nearly 15,000 at an annual pace. 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 15,700 in 2015 and 18,600 in 2016. 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.

A more complete summary of the Oregon economic outlook and forecast changes relative to the previous outlook 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 Chip⁸, with the exception being IHS Economics (formerly IHS Global Insight).

Overall, each forecast certainly expects the economic expansion to continue. Both our office and the Western Blue Chip Consensus expect strong employment gains in 2015

Forecaster	Oregon Forecast Comparison						May 2015		
	Employment			Personal Income					
	2015	2016	2017	2015	2016	2017			
IHS Economics	3.0	1.7	1.5	5.0	4.6	5.5			
Western Blue Chip Consensus	3.4	3.4		5.0	5.1				
<i>Oregon Office of Economic Analysis</i>	3.3	2.9	3.0	5.5	6.1	6.8			

and 2015, even as IHS Economics is forecasting deceleration. Personal income growth largely follows a similar pattern with our office and other Western Blue Chip Consensus forecasts expecting income gains of 5 percent or larger. All told, these rates of growth, while considered full throttle today are still less than Oregon has seen in past expansions. To the extent that the U.S. economy improves, and in-migration flows increase further, there does remain some upside risk to the outlook.

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. Federal fiscal policy remains a risk. The good news for Oregon is that outside of outright land ownership, the federal government has a relatively small physical presence in the state. This means that direct spending reductions are less likely to hurt Oregon. Of course, it also limits the local benefit from any potential increases in federal spending. In terms of federal grants as a share of state revenue, Oregon ranks 29th highest. For federal procurement as a share of the economy, Oregon ranks 48th 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 19th highest among all states. Oregon also is exposed to an above-average share of federal transfer payments to households. Transportation funding is also a major local concern. Overall, 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.

⁸ <http://wpcarey.asu.edu/bluechip/western/oregon.cfm>

- Strength and durability of the housing market recovery. The housing market in recent years has undergone an unusual pattern of growing briskly (2012) to stalling out (2013) to recovering with moderate growth (2014.) How long this lasts and what strength of gains has direct implications for regional economies within the state – namely the medium sized metros and more rural areas. As the recovery continues, some of the same underlying dynamics of growth will reappear. Chief among them is low inventory, which is not keeping up with demand. As such, home prices are rising. There remains much more room for improvement before the market (sales of both existing homes and new construction activity) reflects anything approaching normal levels. While foreclosures and long-term delinquency rates remain somewhat elevated, when compared with pre-recession levels, the market has certainly 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 of construction activity in 2015 and 2016.
- Even as the housing market recovers, new supply entering the market has not kept up with demand (both from new households and investor activity.) This applies to both the rental and ownership sides of the market. As such, prices have risen considerably and housing (in)affordability is becoming a larger risk to the outlook. Expectations are that new construction will pick up in the next year or three, to match the increase in demand, which will alleviate price pressures. However to the extent that supply does not match demand, home prices and rents increasing significantly faster than income or wages for the typical household is a major concern.
- The drought impacting much of the West Coast and Southwestern U.S. is a risk to the outlook. Its impact on the California economy reached into the billions of dollars in 2014 and is expected to increase in cost and size in 2015. The drought has reached Oregon as well and most eastern and/or southern counties are classified accordingly. The impact is most felt within the agriculture industry. Losses are expected to be concentrated more in the grains, feed and other crops in addition to cattle. Fruits, nuts and dairies to be less impacted. The severity and duration of the drought is unknown, however it remains a risk to Oregon’s rural economies in particular.
- 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 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. Even with the temporary reinstatement, it has been and 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](#)⁹.

- **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 Ukraine, 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 – and its real estate market – 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.

Alternative Scenarios

The baseline forecast is our outlook of the most likely path 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.

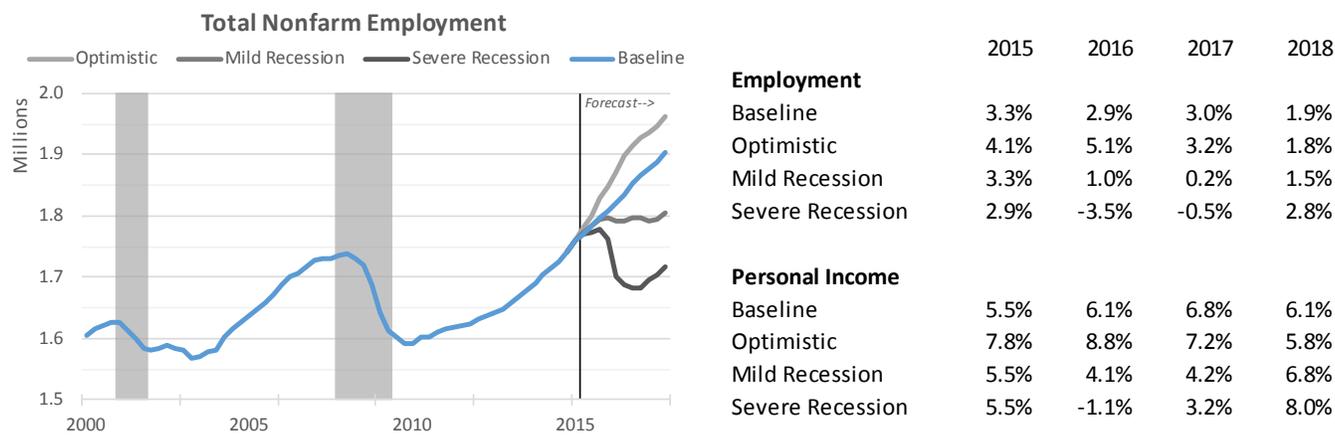
Optimistic Scenario: The recovery gathers steam and pulls the economy further away from the aftermath of the Great Recession and into a stronger cyclical expansion. The lackluster economic growth seen in recent years recedes into the rearview mirror of history and the U.S. economy builds momentum through the spring. The economy is soon firing on all cylinders. Economic growth is above potential in 2015 and 2016, resulting in stronger job and income gains. 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 2015 or about a year earlier than the baseline.

⁹ <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

May 2015



Mild Recession Scenario: The economic acceleration of the past two years proves temporary and soon Oregon is returning to very slow employment and GDP growth in 2015. The housing market stalls (again), removing one driver of growth. The Fed's tightening in mid-2015 causes emerging market turmoil and capital flight. The U.S. dollar strengthens, helping to choke off the manufacturing cycle. These factors are enough weight on the lackluster recovery that by late-2015 the economy slides back into recession. Job losses ensue in 2016, 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 over 8 percent. 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, a key difference.

Severe Recession Scenario: The economy is not able to reach escape velocity from the lackluster recovery to date, and with a newly stalled housing recovery removing one pillar of growth, increasing turmoil in domestic and international markets, and the Fed's premature tightening in 2015, the economy is soon in 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 10 percent and more than 100,000 Oregonians lose their jobs in 2015-16. Besides the domestic economic headwinds and Federal Reserve tightening, the likely culprit in this scenario is a meltdown of the financial markets sparked by the European sovereign debt crisis or other geopolitical shock. 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 that the state will have under built housing during this time period.

Extended Outlook

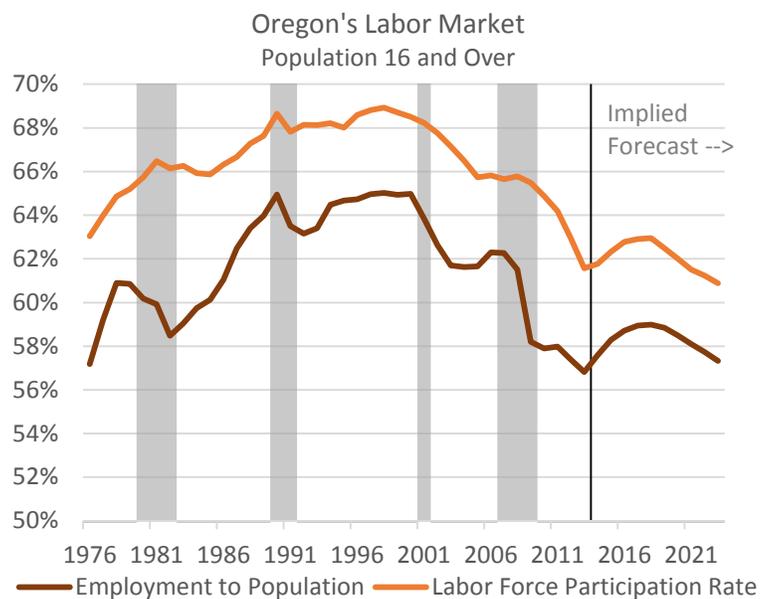
IHS Economics projects Oregon's economy to fare well relative to the rest of the country in the coming years. The state's Real Gross State Product is projected to be the fastest among all states across the country in terms of growth with gains averaging 3.8 percent over the next five years through 2019. Total employment is expected to be the tenth strongest among all states at an annualized 1.8 percent, while manufacturing employment will be

the second fastest in the country at 1.7 percent. Total personal income growth is expected to be 5.3 percent per year, the tenth fastest among all states, according to IHS Economics.

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. OEA has identified three main avenues of economic growth that are important to continue to monitor over the extended horizon: the state’s dynamic labor supply, the state’s industrial structure and the current number of start-ups, or new businesses.

Oregon has typically benefited 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.



With that being said, our office’s baseline outlook calls for some improvement in the near-term for both the labor force participation rate and the employment to population ratio. These gains are due to the shorter run cyclical rebound in the economy, before longer-run demographic trends will weigh on these measures. Focusing just on the prime working age cohorts reveals stronger improvements.

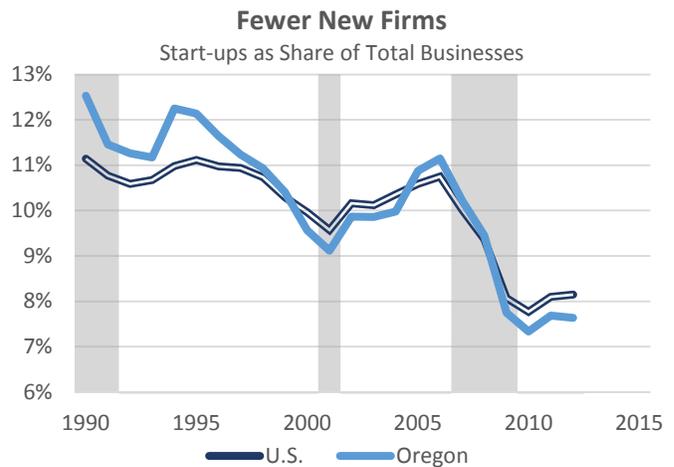
Oregon’s industrial structure is very similar to the U.S. overall, even moreso than nearly all other states. Oregon’s manufacturing industry is larger and weighted toward semiconductors and wood products, relative to the nation which is much more concentrated in transportation equipment. However, these industries which have been Oregon’s strength in both the recent past and historically, are now expected to grow the slowest moving forward. Productivity and output from the state’s technology producers is expected to continue growing quickly, however employment is not likely to follow suit. Similarly, the timber industry remains under pressure from both market based conditions and federal regulations. Barring major changes to either, the slow to downward trajectory of the industry in Oregon is likely to continue.



Industry concentration = 2012 employment location quotient at 4 digit NAICS level
 Each column represents approximately 1/11 of Oregon traded sector employment
 Source: BLS, Oregon Employment Department, Oregon Office of Economic Analysis calculations

With that being said, certainly not all hope is lost. Many industries in which Oregon has a larger concentration than typical state are expected to perform well over the coming decade. These industries include management of companies, food and beverage manufacturing, published software along with gains in crop production and nurseries. The state’s real challenges and opportunities will come in industries in which Oregon does not have a relatively large concentration (the orange bars in the graph). These industries, like consulting, computer system design, financial investment, and scientific R&D, are expected to grow quickly in the decade ahead. To the extent that Oregon is behind the curve than the state may not fully realize these gains in they rely more on clusters and concentrations of similar firms that may already exist elsewhere in the country.

Another area of potential concern that may impact longer term economic growth is that of new business formation. Over the past year, the number of new business license applications with the Oregon Secretary of State have begun to grow again. However, these applications remain low relative to historical standards. Similar trends are seen in data available from the U.S. Census Bureau and Bureau of Labor Statistics. These indicators of entrepreneurship, and business formation all show that the recessionary declines are over, but that not much progress has been made in terms of regaining lost ground.



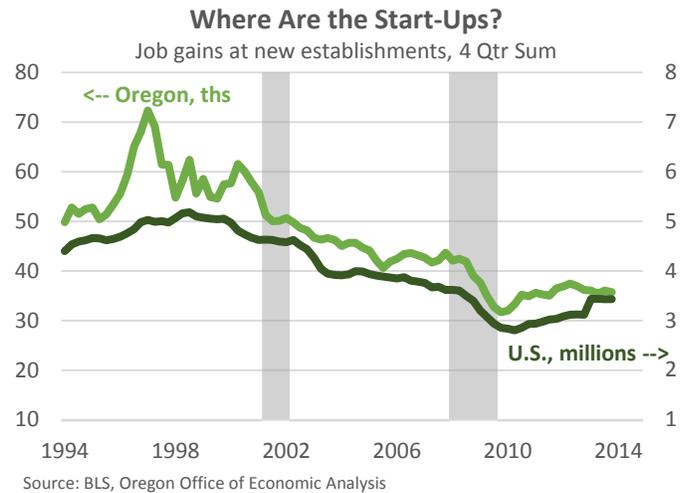
Source: Census Bureau, Oregon Office of Economic Analysis

The share of all businesses that are start-ups, either in Oregon or across the nation, is effectively at an all-time low, with data starting in the late 1970s. Associated start-up employment follows a similar pattern. The concern is that new businesses are generally considered the source of innovation and new ideas, products and services that help propel economic growth. To the extent that lower start-up rates indicates that R&D more broadly is not being undertaken, slower growth is to be expected moving forward. However, if the larger firms that have won out in today’s marketplace are investing in R&D and making those innovations themselves, then the worries about the number of start-ups today is overstated. It can be hard

to say which is the correct view. However seeing these longer run, downward trends in new business formation warrants, at the very least, concern about future growth prospects.

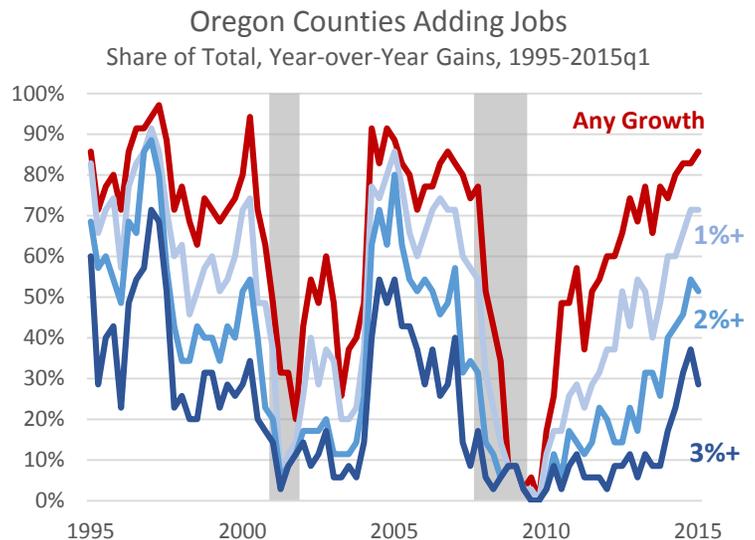
Finally, Oregon also enjoys the long-term advantages of low electricity costs; a central location between the large markets of California, Vancouver and Asia; clean water; low business rents and living costs; and an increasingly diverse industrial base.

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 benefit side of the state’s relatively low income figures is that local firms do not have to pay higher wages, thus helping support the firms’ balance sheets as well. It is not purely a lose-lose proposition. The Oregon Employment Department has published a detailed look at Oregon’s per capita personal income entitled Why Oregon Trails the Nation¹⁰.



Oregon Regional Trends

Job growth continues to pick up across Oregon as the two major weights on the recovery lift. Housing and government play an outsized role in many of Oregon’s rural economies, not because these areas have so many of these jobs. Rather because they have lower industrial diversification than larger metropolitan areas that also include ballets, advertising firms and the like. As such, with the public sector moving to a more neutral position, rather than a drag in terms of employment losses, and the housing market recovering, albeit slowly in recent months, more areas of the state are sharing in the overall economic expansion.



Today nearly 9 out of every 10 counties in Oregon have added jobs over the past year, matching the shares seen during previous expansions. The rate of growth has improved significantly as well outside of the Portland MSA. Over the past 30 years, employment growth in the Portland MSA and the rest of the state have tended to track closely with two exceptions. First, the 2001 recession hit the Portland MSA harder than the state or nation due to its concentration of high-technology and manufacturing firms. Second, in the aftermath of the Great Recession, Portland, along with the nation’s other large metropolitan areas, saw job growth return first, likely due to its

¹⁰ <http://olmis.emp.state.or.us/olmisj/PubReader?itemid=00007366>

heavier concentration in service industries such as professional and business, leisure and hospitality and health, which have outperformed the average industry in recent years.

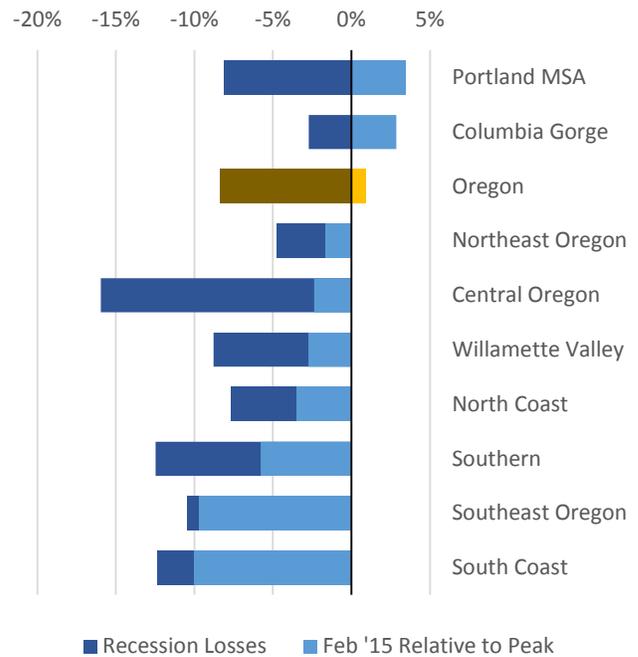
However, as the economic expansion continues and even gathers steam, the state’s second tier metros – Bend, Corvallis, Eugene, Medford, and Salem – are now growing faster than Portland, and more importantly back to their housing boom era growth rates. Collectively, these same metros are growing about as fast as they ever have, even if individual performance varies. In particular, Bend and Salem are currently adding jobs at extremely fast rates. While Eugene and Medford are seeing solid gains, these rates of growth remain below previous expansions.

Rural Oregon continues to see economic improvements, however not as strong as their metropolitan counterparts. Job growth in the state’s non-metro counties is currently at 1.1 percent, its strongest pace since prior to the Great Recession. During the housing boom, Oregon’s rural counties added jobs at a 2 percent rate, however. While economic performance varies across the different rural areas of the state, each one is currently seeing relatively smaller gains than in the past. Part of this is due to the nature of the business cycle, in which housing and government were particularly impacted. Part of this is also due to demographics, in which Oregon’s and the nation’s rural

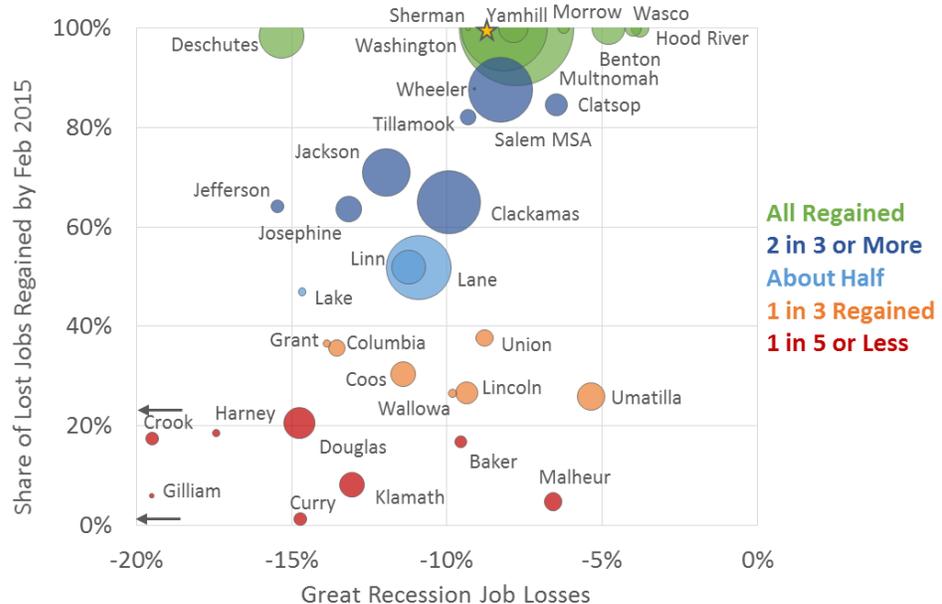
populations are typically older than in most metropolitan areas. As rural Boomers age into retirement, there are few working age adults and households to take their place.

For on Oregon’s regional trends please see our website¹¹ and the Oregon Employment Department’s website¹².

The Great Recession Across Oregon's Region



Oregon Employment by County



¹¹ <http://oregoneconomicanalysis.com/regional/>

¹² <http://www.qualityinfo.org/olmisj/OlmisZine>

State Comparisons

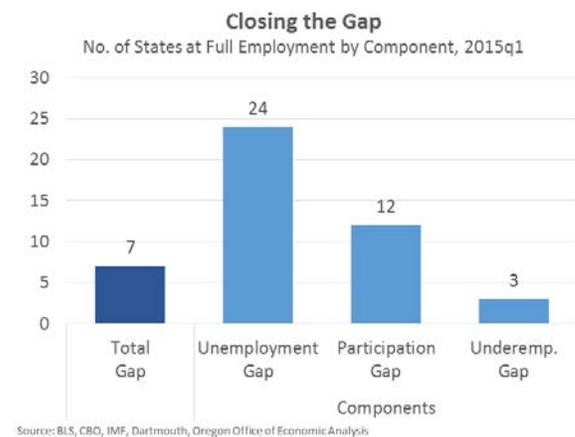
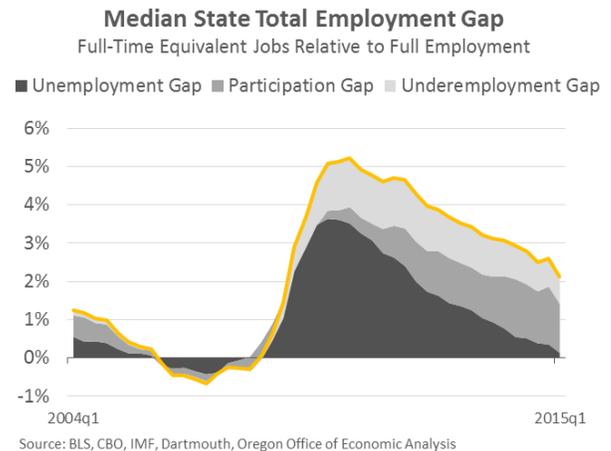
Like Oregon and the nation overall, the typical state has effectively closed its unemployment gap, even as there remains considerable slack as measured by the Total Employment Gap.

In the aftermath of the Great Recession, labor force participation rates have declined in nearly all states, with a few rare exceptions. However, due to an aging population it should be expected that the LFPR would fall. In fact, national studies have shown that one-half to three-quarters of the decline in the LFPR in the U.S. is due to aging alone. The remainder is due to “other factors” which can largely be attributed to economic opportunities, plus some cultural or societal shifts as well.

Applying a similar methodology to each state, to eliminate the impact of demographics on the local LFPR, reveals that just 12 states have no participation gap today. The concern is that working age adults are exiting the labor force due to an underperforming economy. With fewer workers available, it places downward pressure on potential economic growth. The worst result being a permanent reduction in the productive capabilities of the U.S., state or regional economy. The good news is that the participation gap has improved substantially in at least 15 individual states over the past year or so, including some of the hardest hit like Oregon, South Carolina and even Michigan.

A somewhat similar story can be told for the underemployment gap. While generally a smaller component of the Total Employment Gap, it remains an issue in nearly all states. Just 3 individual states – Alaska, North Dakota, and South Dakota – have no underemployment gap today, relative to pre-crises levels. Even as the total number of jobs in the economy is at an all-time high, full-time positions are just now nearing their pre-Great Recession levels. Combined, these facts indicate that the economy is not yet at full employment.

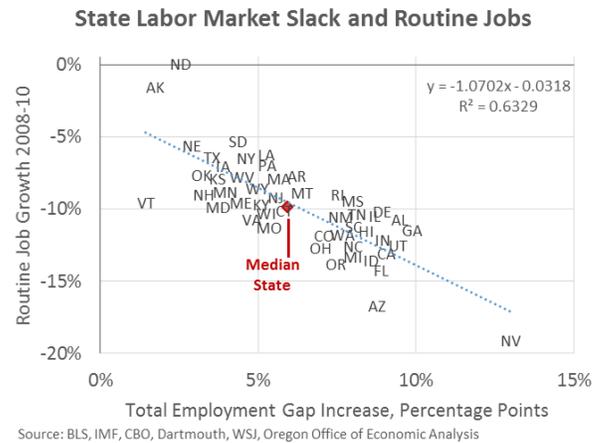
While the severity of a recession and strength of the recovery can generally explain the unemployment gap, the changing nature of the labor market influences the participation and underemployment gaps as well. Specifically, the process of job polarization has big effects. Job polarization refers to the trends that job opportunities are disproportionately concentrated in both high- and low-wage occupations. In the parlance of the research, these are commonly referred to as cognitive non-routine and manual non-routine occupations. Middle-wage jobs, or routine jobs see the largest losses in recession and fewest gains in recovery, at least in percentage terms.



Across states, for each percentage point decline in routine jobs during the recession, the state's Total Employment Gap increased half of a percentage point (see Table 1.) This impact was largest among the traditional blue-collar, or so-called manual routine occupations like construction, transportation, production and installation, maintenance and repair workers. Changes in employment in other occupations, such as high- or low-wage jobs, were not statistically significant during the downturn.

So far in recovery, these relationships are not as strong. However gains in cognitive non-routine occupations, generally high-wage jobs, have a statistically significant impact on a state's declining Total Employment Gap. Other employment changes are not statistically significant.

In other words, losses in routine jobs explain a significant amount of a state's increase in the Total Employment Gap at the depths of the Great Recession and gains in high-wage, cognitive non-routine jobs helps explain some of the decline in recovery. However the larger concern today is not the unemployment gap, but the participation and underemployment gaps. Here, job polarization plays a role as well given that the skills and experience needed for high- and low-wage jobs, which is where most of the employment growth is concentrated, differ from the routine occupations which are lost to a larger degree in recession.



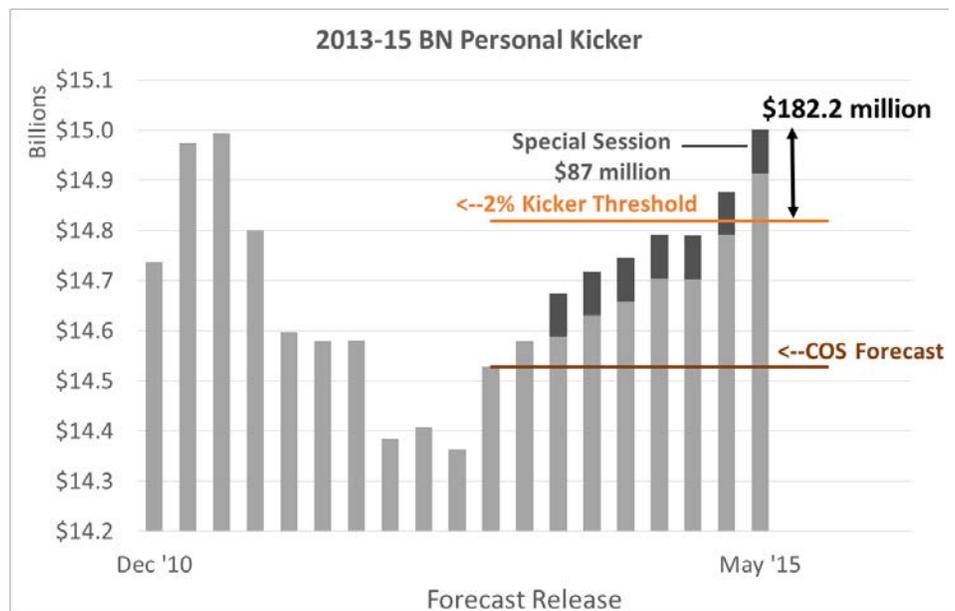
REVENUE OUTLOOK

Revenue Summary

Growth in Oregon's General Fund revenues has been very rapid this fiscal year, rivalling the gains seen during the technology and housing booms. Gains have been broad-based across Oregon's primary revenue instruments, due both to a healthy job market as well as to solid growth in taxable investments and business income. Even lottery sales, which have been relatively dormant for years, are now expanding at a solid clip.

As expected, the personal income tax filing season turned out to be a big one for revenue collections due to large gains in reported business profits and investment income. Realizations of capital gains nearly doubled on the year. While the big April filing season was expected, the full impact of Oregon's rapid job gains and wage growth was not. As a result of booming labor-related income tax collections, it is now highly likely that a personal income tax kicker payment will be triggered at the end of the biennium.

The May 2015 outlook assumes that revenues included in the personal income tax kicker base will exceed the kicker threshold by \$182 million at the end of the biennium. Should this outlook hold true, a personal income tax kicker of \$473 million will be generated. Due to actions taken by the 2011 Legislature, this potential kicker payment will take the form of a credit on 2015 tax returns rather than being issued as a check at the end of the year.



Despite the larger expected kicker payment, the May revenue outlook now calls for a significant increase in available resources for the upcoming biennium. Widespread optimism is now being voiced by a diverse chorus of local businesspeople and economic forecasters. This optimism has been translated into increased expectations for job growth and taxable wage gains. The March 2015 forecast was an aggressive one, calling for job gains over the upcoming biennium matching the best two years of the housing boom. Even so, business sentiment in Oregon has become so bullish that a strong majority among OEA's advisory group members pushed for significantly more growth to be added over and above what was assumed in the March forecast.

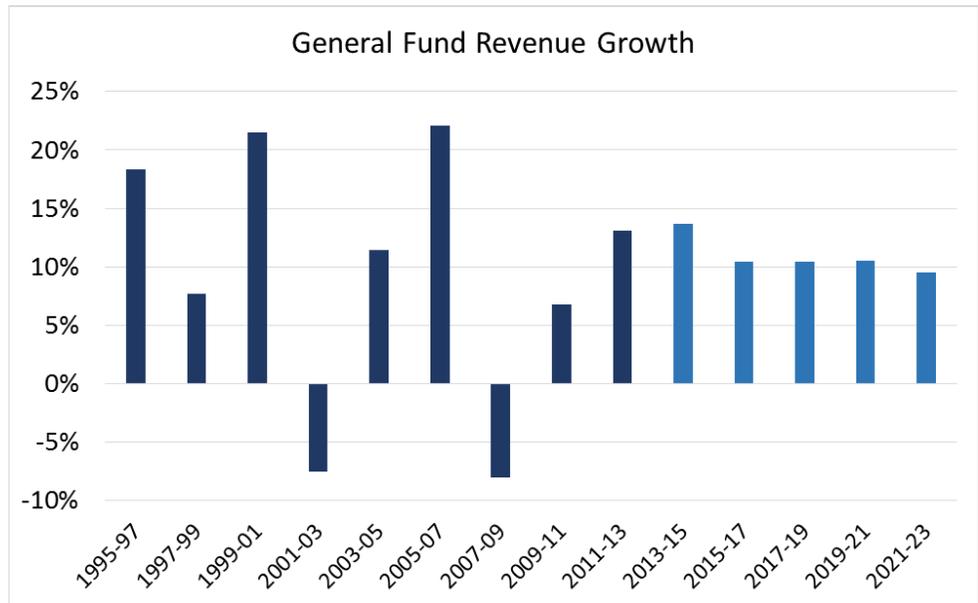
Although the May 2015 forecast provides more wiggle room for budget writers, none of the additional revenue called for in the outlook has come in the door to date. Business sentiment is fickle, and can sour overnight. With such a large amount of downside risk facing the near-term revenue outlook, well-stocked reserve funds are a must.

Bullish consumer and business sentiment notwithstanding, Oregon's economy does not appear to be quite as healthy from an empirical perspective as it was a few months ago. Some fault lines are now beginning to emerge among regional economic indicators, which were universally positive in the recent past. Nevertheless, despite a few bad indicators, it does not look as though the wheels are about to fall off the economic recovery anytime soon.

If Oregon’s businesses and households are as confident about the future as they say they are, their combined hiring and spending should go a long way toward ensuring that their bullish expectations come true.

Although the primary downside risk facing the near-term revenue forecast is the uncertain future of the economic expansion, there is also a considerable amount of uncertainty surrounding the outlook for corporate excise taxes. Corporate collections are notoriously volatile, often doubling or being halved in any given year. With many significant corporate tax law changes having been passed in recent years, historical tax collections may not provide an accurate picture of what is to come. Adding to this complexity, the Oregon Department of Revenue has recently replaced its corporate tax processing system, which has made comparing collections over time even more difficult.

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

General Fund revenues closely matched expectations for most of the 2013-15 biennium, until labor-related personal income tax collections began to take off last winter. General Fund revenue growth has continued to accelerate during 2015, with personal and corporate income taxes now expanding at double-digit rates. With more taxable income of all types, the May forecast expects that both personal and corporate tax kickers will be triggered.

The forecast for gross General Fund revenues for 2013-15 is now \$16,167 million. This represents an increase of \$166 million (+1.0%) from the March 2015 forecast. The May 2015 forecast for the 2013-15 biennium is \$525 million (3.4%) above the Close of Session forecast.

Personal Income Tax

Personal income tax collections were \$1,427 million for the third quarter of fiscal year 2015, \$90 million (6.3%) above the latest forecast. Compared to the year-ago level, total personal income tax collections grew by 11.7% relative to a forecast that called for 5.1% growth. With processing running a bit slower than last year, much of this gap was made up in the fourth quarter. Table B.8 in Appendix B presents a comparison of actual and projected personal income tax revenues for the January-March quarter.

Excluding corporate excise taxes, the General Fund forecast is now \$473 million above the Close of Session forecast. Around one-fifth of this change is due to the impact of law changes, and most of the rest can be traced to a more optimistic economic outlook for Fiscal Year 2015. Should the aggressive growth outlook for Fiscal Year

2015 come to pass, revenues will end up \$182 million above of the personal income tax kicker threshold. This would generate a credit of around \$284 for the average Oregon income tax filer. The top 1% of income earners would receive an average credit of \$5,373.

Corporate Excise Tax

Corporate excise tax collections equaled \$107 million for the third quarter of fiscal year 2015, \$49 million below the December forecast. Compared to one year ago, net corporate receipts were up 44% with the forecast calling for an increase of 111%. Some of the large increase in corporate tax collections is technical in nature, with the pattern of processing having changed due to an upgraded IT system. After a few more months under the new processing system, the collections data should settle into its new trend.

Corporate tax collections would likely be near record levels even without technical issues. Outside of energy production and mining, profitability remains strong in most industries. Also, recent law changes have supported collections, as has a decline in outstanding Business Energy Tax Credits. Even without these issues, corporate tax collections and underlying profits are subject to boom-bust cycles, injecting a considerable amount of downside risk into the outlook.

Following the rapid growth seen in recent months, expectations for corporate income tax collections for 2013-15 are now only \$41 million higher than what was called for in the Close of Session forecast. However, due to a law change affecting the distribution of corporate tax collections into the Rainy Day Fund, the General Fund portion of corporate tax collections is now above the Close of Session forecast. During past budget cycles, this would have led to corporate kicker payments of \$92 million. Now, however, should these unanticipated revenues be realized, the funds will be directed to education programs.

Table R.1

2013-15 General Fund Forecast Summary

(Millions)	2013 COS Forecast	March 2015 Forecast	May 2015 Forecast	Change from Prior Forecast	Change from COS Forecast
Structural Revenues					
Personal Income Tax	\$13,558.2	\$13,914.3	\$14,044.2	\$129.9	\$486.0
Corporate Income Tax	\$1,056.6	\$1,060.9	\$1,097.6	\$36.7	\$41.0
All Other Revenues	\$1,027.9	\$1,025.8	\$1,019.4	-\$6.4	-\$8.5
Gross GF Revenues	\$15,642.6	\$16,000.9	\$16,161.1	\$160.2	\$518.5
Offsets and Transfers	-\$120.8	-\$74.1	-\$74.3	-\$0.2	\$46.5
Administrative Actions ¹	-\$18.2	-\$3.3	-\$3.3	\$0.0	\$14.9
Legislative Actions	-\$136.9	-\$136.7	-\$136.7	\$0.0	\$0.2
Net Available Resources	\$15,910.1	\$16,262.4	\$16,422.4	\$160.0	\$512.2
Confidence Intervals					
67% Confidence	+/- 1.0%		\$154.7	\$16.01B to \$16.32B	
95% Confidence	+/- 1.9%		\$309.5	\$15.85B to \$16.47B	

¹ Reflects cost of cashflow management actions, exclusive of internal borrowing.

Other Sources of Revenue

Among other primary sources of revenue, estate taxes, video lottery sales and insurance taxes have been coming in above expectations in recent months. Fines and fees have been coming in somewhat below forecast. Combined, all other sources of general fund revenue are \$8.5 million below the Close of Session Forecast.

Extended General Fund Outlook

Table R.2 exhibits the long-run forecast for General Fund revenues through the 2023-25 biennium. Users should note that the potential for error in the forecast increases substantially the further ahead we look.

Table R.2

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

Revenue Source	Forecast 2013-15		Forecast 2015-17		Forecast 2017-19		Forecast 2019-21		Forecast 2021-23		Forecast 2023-25	
	Biennium	% Chg	Biennium	% Chg	Biennium	% Chg						
Personal Income Taxes	14,044.2	15.9%	15,749.7	12.1%	17,593.0	11.7%	19,466.0	10.6%	21,380.8	9.8%	23,473.2	9.8%
Corporate Income Taxes	1,097.6	24.2%	1,080.7	-1.5%	1,057.1	-2.2%	1,106.4	4.7%	1,198.8	8.4%	1,265.2	5.5%
All Others	1,019.4	-12.4%	1,021.6	0.2%	1,054.1	3.2%	1,129.8	7.2%	1,189.3	5.3%	1,242.2	4.4%
Gross General Fund	16,161.1	14.1%	17,852.1	10.5%	19,704.3	10.4%	21,702.2	10.1%	23,768.9	9.5%	25,980.5	9.3%
<i>Offsets and Transfers</i>	<i>(74.3)</i>		<i>(96.3)</i>		<i>(98.0)</i>		<i>(41.9)</i>		<i>(45.9)</i>		<i>(47.2)</i>	
Net Revenue	16,086.8	13.7%	17,755.8	10.4%	19,606.3	10.4%	21,660.3	10.5%	23,723.0	9.5%	25,933.3	9.3%

Expectations for healthy job gains support a strong outlook for personal income tax collections in the 2015-17 biennium. Excluding kicker payments, the net general fund is expected to grow by 13.3% over the biennium. Including kicker payments, growth is expected to be a more modest 10.4%.

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.

General Fund revenues are expected to total \$19,606 million in 2017-19 biennium, an increase of 10.4% percent from the prior period, and \$267 million above the March forecast. In the 2019-21 biennium, revenue growth is expected to remain stable, followed by rates of around 9% to 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. In particular, the labor force will lose many very productive workers with a lifetime of experience over the coming years. Table B.2 in Appendix presents a more detailed look at the long-term General Fund revenue forecast.

Tax Law Assumptions

The revenue forecast is based on existing law, including measures and actions signed into law during the 2013 Oregon Legislative Session, the October 2013 Special Legislative Session and the 2014 Oregon 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](#).

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 2015-17 Tax Expenditure Report together with more timely updates produced by the Legislative Revenue Office.

After the 2015 Oregon Legislative Session concludes, the revenue impact of any new laws (as estimated by the Legislative Revenue Office) will be folded into the May forecast. This will serve as the Close of Session Forecast that sets the bar for Oregon's balanced budget requirement and the kicker law.

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. economic recovery will lose steam 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 predicted¹³.

¹³ The methodology for computing alternative scenarios has 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

March 2015

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								
Baseline Case									
Personal Income									
Level	168.46	177.47	188.46	199.77	210.36	221.03	231.55	242.10	253.36
% change	5.1%	5.3%	6.2%	6.0%	5.3%	5.1%	4.8%	4.6%	4.6%
Taxes									
Personal Income	7,286	7,451	8,039	8,463	8,897	9,382	9,847	10,331	10,851
Corporate Excise & Income	566	553	550	525	521	543	561	583	600
Other General Fund	514	497	507	507	530	544	569	579	599
Total General Fund	8,367	8,501	9,095	9,494	9,947	10,468	10,977	11,493	12,050
% change	9.6%	1.6%	7.0%	4.4%	4.8%	5.2%	4.9%	4.7%	4.8%
Moderate Recession									
Personal Income									
Level	168.5	173.1	179.4	192.2	204.8	216.9	228.9	240.0	251.5
% change	5.1%	2.8%	3.6%	7.1%	6.5%	5.9%	5.5%	4.8%	4.8%
Taxes									
Personal Income	7,286	7,197	7,498	8,016	8,566	9,137	9,691	10,195	10,724
<i>Deviation from baseline</i>		-254	-541	-447	-331	-244	-155	-136	-126
Corporate Excise & Income	566	526	497	485	493	523	548	572	591
<i>Deviation from baseline</i>		-27	-53	-40	-28	-20	-13	-10	-9
Other General Fund	514	497	507	507	530	544	569	579	599
Total General Fund	8,367	8,220	8,502	9,008	9,588	10,204	10,809	11,346	11,915
% change	9.6%	-1.8%	3.4%	5.9%	6.4%	6.4%	5.9%	5.0%	5.0%
<i>Deviation from baseline</i>		-281	-593	-486	-359	-265	-168	-146	-135
Severe Recession									
Personal Income									
Level	168.5	161.7	170.1	184.9	199.3	213.5	227.7	238.7	250.2
% change	5.1%	-4.0%	5.2%	8.7%	7.8%	7.1%	6.6%	4.8%	4.8%
Taxes									
Personal Income	7,286	6,526	6,943	7,578	8,243	8,937	9,619	10,119	10,645
<i>Deviation from baseline</i>		-925	-1,096	-884	-654	-445	-228	-212	-206
Corporate Excise & Income	566	455	443	447	466	506	542	566	585
<i>Deviation from baseline</i>		-98	-107	-78	-55	-37	-19	-16	-15
Other General Fund	514	497	507	507	530	544	569	579	599
Total General Fund	8,367	7,478	7,893	8,531	9,239	9,987	10,731	11,264	11,829
% change	9.6%	-10.6%	5.5%	8.1%	8.3%	8.1%	7.5%	5.0%	5.0%
<i>Deviation from baseline</i>		-1,023	-1,203	-963	-708	-482	-246	-228	-221

Lottery Earnings

Revenues and available resources from Lottery games and programs are projected to total \$1,066.0 million, an increase of \$4.2 million from the March outlook and \$6.5 million above the Close of Session forecast (0.6%.) The near-term increase is the result of both higher than expected sales for video and traditional products alike. Please see Table B.9 in Appendix B for the full extended outlook for lottery earnings.

Overall, video lottery dominates total lottery earnings, accounting for approximately 85 percent of all lottery transfers in the past three years. Over the past decade, video lottery has undergone three distinct phases and has recently entered into a fourth.

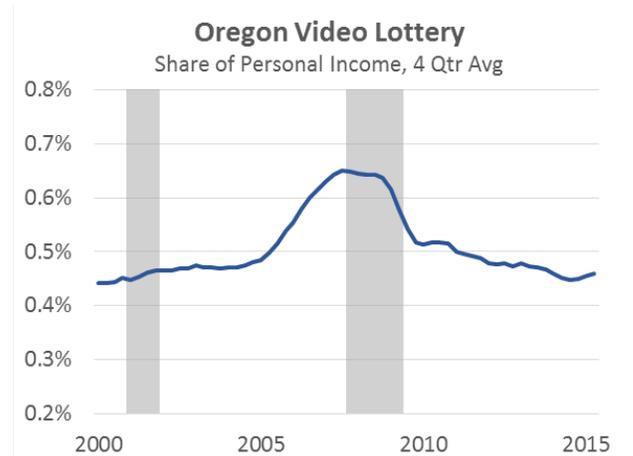
The first, during the housing boom era, followed the implementation of line games back in 2005. Not only was video lottery new to the marketplace and experienced somewhat of a novelty factor intriguing from consumers, it

also coincided with an economic expansion. Growth in the early years of line games was in the double digits and spending as a share of statewide income increased by 40 percent.

The second phase followed the onset of the Great Recession and enactment of the smoking ban in Oregon. During this time, video lottery sales plummeted 23 percent from pre-recession highs to the depths of the recession; the same magnitude of losses seen in slot machines in Clark County, Nevada, home of Las Vegas.

The third phase covered the initial years of recovery, fiscal years 2010 to 2014. Even as Oregon video lottery sales rebounded at approximately three times the rate seen in Clark County, Nevada, growth still averaged just 1.2 percent. Similar sales trends were seen nationwide across the gaming industry, although Oregon's slow growth was better than most where sales were flat to down.

Even as consumers remain cautious with their disposable income, other forms of discretionary spending and entertainment spending have advanced at faster rates. Gaming trends are relatively flat across nearly all states, except for the few locations with new or remodeled casinos. Among mature gaming destinations, revenues continue to decline. The industry is extremely competitive and the share of consumer budgets spent on gaming has not increased. These pressures are unlikely to relent in the near future as more and more jurisdictions turn to gaming as a potential revenue source. See our office's recent report on gaming and tax collections across the country: *Betting the Minimum*¹⁴.



This fiscal year marks a new phase in Oregon video lottery history with the capital replacement plan. During this biennium and the next, 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 about 6.3 percent of available revenue to be transferred, and \$59.2 million in 2015-17, or about 5 percent.

In terms of the new video lottery terminals, the baseline outlook has assumed that older machines would be replaced on a regular basis, given the wear and tear on the machines over time and as technology improves. Clearly this has not been the case, and may be one contributing factor to slow sales growth in recent years. As such, the baseline forecast had been taking more of a wait and see approach to the new machines in terms of the longer-run sales outlook. However, as the first wave of these new video lottery terminals has been deployed across Oregon, there does appear to be a sizable initial sales bump. Not only are these trends and impacts seen in the statewide sales figures, they are nearly uniform across the state by region, albeit with different timing as the new terminals were installed at different times depending upon the location. Even in some of Oregon's hardest

¹⁴ <http://oregoneconomicanalysis.com/2014/10/09/betting-the-minimum-gaming-in-the-u-s-and-state-revenues/>

hit counties, those that have yet to full partake in the economic recovery, growth in video lottery sales is roughly 10 percent over the past year. Sales have started to slow somewhat in the locations where the new terminals were first installed, e.g. Portland MSA.

Expectations are not that double digit growth is baseline, they are such that growth will slow moving forward. Exactly how strong and how long the initial sales bump lasts are still open ended questions at this time. The current forecast builds in a largely one-time novelty factor increase in sales that starts in late 2014 and lasts through mid-2015. Due to the continued

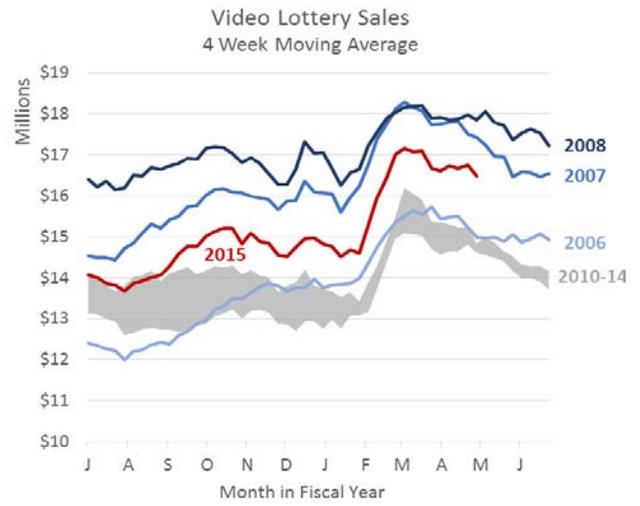
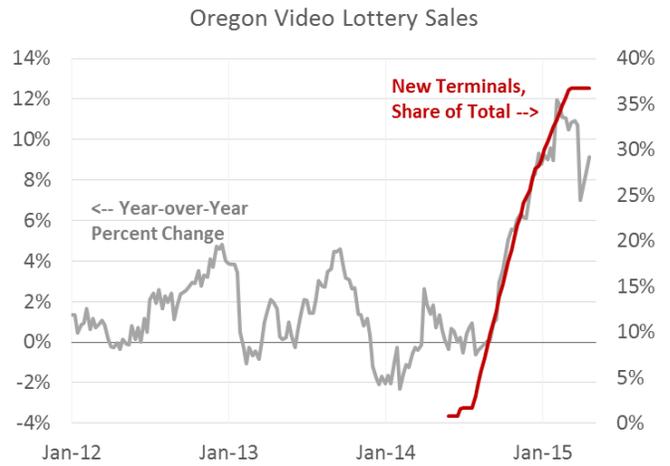
fundamental improvement in the economy – jobs and income growth – along with these increase video lottery sales, the longer term forecast has been raised somewhat from the previous forecast. Growth still remains somewhat subdued relative to pre-Great Recession rates of growth.

Such an outlook does leave room for both upside and downside risks. Should the combination of a stronger economy and the new terminals unlock permanently higher sales over a longer period, instead of one-time novelty factor bump, then the forecast will need to be revised up. Possibly considerably so. However, sales growth has been lackluster to disappointing across the country. Even in brand new casinos, after a year or two of strong growth, sales start to plateau or even fall in some locations.

Given all of these trends, the outlook for video lottery has been reduced in recent years. However not completely down to growth along the lines of the adult population

(our office’s pessimistic scenario.) Such changes to the outlook have reduced available resources over the 10 year horizon. Overall, expectations are certainly for video lottery sales to continue to increase, however, much like the broader economic outlook, at rates of growth lower than in the past.

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



Budgetary Reserves

The state currently administers two general reserve accounts, the Oregon Rainy Day Fund¹⁵ (ORDF) and the Education Stability Fund¹⁶ (ESF). This section updates balances and recalculates the outlook for these funds based on the May revenue forecast.

Following the close of the 2011-13 BN, the two reserve funds totaled \$69.4 million. Given the General Fund’s positive ending balance for 2011-13, one percent of appropriations, \$136.9 million, was deposited into the ORDF during 2013-15.

As of this forecast, the two reserve funds currently total \$378 million, plus a projected General Fund ending balance of \$503 million. One additional deposits is still to come in 2013-15 as well. The ORDF will receive will receive an estimated \$12.1 million deposit due to the increases in corporate tax rates from Measure 67. Assuming no further administrative actions, the two reserve funds are forecasted to total \$391.3 million at the end of 2013-15, or 2.4 percent of General Fund revenues. Including the projected ending balance brings effective budgetary reserves \$895 million, or 5.5 percent.

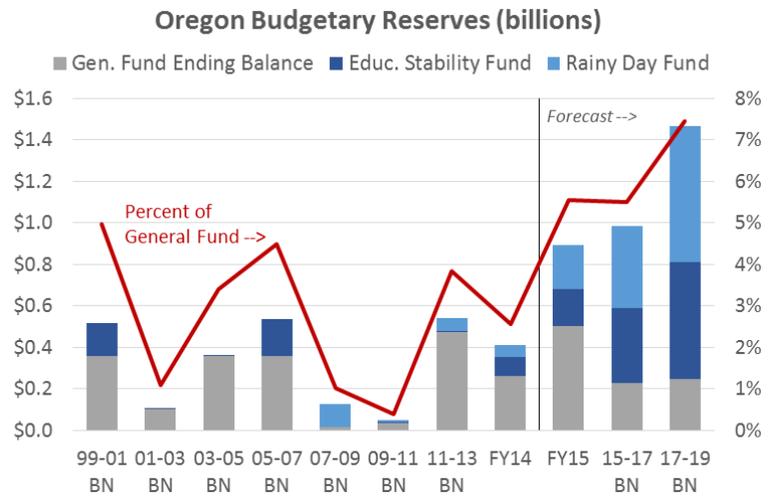
Oregon's Budgetary Reserves

(Millions)	2011-13 Biennium	2013-15 Biennium	2015-17 Biennium
Rainy Day Fund			
Beginning Balance	\$10.4	\$61.9	\$212.0
Net Deposits	\$50.8	\$148.8	\$169.3
Interest	\$0.6	\$1.3	\$12.6
Ending Balance¹	\$61.8	\$212.0	\$393.9
Education Stability Fund			
Beginning Balance	\$5.1	\$7.4	\$179.3
Net Deposits	\$184.8	\$171.9	\$182.9
Interest	\$0.6	\$1.0	\$10.3
Withdrawals	-\$182.9	-\$1.0	-\$10.3
Ending Balance	\$7.6	\$179.3	\$362.2
Total Reserves	\$69.4	\$391.3	\$756.2
Percent of General Fund Revenues	0.5%	2.4%	4.3%

¹⁵ 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.

¹⁶ The ESF gained its current reserve structure and mechanics via constitutional amendment in 2002. The ESF receives 18 percent of lottery earnings, deposited on a quarterly basis – 5% of which are deposited in the Oregon Growth sub-account. The ESF does not retain interest earnings. The ESF has similar triggers as the ORDF, 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.

Such levels of reserve balances are as big as Oregon has ever been able to accumulate, at least in the state’s recent history. However, that does not indicate they are sufficient to withstand a recession’s impact on the state budget. Reserve balances of approximately 7 percent are generally accepted to be able to withstand a recession of average size. (This figure is based on a one standard deviation change in revenues. Larger reserves would be needed to insure against a more severe recession.) Provided the economic expansion continues, Oregon’s reserves are projected to reach 7 percent of expenditures at the end of the 2017-19 biennium.



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

POPULATION AND DEMOGRAPHIC OUTLOOK

Population and Demographic Summary

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. Oregon's national ranking in population growth rate has dropped further to 20th between 2010 and 2014 lagging behind all of the neighboring states. Slow population growth during the decade preceding the 2010 Census characterized by 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. As a result of recent economic downturn and sluggish recovery, Oregon's population increased at a slow pace in the recent past. However, Oregon's population growth in 2014 rebounded nicely and ranked 13th fastest in the nation. Based on the current forecast, Oregon's population will reach 4.35 million in the year 2022 with an annual rate of growth of 1.16 percent between 2014 and 2022.

Oregon's economic condition heavily influences the state's population growth. Its economy determines the ability to retain existing 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 number of 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 include a major recession and a net loss of population during the early years, 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 32 percent in 2010, lowest since early 1980s when we actually had negative net migration. As a sign of slow to modest economic gain, the ratio of net migration-to-population change will increase gradually and will reach 79 percent by the end of the forecast horizon due largely to rising number of deaths among elderly population associated with increasing elderly population. 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. California is the number one state of origin of migrants to Oregon. As California's housing market improves, we expect positive impact on Oregon's net migration.

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 2014-2022. 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 to the record high levels as the baby-boom generation continue to enter this age group. The average annual growth of the elderly population will be 3.9 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 in the near future exceeding 5 percent annual rate of growth due to the direct impact of the baby-boom generation entering the retirement age and smaller pre-baby boom cohort exiting the 65-74 age group. Reversing several years of slow growth and shrinking population, the elderly aged 75-84 started to show a positive growth as the effect of depression era birth-cohort will dissipate. An

unprecedented fast 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 1.5 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 1.5 percent annual average rate during the forecast horizon mainly because of the exiting smaller birth cohort following the baby-boom cohort. The young adult population (aged 18-24) will remain nearly unchanged over the forecast period. 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 colleges 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 past years and will grow in the future at well below the overall state average. The growth rate for children under the age of five has remained below or near zero percent in the recent past due to the sharp decline in the number of births. This cohort of children will see steady positive growth only after 2015. Although the number of children under the age of five declined in the recent years, 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 2011-2013 postcensal totals from the Population Research Center, Portland State University. The numbers of births and deaths through 2013 are from Oregon's Center for Health Statistics.

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 2010. Male and female life expectancies for the 2010-2022 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 77.4 and the female life expectancy of 81.8 in 2010 are projected to improve to 79.0 years for males and 83.25 years for females by the year 2022.

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 neighboring 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 2014 and 2022 is expected to remain in the range of 33,700 to 38,800, averaging 37,000 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. Oregon's population growth is expected a gradual recovery in the 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 had very limited destination choices. As Oregon's economy gets better, net migration and population growth will increase. However, the future growth will not look like high growth period of 1990s. The role of net migration in Oregon's population growth will get more prominence as the natural increase will decline considerably due to rapid increase in the number of deaths associated with ageing population.

APPENDIX A: ECONOMIC FORECAST DETAIL

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Table A.1 – Employment Forecast Tracking

Total Nonfarm Employment, 1st quarter 2015

(Employment in thousands, Annualized Percent Change)

	Preliminary Estimate		Forecast		Forecast Error		Y/Y Change
	level	% ch	level	% ch	level	%	% ch
Total Nonfarm	1,758.7	3.9	1,751.2	3.1	7.5	0.4	3.2
Total Private	1,456.7	4.4	1,452.5	3.3	4.2	0.3	3.4
Mining and Logging	7.8	6.4	7.9	3.3	(0.2)	(1.9)	(0.6)
Construction	83.1	11.7	80.7	1.4	2.5	3.1	3.4
Manufacturing	183.6	5.2	182.1	3.6	1.5	0.8	3.5
Durable Goods	129.0	4.6	128.2	4.1	0.7	0.6	3.3
Wood Product	22.2	3.5	22.3	3.5	(0.1)	(0.5)	1.8
Metals and Machinery	36.4	2.9	36.3	2.2	0.1	0.3	1.8
Computer and Electronic Product	37.2	4.9	37.1	6.4	0.1	0.2	2.0
Transportation Equipment	12.2	4.9	11.7	2.2	0.5	4.6	11.0
Other Durable Goods	21.0	7.8	20.8	5.2	0.1	0.6	6.2
Nondurable Goods	54.6	6.7	53.9	2.3	0.7	1.3	3.8
Food	28.0	8.0	27.0	0.5	1.0	3.6	4.4
Other Nondurable Goods	26.7	5.4	26.9	4.1	(0.3)	(1.0)	3.1
Trade, Transportation & Utilities	330.2	2.3	330.5	3.3	(0.3)	(0.1)	2.6
Retail Trade	198.8	1.9	199.6	3.7	(0.7)	(0.4)	2.7
Wholesale Trade	73.0	2.2	73.1	3.5	(0.1)	(0.1)	1.2
Transportation, Warehousing & Utilities	58.4	4.0	57.8	2.1	0.5	0.9	4.0
Information	32.4	2.2	32.3	2.8	0.0	0.1	0.9
Financial Activities	94.4	3.9	92.8	2.6	1.7	1.8	2.4
Professional & Business Services	227.1	5.4	227.4	4.8	(0.3)	(0.1)	5.1
Educational & Health Services	254.7	5.0	253.2	2.2	1.5	0.6	3.7
Educational Services	34.9	3.3	34.9	1.3	0.0	0.0	1.6
Health Services	220.8	5.3	218.3	2.3	2.5	1.1	4.0
Leisure and Hospitality	186.9	4.3	185.6	3.7	1.3	0.7	3.7
Other Services	59.5	0.4	60.0	3.2	(0.6)	(0.9)	2.0
Government	298.1	1.2	298.7	2.5	(0.7)	(0.2)	2.4
Federal	27.5	(2.2)	27.5	0.3	(0.0)	(0.1)	0.4
State	86.0	3.2	86.2	1.7	(0.1)	(0.2)	4.0
State Education	32.8	1.7	32.5	(1.0)	0.2	0.7	1.3
Local	184.6	0.8	185.0	3.2	(0.5)	(0.3)	2.0
Local Education	95.0	(0.3)	95.7	2.0	(0.7)	(0.7)	1.2

Table A.2 – Short-Term Oregon Economic Summary

	Quarterly					Annual					
	2014:4	2015:1	2015:2	2015:3	2015:4	2013	2014	2015	2016	2017	2018
Personal Income (\$ billions)											
Nominal Personal Income	169.0	171.3	173.4	175.7	178.2	156.6	165.5	174.6	185.3	197.9	209.9
% change	5.2	5.5	5.0	5.4	5.9	2.3	5.7	5.5	6.1	6.8	6.1
Real Personal Income (base year=2005)	155.1	157.9	159.9	161.5	163.0	145.9	152.1	160.6	167.7	175.7	182.6
% change	5.6	7.4	5.3	4.0	3.7	1.1	4.3	5.5	4.4	4.8	3.9
Nominal Wages and Salaries	87.3	88.7	90.4	91.9	93.6	80.4	85.1	91.1	97.8	105.0	111.5
% change	6.8	6.7	7.7	7.1	7.4	4.0	5.9	7.0	7.3	7.4	6.2
Other Indicators											
Per Capita Income (\$1,000)	42.4	42.8	43.2	43.6	44.1	39.9	41.7	43.5	45.6	48.1	50.4
% change	4.0	4.4	3.8	3.9	4.7	1.3	4.5	4.3	4.9	5.5	4.8
Average Wage rate (\$1,000)	49.2	49.9	50.4	50.9	51.5	47.8	48.8	50.7	52.8	55.1	57.5
% change	2.3	5.9	3.9	4.3	4.3	2.2	2.1	3.9	4.3	4.3	4.3
Population (Millions)	4.0	4.0	4.0	4.0	4.0	3.93	3.97	4.02	4.07	4.11	4.16
% change	1.1	1.0	1.2	1.4	1.1	0.9	1.2	1.2	1.2	1.2	1.2
Housing Starts (Thousands)	17.0	14.9	15.5	16.0	16.4	14.2	15.6	15.7	18.6	21.4	22.4
% change	58.6	(40.4)	15.9	12.0	11.4	31.1	9.4	0.7	18.5	15.0	4.7
Unemployment Rate	6.8	5.8	6.0	6.0	5.9	7.8	7.0	5.9	5.6	5.4	5.6
Point Change	(0.1)	(1.0)	0.2	0.0	(0.1)	(1.0)	(0.8)	(1.0)	(0.3)	(0.2)	0.2
Employment (Thousands)											
Total Nonfarm	1,742.1	1,758.7	1,770.8	1,782.9	1,796.4	1,674.4	1,721.1	1,777.2	1,828.9	1,883.9	1,920.4
% change	4.0	3.9	2.8	2.8	3.1	2.1	2.8	3.3	2.9	3.0	1.9
Private Nonfarm	1,441.0	1,456.7	1,471.1	1,482.4	1,495.1	1,382.3	1,423.5	1,476.3	1,525.3	1,576.7	1,609.8
% change	4.1	4.4	4.0	3.1	3.5	2.5	3.0	3.7	3.3	3.4	2.1
Construction	80.9	83.1	83.4	84.0	84.9	74.4	80.4	83.9	86.5	89.1	90.8
% change	5.6	11.7	1.2	3.1	4.4	6.5	8.0	4.4	3.1	3.1	1.9
Manufacturing	181.3	183.6	184.1	185.0	186.4	174.7	179.0	184.8	188.8	191.4	193.4
% change	5.3	5.2	1.1	2.0	3.2	1.7	2.4	3.2	2.2	1.3	1.1
Durable Manufacturing	127.5	129.0	129.3	130.1	131.4	123.1	125.9	129.9	133.5	135.7	137.2
% change	5.4	4.6	1.1	2.6	3.8	1.2	2.3	3.2	2.8	1.6	1.1
Wood Product Manufacturing	22.1	22.2	22.3	22.3	22.5	21.1	21.9	22.3	23.0	23.5	23.8
% change	2.5	3.5	0.8	0.6	3.3	6.8	3.9	1.9	2.8	2.2	1.3
High Tech Manufacturing	36.7	37.2	37.3	37.7	38.2	36.6	36.4	37.6	38.6	38.7	38.7
% change	4.4	4.9	1.6	4.4	5.1	(1.1)	(0.3)	3.1	2.7	0.1	(0.0)
Transportation Equipment	12.1	12.2	12.1	12.2	12.3	10.9	11.5	12.2	12.4	12.6	12.7
% change	19.3	4.9	(2.2)	1.7	2.6	(2.3)	5.7	6.4	1.9	1.3	1.0
Nondurable Manufacturing	53.8	54.6	54.8	54.8	55.1	51.7	53.1	54.8	55.3	55.7	56.2
% change	5.0	6.7	0.9	0.5	1.8	2.8	2.8	3.2	0.9	0.7	0.9
Private nonmanufacturing	1,259.7	1,273.1	1,287.0	1,297.4	1,308.7	1,207.5	1,244.6	1,291.6	1,336.5	1,385.3	1,416.4
% change	3.9	4.3	4.4	3.3	3.5	2.6	3.1	3.8	3.5	3.7	2.2
Retail Trade	197.9	198.8	200.7	202.4	204.2	191.3	195.8	201.5	208.2	215.0	219.4
% change	2.7	1.9	3.8	3.5	3.5	2.2	2.4	2.9	3.3	3.3	2.1
Wholesale Trade	72.6	73.0	73.7	74.1	74.7	71.3	72.2	73.9	75.8	77.7	78.7
% change	1.5	2.2	3.9	2.4	3.2	3.6	1.3	2.3	2.6	2.6	1.3
Information	32.2	32.4	32.7	32.9	33.1	32.2	32.1	32.8	33.8	34.8	35.5
% change	0.5	2.2	3.4	2.9	3.1	0.2	(0.5)	2.2	3.0	3.0	2.2
Professional and Business Services	224.1	227.1	229.3	232.0	235.0	209.7	219.9	230.8	242.8	257.4	268.2
% change	5.9	5.4	4.0	4.8	5.1	3.7	4.9	5.0	5.2	6.0	4.2
Health Services	217.9	220.8	221.6	222.4	223.2	209.3	214.7	222.0	226.6	233.0	236.5
% change	4.7	5.3	1.6	1.4	1.5	2.4	2.6	3.4	2.1	2.8	1.5
Leisure and Hospitality	185.0	186.9	188.9	190.9	192.9	176.3	182.5	189.9	197.6	205.9	210.7
% change	5.4	4.3	4.4	4.2	4.3	3.7	3.5	4.0	4.0	4.2	2.3
Government	297.2	298.1	299.7	300.5	301.3	288.9	293.7	299.9	303.6	307.2	310.5
% change	3.3	1.2	2.2	1.1	1.0	(0.7)	1.7	2.1	1.2	1.2	1.1

Table A.3 – Oregon Economic Forecast Change

Oregon Forecast Change (Current vs. Last)

	Quarterly					Annual					
	2014:4	2015:1	2015:2	2015:3	2015:4	2013	2014	2015	2016	2017	2018
Personal Income (\$ billions)											
Nominal Personal Income	169.0	171.3	173.4	175.7	178.2	156.6	165.5	174.6	185.3	197.9	209.9
% change	0.8	1.0	1.1	1.1	1.2	0.0	0.7	1.1	1.4	1.9	2.4
Real Personal Income (base year=2005)	155.1	157.9	159.9	161.5	163.0	145.9	152.1	160.6	167.7	175.7	182.6
% change	0.8	1.0	1.5	1.8	1.9	0.0	0.7	1.6	2.1	2.6	3.1
Nominal Wages and Salaries	87.3	88.7	90.4	91.9	93.6	80.4	85.1	91.1	97.8	105.0	111.5
% change	0.6	1.0	1.5	1.7	1.9	0.0	0.4	1.6	2.4	3.8	4.4
Other Indicators											
Per Capita Income (\$1,000)	42.4	42.8	43.2	43.6	44.1	39.9	41.7	43.5	45.6	48.1	50.4
% change	0.8	1.0	1.1	1.1	1.2	(0.2)	0.4	0.9	1.1	1.6	2.1
Average Wage rate (\$1,000)	49.2	49.9	50.4	50.9	51.5	47.8	48.8	50.7	52.8	55.1	57.5
% change	0.0	0.8	1.1	1.4	1.6	0.0	0.0	1.2	2.0	2.8	3.4
Population (Millions)	3.99	4.00	4.01	4.0	4.0	3.93	3.97	4.02	4.07	4.11	4.16
% change	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.3	0.3	0.3
Housing Starts (Thousands)	17.0	14.9	15.5	16.0	16.4	14.2	15.6	15.7	18.6	21.4	22.4
% change	0.2	(6.1)	(7.6)	(4.9)	(4.7)	(0.1)	0.1	(5.8)	(5.4)	(3.5)	(3.3)
Unemployment Rate	6.8	5.8	6.0	6.0	5.9	7.8	7.0	5.9	5.6	5.4	5.6
Point Change	(0.1)	(0.8)	(0.6)	(0.5)	(0.5)	0.1	0.0	(0.6)	(0.7)	(0.7)	(0.6)
Employment (Thousands)											
Total Nonfarm	1,742.1	1,758.7	1,770.8	1,782.9	1,796.4	1,674.4	1,721.1	1,777.2	1,828.9	1,883.9	1,920.4
% change	0.2	0.4	0.4	0.4	0.4	0.0	0.0	0.4	0.4	1.0	1.0
Private Nonfarm	1,441.0	1,456.7	1,471.1	1,482.4	1,495.1	1,382.3	1,423.5	1,476.3	1,525.3	1,576.7	1,609.8
% change	0.0	0.3	0.5	0.4	0.4	(0.2)	(0.2)	0.4	0.5	1.2	1.2
Construction	80.9	83.1	83.4	84.0	84.9	74.4	80.4	83.9	86.5	89.1	90.8
% change	0.6	3.1	2.8	2.8	2.7	0.4	0.1	2.8	2.2	2.5	2.3
Manufacturing	181.3	183.6	184.1	185.0	186.4	174.7	179.0	184.8	188.8	191.4	193.4
% change	0.4	0.8	0.7	0.7	1.0	(0.2)	(0.1)	0.8	0.7	0.8	1.2
Durable Manufacturing	127.5	129.0	129.3	130.1	131.4	123.1	125.9	129.9	133.5	135.7	137.2
% change	0.5	0.6	0.5	0.6	0.9	(0.2)	(0.0)	0.6	0.7	0.7	1.2
Wood Product Manufacturing	22.1	22.2	22.3	22.3	22.5	21.1	21.9	22.3	23.0	23.5	23.8
% change	(0.4)	(0.5)	(0.9)	(1.4)	(1.3)	(0.1)	(0.2)	(1.0)	(0.9)	0.8	2.7
High Tech Manufacturing	36.7	37.2	37.3	37.7	38.2	36.6	36.4	37.6	38.6	38.7	38.7
% change	0.5	0.2	0.9	1.7	2.6	(0.2)	0.1	1.4	2.2	1.9	1.9
Transportation Equipment	12.1	12.2	12.1	12.2	12.3	10.9	11.5	12.2	12.4	12.6	12.7
% change	3.9	4.6	3.4	3.4	3.5	0.1	1.0	3.7	4.1	4.9	5.9
Nondurable Manufacturing	53.8	54.6	54.8	54.8	55.1	51.7	53.1	54.8	55.3	55.7	56.2
% change	0.3	1.3	1.2	0.9	1.1	(0.2)	(0.2)	1.1	0.9	0.9	1.1
Private nonmanufacturing	1,259.7	1,273.1	1,287.0	1,297.4	1,308.7	1,207.5	1,244.6	1,291.6	1,336.5	1,385.3	1,416.4
% change	(0.1)	0.2	0.5	0.4	0.4	(0.2)	(0.3)	0.4	0.5	1.2	1.2
Retail Trade	197.9	198.8	200.7	202.4	204.2	191.3	195.8	201.5	208.2	215.0	219.4
% change	0.1	(0.4)	(0.4)	(0.5)	(0.5)	(0.2)	(0.2)	(0.4)	(0.7)	(0.2)	(0.4)
Wholesale Trade	72.6	73.0	73.7	74.1	74.7	71.3	72.2	73.9	75.8	77.7	78.7
% change	0.2	(0.1)	(0.0)	(0.2)	(0.2)	(0.1)	0.3	(0.2)	(0.4)	0.0	(0.1)
Information	32.2	32.4	32.7	32.9	33.1	32.2	32.1	32.8	33.8	34.8	35.5
% change	0.3	0.1	0.2	0.0	(0.1)	0.2	0.5	0.0	(0.1)	0.8	1.7
Professional and Business Services	224.1	227.1	229.3	232.0	235.0	209.7	219.9	230.8	242.8	257.4	268.2
% change	(0.3)	(0.1)	(0.4)	(0.4)	(0.3)	0.1	(0.4)	(0.3)	0.3	2.1	2.6
Health Services	217.9	220.8	221.6	222.4	223.2	209.3	214.7	222.0	226.6	233.0	236.5
% change	0.4	1.1	0.9	0.6	0.3	0.4	0.4	0.7	0.4	1.1	0.9
Leisure and Hospitality	185.0	186.9	188.9	190.9	192.9	176.3	182.5	189.9	197.6	205.9	210.7
% change	0.6	0.7	0.9	1.0	1.1	(0.1)	0.0	0.9	1.3	2.2	1.8
Government	297.2	298.1	299.7	300.5	301.3	288.9	293.7	299.9	303.6	307.2	310.5
% change	0.1	(0.2)	0.0	0.0	0.0	(0.1)	(0.0)	(0.0)	0.0	0.0	0.0

Table A.4 – Annual Economic Forecast

May 2015 - Personal Income

(Billions of Current Dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total Personal Income*												
Oregon	145.8	153.1	156.6	165.5	174.6	185.3	197.9	209.9	221.4	233.2	244.1	255.4
% Ch	5.9	5.0	2.3	5.7	5.5	6.1	6.8	6.1	5.5	5.3	4.7	4.6
U.S.	13,202.0	13,887.7	14,166.9	14,728.6	15,301.6	15,982.7	16,827.7	17,681.0	18,576.8	19,517.5	20,395.0	21,300.7
% Ch	6.2	5.2	2.0	4.0	3.9	4.5	5.3	5.1	5.1	5.1	4.5	4.4
Wage and Salary												
Oregon	74.0	77.3	80.4	85.1	91.1	97.8	105.0	111.5	117.5	123.7	129.3	135.2
% Ch	4.3	4.5	4.0	5.9	7.0	7.3	7.4	6.2	5.4	5.2	4.6	4.5
U.S.	6,633.2	6,932.1	7,124.7	7,446.0	7,808.7	8,180.0	8,576.3	8,979.0	9,425.5	9,905.0	10,360.8	10,815.4
% Ch	4.0	4.5	2.8	4.5	4.9	4.8	4.8	4.7	5.0	5.1	4.6	4.4
Other Labor Income												
Oregon	18.2	19.7	19.8	20.5	21.5	22.6	24.1	25.4	26.7	27.9	29.1	30.3
% Ch	2.4	8.1	0.8	3.7	4.5	5.4	6.4	5.7	4.8	4.6	4.3	4.1
U.S.	1,142.0	1,160.5	1,193.9	1,226.4	1,264.5	1,314.2	1,376.0	1,439.5	1,497.2	1,557.5	1,618.5	1,679.2
% Ch	2.5	1.6	2.9	2.7	3.1	3.9	4.7	4.6	4.0	4.0	3.9	3.7
Nonfarm Proprietor's Income												
Oregon	10.1	10.8	11.4	12.2	12.9	13.8	14.5	15.2	16.2	17.1	18.1	19.0
% Ch	3.2	6.5	5.5	7.2	5.8	6.8	5.2	5.0	6.0	6.0	5.6	5.1
U.S.	1,068.1	1,187.9	1,253.5	1,316.6	1,368.3	1,440.2	1,498.4	1,545.0	1,621.7	1,713.9	1,805.0	1,892.5
% Ch	8.2	11.2	5.5	5.0	3.9	5.3	4.0	3.1	5.0	5.7	5.3	4.8
Dividend, Interest and Rent												
Oregon	28.0	30.1	30.8	31.9	33.1	35.0	38.0	40.8	43.1	45.4	47.4	49.2
% Ch	10.7	7.5	2.6	3.6	3.5	5.8	8.7	7.3	5.7	5.3	4.3	3.9
U.S.	2,399.2	2,621.6	2,675.6	2,765.6	2,821.4	2,944.3	3,186.1	3,422.9	3,615.7	3,793.1	3,928.7	4,078.4
% Ch	12.0	9.3	2.1	3.4	2.0	4.4	8.2	7.4	5.6	4.9	3.6	3.8
Transfer Payments												
Oregon	29.2	29.6	30.7	33.4	35.2	36.5	38.2	40.2	42.6	45.1	47.5	50.3
% Ch	1.8	1.2	3.9	8.8	5.1	3.9	4.5	5.2	6.0	6.0	5.3	5.8
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
Contributions for Social Security												
Oregon	11.6	12.1	14.1	15.0	15.9	17.1	18.3	19.5	20.7	21.8	23.0	24.1
% Ch	(7.6)	4.4	16.3	6.4	6.6	7.2	7.2	6.4	6.1	5.8	5.2	4.7
U.S.	423.9	437.3	578.4	612.2	640.2	677.9	718.6	760.1	804.6	850.6	894.9	939.7
% Ch	(17.6)	3.2	32.3	5.8	4.6	5.9	6.0	5.8	5.9	5.7	5.2	5.0
Residence Adjustment												
Oregon	(2.5)	(2.6)	(2.8)	(3.0)	(3.2)	(3.5)	(3.8)	(4.0)	(4.2)	(4.4)	(4.5)	(4.7)
% Ch	10.1	5.5	7.0	7.7	7.9	8.3	7.7	5.9	4.8	4.5	3.9	3.4
Farm Proprietor's Income												
Oregon	0.4	0.3	0.2	0.1	0.0	0.1	0.2	0.2	0.2	0.3	0.3	0.3
% Ch	1,621.5	(5.2)	(34.0)	(37.6)	(72.8)	263.2	46.0	14.7	5.4	11.7	8.2	(9.1)
Per Capita Income (Thousands of \$)												
Oregon	37.8	39.4	39.9	41.7	43.5	45.6	48.1	50.4	52.6	54.7	56.6	58.5
% Ch	5.3	4.2	1.3	4.5	4.3	4.9	5.5	4.8	4.2	4.1	3.4	3.4
U.S.	42.3	44.2	44.7	46.2	47.6	49.3	51.5	53.7	55.9	58.3	60.4	62.7
% Ch	5.5	4.5	1.3	3.2	3.0	3.6	4.4	4.2	4.2	4.2	3.7	3.6

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

**May 2015 - Employment By Industry
(Oregon - Thousands, U.S. - Millions)**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total Nonfarm												
Oregon	1,619.8	1,640.0	1,674.4	1,721.1	1,777.2	1,828.9	1,883.9	1,920.4	1,945.9	1,972.7	1,989.8	2,006.2
% Ch	1.1	1.2	2.1	2.8	3.3	2.9	3.0	1.9	1.3	1.4	0.9	0.8
U.S.	131.8	134.1	136.4	139.0	141.9	144.0	145.8	147.1	148.8	150.8	152.1	153.1
% Ch	1.2	1.7	1.7	1.9	2.1	1.5	1.2	0.9	1.1	1.3	0.8	0.7
Private Nonfarm												
Oregon	1,324.8	1,349.0	1,382.3	1,423.5	1,476.3	1,525.3	1,576.7	1,609.8	1,631.8	1,653.7	1,669.1	1,682.2
% Ch	1.8	1.8	2.5	3.0	3.7	3.3	3.4	2.1	1.4	1.3	0.9	0.8
U.S.	109.8	112.2	114.5	117.2	120.0	122.1	123.7	124.7	126.1	127.6	128.8	129.6
% Ch	1.8	2.2	2.1	2.3	2.5	1.7	1.3	0.9	1.1	1.2	0.9	0.6
Mining and Logging												
Oregon	7.0	7.2	7.6	7.7	8.0	8.2	8.4	8.6	8.7	8.7	8.8	8.8
% Ch	4.6	3.2	4.3	1.8	3.5	3.5	2.5	2.0	1.1	0.7	0.5	0.4
U.S.	0.8	0.8	0.9	0.9	0.9	0.8	0.9	0.9	0.9	0.9	0.9	0.9
% Ch	11.8	7.6	1.8	3.8	(4.3)	(3.4)	3.6	3.6	2.6	1.7	1.0	1.3
Construction												
Oregon	68.6	69.9	74.4	80.4	83.9	86.5	89.1	90.8	91.8	93.1	94.0	94.8
% Ch	1.4	1.8	6.5	8.0	4.4	3.1	3.1	1.9	1.1	1.4	1.0	0.8
U.S.	5.5	5.6	5.9	6.1	6.5	6.8	7.3	7.7	8.0	8.3	8.5	8.6
% Ch	0.2	2.1	3.7	4.8	5.2	6.0	7.1	5.2	3.6	3.4	2.4	1.5
Manufacturing												
Oregon	168.1	171.9	174.7	179.0	184.8	188.8	191.4	193.4	194.5	194.4	194.4	195.2
% Ch	2.6	2.2	1.7	2.4	3.2	2.2	1.3	1.1	0.5	(0.1)	0.0	0.4
U.S.	11.7	11.9	12.0	12.2	12.3	12.5	12.5	12.6	12.6	12.6	12.5	12.5
% Ch	1.7	1.7	0.8	1.4	1.2	1.1	0.6	0.5	0.3	(0.5)	(0.6)	(0.3)
Durable Manufacturing												
Oregon	118.6	121.6	123.1	125.9	129.9	133.5	135.7	137.2	137.7	137.3	137.0	137.4
% Ch	3.2	2.5	1.2	2.3	3.2	2.8	1.6	1.1	0.4	(0.3)	(0.2)	0.3
U.S.	7.3	7.5	7.5	7.7	7.8	8.0	8.0	8.1	8.1	8.0	8.0	7.9
% Ch	2.9	2.7	1.0	1.8	1.8	1.7	0.8	0.5	0.3	(0.7)	(0.8)	(0.3)
Wood Products												
Oregon	19.3	19.8	21.1	21.9	22.3	23.0	23.5	23.8	23.6	23.3	23.2	23.3
% Ch	(3.7)	2.6	6.8	3.9	1.9	2.8	2.2	1.3	(0.5)	(1.6)	(0.4)	0.6
U.S.	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5
% Ch	(1.5)	0.7	4.2	5.3	2.8	8.3	5.5	3.2	2.7	1.8	0.6	1.1
Metal and Machinery												
Oregon	33.3	34.7	35.4	35.8	36.7	37.7	38.6	39.3	39.7	40.2	40.4	40.5
% Ch	6.9	4.2	1.9	1.3	2.3	2.8	2.5	1.6	1.2	1.2	0.6	0.3
U.S.	2.8	2.9	2.9	3.0	3.0	3.1	3.1	3.1	3.2	3.2	3.2	3.2
% Ch	5.7	4.2	0.7	1.8	1.5	1.6	1.2	1.1	1.2	0.1	0.0	0.5
Computer and Electronic Products												
Oregon	36.4	37.0	36.6	36.4	37.6	38.6	38.7	38.7	38.7	38.6	38.5	38.6
% Ch	4.1	1.6	(1.1)	(0.3)	3.1	2.7	0.1	(0.0)	0.0	(0.2)	(0.1)	0.2
U.S.	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
% Ch	0.8	(1.3)	(2.2)	(1.4)	0.2	1.0	0.8	1.3	1.3	0.6	0.4	0.6
Transportation Equipment												
Oregon	10.7	11.1	10.9	11.5	12.2	12.4	12.6	12.7	12.6	12.1	11.7	11.5
% Ch	5.2	3.4	(2.3)	5.7	6.4	1.9	1.3	1.0	(1.1)	(3.8)	(3.6)	(1.3)
U.S.	1.4	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.4	1.4
% Ch	3.6	5.8	3.3	3.6	3.3	1.0	(0.9)	(2.0)	(2.4)	(3.4)	(3.6)	(3.2)
Other Durables												
Oregon	18.9	19.1	19.2	20.2	21.1	21.8	22.3	22.8	23.1	23.1	23.2	23.4
% Ch	1.7	1.0	0.7	5.2	4.8	3.2	2.2	2.3	1.4	0.2	0.4	0.8
U.S.	2.0	2.0	2.0	2.1	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.2
% Ch	0.0	0.7	1.4	2.4	4.4	2.8	1.0	(0.3)	(0.2)	(0.3)	(0.4)	(0.4)
Nondurable Manufacturing												
Oregon	49.5	50.3	51.7	53.1	54.8	55.3	55.7	56.2	56.8	57.1	57.4	57.8
% Ch	1.2	1.5	2.8	2.8	3.2	0.9	0.7	0.9	1.0	0.6	0.5	0.8
U.S.	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.5	4.5	4.5
% Ch	(0.3)	0.1	0.3	0.7	0.3	0.1	0.2	0.4	0.3	(0.2)	(0.4)	(0.3)
Food Manufacturing												
Oregon	24.2	24.8	25.9	27.0	28.0	28.2	28.4	28.6	28.8	29.0	29.1	29.4
% Ch	1.8	2.4	4.2	4.2	3.9	0.7	0.6	0.8	0.8	0.5	0.4	0.9
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	0.5	1.0	1.7	1.6	1.5	1.1	0.8	0.8	1.0
Other Nondurable												
Oregon	25.3	25.4	25.8	26.2	26.8	27.1	27.3	27.6	27.9	28.1	28.3	28.5
% Ch	0.7	0.5	1.5	1.4	2.5	1.2	0.8	1.0	1.2	0.6	0.6	0.8
U.S.	3.0	3.0	3.0	3.0	3.0	2.9	2.9	2.9	2.9	2.9	2.9	2.8
% Ch	(0.6)	(0.2)	0.0	(0.2)	(0.4)	(1.0)	(0.4)	(0.1)	(0.6)	(0.8)	(0.9)	(1.1)
Trade, Transportation, and Utilities												
Oregon	305.9	310.0	317.3	324.8	334.5	344.6	355.2	361.9	367.2	371.5	374.4	376.3
% Ch	1.2	1.3	2.4	2.4	3.0	3.0	3.1	1.9	1.4	1.2	0.8	0.5
U.S.	25.1	25.5	25.9	26.4	27.0	27.2	27.4	27.4	27.5	27.6	27.7	27.6
% Ch	1.7	1.6	1.5	2.0	2.3	1.0	0.6	0.1	0.3	0.4	0.1	(0.2)

**May 2015 - Employment By Industry
(Oregon - Thousands, U.S. - Millions)**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Retail Trade												
Oregon	184.8	187.1	191.3	195.8	201.5	208.2	215.0	219.4	222.7	225.2	227.2	228.7
% Ch	0.9	1.2	2.2	2.4	2.9	3.3	3.3	2.1	1.5	1.2	0.9	0.7
U.S.	14.7	14.8	15.1	15.4	15.7	15.7	15.6	15.5	15.4	15.4	15.4	15.3
% Ch	1.5	1.1	1.6	1.9	2.0	0.1	(0.5)	(0.8)	(0.2)	0.0	(0.3)	(0.6)
Wholesale Trade												
Oregon	67.7	68.8	71.3	72.2	73.9	75.8	77.7	78.7	79.6	80.7	81.4	81.7
% Ch	1.0	1.6	3.6	1.3	2.3	2.6	2.6	1.3	1.1	1.3	0.9	0.4
U.S.	5.5	5.7	5.7	5.8	6.0	6.1	6.2	6.2	6.3	6.4	6.4	6.5
% Ch	1.7	2.2	1.2	1.6	2.3	1.6	1.5	1.2	1.3	1.2	0.9	0.6
Transportation and Warehousing, and Utilities												
Oregon	53.4	54.1	54.8	56.7	59.1	60.7	62.6	63.8	64.9	65.6	65.8	65.8
% Ch	2.3	1.3	1.3	3.6	4.1	2.7	3.1	2.0	1.7	1.1	0.4	(0.0)
U.S.	4.9	5.0	5.0	5.2	5.4	5.5	5.6	5.7	5.8	5.8	5.8	5.8
% Ch	2.3	2.3	1.6	2.8	3.3	2.7	2.5	1.7	0.8	0.7	0.4	0.0
Information												
Oregon	31.7	32.1	32.2	32.1	32.8	33.8	34.8	35.5	36.0	36.6	36.9	37.3
% Ch	(0.1)	1.5	0.2	(0.5)	2.2	3.0	3.0	2.2	1.4	1.5	1.0	1.1
U.S.	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.9	3.0	3.0
% Ch	(1.3)	0.1	1.2	1.3	1.9	(0.1)	0.3	0.3	1.0	2.2	2.2	1.9
Financial Activities												
Oregon	91.7	90.5	92.1	93.0	95.4	98.6	101.4	102.4	103.1	103.9	104.0	104.0
% Ch	(1.6)	(1.3)	1.8	1.0	2.5	3.3	2.9	1.0	0.7	0.7	0.1	(0.0)
U.S.	7.7	7.8	7.9	8.0	8.1	8.1	8.0	7.9	7.9	7.9	7.9	7.9
% Ch	0.0	1.1	1.3	1.2	1.6	(0.2)	(1.4)	(1.4)	(0.1)	0.6	0.3	0.2
Professional and Business Services												
Oregon	195.2	202.1	209.7	219.9	230.8	242.8	257.4	268.2	274.4	281.9	288.0	292.8
% Ch	3.5	3.6	3.7	4.9	5.0	5.2	6.0	4.2	2.3	2.8	2.1	1.7
U.S.	17.3	17.9	18.5	19.1	19.8	20.7	21.2	21.5	22.0	22.8	23.4	23.8
% Ch	3.6	3.5	3.3	3.1	3.7	4.3	2.7	1.2	2.5	3.4	2.7	2.1
Education and Health Services												
Oregon	234.2	237.9	242.5	248.2	256.7	262.2	269.1	273.0	276.0	280.5	284.5	287.8
% Ch	2.3	1.6	1.9	2.4	3.4	2.1	2.6	1.5	1.1	1.6	1.4	1.2
U.S.	20.2	20.7	21.1	21.5	21.9	22.3	22.6	22.8	23.1	23.3	23.5	23.6
% Ch	1.7	2.3	1.9	1.8	2.1	1.8	1.3	0.9	1.1	0.9	0.8	0.7
Educational Services												
Oregon	32.9	33.6	34.1	34.6	35.0	35.5	36.0	36.5	36.9	37.3	37.6	38.0
% Ch	3.4	2.0	1.4	1.6	1.2	1.6	1.3	1.3	1.2	1.1	0.8	1.1
U.S.	3.3	3.3	3.4	3.4	3.5	3.5	3.4	3.4	3.4	3.3	3.3	3.2
% Ch	3.1	2.8	0.4	1.9	1.8	0.3	(1.3)	(1.1)	(1.3)	(1.3)	(1.6)	(1.8)
Health Care and Social Assistance												
Oregon	201.2	204.3	209.3	214.7	222.0	226.6	233.0	236.5	239.1	243.2	246.9	249.8
% Ch	2.1	1.5	2.4	2.6	3.4	2.1	2.8	1.5	1.1	1.7	1.5	1.2
U.S.	17.0	17.4	17.7	18.1	18.5	18.8	19.2	19.4	19.7	20.0	20.2	20.4
% Ch	1.5	2.2	2.2	1.8	2.2	2.1	1.8	1.3	1.5	1.2	1.2	1.1
Leisure and Hospitality												
Oregon	165.6	170.1	176.3	182.5	189.9	197.6	205.9	210.7	214.0	216.2	216.8	217.3
% Ch	2.0	2.7	3.7	3.5	4.0	4.0	4.2	2.3	1.6	1.0	0.3	0.2
U.S.	13.4	13.8	14.3	14.7	15.1	15.2	15.4	15.6	15.7	15.9	16.0	16.0
% Ch	2.4	3.2	3.5	3.2	3.0	0.6	0.8	1.4	1.0	1.0	0.7	0.2
Other Services												
Oregon	56.8	57.3	57.9	58.9	60.4	62.3	64.0	65.2	66.2	66.8	67.3	67.9
% Ch	0.4	0.9	0.9	1.7	2.5	3.3	2.7	1.9	1.4	1.0	0.7	0.8
U.S.	5.4	5.4	5.5	5.6	5.6	5.6	5.6	5.5	5.5	5.5	5.5	5.5
% Ch	0.6	1.3	1.0	1.6	1.0	(0.3)	(0.8)	(0.5)	(0.6)	(0.2)	(0.1)	(0.2)
Government												
Oregon	295.0	291.0	288.9	293.7	299.9	303.6	307.2	310.5	314.1	319.1	320.7	324.0
% Ch	(1.6)	(1.4)	(0.7)	1.7	2.1	1.2	1.2	1.1	1.1	1.6	0.5	1.0
U.S.	22.1	21.9	21.8	21.9	21.9	21.9	22.1	22.4	22.7	23.2	23.3	23.6
% Ch	(1.8)	(0.8)	(0.3)	0.0	0.2	0.0	0.9	1.3	1.4	2.0	0.5	1.3
Federal Government												
Oregon	28.8	28.1	27.5	27.4	27.6	27.5	27.4	27.2	27.1	28.8	27.2	27.1
% Ch	(5.7)	(2.5)	(1.9)	(0.3)	0.5	(0.1)	(0.5)	(0.6)	(0.4)	6.2	(5.5)	(0.3)
U.S.	2.9	2.8	2.8	2.7	2.7	2.7	2.6	2.6	2.6	2.7	2.6	2.5
% Ch	(3.9)	(1.3)	(1.8)	(1.6)	(0.3)	(1.3)	(1.4)	(1.5)	(1.1)	5.5	(5.7)	(0.6)
State Government, Oregon												
State Total	80.6	80.1	81.0	83.9	86.3	87.0	87.6	88.4	89.2	90.0	90.8	91.7
% Ch	1.0	(0.6)	1.2	3.5	2.9	0.8	0.8	0.8	0.9	0.9	0.9	1.0
State Education	31.1	31.8	32.0	32.5	32.6	32.6	32.7	32.9	33.0	33.2	33.4	33.5
% Ch	4.6	2.1	0.7	1.4	0.5	(0.1)	0.4	0.5	0.6	0.5	0.5	0.4
Local Government, Oregon												
Local Total	185.6	182.8	180.3	182.3	186.0	189.1	192.2	194.9	197.7	200.3	202.7	205.2
% Ch	(2.1)	(1.5)	(1.4)	1.1	2.0	1.7	1.6	1.4	1.4	1.3	1.2	1.2
Local Education	97.0	95.1	93.6	94.4	96.3	98.9	101.0	102.6	104.0	105.2	106.4	107.7
% Ch	(3.3)	(1.9)	(1.6)	0.9	2.0	2.7	2.2	1.6	1.3	1.2	1.2	1.2

May 2015 - Other Economic Indicators

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
GDP (Bil of 2009 \$), Chain Weight (in billions of \$)	15,020.6	15,369.2	15,710.3	16,085.6	16,529.0	16,975.9	17,426.5	17,851.1	18,335.1	18,855.1	19,326.7	19,761.2
% Ch	1.6	2.3	2.2	2.4	2.8	2.7	2.7	2.4	2.7	2.8	2.5	2.2
Price and Wage Indicators												
GDP Implicit Price Deflator, Chain Weight U.S., 2009=100	103.3	105.2	106.7	108.3	109.6	111.7	113.9	116.0	118.3	120.5	122.8	125.3
% Ch	2.1	1.8	1.5	1.5	1.2	1.9	1.9	1.9	1.9	1.9	1.9	2.1
Personal Consumption Deflator, Chain Weight U.S., 2009=100	104.1	106.1	107.3	108.8	108.8	110.5	112.6	115.0	117.3	119.2	121.5	124.0
% Ch	2.5	1.8	1.2	1.3	(0.0)	1.6	1.9	2.1	2.0	1.7	1.9	2.1
CPI, Urban Consumers, 1982-84=100												
Portland-Salem, OR-WA	224.6	229.8	235.5	240.4	240.5	245.2	250.7	256.4	262.0	267.0	272.7	278.9
% Ch	2.9	2.3	2.5	2.1	0.0	2.0	2.2	2.3	2.2	1.9	2.1	2.3
U.S.	224.9	229.6	233.0	236.7	235.9	240.8	246.6	252.9	259.1	263.8	269.5	276.2
% Ch	3.1	2.1	1.5	1.6	(0.4)	2.1	2.4	2.6	2.5	1.8	2.1	2.5
Oregon Average Wage Rate (Thous \$)	45.3	46.7	47.8	48.8	50.7	52.8	55.1	57.5	59.8	62.1	64.4	66.8
% Ch	3.6	3.1	2.2	2.1	3.9	4.3	4.3	4.3	4.0	3.8	3.7	3.7
U.S. Average Wage Rate (Thous \$)	50.3	51.7	52.2	53.6	55.0	56.8	58.8	61.0	63.3	65.7	68.1	70.6
% Ch	2.8	2.7	1.0	2.5	2.7	3.2	3.6	3.7	3.8	3.7	3.7	3.7
Housing Indicators												
FHFA Oregon Housing Price Index 1980 Q1=100	347.9	346.9	372.2	406.0	435.5	459.9	475.5	491.3	508.3	526.4	544.8	563.3
% Ch	(6.9)	(0.3)	7.3	9.1	7.3	5.6	3.4	3.3	3.5	3.5	3.5	3.4
FHFA National Housing Price Index 1980 Q1=100	312.3	312.0	324.9	346.2	370.8	382.6	394.2	403.5	412.9	424.4	436.9	453.5
% Ch	(3.7)	(0.1)	4.1	6.6	7.1	3.2	3.0	2.4	2.3	2.8	3.0	3.8
Housing Starts Oregon (Thous)	8.0	10.9	14.2	15.6	15.7	18.6	21.4	22.4	22.9	23.6	24.1	24.0
% Ch	5.3	35.7	31.1	9.4	0.7	18.5	15.0	4.7	2.3	3.1	2.0	(0.3)
U.S. (Millions)	0.6	0.8	0.9	1.0	1.1	1.3	1.5	1.5	1.6	1.6	1.6	1.6
% Ch	4.5	28.1	18.6	7.6	12.1	16.6	11.9	3.1	3.7	2.3	(0.4)	0.3
Other Indicators												
Unemployment Rate (%) Oregon	9.4	8.8	7.8	7.0	5.9	5.6	5.4	5.6	5.6	5.5	5.4	5.5
Point Change	(1.1)	(0.7)	(1.0)	(0.8)	(1.0)	(0.3)	(0.2)	0.2	0.0	(0.2)	(0.0)	0.0
U.S.	8.9	8.1	7.4	6.2	5.5	5.2	5.2	5.3	5.2	5.1	5.0	5.0
Point Change	(0.7)	(0.9)	(0.7)	(1.2)	(0.7)	(0.2)	(0.1)	0.1	(0.1)	(0.2)	(0.1)	0.0
Industrial Production Index U.S. 2002 = 100	93.6	97.1	99.9	104.1	106.1	109.2	112.6	115.7	119.2	122.8	125.9	128.8
% Ch	3.3	3.8	2.9	4.2	1.9	2.9	3.1	2.8	3.0	3.0	2.5	2.3
Prime Rate (Percent)	3.3	3.3	3.3	3.3	3.3	4.2	5.9	6.8	6.8	6.8	6.8	6.8
% Ch	0.0	0.0	0.0	0.0	2.5	26.2	41.5	13.5	0.0	0.0	0.0	0.0
Population (Millions) Oregon	3.86	3.89	3.93	3.97	4.02	4.07	4.11	4.16	4.21	4.26	4.31	4.36
% Ch	0.6	0.7	0.9	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
U.S.	312.3	314.5	316.7	319.0	321.7	324.3	326.9	329.5	332.2	334.8	337.4	340.0
% Ch	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Timber Harvest (Mil Bd Ft) Oregon	3,649.0	3,595.0	3,523.0	3,760.0	4,298.8	4,441.2	4,468.0	4,490.1	4,528.0	4,535.2	4,540.3	4,566.8
% Ch	13.1	(1.5)	(2.0)	6.7	14.3	3.3	0.6	0.5	0.8	0.2	0.1	0.6

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

Table B.1a

General Fund Revenue Statement -- 2013-15

	Forecasts Dated: 3/1/2015			Forecasts Dated: 5/14/2015			Difference		
	Estimate at COS 2013	2013-14	2014-15	Total 2013-15	2013-14	2014-15	Total 2013-15	05/14/2015 Less 3/1/2015	05/14/2015 Less COS
Taxes									
Personal Income Taxes	13,558,172,000	6,628,021,000	7,286,253,000	13,914,274,000	6,628,021,000	7,416,140,000	14,044,161,000	129,887,000	485,989,000
Shared Service Fund (Gainshare)	(57,542,000)	(24,142,000)	(38,111,000)	(62,253,000)	(24,142,000)	(38,111,000)	(62,253,000)	0	(4,711,000)
Corporate Income Taxes	1,056,570,000	494,759,000	566,098,000	1,060,857,000	494,759,000	602,798,000	1,097,557,000	36,700,000	40,987,000
Rainy Day Fund Transfer (Minimum Tax)	(63,298,000)	(4,873,000)	(6,985,000)	(11,858,000)	(6,570,000)	(5,522,000)	(12,092,000)	(234,000)	51,206,000
Insurance Taxes	107,754,000	60,157,000	56,813,000	116,970,000	60,457,000	59,147,000	119,604,000	2,634,000	11,850,000
Estate Taxes	207,982,000	85,491,000	112,571,000	198,062,000	85,491,000	112,571,000	198,062,000	0	(9,920,000)
Cigarette Taxes	69,049,000	36,624,000	35,733,000	72,357,000	36,624,000	36,477,000	73,101,000	744,000	4,052,000
Other Tobacco Products Taxes	59,366,000	30,350,000	29,669,000	60,019,000	30,350,000	30,105,000	60,455,000	436,000	1,089,000
Other Taxes	1,262,000	1,122,000	634,000	1,756,000	1,122,000	773,000	1,895,000	139,000	633,000
Fines and Fees									
State Court Fees	143,819,000	60,136,000	59,717,000	119,853,000	60,136,000	58,422,000	118,558,000	(1,295,000)	(25,261,000)
Secretary of State Fees	55,031,000	26,245,000	27,481,000	53,726,000	26,245,000	27,481,000	53,726,000	0	(1,305,000)
Criminal Fines & Assessments	46,578,000	24,215,000	28,618,000	52,833,000	24,159,000	28,551,000	52,710,000	(123,000)	6,132,000
Securities Fees	20,244,000	11,462,000	12,590,000	24,052,000	11,462,000	12,314,000	23,776,000	(276,000)	3,532,000
Central Service Charges									
	8,152,000	3,640,000	4,076,000	7,716,000	3,640,000	4,076,000	7,716,000	0	(436,000)
Liquor Apportionment									
	250,959,000	121,426,000	129,493,000	250,919,000	121,426,000	129,493,000	250,919,000	0	(40,000)
Interest Earnings									
	9,961,000	4,236,000	5,145,000	9,381,000	4,236,000	5,012,000	9,248,000	(133,000)	(713,000)
Miscellaneous Revenues									
	15,500,000	3,204,000	6,000,000	9,204,000	3,204,000	3,700,000	6,904,000	(2,300,000)	(8,596,000)
One-time Transfers									
	32,200,000	43,208,000	5,700,000	48,908,000	40,302,000	2,406,000	42,708,000	(6,200,000)	10,508,000
Gross General Fund Revenues									
	15,642,599,000	7,634,296,000	8,366,591,000	16,000,887,000	7,631,634,000	8,529,466,000	16,161,100,000	160,213,000	518,501,000
Offsets and Transfers Total	(120,840,000)	(29,015,000)	(45,096,000)	(74,111,000)	(30,712,000)	(43,633,000)	(74,345,000)	(234,000)	46,495,000
Net General Fund Revenues									
	15,521,759,000	7,605,281,000	8,321,495,000	15,926,776,000	7,600,922,000	8,485,833,000	16,086,755,000	159,979,000	564,996,000
Plus Beginning Balance									
	543,497,392			475,651,424			475,651,424	0	(67,845,968)
Less Anticipated Administrative Actions*									
	(18,222,166)			(3,326,977)			(3,326,977)	0	14,895,189
Plus Legislatively Adopted Actions**									
	(136,886,136)			(136,721,357)			(136,721,357)	0	164,779
Available Resources									
	15,910,148,090			16,262,379,090			16,422,358,090	159,979,000	512,210,000
Legislatively Adopted Budget									
	15,608,670,298			15,914,664,891			15,918,990,876	4,325,985	310,320,578
Plus Administrative Actions									
	0			0			0	NA	0
Projected Expenditures									
	15,608,670,298			15,914,664,891			15,918,990,876	NA	310,320,578
Estimated Ending Balance									
	301,477,792			347,714,199			503,367,214	155,653,015	201,889,422

Notes: Other taxes include General Fund portions of the Eastern and Western Oregon Severance Taxes, and Amusement Device Tax. Detailed entries may not add to totals due to rounding.

* Administrative Actions equal expenses associated with cashflow management, exclusive of internal borrowing.

Table B.1b

General Fund Revenue Statement -- 2015-17

	Forecasts Dated: 3/1/2015			Forecasts Dated: 5/14/2015			Difference 05/14/2015 Less 3/1/2015
	2015-16	2016-17	Total 2015-17	2015-16	2016-17	Total 2015-17	
Taxes							
Personal Income Taxes	7,450,776,000	8,038,894,000	15,489,670,000	7,596,526,000	8,153,213,000	15,749,739,000	260,069,000
Shared Service Fund (Gainshare)	(42,066,000)	(52,828,000)	(94,894,000)	(38,198,000)	(47,970,000)	(86,168,000)	8,726,000
Corporate Income Taxes	553,281,000	549,604,000	1,102,885,000	541,741,000	538,966,000	1,080,707,000	(22,178,000)
Rainy Day Fund Transfer (Minimum Tax)	(5,170,000)	(4,852,000)	(10,022,000)	(5,040,000)	(5,074,000)	(10,114,000)	(92,000)
Insurance Taxes	58,266,000	59,741,000	118,007,000	57,859,000	61,026,000	118,885,000	878,000
Estate Taxes	99,064,000	103,062,000	202,126,000	108,064,000	109,062,000	217,126,000	15,000,000
Cigarette Taxes	32,731,000	29,711,000	62,442,000	33,772,000	31,257,000	65,029,000	2,587,000
Other Tobacco Products Taxes	31,097,000	31,963,000	63,060,000	31,453,000	32,366,000	63,819,000	759,000
Other Taxes	618,000	613,000	1,231,000	868,000	868,000	1,736,000	505,000
Fines and Fees							
State Court Fees	66,625,000	61,765,000	128,390,000	62,746,000	63,232,000	125,978,000	(2,412,000)
Secretary of State Fees	27,588,000	27,839,000	55,427,000	27,588,000	27,839,000	55,427,000	0
Criminal Fines & Assessments	23,335,000	27,578,000	50,913,000	23,547,000	27,828,000	51,375,000	462,000
Securities Fees	11,216,000	11,611,000	22,827,000	10,704,000	11,155,000	21,859,000	(968,000)
Central Service Charges	4,076,000	4,076,000	8,152,000	4,076,000	4,076,000	8,152,000	0
Liquor Apportionment	126,772,000	131,947,000	258,719,000	126,772,000	131,947,000	258,719,000	0
Interest Earnings	6,974,000	7,969,000	14,943,000	6,974,000	7,969,000	14,943,000	0
Miscellaneous Revenues	6,200,000	6,400,000	12,600,000	6,200,000	6,400,000	12,600,000	0
One-time Transfers	2,440,000	2,440,000	4,880,000	3,000,000	3,000,000	6,000,000	1,120,000
Gross General Fund Revenues	8,501,059,000	9,095,213,000	17,596,272,000	8,641,890,000	9,210,204,000	17,852,094,000	255,822,000
Offsets and Transfers Total	(47,236,000)	(57,680,000)	(104,916,000)	(43,238,000)	(53,044,000)	(96,282,000)	8,634,000
Net General Fund Revenues	8,453,823,000	9,037,533,000	17,491,356,000	8,598,652,000	9,157,160,000	17,755,812,000	264,456,000
Plus Beginning Balance			347,714,199			503,367,214	155,653,015
Less Anticipated Administrative Actions*			(20,200,000)			(20,200,000)	0
Plus Legislatively Adopted Actions**			(159,146,649)			(159,189,909)	(43,260)
Available Resources			17,669,723,550			18,079,789,305	420,065,755

Table B.2 General Fund Revenue Forecast by Fiscal Year

General Fund Revenue Forecast												
(\$Millions)												
Fiscal Years	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
	Fiscal Year											
Taxes												
Personal Income	6,628.0	7,416.1	7,596.5	8,153.2	8,585.3	9,007.7	9,511.4	9,954.6	10,430.2	10,950.6	11,477.6	11,995.6
Offsets and Transfers	(24.1)	(38.1)	(38.2)	(48.0)	(57.8)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Corporate Excise & Income	494.8	602.8	541.7	539.0	529.4	527.7	544.2	562.2	589.7	609.1	621.5	643.7
Offsets and Transfers	(6.6)	(5.5)	(5.0)	(5.1)	(20.2)	(20.1)	(20.6)	(21.3)	(22.5)	(23.5)	(23.6)	(23.7)
Insurance	60.5	59.1	57.9	61.0	63.8	65.9	68.1	70.6	72.6	74.7	76.8	78.9
Estate	85.5	112.6	108.1	109.1	112.1	119.3	123.8	128.6	133.9	137.6	141.6	145.6
Cigarette	36.6	36.5	33.8	31.3	29.9	28.1	26.6	24.5	22.7	20.0	18.6	17.3
Other Tobacco Products	30.3	30.1	31.5	32.4	33.3	34.3	35.3	36.3	37.3	38.4	39.5	40.7
Other Taxes	1.1	0.8	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Other Revenues												
Licenses and Fees	122.0	126.8	124.6	130.1	123.7	129.4	126.0	131.7	127.4	133.1	129.5	134.8
Charges for Services	3.6	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Liquor Apportionment	121.4	129.5	126.8	131.9	126.0	129.7	133.6	137.6	141.8	146.0	150.4	154.9
Interest Earnings	4.2	5.0	7.0	8.0	11.8	17.5	24.4	32.7	35.0	38.0	40.0	42.0
Others	43.5	6.1	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0
Gross General Fund	7,631.6	8,529.5	8,641.9	9,210.2	9,629.8	10,074.5	10,608.2	11,093.9	11,605.9	12,163.0	12,711.1	13,269.4
Net General Fund	7,600.9	8,485.8	8,598.7	9,157.2	9,551.9	10,054.4	10,587.6	11,072.7	11,583.5	12,139.5	12,687.6	13,245.7
Biennial Totals	2013-15	Percent	2015-17	Percent	2017-19	Percent	2019-21	Percent	2021-23	Percent	2023-25	Percent
	Biennium	Change										
Taxes												
Personal Income	14,044.2	15.9%	15,749.7	12.1%	17,593.0	11.7%	19,466.0	10.6%	21,380.8	9.8%	23,473.2	9.8%
Corporate Excise & Income	1,097.6	24.2%	1,080.7	-1.5%	1,057.1	-2.2%	1,106.4	4.7%	1,198.8	8.4%	1,265.2	5.5%
Insurance	119.6	20.8%	118.9	-0.6%	129.8	9.2%	138.7	6.9%	147.3	6.2%	155.7	5.7%
Estate Taxes	198.1	-2.7%	217.1	9.6%	231.4	6.6%	252.4	9.1%	271.4	7.5%	287.1	5.8%
Cigarette	73.1	-2.0%	65.0	-11.0%	58.0	-10.8%	51.0	-12.0%	42.7	-16.3%	35.9	-16.0%
Other Tobacco Products	60.5	3.8%	63.8	5.6%	67.6	5.9%	71.6	5.9%	75.8	5.9%	80.2	5.9%
Other Taxes	1.9	-21.1%	1.7	-8.4%	1.7	-3.5%	1.6	-2.4%	1.6	-0.6%	1.6	0.0%
Other Revenues												
Licenses and Fees	248.8	-9.9%	254.6	2.4%	253.2	-0.6%	257.7	1.8%	260.5	1.1%	264.3	1.5%
Charges for Services	7.7	-33.4%	8.2	5.6%	8.2	0.0%	8.2	0.0%	8.2	0.0%	8.2	0.0%
Liquor Apportionment	250.9	7.7%	258.7	3.1%	255.7	-1.2%	271.3	6.1%	287.8	6.1%	305.3	6.1%
Interest Earnings	9.2	-42.7%	14.9	61.6%	29.3	95.9%	57.1	95.1%	73.0	27.8%	82.0	12.3%
Others	49.6	-73.7%	18.6	-62.5%	19.4	4.3%	20.2	4.1%	21.0	4.0%	21.8	3.8%
Gross General Fund	16,161.1	14.1%	17,852.1	10.5%	19,704.3	10.4%	21,702.2	10.1%	23,768.9	9.5%	25,980.5	9.3%
Net General Fund	16,086.8	13.7%	17,755.8	10.4%	19,606.3	10.4%	21,660.3	10.5%	23,723.0	9.5%	25,933.3	9.3%

Table B.3 Summary of 2013 Legislative Session Adjustments

	13-15	15-17	Biennia 17-19	19-21	21-23	Staff Measure Summary	Revenue Impact Statement
Personal Income Tax Impacts (Millions)							
1099 Penalties – HB 2464	\$0.8	\$1.1	\$1.2	\$1.3	\$1.4	HB 2464	HB 2464
Federal Reconnect – HB 2494	-\$0.7	\$0.4	\$0.00	\$0.00	\$0.00	HB 2492	HB 2492
DOR Enforcement – SB 5538	\$33.1	\$0.0	\$0.0	\$0.0	\$0.0		SB 5538
<i>Tax Credits - HB 3367</i>						HB 3367	HB 3367
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		
Personal Income Tax Total	-\$21.3	-\$100.2	-\$93.3	-\$34.9	\$15.3		
Corporate Income Tax Impacts (Millions)							
Out of State Banks – HB 3477	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	HB 3477	HB 3477
1099 Penalties – HB 2464	\$0.2	\$0.1	\$0.1	\$0.1	\$0.1	HB 2464	HB 2464
Tax Havens – HB 2460	\$18.0	\$42.0	\$49.0	\$51.0	\$55.0	HB 2460	HB 2460
Fire Insurance – HB 2084	-\$1.4	-\$2.0	-\$2.2	-\$2.3	-\$2.4	HB 2084	HB 2084
<i>Tax Credits - HB 3367</i>						HB 3367	HB 3367
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		
Corporate Income Tax Total	\$19.1	\$43.6	\$50.2	\$51.9	\$55.9		
Other Tax/Revenue Impacts (Millions)							
Program Change Bill – HB 2322	\$47.5	\$0.0	\$0.0	\$0.0	\$0.0	HB 2322	HB 2322
Criminal Fines – HB 2562	-\$9.2	-\$9.4	-\$9.6	-\$9.8	-\$10.0	HB 2562	HB 2562
Other Tax Total	\$38.3	-\$9.4	-\$9.6	-\$9.8	-\$10.0		

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									
										May 2015
	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	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%
	2013:3	2013:4	2014:1	2014:2	FY 2014	2014:3	2014:4	2015:1	2015:2	FY 2015
WITHHOLDING	1,333,946	1,435,630	1,442,755	1,420,313	5,632,644	1,455,822	1,523,453	1,576,188	1,551,536	6,106,999
%CHYA	5.7%	5.2%	6.5%	7.5%	6.2%	9.1%	6.1%	9.2%	9.2%	8.4%
EST. PAYMENTS	221,695	214,342	247,826	357,218	1,041,080	264,823	236,303	305,582	402,473	1,209,180
%CHYA	7.9%	34.7%	-11.0%	11.0%	7.9%	19.5%	10.2%	23.3%	12.7%	16.1%
FINAL PAYMENTS ¹	83,096	112,495	139,923	730,795	1,066,309	92,647	144,239	156,188	899,612	1,292,685
%CHYA	15.1%	23.2%	13.3%	-7.0%	-0.6%	11.5%	28.2%	11.6%	23.1%	21.2%
REFUNDS	67,098	197,448	472,018	354,437	1,091,001	100,729	173,522	520,272	427,790	1,222,314
%CHYA	28.5%	80.3%	-12.0%	-7.5%	0.9%	50.1%	-12.1%	10.2%	20.7%	12.0%
OTHER	(201,367)	-	-	180,356	(21,011)	(180,356)	-	-	209,945	29,589
TOTAL	1,370,272	1,565,018	1,358,485	2,334,246	6,628,021	1,532,207	1,730,473	1,517,685	2,635,774	7,416,140
%CHYA	5.9%	4.0%	11.4%	3.9%	5.8%	11.8%	10.6%	11.7%	12.9%	11.9%

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									
	2015:3	2015:4	2016:1	2016:2	FY 2016	2016:3	2016:4	2017:1	2017:2	FY 2017
WITHHOLDING	1,551,491	1,645,626	1,713,746	1,623,388	6,534,252	1,645,915	1,745,775	1,808,580	1,711,663	6,911,933
%CHYA	6.6%	8.0%	8.7%	4.6%	7.0%	6.1%	6.1%	5.5%	5.4%	5.8%
EST. PAYMENTS	305,321	261,134	340,872	450,415	1,357,742	316,524	270,715	353,583	471,270	1,412,092
%CHYA	15.3%	10.5%	11.5%	11.9%	12.3%	3.7%	3.7%	3.7%	4.6%	4.0%
FINAL PAYMENTS ¹	82,361	119,537	130,672	882,173	1,214,743	81,476	115,985	141,125	1,016,194	1,354,780
%CHYA	-11.1%	-17.1%	-16.3%	-1.9%	-6.0%	-1.1%	-3.0%	8.0%	15.2%	11.5%
REFUNDS	53,923	121,474	835,407	512,179	1,522,983	79,365	180,551	801,889	475,907	1,537,713
%CHYA	-46.5%	-30.0%	60.6%	19.7%	24.6%	47.2%	48.6%	-4.0%	-7.1%	1.0%
OTHER	(209,945)	-	-	222,717	12,772	(222,717)	-	-	234,836	12,120
TOTAL	1,675,305	1,904,824	1,349,884	2,666,513	7,596,526	1,741,834	1,951,925	1,501,399	2,958,056	8,153,213
%CHYA	9.3%	10.1%	-11.1%	1.2%	2.4%	4.0%	2.5%	11.2%	10.9%	7.3%
	2017:3	2017:4	2018:1	2018:2	FY 2018	2018:3	2018:4	2019:1	2019:2	FY 2019
WITHHOLDING	1,735,493	1,840,787	1,910,116	1,808,276	7,294,672	1,833,425	1,944,661	2,008,285	1,899,614	7,685,985
%CHYA	5.4%	5.4%	5.6%	5.6%	5.5%	5.6%	5.6%	5.1%	5.1%	5.4%
EST. PAYMENTS	331,180	283,250	370,020	494,492	1,478,942	347,499	297,208	388,063	514,812	1,547,582
%CHYA	4.6%	4.6%	4.6%	4.9%	4.7%	4.9%	4.9%	4.9%	4.1%	4.6%
FINAL PAYMENTS ¹	89,852	129,019	149,258	1,060,483	1,428,611	94,311	134,568	153,238	1,122,538	1,504,656
%CHYA	10.3%	11.2%	5.8%	4.4%	5.4%	5.0%	4.3%	2.7%	5.9%	5.3%
REFUNDS	69,904	155,579	861,995	542,672	1,630,151	74,461	167,642	921,249	579,690	1,743,042
%CHYA	-11.9%	-13.8%	7.5%	14.0%	6.0%	6.5%	7.8%	6.9%	6.8%	6.9%
OTHER	(234,836)	-	-	248,089	13,252	(248,089)	-	-	260,629	12,541
TOTAL	1,851,784	2,097,477	1,567,399	3,068,667	8,585,327	1,952,686	2,208,794	1,628,337	3,217,904	9,007,722
%CHYA	6.3%	7.5%	4.4%	3.7%	5.3%	5.4%	5.3%	3.9%	4.9%	4.9%
	2019:3	2019:4	2020:1	2020:2	FY 2020	2020:3	2020:4	2021:1	2021:2	FY 2021
WITHHOLDING	1,926,114	2,042,972	2,121,774	2,008,958	8,099,818	2,036,883	2,160,463	2,230,999	2,110,251	8,538,597
%CHYA	5.1%	5.1%	5.7%	5.8%	5.4%	5.8%	5.8%	5.1%	5.0%	5.4%
EST. PAYMENTS	364,779	312,421	407,356	546,346	1,630,902	384,831	329,570	429,638	573,687	1,717,726
%CHYA	5.0%	5.1%	5.0%	6.1%	5.4%	5.5%	5.5%	5.5%	5.0%	5.3%
FINAL PAYMENTS ¹	100,887	141,933	167,407	1,139,677	1,549,905	103,621	145,465	172,658	1,145,131	1,566,876
%CHYA	7.0%	5.5%	9.2%	1.5%	3.0%	2.7%	2.5%	3.1%	0.5%	1.1%
REFUNDS	79,194	178,339	944,181	582,477	1,784,191	83,430	188,350	995,930	614,812	1,882,523
%CHYA	6.4%	6.4%	2.5%	0.5%	2.4%	5.3%	5.6%	5.5%	5.6%	5.5%
OTHER	(260,629)	-	-	275,620	14,990	(275,620)	-	-	289,529	13,909
TOTAL	2,051,957	2,318,987	1,752,357	3,388,124	9,511,424	2,166,285	2,447,148	1,837,366	3,503,786	9,954,585
%CHYA	5.1%	5.0%	7.6%	5.3%	5.6%	5.6%	5.5%	4.9%	3.4%	4.7%
	2021:3	2021:4	2022:1	2022:2	FY 2022	2022:3	2022:4	2023:1	2023:2	FY 2023
WITHHOLDING	2,139,691	2,269,507	2,338,532	2,211,120	8,958,850	2,242,010	2,378,033	2,451,209	2,317,802	9,389,054
%CHYA	5.0%	5.0%	4.8%	4.8%	4.9%	4.8%	4.8%	4.8%	4.8%	4.8%
EST. PAYMENTS	401,044	343,003	448,120	599,688	1,791,855	421,424	360,434	470,855	629,376	1,882,089
%CHYA	4.2%	4.1%	4.3%	4.5%	4.3%	5.1%	5.1%	5.1%	5.0%	5.0%
FINAL PAYMENTS ¹	107,073	150,734	173,183	1,190,346	1,621,335	107,182	152,858	176,688	1,242,481	1,679,210
%CHYA	3.3%	3.6%	0.3%	3.9%	3.5%	0.1%	1.4%	2.0%	4.4%	3.6%
REFUNDS	87,968	198,459	1,032,474	636,794	1,955,695	91,254	205,556	1,062,290	655,264	2,014,364
%CHYA	5.4%	5.4%	3.7%	3.6%	3.9%	3.7%	3.6%	2.9%	2.9%	3.0%
OTHER	(289,529)	-	-	303,373	13,844	(303,373)	-	-	318,010	14,636
TOTAL	2,270,311	2,564,785	1,927,360	3,667,733	10,430,190	2,375,989	2,685,769	2,036,463	3,852,404	10,950,625
%CHYA	4.8%	4.8%	4.9%	4.7%	4.8%	4.7%	4.7%	5.7%	5.0%	5.0%
	2023:3	2023:4	2024:1	2024:2	FY 2023	2024:3	2024:4	2025:1	2025:2	FY 2025
WITHHOLDING	2,350,174	2,492,761	2,551,712	2,409,867	9,804,514	2,443,675	2,591,932	2,654,978	2,507,690	10,198,275
%CHYA	4.8%	4.8%	4.1%	4.0%	4.4%	4.0%	4.0%	4.0%	4.1%	4.0%
EST. PAYMENTS	442,287	378,277	494,082	658,767	1,973,413	462,942	395,943	517,189	690,247	2,066,320
%CHYA	5.0%	5.0%	4.9%	4.7%	4.9%	4.7%	4.7%	4.7%	4.8%	4.7%
FINAL PAYMENTS ¹	115,928	163,772	188,831	1,303,623	1,772,153	117,062	167,069	192,899	1,354,339	1,831,368
%CHYA	8.2%	7.1%	6.9%	4.9%	5.5%	1.0%	2.0%	2.2%	3.9%	3.3%
REFUNDS	94,004	211,541	1,100,075	679,540	2,085,160	97,323	219,011	1,112,067	685,349	2,113,749
%CHYA	3.0%	2.9%	3.6%	3.7%	3.5%	3.5%	3.5%	1.1%	0.9%	1.4%
OTHER	(318,010)	-	-	330,659	12,649	(330,659)	-	-	344,079	13,421
TOTAL	2,496,376	2,823,269	2,134,550	4,023,375	11,477,570	2,595,697	2,935,932	2,252,998	4,211,007	11,995,634
%CHYA	5.1%	5.1%	4.8%	4.4%	4.8%	4.0%	4.0%	5.5%	4.7%	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

	OREGON CORPORATE INCOME TAX REVENUE FORECAST - QUARTERLY COLLECTIONS									
	Thousands of Dollars - Not Seasonally Adjusted									
										May 2015
	FY									FY
	2007:3	2007:4	2008:1	2008:2	2008	2008:3	2008:4	2009:1	2009:2	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%
	FY									FY
	2009:3	2009:4	2010:1	2010:2	2010	2010:3	2010:4	2011:1	2011:2	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%
	FY									FY
	2011:3	2011:4	2012:1	2012:2	2012	2012:3	2012:4	2013:1	2013:2	2013
ADVANCE PAYMENTS	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	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	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%
	FY									FY
	2013:3	2013:4	2014:1	2014:2	2014	2014:3	2014:4	2015:1	2015:2	2015
ADVANCE PAYMENTS	123,591	187,195	150,401	183,348	644,535	193,248	206,088	106,689	185,276	691,302
%CHYA	-5.2%	69.9%	85.8%	-35.1%	6.7%	56.4%	10.1%	-29.1%	1.1%	7.3%
FINAL PAYMENTS	27,794	18,162	32,218	52,283	130,456	28,815	73,552	57,268	48,830	208,466
%CHYA	69.6%	-15.0%	-12.1%	53.7%	20.3%	3.7%	305.0%	77.8%	-6.6%	59.8%
REFUNDS	20,123	118,303	109,296	32,511	280,232	49,952	155,439	58,361	33,218	296,969
%CHYA	-39.4%	563.4%	327.0%	-82.2%	8.0%	148.2%	31.4%	-46.6%	2.2%	6.0%
TOTAL	131,262	87,054	73,323	203,120	494,759	172,111	124,202	105,597	200,888	602,798
%CHYA	15.6%	-23.5%	-20.3%	52.0%	9.2%	31.1%	42.7%	44.0%	-1.1%	21.8%

TABLE B.5

OREGON CORPORATE INCOME TAX REVENUE FORECAST - QUARTERLY COLLECTIONS

	Thousands of Dollars - Not Seasonally Adjusted									
										May 2015
	2015:3	2015:4	2016:1	2016:2	FY 2016	2016:3	2016:4	2017:1	2017:2	FY 2017
ADVANCE PAYMENTS	183,035	169,887	115,819	205,189	673,929	182,720	173,155	118,249	200,287	674,411
%CHYA	-5.3%	-17.6%	8.6%	10.7%	-2.5%	-0.2%	1.9%	2.1%	-2.4%	0.1%
FINAL PAYMENTS	25,805	22,542	21,493	84,965	154,805	22,303	27,844	25,414	84,879	160,440
%CHYA	-10.4%	-69.4%	-62.5%	74.0%	-25.7%	-13.6%	23.5%	18.2%	-0.1%	3.6%
REFUNDS	74,057	77,518	52,936	82,482	286,993	71,952	84,010	56,387	83,535	295,884
%CHYA	48.3%	-50.1%	-9.3%	148.3%	-3.4%	-2.8%	8.4%	6.5%	1.3%	3.1%
TOTAL	134,784	114,911	84,376	207,671	541,741	133,070	116,990	87,276	201,630	538,966
%CHYA	-21.7%	-7.5%	-20.1%	3.4%	-10.1%	-1.3%	1.8%	3.4%	-2.9%	-0.5%
	2017:3	2017:4	2018:1	2018:2	FY 2018	2018:3	2018:4	2019:1	2019:2	FY 2019
ADVANCE PAYMENTS	182,118	170,563	117,198	207,077	676,957	184,113	174,543	120,603	204,857	684,116
%CHYA	-0.3%	-1.5%	-0.9%	3.4%	0.4%	1.1%	2.3%	2.9%	-1.1%	1.1%
FINAL PAYMENTS	21,785	32,393	26,453	86,550	167,181	21,475	39,158	30,836	89,107	180,576
%CHYA	-2.3%	16.3%	4.1%	2.0%	4.2%	-1.4%	20.9%	16.6%	3.0%	8.0%
REFUNDS	73,486	90,042	59,780	91,436	314,743	76,631	100,727	64,943	94,649	336,950
%CHYA	2.1%	7.2%	6.0%	9.5%	6.4%	4.3%	11.9%	8.6%	3.5%	7.1%
TOTAL	130,417	112,915	83,872	202,191	529,395	128,956	112,974	86,496	199,316	527,743
%CHYA	-2.0%	-3.5%	-3.9%	0.3%	-1.8%	-1.1%	0.1%	3.1%	-1.4%	-0.3%
	2019:3	2019:4	2020:1	2020:2	FY 2020	2020:3	2020:4	2021:1	2021:2	FY 2021
ADVANCE PAYMENTS	187,648	175,721	121,958	217,071	702,398	192,853	183,564	127,300	216,303	720,020
%CHYA	1.9%	0.7%	1.1%	6.0%	2.7%	2.8%	4.5%	4.4%	-0.4%	2.5%
FINAL PAYMENTS	23,728	46,801	34,086	98,745	203,360	26,414	56,279	40,142	104,726	227,561
%CHYA	10.5%	19.5%	10.5%	10.8%	12.6%	11.3%	20.3%	17.8%	6.1%	11.9%
REFUNDS	79,962	108,319	69,048	104,206	361,535	83,798	119,835	74,572	107,162	385,368
%CHYA	4.3%	7.5%	6.3%	10.1%	7.3%	4.8%	10.6%	8.0%	2.8%	6.6%
TOTAL	131,414	114,204	86,996	211,609	544,223	135,469	120,007	92,870	213,866	562,213
%CHYA	1.9%	1.1%	0.6%	6.2%	3.1%	3.1%	5.1%	6.8%	1.1%	3.3%
	2021:3	2021:4	2022:1	2022:2	FY 2022	2022:3	2022:4	2023:1	2023:2	FY 2023
ADVANCE PAYMENTS	198,270	185,633	129,363	231,112	744,378	204,460	194,395	135,141	228,677	762,674
%CHYA	2.8%	1.1%	1.6%	6.8%	3.4%	3.1%	4.7%	4.5%	-1.1%	2.5%
FINAL PAYMENTS	30,289	64,694	44,219	116,100	255,301	33,857	74,554	50,402	120,820	279,634
%CHYA	14.7%	15.0%	10.2%	10.9%	12.2%	11.8%	15.2%	14.0%	4.1%	9.5%
REFUNDS	87,227	127,019	78,637	117,090	409,973	91,218	138,923	84,081	118,966	433,189
%CHYA	4.1%	6.0%	5.5%	9.3%	6.4%	4.6%	9.4%	6.9%	1.6%	5.7%
TOTAL	141,332	123,308	94,945	230,122	589,707	147,099	130,026	101,463	230,532	609,119
%CHYA	4.3%	2.8%	2.2%	7.6%	4.9%	4.1%	5.4%	6.9%	0.2%	3.3%
	2023:3	2023:4	2024:1	2024:2	FY 2024	2024:3	2024:4	2025:1	2025:2	FY 2025
ADVANCE PAYMENTS	208,654	198,212	137,378	231,645	775,889	210,876	199,864	138,606	234,052	783,399
%CHYA	2.1%	2.0%	1.7%	1.3%	1.7%	1.1%	0.8%	0.9%	1.0%	1.0%
FINAL PAYMENTS	36,629	82,915	69,347	147,822	336,713	51,948	122,749	86,258	180,164	441,118
%CHYA	8.2%	11.2%	37.6%	22.3%	20.4%	41.8%	48.0%	24.4%	21.9%	31.0%
REFUNDS	94,897	148,476	103,283	144,489	491,145	109,302	187,019	119,011	165,480	580,812
%CHYA	4.0%	6.9%	22.8%	21.5%	13.4%	15.2%	26.0%	15.2%	14.5%	18.3%
TOTAL	150,386	132,651	103,441	234,978	621,456	153,522	135,594	105,853	248,736	643,705
%CHYA	2.2%	2.0%	2.0%	1.9%	2.0%	2.1%	2.2%	2.3%	5.9%	3.6%

* Due to the recent Department of Revenue IT system replacement, data on corporate tax payments is not available after October 2014. Recent figures represent OEA estimates.

Table B.6 Cigarette and Tobacco Tax Distribution

TABLE B.6 Cigarette & Tobacco Tax Distribution (Millions of \$)								May 2015			
	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
<u>Distribution Forecast*</u>											
2013-14	36.624	140.132	5.675	7.673	190.104	11.086	201.191	30.350	23.416	2.604	56.371
2014-15	36.477	136.842	5.633	15.675	194.627	10.727	205.354	30.105	23.228	2.583	55.916
2013-15 Biennium	73.101	276.974	11.308	23.348	384.731	21.813	406.545	60.455	46.644	5.188	112.287
2015-16	33.772	128.917	5.231	17.663	185.582	10.188	195.770	31.453	24.268	2.699	58.420
2016-17	31.257	121.816	4.859	19.891	177.822	9.718	187.540	32.366	24.972	2.777	60.115
2015-17 Biennium	65.028	250.732	10.090	37.553	363.404	19.906	383.310	63.819	49.239	5.476	118.535
2017-18	29.887	116.478	4.646	19.638	170.649	9.292	179.941	33.304	25.696	2.858	61.858
2018-19	26.560	109.614	4.372	19.177	159.723	8.745	168.467	34.270	26.441	2.941	63.652
2017-19 Biennium	56.447	226.091	9.018	38.814	330.371	18.037	348.408	67.574	52.137	5.799	125.510
2019-20	26.560	103.513	4.129	18.109	152.312	8.258	160.570	35.264	27.208	3.026	65.498
2020-21	24.475	95.387	3.805	16.688	140.355	7.610	147.965	36.287	27.997	3.114	67.397
2019-21 Biennium	51.036	198.900	7.934	34.797	292.667	15.867	308.534	71.551	55.205	6.140	132.895
2021-22	22.725	88.567	3.533	15.495	130.320	7.066	137.385	37.339	28.809	3.204	69.352
2022-23	19.979	77.865	3.106	13.622	114.573	6.212	120.785	38.422	29.644	3.297	71.363
2021-23 Biennium	42.705	166.432	6.639	29.117	244.893	13.277	258.170	75.761	58.453	6.501	140.715

* 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

TABLE B.7									May 2015
Liquor Apportionment and Revenue Distribution to Local Governments (Millions of \$)									
	Liquor Apportionment Distribution								Cigarette Tax Distribution ²
	Total Liquor Revenue Available	General Fund (56%)	Mental Health ¹	Oregon Wine Board	City Revenue			Counties	
					Revenue Sharing	Regular	Total		
2011-12	194.104	110.200	8.300	0.283	23.966	34.237	58.203	17.118	11.795
2012-13	202.612	115.364	8.051	0.282	25.109	35.870	60.980	17.935	11.509
2011-13 Biennium	396.716	225.564	16.351	0.565	49.075	70.107	119.183	35.054	23.304
2013-14	213.810	121.426	8.626	0.294	26.557	37.938	64.495	18.969	11.086
2014-15	227.236	129.493	9.197	0.344	28.064	40.092	68.156	20.046	10.727
2013-15 Biennium	441.047	250.919	17.823	0.638	54.621	78.030	132.652	39.015	21.813
2015-16	235.505	126.772	8.818	0.308	31.693	45.276	76.969	22.638	10.188
2016-17	245.118	131.947	9.178	0.321	32.987	47.124	80.110	23.562	9.718
2015-17 Biennium	480.623	258.719	17.997	0.629	64.680	92.400	157.079	46.200	19.906
2017-18	234.729	125.969	9.454	0.330	31.492	44.989	76.481	22.495	9.292
2018-19	241.771	129.748	9.737	0.340	32.437	46.339	78.776	23.169	8.745
2017-19 Biennium	476.500	255.717	19.191	0.671	63.929	91.328	155.257	45.664	18.037
2019-20	249.024	133.641	10.029	0.351	33.410	47.729	81.139	23.864	8.258
2020-21	256.495	137.650	10.330	0.361	34.413	49.161	83.573	24.580	7.610
2019-21 Biennium	505.519	271.290	20.360	0.712	67.823	96.890	164.712	48.445	15.867
2021-22	264.189	141.779	10.640	0.372	35.445	50.636	86.081	25.318	7.066
2022-23	272.115	146.033	10.959	0.383	36.508	52.155	88.663	26.077	6.212
2021-23 Biennium	536.304	287.812	21.599	0.755	71.953	102.790	174.743	51.395	13.277

¹ Mental Health Alcoholism and Drug Services Account, per ORS 471.810

² For details on cigarette revenues see TABLE B.6 on previous page

Table B.8 Track Record for the June 2014 Forecast

Table B.8 Track Record for the March 2015 Forecast

(Quarter ending March 31, 2015)

Personal Income Tax				Forecast Comparison		Year/Year Change	
(Millions of dollars)	Actual Revenues	Latest Forecast	Percent Difference	Prior Year	Percent Change		
Withholding	\$1,576.2	\$1,529.3	3.1%	\$1,442.8	9.2%		
Dollar difference		\$46.9		\$133.4			
Estimated Payments	\$305.6	\$305.7	-0.1%	\$247.8	23.3%		
Dollar difference		-\$0.2		\$57.8			
Final Payments	\$156.2	\$142.8	9.4%	\$139.9	11.6%		
Dollar difference		\$13.4		\$16.3			
Refunds	-\$520.3	-\$550.5	-5.5%	-\$472.0	10.2%		
Dollar difference		\$30.2		-\$48.3			
Total Personal Income Tax	\$1,517.7	\$1,427.3	6.3%	\$1,358.5	11.7%		
Dollar difference		\$90.4		\$159.2			
Corporate Income Tax*				Forecast Comparison		Year/Year Change	
(Millions of dollars)	Actual Revenues*	Latest Forecast	Percent Difference	Prior Year	Percent Change		
Advanced Payments	\$106.7	\$140.7	-24.2%	\$150.4	-29.1%		
Dollar difference		-\$34.0		-\$43.7			
Final Payments	\$57.3	\$21.4	167.3%	\$32.2	77.8%		
Dollar difference		\$35.8		\$25.1			
Refunds	-\$58.4	-\$7.5	677.8%	-\$109.3	-46.6%		
Dollar difference		-\$50.9		\$50.9			
Total Corporate Income Tax	\$105.6	\$154.6	-31.7%	\$73.3	44.0%		
Dollar difference		-\$49.0		\$32.3			
Total Income Tax				Forecast Comparison		Year/Year Change	
(Millions of dollars)	Actual Revenues	Latest Forecast	Percent Difference	Prior Year	Percent Change		
Corporate and Personal Tax	\$1,623.3	\$1,581.9	2.6%	\$1,431.8	13.4%		
Dollar difference		\$41.4		\$191.5			

* Due to the Department of Revenue IT system replacment, year-to-year comparisons of corporate tax payments are not straightforward.

Table B.9 Summary of Lottery Resources

TABLE B.9 Summary of Lottery Resources	May 2015 Forecast										
	2013-15			2015-17		2017-19		2019-21		2021-23	
(in millions of dollars)	Current Forecast	Change from Mar-15	Change from COS 2013	Current Forecast	Change from Mar-15						
LOTTERY EARNINGS											
Traditional Lottery	139.077	2.197	16.416	117.804	0.329	117.455	0.205	117.468	0.236	117.484	0.248
Video Lottery	993.317	2.039	(9.605)	1,070.652	39.929	1,141.778	66.685	1,225.246	84.302	1,314.200	93.024
Administrative Actions	(0.065)	0.000	(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	(0.200)	(59.200)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Available to Transfer	1,061.129	4.236	6.546	1,129.256	40.258	1,259.234	66.891	1,342.714	84.538	1,431.685	93.272
ECONOMIC DEVELOPMENT FUND											
Beginning Balance	3.491	0.000	0.000	19.318	2.838	0.000	0.000	0.000	0.000	0.000	0.000
Transfers from Lottery	1,061.129	4.236	6.546	1,129.256	40.258	1,259.234	66.891	1,342.714	84.538	1,431.685	93.272
Other Resources ¹	1.400	0.000	0.000	2.000	0.000	2.000	0.000	2.000	0.000	2.000	0.000
Total Available Resources	1,066.020	4.236	6.546	1,150.575	43.097	1,261.234	66.891	1,344.714	84.538	1,433.685	93.272
ALLOCATION OF RESOURCES											
County Economic Development	33.849	0.000	0.000	41.113	1.533	43.844	2.561	47.785	3.288	52.568	3.721
Education Stability Fund ²	191.003	0.762	1.178	203.266	7.247	226.662	12.040	241.689	15.217	257.703	16.789
Parks and Natural Resources Fund ³	159.169	0.635	0.982	169.388	6.039	188.885	10.034	201.407	12.681	214.753	13.991
OUS Sports Lottery Account ⁴	8.000	0.000	0.000	11.293	0.403	12.592	0.669	13.427	0.845	14.317	0.933
Gambling Addiction ⁴	10.593	0.000	0.047	11.293	0.403	12.592	0.669	13.427	0.845	14.317	0.933
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 ⁵	640.418	0.000	0.021	269.600	0.000	258.600	0.000	258.600	0.000	258.600	0.000
Total Distributions	1,046.702	1.398	2.228	709.601	15.624	746.824	25.972	779.983	32.876	815.906	36.37
Ending Balance/Discretionary Resources	19.318	2.838	4.318	440.974	27.473	514.410	40.918	564.732	51.662	617.779	56.906

Note: Some totals may not foot due to rounding.

1. Includes interest earnings on Economic Development Fund and reversions.
2. 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.
3. The Parks and Natural Resources Fund Constitutional amendment requires 15% of net proceeds be transferred to this fund.
4. 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.
5. 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						May 2015
Rainy Day Fund						
(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	\$212.0	\$393.9	\$655.5	\$957.0
Interest Earnings	\$0.6	\$1.3	\$12.6	\$42.7	\$65.6	\$91.5
Deposits ¹	\$50.8	\$148.8	\$169.3	\$218.8	\$236.0	\$260.3
Ending Balance²	\$61.9	\$212.0	\$393.9	\$655.5	\$957.0	\$1,308.8
Education Stability Fund³						
(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	\$179.3	\$362.2	\$566.2	\$783.8
Interest Earnings ⁴	\$0.6	\$1.0	\$10.3	\$36.5	\$53.8	\$71.4
Deposits ⁵	\$184.8	\$171.9	\$182.9	\$204.0	\$217.5	\$172.0
Distributions	-\$182.9	-\$1.0	-\$10.3	-\$36.5	-\$53.8	-\$71.4
Oregon Education Fund	-\$0.5	-\$0.7	-\$7.7	-\$27.4	-\$40.4	-\$53.6
Oregon Student Access Comm.	-\$0.2	-\$0.2	-\$2.6	-\$9.1	-\$13.5	-\$17.9
Withdrawals	-\$182.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Ending Balance	\$7.6	\$179.3	\$362.2	\$566.2	\$783.8	\$955.8
Total Reserves						
(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>
Ending Balances	\$69.4	\$391.3	\$756.2	\$1,221.7	\$1,740.8	\$2,264.6
Percent of GF Revenues	0.5%	2.4%	4.3%	6.2%	8.0%	9.5%

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 1980-2022

STATE OF OREGON
POPULATION FORECASTS
COMPONENTS OF CHANGE 1980 -2022

Year (July 1)	Population	Population Change		Births		Deaths		Natural	Net Migration	
		Number	Percent	Number	Rate/1000	Number	Rate/1000	Increase	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
1980-1985		31,400		204,742		111,690		93,052	-61,652	
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
1985-1990		187,800		199,810		121,318		78,492	109,308	
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
1990-1995		324,000		210,464		131,769		78,695	245,305	
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
1995-2000		246,700		222,239		145,431		76,808	169,892	
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
2000-2005		195,800		227,708		152,804		74,904	120,896	
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
2005-2010		210,400		240,225		157,246		82,979	127,421	
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	32,804	8.47	12,093	14,017	3.62
2013	3,919,020	35,285	0.91	44,969	11.53	33,168	8.50	11,801	23,484	6.02
2014	3,962,710	43,690	1.11	45,413	11.52	33,502	8.50	11,911	31,779	8.06
2015	4,008,100	45,390	1.15	45,834	11.50	34,157	8.57	11,677	33,714	8.46
2010-2015		170,800		226,493		166,068		60,425	110,375	
2016	4,054,400	46,300	1.16	46,257	11.47	34,695	8.61	11,562	34,737	8.62
2017	4,102,300	47,901	1.18	46,688	11.45	35,154	8.62	11,534	36,367	8.92
2018	4,151,000	48,699	1.19	47,068	11.41	35,644	8.64	11,424	37,276	9.03
2019	4,200,200	49,200	1.19	47,471	11.37	36,167	8.66	11,304	37,895	9.08
2020	4,249,800	49,600	1.18	47,849	11.33	36,777	8.70	11,072	38,528	9.12
2015-2020		241,699		235,333		178,437		56,896	184,803	
2021	4,299,000	49,200	1.16	48,184	11.27	37,509	8.78	10,675	38,525	9.01
2022	4,348,000	49,000	1.14	48,491	11.22	38,292	8.86	10,199	38,801	8.97
1980-1990		219,200		404,552		233,008		171,544	47,656	
1990-2000		570,700		432,703		277,200		155,503	415,197	41,520
2000-2010		406,200		467,933		310,050		157,883	248,317	24,832
2010-2020		412,499		461,827		344,505		117,322	295,178	29,518
2012-2022		464,265		468,224		355,065		113,159	351,106	35,111

Sources: 1980-1999 population - U.S. Census Bureau; 2000-2009 population - intercensal estimates by Office of Economic Analysis; population estimates 2010-2014 by Population Research Center, PSU; births and deaths 1980-14: Oregon Center for Health Statistics.

Table C.2 Population Forecasts by Age and Sex: 2000-2022

Age	2000			2001			2002			2003			2004			2005		
	Male	Female	Total															
0-4	114,100	109,107	223,207	114,742	109,903	224,645	115,219	109,865	225,084	116,118	110,533	226,652	117,038	111,315	228,353	117,847	112,161	230,008
5-9	119,699	113,984	233,683	118,879	113,240	232,119	117,908	112,625	230,533	117,595	112,522	230,117	118,055	112,983	231,038	118,737	113,851	232,588
10-14	124,726	118,350	243,076	125,950	119,470	245,421	126,474	120,344	246,818	127,007	120,408	247,415	126,169	119,728	245,898	124,732	118,604	243,336
15-19	126,002	119,265	245,267	127,311	119,879	247,190	122,250	119,862	242,112	126,490	120,236	246,726	127,484	121,227	248,711	129,634	122,978	252,612
20-24	119,300	113,318	232,618	120,814	115,792	236,605	122,925	118,001	240,926	125,433	119,922	245,356	127,001	121,951	248,952	128,090	122,777	250,867
25-29	120,547	112,269	232,816	119,436	111,809	231,245	119,216	112,937	232,153	120,690	114,847	235,536	122,799	117,484	240,282	125,208	121,121	246,329
30-34	122,441	114,757	237,198	125,882	117,768	243,651	127,842	119,417	247,259	128,373	120,485	248,858	127,650	119,951	247,601	126,179	119,324	245,503
35-39	128,698	126,230	254,928	125,463	122,883	248,346	123,019	119,340	242,360	121,225	116,792	238,017	121,489	116,438	237,927	124,789	119,125	243,914
40-44	134,421	137,137	271,558	134,585	136,761	271,346	133,102	135,121	268,224	131,876	133,467	265,343	131,106	132,016	263,121	129,401	129,428	258,829
45-49	135,644	137,430	273,074	136,214	138,948	275,162	136,992	140,305	277,297	136,336	140,343	276,679	134,864	139,381	274,245	134,310	139,320	273,629
50-54	118,659	119,623	238,282	125,826	127,295	253,120	126,548	128,354	254,902	129,544	132,212	261,756	132,767	136,330	269,097	135,022	138,899	273,921
55-59	85,965	88,187	174,151	89,314	91,758	181,072	98,235	100,967	199,202	103,863	106,596	210,460	109,932	112,923	222,855	117,120	120,794	237,914
60-64	64,543	67,459	132,003	67,383	70,539	137,922	70,666	74,175	144,841	75,490	79,114	154,604	80,095	83,740	163,835	84,062	88,300	172,361
65-69	53,103	59,261	112,364	53,861	59,438	113,299	54,966	60,295	115,291	56,889	62,083	118,972	59,083	64,273	123,356	61,643	66,384	128,027
70-74	48,532	58,102	106,633	48,249	57,290	105,539	47,788	56,535	104,323	47,448	55,941	103,389	47,523	55,493	103,016	48,249	55,650	103,899
75-79	40,475	54,794	95,269	40,503	54,397	94,900	40,508	53,697	94,204	40,627	52,917	93,545	40,403	52,009	92,412	40,366	51,512	91,878
80-84	26,469	40,450	66,919	27,465	41,513	68,978	28,398	42,507	70,905	28,798	43,326	72,124	29,266	44,164	73,430	29,725	44,474	74,199
85+	18,517	39,538	58,055	19,293	40,549	59,843	19,854	41,313	61,167	20,727	42,323	63,050	21,444	43,325	64,769	22,398	44,689	67,087
Total	1,701,841	1,729,259	3,431,100	1,721,170	1,749,230	3,470,400	1,736,939	1,765,661	3,502,600	1,754,532	1,784,068	3,538,600	1,774,167	1,804,733	3,578,900	1,797,511	1,829,389	3,626,900
Mdn. Age	35.2	37.6	36.4	35.3	37.8	36.6	35.5	38.0	36.8	35.7	38.2	36.9	35.8	38.4	37.1	36.0	38.5	37.2
Age	2006			2007			2008			2009			2010			2011		
	Male	Female	Total															
0-4	118,832	113,050	231,882	121,058	115,102	236,160	122,723	116,618	239,340	123,056	116,873	239,929	122,327	116,130	238,457	121,092	115,088	236,180
5-9	119,959	115,315	235,274	120,925	115,818	236,743	121,906	116,639	238,545	122,109	116,793	238,901	121,539	116,369	237,908	121,767	115,893	237,660
10-14	124,400	118,240	242,639	124,017	118,145	242,162	124,144	118,401	242,545	124,495	118,646	243,140	124,508	118,732	243,241	124,074	119,044	243,118
15-19	131,680	124,886	256,566	133,027	126,562	259,588	134,019	127,039	261,058	134,994	126,245	259,339	131,126	124,540	255,667	129,068	121,927	250,996
20-24	129,625	123,869	253,494	129,491	124,047	253,538	128,090	124,102	252,192	128,034	124,294	252,328	128,787	124,903	253,689	130,576	126,691	257,267
25-29	128,110	125,220	253,330	131,446	128,889	260,335	134,251	131,308	265,559	134,893	132,724	267,617	134,019	131,816	265,835	133,302	130,829	264,132
30-34	126,016	119,767	245,782	126,936	121,971	248,907	128,841	124,231	253,072	130,499	126,264	256,763	131,489	128,325	259,814	133,512	130,743	264,255
35-39	128,779	127,827	256,606	131,387	125,260	256,647	132,046	126,581	258,627	130,807	125,534	256,341	128,070	123,596	251,665	125,924	121,787	247,710
40-44	126,728	126,664	253,391	124,917	123,759	248,677	123,362	121,440	244,802	123,395	120,853	244,249	125,969	122,843	248,811	128,755	125,358	254,333
45-49	135,135	139,543	274,678	134,349	138,533	272,882	133,523	137,181	270,705	132,802	135,635	268,437	130,825	132,538	263,363	127,795	128,542	256,337
50-54	136,187	140,978	277,165	137,589	142,901	280,489	137,266	143,176	280,443	135,862	142,064	277,926	135,129	141,565	276,693	134,682	140,654	275,336
55-59	124,581	129,098	253,680	125,683	130,760	256,444	128,665	134,868	263,533	131,454	138,782	270,236	133,011	140,802	273,812	134,009	142,349	276,358
60-64	87,811	92,304	180,115	97,117	102,054	199,171	102,948	107,873	210,821	108,952	114,138	223,090	115,236	121,045	236,281	121,440	127,819	249,258
65-69	64,860	69,850	134,710	68,563	73,945	142,509	73,612	79,164	152,776	78,191	83,768	161,959	81,854	87,917	169,771	84,425	90,851	175,277
70-74	49,222	55,999	105,221	50,569	57,052	107,622	52,510	58,915	111,425	54,604	61,042	115,646	56,925	62,949	119,874	59,485	65,640	125,125
75-79	40,359	51,026	91,385	40,218	50,594	90,812	40,073	50,211	90,285	40,236	49,905	90,141	40,932	50,101	91,034	41,549	50,075	91,624
80-84	29,996	44,406	74,402	30,251	44,085	74,336	30,464	43,606	74,069	30,361	43,011	73,372	30,391	42,734	73,126	30,500	42,287	72,787
85+	23,554	46,323	69,877	24,585	47,794	72,379	25,325	49,078	74,403	26,014	50,369	76,383	26,800	51,458	78,258	27,599	52,275	79,874
Total	1,825,834	1,859,366	3,685,200	1,852,129	1,887,271	3,739,400	1,873,769	1,910,431	3,784,200	1,888,859	1,926,941	3,815,800	1,898,938	1,938,362	3,837,300	1,909,773	1,947,852	3,857,625
Mdn. Age	36.3	38.6	37.3	36.5	38.7	37.5	36.7	38.8	37.8	37.0	39.1	38.0	37.2	39.4	38.3	37.4	39.7	38.5
Age	2012			2013			2014			2015			2016			2017		
	Male	Female	Total															
0-4	119,516	113,359	232,875	118,293	111,849	230,142	117,925	111,865	229,790	117,988	111,813	229,801	118,792	112,366	231,158	119,823	113,380	233,203
5-9	122,733	116,900	239,634	124,024	117,953	241,978	124,719	118,025	242,744	125,324	118,232	243,556	124,917	117,773	242,690	124,178	116,699	240,877
10-14	123,603	118,287	241,890	123,387	118,207	241,593	123,395	118,453	241,848	122,882	118,214	241,095	123,487	118,227	241,714	125,029	119,847	244,876
15-19	127,517	120,587	248,104	126,643	119,875	246,519	126,823	119,557	246,780	127,467	120,463	247,929	127,590	121,103	248,693	127,721	120,967	248,688
20-24	132,853	128,787	261,640	135,293	130,705	265,998	136,695	132,020	268,715	136,798	132,000	268,798	135,959	130,604	266,562	135,378	129,927	265,305
25-29	132,463	129,927	262,390	132,508	130,402	262,911	134,520	132,803	267,323	137,291	136,243	273,535	141,436	141,182	282,618	145,379	145,362	290,741
30-34	135,689	133,329	269,018	137,321	135,074	272,395	139,890	137,381	277,271	141,044	138,353	279,397	142,461	139,497	281,958	143,191	140,382	283,573
35-39	1																	

Table C.3 Population of Oregon: 1990-2022

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	3,919,020	35,285	0.91%
2014	3,962,710	43,690	1.11%
2015	4,008,100	45,390	1.15%
2016	4,054,400	46,300	1.16%
2017	4,102,300	47,901	1.18%
2018	4,151,000	48,699	1.19%
2019	4,200,200	49,200	1.19%
2020	4,249,800	49,600	1.18%
2021	4,299,000	49,200	1.16%
2022	4,348,000	49,000	1.14%

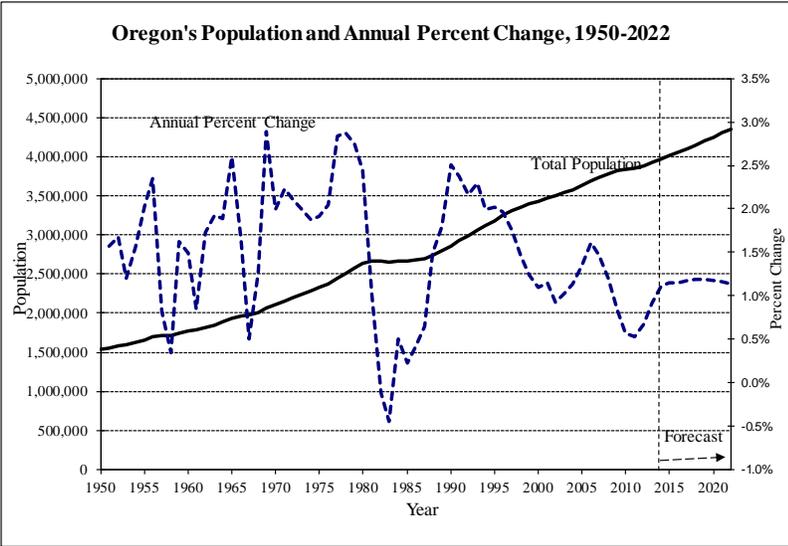


Table C.4 Children: Ages 0-4

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	236,180	-2,277	-0.95%	628,366	-2,375	-0.38%	360,675	911	0.25%
2012	232,875	-3,305	-1.40%	628,689	323	0.05%	362,580	1,904	0.53%
2013	230,142	-2,733	-1.17%	630,162	1,474	0.23%	365,925	3,346	0.92%
2014	229,790	-352	-0.15%	631,689	1,527	0.24%	368,398	2,473	0.68%
2015	229,801	11	0.00%	632,624	935	0.15%	368,754	357	0.10%
2016	231,158	1,357	0.59%	633,114	490	0.08%	366,545	-2,209	-0.60%
2017	233,203	2,045	0.88%	634,170	1,056	0.17%	365,577	-969	-0.26%
2018	235,101	1,898	0.81%	634,257	87	0.01%	366,619	1,042	0.29%
2019	237,158	2,056	0.87%	635,020	762	0.12%	367,844	1,226	0.33%
2020	239,208	2,051	0.86%	637,127	2,107	0.33%	368,055	211	0.06%
2021	241,326	2,118	0.89%	639,010	1,883	0.30%	368,586	531	0.14%
2022	243,301	1,975	0.82%	640,467	1,457	0.23%	369,370	784	0.21%

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	652,382	-1,109	-0.17%	1,030,430	4,304	0.42%	1,057,288	7,138	0.68%
2012	654,539	2,157	0.33%	1,037,116	6,687	0.65%	1,052,983	-4,305	-0.41%
2013	660,449	5,910	0.90%	1,047,278	10,162	0.98%	1,050,537	-2,446	-0.23%
2014	668,771	8,321	1.26%	1,059,704	12,426	1.19%	1,053,370	2,833	0.27%
2015	676,883	8,113	1.21%	1,071,904	12,200	1.15%	1,058,450	5,080	0.48%
2016	684,933	8,050	1.19%	1,087,022	15,119	1.41%	1,063,668	5,218	0.49%
2017	692,528	7,595	1.11%	1,105,078	18,056	1.66%	1,063,101	-568	-0.05%
2018	699,243	6,714	0.97%	1,124,472	19,393	1.75%	1,059,436	-3,664	-0.34%
2019	707,250	8,008	1.15%	1,143,972	19,500	1.73%	1,055,294	-4,142	-0.39%
2020	712,712	5,462	0.77%	1,161,266	17,294	1.51%	1,053,287	-2,007	-0.19%
2021	719,245	6,533	0.92%	1,178,860	17,594	1.52%	1,052,112	-1,174	-0.11%
2022	725,704	6,459	0.90%	1,196,240	17,380	1.47%	1,051,541	-571	-0.05%

Table C.10 Elderly Population by Age Group

Year (July 1)	%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	544,686	2.37%	300,402	3.71%	164,410	0.15%	79,874	2.07%
2012	569,492	4.55%	322,490	7.35%	165,727	0.80%	81,276	1.75%
2013	594,975	4.47%	344,126	6.71%	168,319	1.56%	82,530	1.54%
2014	619,759	4.17%	363,816	5.72%	172,466	2.46%	83,478	1.15%
2015	646,567	4.33%	384,688	5.74%	177,402	2.86%	84,477	1.20%
2016	672,891	4.07%	404,074	5.04%	183,149	3.24%	85,669	1.41%
2017	701,172	4.20%	423,592	4.83%	190,892	4.23%	86,689	1.19%
2018	731,115	4.27%	441,342	4.19%	202,191	5.92%	87,582	1.03%
2019	760,913	4.08%	458,829	3.96%	213,760	5.72%	88,324	0.85%
2020	790,857	3.94%	476,749	3.91%	224,248	4.91%	89,860	1.74%
2021	819,105	3.57%	493,865	3.59%	233,603	4.17%	91,638	1.98%
2022	847,080	3.42%	500,632	1.37%	252,612	8.14%	93,836	2.40%