Oregon Economic and Revenue Forecast

September 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

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This economic expansion just celebrated its sixth birthday. In true-to-form fashion, the party included decent-but-not-great job gains and steady-but-subdued GDP growth. As such there are few signs from the U.S. economy that the expansion is about to end anytime soon, even if growth has been lackluster overall following the financial crisis. However, all expansions do end and the economy is more likely closer to its next recession than not. This is especially true as storm clouds are gathering offshore in the form of a stronger U.S. dollar, weaker global growth and a significant and potentially worrisome slowdown in China.

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 above the rate of inflation.

While growth rates, and the trajectory of the economy have improved considerably, Oregon is not yet fully healed from the Great Recession. The largest economic concern today is the participation gap – the difference between the share of the population with a job or looking for work and what the rate would be when operating at full strength. The improving economy is and will pull workers back into the labor force, helping to support future economic growth at the same time.

Oregon's General Fund revenue growth slowed at the end of fiscal year 2015, as collections of personal income taxes dried up during May and June. Income taxes withheld out of paychecks slowed sharply, and the tax filing season ended with very weak payments as well. As a result of the weakness, General Fund revenues fell short of the May 2015 forecast by $56, which reduces the ending balances that were set aside by budget writers in June. Oregon's tax collections have since picked back up, growing rapidly to start off fiscal year 2016.

Although the General Fund ending balance for the 2013-15 biennium has become smaller, the associated reduction in available resources for the current biennium is largely offset by Oregon's kicker law. With less personal income tax having been collected than was expected in May, revenues have moved closer to the kicker threshold, resulting in a smaller credit for tax filers next year.

Excluding corporate taxes, General Fund revenues exceeded the 2% kicker threshold by $111 million (0.7%), resulting in a kicker credit of $402 million. Due to actions taken by the 2011 Legislature, this 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. Corporate tax revenues exceeded the 2% kicker threshold by $38 million (3.6%), resulting in a kicker amount of $59 million. Due to a 2012 ballot measure, this amount will be dedicated to K-12 funding.

Looking ahead through the rest of the current biennium, the outlook for available General Fund and Lottery resources has remained relatively unchanged. Although downside risks are mounting, the underlying outlook for employment and income growth has remained stable, leading to a stable revenue outlook.

The revenue outlook is stable, yet uncertain. Volatility in equity markets is injecting a great deal of risk into the forecast. Oregon's budget depends heavily on personal income tax collections tied to realizations of capital gains. These collections are extremely volatile, with revenues subject to the sometimes unpredictable behavior of investors. Although housing wealth has played a larger role in driving taxable capital gains over the last decade than in the past, earnings and losses in stock markets account for the lion's share of movements in taxable capital gains in the typical year.

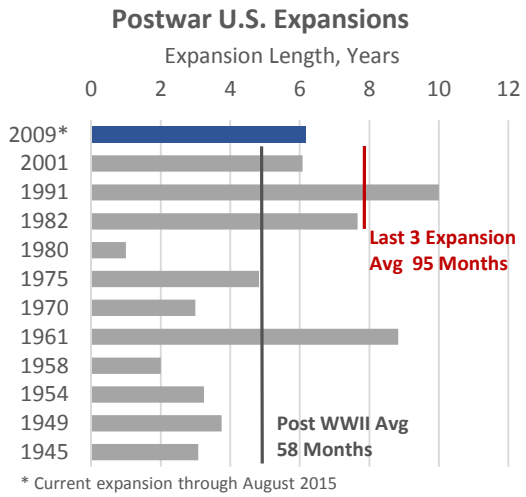
ECONOMIC OUTLOOK

U.S. Economic Summary

This economic expansion just celebrated its sixth birthday. In true-to-form fashion, the party included decent-but-not-great job gains and steady-but-subdued GDP growth. As such there are few signs from the U.S. economy that the expansion is about to end anytime soon, even if growth has been lackluster overall following the financial crisis. However, all expansions do end and the economy is more likely closer to its next recession than not. This is especially true as storm clouds are gathering offshore in the form of a stronger U.S. dollar, weaker global growth and a significant and potentially worrisome slowdown in China, the world's second largest economy.

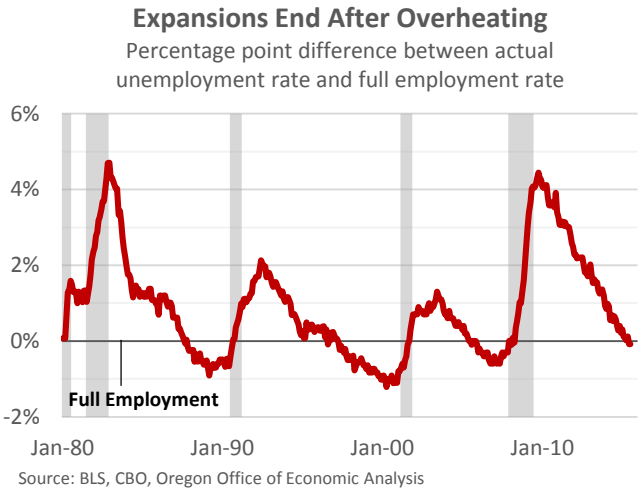
U.S. Economic Detail

Over the summer, the current U.S. economic expansion celebrated its sixth birthday. At 75 months so far, the current expansion is significantly older than the average post-World War II expansion but remains younger than both its 1980s and 1990s brethren. It also just surpassed the mid-2000s, or housing boom, in length. As such, many analysts and forecasters that are forward looking are now searching for the next downturn.



The majority of academic research finds that the length of an expansion has no bearing on the probability of falling into recession. In other words, expansions do not die of old age. Historically the economy enters recession due to an event sending the economy tumbling. Typically that event is the Federal Reserve raising interest rates to head off inflation from an overheated economy.

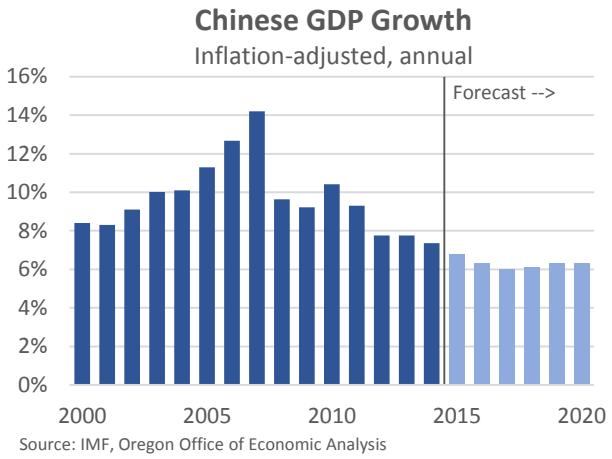
Decent-but-not-great GDP and job growth and low inflation coupled with subdued wage gains nationally are not usually indicative of an overheating economy. The brightest economic indicator today, the unemployment rate which stood at 5.3 percent in July, shows the economy just now returning to full employment. Given the low levels of labor force participation, increased share of employees working part-time but want full-time work and weak wage growth, one is hard pressed to believe the U.S. economy truly is at full employment. Even so, in each of the past three cycles, once the U.S. economy does reach full employment, there has been an average of 3 years before the next recession begins. It is during those three years that the economy typically overheats and inflationary pressures rise. As such, even if the economy is currently at full employment, the expansion likely still has room to run.



Even as the U.S. economy has remained resilient through much global turmoil since the Great Recession ended, current conditions may be different. The U.S. has seemingly shrugged off the ongoing Greek debt crisis, the Arab Spring and broader Middle East unrest, the Ukrainian invasion and a nuclear disaster in Japan among other

events. However today the U.S. faces worse terms of trade, as measured by a strong dollar, weakening global growth and a significant slowdown in China, the world's second largest economy.

Foremost, the slowdown and weakness from China is concerning. Not only does the U.S. trade heavily with China1, according to the International Monetary Fund, approximately one-third of global economic growth since 2010 is from China alone. The country has become an integral part of the global economy.

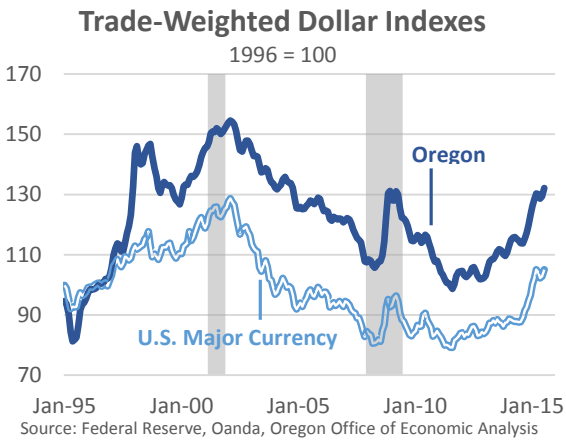


In the wake of multiple bubbles (public debt, housing and most recently stocks) the Chinese government and central bank have stepped up efforts to support growth. The most recent being a significant and sizable devaluation of the yuan relative to the U.S. dollar, amounting to approximately 3 percent in mid-August. The argument for such intervention being that while the USD-yuan exchange rate has been, essentially, fixed for much of the past handful of years, the real (inflation-adjusted) exchange rate was too high relative to economic fundamentals. This was particularly the case given tha the USD has apprciated nearly 20 percent over the past 18 months, bringing the yuan along for the ride.

Furthermore, China has cut interest rates, reserve requirements and eased credit restrictions, all in the past year to stimulate the economy. Even so, China's economic growth has slowed, making it harder to reach their official targets.

While the turmoil in China is the most disconcerting, the broader global economy has slowed in 2015. In fact, according to the IMF, advanced countries are now growing faster than emerging markets, which rarely occurs. The IMF also notes that emerging economies are hurt by lower commodity prices and tighter financial conditions. While growth is expected to improve in 2016, it remains are slower rates than in the recent past.

Such slower growth abroad (an indicator of international demand for U.S. and Oregon products and services) when coupled with a much stronger U.S. dollar is likely to slow exports considerably over the next year. In fact, U.S. exports are down over the past 12 months, even further than can be explained by the West Coast port labor issues alone. Overall the U.S. dollar has appreciated (strengthened) nearly 20 percent against the currencies of its major trading partners over the past 18 months. The Oregon dollar (based on our trading patterns) is up a similar amount. Such appreciation makes U.S. and Oregon based products more expensive to foreign consumers, slowing exports and weakening one pillar of economic growth.



Even with the dark clouds forming offshore, the much stronger U.S. dollar and continuing modest recovery in the U.S., the expansion is nevertheless expected to continue in the near future. There are always external

[1] In 2014 China was the 3rd largest market for U.S. exports trailing Canada and Mexico. China was the single largest country from which the U.S. imported goods, however, outpacing Canada and Mexico. China is Oregon's largest export market for much of the past decade including 2014.

threats to the economy, yet it proves resilient nearly every time. It is very likely the Chinese slowdown could turn into something much worse, or that the Federal Reserve's forthcoming interest rate hikes may choke off the domestic recovery. However, as Moody's Analytics chief economist, Mark Zandi, recently wrote, none of these events, should they come to pass, should send the U.S. economy back into recession before it "celebrates a lot more birthdays."

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 above the rate of inflation.

While growth rates, and the trajectory of the economy have improved considerably, Oregon is not yet fully healed from the Great Recession. The largest economic concern today is the participation gap – the difference between the share of the population with a job or looking for work and what the rate would be when operating at full strength. The improving economy is and will pull workers back into the labor force, helping to support future economic growth at the same time.

The current pace of economic growth is expected to be maintained throughout the 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

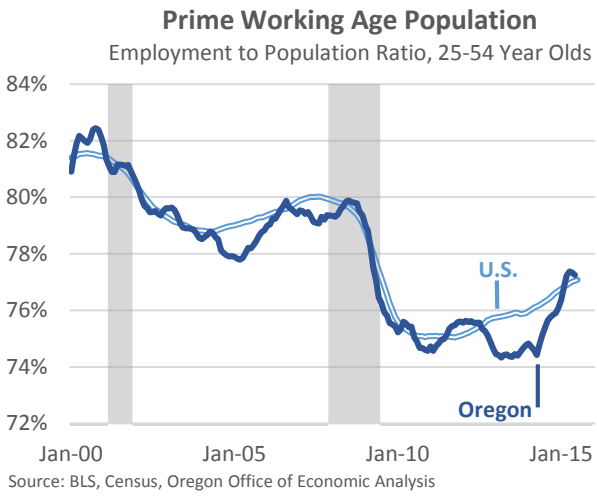
The pace of improvement in Oregon's labor market continues to be full throttle. The state added over 50,000 jobs in the past year, for a 3.4 percent growth rate. Given the demographic trends --- with the labor force growing slowly, as Baby Boomers retire and Millennials are entering – job growth north 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 more than one percentage point faster than in the typical state. This growth differential 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 importantly, these improvements are now translating into stronger wage gains for the average Oregon worker with better wage growth than the typical state. While Oregonian income and wages are below the typical state, average wages today in Oregon are at their highest relative point since the severe early 1980s recession when the timber industry restructured. Much of this improvement has come in the past 2-3 years when Oregon wage growth, much like job growth, has outstripped the average state. While there remains much room for improvement in average income levels in Oregon, wages have not been this high, relatively, for more than a generation.

With strong job growth and accelerating population gains, a key question is whether the economy is strong enough to absorb the influx of new migrants. The short answer is yes. The job gains Oregon is experiencing today are not only strong enough to keep up with population growth, but also to bring down the unemployment rate and make progress on returning the economy to full strength.

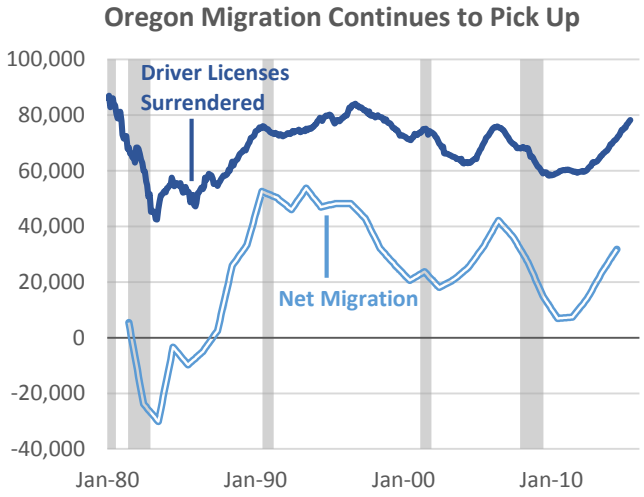
One such measure showing solid, yet incomplete, progress is the employment to population ratio. In particular, examining the so-called prime working age population – ages 25 to 54, generally considered the heart of one's career – reveals that both Oregon and the U.S. have regained about 40 percent of the recessionary decline. This measure is useful as it sidesteps the whole debate about whether the unemployment rate is the best gauge of the economy today, particularly in light of the aging baby boomers and lower labor force participation. The employment to population ratio simply shows the percentage of working age adults who have a job. Here, the improvements have been tangible yet progress remains to reaching pre-Great Recession rates.



Source: BLS, Census, Oregon Office of Economic Analysis

Migration Flows Return

While official population estimates lack timeliness, two measures that closely track migration and economic strength are indicating growth continues to accelerate so far in 2015. First, the number of driver licenses surrendered at DMVs – when an out-of-state driver turns in their old license to obtain an Oregon one – are currently running at a pace not seen since the mid-1990s. It is likely the influx of net new migrants into Oregon this year will be just as large as during the peak of the housing boom, and nearly the numbers seen during the 1990s, the last great migration wave into Oregon.



Source: Census, ODOT, Portland State, Oregon Office of Economic Analysis

Second, the pace of new household formation has returned to high levels here in Oregon, even as household formation nationwide remains lackluster. To be sure, not all new households formed today are from new residents, although some certainly are and confirm the strength seen in the other measures of population growth.

An additional, positive factor influencing the increase in new households is the fact that fewer young Oregonians – ages 18 to 34 – are living with their parents than just a few years ago. Following the Great Recession, the share of such young adults increased from its historical average of around 20 percent up to 25 percent. Such an increase represents about 45-50,000 more young Oregonians living at home, rather than own their own or with roommates. Over the past 18 months, this figure has started to decline, albeit very slowly. This indicates there are more young households being formed and is likely the result of improved employment opportunities and wage gains. In fact, the share of all 25-34 year old Oregonians with a job today is back to pre-Great Recession rates (~80%). The overall increase in new households bodes particularly well for the housing market, provided new construction keeps pace. If not, housing affordability erodes and becomes a bigger economic issue, until new units are added to the housing stock at a sufficient pace to keep price growth low.

Special Report: Financial Market Turmoil and Oregon's Economic Outlook

The recent financial market turmoil, should it persist, will impact the Oregon economy and state tax revenues. These impacts will be felt in a few different ways including capital gains, financial sector employment, local business investment and consumer spending more broadly.

Effect of Stock Prices on Oregon's Taxable Capital Gains

Oregon's personal income tax collections tied to realizations of capital gains are extremely volatile, with revenues subject to the sometimes unpredictable behavior of investors. Although housing wealth is playing a larger role in driving taxable capital gains during the current business cycle than in the past, earnings and losses in stock markets account for the lion's share of movements in taxable capital gains in the typical year.

A 10% drop in stock prices will eventually lead to a 10%-15% decline in the amount of net capital gains reported on tax returns. This negative impact on personal income tax collections is often delayed for several months after investors pull their assets out of equity markets. During a sell-off, the volume of trades increases, and paper gains from past years become subject to tax. Afterward, taxable capital gains face considerable downward pressure, with paper earnings from past years having been tapped, and with losses being carried forward into future tax years.

Effect of Stock Prices on Earnings and Employment in Financial Service Industries

Given the nature of the regional economy, Oregon is relatively shielded from the adverse conditions facing many parts of the financial service industry. Unlike San Francisco, Chicago, and the financial centers of the Northeast, Oregon does not have much exposure to some of the hardest hit industry segments such as investment houses and large banks. Oregon's financial service industry is split roughly evenly between real estate firms, insurance providers, and regional banks. As a share of overall employment, Oregon is less concentrated in non-real estate activities than is the typical state.

Effect of Stock Prices on Local Business Investment

Oregon's largest employers have traditionally not relied very heavily on equity markets to generate capital for investments, which will help to mute the effect of stock price declines on the regional economy. However, falling stock prices threaten to hurt regional investment in other, less direct, ways.

Small banks may see their margins pinched. The flow of venture capital is also threatened by lower stock prices. When a risky investment bears fruit, venture capitalists reap the rewards by selling the successful business model, often through equity markets.

Also, when stock prices fall, purchasing existing businesses becomes less expensive relative to investing in new facilities and equipment. Not only can this slow the growth of Oregon's capital stock, but may also result in less demand for the many local firms that cater to corporate investors in other states and countries (e.g. technology producers, metal makers, machinery firms and transportation equipment producers).

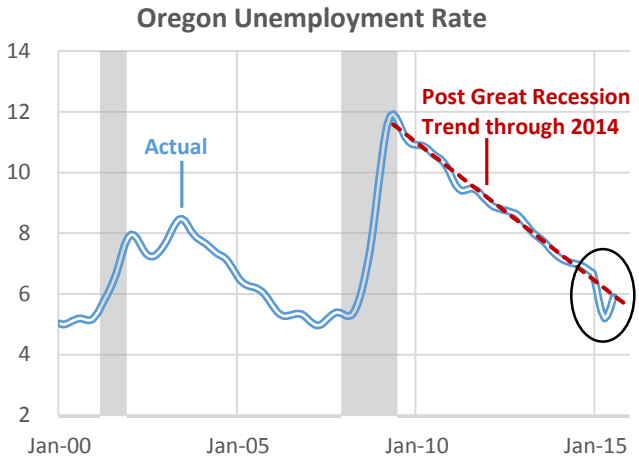
Effect of Stock Prices on Consumer Spending

The drag posed by wealth losses among Oregon's households represents the largest threat to the regional economy resulting from stock price declines. The timing of the technology and housing bubbles could not have been worse for household balance sheets. Households in the baby boom population cohort were fooled by temporary wealth gains in the middle of their peak earning years, which was a time when they should have been

saving more than ever. Federal Reserve research models have typically found that for each dollar of wealth lost, household spending is reduced by three to five cents.

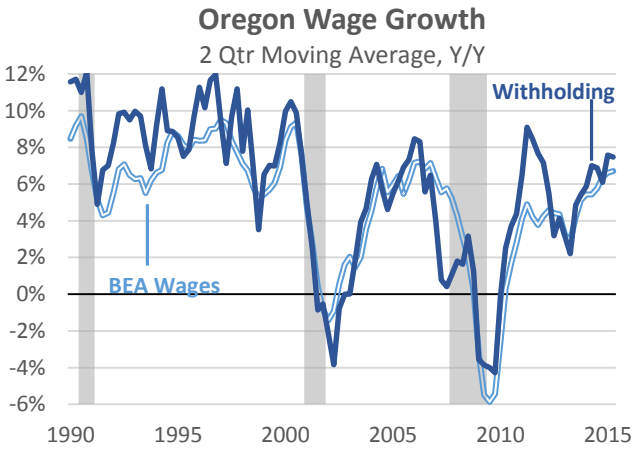
Oregon Labor Market

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 over the past year.



Source: Oregon Employment Department, Oregon Office of Economic Analysis

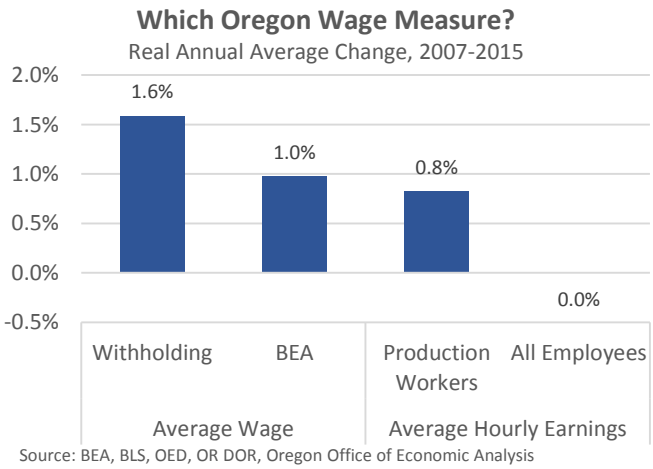
As our office warned three months ago, the large declines in the unemployment rate to start the year likely overstated the strength in the labor market. As the unemployment rate has increased over the summer, it has now returned to its post Great Recession trend, and likely understates the improvements in the labor market. The composition of the unemployment rate is a bit concerning, with falling labor force figures in much of 2015. However the labor grew substantially in 2014 and following revisions to the noisy data, 2015 is likely to look better. Regardless, the broader trends are clear: Oregon's economy is on the upswing, showing strong gains across nearly all measures.



Differences in 2007 and 2011 due to withholding table changes.
Source: BEA, Oregon Dept of Revenue, Oregon Office of Economic Analysis

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 3-4 percent per year, which is faster than inflation, albeit not considerably so.

Unlike the nation overall, Oregon's various measures of wage gains are all increasing above the rate of inflation, producing real wage gains for Oregon workers. All measures that is except one. Average hourly earnings, much like its national counterpart, has been growing at just about 0 percent in inflation-adjusted terms. Given the strength in the labor market overall, in terms of job growth and the other measures of wages, plus the fact the overall average hourly earnings series is still new – beginning in 2007 – our office's position is that wage growth today in Oregon is strong.



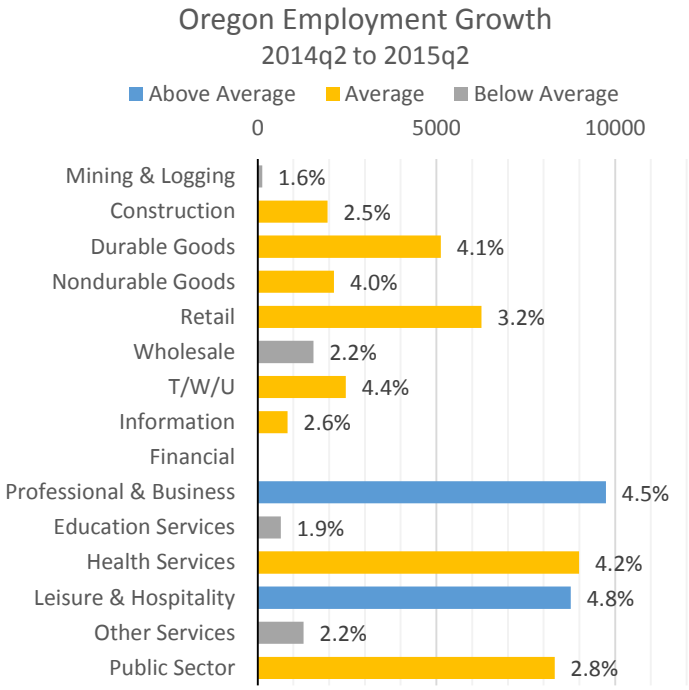
Source: BEA, BLS, OED, OR DOR, Oregon Office of Economic Analysis

The most recent job growth rankings, published by Arizona State University's W.P. Carey School of

Business[2], places Oregon 4th in the nation for job growth in June. Over the past year the state has added 59,300 jobs, or an increase of 3.4 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 revisions[3].

In the second quarter, total nonfarm employment increased 3.4 percent over the past year with the private sector growing at 3.5 percent and the public sector at 2.8 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.

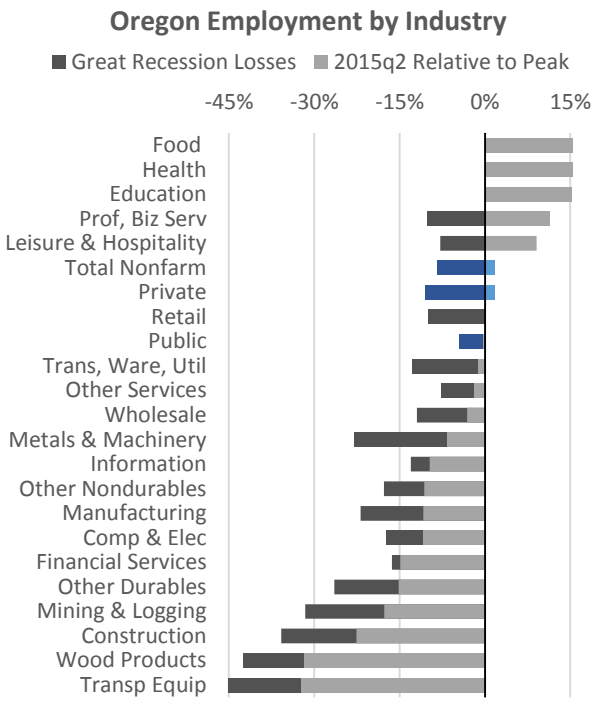


As has been the case in the recovery to date, jobs in the large service sector have led growth in terms of outright job gains and above-average growth rates. These include jobs in professional and business services, health services, and leisure and hospitality industries. These three industries have gained 27,500 jobs in the past year and account for 47 percent of all job gains across the state. The good news is that this share is becoming smaller as other industries continue to strengthen.

[2] http://research.wpcarey.asu.edu/seidman/current-state-rankings/

[3] Each year the U.S. Bureau of Labor Statistics revise the employment data – a process known as benchmarking. The current establishment survey (CES), also known as the monthly payroll survey, is benchmarked against the quarterly census of employment and wages (QCEW), a series that contains all employees covered by unemployment insurance. The monthly CES is based on a sample of firms, whereas the QCEW contains approximately 96 percent of all employees, or nearly a complete count of employment in Oregon. The greatest benefit of the CES is the timeliness – monthly employment estimates are available with only a one month lag – and these estimates are reasonably accurate. However the further removed from the latest benchmark, the larger the errors. The QCEW is less timely as the data is released 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 March 2015, thus the preliminary benchmark used here covers the October 2014 – March 2015 period.

In terms of illustrating how each industry has fared over the Great Recession and so far in recovery, the nearby graph shows both the depths of recessionary losses[4] 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.

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 collapse[5]. 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.

Labor Force Participation Rate

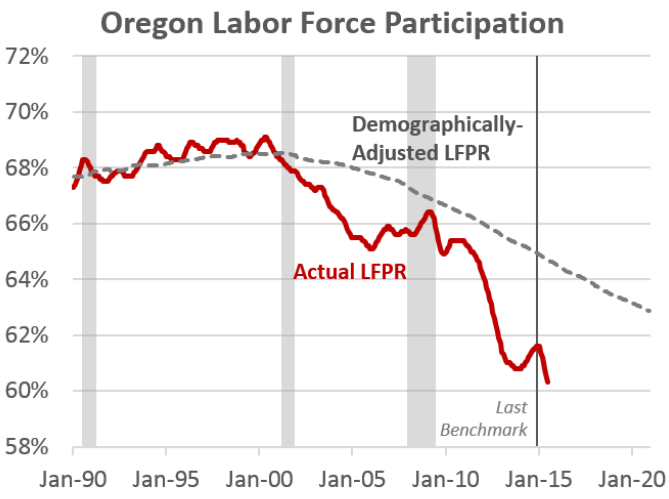
Along with the strong employment gains in Oregon has come the news that the state's labor force participation rate continues to fall. With good data going back to 1976, July's LFPR of 60.2 percent is the lowest on record. This means 4 out of every 10 adult Oregonians neither have a job nor are looking for work. However much of the

[4] 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.
[5] http://oregoneconomicanalysis.com/2012/07/10/rv-workers-and-reemployment/

decline since 2000 was expected. Given that the overall LFPR includes *all* Oregonians 16 years and older, aging baby boomers were always going to pull the measure down, along with the state's influx of retiree migrants.

Labor force participation matters because it is an indicator of the economy's potential: more workers generally create more output, translating into increased sales and wages. To the extent that today's lower participation rates are permanent, particularly among the prime working age group, it will likely weigh on potential economic growth in the future.

As such, it is important to track the LFPR but also to take into account the aging demographics. As such, the dotted gray line in the right on the right is a demographically-adjusted LFPR for Oregon. This is based on participation rates back in 2000 – arguably the last time the U.S. economy was operating at full capacity – and adjusts over time to shifting demographics. This makes the gray line a reasonable approximation for what the LFPR in Oregon would be if the economy was firing on all cylinders.

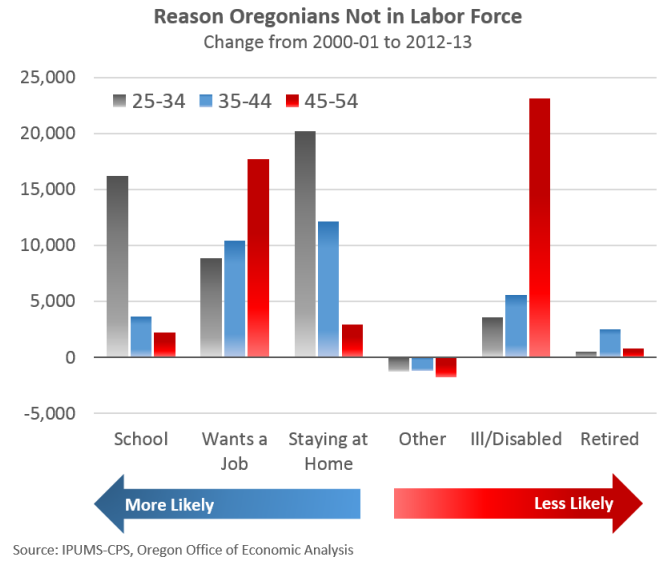


Source: BLS, Census, Oregon Office of Economic Analysis

Clearly, actual labor force participation in Oregon is a few percentage points below the full capacity line. It is this participation gap – the difference between the red and gray lines – that truly matters for the health of the economy.

Even as the vast majority of the decline in the LFPR is due to changes and trends among the youngest and oldest populations, not all is. In fact, lower participation rates among prime working age adults are lower today as well. This is the biggest potential issue in terms of future growth. The chart below shows the relative changes for this population and the reason why they are not in the labor force. The reasons are ordered, subjectively, from most likely to return to the labor force to least likely to return, from left to right.

The results are somewhat mixed depending upon the age group. The youngest group (25-34) has seen lower rates of participation, but for reasons that are fairly easy to reverse: school, a weak economy and staying at home with the kids. Changes among the oldest group (45-54) appear to be harder to reverse, although a stronger economy can and will pull some of these workers back into the labor force. The 35-44 year old group lies somewhere in between the others, although certainly skewing more toward the easier to reverse end with more discouraged workers and an increase in staying at home with the kids. Not that transitioning back into the workforce is easy, but provided the right opportunity exists — and it should in a stronger labor market — these individuals will at least be tempted to return.



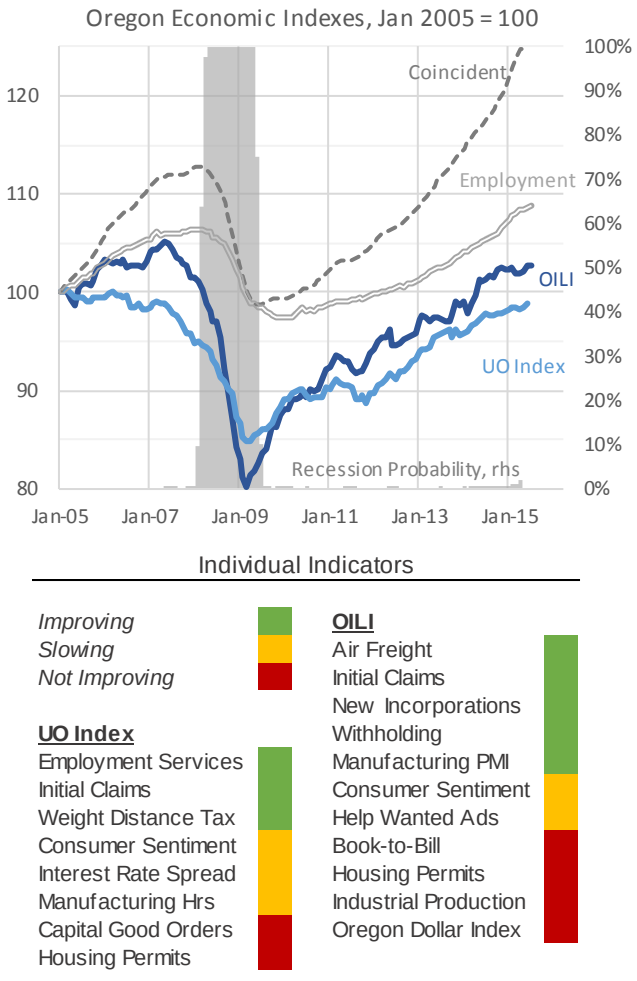
Source: IPUMS-CPS, Oregon Office of Economic Analysis

In terms of the outlook there are three reasonable scenarios. First, the truly pessimistic scenario is that all of the LFPR decline is permanent. The economic-related decline is now structural and not cyclical due to the initial

lackluster recovery. Those Oregonians who dropped out of the labor force will not return in the future. Our office does not believe this will happen, but, unfortunately, it does remain a distinct possibility. Second, a somewhat pessimistic yet reasonable view would be that Oregon does not see any uptick in the LFPR. Rather it moves sidewise (remains unchanged) during the expansion, similar to the 2005-08 period. Under such a scenario, the participation gap will narrow and maybe even close however not quickly. Finally, our office's baseline is that Oregon will see another percentage point or so increase in the LFPR, following the gains in 2014. A stronger economy with more plentiful and better paying jobs will pull workers back into the labor force, at least somewhat. Not enough to overcome the aging demographics, but some of those prime working age adults will return.

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 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 pack on new investment and output, but encouragingly has increased in each of the past two months. The Oregon Dollar Index also continues to remain strengthen; 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 recession[6], calculated in real time by University of Oregon professor Jeremy Piger, is just 1.3 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 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 in recent forecasts, with key aspects such as job and income growth remaining nearly identical to three months ago.

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 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. In fact, the ongoing strength in manufacturing employment has been a pleasant surprise so far in recovery. Gains have been every bit as strong within manfuacturing as outside of it with little signs of slowing down, as of today. Of course, manufacturing growth will slow as the expansion matures, which our baseline outlook expects.

Source: Oregon Employment Department, Oregon Office of Economic Analysis

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

[6] http://pages.uoregon.edu/jpiger/us_recession_probs.htm/

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 5.3 percent in 2015 and 6.1 percent in 2016.

Economic Forecast Summary

		Quarterly					Annual				
		2015:1	2015:2	2015:3	2015:4	2016:1	2014	2015	2016	2017	2018
Personal Income, Nominal	U.S.	4.2	4.6	3.9	3.9	5.1	4.0	4.3	4.6	5.2	5.1
% change	Oregon	4.9	4.2	6.2	5.7	6.3	5.7	5.3	6.1	6.8	6.2
Wages and Salaries, Nominal	U.S.	5.0	3.6	4.7	4.8	5.2	4.6	4.8	4.9	5.1	5.0
% change	Oregon	6.8	5.6	6.7	7.6	7.4	5.9	6.6	7.3	7.4	6.4
Population	U.S.	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.8	0.8	0.8
% change	Oregon	1.0	1.2	1.4	1.1	1.0	1.1	1.2	1.2	1.2	1.2
Housing Starts	U.S.	0.98	1.12	1.13	1.19	1.25	1.00	1.10	1.32	1.45	1.52
U.S. millions, Oregon thousands	Oregon	14.8	13.9	15.4	15.8	16.6	15.6	14.9	17.9	20.8	22.6
Unemployment Rate	U.S.	5.6	5.5	5.4	5.3	5.2	6.2	5.4	5.1	5.0	5.1
	Oregon	5.8	5.3	5.7	6.0	5.9	7.0	5.7	5.8	5.4	5.6
Total Nonfarm Employment	U.S.	2.2	1.8	1.8	1.7	1.5	1.9	2.1	1.5	1.3	1.1
% change	Oregon	4.2	2.4	3.3	3.3	2.9	2.8	3.4	3.1	3.1	2.2
Private Sector Employment	U.S.	2.6	2.1	2.1	2.0	1.7	2.3	2.4	1.8	1.5	1.1
% change	Oregon	4.6	2.5	3.3	3.9	3.2	3.0	3.6	3.4	3.5	2.4

As the economy continues to improve, household formation is increasing too, which will help drive up demand for new houses. Household formation has remained suppressed in recent years as individuals and families turned to rental markets and doubled up during the recession. As these individuals are now finding 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.

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 about 15,000 in 2015 and 17,900 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 Chip[7], with the exception being IHS Economics (formerly IHS Global Insight).

[7] http://wpcarey.asu.edu/bluechip/western/oregon.cfm

Oregon Forecast Comparison						Sept 2015
	Employment			Personal Income		
Forecaster	2015	2016	2017	2015	2016	2017
IHS Economics	2.9	1.5	1.6	5.2	4.6	5.3
Western Blue Chip Consensus	3.1	2.7		5.3	5.3	
Oregon Office of Economic Analysis	**3.4**	**3.1**	**3.1**	**5.3**	**6.1**	**6.8**

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 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, along with downside risks should the expansion falter.

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.
- Strength and durability of the housing market recovery. The housing market in recent years has underwent 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 in 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[8].
- 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.

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

- 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.

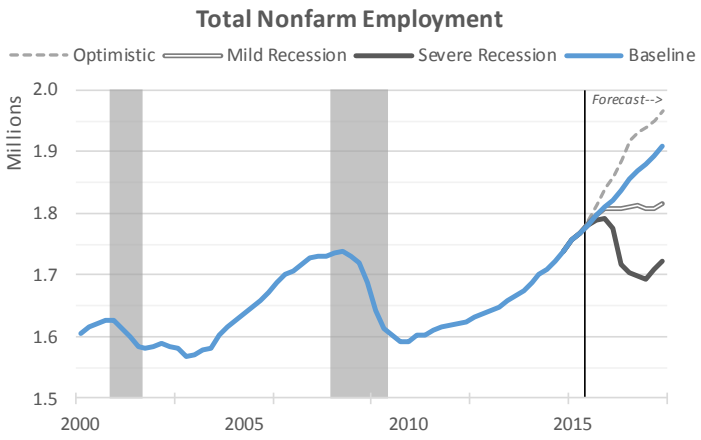
Alternative Scenarios

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 the early stages of recovery recedes into the rearview mirror of history and the U.S. economy builds momentum through the remainder of the year. The economy is soon firing on all cylinders. Economic growth is above potential in the second half of 2015, and all of 2016 and 2017, 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 new construction returns to normal levels by late 2015 or about a year earlier than the baseline.

Alternative Scenarios **Sep 2015**



	2015	2016	2017	2018
Employment				
Baseline	3.4%	3.1%	3.1%	2.2%
Optimistic	3.8%	5.3%	3.8%	1.9%
Mild Recession	3.4%	1.8%	0.1%	1.0%
Severe Recession	3.3%	-1.5%	-2.4%	2.4%
Personal Income				
Baseline	5.3%	6.1%	6.8%	6.2%
Optimistic	6.7%	9.3%	7.7%	5.9%
Mild Recession	5.3%	4.9%	3.9%	6.0%
Severe Recession	5.3%	1.3%	0.7%	7.5%

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 late-2015 causes emerging market turmoil and capital flight. The U.S. dollar strengthens further, helping to choke off the manufacturing cycle. These factors are enough weight on the lackluster recovery that by late-2015 or early-2016 the economy slides back into recession. Job losses ensue in 2016 and 2017, 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 2016-17. 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

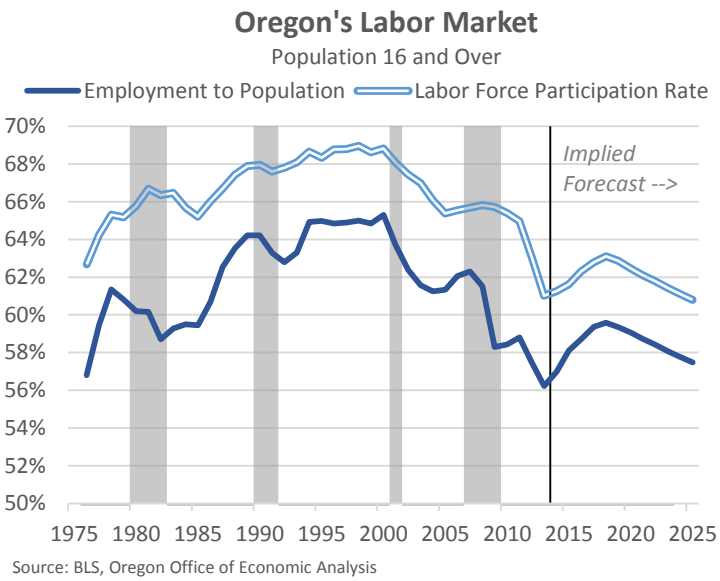
IHS Economics projects Oregon's economy to fare well relative to the rest of the country in the coming years. The state's Real Gross State Product is projected to be the third fastest among all states across the country in terms of growth with gains averaging 3.8 percent through 2020. Total employment 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 ninth 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.



Source: BLS, Oregon Office of Economic Analysis

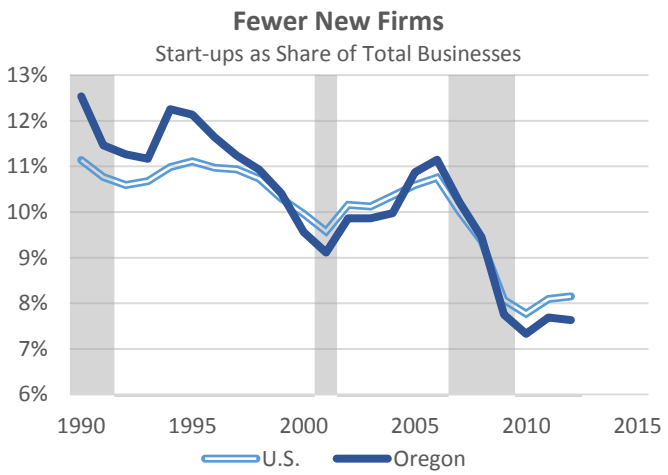
With that being said, our office's baseline outlook calls for some improvement in the near-term for both the labor force participation rate and the employment to population ratio. These gains are due to the shorter run cyclical rebound in the economy, before longer-run demographic trends will weigh on 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

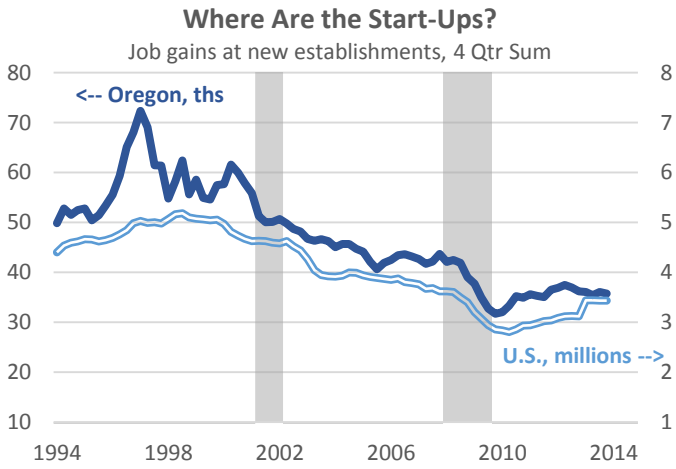
With that being said, certainly not all hope is lost. Many industries in which Oregon has a larger concentration that then typical state are expected to perform well over the coming decade. These industries include management of companies, food and beverage manufacturing, published software along with 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 grpah). 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 or two, 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.



Source: BLS, Oregon Office of Economic Analysis

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 Nation[9].

Oregon Exports

Given that Oregon remains an agricultural and manufacturing hub, and our strategic location along the Pacific Rim, it is no real surprise to see strong exports from the state. In 2014, Oregon exported nearly $21 billion worth

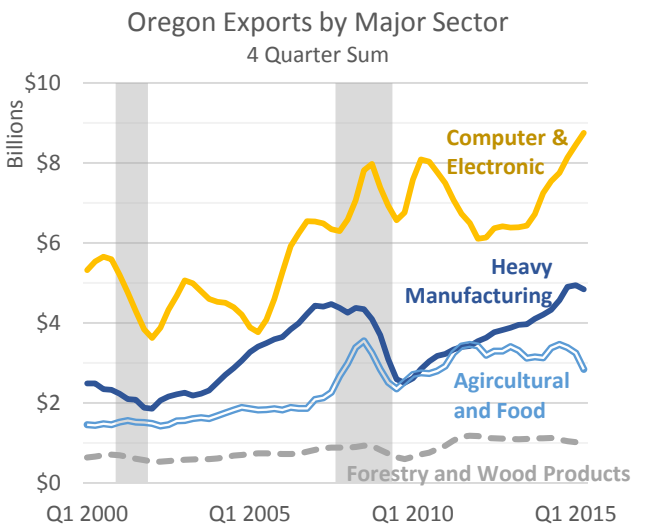
[9] http://olmis.emp.state.or.us/olmisj/PubReader?itemid=00007366

of products and through the first half of 2015, the state is on pace to match that figure. Measuring exports relative to the size of the economy, Oregon consistently ranks well across all states.

Exports by Industry

Exports are generally measured by their dollar value, not their bulk. As such, Oregon's high-technology producers – semiconductors in particular – dominate statewide figures, accounting for over 40 percent of Oregon exports in the past 15-20 years. These products, while generally lightweight and shipped around the world to assembly plants via air, are extremely valuable. They are the "brains" behind many of our electronic products. They are also somewhat different from other types of exports in the sense that they are not influenced so much by any one country's consumer demand but rather the global technology market and the life cycle for each successive generation of products.

One cannot discuss Oregon exports without discussing the impact of the state's technology products, however given their relatively different pattern, focusing on all other industries can be enlightening.



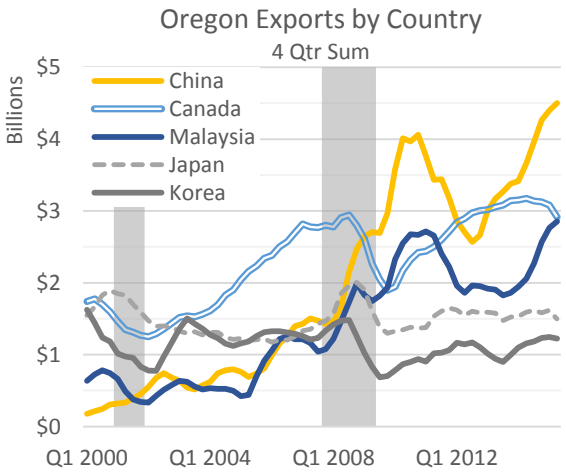
Heavy Manufacturing: Fabricated and Primary Metal, Machinery, Transp. Equip. Agricultural & Food includes frozen fish and beverages | Forestry & Wood Products includes paper and furniture | Source: WiserTrade, Office of Economic Analysis

Much of the growth in Oregon exports in recent years has been in heavy manufacturing – machinery, metals and transportation equipment. While the metals and machinery are holding strong in recent quarters, transportation equipment is declining. Many of these products are destined for Canadian markets, see below.

Agricultural and food products are down in the past two quarters, mostly due to lower commodity prices globally although West Coast labor disputes along with the Port of Portland losing container service may be impacting the numbers as well. Furniture exports are growing, even as the broader wood products sector is stable. Other industries or sectors of the economy have seen strong, but stable exports since the Great Recession.

Exports by Destination Country

The vast majority of Oregon exports (80%) are destined for one of the 21 countries along the Pacific Rim that are members of the Asia-Pacific Economic Cooperation (APEC) including each of Oregon's five largest individual markets: Canada, China, Japan, Korea and Malaysia. Prior to the Great Recession these five countries received 50 percent of all Oregon exports, however in the past six years, that figure is now 60 percent, with much of the additional growth coming from products destined to China.



Source: WiserTrade, Oregon Office of Economic Analysis

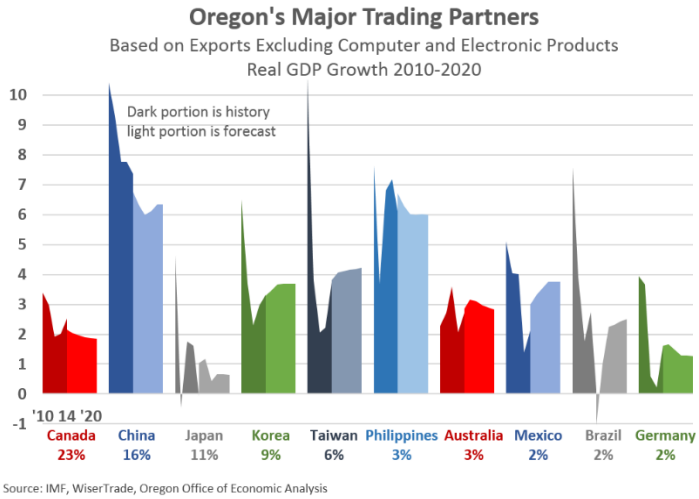
Only two other states in recent years have a larger share of their exports heading to China than does Oregon at just over 20 percent: Alaska (lots of seafood, 27%) and Washington (aerospace, 22%.) Oregon is not dissimilar in the fact that over the past decade 58 percent of all

Oregon exports heading to China are computer and electronic products. Given the state's technology producers' global presence and major investments in China in particular, such a pattern is not unexpected. Encouragingly non-computer and electronic product exports have increased in recent years as well. Agriculture, chemicals and machinery have seen strong gains, and until recently wood products (mostly logs) as well.

Canada – Oregon's second largest export market – is similar in that exports are dominated by one large sector but all other industries are seeing gains. In Canada's case heavy manufacturing exports (machinery, metals and transportation equipment) account for over 40 percent of the total. Many of these exports are tied to the mining industry, which has been hit especially hard over the past year with falling oil prices. As such Oregon's heavy manufacturing exports have declined nearly 30 percent from 2014q2 to 2015q2. Other major export sectors, like agriculture, chemicals and wood products remain relatively robust albeit slowing, likely due to the country's overall economic performance. Largely due to the low energy prices, Canada's economy is facing a deteriorating outlook in the near term relative to the recent history, as energy producers have been hit hard by low oil prices even as all other businesses and households gain from the lower prices.

Outlook for Exports

There is an interesting dichotomy to Oregon exports and discussing their impact on the state and outlook for the future. The fact that much of Oregon's exports are tied to a specific industry (high-tech) or an industry-sector connection (mining) is a double-edged sword. It leaves overall exports less prone to the business cycle but more exposed to individual industries and their patterns, which can be both beneficial and detrimental, depending.



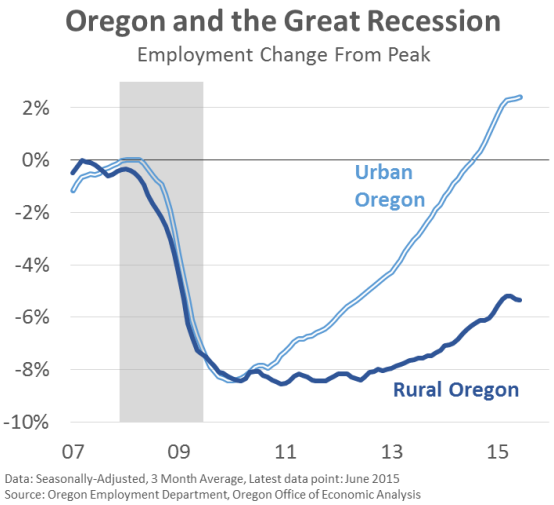
However other products and markets outside of these examples are more tied to global demand. Unfortunately the outlook for global growth is slower in the coming years than in the recent past. The International Monetary Fund (IMF) is forecasting a relative slowing in nearly all of Oregon's major export markets. While Oregon's non-tech, non-mining related exports are growing in size and scope, foreign consumers are facing a likely slowdown. Such an outlook is largely not a worry to the broader U.S. economic expansion, however it may have greater impacts on Oregon-specific industries and firms. In particular, a slowing global economy may impact some of the state's larger firms expecting strong consumer demand from the emerging middle class in many Asian countries.

Weaker global growth is in addition to the stronger U.S. and Oregon dollar which makes our products and services more expensive to foreign consumers. While the IMF expects global growth to strengthen after a couple years of relatively weaker growth, the double whammy of slower growth today and a stronger dollar likely means exports will slow, weakening one pillar of economic growth. Longer term, of course, the vast majority of Oregon's top export markets are expected to grow considerably faster than is the U.S. or Oregon. Increasing exports to these growing economies is and will be a benefit for stronger growth here at home.

Oregon Regional Trends

Rural Oregon

It's no secret that rural Oregon has yet to fully share in the economic recovery, if at all. Rural America at large experiences a similar pattern, outside of the oil and gas boomtowns across the country's heartland. The largest cities in the country turned around first following the Great Recession and have led growth ever since. Today, many second-tier metropolitan areas are thriving as recovery has spread. While growth has returned for many rural economies, struggles continue for most.



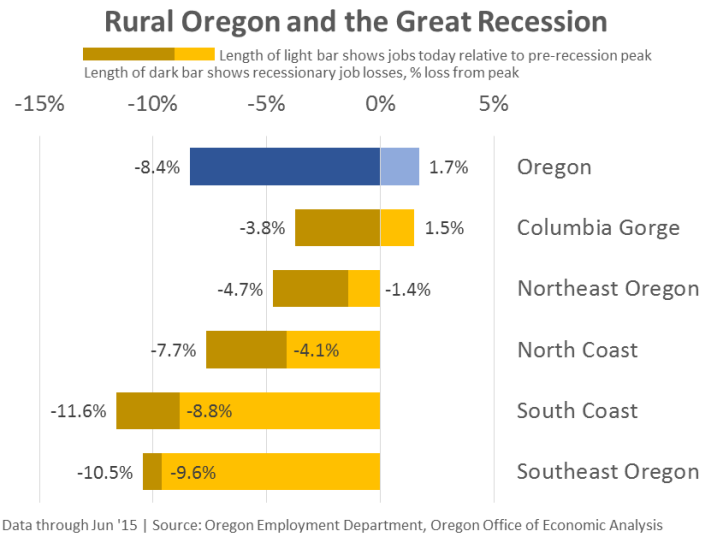
One reason as to why this is occurring is the underlying lack of industrial diversity in many rural economies. In particular, job markets in rural areas have a large degree of exposure to both housing-related industries and government. The Great Recession fell particularly hard on these sectors. Rural areas depend heavily on housing and government, not because they love these industries, but rather because they do not have exposure to many other industries that are only found in big cities. Large population centers are home to ballets, advertising firms and other employers that are rare in rural areas. The broad sector of professional and business services – generally office-type work including accounting, consulting, engineering, legal, software development and similar – has driven much of the job growth throughout the recovery. Such jobs are heavily concentrated in bigger cities.

The good news for many rural areas is that the two biggest weights on the economic recovery – housing and government – are lifting. The housing market is recovering, supporting growth, and the public sector has moved into a more neutral position as tax revenues increase along with an improving economy, rather than a drag in terms of employment losses and budget cuts. As such, job growth has returned to each region within Oregon, even if some individual counties have yet to see sizable gains.

Even so, among the nonmetropolitan regions of Oregon, only the Columbia Gorge has fully regained its recessionary employment losses. The gorge has benefited from three major trends in recent years that are somewhat divorced from the broader business cycle. First, agriculture remains strong – largely fruit in the gorge – and higher commodity prices have benefited local farmers. Second, the installation of major wind farms in the region back in the 2007-11 time period provided investment and jobs during the toughest economic times. Third, the growth of the unmanned aerial vehicles industry (UAVs, aka drones) has been quite strong over the past decade. A large portion of such jobs are on the Washington side of the Columbia River, however the economic and population base in the gorge is on the Oregon side, where much of the consumer spending occurs.

Northeast Oregon suffered a relatively minor Great Recession compared with the state or nation, however recovery has come in fits and starts. Higher wheat prices and commodity prices in general, have benefited local farmers in recent years. Economic growth returned in 2011, however, the closure of the Umatilla Chemical Depot soon sent employment in the region falling again. Job growth has picked up over the past 18 months or so, the vast majority in Morrow county, likely as part of the ongoing strong growth at the Port of Morrow.

Oregon's other rural regions have fared worse, particularly the southern half of the state from the coast to the Idaho border. One of the biggest obstacles facing rural Oregon and the southern counties in particular is demographics. A weak economy exacerbates these impacts. An older population results in a lower labor force participation rate in and of itself, which is a cause for concern when gauging future economic growth. While the labor force – the number of adults either with a job or looking for work – held strong throughout the Great Recession and into 2011, it has fallen considerably in recent years. In rural Oregon, the drop has been about 5 percent, even as the labor force in the state's metropolitan areas is increasing. Rural America has seen a similar labor force decline of more than 4 percent. As such, the recent declines in the unemployment rate across rural Oregon are more for bad reasons (less people looking for work) than for good reasons (more people with a job).

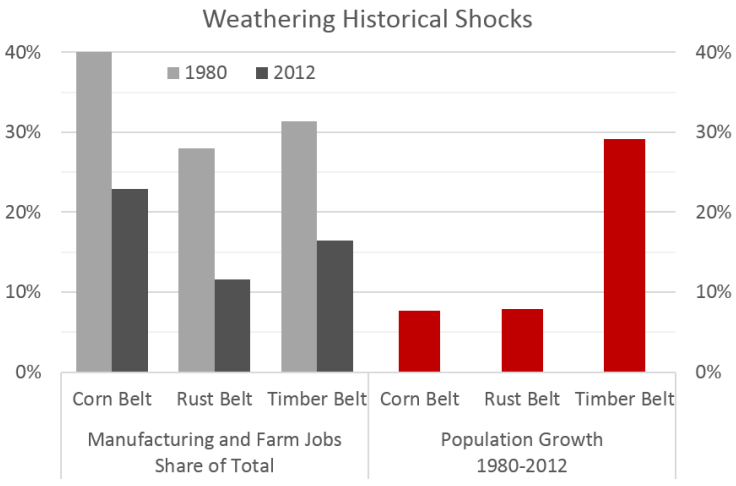


Data through Jun '15 | Source: Oregon Employment Department, Oregon Office of Economic Analysis

Much of the discussion surrounding rural Oregon focuses on data and trends that are backward looking; they indicate how many jobs were lost in the 1980's and 2000's, or how many people moved away, or how old the typical resident is. Given what has happened to natural resource industries across the state, that used to anchor our rural areas, most of these descriptive statistics look bad. While these statistics help describe the current lay of the land, they are not generally forward looking and do not tell us what tomorrow may bring. To be sure, many of the more forward-looking indicators are also less bright in much of rural American than in urban America, but not all hope is lost.

It is true that rural Oregon, like its national counterparts, faces population losses among young working-age households. The so-called "root setting" years, between 25 and 34 years old, are important for future economic growth. During these years, workers are mobile and many begin their careers in earnest, settle down, get married, buy a house, start a family and the like. Rural areas struggle to retain such households. However, unlike national trends, rural Oregon offsets these losses with a strong influx of older migrants from other states.

In fact, the Timber Belt – the nonmetropolitan areas from northern California up through Washington state – has continued to see strong population gains on net in recent decades. The Timber Belt suffered an economic collapse and restructuring just as severe as that seen in the Rust Belt, the Corn Belt, or the old textile mills across the southern states. However, in those other regions, families and households moved away in search of better economic opportunities. What little population growth the regions have experienced are tied to the biggest and strongest cities within the area, like Chicago in the Rust Belt and Omaha in the Corn Belt. All along the Timber Belt, people keep moving in. In fact, in



Source: BEA, Census, Oregon Office of Economic Analysis

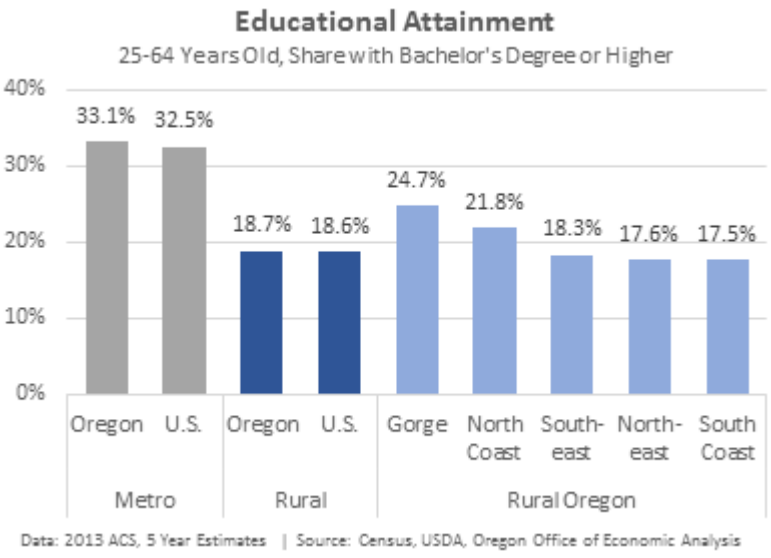
the most recent migration data based on tax return filings with the IRS (2011-12) rural Oregon experienced just as strong of a net migration influx as did urban Oregon, after adjusting for population size, and considerably higher than in the typical state or region nationwide.

In general, these incoming migrants are different than the households moving out. Much of the time they are older and relocate to rural Oregon as they retire or reduce their work hours. Such migration trends are particularly strong in coastal, central and southern Oregon. Furthermore, many bring with them not only a lifetime of experience but also wealth, often in the form of California home equity. Economists and researchers have struggled with how best to measure wealth and its impact on an area, largely because good data on wealth does not exist. There is myriad data and studies on current income but not wealth. Retirees generally have less of the former and more of the latter. Figuring out how best to exploit the Timber Belt's strong influx of retirees should be a top priority given such individuals are voting with their feet, in essence, saying they want to live in the area and be a part of the community. Overall this is certainly a good thing.

Furthermore, it turns out that rural Oregon is a good place to raise a family and have one's children be successful. The Equality of Opportunity Project at Harvard found that the probability of a child born into the bottom of the income distribution and reaching the top of the income distribution as an adult is strong in rural Oregon, in particular much of eastern Oregon. Among the nation's 700+ community zones, the research finds that Burns, Condon, Enterprise, John Day and Lakeview all score among the top third of the entire country; similar or better rates than in some of the best performing big cities in the U.S. like Salt Lake City or San Jose. La Grande and Ontario are just a hair below the median area of the country, yet above the national average[10].

While many of these children do not reap their relative fortunes in the rural areas in which they were raised – they earn them in the cities – such findings are important. Portland and Oregon's other urban centers can thank them for much of their success. Historically, the lifeblood of the Oregon economy – natural resources – would start in the rural areas and flow to and up through the Willamette Valley and the urban centers. Today, even as that lifeblood has changed with the evolving economy – from natural resources to human capital – the flows remain from rural to urban.

Along these lines, an additional measure to track moving forward is educational attainment, particularly for the working age population. Economic growth in today's economy relies more upon human capital (skilled, educated workers) than a generation or two ago. On a positive note, rural Oregon's share of the population with a bachelor's degree or higher outpaces rural America's share, albeit barely. While the gorge and north coast regions in Oregon have sizable



[10] Other rural Oregon regions, such as in southern Oregon, are below the typical region in the country in terms of economic mobility, although not significantly so. Much of this is likely due to the time period of the study. It tracks individuals born in the early 1980s and compares how they are doing in their mid- to late-20s today. It is hard to pick a more challenging time for much of southern Oregon than the early 1980s given the severe recession and timber industry restructuring. Then the ongoing timber industry decline in the ensuing decades. As such, southern Oregon's economic mobility estimates suffer accordingly.

attainment advantages over much of rural America, the rest of Oregon is right around the typical rates seen nationwide.

Encouragingly, local employment gains among high-wage jobs, which generally require college degrees, have outpaced rural America's in recent years. Middle-wage jobs (think construction, manufacturing but also office support and teachers) have seen larger losses. Low-wage job trends are also stronger in rural Oregon than in rural areas in other states. Such broad labor market changes, with job growth concentrated among the high- and low-end of the wage spectrum, is ongoing across Oregon and the U.S. and is not an urban-rural phenomenon in and of itself. However, the majority of the high-wage jobs are being created in urban areas.

While broad prosperity eludes much of rural Oregon, and rural America at large, there are certainly pockets of strength. From the dairy industry, tourism and scientific research on the coast to the drones in the gorge and newly designated federal test sites in Pendleton, Tillamook and Warm Springs. In eastern Oregon, higher commodity prices in recent years have been a boon to the state's wheat farmers, which have found strong demand from Asian consumers, and commerce and employment are booming at the Port of Morrow. Oregon's historical strength in agriculture more broadly continues today, with increasing sales and exports for the state's fruit and nut farmers, in addition to the growing alcohol cluster (beer, spirits and wine) which has a wide footprint across the entire state.

To be sure, challenges – some of them structural – remain. Demographic trends are the most concerning for longer-run economic health. Historical ties to the timber industry have remained more of a liability than asset in recent decades. However the parts of the industry that remain standing today are not only resilient but are doing fairly well. The broader forest sector and related industries have added 5,000 jobs[11] from 2010 through early 2015. While not nearly enough to offset recessionary losses, these gains are felt in rural Oregon. Grant county employment has picked up following increased mill operations in John Day, although media reports indicate in early 2015 operations have been pared back to one shift.

More broadly, as with the state's wheat, specializing and finding niche markets for Oregon products is important, helping to build a customer base. So too is increasing access to both domestic and international markets. Ensuring good infrastructure for both newer technologies, like high speed internet access, and the old fashioned, like highways, ports and rail, will help maintain and increase such access.

For on Oregon's regional trends please see our website[12] and the Oregon Employment Department's website[13].

State Comparisons

Traditional analysis and models indicate the economy is essentially at full employment, given the unemployment rate — currently at 5.3% — is in the range of previous estimates of the so-called natural rate, or NAIRU. Historically the Fed, including its models, agrees. However given the severity of the Great Recession, this time really does appear to be different when it comes to labor market slack, at least so far.

Unfortunately such slack really is an unknown figure but economists keep trying to estimate it. One such measure, the Total Employment Gap used by Andrew Levin, previously at the IMF now at Dartmouth, is particularly useful and applicable. It incorporates not only the cyclical unemployment gap but also estimates of

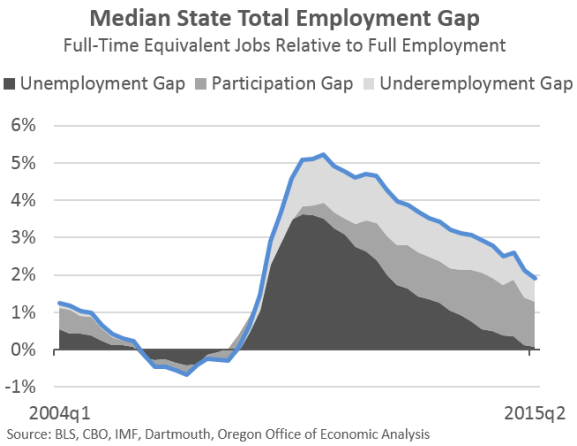
[11] Approximately 3,000 jobs in Wood Products Manufacturing (NAICS 321), 1,100 jobs in Logging (NAICS 113), 800 jobs in Agriculture Support for Forestry (NAICS 11531) with the remainder spread across various furniture and related sectors. Paper Manufacturing (NAICS 322) has yet to see any employment increases.

[12] http://oregoneconomicanalysis.com/regional/

[13] http://www.qualityinfo.org/olmisj/OlmisZine

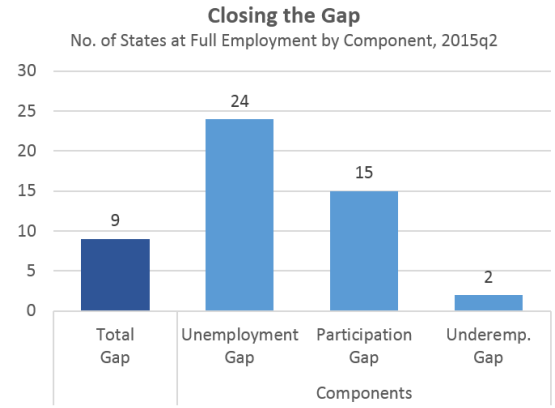
the labor force participation gap (which takes out the impact of aging) and the underemployment gap (involuntary part-time work), into one easy to use and understand metric.

The results show that, like the nation, the typical state today has no cyclical unemployment gap. In 24 of the 50 states, the headline unemployment rate is back down to its full employment rate. However, when examining the Total Employment Gap, just 9 states are at full employment today. Another 10 are within 1 percentage point, but 20 states (40% of all states) remain 2 percentage points or more away. The reason being that there remain large labor force participation gaps and underemployment gaps in most states. Tweaks to the methodology yield similar results, plus or minus a state or two.



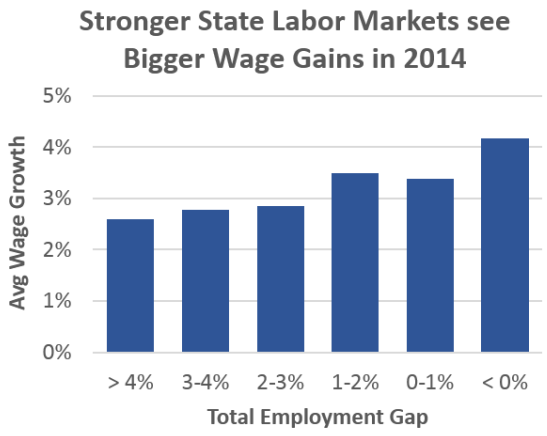
Source: BLS, CBO, IMF, Dartmouth, Oregon Office of Economic Analysis

Finally, the Total Employment Gap may shed some additional light on wage gains, or lack thereof, across the country. There is a highly significant relationship between a state's total employment gap and its wage gains in 2014 (t-stat of -4.84, looking at QCEW average wages, not hourly earnings data.) The explanatory power may not be extremely large, however the total employment gap is a better fit than using the unemployment rate alone. As such, the evidence does line up with the theory that in tighter labor markets firms must compete more on price (wages) to attract and retain the best workers. These findings hold up in recent year as well (2012 and 2013.)



Source: BLS, CBO, IMF, Dartmouth, Oregon Office of Economic Analysis

Overall, progress is being made across the country, no question. As the labor market continues to improve, stronger wage gains will come. Even if some economists were fooled by the employment cost index recently. However just a handful of individual state labor markets can be considered at full employment today. More than twice as many are at least 2 percentage points away. Most encouraging (at least through the latest BLS benchmark), the labor force participation rate was seeing substantial gains in some of the hardest hit states. Oregon is one such state and while our economy has never had more jobs overall and our unemployment rate is back down to 5.5%, our office's forecast calls for the Total Employment Gap to be eliminated only by mid-2017, or some 9 years after the onset of the Great Recession.



Average wage gain among states in each category/grouping.
Source: BLS, Oregon Office of Economic Analysis

REVENUE OUTLOOK

Revenue Summary

Oregon's General Fund revenue growth slowed at the end of fiscal year 2015, as collections of personal income taxes dried up during May and June. Income taxes withheld out of paychecks slowed sharply, and the tax filing season ended with very weak payments as well. When the last of the 2014 income tax returns were processed in early summer, payments came in much lower than in recent years, despite a very big overall season for collections. Oregon's tax collections have since picked back up, growing rapidly to start off fiscal year 2016.

As a result of weakness in income tax collections at the end of the 2013-15 biennium, General Fund revenues fell short of the May 2015 forecast. General Fund revenues for the biennium came in $56 million below forecast, reducing the ending balances that were set aside by budget writers in June.

Although the General Fund ending balance for the 2013-15 biennium has become smaller, the associated reduction in available resources for the current biennium is largely offset by Oregon's kicker law. With less personal income tax having been collected than was expected in May, revenues have moved closer to the kicker threshold, resulting in a smaller credit for tax filers next year.

Excluding corporate taxes, General Fund revenues exceeded the 2% kicker threshold by $111 million (0.7%), resulting in a kicker credit of $402 million. Due to actions taken by the 2011 Legislature, this 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.

Recent trends in corporate tax collections have been roughly the opposite of those for personal income tax collections. Corporate tax collections ended fiscal year 2015 growing at a very rapid pace, but have stalled out during the summer months. Corporate tax revenues[14] exceeded the 2% kicker threshold by $38 million (3.6%), resulting in a kicker amount of $59 million.[15] Due to a 2012 ballot measure, this amount will be dedicated to K-12 funding.

Looking ahead through the rest of the current biennium, the outlook for available General Fund and Lottery resources has remained relatively unchanged. Although downside risks are mounting, the underlying outlook for employment and income growth has remained stable, leading to a stable revenue outlook.

The revenue outlook is stable, yet uncertain. Volatility in equity markets is injecting a great deal of risk into the forecast. Oregon's budget depends heavily on personal income tax collections tied to realizations of capital gains. These collections are extremely volatile, with revenues subject to the sometimes unpredictable behavior of investors. Although housing wealth has played a larger role in driving taxable capital gains over the last decade than in the past, earnings and losses in stock markets account for the lion's share of movements in taxable capital gains in the typical year.

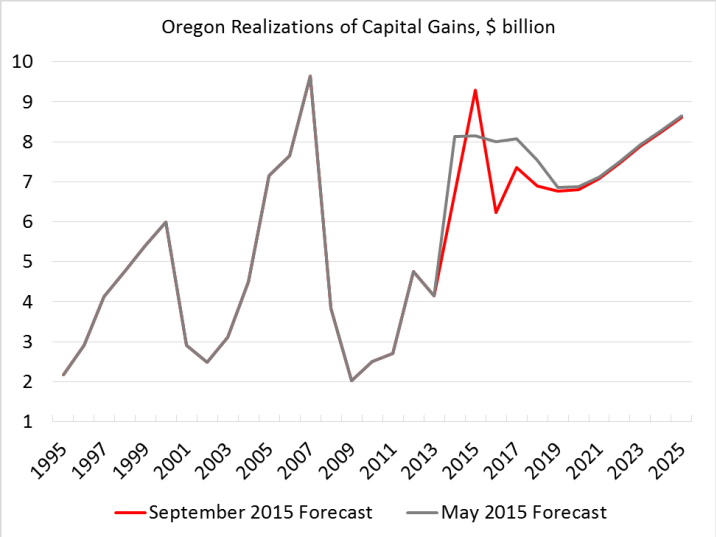
A 10% drop in stock prices will typically lead to a decline of twice that rate or more in the amount of net capital gains reported on tax returns. This negative impact on personal income tax collections is often delayed for several months after investors pull their assets out of equity markets. During a sell-off, the volume of trades increases, and paper gains from past years become subject to tax. Afterward, taxable capital gains face considerable

[14] Excluding minimum taxes paid by S-Corporations, which are not part of the corporate kicker base.

[15] Personal and corporate kicker calculations in the September 2015 forecast reflect a change in the interpretation of how General Fund carve-outs (Corporate Min Tax Rainy Day Transfer-ORS317.853, Gain Share-ORS285C.635) interact with the kicker law. These carve-outs are no longer removed from the kicker base.

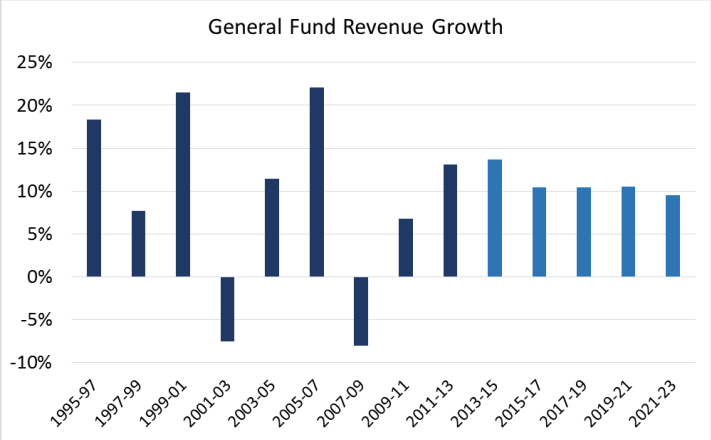
downward pressure, with paper earnings from past years having been tapped, and with losses being carried forward into future tax years.

This potential boom-bust swing in capital gains takes on added significance given the stage of the budget cycle. If equity markets fall sharply this year, tax payments will remain healthy through fiscal year 2016, with large revenue losses to follow in fiscal year 2017. Revenue losses at the end of a given biennium are particularly hard for policymakers to deal with. The impact of any spending cuts or tax increases is limited by the fact that most of the money for the budget period has already gone in or out. Eleventh-hour revenue losses following the 2001 recession led to a bulge of debt that the state only recently paid off.



For now, the revenue outlook calls for what amounts to a hiccup in equity prices. Should a full-blown market crash ensue, the revenue outlook could change significantly before the 2016 legislative session.

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 for the 2013-15 biennium are estimated to have been $16,105 million. This represents a decrease of $56 million (-0.3%) from the May 2015 forecast, and an increase of 13.7% relative to the 2011-13 biennium. General Fund revenues for the 2013-15 biennium came in $462 million (3.0%) above the Close of Session forecast.

Personal Income Tax

Personal income tax collections were $2,426 million for the fourth quarter of fiscal year 2015, $39 million (1.6%) below the latest forecast. Compared to the year-ago level, total personal income tax collections grew by 10.8% relative to a forecast that called for 12.6% growth. Table B.8 in Appendix B presents a comparison of actual and projected personal income tax revenues for the April-June quarter.

Excluding corporate taxes, General Fund revenues exceeded the 2% kicker threshold by $111 million (0.7%), resulting in a kicker credit of $402 million. Due to actions taken by the 2011 Legislature, this 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. This would generate a credit of around $124 for the median Oregon income tax filer. The top 1% of income earners would receive an average credit of $4,614 per tax return.

*Corporat*e Excise Tax

Corporate excise tax collections equaled $201 million for the fourth quarter of fiscal year 2015, $19 million above the May forecast. Some of the large increase in corporate tax collections over the last few months is likely 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. July collections came in well below what they were last year.

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.

Corporate income tax collections for 2013-15 ended the biennium 5.7% higher than what was called for in the Close of Session forecast. This generates a corporate kicker amount of $59 million to be dedicated to K-12 education.

Other Sources of Revenue

Among other primary sources of revenue, secretary of state fees, video lottery sales and criminal fines have been coming in above expectations in recent months. Cigarette and estate taxes have been coming in somewhat below forecast.

Table R.1

2015-17 General Fund Forecast Summary

(Millions)	2015 COS Forecast	May 2015 Forecast	September 2015 Forecast	Change from Prior Forecast	Change from COS Forecast
Structural Revenues					
Personal Income Tax	$15,713.5	$15,749.7	$15,718.2	-$31.6	$4.7
Corporate Income Tax	$1,100.0	$1,080.7	$1,095.5	$14.7	-$4.6
All Other Revenues	$1,184.6	$1,021.6	$1,186.6	$164.9	$2.0
Gross GF Revenues	$17,998.1	$17,852.1	$18,000.2	$148.1	$2.1
Offsets and Transfers	-$42.8	-$96.3	-$43.5	$52.7	-$0.8
Administrative Actions[1]	-$20.2	-$20.2	-$20.2	$0.0	$0.0
Legislative Actions	-$158.9	-$159.2	-$158.9	$0.3	$0.0
Net Available Resources	**$18,309.1**	**$18,079.8**	**$18,254.4**	**$174.6**	**-$54.6**
Confidence Intervals					
67% Confidence	**+/- 8.9%**		**$1,598.7**	**$16.40B to $19.60B**	
95% Confidence	**+/- 17.8%**		**$3,197.5**	**$14.80B to $21.20B**	

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

2015-17 General Fund Revenues

Excluding the impact of laws enacted during the 2015 legislative session, the General Fund forecast for 2015-17 has remained relatively unchanged. Revenues are tracking close to forecast and the underlying economic outlook is stable.

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 11.8% over the biennium. Including kicker payments, growth is expected to be a more modest 10.2%.

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 Biennium	% Chg	Forecast 2015-17 Biennium	% Chg	Forecast 2017-19 Biennium	% Chg	Forecast 2019-21 Biennium	% Chg	Forecast 2021-23 Biennium	% Chg	Forecast 2023-25 Biennium	% Chg
Personal Income Taxes	13,958.3	15.2%	15,718.2	12.6%	17,575.9	11.8%	19,404.5	10.4%	21,364.8	10.1%	23,329.9	9.2%
Corporate Income Taxes	1,116.5	26.3%	1,095.5	-1.9%	1,096.1	0.1%	1,110.0	1.3%	1,141.7	2.9%	1,287.6	12.8%
All Others	1,030.2	-11.4%	1,186.6	15.2%	1,075.2	-9.4%	1,152.3	7.2%	1,211.8	5.2%	1,264.7	4.4%
Gross General Fund	16,105.0	13.7%	18,000.2	11.8%	19,747.2	9.7%	21,666.8	9.7%	23,718.3	9.5%	25,882.3	9.1%
Offsets and Transfers	*(74.2)*		*(43.5)*		*(73.6)*		*(76.4)*		*(80.1)*		*(79.2)*	
Net Revenue	16,030.8	13.3%	17,956.6	12.0%	19,673.6	9.6%	21,590.4	9.7%	23,638.3	9.5%	25,803.1	9.2%

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 $19,747 million in 2017-19 biennium, an increase of 9.7% percent from the prior period, and $43 million above the May 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 2015 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 2015 Legislative Session can be found in Appendix B Table B.3. For a detailed treatment of the components of the 2015 Legislatively Enacted Budget, see: LFO 2015-17 Budget Summary.

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.

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 predicted[16].

TABLE R2b — **September 2015**

Alternative Cyclical Revenue Forecast ($ millions)

Baseline Case	2014-15 Fiscal Year	2015-16 Fiscal Year	2016-17 Fiscal Year	2017-18 Fiscal Year	2018-19 Fiscal Year	2019-20 Fiscal Year	2020-21 Fiscal Year	2021-22 Fiscal Year	2022-23 Fiscal Year
Personal Income									
Level	169.94	179.33	191.17	203.98	215.36	227.25	238.48	249.92	261.59
% change	*5.8%*	*5.5%*	*6.6%*	*6.7%*	*5.6%*	*5.5%*	*4.9%*	*4.8%*	*4.7%*
Taxes									
Personal Income	7,330	7,660	8,059	8,558	9,018	9,442	9,963	10,443	10,922
Corporate Excise & Income	622	540	555	550	546	550	560	569	572
Other General Fund	510	519	668	525	550	563	589	597	615
Total General Fund	8,462	8,719	9,282	9,633	10,114	10,555	11,112	11,609	12,110
% change	*10.7%*	*3.0%*	*6.5%*	*3.8%*	*5.0%*	*4.4%*	*5.3%*	*4.5%*	*4.3%*

Moderate Recession	2014-15 Fiscal Year	2015-16 Fiscal Year	2016-17 Fiscal Year	2017-18 Fiscal Year	2018-19 Fiscal Year	2019-20 Fiscal Year	2020-21 Fiscal Year	2021-22 Fiscal Year	2022-23 Fiscal Year
Personal Income									
Level	169.9	175.0	182.0	196.3	209.6	223.0	235.8	247.7	259.7
% change	*5.8%*	*3.0%*	*4.0%*	*7.9%*	*6.8%*	*6.4%*	*5.7%*	*5.1%*	*4.8%*
Taxes									
Personal Income	7,330	7,398	7,517	8,106	8,682	9,196	9,806	10,305	10,795
Deviation from baseline		*-261*	*-542*	*-452*	*-336*	*-246*	*-157*	*-138*	*-127*
Corporate Excise & Income	622	514	502	508	517	529	548	559	564
Deviation from baseline		*-26*	*-53*	*-41*	*-29*	*-20*	*-13*	*-10*	*-8*
Other General Fund	510	519	668	525	550	563	589	597	615
Total General Fund	8,462	8,431	8,686	9,140	9,749	10,288	10,942	11,461	11,974
% change	*10.7%*	*-0.4%*	*3.0%*	*5.2%*	*6.7%*	*5.5%*	*6.4%*	*4.7%*	*4.5%*
Deviation from baseline		*-288*	*-595*	*-493*	*-365*	*-266*	*-170*	*-148*	*-135*

Severe Recession	2014-15 Fiscal Year	2015-16 Fiscal Year	2016-17 Fiscal Year	2017-18 Fiscal Year	2018-19 Fiscal Year	2019-20 Fiscal Year	2020-21 Fiscal Year	2021-2022 Fiscal Year	2020-21 Fiscal Year
Personal Income									
Level	169.9	163.4	172.6	188.8	204.1	219.6	234.5	246.4	258.3
% change	*5.1%*	*-3.8%*	*5.6%*	*9.4%*	*8.1%*	*7.6%*	*6.8%*	*5.1%*	*4.8%*
Taxes									
Personal Income	7,330	6,709	6,960	7,664	8,355	8,994	9,733	10,228	10,715
Deviation from baseline		*-951*	*-1,098*	*-894*	*-663*	*-448*	*-230*	*-214*	*-207*
Corporate Excise & Income	622	444	447	468	489	513	542	553	558
Deviation from baseline		*-96*	*-108*	*-82*	*-57*	*-37*	*-18*	*-16*	*-14*
Other General Fund	510	519	668	525	550	563	589	597	615
Total General Fund	8,462	7,672	8,075	8,656	9,394	10,070	10,863	11,379	11,888
% change	*10.7%*	*-9.3%*	*5.3%*	*7.2%*	*8.5%*	*7.2%*	*7.9%*	*4.7%*	*4.5%*
Deviation from baseline		*-1,047*	*-1,206*	*-976*	*-720*	*-485*	*-249*	*-230*	*-221*

Lottery Earnings

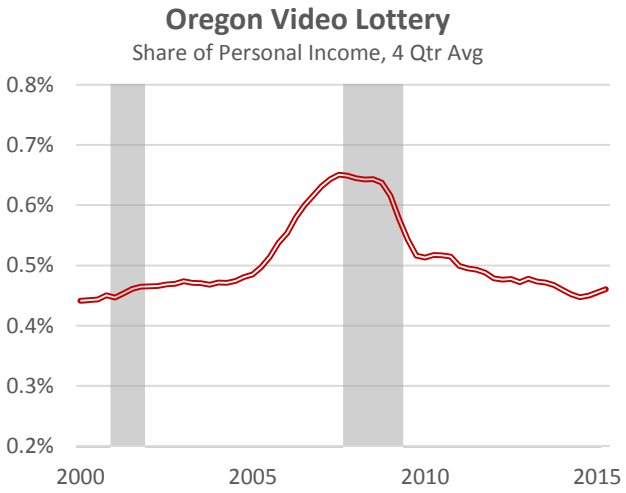
Revenues and available resources from Lottery games and programs are projected to total $1,162.6 million for 2015-17 BN, an increase of $12.0 million from the May outlook and $6.7 million above the Close of Session forecast (0.6%.) The increase is from approximately $5 million in better-than-expected sales (video tracking above forecast, traditional slightly lower), more than $6 million due to reversions from the previous biennium and a bigger beginning balance for this biennium, and minor changes to the underlying sales forecast. 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 underwent three distinct phases and in the past year entered into a fourth.

[16] 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.

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 intrigue 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.

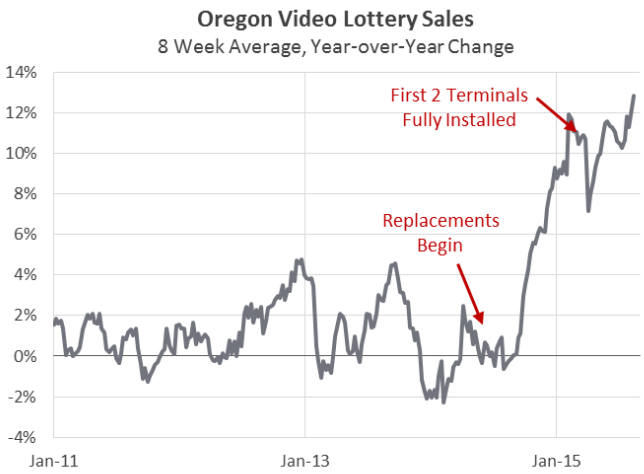


Source: BEA, Oregon Lottery, Oregon Office of Economic Analysis

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 per year. 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.

Last year (FY2015) marked a new phase in Oregon video lottery history with the capital replacement plan. During the past year and throughout this biennium, 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 was $71.2 million in 2013-15, and $59.2 million in 2015-17, or about 5 percent of revenues available to transfer.

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 – essentially two new terminals in each retailer – there has been 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 hit counties, those that have yet to full partake in the



Sales through August 15th | Source: Oregon LOttery, Oregon OFfice of Economic Analysis

economic recovery, growth in video lottery sales is roughly 10 percent over the past year, following the roll-out of the new terminals. Sales have started to slow somewhat in the locations where the new terminals were first installed, e.g. Portland MSA.

While sales remain strong, expectations are not for double digit growth forever. Growth will slow moving forward. Exactly how strong and how long the initial sales bump lasts are still open ended questions at this time.

Another issue to watch is the fact that nearly all other gaming markets are seeing gains over the past year as well. Given this near-universal increase, albeit to varying degrees, it suggests a broader factor influencing sales, such as low gasoline prices. While consumers have saved much of their gas price savings in the past year, it appears one place they are spending more is on a very discretionary item: gaming. Las Vegas casinos are seeing slot revenue growth of 6 percent while other locales are seeing 2-5 percent growth. Except Atlantic City, where sales have declined for years, with no apparent end in sight so far.

Given that for much of the past 6 years consumers have remained cautious with their disposable income, the broader gaming industry has seen relatively flat sales (see our report *Betting the Minimum*[17]*),* the industry is extremely competitive and the uptick in sales recently is the first real signs of life in years, the current forecast builds in a largely one-time novelty factor increase in Oregon video lottery sales.

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 until recently.

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.

[17] http://oregoneconomicanalysis.com/2014/10/09/betting-the-minimum-gaming-in-the-u-s-and-state-revenues/

Budgetary Reserves

The state currently administers two general reserve accounts, the Oregon Rainy Day Fund[18] (ORDF) and the Education Stability Fund[19] (ESF). This section updates balances and recalculates the outlook for these funds based on the September revenue forecast.

As of this forecast, the two reserve funds currently total a combined $391.1 million. Additionally there is a projected General Fund ending balance for this biennium of $255 million, bringing effective reserves to nearly $650 million, or about 4 percent of last biennium's revenue.

There were two deposits into the ORDF last biennium (2013-15). Due to the positive General Fund ending balance in 2011-13, one percent of appropriations, $136.7 million, were deposited along with $12.0 million due to the increases in corporate tax rates from Measure 67. Similarly, the forecast for the current biennium's ORDF includes two deposits related to the positive General Fund ending balance from last biennium (2013-15), $158.9 million along with the increased corporate taxes from Measure 67, $10.1 million. This brings the projected total in the ORDF at the end of 2015-17 to $390.6 million.

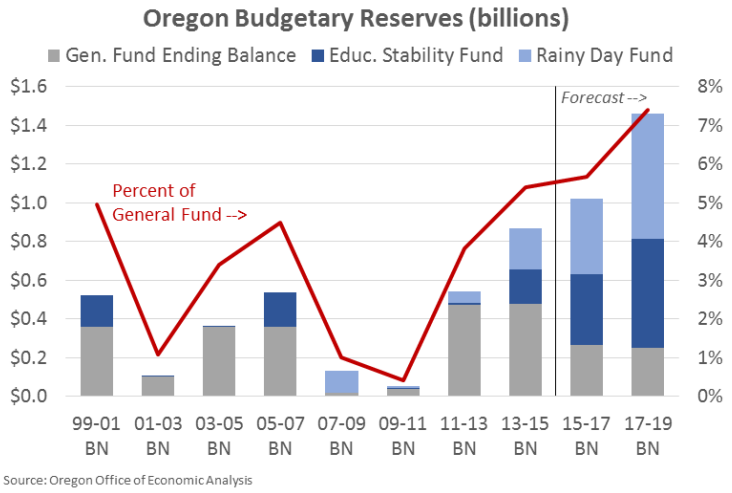
Oregon's Budgetary Reserves (millions)

Rainy Day Fund	**2013-15**	**2015-17**	**2017-19**
Beginning Balance	$61.9	$211.8	$390.6
Net Deposits	$148.7	$169.8	$220.7
Interest	$1.3	$9.0	$35.5
Triggered Withdrawals	$0.0		
Ending Balance	**$211.8**	**$390.6**	**$646.9**
Education Stability Fund			
Beginning Balance	$7.4	$179.4	$363.1
Net Deposits	$171.9	$183.8	$203.9
Interest	-$1.0	-$8.1	-$33.6
Withdrawals	$0.0	$0.0	$0.0
Ending Balance	**$179.4**	**$363.1**	**$567.1**
Total Reserves	**$391.2**	**$753.7**	**$1,213.9**
% of GF Revenues	2.4%	4.2%	6.2%

The ESF received deposits of $171.9 million last biennium based on Oregon Lottery revenues. The forecast calls for an additional $183.8 million in deposits into the ESF in 2015-17 based on the current Lottery forecast. This would bring the ESF balance to $363.1 million at the end of the current biennium.

Together, the ORDF and ESF are projected to have a combined balance of $753.7 million at the close of the 2015-17 biennium.

Such levels of reserve balances are bigger than 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



Source: Oregon Office of Economic Analysis

[18] 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.

[19] 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.

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 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 1.17 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 combination of increase in net migration and rise in the 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) has been growing at an extremely fast pace in the recent past and continue the trend 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 begins as the baby-boom generation starts to mature into 75-84 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. An unprecedented growth in oldest elderly will commence at the end of the forecast horizon.

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 (baby-bust) cohort being replaced by baby-boom echo 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 very 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 2010-202 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 36,600 to 39,300, averaging 37,200 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

Table A.1 – Employment Forecast Tracking

Total Nonfarm Employment, 2nd quarter 2015

(Employment in thousands, Annualized Percent Change)

	Preliminary Estimate		Forecast		Forecast Error		Y/Y Change
	level	% ch	level	% ch	level	%	% ch
Total Nonfarm	1,767.4	2.4	1,770.8	2.8	(3.3)	(0.2)	3.4
Total Private	1,467.2	2.5	1,471.1	4.0	(3.9)	(0.3)	3.5
Mining and Logging	7.8	(2.7)	7.9	7.1	(0.1)	(1.4)	1.6
Construction	81.3	(4.4)	83.4	1.2	(2.1)	(2.5)	2.5
Manufacturing	185.5	3.1	184.1	1.1	1.4	0.8	4.1
Durable Goods	130.4	3.8	129.3	1.1	1.1	0.8	4.1
Wood Product	22.6	5.6	22.3	0.8	0.3	1.3	3.2
Metals and Machinery	36.7	1.7	36.5	1.8	0.2	0.5	2.9
Computer and Electronic Product	37.5	2.2	37.3	1.6	0.2	0.5	3.2
Transportation Equipment	12.5	9.0	12.1	(2.2)	0.3	2.8	10.8
Other Durable Goods	21.1	5.8	21.0	1.3	0.1	0.3	5.0
Nondurable Goods	55.1	1.4	54.8	0.9	0.3	0.6	4.0
Food	27.9	3.4	28.0	0.8	(0.2)	(0.5)	3.6
Other Nondurable Goods	27.2	(0.6)	26.8	1.1	0.5	1.7	4.4
Trade, Transportation & Utilities	333.7	2.5	333.3	3.8	0.4	0.1	3.2
Retail Trade	201.5	3.4	200.7	3.8	0.8	0.4	3.2
Wholesale Trade	73.5	2.9	73.7	3.9	(0.2)	(0.3)	2.2
Transportation, Warehousing & Utilities	58.7	(0.8)	58.9	3.8	(0.2)	(0.3)	4.4
Information	32.7	3.1	32.7	3.4	0.0	0.1	2.6
Financial Activities	91.8	(1.7)	95.0	2.5	(3.2)	(3.3)	(0.1)
Professional & Business Services	227.1	3.3	229.3	4.0	(2.2)	(1.0)	4.5
Educational & Health Services	256.3	3.7	256.4	2.8	(0.1)	(0.0)	3.9
Educational Services	35.2	1.3	34.8	(0.9)	0.4	1.1	1.9
Health Services	221.1	4.0	221.6	1.6	(0.5)	(0.2)	4.2
Leisure and Hospitality	191.0	5.0	188.9	4.4	2.1	1.1	4.8
Other Services	60.0	0.8	60.1	4.4	(0.1)	(0.2)	2.2
Government	300.2	1.9	299.7	2.2	0.5	0.2	2.8
Federal	28.1	6.3	27.6	1.4	0.5	1.7	2.8
State	87.8	5.5	86.3	1.2	1.5	1.8	5.3
State Education	33.0	2.2	32.6	(2.7)	0.5	1.4	1.8
Local	184.4	(0.3)	185.8	2.7	(1.4)	(0.8)	1.7
Local Education	94.8	(1.2)	96.2	5.1	(1.4)	(1.4)	1.0

Table A.2 – Short-Term Oregon Economic Summary

Oregon Forecast Summary

	Quarterly					Annual					
	2015:1	2015:2	2015:3	2015:4	2016:1	2013	2014	2015	2016	2017	2018
Personal Income ($ billions)											
Nominal Personal Income	171.0	172.8	175.4	177.9	180.6	156.6	165.5	174.3	185.0	197.6	209.8
% change	4.9	4.2	6.2	5.7	6.3	2.3	5.7	5.3	6.1	6.8	6.2
Real Personal Income (base year=2005)	157.7	158.5	160.5	162.2	164.3	145.9	152.2	159.7	167.2	175.3	182.5
% change	7.0	2.2	5.1	4.3	5.4	1.1	4.3	5.0	4.6	4.9	4.1
Nominal Wages and Salaries	88.8	90.0	91.4	93.1	94.8	80.4	85.2	90.8	97.5	104.6	111.3
% change	6.8	5.6	6.7	7.6	7.4	4.0	5.9	6.6	7.3	7.4	6.4
Other Indicators											
Per Capita Income ($1,000)	42.8	43.1	43.6	44.1	44.7	39.9	41.7	43.4	45.5	48.1	50.4
% change	3.8	3.0	4.7	4.6	5.3	1.3	4.5	4.1	4.9	5.5	5.0
Average Wage rate ($1,000)	49.8	50.2	50.7	51.2	51.8	47.4	48.9	50.5	52.6	54.8	57.1
% change	2.5	3.2	3.8	4.2	4.3	1.8	3.1	3.2	4.2	4.2	4.2
Population (Millions)	4.0	4.0	4.0	4.0	4.0	3.93	3.97	4.02	4.06	4.11	4.16
% change	1.0	1.2	1.4	1.1	1.0	0.9	1.1	1.2	1.2	1.2	1.2
Housing Starts (Thousands)	14.8	13.9	15.4	15.8	16.6	14.2	15.6	14.9	17.9	20.8	22.6
% change	(40.5)	(21.1)	48.8	11.4	21.6	31.2	9.5	(4.1)	19.8	16.4	8.3
Unemployment Rate	5.8	5.3	5.7	6.0	5.9	7.8	7.0	5.7	5.8	5.4	5.6
Point Change	(1.0)	(0.5)	0.4	0.3	(0.1)	(1.0)	(0.8)	(1.3)	0.0	(0.3)	0.1
Employment (Thousands)											
Total Nonfarm	1,757.1	1,767.4	1,781.8	1,796.5	1,809.1	1,671.1	1,717.4	1,775.7	1,830.2	1,887.0	1,927.6
% change	4.2	2.4	3.3	3.3	2.9	1.9	2.8	3.4	3.1	3.1	2.2
Private Nonfarm	1,458.3	1,467.2	1,479.2	1,493.3	1,505.0	1,382.3	1,423.8	1,474.5	1,524.7	1,577.7	1,614.8
% change	4.6	2.5	3.3	3.9	3.2	2.5	3.0	3.6	3.4	3.5	2.4
Construction	82.2	81.3	82.1	83.3	84.7	73.6	79.4	82.2	85.9	88.3	89.7
% change	11.3	(4.4)	3.8	6.2	6.6	5.3	7.9	3.6	4.5	2.7	1.7
Manufacturing	184.0	185.5	186.2	187.1	187.5	174.7	179.0	185.7	188.3	190.7	193.0
% change	6.0	3.1	1.6	2.0	0.7	1.7	2.4	3.8	1.4	1.3	1.2
Durable Manufacturing	129.2	130.4	130.6	131.3	131.7	123.1	125.9	130.4	132.4	134.3	136.0
% change	5.0	3.8	0.7	2.2	1.1	1.2	2.3	3.6	1.5	1.4	1.3
Wood Product Manufacturing	22.3	22.6	22.5	22.6	22.5	21.1	21.9	22.5	22.7	23.3	23.7
% change	3.3	5.6	(1.3)	1.1	(0.6)	6.8	4.0	2.5	1.1	2.5	1.9
High Tech Manufacturing	37.3	37.5	37.5	37.6	37.7	36.6	36.5	37.5	37.8	37.9	37.9
% change	6.4	2.2	(0.6)	1.2	1.1	(1.1)	(0.3)	2.8	1.0	0.2	(0.1)
Transportation Equipment	12.2	12.5	12.5	12.6	12.7	10.9	11.5	12.5	12.7	12.8	13.0
% change	5.7	9.0	0.5	3.4	3.3	(2.3)	5.7	8.6	1.6	1.0	1.9
Nondurable Manufacturing	54.9	55.1	55.6	55.8	55.8	51.7	53.1	55.3	55.9	56.4	57.0
% change	8.4	1.4	3.6	1.6	(0.2)	2.8	2.8	4.2	1.1	0.9	1.0
Private nonmanufacturing	1,274.3	1,281.8	1,293.0	1,306.1	1,317.5	1,207.5	1,244.8	1,288.8	1,336.4	1,387.0	1,421.8
% change	4.4	2.4	3.6	4.1	3.5	2.6	3.1	3.5	3.7	3.8	2.5
Retail Trade	199.8	201.5	204.1	206.3	207.3	191.3	195.9	202.9	209.5	216.1	221.5
% change	3.6	3.4	5.3	4.3	2.0	2.2	2.4	3.6	3.2	3.2	2.5
Wholesale Trade	73.0	73.5	73.5	74.2	74.6	71.3	72.2	73.5	75.2	77.0	78.2
% change	1.7	2.9	0.2	3.6	2.2	3.6	1.3	1.8	2.2	2.5	1.6
Information	32.4	32.7	33.0	33.4	33.4	32.2	32.1	32.9	33.8	34.8	35.5
% change	2.6	3.1	3.9	5.1	(0.8)	0.2	(0.4)	2.5	2.6	3.0	2.2
Professional and Business Services	225.3	227.1	228.5	232.2	236.5	208.8	218.9	228.3	243.1	260.0	272.2
% change	3.8	3.3	2.4	6.7	7.6	3.3	4.8	4.3	6.5	7.0	4.7
Health Services	218.9	221.1	223.4	224.3	225.3	208.4	213.7	221.9	227.2	233.3	237.7
% change	3.9	4.0	4.1	1.7	1.8	2.0	2.5	3.9	2.4	2.7	1.9
Leisure and Hospitality	188.7	191.0	192.6	194.3	195.8	176.3	182.6	191.7	199.0	207.0	211.5
% change	7.3	5.0	3.4	3.6	3.0	3.7	3.6	4.9	3.8	4.0	2.2
Government	298.8	300.2	302.5	303.2	304.1	288.8	293.7	301.2	305.6	309.3	312.8
% change	2.3	1.9	3.1	0.8	1.3	(0.7)	1.7	2.6	1.5	1.2	1.1

Table A.3 – Oregon Economic Forecast Change

Oregon Forecast Change (Current vs. Last)

	Quarterly					Annual					
	2015:1	2015:2	2015:3	2015:4	2016:1	2013	2014	2015	2016	2017	2018
Personal Income ($ billions)											
Nominal Personal Income	171.0	172.8	175.4	177.9	180.6	156.6	165.5	174.3	185.0	197.6	209.8
% change	(0.1)	(0.3)	(0.1)	(0.2)	(0.2)	0.0	0.0	(0.2)	(0.2)	(0.2)	(0.0)
Real Personal Income (base year=2005)	157.7	158.5	160.5	162.2	164.3	145.9	152.2	159.7	167.2	175.3	182.5
% change	(0.1)	(0.9)	(0.6)	(0.5)	(0.5)	0.0	0.0	(0.5)	(0.3)	(0.2)	(0.0)
Nominal Wages and Salaries	88.8	90.0	91.4	93.1	94.8	80.4	85.2	90.8	97.5	104.6	111.3
% change	0.1	(0.4)	(0.5)	(0.5)	(0.4)	0.0	0.0	(0.3)	(0.3)	(0.3)	(0.2)
Other Indicators											
Per Capita Income ($1,000)	42.8	43.1	43.6	44.1	44.7	39.9	41.7	43.4	45.5	48.1	50.4
% change	(0.1)	(0.3)	(0.1)	(0.1)	(0.2)	0.0	0.1	(0.1)	(0.1)	(0.1)	0.0
Average Wage rate ($1,000)	49.8	50.2	50.7	51.2	51.8	47.4	48.9	50.5	52.6	54.8	57.1
% change	(0.2)	(0.3)	(0.5)	(0.5)	(0.5)	(0.7)	0.3	(0.4)	(0.4)	(0.5)	(0.6)
Population (Millions)	4.00	4.01	4.02	4.0	4.0	3.93	3.97	4.02	4.06	4.11	4.16
% change	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.0)	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)
Housing Starts (Thousands)	14.8	13.9	15.4	15.8	16.6	14.2	15.6	14.9	17.9	20.8	22.6
% change	(1.3)	(10.3)	(3.7)	(3.7)	(3.7)	0.0	0.1	(4.8)	(3.7)	(2.6)	0.8
Unemployment Rate	5.8	5.3	5.7	6.0	5.9	7.8	7.0	5.7	5.8	5.4	5.6
Point Change	0.0	(0.7)	(0.3)	0.1	0.2	0.0	0.0	(0.2)	0.2	0.0	0.0
Employment (Thousands)											
Total Nonfarm	1,757.1	1,767.4	1,781.8	1,796.5	1,809.1	1,671.1	1,717.4	1,775.7	1,830.2	1,887.0	1,927.6
% change	(0.1)	(0.2)	(0.1)	0.0	0.0	(0.2)	(0.2)	(0.1)	0.1	0.2	0.4
Private Nonfarm	1,458.3	1,467.2	1,479.2	1,493.3	1,505.0	1,382.3	1,423.8	1,474.5	1,524.7	1,577.7	1,614.8
% change	0.1	(0.3)	(0.2)	(0.1)	(0.1)	(0.0)	0.0	(0.1)	(0.0)	0.1	0.3
Construction	82.2	81.3	82.1	83.3	84.7	73.6	79.4	82.2	85.9	88.3	89.7
% change	(1.1)	(2.5)	(2.3)	(1.9)	(1.1)	(1.1)	(1.2)	(2.0)	(0.6)	(0.9)	(1.2)
Manufacturing	184.0	185.5	186.2	187.1	187.5	174.7	179.0	185.7	188.3	190.7	193.0
% change	0.3	0.8	0.7	0.4	(0.0)	0.0	0.0	0.5	(0.3)	(0.4)	(0.2)
Durable Manufacturing	129.2	130.4	130.6	131.3	131.7	123.1	125.9	130.4	132.4	134.3	136.0
% change	0.2	0.8	0.4	(0.0)	(0.5)	0.0	0.0	0.3	(0.9)	(1.0)	(0.9)
Wood Product Manufacturing	22.3	22.6	22.5	22.6	22.5	21.1	21.9	22.5	22.7	23.3	23.7
% change	0.1	1.3	0.8	0.3	(0.5)	0.0	0.0	0.6	(1.0)	(0.8)	(0.1)
High Tech Manufacturing	37.3	37.5	37.5	37.6	37.7	36.6	36.5	37.5	37.8	37.9	37.9
% change	0.4	0.5	(0.7)	(1.6)	(2.0)	0.0	0.0	(0.4)	(2.1)	(2.0)	(2.1)
Transportation Equipment	12.2	12.5	12.5	12.6	12.7	10.9	11.5	12.5	12.7	12.8	13.0
% change	0.1	2.8	2.5	2.7	2.8	(0.0)	(0.0)	2.0	1.8	1.5	2.4
Nondurable Manufacturing	54.9	55.1	55.6	55.8	55.8	51.7	53.1	55.3	55.9	56.4	57.0
% change	0.5	0.6	1.4	1.3	1.1	0.0	0.0	0.9	1.1	1.3	1.4
Private nonmanufacturing	1,274.3	1,281.8	1,293.0	1,306.1	1,317.5	1,207.5	1,244.8	1,288.8	1,336.4	1,387.0	1,421.8
% change	0.1	(0.4)	(0.3)	(0.2)	(0.1)	(0.0)	0.0	(0.2)	(0.0)	0.1	0.4
Retail Trade	199.8	201.5	204.1	206.3	207.3	191.3	195.9	202.9	209.5	216.1	221.5
% change	0.5	0.4	0.8	1.0	0.9	(0.0)	0.0	0.7	0.6	0.5	1.0
Wholesale Trade	73.0	73.5	73.5	74.2	74.6	71.3	72.2	73.5	75.2	77.0	78.2
% change	(0.0)	(0.3)	(0.8)	(0.7)	(0.7)	(0.0)	0.0	(0.4)	(0.8)	(0.9)	(0.6)
Information	32.4	32.7	33.0	33.4	33.4	32.2	32.1	32.9	33.8	34.8	35.5
% change	0.2	0.1	0.4	0.9	0.0	(0.0)	0.0	0.4	0.0	0.0	0.0
Professional and Business Services	225.3	227.1	228.5	232.2	236.5	208.8	218.9	228.3	243.1	260.0	272.2
% change	(0.8)	(1.0)	(1.5)	(1.2)	(0.6)	(0.4)	(0.4)	(1.1)	0.1	1.0	1.5
Health Services	218.9	221.1	223.4	224.3	225.3	208.4	213.7	221.9	227.2	233.3	237.7
% change	(0.8)	(0.2)	0.4	0.5	0.5	(0.4)	(0.5)	(0.0)	0.2	0.1	0.5
Leisure and Hospitality	188.7	191.0	192.6	194.3	195.8	176.3	182.6	191.7	199.0	207.0	211.5
% change	0.9	1.1	0.9	0.7	0.7	0.0	0.0	0.9	0.7	0.5	0.4
Government	298.8	300.2	302.5	303.2	304.1	288.8	293.7	301.2	305.6	309.3	312.8
% change	0.2	0.2	0.7	0.6	0.6	(0.0)	(0.0)	0.4	0.6	0.7	0.7

Table A.4 – Annual Economic Forecast

Sept 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	174.3	185.0	197.6	209.8	221.3	232.9	244.1	255.8
% Ch	5.9	5.0	2.3	5.7	5.3	6.1	6.8	6.2	5.4	5.3	4.8	4.8
U.S.	13,202.0	13,887.7	14,166.9	14,733.9	15,372.2	16,073.1	16,915.1	17,778.2	18,640.9	19,530.8	20,426.7	21,367.0
% Ch	6.2	5.2	2.0	4.0	4.3	4.6	5.2	5.1	4.9	4.8	4.6	4.6
Wage and Salary												
Oregon	74.0	77.3	80.4	85.2	90.8	97.5	104.6	111.3	117.3	123.3	129.2	135.3
% Ch	4.3	4.5	4.0	5.9	6.6	7.3	7.4	6.4	5.4	5.2	4.8	4.7
U.S.	6,633.2	6,932.1	7,124.7	7,451.6	7,808.6	8,194.6	8,608.8	9,039.4	9,488.8	9,957.6	10,439.2	10,932.5
% Ch	4.0	4.5	2.8	4.6	4.8	4.9	5.1	5.0	5.0	4.9	4.8	4.7
Other Labor Income												
Oregon	18.2	19.7	19.8	20.5	21.5	22.7	24.1	25.5	26.7	27.9	29.1	30.3
% Ch	2.4	8.1	0.8	3.6	4.9	5.3	6.3	5.7	4.8	4.5	4.3	4.3
U.S.	1,142.0	1,160.5	1,193.9	1,226.4	1,266.6	1,311.9	1,369.3	1,429.5	1,487.3	1,545.0	1,604.9	1,667.2
% Ch	2.5	1.6	2.9	2.7	3.3	3.6	4.4	4.4	4.0	3.9	3.9	3.9
Nonfarm Proprietor's Income												
Oregon	10.1	10.8	11.4	12.2	12.7	13.7	14.5	15.2	16.1	17.1	18.0	18.9
% Ch	3.2	6.5	5.5	7.2	4.2	7.4	5.9	5.2	5.8	5.8	5.5	5.3
U.S.	1,068.1	1,187.9	1,253.5	1,316.6	1,369.6	1,456.9	1,523.9	1,573.8	1,643.3	1,725.1	1,812.2	1,899.1
% Ch	8.2	11.2	5.5	5.0	4.0	6.4	4.6	3.3	4.4	5.0	5.0	4.8
Dividend, Interest and Rent												
Oregon	28.0	30.1	30.8	31.9	33.0	34.7	37.7	40.5	42.8	45.1	47.1	49.1
% Ch	10.7	7.5	2.6	3.6	3.4	5.2	8.5	7.5	5.7	5.2	4.6	4.1
U.S.	2,399.2	2,621.6	2,675.6	2,765.6	2,868.2	2,965.7	3,174.5	3,392.5	3,558.6	3,710.3	3,846.0	3,998.3
% Ch	12.0	9.3	2.1	3.4	3.7	3.4	7.0	6.9	4.9	4.3	3.7	4.0
Transfer Payments												
Oregon	29.2	29.6	30.7	33.4	35.2	36.8	38.4	40.3	42.7	45.3	47.7	50.5
% Ch	1.8	1.2	3.9	8.8	5.2	4.7	4.3	5.0	6.0	6.0	5.4	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	15.8	17.0	18.2	19.3	20.5	21.6	22.8	24.0
% Ch	(7.6)	4.4	16.3	6.4	5.9	7.3	6.9	6.2	6.1	5.7	5.5	5.1
U.S.	423.9	437.3	578.4	612.5	639.4	674.3	709.7	746.7	790.6	834.7	880.3	927.4
% Ch	(17.6)	3.2	32.3	5.9	4.4	5.4	5.3	5.2	5.9	5.6	5.5	5.4
Residence Adjustment												
Oregon	(2.5)	(2.6)	(2.8)	(3.0)	(3.2)	(3.4)	(3.7)	(3.9)	(4.1)	(4.3)	(4.5)	(4.6)
% Ch	10.1	5.5	7.0	7.3	6.8	7.8	7.6	6.1	4.9	4.6	4.2	3.6
Farm Proprietor's Income												
Oregon	0.4	0.3	0.2	0.1	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3
% Ch	1,621.5	(5.2)	(34.0)	(37.6)	(87.4)	284.1	110.3	34.0	13.9	14.4	11.3	(10.7)
Per Capita Income (Thousands of $)												
Oregon	37.8	39.4	39.9	41.7	43.4	45.5	48.1	50.4	52.6	54.7	56.7	58.7
% Ch	5.3	4.2	1.3	4.5	4.1	4.9	5.5	5.0	4.2	4.1	3.6	3.6
U.S.	42.3	44.2	44.7	46.2	47.8	49.6	51.7	53.9	56.1	58.3	60.5	62.8
% Ch	5.5	4.5	1.3	3.3	3.5	3.7	4.4	4.3	4.0	4.0	3.8	3.8

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

Sept 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	1,671.1	1,717.4	1,775.7	1,830.2	1,887.0	1,927.6	1,950.4	1,972.3	1,990.4	2,009.8
% Ch	1.1	1.2	1.9	2.8	3.4	3.1	3.1	2.2	1.2	1.1	0.9	1.0
U.S.	131.8	134.1	136.4	139.0	142.0	144.1	146.0	147.7	149.0	150.5	151.8	153.0
% Ch	1.2	1.7	1.7	1.9	2.1	1.5	1.3	1.1	0.9	1.0	0.9	0.8
Private Nonfarm												
Oregon	1,324.8	1,349.0	1,382.3	1,423.8	1,474.5	1,524.7	1,577.7	1,614.8	1,634.0	1,650.8	1,667.1	1,683.2
% Ch	1.8	1.8	2.5	3.0	3.6	3.4	3.5	2.4	1.2	1.0	1.0	1.0
U.S.	109.8	112.2	114.5	117.2	120.0	122.2	124.0	125.4	126.4	127.5	128.8	129.8
% Ch	1.8	2.2	2.1	2.3	2.4	1.8	1.5	1.1	0.8	0.9	1.0	0.8
Mining and Logging												
Oregon	7.0	7.2	7.6	7.7	8.0	8.3	8.4	8.6	8.6	8.7	8.7	8.8
% Ch	4.6	3.2	4.3	1.8	3.8	3.6	2.0	1.7	0.7	0.5	0.6	0.5
U.S.	0.8	0.8	0.9	0.9	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9
% Ch	11.8	7.6	1.8	3.8	(6.6)	(5.9)	3.3	3.8	2.4	1.7	1.5	1.9
Construction												
Oregon	68.6	69.9	73.6	79.4	82.2	85.9	88.3	89.7	90.8	91.7	92.5	93.6
% Ch	1.4	1.8	5.3	7.9	3.6	4.5	2.7	1.7	1.1	1.0	0.9	1.2
U.S.	5.5	5.6	5.9	6.1	6.4	6.8	7.3	7.6	7.9	8.1	8.3	8.4
% Ch	0.2	2.1	3.7	4.8	4.9	6.3	6.3	4.5	3.4	2.9	2.2	1.7
Manufacturing												
Oregon	168.1	171.9	174.7	179.0	185.7	188.3	190.7	193.0	194.6	195.0	195.6	196.8
% Ch	2.6	2.2	1.7	2.4	3.8	1.4	1.3	1.2	0.8	0.2	0.3	0.6
U.S.	11.7	11.9	12.0	12.2	12.3	12.4	12.5	12.6	12.7	12.7	12.7	12.6
% Ch	1.7	1.7	0.8	1.4	1.2	0.3	1.1	1.1	0.7	(0.3)	(0.3)	(0.2)
Durable Manufacturing												
Oregon	118.6	121.6	123.1	125.9	130.4	132.4	134.3	136.0	137.0	137.1	137.3	138.0
% Ch	3.2	2.5	1.2	2.3	3.6	1.5	1.4	1.3	0.7	0.1	0.2	0.5
U.S.	7.3	7.5	7.5	7.7	7.8	7.8	7.9	8.0	8.1	8.1	8.0	8.0
% Ch	2.9	2.7	1.0	1.8	1.5	0.3	1.3	1.2	0.8	(0.4)	(0.4)	(0.1)
Wood Products												
Oregon	19.3	19.8	21.1	21.9	22.5	22.7	23.3	23.7	23.7	23.5	23.6	23.8
% Ch	(3.7)	2.6	6.8	4.0	2.5	1.1	2.5	1.9	(0.1)	(1.1)	0.3	1.0
U.S.	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
% Ch	(1.5)	0.7	4.2	5.3	1.2	3.9	7.2	4.6	3.4	2.5	1.4	1.6
Metal and Machinery												
Oregon	33.3	34.7	35.4	35.8	36.8	37.5	38.1	38.6	39.2	40.0	40.4	40.5
% Ch	6.9	4.2	1.9	1.2	2.8	2.0	1.4	1.2	1.7	1.9	1.1	0.4
U.S.	2.8	2.9	2.9	3.0	3.0	3.0	3.0	3.1	3.1	3.2	3.2	3.2
% Ch	5.7	4.2	0.7	1.8	0.5	(0.7)	1.5	2.1	1.9	0.5	0.5	0.8
Computer and Electronic Products												
Oregon	36.4	37.0	36.6	36.5	37.5	37.8	37.9	37.9	37.9	37.9	37.8	37.9
% Ch	4.1	1.6	(1.1)	(0.3)	2.8	1.0	0.2	(0.1)	0.1	(0.2)	(0.0)	0.3
U.S.	1.1	1.1	1.1	1.1	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
% Ch	0.8	(1.3)	(2.2)	(1.4)	(0.5)	0.8	1.9	1.3	1.4	0.7	0.6	0.6
Transportation Equipment												
Oregon	10.7	11.1	10.9	11.5	12.5	12.7	12.8	13.0	12.9	12.4	12.0	11.8
% Ch	5.2	3.4	(2.3)	5.7	8.6	1.6	1.0	1.9	(0.8)	(3.9)	(3.6)	(1.4)
U.S.	1.4	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.4
% Ch	3.6	5.8	3.3	3.6	3.8	0.5	(0.6)	(1.2)	(2.2)	(3.3)	(3.6)	(3.2)
Other Durables												
Oregon	18.9	19.1	19.2	20.2	21.2	21.6	22.2	22.8	23.2	23.4	23.6	23.9
% Ch	1.6	1.0	0.7	5.2	4.9	2.1	2.7	2.7	1.9	0.7	1.0	1.1
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	55.3	55.9	56.4	57.0	57.6	57.9	58.3	58.8
% Ch	1.2	1.5	2.8	2.8	4.2	1.1	0.9	1.0	1.1	0.6	0.6	0.9
U.S.	4.5	4.5	4.5	4.5	4.5	4.6	4.6	4.6	4.6	4.6	4.6	4.6
% Ch	(0.3)	0.1	0.3	0.7	0.6	0.5	0.7	0.8	0.5	(0.1)	(0.2)	(0.3)
Food Manufacturing												
Oregon	24.2	24.8	25.9	26.9	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	3.8	0.8	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	1.6	1.6	1.6	1.6	1.7	1.7
% Ch	0.5	0.7	0.3	0.5	1.0	2.2	2.4	2.1	1.4	0.9	1.1	1.1
Other Nondurable												
Oregon	25.3	25.4	25.8	26.2	27.4	27.7	28.0	28.4	28.8	29.0	29.2	29.4
% Ch	0.7	0.5	1.5	1.4	4.6	1.3	1.1	1.2	1.3	0.7	0.8	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	324.9	335.6	345.1	355.6	363.5	367.7	370.9	374.1	376.5
% Ch	1.2	1.3	2.4	2.4	3.3	2.9	3.0	2.2	1.1	0.9	0.9	0.6
U.S.	25.1	25.5	25.9	26.4	27.0	27.2	27.4	27.5	27.5	27.6	27.6	27.6
% Ch	1.7	1.6	1.5	2.0	2.2	0.9	0.6	0.6	0.1	0.1	0.2	(0.0)

Sept 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	195.9	202.9	209.5	216.1	221.5	224.1	225.9	228.1	230.0
% Ch	0.9	1.2	2.2	2.4	3.6	3.2	3.2	2.5	1.2	0.8	1.0	0.9
U.S.	14.7	14.8	15.1	15.4	15.7	15.7	15.7	15.6	15.5	15.5	15.5	15.4
% Ch	1.5	1.1	1.6	1.9	2.1	0.2	(0.4)	(0.3)	(0.5)	(0.3)	(0.1)	(0.4)
Wholesale Trade												
Oregon	67.7	68.8	71.3	72.2	73.5	75.2	77.0	78.2	78.9	79.7	80.4	80.9
% Ch	1.0	1.6	3.6	1.3	1.8	2.2	2.5	1.6	0.8	1.0	0.9	0.5
U.S.	5.5	5.7	5.7	5.8	5.9	6.0	6.1	6.2	6.2	6.3	6.3	6.4
% Ch	1.7	2.2	1.2	1.6	1.6	1.2	1.6	1.5	1.0	0.9	1.0	0.7
Transportation and Warehousing, and Utilities												
Oregon	53.4	54.1	54.8	56.7	59.1	60.5	62.4	63.8	64.8	65.3	65.6	65.6
% Ch	2.3	1.3	1.3	3.6	4.2	2.3	3.1	2.2	1.5	0.8	0.4	0.1
U.S.	4.9	5.0	5.0	5.2	5.3	5.5	5.6	5.7	5.8	5.8	5.8	5.8
% Ch	2.3	2.3	1.6	2.8	3.1	2.5	2.5	2.0	0.6	0.4	0.4	0.2
Information												
Oregon	31.7	32.1	32.2	32.1	32.9	33.8	34.8	35.5	36.0	36.6	36.9	37.3
% Ch	(0.1)	1.5	0.2	(0.4)	2.5	2.6	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	2.9	2.9	2.9	2.9	3.0	3.1
% Ch	(1.3)	0.1	1.2	1.3	1.7	(0.1)	2.6	0.4	0.5	1.8	2.2	2.0
Financial Activities												
Oregon	91.7	90.5	91.3	92.1	92.8	96.3	99.7	101.4	102.1	102.7	103.0	103.2
% Ch	(1.6)	(1.3)	1.0	0.8	0.7	3.8	3.5	1.7	0.7	0.6	0.3	0.2
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	1.9	(0.3)	(1.4)	(1.2)	(0.5)	0.1	0.3	0.2
Professional and Business Services												
Oregon	195.2	202.1	208.8	218.9	228.3	243.1	260.0	272.2	276.1	280.7	286.6	292.1
% Ch	3.5	3.6	3.3	4.8	4.3	6.5	7.0	4.7	1.5	1.6	2.1	1.9
U.S.	17.3	17.9	18.5	19.1	19.8	20.9	21.6	21.9	22.2	22.7	23.3	23.8
% Ch	3.6	3.5	3.3	3.1	3.6	5.5	3.4	1.5	1.5	2.1	2.6	2.3
Education and Health Services												
Oregon	234.2	237.8	242.5	248.2	257.0	262.6	269.3	274.1	277.0	280.9	284.6	288.5
% Ch	2.3	1.6	1.9	2.4	3.5	2.2	2.5	1.8	1.0	1.4	1.3	1.4
U.S.	20.2	20.7	21.1	21.5	22.0	22.4	22.7	22.9	23.2	23.3	23.6	23.8
% Ch	1.7	2.3	1.9	1.8	2.6	1.7	1.1	1.2	1.0	0.8	1.1	1.0
Educational Services												
Oregon	32.9	33.6	34.1	34.6	35.1	35.5	36.0	36.5	36.9	37.3	37.6	38.0
% Ch	3.4	2.0	1.4	1.6	1.4	1.2	1.4	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	3.3	3.3	3.3	3.2
% Ch	3.1	2.8	0.4	1.9	1.8	(0.6)	(1.4)	(1.0)	(1.2)	(1.1)	(1.0)	(1.2)
Health Care and Social Assistance												
Oregon	201.2	204.3	208.4	213.7	221.9	227.2	233.3	237.7	240.1	243.6	247.0	250.4
% Ch	2.1	1.5	2.0	2.5	3.9	2.4	2.7	1.9	1.0	1.5	1.4	1.4
U.S.	17.0	17.4	17.7	18.1	18.6	18.9	19.2	19.5	19.8	20.0	20.3	20.6
% Ch	1.5	2.2	2.2	1.8	2.7	2.1	1.6	1.6	1.4	1.1	1.5	1.3
Leisure and Hospitality												
Oregon	165.6	170.1	176.3	182.6	191.7	199.0	207.0	211.5	214.9	216.9	217.6	218.5
% Ch	2.0	2.7	3.7	3.6	4.9	3.8	4.0	2.2	1.6	0.9	0.4	0.4
U.S.	13.4	13.8	14.3	14.7	15.1	15.2	15.4	15.7	15.9	16.0	16.1	16.2
% Ch	2.4	3.2	3.5	3.2	2.6	0.7	1.2	1.9	1.1	0.9	0.8	0.4
Other Services												
Oregon	56.8	57.3	57.9	58.9	60.4	62.3	64.0	65.3	66.2	66.8	67.3	67.9
% Ch	0.4	0.9	0.9	1.7	2.6	3.2	2.7	2.0	1.4	1.0	0.8	0.9
U.S.	5.4	5.4	5.5	5.6	5.6	5.6	5.5	5.5	5.5	5.5	5.5	5.5
% Ch	0.6	1.3	1.0	1.6	1.1	(0.6)	(1.1)	(0.5)	(0.6)	(0.2)	0.1	0.0
Government												
Oregon	295.0	291.0	288.8	293.7	301.2	305.6	309.3	312.8	316.4	321.5	323.3	326.6
% Ch	(1.6)	(1.4)	(0.7)	1.7	2.6	1.5	1.2	1.1	1.2	1.6	0.5	1.0
U.S.	22.1	21.9	21.8	21.9	21.9	22.0	22.1	22.3	22.6	22.9	23.0	23.2
% Ch	(1.8)	(0.8)	(0.3)	0.0	0.3	0.2	0.5	1.0	1.2	1.7	0.2	0.9
Federal Government												
Oregon	28.8	28.1	27.5	27.4	27.9	27.9	27.7	27.5	27.3	29.0	27.4	27.3
% Ch	(5.7)	(2.5)	(1.9)	(0.3)	1.7	(0.1)	(0.7)	(0.8)	(0.5)	6.0	(5.6)	(0.4)
U.S.	2.9	2.8	2.8	2.7	2.7	2.7	2.7	2.6	2.6	2.7	2.6	2.6
% Ch	(3.9)	(1.3)	(1.8)	(1.6)	0.2	(1.1)	(1.4)	(1.5)	(1.1)	5.5	(5.6)	(0.6)
State Government, Oregon												
State Total	80.6	80.1	81.0	83.9	87.8	88.8	89.7	90.6	91.5	92.4	93.4	94.3
% Ch	1.0	(0.6)	1.2	3.5	4.6	1.2	1.0	1.0	1.0	1.0	1.0	1.0
State Education	31.1	31.8	32.0	32.5	32.8	32.7	32.8	32.9	33.1	33.3	33.4	33.6
% Ch	4.6	2.1	0.7	1.4	1.1	(0.4)	0.3	0.4	0.5	0.5	0.5	0.4
Local Government, Oregon												
Local Total	185.6	182.8	180.3	182.3	185.5	188.8	191.9	194.7	197.6	200.1	202.5	205.0
% Ch	(2.1)	(1.5)	(1.4)	1.1	1.7	1.8	1.6	1.5	1.5	1.3	1.2	1.2
Local Education	97.0	95.1	93.6	94.4	95.7	98.5	100.7	102.4	103.7	105.0	106.3	107.5
% Ch	(3.3)	(1.9)	(1.6)	0.9	1.4	2.9	2.2	1.7	1.3	1.2	1.2	1.2

Sept 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	16,447.2	16,950.2	17,408.8	17,846.9	18,295.6	18,761.3	19,225.5	19,665.9
% Ch	1.6	2.3	2.2	2.4	2.2	3.1	2.7	2.5	2.5	2.5	2.5	2.3
Price and Wage Indicators												
GDP Implicit Price Deflator,												
Chain Weight U.S., 2009=100	103.3	105.2	106.7	108.3	109.5	111.6	113.7	115.7	117.8	120.0	122.4	124.9
% Ch	2.1	1.8	1.5	1.5	1.1	1.9	1.8	1.8	1.8	1.9	2.0	2.1
Personal Consumption Deflator,												
Chain Weight U.S., 2009=100	104.1	106.1	107.3	108.8	109.1	110.7	112.7	115.0	117.2	119.2	121.5	124.1
% Ch	2.5	1.8	1.2	1.3	0.3	1.4	1.8	2.0	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	241.2	245.6	250.9	256.6	262.1	267.3	273.1	279.4
% Ch	2.9	2.3	2.5	2.1	0.3	1.8	2.2	2.3	2.1	2.0	2.2	2.3
U.S.	224.9	229.6	233.0	236.7	237.1	241.4	246.9	253.2	259.3	264.4	270.4	277.4
% Ch	3.1	2.1	1.5	1.6	0.2	1.8	2.3	2.5	2.4	2.0	2.3	2.6
Oregon Average Wage												
Rate (Thous $)	45.2	46.6	47.4	48.9	50.5	52.6	54.8	57.1	59.5	61.9	64.3	66.7
% Ch	3.2	3.2	1.8	3.1	3.2	4.2	4.2	4.2	4.2	4.1	3.9	3.7
U.S. Average Wage												
Wage Rate (Thous $)	50.3	51.7	52.2	53.6	55.0	56.9	58.9	61.2	63.7	66.2	68.8	71.4
% Ch	2.8	2.7	1.0	2.6	2.6	3.4	3.7	3.8	4.0	3.9	3.9	3.9
Housing Indicators												
FHFA Oregon Housing Price Index												
1980 Q1=100	347.9	346.9	372.2	406.0	441.6	478.6	499.3	517.3	535.6	554.8	574.3	594.2
% Ch	(6.9)	(0.3)	7.3	9.1	8.8	8.4	4.3	3.6	3.5	3.6	3.5	3.5
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	14.9	17.9	20.8	22.6	23.1	23.7	24.1	24.0
% Ch	5.2	35.7	31.2	9.5	(4.1)	19.8	16.4	8.3	2.3	2.5	1.8	(0.2)
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	18.4	7.8	10.3	19.3	10.4	4.3	3.4	2.5	(0.3)	0.1
Other Indicators												
Unemployment Rate (%)												
Oregon	9.4	8.8	7.8	7.0	5.7	5.8	5.4	5.6	5.6	5.5	5.4	5.5
Point Change	(1.1)	(0.7)	(1.0)	(0.8)	(1.3)	0.0	(0.3)	0.1	0.0	(0.2)	(0.0)	0.0
U.S.	8.9	8.1	7.4	6.2	5.4	5.1	5.0	5.1	5.1	5.0	5.0	5.0
Point Change	(0.7)	(0.9)	(0.7)	(1.2)	(0.7)	(0.3)	(0.1)	0.1	0.0	(0.0)	(0.0)	0.0
Industrial Production Index												
U.S, 2002 = 100	93.6	97.1	99.9	104.1	105.7	109.3	113.2	116.4	119.5	122.6	125.4	128.2
% Ch	3.3	3.8	2.9	4.2	1.5	3.4	3.5	2.8	2.7	2.6	2.3	2.2
Prime Rate (Percent)	3.3	3.3	3.3	3.3	3.3	4.2	5.7	6.5	6.5	6.5	6.5	6.5
% Ch	0.0	0.0	0.0	0.0	2.5	24.9	36.9	14.1	0.0	0.0	0.0	0.0
Population (Millions)												
Oregon	3.86	3.89	3.93	3.97	4.02	4.06	4.11	4.16	4.21	4.26	4.31	4.36
% Ch	0.6	0.7	0.9	1.1	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	3,749.0	4,199.0	4,126.0	4,479.7	4,735.9	4,708.8	4,683.1	4,681.9	4,662.5	4,643.3	4,650.5
% Ch	13.1	2.7	12.0	(1.7)	8.6	5.7	(0.6)	(0.5)	(0.0)	(0.4)	(0.4)	0.2

APPENDIX B: REVENUE FORECAST DETAIL

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

	Estimate at COS 2013	Forecasts Dated: 5/14/2015 2013-14	2014-15	Total 2013-15	Forecasts Dated: 9/1/2015 2013-14	2014-15	Total 2013-15	Difference 09/1/2015 Less 5/14/2015	09/1/2015 Less COS
Taxes									
Personal Income Taxes	13,558,172,000	6,628,021,000	7,416,140,000	14,044,161,000	6,628,021,000	7,330,268,000	13,958,289,000	(85,872,000)	400,117,000
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	602,798,000	1,097,557,000	494,759,000	621,770,000	1,116,529,000	18,972,000	59,959,000
Rainy Day Fund Transfer (Minimum Tax)	(63,298,000)	(6,570,000)	(5,522,000)	(12,092,000)	(6,499,000)	(5,463,000)	(11,962,000)	130,000	51,336,000
Insurance Taxes	107,754,000	60,457,000	59,147,000	119,604,000	59,764,000	61,258,000	121,022,000	1,418,000	13,268,000
Estate Taxes	207,982,000	85,491,000	112,571,000	198,062,000	85,491,000	110,994,000	196,485,000	(1,577,000)	(11,497,000)
Cigarette Taxes	69,049,000	36,624,000	36,477,000	73,101,000	36,077,000	37,184,000	73,261,000	160,000	4,212,000
Other Tobacco Products Taxes	59,366,000	30,350,000	30,105,000	60,455,000	30,181,000	29,927,000	60,108,000	(347,000)	742,000
Other Taxes	1,262,000	1,122,000	773,000	1,895,000	1,122,000	899,000	2,021,000	126,000	759,000
Fines and Fees									
State Court Fees	143,819,000	60,136,000	58,422,000	118,558,000	60,274,000	59,174,000	119,448,000	890,000	(24,371,000)
Secretary of State Fees	55,031,000	26,245,000	27,481,000	53,726,000	26,245,000	31,972,000	58,217,000	4,491,000	3,186,000
Criminal Fines & Assessments	46,578,000	24,159,000	28,551,000	52,710,000	30,264,000	24,899,000	55,163,000	2,453,000	8,585,000
Securities Fees	20,244,000	11,462,000	12,314,000	23,776,000	11,462,000	12,064,000	23,526,000	(250,000)	3,282,000
Central Service Charges	8,152,000	3,640,000	4,076,000	7,716,000	3,640,000	5,083,000	8,723,000	1,007,000	571,000
Liquor Apportionment	250,959,000	121,426,000	129,493,000	250,919,000	120,821,000	125,895,000	246,716,000	(4,203,000)	(4,243,000)
Interest Earnings	9,961,000	4,236,000	5,012,000	9,248,000	4,236,000	4,774,000	9,010,000	(238,000)	(951,000)
Miscellaneous Revenues	15,500,000	3,204,000	3,700,000	6,904,000	3,204,000	3,667,000	6,871,000	(33,000)	(8,629,000)
One-time Transfers	32,200,000	40,302,000	2,406,000	42,708,000	47,584,000	1,997,000	49,581,000	6,873,000	17,381,000
Gross General Fund Revenues	15,642,599,000	7,631,634,000	8,529,466,000	16,161,100,000	7,643,145,000	8,461,825,000	16,104,970,000	(56,130,000)	462,371,000
Offsets and Transfers Total	(120,840,000)	(30,712,000)	(43,633,000)	(74,345,000)	(30,641,000)	(43,574,000)	(74,215,000)	130,000	46,625,000
Net General Fund Revenues	15,521,759,000	7,600,922,000	8,485,833,000	16,086,755,000	7,612,504,000	8,418,251,000	16,030,755,000	(56,000,000)	508,996,000
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			16,422,358,090			16,366,358,090	(56,000,000)	456,210,000
Legislatively Adopted Budget	15,608,670,298			15,918,990,876			15,889,470,553	(29,520,323)	280,800,255
Plus Administrative Actions	0						0	NA	0
Projected Expenditures	15,608,670,298			15,918,990,876			15,889,470,553	NA	280,800,255
Estimated Ending Balance	301,477,792			503,367,214			476,887,537	(26,479,677)	175,409,745

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

Table B.1b
General Fund Revenue Statement -- 2015-17 - Close of Session

	Forecasts Dated: 5/14/2015			Forecasts Dated: COS			Difference
	2015-16	2016-17	Total 2015-17	2015-16	2016-17	Total 2015-17	COS Less 5/14/2015
Taxes							
Personal Income Taxes (Before Kicker)	7,596,526,000	8,153,213,000	15,749,739,000	7,607,726,000	8,105,733,000	15,713,459,000	(36,280,000)
Offsets and Transfers	(38,198,000)	(47,970,000)	(86,168,000)	(16,313,000)	(16,350,000)	(32,663,000)	53,505,000
Corporate Income Taxes (Before Kicker)	541,741,000	538,966,000	1,080,707,000	551,291,000	548,716,000	1,100,007,000	19,300,000
Offsets and Transfers	(5,040,000)	(5,074,000)	(10,114,000)	(5,040,000)	(5,074,000)	(10,114,000)	0
Insurance Taxes	57,859,000	61,026,000	118,885,000	57,859,000	61,026,000	118,885,000	0
Estate Taxes	108,064,000	109,062,000	217,126,000	108,064,000	109,062,000	217,126,000	0
Cigarette Taxes	33,772,000	31,257,000	65,029,000	33,772,000	31,257,000	65,029,000	0
Other Tobacco Products Taxes	31,453,000	32,366,000	63,819,000	31,453,000	32,366,000	63,819,000	0
Other Taxes	868,000	868,000	1,736,000	868,000	868,000	1,736,000	0
Fines and Fees							
State Court Fees	62,746,000	63,232,000	125,978,000	62,746,000	63,232,000	125,978,000	0
Secretary of State Fees	27,588,000	27,839,000	55,427,000	30,688,000	30,939,000	61,627,000	6,200,000
Criminal Fines & Assessments	23,547,000	27,828,000	51,375,000	27,692,000	32,727,000	60,419,000	9,044,000
Securities Fees	10,704,000	11,155,000	21,859,000	10,704,000	11,155,000	21,859,000	0
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	133,972,000	139,547,000	273,519,000	14,800,000
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	6,105,000	6,304,960	12,409,960	(190,040)
One-time Transfers	3,000,000	3,000,000	6,000,000	3,000,000	136,088,000	139,088,000	133,088,000
Gross General Fund Revenues	8,641,890,000	9,210,204,000	17,852,094,000	8,676,990,000	9,321,065,960	17,998,055,960	145,961,960
Offset and Transfers	(43,238,000)	(53,044,000)	(96,282,000)	(21,353,000)	(21,424,000)	(42,777,000)	53,505,000
Net General Fund Revenues	8,598,652,000	9,157,160,000	17,755,812,000	8,655,637,000	9,299,641,960	17,955,278,960	199,466,960
Plus Beginning Balance			503,367,214			532,887,537	29,520,323
Less Anticipated Administrative Actions*			(20,200,000)			(20,200,000)	0
Less Legislatively Adopted Actions**			(159,189,909)			(158,894,706)	295,203
Available Resources			18,079,789,305			18,309,071,791	229,282,486
Legislatively Adopted Budget			NA			17,984,668,302	NA
Projected Expenditures			NA			17,984,668,302	NA
Estimated Ending Balance			NA			324,403,489	NA

Table B.1bc
General Fund Revenue Statement -- 2015-17

		Forecasts Dated: 5/14/2015			Forecasts Dated: 9/1/2015			Difference	
	Estimate at COS 2015	2015-16	2016-17	Total 2015-17	2015-16	2016-17	Total 2015-17	09/1/2015 Less 5/14/2015	09/1/2015 Less COS
Taxes									
Personal Income Taxes	15,713,459,000	7,596,526,000	8,153,213,000	15,749,739,000	7,659,597,000	8,058,581,000	15,718,178,000	(31,561,000)	4,719,000
Shared Service Fund (Gainshare)	(32,663,000)	(38,198,000)	(47,970,000)	(86,168,000)	(16,313,000)	(16,329,000)	(32,642,000)	53,526,000	21,000
Corporate Income Taxes	1,100,007,000	541,741,000	538,966,000	1,080,707,000	540,107,000	555,343,000	1,095,450,000	14,743,000	(4,557,000)
Rainy Day Fund Transfer (Minimum Tax)	(10,114,000)	(5,040,000)	(5,074,000)	(10,114,000)	(5,717,000)	(5,186,000)	(10,903,000)	(789,000)	(789,000)
Insurance Taxes	118,885,000	57,859,000	61,026,000	118,885,000	57,859,000	61,026,000	118,885,000	0	0
Estate Taxes	217,126,000	108,064,000	109,062,000	217,126,000	108,064,000	109,062,000	217,126,000	0	0
Cigarette Taxes	65,029,000	33,772,000	31,257,000	65,029,000	33,772,000	31,257,000	65,029,000	0	0
Other Tobacco Products Taxes	63,819,000	31,453,000	32,366,000	63,819,000	31,453,000	32,366,000	63,819,000	0	0
Other Taxes	1,736,000	868,000	868,000	1,736,000	868,000	868,000	1,736,000	0	0
Fines and Fees									
State Court Fees	125,978,000	62,746,000	63,232,000	125,978,000	62,746,000	63,232,000	125,978,000	0	0
Secretary of State Fees	61,627,000	27,588,000	27,839,000	55,427,000	31,672,000	31,923,000	63,595,000	8,168,000	1,968,000
Criminal Fines & Assessments	60,419,000	23,547,000	27,828,000	51,375,000	27,692,000	32,727,000	60,419,000	9,044,000	0
Securities Fees	21,859,000	10,704,000	11,155,000	21,859,000	10,704,000	11,155,000	21,859,000	0	0
Central Service Charges	8,152,000	4,076,000	4,076,000	8,152,000	4,076,000	4,076,000	8,152,000	0	0
Liquor Apportionment	273,519,000	126,772,000	131,947,000	258,719,000	133,972,000	139,547,000	273,519,000	14,800,000	0
Interest Earnings	14,943,000	6,974,000	7,969,000	14,943,000	6,974,000	7,969,000	14,943,000	0	0
Miscellaneous Revenues	12,409,960	6,200,000	6,400,000	12,600,000	6,105,000	6,305,000	12,410,000	(190,000)	40
One-time Transfers	139,088,000	3,000,000	3,000,000	6,000,000	3,000,000	136,088,000	139,088,000	133,088,000	0
Gross General Fund Revenues	17,998,055,960	8,641,890,000	9,210,204,000	17,852,094,000	8,718,661,000	9,281,525,000	18,000,186,000	148,092,000	2,130,040
Offsets and Transfers	(42,777,000)	(43,238,000)	(53,044,000)	(96,282,000)	(22,030,000)	(21,515,000)	(43,545,000)	52,737,000	(768,000)
Net General Fund Revenues	17,955,278,960	8,598,652,000	9,157,160,000	17,755,812,000	8,696,631,000	9,260,010,000	17,956,641,000	200,829,000	1,362,040
Plus Beginning Balance	532,887,537			503,367,214			476,887,537	(26,479,677)	(56,000,000)
Less Anticipated Administrative Actions*	(20,200,000)			(20,200,000)			(20,200,000)	0	0
Less Legislatively Adopted Actions**	(158,894,706)			(159,189,909)			(158,894,706)	295,203	0
Available Resources	18,309,071,791			18,079,789,305			18,254,433,831	174,644,526	(54,637,960)
Appropriations	17,984,668,302			17,853,791,939			17,984,668,302	130,876,363	0
Projected Expenditures	17,984,668,302			17,853,791,939			17,984,668,302	130,876,363	0
Estimated Ending Balance	324,403,489			225,997,366			269,765,529	43,768,163	(54,637,960)

Table B.2 General Fund Revenue Forecast by Fiscal Year

General Fund Revenue Forecast

($Millions)

Fiscal Years	2013-14 Fiscal Year	2014-15 Fiscal Year	2015-16 Fiscal Year	2016-17 Fiscal Year	2017-18 Fiscal Year	2018-19 Fiscal Year	2019-20 Fiscal Year	2020-21 Fiscal Year	2021-22 Fiscal Year	2022-23 Fiscal Year	2023-24 Fiscal Year	2024-25 Fiscal Year
Taxes												
Personal Income	6,628.0	7,330.3	7,659.6	8,058.6	8,557.9	9,018.0	9,441.6	9,962.9	10,442.6	10,922.2	11,410.9	11,919.0
Offsets and Transfers	(24.1)	(38.1)	(16.3)	(16.3)	(16.3)	(16.4)	(16.4)	(16.4)	(16.4)	(16.4)	(16.5)	(16.5)
Corporate Excise & Income	494.8	621.8	540.1	555.3	549.9	546.2	549.8	560.2	569.4	572.3	575.7	712.0
Offsets and Transfers	(6.5)	(5.5)	(5.7)	(5.2)	(20.3)	(20.6)	(21.7)	(21.9)	(22.6)	(24.6)	(19.4)	(26.8)
Insurance	59.8	61.3	57.9	61.0	63.8	65.9	68.1	70.6	72.6	74.7	76.8	78.9
Estate	85.5	111.0	108.1	109.1	112.1	119.3	123.8	128.6	133.9	137.6	141.6	145.6
Cigarette	36.1	37.2	33.8	31.3	29.9	28.1	26.6	24.5	22.7	20.0	18.6	17.3
Other Tobacco Products	30.2	29.9	31.5	32.4	33.3	34.3	35.3	36.3	37.3	38.4	39.5	40.7
Other Taxes	1.1	0.9	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	128.2	128.1	132.8	139.0	133.9	140.7	136.9	143.8	138.3	145.2	140.4	146.9
Charges for Services	3.6	5.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Liquor Apportionment	120.8	125.9	126.8	131.9	126.0	129.7	133.6	137.6	141.8	146.0	150.4	154.9
Interest Earnings	4.2	4.8	7.0	8.0	11.8	17.5	24.4	32.7	35.0	38.0	40.0	42.0
Others	50.8	5.7	9.1	142.4	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8
Gross General Fund	7,643.1	8,461.8	8,711.5	9,273.9	9,632.9	10,114.2	10,554.7	11,112.1	11,608.6	12,109.7	12,609.4	13,272.9
Net General Fund	7,612.5	8,418.3	8,689.4	9,252.4	9,596.3	10,077.3	10,516.6	11,073.8	11,569.6	12,068.6	12,573.5	13,229.7

Biennial Totals	2013-15 Biennium	Percent Change	2015-17 Biennium	Percent Change	2017-19 Biennium	Percent Change	2019-21 Biennium	Percent Change	2021-23 Biennium	Percent Change	2023-25 Biennium	Percent Change
Taxes												
Personal Income	13,958.3	15.2%	15,718.2	12.6%	17,575.9	11.8%	19,404.5	10.4%	21,364.8	10.1%	23,329.9	9.2%
Corporate Excise & Income	1,116.5	26.3%	1,095.5	-1.9%	1,096.1	0.1%	1,110.0	1.3%	1,141.7	2.9%	1,287.6	12.8%
Insurance	121.0	22.2%	118.9	-1.8%	129.8	9.2%	138.7	6.9%	147.3	6.2%	155.7	5.7%
Estate Taxes	196.5	-3.5%	217.1	10.5%	231.4	6.6%	252.4	9.1%	271.4	7.5%	287.1	5.8%
Cigarette	73.3	-1.8%	65.0	-11.2%	58.0	-10.8%	51.0	-12.0%	42.7	-16.3%	35.9	-16.0%
Other Tobacco Products	60.1	3.2%	63.8	6.2%	67.6	5.9%	71.6	5.9%	75.8	5.9%	80.2	5.9%
Other Taxes	2.0	-15.9%	1.7	-14.1%	1.7	-3.5%	1.6	-2.4%	1.6	-0.6%	1.6	0.0%
Other Revenues												
Licenses and Fees	256.4	-7.1%	271.9	6.0%	274.6	1.0%	280.7	2.2%	283.4	1.0%	287.3	1.4%
Charges for Services	8.7	-24.7%	8.2	-6.6%	8.2	0.0%	8.2	0.0%	8.2	0.0%	8.2	0.0%
Liquor Apportionment	246.7	5.9%	258.7	4.9%	255.7	-1.2%	271.3	6.1%	287.8	6.1%	305.3	6.1%
Interest Earnings	9.0	-44.1%	14.9	65.9%	29.3	95.9%	57.1	95.1%	73.0	27.8%	82.0	12.3%
Others	56.5	-70.0%	151.5	168.4%	19.0	-87.4%	19.8	4.1%	20.6	4.0%	21.4	3.9%
Gross General Fund	16,105.0	13.7%	17,985.4	11.7%	19,747.2	9.8%	21,666.8	9.7%	23,718.3	9.5%	25,882.3	9.1%
Net General Fund	16,030.8	13.3%	17,941.8	11.9%	19,673.6	9.7%	21,590.4	9.7%	23,638.3	9.5%	25,803.1	9.2%

Table B.3 Summary of 2015 Legislative Session Adjustments

	Biennia				Revenue Impact Statement
	15-17	17-19	19-21	21-23	
Personal Income Tax Impacts (millions)					
DOR Compliance Tools - HB 5035	$4.0	$4.2	$4.4	$4.6	HB 5035
Gain Share - SB 129	$53.5	$24.8	-$33.1	-$34.0	SB 129
ABLE (529) Accounts - SB 777	-$0.2	-$0.5	-$0.5	-$0.6	SB 777
Tax Credits - HB 2171	-$40.1	-$112.6	-$125.3	-$75.7	HB 2171
Working Family Child & Dependent Care	-$31.4	-$62.7	-$62.7	-$31.5	
IDA Contributions	-$6.9	-$14.3	-$14.5	-$7.5	
Oregon Veterans' Home Physicians		< $50K per year			
Severe Disability	-$5.3	-$11.6	-$13.0	-$7.1	
Child with a Disability	-$4.6	-$10.2	-$11.7	-$6.2	
Rural Medical Providers	-$0.1	-$2.8	-$2.3	-$1.9	
Office of Child Care Contributions	-$0.4	-$0.9	-$1.0	-$0.5	
Long-term Care Insurance	$10.4	$0.0	$0.0	$0.0	
Film & Video	$0.0	-$9.3	-$19.3	-$20.0	
Military active duty	-$1.8	-$0.8	-$0.9	-$1.0	
Personal Income Tax Total	**$17.2**	**-$84.1**	**-$154.5**	**-$105.7**	
Corporate Income Tax Impacts (millions)					
Tax Havens - SB 61	$0.1	$0.2	$0.3	$0.4	SB 61
Tax Credits - HB 2171	$19.2	$20.4	$20.7	$0.0	HB 2171
Oregon Life & Health IGA Assessments		< $50K per year			
Corporate minimum tax	$19.2	$20.4	$20.7	$0.0	
Corporate Income Tax Total	**$19.3**	**$20.6**	**$21.0**	**$0.4**	
Other Tax/Revenue Impacts (millions)					
Program Change Bill - SB 501	$154.1	$0.0	$0.0	$0.0	SB 501
Lottery CFA - HB 5029	-$7.1	$0.0	$0.0	$0.0	HB 5029
Racing Commission - HB 2719	-$0.2	-$0.4	-$0.5	-$0.6	HB 2719
Portland Photo Radar - HB 2621	$16.1	$42.5	$47.4	$50.0	HB 2621
Other Tax Total	**$162.9**	**$42.1**	**$46.9**	**$49.4**	

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 **September 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	1,505,337	6,060,801
%CHYA	5.7%	5.2%	6.5%	7.5%	6.2%	9.1%	6.1%	9.2%	6.0%	7.6%
EST. PAYMENTS	221,695	214,342	247,826	357,218	1,041,080	264,823	236,303	305,582	408,957	1,215,665
%CHYA	7.9%	34.7%	-11.0%	11.0%	7.9%	19.5%	10.2%	23.3%	14.5%	16.8%
FINAL PAYMENTS[1]	83,096	112,495	139,923	730,795	1,066,309	92,647	144,239	156,188	847,330	1,240,403
%CHYA	15.1%	23.2%	13.3%	-7.0%	-0.6%	11.5%	28.2%	11.6%	15.9%	16.3%
REFUNDS	67,098	197,448	472,018	354,437	1,091,001	100,729	173,522	520,272	375,119	1,169,642
%CHYA	28.5%	80.3%	-12.0%	-7.5%	0.9%	50.1%	-12.1%	10.2%	5.8%	7.2%
OTHER	(201,367)	-	-	180,356	(21,011)	(180,356)	-	-	163,398	(16,959)
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	2,549,903	7,330,268
%CHYA	5.9%	4.0%	11.4%	3.9%	5.8%	11.8%	10.6%	11.7%	9.2%	10.6%

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 **September 2015**

	2015:3	2015:4	2016:1	2016:2	FY 2016	2016:3	2016:4	2017:1	2017:2	FY 2017
WITHHOLDING	1,562,056	1,636,831	1,697,844	1,587,573	6,484,304	1,665,489	1,756,538	1,821,374	1,686,690	6,930,090
%CHYA	7.3%	7.4%	7.7%	5.5%	7.0%	6.6%	7.3%	7.3%	6.2%	6.9%
EST. PAYMENTS	308,529	263,878	344,334	417,877	1,334,618	321,395	274,881	358,842	438,236	1,393,354
%CHYA	16.5%	11.7%	12.7%	2.2%	9.8%	4.2%	4.2%	4.2%	4.9%	4.4%
FINAL PAYMENTS[1]	76,540	106,127	123,033	940,257	1,245,956	81,609	112,430	128,421	954,852	1,277,312
%CHYA	-17.4%	-26.4%	-21.2%	11.0%	0.4%	6.6%	5.9%	4.4%	1.6%	2.5%
REFUNDS	52,839	118,840	811,856	492,786	1,476,320	76,219	173,401	836,286	498,905	1,584,811
%CHYA	-47.5%	-31.5%	56.0%	31.4%	26.2%	44.2%	45.9%	3.0%	1.2%	7.3%
OTHER	(163,398)	-	-	234,437	71,039	(234,437)	-	-	277,073	42,636
TOTAL	1,730,889	1,887,996	1,353,355	2,687,358	7,659,597	1,757,837	1,970,447	1,472,350	2,857,946	8,058,581
%CHYA	13.0%	9.1%	-10.8%	5.4%	4.5%	1.6%	4.4%	8.8%	6.3%	5.2%

	2017:3	2017:4	2018:1	2018:2	FY 2018	2018:3	2018:4	2019:1	2019:2	FY 2019
WITHHOLDING	1,769,518	1,876,877	1,939,669	1,785,445	7,371,509	1,873,174	1,986,822	2,037,016	1,872,409	7,769,421
%CHYA	6.2%	6.9%	6.5%	5.9%	6.4%	5.9%	5.9%	5.0%	4.9%	5.4%
EST. PAYMENTS	337,053	288,273	376,525	463,533	1,465,384	356,509	304,913	397,992	485,027	1,544,442
%CHYA	4.9%	4.9%	4.9%	5.8%	5.2%	5.8%	5.8%	5.7%	4.6%	5.4%
FINAL PAYMENTS[1]	85,281	117,186	137,029	1,057,522	1,397,019	91,223	125,535	142,443	1,124,771	1,483,971
%CHYA	4.5%	4.2%	6.7%	10.8%	9.4%	7.0%	7.1%	4.0%	6.4%	6.2%
REFUNDS	72,345	162,114	887,795	556,605	1,678,859	76,225	171,834	952,536	598,424	1,799,018
%CHYA	-5.1%	-6.5%	6.2%	11.6%	5.9%	5.4%	6.0%	7.3%	7.5%	7.2%
OTHER	(277,073)	-	-	279,920	2,848	(279,920)	-	-	299,060	19,139
TOTAL	1,842,435	2,120,223	1,565,429	3,029,815	8,557,902	1,964,761	2,245,437	1,624,914	3,182,843	9,017,955
%CHYA	4.8%	7.6%	6.3%	6.0%	6.2%	6.6%	5.9%	3.8%	5.1%	5.4%

	2019:3	2019:4	2020:1	2020:2	FY 2020	2020:3	2020:4	2021:1	2021:2	FY 2021
WITHHOLDING	1,964,552	2,083,743	2,140,961	1,968,706	8,157,962	2,065,549	2,190,867	2,245,692	2,064,138	8,566,246
%CHYA	4.9%	4.9%	5.1%	5.1%	5.0%	5.1%	5.1%	4.9%	4.8%	5.0%
EST. PAYMENTS	376,041	322,053	419,633	514,170	1,631,896	396,148	339,250	441,920	538,387	1,715,704
%CHYA	5.5%	5.6%	5.4%	6.0%	5.7%	5.3%	5.3%	5.3%	4.7%	5.1%
FINAL PAYMENTS[1]	98,484	133,600	157,296	1,158,278	1,547,659	101,804	138,025	162,997	1,162,150	1,564,976
%CHYA	8.0%	6.4%	10.4%	3.0%	4.3%	3.4%	3.3%	3.6%	0.3%	1.1%
REFUNDS	81,770	184,430	968,236	595,578	1,830,014	85,554	192,952	1,012,481	623,300	1,914,287
%CHYA	7.3%	7.3%	1.6%	-0.5%	1.7%	4.6%	4.6%	4.6%	4.7%	4.6%
OTHER	(299,060)	-	-	233,140	(65,920)	(233,140)	-	-	263,402	30,262
TOTAL	2,058,248	2,354,965	1,749,654	3,278,716	9,441,583	2,244,806	2,475,189	1,838,127	3,404,778	9,962,901
%CHYA	4.8%	4.9%	7.7%	3.0%	4.7%	9.1%	5.1%	5.1%	3.8%	5.5%

	2021:3	2021:4	2022:1	2022:2	FY 2022	2022:3	2022:4	2023:1	2023:2	FY 2023
WITHHOLDING	2,165,722	2,297,117	2,351,963	2,161,387	8,976,188	2,267,779	2,405,366	2,458,022	2,258,070	9,389,236
%CHYA	4.8%	4.8%	4.7%	4.7%	4.8%	4.7%	4.7%	4.5%	4.5%	4.6%
EST. PAYMENTS	411,773	352,180	459,737	561,215	1,784,906	431,638	369,169	481,853	587,056	1,869,717
%CHYA	3.9%	3.8%	4.0%	4.2%	4.0%	4.8%	4.8%	4.8%	4.6%	4.8%
FINAL PAYMENTS[1]	105,622	143,279	163,051	1,205,563	1,617,516	105,663	144,950	165,853	1,255,136	1,671,602
%CHYA	3.8%	3.8%	0.0%	3.7%	3.4%	0.0%	1.2%	1.7%	4.1%	3.3%
REFUNDS	89,484	201,743	1,051,258	647,186	1,989,672	92,949	209,322	1,087,783	669,929	2,059,983
%CHYA	4.6%	4.6%	3.8%	3.8%	3.9%	3.9%	3.8%	3.5%	3.5%	3.5%
OTHER	(263,402)	-	-	317,050	53,648	(317,050)	-	-	368,718	51,668
TOTAL	2,330,231	2,590,833	1,923,493	3,598,029	10,442,586	2,395,081	2,710,163	2,017,945	3,799,051	10,922,240
%CHYA	3.8%	4.7%	4.6%	5.7%	4.8%	2.8%	4.6%	4.9%	5.6%	4.6%

	2023:3	2023:4	2024:1	2024:2	FY 2023	2024:3	2024:4	2025:1	2025:2	FY 2025
WITHHOLDING	2,369,263	2,513,006	2,572,314	2,363,771	9,818,354	2,480,131	2,630,602	2,692,564	2,474,252	10,277,550
%CHYA	4.5%	4.5%	4.6%	4.7%	4.6%	4.7%	4.7%	4.7%	4.7%	4.7%
EST. PAYMENTS	451,513	386,168	504,046	614,196	1,955,922	472,386	404,020	527,421	644,025	2,047,852
%CHYA	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.9%	4.7%
FINAL PAYMENTS[1]	114,192	155,238	176,998	1,312,891	1,759,319	114,926	157,726	180,280	1,362,837	1,815,768
%CHYA	8.1%	7.1%	6.7%	4.6%	5.2%	0.6%	1.6%	1.9%	3.8%	3.2%
REFUNDS	96,166	216,481	1,124,203	692,694	2,129,544	99,353	223,590	1,168,870	721,119	2,212,931
%CHYA	3.5%	3.4%	3.3%	3.4%	3.4%	3.3%	3.3%	4.0%	4.1%	3.9%
OTHER	(368,718)	-	-	375,576	6,858	(375,576)	-	-	366,372	(9,203)
TOTAL	2,470,084	2,837,931	2,129,155	3,973,740	11,410,909	2,592,515	2,968,759	2,231,395	4,126,367	11,919,035
%CHYA	3.1%	4.7%	5.5%	4.6%	4.5%	5.0%	4.6%	4.8%	3.8%	4.5%

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

Table B.5 Oregon Corporate Income Tax Revenue Forecast

TABLE B.5	OREGON CORPORATE INCOME TAX REVENUE FORECAST - QUARTERLY COLLECTIONS									
	Thousands of Dollars - Not Seasonally Adjusted									September 2015
	2007:3	2007:4	2008:1	2008:2	FY 2008	2008:3	2008:4	2009:1	2009:2	FY 2009
ADVANCE PAYMENTS	133,408	205,375	64,256	155,284	558,323	100,589	145,285	63,802	97,368	407,044
%CHYA	2.8%	-13.1%	7.5%	-4.4%	-5.1%	-24.6%	-29.3%	-0.7%	-37.3%	-27.1%
FINAL PAYMENTS	23,631	45,064	35,076	52,143	155,912	23,501	26,721	22,314	21,822	94,357
%CHYA	19.8%	162.7%	37.9%	-20.5%	21.9%	-0.6%	-40.7%	-36.4%	-58.1%	-39.5%
REFUNDS	39,623	158,106	36,380	39,394	273,503	28,134	124,826	67,471	37,218	257,649
%CHYA	76.3%	-20.7%	-6.0%	-21.0%	-11.9%	-29.0%	-21.0%	85.5%	-5.5%	-5.8%
TOTAL	117,416	92,333	62,951	168,032	440,732	95,956	47,181	18,645	81,971	243,753
%CHYA	-7.5%	70.4%	35.4%	-5.7%	8.6%	-18.3%	-48.9%	-70.4%	-51.2%	-44.7%
	2009:3	2009:4	2010:1	2010:2	FY 2010	2010:3	2010:4	2011:1	2011:2	FY 2011
ADVANCE PAYMENTS	79,579	163,877	66,451	147,313	457,220	115,286	175,561	76,405	165,354	532,606
%CHYA	-20.9%	12.8%	4.2%	51.3%	12.3%	44.9%	7.1%	15.0%	12.2%	16.5%
FINAL PAYMENTS	20,404	24,009	38,412	45,714	128,539	21,781	21,206	35,770	40,805	119,562
%CHYA	-13.2%	-10.2%	72.1%	109.5%	36.2%	6.8%	-11.7%	-6.9%	-10.7%	-7.0%
REFUNDS	29,072	137,244	40,080	25,774	232,170	23,130	89,877	39,065	31,489	183,562
%CHYA	3.3%	9.9%	-40.6%	-30.7%	-9.9%	-20.4%	-34.5%	-2.5%	22.2%	-20.9%
TOTAL	70,910	50,642	64,784	167,254	353,589	113,936	106,890	73,111	174,670	468,606
%CHYA	-26.1%	7.3%	247.5%	104.0%	45.1%	60.7%	111.1%	12.9%	4.4%	32.5%
	2011:3	2011:4	2012:1	2012:2	FY 2012	2012:3	2012:4	2013:1	2013:2	FY 2013
ADVANCE PAYMENTS	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%
	2013:3	2013:4	2014:1	2014:2	FY 2014	2014:3	2014:4	2015:1	2015:2	FY 2015
ADVANCE PAYMENTS	123,591	187,195	150,401	183,348	644,535	193,248	206,088	106,689	183,611	689,637
%CHYA	-5.2%	69.9%	85.8%	-35.1%	6.7%	56.4%	10.1%	-29.1%	0.1%	7.0%
FINAL PAYMENTS	27,794	18,162	32,218	52,283	130,456	28,815	73,552	57,268	71,415	231,051
%CHYA	69.6%	-15.0%	-12.1%	53.7%	20.3%	3.7%	305.0%	77.8%	36.6%	77.1%
REFUNDS	20,123	118,303	109,296	32,511	280,232	49,952	155,439	58,361	35,167	298,918
%CHYA	-39.4%	563.4%	327.0%	-82.2%	8.0%	148.2%	31.4%	-46.6%	8.2%	6.7%
TOTAL	131,262	87,054	73,323	203,120	494,759	172,111	124,202	105,597	219,860	621,770
%CHYA	15.6%	-23.5%	-20.3%	52.0%	9.2%	31.1%	42.7%	44.0%	8.2%	25.7%

TABLE B.5 **OREGON CORPORATE INCOME TAX REVENUE FORECAST - QUARTERLY COLLECTIONS**

Thousands of Dollars - Not Seasonally Adjusted **September 2015**

	2015:3	2015:4	2016:1	2016:2	FY 2016	2016:3	2016:4	2017:1	2017:2	FY 2017
ADVANCE PAYMENTS	186,694	171,917	162,849	112,199	633,658	187,660	172,017	162,281	111,472	633,430
%CHYA	-3.4%	-16.6%	52.6%	-38.9%	-8.1%	0.5%	0.1%	-0.3%	-0.6%	0.0%
FINAL PAYMENTS	88,317	29,225	18,064	19,453	155,060	93,984	31,524	19,563	20,220	165,290
%CHYA	206.5%	-60.3%	-68.5%	-72.8%	-32.9%	6.4%	7.9%	8.3%	3.9%	6.6%
REFUNDS	74,092	67,529	63,467	43,523	248,611	72,305	66,018	62,176	42,878	243,377
%CHYA	48.3%	-56.6%	8.7%	23.8%	-16.8%	-2.4%	-2.2%	-2.0%	-1.5%	-2.1%
TOTAL	200,918	133,613	117,447	88,129	540,107	209,339	137,523	119,668	88,813	555,343
%CHYA	16.7%	7.6%	11.2%	-59.9%	-13.1%	4.2%	2.9%	1.9%	0.8%	2.8%

	2017:3	2017:4	2018:1	2018:2	FY 2018	2018:3	2018:4	2019:1	2019:2	FY 2019
ADVANCE PAYMENTS	185,846	170,278	160,300	110,580	627,004	184,348	169,050	159,268	110,242	622,908
%CHYA	-1.0%	-1.0%	-1.2%	-0.8%	-1.0%	-0.8%	-0.7%	-0.6%	-0.3%	-0.7%
FINAL PAYMENTS	94,107	31,526	18,843	20,166	164,642	93,242	31,219	18,872	20,540	163,873
%CHYA	0.1%	0.0%	-3.7%	-0.3%	-0.4%	-0.9%	-1.0%	0.2%	1.9%	-0.5%
REFUNDS	71,523	65,618	61,798	42,766	241,704	71,214	65,216	61,529	42,657	240,616
%CHYA	-1.1%	-0.6%	-0.6%	-0.3%	-0.7%	-0.4%	-0.6%	-0.4%	-0.3%	-0.5%
TOTAL	208,431	136,185	117,345	87,981	549,942	206,376	135,053	116,612	88,125	546,166
%CHYA	-0.4%	-1.0%	-1.9%	-0.9%	-1.0%	-1.0%	-0.8%	-0.6%	0.2%	-0.7%

	2019:3	2019:4	2020:1	2020:2	FY 2020	2020:3	2020:4	2021:1	2021:2	FY 2021
ADVANCE PAYMENTS	184,033	168,607	159,141	110,477	622,257	184,679	169,248	159,900	111,175	625,001
%CHYA	-0.2%	-0.3%	-0.1%	0.2%	-0.1%	0.4%	0.4%	0.5%	0.6%	0.4%
FINAL PAYMENTS	94,697	32,201	20,020	21,769	168,688	97,851	34,180	21,834	23,316	177,181
%CHYA	1.6%	3.1%	6.1%	6.0%	2.9%	3.3%	6.1%	9.1%	7.1%	5.0%
REFUNDS	71,281	65,317	61,681	42,859	241,137	71,535	65,542	61,922	43,029	242,027
%CHYA	0.1%	0.2%	0.2%	0.5%	0.2%	0.4%	0.3%	0.4%	0.4%	0.4%
TOTAL	207,448	135,491	117,481	89,387	549,808	210,995	137,886	119,812	91,462	560,155
%CHYA	0.5%	0.3%	0.7%	1.4%	0.7%	1.7%	1.8%	2.0%	2.3%	1.9%

	2021:3	2021:4	2022:1	2022:2	FY 2022	2022:3	2022:4	2023:1	2023:2	FY 2023
ADVANCE PAYMENTS	185,570	169,933	160,228	111,342	627,073	185,517	169,732	159,841	111,100	626,189
%CHYA	0.5%	0.4%	0.2%	0.2%	0.3%	0.0%	-0.1%	-0.2%	-0.2%	-0.1%
FINAL PAYMENTS	101,332	36,088	23,005	24,137	184,562	102,744	36,815	23,583	24,636	187,778
%CHYA	3.6%	5.6%	5.4%	3.5%	4.2%	1.4%	2.0%	2.5%	2.1%	1.7%
REFUNDS	71,755	65,686	61,877	42,966	242,284	71,541	65,465	61,725	42,900	241,631
%CHYA	0.3%	0.2%	-0.1%	-0.1%	0.1%	-0.3%	-0.3%	-0.2%	-0.2%	-0.3%
TOTAL	215,147	140,336	121,356	92,513	569,351	216,720	141,082	121,699	92,835	572,336
%CHYA	2.0%	1.8%	1.3%	1.1%	1.6%	0.7%	0.5%	0.3%	0.3%	0.5%

	2023:3	2023:4	2024:1	2024:2	FY 2024	2024:3	2024:4	2025:1	2025:2	FY 2025
ADVANCE PAYMENTS	185,068	169,469	159,757	111,213	625,508	185,617	170,399	160,911	185,617	702,543
%CHYA	-0.2%	-0.2%	-0.1%	0.1%	-0.1%	0.3%	0.5%	0.7%	66.9%	12.3%
FINAL PAYMENTS	103,832	37,874	24,673	25,653	192,032	106,924	40,334	27,076	106,924	281,257
%CHYA	1.1%	2.9%	4.6%	4.1%	2.3%	3.0%	6.5%	9.7%	316.8%	46.5%
REFUNDS	71,503	65,524	61,814	43,012	241,852	71,805	65,930	62,305	71,805	271,845
%CHYA	-0.1%	0.1%	0.1%	0.3%	0.1%	0.4%	0.6%	0.8%	66.9%	12.4%
TOTAL	217,397	141,819	122,617	93,854	575,687	220,735	144,802	125,683	220,735	711,956
%CHYA	0.3%	0.5%	0.8%	1.1%	0.6%	1.5%	2.1%	2.5%	135.2%	23.7%

Table B.6 Cigarette and Tobacco Tax Distribution

TABLE B.6 **September 2015**

Cigarette & Tobacco Tax Distribution (Millions of $)

	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
Distribution Forecast*					-						
2013-14	36.077	140.132	5.675	7.673	189.557	11.086	200.643	30.181	23.416	2.604	56.202
2014-15	37.184	136.842	5.633	15.675	195.334	10.727	206.061	29.927	23.228	2.583	55.738
2013-15 Biennium	73.260	276.974	11.308	23.348	384.891	21.813	406.704	60.108	46.644	5.188	111.940
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 Reducation 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 **September 2015**

Liquor Apportionment and Revenue Distribution to Local Governments (Millions of $)***

	Liquor Apportionment Distribution								
					City Revenue				
	Total Liquor Revenue Available	General Fund (56%)	Mental Health [1]	Oregon Wine Board	Revenue Sharing	Regular	Total	Counties	Cigarette Tax Distribution [2]
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

*** As of forecast release date this table does not properly reflect the bottle surcharge and distributions. When available, Table B.7 will be updated accordingly.

[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 May 2015 Forecast

(Quarter ending June 30, 2015)

Personal Income Tax	Forecast Comparison			Year/Year Change	
(Millions of dollars)	Actual Revenues	Latest Forecast	Percent Difference	Prior Year	Percent Change
Withholding	$1,505.3	$1,551.5	-3.0%	$1,420.3	6.0%
Dollar difference		-$46.2		$85.0	
Estimated Payments	$409.0	$402.5	1.6%	$357.2	14.5%
Dollar difference		$6.5		$51.7	
Final Payments	$847.3	$899.6	-5.8%	$730.8	15.9%
Dollar difference		-$52.3		$116.5	
Refunds	-$375.1	-$427.8	-12.3%	-$354.4	5.8%
Dollar difference		$52.7		-$20.7	
Total Personal Income Tax	**$2,386.5**	**$2,425.8**	**-1.6%**	**$2,153.9**	**10.8%**
Dollar difference		-$39.3		$232.6	

Corporate Income Tax*	Forecast Comparison			Year/Year Change	
(Millions of dollars)	Actual Revenues*	Latest Forecast	Percent Difference	Prior Year	Percent Change
Advanced Payments	$183.6	$185.3	-0.9%	$183.3	0.1%
Dollar difference		-$1.7		$0.3	
Final Payments	$71.4	$48.8	46.3%	$52.3	36.6%
Dollar difference		$22.6		$19.1	
Refunds	-$35.2	-$33.2	5.9%	-$32.5	8.2%
Dollar difference		-$1.9		-$2.7	
Total Corporate Income Tax	**$219.9**	**$200.9**	**9.4%**	**$203.1**	**8.2%**
Dollar difference		$19.0		$16.7	

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	**$2,606.4**	**$2,626.7**	**-0.8%**	**$2,357.0**	**10.6%**
Dollar difference		-$20.4		$249.4	

Table B.9 Summary of Lottery Resources

TABLE B.9 **Sep 2015 Forecast**

Summary of Lottery Resources

(in millions of dollars)	2015-17 Current Forecast	2015-17 Change from May-15	2015-17 Change from COS 2015	2017-19 Current Forecast	2017-19 Change from May-15	2019-21 Current Forecast	2019-21 Change from May-15	2021-23 Current Forecast	2021-23 Change from May-15	2023-25 Current Forecast	2023-25 Change from May-15
LOTTERY EARNINGS											
Traditional Lottery	114.882	*(2.922)*	*(2.922)*	117.725	*0.270*	117.207	(0.261)	116.921	(0.563)	116.934	(0.583)
Video Lottery	1,079.101	*8.449*	*8.449*	1,141.001	*(0.777)*	1,220.074	(5.172)	1,305.636	(8.564)	1,394.987	(9.151)
Administrative Actions	0.000	*0.000*	*0.000*	0.000	*0.000*	0.000	0.000	0.000	0.000	0.000	0.000
Video Lottery Terminal Replacement	(59.200)	*0.000*	*0.000*	0.000	*0.000*	0.000	0.000	0.000	0.000	0.000	0.000
Total Available to Transfer	**1,134.783**	*5.526*	*5.526*	**1,258.726**	*(0.507)*	**1,337.282**	(5.433)	**1,422.558**	(9.127)	**1,511.920**	(9.734)
ECONOMIC DEVELOPMENT FUND											
Beginning Balance	20.500	*1.181*	*0.000*	0.000	*0.000*	0.000	0.000	0.000	0.000	0.000	0.000
Transfers from Lottery	1,134.783	*5.526*	*5.526*	1,258.726	*(0.507)*	1,337.282	(5.433)	1,422.558	(9.127)	1,511.920	(9.734)
Other Resources[1]	7.339	*5.339*	*0.000*	2.000	*0.000*	2.000	0.000	2.000	0.000	2.000	0.000
Total Available Resources	**1,162.622**	*12.047*	*6.708*	**1,260.726**	*(0.507)*	**1,339.282**	(5.433)	**1,424.558**	(9.127)	**1,513.920**	(9.734)
ALLOCATION OF RESOURCES											
County Economic Development	39.084	*(2.029)*	*0.000*	43.814	*(0.030)*	47.583	(0.202)	52.225	(0.343)	55.799	(0.366)
Education Stability Fund [2]	204.261	*0.995*	*0.995*	226.571	*(0.091)*	240.711	(0.978)	256.060	(1.643)	272.146	(1.752)
Parks and Natural Resources Fund[3]	170.217	*0.829*	*0.829*	188.809	*(0.076)*	200.592	(0.815)	213.384	(1.369)	226.788	(1.460)
HECC Collegiate Athletic & Scholarships[4]	8.240	*(3.053)*	*0.000*	12.587	*(0.005)*	13.373	(0.054)	14.226	(0.091)	15.119	(0.097)
Gambling Addiction [4]	11.293	*(0.000)*	*0.000*	12.587	*(0.005)*	13.373	(0.054)	14.226	(0.091)	15.119	(0.097)
County Fairs	3.864	*0.216*	*0.000*	3.648	*0.000*	3.648	0.000	3.648	0.000	3.648	0.000
Other Legislatively Adopted Allocations[5]	704.779	*435.179*	*0.000*	258.600	*0.000*	258.600	0.000	258.600	0.000	258.600	0.000
Total Distributions	**1,141.738**	*432.137*	*1.824*	**746.617**	*(0.207)*	**777.879**	(2.103)	**812.369**	(3.537)	**847.220**	(3.77)
Ending Balance/Discretionary Resources	**20.884**	*(420.090)*	*4.884*	**514.110**	*(0.300)*	**561.402**	(3.330)	**612.189**	(5.590)	**666.701**	(5.961)

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. Approximately 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 **Sept 2015**

Rainy Day Fund

(Millions)	2013-15	2015-17	2017-19	2019-21	2021-23	2023-25
Beginning Balance	$61.9	$211.8	$390.6	$646.9	$943.2	$1,285.2
Interest Earnings	$1.3	$9.0	$35.5	$57.2	$80.7	$107.8
Deposits[1]	$148.7	$169.8	$220.7	$239.1	$261.4	$280.7
Triggered Withdrawals	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ending Balance[2]	**$211.8**	**$390.6**	**$646.9**	**$943.2**	**$1,285.2**	**$1,673.7**

Education Stability Fund[3]

(Millions)	2013-15	2015-17	2017-19	2019-21	2021-23	2023-25
Beginning Balance	$7.4	$179.4	$363.1	$567.1	$783.7	$955.6
Interest Earnings[4]	$1.0	$8.1	$33.6	$50.8	$67.2	$77.8
Deposits[5]	$171.9	$183.8	$203.9	$216.6	$172.0	$90.2
Distributions	$1.0	$8.1	$33.6	$50.8	$67.2	$77.8
Oregon Education Fund	$0.7	$0.1	$0.0	$0.0	$0.0	$0.0
Oregon Opportunity Grant	$0.2	$8.0	$33.6	$50.8	$67.2	$77.8
Withdrawals	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ending Balance	**$179.4**	**$363.1**	**$567.1**	**$783.7**	**$955.6**	**$1,045.9**

Total Reserves

(Millions)	2013-15	2015-17	2017-19	2019-21	2021-23	2023-25
Ending Balances	**$391.2**	**$753.7**	**$1,213.9**	**$1,726.9**	**$2,240.9**	**$2,719.6**
Percent of General Fund Revenues	2.4%	4.2%	6.2%	8.0%	9.5%	10.5%

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. Includes forecast for corporate income taxes above rate of 6.6% for the biennium are deposited on or before Jun 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%), provided there remains debt outstanding. In the event that debt is paid off, all interest earnings distributed to the State Scholarship Fund.
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

Table C.1 Population Forecasts Component of Change 1980-2022

STATE OF OREGON
POPULATION FORECASTS
COMPONENTS OF CHANGE 1980 -2022

Year		Population Change		Births		Deaths		Natural	Net Migration	
(July 1)	Population	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	45,447	11.53	33,503	8.50	11,944	31,746	8.06
2015	4,009,000	46,290	1.17	45,849	11.50	34,161	8.57	11,688	34,602	8.68
2010-2015		**171,700**		**226,543**		**166,073**		**60,470**	**111,230**	
2016	4,055,800	46,800	1.17	46,291	11.48	34,702	8.61	11,589	35,211	8.73
2017	4,103,700	47,900	1.18	46,730	11.45	35,162	8.62	11,567	36,333	8.91
2018	4,152,400	48,700	1.19	47,110	11.41	35,653	8.64	11,457	37,243	9.02
2019	4,201,500	49,100	1.18	47,511	11.37	36,175	8.66	11,336	37,764	9.04
2020	4,251,000	49,499	1.18	47,886	11.33	36,785	8.70	11,101	38,399	9.09
2015-2020		**241,999**		**235,527**		**178,478**		**57,049**	**184,950**	
2021	4,300,400	49,401	1.16	48,218	11.28	37,517	8.77	10,701	38,699	9.05
2022	4,349,900	49,500	1.15	48,529	11.22	38,302	8.86	10,227	39,273	9.08
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		**413,699**		**462,070**		**344,551**		**117,519**	**296,180**	29,618
2012-2022		**466,165**		**468,539**		**355,130**		**113,410**	**352,755**	35,275

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

	2000			2001			2002			2003			2004			2005		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	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	127,250	119,862	247,112	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	54,996	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

	2006			2007			2008			2009			2010			2011		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	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	256,567	133,027	126,562	259,588	134,019	127,039	261,058	133,094	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	122,827	251,606	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	128,975	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

	2012			2013			2014			2015			2016			2017		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	119,516	113,359	232,875	118,293	111,849	230,142	117,865	111,489	229,355	117,961	111,518	229,479	118,787	112,182	230,970	119,825	113,272	233,097
5- 9	122,733	116,900	239,634	124,024	117,953	241,978	124,729	118,034	242,763	125,356	118,198	243,554	124,965	117,654	242,619	124,231	116,513	240,744
10-14	123,603	118,287	241,890	123,387	118,207	241,593	123,401	118,460	241,860	122,898	118,234	241,132	123,508	118,258	241,766	125,051	119,880	244,931
15-19	127,517	120,587	248,104	126,643	119,875	246,519	126,839	119,967	246,807	127,512	120,490	248,003	127,645	121,133	248,778	127,765	120,988	248,753
20-24	132,853	128,787	261,640	135,293	130,705	265,998	136,726	132,060	268,787	136,885	132,113	268,997	136,065	130,738	266,803	135,468	130,032	265,501
25-29	132,463	129,927	262,390	132,508	130,402	262,911	134,559	132,850	267,410	137,408	136,387	273,795	141,597	141,385	282,982	145,536	145,569	291,104
30-34	135,689	133,329	269,018	137,321	135,074	272,395	139,918	137,402	277,320	141,131	138,419	279,550	142,588	139,602	282,190	143,328	140,510	283,837
35-39	126,018	122,275	248,293	128,684	124,339	253,023	130,854	126,561	257,415	134,320	129,727	264,047	137,544	132,799	270,342	140,925	136,222	277,148
40-44	130,795	126,620	257,415	131,483	127,467	258,949	131,041	126,694	257,736	129,869	125,179	255,048	128,423	123,852	252,275	129,040	124,758	253,798
45-49	125,434	124,976	250,410	123,864	122,179	246,043	124,306	121,472	245,777	126,919	123,449	250,368	130,687	126,438	257,125	133,086	128,160	261,247
50-54	133,446	139,198	272,644	132,081	137,546	269,626	131,569	136,138	267,707	129,903	133,418	263,321	127,503	130,053	257,556	125,682	126,761	252,443
55-59	134,402	143,058	277,460	134,377	142,746	277,122	133,345	142,039	275,383	133,104	142,094	275,198	133,227	142,022	275,249	132,299	141,043	273,341
60-64	122,921	129,548	252,470	124,925	132,821	257,746	127,755	136,840	264,595	130,253	139,582	269,834	132,182	141,920	274,101	133,164	143,257	276,421
65-69	92,096	98,785	190,881	97,983	105,059	203,042	103,550	110,494	214,044	109,853	117,496	227,349	116,433	124,609	241,042	118,407	126,778	245,185
70-74	62,495	69,114	131,609	67,184	73,899	141,084	71,312	78,483	149,795	74,880	82,533	157,414	77,592	85,549	163,141	85,101	93,425	178,526
75-79	42,654	50,692	93,346	44,224	52,064	96,288	46,455	54,157	100,612	48,656	56,133	104,790	50,988	58,709	109,697	53,713	62,020	115,733
80-84	30,559	41,822	72,381	30,774	41,258	72,031	31,057	40,805	71,862	31,747	40,888	72,635	32,467	41,017	73,483	33,494	41,694	75,188
85+	28,360	52,916	81,276	28,994	53,536	82,530	29,544	53,938	83,481	30,236	54,250	84,486	30,966	54,715	85,681	31,623	55,078	86,701
Total	1,923,555	1,960,180	3,883,735	1,942,041	1,976,979	3,919,020	1,964,826	1,997,883	3,962,710	1,988,893	2,020,107	4,009,000	2,013,166	2,042,634	4,055,800	2,037,739	2,065,961	4,103,700
Mdn. Age	37.6	39.9	38.7	37.8	40.0	38.9	38.0	40.1	39.0	38.1	40.2	39.1	38.3	40.3	39.3	38.4	40.4	39.4

	2018			2019			2020			2021			2022		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	120,979	114,293	235,272	122,070	115,265	237,335	123,156	116,237	239,393	124,275	117,246	241,521	125,310	118,208	243,518
5- 9	123,448	115,332	238,779	123,135	115,086	238,222	123,262	115,150	238,412	124,021	115,731	239,752	125,120	116,648	241,768
10-14	126,690	121,269	247,958	127,544	121,487	249,031	128,269	121,768	250,037	127,897	121,291	249,188	126,990	119,991	246,982
15-19	127,852	121,177	249,029	128,056	121,583	249,639	127,676	121,420	249,097	128,388	121,421	249,808	129,799	122,857	252,657
20-24	135,129	129,857	264,986	135,545	130,244	265,789	136,372	131,034	267,406	136,662	132,009	268,670	136,714	131,679	268,393
25-29	149,227	149,042	298,269	151,219	151,058	302,277	151,640	151,376	303,016	150,989	150,111	301,100	150,472	149,803	300,276
30-34	144,317	141,999	286,316	146,845	144,905	291,750	150,105	148,845	298,950	154,831	154,391	309,222	159,575	159,557	319,132
35-39	143,198	138,372	281,570	146,025	140,836	286,861	147,317	141,879	289,196	148,813	143,044	291,857	149,699	143,890	293,589
40-44	132,102	127,055	259,158	134,481	129,424	263,905	138,154	132,741	270,895	141,569	135,986	277,554	144,975	139,348	284,322
45-49	134,112	129,264	263,376	133,777	128,575	262,352	132,648	127,082	259,730	131,225	125,764	256,989	131,943	126,621	258,564
50-54	124,387	124,188	248,575	124,940	123,575	248,515	127,647	125,740	253,387	131,483	128,891	260,374	133,944	130,710	264,654
55-59	131,232	139,726	270,959	130,888	138,440	269,328	129,350	135,686	265,036	127,042	132,362	259,404	125,240	129,260	254,500
60-64	133,546	143,319	276,866	132,686	142,722	275,407	132,578	142,832	275,410	132,812	142,834	275,646	132,127	142,072	274,200
65-69	120,747	130,284	251,030	123,657	134,350	258,007	126,198	137,139	263,337	128,107	139,555	267,662	129,251	140,997	270,248
70-74	90,850	99,593	190,443	96,133	104,824	200,957	102,054	111,496	213,550	108,095	118,267	226,362	110,103	120,475	230,578
75-79	57,927	66,469	124,396	61,604	70,682	132,286	64,779	74,381	139,160	67,115	77,189	144,304	73,723	84,467	158,189
80-84	34,879	42,945	77,824	36,747	44,755	81,502	38,638	46,478	85,116	40,567	48,767	89,334	42,822	51,655	94,476
85+	32,280	55,315	87,595	32,884	55,453	88,337	33,902	55,970	89,873	34,832	56,820	91,652	35,933	57,921	93,854
Total	2,062,904	2,089,497	4,152,400	2,088,236	2,113,264	4,201,500	2,113,744	2,137,256	4,251,000	2,138,721	2,161,679	4,300,400	2,163,740	2,186,160	4,349,900
Mdn. Age	38.6	40.5	39.5	38.8	40.6	39.7	38.9	40.7	39.8	39.1	40.9	40.0	39.3	41.1	40.1

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	4,009,000	46,290	1.17%
2016	4,055,800	46,800	1.17%
2017	4,103,700	47,900	1.18%
2018	4,152,400	48,700	1.19%
2019	4,201,500	49,100	1.18%
2020	4,251,000	49,499	1.18%
2021	4,300,400	49,401	1.16%
2022	4,349,900	49,500	1.15%

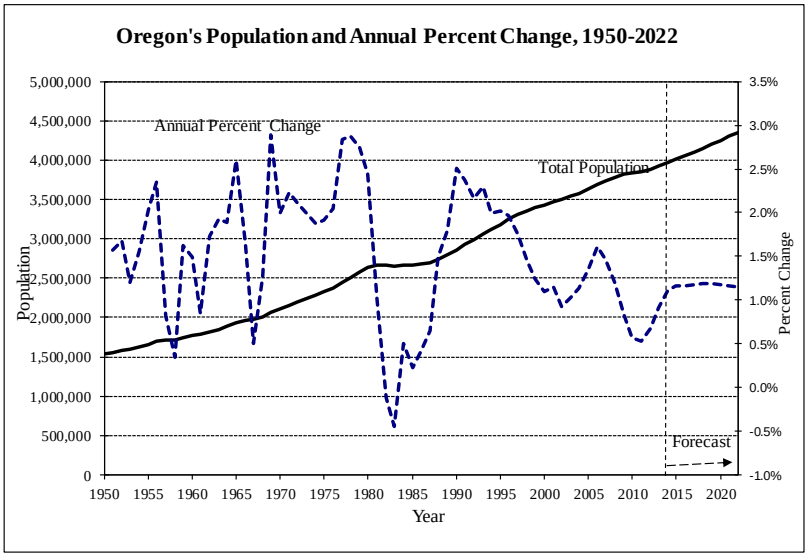


Table C.4 Children: Ages 0-4

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

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

Year (July 1)	Population	% Change from previous decade/yr. Number	Percent	Population	% Change from previous decade/yr. Number	Percent	Population	% Change from previous decade/yr. 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	229,355	-787	-0.34%	631,733	1,571	0.25%	368,484	2,558	0.70%
2015	229,479	124	0.05%	632,694	961	0.15%	368,993	509	0.14%
2016	230,970	1,491	0.65%	633,133	439	0.07%	366,832	-2,161	-0.59%
2017	233,097	2,127	0.92%	634,122	989	0.16%	365,807	-1,025	-0.28%
2018	235,272	2,175	0.93%	633,953	-170	-0.03%	366,799	993	0.27%
2019	237,335	2,063	0.88%	634,716	763	0.12%	367,965	1,166	0.32%
2020	239,393	2,057	0.87%	636,824	2,108	0.33%	368,127	162	0.04%
2021	241,521	2,129	0.89%	638,747	1,924	0.30%	368,671	544	0.15%
2022	243,518	1,997	0.83%	640,277	1,529	0.24%	369,522	851	0.23%

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)	Population	% Change from previous decade/yr. Number	Percent	Population	% Change from previous decade/yr. Number	Percent	Population	% Change from previous decade/yr. 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	668,898	8,449	1.28%	1,059,881	12,603	1.20%	1,053,463	2,926	0.28%
2015	677,257	8,359	1.25%	1,072,440	12,559	1.18%	1,058,722	5,258	0.50%
2016	685,438	8,181	1.21%	1,087,790	15,350	1.43%	1,064,031	5,310	0.50%
2017	693,022	7,584	1.11%	1,105,888	18,098	1.66%	1,063,452	-579	-0.05%
2018	699,724	6,702	0.97%	1,125,313	19,425	1.76%	1,059,776	-3,676	-0.35%
2019	707,691	7,967	1.14%	1,144,794	19,481	1.73%	1,055,602	-4,173	-0.39%
2020	713,110	5,419	0.77%	1,162,057	17,264	1.51%	1,053,564	-2,038	-0.19%
2021	719,682	6,572	0.92%	1,179,734	17,677	1.52%	1,052,413	-1,150	-0.11%
2022	726,260	6,578	0.91%	1,197,319	17,586	1.49%	1,051,918	-495	-0.05%

Table C.10 Elderly Population by Age Group

Year (July 1)	Ages 65+	%Change from previous decade/yr.	Ages 65-74	%Change from previous decade/yr.	Ages 75-84	%Change from previous decade/yr.	Ages 85+	%Change from previous decade/yr.
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	619,794	4.17%	363,839	5.73%	172,474	2.47%	83,481	1.15%
2015	646,673	4.34%	384,762	5.75%	177,425	2.87%	84,486	1.20%
2016	673,044	4.08%	404,183	5.05%	183,180	3.24%	85,681	1.41%
2017	701,334	4.20%	423,712	4.83%	190,921	4.23%	86,701	1.19%
2018	731,288	4.27%	441,473	4.19%	202,220	5.92%	87,595	1.03%
2019	761,088	4.08%	458,963	3.96%	213,788	5.72%	88,337	0.85%
2020	791,036	3.93%	476,887	3.91%	224,276	4.91%	89,873	1.74%
2021	819,314	3.57%	494,023	3.59%	233,638	4.17%	91,652	1.98%
2022	847,346	3.42%	500,826	1.38%	252,666	8.14%	93,854	2.40%