



Kate Brown  
GOVERNOR

# Oregon Economic and Revenue Forecast

**December 2022**

Volume XLII, No. 4

Release Date: November 16<sup>th</sup>, 2022

Oregon Office of  
Economic Analysis



**Department of Administrative Services**

Berri Leslie

DAS Director

Chief Operating Officer

**Office of Economic Analysis**

Mark McMullen, State Economist

Michael Kennedy, Senior Economist

Josh Lehner, Senior Economist

Kanhaiya Vaidya, Senior Demographer

<http://oregon.gov/DAS/OEA>

<http://oregoneconomicanalysis.com>

[http://twitter.com/OR\\_EconAnalysis](http://twitter.com/OR_EconAnalysis)

## **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.



Berri Leslie  
DAS Director  
Chief Operating Officer

# Table of Contents

- EXECUTIVE SUMMARY** ..... 1
- ECONOMIC OUTLOOK** ..... 3
  - Mild Recession in the Baseline ..... 3
  - Nature of the Expected Recession ..... 4
  - Why a Mild Recession? ..... 8
  - Avoiding a Recession is Still Possible ..... 11
  - Alternative Scenarios ..... 14
  - Construction and Housing Outlook ..... 15
  - Oregon’s Agricultural Economy ..... 17
  - Longer-Term Forecast Risks ..... 19
  - Extended Outlook ..... 20
- REVENUE OUTLOOK** ..... 24
  - General Fund Revenues, 2021-23 ..... 25
  - Extended Outlook ..... 27
  - Tax Law Assumptions ..... 28
  - Alternative Scenarios ..... 29
  - Corporate Activity Tax ..... 29
  - Lottery Outlook ..... 30
  - Budgetary Reserves ..... 32
  - Recreational Marijuana ..... 33
- POPULATION AND DEMOGRAPHIC OUTLOOK** ..... 35
- APPENDIX A: ECONOMIC** ..... 39
- APPENDIX B: REVENUE** ..... 47
- APPENDIX C: DEMOGRAPHIC** ..... 64

## EXECUTIVE SUMMARY

### December 2022

A recession now appears more likely than not. The consensus among national forecasters, and our office's advisors expects a mild recession to begin within the next year. This change in the baseline forecast is not due to any fundamental deterioration in the economy in recent months, but rather a shift in assessing the risks. In particular with inflation remaining well above the Federal Reserve's target, expectations are that interest rates will need to be higher and held there longer than previously thought. Slamming on the brakes of a speeding car will cause it to skid and even fishtail. The question is whether the driver is able to pull out of it or end up in the ditch. Most economists today believe a recession is likely, even if the exact path of the economy is uncertain.

Our office has now incorporated a mild recession in Oregon starting next summer. Job losses total 24,000 for a 1.2 percent decline. Job losses will be larger in goods-producing industries like construction and manufacturing, and industries tied to them like finance, and transportation and warehousing. The unemployment rate increases from today's 3.8 percent to a peak of 5.4 percent in early 2024. Income and spending slow, but do not turn negative. Such a cycle would be one of the shallowest, and shortest recessions on record, similar to 1990. The nature of the cycle is more technical than fundamental, more of a fender-bender than a head-on collision.

There are three reasons why a milder recession is to be expected today. First, businesses, financial markets, and households all indicate that they expect today's high inflation to slow in the years ahead. If high inflation is not fully embedded in long-term decision making, it likely only takes a milder recession to bring inflation down.

Second, it has been difficult to find workers for the past handful of years. The labor market is cyclical tight due to a strong economy, and structurally tight for demographic reasons as the large Baby Boomer generation continues to retire. Firms do not want to let go of workers, and likely will work to hold onto workers even as sales slow in the years ahead. Economists call this labor hoarding. With record corporate profits, many businesses have the financial room to do just that.

Third is the strong financial position households are in. Consumer spending is expected to hold up well in the pending recession in large due to the higher level of savings, which is for households across the distribution. Should spending remain strong, firms will have less incentive to cut jobs. Today's strong household balance sheets can help short-circuit the typical negative feedback loop of a recession.

The baseline economic outlook now calls for a mild recession. This is hard to see in the topline outlook for state revenues, as the forecast for available resources remains roughly unchanged in the near term. The recession is expected to be mild, and personal income is expected to remain stable despite job losses. Underlying personal income is not only the primary driver of Oregon's dominant personal income tax, but also a wide range of consumption-based taxes including the corporate activity tax and lottery sales.

In terms of job losses, the baseline scenario looks identical to the recession of 1991. The 1991 cycle was unique in that it did not result in a pronounced downturn in state revenues, only a couple of relatively flat years of available resources.

Unlike what was seen during the 1991 cycle, revenues are expected to drop going forward with or without a recession. General Fund revenues are due for a hangover in 2023-25 even if the economic expansion persists. Recent gains have been driven by taxpayer behavior as well as by underlying economic growth. After so much nonwage income was pulled into tax years 2020 and 2021, less will be realized in the near term. As profits and investment income return to earth, and a record kicker is paid out, expected revenues next biennium will be

around \$3 billion lower than the current biennium. That said, it is surprising that the recession call did not make this expected decline noticeably worse.

This taxpayer behavior also puts Oregon's revenues at risk of the sharp declines experienced after asset market corrections in 2001 and 2007. With recession on the horizon, profits and gains could soon turn into losses, and a smaller share of filers could be subject to the top rate. Recent revenue growth has been more pronounced than during any other period on record. During tax year 2021, personal income tax liability grew at almost double the pace of that was seen during the peaks of the housing and technology booms. Hopefully, the upcoming hangover in revenue growth will not be as pronounced.

The bottom line is that the unexpected revenue growth seen this year has left us with unprecedented balances this biennium, followed by a record kicker in 2023-25. The projected personal kicker is \$3.7 billion, which will be credited to taxpayers when they file their returns in Spring 2024. The projected corporate kicker is \$1.3 billion, which will be retained for K-12 educational spending.

# ECONOMIC OUTLOOK

## Mild Recession in the Baseline

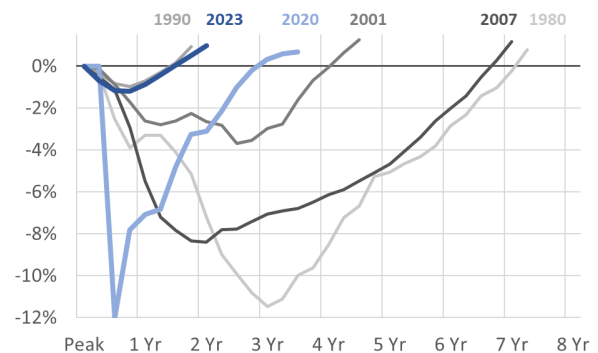
A mild recession is now the most likely outcome for the economy. Slowing economic growth, high inflation, and rising interest rates are a potent combination. Historically, inflationary booms do not end well. In our office's previous forecast the risk of recession was great enough that our office did two full model runs. The first was for the soft landing, no recession outlook and the second was for the boom/bust recession scenario. The overall assessment of the economy today is not fundamentally different than last quarter, however with inflation holding at or near 40 year highs and the Federal Reserve committed to bringing inflation down, the risks have shifted further. A recession now appears more likely than not.

Just as the timing and nature of this cycle has been different than recent experiences, so too is the expected recession. In broad terms the recession is more technical than fundamental in that the impact on jobs, income, and spending is mild. The recession is driven by declines in residential construction and overall business investment due to high interest rates. Additionally, high interest rates and a strong U.S. dollar will weigh on domestic manufacturing activity and exports.

Real GDP is expected to once again turn negative in the quarters ahead, with job losses beginning next summer. While not severe from a historical perspective, Oregon employment declines 1.2 percent, or a loss of 24,000 jobs. The unemployment rate increases to 5.4 percent by early 2024. Income and spending do not decline outright, at least in nominal terms, but do grow slower than in the soft landing alternative scenario. The declines in business investment and slowdown in personal income and consumer spending are enough to alleviate pressures in the economy, and inflation returns to the Federal Reserve's target in 2024.

## Oregon Recession Comparisons

Employment percent change from pre-recession peak



Source: Oregon Employment Department, Oregon Office of Economic Analysis

The economic outlook is highly uncertain today. Risks abound. The sharp rise in interest rates this year is akin to taking one's foot off the gas and slamming on the brakes. The car will shake, skid and even fishtail. The ultimate question is does it end up in the ditch or is the driver able to pull out of it? An economic soft landing remains possible even as the odds have shifted such that a recession is more likely than not. Alternatively, a more severe recession may ultimately be needed if high inflation is more entrenched in the economy than realized.

## Note on the Oregon Office of Economic Analysis Forecast Process

Our office, the Oregon Office of Economic Analysis, has a forecast process that incorporates a high level, U.S. macroeconomic forecast from an outside vendor, IHS Markit. There are several reasons for this. One is it keeps some specific forecasts, like the stock market, at arm's length. Capital gains and the associated tax revenue are an important part of the personal income tax forecast. An outside vendor providing such inputs to our forecast helps maintain objectivity and push back on objections that our office is cooking the books.

Another reason is the macroeconomic forecast includes many more variables than our small office could provide, and that other state agencies lean on in their work. This could include estimates of the fuel efficiency of the vehicle fleet, or more detailed forecasts for interest rates on various financial products and the like.

Even so, these outside forecasts also can fail to notice changes to things that our office does care about. There are times where our office does disagree with and diverge from the national outlook regarding productivity in the wood products industry, or more simply that a national forecast for natural resources employment is driven by oil and gas while here in Oregon it is driven by logging instead.

Our office meets quarterly with our three main advisory groups to vet the reasonableness of the macroeconomic forecast, and the preliminary Oregon forecasts before finalizing the outlook.

Our office and our advisors are willing to push back on certain aspects of the national outlook that we disagree with, however it is a different discussion to throw the entire process away. Today,

IHS Markit has incorporated a mild recession as their baseline outlook. The latest Wall Street Journal’s Economic Forecasting Survey shows 63 percent of forecasters expect a recession in the coming 12 months. Our office’s advisors agree. 10 of the 11 current, or past members of the Governor’s Council of Economic Advisors present at our most recent meeting voted to put a recession in the baseline. 15 of 16 members of the DAS Economic Advisors, a group of government analysts and economists, voted to put a recession in the baseline as well.

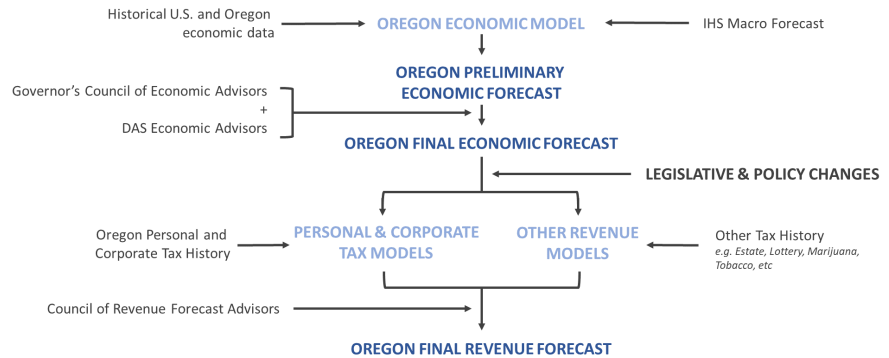
Given that the consensus of economic forecasters has not called a recession in advance before, and only tend to agree there is a recession once one is already underway this is a bit worrisome. Either the upcoming recession is the most telegraphed in history or everyone is missing something. The Federal Reserve will tell you it’s the later, even as the combination of slowing economic growth, high inflation, and rising interest rates is problematic. For now our office is sticking with our process and incorporating a mild recession in the baseline.

The current Oregon economic and revenue forecast does differ in some meaningful ways from the national outlook. IHS forecasts real GDP to be negative starting this quarter, 2024q4, and job losses to ensue in January 2023. Our office, along with our advisors believes the assessment of risks is right but that the timing is wrong. There is simply too much momentum in the labor market for it to turn so quickly to lead to net job losses in a month or two, even as that is a risk. Initial claims for unemployment insurance in recent weeks remain at or near record lows. As such, the Oregon forecast has slowing employment growth in the near-term but pushes the job losses out until next summer. Oregon job losses are not expected to begin until 2023q3, which is one quarter earlier than our old alternative scenario of the boom/bust that began in 2023q4.

**Nature of the Expected Recession**

Inflation remains the single most important macroeconomic issue today. In recent months inflation as measured by the Consumer Price Index has held steady around 8 percent. The latest numbers for October, released last week, show the first real signs of slowing, but so far remains a single data point. It will take time for the higher interest rates to continue to slow inflation. The Federal Reserve is looking for convincing evidence that inflation is slowing before adjusting or rethinking policy. A single month of data is not yet convincing.

**Oregon Office of Economic Analysis Forecast Process**

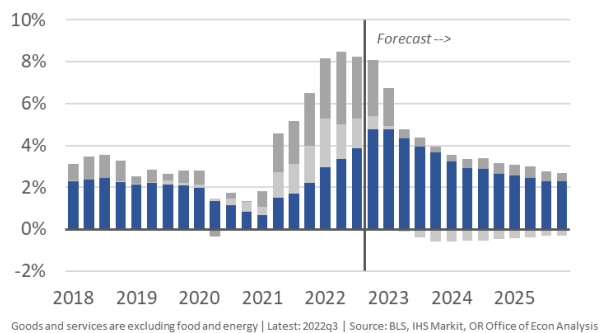




More problematic are the changes underneath the inflation topline. Even as energy and goods prices slow – gray bars in the chart – the acceleration in service inflation – blue bar in the chart – has offset the improvements leaving total inflation essentially unchanged. In a sense one can think of the energy shock from Russia’s invasion of Ukraine, and the supply chain struggles driving goods inflation as supply shocks to the economy and outside of the Federal Reserve’s control. These price increases are and will slow down and even reverse somewhat. Headline inflation will slow as a result from today’s highs. The underlying inflation trend in the U.S. is not 8 percent. However, service inflation is more likely to be driven by demand, which is under the control of the Fed and monetary policy. The underlying trend in inflation appears to be more like 3 or 4 or 5 percent depending upon how one slices the data, which is well above the Fed’s target.

### West Region Consumer Price Index

Decomposing year-over-year inflation: Food and Energy, Goods, and Services



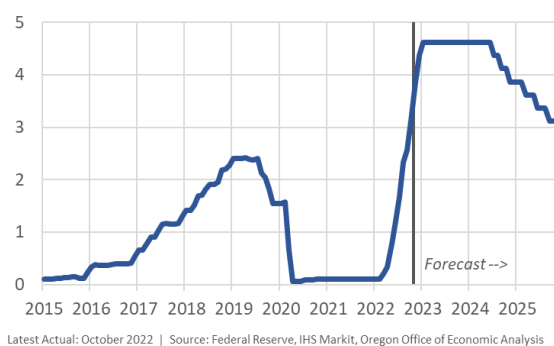
The outlook is for inflation to slow, and higher interest rates are a part of that. The challenge for the Fed and therefore the economy is how quickly will inflation slow, and when it does slow, what pace does it slow down to? From today’s vantage point it is unknown just how high interest rates need to go, especially if the Fed is going to thread the policy needle and engineer a soft landing. An additional challenge here are policy lags. Financial markets tend to be impacted immediately from changes in monetary policy, but the impacts on the rest of the economy can take anywhere from 6 to 12 to 24 months to be felt. With interest rates increases this cycle beginning in March 2022, the impacts are only now starting to show a little. The full effects will not be felt until next year, which is one reason why our office has pushed out the recession date relative to IHS.

Today’s potent combination of slowing growth and high inflation makes the Federal Reserve’s job more challenging. Fed Chair Jerome Powell at the November 2<sup>nd</sup>, 2022 press conference said that the path to the soft landing had narrowed. Chair Powell went on to say that the greater risk was not raising rates high enough to actually bring inflation back to target. The Fed is communicating they are willing to risk a recession to ensure inflation comes down, and ultimately it is this dynamic and forecasters are increasingly expecting.

So far this year the Federal Reserve has raised interest rates nearly 4 percent, going from a zero percent Fed Funds Rate to start the year to the range of 3.75 to 4.0 percent today. Increases of another one percent or so are likely in the months ahead. Back in September the Fed anticipated raising interest rates to the range of 4.5 to 4.75 percent. The Fed will then hold rates at that level into 2024 to cool the economy and inflation pressures ease over time. At the November press conference Chair Powell said that rates would likely be going higher than the September projections. The next set of Fed projections will be released on December 14.

### The Federal Reserve and Interest Rates

The Fed’s own forecast of the Fed Funds Rate



While much of the focus this year has been on the fast pace and size of rate hikes, what matters now is ultimately how high rates go this cycle, the so-called terminal rate, and how long they stay in the restrictive range. It’s this combination of high rates for a period of time that will cool the economy. The Fed is looking to downshift the size of the rate hikes in the coming months from the recent 75 basis point, or 0.75 percent

increases. This downshift will likely be to 50 basis points a meeting and then to 25 basis points a meeting, depending on realized inflation, and the broader set of economic data. Current expectations are the terminal rate will be in the vicinity of 5 percent, up slightly from the Fed's own projections back in September.

Economically this shift in monetary policy is equivalent to having one's foot firmly placed on the gas pedal (0 percent interest rates during the pandemic to stimulate the economy) and then immediately slamming on the brakes (the expected 5 percent increase in interest rates over a 12 month period). When slamming on the brakes of a speeding car, skidding is to be expected. Right now housing is in recession and the strong U.S. dollar will weigh on manufacturing and exports. The question is whether the driver of a skidding car pulls out of it or ends up in the ditch. While the actual outcome is still to be seen, odds are that a recession is more likely than not.

High interest rates impact the economy through a few channels. By raising financing costs, higher rates cool demand for personal credit usage, housing, and business loans. Ultimately if firms are undergoing fewer expansion plans or undertaking fewer investments and households are spending a bit less it feeds back into the production side of the economy where businesses need to hire and produce less to meet this lower trajectory of demand in the economy. As higher rates slow consumer spending and business activity they also weigh on equity markets, dampening the wealth effect on the economy. As underlying economic growth slows, so too does overall inflation. Today the greatest impacts of higher rates are seen in equity markets and the single family home segment of the construction industry. Personal and business loans continue to grow at healthy paces. Consumer spending remains strong. Firms have yet to pull back meaningfully on hiring or increase layoffs, even if hiring is slowing off the pandemic reopening highs.

### **Recession Impacts in Oregon**

Unfortunately, recent decades have brought both large recessions like the dotcom bust and extra large recessions like the Global Financial Crisis and pandemic. The average unemployment rate in Oregon since 2000 is 6.6 percent, indicating an underperforming economy with lots of unemployed workers and underutilized capital has been the norm. That is not the case today for the current state of the economy and that is not even the case for the pending recession.

This cycle has been different at every step, and this is expected to continue with a different type of recession than any in recent experience. Current forecasts call for one of the mildest recessions in U.S. history from both a GDP and employment perspective, more akin to the 1960s or 1990 recessions than anything this century. That said, it is still a recession. Jobs will be lost. Some firms will see their sales dry up. Even in a soft landing scenario, there will be economic pain, as Fed Chair Powell says, in bringing inflation back to target.

Historically, Oregon's economy is more volatile than the typical state. Our recessions tend to be deeper, and our expansions stronger. This volatility is primarily driven by two things. First, migration trends are pro-cyclical as people move more in good economic times than in bad. Second, the state's industrial structure is more reliant upon goods-producing industries than the nation, which are more volatile than the service-providing industries in part due to their sensitive to interest rates and the fact consumers can time their big ticket purchases to when they have more income and/or feel more confident in their financial situation.

These dynamics are expected to impact Oregon's economy moving forward, and our office would expect when the dust settles that Oregon's recession is a bit deeper than the nation's and then our expansion would similarly be faster as interest rate sensitive sectors revive, and migration flows rebound.

Specifically, Oregon employment losses are expected to total 24,000 jobs on net from 2023q2 to 2024q1, for a 1.2 percent decline overall. Growth resumes 2024q2 and the state regains its lost jobs by the end of the year, marking both a shallow, and short cycle. Over the full forecast horizon, the outlook remains relatively unchanged with little permanent damage or economic scarring from the expected 2023 recession.

In percentage terms, larger job losses are expected in goods-producing industries like construction (-3.2%) and manufacturing (-1.6%), in addition to other sectors directly tied to them like trade, transportation, and warehousing (-2.3%). Furthermore, financial activities are expected to see larger job losses (-3.0%) due to the sharp decline in home sales impacting banks, mortgage lenders, real estate agents, and the like.

On the other side, with household incomes and consumer spending expected to continue to grow, albeit at a slower pace, many consumer-facing service industries are expected to hold up better. Smaller job losses are expected in health care (-1.1%), other services (-1.1%), and leisure and hospitality (-0.9%).

The public sector is expected to see average to slightly above average sized job losses of 1.4%, although the timing between state, local administration, and local education are a bit different and can be masked when combined at the total government level. Given strong public revenues today and sizable reserves, there is clear upside risks to the public sector outlook even as a slowdown in economic activity will result in slower revenues. Back in the early 1990s, Oregon’s General Fund did not decline during that mild recession.

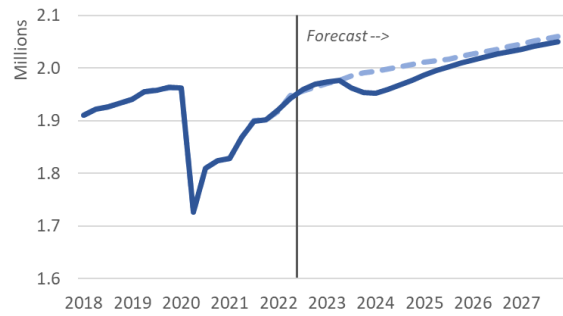
Job losses and slower wage growth per worker during a recession and disinflationary period lowers labor-related income, and tax collections, in the years ahead. Comparing labor income this forecast to the previous forecast shows the outlook has been lowered around 2 percent, with larger changes at the depth of the pending recession of around 3 percent.

However, complicating these underlying forecast changes are larger than usual historical income revisions from the U.S. Bureau of Economic Analysis. In particular, non-wage income in Oregon has been revised 5 percent higher in recent years than previously estimated. These upward revisions were predominantly in nonfarm proprietors’ income and dividends, interest, and rent. When the larger amount of non-wage income is combined with the lower wage outlook, it leaves total personal income in Oregon relatively unchanged one forecast to the next, despite the recession, as seen in the dotted black line.

Two important items to note. One is that if overall income is relatively unchanged, that feeds through into the outlook for many consumption-based taxes like the Corporate Activity Tax, Lottery, recreational marijuana, and the like where those changes are likewise mild in nature. If Oregonians have more income than previously believed, it supports stronger consumption than previously believed.

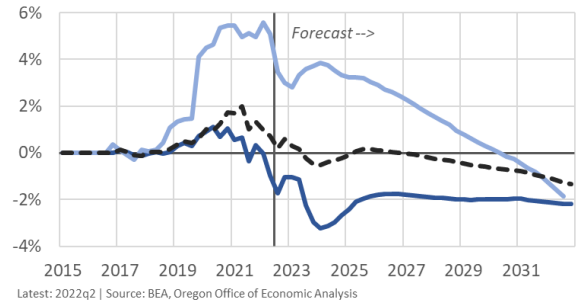
## Oregon Employment

December 2022 Forecast | September 2022 Forecast



## Oregon Personal Income Forecast Revisions

Percent change from current forecast compared to previous  
Total Income | Labor Income | Non-wage Income



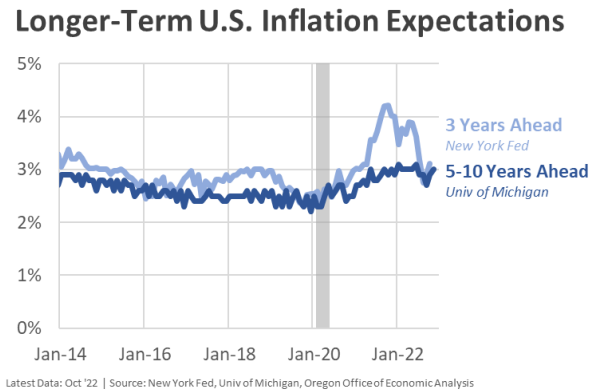
Two is that in terms of personal income taxes, the impacts are actual minimal to nonexistent. Oregonians have already reported their incomes and paid their taxes for 2019, 2020, and 2021. In fact the BEA uses IRS tax return data as part of their revision process. Our office already knows that non-wage income like business income, proprietors income, capital gains, dividends, interest, and rent and so forth have been very strong in recent years. These upward revisions are no surprise. In fact, given the strength reported on tax returns, future BEA income revisions are probably going to be upward as well.

However, the downward trajectory of the light blue line in the chart is that the outlook for non-wage income is due to slightly slower growth every year in the years ahead. This will affect different components of income as part of the overall personal income tax forecast as a result.

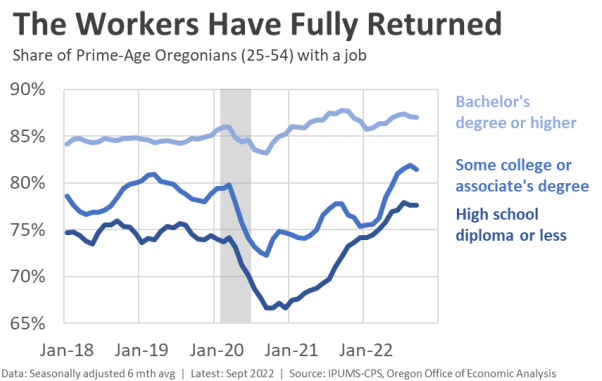
**Why a Mild Recession?**

Recent recessions have been characterized by large to massive job losses and an overall lack of aggregate demand (income, spending, and investment). It has taken years for the economy to fully heal. This cycle is expected to be different for three primary reasons: inflation expectations remain well anchored, firms will hoard labor, and household balance sheets are in good shape. Let’s take each in turn.

First, despite the fastest inflation in 40 years, firms, households, and financial markets all indicate they expect inflation to slow in the years ahead. While surveys of future expectations are not the same thing as actual behavior, they do indicate that businesses and households are not yet adjusting their long-term decisions based on today’s high inflation. This likely means that high inflation is not yet entrenched in the economy. If high inflation is not entrenched in the economy then a more mild recession would be needed to wring out inflation. Conversely, should high inflation be more entrenched than realized, or than these surveys indicate, then a more severe recession may ultimately be needed to bring inflation down. But for now, the Federal Reserve and economists will take at least some comfort in these surveys of inflation expectations.



Second, the labor market is tight. It was hard to find workers in the years leading up to the pandemic, and even harder today given the imbalance where there are more job openings than unemployed workers. One basic reason for the tight labor market is simply that most people who want a job, have a job. Employment rates, or the share of Oregonians with a job, are higher today than before the pandemic for all levels of educational attainment.



Another basic reason for the tight labor market is demographics. The Baby Boomer generation has been retiring in recent years and will continue to for the next decade. The inflows of younger workers into the labor market outnumber the retirements, at least in places like Oregon, so the labor force is growing on net. However, the pace of those net gains is slower than it used to be due to both the increase in retirements, and a slowdown in migration and a relatively smaller Gen Z population here in Oregon.

All told, firms that have been desperate to hire workers in recent years will be very reluctant to let go of workers if sales slow a little bit. It would take a large decline in revenue for firms to lay off workers in large numbers. Economists call this labor hoarding, which is something firms have not done in generations in the U.S. but is expected to be back in vogue. Strong business revenues and record corporate profits also provide wiggle room in the budget for firms to retain more workers than they may have in past recessions.

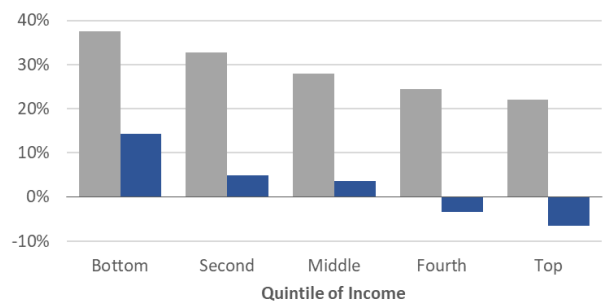
Third, household finances remain strong. Of course a recession would weaken household balance sheets, but given the accumulation of savings during the pandemic, the large wage increases, asset markets that are higher today than before COVID, and relatively lower levels of debt compared to the income gains, the recession weakening would be coming off historic strengths. This would mean, at least in aggregate, that consumer spending would hold up better in the upcoming recession than in recent cycles.

Last quarter our office flagged the possibility for differences across the distribution when it comes to household finances. Given income and wealth inequality in the U.S. and here in Oregon, many of the topline economic data on income and spending are driven by high-income households. The concern was low- and middle-income households could be falling behind due to high inflation and any slowdown in the economy.

Thankfully this does not appear to be the case. New data through the second quarter from both the Federal Reserve<sup>1</sup>, and the JP Morgan Chase Institute<sup>2</sup> show that low- and moderate-income households are still doing well financially. Checking account balances remain strong and show no deterioration across the distribution. Net worth for all households is higher today than before the pandemic (gray bars). If we narrow the focus to the most recent two quarters where inflation has been the hottest (blue bars), net worth still rose among low- and middle-income households, while high-income households net worth declined along with equity markets. Our office will continue to monitor these quarterly updates on household finances across the distribution.

### Pandemic Changes in New Worth

2019q4 - 2022q2 | 2021q4 - 2022q2



Source: Federal Reserve, Oregon Office of Economic Analysis

Now, one risk here when it comes to household finances is just how strong will they be when the recession does begin. Finances are clearly still strong in recent months. However, with inflation remaining hot, and with the job market expected to slow down before it turns south entirely, what will the financial cushion look like at that point? To the extent household balance sheets are in materially worse shape than they are today, the recession may be more severe than anticipated. However, if finances remain in good shape overall, then a mild recession is much more likely.

### Regional Impacts of Recession

While every state and local economy is impacted by changes at the macroeconomic level, there are distinct differences over time due to the nature of the cycle, the local industrial mix, and other key factors like demographics and migration trends. Currently, two considerations stand out when discussing the pending recession from a local perspective.

<sup>1</sup> <https://www.federalreserve.gov/releases/z1/dataviz/dfa/>

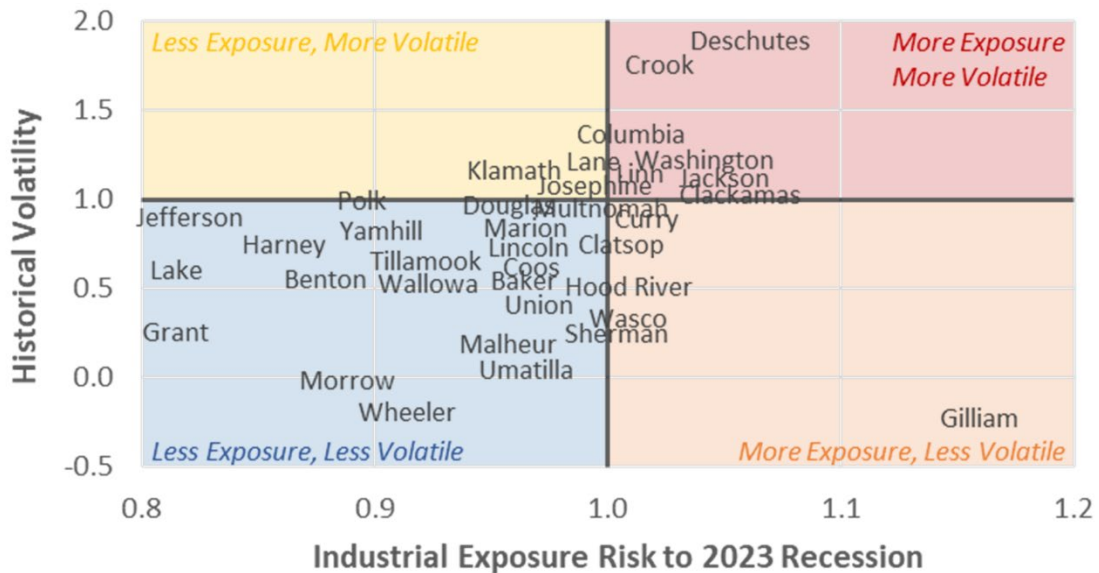
<sup>2</sup> <https://www.jpmorganchase.com/institute/research/household-income-spending/household-pulse-cash-balances-through-june-2022>

First, to what extent does the local economy have a larger, or smaller, reliance on industries that are expected to be the most impacted in the pending recession. This cycle, exposure to credit-sensitive sectors like construction and manufacturing are more likely to weigh on the local economy, as are having a larger share in trade, transportation, and warehousing, along with financial activities. Conversely, with consumer services expected to perform relatively better, local economies with more jobs in industries like health care, leisure and hospitality, and other service are likely to outperform in the coming 12-24 months. This exposure to the nature of the expected recession next year is shown on the horizontal, or x axis in the scatterplot below. A value greater than 1.0 indicates a higher reliance on more impacted sectors while a value less than 1.0 indicates a smaller reliance on those industries.

Second, just as Oregon is more volatile than the nation, some local economies are more volatile than the state. Such volatility leads to deeper local recessions, and stronger local expansions. On the vertical, or y axis in the scatterplot, this volatility is measured looking at annual job growth across counties from 2000 to 2019 compared to statewide growth. A value greater than 1.0 indicates local employment is more volatile than the state, while a value less than 1.0 indicates local employment is more stable than the state.

Combined, these two measures show in advance which local economies in Oregon have the most exposure to the upcoming recession from an industrial mix perspective, and while local economies tend to be more volatile in recent decades. Of course past experience is no guarantee of future performance, but these patterns are indicative of the possible impacts.

## Oregon Counties and Recession



What stands out is that many of the state’s urban areas are most at risk. This includes the Bend (Deschutes County) and Medford (Jackson County) metro areas, along with the Portland suburbs (Clackamas, Columbia, and Washington counties). Other metro counties like Lane (Eugene MSA), Linn (Albany MSA), Josephine (Grants Pass MSA), and Multnomah (Portland MSA) are right about the statewide figures (1.0 on the chart) and are historically a bit more volatile.

Among rural areas, Crook County (Prineville) is part of the fast-growing Central Oregon region, while Gilliam County has a very high share of local jobs in transportation and warehousing, an industry expected to see above-average declines as consumers continue to shift back into services and away from goods.

Most other counties in Oregon have less reliance on the most affect industries and have historically been a bit more stable than the state over recent business cycles.

Again, past experience is no guarantee of future performance. Every recession is a bit different and therefore impacts local economies differently as well. In thinking through how some of the macro changes will impact local economies across the state, it may help identify some risks or issues to watch. And to the extent local economies under- or overperform relative to these expectations will be an important topic to research in the years ahead.

### **Avoiding a Recession is Still a Possibility**

It is not a foregone conclusion that the economy will enter into a recession. The current assessment of the economy remains largely unchanged from last quarter when the odds favored a soft landing compared to the boom/bust. Today those relative odds have shifted as there has been no fundamental deterioration in the economy. Make no mistake, the risks are real. However the exact path the economy takes remains unknown. Plus every single month the economy does not fall into recession means that jobs, income, and spending all increase. These are the economic measures most Oregonians care about the most in terms of their personal situation.

The case for the soft landing is if you squint, you can make a convincing case that nearly all of the data is starting to turn in such a way that makes the soft landing possible, even if it is not the most plausible outcome, or at least not yet. Keep in mind that the near-term path of the economy looks pretty similar regardless of if the economy is headed for recession or a soft landing. Economic growth, including jobs, wages, and spending need to slow to bring inflation down, but they would also slow in a recession.

The most important data point is the just released October inflation data. As noted previously the underlying details to inflation are worrisome, and the slowing in October is just a single month. However should the expected process of stabilizing or declining goods and energy prices plus slowing in service inflation play out a bit faster, it would allow the Federal Reserve more room to breathe as they search for the right pace and level of interest rates. Doing so would mean a lower probability of tightening too much and sending the economy into recession.

Additionally, part of the ongoing strength in inflation has been the strong household finances that allow consumers to pay higher prices. There has not been any demand destruction of note to date when it comes to consumers, outside of homebuying. Even so, household finances are shifting away from extraordinary to normal. Labor income is slowing some as job growth slows off the pandemic reopening highs, and average hourly earnings are likewise starting to slow just a little. While wage growth is an important economic measure of well-being, wage growth noticeably larger than productivity gains is inflationary. A slowdown in wages to something more sustainable with the Federal Reserve's target is needed. The data is clearly not there yet, but is beginning to move in that direction.

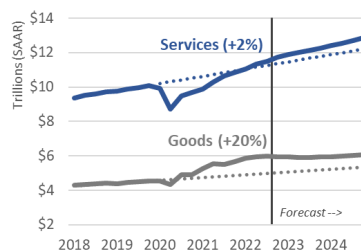
Besides current income, the wealth effect of a down stock market this year and soon-to-be declines in home equity dampen households' ability to spend as well, which will help slow inflation. The risk here is that as household finances swing away from exceptional strength and back toward normal dynamics that they don't stop there but deteriorate even further, negatively impacting the economy.

Another data point that is starting to turn in such a way to slow inflation is the shift in consumer spending. Goods remain 20% above the pre-pandemic trend in nominal terms, but has more or less been moving sideways in recent quarters and no longer surging ahead. This relative slowing in goods spending takes some pressure off supply chains and goods inflation. The long anticipated shift back into services is happening at the same time. Now, the increase in service spending has been inflationary as well given the tight labor market and rising price of inputs. However a rebalancing of spending back toward pre-pandemic patterns should better stabilize prices in the future, hopefully. Note that the nearby charts of U.S. consumer spending include the pending recession in them. Nominal spending continues to increase even in a mild recession, while real, or inflation-adjusted spending temporarily stalls out.

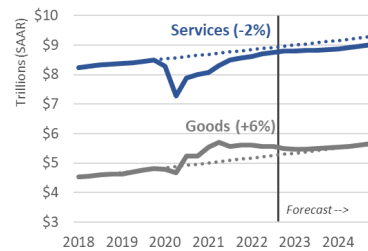
## U.S. Consumer Spending

Dotted lines are pre-pandemic trends

Nominal (not adjusted for inflation)



Real (adjusted for inflation)



Latest: 2022q3 | Source: IHS Markit, Oregon Office of Economic Analysis

### Labor Market Starting to Cool

Perhaps nowhere is a slowdown more needed than in the labor market. Strong job growth and employment prospects are vital to economic health. However there is a difference between a strong and tight labor market and an overheating labor market. Given wage growth is clearly outstripping productivity gains, it is inflationary today. A slowing in wage growth (and an increase in business investment and productivity) is needed for underlying inflation to return to the Fed's target as wage growth provides households their baseline ability to spend.

Encouragingly the data, especially the Oregon data, does appear to be turning in such a way that a slowdown in the labor market and wage growth is not just possible, but likely. Let's start first with job openings. In August there were 1.6 job openings in Oregon for every unemployed Oregonian looking for work. Clearly labor demand (number of jobs that firms are looking to fill) is outstripping labor supply (number of available workers) which ultimately leads to the faster wage growth.

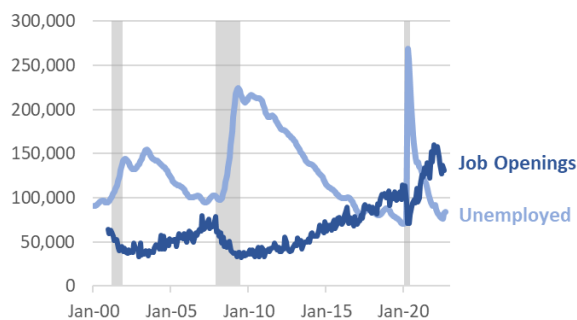
Better labor market balance could come from relatively fewer job openings or a large increase in unemployment.

The Federal Reserve's outlook is the former. This is sometimes referred to as the Waller view, named after Fed Governor Christopher Waller. In a speech earlier in the pandemic, Mr. Waller outlined how there could be a decrease in job openings which brought better balance and slower wage growth and inflation without a sizable increase in unemployment. So far this is playing out at least a little bit. Back in March there were 1.9 job openings in Oregon for every unemployed Oregonian. More progress and better balance is needed, but movement in the right direction is still movement in the right direction.

A key labor market concept is the so-called Beveridge Curve which looks at the relationship between job openings and unemployment. Generally speaking, firms are looking to fill more positions in a strong economy, and it is harder to find workers at the same time because most individuals who want a job are able to find one.

### Oregon's Tight Labor Market

In August there were 1.6 job openings for every unemployed Oregonian



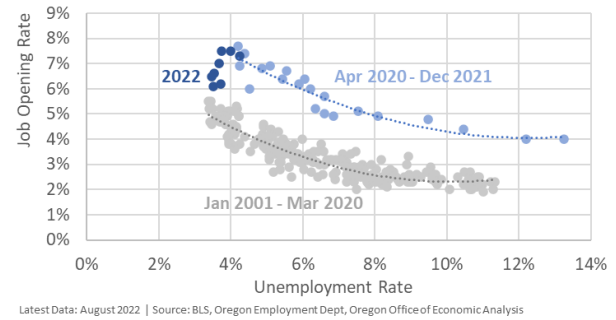
Latest: August 2022 | Source: BLS, Oregon Employment Department, Oregon Office of Economic Analysis



During the pandemic this relationship has broadly held up as before, however what is concerning is it appears to have shifted up, or shifted out as seen in the light blue dots when compared to the gray dots. What this would indicate is that for any given level of job openings, there will be higher unemployment in the economy than there was before the pandemic. One possibility is that this is a timing issue, or something the pandemic temporarily disrupted. Another possibility is something is fundamentally broken in the economy, or that the natural rate of unemployment has increased.

### Oregon's Beveridge Curve

Relationship between job openings and unemployment



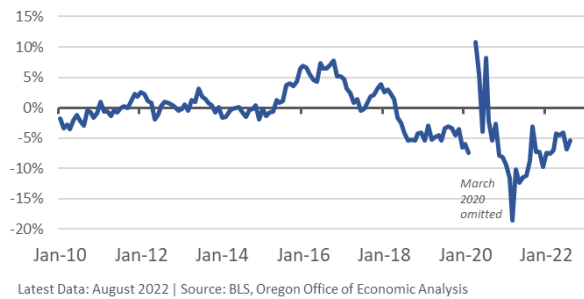
Encouragingly, the data so far this year in Oregon (dark blue dots) has brought the Beveridge curve about halfway back to the pre-pandemic patterns. This is exactly the Waller view in that job openings are declining and unemployment is not increasing. The U.S. data so far in 2022 shows less progress than does the Oregon data, although it has moved in the same direction

More encouraging is that labor matching in the economy – the speed at which unemployed workers are able to find a job, and firms looking to hire are able to do so – does not appear to be permanently broken in recent years.

The nearby chart looks at the job finding rate in the economy based on how many job openings and unemployed workers there are. It compares the actual job finding rate with the expected rate based on historical patterns. There was a clear breakdown earlier in the pandemic. This was likely due to the shutdowns, the virus itself, lack of in-person schooling and childcare, and federal aid including enhanced unemployment insurance benefits, however the data in recent months is now back to the expected patterns as seen in 2019. This is a stepdown in labor matching or efficiency relative to earlier last decade, but so far the 2022 numbers look very similar to the 2018 or 2019 numbers.

### Oregon Labor Matching

Difference in job finding rates vs predicted based on Jan 2010-Feb 2020



This job matching work is based on a 2020 Fed paper from Ahn and Crane<sup>3</sup>, which was updated more recently by the San Francisco Fed<sup>4</sup> discussing the current state of the economy. Our office created an Oregon version to better gauge the local labor market.

Finally, new Fed research from Cheremukhin and Restrepo-Echavarria<sup>5</sup> helps shed light on some of the changes in job openings and the economy in recent years. As the authors detail, when businesses hire workers they are either hiring someone who is unemployed and looking for work, or they are hiring a worker away from another firm, or poaching – a term the authors use. These are different segments to the labor market and have different impacts on job openings, wage growth, the unemployment rate and so on.

<sup>3</sup> <https://www.federalreserve.gov/econres/feds/files/2020027pap.pdf>

<sup>4</sup> <https://www.frbsf.org/economic-research/publications/economic-letter/2022/august/finding-soft-landing-along-beveridge-curve/>

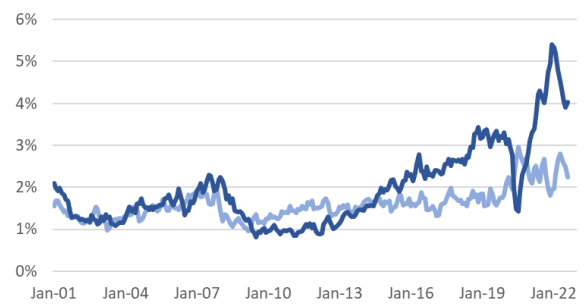
<sup>5</sup> <http://real.stlouisfed.org.s3.amazonaws.com/wp/2022/2022-021.pdf>

What the authors find nationally, and our office has recreated using Oregon data, is that the surge in job openings in recent years is due to more poaching. This has a few implications. First it means that the labor matching process, as discussed above, is not broken and unemployed workers are able to find jobs. Second, workers who switch jobs tend to see larger wage gains than those that stay at their jobs. As such, the higher rate of workforce turnover during the pandemic, including the higher rate of worker quits today as workers switch jobs, helps lead to both faster overall wage gains and inflationary pressures, and firms to advertise more openings to fill their newly vacant positions as workers leave for other opportunities. This is a distinct process from the possibility that unemployment is more structural in that the workers lack the skills needed for the available jobs, or that there is a geographic mismatch between openings and the unemployed, etc.

The decline in job openings so far this year, both nationally and here in Oregon, is coming from the poaching component and not the unemployed portion. This is encouraging that unemployed workers are still able to find jobs quickly, and that overall workforce churn may be slowing as well. As discussed in previous forecasts our office has hoped that the higher rate of worker quits, and job switching would lead to an overall better labor match. This could be in terms of skillset, geographic location and hours worked. At a minimum job switching typically is at least for higher pay. These temporary changes in the labor market, moving from one job to another, can be disruptive from a productivity standpoint. After a period of training or getting acquainted at a new place of work, the expectation is productivity will pick back up. A cooling in the labor market, where more workers are in better financial and workplace positions could be beneficial for the overall economy.

### Decomposing Oregon's Job Openings

Job opening rate for the **unemployed** and for **poaching other workers**



Latest Data: August 2022 | Source: BLS, Federal Reserve, Oregon Office of Economic Analysis

### Alternative Scenarios

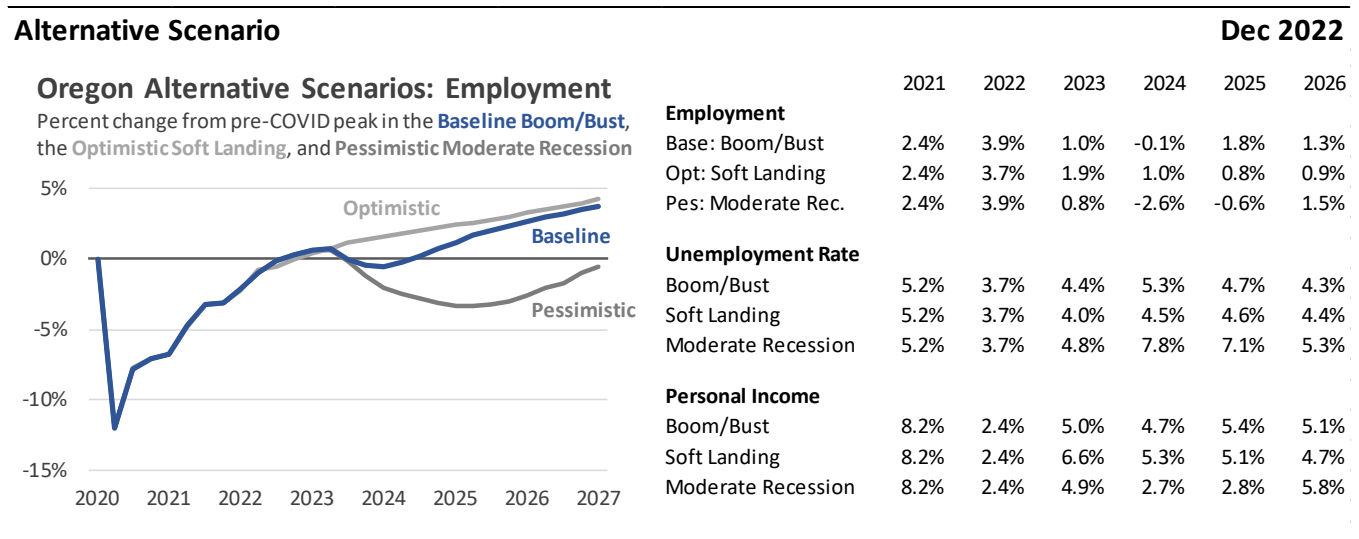
The baseline outlook is our forecast for the most likely path for the Oregon economy. As with any forecast, however, many other scenarios are possible. Historically the combination of slowing economic growth, high inflation, and rising interest rates is problematic and a mild recession appears more likely than not. However it is still possible the economy avoids a recession, or that a more severe recession is ultimately needed to bring inflation down. The two alternative scenarios below are not the upper and lower bounds of all outcomes. Rather, these alternative scenarios are modeled on realistic assumptions that are somewhat more optimistic or pessimistic than the baseline. For the revenue implications of the alternative scenario see page 29.

#### Optimistic Scenario: The Soft Landing

The shifts in the data that are just underway continue, albeit a bit faster than in the baseline. In particular the slower pace of inflation in October continues through the end of the year. The Federal Reserve is able to keep its foot on the brakes but no longer slam down on the pedal. The Fed Funds rate still drifts higher, into the mid-4 percent range, but at a slower pace.

Overall the economy does slow, particularly the goods-producing industries. Construction and finance are in for some job losses. Manufacturing, and trade, transportation, and utilities likely will as well. However, economywide job losses are avoided as service-providing industry gains offset the weak goods. As Fed Chair Powell says, there will still be economic pain in bringing inflation back to target. As a result of the softer, slower labor market, the unemployment rate increases to 4.6 percent, compared with 5.4 percent in the baseline. This

increase is primarily due to fewer job openings and a slightly longer search time needed to find work. Income growth and consumer spending are stronger than in the baseline.



### Pessimistic Scenario: Moderate Recession

While a mild recession makes sense from today’s perspective, when the economy does enter into recession it may play out differently. Consumers may pull back larger than anticipated. Firms may lay off more workers than they expect. High inflation may be more entrenched in the economy than currently believed, forcing the Fed to hold interest rates higher for longer. The end result is not a mild recession but a moderate one closer to the typical or average sized recession the economy has experienced.

In the pessimistic scenario in Oregon, job losses are more severe and the recession lasts longer than under the baseline. Employment declines 4 percent, compared to 1.2 percent in the baseline, or a total of 80,000. Employment bottoms out in mid-2025 and does not return to peak until mid-2027. The unemployment rate spikes to 8.2 percent. Income and spending do turn negative in 2024 and 2025.

### **Construction and Housing Outlook**

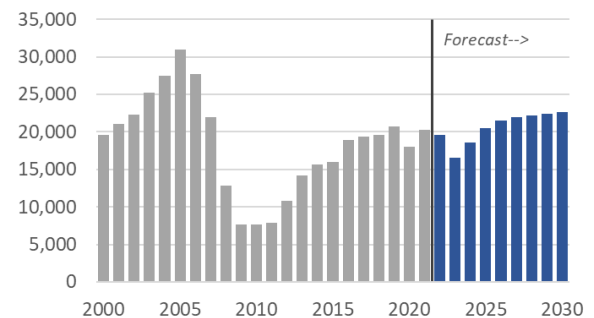
Last quarter our office made two substantive changes to the construction and housing outlook by including declines in both new housing starts and in home prices. This quarter these declines are now expected to be more severe. Oregon housing starts are forecasted to decline 19 percent, and home prices will fall 14 percent.

The key reason why is that mortgage rates have continued to surge throughout the year and homeownership affordability continues to worsen. Increases in mortgage rates is to be expected during a tightening cycle when the Federal Reserve is raising interest rates. However mortgage rates have increased considerably more than other financial products like U.S. treasuries. Investors are demanding even more of a premium than they used to for mortgages. This widening of the spread is not due to potential foreclosure risk with home prices declining, but due to pre-payment risk. For borrowers taking out a mortgage around 7 percent today, many can expect to refinance into a lower rate in the years ahead as the Fed eases off the brakes and cuts interest rates once inflation slows. As such, investors will likely only earn that 7 percent on the loans for a year or three and therefore demand more of a premium to compensate for this pre-payment risk. Note that this spread between mortgages and treasuries has started to lessen a little in recent days, following the softer October CPI print.

As discussed last quarter, this rapid rise in mortgage rates has essentially cut affordability in half, shrinking the pool of potential homebuyers considerably. Such a sharp change in the market is now expected to have deeper, and longer impacts on new construction that previously forecasted.

Overall, housing starts in Oregon are expected to decline 19 percent from 2021 to 2023. It is very important to note that as of this fall, housing starts have not actually declined noticeably. They are off their peaks, and down a little, but in the grand scheme of things so far Oregon housing starts are more stable than declining. This relative strength in recent months is due to the fact that as new detached single family permits have fall 20-25 percent, new multifamily permits have surged to offset those declines. While multifamily construction is expected to remain stronger in the year ahead, a continued surge is unlikely, leading to an expected overall decline in housing starts in Oregon. Housing starts pick up strongly by mid-2024 and increase moderately over the entire forecast horizon.

### Oregon Housing Starts



Source: Census, Oregon Office of Economic Analysis

This slowdown in new construction is not as large as the affordability crunch alone would suggest. This is due to both the undersupply of housing already in the state, which means demand outstrips supply, limiting further declines, and the strong underlying demographics of housing demand this decade as the Millennials age into their 30s and 40s. Even so, the slowdown in new construction likely adds to the undersupply problem in the short term. For more on addressing Oregon’s housing shortage, particularly the workforce needs to approve, inspect, and build more units, please see our office’s previous report<sup>6</sup>.

Looking forward, housing starts will pick back up for three reasons: population growth, underlying demographics, and improving affordability. Population growth should be rebounding this year and next following the slowdown during the pandemic. See last quarter’s forecast<sup>7</sup> for more on the expectations for the soon-to-be-released 2022 population estimates. The underlying demographics and increase in household formation in recent years keeps housing demand high. And affordability will improve as well, reviving housing demand and therefore new construction activity along with it.

The challenge is the improvements in affordability will be coming off the worse affordability in recent memory. Today, the monthly mortgage payment to the bank, as a share of income is worse than it was at the peak of the housing bubble back in the mid-2000s. Sales and starts will revive as affordability improves. There are three things that will bring better affordability over the coming 18 months.

First will be ongoing income growth. Yes, incomes will slow in a recession, but not turn negative. A typical year’s worth of income growth is equivalent to about a 40 bps, or 0.4 percent reduction in the mortgage rate in terms of affordability. After all, higher incomes mean one can afford a larger monthly payment in dollar terms, even if it remains the same percentage of household income or expenses. Expected income growth accounts for about a quarter of the improvement in affordability needed to get back to the historical range.

Second will be price declines. During the earlier parts of the pandemic, the record low interest rates were essentially capitalized into higher home prices. With the surge in rates this year, prices need to decline given

<sup>6</sup> <https://oregoneconomicanalysis.com/2022/09/20/addressing-oregons-housing-shortage-workforce-needs/>

<sup>7</sup> See PDF pg 15 (report pg 11) <https://digital.osl.state.or.us/islandora/object/osl%3A998248/datastream/OBJ/view>

affordability is so out of line. Overall our office expects home prices in Oregon to fall 14 percent between summer 2022 and summer 2024. The majority of the declines will happen in the first year, or right now, followed by some slower and smaller declines in late 2023 and early 2024. These price declines account for another quarter of the improvement in affordability needed to get back to the historical range.

Third will be mortgage rate declines. While higher for longer has been the right view of Federal Reserve policy and interest rates in the past year, the fact that interest rate spreads have widened to such a degree means there is room for mortgage rates to fall in the quarters ahead, if financial markets calm. Beginning in 2024, and 2025 the Fed is expected to take its foot off the brake and cut interest rates as well. Declining mortgage rates from 7 percent today to 5 percent in 2025 will account for the other half of the improvement in affordability needed to get back to the historical range.

### Big Picture Housing Affordability

New Mortgage Payment on Median Sale Price, as Share of Per Capita Income



A key item to keep in mind is that every household's housing affordability is slightly different. Every household has slightly different incomes, credit scores, down payments, other debt and the like. So as affordability begins to improve a little, it will price more potential buyers back into the market. And once most potential buyers are able to again buy or sell at realistic affordability, overall sales, prices, and starts will revive.

Ultimately the combination of rising incomes, declining home prices, and falling mortgage rates will bring ownership affordability back and revive the market. Each of these three key factors may adjust more, or less than anticipated. Each factor can contribute more, or less to the overall improvements. For example, a home price decline of around 25 percent would bring affordability back down to the historical range overnight. Or a drop in mortgage rates back to 5.5 percent would bring affordability halfway back, and so forth.

While there is no question that new detached single family housing is important, it is also a small share of the overall construction industry. In the years leading up to the pandemic, new detached single family housing accounted for just 20 percent of overall construction spending. So if multifamily activity remains strong, and remodeling and repairs holds up relatively well given home equity is larger and the housing stock is aging, it means the fallout from the sharp decline in detached single family activity is more limited than realized. Plus nonresidential and public works will be picking up in the years ahead. This is especially the case once the federally funded infrastructure projects get underway mid-decade. Plus construction is an industry where firms have been discussing labor shortages for the better part of a decade. Businesses will not be looking to lay off workers unless they absolutely have to.

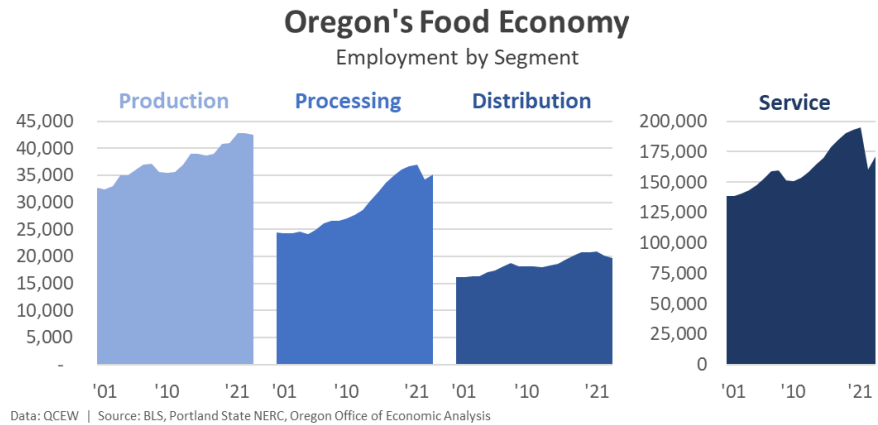
The bottom line is our office is now forecasting overall construction employment in Oregon to decline 3.2 percent from early 2023 through mid-2024. Such declines are more than twice the declines the overall labor market will experience. However given the sharp decline in affordability and new detached single family construction, the industrywide changes are mild.

### Oregon's Agricultural Economy

This year, the Oregon Legislature passed HB 4002 (2022) which establishes maximum hour and overtime compensation requirements for agricultural workers. The law goes into effect starting in 2023. Moving forward, our office will analyze and monitor the economic and labor market data to assess any impacts from the law. Our

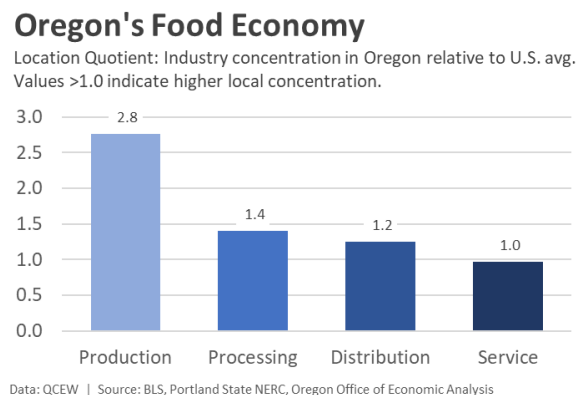
office will work to incorporate these changes, if any, in the broader context of the state’s agricultural economy. In advance of the law going into effect, and the lagged data available to begin to assess any impacts, our office has been highlighting the importance of agriculture to the state’s economy. In recent quarters we have dug into farm employment, income, and sales at the state and county, in addition to international exports. This quarter we will discuss how ag fits in with the broader food economy in the state and how Oregon compares nationally.

Oregon’s food economy overall employs 270,000 workers today, or about 14 percent of the state’s total workforce. It accounts for 4-5 percent of state GDP in the past handful of years. More than one-third of these workers – nearly 100,000 – are in the production, processing, and distribution segments of the food economy. It is here where Oregon has a distinct comparative advantage, and a growing share of the national market.



However, most of us only really interact with the fourth segment of the food economy: food services. The majority of the food economy jobs are in services including restaurants, supermarkets, specialty food and beverage stores, food carts, and the like. While these services garner the national and international attention, and satisfy our tastebuds, they play a lesser role in terms of the actual economic impact and what makes Oregon unique from an industrial structure perspective. This is partially because food services are largely driven by population and consumer spending patterns. Even as Oregon is home to award-winning brewers and chefs, residents of other states go out to eat as well, and likewise have a lot of food service jobs.

Where Oregon’s food economy differs from other states is on production and processing. Oregon’s location quotient for food production in 2021 is 2.8, meaning the concentration of agricultural jobs is nearly three times what it is nationwide. This is primarily driven by crops (grains, fruits, vegetables, etc) and fishing. Over the past decade, the state’s growth in food production is being driven not just by overall economic growth, but also a regional shift, or increase in regional competitiveness. Using a shift-share analysis, the growth in food production in Oregon is 60% regional competitive effect.



Additionally, Oregon’s location quotient for food processing is 1.4, meaning the local concentration 40% larger than in the average state. Here the drivers of growth are a bit more balance looking through a shift-share lens but still important to note and highlight local successes. 41 percent of the growth in the past decade is due to overall economic growth, 26 percent due to a change in industry mix, and 33 percent due to the regional competitive effect.

Compare those figures with the food distribution and food service segments where just 5-10 percent of the growth is due to the regional competitive effect, with the bulk due to broad national, and industry trends.

Among distribution and services, local trends essentially mirror national trends over the past decade, which is one reason why Oregon's location quotients are at or at least closer to 1.0.

Looking forward for Oregon's food economy there will be both a step back in terms of near-term losses during the pending recession next year, and long-term growth. Numerically, much of that growth will come from food services, which still have not fully recovered to their pre-pandemic levels, but eventually will. The exact strength of that growth in food services will largely be tied to population growth. However our office's forecast also includes long-term growth in food manufacturing, and a more stable outlook for food production. The key for the local economic impact will be to maintain these strengths in production and processing as Oregon has done in recent decades.

As the agricultural worker overtime law come into effect, our office will work with other state agencies to gather and analyze the available data. Future quarterly forecasts will include updates to the underlying ag economy, when available, and any such analysis of the impacts of the new law that goes into effect next year.

### **Longer-Term Forecast Risks**

The economic and revenue forecast 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:

- U.S. Economy. While Oregon is more volatile than the nation overall, the state has never missed a U.S. recession or a U.S. expansion. In fact, Oregon's business cycle is perfectly aligned with the nation's when measuring peak and trough dates for total nonfarm employment.
- Housing Affordability. New housing supply has not kept pace with demand in either the ownership or rental markets. Oregon has underbuilt housing by 111,000 units in recent decades<sup>8</sup>. To the extent home prices and rents rise significantly faster than incomes, it is a clear risk to the outlook. Worse housing affordability hurts Oregonians as they need to devote a larger share of their household budget to the basic necessities. Furthermore, while not the baseline outlook, worse affordability may dampen future growth as fewer people can afford to live here, lowering net in-migration, and the size of the labor force in the years ahead.
- Global Spillovers. The international list of risks seems to change by the day. Right now there is an ongoing war in Europe, and the risk of war in Southeast Asia has been uncomfortably high in recent years. Longer-term concerns regarding commodity price spikes in Emerging Markets, or the strength of the Chinese economy – the top destination for Oregon exports – are top of mind.
- Federal Fiscal Policy. Changes in national spending impact regional economies. In terms of federal revenues, spending, and employment Oregon is generally in the middle of the pack across states. Oregon does see larger impacts related to land management and forest policies, including direct federal employment. Oregon ranks below average in terms of military-dependent industries and lacks a substantial military presence within the state.
- Climate and Natural Disasters. While the severity, duration, and timing of catastrophic events like earthquakes, wildfires, and droughts are difficult to predict, we know they impact regional economies. Fires damage forests with long-term impacts, and short-term disrupt tourism. Droughts impact our agricultural sector and rural economies to a greater degree. Whenever Cascadia, the big earthquake, hits, we know our economy and infrastructure will be crippled. Some economic modeling suggests that

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<sup>8</sup> <https://www.oregon.gov/ohcs/about-us/Documents/RHNA/RHNA-Technical-Report.pdf>

Cascadia’s impact on Oregon will be similar to Hurricane Katrina’s on New Orleans. Longer-term issues like the potential impact of climate change on migration patterns are hard to predict and generally thought to be outside our office’s forecast horizon. Even so, it is a reasonable expectation that migration flows remain strong as the rest of the country becomes less habitable over time.

- Initiatives, Referendums, and Referrals. Generally, the ballot box and legislative changes bring a number of unknowns that could have sweeping impacts on the Oregon economic and revenue picture.

## Extended Outlook

Oregon typically outperforms most states over the entire economic cycle. This time is no different, however the expectations are that the relative growth advantage may be a bit smaller than it has been historically. The primary reason being slower population, and labor force growth than in decades past. Our office is a bit more bullish on Oregon’s economic and population growth than IHS Markit is, but our office overall agrees with the relative patterns nationwide. From 2022 to 2027, IHS expects Oregon’s real GDP growth to rank 23<sup>rd</sup> fastest among all states, while employment growth ranks 18<sup>th</sup> fastest, and population gains are the 16<sup>th</sup> fastest.

Over the extended forecast horizon our office has identified four main avenues of growth that are important to continue to monitor: the state’s dynamic labor supply, the state’s industrial structure, productivity, and the current number of start-ups, or new businesses formed.

Labor Supply. 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 economy is equally bad elsewhere, particularly in California. Relative housing prices 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 typically been higher.

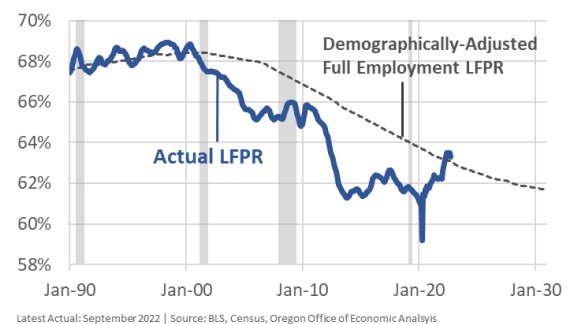
The good news today is that Oregon’s labor force has never been larger, and the labor force participation rate is now higher than it was before the pandemic began. Even in this sometimes noisy, and unrevised data, the strength of Oregon’s labor market is clear.

Moving forward, overall labor force participation rates will decline, simply due to the aging of the population. As more Baby Boomers enter into their retirement years, the share of all adults working or looking for work will fall as a result. As such, comparing Oregon’s participation rates against a demographically-adjusted measure is important. Here, too, the current strength of the Oregon’s labor market is evident, and encouraging.

The challenge moving forward is twofold. First, is overall population growth and whether that rebounds as expected in the years ahead. Second, whenever the next recession (or two) does come, maintaining a high participation rate and not seeing larger numbers of discouraged workers drop out of the labor force like they did following both the dotcom and housing busts. It was only once the economy became strong again in the late 2010s and early 2020s have some of those losses begun to be regained.

### Oregon's Labor Force Participation

Share of all Oregonians 16 years and older with a job or looking for work





**Industrial Structure.** Oregon’s industrial structure is very similar to the U.S. overall. However, Oregon’s manufacturing industry is relatively larger, and weighted more toward semiconductors and wood products, compared to the nation which is more concentrated in transportation equipment (aerospace, and automobiles).

However, industries like timber and high-tech, 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 growth to downward trajectory of the industry in Oregon is likely to continue.

With that being said, certainly not all hope is lost. Those top industries in which Oregon has a local concentration at least twice the national average comprise approximately 4 percent of all statewide employment. Slower growth moving forward is not a weight, but rather more of a lack of a boost.

Many industries in which Oregon has a larger concentration than typical state are expected to perform quite well over the coming decade. These industries include management of companies, food and beverage manufacturing, published software along with some health care related firms.

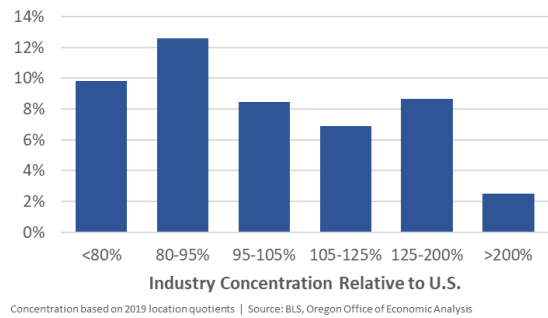
The state’s real challenges and opportunities will come in industries in which Oregon does not have a relatively large concentration. These industries, like consulting, computer system design, financial investment, and scientific R&D, are expected to grow quickly in the decade ahead. To the extent that Oregon is behind the curve, then the state may not fully realize these gains if they rely more on clusters and concentrations of similar firms that may already exist elsewhere around the country.

**Capital and Productivity.** Ultimately, the economy’s industrial structure combined with capital will result in increasing productivity. Higher productivity allows firms to produce and sell more products, and pay higher wages to its workers. Capital can come in many different forms including financial, natural, physical, human, and social. All can help raise firm productivity, benefiting the economy more broadly.

Today, the economy desperately needs better productivity, which has been sluggish this century. Early in the pandemic, productivity perked up as firms had to make due with reduced workforces at the same time consumer demand remained strong. However, as employment has rebounded, these productivity increases not only have not held, but have eroded. The current outlook for productivity is more or less back to the pre-pandemic trend, if not slightly below it. Increasing the stock and use of Oregon’s capital would boost the economy overall.

### Oregon's Industrial Structure and Outlook

Employment Growth by Industry Concentration, 2022-2032



### Oregon Real GDP per Worker

Inflation-adjusted value-added per employee



**New Business Formation.** New businesses are generally considered the primary source of innovation. New ideas, products, and services help propel future economic growth. Unfortunately in the decades leading up to the pandemic, start-up activity was declining. New businesses as a share of all businesses were at or near record lows in 2019. Employment at start-ups follow a similar pattern.

To the extent the low levels of entrepreneurship continue, and R&D more broadly is not being undertaken, slower productivity gains and overall economic growth is to be expected. However, to the extent that larger firms that have won out in today’s marketplace are investing in R&D and making those investments themselves, then the worries about the number of start-ups today is overstated. It can be hard to say which is the correct view. That said, actual, realized productivity in the economy has been sluggish in recent decades.

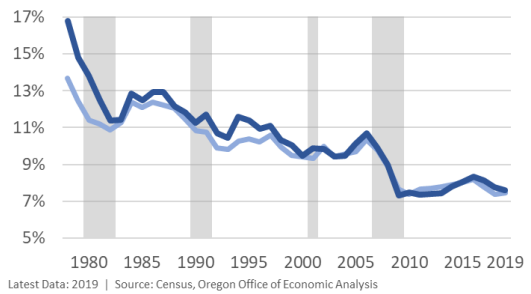
Encouragingly, new business applications during the pandemic actually accelerated, stopping the long-run decline. Applications from what Census calls high-propensity business with planned wages, which are the most likely to eventually turn into real firms that employ workers, have been higher in 2021 and so far in 2022 than back in 2019. New business applications of all other types, including self-employment, are up even further.

These gains provide some hope for future economic growth should some of these new firms bring new ideas, products, and efficiencies to market. Even if the per firm probability of success remains the same, having more ping pong balls in the lottery increases the overall probability that a few will survive and succeed tremendously.

**Oregon Income Relative to U.S.** One long-standing concern for some policymakers and analysts had been Oregon’s relatively low income and wage compared to the rest of the nation. Encouragingly, the strong economic growth last decade did translate into meaningful increases in Oregon’s per capita income and average wage. Today Oregon’s per capita income relative to the U.S. is at its highest point since the dotcom bust two decades ago, and the state’s average wage is at its highest relative point since the timber industry restructured and the mills started closing in the early 1980s.

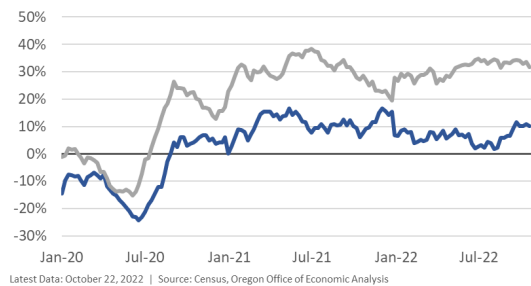
### Entrepreneurship Declining Pre-Pandemic

New Establishments as Share of Total in U.S. and Oregon



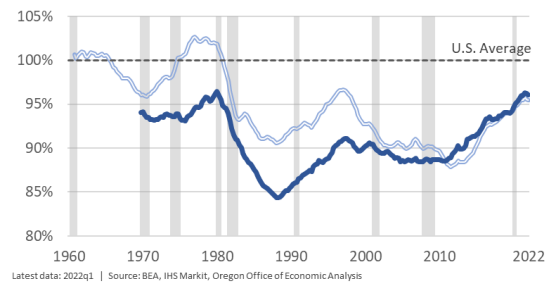
### Oregon Business Applications

Percent change from the same week in 2019 for High Propensity applications with Planned Wages and All Other



### Oregon Income, Share of U.S. Average

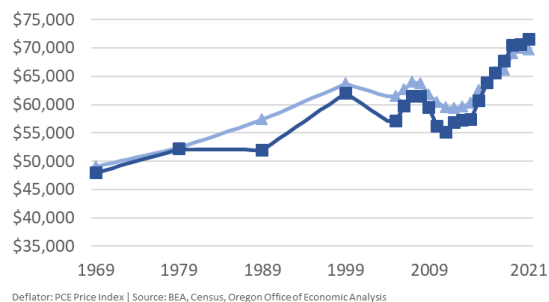
Per Capita Personal Income | Average Wage



Oregon’s median household income in recent years has reach historic highs, even after adjusting for inflation. More importantly, it now stands 2.6 percent higher than the U.S. overall as of 2021. In recent years, this marks the first time in more than 50 years that Oregonian incomes for the typical household or family are higher than the nation. The fact that the strong regional growth translated into more money in the pockets of Oregonians, and regained the ground lost decades ago is one of the most important economic trends in recent generations. The microdata for the 2021 American Community Survey was just released. In the coming months our office will dig deeper into these income trends across regions, ages, and races and ethnicities. The next round of good income data will come from the 2022 American Community Survey which will be released in mid-September 2023.

### Median Household Income

Inflation-Adjusted 2021\$ for the United States and Oregon



## REVENUE OUTLOOK

### **Revenue Summary**

The baseline economic outlook now calls for a mild recession. This is hard to see in the topline outlook for state revenues, as the forecast for available resources remains roughly unchanged in the near term. The recession is expected to be mild, and personal income is expected to remain stable despite job losses. Underlying personal income is not only the primary driver of Oregon’s dominant personal income tax, but also a wide range of consumption-based taxes including the corporate activity tax and lottery sales.

In terms of job losses, the baseline scenario looks identical to the recession of 1991. The 1991 cycle was unique in that it did not result in a pronounced downturn in state revenues, only a couple of relatively flat years of available resources.

Unlike what was seen during the 1991 cycle, revenues are expected to drop going forward with or without a recession. Expected revenues for the 2023-25 biennium are expected to be around \$3 billion lower than they were this biennium as profits and investment income return to earth and a record kicker credit is paid out. That said, it is surprising that the recession call did not make this expected decline noticeably worse.

Even if the economic expansion persists, General Fund revenues are due for a hangover in 2023-25. Recent gains in reported taxable income have been driven by taxpayer behavior as well as by underlying economic growth. Investment and business income are not always realized for tax purposes at the same time as they are earned in the market. Last year was a great time to cash in assets, with equity prices and business valuations high, and potential federal tax increases on the horizon. Corporations and other businesses also had a strong incentive to recognize as much income and as few costs as they could last year.

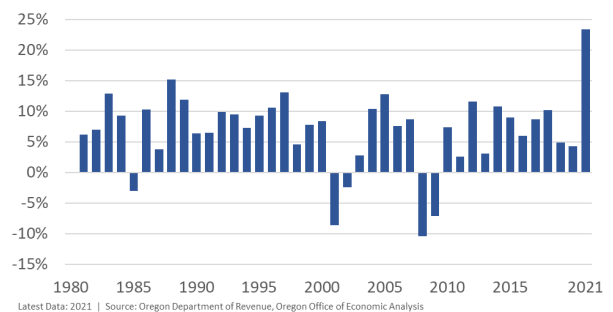
Given that a significant amount of revenue growth has been driven by nonwage sources of income, most of the recent surge in payments will likely prove to be temporary. After so much income was pulled into tax years 2020 and 2021, less will be realized in the near term.

This taxpayer behavior puts Oregon’s revenues at risk of the sharp declines experienced after asset market corrections in 2001 and 2007. With recession on the horizon, profits and gains could soon turn into losses, and a smaller share of filers could be subject to the top rate. Recent revenue growth has been more pronounced than during any other period on record. During tax year 2021, personal income tax liability grew at almost double the pace of that was seen during the peaks of the housing and technology booms. Hopefully, the upcoming hangover in revenue growth will not be as pronounced.

The bottom line is that the unexpected revenue growth seen this year has left us with unprecedented balances this biennium, followed by a record kicker in 2023-25. The projected personal kicker is \$3.7 billion, which will be credited to taxpayers when they file their returns in Spring 2024. The projected corporate kicker is \$1.3 billion, which will be retained for K-12 educational spending.

### **Oregon Personal Income Tax Liability**

*Year-over-year percent change*



## 2021-23 General Fund Revenues

Gross General Fund revenues for the 2021-23 biennium are expected to reach \$28,298 million. This represents an increase of \$421 million from the September 2022 forecast, and an increase of \$4,973 million relative to the Close of Session forecast. Personal and corporate income tax collections and estate taxes continue to set records. Among non-General Fund sources, lottery sales, the Corporate Activity Tax and estate taxes are healthy as well.

### Personal Income Tax

Growth in withholdings of personal income taxes has slowed in recent weeks but remains healthy. Although there are other factors involved (e.g. retirement income, bonuses, and stock options), withholdings are mostly driven by wages and salaries. As such, slower growth could be welcome news, given that the labor market needs to cool down. However, other broad measures of wage growth have yet to show any weakness to date.

Although growth in taxable labor income has been very strong, much of the 2022 flood of personal income tax collections can be traced to nonwage forms of income. With the fall extension filing season now over, the extent of this income growth has become clear. Gains in nonwage taxable income have been very broad based. Passthrough business and rental income, dividends, capital gains and IRA withdrawals have all seen rapid growth.

While broad based, growth in nonwage tax liability has been paced by capital gains. With additional tax return data, we now know that capital gains grew by more than \$8 billion in 2021. This growth is made more remarkable given it came off a record \$10 billion in gains during 2020.

According to the September forecast, the outlook for the personal income tax kicker base is now significantly (16.7%) higher than the Close of Session forecast. If the current outlook holds, a kicker of \$3.7 billion would be paid out when taxes are filed in 2024.

Table R.1

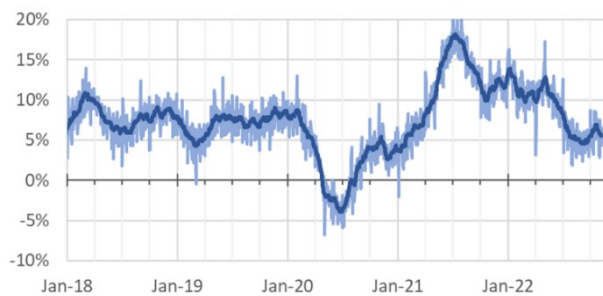
### 2021-23 General Fund Forecast Summary

(Millions)	2021 COS Forecast	September 2022 Forecast	December 2022 Forecast	Change from Prior Forecast	Change from COS Forecast
<b>Structural Revenues</b>					
Personal Income Tax	\$20,628.1	\$23,828.2	\$23,945.5	\$117.2	\$3,317.4
Corporate Income Tax	\$1,344.0	\$2,448.6	\$2,648.0	\$199.4	\$1,304.0
All Other Revenues	\$1,353.5	\$1,600.6	\$1,704.7	\$104.1	\$351.2
<b>Gross GF Revenues</b>	<b>\$23,325.5</b>	<b>\$27,877.4</b>	<b>\$28,298.1</b>	<b>\$420.7</b>	<b>\$4,972.6</b>
Offsets, Transfers, and Actions <sup>1</sup>	-\$417.6	-\$477.0	-\$468.0	\$9.0	-\$50.4
Beginning Balance	\$3,025.6	\$4,082.5	\$4,082.5	\$0.0	\$1,056.9
<b>Net Available Resources</b>	<b>\$26,008.4</b>	<b>\$31,571.9</b>	<b>\$32,001.6</b>	<b>\$429.7</b>	<b>\$5,993.2</b>
Appropriations	\$25,446.0	\$27,861.0	\$27,861.0	\$0.0	\$2,415.0
<b>Ending Balance</b>	<b>\$562.4</b>	<b>\$3,710.9</b>	<b>\$4,140.6</b>	<b>\$429.7</b>	<b>\$3,578.2</b>
<b>Confidence Intervals</b>					
67% Confidence	+/- 3.9%		\$1,106.9	\$27.19B to \$29.41B	
95% Confidence	+/- 7.8%		\$2,213.8	\$26.08B to \$30.51B	

<sup>1</sup> Reflects personal and corporate tax transfers, cost of cashflow management actions (TANS), and Rainy Day Fund transfer

## Oregon Withholding

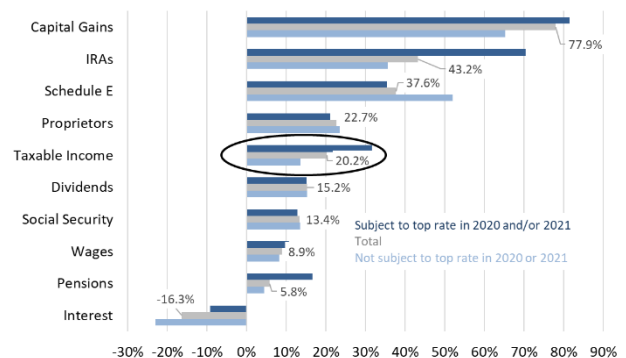
90 Day Rolling Sum of Collections: Year-over-Year Change | Moving Average



Latest Data: November 10, 2022 | Source: Oregon Dept. of Revenue, Oregon Office of Economic Analysis

## Oregon's booming income

2021 reported income, % change, full-year filers



Latest Data: Matched returns through November 8 | Source: Oregon Department of Revenue, Oregon Office of Economic Analysis

As a reminder, the threshold for the kicker calculation is if revenues over the entire biennium are more than 2 percent above the Close of Session forecast made prior to the start of the biennium. If they are, the entire amount of revenues above the Close of Session – including the first 2 percent – are returned to taxpayers the following year.

*Corporate Excise Tax*

Corporate income and excise tax collections have yet to weaken at all. After a temporary drop at the beginning of the recession, corporate tax collections immediately bounced back and continue to set new records. This stands in stark contrast to the last two recessions when corporate tax collections were cut in half.

The strong performance of corporate taxes is particularly surprising given that they were expected to come back down to earth even without an economic downturn. The subtraction for taxes paid under Oregon’s new Corporate Activity Tax is reducing traditional liability, as is the subtraction for expenditures funded by forgiven Payroll Protection Program loans. Even so, collections have yet to show any weakness growing at an average of 14% per year over the past decade.

The current inflationary environment is one factor supporting recent corporate tax collections. With underlying demand so strong, businesses have largely been able to pass cost increases along to their customers. Profits and earnings have skyrocketed.

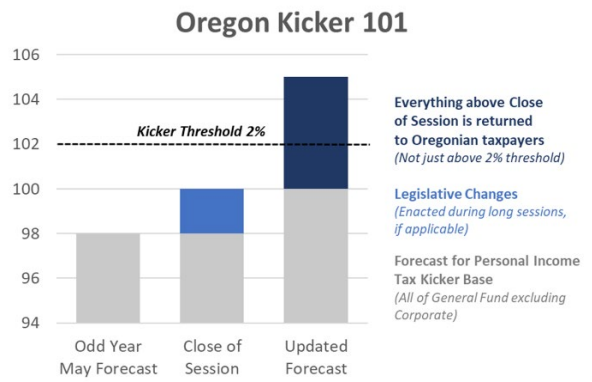
While some of this increase likely reflects a permanent increase in the tax base, a significant amount of the growth is expected to be temporary. As with business and investment income on personal tax returns, corporate taxpayers pulled some income forward in 2020 and 2021 in advance of possible federal tax legislation. Also, a relatively small number of large corporations in industries that benefited from the nature of the pandemic have had an outsized impact on recent revenue collections. This suggests that not all of the recent gains are sustainable. The forecast calls for corporate taxes to soon return to their pre-pandemic levels. However, no signs of weakness have emerged to date.

Although there is a very long way to go, a \$1.3 billion kicker is currently estimated for the next biennium. According to statute, this would lead to additional funding for K-12 education during the 2023-25 budget period.

*Other Sources of Revenue*

Non-personal and non-corporate revenues in the General Fund usually account for approximately 6 or 7 percent of the total. The largest such source are estate taxes, followed by liquor revenues, and judicial revenues.

Relative to the previous forecast, the current outlook for these revenues in 2021-23 is raised by \$104 million (+6.2%) and in the upcoming 2023-25 biennium by \$106 million (+6.6%). These changes are almost entirely driven by higher interest earnings and an upwardly revised liquor forecast. On net, all other non-personal and non-corporate revenues in the General Fund are revised lower by \$5.7 million in 2021-23 and by \$8.0 million in 2023-25.

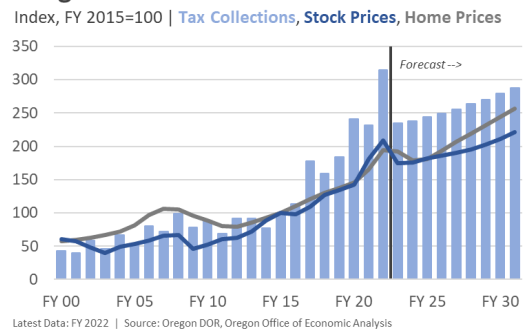


The biggest change is a large increase in interest earnings, both in the current biennium and moving forward. Interest earnings are raised \$90 million in the current 2021-23 biennium and \$85 million in 2023-25. These increases are to the combination of high fund balances, and rising interest rates in keeping with the Fed’s higher or longer policy. Today, fund balances total around \$8 billion, or four times their pre-pandemic size. These balances have yet to taper off and have held steady for the past year. To date it remains an accounting challenge to full decompose the sources of these balances. Our office will continue to work with our counterparts in DAS and the Treasury to get a better handle on the sources of these monies, and any expectation on when they may decline back toward their historical range. As such the risks to the outlook are balanced. Funds may remain larger or interest rates higher than anticipated, however if funds are spent down quicker than expected, interest earnings will follow suit.

The second large increase is an upward revision to the liquor revenue forecast, produced by OLCC and not our office. Sales have been tracking above forecast and the strength in sales is expected to continue over the forecast horizon. One additional upside risk to the outlook is the continuation of the bottle surcharge for the 2023-25 biennium is expected to be discussed by the OLCC Commission in future meetings. Should a continuation of the surcharge be approved, available revenues will be revised higher for 2023-25 in a future forecast.

One final source of revenue of note are estate taxes. These tax collections have outstripped expectations considerably in recent years. The underlying forecast had yet to catch up to the new reality of booming valuations and wealth. The current forecast for estate taxes is essentially unchanged from last quarter. Given the baseline forecast now includes a recession with declines in the stock market and home prices, an unchanged estate tax forecast is effectively an upward revision to the outlook. Our office believes such an outlook now better incorporates recent trends and patterns of collections. The risks are the larger declines in asset markets would negatively affect revenues moving forward, and, as always, a small number of very large estates can move the total collections significantly in any given year.

### Oregon Estate Taxes



### Extended General Fund Outlook

Table R.2 exhibits the long-run forecast for General Fund revenues through the 2029-31 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 2021-23		Forecast 2023-25		Forecast 2025-27		Forecast 2027-29		Forecast 2029-31	
	Biennium	% Chg	Biennium	% Chg	Biennium	% Chg	Biennium	% Chg	Biennium	% Chg
Personal Income Taxes	23,945.5	19.7%	21,540.1	-10.0%	28,551.2	32.5%	32,913.0	15.3%	37,349.2	13.5%
Corporate Income Taxes	2,648.0	29.7%	1,955.9	-26.1%	2,118.9	8.3%	2,271.5	7.2%	2,584.9	13.8%
All Others	1,793.7	6.7%	1,649.8	-8.0%	1,593.9	-3.4%	1,686.9	5.8%	1,788.2	6.0%
<b>Gross General Fund</b>	<b>28,387.1</b>	<b>19.6%</b>	<b>25,145.7</b>	<b>-11.4%</b>	<b>32,264.1</b>	<b>28.3%</b>	<b>36,871.4</b>	<b>14.3%</b>	<b>41,722.4</b>	<b>13.2%</b>
<i>Offsets and Transfers</i>	<i>(247.3)</i>		<i>(128.2)</i>		<i>(103.9)</i>		<i>(92.5)</i>		<i>(105.3)</i>	
<b>Net Revenue</b>	<b>28,139.8</b>	<b>19.2%</b>	<b>25,017.4</b>	<b>-11.1%</b>	<b>32,160.2</b>	<b>28.6%</b>	<b>36,778.9</b>	<b>14.4%</b>	<b>41,617.1</b>	<b>13.2%</b>

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.

**Tax Law Assumptions**

The revenue forecast is based on existing law, including measures and actions signed into law during the 2021 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 2021 Legislative Session can be found in Appendix B Table B.3. For a detailed treatment of the components of the 2021 Legislatively Enacted Budget, see:

Legislative Fiscal Office's [2021-23 Budget Summary](#)<sup>9</sup>

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 2021-23 Tax Expenditure Report<sup>10</sup> together with more timely updates produced by the Legislative Revenue Office.

<sup>9</sup> [https://www.oregonlegislature.gov/lfo/Documents/2021-1 LAB Summary 2021-23.pdf](https://www.oregonlegislature.gov/lfo/Documents/2021-1%20LAB%20Summary%2021-23.pdf)

<sup>10</sup> <https://www.oregon.gov/DOR/programs/gov-research/Pages/research-tax-expenditure.aspx>



## General Fund Alternative Scenarios

The latest revenue forecast for the current biennium represents the most probable outcome given available information. Our office 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.

The near-term outlook is particularly uncertain right now. Odds are a mild recession in the upcoming 2023-25 biennium is more likely than not. However there remain other plausible paths the economy may take in the years ahead. As discussed in the economic section on page 13, the optimistic scenario for the economy is it avoids a recession but still experiences slower growth. The pessimistic scenario is that a moderate recession is needed to bring inflation back down to the Federal Reserve's target.

## Alternative Scenarios - December 2022

Changes relative to the baseline (\$ millions)

General Fund					
	2021-23	2023-25	2025-27	2027-29	2029-31
Optimistic	\$138	\$917	\$823	\$649	\$725
Pessimistic	-\$82	-\$2,438	-\$1,711	-\$1,116	-\$211

Corporate Activity Tax					
	2021-23	2023-25	2025-27	2027-29	2029-31
Optimistic	\$14	\$108	\$86	\$67	\$74
Pessimistic	\$1	-\$202	-\$178	-\$64	-\$11

Source: Oregon Office of Economic Analysis

Looking at the upcoming 2023-25 biennium, in the optimistic scenario, General Fund revenues in Oregon would be \$917 million higher than in the baseline. In the pessimistic scenario, General Fund revenues in Oregon would be \$2.4 billion lower than in the baseline.

Changes would also be seen outside of the General Fund among Oregon's consumption-based revenues as well. Such taxes are generally less volatile than income taxes and help to stabilize Oregon's overall revenue base. Specifically, the state's Corporate Activity Tax next biennium would be \$108 million higher in the optimistic scenario and \$202 million lower in the pessimistic scenario. Lottery resources would be \$18 million higher in the optimistic scenario, or \$27 million lower in the pessimistic scenario.

## Corporate Activity Tax

The 2019 Legislature enacted the corporate activity tax (CAT)<sup>11</sup>, a new tax on gross receipts that went into effect January 2020. Collections related to the 2020 tax year are essentially complete, while tax returns for the 2021 tax year continue to be processed. This would normally provide a reasonable baseline from which to project future collections. However, while taxpayers were required to file on a calendar year basis for tax year 2020, a law change allowed taxpayers to switch to a fiscal year basis beginning with tax year 2021. Thus a complete picture of the 2021 tax year will not be available until well into 2023. For the December forecast, tax liability estimates for tax years 2021 and 2022 have been increased based on current receipts. The remainder of the forecast has been revised downward consistent with the deteriorating economic outlook. For the 2023-25 biennium, a \$6.4 million increase in the beginning balance provides a modest offset to a \$62.0 million decrease in revenues, resulting in \$55.6 million less in available resources.

These revenues are dedicated to spending on education. The legislation also included personal income tax rate reductions, reducing General Fund revenues. The net impact of HB 3427 was designed to generate approximately \$1 billion per year in new state resources, or \$2 billion per biennium.

<sup>11</sup> [0122 \(oregonlegislature.gov\)](https://legislature.oregon.gov/2021/bills/0122)

In terms the macroeconomic effects of a major new tax, the Office of Economic Analysis starts with the Legislative Revenue Office’s (LRO) impact statement and any Oregon Tax Incidence Model (OTIM) results LRO found. At the top line, OTIM results find minimal macroeconomic impacts across Oregon due to the new tax. Personal income, employment, population, investment and the like are less than one-tenth of a percent different under the new tax relative to the baseline. The model results also show that price levels (inflation) will increase above the baseline as some of the CAT is pushed forward onto consumers. Of course these top line, statewide numbers mask the varying experiences that individual firms and different industries will experience. There are likely to be some businesses or sectors that experience large impacts from the CAT, or where pyramiding increases prices to a larger degree, while other businesses or sectors see relatively few impacts.

Table B.12 in Appendix B summarizes the 10-year forecast and the allocation of resources, while Table B.13 presents a more detailed quarterly breakdown of the forecast. The personal income tax reductions are built into the General Fund forecasts shown in Tables B.1 and B.2.

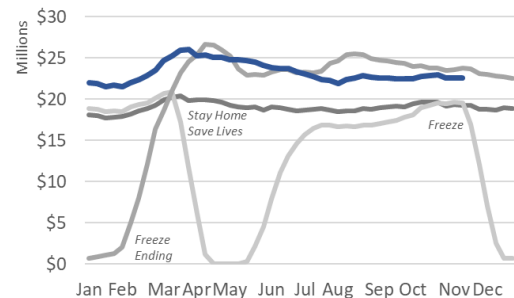
### Lottery Earnings

Lottery sales and revenues continue to be strong. There are no apparent impacts of high inflation or high gas prices slowing spending on discretionary items.

Video lottery sales are down slightly from last year’s pandemic reopening highs, but have settled into a level that is consistently around 20 percent above 2019 sales. Both video and traditional sales have outstripped the forecast in recent months. The record-setting Powerball jackpot is only partially reflected in this forecast as the highest sales figures were too recent to be fully incorporated. All told, Lottery resources for the current 2021-23 biennium are raised another \$10.1 million (+0.6%) compared to the previous forecast.

### Oregon Video Lottery Sales

2019 | 2020 | 2021 | 2022



Latest Data: November 12, 2022 | Source: Oregon Lottery, Oregon Office of Economic Analysis

Looking forward, the pending recession will impact Lottery sales and available resources. However, given the mild recession is expected to have relatively small impacts on jobs, income, and spending the downward adjustments to the Lottery forecast are minimal. Resources in the upcoming 2023-25 biennium are revised lower by \$16.7 million, or 0.9 percent. Instead of large declines, the end result for Lottery is essentially a four year period of flat sales. While such an outcome could create management challenges due to revenues not increasing while costs do, it is a far cry from the aftermath following the Global Financial Crisis and smoking ban which took essentially 8 years to regain the lost ground.

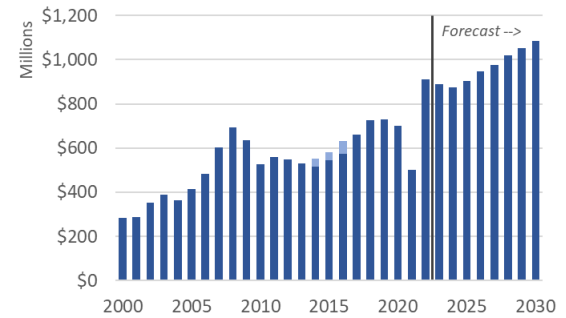
Over the full forecast horizon the Lottery outlook is lowered as well, keeping in line with the downgraded economic forecast. Resources are lowered \$9.9 million (-0.5%) in 2025-27, \$13.8 million (-0.7%) in 2027-29, and \$14.7 million (-0.7%) in 2029-31 relative to the previous forecast.

Risks to the outlook abound and vary depending upon the timeframe. In the very near-term, risks lie primarily to the upside. Consumer spending remains robust and sales may continue to outstrip expectations between today and when the pending recession comes. Conversely, should inflation begin to take a toll on households, discretionary purchases may be cut back.

Over the medium term, in particular the upcoming 2023-25 biennium, risks are balanced. Sales may outpace expectations, or the economy may skirt a recession entirely. Or sales may decline by a larger amount than anticipated in a mild recession. Looking back historically, Lottery held up well in both the 1990 and 2001 recessions. However Oregon also did not have line games back then, which makes comparing historical periods more challenging to today. To the extent that player behavior for line games differs than overall consumer spending, discretionary spending, or even gaming in a broad sense, sales could under- or overperform as a result.

### Annual Lottery Transfers

Actual Transfers | Capital Replacement Program



Latest: FY2022 | Source: Oregon Lottery, Oregon Office of Economic Analysis

Over the long term a few sets of risks stand out. Our office expects increased competition for household entertainment dollars, increased competition within the gaming industry, and potentially shifts in generational preferences and tastes when it comes to gaming. As such, our outlook for video lottery sales is continued growth, however at a rate that is slightly slower than overall personal income growth. Lottery sales will continue to increase as Oregon’s population and economy grows, however video lottery sales will likely be a slightly smaller slice of the overall pie.

However, longer run upside risks remain as well. While it is true that spending on video lottery grew slightly slower than income and spending last decade, that has reversed in the past year. Some of the strong sales since reopening are due to pent-up demand, strong household finances, and the fact that other entertainment options were either not available initially (concerts, spectator sports) or possibly less desirable due to the virus (long distance travel, movie theaters). Even so, the ongoing strength in video sales this year likely points toward some more permanent and not just pandemic or temporary changes in player behavior. The post-pandemic baseline level of play and/or sales could simply be higher, and not yet fully reflected in the current forecast. For example, if sales were to hold steady as a share of income, that would add \$100-200 million to the forecast in future biennia.

Additionally, there is the possibility of another capital replacement program in the years ahead to upgrade and replace video lottery terminals across the state. The pandemic and health-related shutdowns reduced video lottery sales by approximately \$400 million, of which only around half has been regained by the exceptionally strong sales since reopening. This large impact on the Lottery budget has made ongoing replacements more difficult. The average age of the terminals in the market has risen. Given the clear impacts on sales from the VLT replacements last decade, another large effort to upgrade in the years ahead would be expected to raise the forecast as well.

In the months ahead our office will continue to work with our colleagues at the Oregon Lottery, the CFO’s office, the Legislative Revenue Office, and the Legislative Fiscal Office. Plans are to dig deeper into recent demographic data from the Lottery’s player study and incorporate that with our office’s population forecast to get a better sense of the potential demographic or generational changes. Additionally, discussions surrounding the potential for VLT replacements and the expected impact on sales will continue. Any changes related to these topics, and an update on the overall economic outlook will be incorporated into the next forecast, set to be released in early February 2023.

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

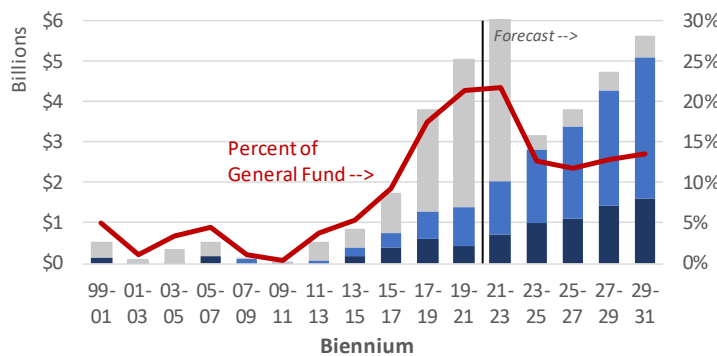
### Budgetary Reserves

The state currently administers two general reserve accounts, the Oregon Rainy Day Fund<sup>12</sup> (ORDF) and the Education Stability Fund<sup>13</sup> (ESF). This section updates balances and recalculates the outlook for these funds based on the December revenue forecast.

As of this forecast the two reserve funds currently total a combined \$1.8 billion. At the end of the current 2021-23 biennium, they will total \$2.0 billion, which is equal to 7.2% of current revenues. Including the currently projected \$4.1 billion ending balance in the General Fund, the total effective reserves at the end of the current 2021-23 biennium are projected to be \$6.2 billion, or 21.8% of current revenues.

### Oregon Budgetary Reserves

Education Stability Fund | Rainy Day Fund | General Fund Ending Balance



Source: Oregon Office of Economic Analysis

### Effective Reserves (\$ millions)

	Current Oct-22	End of 2021-23
ESF	\$600	\$706
RDF	\$1,194	\$1,334
Reserves	\$1,794	\$2,040
Ending Balance	\$4,141	\$4,141
<b>Total</b>	<b>\$5,935</b>	<b>\$6,181</b>
% of GF	20.9%	21.8%

The forecast for the ORDF includes two deposits for this biennium relating to the General Fund ending balance from the previous biennium (2019-21). A deposit of \$220.7 million was made in early 2022 after the accountants closed the books on last biennium. Additionally a \$107.8 million deposit relating to the increased corporate taxes from Measure 67 is expected at the end of the biennium in June 2023. This exact transfer amount is subject to some revision as corporate filings are processed, however the transfer itself will occur. At the end of 2021-23 the ORDF will total \$1.3 billion.

Looking ahead to the 2023-25 biennium, the ORDF is expected to receive two transfers as well. This includes a projected \$278.6 million related to the General Fund ending balance from 2021-23, and \$79.6 million related to the increase in corporate taxes. The ORDF is projected to hit its cap of 7.5% of revenues in FY2027. At that time,

<sup>12</sup> 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.

<sup>13</sup> 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 – 10% 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.

should the forecast prove accurate, the increase in corporate revenues from M67 would be retained in the General Fund and not transferred to the ORDF.

The ESF will receive an expected \$291.4 million in deposits in the current 2021-23 biennium based on the current lottery forecast. At the end of current 2021-23 biennium the ESF will stand at \$705.8 million. The ESF is not projected to hit its cap of 5% of revenues until FY2026, when the deposits will then accrue to the Capital Matching Account.

Together, the ORDF and ESF are projected to have a combined balance of \$2.0 billion at the close of the 2021-23 biennium, or 7.2 percent of current revenues. At the close of 2023-25 the combined balance will be \$2.8 billion, or 11.2 percent of revenues. Such levels of reserve balances are larger than Oregon has been able to accumulate in past cycles, and should help stabilize the budget when the next recession hits.

With a pending recession in the upcoming 2023-25 biennium, the state is expected to meet the trigger for withdrawals should policymakers choose to. In advance of the 2023-25 biennium, the trigger most likely to be met would be if the last quarterly forecast in the current biennium (to be released in May 2023) show General Fund revenues in the upcoming 2023-25 biennium are at least 3 percent lower than the current 2021-23 biennium's appropriations. Right now the 2023-25 revenue forecast is 10 percent lower than current appropriations. That decline is due to paying out the record kicker which reduces revenues and not a fundamental decrease due to the recession. Even so, conditions are likely to be met that trigger potential withdrawals should policymakers so choose.

Another reserve fund trigger – two consecutive quarters of employment declines – is expected to be met during the 2023-25 biennium, just not before the biennium starts. The other triggers may or may not be met. If revenues come in below forecast next biennium, that could trigger a potential withdrawal. And for the ESF only, not the ORDF, a Governor's declaration of emergency could also trigger a potential withdrawal.

Finally, these are the technical considerations for using the reserve funds in the upcoming 2023-25 biennium. Ultimately policymakers will decide whether to use the funds or not. Regardless of the trigger(s) met, the Legislature would need a three-fifths vote in each chamber to approve a reserve fund withdrawal.

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

### Recreational Marijuana Tax Collections

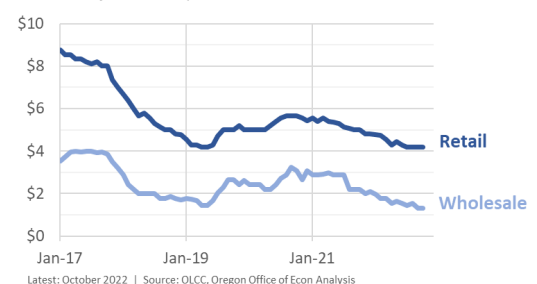
The recreational marijuana forecast is lowered due to the pending recession, downgraded economic outlook in addition to ongoing price declines which impact tax collections even if the underlying volume of sales and consumption remain more steady.

Resources in the current 2021-23 biennium are lowered \$14.4 million (-3.8%). Resources are lowered \$11.6 million (-3.4%) in the upcoming 2023-25 biennium. The out biennia are lowered a smaller \$4-9 million (-0.8 to 2.5%).

The key to the near-term remains prices which continue to decline in the wholesale market, while beginning to stabilize in the retail market at record lows. Given Oregon levies its marijuana tax as a percentage of the sales price, lower prices result in lower tax collections all things equal.

### Oregon Marijuana Prices

Usable Marijuana, Price per Gram



The underlying reason for the low prices is an oversaturated market where production (harvest) outpaces consumer demand, and there are more retailers per capita than in most other states, leading to increased competition. Oregon has more retailers than Colorado or Washington, which are both states with larger populations.

Now, this is great news for consumers who can enjoy widely available products at low prices. This is bad news for firms trying to operate a profitable business. One challenge there is even as businesses do leave the market, to date there has always been another willing to step in and take their place.

Given the saturation and pricing issues from a firm perspective, it would make sense that there would be a supply side response. In a new, preliminary development that supply side response may be happening. Year to date, the marijuana harvest is down 18 percent compared to last year. Right now it is unknown to what extent this could be weather- or crop-related compared to a fundamental decrease in production. However, a reduction in supply should eventually lead to better pricing power for firms.

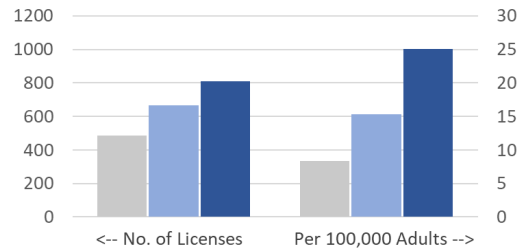
Given these are new developments, the October harvest data was just released the other day, our office is not yet making any fundamental changes to the outlook based on industry conditions or pricing. Our office will reconvene with our advisors to discuss the outlook in the coming months and make any necessary changes to the forecast at that time.

For now, the overall forecast has been downgraded due to the pending recession and recent tracking due to the low prices. Even so, the outlook calls for increases in marijuana sales and tax collections in the years ahead, primarily due to the state’s growing population and incomes. Our office does not have a further increase in marijuana usage rates built into the outlook. Marijuana sales are expected to be a steady share of household budgets.

*See Table B.11 in Appendix B for a full breakdown of revenues and associated distributions to recipient programs.*

### Recreational Marijuana Retailers

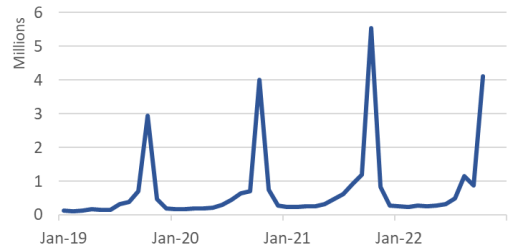
Washington | Colorado | Oregon



Source: Census, CO Dept of Revenue, WA Liquor & Cannabis Board, OR Liquor Control Commission, OR Office of Econ Analysis

### Oregon Marijuana Harvest

Total wet weight (pounds)



Latest Data: October 2022 | Source: OLCC, Oregon Office of Economic Analysis

## POPULATION AND DEMOGRAPHIC OUTLOOK

### *Population and Demographic Summary*

Oregon's resident population count on April 1, 2020 was 4,237,256. This is from the newly released decennial census data administered by the U.S. Census Bureau. During the past decade, Oregon gained 406,182 residents or 10.6 percent. The gain was substantial enough that yielded one additional congressional seat for the state. Oregon will have a total of six members in the House of Representatives. We have been predicting this rare gain for a long time. This is rare because only five states gained one additional seat each and Texas gained two seats.

In Historical context, Oregon's population growth between 2010 and 2020 censuses was the second lowest since the first census count in Oregon in 1860 after gaining statehood. The lowest growth rate was recorded between the 1980 and 1990 censuses, a decade characterized by a major recession. Oregon's population increased by 441 percent in the last century spanning 1920-2020. The gain of 406,182 persons in the last decade alone was nearly the same as the total population count of Oregon in the year 1900 when state's population was 413,536. Oregon's population growth of 10.6 percent in the last decade was 11<sup>th</sup> highest in the nation, excluding Washington D.C. Still, our growth rate for the decade lagged all our neighboring states, except California. The prior decade between 2000 and 2010, Oregon's population growth rate ranked 18<sup>th</sup> highest in the nation when Oregon was hit hard by the double recessions during the decade. As a result of such economic downturn during the Great Recession and sluggish recovery that followed, Oregon's population increased at a slow pace between 2000 and 2010 decade. However, Oregon's population was showing moderately strong growth because of state's strong economic recovery. The current COVID-19 pandemic has caused dire economic and employment situations and has caused slow population growth. The population growth was expected to rebound after 2021. However, current economic turmoil is likely to slow the pace of expected growth. Based on the current forecast, Oregon's population is expected to reach 4.572 million in the year 2030 with an annual rate of growth of 0.77 percent between 2021 and 2030. The projected population of 2030 is 73,100 less than our March 2020 forecast released just before the COVID hit. The lower projection is due to the lingering COVID-19 effect resulting in higher deaths, lower births, and fewer net-migration, and 2020 Census count coming lower than expected estimate by Population Research Center, Portland State University.

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 well below the replacement level and number of deaths continue to rise due to aging population, long-term growth comes from net in-migration. The COVID-19 pandemic has left noticeable impact on demographic processes. Due to the declining births and rising deaths, past forecasts projected natural increase (births minus deaths) to turn negative after the year 2025. However, Oregon's natural increase has already turned negative because of COVID effect. Even during this pandemic, Oregon has gained people through net-migration as the worker are able to work from home in many sectors. Working-age adults come to Oregon as long as we have favorable economic conditions and offers better quality of life. During the 1980s, which included 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 of the economic cycle, net migration accounted for 76 percent of the population change during the booming economy of early 1990s. This share of migration to population change declined to 32 percent in 2010 as a result of economic recession, lowest since early 1980s when we had negative net migration for several years. As a sign of slow to modest economic gain and declining natural increase (births minus deaths), the ratio of net migration-to-population change has

registered at 89 percent in 2020. As a result of sudden rise in the number of deaths and fall in the number of births coinciding with the COVID-19 pandemic, the natural increase will turn negative starting in the year 2020 and extending through 2030 and beyond. So, in the future, all of Oregon's population growth and more will come from the net migration due to the combination of continued positive net migration, well below replacement level fertility, and the rise in the number of deaths associated with the increase in the elderly population. Thus, migration will be solely responsible for Oregon's future population growth.

Age structure and its change affect employment, state revenue, and expenditure as the demand for services varies by age groups. Demographics are the major budget drivers, which are modified by policy choices on service coverage and delivery. Births, deaths, and migration history of over 100 years do impact the current age-sex structure. Growth in many age groups will show the effects of the baby-boom and their echo generations during the forecast period of 2021-2030. It will also reflect demographics impacted by the depression era birth cohort combined with changing migration of working age population and elderly retirees through history. After a period of relatively slow growth during the 1990s and early 2000s, the elderly population (65+) has picked up a faster pace of growth since 2005. This population group will maintain the high growth as the tail end of the baby-boom generation continue to enter this age group combined with the attrition of small depression era birth cohort due to death. This age cohort, however, has hit the plateau of high growth rates exceeding 4 percent annually between 2011 and 2019. The group will experience continued high but diminishing rate of growth. The average annual growth of the elderly population will be 2.0 percent during the 2021-2030 forecast period. Different age groups among the elderly population show quite varied and fascinating growth trends. The youngest elderly (aged 65-74), which was growing at an extremely fast pace in the recent past averaging 5.0 percent annually between 2010 and 2020 due to the direct impact of the baby-boom generation entering and smaller pre-baby boom cohort exiting this 65-74 age group. This fast-paced growth rate will taper off to negative growth by the end of the forecast period of 2021-2030 as a sign of the end of the baby-boom generation transitioning to elderly age group. This high growth transitioning into a net loss of this youngest elderly population result in 0.3 percent annual average growth rate in the next nine years. The next older generation of population aged 75-84 has seen several years of slow growth and a period of shrinking years in the recent past. The elderly aged 75-84 started to show growth as the effect of depression era birth-cohort dissipated. An unprecedented fast pace of growth of population in this age group has started as the baby-boom generation is maturing from the youngest elderly into this 75-84 age group. Annual growth rate during the forecast period of 2021-2030 is expected to be unusually high 4.9 percent. After a period of slow growth, the oldest elderly (aged 85+) will continue to grow at a strong rate but steadily gaining growth momentum 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 2.5 percent. An unprecedented growth in oldest elderly will commence near the end of the forecast horizon as the fast growing 75-84 age group population transition into this oldest elderly age cohort. As a sign of massive demographic structural change of Oregon's population, starting in 2023 the number of elderly will exceed the number of children under the age of 18. To illustrate the contrast, in 2000 elderly population numbered a little over half of the number of children in Oregon.

The oldest working age population aged 45-64 also has seen the dramatic demographic impact as the baby-boom generation matures out of the oldest working-age cohort which is replaced by smaller baby-bust cohort or Gen X. As the effect of this demographic transition 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 has remained and will remain at slow or below zero growth phase for a few more years. The size of this older



working-age population will see only a small increase by the end of the forecast period. The younger working-age population of 25-44 age group has recovered 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 but slow growth starting in the year 2004 and has gained steam since 2013. This group will increase by 1.0 percent annual average rate during the forecast horizon mainly because of the exiting smaller birth (baby-bust) cohort being replaced by larger baby-boom echo cohort. The young adult population (aged 18-24) will see only a small change 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, but college enrollment typically goes up during the time of very competitive job market, 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) has been very slow or negative in the past and is expected to decline through the forecast years. This will translate into slow growth or even decline in the school enrollments. On average for the forecast period, this school-age population will decline by -0.7 percent annually. The growth rate for children under the age of five has remained near or below zero percent in the recent past and will continue to decline in the near future due to the sharp decline in the number of births. We expect slight rebound the int number of births in the forecast period due to a small increase in fertility rate and increase in the women in the child-bearing ages. Although the number of children under the age of five declined in the recent years, the demand for childcare 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 the number of children will decline over the forecast horizon. The number of working-age adults in general will show slow growth during the forecast horizon. Hence, based solely on demographics of Oregon, demand for public services geared towards children and young adults will likely decline or increase only 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, 2020 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.

The U.S. Census Bureau just released apportionment and resident population count of April 1, 2020 for the states. This is the crucial information as the base for all future postcensal population estimates and projections. Also, this 2020 census population is used to determine the error of closure, which is the difference between the actual census enumeration and the estimate based on the previous census of 2010. Again, the error of closure is used to correct and adjust all previous annual postcensal estimates for the time between 2010 and 2020. Since the Bureau has released only the total population, OEA has estimated only the total intercensal population for Oregon based on 2010 and 2020 census counts and postcensal estimates of Population Research Center, Portland State University. Therefore, Oregon's *intercensal* population estimates for the years 2011 through 2020 in this forecast shown in Appendix C are different from prior *postcensal* numbers. Once the Bureau releases age-

sex detail of the census population, OEA will produce readjusted intercensal estimates by age and sex for each of the years from 2011 through 2020. The numbers of births and deaths through 2021 are from Oregon's Center for Health Statistics. All other numbers and age-sex detail are generated by OEA.

Annual numbers of births are determined from the age-specific fertility rates projected based on Oregon's past trends and past and projected national trends. Oregon's total fertility rate is assumed to be 1.4 per woman in 2020 and this rate is projected to 1.5 children per woman by 2030 which is well below the replacement level fertility of 2.1 children per woman. Oregon's fertility level is tracking below the national level.

Life Table survival rates are developed for the year 2010 and a new life table for 2020 will be developed when all necessary data becomes available. Male and female life expectancies for the 2010-2030 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. Due to the effect of the COVID-19 pandemic, number of deaths suddenly increased and the actual life expectancies declined.

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 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. In the recent past, slowdown in Oregon's economy 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. 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, limiting the potential destination choices. The role of net migration in Oregon's population growth will get more prominence as the natural increase has begun to turn negative. The increasing excess of deaths over births will continue due to the rapid increase in the number of deaths associated with the aging population and decline in the number of births largely due to the decline in fertility rate associated with life-style choices. Such a trend was expected, but the COVID-19 has hastened the process. The annual net migration is expected to be low in the short run due to the effects of COVID-19 and economic slowdown. However, the migration is expected to recover after 2024. Between 2021 and 2030 net migration is expected to be in the range of 33,100 to 43,400, averaging 38,900 persons annually with migration rate ranging between 7.9 to 9.5 per thousand population.

APPENDIX A: ECONOMIC FORECAST DETAIL

Table A.1	Employment Forecast Tracking .....	40
Table A.2	Short-term Oregon Economic Summary .....	41
Table A.3	Oregon Economic Forecast Change .....	42
Table A.4	Annual Economic Forecast .....	43

Table A.1 – Employment Forecast Tracking

**Total Nonfarm Employment, 3rd quarter 2022**

(Employment in thousands, Annualized Percent Change)

	Preliminary Estimate		Forecast		Forecast Error		Y/Y Change
	level	% ch	level	% ch	level	%	% ch
<b>Total Nonfarm</b>	1,959.2	3.4	1,956.8	2.0	2.4	0.1	3.2
<b>Total Private</b>	1,661.1	2.0	1,661.7	0.8	(0.6)	(0.0)	3.5
<b>Mining and Logging</b>	6.3	(3.4)	6.5	15.5	(0.2)	(2.9)	(3.4)
<b>Construction</b>	115.1	1.1	114.8	(5.8)	0.3	0.3	3.7
<b>Manufacturing</b>	195.2	0.4	196.9	1.8	(1.7)	(0.9)	3.8
<b>Durable Goods</b>	135.5	0.5	135.9	(0.8)	(0.4)	(0.3)	4.4
<b>Wood Product</b>	23.3	(1.1)	23.4	(4.8)	(0.1)	(0.6)	1.8
<b>Metals and Machinery</b>	38.4	4.8	38.1	(5.1)	0.4	1.0	4.3
<b>Computer and Electronic Product</b>	40.5	(4.3)	40.8	(0.7)	(0.2)	(0.5)	7.0
<b>Transportation Equipment</b>	10.8	(0.6)	11.1	7.1	(0.3)	(2.4)	2.0
<b>Other Durable Goods</b>	22.4	4.3	22.6	7.7	(0.2)	(0.8)	3.6
<b>Nondurable Goods</b>	59.7	0.4	61.0	7.9	(1.3)	(2.1)	2.6
<b>Food</b>	28.8	(0.1)	29.6	6.5	(0.9)	(2.9)	1.5
<b>Other Nondurable Goods</b>	30.9	0.8	31.3	9.3	(0.4)	(1.3)	3.7
<b>Trade, Transportation &amp; Utilities</b>	366.0	(0.2)	366.0	(1.0)	0.0	0.0	1.5
<b>Retail Trade</b>	209.5	(0.6)	208.9	(1.9)	0.6	0.3	0.4
<b>Wholesale Trade</b>	77.2	4.2	77.8	2.1	(0.7)	(0.9)	3.2
<b>Transportation, Warehousing &amp; Utilities</b>	79.4	(3.1)	79.3	(1.4)	0.1	0.1	2.8
<b>Information</b>	36.0	(7.8)	36.6	6.1	(0.6)	(1.5)	1.0
<b>Financial Activities</b>	103.5	(2.8)	103.3	(6.9)	0.1	0.1	(0.6)
<b>Professional &amp; Business Services</b>	261.5	(1.2)	265.9	3.6	(4.4)	(1.7)	3.6
<b>Educational &amp; Health Services</b>	311.2	5.6	309.6	3.5	1.6	0.5	3.3
<b>Educational Services</b>	36.0	16.2	34.7	(1.3)	1.3	3.9	8.7
<b>Health Services</b>	275.2	4.3	274.9	4.1	0.3	0.1	2.6
<b>Leisure and Hospitality</b>	204.2	9.8	201.2	3.0	3.0	1.5	10.2
<b>Other Services</b>	62.0	8.8	60.9	(1.2)	1.1	1.8	4.0
<b>Government</b>	298.1	11.9	295.1	8.7	3.0	1.0	1.3
<b>Federal</b>	27.5	(8.0)	28.5	6.0	(1.0)	(3.6)	(1.9)
<b>State</b>	43.0	0.9	43.0	0.9	(0.0)	(0.1)	1.3
<b>State Education</b>	1.1	20.0	1.1	(4.9)	0.1	6.1	13.1
<b>Local</b>	227.7	17.0	223.6	10.6	4.1	1.8	1.6
<b>Local Education</b>	130.0	18.8	126.1	7.3	3.9	3.1	(0.5)

Table A.2 – Short-Term Oregon Economic Summary

## Oregon Forecast Summary

	Quarterly					Annual					
	2022:3	2022:4	2023:1	2023:2	2023:3	2020	2021	2022	2023	2024	2025
<b>Personal Income (\$ billions)</b>											
<b>Nominal Personal Income</b>	269.3	273.8	276.8	279.8	282.5	241.8	261.5	267.7	281.1	294.3	310.1
% change	5.3	6.9	4.4	4.5	3.9	8.8	8.2	2.4	5.0	4.7	5.4
<b>Real Personal Income (base year=2012)</b>	217.7	218.9	219.3	220.7	221.5	217.5	226.2	217.9	220.9	226.6	234.1
% change	1.1	2.3	0.7	2.5	1.5	7.6	4.0	(3.7)	1.4	2.5	3.3
<b>Nominal Wages and Salaries</b>	137.6	140.4	142.2	143.9	144.3	115.8	126.3	136.9	143.9	149.5	158.2
% change	5.2	8.4	5.3	4.7	1.2	2.5	9.1	8.4	5.1	3.9	5.8
<b>Other Indicators</b>											
<b>Per Capita Income (\$1,000)</b>	62.7	63.6	64.2	64.8	65.3	57.0	61.3	62.3	65.0	67.7	70.8
% change	4.6	6.2	3.8	3.8	3.2	8.0	7.6	1.7	4.3	4.1	4.6
<b>Average Wage rate (\$1,000)</b>	69.9	70.9	71.6	72.4	73.1	62.9	66.9	69.9	72.7	75.7	78.7
% change	2.4	5.4	4.3	4.3	4.1	9.5	6.4	4.4	4.1	4.0	4.0
<b>Population (Millions)</b>	4.3	4.3	4.3	4.3	4.3	4.24	4.27	4.29	4.32	4.35	4.38
% change	0.6	0.6	0.6	0.6	0.6	0.7	0.5	0.7	0.6	0.6	0.8
<b>Housing Starts (Thousands)</b>	20.3	17.2	16.1	16.2	16.8	18.1	20.2	19.6	16.5	18.5	20.5
% change	(3.0)	(48.2)	(24.2)	4.0	15.9	(12.7)	11.9	(3.0)	(15.7)	12.1	10.6
<b>Unemployment Rate</b>	3.6	3.7	3.8	3.9	4.6	7.6	5.2	3.7	4.4	5.3	4.7
Point Change	0.0	0.1	0.1	0.1	0.7	3.9	(2.4)	(1.5)	0.7	0.9	(0.6)
<b>Employment (Thousands)</b>											
<b>Total Nonfarm</b>	1,959.2	1,969.1	1,974.2	1,976.0	1,962.2	1,830.7	1,874.7	1,947.9	1,966.3	1,963.8	1,998.3
% change	3.4	2.0	1.0	0.4	(2.8)	(6.3)	2.4	3.9	0.9	(0.1)	1.8
<b>Private Nonfarm</b>	1,661.1	1,671.2	1,676.2	1,677.0	1,663.2	1,546.0	1,589.7	1,654.7	1,667.9	1,664.5	1,695.7
% change	2.0	2.5	1.2	0.2	(3.2)	(6.6)	2.8	4.1	0.8	(0.2)	1.9
<b>Construction</b>	115.1	115.2	115.2	114.4	113.5	108.4	111.0	114.8	113.9	111.7	113.6
% change	1.1	0.3	0.0	(2.6)	(3.3)	(1.1)	2.5	3.3	(0.8)	(1.9)	1.7
<b>Manufacturing</b>	195.2	196.0	195.9	194.7	193.4	185.5	187.1	194.4	194.2	194.0	195.3
% change	0.4	1.7	(0.1)	(2.4)	(2.7)	(6.4)	0.9	3.9	(0.1)	(0.1)	0.7
<b>Durable Manufacturing</b>	135.5	135.8	135.6	134.4	133.0	128.4	129.1	134.7	133.9	133.6	134.7
% change	0.5	0.9	(0.6)	(3.5)	(3.9)	(6.3)	0.5	4.4	(0.6)	(0.2)	0.8
Wood Product Manufacturing	23.3	23.3	23.0	22.6	22.1	22.0	22.7	23.2	22.4	22.4	23.2
% change	(1.1)	0.4	(4.3)	(8.1)	(8.1)	(5.3)	3.4	2.3	(3.6)	0.1	3.5
High Tech Manufacturing	40.5	40.6	40.6	40.4	40.3	38.0	37.9	40.4	40.4	40.2	40.1
% change	(4.3)	0.2	0.1	(1.4)	(1.4)	(1.7)	(0.1)	6.6	(0.1)	(0.5)	(0.3)
Transportation Equipment	10.8	10.8	10.9	11.0	11.1	11.0	10.7	10.8	11.1	11.5	11.8
% change	(0.6)	0.8	1.9	5.5	4.2	(13.0)	(2.5)	0.8	2.8	3.8	2.7
<b>Nondurable Manufacturing</b>	59.7	60.2	60.4	60.4	60.4	57.1	58.1	59.7	60.4	60.3	60.6
% change	0.4	3.5	1.3	(0.1)	0.2	(6.5)	1.7	2.8	1.1	(0.0)	0.4
<b>Private nonmanufacturing</b>	1,465.9	1,475.2	1,480.3	1,482.3	1,469.8	1,360.4	1,402.5	1,460.3	1,473.7	1,470.6	1,500.4
% change	2.2	2.6	1.4	0.5	(3.3)	(6.7)	3.1	4.1	0.9	(0.2)	2.0
Retail Trade	209.5	209.5	209.6	209.3	205.8	201.0	209.6	209.9	207.2	204.5	207.3
% change	(0.6)	0.1	0.1	(0.6)	(6.5)	(4.4)	4.3	0.1	(1.3)	(1.3)	1.4
Wholesale Trade	77.2	77.4	77.3	77.1	76.0	74.2	74.6	76.7	76.6	76.4	76.8
% change	4.2	1.0	(0.4)	(1.2)	(5.2)	(3.1)	0.6	2.7	(0.1)	(0.3)	0.6
<b>Information</b>	36.0	36.2	36.4	36.7	36.4	33.3	35.1	36.3	36.4	36.2	36.6
% change	(7.8)	1.6	3.1	2.4	(2.8)	(5.1)	5.3	3.6	0.2	(0.7)	1.2
<b>Professional and Business Services</b>	261.5	263.0	264.9	266.4	263.4	243.4	250.8	261.3	264.4	263.2	270.4
% change	(1.2)	2.3	3.0	2.3	(4.5)	(4.4)	3.1	4.2	1.2	(0.4)	2.7
<b>Health Services</b>	275.2	280.7	283.0	283.9	282.3	265.3	267.4	274.1	282.5	285.1	293.2
% change	4.3	8.2	3.4	1.3	(2.3)	(3.7)	0.8	2.5	3.0	0.9	2.9
<b>Leisure and Hospitality</b>	204.2	207.9	208.7	209.3	208.3	162.2	174.8	201.7	208.5	207.8	212.0
% change	9.8	7.4	1.5	1.2	(1.8)	(24.2)	7.8	15.4	3.4	(0.4)	2.0
<b>Government</b>	298.1	297.9	297.9	299.0	299.0	284.7	285.1	293.2	298.4	299.2	302.5
% change	11.9	(0.2)	(0.0)	1.5	(0.1)	(4.6)	0.1	2.9	1.8	0.3	1.1

Table A.3 – Oregon Economic Forecast Change

	Quarterly					Annual					
	2022:3	2022:4	2023:1	2023:2	2023:3	2020	2021	2022	2023	2024	2025
<b>Personal Income (\$ billions)</b>											
<b>Nominal Personal Income</b>	269.3	273.8	276.8	279.8	282.5	241.8	261.5	267.7	281.1	294.3	310.1
% change	0.2	0.6	0.3	0.2	(0.2)	1.2	1.5	0.6	(0.1)	(0.4)	0.1
<b>Real Personal Income (base year=2012)</b>	217.7	218.9	219.3	220.7	221.5	217.5	226.2	217.9	220.9	226.6	234.1
% change	(0.2)	0.0	(0.5)	(0.6)	(1.1)	1.3	1.4	0.2	(0.9)	(1.7)	(1.4)
<b>Nominal Wages and Salaries</b>	137.6	140.4	142.2	143.9	144.3	115.8	126.3	136.9	143.9	149.5	158.2
% change	(2.3)	(1.6)	(1.6)	(1.7)	(2.8)	0.4	(0.2)	(1.5)	(2.4)	(3.6)	(2.6)
<b>Other Indicators</b>											
<b>Per Capita Income (\$1,000)</b>	62.7	63.6	64.2	64.8	65.3	57.0	61.3	62.3	65.0	67.7	70.8
% change	0.3	0.7	0.4	0.3	(0.0)	1.2	1.5	0.7	0.1	(0.1)	0.4
<b>Average Wage rate (\$1,000)</b>	69.9	70.9	71.6	72.4	73.1	62.9	66.9	69.9	72.7	75.7	78.7
% change	(2.2)	(1.9)	(1.8)	(1.6)	(1.7)	0.4	(0.2)	(1.6)	(1.7)	(1.8)	(1.8)
<b>Population (Millions)</b>	4.30	4.30	4.31	4.3	4.3	4.24	4.27	4.29	4.32	4.35	4.38
% change	(0.0)	(0.1)	(0.1)	(0.1)	(0.2)	(0.0)	(0.0)	(0.0)	(0.2)	(0.3)	(0.3)
<b>Housing Starts (Thousands)</b>	20.3	17.2	16.1	16.2	16.8	18.1	20.2	19.6	16.5	18.5	20.5
% change	12.5	(7.9)	(18.4)	(20.3)	(19.1)	0.0	(0.1)	1.0	(19.2)	(13.9)	(5.9)
<b>Unemployment Rate</b>	3.6	3.7	3.8	3.9	4.6	7.6	5.2	3.7	4.4	5.3	4.7
Point Change	0.1	0.1	0.0	(0.1)	0.5	0.0	0.0	0.0	0.4	0.9	0.2
<b>Employment (Thousands)</b>											
<b>Total Nonfarm</b>	1,959.2	1,969.1	1,974.2	1,976.0	1,962.2	1,830.7	1,874.7	1,947.9	1,966.3	1,963.8	1,998.3
% change	0.1	0.3	0.2	(0.1)	(1.2)	(0.0)	(0.0)	0.1	(0.7)	(1.8)	(0.9)
<b>Private Nonfarm</b>	1,661.1	1,671.2	1,676.2	1,677.0	1,663.2	1,546.0	1,589.7	1,654.7	1,667.9	1,664.5	1,695.7
% change	(0.0)	0.3	0.2	(0.1)	(1.3)	0.0	0.0	0.0	(0.8)	(2.0)	(1.0)
<b>Construction</b>	115.1	115.2	115.2	114.4	113.5	108.4	111.0	114.8	113.9	111.7	113.6
% change	0.3	2.7	1.9	(0.6)	(2.1)	0.0	0.0	0.4	(1.0)	(3.6)	(2.2)
<b>Manufacturing</b>	195.2	196.0	195.9	194.7	193.4	185.5	187.1	194.4	194.2	194.0	195.3
% change	(0.9)	(0.8)	(1.2)	(2.0)	(3.1)	0.0	0.0	(0.5)	(2.4)	(2.7)	(1.8)
<b>Durable Manufacturing</b>	135.5	135.8	135.6	134.4	133.0	128.4	129.1	134.7	133.9	133.6	134.7
% change	(0.3)	(0.5)	(0.8)	(1.9)	(3.0)	(0.0)	(0.0)	(0.3)	(2.3)	(2.4)	(1.3)
Wood Product Manufacturing	23.3	23.3	23.0	22.6	22.1	22.0	22.7	23.2	22.4	22.4	23.2
% change	(0.6)	0.1	(1.1)	(3.2)	(5.3)	(0.0)	(0.0)	(0.5)	(4.0)	(4.1)	(1.2)
High Tech Manufacturing	40.5	40.6	40.6	40.4	40.3	38.0	37.9	40.4	40.4	40.2	40.1
% change	(0.5)	(0.8)	(1.1)	(1.8)	(2.2)	0.0	0.0	(0.2)	(1.9)	(2.6)	(2.8)
Transportation Equipment	10.8	10.8	10.9	11.0	11.1	11.0	10.7	10.8	11.1	11.5	11.8
% change	(2.4)	(5.5)	(6.0)	(6.0)	(6.5)	0.0	(0.0)	(2.2)	(6.0)	(3.2)	(0.5)
<b>Nondurable Manufacturing</b>	59.7	60.2	60.4	60.4	60.4	57.1	58.1	59.7	60.4	60.3	60.6
% change	(2.1)	(1.7)	(1.9)	(2.3)	(3.1)	0.0	0.0	(0.8)	(2.8)	(3.4)	(2.8)
<b>Private nonmanufacturing</b>	1,465.9	1,475.2	1,480.3	1,482.3	1,469.8	1,360.4	1,402.5	1,460.3	1,473.7	1,470.6	1,500.4
% change	0.1	0.4	0.4	0.2	(1.1)	0.0	0.0	0.1	(0.6)	(2.0)	(0.9)
Retail Trade	209.5	209.5	209.6	209.3	205.8	201.0	209.6	209.9	207.2	204.5	207.3
% change	0.3	0.3	0.3	0.4	(1.0)	0.0	0.0	0.1	(0.5)	(1.1)	(0.0)
Wholesale Trade	77.2	77.4	77.3	77.1	76.0	74.2	74.6	76.7	76.6	76.4	76.8
% change	(0.9)	(1.0)	(1.4)	(1.8)	(3.1)	0.0	0.0	(0.8)	(2.4)	(2.7)	(2.3)
<b>Information</b>	36.0	36.2	36.4	36.7	36.4	33.3	35.1	36.3	36.4	36.2	36.6
% change	(1.5)	(1.3)	(0.9)	(0.0)	(1.1)	0.0	0.0	(0.0)	(1.0)	(2.7)	(1.7)
<b>Professional and Business Services</b>	261.5	263.0	264.9	266.4	263.4	243.4	250.8	261.3	264.4	263.2	270.4
% change	(1.7)	(1.7)	(1.4)	(1.0)	(2.7)	0.0	0.0	(0.9)	(2.1)	(3.6)	(1.8)
<b>Health Services</b>	275.2	280.7	283.0	283.9	282.3	265.3	267.4	274.1	282.5	285.1	293.2
% change	0.1	1.2	1.6	1.5	0.2	0.0	0.0	0.3	0.6	(0.7)	0.3
<b>Leisure and Hospitality</b>	204.2	207.9	208.7	209.3	208.3	162.2	174.8	201.7	208.5	207.8	212.0
% change	1.5	3.2	3.4	3.4	2.2	0.0	0.0	1.2	2.6	0.2	0.3
<b>Government</b>	298.1	297.9	297.9	299.0	299.0	284.7	285.1	293.2	298.4	299.2	302.5
% change	1.0	0.4	(0.1)	0.0	(0.3)	(0.0)	(0.0)	0.5	(0.3)	(0.7)	(0.1)

Table A.4 – Annual Economic Forecast

**Dec 2022 - Personal Income**

**(Billions of Current Dollars)**

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>Total Personal Income*</b>												
Oregon	222.3	241.8	261.5	267.7	281.1	294.3	310.1	326.1	342.6	360.1	378.7	397.9
% Ch	5.1	8.8	8.2	2.4	5.0	4.7	5.4	5.1	5.1	5.1	5.2	5.1
U.S.	18,587.0	19,832.3	21,294.8	21,745.8	22,552.9	23,580.5	24,733.4	25,890.5	27,078.3	28,310.1	29,578.5	30,892.5
% Ch	5.1	6.7	7.4	2.1	3.7	4.6	4.9	4.7	4.6	4.5	4.5	4.4
<b>Wage and Salary</b>												
Oregon	112.9	115.8	126.3	136.9	143.9	149.5	158.2	166.4	174.5	182.8	191.5	200.6
% Ch	5.3	2.5	9.1	8.4	5.1	3.9	5.8	5.2	4.9	4.8	4.7	4.8
U.S.	9,324.6	9,457.4	10,290.1	11,191.3	11,582.6	12,061.9	12,689.3	13,302.0	13,892.2	14,474.0	15,055.7	15,659.8
% Ch	4.8	1.4	8.8	8.8	3.5	4.1	5.2	4.8	4.4	4.2	4.0	4.0
<b>Other Labor Income</b>												
Oregon	27.6	28.6	30.5	32.4	34.1	35.6	37.7	39.7	41.7	43.7	45.8	48.0
% Ch	5.3	3.5	6.6	6.1	5.4	4.3	6.0	5.3	4.9	4.8	4.8	4.9
U.S.	1,472.9	1,476.2	1,550.3	1,612.2	1,658.8	1,727.6	1,817.4	1,905.2	1,989.7	2,073.0	2,156.3	2,242.9
% Ch	2.8	0.2	5.0	4.0	2.9	4.1	5.2	4.8	4.4	4.2	4.0	4.0
<b>Nonfarm Proprietor's Income</b>												
Oregon	18.9	20.7	21.8	23.0	23.5	24.3	25.1	26.3	27.6	29.2	31.1	33.0
% Ch	1.4	9.8	5.3	5.7	2.0	3.5	3.0	4.9	5.0	5.9	6.5	6.1
U.S.	1,572.3	1,597.9	1,702.2	1,750.0	1,774.3	1,811.3	1,853.5	1,928.8	2,010.5	2,111.4	2,224.6	2,347.1
% Ch	2.1	1.6	6.5	2.8	1.4	2.1	2.3	4.1	4.2	5.0	5.4	5.5
<b>Dividend, Interest and Rent</b>												
Oregon	44.9	45.4	46.8	49.1	52.2	55.5	58.0	60.7	63.6	66.7	70.1	73.7
% Ch	5.2	1.2	3.1	4.9	6.4	6.2	4.5	4.7	4.8	4.9	5.1	5.0
U.S.	3,817.2	3,815.3	3,926.2	4,107.7	4,369.2	4,637.4	4,843.9	5,046.8	5,256.3	5,485.1	5,735.8	6,001.2
% Ch	7.8	(0.1)	2.9	4.6	6.4	6.1	4.5	4.2	4.1	4.4	4.6	4.6
<b>Transfer Payments</b>												
Oregon	42.7	56.8	63.4	55.8	58.3	61.6	65.1	68.6	72.6	76.8	81.2	85.6
% Ch	6.0	33.1	11.6	(12.1)	4.4	5.8	5.6	5.3	5.8	5.8	5.7	5.3
U.S.	3,089.7	4,187.1	4,546.4	3,834.6	3,954.0	4,172.3	4,400.3	4,626.4	4,883.8	5,158.2	5,436.4	5,713.7
% Ch	5.6	35.5	8.6	(15.7)	3.1	5.5	5.5	5.1	5.6	5.6	5.4	5.1
<b>Contributions for Social Security</b>												
Oregon	19.6	20.1	21.5	23.4	24.9	26.1	27.6	29.0	30.4	31.9	33.4	35.0
% Ch	5.3	2.7	6.8	9.0	6.5	4.5	5.8	5.2	4.8	4.8	4.8	4.9
U.S.	773.9	790.9	842.7	909.6	942.0	978.9	1,028.8	1,077.2	1,113.8	1,158.4	1,205.5	1,254.4
% Ch	5.0	2.2	6.6	7.9	3.6	3.9	5.1	4.7	3.4	4.0	4.1	4.1
<b>Residence Adjustment</b>												
Oregon	(5.5)	(5.7)	(6.0)	(6.5)	(6.9)	(7.1)	(7.4)	(7.7)	(8.0)	(8.3)	(8.7)	(9.0)
% Ch	6.8	4.4	4.7	8.5	5.4	3.2	4.5	4.1	4.0	4.1	4.2	4.3
<b>Farm Proprietor's Income</b>												
Oregon	0.3	0.3	0.2	0.5	0.9	0.9	1.0	1.0	1.0	1.1	1.1	1.1
% Ch	26.9	(15.0)	(36.1)	161.8	78.2	7.0	11.3	1.4	(0.1)	3.2	3.8	2.8
<b>Per Capita Income (Thousands of \$)</b>												
Oregon	52.7	57.0	61.3	62.3	65.0	67.7	70.8	73.8	76.9	80.1	83.5	87.0
% Ch	4.1	8.0	7.6	1.7	4.3	4.1	4.6	4.2	4.2	4.2	4.3	4.2
U.S.	56.2	59.8	64.1	65.3	67.4	70.2	73.2	76.3	79.4	82.6	85.9	89.2
% Ch	4.6	6.3	7.2	1.8	3.3	4.1	4.4	4.2	4.1	4.0	4.0	3.9

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

**Dec 2022 - Employment By Industry  
(Oregon - Thousands, U.S. - Millions)**

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>Total Nonfarm</b>												
Oregon	1,954.2	1,830.7	1,874.7	1,947.9	1,966.3	1,963.8	1,998.3	2,023.7	2,043.3	2,059.7	2,074.8	2,090.6
% Ch	1.6	(6.3)	2.4	3.9	0.9	(0.1)	1.8	1.3	1.0	0.8	0.7	0.8
U.S.	150.9	142.1	146.1	152.0	151.3	150.5	151.8	152.9	153.6	154.3	154.9	155.5
% Ch	1.3	(5.8)	2.8	4.0	(0.4)	(0.5)	0.9	0.7	0.5	0.4	0.4	0.4
<b>Private Nonfarm</b>												
Oregon	1,655.8	1,546.0	1,589.7	1,654.7	1,667.9	1,664.5	1,695.7	1,719.7	1,737.6	1,752.2	1,765.8	1,779.4
% Ch	1.7	(6.6)	2.8	4.1	0.8	(0.2)	1.9	1.4	1.0	0.8	0.8	0.8
U.S.	128.3	120.2	124.1	129.7	128.8	127.8	128.9	129.8	130.4	130.9	131.4	131.8
% Ch	1.5	(6.3)	3.3	4.5	(0.7)	(0.8)	0.9	0.7	0.4	0.4	0.4	0.3
<b>Mining and Logging</b>												
Oregon	6.9	6.6	6.6	6.4	6.2	6.2	6.4	6.5	6.6	6.7	6.7	6.7
% Ch	(4.4)	(4.8)	0.1	(3.2)	(2.1)	(0.2)	2.7	2.0	1.6	0.8	0.1	0.2
U.S.	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
% Ch	(0.1)	(17.6)	(5.6)	9.4	3.5	3.6	1.7	2.1	2.0	0.7	(0.2)	(1.5)
<b>Construction</b>												
Oregon	109.6	108.4	111.0	114.8	113.9	111.7	113.6	115.9	116.9	117.3	117.8	118.1
% Ch	3.9	(1.1)	2.5	3.3	(0.8)	(1.9)	1.7	2.0	0.8	0.4	0.4	0.3
U.S.	7.5	7.3	7.4	7.7	7.4	7.3	7.3	7.3	7.4	7.4	7.5	7.6
% Ch	2.8	(3.2)	2.2	3.4	(3.2)	(1.6)	(0.2)	0.3	0.4	1.0	1.2	1.3
<b>Manufacturing</b>												
Oregon	198.1	185.5	187.1	194.4	194.2	194.0	195.3	195.9	196.3	196.5	196.9	197.2
% Ch	1.5	(6.4)	0.9	3.9	(0.1)	(0.1)	0.7	0.3	0.2	0.1	0.2	0.2
U.S.	12.8	12.2	12.3	12.8	12.5	12.1	12.0	11.9	11.9	11.8	11.8	11.7
% Ch	1.0	(5.1)	1.5	3.5	(1.9)	(3.4)	(1.0)	(0.7)	(0.2)	(0.5)	(0.4)	(0.3)
<b>Durable Manufacturing</b>												
Oregon	137.1	128.4	129.1	134.7	133.9	133.6	134.7	135.0	135.0	134.8	134.8	134.8
% Ch	1.1	(6.3)	0.5	4.4	(0.6)	(0.2)	0.8	0.2	0.0	(0.1)	(0.1)	0.0
U.S.	8.0	7.6	7.7	7.9	7.8	7.5	7.4	7.3	7.3	7.3	7.3	7.3
% Ch	1.2	(5.8)	1.4	3.5	(2.3)	(3.8)	(0.9)	(0.7)	0.0	(0.5)	(0.5)	(0.3)
<b>Wood Products</b>												
Oregon	23.2	22.0	22.7	23.2	22.4	22.4	23.2	23.4	23.5	23.6	23.6	23.7
% Ch	(1.4)	(5.3)	3.4	2.3	(3.6)	0.1	3.5	0.9	0.3	0.4	0.3	0.4
U.S.	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4
% Ch	0.7	(3.2)	3.6	4.5	(24.4)	(12.2)	8.7	7.2	6.8	3.5	3.1	2.5
<b>Metal and Machinery</b>												
Oregon	40.2	36.6	36.3	38.1	38.0	37.8	38.1	38.1	38.0	37.7	37.7	37.7
% Ch	2.2	(8.9)	(0.8)	4.8	(0.3)	(0.4)	0.8	0.1	(0.5)	(0.6)	(0.2)	0.2
U.S.	3.0	2.8	2.8	2.9	2.8	2.7	2.7	2.7	2.7	2.7	2.6	2.6
% Ch	1.1	(6.8)	(0.2)	3.6	(1.6)	(4.5)	(1.3)	(0.1)	0.0	(0.7)	(0.5)	(0.1)
<b>Computer and Electronic Products</b>												
Oregon	38.6	38.0	37.9	40.4	40.4	40.2	40.1	40.0	40.0	40.0	40.0	40.0
% Ch	1.8	(1.7)	(0.1)	6.6	(0.1)	(0.5)	(0.3)	(0.1)	0.0	0.0	0.0	0.0
U.S.	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
% Ch	2.0	(1.1)	(0.4)	2.3	1.0	0.7	0.7	(0.1)	(0.6)	(1.1)	(1.2)	(1.0)
<b>Transportation Equipment</b>												
Oregon	12.6	11.0	10.7	10.8	11.1	11.5	11.8	12.0	11.9	11.7	11.6	11.5
% Ch	3.8	(13.0)	(2.5)	0.8	2.8	3.8	2.7	1.2	(0.5)	(1.3)	(1.0)	(0.9)
U.S.	1.7	1.6	1.6	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.5	1.5
% Ch	1.6	(8.0)	3.0	3.6	0.3	(2.8)	(1.0)	(3.1)	(0.9)	(1.3)	(1.4)	(1.7)
<b>Other Durables</b>												
Oregon	22.4	20.9	21.4	22.2	22.0	21.7	21.5	21.5	21.7	21.8	21.8	21.8
% Ch	(0.7)	(6.7)	2.3	3.6	(0.6)	(1.4)	(0.8)	(0.3)	1.1	0.4	0.2	(0.0)
U.S.	2.2	2.1	2.2	2.3	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0
% Ch	0.6	(4.9)	3.1	3.6	(6.9)	(5.8)	(1.0)	0.2	1.1	0.6	0.8	0.9
<b>Nondurable Manufacturing</b>												
Oregon	61.1	57.1	58.1	59.7	60.4	60.3	60.6	60.9	61.2	61.6	62.1	62.4
% Ch	2.4	(6.5)	1.7	2.8	1.1	(0.0)	0.4	0.5	0.5	0.7	0.8	0.5
U.S.	4.8	4.6	4.7	4.8	4.8	4.7	4.6	4.6	4.5	4.5	4.5	4.5
% Ch	0.8	(3.9)	1.7	3.7	(1.1)	(2.7)	(1.1)	(0.8)	(0.4)	(0.5)	(0.4)	(0.3)
<b>Food Manufacturing</b>												
Oregon	29.9	28.0	28.5	28.8	29.4	29.8	29.9	30.0	30.1	30.2	30.4	30.6
% Ch	0.1	(6.2)	1.7	1.0	2.0	1.2	0.6	0.2	0.3	0.2	0.7	0.6
U.S.	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8
% Ch	1.5	(1.8)	1.4	3.6	0.2	(1.3)	0.1	0.7	1.1	0.8	0.9	0.9
<b>Other Nondurable</b>												
Oregon	31.2	29.1	29.5	30.9	31.0	30.6	30.7	30.9	31.1	31.4	31.7	31.8
% Ch	4.7	(6.8)	1.6	4.6	0.2	(1.2)	0.2	0.8	0.7	1.1	0.8	0.4
U.S.	3.1	3.0	3.0	3.1	3.1	3.0	2.9	2.9	2.8	2.8	2.8	2.7
% Ch	0.4	(4.9)	1.8	3.8	(1.8)	(3.5)	(1.9)	(1.7)	(1.3)	(1.3)	(1.1)	(1.1)
<b>Trade, Transportation, and Utilities</b>												
Oregon	357.2	349.6	361.6	366.0	361.9	360.1	364.8	368.0	369.8	370.1	370.3	370.4
% Ch	1.3	(2.1)	3.4	1.2	(1.1)	(0.5)	1.3	0.9	0.5	0.1	0.1	0.0
U.S.	27.7	26.7	27.7	28.7	28.4	27.9	27.8	27.7	27.7	27.6	27.4	27.2
% Ch	0.4	(3.7)	3.9	3.6	(1.1)	(1.6)	(0.5)	(0.1)	(0.0)	(0.5)	(0.8)	(0.5)



**Dec 2022 - Employment By Industry  
(Oregon - Thousands, U.S. - Millions)**

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>Retail Trade</b>												
Oregon	210.1	201.0	209.6	209.9	207.2	204.5	207.3	209.2	210.1	210.0	209.9	209.8
% Ch	(0.6)	(4.4)	4.3	0.1	(1.3)	(1.3)	1.4	0.9	0.4	(0.1)	(0.0)	(0.0)
U.S.	15.6	14.9	15.4	15.8	15.6	15.1	14.8	14.6	14.6	14.6	14.5	14.5
% Ch	(1.0)	(4.7)	3.6	2.6	(1.5)	(3.4)	(2.0)	(0.8)	(0.1)	(0.2)	(0.6)	(0.1)
<b>Wholesale Trade</b>												
Oregon	76.6	74.2	74.6	76.7	76.6	76.4	76.8	77.0	77.1	77.4	77.7	78.1
% Ch	1.2	(3.1)	0.6	2.7	(0.1)	(0.3)	0.6	0.2	0.2	0.3	0.5	0.5
U.S.	5.9	5.6	5.7	5.9	5.9	5.9	6.0	6.0	6.0	6.0	5.9	5.8
% Ch	0.8	(4.3)	0.8	3.3	(0.2)	0.9	1.2	0.6	0.3	(0.9)	(1.1)	(1.2)
<b>Transportation and Warehousing, and Utilities</b>												
Oregon	70.6	74.4	77.3	79.5	78.1	79.2	80.8	81.8	82.6	82.8	82.7	82.5
% Ch	7.4	5.5	3.9	2.8	(1.7)	1.4	2.0	1.3	1.0	0.2	(0.1)	(0.2)
U.S.	6.2	6.2	6.6	7.0	6.9	6.9	7.0	7.1	7.1	7.0	7.0	6.9
% Ch	3.9	(0.6)	7.3	6.0	(1.2)	0.1	1.1	0.9	(0.1)	(0.6)	(0.8)	(0.9)
<b>Information</b>												
Oregon	35.1	33.3	35.1	36.3	36.4	36.2	36.6	36.9	37.1	37.3	37.4	37.6
% Ch	2.2	(5.1)	5.3	3.6	0.2	(0.7)	1.2	0.8	0.6	0.5	0.4	0.4
U.S.	2.9	2.7	2.8	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
% Ch	0.9	(5.0)	4.0	5.4	(0.5)	0.4	1.9	(0.6)	(1.0)	(0.6)	(0.0)	(0.0)
<b>Financial Activities</b>												
Oregon	103.5	102.5	103.9	103.5	102.2	102.0	103.8	103.9	104.1	104.2	103.8	103.2
% Ch	1.3	(1.0)	1.3	(0.4)	(1.2)	(0.1)	1.7	0.1	0.2	0.0	(0.3)	(0.6)
U.S.	8.8	8.7	8.8	8.9	8.7	8.9	9.0	9.1	9.1	9.0	9.0	8.9
% Ch	1.9	(0.6)	0.8	1.8	(2.3)	1.7	1.8	0.5	(0.2)	(0.4)	(0.6)	(0.9)
<b>Professional and Business Services</b>												
Oregon	254.7	243.4	250.8	261.3	264.4	263.2	270.4	278.5	284.6	290.9	297.7	305.1
% Ch	2.0	(4.4)	3.1	4.2	1.2	(0.4)	2.7	3.0	2.2	2.2	2.4	2.5
U.S.	21.3	20.3	21.2	22.3	21.1	20.2	20.9	21.5	21.8	22.3	22.9	23.4
% Ch	1.6	(4.5)	4.6	4.8	(5.2)	(4.4)	3.5	2.9	1.5	2.3	2.6	2.3
<b>Education and Health Services</b>												
Oregon	312.0	296.8	299.6	309.1	318.2	321.0	329.2	334.2	339.0	342.4	345.0	347.6
% Ch	2.1	(4.9)	0.9	3.2	2.9	0.9	2.5	1.5	1.5	1.0	0.8	0.7
U.S.	24.2	23.3	23.7	24.4	24.9	25.3	25.6	25.7	25.9	26.0	26.1	26.1
% Ch	2.2	(3.7)	1.7	3.2	2.0	1.5	1.1	0.7	0.6	0.5	0.3	0.1
<b>Educational Services</b>												
Oregon	36.6	31.5	32.1	35.0	35.7	36.0	36.0	35.9	35.9	35.8	35.7	35.6
% Ch	0.3	(13.9)	1.9	8.8	2.2	0.7	0.0	(0.1)	(0.2)	(0.2)	(0.2)	(0.2)
U.S.	3.7	3.5	3.6	3.8	3.9	3.9	3.9	4.0	4.0	4.0	4.0	4.0
% Ch	0.7	(7.1)	3.1	6.4	1.0	1.0	1.0	0.6	0.7	0.5	0.0	(0.3)
<b>Health Care and Social Assistance</b>												
Oregon	275.4	265.3	267.4	274.1	282.5	285.1	293.2	298.2	303.1	306.6	309.3	312.0
% Ch	2.4	(3.7)	0.8	2.5	3.0	0.9	2.9	1.7	1.7	1.2	0.9	0.9
U.S.	20.4	19.8	20.1	20.6	21.1	21.4	21.6	21.8	21.9	22.0	22.1	22.1
% Ch	2.5	(3.1)	1.5	2.6	2.2	1.6	1.1	0.7	0.6	0.5	0.3	0.1
<b>Leisure and Hospitality</b>												
Oregon	213.9	162.2	174.8	201.7	208.5	207.8	212.0	215.5	218.0	221.1	223.8	226.6
% Ch	1.2	(24.2)	7.8	15.4	3.4	(0.4)	2.0	1.7	1.2	1.4	1.2	1.3
U.S.	16.6	13.1	14.1	15.7	16.4	16.7	16.8	16.9	16.9	16.9	16.9	16.9
% Ch	1.8	(20.8)	7.4	11.2	4.8	1.9	0.4	0.4	0.2	0.0	0.1	0.0
<b>Other Services</b>												
Oregon	64.8	57.8	59.2	61.3	62.1	62.4	63.6	64.5	65.2	65.8	66.3	66.8
% Ch	0.6	(10.8)	2.5	3.5	1.3	0.5	1.9	1.4	1.2	0.9	0.8	0.8
U.S.	5.9	5.3	5.5	5.7	5.6	5.7	5.9	6.0	6.0	6.1	6.2	6.2
% Ch	1.0	(9.6)	2.4	4.2	(0.6)	1.6	2.2	1.8	1.4	1.3	0.9	0.6
<b>Government</b>												
Oregon	298.4	284.7	285.1	293.2	298.4	299.2	302.5	303.9	305.7	307.5	309.1	311.2
% Ch	1.2	(4.6)	0.1	2.9	1.8	0.3	1.1	0.5	0.6	0.6	0.5	0.7
U.S.	22.6	22.0	22.0	22.3	22.5	22.8	22.9	23.1	23.2	23.4	23.5	23.7
% Ch	0.7	(2.8)	0.1	1.1	1.3	0.9	0.8	0.7	0.6	0.6	0.5	0.8
<b>Federal Government</b>												
Oregon	28.5	29.2	28.5	27.9	28.2	28.2	28.2	28.2	28.3	28.4	28.5	29.2
% Ch	1.4	2.5	(2.3)	(2.1)	0.9	0.0	0.0	0.0	0.5	0.3	0.2	2.6
U.S.	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.0
% Ch	1.1	3.6	(1.6)	(0.6)	0.9	0.0	0.0	0.0	0.5	0.3	0.2	2.3
<b>State Government, Oregon</b>												
State Total	40.9	41.4	42.5	42.8	43.4	43.5	44.0	44.4	45.0	45.6	46.1	46.4
% Ch	3.6	1.1	2.7	0.7	1.2	0.2	1.3	1.0	1.3	1.4	1.0	0.8
State Education	0.9	0.9	0.9	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0
% Ch	7.2	4.1	6.7	15.9	(1.3)	(2.3)	(2.0)	(2.0)	(1.4)	(1.3)	(0.8)	(1.0)
<b>Local Government, Oregon</b>												
Local Total	229.0	214.1	214.0	222.5	226.9	227.6	230.4	231.4	232.4	233.4	234.5	235.6
% Ch	0.8	(6.5)	(0.0)	3.9	2.0	0.3	1.2	0.4	0.4	0.5	0.5	0.5
Local Education	133.0	121.9	121.7	126.7	128.3	128.5	128.6	128.5	128.4	128.2	128.1	127.9
% Ch	0.3	(8.3)	(0.2)	4.1	1.3	0.1	0.1	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)

**Dec 2022 - Other Economic Indicators**

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
GDP (Bil of 2012 \$),												
Chain Weight (in billions of \$)	19,036.1	18,509.1	19,609.8	19,945.3	19,851.0	20,106.7	20,517.8	20,927.7	21,292.0	21,669.5	22,044.4	22,431.1
% Ch	2.3	(2.8)	5.9	1.7	(0.5)	1.3	2.0	2.0	1.7	1.8	1.7	1.8
<b>Price and Wage Indicators</b>												
GDP Implicit Price Deflator,												
Chain Weight U.S., 2012=100	112.3	113.8	118.9	127.4	133.1	136.1	139.0	142.0	145.1	148.4	151.7	155.1
% Ch	1.8	1.3	4.5	7.1	4.5	2.3	2.1	2.2	2.2	2.2	2.2	2.2
Personal Consumption Deflator,												
Chain Weight U.S., 2012=100	109.9	111.1	115.6	122.9	127.2	129.9	132.5	135.2	137.9	140.6	143.4	146.2
% Ch	1.5	1.1	4.0	6.3	3.5	2.1	2.0	2.0	2.0	2.0	2.0	2.0
CPI, Urban Consumers,												
1982-84=100												
West Region	270.3	275.1	287.5	311.2	325.7	334.8	343.2	352.0	360.8	369.8	379.0	388.6
% Ch	2.7	1.7	4.5	8.2	4.7	2.8	2.5	2.6	2.5	2.5	2.5	2.5
U.S.	255.6	258.8	271.0	292.9	305.2	312.8	319.8	326.9	334.3	341.5	348.7	356.0
% Ch	1.8	1.2	4.7	8.1	4.2	2.5	2.2	2.2	2.3	2.2	2.1	2.1
Oregon Average Wage												
Rate (Thous \$)	57.4	62.9	66.9	69.9	72.7	75.7	78.7	81.8	85.0	88.3	91.9	95.6
% Ch	3.9	9.5	6.4	4.4	4.1	4.0	4.0	3.9	3.9	3.9	4.0	4.0
U.S. Average Wage												
Wage Rate (Thous \$)	61.8	66.5	70.4	73.6	76.6	80.1	83.6	87.0	90.4	93.8	97.2	100.7
% Ch	3.4	7.7	5.9	4.6	3.9	4.7	4.3	4.1	4.0	3.7	3.6	3.6
<b>Housing Indicators</b>												
FHFA Oregon Housing Price Index												
1991 Q1=100	435.8	471.8	558.6	618.0	565.9	549.0	579.1	616.9	657.8	696.4	736.4	773.4
% Ch	4.8	8.2	18.4	10.6	(8.4)	(3.0)	5.5	6.5	6.6	5.9	5.7	5.0
FHFA National Housing Price Index												
1991 Q1=100	269.4	290.6	339.6	387.2	380.2	377.0	382.2	393.7	406.2	419.5	434.9	451.0
% Ch	5.1	7.9	16.8	14.0	(1.8)	(0.8)	1.4	3.0	3.2	3.3	3.7	3.7
Housing Starts												
Oregon (Thous)	20.7	18.1	20.2	19.6	16.5	18.5	20.5	21.6	22.0	22.2	22.4	22.7
% Ch	5.7	(12.7)	11.9	(3.0)	(15.7)	12.1	10.6	5.2	2.1	0.9	1.0	1.1
U.S. (Millions)	1.3	1.4	1.6	1.6	1.2	1.3	1.4	1.4	1.4	1.4	1.4	1.4
% Ch	3.5	8.1	15.1	(2.5)	(22.0)	8.0	7.6	(1.8)	(1.9)	(0.0)	0.5	0.0
<b>Other Indicators</b>												
Unemployment Rate (%)												
Oregon	3.7	7.6	5.2	3.7	4.4	5.3	4.7	4.3	4.2	4.2	4.2	4.2
Point Change	(0.3)	3.9	(2.4)	(1.5)	0.7	0.9	(0.6)	(0.4)	(0.1)	0.0	0.0	0.0
U.S.	3.7	8.1	5.4	3.7	5.1	5.7	5.2	4.7	4.5	4.4	4.3	4.3
Point Change	(0.2)	4.4	(2.7)	(1.7)	1.4	0.6	(0.6)	(0.4)	(0.2)	(0.1)	(0.1)	(0.1)
Industrial Production Index												
U.S. 2012 = 100	102.5	95.3	100.0	104.1	102.5	102.7	104.2	105.9	107.3	108.9	110.3	111.8
% Ch	(0.7)	(7.0)	4.9	4.1	(1.5)	0.1	1.5	1.6	1.3	1.4	1.4	1.3
Prime Rate (Percent)	5.3	3.5	3.3	4.8	7.7	7.2	5.8	5.8	5.8	5.8	5.8	5.8
% Ch	7.7	(32.9)	(8.3)	48.1	59.5	(6.7)	(19.6)	0.1	0.0	(0.0)	(0.1)	(0.0)
Population (Millions)												
Oregon	4.21	4.24	4.27	4.29	4.32	4.35	4.38	4.42	4.46	4.50	4.53	4.57
% Ch	0.9	0.7	0.5	0.7	0.6	0.6	0.8	0.9	0.8	0.8	0.8	0.9
U.S.	330.7	331.8	332.2	333.1	334.5	336.1	337.7	339.4	341.1	342.8	344.5	346.2
% Ch	0.5	0.3	0.1	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Timber Harvest (Mil Bd Ft)												
Oregon	3,541.3	3,377.5	3,664.9	3,653.0	3,432.8	3,508.2	3,564.3	3,624.7	3,685.3	3,693.2	3,687.5	3,682.9
% Ch	(12.9)	(4.6)	8.5	(0.3)	(6.0)	2.2	1.6	1.7	1.7	0.2	(0.2)	(0.1)

## APPENDIX B: REVENUE FORECAST DETAIL

Table B.1a	General Fund Revenue Statement – 2021-23 .....	48
Table B.1b	General Fund Revenue Statement – 2023-25 .....	49
Table B.2	General Fund Revenue Forecast by Fiscal Year .....	50
Table B.3	Summary of 2021 Legislative Session Adjustments .....	51
Table B.4	Oregon Personal Income Tax Revenue Forecast .....	52
Table B.5	Oregon Corporate Income Tax Revenue Forecast .....	54
Table B.6	Cigarette and Tobacco Tax Distribution .....	56
Table B.7	Liquor Apportionment and Revenue Distribution to Local Governments .....	57
Table B.8	Track Record for the May 2021 Forecast .....	58
Table B.9	Summary of Lottery Resources .....	59
Table B.10	Budgetary Reserve Summary .....	60
Table B.11	Recreational Marijuana Resources and Distributions .....	61
Table B.12	Fund for Student Success (Corporate Activity Tax) .....	62
Table B.13	Fund for Student Success Quarterly Revenues .....	63

Table B.1a – General Fund Revenue Statement – 2021-2023

	Table B.1a General Fund Revenue Statement – 2021-23									
	Estimate at COS 2021	Forecasts Dated: 9/1/2022			Forecasts Dated: 12/1/2022			Difference		
		2021-22	2022-23	Total 2021-23	2021-22	2022-23	Total 2021-23	12/1/2022 Less 9/1/2022	12/1/2022 Less COS	
<b>Taxes</b>										
Personal Income Taxes	20,628,060,000	12,482,887,000	11,345,352,000	23,828,239,000	12,482,887,000	11,462,568,000	23,945,455,000	117,216,000	3,317,395,000	
Film & Video, Gain Share, Industrial Lands	(40,583,000)	(24,823,000)	(25,631,000)	(50,454,000)	(24,823,000)	(25,631,000)	(50,454,000)	0	(9,871,000)	
Corporate Income Taxes	1,343,966,000	1,539,051,000	909,523,000	2,448,574,000	1,539,051,000	1,108,908,000	2,647,959,000	199,385,000	1,303,993,000	
Transfer to Rainy Day Fund (Minimum Tax)	(56,001,000)	0	(95,356,000)	(95,356,000)	0	(107,833,000)	(107,833,000)	(12,477,000)	(51,832,000)	
Insurance Taxes	135,086,000	86,214,000	49,895,000	136,109,000	86,214,000	48,886,000	135,100,000	(1,009,000)	14,000	
Estate Taxes	443,848,000	325,468,000	256,467,000	581,935,000	325,468,000	260,147,000	585,615,000	3,680,000	141,767,000	
Transfer to PERS UAL	(74,916,000)	0	(89,003,000)	(89,003,000)	0	(89,003,000)	(89,003,000)	0	(14,087,000)	
Cigarette Taxes	44,903,000	24,396,000	22,203,000	46,599,000	24,396,000	22,084,000	46,480,000	(119,000)	1,577,000	
Other Tobacco Products Taxes	65,129,000	30,320,000	32,011,000	62,331,000	30,320,000	31,711,000	62,031,000	(300,000)	(3,098,000)	
Other Taxes	1,786,000	1,007,000	893,000	1,900,000	1,007,000	893,000	1,900,000	0	114,000	
<b>Fines and Fees</b>										
State Court Fees	136,147,000	52,488,000	67,742,000	120,230,000	52,488,000	59,540,000	112,028,000	(8,202,000)	(24,119,000)	
Secretary of State Fees	82,185,000	42,949,000	41,699,000	84,648,000	42,949,000	41,899,000	84,848,000	200,000	2,663,000	
Criminal Fines & Assessments	27,202,000	792,000	8,731,000	9,523,000	792,000	8,520,000	9,312,000	(211,000)	(17,890,000)	
Securities Fees	26,538,000	15,575,000	12,457,000	28,032,000	15,575,000	12,680,000	28,255,000	223,000	1,717,000	
<b>Central Service Charges</b>	12,746,000	6,373,000	6,373,000	12,746,000	6,373,000	6,373,000	12,746,000	0	0	
<b>Liquor Apportionment</b>	347,137,000	160,020,000	177,703,000	337,723,000	193,470,000	164,101,000	357,571,000	19,848,000	10,434,000	
<b>Interest Earnings</b>	35,000,000	39,984,000	60,000,000	99,984,000	39,984,000	150,000,000	189,984,000	90,000,000	154,984,000	
<b>Miscellaneous Revenues</b>	12,000,000	8,490,000	6,000,000	14,490,000	8,490,000	6,000,000	14,490,000	0	2,490,000	
<b>One-time Transfers</b>	58,677,000	94,681,000	58,677,000	153,358,000	94,681,000	58,677,000	153,358,000	0	94,681,000	
<b>Gross General Fund Revenues</b>	23,400,410,000	14,910,695,000	13,055,726,000	27,966,421,000	14,944,145,000	13,442,987,000	28,387,132,000	420,711,000	4,986,722,000	
Total Transfers	(171,500,000)	(24,823,000)	(209,990,000)	(234,813,000)	(24,823,000)	(222,467,000)	(247,290,000)	(12,477,000)	(61,703,000)	
<b>Net General Fund Revenues</b>	23,228,910,000	14,885,872,000	12,845,736,000	27,731,608,000	14,919,322,000	13,220,520,000	28,139,842,000	408,234,000	4,910,932,000	
Plus Beginning Balance	3,025,585,699			4,082,489,264			4,082,489,264	0	1,056,903,565	
Less Anticipated Administrative Actions*	(21,472,000)			(21,472,000)			0	21,472,000	21,472,000	
Less Legislatively Adopted Actions**	(224,612,788)			(220,722,881)			(220,722,881)	0	3,889,907	
<b>Available Resources</b>	26,008,410,911			31,571,902,383			32,001,608,383	429,706,000	5,993,197,472	
Appropriations	25,445,991,039			27,861,031,017			27,861,031,017	0	2,415,039,978	
<b>Estimated Ending Balance</b>	562,419,872			3,710,871,366			4,140,577,366	429,706,000	3,578,157,494	

Table B.1b – General Fund Revenue Statement – 2023-2025 Baseline Forecast

Table B.1b General Fund Revenue Statement – 2023-25							
	Forecasts Dated: 9/1/2022			Forecasts Dated: 12/1/2022			Difference
	2023-24	2024-25	Total 2023-25	2023-24	2024-25	Total 2023-25	12/1/2022 Less 9/1/2022
<b>Taxes</b>							
Personal Income Taxes (Before Kicker)	9,766,077,000	12,364,931,000	22,131,008,000	9,365,654,000	12,174,401,000	21,540,055,000	(590,953,000)
Film and Video and Transfer to Counties	(25,900,000)	(22,672,000)	(48,572,000)	(25,900,000)	(22,672,000)	(48,572,000)	0
Corporate Income Taxes (Before Kicker)	889,578,000	905,821,000	1,795,399,000	991,819,000	964,039,000	1,955,858,000	160,459,000
Transfer to Rainy Day Fund (Minimum Tax)	0	(68,764,000)	(68,764,000)	0	(79,648,000)	(79,648,000)	(10,884,000)
Insurance Taxes	67,281,000	67,929,000	135,210,000	67,078,000	68,000,000	135,078,000	(132,000)
Estate Taxes	263,673,000	270,966,000	534,639,000	263,673,000	270,966,000	534,639,000	0
Transfer to PERS UAL	0	0	0	0	0	0	0
Cigarette Taxes	22,010,000	21,490,000	43,500,000	21,870,000	21,208,000	43,078,000	(422,000)
Other Tobacco Products Taxes	32,067,000	32,265,000	64,332,000	31,859,000	31,839,000	63,698,000	(634,000)
Other Taxes	893,000	893,000	1,786,000	893,000	893,000	1,786,000	0
<b>Fines and Fees</b>							
State Court Fees	69,756,000	69,843,000	139,599,000	67,566,000	69,029,000	136,595,000	(3,004,000)
Secretary of State Fees	42,033,000	42,369,000	84,402,000	43,033,000	42,969,000	86,002,000	1,600,000
Criminal Fines & Assessments	13,511,000	13,511,000	27,022,000	10,677,000	10,677,000	21,354,000	(5,668,000)
Securities Fees	13,499,000	13,885,000	27,384,000	13,617,000	14,014,000	27,631,000	247,000
<b>Central Service Charges</b>	6,373,000	6,373,000	12,746,000	6,373,000	6,373,000	12,746,000	0
<b>Liquor Apportionment</b>	168,162,000	176,334,000	344,496,000	179,151,000	190,996,000	370,147,000	25,651,000
<b>Interest Earnings</b>	60,000,000	60,000,000	120,000,000	140,000,000	65,000,000	205,000,000	85,000,000
<b>Miscellaneous Revenues</b>	6,000,000	6,000,000	12,000,000	6,000,000	6,000,000	12,000,000	0
<b>One-time Transfers</b>	0	0	0	0	0	0	0
<b>Gross General Fund Revenues</b>	11,420,913,000	14,052,610,000	25,473,523,000	11,209,263,000	13,936,404,000	25,145,667,000	(327,856,000)
Total Personal and Corporate Transfers	(25,900,000)	(91,436,000)	(117,336,000)	(25,900,000)	(102,320,000)	(128,220,000)	(10,884,000)
<b>Net General Fund Revenues</b>	11,395,013,000	13,961,174,000	25,356,187,000	11,183,363,000	13,834,084,000	25,017,447,000	(338,740,000)

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, Other Tobacco, and Liquor are the General Fund portions only, see Table B.6 and B.7 for more.

Table B.2 General Fund Revenue Forecast by Fiscal Year

**TABLE B.2**

<b>General Fund Revenue Forecast</b>												<b>December 2022</b>
												(\$Millions)
<b>Fiscal Years</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</b>	<b>2027-28</b>	<b>2028-29</b>	<b>2029-30</b>	<b>2030-31</b>
	<b>Fiscal Year</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>	<b>Fiscal Year</b>
<b>Taxes</b>												
Personal Income	7,212.2	12,792.8	12,482.9	11,462.6	9,365.7	12,174.4	13,826.0	14,725.2	15,900.5	17,012.4	18,162.0	19,187.2
Film & Video, Gain Share, Industrial Lands	(20.1)	(20.2)	(24.8)	(25.6)	(25.9)	(22.7)	(17.6)	0.0	0.0	0.0	0.0	0.0
Corporate Excise & Income	488.3	1,553.1	1,539.1	1,108.9	991.8	964.0	1,028.1	1,090.9	1,107.9	1,163.6	1,251.4	1,333.5
Transfer to RDF & PERS UAL	0.0	(74.5)	0.0	(107.8)	0.0	(79.6)	0.0	(86.3)	0.0	(92.5)	0.0	(105.3)
Insurance	75.3	83.9	86.2	48.9	67.1	68.0	69.9	71.5	77.7	78.7	81.1	84.6
Estate	113.8	410.3	325.5	260.1	263.7	271.0	276.5	283.7	292.3	300.1	310.0	319.1
Transfer to PERS UAL	0.0	0.0	0.0	(89.0)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cigarette	30.5	24.6	24.4	22.1	21.9	21.2	20.5	20.1	19.8	19.5	19.3	19.0
Other Tobacco Products	30.9	30.4	30.3	31.7	31.9	31.8	31.7	31.9	31.8	31.9	31.9	31.9
Other Taxes	0.4	0.6	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
<b>Other Revenues</b>												
Licenses and Fees	135.3	114.1	111.8	122.6	134.9	136.7	136.8	137.5	137.9	138.7	139.2	139.9
Charges for Services	5.7	5.7	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Liquor Apportionment	162.1	178.8	193.5	164.1	179.2	191.0	188.6	198.6	209.6	222.4	235.9	249.8
Interest Earnings	64.5	28.5	40.0	150.0	140.0	65.0	50.0	50.0	50.0	50.0	50.0	50.0
Others	20.4	165.4	103.2	64.7	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
<b>Gross General Fund</b>	<b>8,339.4</b>	<b>15,388.1</b>	<b>14,944.1</b>	<b>13,443.0</b>	<b>11,209.3</b>	<b>13,936.4</b>	<b>15,641.5</b>	<b>16,622.6</b>	<b>17,840.9</b>	<b>19,030.5</b>	<b>20,294.1</b>	<b>21,428.2</b>
<b>Net General Fund</b>	<b>8,319.3</b>	<b>15,293.4</b>	<b>14,919.3</b>	<b>13,220.5</b>	<b>11,183.4</b>	<b>13,834.1</b>	<b>15,623.8</b>	<b>16,536.3</b>	<b>17,840.9</b>	<b>18,938.0</b>	<b>20,294.1</b>	<b>21,323.0</b>
<b>Biennial Totals</b>												
	<b>2019-21 BN</b>	<b>Change (%)</b>	<b>2021-23 BN</b>	<b>Change (%)</b>	<b>2023-25 BN</b>	<b>Change (%)</b>	<b>2025-27 BN</b>	<b>Change (%)</b>	<b>2027-29 BN</b>	<b>Change (%)</b>	<b>2029-31 BN</b>	<b>Change (%)</b>
<b>Taxes</b>												
Personal Income	20,005.0	6.3%	23,945.5	19.7%	21,540.1	-10.0%	28,551.2	32.5%	32,913.0	15.3%	37,349.2	13.5%
Corporate Excise & Income	2,041.4	16.5%	2,648.0	29.7%	1,955.9	-26.1%	2,118.9	8.3%	2,271.5	7.2%	2,584.9	13.8%
Insurance	159.2	-0.7%	135.1	-15.1%	135.1	0.0%	141.3	4.6%	156.3	10.6%	165.7	6.0%
Estate Taxes	524.1	37.5%	585.6	11.7%	534.6	-8.7%	560.3	4.8%	592.4	5.7%	629.2	6.2%
Cigarette	55.1	-16.0%	46.5	-15.7%	43.1	-7.3%	40.6	-5.7%	39.3	-3.3%	38.3	-2.6%
Other Tobacco Products	61.3	-3.6%	62.0	1.2%	63.7	2.7%	63.6	-0.1%	63.7	0.2%	63.8	0.1%
Other Taxes	1.0	-49.4%	1.9	90.2%	1.8	-6.0%	1.8	0.0%	1.8	0.0%	1.8	0.0%
<b>Other Revenues</b>												
Licenses and Fees	249.4	-3.7%	234.4	-6.0%	271.6	15.8%	274.3	1.0%	276.6	0.8%	279.1	0.9%
Charges for Services	11.5	5.5%	12.7	11.0%	12.7	0.0%	12.7	0.0%	12.7	0.0%	12.7	0.0%
Liquor Apportionment	340.9	15.8%	357.6	4.9%	370.1	3.5%	387.2	4.6%	432.0	11.6%	485.7	12.4%
Interest Earnings	92.9	6.6%	190.0	104.5%	205.0	7.9%	100.0	-51.2%	100.0	0.0%	100.0	0.0%
Others	185.8	1121.7%	167.8	-9.7%	12.0	-92.9%	12.0	0.0%	12.0	0.0%	12.0	0.0%
<b>Gross General Fund</b>	<b>23,727.5</b>	<b>8.3%</b>	<b>28,387.1</b>	<b>19.6%</b>	<b>25,145.7</b>	<b>-11.4%</b>	<b>32,264.1</b>	<b>28.3%</b>	<b>36,871.4</b>	<b>14.3%</b>	<b>41,722.4</b>	<b>13.2%</b>
<b>Net General Fund</b>	<b>23,612.7</b>	<b>8.4%</b>	<b>28,139.8</b>	<b>19.2%</b>	<b>25,017.4</b>	<b>-11.1%</b>	<b>32,160.2</b>	<b>28.6%</b>	<b>36,778.9</b>	<b>14.4%</b>	<b>41,617.1</b>	<b>13.2%</b>

Table B.3 Summary of 2021 Legislative Session Adjustments

	21-23	23-25	25-27	Revenue Impact Statement
<b>Personal Income Tax Impacts (millions)</b>				
Tax Expenditure – HB 2433	-\$68.5	-\$149.5	-\$165.1	<a href="#">HB 2433</a>
EITC (Federal Reconnect) – HB 2457	-\$13.0	-\$0.4	-\$0.4	<a href="#">HB 2457</a>
Pass-Through Entity – SB 139	\$41.7	\$59.9	\$64.2	<a href="#">SB 139</a>
<b>Personal Income Tax Total</b>	<b>-\$39.8</b>	<b>-\$90.1</b>	<b>-\$101.4</b>	
<b>Corporate Income Tax Impacts (millions)</b>				
Tax Expenditure – HB 2433	-\$1.0	-\$6.5	-\$9.7	<a href="#">HB 2433</a>
Broadcasters – SB 136	-\$1.2	-\$1.2	-\$1.2	<a href="#">SB 136</a>
<b>Corporate Income Tax Total</b>	<b>-\$2.2</b>	<b>-\$7.7</b>	<b>-\$10.9</b>	
<b>Other Tax/Revenue Impacts (millions)</b>				
Criminal Fine Account, Traffic - HB 2137	-\$0.8	-\$0.3	\$0.0	<a href="#">HB 2137</a>
Criminal Fine Account, Photo Radar – HB 2530	\$0.0	\$4.8	\$7.5	<a href="#">HB 2530</a>
Criminal Fine Account, Filing Fee – SB 397	-\$1.2	-\$1.2	-\$1.2	<a href="#">SB 397</a>
Criminal Fine Account, Juvenile – SB 817	-\$3.0	-\$0.9	-\$0.9	<a href="#">SB 817</a>
Tax Court - HB 2178	-\$0.2	-\$0.2	-\$0.2	<a href="#">HB 2178</a>
Secretary of State Filing Fees – SB 25	\$1.5	-\$0.6	-\$6.3	<a href="#">SB 25</a>
OLCC, Retail Agents – HB 2740	-\$7.6	-\$8.0	-\$8.4	<a href="#">HB 2740</a>
OLCC, Retail Agents – SB 316	-\$1.5	-\$2.3	-\$2.3	<a href="#">SB 316</a>
<b>Other Tax Total</b>	<b>-\$12.7</b>	<b>-\$8.6</b>	<b>-\$11.9</b>	

Table B.4 Oregon Personal Income Tax Revenue Forecast

	OREGON PERSONAL INCOME TAX REVENUE FORECAST - QUARTERLY COLLECTIONS									
	Thousands of Dollars - Not Seasonally Adjusted									
	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	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%
	2015:3	2015:4	2016:1	2016:2	FY 2016	2016:3	2016:4	2017:1	2017:2	FY 2017
WITHHOLDING	1,551,517	1,644,209	1,711,568	1,634,728	6,542,022	1,675,744	1,705,280	1,835,155	1,769,354	6,985,533
%CHYA	6.6%	7.9%	8.6%	8.6%	7.9%	8.0%	3.7%	7.2%	8.2%	6.8%
EST. PAYMENTS	309,470	141,009	327,008	423,839	1,201,325	300,866	319,225	382,445	450,241	1,452,777
%CHYA	16.9%	-40.3%	7.0%	5.7%	-0.5%	-2.8%	126.4%	170.0%	6.2%	20.9%
FINAL PAYMENTS <sup>1</sup>	99,618	321,345	141,818	813,132	1,375,913	103,631	144,248	175,235	919,186	1,342,301
%CHYA	7.5%	122.8%	-9.2%	-4.9%	10.2%	4.0%	-55.1%	23.6%	13.0%	-2.4%
REFUNDS	85,113	203,981	577,546	562,601	1,429,241	138,825	254,851	574,417	454,899	1,422,992
%CHYA	-15.5%	17.6%	11.0%	50.0%	22.2%	63.1%	24.9%	-0.5%	-19.1%	-0.4%
OTHER	(163,398)	-	-	236,108	72,710	(236,108)	-	-	192,251	(43,856)
TOTAL	1,712,094	1,902,583	1,602,848	2,545,205	7,762,729	1,705,308	1,913,902	1,818,419	2,876,134	8,313,763
%CHYA	11.7%	9.9%	5.6%	-0.2%	5.9%	-0.4%	0.6%	13.4%	13.0%	7.1%
	2017:3	2017:4	2018:1	2018:2	FY 2018	2018:3	2018:4	2019:1	2019:2	FY 2019
WITHHOLDING	1,748,844	1,836,249	2,011,564	1,851,177	7,447,834	1,925,880	2,039,120	2,079,900	1,999,015	8,043,914
%CHYA	4.4%	7.7%	9.6%	4.6%	6.6%	10.1%	11.0%	3.4%	8.0%	8.0%
EST. PAYMENTS	321,032	451,037	464,534	512,671	1,749,274	367,772	284,002	321,858	532,273	1,505,905
%CHYA	6.7%	41.3%	21.5%	13.9%	20.4%	14.6%	-37.0%	30.7%	3.8%	-13.9%
FINAL PAYMENTS <sup>1</sup>	92,364	169,785	174,096	878,587	1,314,832	104,644	156,592	225,515	1,385,562	1,872,312
%CHYA	-10.9%	17.7%	-0.6%	-4.4%	-2.0%	13.3%	-7.8%	29.5%	57.7%	42.4%
REFUNDS	133,143	266,467	686,100	610,486	1,696,196	140,701	335,635	546,225	445,573	1,468,133
%CHYA	-4.1%	4.6%	19.4%	34.2%	19.2%	5.7%	26.0%	-20.4%	-27.0%	-13.4%
OTHER	(192,251)	-	-	237,300	45,049	(237,300)	-	-	222,477	(14,823)
TOTAL	1,836,845	2,190,604	1,964,094	2,869,249	8,860,793	2,020,295	2,144,078	2,081,049	3,693,754	9,939,176
%CHYA	7.7%	14.5%	8.0%	-0.2%	6.6%	10.0%	-2.1%	6.0%	28.7%	12.2%

Note: "Other" includes 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 2022	
	2019:3	2019:4	2020:1	2020:2	FY 2020	2020:3	2020:4	2021:1	2021:2	FY 2021	
WITHHOLDING	2,059,715	2,223,410	2,183,444	1,997,661	8,464,230	2,127,124	2,291,161	2,321,603	2,266,779	9,006,667	
%CHYA	6.9%	9.0%	5.0%	-0.1%	5.2%	3.3%	3.0%	6.3%	13.5%	6.4%	
EST. PAYMENTS	413,316	296,072	376,127	428,769	1,514,284	497,544	292,601	432,742	701,877	1,924,764	
%CHYA	12.4%	4.3%	16.9%	-19.4%	0.6%	20.4%	-1.2%	15.1%	63.7%	27.1%	
FINAL PAYMENTS <sup>1</sup>	131,560	195,074	159,708	330,328	816,671	758,710	142,228	220,765	1,500,229	2,621,931	
%CHYA	25.7%	24.6%	-29.2%	-76.2%	-56.4%	476.7%	-27.1%	38.2%	354.2%	221.1%	
REFUNDS	144,251	289,464	1,120,326	735,922	2,289,962	432,836	360,529	558,588	672,421	2,024,375	
%CHYA	2.5%	-13.8%	105.1%	65.2%	56.0%	200.1%	24.6%	-50.1%	-8.6%	-11.6%	
OTHER	(222,477)	-	-	175,167	(47,310)	(175,167)	-	-	194,880	19,713	
TOTAL	2,237,864	2,425,092	1,598,954	2,196,004	8,457,914	2,775,375	2,365,460	2,416,522	3,991,345	11,548,702	
%CHYA	10.8%	13.1%	-23.2%	-40.5%	-14.9%	24.0%	-2.5%	51.1%	81.8%	36.5%	
	2021:3	2021:4	2022:1	2022:2	FY 2022	2022:3	2022:4	2023:1	2023:2	FY 2023	
WITHHOLDING	2,393,995	2,525,865	2,611,195	2,467,726	9,998,782	2,509,729	2,657,971	2,616,227	2,405,410	10,189,337	
%CHYA	12.5%	10.2%	12.5%	8.9%	11.0%	4.8%	5.2%	0.2%	-2.5%	1.9%	
EST. PAYMENTS	495,468	340,639	508,064	904,746	2,248,917	659,287	400,359	351,481	824,646	2,235,772	
%CHYA	-0.4%	16.4%	17.4%	28.9%	16.8%	33.1%	17.5%	-30.8%	-8.9%	-0.6%	
FINAL PAYMENTS <sup>1</sup>	153,160	208,665	255,615	2,115,965	2,733,405	162,621	270,198	211,258	885,138	1,529,215	
%CHYA	-79.8%	46.7%	15.8%	41.0%	4.3%	6.2%	29.5%	-17.4%	-58.2%	-44.1%	
REFUNDS	162,428	300,852	1,062,458	960,617	2,486,355	293,038	538,818	967,770	756,480	2,556,107	
%CHYA	-62.5%	-16.6%	90.2%	42.9%	22.8%	80.4%	79.1%	-8.9%	-21.3%	2.8%	
OTHER	(194,880)	-	-	183,017	(11,863)	(183,017)	-	-	247,367	64,350	
TOTAL	2,685,315	2,774,318	2,312,417	4,710,837	12,482,887	2,855,581	2,789,709	2,211,196	3,606,082	11,462,568	
%CHYA	-3.2%	17.3%	-4.3%	18.0%	8.1%	6.3%	0.6%	-4.4%	-23.5%	-8.2%	
	2023:3	2023:4	2024:1	2024:2	FY 2023	2024:3	2024:4	2025:1	2025:2	FY 2025	
WITHHOLDING	2,476,194	2,685,062	2,745,382	2,546,512	10,453,149	2,599,520	2,818,714	2,936,011	2,730,746	11,084,991	
%CHYA	-1.3%	1.0%	4.9%	5.9%	2.6%	5.0%	6.9%	7.2%	6.0%	6.0%	
EST. PAYMENTS	600,918	237,308	328,421	877,127	2,043,774	639,161	252,411	350,831	956,450	2,198,852	
%CHYA	-8.9%	-40.7%	-6.6%	6.4%	-8.6%	6.4%	6.4%	6.8%	9.0%	7.6%	
FINAL PAYMENTS <sup>1</sup>	124,875	178,862	114,154	224,528	642,420	76,050	105,218	190,797	1,234,816	1,606,880	
%CHYA	-23.2%	-33.8%	-46.0%	-74.6%	-58.0%	-39.1%	-41.2%	67.1%	450.0%	150.1%	
REFUNDS	164,273	359,381	1,836,844	1,450,742	3,811,241	300,715	687,226	982,184	741,715	2,711,839	
%CHYA	-43.9%	-33.3%	89.8%	91.8%	49.1%	83.1%	91.2%	-46.5%	-48.9%	-28.8%	
OTHER	(247,367)	-	-	334,919	37,552	(334,919)	-	-	330,435	(4,484)	
TOTAL	2,790,346	2,741,852	1,351,112	2,532,343	9,365,654	2,679,097	2,489,116	2,495,455	4,510,732	12,174,401	
%CHYA	-2.3%	-1.7%	-38.9%	-29.8%	-18.3%	-4.0%	-9.2%	84.7%	78.1%	30.0%	
	2025:3	2025:4	2026:1	2026:2	FY 2026	2026:3	2026:4	2027:1	2027:2	FY 2027	
WITHHOLDING	2,787,479	3,022,494	3,119,884	2,897,885	11,827,743	2,958,148	3,207,567	3,296,001	3,059,434	12,521,150	
%CHYA	7.2%	7.2%	6.3%	6.1%	6.7%	6.1%	6.1%	5.6%	5.6%	5.9%	
EST. PAYMENTS	696,963	275,238	380,797	1,015,506	2,368,504	739,998	292,232	405,063	1,089,950	2,527,243	
%CHYA	9.0%	9.0%	8.5%	6.2%	7.7%	6.2%	6.2%	6.4%	7.3%	6.7%	
FINAL PAYMENTS <sup>1</sup>	128,734	205,046	211,388	1,415,709	1,960,879	126,079	212,949	229,041	1,476,331	2,044,400	
%CHYA	69.3%	94.9%	10.8%	14.6%	22.0%	-2.1%	3.9%	8.4%	4.3%	4.3%	
REFUNDS	168,135	364,031	977,389	771,677	2,281,232	179,315	388,160	1,015,413	801,029	2,383,917	
%CHYA	-44.1%	-47.0%	-0.5%	4.0%	-15.9%	6.6%	6.6%	3.9%	3.8%	4.5%	
OTHER	(330,435)	-	-	280,542	(49,893)	(280,542)	-	-	296,883	16,340	
TOTAL	3,114,607	3,138,747	2,734,681	4,837,966	13,826,001	3,364,368	3,324,588	2,914,691	5,121,569	14,725,216	
%CHYA	16.3%	26.1%	9.6%	7.3%	13.6%	8.0%	5.9%	6.6%	5.9%	6.5%	
	2027:3	2027:4	2028:1	2028:2	FY 2028	2028:3	2028:4	2029:1	2029:2	FY 2029	
WITHHOLDING	3,123,087	3,386,420	3,481,837	3,232,221	13,223,566	3,299,465	3,577,668	3,684,590	3,421,280	13,983,004	
%CHYA	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.8%	5.8%	5.7%	
EST. PAYMENTS	794,244	313,655	435,011	1,173,800	2,716,710	855,346	337,784	467,480	1,248,586	2,909,196	
%CHYA	7.3%	7.3%	7.4%	7.7%	7.5%	7.7%	7.7%	7.5%	6.4%	7.1%	
FINAL PAYMENTS <sup>1</sup>	139,339	231,495	273,474	1,658,920	2,303,228	167,987	270,902	304,071	1,845,410	2,588,370	
%CHYA	10.5%	8.7%	19.4%	12.4%	12.7%	20.6%	17.0%	11.2%	11.2%	12.4%	
REFUNDS	185,943	402,656	1,032,007	813,594	2,434,200	189,205	409,172	1,049,320	827,351	2,475,048	
%CHYA	3.7%	3.7%	1.6%	1.6%	2.1%	1.8%	1.6%	1.7%	1.7%	1.7%	
OTHER	(296,883)	-	-	388,122	91,239	(388,122)	-	-	395,017	6,895	
TOTAL	3,573,845	3,528,915	3,158,315	5,639,468	15,900,543	3,745,472	3,777,183	3,406,821	6,082,942	17,012,417	
%CHYA	6.2%	6.1%	8.4%	10.1%	8.0%	4.8%	7.0%	7.9%	7.9%	7.0%	
	2029:3	2029:4	2030:1	2030:2	FY 2030	2030:3	2030:4	2031:1	2031:2	FY 2030	
WITHHOLDING	3,492,444	3,786,916	3,902,482	3,623,927	14,805,770	3,699,302	4,011,214	4,130,719	3,835,472	15,676,707	
%CHYA	5.8%	5.8%	5.9%	5.9%	5.9%	5.9%	5.9%	5.8%	5.8%	5.9%	
EST. PAYMENTS	909,842	359,306	496,892	1,322,342	3,088,382	963,588	380,530	526,709	1,407,689	3,278,517	
%CHYA	6.4%	6.4%	6.3%	5.9%	6.2%	5.9%	5.9%	6.0%	6.5%	6.2%	
FINAL PAYMENTS <sup>1</sup>	186,432	300,240	326,621	1,964,522	2,777,815	199,688	320,843	350,126	2,089,272	2,959,930	
%CHYA	11.0%	10.8%	7.4%	6.5%	7.3%	7.1%	6.9%	7.2%	6.4%	6.6%	
REFUNDS	192,786	416,421	1,095,933	864,815	2,569,956	201,082	435,038	1,163,869	918,764	2,718,753	
%CHYA	1.9%	1.8%	4.4%	4.5%	3.8%	4.3%	4.5%	6.2%	6.2%	5.8%	
OTHER	(395,017)	-	-	455,040	60,023	(455,040)	-	-	445,841	(9,200)	
TOTAL	4,000,915	4,030,040	3,630,062	6,501,016	18,162,034	4,206,456	4,277,550	3,843,685	6,859,510	19,187,201	
%CHYA	6.8%	6.7%	6.6%	6.9%	6.8%	5.1%	6.1%	5.9%	5.5%	5.6%	

Note: "Other" includes 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**

<b>TABLE B.5 OREGON CORPORATE INCOME TAX REVENUE FORECAST - QUARTERLY COLLECTIONS</b>										
<b>Thousands of Dollars - Not Seasonally Adjusted</b>										
	<b>FY</b>									<b>December 2022</b>
	2009:3	2009:4	2010:1	2010:2	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%
	<b>FY</b>									<b>FY</b>
	2011:3	2011:4	2012:1	2012:2	2012	2012:3	2012:4	2013:1	2013:2	2013
ADVANCE PAYMENTS	120,766	154,290	86,873	156,652	518,581	130,348	110,207	80,942	282,526	604,023
%CHYA	4.8%	-12.1%	13.7%	-5.3%	-2.6%	7.9%	-28.6%	-6.8%	80.4%	16.5%
FINAL PAYMENTS	19,117	26,841	32,512	33,322	111,792	16,387	21,377	36,660	34,009	108,433
%CHYA	-12.2%	26.6%	-9.1%	-18.3%	-6.5%	-14.3%	-20.4%	12.8%	2.1%	-3.0%
REFUNDS	34,927	91,252	55,051	18,153	199,384	33,212	17,832	25,595	182,929	259,568
%CHYA	51.0%	1.5%	40.9%	-42.4%	8.6%	-4.9%	-80.5%	-53.5%	907.7%	30.2%
TOTAL	104,955	89,878	64,335	171,820	430,989	113,524	113,751	92,007	133,606	452,888
%CHYA	-7.9%	-15.9%	-12.0%	-1.6%	-8.0%	8.2%	26.6%	43.0%	-22.2%	5.1%
	<b>FY</b>									<b>FY</b>
	2013:3	2013:4	2014:1	2014:2	2014	2014:3	2014:4	2015:1	2015:2	2015
ADVANCE PAYMENTS	123,591	187,195	150,401	183,348	644,535	193,248	206,088	106,689	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%
	<b>FY</b>									<b>FY</b>
	2015:3	2015:4	2016:1	2016:2	2016	2016:3	2016:4	2017:1	2017:2	2017
ADVANCE PAYMENTS	173,329	220,326	118,673	202,813	715,141	136,698	215,677	102,663	195,412	650,449
%CHYA	-10.3%	6.9%	11.2%	10.5%	3.7%	-21.1%	-2.1%	-13.5%	-3.6%	-9.0%
FINAL PAYMENTS	67,305	59,752	63,509	70,433	260,998	44,746	93,441	52,164	81,824	272,175
%CHYA	133.6%	-18.8%	10.9%	-1.4%	13.0%	-33.5%	56.4%	-17.9%	16.2%	4.3%
REFUNDS	42,388	156,984	85,446	81,453	366,271	39,680	166,537	73,066	57,733	337,016
%CHYA	-15.1%	1.0%	46.4%	131.6%	22.5%	-6.4%	6.1%	-14.5%	-29.1%	-8.0%
TOTAL	198,245	123,094	96,736	191,793	609,868	141,764	142,581	81,761	219,503	585,608
%CHYA	15.2%	-0.9%	-8.4%	-12.8%	-1.9%	-28.5%	15.8%	-15.5%	14.4%	-4.0%
	<b>FY</b>									<b>FY</b>
	2017:3	2017:4	2018:1	2018:2	2018	2018:3	2018:4	2019:1	2019:2	2019
ADVANCE PAYMENTS	179,603	185,787	182,395	303,835	851,620	222,891	249,768	158,748	264,445	895,852
%CHYA	31.4%	-13.9%	77.7%	55.5%	30.9%	24.1%	34.4%	-13.0%	-13.0%	5.2%
FINAL PAYMENTS	42,600	66,460	46,270	108,539	263,869	74,735	102,942	68,818	174,861	421,356
%CHYA	-4.8%	-28.9%	-11.3%	32.6%	-3.1%	75.4%	54.9%	48.7%	61.1%	59.7%
REFUNDS	72,225	129,963	122,291	54,224	378,703	43,428	167,871	128,586	50,616	390,501
%CHYA	82.0%	-22.0%	67.4%	-6.1%	12.4%	-39.9%	29.2%	5.1%	-6.7%	3.1%
TOTAL	149,978	122,284	106,374	358,150	736,786	254,198	184,839	98,980	388,690	926,707
%CHYA	5.8%	-14.2%	30.1%	63.2%	25.8%	69.5%	51.2%	-7.0%	8.5%	25.8%

TABLE B.5

## OREGON CORPORATE INCOME TAX REVENUE FORECAST - QUARTERLY COLLECTIONS

	Thousands of Dollars - Not Seasonally Adjusted									
	2019:3	2019:4	2020:1	2020:2	FY 2020	2020:3	2020:4	2021:1	2021:2	FY 2021
ADVANCE PAYMENTS	236,341	346,651	137,782	263,138	983,912	260,668	378,192	249,855	381,413	1,270,128
%CHYA	6.0%	38.8%	-13.2%	-0.5%	9.8%	10.3%	9.1%	81.3%	44.9%	29.1%
FINAL PAYMENTS	67,657	105,446	66,346	111,149	350,598	114,684	98,371	78,356	263,524	554,935
%CHYA	-9.5%	2.4%	-3.6%	-36.4%	-16.8%	69.5%	-6.7%	18.1%	137.1%	58.3%
REFUNDS	73,866	247,403	91,312	86,858	499,439	62,538	254,020	154,026	153,392	623,976
%CHYA	70.1%	47.4%	-29.0%	71.6%	27.9%	-15.3%	2.7%	68.7%	76.6%	24.9%
TOTAL	230,132	204,694	112,816	287,429	835,071	312,814	222,543	174,185	491,545	1,201,087
%CHYA	-9.5%	10.7%	14.0%	-26.1%	-9.9%	35.9%	8.7%	54.4%	71.0%	43.8%
	2021:3	2021:4	2022:1	2022:2	FY 2022	2022:3	2022:4	2023:1	2023:2	FY 2023
ADVANCE PAYMENTS	356,491	494,937	288,546	416,777	1,556,751	428,034	437,604	230,553	306,257	1,402,447
%CHYA	36.8%	30.9%	15.5%	9.3%	22.6%	20.1%	-11.6%	-20.1%	-26.5%	-9.9%
FINAL PAYMENTS	56,491	96,179	115,111	261,579	529,360	72,368	92,773	95,008	214,701	474,850
%CHYA	-50.7%	-2.2%	46.9%	-0.7%	-4.6%	28.1%	-3.5%	-17.5%	-17.9%	-10.3%
REFUNDS	49,631	255,602	197,775	44,052	547,060	116,377	290,326	226,047	135,639	768,389
%CHYA	-20.6%	0.6%	28.4%	-71.3%	-12.3%	134.5%	13.6%	14.3%	207.9%	40.5%
TOTAL	363,352	335,513	205,882	634,304	1,539,051	384,025	240,051	99,513	385,319	1,108,908
%CHYA	16.2%	50.8%	18.2%	29.0%	28.1%	5.7%	-28.5%	-51.7%	-39.3%	-27.9%
	2023:3	2023:4	2024:1	2024:2	FY 2024	2024:3	2024:4	2025:1	2025:2	FY 2025
ADVANCE PAYMENTS	272,314	333,003	187,199	262,960	1,055,476	241,884	321,464	192,108	276,365	1,031,822
%CHYA	-36.4%	-23.9%	-18.8%	-14.1%	-24.7%	-11.2%	-3.5%	2.6%	5.1%	-2.2%
FINAL PAYMENTS	109,285	240,134	171,701	249,252	770,371	102,626	300,494	200,401	274,912	878,434
%CHYA	51.0%	158.8%	80.7%	16.1%	62.2%	-6.1%	25.1%	16.7%	10.3%	14.0%
REFUNDS	92,207	363,679	230,437	147,705	834,028	103,242	413,711	260,634	168,629	946,216
%CHYA	-20.8%	25.3%	1.9%	8.9%	8.5%	12.0%	13.8%	13.1%	14.2%	13.5%
TOTAL	289,392	209,457	128,463	364,506	991,819	241,269	208,247	131,876	382,648	964,039
%CHYA	-24.6%	-12.7%	29.1%	-5.4%	-10.6%	-16.6%	-0.6%	2.7%	5.0%	-2.8%
	2025:3	2025:4	2026:1	2026:2	FY 2026	2026:3	2026:4	2027:1	2027:2	FY 2027
ADVANCE PAYMENTS	257,935	345,251	207,079	298,869	1,109,133	277,306	369,763	222,016	321,216	1,190,301
%CHYA	6.6%	7.4%	7.8%	8.1%	7.5%	7.5%	7.1%	7.2%	7.5%	7.3%
FINAL PAYMENTS	114,272	349,172	207,842	287,540	958,827	116,663	358,710	214,015	300,662	990,050
%CHYA	11.3%	16.2%	3.7%	4.6%	9.2%	2.1%	2.7%	3.0%	4.6%	3.3%
REFUNDS	117,756	472,123	273,410	176,613	1,039,902	123,701	494,227	286,364	185,172	1,089,464
%CHYA	14.1%	14.1%	4.9%	4.7%	9.9%	5.0%	4.7%	4.7%	4.8%	4.8%
TOTAL	254,452	222,300	141,510	409,796	1,028,058	270,268	234,246	149,667	436,707	1,090,888
%CHYA	5.5%	6.7%	7.3%	7.1%	6.6%	6.2%	5.4%	5.8%	6.6%	6.1%
	2027:3	2027:4	2028:1	2028:2	FY 2028	2028:3	2028:4	2029:1	2029:2	FY 2029
ADVANCE PAYMENTS	295,092	393,968	232,491	337,184	1,258,735	315,006	422,014	245,808	357,559	1,340,387
%CHYA	6.4%	6.5%	4.7%	5.0%	5.7%	6.7%	7.1%	5.7%	6.0%	6.5%
FINAL PAYMENTS	117,629	363,840	214,593	305,013	1,001,075	118,429	370,571	218,072	312,367	1,019,438
%CHYA	0.8%	1.4%	0.3%	1.4%	1.1%	0.7%	1.8%	1.6%	2.4%	1.8%
REFUNDS	131,400	525,423	300,483	194,556	1,151,863	136,449	546,753	311,161	201,897	1,196,261
%CHYA	6.2%	6.3%	4.9%	5.1%	5.7%	3.8%	4.1%	3.6%	3.8%	3.9%
TOTAL	281,321	232,385	146,601	447,640	1,107,947	296,986	245,832	152,718	468,029	1,163,564
%CHYA	4.1%	-0.8%	-2.0%	2.5%	1.6%	5.6%	5.8%	4.2%	4.6%	5.0%
	2029:3	2029:4	2030:1	2030:2	FY 2030	2030:3	2030:4	2031:1	2031:2	FY 2031
ADVANCE PAYMENTS	335,814	450,881	263,183	383,505	1,433,382	360,469	484,602	283,198	413,219	1,541,488
%CHYA	6.6%	6.8%	7.1%	7.3%	6.9%	7.3%	7.5%	7.6%	7.7%	7.5%
FINAL PAYMENTS	118,843	378,995	223,407	323,976	1,045,221	120,229	389,524	230,451	339,018	1,079,222
%CHYA	0.3%	2.3%	2.4%	3.7%	2.5%	1.2%	2.8%	3.2%	4.6%	3.3%
REFUNDS	139,658	560,508	319,462	207,542	1,227,170	146,258	587,575	335,313	218,064	1,287,210
%CHYA	2.4%	2.5%	2.7%	2.8%	2.6%	4.7%	4.8%	5.0%	5.1%	4.9%
TOTAL	314,998	269,368	167,129	499,938	1,251,433	334,440	286,550	178,337	534,172	1,333,500
%CHYA	6.1%	9.6%	9.4%	6.8%	5.6%	6.2%	6.4%	6.7%	6.8%	6.6%

Table B.6 Cigarette and Tobacco Tax Distribution

TABLE B.6 Cigarette & Tobacco Tax Distribution (Millions of \$)													December 2022		
	Cigarette Tax Distribution*								Other Tobacco Tax Distribution				Inhalent Delivery Distribution		
	Total	General Fund	Health Plan	Mental Health	Health Authority <sup>1</sup>	Tobacco Use Reduction <sup>2</sup>		Cities, Counties & Public Transit	Total	General Fund	Health Plan	Tobacco Use Reduction	Total	Health Authority	Tobacco Use Reduction
					Old	New									
<b>Distribution Forecast</b>															
2019-20	187.2	30.5	121.0	21.2	0.0	4.8	0.0	9.7	57.7	30.9	24.1	2.7	0.0	0.0	0.0
2020-21	292.3	24.6	107.1	18.7	118.9	4.3	10.1	8.5	56.6	30.4	23.6	2.6	10.5	9.5	1.1
2019-21 Biennium	479.5	55.1	228.1	39.9	118.9	9.1	10.1	18.2	114.3	61.3	47.7	5.3	10.5	9.5	1.1
2021-22	363.6	24.4	93.0	16.3	197.1	3.7	21.7	7.4	56.5	30.3	23.5	2.6	35.9	32.3	3.6
2022-23	334.4	22.1	86.1	15.1	180.8	3.4	20.1	6.9	58.9	31.7	24.5	2.7	31.4	28.3	3.1
2021-23 Biennium	698.0	46.5	179.1	31.3	377.9	7.1	41.8	14.3	115.4	62.0	48.0	5.3	67.3	60.6	6.7
2023-24	331.0	21.9	85.2	14.9	178.9	3.4	19.9	6.8	59.2	31.9	24.6	2.7	30.8	27.8	3.1
2024-25	321.0	21.2	82.7	14.5	173.5	3.3	19.3	6.6	59.1	31.8	24.6	2.7	31.1	28.0	3.1
2023-25 Biennium	652.0	43.1	167.9	29.4	352.5	6.7	39.2	13.4	118.3	63.7	49.1	5.5	61.9	55.7	6.2
2025-26	310.6	20.5	80.0	14.0	167.9	3.2	18.7	6.4	59.0	31.7	24.5	2.7	31.4	28.2	3.1
2026-27	304.4	20.1	78.4	13.7	164.5	3.1	18.3	6.3	59.2	31.9	24.6	2.7	31.6	28.5	3.2
2025-27 Biennium	615.0	40.6	158.3	27.7	332.4	6.3	36.9	12.6	118.1	63.6	49.1	5.5	63.0	56.7	6.3
2027-28	299.4	19.8	77.1	13.5	161.8	3.1	18.0	6.1	59.2	31.8	24.6	2.7	31.9	28.7	3.2
2028-29	295.5	19.5	76.1	13.3	159.7	3.0	17.7	6.1	59.2	31.9	24.6	2.7	32.1	28.9	3.2
2027-29 Biennium	594.9	39.3	153.2	26.8	321.6	6.1	35.7	12.2	118.4	63.7	49.2	5.5	64.0	57.6	6.4
2029-30	291.8	19.3	75.1	13.1	157.8	3.0	17.5	6.0	59.3	31.9	24.6	2.7	32.4	29.1	3.2
2030-31	287.6	19.0	74.0	13.0	155.4	3.0	17.3	5.9	59.2	31.9	24.6	2.7	32.6	29.4	3.3
2029-31 Biennium	579.4	38.3	149.2	26.1	313.2	6.0	34.8	11.9	118.5	63.8	49.2	5.5	65.0	58.5	6.5

<sup>1</sup> Includes the cigarette floor tax in FY21 of \$27.7 million and FY22 of \$1.6 million

<sup>2</sup> Old and New refer to pre- and post-Measure 108 (2020) taxes and programs

Table B.7 Revenue Distribution to Local Governments

TABLE B.7 Liquor Apportionment and Revenue Distribution to Local Governments (Millions of \$)									December 2022
	Liquor Apportionment Distribution								
	Total Liquor Revenue Available	General Fund (56%)	Mental Health <sup>1</sup>	Oregon Wine Board	City Revenue			Counties	Cigarette Tax Distribution <sup>2</sup>
					Revenue Sharing	Regular	Total		
<b>2019-20</b>	290.649	165.629	9.534	0.338	52.340	36.638	88.979	26.170	9.653
<b>2020-21</b>	314.695	179.692	8.690	0.330	57.265	40.086	97.351	28.633	8.546
<b>2019-21 Biennium</b>	605.344	345.321	18.224	0.668	109.605	76.724	186.329	54.803	18.199
<b>2021-22</b>	311.292	176.701	10.675	0.359	56.163	39.314	95.476	28.081	7.419
<b>2022-23</b>	317.711	180.870	9.622	0.386	57.651	40.356	98.007	28.826	6.866
<b>2021-23 Biennium</b>	629.004	357.571	20.297	0.745	113.814	79.670	193.484	56.907	14.286
<b>2023-24</b>	321.704	179.151	10.019	0.376	60.072	42.050	102.122	30.036	6.800
<b>2024-25</b>	342.974	190.996	10.681	0.401	64.043	44.830	108.874	32.022	6.594
<b>2023-25 Biennium</b>	664.678	370.147	20.700	0.777	124.115	86.881	210.996	62.058	13.393
<b>2025-26</b>	345.418	188.633	11.604	0.432	65.795	46.057	111.851	32.897	6.380
<b>2026-27</b>	362.881	198.594	11.884	0.445	69.072	48.350	117.422	34.536	6.253
<b>2025-27 Biennium</b>	708.299	387.227	23.489	0.877	134.867	94.407	229.273	67.433	12.632
<b>2027-28</b>	382.108	209.648	12.167	0.458	72.652	50.857	123.509	36.326	6.149
<b>2028-29</b>	403.927	222.361	12.471	0.472	76.647	53.653	130.301	38.323	6.070
<b>2027-29 Biennium</b>	786.036	432.008	24.638	0.931	149.299	104.510	253.809	74.649	12.219
<b>2029-30</b>	427.102	235.905	12.790	0.487	80.873	56.611	137.484	40.436	5.995
<b>2030-31</b>	450.932	249.819	13.125	0.503	85.220	59.654	144.875	42.610	5.907
<b>2029-31 Biennium</b>	878.034	485.724	25.915	0.990	166.093	116.265	282.358	83.046	11.901

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

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

Table B.8 Track Record for the September 2022 Forecast

## Table B.8 Track Record for the September 2022 Forecast

(Quarter ending September 30, 2022)

<b>Personal Income Tax</b>		<b>Forecast Comparison</b>			<b>Year/Year Change</b>	
(Millions of dollars)	Actual Revenues	Latest Forecast	Percent Difference	Prior Year	Percent Change	
Withholding	\$2,509.7	\$2,420.6	3.7%	\$2,394.0	4.8%	
Dollar difference		\$89.1				
Estimated Payments*	\$659.3	\$398.8	65.3%	\$495.5	33.1%	
Dollar difference		\$260.5				
Final Payments*	\$162.6	\$146.1	11.3%	\$153.2	6.2%	
Dollar difference		\$16.5				
Refunds	-\$293.0	-\$252.0	16.3%	-\$162.4	80.4%	
Dollar difference		-\$41.0				
<b>Total Personal Income Tax</b>	<b>\$3,038.6</b>	<b>\$2,713.5</b>	<b>12.0%</b>	<b>\$2,880.2</b>	<b>5.5%</b>	
Dollar difference		\$325.1				
<b>Corporate Income Tax</b>		<b>Forecast Comparison</b>			<b>Year/Year Change</b>	
(Millions of dollars)	Actual Revenues	Latest Forecast	Percent Difference	Prior Year	Percent Change	
Advanced Payments	\$428.0	\$315.9	35.5%	\$356.5	20.1%	
Dollar difference		\$112.1				
Final Payments	\$72.4	\$62.8	15.2%	\$56.5	28.1%	
Dollar difference		\$9.5				
Refunds	-\$116.4	-\$80.6	44.4%	-\$49.6	134.5%	
Dollar difference		-\$35.8				
<b>Total Corporate Income Tax</b>	<b>\$384.0</b>	<b>\$298.1</b>	<b>28.8%</b>	<b>\$363.4</b>	<b>5.7%</b>	
Dollar difference		\$85.9				
<b>Total Income Tax</b>		<b>Forecast Comparison</b>			<b>Year/Year Change</b>	
(Millions of dollars)	Actual Revenues	Latest Forecast	Percent Difference	Prior Year	Percent Change	
<b>Corporate and Personal Tax</b>	<b>\$3,422.6</b>	<b>\$3,011.7</b>	<b>13.6%</b>	<b>\$3,243.5</b>	<b>5.5%</b>	
Dollar difference		\$411.0		\$179.1		

\* Data separating estimated and other personal income tax payments is no longer available. Tracking represents estimates based on banking data.

Table B.9 Summary of Lottery Resources

TABLE B.9 Summary of Lottery Resources	<b>Dec 2022 Forecast</b>										
	2021-23			2023-25		2025-2027		2027-29		2029-31	
(in millions of dollars)	Current Forecast	Change from Sep-22	Change from COS 2021	Current Forecast	Change from Sep-22	Current Forecast	Change from Sep-22	Current Forecast	Change from Sep-22	Current Forecast	Change from Sep-22
<b>LOTTERY EARNINGS</b>											
Traditional Lottery	172.716	2.938	13.881	156.440	(0.464)	154.566	(0.366)	154.182	(0.247)	154.167	(0.251)
Video Lottery	1,601.419	7.224	128.131	1,589.234	(16.273)	1,725.490	(9.554)	1,871.221	(13.528)	2,003.705	(14.490)
Sports Betting <sup>1</sup>	27.821	0.000	8.484	33.154	0.000	41.235	0.000	44.343	0.000	47.685	0.000
Administrative Actions	(0.017)	(0.017)	(0.017)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Total Available to Transfer</b>	<b>1,801.939</b>	<b>10.145</b>	<b>150.478</b>	<b>1,778.828</b>	<b>(16.736)</b>	<b>1,921.291</b>	<b>(9.921)</b>	<b>2,069.746</b>	<b>(13.775)</b>	<b>2,205.556</b>	<b>(14.741)</b>
<b>ECONOMIC DEVELOPMENT FUND</b>											
Beginning Balance	72.370	0.000	0.000	73.779	6.643	0.000	0.000	0.000	0.000	0.000	0.000
Transfers from Lottery	1,801.939	10.145	150.478	1,778.828	(16.736)	1,921.291	(9.921)	2,069.746	(13.775)	2,205.556	(14.741)
Other Resources <sup>2</sup>	8.392	0.000	6.392	2.000	0.000	2.000	0.000	2.000	0.000	2.000	0.000
<b>Total Available Resources</b>	<b>1,882.700</b>	<b>10.145</b>	<b>156.870</b>	<b>1,854.607</b>	<b>(10.093)</b>	<b>1,923.291</b>	<b>(9.921)</b>	<b>2,071.746</b>	<b>(13.775)</b>	<b>2,207.556</b>	<b>(14.741)</b>
<b>ALLOCATION OF RESOURCES</b>											
Constitutional Distributions											
Education Stability Fund <sup>3</sup>	323.821	1.829	26.559	320.189	(3.013)	127.667	(0.871)	372.575	45.766	195.248	(51.696)
Oregon Capital Matching Fund <sup>3</sup>	0.000	0.000	0.000	0.000	0.000	181.804	(0.762)	0.000	(40.204)	167.897	40.868
Parks and Natural Resources Fund <sup>4</sup>	270.291	1.522	22.572	266.824	(2.510)	288.194	(1.488)	310.462	(2.066)	330.833	(2.211)
Veterans' Services Fund <sup>5</sup>	28.162	0.152	3.390	26.682	(0.251)	28.819	(0.149)	31.046	(0.207)	33.083	(0.221)
Other Distributions											
Outdoor School Education Fund <sup>6</sup>	49.419	0.000	0.000	56.566	1.888	60.223	2.632	64.118	3.457	68.264	4.371
County Economic Development	54.210	0.000	0.000	60.931	(0.624)	66.155	(0.366)	71.743	(0.519)	76.822	(0.556)
HECC Collegiate Athletic & Scholarships <sup>7</sup>	16.515	0.000	0.000	17.788	(0.167)	19.213	(0.099)	20.697	(0.138)	22.056	(0.147)
Gambling Addiction <sup>7</sup>	16.543	0.000	0.028	17.788	(0.167)	19.213	(0.099)	20.697	(0.138)	22.056	(0.147)
County Fairs	3.828	0.000	0.000	3.828	0.000	3.828	0.000	3.828	0.000	3.828	0.000
Other Legislatively Adopted Allocations <sup>8</sup>	1,030.798	0.000	57.873	234.300	0.000	234.300	0.000	234.300	0.000	234.300	0.000
Employer Incentive Fund (PERS) <sup>1</sup>	15.335	0.000	2.669	21.716	0.000	27.789	0.001	29.044	(0.171)	31.966	0.180
<b>Total Distributions</b>	<b>1,808.921</b>	<b>3.503</b>	<b>113.091</b>	<b>1,026.613</b>	<b>(4.845)</b>	<b>1,057.206</b>	<b>(1.202)</b>	<b>1,158.510</b>	<b>5.781</b>	<b>1,186.352</b>	<b>(9.559)</b>
<b>Ending Balance/Discretionary Resources</b>	<b>73.779</b>	<b>6.643</b>	<b>43.779</b>	<b>827.994</b>	<b>(5.249)</b>	<b>866.085</b>	<b>(8.718)</b>	<b>913.236</b>	<b>(19.556)</b>	<b>1,021.205</b>	<b>(5.182)</b>

Note: Some totals may not foot due to rounding.

1. Sports Betting revenues are transferred to Economic Development Fund making them subject to the constitutional distributions, after which the remainder is transferred to the Employer Incentive Fund
2. Includes reversions (unspent allocations from previous biennium) and interest earnings on Economic Development Fund.
3. Eighteen percent of proceeds accrue to the Ed. Stability Fund, until the balance equals 5% of GF Revenues. Thereafter, 15% of proceeds accrue to the School Capital Matching Fund.
4. The Parks and Natural Resources Fund Constitutional amendment requires 15% of net proceeds be transferred to this fund.
5. Per Ballot Measure 96 (2016), 1.5% of net lottery proceeds are dedicated to the Veterans' Services Fund
6. Per Ballot Measure 99 (2016), the lesser of 4% of Lottery transfers or \$22 million per year is transferred to the Outdoor Education Account. Adjusted annually for inflation.
7. Approximately one percent of net lottery proceeds are dedicated to each program. Certain limits are imposed by the Legislature.
8. Includes Debt Service Allocations, Allocations to State School Fund and Other Agency Allocations

Table B.10 Budgetary Reserve Summary and Outlook

**Table B.10: Budgetary Reserve Summary and Outlook****Dec 2022****Rainy Day Fund**

(Millions)	2019-21	2021-23	2023-25	2025-27	2027-29
Beginning Balance	\$666.6	\$962.2	\$1,334.1	\$1,811.0	\$2,294.4
Interest Earnings	\$22.8	\$43.3	\$118.7	\$111.9	\$140.3
Deposits <sup>1</sup>	\$272.8	\$328.6	\$358.3	\$371.5	\$410.8
Triggered Withdrawals	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Ending Balance<sup>2</sup></b>	<b>\$962.2</b>	<b>\$1,334.1</b>	<b>\$1,811.0</b>	<b>\$2,294.4</b>	<b>\$2,845.6</b>

**Education Stability Fund<sup>3</sup>**

(Millions)	2019-21	2021-23	2023-25	2025-27	2027-29
Beginning Balance	\$621.1	\$414.6	\$705.8	\$994.0	\$1,108.9
Interest Earnings <sup>4</sup>	\$20.1	\$24.2	\$67.3	\$61.7	\$72.1
Deposits <sup>5</sup>	\$194.7	\$291.4	\$288.2	\$114.9	\$335.3
Distributions	\$419.9	\$24.4	\$67.3	\$61.7	\$72.1
Oregon Education Fund	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Oregon Opportunity Grant	\$19.9	\$24.4	\$67.3	\$61.7	\$72.1
Withdrawals	\$400.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Ending Balance</b>	<b>\$414.6</b>	<b>\$705.8</b>	<b>\$994.0</b>	<b>\$1,108.9</b>	<b>\$1,444.2</b>

**Total Reserves**

(Millions)	2019-21	2021-23	2023-25	2025-27	2027-29
<b>Ending Balances</b>	<b>\$1,376.8</b>	<b>\$2,039.9</b>	<b>\$2,805.0</b>	<b>\$3,403.3</b>	<b>\$4,289.8</b>
Percent of General Fund Revenues	5.8%	7.2%	11.2%	10.6%	11.7%

## 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



Table B.11 Recreational Marijuana Resources and Distributions

<b>Dec 2022</b>											
<b>TABLE B.11 Summary of Marijuana Resources</b>											
	<b>2021-23</b>			<b>2023-25</b>		<b>2025-27</b>		<b>2027-29</b>		<b>2029-31</b>	
	<b>Current Forecast</b>	<b>Change from Sep-22</b>	<b>Change from COS 2021</b>	<b>Current Forecast</b>	<b>Change from Sep-22</b>	<b>Current Forecast</b>	<b>Change from Sep-22</b>	<b>Current Forecast</b>	<b>Change from Sep-22</b>	<b>Current Forecast</b>	<b>Change from Sep-22</b>
<i>(in millions of dollars)</i>											
<b>MARIJUANA EARNINGS</b>											
+ Tax Revenue <sup>1</sup>	326.856	(12.252)	(27.531)	351.551	(11.607)	394.032	(9.442)	443.541	(5.383)	495.490	(4.085)
+ Medical Marijuana Tax Revenue <sup>2</sup>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	31.896	0.000	44.041	0.000
- Administrative Costs <sup>3</sup>	17.193	2.167	2.167	18.374	0.000	18.746	0.000	19.144	0.000	19.571	0.000
<b>Net Available to Transfer</b>	<b>309.663</b>	<b>(14.419)</b>	<b>(29.697)</b>	<b>333.177</b>	<b>(11.607)</b>	<b>375.286</b>	<b>(9.442)</b>	<b>456.293</b>	<b>(5.383)</b>	<b>519.960</b>	<b>(4.085)</b>
<b>OREGON MARIJUANA ACCOUNT</b>											
Beginning Balance	0.000	0.000	(0.000)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Revenue Transfers	311.829	(12.252)	(27.531)	333.177	(11.607)	375.286	(9.442)	456.293	(5.383)	519.960	(4.085)
Other Resources	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Total Available Resources</b>	<b>311.829</b>	<b>(12.252)</b>	<b>(27.531)</b>	<b>333.177</b>	<b>(11.607)</b>	<b>375.286</b>	<b>(9.442)</b>	<b>456.293</b>	<b>(5.383)</b>	<b>519.960</b>	<b>(4.085)</b>
<b>ALLOCATION OF RESOURCES <sup>4</sup></b>											
Drug Treatment & Recovery	221.829	(12.252)	(27.531)	231.300	(12.374)	266.762	(11.725)	342.879	(8.041)	401.540	(6.850)
State School Fund	36.000	0.000	0.000	40.751	0.307	43.409	0.913	45.366	1.063	47.368	1.106
Mental Health, Alcoholism, & Drug Services	18.000	0.000	0.000	20.375	0.153	21.705	0.457	22.683	0.532	23.684	0.553
State Police	13.500	0.000	0.000	15.281	0.115	16.279	0.343	17.012	0.399	17.763	0.415
Cities	9.000	0.000	0.000	10.188	0.077	10.852	0.228	11.341	0.266	11.842	0.276
Counties	9.000	0.000	0.000	10.188	0.077	10.852	0.228	11.341	0.266	11.842	0.276
Alcohol & Drug Abuse Prevention, Intervention & Treatment	4.500	0.000	0.000	5.094	0.038	5.426	0.114	5.671	0.133	5.921	0.138
<b>Total Distributions</b>	<b>311.829</b>	<b>(12.252)</b>	<b>(27.531)</b>	<b>333.177</b>	<b>(11.607)</b>	<b>375.286</b>	<b>(9.442)</b>	<b>456.293</b>	<b>(5.383)</b>	<b>519.960</b>	<b>(4.085)</b>
<b>Ending Balance</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>

Note: Some totals may not foot due to rounding.

1. Retailers pay taxes monthly, however taxes are not available for distribution to recipient programs until the Department of Revenue receives and processes retailers' quarterly tax returns. As such, there is a one to two quarter lag between when the initial monthly payments are made and when monies become available to distribute.
2. Medical marijuana being exempt from tax is an explicit tax expenditure per HB 2433 (2021). Tax expenditures sunset after 6 years, although they may be renewed at that time. Current law is that medical marijuana sales will be taxed beginning January 1, 2028.
3. Administrative Costs reflect monthly collection costs for the Department of Revenue in addition to distributions to the Criminal Justice Commission and OLCC per SB 1544 (2018)
4. The first \$11.25 million per quarter (\$45m per year) is distributed via formula to the initial recipient programs. These distributions are adjusted for inflation. All additional revenues go to the Drug Treatment & Recovery Fund.

Table B.12 Fund for Student Success (Corporate Activity Tax)

TABLE B.12											December 2022		
Summary of Corporate Activity Tax Resources													
(in millions of dollars)	2021-23			2023-25		2025-27		2027-29		2029-31			
	Current Forecast	Change from Sep-22	Change from COS 2021	Current Forecast	Change from Sep-22	Current Forecast	Change from Sep-22	Current Forecast	Change from Sep-22	Current Forecast	Change from Sep-22	Current Forecast	Change from Sep-22
<b>Corporate Activity Tax</b>													
+ Tax Revenue	2,455.739	12.035	87.443	2,577.106	(62.054)	2,859.522	(50.627)	3,195.008	(54.717)	3,571.829	(82.016)		
- Administrative Costs	19.200	0.000	0.000	21.312	0.000	23.656	0.000	26.259	0.000	28.689	0.000		
<b>Net Available to Transfer</b>	<b>2,436.539</b>	<b>12.035</b>	<b>87.443</b>	<b>2,555.794</b>	<b>(62.054)</b>	<b>2,835.866</b>	<b>(50.627)</b>	<b>3,168.750</b>	<b>(54.717)</b>	<b>3,543.141</b>	<b>(82.016)</b>		
<b>Fund for Student Success</b>													
Beginning Balance	200.557	0.000	0.000	180.821	6.431	0.000	0.000	0.000	0.000	0.000	0.000		
Revenue Transfers	2,436.539	12.035	87.443	2,555.794	(62.054)	2,835.866	(50.627)	3,168.750	(54.717)	3,543.141	(82.016)		
Other Resources	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
<b>Total Available Resources</b>	<b>2,637.096</b>	<b>12.035</b>	<b>87.443</b>	<b>2,736.614</b>	<b>(55.623)</b>	<b>2,835.866</b>	<b>(50.627)</b>	<b>3,168.750</b>	<b>(54.717)</b>	<b>3,543.141</b>	<b>(82.016)</b>		
<b>ALLOCATION OF RESOURCES</b>													
State School Fund	728.849	5.604	43.171	739.127	(12.100)	807.207	(11.245)	884.819	(12.718)	975.395	(16.503)		
Student Investment Account	892.277	0.000	0.000	998.744	(21.761)	1,014.329	(19.691)	1,141.965	(20.999)	1,283.873	(32.756)		
Statewide Education Initiative Account	398.925	0.000	26.024	599.246	(13.057)	608.597	(11.815)	685.179	(12.600)	770.324	(19.654)		
Early Learning Account	436.225	0.000	0.118	399.497	(8.705)	405.732	(7.876)	456.786	(8.400)	513.549	(13.102)		
<b>Total Distributions</b>	<b>2,456.276</b>	<b>5.604</b>	<b>69.313</b>	<b>2,736.614</b>	<b>(55.623)</b>	<b>2,835.866</b>	<b>(50.627)</b>	<b>3,168.750</b>	<b>(54.717)</b>	<b>3,543.141</b>	<b>(82.016)</b>		
<b>Ending Balance</b>	<b>180.821</b>	<b>6.431</b>	<b>18.130</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>		

Note: The State School Fund distribution equals an estimate of the lost General Fund due to the Personal and Corporate Income Tax changes enacted in HB 3427 plus \$40 million dedicated to the High Cost Disabilities Account. The 2021-23 distribution includes a \$33.4 million reconciling adjustment for the prior biennium.

Some totals may not foot due to rounding.

Table B.13 Fund for Student Success Quarterly Revenues (Corporate Activity Tax)

<b>Table B.13 Corporate Activity Tax Collections By Quarter</b>										
<b>Dec-22</b>										
(thousands)	2019:3	2019:4	2020:1	2020:2	FY 2020	2020:3	2020:4	2021:1	2021:2	FY 2021
<b>Estimated Payments</b>	\$0	\$0	\$4,023	\$222,495	\$226,518	\$224,973	\$254,387	\$223,550	\$270,784	\$973,693
<b>Final Payments</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$26,911	\$163,436	\$190,348
<b>Refunds</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	-\$997.05	-\$14,657	-\$15,654
<b>Total</b>	\$0	\$0	\$4,023	\$222,495	\$226,518	\$224,973	\$254,387	\$249,464	\$419,563	\$1,148,387
	2021:3	2021:4	2022:1	2022:2	FY 2022	2022:3	2022:4	2023:1	2023:2	FY 2023
<b>Estimated Payments</b>	\$271,858	\$389,810	\$230,942	\$279,349	\$1,171,959	\$291,990	\$326,726	\$234,005	\$278,868	\$1,131,589
<b>Final Payments</b>	\$15,153	\$41,892	\$41,950	\$168,644	\$267,640	\$59,490	\$49,045	\$49,925	\$158,996	\$317,456
<b>Refunds</b>	-\$16,356	-\$141,389	-\$15,151	-\$50,166	-\$223,062	-\$41,565	-\$89,984	-\$20,297	-\$57,997	-\$209,843
<b>Total</b>	\$270,656	\$290,314	\$257,741	\$397,828	\$1,216,538	\$309,914	\$285,787	\$263,634	\$379,867	\$1,239,202
	2023:3	2023:4	2024:1	2024:2	FY 2024	2024:3	2024:4	2025:1	2025:2	FY 2025
<b>Estimated Payments</b>	\$288,991	\$331,689	\$232,801	\$288,565	\$1,142,046	\$299,239	\$343,399	\$242,994	\$301,841	\$1,187,473
<b>Final Payments</b>	\$59,471	\$48,295	\$49,442	\$160,894	\$318,103	\$59,877	\$49,292	\$51,186	\$167,506	\$327,862
<b>Refunds</b>	-\$42,001	-\$92,003	-\$19,200	-\$53,194	-\$206,398	-\$37,728	-\$82,173	-\$18,531	-\$53,548	-\$191,979
<b>Total</b>	\$306,462	\$287,981	\$263,042	\$396,265	\$1,253,751	\$321,389	\$310,518	\$275,649	\$415,799	\$1,323,355
	2025:3	2025:4	2026:1	2026:2	FY 2026	2026:3	2026:4	2027:1	2027:2	FY 2027
<b>Estimated Payments</b>	\$313,118	\$359,308	\$254,825	\$319,378	\$1,246,629	\$331,557	\$380,409	\$270,214	\$337,749	\$1,319,928
<b>Final Payments</b>	\$62,257	\$51,430	\$53,509	\$175,239	\$342,435	\$65,120	\$53,820	\$56,455	\$185,473	\$360,868
<b>Refunds</b>	-\$39,063	-\$85,737	-\$19,364	-\$56,000	-\$200,165	-\$40,873	-\$89,721	-\$20,397	-\$59,183	-\$210,174
<b>Total</b>	\$336,312	\$325,001	\$288,970	\$438,616	\$1,388,899	\$355,803	\$344,507	\$306,272	\$464,039	\$1,470,622
	2027:3	2027:4	2028:1	2028:2	FY 2028	2028:3	2028:4	2029:1	2029:2	FY 2029
<b>Estimated Payments</b>	\$350,298	\$401,916	\$285,377	\$356,838	\$1,394,429	\$370,098	\$424,633	\$301,548	\$377,186	\$1,473,465
<b>Final Payments</b>	\$68,873	\$57,033	\$59,691	\$195,933	\$381,529	\$72,771	\$60,229	\$63,058	\$207,011	\$403,069
<b>Refunds</b>	-\$43,288	-\$95,077	-\$21,576	-\$62,546	-\$222,487	-\$45,721	-\$100,405	-\$22,791	-\$66,079	-\$234,996
<b>Total</b>	\$375,882	\$363,871	\$323,492	\$490,224	\$1,553,470	\$397,148	\$384,456	\$341,815	\$518,119	\$1,641,538
	2029:3	2029:4	2030:1	2030:2	FY 2030	2030:3	2030:4	2031:1	2031:2	FY 2031
<b>Estimated Payments</b>	\$391,204	\$448,848	\$318,803	\$399,011	\$1,557,866	\$413,845	\$474,824	\$337,318	\$422,358	\$1,648,344
<b>Final Payments</b>	\$76,884	\$63,638	\$66,647	\$218,821	\$425,989	\$81,267	\$67,271	\$70,491	\$231,492	\$450,521
<b>Refunds</b>	-\$48,308	-\$106,088	-\$24,087	-\$69,844	-\$248,327	-\$51,065	-\$112,145	-\$25,473	-\$73,881	-\$262,565
<b>Total</b>	\$419,780	\$406,398	\$361,363	\$547,987	\$1,735,528	\$444,047	\$429,950	\$382,336	\$579,968	\$1,836,301

## APPENDIX C: POPULATION FORECASTS BY AGE AND SEX

Table C.1	Oregon’s Population Forecasts and Component of Change 1990-2030 .....	65
Table C.2	Population Forecasts by Age and Sex: 2010-2030 .....	66
Table C.3	Population of Oregon: 1980-2030 .....	67
Table C.4	Children: Ages 0-4 .....	67
Table C.5	School Age Population: Ages 5-17 .....	67
Table C.6	Young Adult Population: Ages 18-24 .....	67
Table C.7	Criminally At Risk Population: Males Ages 15-39 .....	68
Table C.8	Prime Wage Earners: Ages 25-44 .....	68
Table C.9	Older Wage Earners: Ages 45-64 .....	68
Table C.10	Elderly Population by Age Group .....	68

Table C.1 Oregon's Population Forecasts and Component of Change 1990-2030

Year (July 1)	Population	Population Change		Births		Deaths		Natural	Net Migration	
		Number	Percent	Number	Rate/1000	Number	Rate/1000	Increase	Number	Rate/1000
1990	2,860,400	69,800	2.50	42,008	14.87	24,763	8.76	17,245	52,555	18.60
1991	2,928,500	68,100	2.38	42,682	14.75	24,944	8.62	17,738	50,362	17.40
1992	2,991,800	63,300	2.16	42,427	14.33	25,166	8.50	17,261	46,039	15.55
1993	3,060,400	68,600	2.29	41,442	13.69	26,543	8.77	14,899	53,701	17.75
1994	3,121,300	60,900	1.99	41,487	13.42	27,564	8.92	13,923	46,977	15.20
1995	3,184,400	63,100	2.02	42,426	13.46	27,552	8.74	14,874	48,226	15.30
<b>1990-1995</b>		<b>324,000</b>		<b>210,464</b>		<b>131,769</b>		<b>78,695</b>	<b>245,305</b>	
1996	3,247,100	62,700	1.97	43,196	13.43	28,768	8.95	14,428	48,272	15.01
1997	3,304,300	57,200	1.76	43,625	13.32	29,201	8.91	14,424	42,776	13.06
1998	3,352,400	48,100	1.46	44,696	13.43	28,705	8.62	15,991	32,109	9.65
1999	3,393,900	41,500	1.24	45,188	13.40	29,848	8.85	15,340	26,160	7.76
2000	3,431,100	37,200	1.10	45,534	13.34	28,909	8.47	16,625	20,575	6.03
<b>1995-2000</b>		<b>246,700</b>		<b>222,239</b>		<b>145,431</b>		<b>76,808</b>	<b>169,892</b>	
2001	3,470,400	39,300	1.15	45,536	13.20	29,934	8.67	15,602	23,698	6.87
2002	3,502,600	32,200	0.93	44,995	12.91	30,828	8.84	14,167	18,033	5.17
2003	3,538,600	36,000	1.03	45,686	12.98	30,604	8.69	15,082	20,918	5.94
2004	3,578,900	40,300	1.14	45,599	12.81	30,721	8.63	14,878	25,422	7.14
2005	3,626,900	48,000	1.34	45,892	12.74	30,717	8.53	15,175	32,825	9.11
<b>2000-2005</b>		<b>195,800</b>		<b>227,708</b>		<b>152,804</b>		<b>74,904</b>	<b>120,896</b>	
2006	3,685,200	58,300	1.61	46,946	12.84	30,771	8.42	16,175	42,125	11.52
2007	3,739,400	54,200	1.47	49,404	13.31	31,396	8.46	18,008	36,192	9.75
2008	3,784,200	44,800	1.20	49,659	13.20	32,008	8.51	17,651	27,149	7.22
2009	3,815,800	31,600	0.84	47,960	12.62	31,382	8.26	16,578	15,022	3.95
2010	3,837,300	21,500	0.56	46,256	12.09	31,689	8.28	14,567	6,933	1.81
<b>2005-2010</b>		<b>210,400</b>		<b>240,225</b>		<b>157,246</b>		<b>82,979</b>	<b>127,421</b>	
2011	3,857,625	20,325	0.53	45,381	11.80	32,437	8.43	12,944	7,381	1.92
2012	3,878,877	21,252	0.55	44,897	11.61	32,804	8.48	12,093	9,159	2.37
2013	3,911,943	33,066	0.85	44,969	11.54	33,168	8.51	11,801	21,265	5.46
2014	3,953,356	41,413	1.06	45,447	11.56	33,731	8.58	11,716	29,697	7.55
2015	4,002,145	48,789	1.23	45,660	11.48	35,318	8.88	10,342	38,447	9.67
<b>2010-2015</b>		<b>164,845</b>		<b>226,354</b>		<b>167,458</b>		<b>58,896</b>	<b>105,949</b>	
2016	4,062,203	60,058	1.50	45,647	11.32	35,339	8.76	10,308	49,750	12.34
2017	4,124,435	62,232	1.53	44,602	10.90	36,773	8.98	7,829	54,403	13.29
2018	4,176,095	51,660	1.25	42,906	10.34	36,268	8.74	6,638	45,022	10.85
2019	4,214,664	38,569	0.92	42,220	10.06	36,622	8.73	5,598	32,971	7.86
2020	4,243,791	29,127	0.69	40,920	9.68	37,821	8.94	3,099	26,028	6.15
<b>2015-2020</b>		<b>241,646</b>		<b>216,295</b>		<b>182,823</b>		<b>33,472</b>	<b>208,174</b>	
2021	4,266,584	22,793	0.54	39,634	9.31	41,893	9.85	-2,259	25,052	5.89
2022	4,294,500	27,916	0.65	40,437	9.45	46,278	10.81	-5,841	33,757	7.89
2023	4,321,900	27,400	0.64	41,100	9.54	46,878	10.88	-5,778	33,178	7.70
2024	4,349,500	27,600	0.64	41,658	9.61	46,612	10.75	-4,954	32,554	7.51
2025	4,383,200	33,700	0.77	42,199	9.66	46,754	10.71	-4,554	38,254	8.76
<b>2020-2025</b>		<b>139,409</b>		<b>205,028</b>		<b>228,414</b>		<b>-23,386</b>	<b>162,795</b>	
2026	4,420,600	37,400	0.85	42,826	9.73	47,417	10.77	-4,591	41,991	9.54
2027	4,457,800	37,200	0.84	43,499	9.80	48,115	10.84	-4,616	41,816	9.42
2028	4,495,500	37,700	0.85	44,157	9.86	48,759	10.89	-4,601	42,301	9.45
2029	4,533,600	38,100	0.85	44,823	9.93	49,451	10.95	-4,628	42,728	9.46
2030	4,572,300	38,700	0.85	45,483	9.99	50,131	11.01	-4,648	43,348	9.52
<b>2025-2030</b>		<b>189,100</b>		<b>220,788</b>		<b>243,872</b>		<b>-23,084</b>	<b>212,184</b>	
<b>1990-2000</b>		<b>570,700</b>		<b>432,703</b>		<b>277,200</b>		<b>155,503</b>	<b>415,197</b>	13.10
<b>2000-2010</b>		<b>406,200</b>		<b>467,933</b>		<b>310,050</b>		<b>157,883</b>	<b>248,317</b>	6.83
<b>2010-2020</b>		<b>406,491</b>		<b>442,649</b>		<b>350,281</b>		<b>92,368</b>	<b>314,123</b>	7.81
<b>2020-2030</b>		<b>328,509</b>		<b>425,816</b>		<b>472,286</b>		<b>-46,470</b>	<b>374,979</b>	8.53

Sources: 1990-1999 population - U.S. Census Bureau; 2000-2019 intercensal population estimates by Office of Economic Analysis based on postcensal estimates by Population Research Center, PSU; 2020-2021 population by PRC/PSUI; births and deaths 1990-2021: Oregon Center for Health Statistics. Forecasts of population, births, deaths, and net migration are by the Oregon Office of Economic Analysis.

Table C.2 Population Forecasts by Age and Sex: 2010-2030

Age	2010			2015			2020		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	122,327	116,130	238,457	117,860	111,418	229,278	113,260	106,931	220,192
5- 9	121,539	116,369	237,908	125,142	118,090	243,232	123,931	115,417	239,348
10-14	124,508	118,732	243,241	122,812	118,117	240,928	128,201	121,882	250,083
15-19	131,126	124,540	255,667	127,444	120,458	247,903	127,439	121,122	248,561
20-24	128,787	124,903	253,689	136,686	131,964	268,650	137,175	131,545	268,720
25-29	134,019	131,816	265,835	136,997	135,808	272,805	153,302	153,797	307,100
30-34	131,489	128,325	259,814	140,637	137,861	278,499	151,909	150,900	302,809
35-39	128,070	123,596	251,665	134,041	129,570	263,611	148,252	142,226	290,478
40-44	125,969	122,843	248,811	129,724	125,081	254,805	138,502	132,987	271,489
45-49	130,825	132,538	263,363	126,762	123,353	250,116	133,124	127,339	260,462
50-54	135,129	141,565	276,693	129,738	133,279	263,017	128,077	126,009	254,086
55-59	133,011	140,802	273,812	132,989	141,912	274,901	129,398	136,078	265,475
60-64	115,236	121,045	236,281	130,018	139,366	269,383	133,067	143,221	276,288
65-69	81,854	87,917	169,771	109,644	117,322	226,966	126,505	137,205	263,710
70-74	56,925	62,949	119,874	74,718	82,405	157,123	102,222	111,379	213,602
75-79	40,932	50,101	91,034	48,565	56,028	104,593	64,567	74,042	138,609
80-84	30,391	42,734	73,126	31,632	40,772	72,405	38,526	46,079	84,605
85+	26,800	51,458	78,258	30,026	53,904	83,930	33,582	54,593	88,175
Total	1,898,938	1,938,362	3,837,300	1,985,437	2,016,709	4,002,145	2,111,039	2,132,752	4,243,791
Mdn. Age	37.2	39.4	38.3	38.1	40.2	39.1	39.0	40.8	39.9

Age	2021			2022			2023			2024			2025		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	109,617	103,606	213,223	107,352	101,477	208,830	106,427	100,596	207,023	106,162	100,335	206,496	107,011	101,070	208,081
5- 9	124,191	115,607	239,798	123,944	115,430	239,374	122,466	114,160	236,626	120,239	112,201	232,441	117,355	109,585	226,940
10-14	127,788	121,166	248,954	126,952	119,716	246,668	126,144	118,328	244,472	125,861	118,013	243,874	125,953	118,051	244,004
15-19	127,583	120,951	248,535	128,847	122,493	251,340	130,374	123,848	254,222	131,171	123,943	255,114	132,080	124,160	256,240
20-24	136,469	131,061	267,530	136,080	130,198	266,277	135,704	130,024	265,727	135,352	130,129	265,481	134,781	130,246	265,027
25-29	151,182	150,730	301,912	149,956	149,408	299,364	149,015	148,298	297,313	148,911	147,765	296,676	149,794	148,334	298,128
30-34	155,876	156,149	312,025	160,197	161,109	321,306	163,730	164,460	328,190	165,186	165,889	331,076	165,221	165,562	330,783
35-39	149,590	143,457	293,047	150,443	144,522	294,965	151,389	146,292	297,680	153,846	149,460	303,307	157,172	153,699	310,871
40-44	141,444	135,768	277,212	144,650	138,878	283,528	146,926	140,970	287,896	149,829	143,483	293,311	151,386	144,783	296,169
45-49	131,367	125,879	257,246	131,876	126,732	258,608	134,773	128,952	263,725	136,896	131,110	268,006	140,469	134,258	274,728
50-54	131,652	128,676	260,328	133,833	130,175	264,008	134,559	131,127	265,686	133,963	130,319	264,282	132,753	128,927	261,679
55-59	126,656	132,279	258,935	124,627	128,948	253,575	123,203	126,161	249,365	123,635	125,317	248,952	126,323	127,333	253,656
60-64	132,636	142,795	275,431	131,333	141,691	273,024	129,744	140,072	269,817	128,931	138,462	267,392	127,228	135,643	262,871
65-69	127,975	139,115	267,090	128,598	140,151	268,749	128,500	139,982	268,482	127,209	139,198	266,407	126,796	139,259	266,055
70-74	107,871	117,792	225,663	109,173	119,591	228,765	110,766	122,628	233,394	112,975	126,117	239,092	114,992	128,482	243,474
75-79	66,624	76,446	143,071	72,656	83,180	155,836	77,167	88,441	165,607	81,247	92,838	174,084	85,866	98,564	184,430
80-84	40,061	48,004	88,065	41,610	50,386	91,996	44,349	53,731	98,080	46,756	56,862	103,618	48,888	59,587	108,475
85+	34,049	54,471	88,520	34,034	54,252	88,287	34,209	54,387	88,595	34,878	55,011	89,890	35,775	55,814	91,589
Total	2,122,631	2,143,953	4,266,584	2,136,161	2,158,339	4,294,500	2,149,444	2,172,456	4,321,900	2,163,047	2,186,452	4,349,500	2,179,844	2,203,357	4,383,200
Mdn. Age	39.3	41.0	40.1	39.5	41.2	40.3	39.6	41.4	40.5	39.8	41.6	40.7	40.0	41.7	40.8

Age	2026			2027			2028			2029			2030		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	108,911	102,777	211,688	110,679	104,378	215,057	112,402	105,953	218,354	114,123	107,547	221,670	115,881	109,172	225,052
5- 9	114,014	106,452	220,466	111,848	104,366	216,215	111,126	103,579	214,705	111,148	103,456	214,604	112,160	104,260	216,420
10-14	126,445	118,520	244,965	126,252	118,455	244,707	124,831	117,288	242,119	122,690	115,430	238,120	119,784	112,788	232,572
15-19	132,056	123,679	255,735	131,396	122,272	253,668	130,726	120,909	251,635	130,567	120,661	251,228	130,697	120,692	251,389
20-24	135,717	130,936	266,653	137,428	133,074	270,502	139,434	134,964	274,398	140,668	135,446	276,115	141,801	135,883	277,685
25-29	150,414	149,601	300,015	150,696	149,537	300,233	151,030	150,334	301,364	151,398	151,509	302,907	151,089	152,135	303,225
30-34	164,320	163,626	327,946	163,625	162,778	326,402	163,360	162,320	325,680	164,153	162,715	326,867	165,539	163,773	329,312
35-39	162,023	159,474	321,497	166,768	164,605	331,373	170,780	168,150	338,931	172,782	169,861	342,643	173,010	169,602	342,612
40-44	153,239	146,364	299,603	154,371	147,629	302,001	155,616	149,612	305,228	158,428	153,012	311,440	161,978	157,399	319,377
45-49	143,898	137,365	281,263	147,400	140,633	288,033	149,997	142,896	292,893	153,267	145,631	298,898	155,019	147,033	302,052
50-54	131,339	127,824	259,164	132,055	128,905	260,960	135,198	131,391	266,589	137,583	133,824	271,407	141,335	137,148	278,484
55-59	130,158	130,490	260,648	132,566	132,269	264,836	133,548	133,521	267,068	133,197	132,997	266,194	132,133	131,730	263,863
60-64	124,993	132,282	257,274	123,353	129,172	252,525	122,335	126,659	248,994	123,153	126,146	249,299	126,085	128,380	254,464
65-69	126,770	139,232	266,002	125,876	138,407	264,283	124,742	137,115	261,856	124,334	135,826	260,160	122,953	133,224	256,177
70-74	116,499	130,500	246,999	117,399	131,658	249,056	117,701	131,765	249,466	116,875	131,306	248,181	116,794	131,548	248,341
75-79	90,514	104,291	194,805	91,954	106,153	198,107	93,664	109,172	202,836	95,826	112,541	208,366	97,815	114,837	212,653
80-84	50,441	61,580	112,021	55,477	67,352	122,829	59,432	71,959	131,391	62,920	75,792	138,712	66,755	80,626	147,381
85+	36,733	57,122	93,855	38,044	58,968	97,012	40,249	61,743	101,991	42,301	64,488	106,789	44,304	66,939	111,242
Total	2,198,485	2,222,115	4,420,600	2,217,188	2,240,612	4,457,800	2,236,170	2,259,329	4,495,500	2,255,412	2,278,188	4,533,600	2,275,132	2,297,167	4,572,300
Mdn. Age	40.1	41.9	41.0	40.3	42.0	41.1	40.4	42.2	41.3	40.6	42.3	41.4	40.7	42.5	41.6

Table C.3 Population of Oregon: 1990-2030

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	3,854,947	17,647	0.46%
2012	3,878,877	23,930	0.62%
2013	3,911,943	33,066	0.85%
2014	3,953,356	41,413	1.06%
2015	4,002,145	48,789	1.23%
2016	4,062,203	60,058	1.50%
2017	4,124,435	62,232	1.53%
2018	4,176,095	51,660	1.25%
2019	4,214,664	38,569	0.92%
2020	4,243,791	29,127	0.69%
2021	4,266,584	22,793	0.54%
2022	4,294,500	27,916	0.65%
2023	4,321,900	27,400	0.64%
2024	4,349,500	27,599	0.64%
2025	4,383,200	33,701	0.77%
2026	4,420,600	37,400	0.85%
2027	4,457,800	37,200	0.84%
2028	4,495,500	37,699	0.85%
2029	4,533,600	38,101	0.85%
2030	4,572,300	38,699	0.85%

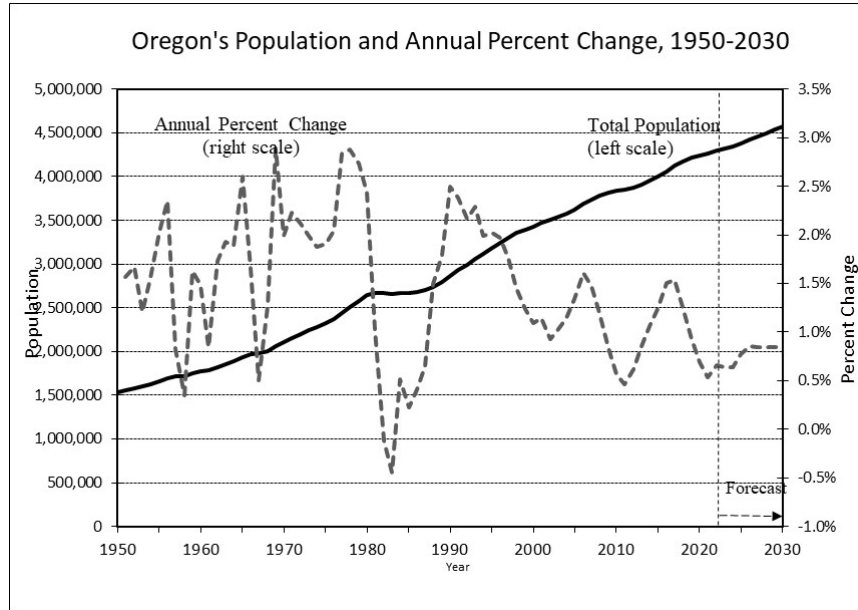


Table C.4 Children: Ages 0-4

Year (July 1)	Population	% Change from previous decade/yr.	
		Number	Percent
1980	199,525	---	---
1990	209,638	10,113	5.07%
2000	223,207	13,569	6.47%
2001	224,645	1,438	0.64%
2002	225,084	439	0.20%
2003	226,652	1,568	0.70%
2004	228,353	1,701	0.75%
2005	230,008	1,655	0.72%
2006	231,882	1,874	0.81%
2007	236,160	4,278	1.85%
2008	239,340	3,180	1.35%
2009	239,929	589	0.25%
2010	238,457	-1,472	-0.61%
2011	236,033	-2,424	-1.02%
2012	232,641	-3,392	-1.44%
2013	229,849	-2,792	-1.20%
2014	229,040	-809	-0.35%
2015	229,278	238	0.10%
2016	230,910	1,632	0.71%
2017	231,892	982	0.43%
2018	229,977	-1,915	-0.83%
2019	226,022	-3,955	-1.72%
2020	220,192	-5,830	-2.58%
2021	213,223	-6,969	-3.17%
2022	208,830	-4,393	-2.06%
2023	207,023	-1,807	-0.87%
2024	206,496	-527	-0.25%
2025	208,081	1,585	0.77%
2026	211,688	3,607	1.73%
2027	215,057	3,369	1.59%
2028	218,354	3,297	1.53%
2029	221,670	3,316	1.52%
2030	225,052	3,382	1.53%

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

Year (July 1)	Population	% Change from previous decade/yr.	
		Number	Percent
1980	524,446	---	---
1990	532,727	8,281	1.58%
2000	624,316	91,589	17.19%
2001	624,675	358	0.06%
2002	624,611	-64	-0.01%
2003	624,349	-262	-0.04%
2004	625,461	1,112	0.18%
2005	628,326	2,865	0.46%
2006	633,646	5,320	0.85%
2007	635,720	2,074	0.33%
2008	635,372	-348	-0.05%
2009	633,575	-1,797	-0.28%
2010	630,741	-2,835	-0.45%
2011	628,103	-2,638	-0.42%
2012	628,214	111	0.02%
2013	629,466	1,251	0.20%
2014	630,820	1,354	0.22%
2015	632,114	1,294	0.21%
2016	634,041	1,927	0.30%
2017	636,366	2,325	0.37%
2018	636,368	2	0.00%
2019	636,593	225	0.04%
2020	637,442	849	0.13%
2021	637,977	535	0.08%
2022	637,045	-932	-0.15%
2023	634,323	-2,722	-0.43%
2024	629,905	-4,419	-0.70%
2025	623,443	-6,462	-1.03%
2026	615,769	-7,674	-1.23%
2027	609,872	-5,897	-0.96%
2028	605,058	-4,814	-0.79%
2029	601,813	-3,245	-0.54%
2030	599,330	-2,483	-0.41%

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

Year (July 1)	Population	% Change from previous decade/yr.	
		Number	Percent
1980	329,407	---	---
1990	268,134	-61,273	-18.60%
2000	330,328	62,194	23.20%
2001	336,660	6,333	1.92%
2002	340,778	4,118	1.22%
2003	345,266	4,487	1.32%
2004	349,138	3,873	1.12%
2005	351,076	1,938	0.55%
2006	354,328	3,252	0.93%
2007	356,311	1,983	0.56%
2008	358,967	2,656	0.75%
2009	360,134	1,166	0.32%
2010	359,764	-370	-0.10%
2011	360,180	416	0.12%
2012	361,748	1,568	0.44%
2013	364,800	3,053	0.84%
2014	367,153	2,353	0.64%
2015	368,599	1,446	0.39%
2016	369,160	561	0.15%
2017	371,218	2,058	0.56%
2018	372,896	1,678	0.45%
2019	372,182	-713	-0.19%
2020	369,271	-2,912	-0.78%
2021	366,840	-2,430	-0.66%
2022	366,614	-226	-0.06%
2023	366,724	110	0.03%
2024	367,006	281	0.08%
2025	368,768	1,763	0.48%
2026	372,051	3,282	0.89%
2027	375,220	3,170	0.85%
2028	377,799	2,579	0.69%
2029	378,254	455	0.12%
2030	378,735	482	0.13%

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

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

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

Year (July 1)	% Change from previous decade/yr.			% Change from previous decade/yr.			% Change from previous decade/yr.		
	Population	Number	Percent	Population	Number	Percent	Population	Number	Percent
1980	561,931	---	---	790,750	---	---	491,249	---	---
1990	544,738	-17,193	-3.06%	926,326	135,576	17.15%	531,181	39,932	8.13%
2000	616,988	72,250	13.26%	996,500	70,174	7.58%	817,510	286,329	53.90%
2001	618,906	1,918	0.31%	994,587	-1,913	-0.19%	847,276	29,766	3.64%
2002	620,252	1,347	0.22%	989,996	-4,591	-0.46%	876,242	28,966	3.42%
2003	622,211	1,959	0.32%	987,755	-2,241	-0.23%	903,499	27,257	3.11%
2004	626,423	4,212	0.68%	988,932	1,177	0.12%	930,032	26,533	2.94%
2005	633,901	7,478	1.19%	994,575	5,644	0.57%	957,826	27,793	2.99%
2006	644,210	10,309	1.63%	1,004,110	9,535	0.96%	985,638	27,813	2.90%
2007	652,287	8,077	1.25%	1,014,565	10,455	1.04%	1,008,986	23,348	2.37%
2008	657,248	4,961	0.76%	1,022,060	7,495	0.74%	1,025,501	16,515	1.64%
2009	657,327	79	0.01%	1,024,971	2,911	0.28%	1,039,689	14,188	1.38%
2010	653,491	-3,836	-0.58%	1,026,126	1,155	0.11%	1,050,150	10,461	1.01%
2011	651,641	-1,850	-0.28%	1,029,393	3,268	0.32%	1,056,732	6,582	0.63%
2012	653,201	1,560	0.24%	1,035,159	5,765	0.56%	1,051,985	-4,747	-0.45%
2013	658,504	5,303	0.81%	1,044,330	9,171	0.89%	1,049,096	-2,889	-0.27%
2014	666,390	7,887	1.20%	1,055,947	11,618	1.11%	1,051,575	2,479	0.24%
2015	675,806	9,416	1.41%	1,069,720	13,772	1.30%	1,057,417	5,842	0.56%
2016	688,009	12,203	1.81%	1,090,595	20,875	1.95%	1,065,504	8,087	0.76%
2017	700,639	12,630	1.84%	1,116,186	25,591	2.35%	1,068,123	2,619	0.25%
2018	709,548	8,909	1.27%	1,139,887	23,701	2.12%	1,065,931	-2,192	-0.21%
2019	716,165	6,618	0.93%	1,158,692	18,805	1.65%	1,060,795	-5,137	-0.48%
2020	718,078	1,912	0.27%	1,171,876	13,183	1.14%	1,056,311	-4,484	-0.42%
2021	720,700	2,623	0.37%	1,184,195	12,320	1.05%	1,051,939	-4,372	-0.41%
2022	725,522	4,822	0.67%	1,199,163	14,968	1.26%	1,049,214	-2,725	-0.26%
2023	730,211	4,690	0.65%	1,211,078	11,915	0.99%	1,048,592	-622	-0.06%
2024	734,468	4,256	0.58%	1,224,369	13,291	1.10%	1,048,632	40	0.00%
2025	739,048	4,580	0.62%	1,235,950	11,581	0.95%	1,052,934	4,302	0.41%
2026	744,530	5,482	0.74%	1,249,061	13,111	1.06%	1,058,349	5,415	0.51%
2027	749,913	5,383	0.72%	1,260,009	10,948	0.88%	1,066,354	8,005	0.76%
2028	755,331	5,418	0.72%	1,271,203	11,194	0.89%	1,075,544	9,190	0.86%
2029	759,568	4,236	0.56%	1,283,857	12,654	1.00%	1,085,798	10,254	0.95%
2030	762,137	2,570	0.34%	1,294,526	10,668	0.83%	1,098,862	13,064	1.20%

Table C.10 Elderly Population by Age Group

Year (July 1)	%Change from previous decade/yr.		%Change from previous decade/yr.		%Change from previous decade/yr.		%Change from previous decade/yr.	
	Ages 65+	decade/yr.	Ages 65-74	decade/yr.	Ages 75-84	decade/yr.	Ages 85+	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	544,506	2.34%	300,288	3.67%	164,364	0.12%	79,855	2.04%
2012	569,131	4.52%	322,254	7.32%	165,642	0.78%	81,235	1.73%
2013	594,402	4.44%	343,741	6.67%	168,193	1.54%	82,467	1.52%
2014	618,820	4.11%	363,253	5.68%	172,253	2.41%	83,315	1.03%
2015	645,017	4.23%	384,089	5.74%	176,998	2.75%	83,930	0.74%
2016	671,994	4.18%	404,131	5.22%	182,863	3.31%	85,000	1.27%
2017	700,649	4.26%	424,450	5.03%	190,577	4.22%	85,622	0.73%
2018	731,036	4.34%	442,756	4.31%	201,884	5.93%	86,396	0.90%
2019	760,380	4.01%	460,136	3.93%	213,247	5.63%	86,997	0.70%
2020	788,700	3.72%	477,311	3.73%	223,214	4.67%	88,175	1.35%
2021	812,409	3.01%	492,753	3.24%	231,136	3.55%	88,520	0.39%
2022	833,633	2.61%	497,514	0.97%	247,833	7.22%	88,287	-0.26%
2023	854,159	2.46%	501,876	0.88%	263,687	6.40%	88,595	0.35%
2024	873,091	2.22%	505,499	0.72%	277,703	5.32%	89,890	1.46%
2025	894,023	2.40%	509,529	0.80%	292,905	5.47%	91,589	1.89%
2026	913,682	2.20%	513,001	0.68%	306,826	4.75%	93,855	2.47%
2027	931,288	1.93%	513,340	0.07%	320,936	4.60%	97,012	3.36%
2028	947,541	1.75%	511,323	-0.39%	334,227	4.14%	101,991	5.13%
2029	962,208	1.55%	508,341	-0.58%	347,078	3.85%	106,789	4.70%
2030	975,794	1.41%	504,518	-0.75%	360,034	3.73%	111,242	4.17%