

**GOVERNOR** 

# Oregon Economic and Revenue Forecast

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#### **Foreword**

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

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

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

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

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

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

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#### **EXECUTIVE SUMMARY**

#### May 2023

Inflationary economic booms have not traditionally ended well, meaning not without a recession. As such it is easy to be pessimistic about the outlook for the economy. Economic developments like last year's goods recession, and the banking turmoil earlier this year add more fear to the outlook. However, a near-term recession is far from a slam dunk. The reasons include some nascent signs that inflation is cooling and the Federal Reserve is looking to pause its interest rate increases which limits the potential for overtightening. Furthermore, the economy is showing some signs of renewed strength as housing and manufacturing stabilize, and income growth is again outpacing inflation. All of these indicate a sudden stop in the economy in the short-term is unlikely. Part of forecasting is not just identifying the dynamics, but also the timing.

Our office's baseline forecast calls for the economic soft landing and continued expansion. Even so, Oregon's economy will slow noticeably in the upcoming 2023-25 biennium, however for good reasons. The recovery from the pandemic has been faster, and more inclusive than any in recent memory. With the economy operating at or near full employment, underlying gains in the labor market will be closely tied to demographics and population growth. To maintain even stronger economic growth in the years ahead Oregon will need to see faster population gains, and/or rely on business investment and capital to increase productivity. This cycle has been different in the sense Oregon ranks in the middle of the pack economically with income and productivity outpacing the typical state while jobs and population lag, the opposite pattern of decades past.

Available resources are expected to be up sharply relative to what was assumed in the March 2023 forecast, both in the near term and over the extended horizon. The upward revision in the outlook is based both on a stronger than expected tax filing season, as well as methodological changes made in light of fundamental shifts seen in recent years.

The tax filing season once again outstripped expectations, albeit modest ones. Revenue gains have cooled some, but it is clear that Oregon's tax sources have become more effective than they were pre-pandemic.

One major factor has been the current inflationary environment. The vast majority of Oregon's taxes are not adjusted to inflation and rise along with prices. With demand outstripping supply, businesses and consumers are paying premiums for their needs. This has translated into a wide range of taxable business and labor income, which has moved many filers into higher tax brackets. The new Corporate Activity Tax, Vehicle Privilege Tax, alcohol, and tobacco taxes have risen with inflation as well.

Inflationary dynamics have not been captured well by Oregon's revenue models, given that this sort of environment has not existed since years before computerized models have. Oregon's revenue models have also been refined to better account for fixed tax brackets and federal tax reform.

Qualitatively, there is not much difference between the updated revenue outlook, and what was predicted in March. After unsustainably high revenue collections over the past two years, tax revenues are expected to come back to earth over the next biennium, before returning to healthy growth thereafter.

Quantitatively, small differences in trajectory matter a lot, and compound over time. Taken together, the outlook for personal and corporate income taxes has risen by \$1.5 to \$2 billion over the forecast horizon due to the updated model methodology. The 2021-23 personal kicker is now estimated to be \$5.5 billion, and the corporate kicker is now estimated to be \$1.8 billion.

#### **ECONOMIC OUTLOOK**

#### **Macroeconomic Setting**

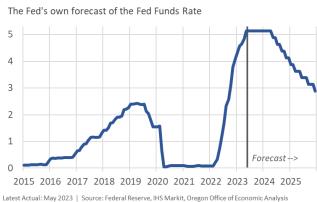
The economic recovery from the pandemic has been faster, and more inclusive than any in recent memory. Employment is at an all-time high and wage growth is strong. Household finances are in a better position than pre-pandemic across the entire distribution. All of these outcomes are unequivocally good news. The challenge is these dynamics, when combined with pandemic production and supply chain issues has proved inflationary. Inflation has slowed off its peak rates a year ago but remains in the 4 or 5 percent range. The Federal Reserve has a 2 percent inflation target.

As such, it is easy to be pessimistic about how the current macroeconomic situation resolves itself. The good outcome involves an immaculate slowdown in inflation, one that is not really seen in the historical data. The bad outcome involves the Federal Reserve raising interest rates to head off inflation, but in doing so creates a recession given monetary policy is a blunt instrument prone to policy lags. Importantly, the initial path the economy takes to either the good, or bad outcome starts the same way. Right now it is hard to tell for certain which path the U.S. economy will ultimately take.

For starters, the Federal Reserve has now raised the Fed Funds Rate by 5 percentage points (500 basis points) since early 2022 and yet the unemployment rate stands at or near an all-time low. There are two main avenues of thought when it comes to the macroeconomic outlook.

First, the full impact of the past interest rate increases have yet to fully hit the economy. The goods recession last year is a precursor to an economy wide recession this year. Historically inflationary economic booms do not end well. Monetary policy is a blunt instrument prone to

#### The Federal Reserve and Interest Rates



lagged impacts on the real economy. Threading the needle is simply too tough a task to achieve. That means this

cycle, with high inflation, rising interest rates, and slowing economic growth results in the most telegraphed recession in recent memory.

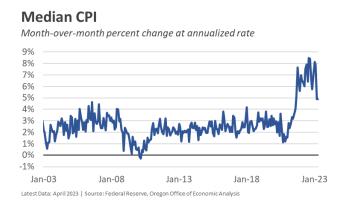
The exact timing of a recession is always difficult. A number of economists and forecasters have been predicting an imminent recession for at least the past 9 months. They have clearly been wrong. Even so, these recession risks are real. Pulling off the soft landing when inflation was running at double-digit rates on an annualized basis is something not seen historically. Even as a recession may ultimately be needed to bring inflation fully back to the Federal Reserve targets, the current momentum in the economy continues to push the recession date further into the future. In forecasting, it's not just identifying the right dynamics, but also the right timing.

The second way many are reading the economy today is that there are a few encouraging signs in the data that this initial path is at least sufficient to keep open the possibility of the soft landing. It may not ultimately be achieved, the Fed may have already done too much, or still have more work to do. But for now it is also the fact that timing matters. It appears there is renewed near-term momentum in the economy, and so an uncertain recession starting in 6, 9, or 12 months from now is extremely difficult to put in the baseline. As a result our

office's forecast calls for continued economic growth and the soft landing. Our office's Boom/Bust alternative scenario remains just that, an alternative scenario to the baseline. See page 17 for more details.

So what are these encouraging signs? Let's start with inflation, which remains the key macroeconomic issue to watch. Overall, inflation remains stubbornly high. Or rather the continued strength in consumer demand still outpaces supply leading to faster price increases. Even so, for the first real time this cycle there are glimmers of inflation slowing.

Yes, there are still likely lagged effects of higher interest rates that will help cool spending and the overall economy in the quarters ahead. However, underneath the hood of the inflation data, the strength and breadth of prices increases across all categories is starting to narrow. The increases are getting smaller, and the number of categories with, say, double-digit increases is shrinking. The median CPI, or the inflation for the midpoint of price increases across all categories as reported by the Federal Reserve Bank of Cleveland has slowed noticeably in recent months. When this is



combined with lower food and energy costs, and the sizable slowdown in shelter costs that will weigh on headline inflation for the next six months or more, the path toward slower inflation is clear.

Slower inflation in the months ahead will keep the Federal Reserve from raising interest rates further, especially now that they believe they have policy at or near the "sufficiently restrictive" range they have been aiming for. Pausing on interest rate increases will both allow time to see how large the lagged policy impacts may be, and also for the banking sector to recapitalize or adjust and sort through its recent turmoil. Plus pausing on continued interest rate increases ensures that demand, be it consumer spending and business investment, does not crash immediately due to ever higher rates.

Besides inflation, there is a bit of renewed momentum in segments of the economy that point toward near-term strength and likely delay the onset date of any potential recession. While those may be famous last words for economists forecasting the economy, they do appear to be the case today.

Specifically, real personal income excluding transfer payments — a key measure the National Bureau of Economic Analysis uses to date recessions and looks at income after excluding public assistance programs and adjusting for inflation — is growing. That is, household finances are doing better. The personal income savings rate has inched up over the past six months, meaning consumers are relying less on their pandemic excess savings and more on current income.

Additionally, as discussed in more detail in the March 2023 forecast, the economy has so far survived the goods recession. Now that goods recession appears to be

**Real Personal Income ex Transfer Payments** 



bottoming out. Purchasing managers indexes for manufacturers, a look at whether new orders are rising or falling, are starting to turn around. So far that means less bad news that before, but with inventories declining

and the U.S. dollar depreciating, it is likely factory demand in the U.S. will pick up in the near future. Furthermore, housing has stabilized. There are two offsetting factors here. First, multifamily construction remains very strong, but likely to fall in the near future given there are a record number of units under construction and household formation has slowed. Second, single family construction has fallen due to high interest rates and bad affordability, but has stabilized and is likely to pick up moving forward. New home construction takes on extra importance in the housing market when resale inventories are low, and new home construction is a boost to economic growth.

The combination of the goods recession bottoming out, and the consumer on more solid footing, it is hard to see where an imminent recession comes from. A banking crisis and credit crunch could do it, but so far the economy is adjusting and working through the banking issues. As such this makes a potential recession more of a 2024 story, and far enough into the future that it is difficult to incorporate into the baseline forecast.

Given that the near-term path of the economy looks broadly similar whether it ultimately ends up in a recession or not, reading the economic tea leaves today is difficult. However the resilience and strength in the economy this cycle has been underappreciated. The recovery has been faster and more inclusive than any in recent memory. And while the recession risks are real, it remains possible that this cycle which has been different at every turn could also play out in such a way that the immaculate inflation slowdown and economic soft landing is achieved. Time will tell.

#### Federal Fiscal Policy

The U.S. Government is fast approaching the debt ceiling, which is an arbitrary number set independent of actual budget and spending legislation. Even so, should the U.S. default on its debt, the economic fallout could be consequential depending on how long-lasting the situation is. As Fed Chair Powell said at his May 2023 press conference, he does not want to envision a world where the U.S. government does not pay its bills.

The baseline forecast assumes the debt ceiling is raised in time to avoid default, and a budget is passed to avoid a federal shutdown this fall.

When it comes to the possibility that political brinkmanship in Washington DC would cause the federal government to not pay the bills it has already authorized itself to make, the potential economic fallout is considerable. Moody's Analytics estimates that even a short debt limit breach could lead to a decline in real GDP, nearly two million jobs lost and a rise in the unemployment rate of a percent or two. The potential long-lasting costs could be in the form of higher borrowing costs in financial markets. U.S. Treasuries are typically the risk-free asset in global markets that many other interest rates are anchored to, so defaulting could alter those dynamics permanently resulting in higher interest costs in the years ahead.

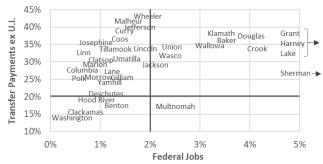
The White House Council of Economic Advisors also notes that that in a recession caused by defaulting, any fiscal stimulus would not be coming given it is typically the federal government who provides the funding, and private sector borrowing would be impaired for households and businesses due to financial market turmoil and skyrocketing interest rates. That means any recession could be worse than anticipated given these dynamics which typically boost the economy during times of need.

While it remains unknown how exactly the U.S. Treasury would move forward in the event of a debt ceiling breach, the federal government has bills to pay to creditors, contractors, and citizens. The nearby scatterplot shows Oregon counties and their direct exposure to the federal government. This is by no means an exhaustive look at the impacts of federal spending, or the ramifications of financial market turmoil, but rather a simple look at what share of local income comes from federal programs, and whare of local jobs are federal jobs.

Overall, Oregon's direct exposure to the federal government is below average. Local federal jobs are a slightly smaller share of the workforce than they are nationwide (1.5% vs 2.0%). Part of this difference is due to the lack of large military bases, and military contracting more broadly which are private sector firms but closely tied to military spending nationally. Counties within Oregon that have a larger federal workforce footprint include many Southern and Eastern portions of the state where federal land management accounts for a larger share of local jobs.

#### **Oregon's Exposure to the Federal Government**

Direct federal share of county totals, solid lines are U.S. averages



Data: 2021 annual figures | Source: BEA, BLS, Oregon Office of Economic Analysis

Where Oregon has a larger direct reliance on the federal government is in terms of so-called transfer payments, these include federal aid programs like Medicaid, Medicare, Social Security and so on. Transfer payments, excluding state unemployment insurance, account for a few more percentage points of total income locally as they do nationally. Nearly every single Oregon county relies on such payments more than the U.S. average. As such, any delay in the U.S. government paying its bills to citizens could result in more household financial hardship and a drop in consumer spending than in the typical state.

Finally, absent the debt ceiling political brinkmanship there are a few main forces impacting the federal budget and investment in the years ahead. On one hand the federal deficit is shrinking compared to outsized pandemic deficits. A relative shrinking of the deficit on its own could be moderately contractionary, and help to slow inflation. On the other hand, recent federal legislation like the Bipartisan Infrastructure Bill, the Inflation Reduction Act, and the CHIPS act all work to boost federal investment in industries and programs that should increase the productive capacity of the economy in the years and decades ahead. One risk here raised by our advisors is the increased investment during a time of tight labor markets and high construction costs could itself prove inflationary and crowd out other investments that would have been made.

#### **Oregon Economic Outlook**

The economic recovery from the pandemic has been faster, more complete, and more inclusive than any in recent memory. Employment across Oregon has never been higher when analyzing based on educational attainment, gender, geographic location, or race and ethnicity. Household incomes and finances are likewise a stronger position today than pre-pandemic. However, as the economy is now at or near full employment, growth is set to slow. The upcoming 2023-25 biennium will see economic growth that is near its potential, which is determined by the amount of labor and capital in the state. Economic growth is all about how many workers there are, and how productive each worker is.

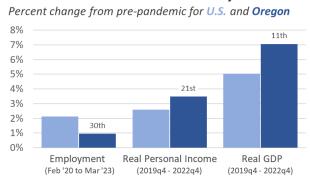
#### State Comparisons

If we step back and look at the economic cycle to date, it can be informative to see how Oregon compares. This cycle has been different. Typically Oregon is more volatile than the nation and the typical state. The timing of our local business cycles is perfectly aligned with the nation, Oregon neither leads nor lags going into or coming out of a recession. However, local recessions tend to be deeper, and expansions faster. So far that has not been the case this cycle. Oregon's economic performance since the start of the pandemic is in the middle of the pack across all states.

Even so, local employment trends are a bit below average. The change in employment since the start of the pandemic ranks 30<sup>th</sup> fastest out of all states, and trails the nation by one percentage point. The most recent round of annual benchmark revisions from the U.S. Bureau of Labor Statistics widened this gap as Oregon saw a slight downward revision to the published data in the past year. Examining trends across sectors, Oregon's relatively slower employment growth compared to the nation is primarily due to slower recoveries in health care and leisure and hospitality, while stronger gains in construction help offset some of the weakness.

#### **Pandemic Economic Recovery**

Source: BEA, BLS, Oregon Office of Economic Analysis



More encouraging are local income trends that are a bit above average. Total personal income in Oregon has increased 19.8 percent from the end of 2019 through the end of 2022. This large increase translates to the strong increases in consumer spending and income taxes paid in recent years. Of course the high inflation during the pandemic means the cost of living has also increased during the same time period. After adjusting for inflation, total Oregon personal income is 3.5 percent higher than at the end of 2019 while the U.S. is up 2.6 percent. Oregon's income growth ranks 21<sup>st</sup> fastest across all states. This relative strength is primarily in the non-wage forms of income.

While Oregon is right in the middle of the pack when it comes to employment and income, that same cannot be said for local GDP where the state has experienced the 11<sup>th</sup> strongest growth across the country. Local GDP data is prone to revisions and assumptions about productivity and value-added. As such it may be best to wait for a few more quarters of data, and the upcoming comprehensive revisions this fall to know exactly where the state stands, even as it is encouraging to see the strong growth.

What is most interesting overall is that this cycle to date has been different for Oregon than the experiences in recent decades. It's not just that the state is in the middle of the pack, compared to being more boom/bust typically. But it is also the composition of that growth being different. Today employment and population gains are lagging the nation and expectations. Instead, it is income and production leading the recovery. In much of the 1990s through early 2010s it was Oregon's relative income growth that was most concerning as it lagged, while jobs were plentiful and grew at a fast pace. This relative pattern of growth started to shift late last decade, and appears to have continued through the pandemic and recovery. To a certain extent it does not matter the exact composition of economic growth, but it is determined by both the amount of capital and labor in the region.

#### Capital and Productivity

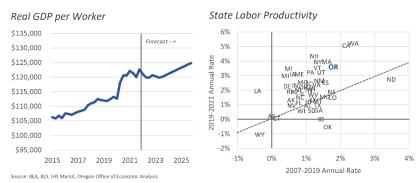
Increased productivity raises the overall speed limit of the economy. Producing more per hour work increases business revenue and worker wages. However, it typically takes investment in the various forms of capital on the part of both businesses and workers to raise productivity. Capital can take different forms includes financial, physical, natural, human, and social. No firm or region excels at or has access to each type of capital. However, they can rely more upon the other types of capital that it does have for future growth.

Overall Oregon has good productivity. Part of this is the state's historical strength in high-tech manufacturing which is a highly productive industry. But improvements in productivity in recent decades are broader than that.

In the real GDP estimates currently published, it is not Oregon's manufacturing output per worker driving the above-average gains, but rather strength across a variety of industries<sup>1</sup>.

The U.S. Bureau of Labor Statistics also publishes state level estimates of labor productivity. Last cycle, from the height of the housing boom in 2007 through the pre-COVID peak in 2019, Oregon's labor productivity ranked 4<sup>th</sup> fastest among all states. During the early part of the pandemic, productivity picked up nationwide as businesses made due with what workers they had in the

#### **Oregon Productivity**



face of strong consumer demand. From 2019 to 2021 Oregon's labor productivity ranked 6<sup>th</sup> fastest among all states. The 2022 state estimates are due out next week (May 25<sup>th</sup>) from BLS and our office will be watching closely to see how Oregon stacks up. Expectations are for steady or even declining productivity in the 2022 numbers given how businesses ramped up employment back to pre-pandemic numbers by and large. A portion of the initial pandemic productivity gains were more illusionary or the artifact of lower employment counts, so reverting back to higher employment gains will weigh on the productivity numbers, which is something the U.S. has already seen in the real-time quarterly data. Additionally, it takes time for new workers to gain the experience and become more productive. Moving forward output per worker and productivity more broadly is expected to be a bit better than in recent decades.

Among the reasons why productivity may be stronger in the years ahead than in the recent past isn't just the slowdown in labor growth due to demographics, but also the increase in new business formation during the pandemic. New firms typically bring new ideas and products, and improve efficiencies compared to existing firms, which raises economywide productivity.

Initially, the increase in start-ups during the pandemic was viewed with a bit of caution. New IRS rules requiring more sole proprietor types to register, and the possibility of more individuals trying to access pandemic aid programs and needing a registered business to so and the like could result in the start-up spike even if the fundamental nature of the economy remained the same. However, even if those reasons are part of the story, and they likely are a part, new business formation continues to run at a strong rate three years into this cycle. At least some portion of this increase represents a fundamental increase in entrepreneurship.

Statistics show that running a business is hard. Many firms do not make it beyond their first year or two. And only a couple will eventually grow to be huge, successful firms. As such when it comes to future economic growth for the entire economy, it is not necessarily about the probability of success for any given firm, but the

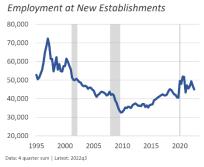
<sup>&</sup>lt;sup>1</sup> A quick word of caution as to why our office is awaiting the comprehensive GDP revisions this fall. About one-third of Oregon's stronger-than-the-nation's GDP growth is due to value-added in the food service and accommodation sector, which is also the same industry that is a big reason why Oregon's employment trails the nation a little bit. Expectations are for that industry to see downward revisions, but even so other industries are still outpacing the typical state. It remains to be seen whether Oregon's GDP is similarly in the middle of the pack across states after revisions or remains above average for growth during the pandemic.

cumulative probability that one or two of these new businesses will succeed. More ping pong balls in the hopper increases the overall chance of success.

Looking forward the outlook for new business formation faces some crosscurrents. Personal savings and home equity are the most common funding source for new businesses. While those are higher today, the impacts of high inflation, rising interest rates, and recession risks likely weigh on start-up activity in the near term. Additionally, we know that venture capital and bank lending is tighter today than earlier in the

# **Strong Oregon Start-Up Activity**





pandemic, which keeps a lid on new business formation as well.

However, on the upside are demographics. Research from the Census Bureau<sup>2</sup> shows that entrepreneurship rates peak in ones late 30s through early 40s. In the decade ahead the large Millennial generation will age into their peak entrepreneurship years, likely providing a long-lasting demographic tailwind to start-up activity in the years ahead. Now, simply having more businesses does not necessarily lead to increased business investment and productivity gains, but it is an encouraging signal about the possibilities in the years ahead.

#### Labor Market At Or Near Full Employment

A key concept in economics is that of full employment, or the natural rate of unemployment, so-called NAIRU or u\* (pronounced u star). Basically it is the highest employment level an economy can have without generating higher inflation, and when nearly everyone who wants a job, has a job. Even with today's high inflation, one can be hard pressed to say the economy is currently beyond full employment from a demographic perspective. Even so, whether Oregon and the U.S. are beyond full employment or not, they are certainly near it. That means the current labor market is at or near its potential. That means future growth will be tied to demographic changes and migration trends.

One key number to monitor is the labor force participation rate. This measure is based on the entire population 16 years and older and what share has a job or is actively looking for work. The most recent reading for Oregon stood at 62.7 percent in March. Such a statistical may seem low, but it is important to remember that since the calculation is based on the entire population 16 years and older, it means as the large Baby Boomer cohort continues to retire, demographics are pulling down the statistic even if younger workers work at the same rates they have historically. As such, March's 62.7 percent labor force

# **Oregon's Labor Force Participation**

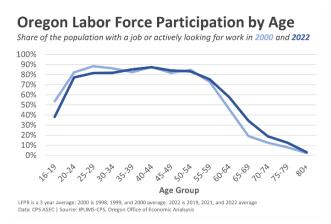


<sup>&</sup>lt;sup>2</sup> https://www.census.gov/content/dam/Census/library/working-papers/2018/adrm/carra-wp-2018-03.pdf

participation rate in Oregon is almost exactly what one would expect in a full employment economy given today's demographics.

Now, the 2000s and 2010s were best characterized economically as underperforming, at best. The millennium started with a recession, followed by an incomplete recovery during the mid-2000s that was then followed by a severe Global Financial Crisis and subsequent recovery that took the better part of a decade to complete. As such many economists tend to think of 1999 or 2000 as the last time the U.S. economy was truly at full employment and any analysis in recent decades was benchmarked relative to labor market patterns at that time. However, given we are now more than two decades removed from then and the labor market is at or near, or possibly a bit beyond full employment today, it may be time for economists to update their priors and thoughts about what full employment looks like.

Specifically, when comparing today's strong labor market with that of the late 1990s, three things stand out. First, among 30-somethings through 50-somethings, employment rates and labor force participation rates are nearly identical. Prime working-age individuals today look an awful lot like prime working-age individuals a generation ago, at least from a labor market perspective. Second, 60-something, and even 70-somethings have higher employment rates today compared to 20-25 years ago. Third, teenagers and 20-somethings have lower employment rates today compared to 20-25 years ago.



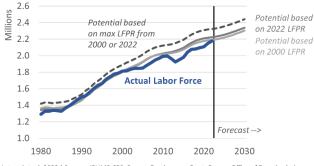
For a macro, high level perspective this relative shift to lower rates among young adults to higher rates among older adults do not make a discernable difference. Oregon's current labor force is at or near its potential regardless. However, when thinking about potential labor force gains in the years ahead, the differences can matter considerably.

On one hand it can likely be expected to higher employment and labor force participation rates among older Oregonians is here to stay. Part of this increase is due to the shift in work away from manual labor and into office-based work, which physically allows employees to work later in life if they so choose. Part of this increase is also due to inadequate retirement savings and the need to work longer financially.

On the other hand, it is harder to know to what extent participation will pick back up among younger Oregonians. Much of the relative decline since 2000 has been due to increased schooling. Young Oregonians attended higher education at higher rates, which should increase human capital, productivity, and wages in the long-run even if it has been at the expense of labor supply in the short-term. However these lower participation rates have endured during and so far after the pandemic, even as the labor market has been strong and higher education enrollments have fallen. Nationally participation rates

#### **Oregon's Potential Labor Force**

Oregon residents 16 years and older with a job or actively looking for work



 $Latest\ Actual:\ 2022\ |\ Source:\ IPUMS-CPS, Oregon\ Employment\ Dept, Oregon\ Office\ of\ Econ\ Analysis$ 

are edging slightly higher for teenagers and 20-somethings in recent months, but still have a long way to go to regain those late 1990s rates.

Overall with labor supply at or near its potential it is important to think through exercises such as this to assess where the economy could be heading in the years ahead. For instance, if Oregon were to retain the higher participation rates among older workers, and also regain the higher rates among younger workers, it would mean an increase of more than 100,000 workers that does not rely on any increases in population growth or the like. These potential workers already live in Oregon.

Given there are still more unfilled job openings today than unemployed workers searching for a job, a boost to labor supply would likewise boost economic growth.

The key source of labor supply in the future will be a rebound in migration and population growth. Oregon's population has been stagnant during the pandemic – up slightly based on estimates from Portland State's Population Research Center, and down slightly based on estimates from the Census Bureau. But net migration to Oregon has historically been pro-cyclical. It always slows in recession, and rebounds in expansion. So far this cycle migration did slow early in the pandemic, but so far in recovery has not rebounded. The baseline forecast has a modest rebound in population growth – sub-1 percent annual gains in the decade ahead – based on this

#### **Oregon Population Growth** Annual change in total state population 70,000 Forecast --> 60,000 50,000 40,000 30,000 20.000 10,000 2000 2005 2010 2015 2020 2025 Source: Portland State Population Research Center, Oregon Office of Economic Analysis

historical pattern, and the fact that surrendered driver licenses at Oregon DMVs indicates in-migration continues to occur at the same rate as in the past. See page 13 for more on an alternative scenario where migration does not rebound as expected.

For Oregon businesses looking to hire, future labor growth could come from more young workers, and also gains from the state's Latent Labor Force<sup>3</sup> which is about the possibility of reducing historical disparities when it comes to differences based on sex, education attainment, and race and ethnicity. Increasing participation among existing Oregon residents could boost labor supply in the state by far more than any relative change in population growth. Importantly, such gains would take on extra importance in a world where migration does not rebound as expected. If one looks across the country, many states in the Midwest or the Great Plains have higher demographically-adjusted participation rates. These tend to be places where economic growth has been slower in recent decades and have not experienced the stronger migration trends like the South and West have.

#### Labor Market Forecast

The baseline forecast calls for the economic soft landing and continued expansion. What this means for the forecast is given Oregon's labor force is at or near its potential, job growth will slow to match those underlying gains. Job growth has already slowed off the pandemic reopening highs, and will continue to do so. Employment growth for the next couple of quarters is expected to be slightly stronger than gains in the potential labor force. In 2024 and beyond the employment forecast matches the demographic outlook for 0.7 percent annual gains on average.

The risks to such an outlook are balanced. To the downside growth could slow more than anticipated. If Oregon is at or beyond full employment, job gains are more likely to match demographic trends immediately and not in the quarters ahead. Already Oregon job growth was downwardly revised by the recent annual benchmark

<sup>&</sup>lt;sup>3</sup> https://oregoneconomicanalysis.com/2021/09/09/report-oregons-latent-labor-force/

revision. Similarly, should the modest rebound in population growth assumed in the baseline forecast not materialize, job growth should be lower as well.

However, to the upside, should participation remain strong among older Oregonians and pick up among younger Oregonians, then employment can significantly outpace underlying demographics for the next biennium, if not longer. Plus, given the baseline forecast is for only a modest migration rebound, should population growth surprise to the upside, expectations would be for job growth and the labor force to strengthen as well.

Additionally when it comes to employment and the hiring outlook, there are signs that the tight labor market is moderating just a bit. If firms are now fully staffed, or at least not as desperate to hire as earlier this cycle, job growth will slow from an economic perspective, and not just a demographic one.

Specifically, over the past year the number of job openings have declined 20 percent in Oregon. While such a decline still leaves job openings higher than they were pre-pandemic, and still outnumbering unemployed Oregonians, it does bring the labor market into somewhat better balance than earlier in the pandemic, as discussed in more detail in the December 2022 forecast<sup>4</sup>. Fed Chair Powell noted in his May 2023 press conference that this pattern was not supposed to be possible, a sizable decline in job openings has historically coincided with a noticeable rise in unemployment.

Even so, one place this somewhat better balance in the labor market is visible is in the number of Oregonians receiving unemployment insurance benefits. 2022 was a record low year for UI benefits paid due to both the strong labor market and fast employment growth, but also in part due to so many Oregonians exhausted their benefits during the pandemic and were ineligible.

So far in 2023 claims for UI benefits have risen. Traditionally a rise in initial claims for unemployment insurance is a leading indicator of recession. And the lack of a normal seasonal decline in continuing claims through the spring means it is taking a bit longer for unemployed workers to find another job.

However, besides simply being a precursor to recession, another way

## **Oregon's Labor Market is Cooling**

Unemployment insurance claims for 2018, 2022, 2023



to interpret the current data is that the overly tight labor market is now just cyclically tight. So far claims are up both locally and nationally, however they have yet to spiral upward and appear more of a one-time level adjustment higher. UI claims data will continue to be closely monitored in the weeks and months ahead but for now provide an opportunity for a Rorschach test of how to read the labor market.

Overall these dynamics point toward the labor market being a little less tight than it was in the recent past. With a bit less pressure, it is likely firms will not feel the need to compete for workers to the same degree, and wage growth will slow as a result. Right now there are mixed signals as to whether wage growth is actually slowing or not. On one hand measures like the U.S. Employment Cost Index or Oregon's average hourly earnings show no slowing, which are both measures on a per worker basis. However, aggregate wage growth, a combination of

<sup>&</sup>lt;sup>4</sup> https://digital.osl.state.or.us/islandora/object/osl%3A1003178/datastream/OBJ/view

jobs, hours, and hourly wage, are slowing down, this includes Oregon tax withholdings, and total wages and salaries.

This slowdown in total labor income is expected to continue, even as our office's forecast for Oregon's average wage is somewhat stronger than pre-pandemic rates (4.4 percent this year and next, slowing to 4.1 percent annually in the out years of the forecast compared to 3-4 percent annually last decade). Given that at a base level wage growth translates into household spending power, this slowdown in labor income should slow consumer spending and inflation in the years ahead.

#### Labor Market Industry Outlook

Looking forward the nature of the employment outlook is

Year-over-year change in Aggregate Wages decomposed into contributions from Job Gains and Average Wage Gains Forecast --> 10% 5% Total Wages Avg Wages Jobs 0% -5% -10% 2000 2005 2010 2015 2020 Latest Data: 2023q1 | Source: BEA, Oregon Employment Dept, Oregon Office of Econ Analysis

Oregon Labor Income Will Slow

a mixture of fundamental, underlying growth for certain sectors, and also a continued return toward prepandemic patterns. While total employment, and many sectors are at historic highs today, not every single industry has fully recovered from the pandemic. As some sectors play catchup their gains in the years ahead will outpace the overall economy.

Specifically, health care and leisure and hospitality are expected to lead statewide job growth over the next two years. Both sectors were leaders last decade, but have seen slower gains (health care) or an incomplete recovery (leisure and hospitality) so far during the pandemic and early recovery. Health care will see fundamental increases due to population growth and an aging population that will require more medical care. Leisure and hospitality will eventually hit all-time highs for employment, but remain lower on a population-adjusted basis due to some structural changes in the industry be they more kiosk ordering at restaurants or hotel rooms being not being cleaned every and the like.

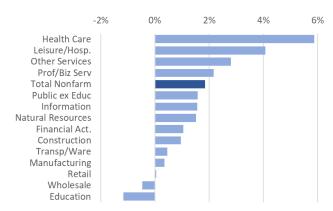
Similarly other services, which includes dry cleaners, gyms, and hair salons among other things, will see above average growth rates, albeit less so.

Conversely, some sectors that lead the recovery throughout the pandemic and its aftermath are expected to slow in the years ahead. This includes construction, manufacturing, and transportation and warehousing. The outlook is not for outright declines, but for more steady employment.

E-commerce is still a growth industry, but the rapid expansion of warehousing and delivery that occurred during the pandemic when much of society sheltered in

# Oregon's Industry Outlook

Percent change 2023q1 to 2025q1



place initially is unlikely to be repeated. Already some announced expansion plans have been cancelled or put on the shelf. Manufacturing has had a strong rebound, in part due to the strong demand for goods. As consumer spending on goods flattens, factory demand will too leading to steady employment.

Construction faces more of a mixed bag. There is expected to be ongoing weakness in terms of high-rise office and lodging, especially in larger cities. However ongoing strength in industrial and retail in suburban, and

secondary metro markets is expected, provided population growth returns. Residential construction faces two divergent trends. First multifamily continues to be strong, but is expected to slow considerably given the number of units under construction and slowdown in household formation. Second, single family construction is down due affordability challenges with high interest rates, but is leveling off and expected to rebound in the year ahead. Finally, increases in federal infrastructure projects should boost construction through the end of the decade.

Lastly, two industries facing structural decline are retail and education. Retail employment has recovered from the pandemic, in part due to the strong consumer spending. However the outlook calls for steady employment and not growth, meaning it continues to fall on a population-adjusted basis at the same rate as in recent decades. Education faces ongoing declines in school enrollment, leading to less industry demand and fewer workers in the years ahead. Given the number of births in Oregon continues to decline outright, it will take a sizable increase in the birth rate or very large rebound in migration among families with school-age children to reverse these trends any time soon.

#### **Zero Migration Alternative Scenario: Exploratory Findings**

Oregon's historical comparative advantage has been the ability to attract and retain working-age households. The influx of mostly younger and highly educated new residents provides an ample supply of workers for local businesses to hire and expand from at a faster rate than in most other states. While our office's baseline forecast still calls for a modest rebound in migration, banking on historical patterns, there is the possibility that migration will not return. The 2022 Census estimates showed almost the entire West Coast losing domestic migrants to elsewhere in the country. And as our office detailed in the March 2023 forecast, under the hood of the 2021 migration trends was a clear acceleration in out-migration from high cost of living regions and among working-from-home types. Increased working from home is a structural change in the economy. Oregon, and the West Coast, remains a high cost of living region with terrible housing affordability.

As such our office is open to the possibility our population and demographic forecast are too strong. Our office is beginning to model and think through the implications for Oregon if migration does not rebound as expected. Specifically our office has developed a demographic alternative scenario that has net zero migration each year. That is, the number of people moving into Oregon perfectly offset the number of people leaving Oregon.

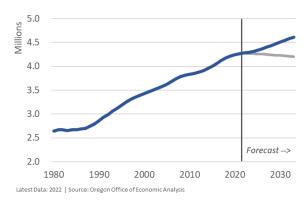
What this actually means is Oregon's total population would decline gradually. Deaths outnumber births in the state, and without a net influx of new residents, the population would shrink. Not drastically, but at a 0.1 or 0.2 percent pace per year. That means the real, big, practical implications of the zero migration scenario is the relative difference between the baseline outlook, and this new scenario. The gap is what matters, and our office has started to model the results. Consider this a first, and admittedly incomplete effort along these lines, and one we will continue to hone and explore in the coming forecasts.

One key aspect to comparing the baseline forecast and

the zero net migration scenario is thinking through the demographics of who moves, and how that could alter

#### **Oregon's Population**

Number of Oregon residents, all ages Baseline Forecast | Zero Migration Scenario



the number and composition of Oregonians in the years ahead. In particular migration rates are highest among

20- and 30-somethings. The state has historically seen net in-migration across all age groups, but the largest numbers among these young adults cohorts.

But in a net zero migration scenario it is not just the working-age population that would look different a decade from now. Every age group would experience a different outcome than under the baseline forecast, albeit some being simply a matte of degree, while others a matter of kind.

The nearby bar chart show the percentage change in what our office calls the budget driver demographics. To be sure these are not the forecasted change in caseloads for each group, but rather the change in the underlying demographics that most impact various programs or slices of society. Policies, household choices, and the state of the economy will all ultimately decide the actual program numbers, even as these underlying demographics play a key role.

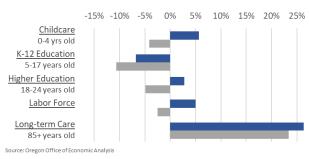
Among the differences between the baseline and the zero migration scenario that are more a matter of degree are both K-12 Education and Long-Term Care. For K-12, enrollment declines are expected in the baseline forecast given a declining number of children in the state. With zero migration, fewer young families will move to the state than expected, resulting in a deeper decline in the number of kids.

Conversely, large increases are expected among older Oregonians. These increases will be slightly less strong if there is net zero migration to the state, but still a

#### **Oregon Budget Driver Demographics**

Percent change 2022-2030 in underlying demographics impacting each cohort

Baseline Forecast | Net Zero Migration Scenario



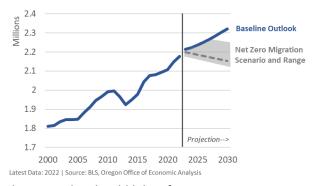
large increase as most of these individual already live in the state and older age groups have lower migration rats.

The differences that are more a matter of kind show an outright reversal when comparing the baseline forecast of modest increases compared to an expected decline in the zero migration scenario. This situation applies to Childcare, where fewer young people moving to the state translates into fewer future births, Higher Education, again the result of fewer young families and people moving, but also to the potential Labor Force.

Estimating the number of working-age Oregonians in the zero migration scenario is relatively straightforward. With the large Baby Boomer generation continuing to retire, and a smaller Gen Z generation now entering into the workforce, without net in-migration the number of potential workers will decline. In the zero migration scenario, Oregon's potential labor force would be expected to decline outright by 54,000 by the year 2030. Comparing this to the baseline projection of an increase of 114,000 shows a difference, or a gap of 168,000 in the years ahead.

#### **Oregon's Labor Force**

Residents 16 years and older with a job or activley looking for work



However, as discussed in a previous section, it is not necessarily so simple. Should labor force participation rates among younger workers, or historical disparities by gender, educational attainment, or race and ethnicity change, the potential labor force could be noticeably higher even absent migration. As such, the range of

possible outcomes is large. Even in a world with zero net migration, Oregon's labor force could increase slightly in the years ahead, albeit smaller gains than in the baseline forecast. The net zero migration scenario would represent a downgrade to the overall economic outlook, even under optimistic assumptions about participation rates among existing residents.

The final piece to this initial exploratory analysis relates to housing. As with the labor force, there are a wide range of possible outcomes depending upon what happens to household formation rates. However, at a base comparison, net zero migration to Oregon would lower the amount of housing needed to be built to meet future population growth.

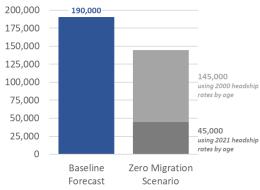
This relative reduction in housing demand likely means Oregon needs to build in the 50,000 to 150,000 unit range in the decade ahead compared to 190,000 in the baseline forecast. These projections are based entirely on population growth and future demand, and do not take into account Oregon's historical underproduction nor the housing needed for our homeless neighbors. Oregon needs to build an additional 140,000 units for those reasons based on recent estimates.

The reason for this range is based on plausible household formation rates by age (referred to as headship rates). If current headship rates by age continue in the years ahead, Oregon would need to build about 5,000 housing units per year.

However, if headship rates were to continue to rise and regain their rates in 2000. Oregon would need to build about 15,000 un

#### **Oregon Housing Demand**

Change in the number of households from 2022 to 2032



Source: IPUMS-USA, Oregon Office of Economic Analysis

their rates in 2000, Oregon would need to build about 15,000 units per year.

If Oregon's housing production were to increase and begin to address the historical shortage, it would improve affordability. Bad housing affordability has been suppressing household formation in recent decades as more individuals lived with roommates for financial reasons. As affordability improves, or household finances strengthen, it is likely that headship rates would increase some. This certainly occurred during the pandemic when many individuals dropped roommates, likely in part due to fear of a contagious, deadly virus, and in part due to the stronger household finances.

Moving forward our office will continue to refine this scenario. There are at least three specific pieces still in the works. One is a detailed industry employment forecast. Two is a personal income forecast. Labor-related income is relatively straightforward, however modeling the impacts on non-wage income given the shifting composition of the population takes a bit more time. Three is producing alternative revenue forecasts based on the economic forecasts. This will allow policymakers to better understand not only the economic, but also budgetary impacts of the zero migration alternative scenario.

Finally it should be noted that our office will not switch the baseline forecast to incorporate something similar to the zero migration scenario overnight. To the extent it does prove right, it will be a gradual process. Given demographic data is released once per year, it will take time to assess whether on one or two disappointing years of migration data truly are the new normal.

As such, our office will be closely monitoring and waiting for the next big demographic data releases. The first will be the 2022 American Community Survey data released this fall. This will provide context and the socioeconomic characteristics of migrants. Today we only have total population counts for 2022 and no underlying

details. The second will be the 2023 population estimates released, typically, in November by Portland State and December by Census. This will provide a high level look to what extent population growth rebounded as expected this year, or not.

One final note, Census is set to finally begin to release the details of the 2020 Census in the weeks and months ahead. The big decennial census forms the backbone of our office's population and demographic forecast. In particular something like the age structure of the population matters when thinking through not just births and deaths, but also the potential labor force and household formation. Right now demographers are still working off of estimates and models based on the 2010 Census. Updating this with the 2020 Census data is important, and could alter both our office's baseline and zero migration scenario depending on what the data actually show.

#### **Regional: Zoom Town's Cascading Migration**

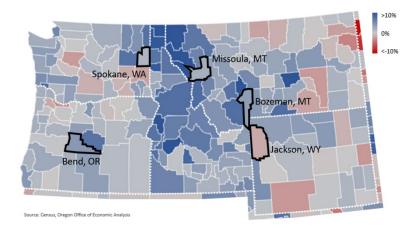
Early in the pandemic when working-from-home (WFH) increased substantially the concept of Zoom Towns, coined by Bloomberg's Conor Sen, emerged. These were generally smaller, scenic areas that were desirable places to live, and where workers could telecommute from. Zoom Towns garnered a lot of attention, and local home sales boomed more than in most other markets. A question at that time was whether WFH migration would continue to double down on existing growth patterns, or if new patterns would emerge.

Untangling cause and effect is challenging, but during the pandemic many medium sized metros and rural counties did experience faster population growth than they did pre-pandemic. If one focuses specifically on Zoom Towns in western states, an interest pattern emerges. Zoom Towns experienced population growth an increased demand. Net domestic migration rates to places like Bend, Bozeman, Missoula, and Spokane were all positive. However, it is actually the Zoom Towns' neighboring counties that grew the fastest.

It should be noted that these surrounding areas are small. These counties have thousands, maybe tens of thousands of residents. As such, from a net migration perspective these fast rates mean hundreds of new residents. This pattern is not an overwhelming large wave of migrants, but rather modest numbers resulting in large percentage increases. Even so, given generally declining, and aging population in many of these places, these new inflows provides an economic and demographic boost.

# **Zoom Towns' Cascading Migration**

Domestic migration rate, 2020 to 2022



The question becomes, who are these new

residents? Census will release the 2022 American Community Survey data this fall, providing a glimpse at the socio-economic characteristics but detailed data is not available at small geographic areas on an annual basis. Even so, there are two real possibilities, one more interesting and one more policy oriented.

On one hand, some of the new residents could be big city households who can work remotely to a greater degree and move into rural communities. That would be a big, new pattern compared to the recent past.

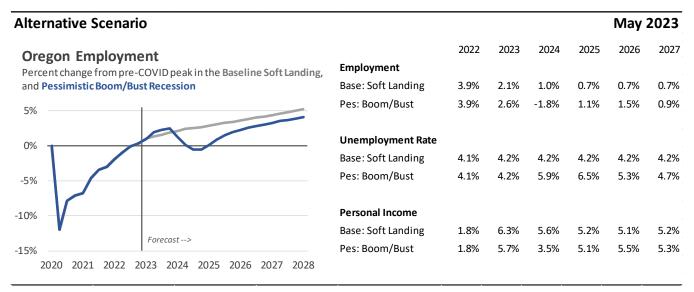
On the other hand, which is more likely to be happening is cascading migration. The increased demand to live in and move to Zoom Towns literally, or at least effectively pushes some residents into nearby communities. A big part of this is due to housing affordability and availability programs.

To be sure, some households do prefer to live in smaller towns. As the bigger hub in the region grows, some households want to move away, yet remain close enough to maintain community, economic, and social ties they have built up over the years.

However, to the extent this cascading migration is about housing affordability it does result in economic displacement. Households try to find the right balance in terms of location, opportunity and affordability. Some neighbors, particularly those lower- and middle-income friends, family, and neighbors are financially force to move at time. As such this highlights the importance of *regional* housing markets and continued need to increase Oregon's housing supply. The new Oregon Housing Needs Analysis (OHNA) is aimed to highlight and address these issues. Our office is part of the process in estimating the need and production targets.

#### **Alternative Scenario**

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. Inflation is likely to remain above the Federal Reserve's target for the foreseeable future. As such, the Fed likely will need to raise interest rates further to cool the economy. The combination of high inflation, rising interest rates, and slowing economic growth is problematic. The risk of a recession in the future remains very real. The alternative scenario below is not the lower bound of all outcomes, but rather one plausible scenario modeled on realistic assumptions. For the revenue implications, see page 28.



#### Boom/Bust Scenario: Moderate Recession

Should the economy fall into recession in the near-term, it would likely be a mild recession due to inflation expectations remain well anchored, businesses looking to hoard labor, and strong household finances keeping spending relatively strong. However, the longer the cycle lasts, the more things can change. And with the current underlying strength in the economy and somewhat slower inflation, it likely pushes any potential recessionary dynamics further out. As such, it is possible that today's household savings could be spent down in the months ahead, leaving weaker consumers when a recession does come, leading to larger layoffs than

expected. As such, the boom/bust alternative scenario this forecast is for a moderate sized recession beginning in early 2024.

The nature of the moderate recession is based on the impacts of higher interest rates, which will impact goods-producing industries to a greater degree than service-providing industries. And the severity of the cycle is close to the average recession Oregon has experienced since World War II, excluding the severe cycles in the early 1980s, the Great Recession, and the COVID recession. Looking specifically at the recessions beginning in 1957, 1960, 1969, 1973, 1990, and 2001, Oregon's average employment change has been a decline lasting three quarters and totaling 2.7 percent, followed by a four quarter recovery period to regain the lost jobs.

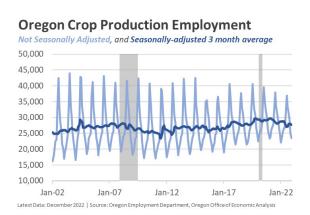
The 2024 moderate recession scenario is for a three quarter decline in employment totaling 3.0 percent, followed by a six quarter recovery period, more inline with the so-called jobless recoveries following the 1990 and 2001 cycles, compared to the faster recoveries in the 1950s, 1960s, and 1970s.

The 3 percent decline in employment is a loss of 60,000 jobs. No industry is spared, but goods-producing ones see relatively larger losses at 4.5 percent, while services see slightly fewer losses at 2.8 percent, and the somewhat more stable public sectors experiences job losses of 2.3 percent. The unemployment rate increases to nearly 7 percent by early 2025. Nominal income does not fall outright but growth slows considerably. Income in Oregon is 2.5 percent below the baseline.

#### **Oregon's Agricultural Economy**

Last 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 this year, 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. It will take some time before data is available to assess any impacts. Even so, 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 level, in addition to international exports. Additionally we discussed how ag fits in with the broader food economy in the state and nation, and also the outlook for consumer spending on food and price forecasts related to revenues and costs.

This quarter we will highlight some of the basic, real-time data our office will be tracking: the quarterly census of employment and wages (QCEW). This data is based on records businesses submit for unemployment insurance. While agriculture has more jobs not covered by unemployment insurance than the typical industry, in Oregon the QCEW has better coverage of industry trends than it does nationally. The benefit here is this data is available every three months, albeit with a couple months reporting lag. The 2022q4 data recently was released and provides a good setting for how the ag industry in Oregon entered the year, just as HB 4002 went into effect.



Within the ag sector, crop production by far has the most employees, albeit on a highly seasonal basis surrounding harvest. Over the course of the year, crop production employment in the state varies from winter

lows around 20,000 jobs to harvest highs of 35,000 or 40,000 jobs. From a big picture perspective two items stand out.

First, agricultural employment in Oregon is relatively steady when taking the long-term view. The underlying trend in jobs increase and decrease a few thousand depending upon the year, with not real sustained moves over time. Second, crop production employment in Oregon has been on slight downward trend the past two years, heading into 2023 when the new law goes into effect. This is worth highlighting when it comes to gauging the impacts of the new bill, and any sort of before and after comparisons.

As the agricultural worker overtime law comes into effect this year, 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.

#### **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>U.S. Economy</u>. While Oregon is usually 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 140,000 units in recent decades<sup>5</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.
- <u>Global Spillovers</u>. 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.
- <u>Federal Fiscal Policy</u>. 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.
- <u>Climate and Natural Disasters</u>. 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 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

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<sup>&</sup>lt;sup>5</sup> https://www.oregon.gov/ohcs/about-us/Documents/RHNA/RHNA-Technical-Report.pdf

- 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.
- <u>Initiatives, Referendums, and Referrals</u>. 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 2023 to 2028, IHS expects Oregon's real GDP growth to rank 17<sup>th</sup> fastest among all states, while employment growth ranks 23<sup>rd</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.

<u>Labor Supply</u>. Oregon has typically benefited from an influx of households from other states, including an ample supply of skilled workers. Households at least used to 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

**Oregon's Labor Force Participation** 



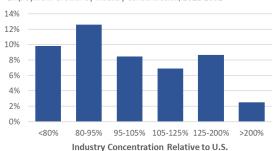
current strength of the Oregon's labor market is evident, and encouraging.

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.

<u>Industrial Structure</u>. 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

# Oregon's Industrial Structure and Outlook Employment Growth by Industry Concentration, 2022-2032



Concentration based on 2019 location quotients | Source: BLS, Oregon Office of Economic Analysis

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 that then 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.

<u>Capital and Productivity</u>. 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, phsyical, human, and social. All can help raise firm productivity, benefiting the economy more broadly.

Today, the economy desparately needs better productivity, which has been sluggish this century. Early in the pandemic,

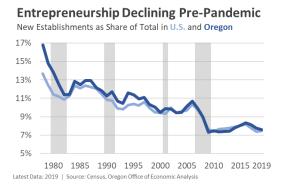
# Oregon Real GDP per Worker Inflation-adjusted value-added per employee \$130,000 \$125,000 \$115,000 \$110,000 \$105,000 \$100,000 \$2016 2017 2018 2019 2020 2021 2022 2023 2024 2025

Latest Data: 2022q4 | Source: IHS Markit, Oregon Office of Economic Analysis

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 producivity is more or less back to the pre-pandemic trend, if slightly above it. Increasing the stock and use of Oregon's capital would boost the economy overall.

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

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

**Oregon Business Applications** 



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.

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.

#### **Median Household Income**

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



Deflator: PCE Price Index | Source: BEA, Census, Oregon Office of Economic Analysis

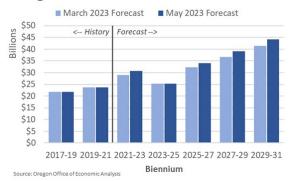
#### REVENUE OUTLOOK

#### **Revenue Summary**

Available resources are expected to be up sharply relative to what was assumed in the March 2023 forecast, both in the near term and over the extended horizon. The upward revision in the outlook is based both on a stronger than expected tax filing season, as well as methodological changes made in light of fundamental shifts seen in recent years.

The tax filing season once again outstripped expectations, albeit modest ones. Revenue gains have cooled some, but it is clear that Oregon's tax sources have become more effective than they were pre-pandemic.

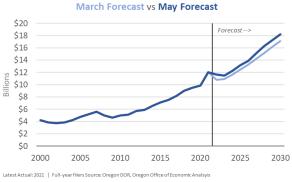
#### **Oregon General Fund Forecast**



Before the filing season, it was expected that most of Oregon's primary sources of revenue would quickly revert back to pre-pandemic trends. This has not occurred, as Oregon's major taxes have grown in relation to the amount of underlying economic activity.

One major factor has been the current inflationary environment and related wage pressures. The vast majority of Oregon's taxes are not adjusted to inflation and rise along with prices. With demand outstripping supply, businesses and consumers are paying premiums for their needs. This has translated into a wide range of taxable business and labor income, which has moved many filers into higher tax brackets. The new Corporate Activity Tax, Vehicle Privilege Tax, alcohol, and tobacco taxes have risen with inflation as well.

## Oregon Personal Income Tax Liability



Inflationary dynamics have not been captured well by Oregon's revenue models, given that this sort of environment has not existed since years before computerized models have. In addition to accounting for inflation, Oregon's revenue models have been refined to better account for fixed tax brackets and federal tax reform.

Qualitatively, there is not much difference between the updated revenue outlook, and what was predicted in March. After unsustainably high revenue collections over the past two years, tax revenues are expected to come back to earth over the next biennium, before returning to healthy growth thereafter if the economic expansion persists.

Quantitatively, small differences in trajectory matter a lot, and compound over time. Taken together, the outlook for

#### **Oregon Corporate Excise Tax** 4-QTR sum, \$ billions \$1.8 \$1.6 \$1.4 \$1.2 \$1.0 \$0.8 \$0.6 \$0.4 \$0.2 Forecast --> \$0.0 1995 2000 2005 2010 2015 2020 2025

Source: OR Dept of Revenue, Oregon Office of Economic Analysis

personal and corporate income taxes has risen by \$1.5 to \$2 billion over the forecast horizon due to the updated model methodology.

#### 2021-23 General Fund Revenues

Gross General Fund revenues for the 2021-23 biennium are expected to reach \$30,666 million. This represents an increase of \$1,871 million from the December 2022 forecast, and an increase of \$7,341 million relative to the Close of Session forecast. Although personal income tax collections over the filing season came in smaller than last year, they did not return to earth as expected. Corporate taxes have yet to decline meaningfully as well.

Table R.1							
2021-23 General Fund Forecast Summary							
(Millions)	2021 COS Forecast	March 2023 Forecast	May 2023 Forecast	Change from Prior Forecast	Change from COS Forecast		
Structural Revenues Personal Income Tax	\$20,628.1	\$24,185.4	\$25,659.5	\$1,474.1	\$5,031.4		
Corporate Income Tax	\$1,344.0	\$2,889.4	\$3,161.2	\$271.7	\$1,817.2		
All Other Revenues	\$1,353.5	\$1,720.2	\$1,845.5	\$125.3	\$492.0		
Gross GF Revenues	\$23,325.5	\$28,795.0	\$30,666.1	\$1,871.1	\$7,340.6		
Offsets, Transfers, and Actions <sup>1</sup>	-\$417.6	-\$477.8	-\$468.1	\$9.8	-\$50.5		
Beginning Balance	\$3,025.6	\$4,082.5	\$4,082.5	\$0.0	\$1,056.9		
Net Available Resources	\$26,008.4	\$32,488.7	\$34,369.5	\$1,880.8	\$8,361.1		
Appropriations	\$25,446.0	\$27,861.0	\$27,367.4	-\$493.6	\$1,921.4		
Ending Balance	\$562.4	\$4,627.6	\$7,002.1	\$2,374.5	\$6,439.7		
Confidence Intervals							
67% Confidence	+/- 1.0%		\$320.5	\$30.35B to	\$30.35B to \$30.99B		
95% Confidence	+/- 2.1%		\$641.0	\$30.03B to \$31.31B			

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

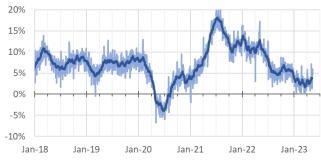
#### Personal Income Tax

Growth in withholdings has remained slow in recent weeks, growing at an annual rate of around 4%, far slower than what is typically seen when Oregon's economy is expanding. 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 this degree of weakness to date.

Although overall income tax collections were not as weak as expected during the filing season, assumptions about underlying income streams closely matched the March forecast. Unexpected revenues were largely the result of an upward shift in average tax rates. In particular, reported income from capital gains fell back to a more sustainable level. Capital gains realizations were roughly cut in half relative to last year, right in line with the March outlook. When this sort of correction has happened historically, average tax rates have fallen sharply as well. This was not the case this

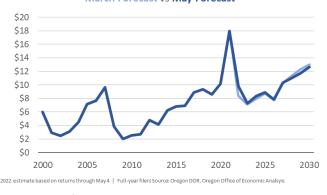
#### **Oregon Withholding**





Latest Data: May 12, 2023 | Source: Oregon Dept. of Revenue, Oregon Office of Economic Analysis

# Oregon Realizations of Capital Gains March Forecast vs May Forecast



year, in part due to continued growth in labor income that kept many filers subject to the top rate.

In the past, the mix between income sources has done a good job of explaining the average personal income tax rate. The share of income sources that are typically realized by high-income filers (e.g. capital gains, business income) relative to the share of income from other sources (e.g. wages, retirement) has proven to be an accurate predictor of average tax rates. Now, in light of rapid wage growth and gains in business income, many fewer filers are falling below the top-rate threshold despite large losses in investment income. The fixed rate threshold has now been explicitly modeled, contributing to a stronger long-run outlook for tax collections.

According to the September forecast, the outlook for the personal income tax kicker base is now significantly (25.1%) higher than the Close of Session forecast. If the current outlook holds, a kicker of \$5.5 billion would be paid out when taxes are filed in 2024.

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

Oregon's traditional corporate income and excise tax collections have continued to outstrip expectations, as well as underlying corporate profits. 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. Even so, growth in corporate tax payments has been far faster than has growth in underlying business income.

#### More High-Income Filers

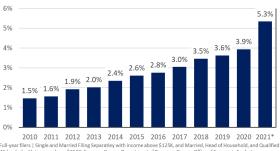
Odd Year

May Forecast

Close of

Session

Share of personal income tax returns subject to the top rate



**Oregon Kicker 101** 106 104 **Everything above Close** of Session is returned Kicker Threshold 2% to Oregonian taxpayers (Not just above 2% threshold) 102 100 Legislative Changes if applicable) 98 Forecast for Personal Incom 96 Tax Kicker Base (All of General Fund excluding Corporate) 94

Updated

Forecast

#### **OR Corporate Excise Taxes & US Profits**

Level relative to 2005, SAAR



The surge in tax collections relative to underlying profits began around the same time as the federal tax reforms included in the Tax Cuts and Jobs Act. Among many other things, the reforms encouraged corporations to realize more of their income domestically, potentially increasing the tax base for states. With more than four years of post-reform data now available, the federal reforms are now incorporated in the corporate tax model. This has led to a stronger outlook for collections throughout the forecast horizon.

A \$1.8 billion corporate kicker is currently estimated for the next biennium. According to statute, this would be retained in the General Fund for 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.

However interest earnings are now of substantial size given high fund balances (revenues exceeding expectations and spending) and rising interest rates. Interest earning this fiscal year are expected to total \$277.7 million, which is more than the previous 13 years combined of interest earnings. Looking forward, the outlook is uncertain. Today, fund balances are \$6.5 billion higher than back in 2019, and the interest rate on short-term U.S. treasuries is around 5 percent. Even as the big increase in fund balance is expected to fade as the record kicker is returned to taxpayers during the next tax filing season, total interest earnings in FY 2024 will be \$348.9 million. After that time, interest earnings will be larger than last decade given both higher fund balances, and higher interest rates. One risk here, given the now substantial size of interest earnings in the General Fund, is any timing related to when fund balances are spent down, and any changes to monetary policy or financial markets.

Relative to the previous forecast, the current outlook for these non-Corporate and non-Personal Income tax revenues in 2021-23 is raised by \$125.3 million (6.9%). This net figure masks many changes under the surface for different sources of revenue. On the positive side, there are sizable upward revisions Interest Earnings (+\$117.7 million), and

#### **Oregon General Fund Interest Earnings**



Estate Taxes (+8.9 million). These gains are partially offset by small declines to judicial revenues (-\$2.4 million), and tobacco (-\$0.9 million).

Looking forward, these other sources of revenue in the General Fund are raised considerably in the 2023-25 biennium. The combined change is an increase of \$273.1 million (16.0%) relative to the previous forecast. The primary reason for the change in the outlook for Interest Earnings (+254.3 million) that fully incorporates the high fund balances and interest rates. Other notable changes in 2023-25 include Secretary of State Fees (+\$13.7 million), Estate (+\$11.7 million), judicial revenues (-\$6.5 million), liquor earnings (-\$4.1 million), and tobacco revenues (-\$2.5 million).

#### **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.

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.

Table R.2

General Fund Revenue Forecast Summary (Millions of Dollars, Current Law)										
	Forecast Forecast		Forecast Fo		Forecast	Forecast				
	2021-23	%	2023-25	%	2025-27	%	2027-29	%	2029-31	%
Revenue Source	Biennium	Chg	Biennium	Chg	Biennium	Chg	Biennium	Chg	Biennium	Chg
Personal Income Taxes	25,659.5	28.4%	21,088.3	-17.8%	29,911.4	41.8%	34,601.6	15.7%	39,217.9	13.3%
Corporate Income Taxes	3,161.2	60.7%	2,245.0	-29.0%	2,380.3	6.0%	2,673.2	12.3%	2,960.9	10.8%
All Others	1,934.5	15.1%	1,975.3	2.1%	1,724.4	-12.7%	1,828.3	6.0%	1,950.8	6.7%
Gross General Fund	30,755.1	30.1%	25,308.6	-17.7%	34,016.2	34.4%	39,103.1	15.0%	44,129.6	12.9%
Offsets and Transfers	(245.2)		(128.6)		(116.5)		(113.8)		(140.8)	
Net Revenue	30,509.9	29.6%	25,180.0	-17.5%	33,899.7	34.6%	38,989.3	15.0%	43,988.8	12.8%

#### **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>6</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>7</sup> together with more timely updates produced by the Legislative Revenue Office.

#### 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. The probability of the soft landing, no recession is rising but the odds of a recession in the upcoming 2023-25 biennium remain uncomfortably high. See page 17 for more on the economic alternative boom/bust recession scenario.

<sup>&</sup>lt;sup>6</sup> https://www.oregonlegislature.gov/lfo/Documents/2021-1 LAB Summary 2021-23.pdf

<sup>&</sup>lt;sup>7</sup> https://www.oregon.gov/DOR/programs/gov-research/Pages/research-tax-expenditure.aspx

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

Revenues in 2025-27 would be recovery but still \$1.2 billion below the current baseline outlook.

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 \$372 million lower in the

Recession Forecast Changes						
	\$ Millions from Baseline					
	21-23	23-25	25-27	27-29	27-29	
General Fund Total	0	-2,387	-1,195	-733	-291	
Other Revenues	\$ Millions from Baseline					
Other Revenues	21-23	23-25	25-27	27-29	27-29	
Lottery	0	-42	-44	-33	-21	
Corporate Activity Tax	0	-372	-171	-123	-93	
Marijuana Tax	0	-6	-7	-9	-9	
Total	0	-420	-222	-165	-123	
	\$ Millions from Baseline					
	21-23	23-25	25-27	27-29	27-29	
Total Sum	0	-2,807	-1,417	-898	-414	

boom/bust scenario. Lottery resources would be \$42 million lower, and marijuana revenues would be \$6 million lower in the pessimistic scenario.

#### Corporate Activity Tax

The 2019 Legislature enacted the corporate activity tax (CAT)<sup>8</sup>, a new tax on gross receipts that went into effect January 2020. 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 near the end of the 2023 calendar year. The current estimate for 2021 tax liability has been revised upward significantly due to an absence of refunds as the tail end of the return season transpires. The same is even more true for tax year 2022, for which the tax filing season is just getting underway. The net result is an increase in revenues for the current biennium of \$90.3 million and a jump of \$175.7 million for the 2023-25 biennium. In addition, Senate Bill 5545 passed early on in the 2023 legislative session reduced 2021-23 allocations to the three subaccounts of the Fund for Student Success by \$55 million. Combined with the current revenue increase and a modest increase to the State School Fund distribution, the 2023-25 beginning balance in the FSS is increased \$128.6 million, thus contributing to a change in available resources for next biennium of \$304.3 million.

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.

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.

<sup>8</sup> https://www.oregonlegislature.gov/bills laws/lawsstatutes/2019orlaw0122.pdf

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**

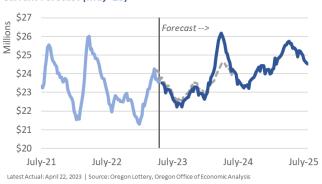
Overall lottery sales have tracked the previous forecast well. When combined with a modest upward revision to the economic outlook, the lottery forecast is raised slightly. The upcoming 2023-25 biennium outlook is increased \$17.8 million (1.0%) while the outer biennia are increased about \$12 million (0.6%) each.

The current 2021-23 biennium is now in the books as sales in one quarter are transferred for revenue purposes the following quarter. 2021-23 finishes as a record-setting biennium for lottery sales and earnings, far outpacing anything seen in history and 9.9 percent higher than our office's forecast made before the budget period began. The fundamental reason why is due to strong household finances and consumer spending, especially when factoring in pent-up demand following the public health restrictions and shutdowns early in the pandemic.

Overall, this strength is expected to hold in the years ahead. Sales did slow following the pandemic reopening high, but remain well above pre-pandemic levels, and are rising again more recently. One additional factor impacting sales next year is the record \$5.5 billion personal income tax kicker that will be return to taxpayers. While video lottery sales are only approximately 0.45 percent of Oregon personal income, such a large increase in disposable income is likely to result in higher consumer spending statewide, including on discretionary items like video lottery. The result is expectations are sales next spring to regain

#### **Oregon Video Lottery Sales**

4 week average of Actual Sales, Previous Forecast (Mar '23), and Current Forecast (May '23)



the pandemic reopening highs, followed by slightly lower sales the following year when there will be no kicker paid out.

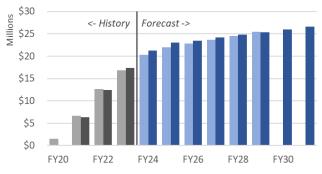
The modest increase in the Lottery forecast is not due to video sales alone, but also due to upward revisions to both Sports Betting and Traditional Lottery products as well.

Sports Betting is raised \$11.1 million in the upcoming 2023-25 biennium and \$5 or \$6 million in the out biennium. This brings the current outlook to a level just a bit higher than the original estimates made when sports betting was first authorized. The path from then until now has been anything but smooth given the pandemic, and sports either canceling or moving their games and the like.

However the increase in underlying sales, plus a hold, or win percentage a bit higher than expected means actual sports betting transfers are matching and

# Sports Betting Annual Transfers

Initial Forecast | Current Forecast



exceeding those expectations. Overall there is 5 year ramp-up period assumed for fundamental growth in the

player base. The start of the NFL season in the fall typically coincides with a big increase in players. As the next football season approaches in the fall, our office will be looking to see the growth in registered user that is expected.

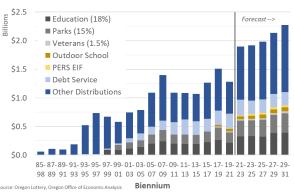
#### Risks to the Outlook

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. Conversely, should inflation begin to take a toll on households, discretionary purchases may be cut back, similar to what appears to have happened during the recent holiday season.

Over the medium term, in particular the upcoming 2023-25 biennium, risks are balanced. Sales may outpace expectations, or the economy may fall into a 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.

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 discussed in depth in the March 2023 forecast, the structural impact of aging has been fully absorbed and has minimal impact moving forward as the Millennials are now entering their peak lottery years. 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 Resources and Distributions**



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. This outlook has been revised up some, so the relative decline is smaller than in previous forecasts due to the updated player demographic work.

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 couple of years. 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 likely points toward some more permanent and not just pandemic or temporary changes in player behavior.

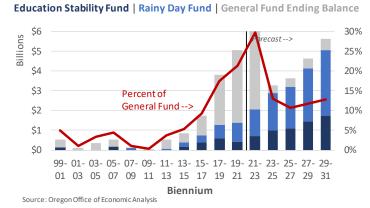
The full extended outlook for lottery earnings can be found in Table B.9 in Appendix B.

#### **Budgetary Reserves**

The state currently administers two general reserve accounts, the Oregon Rainy Day Fund<sup>9</sup> (ORDF) and the Education Stability Fund<sup>10</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 \$1.9 billion. At the end of the current 2021-23 biennium, they will total \$2.1 billion, which is equal to 6.8% of current revenues. Including the currently projected \$7.0 billion ending balance in the General Fund, the total effective reserves at the end of the current 2021-23 biennium are projected to be \$9.1 billion, or 29.7% of current revenues.

#### **Oregon Budgetary Reserves**



#### Effective Reserves (\$ millions)

	-	-
	Current Apr-23	End of 2021-23
ESF	\$675	\$708
RDF	\$1,213	\$1,352
Reserves	\$1,887	\$2,060
Ending		
Balance	\$7,002	\$7,002
Total	\$8,889	\$9,062
% of GF	29.1%	29.7%

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 \$129.0 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 \$1.4 billion.

Looking ahead to the 2023-25 biennium, the ORDF is expected to receive two transfers as well. This includes a projected \$279.7 million related to the General Fund ending balance from 2021-23, and \$91.6 million related to the increase in corporate taxes. The ORDF is projected to hit its cap of 7.5% of revenues in the middle of FY2026. At that time, should the forecast prove accurate, the ending balance transfer related to 2023-25 would not be

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<sup>&</sup>lt;sup>9</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>&</sup>lt;sup>10</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.

made, and those revenues would be retained in the General Fund. The ORDF would once again hit its cap in FY2032 based on the current outlook.

The ESF will receive an expected \$294.0 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 \$708.4 million. The ESF is not projected to hit its cap of 5% of revenues until the end of 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 \$2.1 billion at the close of the 2021-23 biennium, or 6.8 percent of current revenues. At the close of 2023-25 the combined balance will be \$2.9 billion, or 11.4 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 potential recession in the upcoming 2023-25 biennium, the state is expected to meet the trigger for withdrawals should the recession come and should policymakers choose to. In particular the reserve fund trigger of two consecutive quarters of employment declines would be expected to be met based on our office's alternative scenario of a moderate recession. 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.

Additionally, in the Governor's Recommended Budget for 2023-25, the proposal was to suspend or divert the upcoming distributions to both the ORDF and ESF. Should the Legislature choose to follow this proposal, the impact on the reserve funds would be the following. The diversion of the transfers into the ORDF next biennium, along with the interest earnings would total \$479 million. This would mean the ORDF does not hit its cap until FY2031. The practical difference for the ORDF would be diverting the transfer in 2023-25 as in the Governor's Recommended Budget, or diverting the transfer in 2025-27 as the fund will reach its statutory cap.

For the ESF, diverting the transfers would amount to \$294 million not going into the fund. The end result is \$773 million would be suspended or diverted based on the current forecast and the expected combined reserve fund balances at the end of 2023-25 would be \$2.1 billion instead of \$2.9 billion, or 8.2 percent of revenues instead of the 11.4 percent currently expected.

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 an ESF reserve fund withdrawal and a simple majority vote in each chamber to approve an ORDF withdrawal.

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

#### **Recreational Marijuana Tax Collections**

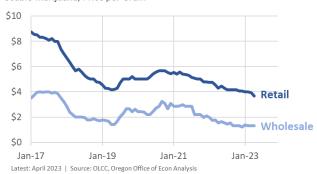
The underlying recreational marijuana forecast remains unchanged. Revenues in the current 2021-23 biennium are raised \$1.7 million and raised by \$1.1 million in the upcoming 2023-25 biennium. The outer biennia are unchanged compared to the previous forecast. The primary reason is sales are coming in as expected, and the previous outlook made substantial changes given market dynamics. What follows is largely the summary provided last quarter and updated where appropriate.

The combination of an oversupply of production and saturated retailer market continues to drive prices lower. Given Oregon taxes marijuana based on the price, the trend is for lower tax collections even as the underlying volume of sales remains steadier. None of this is new.

However, these ongoing issues have really come to a head in recent quarters where actual tax collections are considerably below expectations based on actual sales as firms struggle with profitability in the market, leading

### **Oregon Marijuana Prices**

Usable Marijuana, Price per Gram



to rising tax delinquencies. It's a complicated picture of businesses struggling with market conditions, and being unable to pay all their bills. The cascading impact is for those lower on the priority list, be they growers on consignment or the taxing authority to see the biggest impacts. Oregon's Department of Revenue is working with firms who are behind on their taxes, and through increased enforcement activity expect some revenues to be regained. However, given the tough current market conditions, our office's forecast is taking more of a wait and see approach. Declines in delinquencies represent an upside risk to the forecast in the quarters ahead.

#### **Market Conditions**

As former Oregon state economist Tom Potiowsky said during the dark days of the Great Recession, the good news is when you're flat on your back, everywhere you look is up. For recreational marijuana, even though it feels that way, it's hard to know if the industry is truly flat on its back yet, or if more weakness is to come first. But eventually a bottom will be reached as demand strengthens with a growing population and economy, and supply stabilizes.

The crux of the issue today are the record low prices. The underlying reason for the low prices is an oversaturated market where production (harvest and inventory) outpaces consumer demand, and there are more retailers per capita than in most other states, leading to increased competition.

These dynamics are great news for consumers who can enjoy widely available products at low prices. However, one key item to note is that today's lower prices do not appear to have resulted in an increase in quantities sold. Now, OLCC estimates that the total amount of THC sold increased in 2022 compared to 2021 but at the product level the number of pounds of usable marijuana, or number of edibles and the like is more steady. Consumers appear to have stable consumption patterns and have pocketed the savings or had to spend it on other items in their budget due to high inflation.

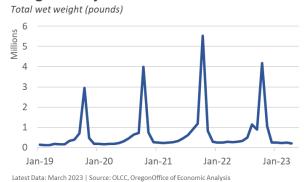
Typically in a mature market, sales would more closely track incomes and inflation or the cost of production. However in the current marijuana market this is not happening due to the ongoing price declines, a result of increased competition. These dynamics are bad news for firms trying to operate a profitable business.

Now, an initial supply response occurred last year. Total harvest in 2022 declined 13 percent compared to 2021, with an even larger 19 percent decline during peak harvest season. That said, the market still is not in balance. Some of our advisors indicated another similar decline this year, bringing harvest closer to 2019 or 2020 amounts would likely bring the market into better balance.

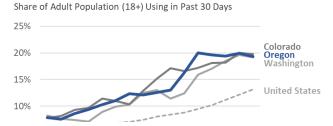
The other source of balance could come from increased consumer demand. That said the low-hanging fruit for demand growth is behind us. Marijuana usage rates are steady in recent years, after increase considerably in the past decade. Many former black market consumers have converted to the legal market, and those that remain may be harder to switch. And underlying population growth has slowed during the pandemic, with only a modest rebound expected in the outlook.

Overall, expectations are the market will stabilize in the not too distant future. Sales and tax collections will remain relatively steady this year and next. Overall revenue and resources will be unchanged from the current 2021-23 to 2023-25 biennium. As supply and demand are expected to get into better balance, some pricing power and profitability will return to the market. Overall sales and taxes will increase with a growing population and economy in the decade ahead. Usage rates and consumption as share of income are expected to hold steady in the longer-run. Both upside and downside risks abound to this outlook.

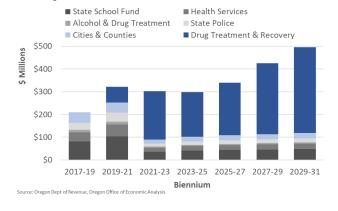
### **Oregon Marijuana Harvest**



### Marijuana Usage Rates



### **Marijuana Resources and Distributions**



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

#### **Psilocybin Tax Collections**

Ballot Measure 109 which voters passed in 2020 and legalized psilocybin, tasked our office with the revenue forecasting responsibilities. After speaking with other state agencies and private businesses entering the psilocybin industry there are a few important items to note up front.

First, the overall cost of a session to a customer is expected to be in the hundreds, and even thousands of dollar range. Second, the state's 15 percent retail sales tax which was part of BM109 only applies to the product itself and not the overall cost of the session. Third, by all accounts the cost of the product is relatively small compared to the overall cost of a session, where the vast majority of the revenue will go to cover the operational costs of the service center and facilitator.

This newly legal industry is just getting started. The Oregon Health Authority has recently issued some of the first licenses in the state. Once the industry is up and running, OHA will gather data, including the number of sessions, product prices and the like. Unfortunately for now there is no data and our office's initial forecasts are based entirely on assumptions. Those assumptions are as follows.

OHA estimates they will license 28 service centers in the first year. Assuming 20 customers per day, the equivalent of one large class, all year long results in 204,000 individual customers or session over the course of the first year. Some service center centers will accommodate many more customers while others may focus on smaller, more in-depth sessions.

As uncertain as those projections are, the average product price assumption is even more so. Service centers may charge customers whatever price they want to for the actual product. There are two main ways to think through these possibilities, and for now our office is taking a middle ground approach.

On one hand, service centers may charge customers the traditional retail price that includes a markup over wholesale cost which largely relates to production, testing, and distribution costs. Whether the sales tax piece would be an additional charge on top of the session costs overall, or already factored that price is unknown. Tax revenues are estimated to be \$1-2 million per year under these scenarios.

On the other hand, service center may charge customers a minimal product cost of \$1 or \$10, even if that is below their wholesale or acquisition costs. The benefit to doing so would be to increase revenues and profits for service centers and facilitators as less of the overall session price would be sent to pay taxes. This is more likely to be the case if the sales tax is folded into the total session price initially and not an add-on fee when the customer pays. Tax revenues are estimated to be tens of thousands or hundreds of thousands of dollars a year under these scenarios.

For now, given the uncertainty of a newly legal industry our office is taking a middle ground approach and assuming a \$10 average product price per session. The state is likely to receive a bit more than \$600,000 in the upcoming 2023-25 biennium based on the assumptions discussed above. We know that business practices will vary and time will tell what ultimately becomes the industry standard. Our office will continue to

# Oregon Psilocybin Retail Sales Tax Revenue (millions)

Average	Biennial Revenue								
Product Price	2023-25	2025-27	2027-29	2029-31					
\$1	\$0.062	\$0.064	\$0.067	\$0.068					
\$10	\$0.618	\$0.643	\$0.666	\$0.679					
\$25	\$1.545	\$1.608	\$1.664	\$1.698					
\$50	\$3.091	\$3.215	\$3.329	\$3.396					

update these estimates as we learn more. Expectations are by this fall there will be useful data to help guide these estimates and they will not be made entirely upon assumptions.

### 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 now has 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 it took 40 years for Oregon to gain this seat and only five states gained one additional seat each and Texas gained two seats following the 2020 Census.

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 11th highest in the nation, excluding Washington D.C. Still, our growth rate for the decade lagged all our neighboring states, except California. During the prior decade between 2000 and 2010, Oregon's population growth rate ranked 18th 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 since then 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 the year 2023. However, current economic turmoil is likely to slow the pace of expected growth based on the historical trend. Oregon's population is expected to reach 4.505 million in the year 2030 with an annual rate of growth of 0.64 percent between 2022 and 2030. The projected population of 2030 is 140,900 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.

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 the COVID effect. Even during this pandemic, Oregon has gained people through net-migration as the workers 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 the 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 drop in the number of births coinciding with the COVID-19 pandemic, the natural increase turned 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. Without the gain due to migration, Oregon's population will start to decline.

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 a century past do impact the current agesex structure. Growth in many age groups will show the effects of the baby-boom and their echo generations during the forecast period of 2022-2030. It will also reflect demographics impacted by the depression era smaller 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 1.9 percent during the 2022-2030 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 2022-2030 as a sign of the end of the babyboom generation transitioning to elderly age group. This high growth transitioning into a net loss of this youngest elderly population resulting in 0.1 percent annual average growth rate in the next eight 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 from this age group. 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 2022-2030 is expected to be unusually high 4.6 percent. After a period of slow growth, the oldest elderly (aged 85+) will resume growth at a strong rate 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 2.9 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 population 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, now the elderly outnumber the children.

The oldest working age population aged 45-64 also has seen the dramatic demographic impact as the babyboom 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 about 0.5 percent annualized rate of change. The younger working-age population of 25-44 age group has recovered from several years of declining and slow growing trend. The decline in the past 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 0.7 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 due to the combination of negative and slow growth years. 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 decline in the school enrollments. On average for the forecast period, this school-age population will decline by -0.9 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 in the 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. However, due to the delay in releasing the population by single year of age and sex, we still basing the age-sex distribution on 2010 Census data. 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 2022 and 2030 net migration is expected to be in the range of 20,960 to 40,340, averaging 33,100 persons annually with net migration rate ranging between 4.9 to 9.0 per thousand population.

### APPENDIX A: ECONOMIC FORECAST DETAIL

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Table A.1 – Employment Forecast Tracking

## Total Nonfarm Employment, 1st quarter 2023 (Employment in thousands, Annualized Percent Change)

(Employment in thousands, Annualized Percent Change)	Due limi		Famo	4	Forecas	Y/Y	
	Prelimi Estim	•	Fore	cast	Forecas	St Error	Change
	level	ate % ch	level	% ch	level	%	% ch
	icvei	70 CH	10 701	/0 CH	ic vei	70	/0 CH
Total Nonfarm	1,982.6	2.9	1,987.1	2.3	(4.5)	(0.2)	3.0
Total Private	1,680.8	2.6	1,687.6	2.5	(6.8)	(0.4)	2.8
Mining and Logging	6.3	2.0	6.3	1.6	0.0	0.3	(1.1)
Construction	120.5	11.0	118.9	2.7	1.6	1.3	5.4
Manufacturing	194.5	(2.2)	197.2	1.9	(2.6)	(1.3)	2.1
<b>Durable Goods</b>	136.6	(0.5)	136.3	1.3	0.4	0.3	2.9
Wood Product	23.2	(5.4)	23.7	1.7	(0.4)	(1.9)	0.7
Metals and Machinery	38.6	0.4	39.2	3.4	(0.6)	(1.5)	3.0
Computer and Electronic Product	41.1	(5.7)	40.1	(2.1)	1.0	2.5	3.2
Transportation Equipment	10.9	(3.0)	11.1	7.3	(0.1)	(1.3)	2.5
Other Durable Goods	22.8	15.2	22.3	0.9	0.5	2.4	4.8
Nondurable Goods	57.9	(5.9)	60.9	3.1	(3.0)	(4.9)	0.2
Food	28.9	(5.9)	29.4	4.1	(0.5)	(1.6)	0.6
Other Nondurable Goods	29.0	(5.8)	31.5	2.3	(2.5)	(8.0)	(0.1)
Trade, Transportation & Utilities	368.0	0.6	363.6	(0.0)	4.3	1.2	0.5
Retail Trade	210.3	(0.1)	208.2	(0.7)	2.1	1.0	(0.3)
Wholesale Trade	78.6	0.3	78.1	1.3	0.5	0.6	3.2
Transportation, Warehousing & Utilities	79.1	2.8	77.3	0.6	1.7	2.2	0.1
Information	36.9	(0.5)	36.3	10.7	0.6	1.8	1.1
Financial Activities	106.8	1.3	107.7	1.1	(1.0)	(0.9)	1.5
<b>Professional &amp; Business Services</b>	269.4	2.8	267.0	1.9	2.4	0.9	3.6
<b>Educational &amp; Health Services</b>	309.6	5.1	318.1	5.0	(8.5)	(2.7)	2.9
<b>Educational Services</b>	35.0	6.9	35.5	(13.8)	(0.5)	(1.3)	3.1
Health Services	274.6	4.9	282.6	7.7	(8.0)	(2.8)	2.9
Leisure and Hospitality	205.1	2.0	210.5	5.7	(5.4)	(2.6)	5.3
Other Services	63.7	6.3	61.9	(2.8)	1.7	2.8	4.3
Government	301.8	4.9	299.5	1.2	2.3	0.8	4.2
Federal	28.2	3.8	28.1	3.4	0.1	0.3	0.1
State	43.4	2.9	43.7	6.9	(0.3)	(0.7)	2.0
State Education	1.3	30.9	1.2	(6.0)	0.1	12.4	18.2
Local	230.3	5.4	227.7	(0.1)	2.5	1.1	5.1
Local Education	131.8	4.3	129.5	(0.5)	2.3	1.8	4.8

Table A.2 – Short-Term Oregon Economic Summary

Oregon Forecast Summary	y	Ou	arterly					Ann	แลไ		
_	2023:1	2023:2	2023:3	2023:4	2024:1	2022	2023	2024	2025	2026	2027
			Personal I	ncome (\$ b	illions)						
Nominal Personal Income	277.4	281.2	284.9	288.7	293.4	266.1	283.0	298.9	314.3	330.5	347.6
% change	8.8	5.6	5.4	5.5	6.6	1.8	6.3	5.6	5.2	5.1	5.2
Real Personal Income (base year=2012)	219.9	221.2	222.1	223.6	225.8	216.6	221.7	228.0	234.8	242.2	249.7
% change	4.6	2.4	1.7	2.7	4.1	(4.2)	2.3	2.8	3.0	3.2	3.1
Nominal Wages and Salaries	142.3	144.1	146.1	148.3	150.2	136.1	145.2	153.0	160.5	168.3	176.4
% change	8.3	5.2	5.6	6.1	5.3	7.7	6.7	5.4	4.9	4.8	4.8
			Othe	r Indicator	·s						
Per Capita Income (\$1,000)	64.7	65.5	66.3	67.1	68.1	62.2	65.9	69.3	72.4	75.6	79.0
% change	8.5	5.2	4.9	5.0	6.1	1.4	6.0	5.1	4.5	4.4	4.4
Average Wage rate (\$1,000)	71.0	71.8	72.7	73.5	74.3	69.2	72.3	75.5	78.7	81.9	85.2
% change	4.5	4.5	4.8	4.7	4.3	3.7	4.4	4.4	4.2	4.1	4.1
Population (Millions)	4.3	4.3	4.3	4.3	4.3	4.28	4.29	4.31	4.34	4.37	4.40
% change	0.3	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.6	0.7	0.7
Housing Starts (Thousands)	19.9	19.7	19.6	19.7	19.9	20.0	19.7	20.4	21.1	21.1	21.2
% change	19.4	(3.2)	(2.3)	2.5	4.7	(1.4)	(1.3)	3.5	3.2	(0.0)	0.5
Unemployment Rate	4.6	4.1	4.0	4.0	4.1	4.1	4.2	4.2	4.2	4.2	4.2
Point Change	(0.2)	(0.5)	(0.1)	0.0	0.1	(1.1)	0.0	(0.0)	0.0	0.0	0.0
T I.N 6	1 002 (	1 000 0		ent (Thous		1.040.6	1 001 4	20100	2.024.0	2 0 4 0 0	2.055.2
Total Nonfarm % change	1,982.6 2.9	1,989.0 1.3	1,993.8 1.0	2,000.4	2,005.4 1.0	1,949.6 3.9	1,991.4 2.1	2,010.9 1.0	2,024.9 0.7	2,040.0 0.7	2,055.2 0.7
Private Nonfarm	1,680.8	1,685.6	1,691.4	1,698.1	1,703.2	1,655.0	1,689.0	1,708.9	1,722.9	1,736.8	1,750.7
% change	2.6	1.1	1,071.4	1.6	1,703.2	4.1	2.1	1.7	0.8	0.8	0.8
Construction	120.5	120.3	120.2	120.1	120.2	115.9	120.3	120.7	122.0	122.5	122.8
% change	11.0	(0.6)	(0.4)	(0.2)	0.3	4.1	3.8	0.4	1.1	0.4	0.3
Manufacturing	194.5	194.5	195.4	195.9	196.0	193.8	195.1	195.8	195.0	194.6	194.1
% change	(2.2)	(0.0)	1.8	1.1	0.1	3.8	0.6	0.3	(0.4)	(0.2)	(0.3)
Durable Manufacturing	136.6	136.3	136.4	136.5	136.6	135.6	136.4	136.4	135.8	135.4	134.5
% change	(0.5)	(0.9)	0.2	0.2	0.4	5.0	0.6	(0.0)	(0.5)	(0.3)	(0.6)
Wood Product Manufacturing	23.2	23.3	23.3	23.3	23.3	23.4	23.3	23.4	23.7	23.9	23.8
% change	(5.4)	0.7	0.7	0.5	0.2	2.8	(0.4)	0.5	1.1	0.8	(0.4)
High Tech Manufacturing	41.1	40.5	40.6	40.5	40.5	41.1	40.7	40.4	40.2	40.0	39.9
% change	(5.7)	(5.2)	0.2	(0.8)	0.3	8.4	(1.2)	(0.6)	(0.6)	(0.5)	(0.2)
Transportation Equipment	10.9	11.2	11.1	11.2	11.3	10.9	11.1	11.4	11.8	11.9	11.7
% change	(3.0)	8.9	(0.6)	0.6	4.1	1.6	2.2	2.9	3.5	0.9	(2.0)
Nondurable Manufacturing	57.9	58.2	59.0	59.5	59.4	58.3	58.6	59.3	59.2	59.2	59.5
% change	(5.9)	2.1	5.6	3.2	(0.6)	1.2	0.6	1.2	(0.2)	(0.0)	0.5
Private nonmanufacturing	1,486.3	1,491.1	1,496.0	1,502.2	1,507.2	1,461.1	1,493.9	1,513.2	1,527.8	1,542.2	1,556.6
% change	3.2	1.3	1.3	1.7	1.4	4.1	2.2	1.3	1.0	0.9	0.9
Retail Trade	210.3	210.4	210.5	210.5	210.5	210.8	210.4	210.5	210.4	210.3	210.0
% change	(0.1)	0.2	0.1	0.0	0.0	0.8	(0.2)	0.0	(0.0)	(0.0)	(0.1)
Wholesale Trade	78.6	78.7	78.4	78.3	78.3	77.4	78.5	78.2	78.2	78.3	78.6
% change	0.3	0.7	(1.6)	(0.6)	0.2	3.2	1.4	(0.3)	(0.1)	0.1	0.4
Information	36.9	37.0	37.0	37.3	37.5	36.9	37.1	37.3	37.5	37.5	37.5
% change	(0.5)	0.3	0.6	3.5	1.5	5.1	0.5	0.6	0.6	(0.0)	0.0
Professional and Business Services	269.4	269.9	270.8	272.8	273.7	264.7	270.7	274.3	276.4	281.0	286.7
% change	2.8	0.8	1.3	2.9	1.4	5.2	2.3	1.3	0.8	1.7	2.0
Health Services	274.6	277.0	279.4	281.8	284.2	268.9	278.2	287.0	293.1	298.4	303.3
% change	4.9	3.5	3.5	3.5	3.4	0.7	3.5	3.2	2.1	1.8	1.6
Leisure and Hospitality	205.1	206.2	207.4	208.6	209.9	198.7	206.8	211.4	214.5	216.7	218.9
% change	2.0	2.2	2.2	2.3	2.5	13.6	4.1	2.2	1.5	1.0	1.0
Government	301.8	303.4	302.4	302.2	302.1	294.6	302.5	302.0	302.0	303.2	304.6
% change	4.9	2.1	(1.3)	(0.2)	(0.2)	3.1	2.7	(0.2)	0.0	0.4	0.5

Table A.3 – Oregon Economic Forecast Change

<b>Oregon Forecast Change</b>	Current		arterly					Ann	ual		
_	2023:1	2023:2	2023:3	2023:4	2024:1	2022	2023	2024	2025	2026	2027
			Personal I	ncome (\$ b	illions)						
Nominal Personal Income	277.4	281.2	284.9	288.7	293.4	266.1	283.0	298.9	314.3	330.5	347.6
% change	0.0	0.1	(0.0)	(0.1)	0.1	(0.2)	0.0	0.2	0.4	0.4	0.4
Real Personal Income (base year=2012)	219.9	221.2	222.1	223.6	225.8	216.6	221.7	228.0	234.8	242.2	249.7
% change	(0.4)	(0.4)	(0.7)	(0.8)	(0.8)	(0.2)	(0.6)	(0.9)	(0.9)	(0.8)	(0.9)
Nominal Wages and Salaries	142.3	144.1	146.1	148.3	150.2	136.1	145.2	153.0	160.5	168.3	176.4
% change	(0.1)	(0.4)	(0.4) Othe	(0.2) er Indicator	(0.1)	(0.4)	(0.3)	0.1	0.3	0.3	0.4
Per Capita Income (\$1,000)	64.7	65.5	66.3	67.1	68.1	62.2	65.9	69.3	72.4	75.6	79.0
% change	0.6	0.7	0.6	0.7	0.8	0.2	0.7	1.0	1.4	1.6	1.6
Average Wage rate (\$1,000)	71.0	71.8	72.7	73.5	74.3	69.2	72.3	75.5	78.7	81.9	85.2
% change	(0.1)	(0.2)	(0.2)	(0.2)	(0.2)	(0.0)	(0.2)	(0.1)	0.2	0.2	0.3
Population (Millions)	4.29	4.29	4.30	4.3	4.3	4.28	4.29	4.31	4.34	4.37	4.40
% change	(0.6)	(0.6)	(0.7)	(0.7)	(0.7)	(0.4)	(0.6)	(0.8)	(1.0)	(1.1)	(1.3)
Housing Starts (Thousands)	19.9	19.7	19.6	19.7	19.9	20.0	19.7	20.4	21.1	21.1	21.2
% change	9.8	7.4	6.3	6.1	5.6	0.0	7.4	4.2	(0.0)	(1.4)	(2.6)
Unemployment Rate	4.6	4.1	4.0	4.0	4.1	4.1	4.2	4.2	4.2	4.2	4.2
Point Change	0.5	0.1	0.0	(0.1)	(0.1)	0.2	0.1	(0.0)	0.0	0.0	0.0
Tomic change	0.0	0.1		ent (Thous	. ,	0.2	0.1	(0.0)	0.0	0.0	0.0
Total Nonfarm	1,982.6	1,989.0	1,993.8	2,000.4	2,005.4	1,949.6	1,991.4	2,010.9	2,024.9	2,040.0	2,055.2
% change	(0.2)	(0.3)	(0.2)	(0.1)	0.0	(0.2)	(0.2)	0.1	0.1	0.1	0.1
Private Nonfarm	1,680.8	1,685.6	1,691.4	1,698.1	1,703.2	1,655.0	1,689.0	1,708.9	1,722.9	1,736.8	1,750.7
% change	(0.4)	(0.6)	(0.4)	(0.2)	(0.1)	(0.3)	(0.4)	(0.0)	0.0	0.1	0.1
Construction	120.5	120.3	120.2	120.1	120.2	115.9	120.3	120.7	122.0	122.5	122.8
% change	1.3	0.5	0.7	0.9	1.1	(0.4)	0.9	1.3	1.0	0.4	0.3
Manufacturing	194.5	194.5	195.4	195.9	196.0	193.8	195.1	195.8	195.0	194.6	194.1
% change	(1.3)	(1.6)	(1.2)	(0.7)	(0.8)	(0.8)	(1.2)	(1.0)	(1.3)	(1.5)	(1.5)
Durable Manufacturing	136.6	136.3	136.4	136.5	136.6	135.6	136.4	136.4	135.8	135.4	134.5
% change	0.3	(0.2)	(0.1)	0.2	0.2	0.0	0.0	0.1	(0.3)	(0.6)	(0.8)
Wood Product Manufacturing	23.2	23.3	23.3	23.3	23.3	23.4	23.3	23.4	23.7	23.9	23.8
% change	(1.9)	(1.6)	(1.0)	(0.4)	(0.5)	(0.1)	(1.2)	(0.5)	0.0	(0.4)	(1.2)
High Tech Manufacturing	41.1	40.5	40.6	40.5	40.5	41.1	40.7	40.4	40.2	40.0	39.9
% change	2.5	1.2	1.3	1.3	1.3	1.3	1.6	1.0	0.1	(0.4)	(0.6)
Transportation Equipment	10.9	11.2	11.1	11.2	11.3	10.9	11.1	11.4	11.8	11.9	11.7
% change	(1.3)	(0.2)	(0.4)	(0.3)	0.1	0.2	(0.6)	0.1	(0.1)	(0.2)	(0.3)
Nondurable Manufacturing	57.9	58.2	59.0	59.5	59.4	58.3	58.6	59.3	59.2	59.2	59.5
% change	(4.9)	(4.8)	(3.5)	(2.8)	(3.0)	(2.6)	(4.0)	(3.3)	(3.6)	(3.5)	(3.2)
Private nonmanufacturing	1,486.3	1,491.1	1,496.0	1,502.2	1,507.2	1,461.1	1,493.9	1,513.2	1,527.8	1,542.2	1,556.6
% change	(0.3)	(0.4)	(0.3)	(0.2)	0.0	(0.3)	(0.3)	0.1	0.2	0.2	0.3
Retail Trade	210.3	210.4	210.5	210.5	210.5	210.8	210.4	210.5	210.4	210.3	210.0
% change	1.0	0.7	0.5	0.3	0.3	0.6	0.6	0.3	0.3	0.3	0.3
Wholesale Trade	78.6	78.7	78.4	78.3	78.3	77.4	78.5	78.2	78.2	78.3	78.6
% change	0.6	0.7	0.5	0.5	0.6	0.6	0.6	0.5	0.3	0.4	0.5
Information	36.9	37.0	37.0	37.3	37.5	36.9	37.1	37.3	37.5	37.5	37.5
% change	1.8	2.1	2.7	3.1	3.2	3.4	2.4	2.5	2.7	1.6	0.6
Professional and Business Services	269.4	269.9	270.8	272.8	273.7	264.7	270.7	274.3	276.4	281.0	286.7
% change	0.9	0.8	0.7	1.1	1.1	0.8	0.9	0.8	0.3	0.5	0.5
Health Services	274.6	277.0	279.4	281.8	284.2	268.9	278.2	287.0	293.1	298.4	303.3
% change	(2.8)	(2.9)	(2.5)	(2.0)	(1.5)	(1.6)	(2.5)	(1.0)	(0.2)	0.3	0.5
Leisure and Hospitality	205.1	206.2	207.4	208.6	209.9	198.7	206.8	211.4	214.5	216.7	218.9
% change	(2.6)	(2.6)	(2.6)	(2.5)	(2.2)	(1.4)	(2.6)	(1.8)	(1.3)	(1.2)	(1.0)
Government	301.8	303.4	302.4	302.2	302.1	294.6	302.5	302.0	302.0	303.2	304.6
% change	0.8	1.2	0.8	0.8	0.7	0.4	0.9	0.7	0.5	0.1	0.0

Table A.4 – Annual Economic Forecast

May 2023 - Personal Income (Billions of Current Dollars)

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	203
Total Personal												
Oregon	222.3	241.8	261.5	266.1	283.0	298.9	314.3	330.5	347.6	365.9	385.2	405.2
% Ch	5.1	8.8	8.2	1.8	6.3	5.6	5.2	5.1	5.2	5.3	5.3	5.2
U.S. % Ch	18,587.0	19,832.3	21,294.8	21,809.0	22,953.7	24,030.9	25,134.3	26,290.8	27,512.3	28,765.6	30,022.6	31,320.3
70 CII	5.1	6.7	7.4	2.4	5.2	4.7	4.6	4.6	4.6	4.6	4.4	4.3
Wage and Sala	-											
Oregon	112.9	115.8	126.3	136.1	145.2	153.0	160.5	168.3	176.4	184.9	193.6	202.7
% Ch	5.3	2.5	9.1	7.7	6.7	5.4	4.9	4.8	4.8	4.8	4.7	4.7
U.S.	9,324.6	9,457.4	10,290.1	11,223.5	11,945.6	12,471.7	13,017.0	13,600.1	14,214.7	14,834.4	15,444.2	16,075.2
% Ch	4.8	1.4	8.8	9.1	6.4	4.4	4.4	4.5	4.5	4.4	4.1	4.1
Other Labor In	come											
Oregon	27.6	28.6	30.5	32.1	34.4	36.4	38.4	40.3	42.3	44.3	46.5	48.7
% Ch	5.3	3.5	6.6	5.2	7.2	5.9	5.3	5.1	5.0	4.9	4.8	4.8
U.S.	1,472.9	1,476.2	1,550.3	1,612.5	1,681.9	1,756.0	1,832.9	1,915.0	2,001.5	2,088.7	2,174.6	2,263.4
% Ch	2.8	0.2	5.0	4.0	4.3	4.4	4.4	4.5	4.5	4.4	4.1	4.1
Nonfarm Propr	ietor's Income											
Oregon	18.9	20.7	21.8	22.9	24.2	25.5	26.8	28.3	29.9	31.8	33.9	35.8
% Ch	1.4	9.8	5.3	4.9	6.0	5.3	5.1	5.6	5.6	6.3	6.5	5.9
U.S.	1,572.3	1,597.9	1,702.2	1,756.6	1,778.2	1,813.3	1,863.3	1,942.0	2,021.7	2,117.4	2,224.6	2,344.4
% Ch	2.1	1.6	6.5	3.2	1.2	2.0	2.8	4.2	4.1	4.7	5.1	5.4
Dividend, Inter	est and Rent											
Oregon	44.9	45.4	46.8	49.4	53.0	56.2	59.0	61.7	64.5	67.6	71.0	74.5
% Ch	5.2	1.2	3.1	5.6	7.3	6.1	4.9	4.5	4.6	4.8	5.0	5.0
U.S.	3,817.2	3,815.3	3,926.2	4,125.8	4,395.2	4,642.6	4,874.2	5,086.9	5,308.6	5,526.5	5,742.5	5,965.0
% Ch	7.8	(0.1)	2.9	5.1	6.5	5.6	5.0	4.4	4.4	4.1	3.9	3.9
Transfer Payme	ents											
Oregon	42.7	56.8	63.4	54.8	57.5	60.9	64.4	68.4	72.7	77.4	82.3	87.4
% Ch	6.0	33.1	11.6	(13.5)	4.8	6.0	5.8	6.2	6.2	6.4	6.4	6.1
U.S.	3,089.7	4,187.1	4,546.4	3,839.6	3,956.3	4,184.0	4,417.2	4,661.0	4,919.0	5,198.3	5,481.8	5,763.7
% Ch	5.6	35.5	8.6	(15.5)	3.0	5.8	5.6	5.5	5.5	5.7	5.5	5.1
Contributions 1	for Social Security											
Oregon	19.6	20.1	21.5	23.1	25.0	26.4	27.7	29.1	30.5	31.9	33.5	35.1
% Ch	5.3	2.7	6.8	7.8	8.1	5.7	4.9	4.8	4.8	4.9	4.8	4.8
U.S.	773.9	790.9	842.7	911.8	968.8	1,005.8	1,047.8	1,093.6	1,133.1	1,182.8	1,233.1	1,284.9
% Ch	5.0	2.2	6.6	8.2	6.2	3.8	4.2	4.4	3.6	4.4	4.3	4.2
Residence Adj	ustment											
Oregon	(5.5)	(5.7)	(6.0)	(6.4)	(6.8)	(7.2)	(7.6)	(7.9)	(8.3)	(8.6)	(9.0)	(9.4
% Ch	6.8	4.4	4.7	6.8	7.0	5.4	4.8	4.5	4.5	4.5	4.4	4.4
Farm Proprieto:	r's Income											
Oregon	0.3	0.3	0.2	0.4	0.6	0.5	0.5	0.5	0.4	0.5	0.5	0.5
% Ch	26.9	(15.0)	(36.1)	125.5	44.3	(18.5)	(4.3)	(2.7)	(0.7)	1.2	1.9	1.6
Per Canita Inc.	ome (Thousands o	of S)										
Oregon	52.7	57.0	61.3	62.2	65.9	69.3	72.4	75.6	79.0	82.5	86.2	89.9
% Ch	4.1	8.0	7.7	1.4	6.0	5.1	4.5	4.4	4.4	4.5	4.5	4.3
U.S.	56.3	59.8	64.1	65.4	68.5	71.4	74.3	77.3	80.4	83.7	86.9	90.2
% Ch	4.5	6.3	7.2	2.0	4.8	4.2	4.1	4.1	4.1	4.0	3.8	3.8

May 2023 - Emp (Oregon - Thous												
`	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total Nonfarm												
Oregon	1,954.3	1,830.8	1,875.9	1,949.6	1,991.4	2,010.9	2,024.9	2,040.0	2,055.2	2,070.7	2,084.0	2,098.0
% Ch	1.6	(6.3)	2.5	3.9	2.1	1.0	0.7	0.7	0.7	0.8	0.6	0.7
U.S.	150.9	142.2	146.3	152.6	155.6	155.6	155.8	156.5	157.2	157.9	158.5	159.1
% Ch	1.3	(5.8)	2.9	4.3	2.0	(0.0)	0.1	0.4	0.5	0.5	0.4	0.4
Private Nonfarm Oregon	1,655.9	1,546.2	1,590.2	1,655.0	1,689.0	1,708.9	1,722.9	1,736.8	1,750.7	1,765.0	1,777.4	1,789.7
% Ch	1.7	(6.6)	2.8	4.1	2.1	1.7	0.8	0.8	0.8	0.8	0.7	0.7
U.S.	128.3	120.2	124.3	130.4	133.0	132.8	132.8	133.3	133.9	134.5	134.9	135.4
% Ch	1.5	(6.3)	3.4	4.9	2.0	(0.2)	0.0	0.4	0.4	0.4	0.3	0.3
Mining and Logg	ing											
Oregon	6.9	6.6	6.6	6.4	6.3	6.4	6.5	6.6	6.7	6.7	6.7	6.7
% Ch	(4.4)	(4.8)	(0.1)	(3.2)	(0.6)	0.6	1.8	1.5	1.5	0.8	0.1	0.3
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	(0.0)	(17.5)	(6.5)	8.0	5.9	4.9	2.2	2.3	2.2	0.9	(0.2)	(1.4)
Construction Oregon	109.6	108.4	111.2	115.9	120.3	120.7	122.0	122.5	122.8	122.8	122.6	122.6
% Ch	3.9	(1.1)	2.6	4.1	3.8	0.4	1.1	0.4	0.3	0.0	(0.2)	0.0
U.S.	7.5	7.3	7.4	7.7	7.8	7.8	7.7	7.8	7.9	7.9	8.0	8.1
% Ch	2.8	(3.2)	2.5	4.2	1.3	(1.0)	(0.2)	0.8	0.6	0.9	0.9	0.9
Manufacturing												
Oregon	198.1	185.5	186.7	193.8	195.1	195.8	195.0	194.6	194.1	193.8	194.0	193.9
% Ch	1.5	(6.4)	0.6	3.8	0.6	0.3	(0.4)	(0.2)	(0.3)	(0.1)	0.1	(0.0)
U.S.	12.8	12.2	12.4	12.8	12.9	12.4	12.1	12.0	11.9	11.8	11.8	11.7
% Ch	1.0	(5.1)	1.6	3.8	0.7	(3.6)	(2.5)	(1.1)	(0.5)	(0.8)	(0.7)	(0.4)
Durable Man	_	120.4	120.1	125 (	126.4	126.4	125.0	125.4	1245	122.0	122.6	122.2
Oregon % Ch	137.1 1.1	128.4 (6.3)	129.1 0.5	135.6 5.0	136.4 0.6	136.4 (0.0)	135.8 (0.5)	135.4 (0.3)	134.5	133.8 (0.5)	133.6 (0.2)	133.2 (0.3)
U.S.	8.0	7.6	7.7	8.0	8.0	7.7	7.5	7.4	(0.6) 7.3	7.3	7.2	7.2
% Ch	1.2	(5.8)	1.4	3.8	0.9	(4.2)	(3.0)	(1.2)	(0.6)	(1.1)	(0.9)	(0.6)
Wood Prod		(0.0)				( )	(0.0)	()	(***)	()	(***)	(***)
Oregon	23.2	22.0	22.7	23.4	23.3	23.4	23.7	23.9	23.8	23.7	23.6	23.5
% Ch	(1.4)	(5.3)	3.5	2.8	(0.4)	0.5	1.1	0.8	(0.4)	(0.5)	(0.4)	(0.3)
U.S.	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4
% Ch	0.7	(3.1)	3.5	4.6	(7.2)	(14.2)	5.1	9.1	5.9	2.0	1.0	1.0
Metal and		26.6	26.2	20.1	20.5	20.4	20.0	27.5	27.0	26.0	26.0	26.0
Oregon % Ch	40.2 2.2	36.6 (8.9)	36.3 (0.8)	38.1 5.0	38.5 1.1	38.4 (0.4)	38.0 (1.1)	37.5 (1.3)	37.0 (1.3)	36.9 (0.5)	36.9 0.1	36.8 (0.2)
U.S.	3.0	2.8	2.8	2.9	2.9	2.8	2.7	2.7	2.7	2.6	2.6	2.6
% Ch	1.1	(6.8)	(0.2)	4.0	0.8	(4.8)	(3.4)	(0.6)	(0.3)	(1.3)	(0.8)	(0.4)
	and Electroni		( )			( -)	(- )	()	()	( - )	()	( )
Oregon	38.6	38.0	37.9	41.1	40.7	40.4	40.2	40.0	39.9	39.9	39.8	39.8
% Ch	1.8	(1.7)	(0.1)	8.4	(1.2)	(0.6)	(0.6)	(0.5)	(0.2)	(0.1)	(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	1.0
% Ch	2.0	(1.2)	(0.3)	2.7	1.2	(0.3)	(0.1)	(0.5)	(0.9)	(1.3)	(1.3)	(1.0)
-	ation Equipme		10.7	10.0	11.1	11.4	11.0	11.0	11.7	11.4	11.2	11.1
Oregon % Ch	12.6 3.8	11.0 (13.0)	10.7 (2.4)	10.9 1.6	11.1 2.2	11.4 2.9	11.8 3.5	11.9 0.9	11.7 (2.0)	11.4 (2.3)	11.3 (1.3)	11.1 (1.5)
U.S.	1.7	1.6	1.6	1.7	1.8	1.7	1.7	1.6	1.5	1.5	1.5	1.4
% Ch	1.6	(8.0)	3.4	4.9	3.1	(2.6)	(4.4)	(4.5)	(2.4)	(1.8)	(2.4)	(2.0)
Other Dura	ables	. ,				. ,	` '	,	` /	. ,	. ,	, ,
Oregon	22.4	20.9	21.4	22.0	22.8	22.8	22.1	22.1	22.1	22.0	22.0	22.0
% Ch	(0.7)	(6.7)	2.2	3.0	3.6	(0.4)	(2.8)	(0.2)	0.2	(0.5)	(0.2)	(0.2)
U.S.	2.2	2.1	2.2	2.3	2.2	2.1	2.0	2.0	2.1	2.1	2.1	2.1
% Ch	0.6	(4.9)	2.9	3.5	(0.9)	(6.6)	(2.7)	0.3	0.7	(0.1)	0.1	0.5
Nondurable N			57.6	50.2	50.6	50.2	50.2	50.0	50.5	(0.0	60.4	<b>60.7</b>
Oregon % Ch	61.1 2.4	57.1 (6.5)	57.6 0.9	58.3 1.2	58.6 0.6	59.3 1.2	59.2 (0.2)	59.2 (0.0)	59.5 0.5	60.0 0.8	60.4 0.8	60.7 0.5
U.S.	4.8	4.6	4.7	4.9	4.9	4.7	4.7	4.6	4.6	4.6	4.6	4.5
% Ch	0.8	(3.9)	1.8	3.8	0.3	(2.7)	(1.7)	(0.9)	(0.4)	(0.4)	(0.3)	(0.2)
Food Manı		(3.7)	1.0	5.0	0.5	(2.7)	(1.7)	(0.7)	(0.1)	(0.1)	(0.5)	(0.2)
Oregon	29.9	28.0	28.5	29.0	29.4	30.0	30.0	30.1	30.2	30.4	30.7	30.9
% Ch	0.1	(6.2)	1.7	1.8	1.4	1.9	(0.0)	0.2	0.4	0.6	0.9	0.7
U.S.	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8
% Ch	1.5	(1.8)	1.4	3.6	1.9	(1.2)	(0.4)	0.4	1.0	0.9	0.9	1.1
Other Non		20.1	20.1	20.2	20.2	20.2	20.2	20.1	20.2	20. (	200	200
Oregon	31.2	29.1	29.1	29.2	29.2	29.3	29.2	29.1	29.3	29.6	29.8	29.9
% Ch U.S.	4.7 3.1	(6.8) 3.0	0.1 3.0	0.5 3.2	(0.1)	0.4 3.0	(0.3)	(0.3) 2.9	0.5 2.9	1.1 2.8	0.7 2.8	0.2 2.8
0.S. % Ch	0.4	(5.0)	1.9	3.2	(0.5)	(3.6)	(2.4)	(1.7)	(1.3)	(1.2)	(1.1)	(1.1)
Trade, Transports		. ,	1.7	3.7	(0.5)	(3.0)	(2.7)	(1.7)	(1.3)	(1.2)	(1.1)	(1.1)
Oregon	357.2	349.6	361.5	367.5	368.1	367.9	368.2	368.7	369.1	369.5	369.5	369.6
% Ch	1.3	(2.1)	3.4	1.7	0.2	(0.0)	0.1	0.1	0.1	0.1	0.0	0.0
U.S.	27.7	26.6	27.7	28.7	28.8	28.3	27.9	27.8	27.7	27.5	27.3	27.1
% Ch	0.4	(3.7)	3.9	3.6	0.4	(1.6)	(1.6)	(0.3)	(0.3)	(0.7)	(0.8)	(0.6)

May 2023 - Emp (Oregon - Thous:												
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Retail Trade												
Oregon	210.1	200.9	209.2	210.8	210.4	210.5	210.4	210.3	210.0	209.8	209.6	209.5
% Ch	(0.7)	(4.4)	4.1	0.8	(0.2)	0.0	(0.0)	(0.0)	(0.1)	(0.1)	(0.1)	(0.0)
U.S.	15.6	14.8	15.3	15.5	15.5	14.9	14.4	14.2	14.1	14.0	13.9	13.9
% Ch	(1.1)	(4.7)	3.0	1.5	0.0	(3.9)	(3.6)	(1.1)	(0.6)	(0.7)	(0.7)	(0.1)
Wholesale Tr												
Oregon	76.6	74.3	75.0	77.4	78.5	78.2	78.2	78.3	78.6	78.9	79.2	79.5
% Ch	1.2	(3.0)	1.0	3.2	1.4	(0.3)	(0.1)	0.1	0.4	0.5	0.4	0.4
U.S.	5.9	5.6	5.7	6.0	6.0	6.1	6.2	6.2	6.2	6.2	6.1	6.0
% Ch	0.8	(4.3)	1.4	4.5	1.4	1.6	0.7	0.5	0.2	(0.8)	(1.1)	(1.3)
Transportatio		٠.										
Oregon	70.6	74.5	77.3	79.3	79.2	79.3	79.6	80.1	80.5	80.7	80.7	80.6
% Ch	7.5	5.5	3.8	2.5	(0.1)	0.1	0.4	0.6	0.5	0.3	0.0	(0.2)
U.S.	6.2	6.2	6.7	7.2	7.2	7.3	7.3	7.4	7.4	7.3	7.3	7.2
% Ch	3.9	(0.6)	8.3	7.8	0.4	0.7	0.6	0.7	(0.1)	(0.5)	(0.8)	(1.0)
Information		22.2	25.	260	25.	25.2	25.5	25.5	25.5	25.5	25.0	20.0
Oregon	35.1	33.3	35.1	36.9	37.1	37.3	37.5	37.5	37.5	37.7	37.9	38.0
% Ch	2.2	(5.1)	5.4	5.1	0.5	0.6	0.6	(0.0)	0.0	0.6	0.5	0.1
U.S.	2.9	2.7	2.9	3.1	3.1	3.1	3.2	3.2	3.1	3.1	3.1	3.1
% Ch	0.9	(5.0)	5.0	7.6	1.0	0.9	2.4	(1.1)	(1.5)	(0.3)	0.1	(0.3)
Financial Activiti		100 -	1042	1050	107 1	107.5	100 1	100 =	100.0	100 5	107.0	107.0
Oregon	103.5	102.5	104.2	105.8	107.1	107.5	108.1	108.7	109.0	108.6	107.9	107.0
% Ch	1.3	(1.0)	1.6	1.6	1.2	0.4	0.5	0.6	0.2	(0.3)	(0.6)	(0.8)
U.S.	8.8	8.7	8.8	9.0	9.1	9.1	9.2	9.3	9.5	9.4	9.4	9.3
% Ch	1.9	(0.6)	1.2	2.7	0.5	0.4	1.3	1.1	1.2	(0.1)	(0.5)	(1.0)
Professional and			251.5	264.5	270 7	27.4.2	2761	201.0	206 =	202.5	200.0	207.5
Oregon	254.7	243.6	251.6	264.7	270.7	274.3	276.4	281.0	286.7	293.6	300.0	306.6
% Ch	2.0	(4.3)	3.3	5.2	2.3	1.3	0.8	1.7	2.0	2.4	2.2	2.2
U.S.	21.3	20.4	21.4	22.6	23.0	23.0	23.2	23.4	23.6	24.2	24.7	25.1
% Ch	1.6	(4.5)	5.0	5.6	1.7	0.2	0.8	0.9	1.1	2.2	2.1	1.9
Education and He			200.1	202 (	212.5	222.0	2200	2244	220.0	242.5	2450	2.40.4
Oregon	312.1	296.7	299.1	303.6	313.7	322.9	328.9	334.1	338.9	342.5	345.8	349.4
% Ch	2.1	(4.9)	0.8	1.5	3.3	2.9	1.9	1.6	1.4	1.1	1.0	1.0
U.S.	24.2	23.3	23.6	24.4	25.2	25.9	26.1	26.2	26.4	26.6	26.7	26.9
% Ch	2.2	(3.7)	1.6	3.0	3.6	2.5	0.7	0.6	0.7	0.7	0.5	0.6
Educational S		21.5	22.1	246	25.4	25.0	25.0	25.5	25.6	25.5	25.4	25.2
Oregon	36.6	31.5	32.1	34.6	35.4	35.9	35.8	35.7	35.6	35.5	35.4	35.3
% Ch	0.3	(13.9)	1.7	8.1	2.3	1.2	(0.1)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)
U.S.	3.7	3.5	3.6	3.8	3.9	4.0	4.0	4.0	4.0	4.0	4.0	4.0
% Ch	0.7	(7.1)	3.1	5.9	3.2	1.8	(0.8)	0.1	0.8	0.9	0.3	(0.1)
Health Care			265.	2400	2502	205.0	202.	200.4	202.2	205.0	2101	2111
Oregon	275.5	265.2	267.1	268.9	278.2	287.0	293.1	298.4	303.3	307.0	310.4	314.1
% Ch	2.3	(3.7)	0.7	0.7	3.5	3.2	2.1	1.8	1.6	1.2	1.1	1.2
U.S.	20.4	19.8	20.1	20.6	21.3	21.9	22.1	22.2	22.4	22.6	22.7	22.9
% Ch	2.5	(3.1)	1.4	2.4	3.7	2.7	1.0	0.7	0.7	0.7	0.6	0.7
Leisure and Hosp				100 =	2010		2115	2165	2100	222.0	224 =	225.2
Oregon	213.9	162.1	175.0	198.7	206.8	211.4	214.5	216.7	218.9	222.0	224.7	227.3
% Ch	1.2	(24.2)	7.9	13.6	4.1	2.2	1.5	1.0	1.0	1.4	1.2	1.1
U.S. % Ch	16.6 1.8	13.1	14.1	15.9	16.7	16.5	16.7	16.8	16.9	16.9	16.9	16.9
	1.8	(20.8)	7.7	12.0	5.3	(0.9)	1.0	0.7	0.3	(0.0)	0.2	0.1
Other Services	(10	57.0	50.3	61.0	62.0	640	657	66.4	67.0	67.6	60.1	60.6
Oregon	64.8	57.8	59.2	61.8	63.9	64.8	65.7	66.4	67.0	67.6	68.1	68.6
% Ch U.S.	0.6 5.9	(10.8) 5.3	2.5	4.3 5.7	3.3 5.8	1.4 5.9	1.4	1.0	1.0	0.9	0.7	0.7
0.S. % Ch	1.0		5.5 2.4	3.7 4.6	1.7		6.0 1.1	6.1 1.5	6.2 1.5	6.2 1.5	6.3 1.1	6.4 0.7
	1.0	(9.6)	2.4	4.0	1.7	1.8	1.1	1.3	1.3	1.3	1.1	0.7
Government	200.2	204.7	205.7	2046	202.5	202.0	202.0	202.2	304.6	205.7	206.7	200.2
Oregon	298.3	284.7	285.7	294.6	302.5	302.0	302.0	303.2		305.7	306.7	308.3
% Ch	1.2	(4.6)	0.4	3.1	2.7	(0.2)	0.0	0.4	0.5	0.4	0.3	0.5
U.S.	22.6	22.0	22.0	22.2	22.6	22.8	23.0	23.2	23.3	23.4	23.6	23.7
% Ch	0.7	(2.8)	(0.1)	0.9	1.8	1.0	0.8	0.7	0.7	0.6	0.5	0.8
Federal Governm		20.2	20.5	27.0	20.2	20.2	20.1	27.0	20.0	20.0	20.0	20.7
Oregon	28.5	29.2	28.5	27.9	28.3	28.2	28.1	27.9	28.0	28.0	28.0	28.6
% Ch	1.4	2.5	(2.3)	(2.3)	1.5	(0.3)	(0.5)	(0.4)	0.1	(0.0)	(0.1)	2.4
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)	0.7	0.0	0.0	0.0	0.5	0.3	0.2	2.3
State Governmen		41.4	40.6	42.0	44.2	44.6	44.0	45.0	45.0	46.5	47.0	47.4
State Total	40.9	41.4	42.6	42.9	44.2	44.6	44.8	45.2	45.8	46.5	47.0	47.4
% Ch	3.6	1.1	2.8	0.8	3.0	0.9	0.4	1.1	1.3	1.4	1.0	0.9
State Education	0.9	0.9	1.0	1.2	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.1
% Ch	7.2	4.1	11.4	17.8	10.8	(2.6)	(2.7)	(3.2)	(2.5)	(2.2)	(1.7)	(1.8)
Local Governmen			2111	222.5	222 -	222 -	222 -	220 -	222 =	221 -	221 =	222 -
Local Total	228.9	214.1	214.6	223.8	230.0	229.2	229.2	230.0	230.8	231.2	231.7	232.3
% Ch	0.8	(6.5)	0.2	4.3	2.7	(0.4)	0.0	0.3	0.3	0.2	0.2	0.2
Local Education	133.0	121.9	122.2	128.6	131.2	129.6	128.9	128.6	127.9	127.0	126.4	126.0
% Ch	0.3	(8.3)	0.2	5.2	2.0	(1.2)	(0.5)	(0.3)	(0.5)	(0.7)	(0.4)	(0.3)

May 2023 - Other Economic In	dicators											
	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	20,014.1	20,303.6	20,599.1	20,991.7	21,405.5	21,792.2	22,176.2	22,546.1	22,926.8
% Ch	2.3	(2.8)	5.9	2.1	1.4	1.5	1.9	2.0	1.8	1.8	1.7	1.7
				Duine	nd Waga Im	dia ata wa						
GDP Implicit Price Deflator,				Price a	nd Wage In	dicators						
Chain Weight U.S., 2012=100	112.3	113.8	118.9	127.2	132.3	135.9	138.9	142.0	145.2	148.6	152.0	155.5
% Ch	1.8	1.3	4.5	7.0	4.0	2.8	2.2	2.2	2.3	2.3	2.3	2.3
Personal Consumption Deflator,												
Chain Weight U.S., 2012=100	109.9	111.1	115.6	122.9	127.7	131.1	133.8	136.4	139.2	142.0	144.9	147.8
% Ch	1.5	1.1	4.0	6.3	3.9	2.7	2.1	1.9	2.0	2.0	2.0	2.0
CPI, Urban Consumers,												
1982-84=100												
West Region	270.3	275.1	287.5	310.5	324.6	335.5	344.2	352.3	360.8	369.6	378.5	387.7
% Ch	2.7	1.7	4.5	8.0	4.5	3.3	2.6	2.3	2.4	2.5	2.4	2.4
U.S.	255.7	258.9	271.0	292.6	305.7	314.0	321.0	327.8	335.2	342.7	350.1	357.8
% Ch	1.8	1.3	4.7	8.0	4.5	2.7	2.2	2.1	2.3	2.2	2.2	2.2
/0 CII	1.0	1.5	4.7	6.0	4.5	2.1	2.2	2.1	2.3	2.2	2.2	2.2
Oregon Average Wage		<b>62.0</b>		<0.2	<b>52.2</b>		<b>50.5</b>	21.2	05.2	00.7	02.2	07.0
Rate (Thous \$)	57.4	62.9	66.8	69.2	72.3	75.5	78.7	81.9	85.2	88.7	92.3	96.0
% Ch	3.9	9.5	6.1	3.7	4.4	4.4	4.2	4.1	4.1	4.1	4.0	4.0
U.S. Average Wage												
Wage Rate (Thous \$)	61.8	66.5	70.3	73.5	76.8	80.2	83.6	86.9	90.4	94.0	97.4	101.0
% Ch	3.4	7.7	5.7	4.5	4.4	4.4	4.2	4.0	4.0	3.9	3.7	3.7
				**								
FHFA Oregon Housing Price Inde	×			Но	using Indica	itors						
1991 Q1=100	435.2	471.0	557.3	616.3	598.1	603.4	629.4	662.2	694.2	726.9	759.5	793.6
% Ch	4.8	8.2	18.3	10.6	(3.0)	0.9	4.3	5.2	4.8	4.7	4.5	4.5
FHFA National Housing Price Ind	ex											
1991 Q1=100	268.9	290.1	338.7	386.6	384.0	378.0	377.5	380.8	386.4	394.5	404.8	417.0
% Ch	5.1	7.9	16.8	14.1	(0.7)	(1.6)	(0.1)	0.9	1.5	2.1	2.6	3.0
Housing Starts												
_	20.7	18.1	20.2	20.0	19.7	20.4	21.1	21.1	21.2	21.4	21.4	21.5
Oregon (Thous) % Ch	5.7		12.0			3.5	3.2			1.2	0.0	0.2
U.S. (Millions)	1.3	(12.8) 1.4	1.6	(1.4) 1.6	(1.3) 1.3	1.3	1.4	(0.0) 1.4	0.5 1.4	1.4	1.4	1.4
% Ch	3.5	8.1	1.6	(3.2)	(16.7)	2.0	6.8	(0.7)	(1.2)	(0.2)	(0.1)	(0.6)
Unemployment Rate (%)				O	ther Indicat	ors						
Oregon	3.7	7.6	5.2	4.1	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Point Change	(0.3)	3.9	(2.4)	(1.1)	0.0	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0
U.S.	3.7	8.1	5.4	3.6	3.8	4.4	4.6	4.5	4.4	4.3	4.3	4.3
Point Change	(0.2)	4.4	(2.7)	(1.7)	0.1	0.6	0.2	(0.1)	(0.1)	(0.1)	(0.0)	(0.0)
Industrial Production Index												
U.S, 2012 = 100	102.4	95.1	99.2	102.6	101.9	102.2	103.6	105.1	106.2	107.5	108.5	109.5
% Ch	(0.7)	(7.2)	4.4	3.4	(0.7)	0.3	1.3	1.5	1.1	1.2	1.0	0.9
Prime Rate (Percent)	5.3	3.5	3.3	4.9	8.1	7.5	6.1	5.8	5.8	5.8	5.8	5.8
% Ch	7.7	(32.9)	(8.3)	49.3	66.0	(7.0)	(18.7)	(5.6)	0.0	(0.0)	(0.0)	(0.0)
Description (MIII)		ŕ					Í				. ,	
Population (Millions)	4.01	4.04	1.00	4.00	4.00	4.27	4.24	4.35	4.40	4.40	4 47	4.50
Oregon	4.21	4.24	4.26	4.28	4.29	4.31	4.34	4.37	4.40	4.43	4.47	4.50
% Ch	0.9	0.7	0.5	0.4	0.4	0.5	0.6	0.7	0.7	0.7	0.8	0.8
U.S.	330.3	331.6	332.2	333.5	335.1	336.7	338.5	340.2	342.0	343.7	345.4	347.1
% Ch	0.6	0.4	0.2	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Timber Harvest (Mil Bd Ft)												
Timber Harvest (Mil Bd Ft) Oregon % Ch	3,541.3 (12.9)	3,624.7 2.4	3,880.5 7.1	3,652.0 (5.9)	3,644.0 (0.2)	3,613.4 (0.8)	3,643.2 0.8	3,689.1 1.3	3,738.7 1.3	3,736.6 (0.1)	3,724.1 (0.3)	3,715.2 (0.2)

### APPENDIX B: REVENUE FORECAST DETAIL

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

Table B.1a General Fund Revenue Statement -- 2021-23

	_	Fore	casts Dated: 3/1/20	)23	Forec	easts Dated: 5/17/2	Difference		
	Estimate at COS 2021	2021-22	2022-23	Total 2021-23	2021-22	2022-23	Total 2021-23	05/17/2023 Less 03/1/2023	05/17/2023 Less COS
Taxes									
Personal Income Taxes	20,628,060,000	12,482,887,000	11,702,543,000	24,185,430,000	12,482,887,000	13,176,596,000	25,659,483,000	1,474,053,000	5,031,423,000
Film & Video, Gain Share, Industrial Lands	(40,583,000)	(24,823,000)	(25,633,000)	(50,456,000)	(16,409,000)	(10,814,000)	(27,223,000)	23,233,000	13,360,000
Corporate Income Taxes	1,343,966,000	1,539,051,000	1,350,367,000	2,889,418,000	1,539,051,000	1,622,101,000	3,161,152,000	271,734,000	1,817,186,000
Transfer to Rainy Day Fund (Minimum Tax)	(56,001,000)	0	(117,666,000)	(117,666,000)	0	(128,983,000)	(128,983,000)	(11,317,000)	(72,982,000)
Insurance Taxes	135,086,000	86,214,000	60,973,000	147,187,000	86,214,000	61,457,000	147,671,000	484,000	12,585,000
Estate Taxes	443,848,000	325,468,000	255,282,000	580,750,000	325,468,000	264,175,000	589,643,000	8,893,000	145,795,000
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	21,904,000	46,300,000	24,396,000	21,976,000	46,372,000	72,000	1,469,000
Other Tobacco Products Taxes	65,129,000	30,320,000	31,223,000	61,543,000	30,320,000	30,234,000	60,554,000	(989,000)	* ' ' '
Other Taxes	1,786,000	1,007,000	893,000	1,900,000	1,007,000	898,000	1,905,000	5,000	119,000
Fines and Fees									
State Court Fees	136,147,000	52,488,000	55,159,000	107,647,000	52,488,000	54,566,000	107,054,000	(593,000)	(29,093,000)
Secretary of State Fees	82,185,000	42,949,000	42,999,000	85,948,000	42,949,000	44,099,000	87,048,000	1,100,000	4,863,000
Criminal Fines & Assessments	27,202,000	792,000	7,847,000	8,639,000	792,000	6,068,000	6,860,000	(1,779,000)	
Securities Fees	26,538,000	15,575,000	14,548,000	30,123,000	15,575,000	14,365,000	29,940,000	(183,000)	3,402,000
Central Service Charges	12,746,000	6,373,000	6,373,000	12,746,000	6,373,000	6,373,000	12,746,000	0	0
Liquor Apportionment	347,137,000	193,470,000	164,101,000	357,571,000	160,020,000	197,552,000	357,572,000	1,000	10,435,000
Interest Earnings	35,000,000	39,984,000	160,000,000	199,984,000	39,984,000	277,683,000	317,667,000	117,683,000	282,667,000
Miscellaneous Revenues	12,000,000	8,490,000	7,000,000	15,490,000	8,490,000	7,600,000	16,090,000	600,000	4,090,000
One-time Transfers	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
Gross General Fund Revenues	23,400,410,000	14,944,145,000	13,939,889,000	28,884,034,000	14,910,695,000	15,844,420,000	30,755,115,000	1,871,081,000	7,354,705,000
Total Transfers	(171,500,000)	(24,823,000)	(232,302,000)	(257,125,000)	(16,409,000)	(228,800,000)	(245,209,000)	11,916,000	(59,622,000)
Net General Fund Revenues	23,228,910,000	14,919,322,000	13,707,587,000	28,626,909,000	14,894,286,000	15,615,620,000	30,509,906,000	1,882,997,000	7,280,996,000
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)			0			0	0	21,472,000
Less Statutory Transfers**	(224,612,788)			(220,722,881)			(222,880,647)	(2,157,766)	1,732,141
Available Resources	26,008,410,911		-	32,488,675,383		<del>-</del>	34,369,514,617	1,880,839,234	8,361,103,706
Appropriations	25,445,991,039			27,861,031,017			27,367,410,483	(493,620,534)	1,921,419,444
Estimated Ending Balance	562,419,872		=	4,627,644,366			7,002,104,134	2,374,459,768	6,439,684,262

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.

<sup>\*</sup> The "Anticipated Administrative Actions line includes items like Tax Anticipation Note borrowing costs. None of these costs occurred for the 2021-23 biennium.

<sup>\*\* &</sup>quot;Legislatively Adopted Actions" include the Rainy Day Fund transfer of \$220,722,881 and the Ballot Measure 110 savings transfer of \$2,157,766.

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

Table B.1b General Fund Revenue Statement – 2023-25

	Fore	casts Dated: 3/1/2	023	Fore	Difference		
			Total			Total	05/17/2023 Less
	2023-24	2024-25	2023-25	2023-24	2024-25	2023-25	03/1/2023
Taxes							
Personal Income Taxes	9,320,213,000	12,249,279,000	21,569,492,000	8,712,640,000	12,375,653,000	21,088,293,000	(481,199,000)
Film & Video, Gain Share, Industrial Lands	(26,012,000)	(22,672,000)	(48,684,000)	(17,520,000)	(19,510,000)	(37,030,000)	11,654,000
Corporate Income Taxes	1,075,515,000	983,071,000	2,058,586,000	1,136,036,000	1,109,009,000	2,245,045,000	186,459,000
Transfer to Rainy Day Fund (Minimum Tax)	0	(83,832,000)	(83,832,000)	0	(91,604,000)	(91,604,000)	(7,772,000)
Insurance Taxes	72,135,000	73,508,000	145,643,000	71,825,000	73,186,000	145,011,000	(632,000)
Estate Taxes	263,673,000	272,366,000	536,039,000	270,366,000	277,366,000	547,732,000	11,693,000
Transfer to PERS UAL	0	0	0	0	0	0	0
Cigarette Taxes	21,896,000	21,361,000	43,257,000	21,847,000	21,297,000	43,144,000	(113,000)
Other Tobacco Products Taxes	31,859,000	31,839,000	63,698,000	30,684,000	30,619,000	61,303,000	(2,395,000)
Other Taxes	893,000	893,000	1,786,000	898,000	898,000	1,796,000	10,000
Fines and Fees							
State Court Fees	62,642,000	65,094,000	127,736,000	60,398,000	62,919,000	123,317,000	(4,419,000)
Secretary of State Fees	43,233,000	43,059,000	86,292,000	50,642,000	49,358,000	100,000,000	13,708,000
Criminal Fines & Assessments	10,724,000	10,724,000	21,448,000	9,695,000	9,695,000	19,390,000	(2,058,000)
Securities Fees	14,591,000	15,220,000	29,811,000	15,442,000	16,153,000	31,595,000	1,784,000
Central Service Charges	6,373,000	6,373,000	12,746,000	8,050,000	8,050,000	16,100,000	3,354,000
Liquor Apportionment	193,944,000	206,767,000	400,711,000	191,943,000	204,634,000	396,577,000	(4,134,000)
Interest Earnings	146,000,000	73,000,000	219,000,000	348,920,000	124,405,000	473,325,000	254,325,000
Miscellaneous Revenues	7,000,000	7,000,000	14,000,000	8,000,000	8,000,000	16,000,000	2,000,000
One-time Transfers	0	0	0	0	0	0	0
Gross General Fund Revenues	11,270,691,000	14,059,554,000	25,330,245,000	10,937,386,000	14,371,242,000	25,308,628,000	(21,617,000)
Total Personal and Corporate Transfers	(26,012,000)	(106,504,000)	(132,516,000)	(17,520,000)	(111,114,000)	(128,634,000)	3,882,000
Net General Fund Revenues	11,244,679,000	13,953,050,000	25,197,729,000	10,919,866,000	14,260,128,000	25,179,994,000	(17,735,000)
Plus Beginning Balance		_	4,627,644,366		_	7,002,104,134	2,374,459,768
Less Anticipated Administrative Actions*			0			0	0
Less Statutory Transfers**			(278,610,310)			(310,743,560)	(32,133,250)
Available Resources		_	29,546,763,056		_	31,871,354,575	2,324,591,518

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.

<sup>\*</sup> The "Anticipated Administrative Actions line includes items like Tax Anticipation Note borrowing costs. None of these costs are anticipated for the 2023-25 biennium.

<sup>\*\* &</sup>quot;Legislatively Adopted Actions" include the Rainy Day Fund transfer of \$273,674,105 and the Ballot Measure 110 savings transfer of \$37,069,455.

Table B.2 General Fund Revenue Forecast by Fiscal Year

		Gei	neral Fund	Revenue	Forecast							May 2023
			(\$	Millions)								
Fiscal Years	2019-20 Fiscal Year	2020-21 Fiscal Year	2021-22 Fiscal Year	2022-23 Fiscal Year	2023-24 Fiscal Year	2024-25 Fiscal Year	2025-26 Fiscal Year	2026-27 Fiscal Year	2027-28 Fiscal Year	2028-29 Fiscal Year	2029-30 Fiscal Year	2030-31 Fiscal Year
Taxes												
Personal Income	7,204.8	12,784.6	12,482.9	13,176.6	8,712.6	12,375.7	14,531.6	15,379.9	16,665.4	17,936.2	19,056.0	20,161.9
Film & Video, Gain Share, Industrial Lands	(12.8)	(12.0)	(16.4)	(10.8)	(17.5)	(19.5)	(18.9)	(0.4)	(2.3)			,
Corporate Excise & Income	488.3	1,478.6		1,622.1	1,136.0	1,109.0	1,153.7	1,226.7	1,303.8			
Transfer to RDF & PERS UAL	0.0	(74.5)	0.0	(129.0)	0.0	(91.6)	0.0	(97.1)	0.0	(109.1)	0.0	(120.8)
Insurance	75.3	83.9	86.2	61.5	71.8	73.2	75.4	77.6		85.9	87.8	90.0
Estate	113.8	410.3	325.5	264.2	270.4	277.4	283.8	289.9	294.5	302.2	312.3	320.9
Transfer toPERS 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	22.0	21.8	21.3	20.7	20.3	19.9	19.6	19.3	19.0
Other Tobacco Products	30.9	30.4	30.3	30.2	30.7	30.6	30.6	30.8	30.7	30.9	31.0	30.9
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
Other Revenues												
Licenses and Fees	135.3	114.1	111.8	119.1	136.2	138.1	140.7	140.0	142.2	141.5	143.5	142.7
Charges for Services	5.7	5.7		6.4	8.1	8.1	8.7	8.7	9.4			
Liquor Apportionment	162.1	178.8	160.0	197.6	191.9	204.6	186.5	197.1	209.7	223.6	239.8	255.7
Interest Earnings	64.5	28.5	40.0	277.7	348.9	124.4	97.2	98.6	101.8	105.0	108.3	111.7
Others	20.4	165.4	103.2	66.3	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Gross General Fund	8,332.0	15,305.4	14,910.7	15,844.4	10,937.4	14,371.2	16,537.7	17,478.4	18,870.6	20,232.5	21,455.4	22,674.2
Net General Fund	8,319.3	15,218.9	14,894.3	15,615.6	10,919.9	14,260.1	16,518.8	17,380.9	18,868.2		21,445.4	
Biennial Totals	2019-21 BN	Change (%)	2021-23 BN	Change (%)	2023-25 BN	Change (%)	2025-27 BN	Change (%)	2027-29 BN	Change (%)	2029-31 BN	Change (%)
Taxes												
Personal Income	19,989.4	6.2%	25,659.5	28.4%	21,088.3	-17.8%	29,911.4	41.8%	34,601.6	15.7%	39,217.9	13.3%
Corporate Excise & Income	1,966.9	11.2%		60.7%		-29.0%	,	6.0%				
Insurance	159.2	-0.7%		-7.2%	145.0	-1.8%	153.0	5.5%	,			
Estate Taxes	524.1	37.5%	589.6	12.5%	547.7	-7.1%	573.7	4.7%	596.7	4.0%	633.3	6.1%
Cigarette	55.1	-16.0%	46.4	-15.9%	43.1	-7.0%	41.0	-5.0%	39.6	-3.4%	38.4	-3.1%
Other Tobacco Products	61.3	-3.6%	60.6	-1.2%	61.3	1.2%	61.4	0.2%	61.7	0.4%	61.8	0.3%
Other Taxes	1.0	-49.4%	1.9	90.7%	1.8	-5.7%	1.8	0.0%	1.8	0.0%	1.8	0.0%
Other Revenues												
Licenses and Fees	249.4	-3.7%	230.9	-7.4%	274.3	18.8%	280.7	2.3%	283.7	1.0%	286.2	0.9%
Charges for Services	11.5	5.5%		11.0%	16.1	26.3%	17.4	8.1%				
Liquor Apportionment	340.9	15.8%		4.9%	396.6	10.9%						
Interest Earnings	92.9			241.9%	473.3	49.0%	195.8	-58.6%				
Others	185.8	1121.7%		-8.8%	16.0	-90.6%	16.0	0.0%	16.0			
Gross General Fund	23,637.5	7.8%	30,755.1	30.1%	25,308.6	-17.7%	34,016.2	34.4%	39,103.1	15.0%	44,129.6	12.9%
Net General Fund	23,538.2	8.0%	30,509.9	29.6%	25,180.0	-17.7%	33,899.7	34.6%	38,989.3			
THE GENETAL PURG	43,336.2	0.070	30,307.9	29.070	23,100.0	-1/.570	23,077./	34.0%	30,707.3	13.070	73,700.0	12.070

Table B.3 Summary of 2021 Legislative Session Adjustments

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

Table B.4 Oregon Personal Income Tax Revenue Forecast

TABLE B.4		OREGON PE			VENUE FORE lars - Not Seaso	-		ECTIONS	May 2	023
	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%
WATER HOLDING	2013:3	2013:4	2014:1	2014:2	FY 2014	2014:3	2014:4	2015:1	2015:2	FY 2015
WITHHOLDING %CHYA	1,333,946 5.7%	1,435,630 5.2%	1,442,755 6.5%	1,420,313 7.5%	5,632,644 6.2%	1,455,822 9.1%	1,523,453 6.1%	1,576,188 9.2%	1,505,337	6,060,801 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)	1.565.010	1 250 405	180,356	(21,011)	(180,356)	1 720 472	- 1.517.605	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
%СНҮА	16.9%	-40.3%	7.0%	5.7%	-0.5%	-2.8%	126.4%	17.0%	6.2%	20.9%
FINAL PAYMENTS <sup>1</sup> %CHYA	99,618	321,345	141,818	813,132	1,375,913	103,631	144,248	175,235	919,186	1,342,301
	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%	
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

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		May 2	023							
	2019:3	2019:4	2020:1	2020:2	lars - Not Seaso FY 2020	2020:3	2020:4	2021:1	2021:2	FY 2021
WITHHOLDING %CHYA	2,059,715 6.9%	2,223,410 9.0%	2,183,444 5.0%	1,997,661 -0.1%	8,464,230 5.2%	2,127,124 3.3%	2,291,161 3.0%	2,321,603 6.3%	2,266,779 13.5%	9,006,667 6.4%
EST. PAYMENTS %CHYA	413,316 12.4%	296,072 4.3%	376,127 16.9%	428,769 -19.4%	1,514,284 0.6%	497,544 20.4%	292,601 -1.2%	432,742 15.1%	701,877 63.7%	1,924,764 27.1%
FINAL PAYMENTS <sup>1</sup> %CHYA	131,560 25.7%	195,074 24.6%	159,708 -29.2%	330,328 -76.2%	816,671 -56.4%	758,710 476.7%	142,228 -27.1%	220,765 38.2%	1,500,229 354.2%	2,621,931 221.1%
REFUNDS %CHYA	144,251 2.5%	289,464 -13.8%	1,120,326 105.1%	735,922 65.2%	2,289,962 56.0%	432,836 200.1%	360,529 24.6%	558,588 -50.1%	672,421 -8.6%	2,024,375
OTHER	(222,477)	-	-	175,167	(47,310)	(175,167)	-	-	194,880	19,713
TOTAL %CHYA	2,237,864 10.8%	2,425,092 13.1%	1,598,954 -23.2%	2,196,004 -40.5%	8,457,914 -14.9%	2,775,375 24.0%	2,365,460 -2.5%	2,416,522 51.1%	3,991,345 81.8%	11,548,702 36.5%
	2021:3	2021:4	2022:1	2022:2	FY 2022	2022:3	2022:4	2023:1	2023:2	FY 2023
WITHHOLDING %CHYA	2,393,995 12.5%	2,525,865 10.2%	2,611,195 12.5%	2,467,726 8.9%	9,998,782 11.0%	2,509,729 4.8%	2,641,474 4.6%	2,680,227 2.6%	2,532,694 2.6%	10,364,124 3.7%
EST. PAYMENTS %CHYA	495,468 -0.4%	340,639 16.4%	508,064 17.4%	904,746 28.9%	2,248,917 16.8%	659,287 33.1%	713,409 109.4%	575,127 13.2%	845,836 -6.5%	2,793,658 24.2%
FINAL PAYMENTS <sup>1</sup> %CHYA	153,160 -79,8%	208,665 46.7%	255,615 15.8%	2,115,965 41.0%	2,733,405 4,3%	162,621 6.2%	255,669 22.5%	349,752 36.8%	1,612,331 -23.8%	2,380,374 -12.9%
REFUNDS	162,428	300,852	1,062,458	960,617	2,486,355	293,038	559,280	854,946	674,093	2,381,356
%CHYA OTHER	-62.5% (194,880)	-16.6%	90.2%	42.9% 183,017	22.8% (11,863)	80.4% (183,017)	85.9%	-19.5%	-29.8% 202,813	-4.2% 19,796
TOTAL	2,685,315	2,774,318	2,312,417	4,710,837	12,482,887	2,855,581	3,051,273	2,750,161	4,519,582	13,176,596
%CHYA	-3.2% 2023:3	17.3% 2023:4	-4.3% 2024:1	18.0% 2024:2	8.1% FY 2023	6.3%	10.0%	18.9% 2025:1	-4.1% 2025:2	5.6% FY 2025
WITHHOLDING	2,604,972	2,757,112	2,913,463	2,676,716	10,952,263	2,742,260	2,902,414	3,068,952	2,819,820	11,533,445
%CHYA EST. PAYMENTS	3.8% 449,780	4.4% 388,850	8.7% 487,676	5.7% 610,252	5.7% 1,936,558	5.3% 485,086	5.3% 419,374	5.3% 528,333	5.3% 692,835	5.3% 2,125,628
%CHYA FINAL PAYMENTS <sup>1</sup>	-31.8% 185,576	-45.5% 296,817	-15.2% 179,505	-27.9% 509,785	-30.7% 1,171,684	7.8% 109,279	7.8% 154,415	8.3% 244,591	13.5%	9.8%
%CHYA REFUNDS	14.1% 159,465	16.1% 347,628	-48.7% 2,708,580	-68.4% 2,142,881	-50.8% 5,358,555	-41.1% 428,915	-48.0% 997,668	36.3% 1,103,228	201.2% 808,555	74.4% 3,338,366
%CHYA	-45.6%	-37.8%	216.8%	217.9%	125.0%	169.0%	187.0%	-59.3%	-62.3%	-37.7%
OTHER TOTAL	(202,813) 2,878,049	3,095,152	872,065	213,504 1,867,375	10,690 8,712,640	(213,504) 2,694,207	2,478,534	2,738,648	224,918 4,464,264	11,415
%CHYA	2025:3	1.4% 2025:4	-68.3% 2026:1	-58.7% 2026:2	-33.9% FY 2026	-6.4% 2026:3	-19.9% <b>2026:4</b>	214.0% 2027:1	139.1% 2027:2	42.0% FY 2027
WITHHOLDING	2,888,865	3,057,580	3,224,422	2,961,547	12,132,415	3,034,077	3,211,276	3,413,469	3,138,711	12,797,533
%CHYA EST. PAYMENTS	5.3% 550,731	5.3% 476,126	5.1% 598,183	5.0% 762,538	5.2% 2,387,578	5.0% 606,138	5.0% 524,027	5.9% 657,916	6.0% 832,726	5.5% 2,620,807
%CHYA FINAL PAYMENTS <sup>1</sup>	13.5%	13.5% 256.624	13.2% 281.325	10.1%	12.3% 2,434,326	10.1% 171,309	10.1% 275,267	10.0% 286,799	9.2% 1,829,728	9.8%
%CHYA	48.5%	66.2%	15.0%	13.0%	19.1%	5.6%	7.3%	1.9%	5.5%	5.3%
REFUNDS %CHYA	179,341 -58.2%	389,012 -61.0%	1,042,704 -5.5%	822,999 1.8%	2,434,057 -27.1%	190,618 6.3%	413,068 6.2%	1,124,242 7.8%	887,789 7.9%	2,615,717 7.5%
OTHER TOTAL	3,197,626	3,401,319	3,061,225	236,223 4,871,395	11,304	(236,223)	3,597,503	3,233,942	250,354 5,163,730	14,132
%CHYA	18.7%	37.2%	11.8%	9.1%	17.4%	5.8%	5.8%	5.6%	6.0%	5.8%
NUTRINIO DE DE CO	2027:3	2027:4	2028:1	2028:2	FY 2028	2028:3	2028:4	2029:1	2029:2	FY 2029
WITHHOLDING %CHYA	3,215,535 6.0%	3,403,321 6.0%	3,613,299 5.9%	3,321,888 5.8%	13,554,043 5.9%	3,403,202 5.8%	3,601,950 5.8%	3,819,761 5.7%	3,511,127 5.7%	14,336,041 5.8%
EST. PAYMENTS %CHYA	661,930 9.2%	572,262 9.2%	717,484 9.1%	894,921 7.5%	2,846,596 8.6%	711,368 7.5%	615,003 7.5%	770,122 7.3%	947,900 5.9%	3,044,393 6.9%
FINAL PAYMENTS1 %CHYA	175,052 2.2%	288,725 4.9%	343,419 19.7%	2,106,066 15.1%	2,913,262 13.7%	210,756 20.4%	340,362 17.9%	377,027 9.8%	2,279,887 8.3%	3,208,032 10.1%
REFUNDS %CHYA	205,298 7.7%	445,377 7.8%	1,125,605 0.1%	886,851 -0.1%	2,663,131 1.8%	206,173 0.4%	445,467 0.0%	1,127,303 0.2%	888,432 0.2%	2,667,375 0.2%
OTHER	(250,354)		-	264,965	14,611	(264,965)	-		280,059	15,094
TOTAL %CHYA	3,596,863 6.3%	3,818,930 6.2%	3,548,597 9.7%	5,700,990 10.4%	16,665,380 8.4%	3,854,189 7.2%	4,111,848 7.7%	3,839,607 8.2%	6,130,541 7.5%	17,936,185 7.6%
7,4011111	2029:3	2029:4	2030:1	2030:2	FY 2030	2030:3	2030:4	2031:1	2031:2	FY 2030
WITHHOLDING	3,597,080	3,807,152	4,039,561	3,713,453	15,157,247	3,804,356	4,026,532	4,272,182	3,927,274	16,030,344
%CHYA EST. PAYMENTS	5.7% 753,481	5.7% 651,411	5.8% 815,519	5.8%	5.7% 3,221,600	5.8% 795,840	5.8%	5.8% 861,540	5.8%	5.8% 3,405,427
%CHYA	5.9%	5.9%	5.9%	5.6%	5.8%	5.6%	5.6%	5.6%	5.9%	5.7%
FINAL PAYMENTS1 %CHYA	230,564 9.4%	370,256 8.8%	404,255 7.2%	2,425,975 6.4%	3,431,050 7.0%	247,240 7.2%	395,925 6.9%	434,107 7.4%	2,584,557 6.5%	3,661,829 6.7%
REFUNDS %CHYA	207,255 0.5%	446,868 0.3%	1,182,554 4.9%	933,352 5.1%	2,770,028 3.8%	217,202 4.8%	469,235 5.0%	1,266,376 7.1%	999,9 <u>2</u> 0 7.1%	2,952,733 6.6%
OTHER	(280,059)	-	-	296,198	16,138	(296,198)	-	-	313,253	17,055
TOTAL %CHYA	4,093,811 6.2%	4,381,951 6.6%	4,076,781 6.2%	6,503,463 6.1%	19,056,007 6.2%	4,334,036 5.9% <b>5</b>	4,641,254 5.9%	4,301,453 5.5%	6,885,178 5.9%	20,161,921 5.8%

Table B.5 Oregon Corporate Income Tax Revenue Forecast

Table B.5 Oregon C					VENUE FOR	FCAST - OU	ARTERI V CC	LLECTIONS	1	
TABLE B.3	OK	EGON COKI			ars - Not Seaso			LLEC HONS	, May 2	
	2009:3	2009:4	2010:1	2010:2	FY 2010	2010:3	2010:4	2011:1	2011:2	FY 2011
ADVANCE PAYMENTS	79,579	163,877	66,451	147,313	457,220	115,286	175,561	76,405	165,354	532,606
%CHYA	-20.9%	12.8%	4.2%	51.3%	12.3%	44.9%	7.1%	15.0%	12.2%	16.5%
FINAL PAYMENTS	20,404	24,009	38,412	45,714	128,539	21,781	21,206	35,770	40,805	119,562
%CHYA	-13.2%	-10.2%	72.1%	109.5%	36.2%	6.8%	-11.7%	-6.9%	-10.7%	-7.0%
REFUNDS	29,072	137,244	40,080	25,774	232,170	23,130	89,877	39,065	31,489	183,562
%CHYA	3.3%	9.9%	-40.6%	-30.7%	-9.9%	-20.4%	-34.5%	-2.5%	22.2%	-20.9%
TOTAL	70,910	50,642	64,784	167,254	353,589	113,936	106,890	73,111	174,670	468,606
%CHYA	-26.1%	7.3%	247.5%	104.0%	45.1%	60.7%	111.1%	12.9%	4.4%	32.5%
	2011:3	2011:4	2012:1	2012:2	FY 2012	2012:3	2012:4	2013:1	2013:2	FY 2013
ADVANCE PAYMENTS	120,766	154,290	86,873	156,652	518,581	130,348	110,207	80,942	282,526	604,023
%CHYA	4.8%	-12.1%	13.7%	-5.3%	-2.6%	7.9%	-28.6%	-6.8%	80.4%	16.5%
FINAL PAYMENTS	19,117	26,841	32,512	33,322	111,792	16,387	21,377	36,660	34,009	108,433
%CHYA	-12.2%	26.6%	-9.1%	-18.3%	-6.5%	-14.3%	-20.4%	12.8%	2.1%	-3.0%
REFUNDS	34,927	91,252	55,051	18,153	199,384	33,212	17,832	25,595	182,929	259,568
%CHYA	51.0%	1.5%	40.9%	-42.4%	8.6%	-4.9%	-80.5%	-53.5%	907.7%	30.2%
TOTAL	104,955	89,878	64,335	171,820	430,989	113,524	113,751	92,007	133,606	452,888
%CHYA	-7.9%	-15.9%	-12.0%	-1.6%	-8.0%	8.2%	26.6%	43.0%	-22.2%	5.1%
	2013:3	2013:4	2014:1	2014:2	FY 2014	2014:3	2014:4	2015:1	2015:2	FY 2015
ADVANCE PAYMENTS	123,591	187,195	150,401	183,348	644,535	193,248	206,088	106,689	183,611	689,637
%CHYA	-5.2%	69.9%	85.8%	-35.1%	6.7%	56.4%	10.1%	-29.1%	0.1%	7.0%
FINAL PAYMENTS	27,794	18,162	32,218	52,283	130,456	28,815	73,552	57,268	71,415	231,051
%CHYA	69.6%	-15.0%	-12.1%	53.7%	20.3%	3.7%	305.0%	77.8%	36.6%	77.1%
REFUNDS	20,123	118,303	109,296	32,511	280,232	49,952	155,439	58,361	35,167	298,918
%CHYA	-39.4%	563.4%	327.0%	-82.2%	8.0%	148.2%	31.4%	-46.6%	8.2%	6.7%
TOTAL	131,262	87,054	73,323	203,120	494,759	172,111	124,202	105,597	219,860	621,770
%CHYA	15.6%	-23.5%	-20.3%	52.0%	9.2%	31.1%	42.7%	44.0%	8.2%	25.7%
	2015:3	2015:4	2016:1	2016:2	FY 2016	2016:3	2016:4	2017:1	2017:2	FY 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%
_	2017:3	2017:4	2018:1	2018:2	FY 2018	2018:3	2018:4	2019:1	2019:2	FY 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 May 2023  FY									
	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	568,160	406,675	447,424	1,850,293
%CHYA	36.8%	30.9%	15.5%	9.3%	22.6%	20.1%	14.8%	40.9%	7.4%	18.9%
FINAL PAYMENTS	56,491	96,179	115,111	261,579	529,360	72,368	50,907	83,324	297,142	503,741
%CHYA	-50.7%	-2.2%	46.9%	-0.7%	-4.6%	28.1%	-47.1%	-27.6%	13.6%	-4.8%
REFUNDS	49,631	255,602	197,775	44,052	547,060	116,377	247,875	320,324	47,356	731,932
%CHYA	-20.6%	0.6%	28.4%	-71.3%	-12.3%	134.5%	-3.0%	62.0%	7.5%	33.8%
TOTAL	363,352	335,513	205,882	634,304	1,539,051	384,025	371,192	169,675	697,209	1,622,101
%CHYA	16.2%	50.8%	18.2%	29.0%	28.1%	5.7%	10.6%	-17.6%	9.9%	5.4%
	2023:3	2023:4	2024:1	2024:2	FY 2024	2024:3	2024:4	2025:1	2025:2	FY 2025
ADVANCE PAYMENTS	373,649	426,980	238,011	313,687	1,352,326	282,772	353,570	215,916	300,240	1,152,497
%CHYA	-12.7%	-24.8%	-41.5%	-29.9%	-26.9%	-24.3%	-17.2%	-9.3%	-4.3%	-14.8%
FINAL PAYMENTS	55,044	203,834 300.4%	179,962	285,959	724,798	118,279	284,450	221,199	326,984	950,912
%CHYA	-23.9%		116.0%	-3.8%	43.9%	114.9%	39.6%	22.9%	14.3%	31.2%
REFUNDS	126,096	373,955	266,509	174,529	941,088	122,246	391,821	287,733	192,600	994,400
%CHYA	8.4%	50.9%	-16.8%	268.5%	28.6%	-3.1%	4.8%	8.0%	10.4%	
OTAL	302,597	256,858	151,464	425,117	1,136,036	278,805	246,199	149,382	434,624	1,109,009
%CHYA	-21.2%	-30.8%	-10.7%	-39.0%	-30.0%	-7.9%	-4.2%	-1.4%	2.2%	-2.4%
	2025:3	2025:4	2026:1	2026:2	FY 2026	2026:3	2026:4	2027:1	2027:2	FY 2027
DVANCE PAYMENTS	279,603	358,783	223,103	313,787	1,175,275	294,286	378,718	236,717	334,677	1,244,397
%CHYA	-1.1%	1.5%	3.3%	4.5%	2.0%	5.3%	5.6%	6.1%	6.7%	5.9%
INAL PAYMENTS	143,236	337,432	233,984	344,645	1,059,297	150,713	352,773	244,281	364,674	1,112,441
%CHYA	21.1%	18.6%	5.8%	5.4%	11.4%	5.2%	4.5%	4.4%	5.8%	5.0%
EFUNDS	136,627	441,563	300,929	201,794	1,080,913	143,097	461,541	314,497	211,054	1,130,188
%CHYA	11.8%	12.7%	4.6%	4.8%	8.7%	4.7%	4.5%	4.5%	4.6%	4.6%
OTAL	286,212	254,653	156,158	456,637	1,153,660	301,902	269,951	166,501	488,297	1,226,651
%CHYA	2.7%	3.4%	4.5%	5.1%	4.0%	5.5%	6.0%	6.6%	6.9%	6.3%
	2027:3	2027:4	2028:1	2028:2	FY 2028	2028:3	2028:4	2029:1	2029:2	FY 2029
ADVANCE PAYMENTS	315,332	406,942	250,452	355,118	1,327,844	335,461	434,308	264,138	375,623	1,409,530
%CHYA	7.2%	7.5%	5.8%	6.1%	6.7%	6.4%	6.7%	5.5%	5.8%	6.2%
FINAL PAYMENTS	158,197	366,562	250,568	378,679	1,154,005	161,912	374,593	255,612	389,549	1,181,666
%CHYA	5.0%	3.9%	2.6%	3.8%	3.7%	2.3%	2.2%	2.0%	2.9%	2.4%
REFUNDS	149,893	483,802	325,600	218,786	1,178,080	155,528	502,746	336,794	226,731	1,221,798
%CHYA	4.7%	4.8%	3.5%	3.7%	4.2%	3.8%	3.9%	3.4%	3.6%	3.7%
TOTAL	323,636	289,702	175,420	515,011	1,303,769	341,846	306,155	182,956	538,441	1,369,398
%CHYA	7.2%	7.3%	5.4%	5.5%	6.3%	5.6%	5.7%	4.3%	4.5%	5.0%
	2029:3	2029:4	2030:1	2030:2	FY 2030	2030:3	2030:4	2031:1	2031:2	FY 2031
ADVANCE PAYMENTS	355,459	461,240	281,198	400,501	1,498,397	379,519	493,103	300,774	428,986	1,602,383
%CHYA	6.0%	6.2%	6.5%	6.6%	6.3%	6.8%	6.9%	7.0%	7.1%	6.9%
FINAL PAYMENTS	163,716	382,458	261,819	403,051	1,211,043	166,595	392,311	269,272	419,601	1,247,778
%CHYA	1.1%	2.1%	2.4%	3.5%	2.5%	1.8%	2.6%	2.8%	4.1%	3.0%
REFUNDS	161,383	522,624	350,679	236,323	1,271,008	168,395	545,778	366,364	247,175	1,327,712
%CHYA	3.8%	4.0%	4.1%	4.2%	4.0%	4.3%	4.4%	4.5%	4.6%	4.5%
TOTAL	357,792	321,074	192,338	567,228	1,438,432	377,719	339,636	203,683	601,412	1,522,450
%CHYA	4.7%	4.9%	5.1%	5.3%	J5.10%	5.6%	5.8%	5.9%	6.0%	5.8%

Table B.6 Cigarette and Tobacco Tax Distribution

TABLE B.6
Cigarette & Tobacco Tax Distribution (Millions of \$)

	Cigarette Tax Distribution*							Other Tobacco Tax Distribution			stribution	Inhalent Delivery Distribution		
	General	Health	Mental	Health	Tobacco Use	Reduction <sup>2</sup>	Cities, Counties		General	Health	Tobacco Use		Health	Tobacco Use
Total	Fund	Plan	Health	Authority <sup>1</sup>	Old	New	& Public Transit	Total	Fund	Plan	Reduction	Total	Authority	Reduction
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
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
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
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
332.7	22.0	85.6	15.0	179.9	3.4	20.0	6.8	56.2	30.2	23.3	2.6	31.5	28.3	3.1
696.3	46.4	178.7	31.3	377.0	7.1	41.7	14.3	112.6	60.6	46.9	5.2	67.3		
330.7	21.8	85.1	14.9	178.7	3.4	19.9	6.8	57.0	30.7	23.7	2.6	29.9	26.9	3.0
322.4	21.3	83.0	14.5	174.2	3.3	19.4	6.6	56.9	30.6	23.6	2.6	30.2	27.1	3.0
653.0	43.1	168.1	29.4	353.0	6.7	39.2	13.4	113.9	61.3	47.3	5.3	60.1	54.1	6.0
313.0	20.7	80.6	14.1	169.2	3.2	18.8	6.4	56.9	30.6	23.6	2.6	30.4	27.4	3.0
307.0	20.3	79.1	13.8	166.0	3.2	18.4	6.3	57.2	30.8	23.7	2.6	30.7	27.6	3.1
620.1	41.0	159.7	27.9	335.2	6.4	37.2	12.7	114.1	61.4	47.4	5.3	61.1	55.0	6.1
301.8	19.9	77.7	13.6	163.1	3.1	18.1	6.2	57.1	30.7	23.7	2.6	30.9	27.8	3.1
297.1	19.6	76.5	13.4	160.6	3.1	17.8	6.1	57.4	30.9	23.9	2.7	31.2	28.0	3.1
598.9	39.6	154.2	27.0	323.7	6.2	36.0	12.3	114.5	61.7	47.6	5.3	62.1	55.9	6.2
292.5	19.3	75.3	13.2	158.1	3.0	17.6	6.0	57.5	31.0	23.9	2.7	31.4	28.3	3.1
288.0	19.0	74.2	13.0	155.7	3.0	17.3	5.9	57.4	30.9	23.8	2.7	31.6		3.2
580.5	38.4	149.5	26.2	313.8	6.0	34.9	11.9	114.9	61.8	47.7	5.3	63.0	56.7	6.3
	187.2 292.3 479.5 363.6 332.7 696.3 330.7 322.4 653.0 313.0 307.0 620.1 301.8 297.1 598.9	Total         Fund           187.2         30.5           292.3         24.6           479.5         55.1           363.6         24.4           332.7         22.0           696.3         46.4           330.7         21.8           322.4         21.3           653.0         43.1           313.0         20.7           307.0         20.3           620.1         41.0           301.8         19.9           297.1         19.6           598.9         39.6           292.5         19.3           288.0         19.0	Total         Fund         Plan           187.2         30.5         121.0           292.3         24.6         107.1           479.5         55.1         228.1           363.6         24.4         93.0           332.7         22.0         85.6           696.3         46.4         178.7           330.7         21.8         85.1           322.4         21.3         83.0           653.0         43.1         168.1           313.0         20.7         80.6           307.0         20.3         79.1           620.1         41.0         159.7           301.8         19.9         77.7           297.1         19.6         76.5           598.9         39.6         154.2           292.5         19.3         75.3           288.0         19.0         74.2	General Total         Health Fund         Health Plan         Mental Health           187.2         30.5         121.0         21.2           292.3         24.6         107.1         18.7           479.5         55.1         228.1         39.9           363.6         24.4         93.0         16.3           332.7         22.0         85.6         15.0           696.3         46.4         178.7         31.3           330.7         21.8         85.1         14.9           322.4         21.3         83.0         14.5           653.0         43.1         168.1         29.4           313.0         20.7         80.6         14.1           307.0         20.3         79.1         13.8           620.1         41.0         159.7         27.9           301.8         19.9         77.7         13.6           297.1         19.6         76.5         13.4           598.9         39.6         154.2         27.0           292.5         19.3         75.3         13.2           288.0         19.0         74.2         13.0	General Total         Health Plan         Mental Health Health Authority¹         Health Authority¹           187.2         30.5         121.0         21.2         0.0           292.3         24.6         107.1         18.7         118.9           479.5         55.1         228.1         39.9         118.9           363.6         24.4         93.0         16.3         197.1           332.7         22.0         85.6         15.0         179.9           696.3         46.4         178.7         31.3         377.0           330.7         21.8         85.1         14.9         178.7           322.4         21.3         83.0         14.5         174.2           653.0         43.1         168.1         29.4         353.0           313.0         20.7         80.6         14.1         169.2           307.0         20.3         79.1         13.8         166.0           620.1         41.0         159.7         27.9         335.2           301.8         19.9         77.7         13.6         163.1           297.1         19.6         76.5         13.4         160.6           598.9 <td< td=""><td>Total         General Fund         Health Plan         Mental Health Authority¹         Health Authority¹         Tobacco Use           187.2         30.5         121.0         21.2         0.0         4.8           292.3         24.6         107.1         18.7         118.9         4.3           479.5         55.1         228.1         39.9         118.9         9.1           363.6         24.4         93.0         16.3         197.1         3.7           332.7         22.0         85.6         15.0         179.9         3.4           696.3         46.4         178.7         31.3         377.0         7.1           330.7         21.8         85.1         14.9         178.7         3.4           322.4         21.3         83.0         14.5         174.2         3.3           653.0         43.1         168.1         29.4         353.0         6.7           313.0         20.7         80.6         14.1         169.2         3.2           307.0         20.3         79.1         13.8         166.0         3.2           620.1         41.0         159.7         27.9         335.2         6.4</td><td>Total         General Fund         Health Plan         Mental Health Authority¹         Health Authority¹         Tobacco Use Reduction²           187.2         30.5         121.0         21.2         0.0         4.8         0.0           292.3         24.6         107.1         18.7         118.9         4.3         10.1           479.5         55.1         228.1         39.9         118.9         9.1         10.1           363.6         24.4         93.0         16.3         197.1         3.7         21.7           332.7         22.0         85.6         15.0         179.9         3.4         20.0           696.3         46.4         178.7         31.3         377.0         7.1         41.7           330.7         21.8         85.1         14.9         178.7         3.4         19.9           322.4         21.3         83.0         14.5         174.2         3.3         19.4           653.0         43.1         168.1         29.4         353.0         6.7         39.2           313.0         20.7         80.6         14.1         169.2         3.2         18.8           307.0         20.3         79.1</td><td>Total         General Fund         Health Plan         Mental Health Authority¹         Health Authority¹         Tobacco Use Reduction² Old         Cities, Counties &amp; Public Transit           187.2         30.5         121.0         21.2         0.0         4.8         0.0         9.7           292.3         24.6         107.1         18.7         118.9         4.3         10.1         8.5           479.5         55.1         228.1         39.9         118.9         9.1         10.1         18.2           363.6         24.4         93.0         16.3         197.1         3.7         21.7         7.4           332.7         22.0         85.6         15.0         179.9         3.4         20.0         6.8           696.3         46.4         178.7         31.3         377.0         7.1         41.7         14.3           330.7         21.8         85.1         14.9         178.7         3.4         19.9         6.8           322.4         21.3         83.0         14.5         174.2         3.3         19.4         6.6           653.0         43.1         168.1         29.4         353.0         6.7         39.2         13.4</td><td>Total         Fund         Health Plan         Health Authority¹         Tobacco Use Reduction²         Cities, Counties &amp; Public Transit         Total           187.2         30.5         121.0         21.2         0.0         4.8         0.0         9.7         57.7           292.3         24.6         107.1         18.7         118.9         4.3         10.1         8.5         56.6           479.5         55.1         228.1         39.9         118.9         9.1         10.1         18.2         114.3           363.6         24.4         93.0         16.3         197.1         3.7         21.7         7.4         56.5           332.7         22.0         85.6         15.0         179.9         3.4         20.0         6.8         56.2           696.3         46.4         178.7         31.3         377.0         7.1         41.7         14.3         112.6           330.7         21.8         85.1         14.9         178.7         3.4         19.9         6.8         57.0           322.4         21.3         83.0         14.5         174.2         3.3         19.4         6.6         56.9           653.0         43.1</td><td>General Total         Health Fund         Mental Plan         Health Authority¹         Tobacco Use Reduction² Old         Cities, Counties &amp; Public Transit         General Total           187.2         30.5         121.0         21.2         0.0         4.8         0.0         9.7         57.7         30.9           292.3         24.6         107.1         18.7         118.9         4.3         10.1         8.5         56.6         30.4           479.5         55.1         228.1         39.9         118.9         9.1         10.1         18.2         114.3         61.3           363.6         24.4         93.0         16.3         197.1         3.7         21.7         7.4         56.5         30.3           332.7         22.0         85.6         15.0         179.9         3.4         20.0         6.8         56.2         30.2           696.3         46.4         178.7         31.3         377.0         7.1         41.7         14.3         112.6         60.6           330.7         21.8         85.1         14.9         178.7         3.4         19.9         6.8         57.0         30.7           322.4         21.3         83.0         14.5</td><td>Total         Health Fund         Health Plan         Health Plan         Health Plan         Health Plan         Health Plan         Total Plan         Health Plan         Health Plan         New         &amp; Public Transit         Total         Fund         Plan           187.2         30.5         121.0         21.2         0.0         4.8         0.0         9.7         57.7         30.9         24.1           292.3         24.6         107.1         18.7         118.9         4.3         10.1         8.5         56.6         30.4         23.6           479.5         55.1         228.1         39.9         118.9         9.1         10.1         18.2         114.3         61.3         47.7           363.6         24.4         93.0         16.3         197.1         3.7         21.7         7.4         56.5         30.3         23.5           332.7         22.0         85.6         15.0         179.9         3.4         20.0         6.8         56.2         30.2         23.3           696.3         46.4         178.7         31.3         377.0         7.1         41.7         14.3         112.6         60.6         46.9           330.7         21.8&lt;</td><td>  Total   Fund   Health   Health   Health   Tobacco Use   Reduction   Reductio</td><td>  Total   Fund   Plan   Health   Health   Fund   Plan   Health   Health   Tobacco Use Reduction   Old   New   &amp; Public Transit   Total   Fund   Plan   Plan   Reduction   Total    </td><td>  Total   Fund   Health   Heal</td></td<>	Total         General Fund         Health Plan         Mental Health Authority¹         Health Authority¹         Tobacco Use           187.2         30.5         121.0         21.2         0.0         4.8           292.3         24.6         107.1         18.7         118.9         4.3           479.5         55.1         228.1         39.9         118.9         9.1           363.6         24.4         93.0         16.3         197.1         3.7           332.7         22.0         85.6         15.0         179.9         3.4           696.3         46.4         178.7         31.3         377.0         7.1           330.7         21.8         85.1         14.9         178.7         3.4           322.4         21.3         83.0         14.5         174.2         3.3           653.0         43.1         168.1         29.4         353.0         6.7           313.0         20.7         80.6         14.1         169.2         3.2           307.0         20.3         79.1         13.8         166.0         3.2           620.1         41.0         159.7         27.9         335.2         6.4	Total         General Fund         Health Plan         Mental Health Authority¹         Health Authority¹         Tobacco Use Reduction²           187.2         30.5         121.0         21.2         0.0         4.8         0.0           292.3         24.6         107.1         18.7         118.9         4.3         10.1           479.5         55.1         228.1         39.9         118.9         9.1         10.1           363.6         24.4         93.0         16.3         197.1         3.7         21.7           332.7         22.0         85.6         15.0         179.9         3.4         20.0           696.3         46.4         178.7         31.3         377.0         7.1         41.7           330.7         21.8         85.1         14.9         178.7         3.4         19.9           322.4         21.3         83.0         14.5         174.2         3.3         19.4           653.0         43.1         168.1         29.4         353.0         6.7         39.2           313.0         20.7         80.6         14.1         169.2         3.2         18.8           307.0         20.3         79.1	Total         General Fund         Health Plan         Mental Health Authority¹         Health Authority¹         Tobacco Use Reduction² Old         Cities, Counties & Public Transit           187.2         30.5         121.0         21.2         0.0         4.8         0.0         9.7           292.3         24.6         107.1         18.7         118.9         4.3         10.1         8.5           479.5         55.1         228.1         39.9         118.9         9.1         10.1         18.2           363.6         24.4         93.0         16.3         197.1         3.7         21.7         7.4           332.7         22.0         85.6         15.0         179.9         3.4         20.0         6.8           696.3         46.4         178.7         31.3         377.0         7.1         41.7         14.3           330.7         21.8         85.1         14.9         178.7         3.4         19.9         6.8           322.4         21.3         83.0         14.5         174.2         3.3         19.4         6.6           653.0         43.1         168.1         29.4         353.0         6.7         39.2         13.4	Total         Fund         Health Plan         Health Authority¹         Tobacco Use Reduction²         Cities, Counties & Public Transit         Total           187.2         30.5         121.0         21.2         0.0         4.8         0.0         9.7         57.7           292.3         24.6         107.1         18.7         118.9         4.3         10.1         8.5         56.6           479.5         55.1         228.1         39.9         118.9         9.1         10.1         18.2         114.3           363.6         24.4         93.0         16.3         197.1         3.7         21.7         7.4         56.5           332.7         22.0         85.6         15.0         179.9         3.4         20.0         6.8         56.2           696.3         46.4         178.7         31.3         377.0         7.1         41.7         14.3         112.6           330.7         21.8         85.1         14.9         178.7         3.4         19.9         6.8         57.0           322.4         21.3         83.0         14.5         174.2         3.3         19.4         6.6         56.9           653.0         43.1	General Total         Health Fund         Mental Plan         Health Authority¹         Tobacco Use Reduction² Old         Cities, Counties & Public Transit         General Total           187.2         30.5         121.0         21.2         0.0         4.8         0.0         9.7         57.7         30.9           292.3         24.6         107.1         18.7         118.9         4.3         10.1         8.5         56.6         30.4           479.5         55.1         228.1         39.9         118.9         9.1         10.1         18.2         114.3         61.3           363.6         24.4         93.0         16.3         197.1         3.7         21.7         7.4         56.5         30.3           332.7         22.0         85.6         15.0         179.9         3.4         20.0         6.8         56.2         30.2           696.3         46.4         178.7         31.3         377.0         7.1         41.7         14.3         112.6         60.6           330.7         21.8         85.1         14.9         178.7         3.4         19.9         6.8         57.0         30.7           322.4         21.3         83.0         14.5	Total         Health Fund         Health Plan         Health Plan         Health Plan         Health Plan         Health Plan         Total Plan         Health Plan         Health Plan         New         & Public Transit         Total         Fund         Plan           187.2         30.5         121.0         21.2         0.0         4.8         0.0         9.7         57.7         30.9         24.1           292.3         24.6         107.1         18.7         118.9         4.3         10.1         8.5         56.6         30.4         23.6           479.5         55.1         228.1         39.9         118.9         9.1         10.1         18.2         114.3         61.3         47.7           363.6         24.4         93.0         16.3         197.1         3.7         21.7         7.4         56.5         30.3         23.5           332.7         22.0         85.6         15.0         179.9         3.4         20.0         6.8         56.2         30.2         23.3           696.3         46.4         178.7         31.3         377.0         7.1         41.7         14.3         112.6         60.6         46.9           330.7         21.8<	Total   Fund   Health   Health   Health   Tobacco Use   Reduction   Reductio	Total   Fund   Plan   Health   Health   Fund   Plan   Health   Health   Tobacco Use Reduction   Old   New   & Public Transit   Total   Fund   Plan   Plan   Reduction   Total	Total   Fund   Health   Heal

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

<sup>&</sup>lt;sup>2</sup> Old and New refere 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 \$)

**Liquor Apportionment Distribution Total Liquor City Revenue** Cigarette Tax Revenue General Mental Oregon Revenue Distribution<sup>2</sup> Health 1 Available Fund (56%) Wine Board **Sharing** Regular **Counties** Total 2019-20 290.649 165.629 9.534 0.338 52.340 88.979 26.170 9.653 36.638 2020-21 314.695 179.692 8.690 0.330 57.265 40.086 97.351 28.633 8.546 605.344 345.321 18.224 109.605 76.724 54.803 18.199 **2019-21 Biennium** 0.668 186.329 2021-22 311.292 176.701 10.675 0.359 56.163 39.314 95.476 28.081 7.419 2022-23 9.622 317.711 180.870 0.386 57.651 40.356 98.007 28.826 6.833 **2021-23 Biennium** 629.004 357.571 20.297 0.745 113.814 79.670 193.484 56.907 14.252 2023-24 337.158 191.943 10.019 0.376 42.897 104.179 6.792 61.282 30.641 2024-25 359.449 10.681 0.401 6.621 204.634 65.333 45.733 111.067 32.667 **2023-25 Biennium** 696.607 396.577 20.700 0.777 88.630 215.245 63.307 13.414 126.615 2025-26 341.486 186.486 11.472 0.427 65.046 45.532 110.578 32.523 6.430 2026-27 11.797 47.996 6.307 360.220 197.138 0.442 68.565 116.561 34.282 701.706 383.624 23.269 93.528 227.139 66.805 12.736 **2025-27 Biennium** 0.869 133.611 2027-28 382.147 209.669 12.169 0.458 72.659 50.862 123.521 36.329 6.199 12.543 2028-29 406.260 223.645 0.475 77.090 53.963 131.053 38.545 6.103 **2027-29 Biennium** 788.407 433.314 24.711 0.933 149.749 254.574 12.301 104.825 74.874 2029-30 434.107 239.774 139.738 41.099 6.009 13.000 0.495 82.199 57.539 2030-31 461.548 255.701 13.434 0.515 87.227 61.059 148.286 43.613 5.916 895.655 2029-31 Biennium 495.475 26.434 1.010 169.426 118.598 288.024 84.712 11.924

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

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

### **Table B.8 Track Record for the March 2023 Forecast**

(Quarter ending March 31, 2022)

ersonal Income Tax	Fo	recast Comparis	on	Year/Yea	r Change	
	Actual	Latest	Percent	Prior	Percent	
(Millions of dollars)	Revenues	Forecast	Difference	Year	Change	
Withholding	\$2,680.2	\$2,621.0	2.3%	\$2,611.2	2.6%	
Dollar difference		\$59.3	_			
Estimated Payments*	\$575.1	\$605.9	-5.1%	\$508.1	13.2%	
Dollar difference		-\$30.8				
Final Payments*	\$349.8	\$217.7	60.7%	\$255.6	36.8%	
Dollar difference		\$132.1				
Refunds	-\$854.9	-\$1,004.4	-14.9%	-\$1,062.5	-19.5%	
Dollar difference		\$149.4	_			
Total Personal Income Tax	\$2,750.2	\$2,440.2	12.7%	\$2,312.4	18.9%	
Dollar difference		\$310.0	_			
orporate Income Tax	Fo	recast Comparis	on	Year/Year Change		
	Actual	Latest	Percent	Prior	Percent	
(Millions of dollars)	Revenues	Forecast	Difference	Year	Change	
Advanced Payments	\$406.7	\$274.8	48.0%	\$288.5	40.9%	
Dollar difference		\$131.9				
Final Payments	\$83.3	\$86.5	-3.6%	\$115.1	-27.6%	
Dollar difference		-\$3.1	_			
Refunds	-\$320.3	-\$223.6	43.2%	-\$197.8	62.0%	
Dollar difference		-\$96.7				
Total Corporate Income Tax	\$169.7	\$137.6	23.3%	\$205.9	-17.6%	
Dollar difference		\$32.0				
tal Income Tax	Fo	recast Comparis	on	Year/Yea	r Change	
	Actual	Latest	Percent	Prior	Percent	
(Millions of dollars)	Revenues	Forecast	Difference	Year	Change	
Corporate and Personal Tax	\$2,919.8	\$2,577.8	13.3%	\$2,518.3	15.9%	
Dollar difference		\$342.0		\$401.5		

<sup>\*</sup> 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										May 202	3 Forecast
Summary of Lottery Resources	2021-23			2023-25		2025-2027	,	2027-29		2029-31	
(in millions of dollars)	Current Forecast	Change from Mar-23	Change from COS 2021	Current Forecast	Change from Mar-23						
LOTTERY EARNINGS											
Traditional Lottery	190.183	1.458	31.348	163.696	1.704	161.372	1.549	161.607	1.623	161.617	1.635
Video Lottery	1,595.137	(1.780)	121.848	1,624.984	4.975	1,769.218	4.638	1,919.047	4.748	2,054.916	5.084
Sports Betting <sup>1</sup>	29.772	(2.944)	10.435	44.315	11.161	47.643	6.408	50.146	5.804	52.594	4.909
Administrative Actions	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Available to Transfer	1,815.092	(3.266)	163.631	1,832.994	17.839	1,978.232	12.595	2,130.800	12.175	2,269.127	11.628
ECONOMIC DEVELOPMENT FUND											
Beginning Balance	72.370	0.000	0.000	84.396	(0.142)	0.000	0.000	0.000	0.000	0.000	0.000
Transfers from Lottery	1,815.092	(3.266)	163.631	1,832.994	17.839	1,978.232	12.595	2,130.800	12.175	2,269.127	11.628
Other Resources <sup>2</sup>	7.259	(1.133)	5.259	2.000	0.000	2.000	0.000	2.000	0.000	2.000	0.000
Total Available Resources	1,894.720	(4.399)	168.890	1,919.391	17.698	1,980.232	12.595	2,132.800	12.175	2,271.127	11.628
ALLOCATION OF RESOURCES											
Constitutional Distributions											
Education Stability Fund <sup>3</sup>	326.714	(0.058)	29.451	329.939	3.211	131.473	0.950	383.512	51.169	302.216	51.126
Oregon Capital Matching Fund <sup>3</sup>	0.000	0.000	0.000	0.000	0.000	187.174	1.098	0.000	(40.859)	88.049	(41.094)
Parks and Natural Resources Fund <sup>4</sup>	272.264	(0.490)	24.545	274.949	2.676	296.735	1.889	319.620	1.826	340.369	1.744
Veterans' Services Fund <sup>5</sup>	27.226	(1.182)	2.454	27.495	0.268	29.673	0.189	31.962	0.183	34.037	0.174
Other Distributions											
Outdoor School Education Fund <sup>6</sup>	49.419	0.000	0.000	56.406	0.000	60.360	0.000	64.592	0.000	69.120	0.000
County Economic Development	54.210	0.000	0.000	62.302	0.191	67.832	0.178	73.576	0.182	78.785	0.195
HECC Collegiate Athletic & Scholarships <sup>7</sup>	16.515	0.000	0.000	18.330	0.178	19.782	0.126	21.308	0.122	22.691	0.116
Gambling Addiction <sup>7</sup>	16.543	0.000	0.028	18.330	0.178	19.782	0.126	21.308	0.122	22.691	0.116
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>	1,028.271	(2.527)	55.346	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	29.026	7.310	32.107	4.318	32.847	3.632	34.871	3.085
Total Distributions	1,810.324	(4.257)	114.493	1,054.905	14.012	1,083.048	8.873	1,186.853	16.376	1,230.958	15.464
Ending Balance/Discretionary Resources	84.396	(0.142)	54.396	864.486	3.685	897.185	3.722	945.948	(4.201)	1,040.169	(3.836)

Note: Some totals may not foot due to rounding.

<sup>1.</sup> 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

<sup>2.</sup> Includes reversions (unspent allocations from previous biennium) and interest earnings on Economic Development Fund.

<sup>3.</sup> 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.

<sup>4.</sup> The Parks and Natural Resources Fund Constitutional amendment requires 15% of net proceeds be transferred to this fund.

<sup>5.</sup> Per Ballot Measure 96 (2016), 1.5% of net lottery proceeds are dedicated to the Veterans' Services Fund

<sup>6.</sup> 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.

<sup>7.</sup> Approximately one percent of net lottery proceeds are dedicated to each program. Certain limits are imposed by the Legislature.

<sup>8.</sup> Includes Debt Service Allocations, Allocations to State School Fund and Other Agency Allocations

Table B.10: Budgetary Reserve Summary and Outlook

May 2023

Rainy	Day	<b>Fund</b>

(Millions)	2019-21	2021-23	2023-25	2025-27	2027-29
Beginning Balance	\$666.6	\$962.2	\$1,351.6	\$1,853.8	\$2,058.2
Interest Earnings	\$22.8	\$39.7	\$130.8	\$107.3	\$127.0
Deposits <sup>1</sup>	\$272.8	\$349.7	\$371.3	\$97.1	\$444.7
Triggered Withdrawals	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Ending Balance <sup>2</sup>	\$962.2	\$1,351.6	\$1,853.8	\$2,058.2	\$2,629.9

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

(Millions)	2019-21	2021-23	2023-25	2025-27	2027-29
Beginning Balance	\$621.1	\$414.6	\$708.4	\$1,005.3	\$1,123.7
Interest Earnings <sup>4</sup>	\$20.1	\$23.0	\$73.7	\$63.0	\$73.1
Deposits <sup>5</sup>	\$194.7	\$294.0	\$296.9	\$118.3	\$345.2
Distributions	\$419.9	\$23.2	\$73.7	\$63.0	\$73.1
Oregon Education Fund	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Oregon Opportunity Grant	\$19.9	\$23.2	\$73.7	\$63.0	\$73.1
Withdrawals	\$400.0	\$0.0	\$0.0	\$0.0	\$0.0
Ending Balance	\$414.6	\$708.4	\$1,005.3	\$1,123.7	\$1,468.8

### **Total Reserves**

(Millions)	2019-21	2021-23	2023-25	2025-27	2027-29
Ending Balances	\$1,376.8	\$2,060.0	\$2,859.1	\$3,181.9	\$4,098.7
Percent of General Fund Revenues	5.8%	6.8%	11.4%	9.4%	10.5%

#### Footnotes:

<sup>1.</sup> 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.

<sup>2.</sup> Available funds in a given biennium equal 2/3rds of the beginning balance under current law.

<sup>3.</sup> Excludes funds in the Oregon Growth and the Oregon Resource and Technology Development subaccounts.

<sup>4.</sup> 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.

<sup>5.</sup> 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

TABLE B.11
Summary of Marijuana Resources

May 2023

Summary of Marijuana Resource	ა <u> </u>										
	2021-23			2023-25		2025-27		2027-29		2029-31	
	Current	Change from	Change from	Current	Change from						
(in millions of dollars)	Forecast	Mar-23	COS 2021	Forecast	Mar-23	Forecast	Mar-23	Forecast	Mar-23	Forecast	Mar-23
MARIJUANA EARNINGS											
+ Tax Revenue <sup>1</sup>	315.861	1.701	(38.525)	316.860	1.160	357.522	0.000	412.880	0.000	471.063	0.000
+ Medical Marijuana Tax Revenue 2	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>	14.193	0.000	(0.833)	18.374	0.000	18.746	0.000	19.144	0.000	19.571	0.000
Net Available to Transfer	301.668	1.701	(37.692)	298.486	1.160	338.776	0.000	425.633	0.000	495.534	0.000
OREGON MARIJUANA ACCOUNT											
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	301.668	1.701	(37.692)	298.486	1.160	338.776	0.000	425.633	0.000	495.534	0.000
Other Resources	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Available Resources	301.668	1.701	(37.692)	298.486	1.160	338.776	0.000	425.633	0.000	495.534	0.000
ALLOCATION OF RESOURCES 4											
Drug Treatment & Recovery	211.668	1.701	(37.692)	196.610	1.160	230.252	0.000	312.218	0.000	377.113	0.000
State School Fund	36.000	0.000	0.000	40.751	0.000	43.409	0.000	45.366	0.000	47.368	0.000
Mental Health, Alcoholism, & Drug Services	18.000	0.000	0.000	20.375	0.000	21.705	0.000	22.683	0.000	23.684	0.000
State Police	13.500	0.000	0.000	15.281	0.000	16.279	0.000	17.012	0.000	17.763	0.000
Cities	9.000	0.000	0.000	10.188	0.000	10.852	0.000	11.341	0.000	11.842	0.000
Counties	9.000	0.000	0.000	10.188	0.000	10.852	0.000	11.341	0.000	11.842	0.000
Alcohol & Drug Abuse Prevention, Intervention & Treatment	4.500	0.000	0.000	5.094	0.000	5.426	0.000	5.671	0.000	5.921	0.000
Total Distributions	301.668	1.701	(37.692)	298.486	1.160	338.776	0.000	425.633	0.000	495.534	0.000
Ending Balance	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note: Some totals may not foot due to rounding.

<sup>1.</sup> Retailers pay taxes monthly, however taxes are not available for distribution to recepient 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 be come available to distribute.

<sup>2.</sup> 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.

<sup>3.</sup> 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)

<sup>4.</sup> The first \$11.25 million per quarter (\$45m per year) is distributed via forumula 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
Summary of Corporate Activity Tax Resources

May 2023

duminary of corporate Activity	ant i tooo air o	-									
	2021-23			2023-25		2025-27		2027-29		2029-31	
	Current	Change from	Change from	Current	Change from						
(in millions of dollars)	Forecast	Mar-23	COS 2021	Forecast	Mar-23	Forecast	Mar-23	Forecast	Mar-23	Forecast	Mar-23
Corporate Activity Tax											
+ Tax Revenue	2,541.377	90.350	173.080	2,779.098	175.685	3,110.867	201.575	3,474.353	225.175	3,888.083	245.802
- Administrative Costs	19.200	0.000	0.000	21.312	0.000	23.656	0.000	26.259	0.000	28.689	0.000
Net Available to Transfer	2,522.177	90.350	173.080	2,757.786	175.685	3,087.210	201.575	3,448.095	225.175	3,859.395	245.802
Fund for Student Success											
Beginning Balance	200.557	0.000	0.000	318.527	128.628	0.000	0.000	0.000	0.000	0.000	0.000
Revenue Transfers	2,522.177	90.350	173.080	2,757.786	175.685	3,087.210	201.575	3,448.095	225.175	3,859.395	245.802
Other Resources	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Available Resources	2,722.734	90.350	173.080	3,076.313	304.314	3,087.210	201.575	3,448.095	225.175	3,859.395	245.802
ALLOCATION OF RESOURCES											
State School Fund	731.771	16.712	46.093	701.955	14.091	791.894	14.540	908.656	28.594	1,016.010	27.734
Student Investment Account	891.938	(0.339)	(0.339)	1,187.179	145.112	1,147.658	93.518	1,269.719	98.291	1,421.692	109.034
Statewide Education Initiative Account	382.930	(15.995)	10.028	712.307	87.067	688.595	56.111	761.832	58.974	853.015	65.421
Early Learning Account	397.568	(38.657)	(38.539)	474.872	58.045	459.063	37.407	507.888	39.316	568.677	43.614
Total Distributions	2,404.207	(38.278)	17.244	3,076.313	304.314	3,087.210	201.575	3,448.095	225.175	3,859.395	245.802
Ending Balance	318.527	128.628	155.837	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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 \$58.0 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)

### Table B.13

### **Corporate Activity Tax Collections By Quarter**

May-23

(thousands)	2019:3	2019:4	2020:1	2020:2	FY 2020	2020:3	2020:4	2021:1	2021:2	FY 2021
Estimated Payments	\$(	) \$0	\$4,023	\$222,495	\$226,518	\$224,973	\$254,387	\$223,550	\$270,784	\$973,693
Final Payments	\$0	) \$0	\$0	\$0	\$0	\$0	\$0	\$26,911	\$163,436	\$190,348
Refunds	\$(	) \$0	\$0	\$0	\$0	\$0	\$0	-\$997.05	-\$14,657	-\$15,654
Total	\$(	) \$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
Estimated Payments	\$271,858	\$389,810	\$230,942	\$279,349	\$1,171,959	\$292,325	\$391,140	\$250,948	\$279,003	\$1,213,415
Final Payments	\$15,153	\$41,892	\$41,950	\$168,644	\$267,640	\$59,490	\$75,201	\$65,187	\$172,303	\$372,180
Refunds	-\$16,356	-\$141,389	-\$15,151	-\$50,166	-\$223,062	-\$41,565	-\$170,978	-\$21,976	-\$26,236	-\$260,756
Total	\$270,656	\$290,314	\$257,741	\$397,828	\$1,216,538	\$310,249	\$295,362	\$294,158	\$425,070	\$1,324,839

	2023:3	2023:4	2024:1	2024:2	FY 2024	2024:3	2024:4	2025:1	2025:2	FY 2025
<b>Estimated Payments</b>	\$291,022	\$389,961	\$255,874	\$289,412	\$1,226,268	\$301,985	\$406,545	\$267,878	\$305,529	\$1,281,938
Final Payments	\$61,828	\$70,480	\$65,406	\$180,437	\$378,151	\$64,500	\$73,951	\$67,015	\$180,456	\$385,922
Refunds	-\$39,673	-\$152,053	-\$22,596	-\$26,716	-\$241,038	-\$41,305	-\$161,728	-\$23,578	-\$25,532	-\$252,143
Total	\$313,176	\$308,388	\$298,684	\$443,133	\$1,363,381	\$325,180	\$318,768	\$311,315	\$460,453	\$1,415,717

	2025:3	2025:4	2026:1	2026:2	FY 2026	2026:3	2026:4	2027:1	2027:2	FY 2027
<b>Estimated Payments</b>	\$318,927	\$429,741	\$283,303	\$322,718	\$1,354,688	\$337,063	\$454,008	\$299,397	\$341,125	\$1,431,592
Final Payments	\$64,834	\$73,767	\$68,711	\$190,247	\$397,559	\$67,956	\$78,002	\$72,598	\$200,855	\$419,411
Refunds	-\$39,070	-\$151,486	-\$22,491	-\$26,484	-\$239,531	-\$40,928	-\$160,183	-\$23,776	-\$27,965	-\$252,852
Total	\$344,691	\$352,022	\$329,523	\$486,481	\$1,512,716	\$364,090	\$371,826	\$348,219	\$514,015	\$1,598,150

	2027:3	2027:4	2028:1	2028:2	FY 2028	2028:3	2028:4	2029:1	2029:2	FY 2029
<b>Estimated Payments</b>	\$355,971	\$479,496	\$316,273	\$360,749	\$1,512,489	\$376,454	\$507,151	\$334,545	\$381,623	\$1,599,772
Final Payments	\$71,756	\$82,345	\$76,657	\$212,131	\$442,889	\$75,781	\$86,969	\$81,021	\$224,366	\$468,138
Refunds	-\$43,212	-\$169,101	-\$25,102	-\$29,534	-\$266,948	-\$45,637	-\$178,599	-\$26,518	-\$31,232	-\$281,986
Total	\$384,516	\$392,739	\$367,828	\$543,347	\$1,688,430	\$406,598	\$415,522	\$389,048	\$574,757	\$1,785,924

	2029:3	2029:4	2030:1	2030:2	FY 2030	2030:3	2030:4	2031:1	2031:2	FY 2031
<b>Estimated Payments</b>	\$398,236	\$536,502	\$353,908	\$403,713	\$1,692,359	\$421,288	\$567,557	\$374,414	\$427,230	\$1,790,490
Final Payments	\$80,140	\$91,993	\$85,705	\$237,351	\$495,189	\$84,777	\$97,317	\$90,666	\$251,091	\$523,851
Refunds	-\$48,268	-\$188,914	-\$28,050	-\$33,040	-\$298,271	-\$51,061	-\$199,848	-\$29,673	-\$34,952	-\$315,535
Total	\$430,109	\$439,580	\$411,564	\$608,025	\$1,889,278	\$455,005	\$465,026	\$435,406	\$643,368	\$1,998,806

### APPENDIX C: POPULATION FORECASTS BY AGE AND SEX

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

Year		Population C	Change	Birt	ths	Dea	iths	Natural	Net Mig	ration
(July 1)	Population	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
1990-1995	;	324,000		210,464		131,769		78,695	245,305	
1996	3,247,100	62,700	1.97	43,196	13.43	28,768	8.95	14,428	48,272	15.01
1997	3,304,300	57,200	1.76	43,625	13.32	29,201	8.91	14,424	42,776	13.06
1998	3,352,400	48,100	1.46	44,696	13.43	28,705	8.62	15,991	32,109	9.65
1999	3,393,900	41,500	1.24	45,188	13.40	29,848	8.85	15,340	26,160	7.76
2000	3,431,100	37,200	1.10	45,534	13.34	28,909	8.47	16,625	20,575	6.03
1995-2000	)	246,700		222,239		145,431		76,808	169,892	
2001	3,470,400	39,300	1.15	45,536	13.20	29,934	8.67	15,602	23,698	6.87
2002	3,502,600	32,200	0.93	44,995	12.91	30,828	8.84	14,167	18,033	5.17
2003	3,538,600	36,000	1.03	45,686	12.98	30,604	8.69	15,082	20,918	5.94
2004	3,578,900	40,300	1.14	45,599	12.81	30,721	8.63	14,878	25,422	7.14
2005	3,626,900	48,000	1.34	45,892	12.74	30,717	8.53	15,175	32,825	9.11
2000-2005	i	195,800		227,708		152,804		74,904	120,896	
2006	3,685,200	58,300	1.61	46,946	12.84	30,771	8.42	16,175	42,125	11.52
2007	3,739,400	54,200	1.47	49,404	13.31	31,396	8.46	18,008	36,192	9.75
2008	3,784,200	44,800	1.20	49,659	13.20	32,008	8.51	17,651	27,149	7.22
2009	3,815,800	31,600	0.84	47,960	12.62	31,382	8.26	16,578	15,022	3.95
2010	3,837,300	21,500	0.56	46,256	12.09	31,689	8.28	14,567	6,933	1.81
2005-2010	l	210,400		240,225		157,246		82,979	127,421	
2011	3,857,625	20,325	0.53	45,381	11.80	32,437	8.43	12,944	7,381	1.92
2012	3,878,877	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
2010-2015	;	164,845		226,354		167,458		58,896	105,949	
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
2015-2020	)	241,646		216,295		182,823		33,472	208,174	
2021	4,263,827	20,036	0.47	39,654	9.32	41,893	9.85	-2,239	22,275	5.24
2022	4,278,910	15,083	0.35	40,454	9.47	46,224	10.82	-5,770	20,853	4.88
2023	4,294,000	15,090	0.35	40,876	9.54	46,751	10.91	-5,875	20,965	4.89
2024	4,314,500	20,500	0.48	41,221	9.58	46,427	10.79	-5,206	25,706	5.97
2025	4,340,900	26,400	0.61	41,624	9.62	46,415	10.73	-4,791	31,191	7.21
2020-2025	;	97,109		203,829		227,710		-23,882	120,991	
2026	4,370,200	29,300	0.67	42,104	9.67	46,744	10.73	-4,639	33,939	7.79
2027	4,401,400	31,200	0.71	42,630	9.72	47,238	10.77	-4,608	35,808	8.16
2028	4,434,100	32,700	0.74	43,181	9.77	47,874	10.84	-4,694	37,394	8.46
2029	4,468,700	34,600	0.78	43,768	9.83	48,487	10.89	-4,718	39,318	8.83
2030	4,504,500	35,800	0.80	44,384	9.89	48,924	10.90	-4,539	40,339	8.99
2025-2030	)	163,600		216,067		239,267		-23,199	186,799	
1990-2000		570,700		432,703		277,200		155,503	415,197	13.10
2000-2010		406,200		467,933		310,050		157,883	248,317	6.83
2010-2020		406,491		442,649		350,281		92,368	314,123	7.81
2020-2030	)	260,709		419,896		466,977		-47,081	307,790	7.07

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; 2020-2022 population by PRC/PSUI; births and deaths 1990-2022: 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

					2010			2015			2020				
Age				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 10-14				121,539 124,508	116,369 118,732	237,908 243,241	125,142 122,812	118,090 118,117	243,232 240,928	123,931 128,201	115,417 121,882	239,348 250,083			
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 35-39				131,489 128,070	128,325 123,596	259,814 251,665	140,637 134,041	137,861 129,570	278,499 263,611	151,909 148,252	150,900 142,226	302,809 290,478			
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 60-64				133,011 115,236	140,802 121,045	273,812 236,281	132,989 130,018	141,912 139,366	274,901 269,383	129,398 133,067	136,078 143,221	265,475 276,288			
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			
		2021			2022			2023			2024			2025	
Age	Male	Female	Total												
0-4	109,547	103,569	213,116	106,947	101,248	208,195	105,668	100,114	205,782	105,169	99,631	204,800	105,753	100,099	205,852
5- 9	124,132	115,558	239,690	123,601	115,153	238,754	121,818	113,679	235,497	119,369	111,617	230,987	116,259	108,891	225,150
10-14	127,754	121,127	248,882	126,767	119,492	246,259	125,826	117,905	243,731	125,460	117,448	242,908	125,428	117,348	242,776
15-19 20-24	127,491 136,295	120,892 130,832	248,383 267,127	128,331 135,123	122,170 128,950	250,501 264,073	129,515 134,109	123,350 127,983	252,866 262,092	130,219 133,540	123,428 127,899	253,647 261,439	131,061 132,772	123,593 127,905	254,654 260,677
25-29	150,930	150,426	301,356	148,554	147,706	296,260	146,555	145,247	291,802	145,912	143,958	289,870	146,296	143,819	290,115
30-34	155,694	156,014	311,708	159,125	160,286	319,411	161,693	162,795	324,488	162,483	163,489	325,972	161,839	162,341	324,180
35-39	149,512	143,418	292,930	149,994	144,300	294,294	150,540	145,883	296,423	152,656	148,883	301,539	155,528	152,842	308,371
40-44	141,363	135,709	277,072	144,183	138,535	282,718	146,088	140,348	286,436	148,790	142,716	291,506	150,170	143,912	294,082
45-49 50-54	131,300 131,607	125,833 128,608	257,133 260,215	131,498 133,577	126,479 129,787	257,976 263,364	134,087 134,083	128,517 130,442	262,604 264,524	136,030 133,331	130,580 129,494	266,609 262,825	139,398 131,957	133,591 127,984	272,989 259,940
55-59	126,584	132,200	258,783	124,238	128,517	252,755	122,569	125,419	247,988	122,927	124,423	247,351	125,550	126,267	251,817
60-64	132,549	142,731	275,280	130,846	141,332	272,179	128,877	139,427	268,304	127,852	137,636	265,488	125,985	134,621	260,607
65-69	127,909	139,060	266,969	128,226	139,837	268,064	127,835	139,409	267,244	126,379	138,471	264,850	125,805	138,369	264,174
70-74	107,843	117,768	225,611	109,006	119,451	228,457	110,421	122,361	232,782	112,469	125,751	238,219	114,350	127,973	242,324
75-79 80-84	66,605 40,039	76,432 47,997	143,037 88,036	72,550 41,487	83,090 50,344	155,639 91,832	76,998 44,116	88,268 53,653	165,265 97,769	81,062 46,459	92,611 56,758	173,673 103,217	85,684 48,578	98,253 59,427	183,937 108,005
85+	34,037	54,462	88,499	33,969	54,210	88,180	34,091	54,312	88,403	34,708	54,893	89,602	35,630	55,621	91,252
	2 121 102	2.4.2.525	4.0.50.00		2.150.005	4.000.040	2.12.1.000							2.102.055	1210.000
Total Mdn. Age	2,121,192 39.3	2,142,635 41.0	4,263,827 40.2	2,128,023 39.5	2,150,886 41.3	4,278,910 40.4	2,134,889 39.7	2,159,111 41.5	4,294,000 40.6	2,144,814 39.9	2,169,685 41.7	4,314,500 40.8	2,158,044 40.1	2,182,856 41.9	4,340,900 41.0
Widii. Age	37.3	41.0	40.2	37.3	41.5	40.4	37.1	41.5	40.0	37.7	41.7	40.0	40.1	41.7	41.0
		2026			2027			2028			2029			2030	
Age	Male	Female	Total												
0-4 5- 9	107,301 112,706	101,461 105,646	208,762 218,352	108,693 110,420	102,677 103,506	211,369 213,925	110,098 109,551	103,925 102,600	214,023 212,152	111,590 109,410	105,269 102,309	216,859 211,719	113,155 110,245	106,686 102,905	219,841 213,150
10-14	125,748	117,677	243,425	125,380	117,514	242,895	123,779	116,282	240,061	121,461	114,386	235,846	118,382	111,713	230,095
15-19	130,970	123,009	253,979	130,329	121,526	251,855	129,694	120,083	249,777	129,573	119,758	249,331	129,696	119,709	249,404
20-24	133,455	128,472	261,928	135,060	130,677	265,737	137,049	132,733	269,782	138,399	133,486	271,885	139,686	134,144	273,830
25-29	146,419	144,372	290,792	146,469	143,977	290,445	146,727	144,670	291,397	147,194	146,024	293,218	147,060	147,006	294,066
30-34 35-39	160,214 159,791	159,505 158,188	319,719 317,979	158,938 163,927	157,800 162,797	316,738 326,724	158,203 167,321	156,578 165,722	314,782 333,043	158,668 168,752	156,349 166,740	315,016 335,492	159,836 168,447	156,927 165,730	316,763 334,177
40-44	151,820	145,397	297,217	152,795	146,622	299,416	153,861	148,558	302,420	156,441	151,872	308,313	159,658	156,074	315,732
45-49	142,587	136,511	279,098	145,890	139,612	285,503	148,331	141,738	290,069	151,496	144,386	295,882	153,189	145,759	298,948
50-54	130,376	126,770	257,147	130,949	127,799	258,749	133,952	130,255	264,206	136,228	132,679	268,907	139,854	135,973	275,827
55-59 60-64	129,286 123,616	129,212 131,057	258,497	131,631	130,850	262,481	132,555 120,927	131,998	264,553	132,165	131,446 124,619	263,611	131,045	130,200 126,785	261,245 251,593
60-64 65-69	125,599	131,057	254,672 263,771	121,931 124,568	127,811 137,230	249,742 261,797	120,927	125,199 135,834	246,126 259,154	121,808 122,836	124,619	246,427 257,298	124,808 121,418	126,785	251,593 253,220
70-74	115,752	129,824	245,576	116,566	130,844	247,411	116,799	130,825	247,624	115,924	130,276	246,199	115,782	130,463	246,245
75-79	90,342	103,886	194,228	91,785	105,707	197,492	93,470	108,676	202,145	95,590	111,999	207,589	97,521	114,274	211,795
80-84	50,166	61,363	111,529	55,259	67,095	122,354	59,297	71,666	130,964	62,885	75,485	138,371	66,814	80,348	147,162
85+	36,667	56,863	93,530	38,057	58,708	96,766	40,341	61,480	101,822	42,484	64,252	106,736	44,586	66,821	111,406
Total	2,172,815	2,197,385	4,370,200	2,188,647	2,212,753	4,401,400	2,205,276	2,228,824	4,434,100	2,222,904	2,245,796	4,468,700	2,241,182	2,263,318	4,504,500
Mdn. Age	40.3	42.0	41.2	40.5	42.2	41.3	40.7	42.4	41.5	40.8	42.5	41.7	41.0	42.7	41.8

Table C.3 Population of Oregon: 1990-2030

Year	Total	Change from previous year		
(July 1)	Population	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	4,263,827	20,036	0.47%	
2022	4,278,910	15,083	0.35%	
2023	4,294,000	15,090	0.35%	
2024	4,314,500	20,500	0.48%	
2025	4,340,900	26,400	0.61%	
2026	4,370,200	29,301	0.67%	
2027	4,401,400	31,200	0.71%	
2028	4,434,100	32,700	0.74%	
2029	4,468,700	34,600	0.78%	
2030	4,504,500	35,800	0.80%	

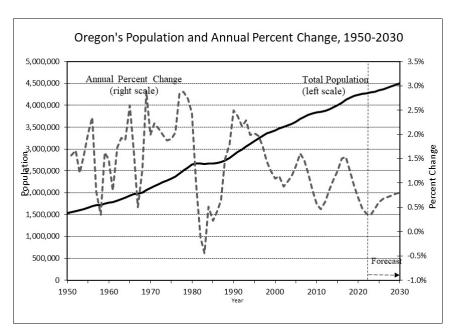


Table C.4 Children: Ages 0-4

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

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

		0			0		-	0	
Year % Change from previous decade/yr.			ious decade/yr.	% Change from previous decade/yr.				% Change from previous decade/yr.	
(July 1)	Population	Number	Percent	Population	Number	Percent	Population	Number	Percent
1980	199,525			524,446			329,407		
1990	209,638	10,113	5.07%	532,727	8,281	1.58%	268,134	-61,273	-18.60%
2000	223,207	13,569	6.47%	624,316	91,589	17.19%	330,328	62,194	23.20%
2001	224,645	1,438	0.64%	624,675	358	0.06%	336,660	6,333	1.92%
2002	225,084	439	0.20%	624,611	-64	-0.01%	340,778	4,118	1.22%
2003	226,652	1,568	0.70%	624,349	-262	-0.04%	345,266	4,487	1.32%
2004	228,353	1,701	0.75%	625,461	1,112	0.18%	349,138	3,873	1.12%
2005	230,008	1,655	0.72%	628,326	2,865	0.46%	351,076	1,938	0.55%
2006	231,882	1,874	0.81%	633,646	5,320	0.85%	354,328	3,252	0.93%
2007	236,160	4,278	1.85%	635,720	2,074	0.33%	356,311	1,983	0.56%
2008	239,340	3,180	1.35%	635,372	-348	-0.05%	358,967	2,656	0.75%
2009	239,929	589	0.25%	633,575	-1,797	-0.28%	360,134	1,166	0.32%
2010	238,457	-1,472	-0.61%	630,741	-2,835	-0.45%	359,764	-370	-0.10%
2011	236,033	-2,424	-1.02%	628,103	-2,638	-0.42%	360,180	416	0.12%
2012	232,641	-3,392	-1.44%	628,214	111	0.02%	361,748	1,568	0.44%
2013	229,849	-2,792	-1.20%	629,466	1,251	0.20%	364,800	3,053	0.84%
2014	229,040	-809	-0.35%	630,820	1,354	0.22%	367,153	2,353	0.64%
2015	229,278	238	0.10%	632,114	1,294	0.21%	368,599	1,446	0.39%
2016	230,910	1,632	0.71%	634,041	1,927	0.30%	369,160	561	0.15%
2017	231,892	982	0.43%	636,366	2,325	0.37%	371,218	2,058	0.56%
2018	229,977	-1,915	-0.83%	636,368	2	0.00%	372,896	1,678	0.45%
2019	226,022	-3,955	-1.72%	636,593	225	0.04%	372,182	-713	-0.19%
2020	220,192	-5,830	-2.58%	637,442	849	0.13%	369,271	-2,912	-0.78%
2021	213,116	-7,076	-3.21%	637,725	283	0.04%	366,356	-2,915	-0.79%
2022	208,195	-4,921	-2.31%	635,622	-2,102	-0.33%	363,965	-2,391	-0.65%
2023	205,782	-2,413	-1.16%	631,818	-3,805	-0.60%	362,369	-1,597	-0.44%
2024	204,800	-982	-0.48%	626,795	-5,022	-0.79%	362,185	-184	-0.05%
2025	205,852	1,052	0.51%	619,674	-7,121	-1.14%	363,581	1,397	0.39%
2026	208,762	2,910	1.41%	611,264	-8,410	-1.36%	366,418	2,837	0.78%
2027	211,369	2,608	1.25%	604,849	-6,415	-1.05%	369,563	3,145	0.86%
2028	214,023	2,653	1.26%	599,448	-5,401	-0.89%	372,324	2,760	0.75%
2029	216,859	2,836	1.33%	595,574	-3,875	-0.65%	373,208	884	0.24%
2030	219,841	2,981	1.37%	592,400	-3,173	-0.53%	374,080	872	0.23%

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

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

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

Year	% Change from previous decade/yr.		% Change from previous decade/yr.			% Change from previous decade/yr.			
(July 1)	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	719,922	1,845	0.26%	1,183,066	11,190	0.95%	1,051,412	-4,899	-0.46%
2022	721,128	1,205	0.17%	1,192,683	9,617	0.81%	1,046,274	-5,139	-0.49%
2023	722,412	1,285	0.18%	1,199,149	6,466	0.54%	1,043,421	-2,853	-0.27%
2024	724,809	2,397	0.33%	1,208,886	9,737	0.81%	1,042,273	-1,148	-0.11%
2025	727,496	2,687	0.37%	1,216,747	7,861	0.65%	1,045,353	3,080	0.30%
2026	730,849	3,353	0.46%	1,225,707	8,960	0.74%	1,049,414	4,061	0.39%
2027	734,722	3,873	0.53%	1,233,324	7,617	0.62%	1,056,475	7,060	0.67%
2028	738,995	4,273	0.58%	1,241,642	8,318	0.67%	1,064,955	8,480	0.80%
2029	742,586	3,592	0.49%	1,252,040	10,398	0.84%	1,074,826	9,871	0.93%
2030	744,725	2,138	0.29%	1,260,738	8,698	0.69%	1,087,613	12,786	1.19%

Table C.10 Elderly Population by Age Group

Year (July 1)	Ages 65+	%Change from previous decade/yr.	Ages 65-74	%Change from previous decade/yr.	Ages 75-84	%Change from previous decade/yr.	Ages 85+	%Change from previous decade/yr.
1980	305,841		185,863		91,137		28,841	
1990	392,369	28.29%	224,772	20.93%	128,813	41.34%	38,784	34.48%
2000	439,239	11.95%	218,997	-2.57%	162,187	25.91%	58,055	49.69%
2001	442,558	0.76%	218,838	-0.07%	163,878	1.04%	59,843	3.08%
2002	445,890	0.75%	219,614	0.35%	165,109	0.75%	61,167	2.21%
2003	451,080	1.16%	222,361	1.25%	165,669	0.34%	63,050	3.08%
2004	456,984	1.31%	226,373	1.80%	165,842	0.10%	64,769	2.73%
2005	465,089	1.77%	231,926	2.45%	166,077	0.14%	67,087	3.58%
2006	475,596	2.26%	239,931	3.45%	165,787	-0.17%	69,877	4.16%
2007	487,657	2.54%	250,131	4.25%	165,148	-0.39%	72,379	3.58%
2008	502,959	3.14%	264,201	5.63%	164,354	-0.48%	74,403	2.80%
2009	517,502	2.89%	277,606	5.07%	163,513	-0.51%	76,383	2.66%
2010	532,062	2.81%	289,645	4.34%	164,159	0.40%	78,258	2.45%
2011	544,506	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	812,152	2.97%	492,580	3.20%	231,073	3.52%	88,499	0.37%
2022	832,171	2.46%	496,520	0.80%	247,471	7.10%	88,180	-0.36%
2023	851,462	2.32%	500,025	0.71%	263,034	6.29%	88,403	0.25%
2024	869,560	2.13%	503,069	0.61%	276,889	5.27%	89,602	1.36%
2025	889,691	2.32%	506,497	0.68%	291,942	5.44%	91,252	1.84%
2026	908,634	2.13%	509,347	0.56%	305,758	4.73%	93,530	2.50%
2027	925,820	1.89%	509,208	-0.03%	319,846	4.61%	96,766	3.46%
2028	941,709	1.72%	506,778	-0.48%	333,109	4.15%	101,822	5.22%
2029	956,193	1.54%	503,497	-0.65%	345,959	3.86%	106,736	4.83%
2030	969,828	1.43%	499,464	-0.80%	358,957	3.76%	111,406	4.38%