Revenue Outlook

Revenue Summary

After several quarters of unexpectedly rapid growth in tax collections, Oregon's state revenue outlook appears to have stabilized. A consensus of economic forecasters has converged on a baseline scenario in which monetary policymakers are able to navigate a soft landing, cooling inflation without large job and income losses. Although this economic outlook remains highly uncertain, it appears on track for now. The same can be said for the state revenue outlook. Collections in recent months have tracked closely with the May forecast. Even so, Oregon has yet to go through its first personal income tax filing season of the biennium, and as such, everything remains at risk.

This revenue forecast represents the last look at the 2021-23 biennium and reveals the Close of Session (COS) forecast. The Close of Session forecast sets the bar for Oregon's constitutionally required balanced budget, as well as its unique kicker law. The COS incorporates any legislative changes enacted during the legislative session that impact General Fund revenues and folds them into the mid-session (May) revenue forecast that covers the next two years, and forms the basis of the legislatively adopted budget.

This session's legislative changes were relatively modest in scope when compared to the changes that have been made in recent years. After recent transformational changes to Oregon's revenue system, which have shifted the state toward a more consumption-focused revenue base, the legislative changes made during the 2023 session were relatively minor. All told, law changes during the 2023 session resulted in a reduction of $48.6 million in expected General Fund revenue during the current biennium.

2023-25 General Fund Revenues

Gross General Fund revenues for the 2023-25 biennium are expected to reach $25,663 million. This represents an increase of $354 million from the May 2023 forecast, and an increase of $403 million relative to the Close of Session forecast. Most of the increase can be attributed to collections of corporate income taxes, which continue to outstrip underlying profit earnings. Total available resources in the current 2023-25 biennium are increased $437 million after accounting for a bigger beginning balance which was the result of a larger ending balance in the previous 2021-23 biennium after it closed this summer.

Table R.1

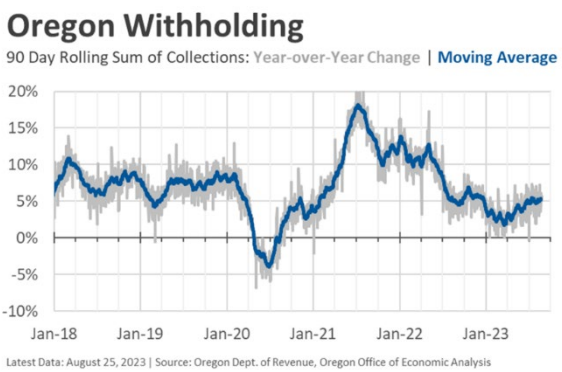
2023-25 General Fund Forecast Summary

(Millions)	2023 COS Forecast	May 2023 Forecast	September 2023 Forecast	Change from Prior Forecast	Change from COS Forecast
Structural Revenues					
Personal Income Tax	$21,019.7	$21,088.3	$21,063.6	-$24.7	$43.9
Corporate Income Tax	$2,228.9	$2,245.0	$2,549.9	$304.8	$320.9
All Other Revenues	$2,011.3	$1,975.3	$2,049.5	$74.2	$38.2
Gross GF Revenues	$25,259.9	$25,308.6	$25,663.0	$354.4	$403.1
Offsets, Transfers, and Actions[1]	-$437.0	-$439.4	-$545.6	-$106.2	-$108.6
Beginning Balance	$7,493.5	$7,002.1	$7,636.2	$634.1	$142.8
Net Available Resources	**$32,316.4**	**$31,871.4**	**$32,753.7**	**$882.3**	**$437.3**
Appropriations	$31,873.6	NA	$31,873.6	NA	$0.0
Ending Balance	**$442.8**	**NA**	**$880.1**	**NA**	**$437.3**
Confidence Intervals					
67% Confidence	+/- 9.0%		**$2,302.0**	**$23.36B to $27.97B**	
95% Confidence	+/- 17.9%		**$4,604.0**	**$21.06B to $30.27B**	

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

Personal Income Tax

Growth in withholdings has picked back up in recent weeks, and are not growing at an annual rate of around 5%, in range with 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. While usually wage acceleration would be welcome news, today's labor market needs to cool down. If the labor market continues to heat up at the national level, monetary policymakers may need to clamp down harder going forward.



As always, the most difficult components of personal income taxes to predict are nonwage forms of income such as capital gains. Unlike labor income, taxpayers have flexibility over when they realize capital gains for tax purposes. After setting records during 2022, realized capital gains declined by nearly 50% this year matching expectations. These declines have an outsized impact on tax collections given that most are claimed by high-income households. The drag on revenues will persist in going forward due to losses carried forward into future tax years.

Calculation of Oregon's Personal Income Kicker Credit

Article IX, Section 14 of the Oregon Constitution establishes personal and corporate "kicker" tax rebates. The law is codified in Oregon Revised Statute 291.249, which governs the calculation and certification of the rebates.

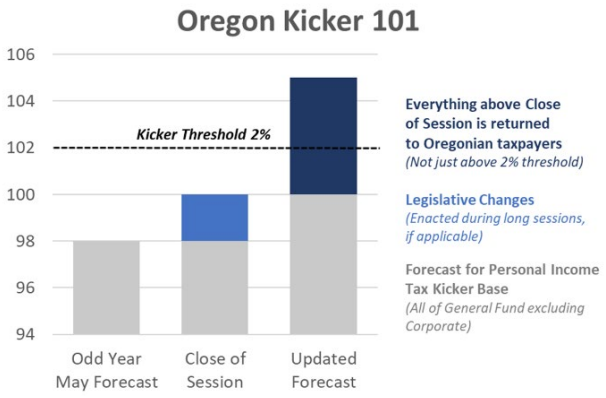
The personal tax rebate is a tax credit refunding a surplus of all General Fund revenues excluding corporate income and excise taxes. The surplus is calculated as the difference between actual revenues for the biennium in question less the forecast issued two years prior that formed the basis of the legislatively adopted budget. The refunding is triggered if actual revenues are more than two percent larger than forecasted revenues.

The Department of Administrative Services is required to tabulate General Fund revenues for the preceding biennium, determine whether they have exceeded the two-percent threshold, and certify the surplus and income tax credit percentage to the Department of Revenue by October 1.

Determining the Kicker Threshold

The personal kicker threshold is set two percent higher than General Fund revenues (excluding corporate income and excise taxes) were expected to be when the budget was drafted. According to ORS 291 349:

"*The Oregon Department of Administrative Services shall base its estimate on the last forecast given to the Legislative Assembly before adjournment sine die of the odd-numbered year regular session on which the printed, adopted budget prepared in the Oregon Department of Administrative Services is based, adjusted only insofar as necessary to reflect changes in laws adopted at that session."*



In practice, the last forecast presented to the Legislature is typically delivered around May 15 during odd-numbered years. Any statutory changes made during the session that impact revenues are folded into the May outlook using revenue impact estimates developed by the Legislative Revenue Office. This forecast is commonly referred to as the Close of Session forecast and is first reported in the September quarterly economic and revenue outlook report (Table B.1). The Close of Session forecast and resulting kicker threshold remain unchanged over the remainder of the biennium, unless the Legislature chooses to revise the estimate with a 2/3rds vote.[9]

Determining General Fund Revenues

Unlike most state accounts, General Fund resources used in the kicker calculation are accounted for on a cash basis. According to Article IX, Section 14: *"As soon as is practicable after the end of the biennium, the Governor shall cause actual collections of revenues received by the General Fund for that biennium to be determined."* With few exceptions[10][11], revenues are counted at the time they are deposited into the General Fund, not when they are remitted by taxpayers or generated in the

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9 Article IX, Section 14: (6)(a) Prior to the close of a biennium for which an estimate described in subsection (1) of this section has been made, the Legislative Assembly, by a two-thirds majority vote of all members elected to each House, may enact legislation declaring an emergency and increasing the amount of the estimate prepared pursuant to subsection (1) of this section.

[10] According to LC opinion, any revenue that was understood to be part of the General Fund when the kicker rebate was written into the Constitution (fiscal year 2000) must be included in the kicker calculation even if that revenue is no longer deposited into the General Fund. For the 2021-23 biennium, this included income tax carve-outs for the Greenlight film and video credit, the Gain Share transfer to counties, and reimbursements for investment in Regionally Significant Industrial sites. These, along with a transfer to the PERS UAL out of estate tax collections, are added back into General Fund revenues for the purposes of the kicker calculation.

[11] Some withholdings of personal income taxes that are collected in July are accrued to June due to a rule known as the 30-day number. This accrual is explained in an addendum.

marketplace. As such, all deposits into the General Fund occurring between July 1 of the first year of the biennium, and June 30 of the last year of the biennium are included in revenues. For the 2021-23 biennium the personal income tax surplus has been estimated to be $5.6 billion.

Given the strict cash basis, agency financial statements cannot be used for kicker certification. Instead, the several thousand individual deposits into the General Fund over the course of the biennium must be summed together to reach a total revenue figure. A query of the Statewide Financial Management System identifies all such deposits. Any unusual transactions are reviewed with the DAS Statewide Accounting and Reporting Section and agency financial personnel for verification and potential correction.

Determining the Personal Income Tax Credit Percentage

The kicker rebate is distributed as a refundable income tax credit in the first tax year of the biennium. This size of this credit is based on the taxpayer's personal income tax liability in the previous year.

The Department of Administrative Services is required to calculate the total kicker rebate (actual General Fund revenues less the Close of Session forecast) as a percentage of personal income tax liability for the previous tax year (less credits for taxes paid to other states).

The October 1 certification deadline arrives before liability data for the previous tax year is complete. The extension filing deadline arrives two weeks later, when many of the most complicated and highest-income returns are filed. As a result, the liability figure used in the tax credit percentage represents an estimate based on all collections and returns filed to date, together with historical arrival rates for reported income. After the Department of Administrative Services certifies the income tax credit percentage, the Department of Revenue is allowed to adjust the percentage to account for administrative costs.

Income Group	Adjusted Gross Income*	Rough Estimate of Kicker Size**
Bottom 20%	< $11,400	$60
Second 20%	$11,400 - $28,900	$440
Middle 20%	$28,900 - $52,400	$1,000
Fourth 20%	$52,400 - $96,200	$1,900
Next 15%	$96,200 - $201,300	$3,800
Next 4%	$201,300 - $466,700	$9,200
Top 1%	> $466,700	$44,600
Average	$69,400	$2,100
Median	$35-40,000	$980

* Based on 2020 actual tax returns
** Based on 2020 actual tax returns, PIT kicker amount ($5.6 billion) and the Oregon Office of Economic Analysis' forecast tax liability

Addendum: The 30-day Number

Oregon's General Fund revenues are counted on a pure cash basis with few exceptions. The primary exception is the 30-day accrual of July withholding receipts:

In 1981, Budget and Management recommended instituting a 10 working-day accrual for July 1981. This moved personal income tax withholdings that were related to June activity back into the 1979-81 biennium even though they were received after the biennium ended. Prior to that time, everything was on a cash basis. The motive was to help balance the 1979-81 budget as well as build the 1981-83 budget.

In 1995, the Department of Administrative Services went to a 30-day accrual. This was in response to a Governmental Accounting Standards Board (GASB) recommended change for all states. Most all were making the change because of the one-time revenue gain.

OAM 20.50.00, section 106, describes the 30-day number: *For each biennium ending June 30, the Department of Revenue will record in the biennium then ended net personal income tax withholding receipts received in July related to June (and prior), less any withholding related refunds (errors or adjustments) that occur in July that relate to June (and prior). This is an exception to the cash basis budgetary accounting used for other types of General Fund revenue. For purposes of the General Fund "kicker" calculation, this amount is the "30-day number."*

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.

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.

Other Sources of Revenue

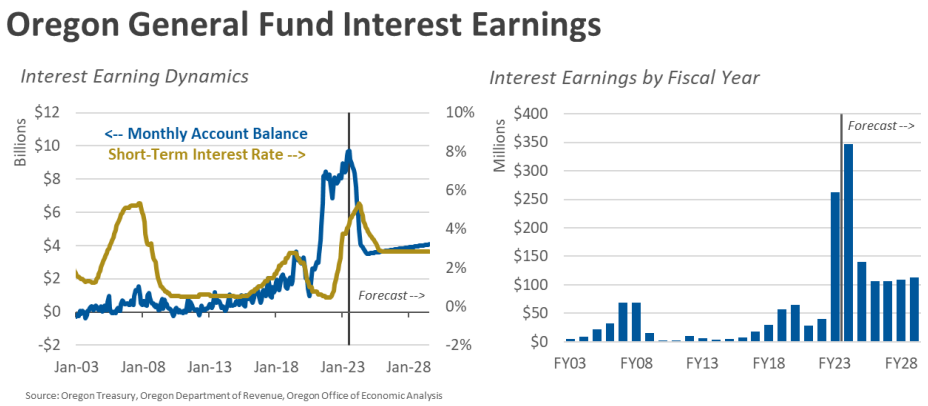
Non-personal and non-corporate revenues in the General Fund usually account for approximately six or seven percent of the total. In the newly started 2023-25 biennium they account for nearly eight percent (largely driven by the record personal income tax kicker being paid out which reduces overall Genearl Fund revenues.) The largest such source are estate taxes, followed by interest earnings, liquor revenues, and judicial revenues.

The 2023-25 Close of Session forecast is increased nearly two percent from the May forecast due to legislative actions. The largest change comes from SB 1049 which transfers $40.6 million from Other Funds to the General Fund. Additionally, liquor revenues transferred to the General Fund were increased $5.2 million due to the combination of increased revenues (HB 3308) from home delivery sales, and other cost savings in the agency budget. These gains were partially offset by SB 498 which reduces

Estate Taxes by $8.0 million this biennium, as a new natural resource property exemption is implemented. Additionally, Criminal Fine Account revenues transferred to the General Fund are lowered after account for increased revenues from photo radar expansion and increased expenditures in other programs that receive CFA revenues.

Relative to the new Close of Session forecast, these other revenue sources are raised $38.2 million (+1.9%). Insurance Taxes are increased $20.1 million, Interest Earnings are raised $13.9 million, Estate Taxes are increased $5.4 million, while Securities Fees are lowered $1.1 million.
Looking forward, these revenues are raised $20.0 million (+1.2%) in the next biennium 2025-27, by $14.0 million in 2027-29 (+0.8%), by $9.8 million (+0.5%) in 2029-31, and by $4.2 million (+0.2%) in 2031-33.

One key revenue sources that continues to stand out relative to history is General Fund interest earnings. The combination of high fund balances today – the result of the inflationary economic boom outpacing forecast expectations – and high interest rates, means public sector interest earnings are now substantial. In the just completed Fiscal Year 2023, Oregon saw $262.5 million in interest earnings, which is more than the state received in the previous 10 years combined. The forecast for interest earnings in the current Fiscal Year 2024 are expected to total $346.7 million.



The outlook for interest earnings is somewhat uncertain given potential timing issues. Today, fund balances are more than $6 billion higher than back in 2019. Next spring the record kicker will be returned to taxpayers, which is expected to reduce the balances from today's high-water mark. To the extent the timing of the kicker credits being paid out differ from expectations, or that short-term interest rates shift with broader changes in the financial markets, then the state's interest earnings will differ from this forecast.

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)

Revenue Source	Forecast 2023-25 Biennium	% Chg	Forecast 2025-27 Biennium	% Chg	Forecast 2027-29 Biennium	% Chg	Forecast 2029-31 Biennium	% Chg	Forecast 2031-33 Biennium	% Chg
Personal Income Taxes	21,063.6	-18.0%	30,171.1	43.2%	35,122.7	16.4%	39,838.6	13.4%	44,702.9	12.2%
Corporate Income Taxes	2,549.9	-19.2%	2,898.8	13.7%	3,208.3	10.7%	3,481.5	8.5%	3,840.5	10.3%
All Others	2,049.5	5.7%	1,744.6	-14.9%	1,842.3	5.6%	1,960.6	6.4%	2,096.6	6.9%
Gross General Fund	25,663.0	-16.6%	34,814.5	35.7%	40,173.4	15.4%	45,280.6	12.7%	50,640.0	11.8%
Offsets and Transfers	*(274.3)*		*(191.1)*		*(210.3)*		*(191.0)*		*(10.1)*	
Net Revenue	25,388.7	-17.0%	34,623.4	36.4%	39,963.1	15.4%	45,089.6	12.8%	50,629.9	12.3%

Tax Law Assumptions

The revenue forecast is based on existing law, including measures and actions signed into law during the 2023 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 2023 Legislative Session can be found in Appendix B Table B.3. For a detailed treatment of the components of the 2023 Legislatively Enacted Budget, see:

Legislative Fiscal Office's 2023-25 Budget Summary[12]

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 2023-25 Tax Expenditure Report[13] together with more timely updates produced by the Legislative Revenue Office.

[12] https://www.oregonlegislature.gov/lfo/Documents/2023-25%20Legislatively%20Adopted%20Budget%20-%20General%20Fund%20and%20Lottery%20Funds%20Summary.pdf

[13] https://www.oregon.gov/DOR/programs/gov-research/Pages/research-tax-expenditure.aspx

General Fund Alternative Scenarios

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

The near-term outlook is particularly uncertain right now. The probability of the soft landing, no recession is rising but the odds of a recession in coming years remains uncomfortably high. Our office's economic alternative scenario (see page 15) is a Boom/Bust cycle with a recession beginning in the second half of 2024. This does mean the revenue impact will be felt in both the current 2023-25 biennium and the next 2025-27 biennium.

Looking at the current 2023-25 biennium, in the pessimistic scenario, General Fund revenues in Oregon would be $1.6 billion lower than in the baseline. Revenues in 2025-27 would be recovering but still $1.1 billion below the current baseline outlook.

Boom/Bust Alternative Scenario

	$ Millions from Baseline				
	23-25	25-27	27-29	29-31	31-33
General Fund Total	-1,648	-1,122	-223	-125	-102
Other Revenues	$ Millions from Baseline				
	23-25	25-27	27-29	29-31	31-33
Lottery	-24	-59	-47	-41	-24
Corporate Activity Tax	-258	-192	-49	-20	-18
Marijuana Tax	-4	-11	-9	-9	-5
Total	-286	-262	-105	-69	-47
	$ Millions from Baseline				
	23-25	25-27	27-29	29-31	31-33
Total Sum	-1,934	-1,384	-328	-194	-149

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 in 2023-25, the Corporate Activity Tax would be $258 million lower than the baseline, while Lottery is expected to be $24 million lower, and Marijuana revenues $4 million lower.

In 2025-27, the Corporate Activity Tax would be $192 million lower than the baseline, while Lottery would be $59 million, and Marijuana $11 million. Over time the economy and state revenues would make up the recessionary lost ground and nearly converge with the baseline outlook. However, recessions tend to leave scars, and the Boom/Bust scenario never fully regains all of the lost ground economically or in terms of state revenues.

Corporate Activity Tax

The 2019 Legislature enacted the corporate activity tax (CAT)14, 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. While a full snapshot of 2021 tax returns won't be available for a few months, an estimate of tax liability is well known. The estimate for 2022 liability will continue to evolve during the extension filing season in the Fall. Given lower-than-expected refund activity in recent months, this estimate has been lowered

[14] 0122 (oregonlegislature.gov)

modestly since the May forecast. Otherwise, the forecast remains little changed in line with the economic outlook presented earlier in this publication. Available resources for the 2023-25 biennium have been revised upward by $29.9 million, primarily buoyed by a larger beginning balance, while legislatively adopted allocations were reduced well below the levels anticipated in the prior forecast. This results in a projected ending balance of $220.7 million in the Fund for Student Success.

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.

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 Forecast

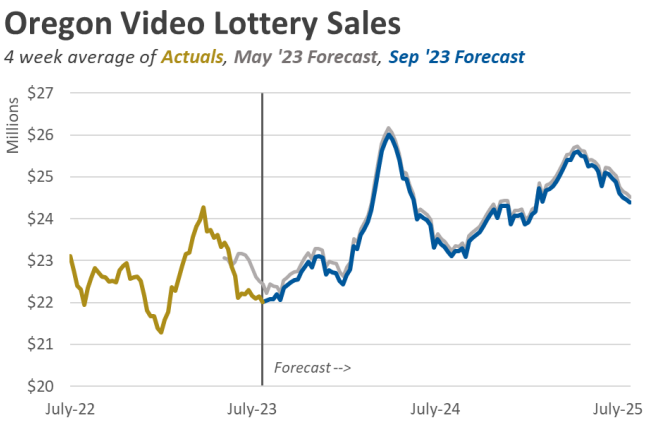
In keeping with a stable economic outlook in terms of income, jobs, population, and spending, the overall lottery forecast is relatively unchanged as well. Resources in the current 2023-25 biennium are raised $9.5 million (+0.5%), while resources in 2025-27 and beyond are all lowered by approximately one half of one percent, or $11 to $15 million per biennium.

The primary change made to the outlook is slight reduction in the sales outlook for video lottery. Sales have tracked low in recent months. This is carried forward into the forecast, when combined with stable income and spending forecasts. It remains an open question to what extent the sharper slowdown in video sales recently is temporary, or a sign of something more permanent. On one hand, sales slowed in other states, but less so than in Oregon. On the other hand, households may be struggling with continued high inflation which could crimp their spending on discretionary items to a greater degree. Or conversely, with increased travel and the high cost of vacations today, consumers may be choosing to spend their money on other entertainment options to a greater degree.

But overall, sales remain much stronger than pre-pandemic, and are tracking closer to the previous forecast in recent weeks than they were a couple of months ago. And comparing the entire cycle to

date, Oregon video sales are right in the middle of the pack for sales growth in slots or video seen in other states.

One additional factor impacting sales next year is the record $5.6 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 the pandemic reopening highs, followed by slightly lower sales the following year when there will be no kicker paid out.



Besides the changes made to the video lottery forecast, there are two other impacts to revenues in the current 2023-25 biennium. High jackpots continue to drive traditional Lottery sales above forecast. Additionally, following the close out of the previous biennium, Oregon Lottery was able to transfer $9.2 million in administrative savings this past quarter, raising available resources in the current biennium.

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 could outstrip the expectations of an economic soft landing. Conversely, should inflation begin to take a toll on households, discretionary purchases may be cut back, similar to what appears to have happened in recent weeks.

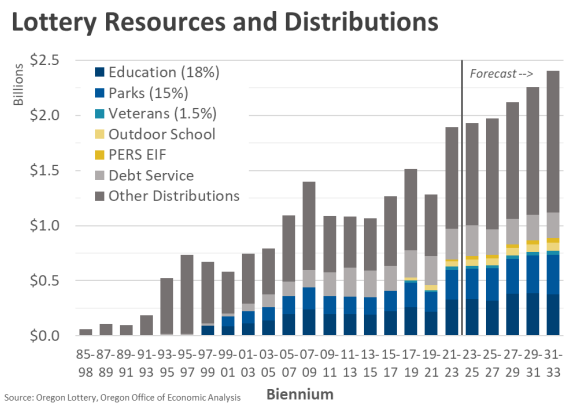
Over the medium term, risks are balanced. Sales may outpace expectations, or the economy may fall into a recession. Looking back historically, Lottery held up well in both the 1990 and 2001 recessions. However Oregon also did not have line games back then, which makes comparing historical periods more 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 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 had 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 relative strength in video sales could point 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 Fund15 (ORDF) and the Education Stability Fund16 (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 $2.1 billion. At the end of the current 2023-25 biennium, they will total $2.9 billion, which is equal to 11.3 percent of current revenues. Including the currently projected $880 million ending balance in the General Fund, the total effective reserves at the end of the current 2023-25 biennium are projected to be $3.8 billion, or 14.8 percent of current revenues.

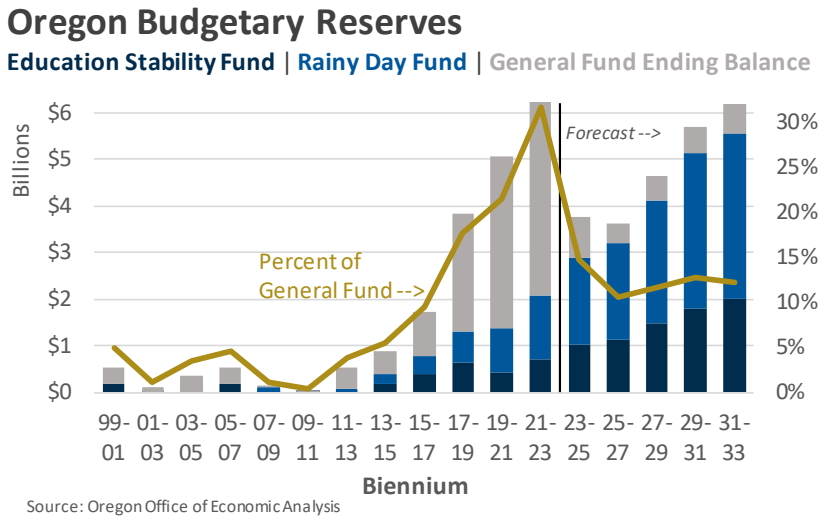
The forecast for the ORDF includes two deposits for this biennium relating to the General Fund ending balance from the previous biennium (2021-23). A deposit of $271.3 million will be made in early 2024 after the accountants closed the books on last biennium. Additionally, a $91.6 million deposit relating to the increased corporate taxes from Measure 67 is expected at the end of the biennium in June 2025. This exact transfer amount is subject to some revision as corporate filings are processed, however the transfer itself will occur. At the end of 2023-25 the ORDF will total $1.9 billion.

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

[16] The ESF gained its current reserve structure and mechanics via constitutional amendment in 2002. The ESF receives 18 percent of lottery earnings, deposited on a quarterly basis – 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.

Looking ahead to the 2025-27 biennium, the ORDF is projected to hit its cap of 7.5 percent of revenues early in calendar year 2026. At that time, should the forecast prove accurate, the ending balance transfer related to 2023-25 would not be made, and those revenues would be retained in the General Fund. The ORDF would once again hit is cap in fiscal year 2031 based on the current outlook.
The ESF will receive an expected $298.5 million in deposits in the current 2023-25 biennium based on the current lottery forecast. At the end of current 2023-25 biennium the ESF will stand at $1.0 billion. The ESF is projected to hit its cap of 5 percent of revenues early in calendar year 2026, when the deposits will then accrue to the Capital Matching Account.

Together, the ORDF and ESF are projected to have a combined balance of $2.9 billion at the close of the 2023-25 biennium, or 11.3 percent of current revenues. At the close of 2025-27 the combined balance will be $3.2 billion, or 9.2 percent of revenues. Such levels of reserve balances are larger than Oregon has been able to accumulate in past cycles, and should help stabilize the budget when the next recession hits.



Effective Reserves ($ millions)

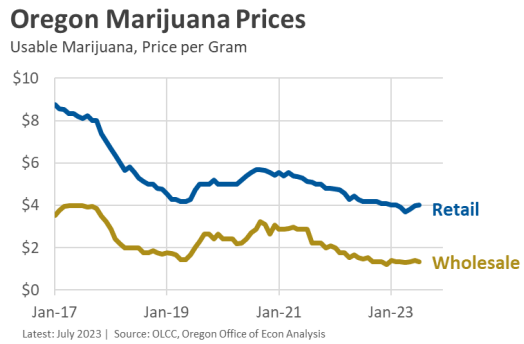
	Current Jul-23	*End of 2023-25*
ESF	$713	$1,009
RDF	$1,358	$1,863
Reserves	$2,071	$2,872
Ending Balance	$880	$880
Total	**$2,952**	**$3,752**
% of GF	11.6%	14.8%

With a potential recession in year ahead, 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 this biennium, that could trigger a potential withdrawal. And for the ESF only, not the ORDF, a Governor's declaration of emergency could also trigger a potential withdrawal. Finally, these are the technical considerations for using the reserve funds in the upcoming 2023-25 biennium. Ultimately policymakers will decide whether to use the funds or not. Regardless of the trigger(s) met, the Legislature would need a three-fifths vote in each chamber to approve 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.

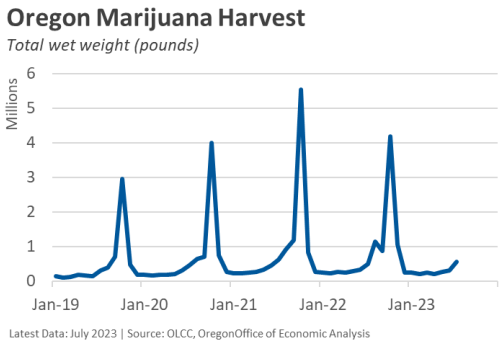
Recreational Marijuana Forecast

The underlying recreational marijuana forecast remains effectively unchanged. Revenues in the current 2023-25 biennium are lowered $2.8 million (-0.9%) compared to the Close of Session forecast. Revenues remain unchanged in both 2025-27 and 2027-29, while being lowered $1.3 million in 2029-31.



The primary reason for the stable outlook is largely tracking as expected following the large downward forecast adjustment made back in the March 2023 forecast.

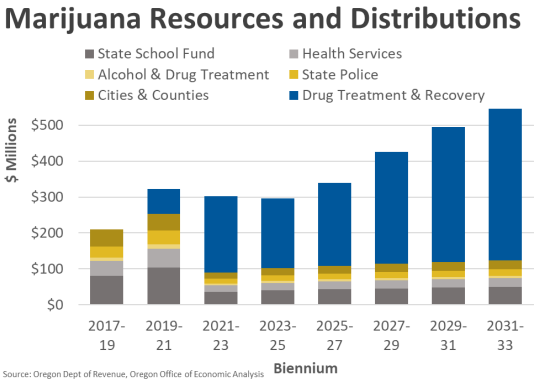
Encouragingly, the underlying market dynamics appear to be stabilizing. Harvest levels are down, sales are stable to rising, and average prices are firming. Given the market saturation, low prices that make it difficult for businesses to be profitable, and the fact that the large, outdoor harvest is about to begin, it remains an open question to whether today's stabilizing market dynamics are temporary or represent a true bottom.



Moving forward the crux of the issue remains the low prices, not only for firms but for tax collections given Oregon levies its recreational marijuana tax based on the price of the product. The forecast calls for better market balance, meaning lower levels of harvest and supply, combined with rising 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 last biennium (2021-23) to the current 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.



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

Psilocybin Forecast

Ballot Measure 109 which voters passed in 2020 and legalized psilocybin, tasked our office with the revenue forecasting responsibilities. The current forecast remains unchanged from last quarter. The first quarterly tax returns were recently due. As more returns and data become available in the quarters ahead, our office will adjust the outlook accordingly.

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. Anecdotal information to date indicates the first couple of service centers are serving just a handful of customers per week currently.

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 current 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 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.

Oregon Psilocybin Retail Sales Tax Revenue

Average Product Price	Biennial Revenue (millions) 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

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 rate between the 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 recent COVID-19 pandemic has caused dire economic and employment situations and has caused slow population growth. The population growth is expected to rebound after the year 2023. However, current economic turmoil is likely to slow the pace of expected growth. The average population growth between 2021 and 2023 was lowest since 1985-86. Oregon's population is expected to reach 4.575 million in the year 2032 with an annual rate of growth of 0.66 percent between 2022 and 2032. The projected population of 2030 is 141,500 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 73 percent of the population change during the booming economy of early 1990s. This share of migration to population change declined to 25 percent in 2010-11 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 (excess of deaths over births), the ratio of net migration-to-population change has registered at 90 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 will continue through 2032 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. Oregon's negative natural increase caused by excess of deaths over births is expected to continue. However, under a few scenarios this trend may reverse itself. Such reversal can happen if the women start to have more children due to behavioral or motivational factors, or mortality and life expectancy improve suddenly resulting in fewer deaths or large number of women in childbearing age move into Oregon. Since all the states in the country are already experiencing below replacement level fertility (2.1 children per woman), the natural increase will eventually turn negative nationwide even if the trend is mitigated for the short term because of the large number of women in childbearing age.

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 decades past do impact the current age-sex structure. Growth in many age groups will show the effects of the baby-boom and their echo generations during the forecast period of 2022-2032. 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 1.8 percent during the 2022-2032 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 5.1 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 2022-2032 as a sign of the end of the baby-boom generation transitioning to elderly age group. This high growth transitioning into a net loss of this youngest elderly population resulting in -0.3 percent annual average loss in the coming ten years. The next older generation of population aged 75-84 has seen several years of slow growth and a period of shrinking until a decade ago. The elderly aged 75-84 started to show growth as the effect of depression era birth-cohort matured out of this age group. An unprecedented fast pace of growth of population in this age group has already 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 2022-2032 is expected to be unusually high 4.4 percent. However, for most of the forecast period, the annual growth rate will exceed 4 percent per year. After a period of slow growth, the oldest elderly (aged 85+) will resume growth at a strong rate steadily gaining 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 4.2 percent. An unprecedented growth in oldest elderly will commence near the end of the forecast horizon as the fast growing 75-84 age group population transition into this oldest elderly age cohort. As a sign of massive demographic structural change of Oregon's population, starting in 2023 the number of elderly will exceed the number of children under the age of 18. To illustrate the contrast, in 2000 elderly population numbered a little over half of the number of children in Oregon, now the elderly outnumber the children.

The oldest working age population aged 45-64 also has seen the dramatic demographic impact as the baby-boom generation matures out of the oldest working-age cohort which is replaced by smaller baby-bust cohort or Gen X. As the effect of this demographic transition combined with slowing net migration, the once fast-paced growth of population aged 45-64 has gradually tapered off to below zero percent rate of growth by 2012 and has remained and will remain at slow or below zero growth phase for a few more years. The size of this older working-age population will see about 0.8 percent annualized rate of change over the forecast horizon of next ten years. 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 0.5 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 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 -1.0 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 a 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. During the forecast horizon, the children under the age of five will increase at the rate of 0.6 percent annually. Although the number of children under the age of five declined in the recent years, the demand for childcare services and pre-Kindergarten program will be additionally determined by the labor force participation and poverty rates of the parents.

Overall, elderly population over age 65 will increase rapidly whereas the number of children will decline over the forecast horizon. The number of working-age adults in general will show slow growth during the forecast horizon. Hence, based solely on demographics of Oregon, demand for public services geared towards children and young adults will likely decline or increase only at a slower pace, whereas demand for elderly care and services will increase rapidly.

Procedure and Assumptions

Population forecasts by age and sex are developed using the cohort-component projection procedure. The population by single year of age and sex is projected based on the specific assumptions of vital events and migrations. Oregon's estimated population of July 1, 2020 based on the most recent decennial census is the base for the forecast. To explain the cohort-component projection procedure very briefly, the forecasting model "survives" the initial population distribution by age and sex to the next age-sex category in the following year, and then applies age-sex-specific birth and migration rates to the mid-period population. Further iterations subject the in-and-out migrants to the same mortality and fertility rates. Hence, the age-sex group we start with become one year older the next year accounting for the deaths during the year, births to the women in childbearing ages, and add/subtract net migration for that age during the year.

The U.S. Census Bureau just released the age-sex details of the 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. The 2020 census population total and age-sex detail are 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 2011 and 2019. OEA has estimated 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 2029 in this forecast shown in Appendix C are different from prior *postcensal* numbers and PSU's original estimates. The Bureau released age-sex detail of the census population in June of this year. OEA has produce preliminary readjusted intercensal estimates by age and sex for each of the years from 2011 through 2019. The numbers of

births and deaths through 2022 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 2032 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 2020. Male and female life expectancies for the 2020-2032 period are projected based on the past three decades of trends and national projected life expectancies. After a sudden decline during the COVID pandemic, 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 77.3 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. The life expectancy at birth in 2020 was 76.9 and 81.7 years respectively for males and females. This is expected to improve to 79.5 years for women and 83.5 years for men by 2032.

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 take into account Oregon's employment, unemployment rates, income/wage data from Oregon and neighboring states, past trends and migration to population ratio. 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 2010-2011 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 relatively fewer 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 due to the after-effect of COVID-19 and economic slowdown. However, the migration is expected to recover after 2024. Between 2022 and 2033 net migration is expected to be in the range of 19,280 to 40,740, averaging 33,860 persons annually with net migration rate ranging between 4.5 to 8.9 per thousand population.