

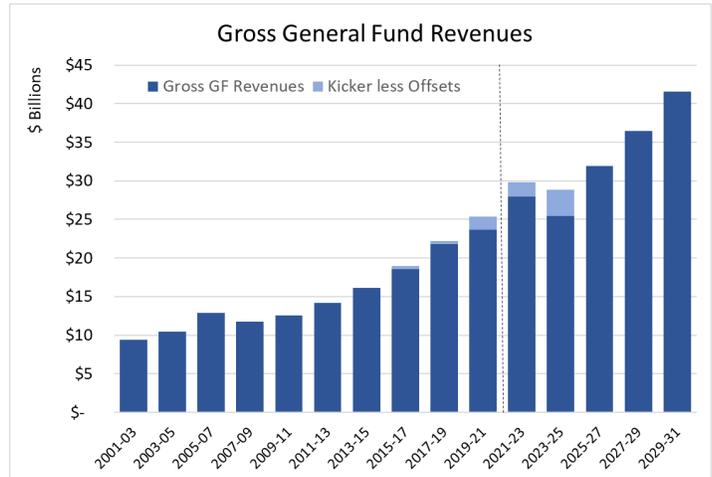
REVENUE OUTLOOK

Revenue Summary

Heading into the budget development season, growth in Oregon’s primary revenue instruments continues to outstrip expectations. Both personal and corporate tax collections remain strong, in keeping with income gains seen in the underlying economy. Inflation is supporting revenue growth as well, due to higher sales and wages. As a result, the forecast for the current 2021-23 biennium has been revised upward.

Although the near-term forecast calls for additional revenue, this is offset in future budget periods by a more pessimistic economic outlook. Growth in spending and wages will need to slow to tame inflation. This will translate to less state revenue growth across a broad range of taxes. Combined General Fund resources for the upcoming 2023-35 budget period are virtually unchanged from the June 2022 outlook.

Of course, an economic downturn of the sort described in the alternative boom/bust scenario would weigh heavily on revenues over the next several years. However, even if the economic expansion persists, General Fund revenues are due for a hangover in 2023-25. General Fund resources have continued to expand in recent years despite large kicker credits being issued. This growth is expected to pause in the near term, as nonwage forms of income return to earth and gains in the labor market slow.



Recent gains in reported taxable income have been driven by taxpayer behavior as well as by underlying economic growth. Investment and business income are not always realized for tax purposes at the same time as they are earned in the market. Late 2021 was a great time to cash in assets, with equity prices and business valuations high, and potential federal tax increases on the horizon. As a result, income reported on tax returns grew at more than double the rate of economic measures of income in 2021.

Given that a significant amount of revenue growth has been driven by nonwage sources of income, most of the recent surge in payments will likely prove to be temporary. After so much income was pulled into tax years 2020 and 2021, less will be realized in the near term. This taxpayer behavior also puts Oregon’s revenues at risk of the sharp declines experienced after asset market corrections in 2001 and 2007. With recessionary risks rising, profits and gains could soon turn into losses, and a smaller share of filers could be subject to the top rate.

The bottom line is that the unexpected revenue growth seen this year has left us with unprecedented balances this biennium, followed by a record kicker in 2023-25. The projected personal kicker is \$3.4 billion, which will be credited to taxpayers when they file their returns in Spring 2024. The projected corporate kicker is \$1.1 billion, which will be retained for educational spending. If balances are not spent, net General Fund resources for the 2023-25 biennium will be reduced by \$24 million relative to the June 2022 forecast.

2021-23 General Fund Revenues

Gross General Fund revenues for the 2021-23 biennium are expected to reach \$27,877 million. This represents an increase of \$601 million from the June 2022 forecast, and an increase of \$4,552 million relative to the Close of Session forecast. Personal and corporate income tax collections and estate taxes continue to set records. Among non-General Fund sources, lottery sales, the Corporate Activity Tax and excise taxes are expanding as well.

Personal Income Tax

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

Although growth in taxable labor income has been very strong, much of the 2022 flood of personal income tax collections can be traced to nonwage forms of income. Gains in nonwage taxable income have been very broad based. Passthrough business and rental income, dividends, capital gains and IRA withdrawals have all seen rapid growth. As tax returns for high-income extension filers are now beginning to trickle in, this growth in business and investment income is revealed to be stronger by the day

While broad based, growth in nonwage tax liability has been paced by capital gains. With additional tax return data, we now know that capital gains grew by at least \$8.5 billion in 2021. This growth is made more remarkable given it came off a record \$10 billion in gains during 2020.

Oregon has experience with booming capital gains. In both the technology and housing booms, personal income tax collections grew rapidly as filers cashed in assets. At the end of each of these cycles, capital gains became depressed quickly.

After the housing bust, realizations of capital gains dropped from \$10 billion to \$2 billion virtually overnight.

Table R.1

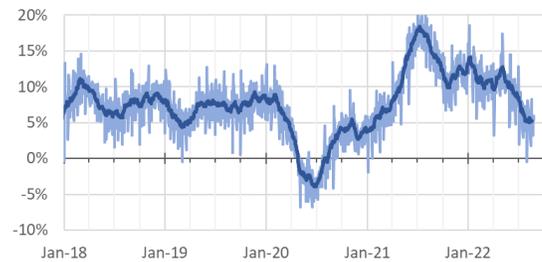
2021-23 General Fund Forecast Summary

(Millions)	2021 COS Forecast	June 2022 Forecast	September 2022 Forecast	Change from Prior Forecast	Change from COS Forecast
Structural Revenues					
Personal Income Tax	\$20,628.1	\$23,460.8	\$23,828.2	\$367.4	\$3,200.2
Corporate Income Tax	\$1,344.0	\$2,275.0	\$2,448.6	\$173.6	\$1,104.6
All Other Revenues	\$1,353.5	\$1,540.6	\$1,600.6	\$60.0	\$247.1
Gross GF Revenues	\$23,325.5	\$27,276.4	\$27,877.4	\$601.0	\$4,551.9
Offsets, Transfers, and Actions ¹	-\$417.6	-\$465.1	-\$477.0	-\$11.9	-\$59.4
Beginning Balance	\$3,025.6	\$4,082.5	\$4,082.5	\$0.0	\$1,056.9
Net Available Resources	\$26,008.4	\$30,982.8	\$31,571.9	\$589.1	\$5,563.5
Appropriations	\$25,446.0	\$27,861.0	\$27,861.0	\$0.0	\$2,415.0
Ending Balance	\$562.4	\$3,121.7	\$3,710.9	\$589.1	\$3,148.5
Confidence Intervals					
67% Confidence	+/- 3.8%		\$1,046.7	\$26.83B to \$28.92B	
95% Confidence	+/- 7.5%		\$2,093.4	\$25.78B to \$29.97B	

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

Oregon Withholding

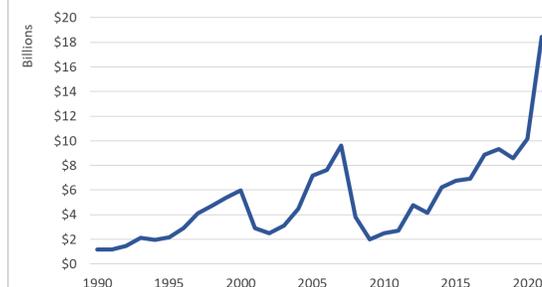
90 Day Rolling Sum of Collections: [Year-over-Year Change](#) | [Moving Average](#)



Latest Data: August 26, 2022 | Source: Oregon Dept. of Revenue, Oregon Office of Economic Analysis

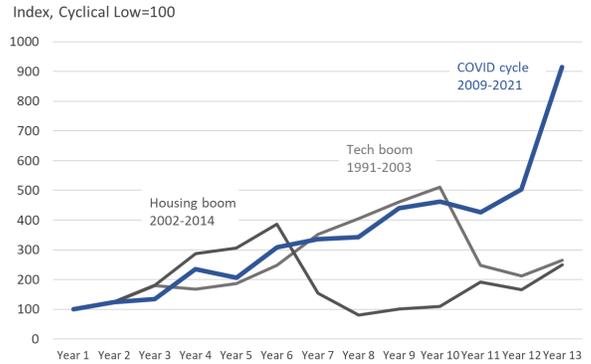
Oregon Realizations of Capital Gains

Fully-year income tax filers



Until this year, the current cycle for capital gains looked much like our experience of the technology boom. Now, it looks like the technology and housing booms stacked together. Even without a recession, taxable capital gains are expected to fall in the near term. After reporting so many gains in recent years, taxpayers are now left with fewer assets to cash in.

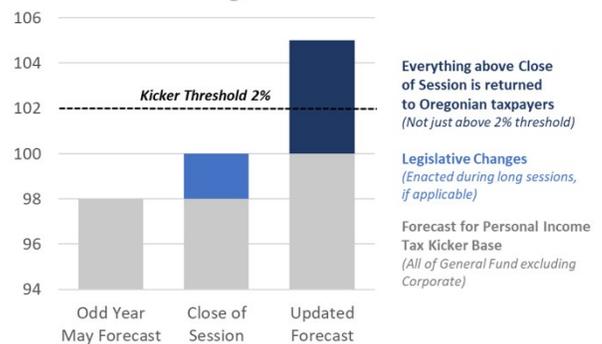
Capital Gains Income Reported on Oregon Tax Returns



According to the September forecast, the outlook for the personal income tax kicker base is now significantly (15.7%) higher than the Close of Session forecast. If the current outlook holds, a kicker of \$3.4 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.

Oregon Kicker 101



Corporate Excise Tax

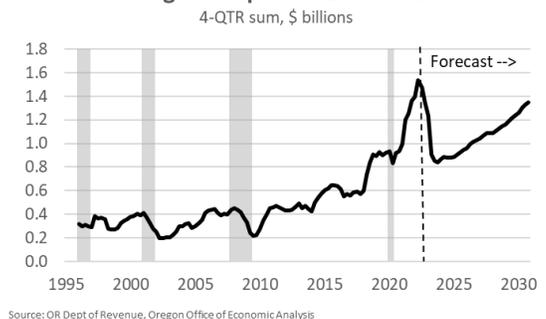
Corporate excise tax collections have yet to weaken at all. After a temporary drop at the beginning of the recession, corporate tax collections immediately bounced back and continue to set new records. This stands in stark contrast to the last two recessions when corporate tax collections were cut in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

The strong performance of corporate taxes is particularly surprising given that they were expected to come back down to earth even without an economic downturn. The subtraction for taxes paid under Oregon’s new Corporate Activity Tax is reducing traditional liability, as is the subtraction for expenditures funded by forgiven Payroll Protection Program loans. Even so, collections have increased by 70% since the pandemic began.

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

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

Oregon Corporate Excise Tax



Although there is a very long way to go, a \$1.1 billion kicker is currently estimated for the next biennium. According to statute, this would lead to additional funding for K-12 education during the 2023-25 budget period.

Other Sources of Revenue

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

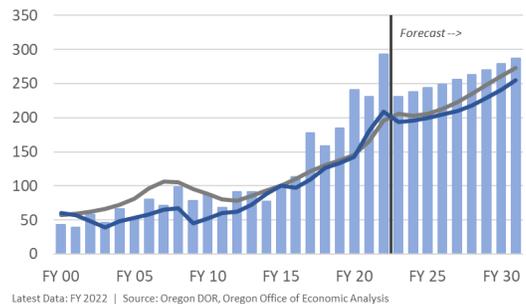
Relative to the previous forecast, the current outlook for these revenues in 2021-23 is raised by \$60 million (+3.7%). This overall change is the combination of two large increases to interest earnings and estate taxes, being partially offset by smaller declines in judicial and liquor revenues.

The biggest change is a large increase in interest earnings, both in the current biennium and moving forward, in keeping with the higher for longer stance of monetary policy. Additionally, fund balances remain near record highs, which when combined with higher rates results in interest earnings coming in considerably above forecast in recent months. Overall interest earnings are raised nearly \$50 million in the current 2021-23 biennium, \$45 million in 2023-25, \$25 million in 2025-27, and \$20 million in both 2027-29 and 2029-31.

The second large increase is to estate taxes (+\$24.7 million in 2021-23) which continue to come in considerably above expectations. The just completed fiscal year 2022 set another record for estate collections, totaling \$325.5 million which is 22 percent above the previous record set two years ago. Estate taxes are increased a more modest \$4-11 million per biennium over the forecast horizon as well, keeping with more subdued outlooks for home prices and stock markets. While the underlying trends of a growing and aging population combined with rising asset values means the state should see estate taxes grow in the years ahead, this outlook is not without risks. One risk is that a small number of very large estates can move the total collections significantly in any given year. Oregon has seen this happen in recent years, even if the underlying trend is upward.

Oregon Estate Taxes

Index, FY 2015=100 | Tax Collections, Stock Prices, Home Prices



Following a couple quarters of large increases, the tobacco revenue forecast is relatively stable. The primary driver of the recent increases has been inhalant delivery revenues, which are outside of the General Fund but part of our office’s tobacco forecasts. These revenues came in slightly above forecast in recent months but for now the longer-term outlook remains unchanged. The cigarette outlook is unchanged. Other Tobacco Products (OTP), which are dominated by moist snuff, have been coming in below forecast in recent quarters. In keeping with this lower consumption trend, the overall outlook is revised down by 2 percent, or \$2.5 million per biennium.

Offsetting the larger increases in the General Fund are a \$9.4 million downward revision to judicial revenues, the combined change in State Court Fees and the Criminal Fine Account, and \$8.7 million in liquor revenues.

All other items sum to +\$4.6 million compared to the previous 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.

Table R.2**General Fund Revenue Forecast Summary (Millions of Dollars, Current Law)**

Revenue Source	Forecast 2021-23		Forecast 2023-25		Forecast 2025-27		Forecast 2027-29		Forecast 2029-31	
	Biennium	% Chg								
Personal Income Taxes	23,828.2	19.1%	22,131.0	-7.1%	28,248.1	27.6%	32,453.7	14.9%	37,061.6	14.2%
Corporate Income Taxes	2,448.6	19.9%	1,795.4	-26.7%	2,060.3	14.8%	2,297.5	11.5%	2,708.5	17.9%
All Others	1,689.6	0.5%	1,547.1	-8.4%	1,614.4	4.3%	1,702.8	5.5%	1,792.4	5.3%
Gross General Fund	27,966.4	17.9%	25,473.5	-8.9%	31,922.9	25.3%	36,454.0	14.2%	41,562.5	14.0%
<i>Offsets and Transfers</i>	<i>(234.8)</i>		<i>(117.3)</i>		<i>(133.3)</i>		<i>(98.5)</i>		<i>(101.0)</i>	
Net Revenue	27,731.6	17.4%	25,356.2	-8.6%	31,789.6	25.4%	36,355.5	14.4%	41,461.4	14.0%

Revenue growth in Oregon and other states will face considerable downward pressure over the 10-year extended forecast horizon. As the baby boom population cohort works less and spends less, traditional state tax instruments such as personal income taxes and general sales taxes will become less effective, and revenue growth will fail to match the pace seen in the past.

Tax Law Assumptions

The revenue forecast is based on existing law, including measures and actions signed into law during the 2021 Oregon Legislative Session. OEA makes routine adjustments to the forecast to account for legislative and other actions not factored into the personal and corporate income tax models. These adjustments can include expected kicker refunds, when applicable, as well as any tax law changes not yet present in the historical data. A summary of actions taken during the 2021 Legislative Session can be found in Appendix B Table B.3. For a detailed treatment of the components of the 2021 Legislatively Enacted Budget, see:

Legislative Fiscal Office's [2021-23 Budget Summary](#)⁵

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 Report⁶ together with more timely updates produced by the Legislative Revenue Office.

⁵ [https://www.oregonlegislature.gov/lfo/Documents/2021-1 LAB Summary 2021-23.pdf](https://www.oregonlegislature.gov/lfo/Documents/2021-1%20LAB%20Summary%2021-23.pdf)

⁶ <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, with the odds of a recession occurring during the 2023-25 biennium being roughly even money.

Given the uncertain outlook, the Boom/Bust alternative economic scenario has been run through our revenue models along with the baseline case. Detailed revenue estimates are presented in Table B.1c in the appendix.

Oregon’s regional economy is far more volatile than that of most states, given strong migration trends and dependence upon manufacturing and resource industries. General Fund tax revenues are even more volatile than is the underlying economy, due to the prominence of personal and corporate income taxes. Oregon’s revenue system has diversified a lot in recent years with a shift toward consumption-based taxes, but most of these sources are not deposited into the General Fund. Income tax collections are likely to fall by twice as much as underlying income during a recession.

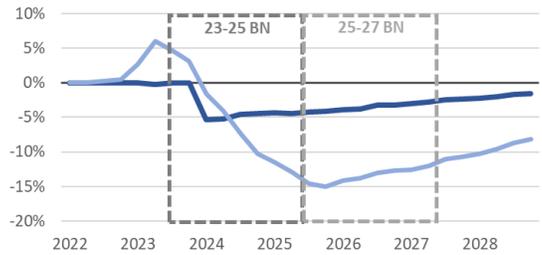
In the recessionary scenario, revenues are considerably below the baseline outlook in both 2023-25 and 2025-27. As is typically the case, corporate taxes are expected to be the most volatile, as underlying profits evaporate during economic downturns. As wage growth slows, personal income tax collections are expected to drop as well. However, losses in personal income taxes are paced by declines in investment and business income. Retirement income on the other hand is relatively recession-proof, with the main drag being lower asset values.

Declines would also be seen outside of the General Fund among Oregon’s consumption-based revenues as well. These include marijuana and lottery sales, in addition to the state’s Corporate Activity Tax revenues. Even so, consumption-based taxes are less volatile than income taxes and help to stabilize Oregon’s overall revenue base.

Corporate Activity Tax

The 2019 Legislature enacted the corporate activity tax (CAT)⁷, a new tax on gross receipts that went into effect January 2020. Collections related to the 2020 tax year are essentially complete, while tax returns for the 2021 tax year continue to be processed. This would normally provide a reasonable baseline from which to project

Alternative Scenario Revenues
Percent Change Relative to Baseline for Corporate Excise Taxes and Personal Income Tax



Recession Forecast Changes				
General Fund Revenues	\$ Millions from Baseline			
	21-23	23-25	25-27	27-29
Personal Income Taxes	-7	-776	-979	-584
Corporate Income Taxes	25	-115	-277	-207
Other	9	-98	-87	-46
Total	27	-989	-1,344	-838

Other Revenues	\$ Millions from Baseline			
	21-23	23-25	25-27	27-29
Lottery	0	-25	-42	-27
Corporate Activity Tax	26	-222	-70	-3
Marijuana Tax	0	-4	-9	-5
Total	26	-252	-121	-36

Total Sum	\$ Millions from Baseline			
	21-23	23-25	25-27	27-29
Total Sum	53	-1,241	-1,465	-873

⁷ [0122 \(oregonlegislature.gov\)](https://oregonlegislature.gov)

future collections. However, while taxpayers were required to file on a calendar year basis for tax year 2020, a law change allowed taxpayers to switch to a fiscal year basis beginning with tax year 2021. Thus the magnitude of tax liability for the 2021 tax year will not be known until late 2023. In terms of revisions to the forecast, the outlook has been lowered for tax year 2023 and beyond commensurate with the softened economic forecast. This translates to a decline of roughly \$50 million in available resources for the 2023-25 biennium.

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 Earnings

In recent months Lottery sales have closely tracked forecast. Video lottery sales slowed through the spring and into summer as expected, while a billion dollar jackpot propelled traditional sales higher than expected. The upshot is Lottery resources for the current 2021-23 biennium are raised \$6.7 million (+0.4) compared to last forecast, and now stand \$140 million (+8.5%) above the Close of Session forecast when the Legislature passed the budget last year.

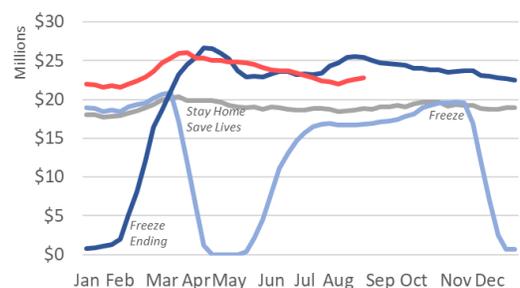
Moving forward, the weaker economic outlook of the soft landing feeds into the Lottery forecast as well. Future biennia Lottery resources are all lowered by about 1 percent compared to the previous forecast, or \$19-25 million depending upon the biennium.

Our office’s baseline forecast for the past year or so has been that video lottery sales would slow. The combination of fading fiscal policy, and household returning to other entertainment options would impact sales. Recent months have followed the expected sales patterns, although sales have firmed a bit more than expected in just the past couple of weeks.

However, it is an open question whether the slowing in video sales was due to the expected reasons, or whether the slowing was due to inflation crimping household budgets. The forecast calls for sales to hold steady from this relatively lower point, and grow along with income and spending moving forward.

Oregon Video Lottery Sales

2019 | 2020 | 2021 | 2022



Latest Data: August 20, 2022 | Source: Oregon Lottery, Oregon Office of Economic Analysis

With sales today coming off the record highs from a year ago, overall Lottery resources in the upcoming biennium are expected to be relatively stable from this biennium, even as underlying sales return to growth in the months ahead.

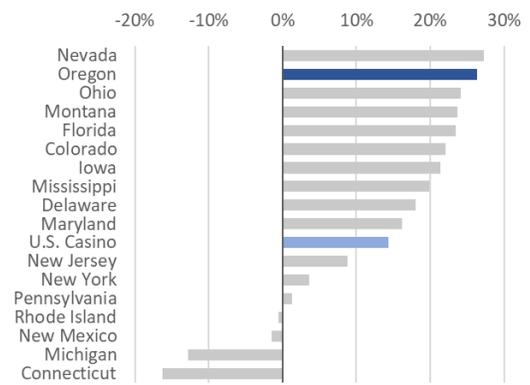
The risks to such an outlook are balanced. Given the ongoing strength in household finances, income growth, and consumer’s resiliency even in the face of the fastest inflation in 40 years, stronger gaming sales than expected would not be a surprise. On the other hand, should inflation not subside, or household savings is drawn down more than realized, discretionary spending may be impacted more than expected. Additionally, households may choose to shift more of their entertainment budget into other categories like going out to eat, on vacations, to sporting events or movies, and the like. Gaming has been strong, in part because it was initially one of the first entertainment options to reopen.

As discussed further last quarter, this strength in gaming during the pandemic is not just in Oregon. Gaming expenditures as a share of disposable personal income is essentially back to where it was pre-pandemic, albeit just a little lower. That means, even as incomes have boomed in recent years, the corresponding boom in gaming activity is just a little less.

As the nearby chart shows, the big increase in slot revenues in particular are seen across most of the nation, or at least in the 16 other markets our office tracks. Among these states, only Nevada slots have experienced a larger increase since 2019 than has Oregon’s video lottery. That said, a handful of other states are likewise up 20 percent or more in recent years. A few big and/or mature markets, particularly in the Northeast are seeing slower increases or even further declines, which weigh on the national figures overall. The combined sum of states shown in the chart are up 16 percent over the past three years, not far off from the BEA’s estimate of total U.S. casino gaming being up 14 percent.

Slot Revenues

Percent Change from 2019q2 to 2022q2

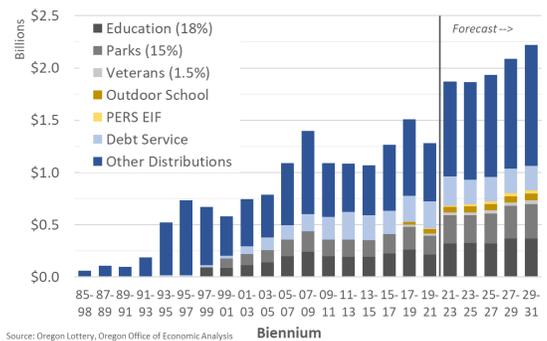


Video lottery or casino slot revenues for all states except MI, MS, NM, & US which are total casino gaming | Source: BEA, various states gaming/lottery, OR Office of Econ Analysis

Lottery Outlook and Distributions

Issues to watch include broader national trends in gaming markets, demographic preferences for recreational activities, and to what extent consumers decrease the share of their incomes spent on gaming. Last decade consumers remained cautious with their disposable income until late in the cycle. Increases in spending on gaming had largely matched income growth. In an inflationary boom, how will consumers respond in terms of their discretionary purchases, particularly on products like Lottery that are not increasing in cost.

Lottery Resources and Distributions

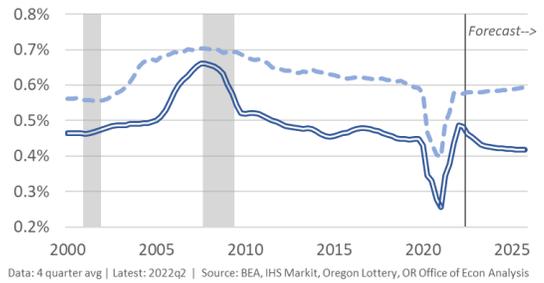


Source: Oregon Lottery, Oregon Office of Economic Analysis

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

Gaming as a Share of Personal Income

U.S. Casino Gaming | Oregon Video Lottery



Lottery in Recession: The Boom/Bust Alternative Scenario

In the Boom/Bust recession scenario, Lottery revenues are lower than in the baseline. The recession drops sales by 1-2 percent below the baseline, which amounts to -\$25.5 million in the upcoming 2023-25 biennium and -\$38.8 million in 2025-27. As the economy recovers in the second half of the decade, Lottery sales begin to catch up to the baseline, although never fully regaining the old path. There is some scarring, or permanent damage from the recession.

Two items to note. First, with the recession in this scenario beginning at the end of 2023, the full impact on Lottery sales is not until late 2024 and early 2025. As such, the impacts are a little larger in the 2025-27 biennium than in the 2023-25 biennium due to the timing of the recession overlaid with sales and transfers.

Second, with a relatively mild recession, income and spending are affected less than in a more severe recession. In the 1990 and 2001 recessions, consumer spending largely kept going, including on Oregon Lottery products, unlike the large declines experienced in the Great Recession, which also coincided with Oregon’s indoor smoking ban. One potential difference today is Oregon offers line games, which the state did not back in either the 1990 or 2001 recessions. Expectations are that in a mild recession consumers will continue to spend, even on line games, but it is one noteworthy difference when comparing historical periods.

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 Fund⁸ (ORDF) and the Education Stability Fund⁹ (ESF). This section updates balances and recalculates the outlook for these funds based on the September revenue forecast.

⁸ 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.

⁹ 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.

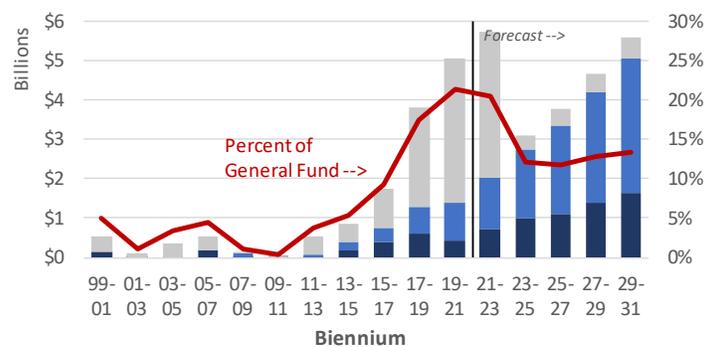
As of this forecast the two reserve funds currently total a combined \$1.8 billion. At the end of the current 2021-23 biennium, they will total \$2.0 billion, which is equal to 7.2% of current revenues. Including the currently projected \$3.7 billion ending balance in the General Fund, the total effective reserves at the end of the current 2021-23 biennium are projected to be \$5.7 billion, or 20% 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 (2019-21). A deposit of \$220.7 million was made in early 2022 after the accountants closed the books on last biennium. Additionally a \$95.4 million deposit relating to the increased corporate taxes from Measure 67 is expected at the end of the biennium in June 2023. This exact transfer amount is subject to some revision as corporate filings are processed, however the transfer itself will occur. At the end of 2021-23 the ORDF will total \$1.3 billion.

Looking ahead to the 2023-25 biennium, the ORDF is expected to receive two transfers as well. This includes a projected \$278.6 million related to the General Fund ending balance from 2021-23, and \$68.8 million related to the increase in corporate taxes. The ORDF is projected to hit its cap of 7.5% of revenues in FY2027. At that time, should the forecast prove accurate, the increase in corporate revenues from M67 would be retained in the General Fund and not transferred to the ORDF.

Oregon Budgetary Reserves

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



Source: Oregon Office of Economic Analysis

Effective Reserves (\$ millions)

	Current Jul-22	End of 2021-23
ESF	\$562	\$704
RDF	\$1,189	\$1,315
Reserves	\$1,752	\$2,019
Ending Balance	\$3,711	\$3,711
Total	\$5,462	\$5,730
% of GF	19.5%	20.5%

The ESF will receive an expected \$289.8 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 \$704.1 million. The ESF is not projected to hit its cap of 5% of revenues until FY2026, when the deposits will then accrue to the Capital Matching Account.

Together, the ORDF and ESF are projected to have a combined balance of \$2.0 billion at the close of the 2021-23 biennium, or 7 percent of current revenues. At the close of 2023-25 the combined balance will be \$2.75 billion, or 11 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.

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

Recreational Marijuana Tax Collections

Overall tax collections and available resources from marijuana are lowered over the forecast horizon by around 4 percent. There are four main items to note.

First, sales are below expectations in recent months. These lower level of sales appear to be primarily the result of a further decline in prices. This summer, prices have been about as low as Oregon has experienced since legalization. Given that Oregon levies the tax based on the price of purchase, if consumers are buying the same quantity of product but at the current, lower prices, then the tax due is lower as well.

The recent price declines could be the result of a record harvest last fall. Producers can, and are converting usable marijuana into concentrates and extracts which have a longer shelf life, but overall the increase in supply seems to be depressing prices given consumption has stabilized in the past year. With this year’s harvest right around the corner, the size and yield is still to be determined, as its impact on prices next year. But another big harvest, combined with market saturation and stable demand could point toward ongoing low prices and future industry consolidation.

Second, the somewhat weaker economic outlook results in slower gains in consumer spending in the years ahead. The outlook calls for increases in marijuana sales and tax collections, primarily due to the state’s growing population and incomes, but these gains are a bit slower than previously forecasted. Our office does not have a further increase in marijuana usage rates built into the outlook. Marijuana sales are expected to be a steady share of household budgets.

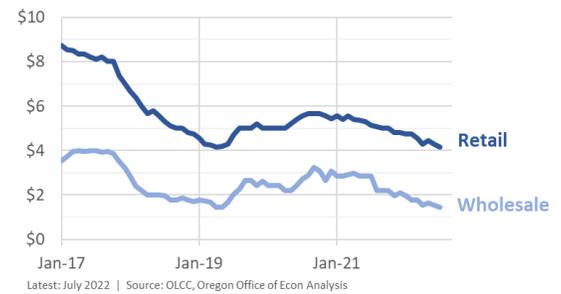
The combined changes in average prices and a downwardly revised economic outlook translate into about \$12-14 million reduction in marijuana tax collections each biennium over the forecast horizon, which is about a 3 percent downward revision.

Third, available resources are lowered a bit further as well due to HB 3000 (2019) which increased transfers for administrative costs to the Criminal Justice Commission by \$1.5 million per year. These increased transfers begin next biennium and were not included in previous forecasts. Our office regrets this oversight.

The fourth item does not change overall resources, but it does impact how the resources are transferred to recipient programs. The passage of Measure 108? in 2020 capped transfers to the initial recipient programs of recreational marijuana revenue like the State School Fund, State Police, cities and counties, etc at \$11.25 million per quarter, or \$45 million per year. All revenues above that amount were diverted to the new drug treatment fund. Per HB 4056 (2022), that initial \$45 million per year is now indexed for inflation. This forecast now incorporates the inflation adjustment, resulting in slightly larger distributions moving forward for the initial programs, and slightly smaller distributions moving forward for the drug treatment fund as a result. This adjustment will be updated each quarter moving forward along with the new economic and inflation forecast.

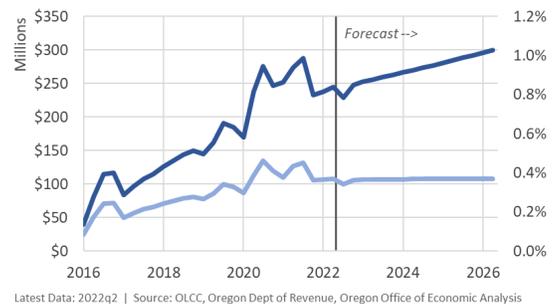
Oregon Marijuana Prices

Usable Marijuana, Price per Gram



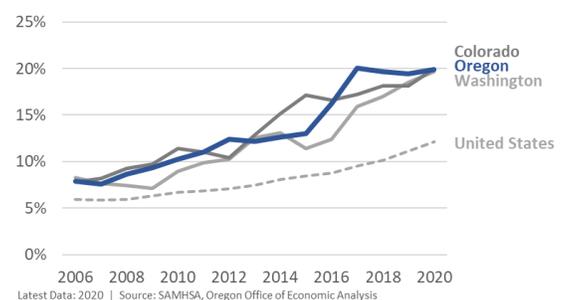
Quarterly Oregon Marijuana Sales

Recreational Sales, left | Share of Personal Income, right



Marijuana Usage Rates

Share of Adult Population (18+) Using in Past 30 Days



Marijuana in Recession: The Boom/Bust Alternative Scenario

In the Boom/Bust recession scenario, marijuana revenues are lower than in the baseline. The recession drops sales by 1-2 percent below the baseline, which amounts to -\$4.3 million in the upcoming 2023-25 biennium and -\$9.4 million in 2025-27. As the economy recovers in the second half of the decade, marijuana sales begin to catch up to the baseline, although never fully regaining the old path. There is some scarring, or permanent damage from the recession.

Two items to note. First, with the recession in this scenario beginning at the end of 2023, the full impact on marijuana sales is not until late 2024 and early 2025. As such, the impacts are a little larger in the 2025-27 biennium than in the 2023-25 biennium due to the timing of the recession overlaid with sales.

Second, with a relatively mild recession, income and spending are affected less than in a more severe recession. In the 1990 and 2001 recessions, consumer spending largely kept going, unlike the large declines experienced in the Great Recession.

Past research shows that during recessions households typically continue to spend on vice (alcohol, gaming, tobacco, etc) but may trade down to less expensive options. This would be the first traditional recession legal marijuana in Oregon has experienced; the COVID shutdowns and large federal aid are not normal in any way, shape, or form. How consumers react in this scenario is a bit of a wildcard. Should consumers purchase larger quantities of lower priced products and smaller quantities of higher priced products, it could affect topline revenue more than anticipated even if total consumption holds steady.

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