March 2023 Economic and Revenue Forecast

February 22\textsuperscript{nd}, 2023

Oregon Office of Economic Analysis
Mark McMullen
Josh Lehner
OEA Forecast Process

Historical U.S. and Oregon economic data → OREGON ECONOMIC MODEL → OREGON PRELIMINARY ECONOMIC FORECAST → OREGON FINAL ECONOMIC FORECAST

Governor’s Council of Economic Advisors + DAS Economic Advisors

Oregon Personal and Corporate Tax History → PERSONAL & CORPORATE TAX MODELS

Council of Revenue Forecast Advisors

LEGISLATIVE & POLICY CHANGES

OREGON FINAL REVENUE FORECAST

IHS Macro Forecast

OTHER REVENUE MODELS

Other Tax History (e.g., Estate, Lottery, Marijuana, Tobacco, etc.)
Economic Outlook
Recession no longer in the baseline, even as risks remain high

• With some improvement in inflation, a slow growth/soft landing scenario is the most likely in the near term

• The Fed has more work to do, but the recent slowing buys the economy time to continue to readjust to post-pandemic life

• Alternative Boom/Bust Scenario
  • Moderate sized recession starting in 2024
Oregon Pandemic Population Growth

*Annual change in total state population*

OEA History and Forecast, Portland State Estimates, Census Bureau Estimates

- Primary reason Oregon grows faster than U.S.
  - Local businesses can hire and expand at faster rate

- Weakness has been in urban cores of large metros nationwide

- Forecast
  - Migration has historically been pro-cyclical
  - Surrendered driver licenses at Oregon DMVs are strong
  - Deaths are rising, and birthrate is very low

Source: Census, Portland State Population Research Center, Oregon Office of Economic Analysis
Out-of-state WFH migration a larger share in high-cost states

WFH Outmigration from High-Cost States
Share of workers leaving each state who work from home in 2019 and 2021

- Focus only of employed workers moving out of state
- The higher the cost of living, the higher the share of workers leaving that are WFH
  - A 1% increase in the relative cost of living correlates with a 0.8% increase in the share of WFH outmigrants
- From 2019 to 2021 the correlation strengthened considerably
  - Essentially the coefficient quadrupled and the goodness of fit doubled

Data excludes Hawaii (2021 outlier) | Source: BEA, IPUMS-USA, Oregon Office of Economic Analysis
Oregon household distribution update

**Median Household Income**
Inflation-Adjusted 2021$ for the United States and Oregon

- $75,000
- $70,000
- $65,000
- $60,000
- $55,000
- $50,000
- $45,000
- $40,000
- $35,000


**Oregon Household Income Distribution**
2021, $ difference between Oregon and the U.S.

- $100
- $0
- $-100
- $-200
- $-300
- $-400
- $-500
- $-600
- $-700
- $-800

0 10 20 30 40 50 60 70 80 90 100

Percentile of Income

Data: 2021 ACS  |  Source: IPUMS-USA, Oregon Office of Economic Analysis

Deflator: PCE Price Index  |  Source: BSA, Census, Oregon Office of Economic Analysis
In 1980 the typical rural household in Oregon earned 10 percent less than the typical urban household. In 2021 the gap was 25 percent.

Race and Ethnicity:
- Black, Indigenous, and Hispanic or Latino households in Oregon historically have incomes 20-40% lower than their white, non-Hispanic neighbors.
- In 2021 the gap is 10-20%.

Median Household Income Gap in Oregon

Percent difference compared to White, Not Hispanic households

- Urban-Rural
  - In 1980 the typical rural household in Oregon earned 10 percent less than the typical urban household.
  - In 2021 the gap was 25 percent.

Source: Census, IPUMS-USA, Oregon Office of Economic Analysis
• 3 in 10 Oregon seniors essentially rely entirely on Social Security for their income, for nearly 6 in 10 it accounts for more than half of their income

• The 2023 Cost-of-Living-Adjustment is 8.7% for Social Security

• With inflation slowing, and the COLA accelerating it provides a macroeconomic tailwind for consumers

• COLA boosts total personal income in Oregon by 0.6 percent, equivalent to the income and spending power of about 22,000 jobs paying the statewide average wage
Revenue Outlook
Taking stock of tax year 2021

Oregon Personal Income Tax Liability

Year-over-year percent change

- Management is playing a role
  - Record 21.9% liability growth
  - Next highest were after Reagan tax cuts (1983:12.9% 1988:15.2%) and before Bush cuts expired (2005:12.8%)

- Tax liability among filers subject to the top rate grew by 49%, more than double the overall average
Taking stock of tax year 2021

**Broad-based Income Boom**

2021 growth in reported income, full-year filers

- Interest: -18.0%
- Pensions: 4.1%
- Wages: 7.6%
- Social Security: 11.7%
- Dividends: 14.3%
- Business: 20.1%
- Schedule E: 33.6%
- IRAs: 40.6%
- Capital Gains: 77.1%
- Taxable Income: 18.5%
- Tax After Credits: 21.9%

- While income growth was broad based, business and investment income boomed
- A few weak income sources
  - Alimony: -12.5%
  - Unemployment Insurance: -42.9%
  - State Tax Refund: -44.8%
- A record 5.9% of filers were subject to the top rate, accounting for 44% of tax liability

Sources: Oregon Department of Revenue, Office of Economic Analysis
Traditional corporate taxes expected to pull back

Corporate excise and income taxes have grown by 25% per year over the past five years, far faster than underlying measures of profits would suggest.

Although federal tax reforms have increased the Oregon tax base, much of the recent gains are assumed to be temporary.

Although early, collections in 2023 have shown some weakness.

Oregon Corporate Income & Excise Taxes: Collections-to-Profit Index
Seasonally adjusted, 2005Q1=100, U.S. corporate profits

Sources: Oregon Department of Revenue, U.S. Bureau of Economic Analysis, Oregon Office of Economic Analysis
Consumption-based revenues will reduce overall revenue volatility

Oregon Revenues are More Diversified

*Increase in state revenues from 2011-13 to 2023-25, $ billion*

- Personal Income & Corporate Excise: $10.6b (+82%)
- Consumption-Based Revenues: $4.4b (+218%)

*Other includes Liquor, Lodging, Vehicle Privilege and Use, and Bicycle Excise taxes*

Source: Oregon Dept of Revenue, Oregon Dept of Transportation, Oregon Office of Econ Analysis
Consumption-based revenues improve with better economy, except marijuana

- Economic soft landing improves jobs, income, and consumer spending
- Forecast Changes
  - Corporate Activity Tax and Lottery raised approximately 2% per biennia
  - Marijuana lowered 11% in 2023-25, and 5-9% in future biennia

**Consumption Revenues Generally Improve**
*Forecast change from December 2022 to March 2023 ($ millions)*

<table>
<thead>
<tr>
<th>Year</th>
<th>Corporate Activity Tax</th>
<th>Lottery</th>
<th>Marijuana</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021-23</td>
<td>($20)</td>
<td>10</td>
<td>($5)</td>
</tr>
<tr>
<td>2023-25</td>
<td>20</td>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td>2025-27</td>
<td>30</td>
<td>35</td>
<td>20</td>
</tr>
<tr>
<td>2027-29</td>
<td>40</td>
<td>45</td>
<td>25</td>
</tr>
<tr>
<td>2029-31</td>
<td>50</td>
<td>55</td>
<td>30</td>
</tr>
</tbody>
</table>

Source: Oregon Office of Economic Analysis
Bottom Line
### Changes relative to the Dec Forecast

**March 2023 Forecast Changes**

<table>
<thead>
<tr>
<th>General Fund Revenues</th>
<th>$ Millions from Dec</th>
<th>21-23</th>
<th>23-25</th>
<th>25-27</th>
<th>27-29</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Income Taxes</td>
<td>240</td>
<td>29</td>
<td>-14</td>
<td>-127</td>
<td></td>
</tr>
<tr>
<td>Corporate Income Taxes</td>
<td>232</td>
<td>99</td>
<td>-37</td>
<td>-63</td>
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</tr>
<tr>
<td>Other</td>
<td>15</td>
<td>52</td>
<td>14</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>487</strong></td>
<td><strong>180</strong></td>
<td><strong>-36</strong></td>
<td><strong>-173</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Revenues</th>
<th>$ Millions from Dec</th>
<th>21-23</th>
<th>23-25</th>
<th>25-27</th>
<th>27-29</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lottery</td>
<td>16</td>
<td>36</td>
<td>44</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td>Corporate Activity Tax</td>
<td>-5</td>
<td>26</td>
<td>50</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>Marijuana Tax</td>
<td>-10</td>
<td>-36</td>
<td>-37</td>
<td>-31</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2</strong></td>
<td><strong>27</strong></td>
<td><strong>58</strong></td>
<td><strong>72</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Total Sum</th>
<th>$ Millions from Dec</th>
<th>21-23</th>
<th>23-25</th>
<th>25-27</th>
<th>27-29</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Sum</strong></td>
<td><strong>489</strong></td>
<td><strong>207</strong></td>
<td><strong>21</strong></td>
<td><strong>-101</strong></td>
<td></td>
</tr>
</tbody>
</table>

- Data in the table show how the revenue outlook has changed since the December forecast (released 11/16/22)
- Collections of personal income and traditional corporate taxes continue to outstrip expectations
- With the improved baseline economic outlook, additional gains in most taxes are expected through 2023-25
- One exception is the marijuana tax, which is expected to fall by 11% due to low prices (drug treatment funds)
- Combined resources for the 2021-23 and 2023-25 budget cycles have **increased** by **$696 million**
- Personal Kicker
  - $3.938 billion
- Corporate Kicker
  - $1.545 billion
Sizable reserves remain

- Under the current forecast, Oregon’s reserve funds are expected to hit their statutory caps at the end of fiscal year 2026

<table>
<thead>
<tr>
<th>Oregon's Budgetary Reserves (millions)</th>
<th>GRB Proposal</th>
<th>2023-25</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rainy Day Fund</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017-19</td>
<td>2019-21</td>
<td>2021-23</td>
</tr>
<tr>
<td>Beginning Balance</td>
<td>$376.4</td>
<td>$666.6</td>
</tr>
<tr>
<td>Net Deposits</td>
<td>$266.7</td>
<td>$272.8</td>
</tr>
<tr>
<td>Interest</td>
<td>$23.5</td>
<td>$22.8</td>
</tr>
<tr>
<td>Triggered Withdrawals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ending Balance</td>
<td>$666.6</td>
<td>$962.2</td>
</tr>
</tbody>
</table>

- RDF: 7.5% of GF (Retained in GF)

- ESF: 5% of GF (Capital Matching Account)

| **Education Stability Fund**           |              |        |
| 2017-19                                | 2019-21      | 2021-23 | 2023-25 |
| Beginning Balance                      | $384.2       | $621.1  | $414.6  | $708.4  |
| Net Deposits                           | $235.9       | $194.7  | $294.1  | $294.1  |
| Interest                               | -$22.4       | -$19.9  | -$24.3  | -$71.9  |
| Withdrawals                            | $0.0         | $400.0  | $0.0    | $0.0    |
| Ending Balance                         | $621.1       | $414.6  | $708.4  | $1,002.5|

- Total Reserves                        | $1,287.7     | $1,376.8| $2,051.0| $2,834.4|
| % of GF Revenues                       | 5.9%         | 5.8%    | 7.2%    | 11.2%   | 8.1%
Contact

mark.mcmullen@oregon.gov
(971) 345-1003

joshua.lehner@oregon.gov
(971) 209-5929

www.OregonEconomicAnalysis.com
@OR_EconAnalysis