



Oregon

Tina Kotek, Governor

Oregon Transportation Commission

Office of the Director, MS 11

355 Capitol St NE

Salem, OR 97301-3871

DATE: January 6, 2025
TO: Oregon Transportation Commission

FROM: Kristopher W. Strickler
Director

SUBJECT: **Agenda Item I** – Accept Internal Audit Report on Budget and Capital Planning #25-02

Requested Action: Accept the Oregon Department of Transportation's (ODOT) Internal Audit Report #25-02: Internal Audit Report on Budget and Capital Planning.

Background:

The Oregon Department of Transportation (ODOT) has lacked key controls to ensure that its legislative budget is built with an accurate revenue figure. The 2023-25 ODOT budget totaled \$5.9 billion. However, ODOT later realized that there were issues in the budget development process leading to incorrect revenue assumptions made in developing the 2023-25 budget. Revenue was too high by \$1.1 billion. The objectives for this audit were to answer three questions.

1. Has ODOT been using reasonable revenue assumptions in the budget process for recent cycles?
2. Has ODOT taken sufficient actions to correct the 2023-25 budget error and to prevent such an error in the future?
3. Has the agency utilized dedicated HB 2017 funding in alignment with statute?

Outcomes:

ODOT Internal Audit will track ODOT's implementation of the recommendations until actions are completed. A follow-up audit may occur.

Attachments:

- Attachment 01 – Internal Audit Report #25-02



ODOT Has Taken Steps to Improve the Budget Development Process, But More Actions Are Needed

Report 25-02
January 9, 2025

Marlene Hartinger, Chief Auditor
James Hanseling, Principal Internal Auditor
Meredith Kim, Senior Internal Auditor

January 9, 2025

ODOT Executive Strategy Team Members:

Kris Strickler, ODOT Director

Travis Brouwer, Assistant Director – Revenue, Finance & Compliance

Leah Horner, Assistant Director – Operations

Lindsay Baker, Assistant Director – Government & External Relations

Serena Stoudamire-Wesley, Assistant Director – Social Equity

Carolyn Sullivan, Chief Administrative Officer

Dear Executive Strategy Team Members:

The Oregon Department of Transportation (ODOT) did not have key controls in place to ensure that its legislative budget was built with an accurate revenue figure. The 2023-25 ODOT budget totaled \$5.9 billion. However, ODOT later realized that there were issues in the budget development process leading to incorrect revenue assumptions made in developing the 2023-25 budget. Revenue was forecasted too high by \$1.1 billion. The objectives for this audit were to answer three questions related to the budget build process, actions taken to prevent future budget errors, and utilization of HB 2017 funds.

In developing the agency's budget, the process did not ensure that a reasonable federal revenue figure was used for the Delivery and Operations Division budget. An over-reliance on the highway cash flow model and a lack of understanding on how STIP programming impacts that model drove the budget error. Steps taken to remedy the budget error have addressed short-term impacts, but additional actions are needed to reduce the opportunity for future errors.

ODOT was able to demonstrate allocating the majority of the HB 2017 funds dedicated for highway purposes. However, a gap of \$173 million remained between what has been allocated and the expected amount based on revenue in the STIP. To reconcile the gap in what ODOT has allocated in the STIP and HB 2017 funds, staff identified other state funds that may fill the gap. We did not make a determination on whether these additional funds meet the statutory requirements for HB 2017 revenue.

Sincerely,



Marlene V. Hartinger, MBA, CPA, CIA
Chief Auditor

Table of Contents

Executive Summary	1
Background	2
Audit Results	4
ODOT’s budget build process has lacked necessary controls to ensure alignment between planned expenditures and projected revenues.....	4
Further corrective actions necessary but steps taken to date have improved the budget process.....	9
Agency records could not demonstrate that all HB 2017 revenue has been allocated in alignment with statutory requirements.	11
ODOT’s highway cash flow model has had a low level of accuracy in forecasting capital construction expenditures over recent years.....	13
Conclusion.....	20
Recommendations	20
Objective, Scope and Methodology	21
Management Response	23
Appendix A.....	28
Appendix B.....	29

ODOT HAS TAKEN STEPS TO IMPROVE THE BUDGET DEVELOPMENT PROCESS, BUT MORE ACTIONS ARE NEEDED.

EXECUTIVE SUMMARY

The Oregon Department of Transportation (ODOT) has lacked key controls to ensure that its legislative budget is built with an accurate revenue figure. The 2023-25 ODOT budget totaled \$5.9 billion. However, ODOT later realized that there were issues in the budget development process leading to incorrect revenue assumptions made in developing the 2023-25 budget. Revenue was too high by \$1.1 billion. The objectives for this audit were to answer three questions.

1. Has ODOT been using reasonable revenue assumptions in the budget process for recent cycles?

State highway fund revenue has been forecasted and budgeted in close alignment with actual revenues across recent budget cycles, but the federal portion has not. ODOT has relied on a highway cash flow model to generate what the federal expenditures would be for the Delivery and Operations Division and then assuming sufficient federal revenues would be available to cover those expenditures. The model uses project information from the Statewide Transportation Improvement Program (STIP) to forecast what expenditures will be during the agency budget period. The federal share of agency revenue was then assumed based on the amount of federal funding for projects in the STIP at the time of budget build. The highway cash flow model has multiple limitations that lead to an inflated forecast of federal expenditures, which in turn lead to an inflated amount of federal revenue. This inflated number was not identified by staff during the budget build.

2. Has ODOT taken sufficient actions to correct the 2023-25 budget error and to prevent such an error in the future?

Further actions are required by ODOT to prevent budget errors occurring in the future. Actions taken so far appear to have remedied the short-term impacts of the budget error. This has been done through adjustments to the STIP, issuance of additional debt, and process changes to how ODOT develops the agency budget. The highway cash flow model was seen by our review as unreliable in forecasting expenditures for an upcoming budget cycle.

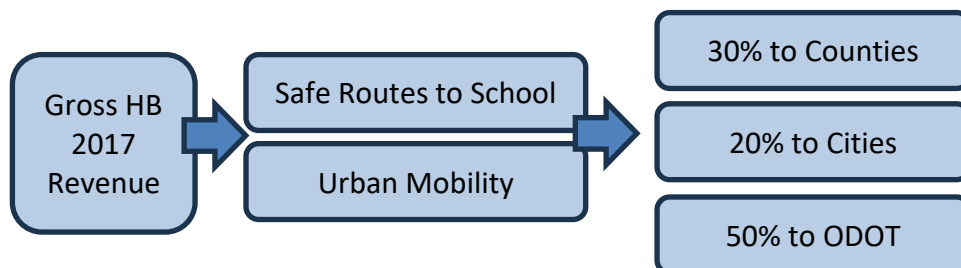
3. Has the agency utilized dedicated HB 2017 funding in alignment with statute?

Most of the HB 2017 funding has been programmed in the Statewide Transportation Improvement Program (STIP). We were able to verify approximately 85% of ODOT’s share in dedicated HB 2017 funding areas (bridge, seismic, preservation, culverts, and safety) has been allocated in alignment with statute. Agency staff pointed to two other areas to fill most of the gap: construction of a new maintenance facility and additional state bridge funding that was not programmed as HB 2017 funds in the STIP. Even with this, about a third of safety funds had not been allocated and the preservation and culverts program has been over-programmed.

BACKGROUND

In 2017, the Oregon Legislature passed House Bill 2017 which brought a significant increase of funding to ODOT. The additional state highway fund revenue came from fee increases at DMV, Commerce and Compliance (motor carriers), and the gas tax. At the time of passage, it was estimated that HB 2017 would generate \$5.3 billion in revenue over the first 10 years, including highway and non-highway funding. The bill directed how ODOT would utilize the increased revenue going to the state highway fund. The figure below captures the flow of how funding is to be allocated. The Safe Routes to School allocation increased in January 2023 (from \$10 to \$15 million) and the Interstate 5 Rose Quarter Project¹ (Urban Mobility) annual allocation of \$30 million started in January 2022. The Urban Mobility funds may cover current project costs and debt service on bonds related to the projects.

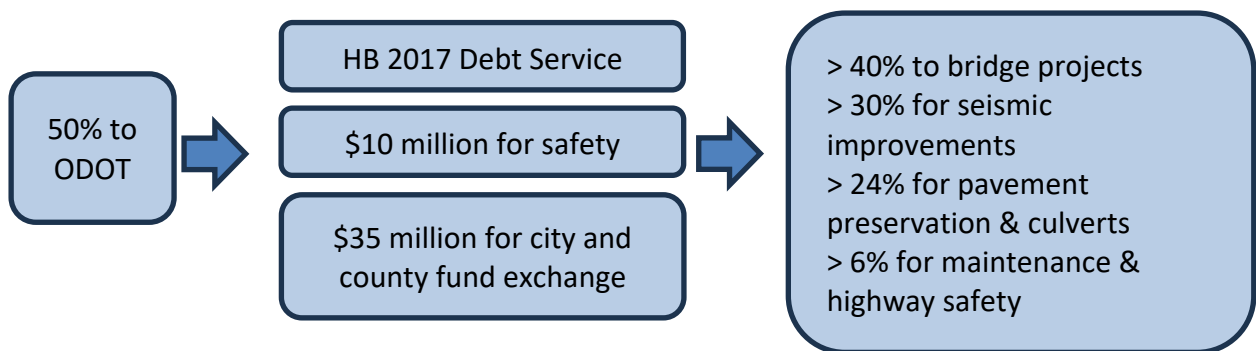
Oregon statute directs how HB 2017 revenue is used.



¹ Initially this was for the Interstate 5 Rose Quarter Project; House Bill 3055 changed this to include additional projects: Interstate 205 Improvements, Interstate 5 Boone Bridge, and implementation of a toll program.

ODOT's portion is further dictated in statute for usage as shown in the figure below. Debt service payments started in December 2020 for bonds used to pay for named projects in the legislation. Additional named projects were to be funded with HB 2017 revenue and not bond funds. These projects totaled \$168 million. The city and county fund exchange started in 2023 after passage of HB 2101. After these allocations and the \$10 million for safety, the remainder is to be programmed to dedicated areas across ODOT programs.

ODOT's portion of HB 2017 revenue is allocated based on statute.



ODOT has collected \$2.1 billion in state highway fund revenue from HB 2017 through June 2024. Counties have received \$605 million and cities \$403 million. Revenue forecasts project another \$1.4 billion over the next three years. The revenue from HB 2017 is identified and marked each month by accounting staff. Funds are kept in a fund detail along with other state highway fund revenue. The majority of ODOT's HB 2017 revenue has been programmed in the STIP.

The STIP is ODOT's short-term capital improvement program for state and regional transportation systems. The STIP provides project scheduling and resource allocation for most improvements with approved funding and that are likely to be undertaken during the four-year period. Preparation of the STIP determines which projects should be funded, when the work should be done, and what funding source should pay for them. A financial plan is included that identifies all capital and non-capital projects within the state with committed or reasonably available funding.

The following information is included for each project:

- Scope description
- Estimated total project cost
- Federal funds proposed by year
- Proposed source of Federal and non-Federal funding
- Responsible agency

The STIP development process starts about three years prior to its adoption by the Oregon Transportation Commission (OTC), Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA). ODOT is required to include a demonstration of fiscal constraint that shows that the projects included in the STIP can be implemented using the committed or reasonably available revenue sources. This is based on the state and federal dollars forecasted to be available.

AUDIT RESULTS

The development of ODOT's agency budget has lacked controls to ensure a reasonable federal revenue figure is used for the Delivery and Operations Division budget. An over-reliance on the highway cash flow model and a lack of understanding on how STIP programming impacts that model drove the budget error. Steps taken to remedy the budget error have addressed short-term impacts, but additional actions are needed to reduce the chance for future errors. ODOT was able to demonstrate allocating the majority of the HB 2017 funds dedicated for highway purposes. However, a gap of \$173 million remained between what has been allocated and the expected amount based on revenue in the STIP.

ODOT'S BUDGET BUILD PROCESS HAS LACKED NECESSARY CONTROLS TO ENSURE ALIGNMENT BETWEEN PLANNED EXPENDITURES AND PROJECTED REVENUES.

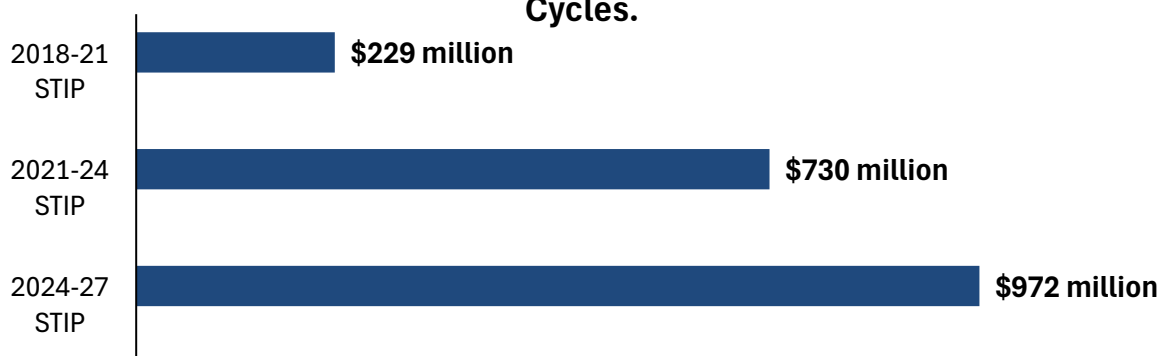
ODOT's development of its biennial budget has relied heavily on the results of agency's highway cash flow model to inform its budget for the capital program that is in the STIP. Staff did not understand how the highway cash flow model assumptions and mechanics were impacted by project funding in the STIP, namely, fund sources and allocations for projects. Staff utilized the highway cash flow model to establish budget figures for the capital program for the next biennium. The model extracts project data from the STIP during the budget build process. The model considers multiple factors in forecasting the amount of expenditures and when they will occur during the two-year budget cycle. Manual adjustments may be made to the model's results for projects not yet programmed in the STIP.

One factor that was not understood was the impact of how the highway cash flow model interpreted advanced construct funding in the STIP. Advanced construct is a tool utilized by ODOT to jump start projects using state funds that may or may not be reimbursed with federal dollars at a later date. Projects programmed in the STIP with advanced construct have the funding responsibility split the same as other projects with federal funding, commonly 89.73% federal and 10.27% state. However, some projects end up being 100% state funded.

The highway cash flow model interprets advanced construct funding as it is programmed in the STIP. This led to an overestimation of how much federal funding the agency would be utilizing to deliver the STIP projects during the budget cycle. It also underestimated the amount of state funds needed to pay the advanced construct expenditures pending federal reimbursement. The volume of advanced construct in recent STIP cycles requires that at least some remain 100% state funded.

Across the last three STIP cycles, the utilization of advanced construct has significantly increased. The 2018-21 STIP had \$229 million of advanced construct. By the 2024-27 STIP cycle, the figure had increased to \$972 million. The chart below shows the increase over the last three STIP cycles. This has coincided with the increase in HB 2017 revenue. When applicable, HB 2017 funds are initially programmed as advanced construct in the STIP to give flexibility to staff managing funding across projects. The HB 2017 funds can be switched out for federal funds at a later date.

The Amount of Advanced Construct Programmed in the First Two Years of the STIP Significantly Increased in the Last Two STIP Cycles.



At the project level, only state funds are used to pay for expenditures initially. No federal reimbursement is done unless the agency decides to do so. This decision is made separate from the group that manages the highway cash flow model. The near-term impact on state funds can be sizeable on a single project as seen in the table below, even if eventually reimbursed with federal dollars.

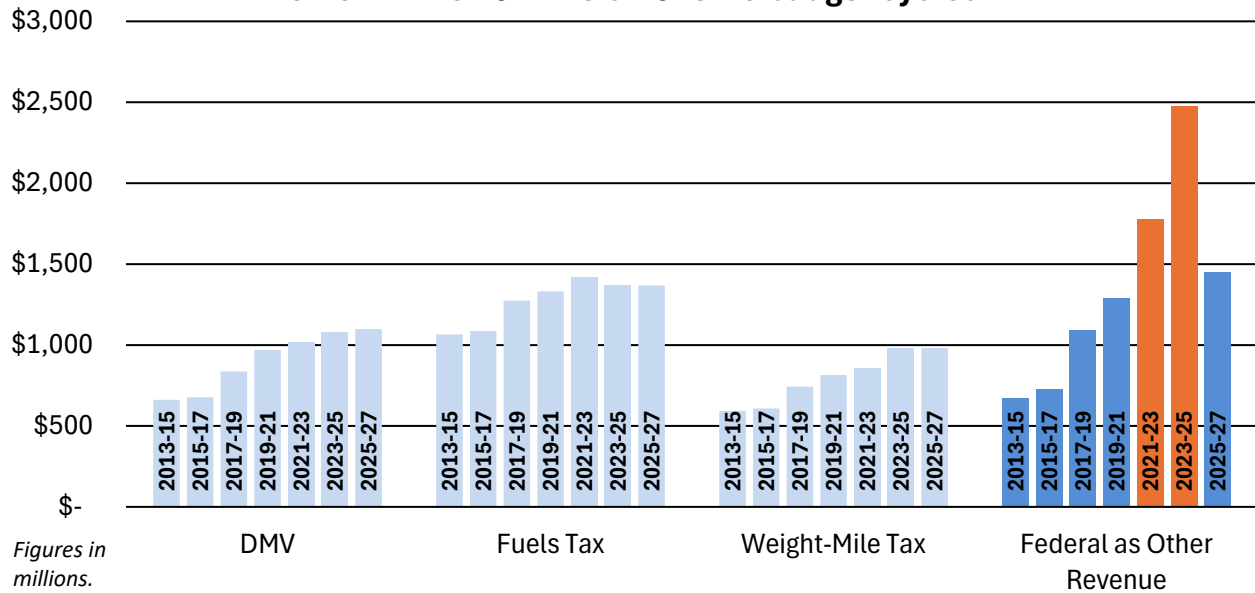
	Construction Funding	STIP Federal Share	STIP State Share	Actual State Share as Advanced Construct
Project A	\$38,000,000	\$34,097,400	\$3,902,600	\$38,000,000
Project B	\$9,700,000	\$8,945,340	\$754,660	\$9,700,000
Project C	\$12,476,467	\$11,228,820	\$1,247,647	\$12,476,467

A second issue that contributed to budget issues for the 2023-25 biennium, and likely the 2021-23 biennium also, was the budget build process relied strictly on the funding projections from the highway cash flow model derived from STIP programmed amounts to determine how much federal as other revenue² ODOT would receive.

There was no check on the reasonableness of the figure with historical actuals. Again, the cash flow model extracts the projects from the STIP and forecasts the expected expenditures during the biennium. Since the model is using funding breakdown for advanced construct projects with a high percentage of federal reimbursement, that translates into a significantly higher federal as other revenue expectation than what would be likely based on historical trends. This revenue shift can be seen in the chart below that includes the main revenue sources for ODOT for each legislatively approved budget going back to 2013-15. The large increase of federal as other revenue coincides with the large increase of advanced construct programmed in the STIP seen on the previous page. None of the three state sources had nearly the same growth rate.

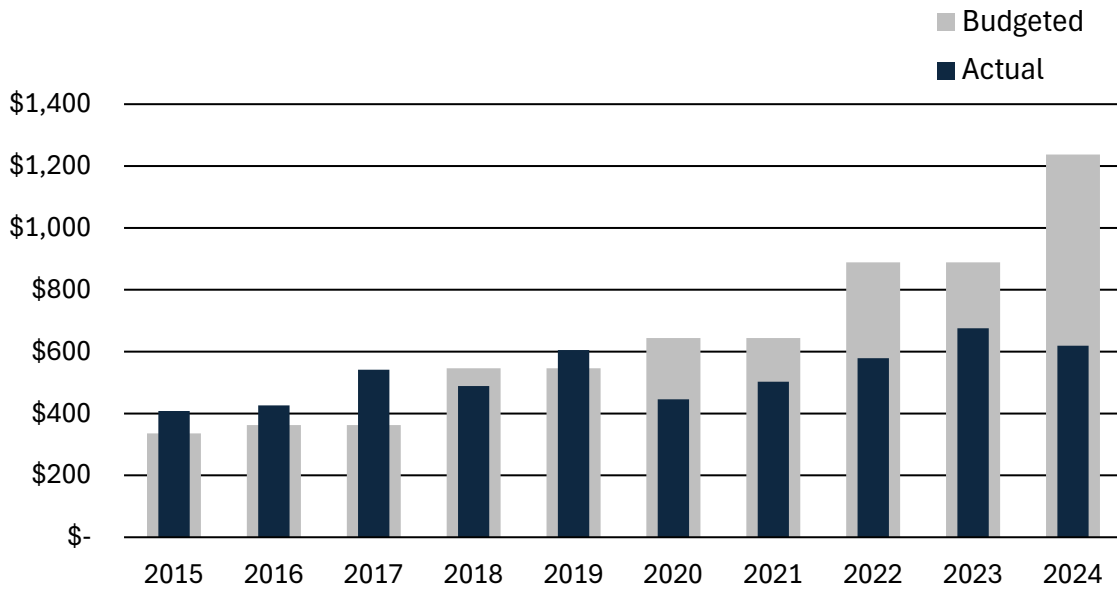
² In the ODOT budget, federal as other revenue is the formula funds and any competitive grants received from FHWA. Most of these funds requires a 10.27% match.

Federal revenue grew much faster than other revenue sources for ODOT in the 2021-23 & 2023-25 budget cycles.



The increase to federal revenue for the 2021-23 and 2023-25 budgets was a significant increase over prior years. The amount budgeted was a 38% increase (\$489 million) in 2021-23 and 39% increase (\$698 million) in 2023-25 from the prior budget. Going back to fiscal year 2020, ODOT has budgeted more federal revenue than what has been received. In 2020, the gap was \$198 million and rose to over \$600 million in 2024. The chart below shows the comparison of the budgeted amount to actuals going back to fiscal year 2015.

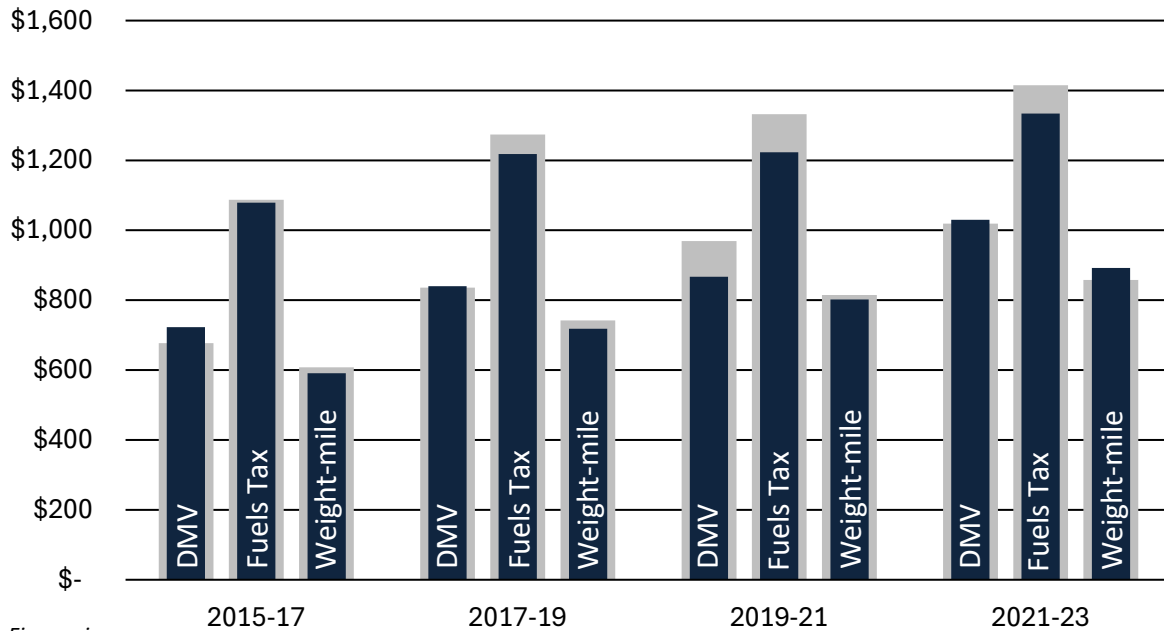
Actual federal as other revenue was much less than budgeted revenue going back to 2020.



Figures in millions.

In contrast to the federal as other revenue, state revenue actuals have aligned much closer to the amount in the agency budget. The state revenue figures used in the agency budget come from the revenue forecasts completed twice a year. We reviewed revenue forecasts and compared to actuals to see how well the forecasts tracked with actuals. Forecasts have been fairly accurate in projecting what revenue will be that becomes more accurate as the forecast nears the actual year. Of note, forecasts prior to December 2017 were not included in the analysis since those did not include the additional revenue from HB 2017.

Actual state revenue has aligned closely with the budgeted amount over the last four biennium.



Figures in millions.

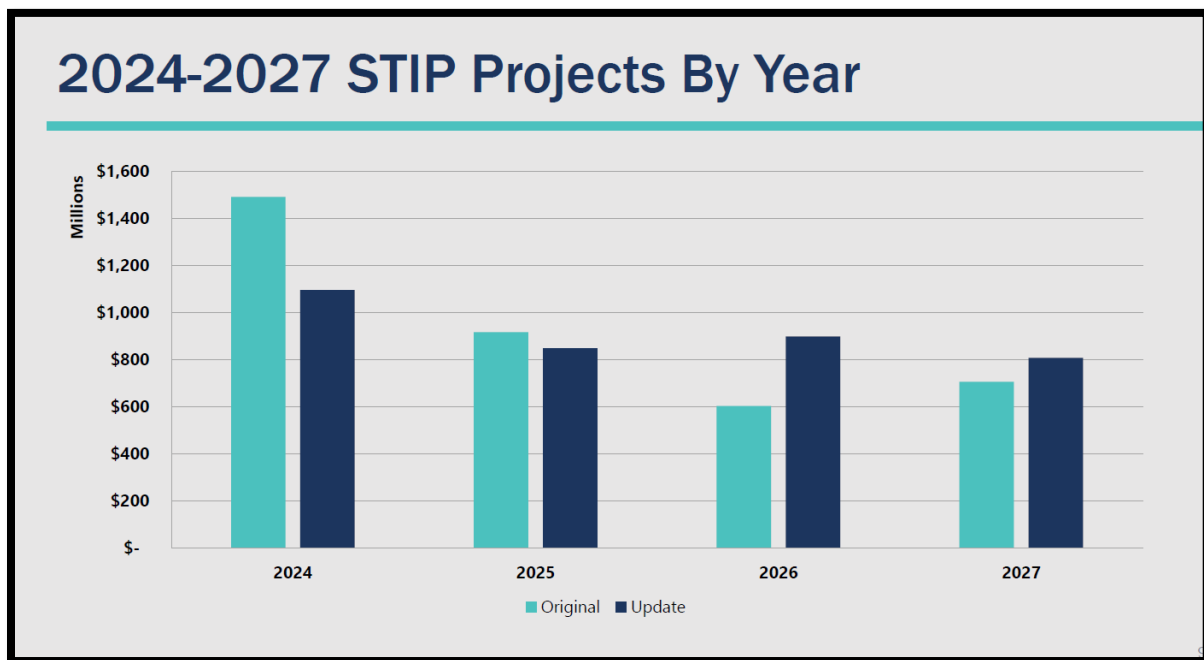
The process used to develop the 2023-25 agency budget, namely the amount of federal as other revenue left ODOT short \$1,175 million to fulfill commitments for the biennium. This issue is further exacerbated in that staff did not ensure that there was sufficient state revenue to deliver the 2024-27 STIP as programmed. Available state revenues could not support delivery of what is in the STIP for 2024 and 2025. Prior STIP cycles were also not checked against the agency budget and available state dollars. Per staff, the stance has been that there is always state revenue available to deliver on what is programmed in the STIP. Checking that the budget and STIP align was not seen as necessary. However, ODOT’s current cash flow challenges have put limits on the availability of state funds.

FURTHER CORRECTIVE ACTIONS NECESSARY BUT STEPS TAKEN TO DATE HAVE IMPROVED THE BUDGET PROCESS.

ODOT has taken multiple steps to address the issues leading to this disconnect between the amount of federal as other revenue budgeted to what is received. The results from the highway cash flow model are now checked with historical actuals to ensure the budget figure is reasonable. Staff have also added a step to adjust the model results accounting for advanced construct projects in the STIP. All advanced construct funding is considered 100% state funded instead of what the STIP lists as the federal and state split.

The STIP development process will also take steps to check that the STIP is constrained to the available state revenues to support project delivery. One change already made to the 2024-27 STIP and will be done for future STIP rounds, is balancing out the volume of work across the STIP years. The 2024-27 STIP was heavily frontloaded with more projects planned in the first two years compared to the second two years. The image below captures how the 2024-27 STIP was initially programmed and the change made to balance out the volume of projects across all four years.

ODOT delayed projects in the 2024-27 STIP to balance the volume of expenditures in each year.



From ODOT presentation made to the OTC in May 2024.

Supporting documents used to develop the agency budget have been adjusted to include HB 2017 revenue as a standalone line item instead of including it with all state highway revenue. The change has also included identifying the specific uses of HB 2017 to show how the funds are being allocated in accordance with statute. The supporting documents for the 2025-27 agency request budget clearly showed this change and the figures were accurate based on forecasted revenue.

Other actions taken by the agency to address the revenue gap included issuance of additional debt that was not included in the 2023-25 budget. The amount totaled \$497 million and was done through a combination of commercial paper and GARVEE bonds. Commercial paper is a short-term borrowing program to provide more liquidity for the agency. GARVEE bonds can be paid back using federal funds. The additional debt in combination with the STIP amendment was expected to address the budget gap and state highway fund balance issues for the agency.

AGENCY RECORDS COULD NOT DEMONSTRATE THAT ALL HB 2017 REVENUE HAS BEEN ALLOCATED IN ALIGNMENT WITH STATUTORY REQUIREMENTS.

Records could not demonstrate how ODOT used \$98 million of HB 2017 revenue. Legislation did not direct ODOT to program all funds in the STIP but in practice, this is how ODOT has allocated the vast majority of the funds. The amount of HB 2017 revenue allocated to dedicated funding programs in the STIP through 2027 totaled \$986 million. Plus, an additional \$50 million for a capital construction project³ brings the total to \$1,036 million. But based on revenues, the total should be \$1,183 million. Within the STIP, ODOT identified a funding responsibility for the dedicated HB 2017 revenue: bridge/seismic, preservation, culverts, and safety⁴.

The HB 2017 legislation directed how ODOT was to allocate the 50% of the revenue it receives. First, \$10 million goes to safety, and ODOT pays for debt service on bonds issued for named projects under the legislation. The remainder is split in the following way for dedicated programs:

- 40% for bridge projects
- 30% for seismic projects
- 24% for preservation and culvert projects
- 6% for highway maintenance and safety improvements

In 2023, legislation was passed that directed ODOT to allocate \$35 million of HB 2017 revenue to the city and county fund exchange program.⁵ This program allows local agencies to exchange federal highway funds with state dollars.

³ The project is a consolidation of three office/maintenance stations into one location that will be seismically resilient, serving the south coast area of Oregon.

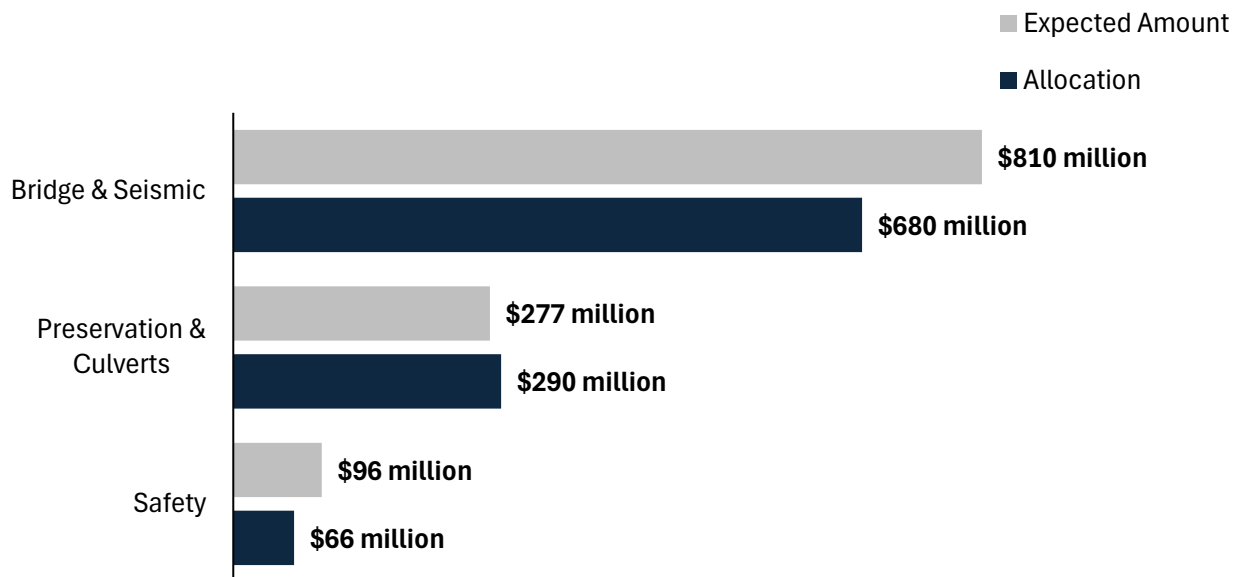
⁴ Safety is broken up into multiple funding responsibilities: Statewide Safety, Region 1, Region 2, Region 3, Region 4, and Region 5. The total of each one accounts for safety in the report.

⁵ HB 2101

This additional \$35 million comes out of ODOT’s share prior to the allocation to the dedicated programs moving forward, and ODOT backfills the state money with federal funds that were previously available to local governments.

The chart below shows the gap between the amounts allocated to each program in the STIP compared to ODOT’s total revenue for each of the categories. The expected amount was calculated using actual revenue collected through fiscal year 2024 and forecasted revenue through fiscal year 2027. It focuses on the funds allocated for bridge, seismic, preservation and culverts, and safety. The 6% for highway maintenance and safety improvements was not included in the audit scope.

The allocation of HB 2017 revenue to dedicated programs was less than the expected amounts in two areas.



To reconcile the gap in what ODOT has allocated in the STIP and HB 2017 funds for bridge and seismic, staff pointed to two other areas. The first is \$117 million in state bridge funds allocated under other funding responsibilities. These are state dollars that were not programmed as being funded with HB 2017 revenue in the STIP. The second is usage of HB 2017 seismic funds to pay for a new maintenance facility. As a capital construction project, it is not included in the STIP and has been included in recent legislatively adopted budgets. If these funds are included, it would more than cover the gap between the expected amount of bridge and seismic funds to what we expected based on revenue. We did not make a determination on whether these additional funds meet the statutory requirements for HB 2017 revenue.

Funding allocation for preservation and culverts is overprescribed by \$13 million. To address the \$30 million gap in safety funds, staff identified an additional \$3.2 million in state funds allocated to safety projects outside of the dedicated HB 2017 safety funds that could be used to fill the gap. As with bridge and seismic, we did not make a determination on whether these funds meet the statutory requirements for HB 2017 revenue. Additionally, staff shared that a separate funding category for HB 2017 safety was not initially created in the STIP.

ODOT'S HIGHWAY CASH FLOW MODEL HAS HAD A LOW LEVEL OF ACCURACY IN FORECASTING CAPITAL CONSTRUCTION EXPENDITURES OVER RECENT YEARS.

The highway cash flow model is limited its ability to reasonably forecast expenditures due to project delivery uncertainty and model mechanics. Across the four years reviewed, the model consistently forecasted amounts with high variability over and under actual expenditures. Across calendar years 2020-2023, we reviewed a subset of projects to determine how actual construction expenditures aligned with what the highway cash flow model projected for coming year. We identified two issues in the mechanics of how the cash flow model operates that contributed to the forecast being different than actuals by a significant amount. The first was the model including the entire construction budget when only a portion impacts ODOT's cash flow and the second was under or overestimating the rate of expenditures in the coming year.

We reviewed 40 projects from each year for a total of 160.⁶ Across all four years, there were 2,186 projects included in the November cash flow model forecasts. Auditor judgment was used to select a group of projects meeting a mix of criteria: the construction contract already bid, planned to bid in the coming year, a range of forecasted expenditures, and different project types.

We did not consider a significant schedule or budget change for a project during the year reviewed as reason for the cash flow model being inaccurate.

We did not consider a significant schedule or budget change for a project during the year reviewed as reason for the cash flow model being inaccurate. It was expected that a significant schedule change, such as delaying when the construction contract bid would negatively impact the accuracy of the cash flow model. Additionally, if a construction budget was significantly changed causing the forecast to differ from the actuals, we did not attribute the difference to cash flow model. We considered a significant schedule change to be more than a 30-day change in the let date. A significant budget change was 10% (plus or minus) or more. If either of these changes occurred for a project, we considered whether it was the driver for the difference between the forecasted and actual construction expenditures.

One contributing factor on schedule changes impacting the cash flow model was the STIP not having accurate bid let dates.

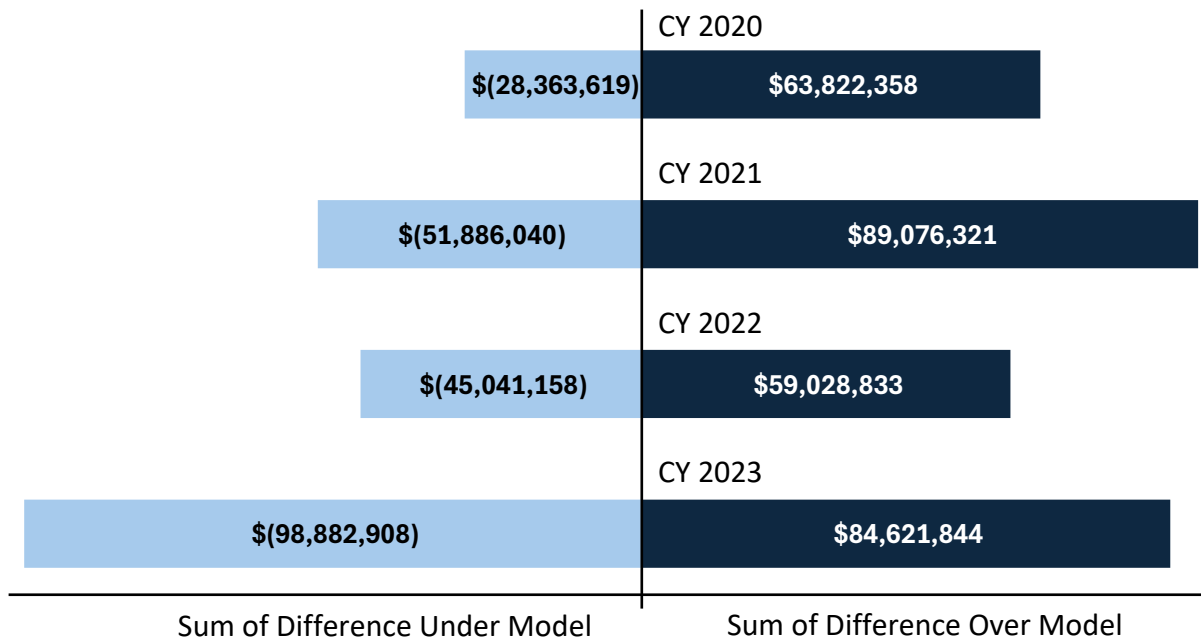
One contributing factor on schedule changes impacting the cash flow model was the STIP not having accurate bid let dates. The cash flow model relies on the bid let date in the STIP to know when construction expenditures are likely to begin. We saw multiple projects that did not have an accurate bid let date in the STIP. This can cause projects to have forecasted construction expenditures well before work begins. For example, one project's bid let date was 7/24/2019 but the contract wasn't let until January 2022. The cash flow model included the project in forecasting expenditures in 2020 and 2021. The STIP was not updated with the actual bid let date.

Of the 160 projects we reviewed, 44 fell into this category of having a significant budget or schedule change. The cash flow model forecasted \$203 million for these projects with actuals being \$94 million, a net difference of \$109 million. Actual construction expenditures differed considerably with the forecasted amounts for the remaining 116 projects.

⁶ The same project may be included in different years.

Combining the differences across projects can hide issues in how the cash flow model operates. The differences in the actual versus the projected expenditures were attributed to the how the cash flow model operates. The net difference was \$72 million for the projects from a total forecast amount of \$754 million. But if the difference is taken on an absolute value, the total difference is \$521 million. The chart below shows the total amount of difference, over and under, for each year reviewed. The total amount of over (positive total) is the sum of when the model forecasted more than actuals. The total amount of under (negative total) is the sum of when the model forecasted less than actuals.⁷

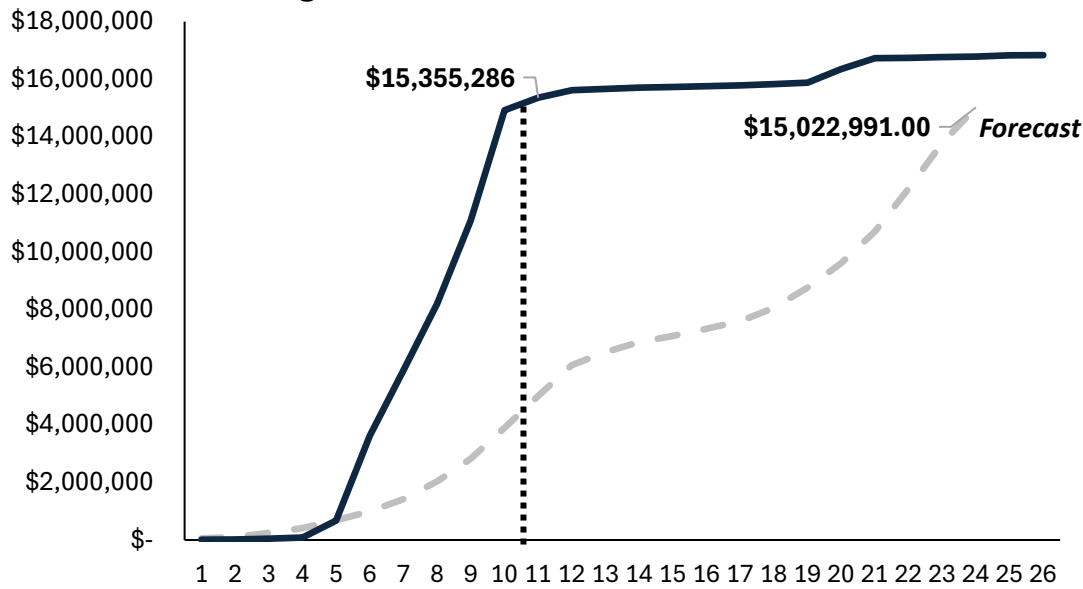
The total amount of over/under difference in the forecast and actuals shows a significant issue versus looking at the net difference.



⁷ The same chart can be seen in appendix A for projects that had a significant schedule or budget change. Appendix B includes a breakdown by each project included in the review.

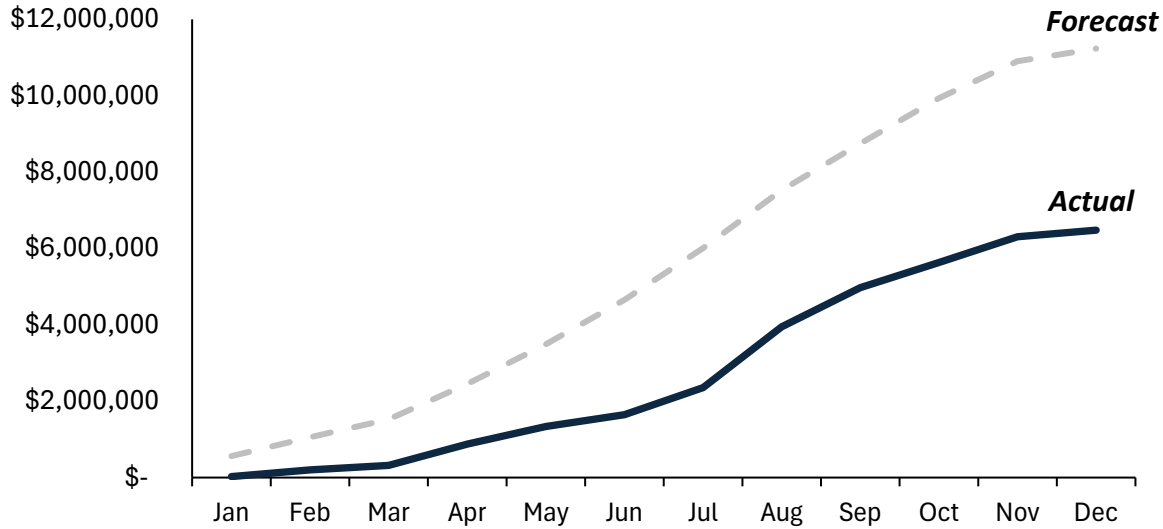
Project expenditure forecasts were missed consistently by the cash flow model across the four years reviewed. Forecasted expenditures often had a consistent pattern over an estimated project timeline with seasonal changes. In the actuals, project expenditures occurred much faster. An example is seen in the graph below of a project that expended over \$15 million by the 11th month compared to the forecast which showed that amount in the 24th month.

The project construction expenditures occurred much faster hitting \$15 million 13 months sooner than forecasted.



In contrast, projects also had construction expenditures that occurred at a slower rate compared to the forecast. Below is an example of one project that had a forecasted total of \$11.2 million but actuals were \$6.4 million for calendar year 2021.

Forecasted construction expenditures were \$4.8 million higher compared to actuals for the project across the calendar year.



A systemic issue of not accounting for how much of a project’s construction expenditures was seen in the cash flow model across certain project types. Projects with a connection to local agencies, the Washington State DOT (WSDOT), and projects with funding from the Western Federal Lands Highway Division (WFLHD)⁸ all had common discrepancies. The cash flow model included the entire construction amount from the STIP and used that figure as the basis for the expenditure forecast. However, the cash flow model did not account for whether ODOT would pay a portion of or all the expenditures.

For many of these projects, ODOT incurred only a small portion of the construction expenditures. Often, none of a project’s forecasted expenditures were incurred by ODOT. Across the four years, the cash flow model forecasted \$226 million in construction expenditures with actuals being \$10.9 million.

⁸ WFLDH is with the Office of Federal Lands Highway which promotes effective, efficient, and reliable administration for a coordinated program of federal public roads and bridges; to protect and enhance natural resources; and to provide needed transportation access for Native Americans.

The highway cash flow model will include the entire project's construction expenditures to show how much cash is needed to fund the project.

The STIP identifies the different funding sources for a project. For an ODOT project, the state will pay for the entire project with FHWA reimbursing ODOT for the federal share (typically 89.73%) after the expense is paid. The highway cash flow model will include the entire project's construction expenditures to show how much cash is needed to fund the project before being reimbursed. On a local agency project, ODOT can be billed for a share of the project cost. In practice, several projects didn't follow this pattern.

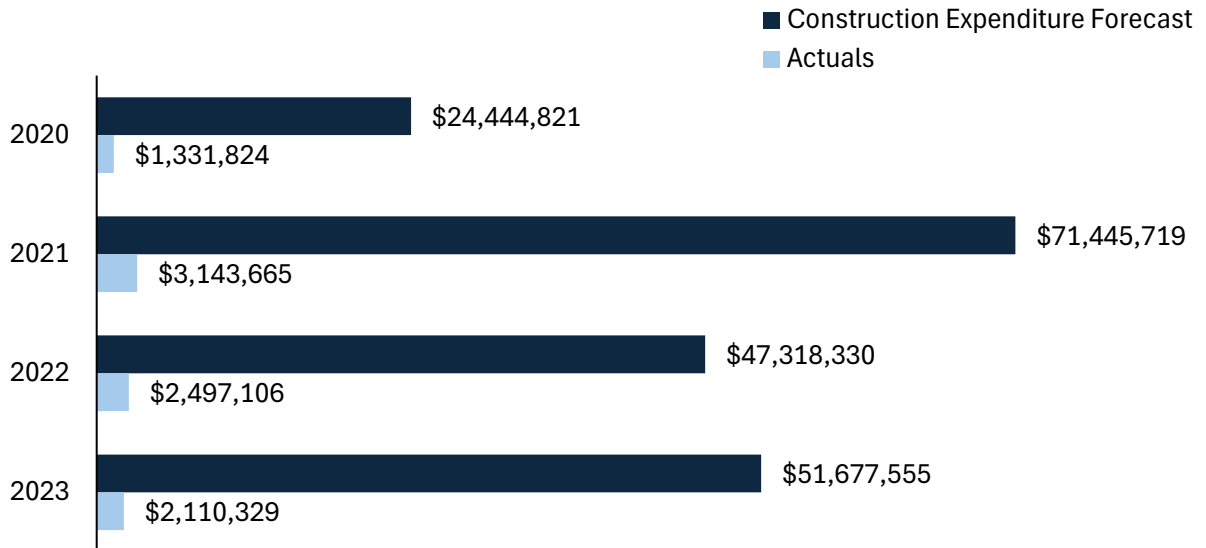
One local agency project shows how impactful it is when expenditures are not passed through ODOT as typically assumed in the highway cash flow model. This project was 100% local agency funded in the STIP, yet the cash flow model included the entire construction phase in the November 2019 report. The model projected it would have \$1.3 million in expenditures, but the actuals were \$0. It showed up again the November 2020-22 reports with a projected amount of \$7.3 million each year. And each year no actual expenditures came through ODOT as the project doesn't have an expenditure account for transactions to be billed to.

The cash flow model projected \$16.6 million in expenditures for one project but actuals were only \$71,280.

Projects tied to the WFLHD funding program consistently overestimated the amount of construction expenditures that would occur. These projects and contracts are managed by FHWA with ODOT only expending the state share of the cost. This amount is much less than what is programmed in the STIP. One project had a construction estimate of \$21.5 million in the STIP and the cash flow model projected \$16.6 million in expenditures in calendar year 2022. However, the actuals were only \$71,280. The same pattern was seen across all projects within this funding program. In total, the cash model projected \$226 million in expenditures, yet actuals were \$10.9 million. Some of these projects were included year over year with little to no actual expenditures.

The impact was significant as this pattern played out across the years reviewed. The chart below shows how sizeable the difference was for the projects that the entire construction phase was included in the cash flow model but only a small, if any, expenditures actually came through ODOT. Projects included in the chart data were local agency, joint projects with WSDOT, and WFLHD.

The forecated construction expenditures were significantly more than actuals across multiple years.



These projects can linger in the model year after year because they are in the STIP and little to no expenditures have come through ODOT. One project was included in the forecast three consecutive years with over \$16 million in projected expenditures. In total, across those three years actual expenditures were just over \$1.6 million in the middle year. However, the cash flow model continued to include the project with a high amount of projected construction expenditures. Another project had \$16.9 million forecasted in one year and \$16.6 million forecasted in the following year. Actual expenditures were \$252,362 and \$49,757.

The highway cash flow model holds another limitation tied to how it performs in forecasting construction expenditures. The model runs on older technology (COBOL) and was likely developed in the 1990s. We could not determine exactly when the model was developed and implemented since it predates current staff. Feedback from the ODOT Information Systems Branch staff is that the model couldn't be modified from how it currently operates and would take a tremendous amount of effort to determine what exactly it is doing. Program staff using the model also noted the inability to understand exactly what it is doing as a limitation to know whether it is working or not.

CONCLUSION

ODOT has taken steps to address issues arising from the 2023-25 budget error, but further actions are necessary. Carrying the planned actions out will be key to preventing future errors. The limitations and accuracy issues with the highway cash flow model reduce its reliability as a tool to inform what figures should be used in building ODOT's budget. Current steps to monitor and track allocation of HB 2017 revenue has left dedicated programs short of funding. Although ODOT may be able to fill the gap with other state dollars, improvements are needed to demonstrate how statutory requirements are met.

RECOMMENDATIONS

ODOT should:

1. Complete a reconciliation of forecasted HB 2017 revenue with actual revenue at least every biennium to ensure allocation follows statutory requirements.
2. Create a fund detail to hold HB 2017 revenue separate from other state highway fund revenue.
3. Ensure alignment between the STIP and the agency budget for how state highway revenue is committed. Retain supporting documentation for both the STIP and budget development on what the commitment of state highway revenue is.
4. Review the 2025-27 budget for potential adjustments per the observations made concerning the highway cash flow model's use to develop the Delivery and Operations Division budget.
5. Ensure bid let dates in the STIP are kept current based on project schedule changes and are updated timely.
6. Explore viable alternatives to the highway cash flow model and move to a new approach for developing the Delivery and Operations Division budget. Consider other options for forecasting construction expenditures that meet the agency's needs to support adherence to the budget and cash flow.

**OBJECTIVE, SCOPE AND
METHODOLOGY**

The objectives for the audit included the following:

1. Has ODOT been using reasonable revenue assumptions in the budget process for recent cycles?
2. Has ODOT taken sufficient actions to correct the 2023-25 budget error and to prevent such an error in the future?
3. Has the agency utilized dedicated HB 2017 funding in alignment with statute?

Audit scope for the first objective was the 2013-15 to 2023-25 budget cycles. For the second objective, we reviewed actions taken since June 1, 2024, with our initial feedback to agency management occurring on May 31, 2024. The third objective covered the start of HB 2017 revenue in January 2018 and reviewed allocation through 2027. Revenue from bonds issued to deliver HB 2017 projects and HB 2017 non-highway revenue was not included in the audit scope. Federal revenue outside of Delivery and Operations was not included in the scope.

We reviewed the programmed revenue supporting each budget against corresponding revenue forecasts and actuals to determine if revenue assumptions were reasonable. Budgeted amounts for federal as other funding were matched against reporting from FHWA on the allocation estimates for Oregon.

To determine if dedicated HB 2017 funding was allocated to funding programs as listed in statute, the following steps were completed:

- Reviewed ODOT accounting records to calculate how much HB 2017 has been received.
- Reviewed allocation of HB 2017 revenue as recorded in the STIP.
- Met with agency staff to understand how revenue has been utilized.
- We did not review project expenditures for compliance with statute.

The highway cash flow model is run monthly by staff. We reviewed the February, May, August, and November reports from 2019-2024.⁹ The results from the model from the November 2019-2022 reports were matched against actuals from the following calendar year. TEAMS records were used to determine what actuals were. Only construction expenditures were included in the review and preliminary engineering, right of way, or utility phases were excluded. The highway cash flow model doesn't include these areas.

Additional steps taken to complete the audit include:

- Reviewed applicable Oregon Revised Statute and legislative documents.
- Reviewed ODOT materials related to the budget, STIP, revenue forecasts, and accounting records.
- Reviewed FHWA funding allocations and related materials.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

⁹ November 2024 was not included since testing occurred prior to that month.

MANAGEMENT RESPONSE



Oregon

Tina Kotek, Governor

Oregon Department of Transportation
Finance & Budget Division
355 Capitol Street NE
Salem, OR 97301

January 8, 2025

Marlene Hartinger
ODOT Chief of Audit Services
355 Capitol Street NE
Salem, OR 97301

Re: Budget and Capital Planning Audit – Management Response

Dear Ms. Hartinger,

As part of the Strategic Review an internal audit was conducted to review financial processes in ODOT to answer three specific questions.

1. Has ODOT been using reasonable revenue assumptions in the budget process for recent cycles?
2. Has ODOT taken sufficient actions to correct the 2023-25 budget error and to prevent such an error in the future?
3. Has the agency utilized dedicated HB 2017 funding in alignment with statute?

The audit spanned several months and worked with a variety of Finance and Budget Division (FBD) staff and leadership to build a comprehensive understanding of the current financial processes and procedures to answer the three questions. The audit shows while some elements of the budget process are in good shape and changes already in place have moved the agency in the right direction, there is still work to be done.

For the first question the audit found the revenue assumptions for state revenue were shown to be reasonable, while the federal assumptions were not. Beginning with the 2025-2027 Agency Request Budget, FBD has already adjusted the method for forecasting federal revenue, shifting from using the Delivery & Operations (D&O) Division cash flow model to using historic actual federal funds as the basis for the projection. While this change fixes this specific problem, questions linger about the D&O cash flow tool historically used for forecasting federal expenditures.

Regarding the second question the audit found that actions taken so far have solved the short-term issue, but some longer-term concerns remain, particularly with the D&O cash flow model.

In looking at the third question, the audit found the agency has not set up a fund structure to readily answer this question and documentation is lacking around decision making when HB 2017 was first passed, leading to unclear categorical expenditures of these funds. During the process of the audit, FBD was able to identify eligible expenditures for all HB 2017 revenue.

January 8, 2025

Page | 2

However, the lack of a separate fund structure made this difficult or impossible to track, and documentation of key decisions made immediately after passage of HB 2017 was missing. Based on the audit findings in answering these questions, the auditors came to a series of six recommendations. Below are the recommendations and the agency's immediate plan for implementing each recommendation.

1. Complete a reconciliation of forecasted HB 2017 revenue with actual revenue at least every biennium to ensure allocation follows statutory requirements.

If forecasted revenue does not match actual revenue as allocated in the Statewide Transportation Improvement Program (STIP), then the STIP becomes either over or under allocated over time. To prevent this from occurring, regular adjustments need to be made as actuals come in to ensure any imbalance is corrected in the current or future STIP. To address this recommendation, the FBD will:

- Report to the OTC actuals each fiscal year compared to allocated amounts, beginning with fiscal year 2025, including a lookback of prior fiscal years.
- Adjust either the next STIP, or if possible, work with the OTC to adjust the current STIP to account for the difference between actuals and allocated amounts.

2. Create a fund detail to hold HB 2017 revenue separate from other state highway fund revenue.

Currently the additional HB 2017 revenue that stays in ODOT dedicated to safety, bridge, seismic, preservation and maintenance does not have a separate fund in the agency's accounting system that would allow easy tracking of revenue and expenditures. Instead, these revenues and expenditures are comingled with other State Highway Funds. To address this recommendation, the FBD will:

- Beginning July 2025 for state FY 2026, create specific fund details within the broader HB 2017 capital program fund to place the monthly ODOT share of incremental revenues from HB 2017.
- On a monthly basis, transfer the Maintenance funds to the appropriate maintenance fund detail.
- Beginning with new STIP project programming in July 2025, create Expenditure Accounts (EA's) to point to the new fund detail structure.

3. Ensure alignment between the STIP and the agency budget for how state highway revenue is committed. Retain supporting documentation for both the STIP and budget development on what the commitment of state highway revenue is.

Each biennial budget and three-year STIP relies on point in time forecasts for State Highway Fund revenue. This becomes a problem in that the time periods do not align, nor do they use the same forecasts for developing their estimates of State Highway Funds. Accordingly, the two financial documents will not match as each is developed due to timing. However, that does not

January 8, 2025

Page | 3

mean they cannot be adjusted throughout the STIP and/or budget cycle. To address this recommendation, the FBD will:

- Develop a report to show total State Highway Fund revenue included in the STIP by allocation year.
 - Compare the reported amount to the State Highway Fund revenue available to the Project Delivery appropriation in the budget.
 - Using the most recent available State Highway Fund revenue forecast and/or actuals, propose adjustments to the STIP and/or budget if necessary to ensure alignment in revenue.
 - Document this process and develop a report to the ODOT Fiscal Policy Steering Team for recommended changes to the OTC.
 - Create ongoing detailed documentation of all STIP investment decisions so the agency and decisionmakers can easily understand and trace how and where different funds were allocated in the STIP.
4. Review the 2025-27 budget for potential adjustments per the observations made concerning the highway cash flow model's use to develop the Delivery and Operations Division budget.

In prior biennia, strict reliance on the D&O cash flow model's expected expenditures without adjustments proved to overstate the amount of revenue required. This error was explored during the 2024 calendar year and development of the 2025-27 budget bypassed this old process, instead using historic actual federal reimbursements to forecast 2025-2027 revenue. However, validation of this change is warranted. To address this recommendation, the FBD will:

- Develop a report on the use of the D&O cash flow model in development of the 2025-27 budget and deliver it to the Fiscal Policy Steering Team for recommendation of any proposed changes to the 2025-27 budget and for development of the 2027-29 budget.
5. Ensure bid let dates in the STIP are kept current based on project schedule changes and are updated timely.

The Delivery and Operations cash flow model uses STIP bid let dates for forecasting expenditures over time. Having the most accurate and up to date information on these dates will ensure more accurate forecast results. To address this recommendation, the FBD will:

- Work with D&O Project Controls Office to review bid/let dates every quarter to ensure the most accurate bid/let dates are in the STIP Financial Plan system (STIP-FP). Future construction projects currently in the STIP will be reviewed quarterly for bid/let accuracy.
6. Explore viable alternatives to the highway cash flow model and move to a new approach for developing the Delivery and Operations Division budget. Consider other options for

January 8, 2025

Page | 4

forecasting construction expenditures that meet the agency's needs to support adherence to the budget and cash flow.

The Delivery and Operations cash flow model was developed internally during the 1990's and no one currently completely understands the context for some of the model assumptions or can fully update its parameters. An attempt to replace this model was undertaken about a decade ago, but ultimately failed. While it continues to serve a vital function as the only tool available to forecast expenditures at the project level, we must continue to look for a new alternative. To address this recommendation, the FBD will:

- Continue to rely primarily on federal actual reimbursements in setting the Project Delivery budget rather than the cash flow model, as was done for the 2025-2027 Agency Request Budget.
- Document the current uses of the cash flow model output.
- Based on the uses of the cash flow model, identify the components required for a new model.
- Report results to the Fiscal Policy Steering Team no later than June 30th, 2025.
- Based on the requirements, research potential replacement model options.
- Move to purchase and deploy a new model as funds become available.

Beyond the specific findings included in the audit, FBD is taking several other steps to address the budget error and tighten up agency financial management.

Develop a new State Highway Fund revenue and expenditure tracking model. Historically, a model called the "Funding Allocation" provided actual and projected revenue and expenditures as well as a State Highway Fund cash balance. This model proved to be increasingly difficult to update and was not adaptable to our changing financial needs. During 2024, a new model was developed looking at both State Highway Fund and federal revenues and expenditures and providing a cash balance forecast for the State Highway Fund. This new tool provides a check on the D&O cash flow model as well as providing a comparison of actuals and forecast to the agency budget numbers.

Monitoring Delivery and Operations expenditures in the 2023-2025 budget to better understand the budget error and solutions for future biennia. Because the budget error overestimated federal revenue for the 2023-2025 budget, FBD has been closely monitoring expenditures in the D&O Project Delivery and Local Government budgets to ensure that we do not overspend available resources, as well as producing updated federal revenue forecasts on a quarterly basis. As of November 30, 2024, the Project Delivery and Local Government budget areas had spent \$1.673 billion, just 74% of the anticipated expenditures to that date. This means that the budget error appears to have overestimated both actual federal revenue and actual expenditures, reducing the likelihood that ODOT will overspend against available resources.

Addressing how ODOT uses the federal "Advance Construction" (AC) tool and monitoring balances of AC obligations. A significant portion of the budget error related to how the D&O cash flow model translated projects where funds were programmed using the AC tool. When ODOT programs a project in the STIP as AC, it allows the agency to spend state funds with the

January 8, 2025

Page | 5

option to receive federal reimbursements for some or all of the project in the future. To provide flexibility for receive federal reimbursements on projects, more projects were programmed using AC than the available federal funding. However, the cash flow model converted all projects programmed as AC into federal reimbursements in the year of expenditure—even though not all projects would be federally reimbursed, and reimbursements often are not received for several years. To address issues around use of AC, FBD is modifying how it manages its use of AC, including monitoring projects using AC and converting state expenditures to federal reimbursements more expeditiously. In addition, the D&O cash flow model has been modified to assume all AC marked projects are assumed 100% State Highway Funded, rather than any percentage of federal. This change provides a conservative estimate of the State Highway Fund resources required during a biennium, not knowing when or if an AC project will be converted to federal.

Thank you for the opportunity to provide a response to the audit and for the diligent work of the audit staff in completing the audit.

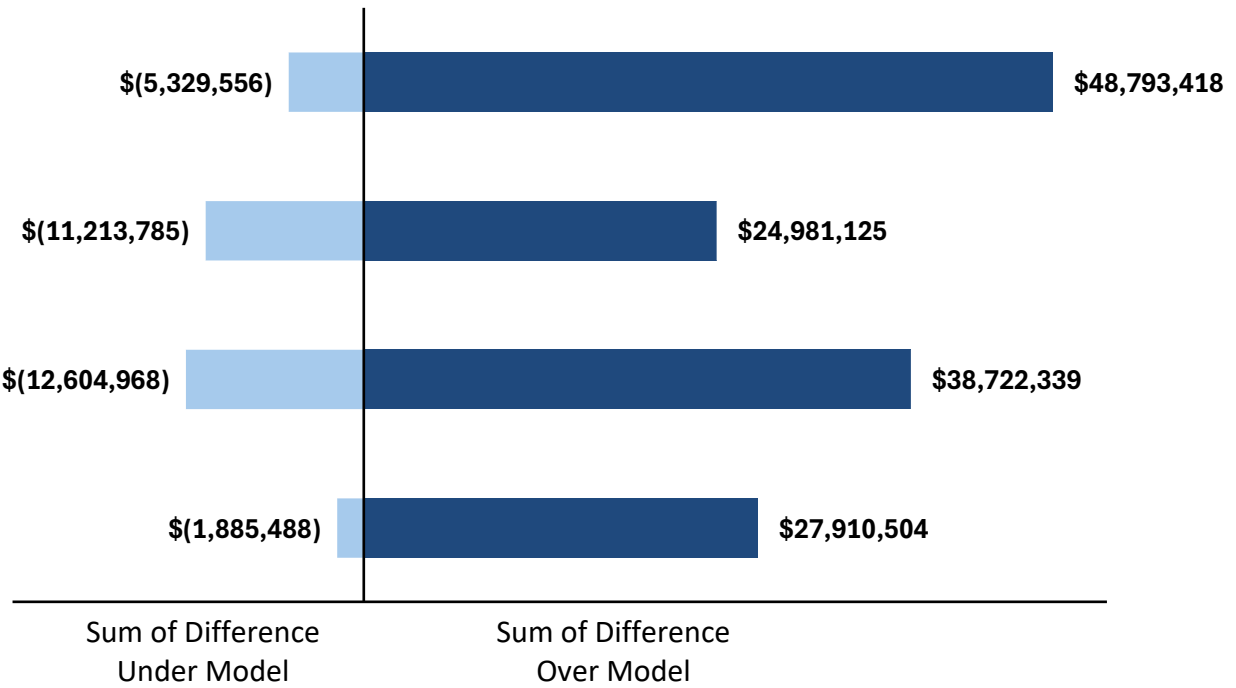
Sincerely,



Daniel Porter
Finance & Budget Division Administrator

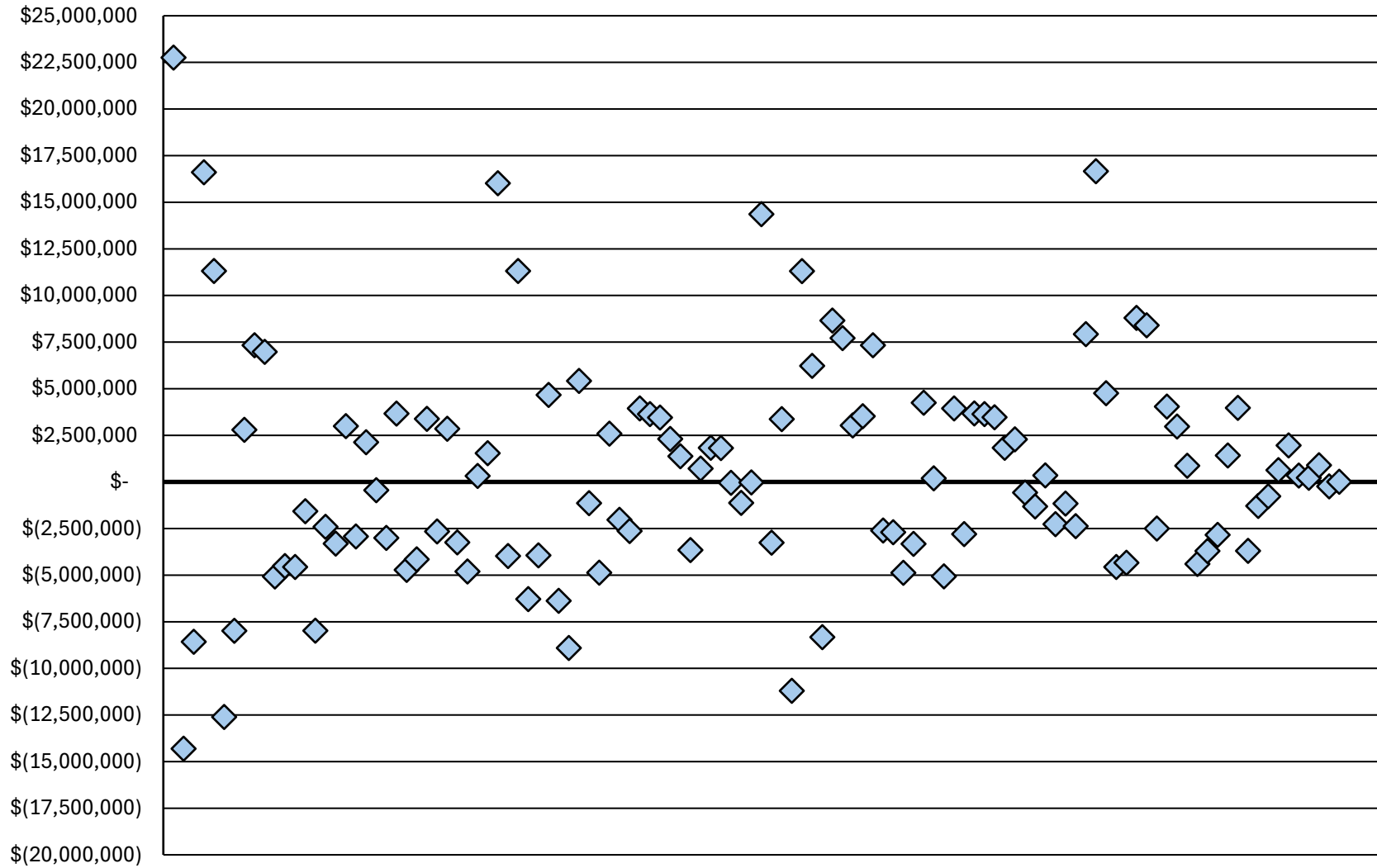
APPENDIX A

The total amount of over/under difference in the forecast and actuals for projects with a significant schedule or budget change driving the difference.



APPENDIX B

The difference between the forecasted and actual construction expenditures varied widely across projects.
Data includes the 116 projects that the difference is attributed to the highway cash flow model.



The difference between the forecasted and actual construction expenditures varied widely across projects. Data includes the 44 projects that the difference is attributed to a significant schedule or budget change.

