

Research Stage 1 Problem Statement

Proposed Title: Closing the Loop: Agency-Wide Fiscal Program Evaluation of ODOT Programs and Projects to Determine Actual ROI

1. Concisely describe the transportation issue (including problems, improvements, or untested solutions) that Oregon needs to research.

ODOT manages billions of dollars in public transportation investments each year, yet programs and projects are not consistently evaluated using an agency-wide, standardized, transparent fiscal performance framework. Without a unified method to track revenue inputs, operational throughputs, and outcome-based ROI, the agency cannot clearly quantify the true value generated for every taxpayer dollar spent. This gap limits ODOT’s ability to validate that investments are efficient, equitable, and aligned with strategic goals, while also weakening public accountability and trust. Research is needed to establish a repeatable, auditable, and data-driven process that measures actual ROI across all ODOT programs and project types. This will enable decision-makers to prioritize funding based on measurable public benefit, maximize fiscal stewardship, and improve transparency with stakeholders, communities and travelers.

2. What final product or information needs to be produced to enable this research to be implemented?

This research should produce a comprehensive fiscal evaluation framework that ODOT can apply consistently across all programs and project categories—capital, maintenance, operations, safety, mobility, and modernization initiatives. The final product should include a standardized ROI methodology, including definitions, required data inputs, cost-benefit and cost-effectiveness metrics, analytical models, dashboards or reporting tools, and auditing procedures. The framework must clearly describe how to measure revenue inputs, throughputs, and outcomes, and how to calculate ROI in ways that account for financial impacts, safety outcomes, mobility improvements, climate impacts, equity outcomes, and long-term system performance.

The research should also identify necessary updates to relevant work policies, budgeting procedures, program management standards, investment prioritization tools, and reporting requirements. Additional deliverables may include pilot testing on selected programs, implementation guidance, workforce training modules, and recommendations for continuous improvement. Ultimately, this product must enable ODOT to institutionalize a transparent, repeatable, and accountable method for evaluating the effectiveness of public transportation investments.

3. (Optional) Are there any individuals in Oregon who will be instrumental to the success of implementing any solution that is identified by this research? If so, please list them below.

Name	Title	Email
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Dan Porter Travis Brouwer	ODOT Finance	On file...
TBD (Lead Administrator)	ODOT Delivery & Operations	
Staff TBD (Mike Woodford)	ODOT Data Governance	

4. Other comments:

Other state DOTs and public-sector agencies have begun implementing ROI-based evaluation frameworks to strengthen public accountability and improve investment prioritization. However, no current model fully aligns with ODOT’s unique program structures, revenue sources, statutory constraints, and strategic lenses (equity, climate, and safety). This research would help benchmark proven national practices, identify gaps in ODOT’s current fiscal performance systems, and adapt best-in-class evaluation methods to Oregon’s needs.

Potential tasks include: (1) inventory and assessment of existing ODOT fiscal tracking tools, program reporting systems, and performance measures; (2) review of national and international ROI evaluation frameworks; (3) development of a multi-dimensional ROI model that includes financial, operational, social, climate, and safety outcomes; (4) identification of necessary data sources and data governance processes; (5) pilot implementation; and (6) development of agency-wide rollout recommendations. This work would also support improved public transparency by enabling ODOT to show clearly how investments translate into measurable public value.

This research will help ODOT better align with Oregon’s Strategic Action Plan goals by improving fiscal stewardship, ensuring resources are directed toward the highest-value uses, and strengthening public trust. It also would provide foundational infrastructure for future performance audits, legislative reporting, and long-term financial planning.

5. State of Oregon Decision Making Lenses

State decision making lenses are a part of the state of Oregon’s policy structure. State policy and federal policy are not always aligned. The state will prioritize research according to state policy, however ODOT may be required to skip prioritized proposals based on constraints placed on the use of federal funds. If state funds are available ODOT will attempt to fund prioritized research that is deemed ineligible for federal funding.

Please complete the following three sections. Your answers to these questions will be applied on a programmatic basis to support agency decisions. Answering yes to the questions below is not required. Resolving a narrowly focused technical research problem may meet agency needs without answering yes to any of the following questions. The ODOT Research Section will seek a balanced portfolio some projects will answer yes to one of the three categories below (e.g. climate, equity, and/ or safety) and other projects in a different category.

We are looking for an overall program balance and no one project is expected to balance all categories. Generally, a research problem statement is expected to be able to answer yes with clear and verifiable information in only one of the three categories below, some projects may be able to answer yes in two or even three categories. Some projects (i.e. needs focused on specific elements of infrastructure design), may have no ‘yes’ answers but may still be a high value research need.

Climate

Oregon recognizes the climate crisis and makes systemic changes to reduce emissions caused by travel. To that end, we seek research that reduces carbon emissions from construction activities and materials, and from maintenance equipment and operations. Oregon envisions a transportation system that is resilient, this means a system that is durable in the face of seismic events and extreme weather to avoid negative impacts, withstand them or bounce back quickly to resume system function. We seek research that improves the ability of the transportation system to adapt or cope with more frequent and extreme weather events. This may include innovations in data and data sharing, construction materials and project design, communication, emergency planning and response, and more. Similarly, we seek research that avoids negative impacts on key habitats and ecosystems that can buffer or reduce damage to infrastructure and improve environmental conditions for wildlife and native vegetation. For definitions and details please review the equity vision, goals, and objectives of the [ODOT Strategic Action Plan](#) and [Oregon Transportation Plan](#).

5a. Will addressing the transportation issue identified as a need in Question 1 develop, or **validate methods for the estimation, measurement, or monitoring** of transportation generated greenhouse gases (GHG)?

☐ Yes

☒ No

☐ Unsure

5b. If climate or GHG is not the focus of this **transportation issue** identified in this problem statement, will the research apply a GHG analysis to transportation infrastructure, planning, operations, maintenance, or materials?

☐ Yes

☒ No

☐ Unsure

5c. Will addressing the **transportation issue** include development or testing of construction practices, methods, or materials to establish potential reductions in greenhouse gas emissions?

☐ Yes

☒ No

☐ Unsure

5d. Will solving the **transportation issue** in question 1 study or support the reduction of vehicle miles traveled and single occupancy vehicle travel or support transition to electric vehicles (or other types of zero emission vehicles) or low-carbon alternative fuels?

☐ Yes

☒ No

☐ Unsure

5e. Will the solving the **transportation issue** in question 1 lead to work that will support, measure, or monitor, transportation system resilience in response to expected climate events, effects, or natural disasters in general?

☐ Yes

☒ No

☐ Unsure

5f. Will solving the **transportation issue** in question 1 lead to work that may result in better environmental conditions for wildlife and native vegetation?

☐ Yes

☒ No

☐ Unsure

5g. If you answered yes to any of the climate questions above or can provide alternative details related to climate, please provide additional information:

Climate is not the primary focus of this proposal. However, the ROI framework may include modules that allow climate-related benefits (GHG reduction, resilience improvements, environmental outcomes) to be measured as subcomponents of project value. Including these optional metrics would allow ODOT to quantify climate-related costs and benefits more consistently during investment decision-making.

Equity

Equity can have many dimensions and impacts relating to communities and transportation. It is important that problem statement proposals clearly explain the equity dimensions or impacts being examined. Oregon commits to social equity in the OTP, specifically to *improve access to safe and affordable transportation for all, recognizing the unmet mobility needs of people who have been systemically excluded and underserved. Create an equitable and transparent engagement and communications decision-making structure that builds public trust.* We seek research that studies elements of this goal or applies analysis to specific transportation topics to ensure the resulting research recommendation is consistent with agency equity goals. For definitions and details please review the equity vision, goals, and objectives of the [ODOT Strategic Action Plan](#) and [Oregon Transportation Plan](#).

5h. Is the **transportation issue** identified as a need in Question 1 specifically focused on transportation equity?

☐ Yes

☒ No

☐ Unsure

5i. If the **transportation issue** is not focused on transportation equity, will the primary topic be assessed for equity benefits or impacts within the research project?

☒ Yes

☐ No

☐ Unsure

5j. Is the implementation of potential findings from this research likely to directly involve participation from an identified group that would benefit from an equitable process or outcome?

☒ Yes

☐ No

☐ Unsure

5k. Is the intended final product or information expected to support ODOT's equity efforts (Including but not limited to supporting one of the equity related objectives of the [ODOT's Strategic Action Plan](#) or [Oregon Transportation Plan](#)) ?

☒ Yes

☐ No

☐ Unsure

5l. If you answered yes to any of the equity questions above or can provide alternative details related to equity, please provide additional information:

While equity is not the sole focus, the ROI framework should include equity impact assessment as a core component of calculating public value. This aligns with ODOT's Strategic Action Plan, which emphasizes fair distribution of transportation benefits and transparent decision-making. Incorporating equity metrics—such as distributional impacts, access to essential services, and benefits to underserved communities—will ensure that investment decisions reflect statewide equity commitments.

Safety

Research outcomes may include interventions and countermeasures to prevent or reduce the frequency of crashes or other causes of transportation-related injury or death; or may include measures to reduce

severity of injury (including prevention of death) after a crash or other injurious event. For definitions and details please review the equity vision, goals, and objectives of the [ODOT Strategic Action Plan](#), [Oregon Transportation Safety Action Plan](#) and [Oregon Transportation Plan](#).

5m. Will solving the **transportation issue** in question 1 support improving **safety culture** for either transportation workers or the traveling public?

☒ Yes

☐ No

☐ Unsure

5n. Will the solving the **transportation issue** support improving safety through **healthy and livable communities**?

☒ Yes

☐ No

☐ Unsure

5o. Will solving the **transportation issue** support improving safety through using **best available technologies**?

☒ Yes

☐ No

☐ Unsure

5p. Will solving the **transportation issue** support improving safety through **communication and collaboration**?

☒ Yes

☐ No

☐ Unsure

5q. Will solving the **transportation issue** support improving safety through **investing strategically**? 5r. If you answered yes to any of the safety questions above or can provide alternative details related to safety, please provide additional information:

Safety outcomes are a core component of ODOT's investment decisions. A standardized ROI framework would allow the agency to quantify safety impacts—such as crash reduction value, risk mitigation, and long-term public health benefits—as part of investment evaluation. This improves strategic safety investments, supports transparent reporting, strengthens collaboration among safety-focused programs, and integrates modern analytical tools to produce more data-driven safety outcomes.

6. Corresponding Submitter's Contact Information:

Name:	Matt Bagwell
Title:	Principal Research Analyst
Affiliation:	ODOT employee
Telephone:	
Email:	

7. ODOT Sponsor Contact Information (Required if Submitter is not an ODOT employee)

Name:	
Title:	
Crew Number:	
Telephone:	

Email:	
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POTENTIAL SUPPORTERS: MIKE WOODFORD, DAN PORTER, TRAVIS BROUWER, ET AL IN LEADERSHIP.

This form is not a grant application or contract document. Please do not include proprietary information on this form. Once this form is received ODOT may revise and publish the problem statement. If selected, ODOT will assign investigator(s) of the department’s choosing to conduct research.