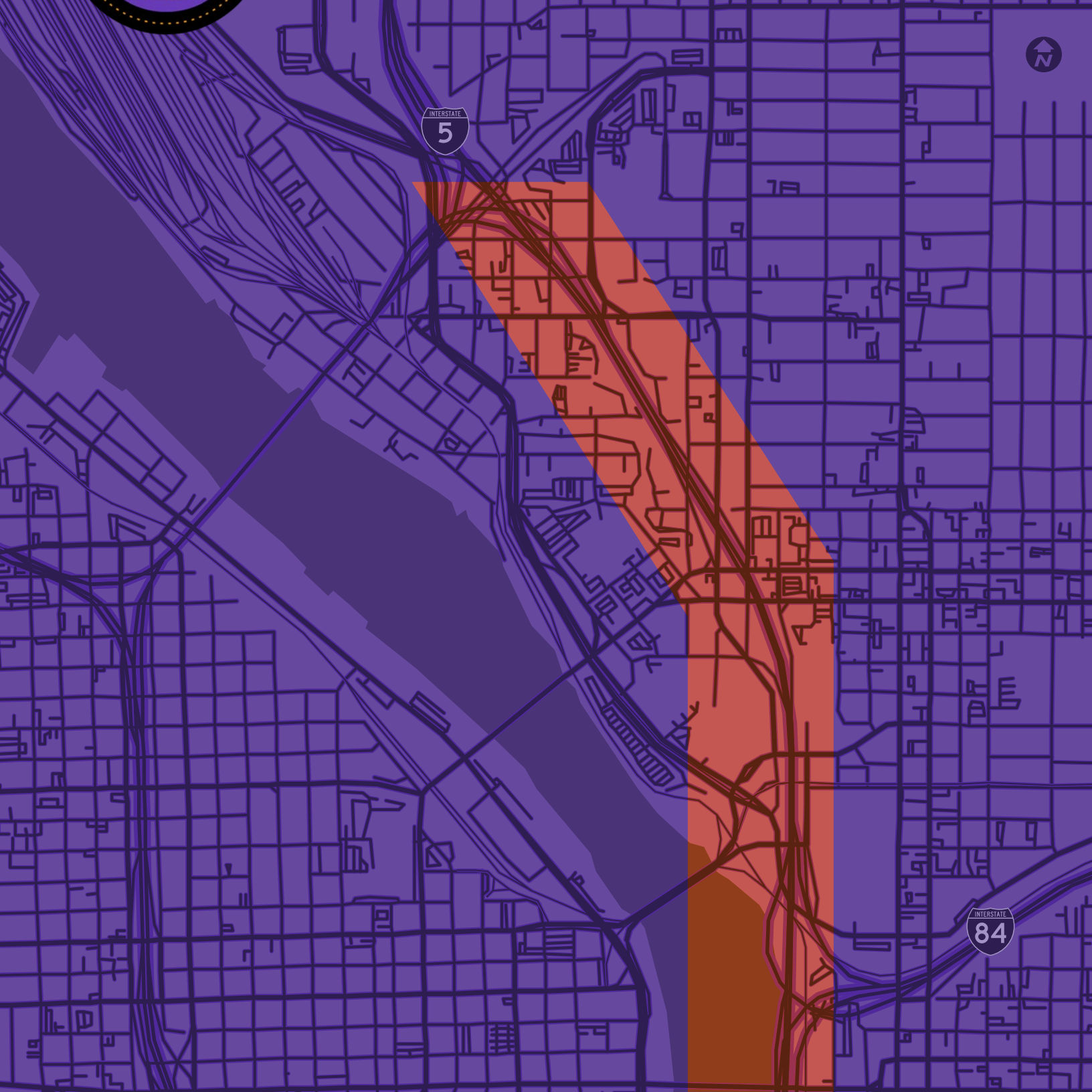




INFRASTRUCTURE FOR REBUILDING AMERICA (INFRA) GRANT APPLICATION PROJECT REQUIREMENTS





I-5 ROSE QUARTER

IMPROVEMENT PROJECT

Fiscal Year 2025-2026
Infrastructure for Rebuilding America (INFRA)
Large Project Grant Application

PROJECT REQUIREMENTS

Submitted by:
Oregon Department of Transportation (Applicant/Recipient)

Submission Date: May 6, 2024

This project is designated as
Reconnecting Communities and Neighborhoods (RCN) Program Extra
for having received a Fiscal Year (FY) 2023 Award
Click here: [Neighborhood Access and Equity Capital Construction Grant](#)

***Note:** Adobe Acrobat is the recommended application
to use when accessing hyperlinks within this document.*

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LIST OF ACRONYMS

BCA	Benefit-cost analysis
CFR	Code of Federal Regulations
CM/GC	Construction Manager/General Contractor
DBE	Disadvantaged Business Enterprise
FHWA	Federal Highway Administration
FY	Fiscal Year
FONSI	Finding of No Significant Impact
HB 2017	House Bill 2017
ICA	Independent Cover Assessment
I-405	Interstate 405
I-5	Interstate 5
I-84	Interstate 84
NEPA	National Environmental Policy Act
ODOT	Oregon Department of Transportation
PE	Preliminary Engineering
RCN	Reconnecting Communities and Neighborhoods
RSEA	Revised Supplemental Environmental Assessment
SUE	Subsurface Utility Engineering
TAMP	Transportation Asset Management Plan
USDOT	U.S. Department of Transportation



PROJECT REQUIREMENTS

23 U.S.C. 117 INFRA LARGE REQUIREMENT #1

The project will generate national, or regional economic, mobility, or safety benefits.

REGIONAL ECONOMIC BENEFITS

Constructing the I-5 Rose Quarter Improvement Project's (project) highway cover creates 7.58 acres of new land, including 4.11 acres on top of the highway cover and 3.47 acres of remnant developable land off cover, providing the foundation for the community to advance place-based strategies. For more detail on these opportunities, please see *Outcome Criteria, Criterion 5*. Additionally, through the project's Disadvantaged Business Enterprise (DBE) and Workforce Program, the Oregon Department of Transportation (ODOT) and the Construction Manager/General Contractor (CM/GC) have defined a clear pathway to economic empowerment and prosperity for a local, diverse and Black workforce. The project's DBE and Workforce Program creates an estimated \$95 million in DBE contracting opportunity for previously marginalized community members to build and maintain careers that positively impact the current generation and the generations to follow. For more detail on the project's DBE and Workforce Program, please see *Outcome Criteria, Criterion 3*.

REGIONAL MOBILITY BENEFITS

The project is expected to result in enhanced traffic operations, more uniform lane speeds, and a reduction in lane changes, all of which contribute to reduced traffic congestion. The project provides one new auxiliary lane in each direction on Interstate 5 (I-5) that support transitions without merging into traffic to reduce bottlenecks, and wider shoulders that improve access for emergency vehicles, both of which contribute to reducing congestion and smoothing traffic flow. Further, the project includes several reconnection and multimodal transportation options that provide more space to walk, bike and roll.

REGIONAL SAFETY BENEFITS

The project's safety benefits include:

- Providing smoother traffic flow on I-5 through ramp-to-ramp connections and improved shoulders
- Enabling faster emergency response times as responders use wider shoulders to move through traffic
- Reducing frequent crashes on I-5 by up to 50%
- Saving travelers on I-5 nearly 2.5 million hours of travel time each year, getting people, goods and freight through this section of I-5 more quickly

As summarized in the project's [Finding of No Significant Impact](#) (FONSI), the project is expected to improve safety and operations on I-5 between Interstate 405 (I-405) and Interstate 84 (I-84), in the Portland metro region, through the Broadway/Weidler interchange (the future location of the highway cover) and adjacent surface streets. The existing short weaving distances and lack of shoulders for crash/incident recovery in this segment of I-5 are physical factors that contribute to the high number of crashes and safety problems. Click on the video to the right to learn how the project's northbound and southbound auxiliary lanes benefit safety efforts and reduce the potential for crashes within the I-5 mainline corridor.



23 U.S.C. 117 INFRA LARGE REQUIREMENT #2

The project will be cost effective.

The project's benefit-cost analysis (BCA) demonstrates that the project generates significant benefits to society with a **benefit-cost ratio of 1.51**. In other words, for each dollar spent in project costs, approximately \$1.51 worth of benefits will be generated by the project's improvements. See the benefit cost narrative and analysis for further details.

23 U.S.C. 117 INFRA LARGE REQUIREMENT #3

The project will contribute to one (1) or more of the seven (7) national goals described under Section 150.

GOAL #1: SAFETY

To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.

I-5 between I-405 and I-84 in the project area has the highest crash rate on urban interstates in Oregon. Crash data from 2011 to 2015 indicate that the crash rate for a significant portion of the mainline through the project area (for all types of crashes) was approximately 3.5 times higher than the statewide average for comparable urban interstate facilities.¹

Based on the project's benefit-cost analysis (BCA) results for the 30-year analysis period from 2036-2065, building the project is expected to:

- **Reduce the number of fatal crashes by 30%** (23 total crashes without the project versus 16 with the project: a reduction of 7 crashes)
- **Reduce the number of anticipated injury crashes by 27%** (3,098 injury crashes without the project versus 2,261 with the project: a reduction of 837 crashes)
- **Reduce the number of property damage only crashes by 23%** (1,538 total crashes without the project versus 1,178 with the project: a reduction of 360)

See *Outcome Criteria, Criterion 1* for more information on how the project would improve regional safety.

GOAL #2: INFRASTRUCTURE CONDITION

To maintain the highway infrastructure asset system in a state of good repair.

The project will be maintained in a state of good repair as required by the 2022 Oregon Transportation Asset Management Plan (TAMP). As required by the Code of Federal Regulations (CFR) 23 515.13(b)(2), every year following the certification of the 2019 TAMP, ODOT has demonstrated through current and verifiable documentation that ODOT is "using the investment strategies in its asset management plan to make progress toward achievement of its targets for asset condition and performance of the National Highway System and to support progress toward achievement of national goals identified in 23 U.S.C. 150(b)." Development of the TAMP draws heavily upon a series of policy plans, project plans, financial plans and condition reports, all of which include considerations of asset management.

As one example of how the project is maintaining Oregon's highway infrastructure in a state of good repair, the project's seismically resilient highway cover structure will replace five individual bridges built in the early 1960s that are not seismically resilient. Further, the project's additional structures, including retaining walls and sound walls, also will be designed to new seismic standards. Existing bridges within the project's footprint will be seismically upgraded to meet new standards. Phase 1 seismic upgrades will be installed on the remaining structures that are not replaced or widened.

¹Oregon Department of Transportation, 2015 State Highway Crash Rate Tables, 2017.

GOAL #3: CONGESTION REDUCTION

To achieve a significant reduction in congestion on the National Highway System.

The project area segment of I-5 experiences 12 hours of congestion each day, and is the state's worst truck freight bottleneck and the **nation's 28th worst truck freight bottleneck**² (as of 2024), negatively affecting the regional and statewide economy. The project's operational and mainline improvements (one new auxiliary lane in each direction and modified shoulders) are expected to result in more uniform lane speeds and a reduction in lane changes contributing to improved freight efficiency and reduced traffic bottlenecks. Additionally, the project would improve traffic operations at both I-5 southbound and northbound off-ramps by reducing ramp queue lengths and providing increased ramp storage, which would reduce the potential for queues extending onto the I-5 mainline. See *Outcome Criteria, Criterion 3* for more information on how the project would reduce congestion.

GOAL #5: FREIGHT MOVEMENT AND ECONOMIC VITALITY

To improve the National Highway Freight Network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.

Constructing the project's safety and operational improvements, community connection and multimodal elements, and the project's central reconnecting feature—the highway cover, provide the foundation for space to be developed by and for the community that supports regional economic opportunities and development. Further, the project's DBE and Workforce Program creates the opportunity for previously marginalized community members to gain knowledge, and build and maintain careers that positively impact the current generation and generations to follow. For more detail on the economic opportunities that building the project creates, please see *Outcome Criteria, Criterion 3 and Criterion 5*.

GOAL #7: REDUCED PROJECT DELIVERY DELAYS

To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

In 2020, ODOT competitively selected a CM/GC team to maximize the project's delivery. The Federal Highway Administration's (FHWA) Center for Innovative Finance Support recognizes the CM/GC model as an **innovative project delivery method**. During the design phase, ODOT is gaining CM/GC benefits from early contractor input such as optimizing schedule, providing constructability input, defining early price certainty, identifying innovations and value engineering ideas, and managing risk, among others. During construction, ODOT expects to gain the additional benefits of a more streamlined construction process tailored to the contractor's means and methods and shaped by contractor over-the-shoulder design input. ODOT further expects to collaboratively address issues with the contractor during construction to optimize schedule, manage risk, minimize impacts to businesses and the community, limit rework and avoid or minimize change orders or claims. All of these benefits contribute to delivering the project more efficiently and reducing the potential for delays.

23 U.S.C. 117 INFRA LARGE REQUIREMENT #4

The project is based on the results of preliminary engineering.

The project's design is based on preliminary engineering efforts as noted in Table 1. The project's preliminary engineering results, extensive community engagement, independent assessments and peer reviews, and decades of planning in partnership with the City of Portland and other project partners are the basis of the project's design. The project has completed the National Environmental Policy Act (NEPA) phase as documented in the [Revised Supplemental Environmental Assessment](#) (RSEA). FHWA published the project's [FONSI](#) on March 6, 2024.

² American Transportation Research Institute, [Top 100 Truck Bottleneck—2024—TruckingResearch.org](#).

Table 1: Preliminary Engineering (PE) project documents

PE Document	Status
Topographic Surveys	Topographic surveys are included in the project’s design milestone progression packages.
Metes and Bounds Surveys	The project includes right of way retracement surveys.
Geotechnical Investigations	Multiple geotechnical memos and reports have been developed and submitted with various design milestone packages.
Hydrologic Analysis	Not applicable to the project as the scope of work does not include in-water work.
Utility Engineering	Utility engineering and retracement efforts are part of the project’s design. The project has also completed subsurface utility engineering (SUE) investigations which exceeds typical project utility mapping requirements; the project’s SUE documents are confidential due to utility privacy requirements. During the project’s original environmental assessment process, the project published the Utilities Technical Report , including appendices.
Traffic Studies	The project has completed several traffic studies utilizing VISSIM as reported in the RSEA Revised Traffic Analysis Supplemental Technical Report .
Financial Plans	The project is included in ODOT’s Urban Mobility Office (UMO) Finance Plan . The project is developing the Initial Financial Plan as part of FHWA’s major project requirements.
Revenue Estimates	N/A
Hazardous Materials Assessments	The project has developed multiple draft reports including the Hazardous Materials Technical Report published during the project’s 2019 environmental assessment, a Phase 1 hazmat survey, building and materials surveys, and in some cases Phase 2 hazmat survey.
General estimates of the types and quantities of materials	The project includes updated cost estimates at each design milestone and, during early preliminary design, developed the Cost to Complete report required as part of House Bill 2017 (HB 2017) that estimated the project’s 15% design concept (prior to the current community-informed highway cover design). As part of FHWA’s Cost and Schedule Risk Assessment process, the project continues to develop updated estimates and pricing packages that include contingency to account for unknown risk.
Other work needed to establish parameters for the final design	The project includes several other studies that provide the parameters for final design including the Independent Cover Assessment Report , 15% and 20% Basis of Design memos that outline the project design criteria. The RSEA updates previous design milestone progression documents including updated design criteria. In 2020, the project completed an independent environmental peer review that validated environmental analysis and identified construction best practices to reduce environmental and community impacts during construction. The CM/GC is under contract informing final design, means and methods, early cost certainty and risk mitigation.

23 U.S.C. 117 INFRA LARGE REQUIREMENT #5

With respect to related non-federal financial commitment, one or more stable and dependable sources of funding and financing are available to construct, maintain, and operate the project, and contingency amounts are available to cover unanticipated cost increases.

ODOT's INFRA funding request of \$750 million requires ODOT to commit 40% (\$500 million) in matching funds, which is comprised of \$250 million (20 %) in state funds and \$250 million (20 %) from the project's FY 2023 RCN Capital Construction Grant award of \$450 million from the USDOT. The total project cost range, inclusive of design and construction, is \$1.5 billion to \$1.9 billion. For the purposes of this grant application, the high end of the range (\$1.9 billion) is used in the *Budget and Benefit Cost Analysis*. To date, the project has been allocated \$158 million in total resources from state and federal highway formula funds (primarily from HB 2017's allocation of funding to the Urban Mobility Strategy). The \$250 million in state matching funds is from funding provided by the Oregon Legislature for ODOT's Urban Mobility Strategy projects. The Oregon Transportation Commission (OTC) will confirm the \$250 million of state matching funds for this INFRA grant funding request at its May 9, 2024 meeting. ODOT will be working with its legislative partners in 2025 to identify other potential state funding opportunities. The project's cost estimate—updated at design milestones and during construction—includes contingency amounts to account for unknown risk.

23 U.S.C. 117 INFRA LARGE REQUIREMENT #6

The project cannot be easily and efficiently completed without other Federal funding or financing available to the project sponsor.

If the project does not receive the funding request detailed in this INFRA Large project grant application, the project's scope, schedule and cost would all be concurrently and significantly negatively impacted. Without INFRA funding, the project:

- Would not have near-term funding to construct the remaining two-thirds of the project's central reconnecting feature—the highway cover—and thus would limit the ability to support the full regional equitable vision for the Albina community
- Would not have near-term funding to construct the I-5 mainline safety and operational improvements resulting in continued high crash rates, regional congestion, time and travel losses, reduced air quality and increased emissions
- Would result in a smaller DBE and Workforce Program intended to create and foster professional career prospects for previously marginalized community members negatively impacting economic and generational wealth opportunities

The project's cost would continue to rise due to ongoing supply chain issues that are constraining market availability, and rapid construction cost escalation due to pricing for labor and materials and other major construction commodities. Since the first quarter of 2017, when ODOT presented the project's first cost estimate to the Oregon Legislature, FHWA National Highway Construction Cost Index has increased by 72%. Schedule delays would also have a substantial regional impact not only for the project scope described in this grant application but also for the City of Portland and Albina Vision Trust as the highway cover's construction is critical to realizing the community's vision for development. See *Outcome Criteria, Criterion 5* for more information on the regional equitable vision shared by the project and the community.

23 U.S.C. 117 INFRA LARGE REQUIREMENT #7

The project is reasonably expected to begin construction not later than 18 months after the date of obligation of funds for the project.

ODOT is prepared to obligate any awarded INFRA Large program funds no later than September 30, 2028 and expend awarded funds no later than September 30, 2033. The project's anticipated **construction start date is May 2028** and **construction end date is November 2032**.