Oregon Department of Transportation

MULTIMODAL TRANSPORTATION PROGRAM PROJECT APPLICATION

Transportation Project Sponsors

1. Project Sponsor (must be a public agency)–REQUIRED

Organization Name:	ODOT Region 1		
Contact Person Name:	Andy Johnson	Title:	Major Projects Manager
Street Address:	123 NW Flanders Street	Phone:	(503) 731-8356
City, State Zip:	Portland, OR 97209-4012		
E-mail:	Andrew.JOHNSON@odot.state.or.us		

2. Co-Sponsor(s)

List the organization names for any Co-Sponsors of this project:

Transportation Project Information

3. Project Name–REQUIRED

Project Name: I-5 SB: Lower Boones Ferry Exit to Lower Boones Ferry Entrance Auxiliary Lane

4. Project Budget Summary - This table will automatically fill in.

	Project Funds	% of Project Costs
Total Costs	$8,500,000	100%
Non-Eligible Costs		0%
Total Transportation Project Cost	$8,500,000	100%
Matching Funds	$872,950	10.27%
Requested Funds	$7,627,050	89.73%

5. Provide a brief summary of the project (max 800 characters)**–REQUIRED:**

In a period of constrained revenue forecasts ODOT R-1 has conducted Corridors Bottleneck Operations Study (CBOS) to identify major congestion bottlenecks on freeways and develop cost effective, small-scale operational improvements. This project was one of the high priority projects derived from CBOS and addresses a section of I-5 with a high accident frequency and many operational problems.

The project would extend I-5 SB auxiliary lane from Lower Boones Ferry SB exit-ramp to Lower Boones Ferry SB entrance-ramp and tie into existing auxiliary lane between Lower Boones Ferry and Nyberg.

This project will reduce congestion, improve lane balance and travel time reliability, reduce weaving related collisions and sustain stable traffic flow in this section of I-5.

6. Is this project a continuation of a previous Statewide Transportation Improvement Program (STIP) Project?

○ Yes ◉ No

If yes, describe the status of the previous STIP project.

7. Does this project complement or enhance an existing or planned STIP project? For example, does it provide a more complete solution for an existing project or is it intended to work with another planned project, including a "Fix-It" STIP project?

○ Yes ◉ No

If yes, describe the relationship of this proposed project to the other, including planned timing of both projects.

8. Project Problem Statement–REQUIRED

Provide a paragraph explaining the problem or transportation need the project will address:

I-5 congestion is due to the high volume weaving section between Lower Boones Ferry Interchange and Nyberg Interchange. The demand for the SB Nyberg exit also results in unbalanced lane utilization north of Lower Boones Ferry Interchange. Contributing factors to the congestion include: the fourth lane from Hwy 217 entrance-ramp drops at Lower Boones Ferry Road exit-ramp; and, a high volume weaving movement to Nyberg exit-ramp, resulting in an unbalanced lane utilization and operational deficiency. The duration of the congestion is approximately 2 hours daily between 4:00PM to 6:00PM.

The purpose is to improve freeway operations, improve lane balance and travel time reliability, and reduce collisions. The auxiliary lane would provide a continuous lane from Hwy 217 to Nyberg exit.

9. Transportation Project Location–REQUIRED

City:	Tualatin	County:	Washington County
MPO:	Metro	Special District:	

Project Location Detail: (include as appropriate: road and milepost range, rail line and milepost range, GPS coordinates, bus route and stops, bike path or multipurpose trail locations, sidewalk locations, or other location detail)

I-5, Pacific Highway, SB
MP 290.0 – 290.8
Lower Boones Ferry Rd. Interchange

10. Maps and Plans (Project Site and Vicinity Maps are required for all construction projects. Include other applicable maps or drawings, if available.)

◉ Attached/Upload ○ Not Applicable	Vicinity Map (8.5x11) (may be inset on site map page)
◉ Attached/Upload ○ Not Applicable	Site map/air photo (showing existing site) (8.5x11)
◉ Attached/Upload ○ Not Applicable	Site map (showing proposed construction area clearly marked) (8.5x11)
○ Attached/Upload ○ Not Applicable	Typical Cross Section Drawings (showing proposed construction funded by the requested funds clearly marked) (8.5x11)

11. Project Description–REQUIRED

Clearly describe the work to be funded and describe what will be built, any services that will be provided, what equipment will be purchased, or project planning or environmental document efforts that will be paid for with Requested Funds. Include whether Practical Design considerations have been applied to the proposed project. Identify if the project can be completed in phases, and whether the project or phase will provide a complete, useful product or service. (Maximum 4000 characters)

The proposed project will extend I-5 SB existing auxiliary lane from Lower Boones Ferry SB exit-ramp to Lower Boones Ferry SB entrance-ramp, and tie into an existing auxiliary lane between Lower Boones Ferry and Nyberg. The lane extension will include paving from the exit ramp gore to the Lower Boones Ferry structure and then paving from the south end of the structure to the existing SB entrance ramp gore. The SB entrance ramp will be reconstructed.

Application of Practical Design considerations to the congestion and safety issues in this section of I-5 provides for a reasonably low-cost operational solution that contributes to system-wide traffic flow stability and reliability.

The project will not require any purchasing or leasing of ROW. The proposed improvement will be constructed within existing ODOT ROW.

The project is a small-scale cost effective operational and safety improvement that is responds to constrained agency revenue forecasts. It was developed through CBOS, which seeks to address FHWA Localized Bottleneck Reduction (LBR) Program objectives. The cost range for the CBOS operational and safety improvements were not to exceed $20 million.

This is an operational improvement and not a capacity improvement project. The project is anticipated to reduce congestion, but would not meet a 20-year design life. It will provide on-going safety benefits and interim congestion relief for 5-10 years after construction.

CBOS is an innovative approach to develop freeway operational and safety improvements. Several CBOS projects have been moved into design and construction, and preliminary results are very encouraging. The most CBOS recent project is the I-5 SB Carman Drive Auxiliary Lane Extension which was constructed in August 2012. It is an example of the ODOT's strategy to focus on making improvements to the existing system that will reduce congestion and enhance safety. This project was constructed at an estimated $1.25 million. It was built within the existing ROW; avoided widening of existing structures; and, incurred no environmental impacts. The resulting outcomes reduced queuing by about 1 mile; reduced congestion by about an hour; and, increased reliability with less I-5 SB speed fluctuation.

Other alternatives were considered to address the lane balance/weaving conflicts – this included braided ramps. The cost and impact of this alternative exceed the CBOS cost limits.

From a Practical Design perspective, the proposed project meets the S.C.O.P.E. values in the

following ways:
Safety- Although the proposed auxiliary lane extension does not eliminate all the weaving conflicts, it will provide for better lane balance and fewer lane changes.
Corridor Context- The proposed project grew out of a corridor analysis to identify congestion points and their causes, and develop reasonable solutions to address them.
Optimize the System- The proposed project takes advantage of the opportunity to make minor widening and provide a safer, more efficient system.
Public Support- The reduction in congestion and increase in safety will benefit all users. The recently completed congestion relief project at I-5 SB Carman Drive has been well received by the public.
Efficient Cost- As compared to the braided ramp option, the proposed project provides reasonable cost enhancement that has substantive results in reducing congestion and improving safety.

12. Primary Project Mode(s)

☐ Passenger Rail	☐ Light Rail	☐ Bus/Transit
☐ Pedestrian	☐ Bike	☒ Highway/Road
☐ Other:		

13. Project Activities

☒ Infrastructure Engineering, Design, or Construction	☐ Project Planning and Development	☐ Operations/Service Delivery
☐ Capital Equipment Purchases	☐ Transportation Demand Management	☐ Other

Timetable and Readiness Information

14. Indicate anticipated timing for the following activities, as applicable. Provide a date, if known, or year–REQUIRED.

Anticipated Dates	Activity
2016	Requested STIP Funding Year (e.g. 2016, 2017, 2018) **- REQUIRED**
	Bid Let Date
	Construction Contract Award
	Construction Complete
	Capital Equipment Purchase
	Operations/Service Begin
	Other Major Milestone:
2017	Project Completion/End of Activities funded through this request - **REQUIRED**

15. Is the proposed project consistent with adopted plans? (Plans may include, for example, transportation plans, mode plans such as bike/ped or transit plans, economic development plans, comprehensive plans, corridor plans or facility plans.)–REQUIRED

◉ Yes ○ No

Describe how the proposed project is consistent with adopted plans. List plans that include the project (with page numbers if possible) or describe how the project meets plan intent. If the project is not consistent, explain how and when plans will be amended to include the project.

The project is consistent with the 2006 Oregon Transportation Plan (OTP) and the 1999 Oregon Highway Plan (OHP). The project is consistent with the following policies and action strategies:

OTP Goal 1 – Mobility and Accessibility (page 45). The project addresses the ODOT Major Improvements Policies including OTP Strategy 1.1.4. in managing the existing freeway system to improve its efficiency and operational capacity by making minor improvements to the system.
Goal 2 – Management of the System, Strategy 2.1.4 (pg 50), by seeking to reduce bottlenecks and geometric constraints on the interstate system.
Goal 3 – Economic Vitality, Strategy 3.1.7, by seeking to develop priorities to freight projects on freight routes (pg. 53).
Goal 5 – Safety and Security; Policy 5.1 Safety (pg 64),by improving the safety of all transportation facilities.

OHP Goal 1: System Definition, Action 1A.1 (pg 41), in managing the Interstate Highways to provide for safe and efficient high-speed continuous-flow operation in urban areas.
Policy 1C: State Highway Freight System (pg 66), by seeking to improve the overall efficiency of freight movement.
Policy 1G: Major Improvements, Action 1G.1. (pg 85),by protecting the existing freeway system and improving efficiency and capacity of the existing freeway by making minor improvements.
Policy 2F: Traffic Safety, Action 2F.1 (pg 113), identify and develop cost-efficient solutions to high priority safety problems on the Metro-area freeways

16. Is the proposed Transportation Project consistent with Major Improvement Policies including OTP Strategy 1.1.4 and OHP Action 1G.1?–REQUIRED

(●) Yes ( ) No

Describe how the proposed investment is consistent with OTP Strategy 1.1 and for highway projects, OHP Action 1G.1. If the project corresponds to a later priority in these strategies, describe how higher priority solutions have already been tried or why they are not applicable or not appropriate to the location.

The project is consistent with the ODOT Major Improvements Policies including OTP Strategy 1.1.4 and OHP Action 1G.1, particularly 'Improve efficiency and capacity of existing highway facilities'. The project was selected from the ODOT Region 1 Corridor Bottleneck Operations Study (CBOS). CBOS identified, ranked and provided conceptual solutions for the worst bottlenecks on I-5 south of the Marquam Bridge, I-205, I-84, I-405 and US 26 in the Portland Metro Region.

CBOS has identified several bottlenecks on the aforementioned corridors based on PORTAL data, ODOT traffic cameras, travel time runs, collision data, and field observations. These data helped identify the locations of the bottlenecks, duration of congestion, contributing factors, and speeds during bottleneck activation periods. The bottlenecks were ranked in terms of delay and cost, and those projects with the highest potential benefit and reasonable costs were proposed to move forward. CBOS identified the types of deficiencies causing bottlenecks as:

- Heavy merges
- Weaving sections
- Lanes drops
- Narrow lanes and lateral obstructions
- Inadequate acceleration and/or deceleration lanes
- Lane imbalance

This project improves the efficiency and operations of the existing freeway in an area of heavy traffic without major reconstruction to add capacity to the freeway.

Project Benefit Information

Questions 17 through 26: Describe how the proposed solution will help achieve the outcomes listed below. Describe the benefits that the proposed solution is expected to achieve and provide documentation of those benefits where available, such as summaries of data analysis or modeling results, or letters of commitment from participants or employers. Where appropriate, also include in the description whether the proposal will mitigate or prevent a negative impact to the desired outcome.

This information and information throughout the application will be used as input to the STIP decision process. It is not expected that every solution will help achieve every benefit. Different types of solutions are likely to have different kinds of benefits and no type of solution or benefit is assumed to be more important than others. Please provide a realistic description of expected benefits of the proposed solution and feel free to use N/A where the benefit or outcome listed does not apply to the proposal.

17. Benefits to State-Owned Facilities

Outcome sought: preserve public investment by maintaining efficient operation of state-owned highways and other facilities through operational improvements, local connectivity, congestion-reducing projects and activities, etc.

For example, will the solution:

- Provide an alternative to travel on state owned facilities?
- Cost less than a state facility improvement with equal benefits?
- Include local efforts to protect the investment such as an Interchange Area Management Plan?
- Plan for or contribute to development of a seamless multimodal transportation system?
- Complete or extend a critical system or modal link?

This project is located on the critical I-5 freight route through the Portland Metro area. I-5 provides the main north-south through-route serving the west coast of the United States from Mexico to Canada and links population centers along its route.

This project is beneficial to the existing Interstate freeway system. The proposed project will preserve the existing freeway system through the construction of a minor operational improvement i.e. the extension of the auxiliary lane. The improvements will reduce congestion and improve safety.

It will address an identified congested bottleneck on I-5 at a reasonably low cost, and avoids any major reconstruction costs to I-5. The proposed project was selected as providing the best value of benefits and cost. It should be noted, however, that traffic volumes on these highways are very high, particularly during the peak commute hours, and even though operational improvements do not add capacity, the benefits achieved will reduce the duration of queuing for two hours to less than 1 hour during the peak periods. Congestion/queuing would be reduced in all lanes by providing balanced traffic movements.

18. Mobility

Outcome sought: provide mobility for all transportation system users and a balanced, efficient, cost-effective and integrated multimodal transportation system.

For example, will the solution:

- Improve or better integrate passenger or freight facilities and connections, including multimodal connections, to expedite travel and provide travel options?
- Improve or provide a critical link in the transportation system or connection between modes for travelers or goods?

I-5 is identified as part of the National Truck Network which designates highways (including most of the Interstate Highway System) for use by large trucks. In the Portland-Vancouver area, I-5 is the most critical component of this national network as it provides access to the transcontinental rail system and connections to the ports of Vancouver and Portland as well as the majority of the area's freight consolidation facilities and distribution terminals.

Freight volumes moved by trucks in the region are projected to more than double over the next 25 years. Vehicle-hours of delay on truck routes in the Portland-Vancouver area are projected to increase by more than 90% over the next 20 years. Growing demand and congestion will result in increasing delay, costs and uncertainty for all businesses that rely on this corridor for freight movement.

I-5 SB in this area has a daily traffic volume of 77,000 (2011) with 10% trucks. It has one of the highest truck volumes in the Portland Metro area. This project will improve the traffic operations and connectivity of freight-reliant users. The I-5 SB traffic congestion and queuing spreads across all lanes of traffic. The project will reduce congestion, improve lane balance and travel time reliability, and sustain stable traffic flow. It will allow the I-5 SB mainline to function more smoothly. This will help the freight industry maintain a more reliable travel time for I-5 SB movement of freight.

19. Accessibility

Outcome sought: ensure appropriate access to all areas with connectivity among modes and places and enable travelers and shippers to reach and use various modes with ease.

For example, will the solution:

- Improve connections within residential areas and/or to schools, services, transit stops, activity centers and open spaces, such as by filling a gap in bicycle, pedestrian, or transit facilities?
- Improve or expand access to employers, businesses, labor sources, goods or services?
- Plan for or contribute to expanding transportation choices for all Oregonians?

I-5 is identified as part of the National Truck Network which designates highways (including most of the Interstate Highway System) for use by large trucks. In the Portland-Vancouver area, I-5 is the most critical component of this national network as it provides access to the transcontinental rail system, deep water shipping and barge traffic on the Columbia River, connections to the ports of Vancouver and Portland as well as the majority of the area's freight consolidation facilities and distribution terminals. It is extremely important to retain reliable travel times through the Portland Metro I-5 corridor.

This project will help improve access to the Lower Boones Ferry Road interchange which is one of the highest volume arterial interchange in the metro area. The interchange serves a major retail center (Bridgeport Village) including restaurants, activity center (Club Sport), a regional trail and medical facility (Providence). The southbound auxiliary lane facilitates movements to the Tualatin Transit Park-n-Ride facility, with connections to local transit (SMART) and regional (Tri-Met).

This project will help eliminate one of the bottlenecks identified on I-5 SB without a major reconstruction of the freeway. By alleviating the stop-and-go condition, it will benefit the primary users of the interstate freeway system to improve their accessibility to employment centers, businesses, transit centers and goods and services within the region, state and nation.

20. Economic Vitality

Outcome sought: expand and diversify Oregon's economy by efficiently transporting people, goods, services and information.

For example, will the solution:

- Support, preserve, or create long-term jobs and capital investment? Will it do so in an economically distressed area?
- Enhance opportunities for tourism and recreation?
- Plan for or contribute to linking workers to jobs?

In the Portland-Vancouver area, I-5 is the most critical component of this national network as it provides access to the transcontinental rail system, deep water shipping and barge traffic on the Columbia River, connections to the ports of Vancouver and Portland as well as the majority of the area's freight consolidation facilities and distribution terminals. It is extremely important to retain reliable travel time through the Portland Metro I-5 corridor.

The Lower Boones Ferry interchange experiences some of the heaviest exit/entrance movement in the metro area, reflecting the high density of employment generators at this location.

The project will help contribute to the overall expansion and broadening of the Oregon and the Portland region economy by efficiently developing and enhancing the existing freeway system at a reasonable cost. The project would eliminate one of the identified bottlenecks in the I-5 SB area at the Lower Boones Ferry interchange. By removing this bottleneck on I-5 SB it would allow mainline traffic to reduce delay at the exit area and help improve reliability on I-5 SB. This small scale operations project contributes to the overall improvements to the transportation system and helps in enhancing the regions economic vitality. People will have better travel time reliability to get to work and freight can move more easily within the region with this improvements.

21. Environmental Stewardship

Outcome sought: provide an environmentally responsible transportation system that does not compromise the ability of future generations to meet their needs and encourage conservation of natural resources.

For example, will the solution:

- Use design, materials or techniques that will more than meet minimum environmental requirements or mitigate an existing environmental problem in the area?
- Help meet air or water quality, energy or natural resource conservation, greenhouse gas reduction or similar goals?
- Plan for or contribute to the use of sustainable energy sources for transportation?

The proposed project will be built within the existing freeway ROW and not impact existing land uses in the area. The minor widening will include water quality treatment for both the proposed and existing impervious pavement, improving the overall water quality in this area. The reduction in congestion will also reduce vehicular idling, better meeting some of the air quality measures.

22. Land Use and Growth Management

Outcome sought: support existing land use plans and encourage development of compact communities and neighborhoods that integrate land uses to help make short trips, transit, walking and biking feasible.

For example, will the solution plan for or contribute to:

- Efficient development and use of land as designated by comprehensive or other land use plans?
- Community revitalization including downtowns, economic centers and main streets?
- Compact urban development and mixed land uses?

NA

23. Livability

Outcome sought: promote solutions that fit the community and physical setting, enable healthy communities and serve and respond to the scenic, aesthetic, historic, cultural and environmental resources.

For example, will the solution:

- Enhance or serve unique characteristics of the community?
- Use context sensitive principles in design and minimize impacts on the built and natural environment?
- Encourage a healthy lifestyle and enable active transportation by enhancing biking and walking networks and connections to community destinations or public transit stops or stations?
- Include elements that will make the facility or service more attractive, enjoyable, comfortable or convenient for potential users?

The proposed project will be built within the existing ODOT ROW. The widening will include water quality treatment for both the proposed and existing impervious pavement, improving the overall water quality in this area. The reduction in congestion will also reduce vehicular idling, better meeting some of the air quality measures.

This project will help improve access to a major retail center (Bridgeport Village) including restaurants, activity center (Club Sport), a regional trail and medical facility (Providence). The southbound auxiliary lane facilitates movements to the Tualatin Transit Park-n-Ride facility, with connections to local transit (SMART) and regional (Tri-Met).

Reducing congestion and unsafe weaving movements at/near this very busy interchange will facilitate access/egress, allowing for less commuting delay along the corridor, with more time for home and family.

24. Safety and Security

Outcome sought: Investment improves the safety and security of the transportation system and takes into account the needs of potential users.

For example, will the solution:

- Improve safety by using designs or techniques that exceed minimum requirements for safety and are likely to reduce the frequency or severity of crashes?
- Help reduce crashes involving vulnerable road users such as bicyclists and pedestrians?
- Improve the ability to respond to an emergency and quickly recover use of the facility or service?

The primary mission of ODOT is to improve safety on its highways for all users. The project would help to alleviate queuing in all lanes of I-5 southbound traffic. A high volume of vehicles are travelling from Hwy. 217 to Nyberg Street exit. This project would allow them to make that movement without weaving into the mainline I-5 southbound traffic. This would result in safety improvements due to enhanced traffic operations.

The reduction in congestion on the freeway mainline will improve emergency vehicle response times along I-5, Lower Boones and the surrounding area. The peak traffic congestion times will be reduced and allowing the facility to recover from an incidents more quickly.

Queuing occurs from the Lower Boones Ferry Road exit-ramp to the Lower Boones Ferry Road entrance-ramp for approximately 2 hours daily between 4:00PM to 6:00PM. These types of traffic conditions create unsafe, stop-and-go traffic in all lanes of the freeway.

ODOT has studied before and after crash history of similar type projects. Construction of the auxiliary lane is anticipated to result in a 30% reduction in mainline crashes, based on comparative auxiliary lane improvements.

25. Equity

Outcome sought: promote a transportation system with multiple travel choices for potential users and fairly share benefits and burdens among Oregonians.

For example, will the solution:

- Benefit a large segment of the community?
- Benefit one or more transportation disadvantaged populations?
- Improve environmental justice or economic equity of the community or region?

The improved traffic operations will better serve the transit center and the surrounding businesses in the interchange area, thereby encouraging use of the transit connections and increasing economic vitality. This will enhance access to area park-and-ride facility served by both Tri-Met and SMART transit services. This will also provide benefits to users in the area who use this stretch of I-5 to get to employment in the area.

26. Funding and Finance

Outcome sought: investment uses funding structures that will support a viable transportation system and are fair and fiscally responsible.

For example, will the solution:

- Have ongoing funding available for operations and maintenance?
- Support the continued use of prior investments or reduce the need for future investments?

This project is an example of ODOT's strategy of developing cost effective solutions for the worst bottlenecks on interstates and freeways in the Portland Metro Region. I-5 SB at the Lower Boones Ferry interchange was identified as a bottleneck that slowed traffic down to stop and go conditions in the outside lanes.

CBOS recommendation is to extend the I-5 SB auxiliary lane from Lower Boones Ferry exit-ramp to Lower Boones Ferry entrance-ramp. It is anticipated that the queue would be reduced to less than an hour during the peak periods.

The auxiliary lane from Lower Boones Ferry exit-ramp to Lower Boones Ferry entrance-ramp is estimated to cost $7.0 M to $8.5 M. ODOT will leverage programmed bridge seismic-retrofitting of the lower Boones Ferry Overcrossing and the Interstate Maintenance project repaving the area.

The most recent CBOS project is the I-5 SB Carman Drive Auxiliary Lane Extension (constructed in August 2012). It is an example of the strategy ODOT has adopted that is focusing on making improvements to the existing system that will reduce congestion and enhance safety. The project was constructed at a cost of $1.25 million. It was built within the existing ROW; avoids widening of existing structures; and incurs no environmental impacts. The resulting outcomes have reduced queuing by about 1 mile; reduced congestion by about an hour; and, increased reliability with less I-5 SB speed fluctuation.

Budget Information

27. Estimated Project Costs–REQUIRED

List estimated costs for the various activities listed below, as applicable to proposed project. Shaded fields are automatically calculated.

	Enter Values in this Column	Total Column
Project Administration		
Staff Costs (for Service/Educational Projects)		
Project development and PE		
Environmental Work	$0	
Coordination and Outreach		
Leased Space		
Building purchase and/or Right of Way	$0	
Capital Equipment	$0	
Non-Construction Project Costs Total		**$0**
Utility Relocation		
Construction	$8,500,000	
Construction Project Costs Total		**$8,500,000**
Total Eligible Project Cost		**$8,500,000**
Non-Eligible Costs (other project non-transportation expenditures, e.g. un-reimbursable utilities)		

28. Project Participants and Contributions–REQUIRED

List expected project participants and their contributions in the table below. Begin with the amount contributed by the Sponsor and include contributions from Project Co-Sponsor and other participants, if applicable. Sponsor and participant contributions must add to at least 10.27% of Total Transportation Project Costs. This is the amount of matching funds typically required for most federal funding programs. The specific amount of matching funds required for the proposed project may be more or less than 10.27%, depending on its funding eligibility. Specific match requirements will be determined during application review.

Participant Role	Participant Name	Project Funds Contribution	Percent of Transportation Project Total Cost
Sponsor	ODOT	$872,950	10%
Co-Sponsor			0%
Participant			0%
Participant			0%
Total		$872,950	10%

If you have more co-sponsors and participants than lines in the table above, list their names and contribution amounts in the box below and enter the totals of Co-Sponsor and Participant contributions in the appropriate spaces in the table above.

Submittal Approval

29. Project Sponsor Signature Authority Information–REQUIRED

The Authorizing Authority identified below approved the submittal of this application on behalf of the Project Sponsor. Project sponsors other then the Oregon Department of Transportation will be required to sign an Intergovernmental Agreement (IGA) with ODOT prior to receiving any project funds. The IGA with the state will detail the requirements for the use and management of requested funds.

Authorizing Authority Name: Andy Johnson

Authorizing Authority Title: Major Projects Manager

☒ Electronic submittal was approved by the identified authorizing individual. No signature needed if checked.

Signature: Date:

30. Co-Sponsor Signature Authority Information

The signature below demonstrates support of this application on behalf of the Co-Sponsor:

Authorizing Authority Name:

Authorizing Authority Title:

Signature: Date:

If you have more than one Co-Sponsor, list further Co-Sponsors' submittal authority names and titles in the box below and ask those named to provide their signatures and the date signed by their names.

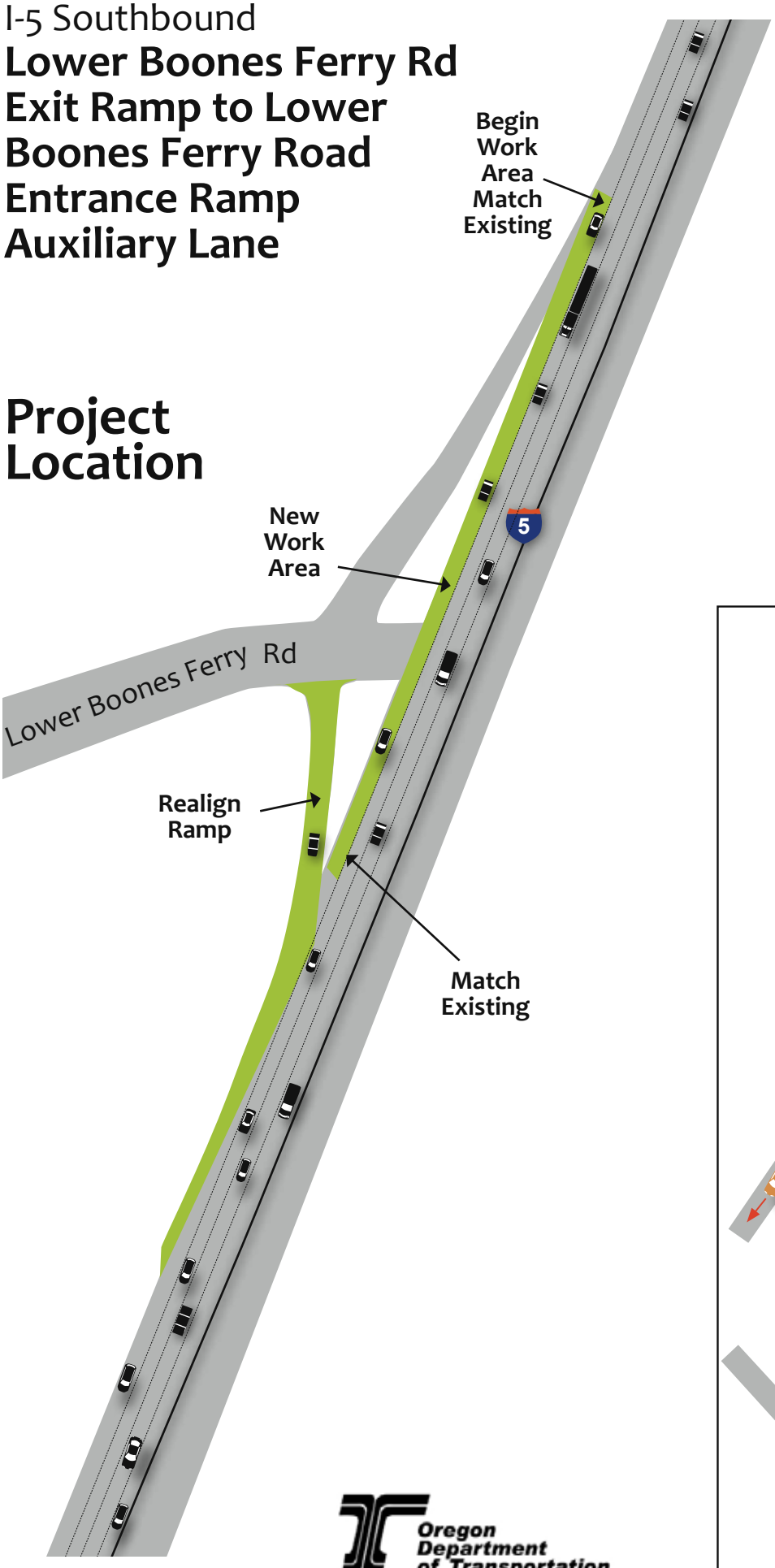
☐ Electronic submittal was approved by the identified authorizing individuals. No signatures needed if checked.

Save Application

I-5 Southbound

Lower Boones Ferry Rd Exit Ramp to Lower Boones Ferry Road Entrance Ramp Auxiliary Lane

Project Location



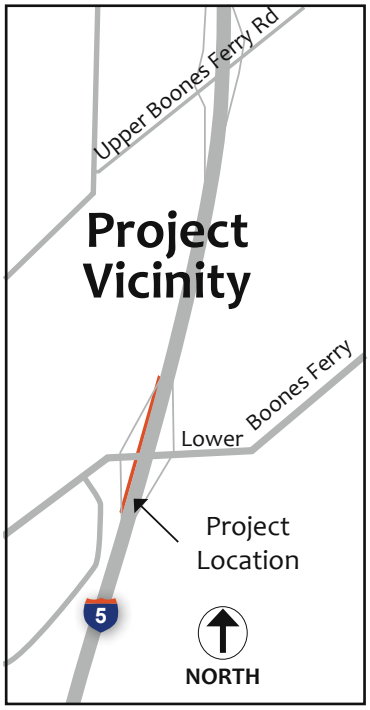
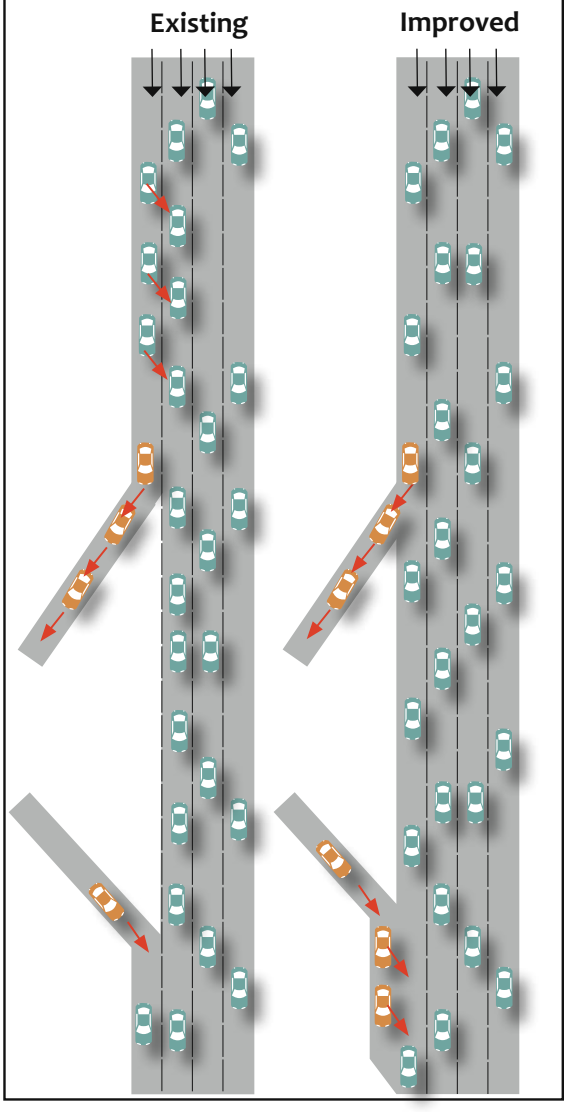
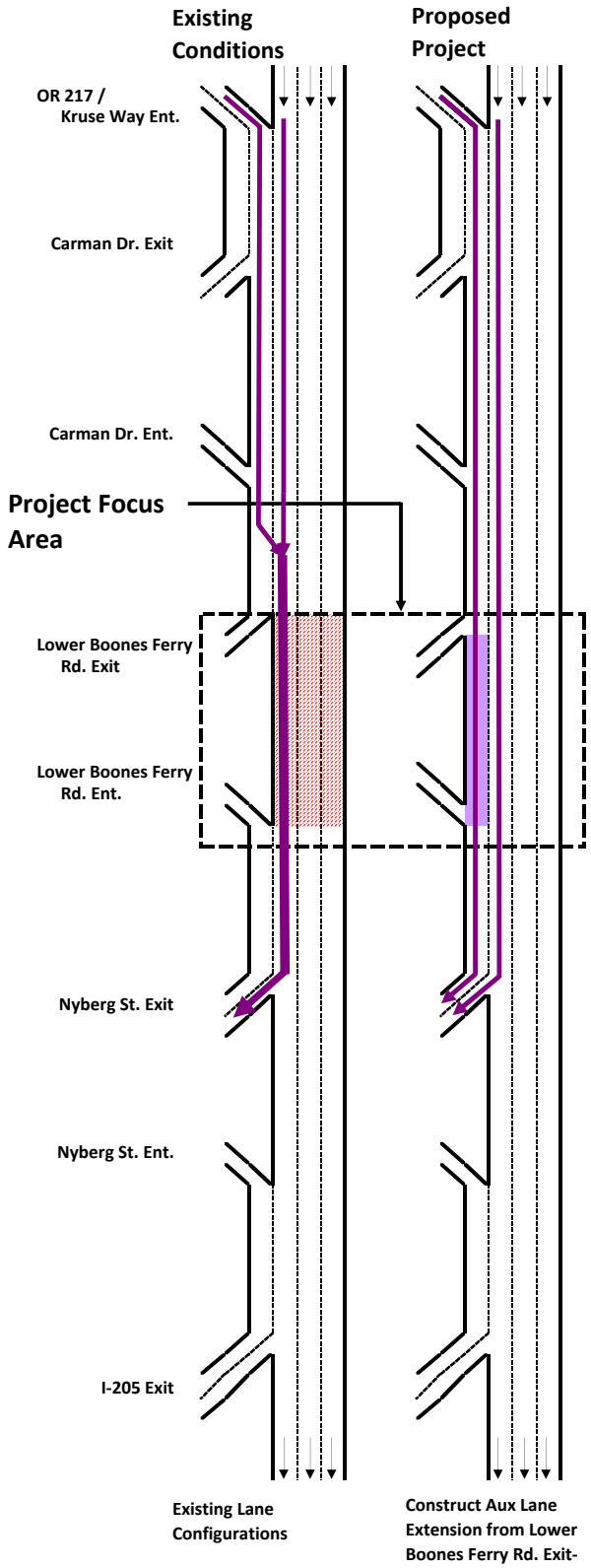


Diagram of Improvements



Oregon Department of Transportation

I-5 SB: Lower Boones Ferry Exit-ramp to Lower Boones Ferry Entrance-ramp Auxiliary Lane



Existing Conditions

Queue: Queuing experienced from the Lower Boones Ferry Road exit-ramp to the Lower Boones Ferry Road entrance-ramp. Contributing Factors: The fourth lane from OR 217 entrance-ramp drops at Lower Boones Ferry Road exit-ramp, and a high volume weaving movement to Nyberg St. exit-ramp, resulting in an unbalanced lane utilization and operational deficiency.

Duration: Approximately 2 hours daily between 4:00PM to 6:00PM.

Speed: Bottleneck activation speeds drop as low as 30 mph.

Volume (2011 ADT): Mainline: 77,020 (10% truck); Exit-Ramp to Lower Boones Ferry Road: 13,610; Entrance-Ramp from Lower Boones Ferry Road : 12,870; Exit-ramp to Nyberg St.: 21,190

Focus Area Crashes: Rate: 0.39 per MVMT; Frequency: 27 crashes from 2007-2011; 1 Fatal Crash

Proposed Project

Description: Extend I-5 SB auxiliary lane from Lower Boones Ferry exit-ramp to Lower Boones Ferry entrance-ramp.

Benefits:

Queue: Congestion/queuing would be reduced in all lanes by providing a balanced roadway section.

Duration: It is anticipated that the queue would be reduced to less than an hour during the peak periods.

Speed: Average speeds within the congested areas are expected to increase to between 40 and 50 mph.

Project Benefits Summary:

Reduce congestion, improve lane balance and travel time reliability, and sustain stable traffic flow. Extension of the auxiliary lane would provide continuous lane from OR 217 to Nyberg St. exit. Construction of the auxiliary lane is anticipated to result in a 30% reduction in mainline crashes, based on comparative auxiliary lane improvements.

Project Estimated Cost:

$7M - $8.5M

Follow-up Phases to Further Enhance Operations and Safety in Corridor

I-5 SB Auxiliary Lanes:

An I-5 SB auxiliary lane extension would create a continuous lane connection from OR 217 entrance-ramp to the I-205 exit-ramp.

Description: Extend the SB auxiliary lane from Nyberg St. exit-ramp to the Nyberg St. entrance-ramp. This would connect to the existing auxiliary lane between Nyberg entrance-ramp and I-205 exit-ramp. A new auxiliary lane between Nyberg St. entrance-ramp and I-205 exit-ramp will be required.

Benefits: This would result in improved system to system traffic operations for this section from OR 217 to I-205.

Queue: Congestion/queuing is reduced in all lanes due to improved lane utilization.

Duration: It is anticipated that the queue would be considerably reduced.

Speed: Average speeds within the congested areas are expected to increase to between 40 and 50 mph.

Project Estimated Cost: $19M - $20M

Oregon Department of Transportation

Site Map Diagram

C-BOS: High Priority Projects

I-5 SB - Lower Boones Ferry Exit-ramp to Lower Boones Ferry Entrance-ramp