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TECHNICAL MEMORANDUM #1

DATE: April 1, 2024

TO: Virginia Elandt | ODOT

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SUBJECT: OR 42-US 101 Passing Lanes Study Purpose and Objectives

DKS P#22129-004

INTRODUCTION

OR 42 (Coos Bay-Roseburg Highway No. 35) and US 101 (Oregon Coast Highway No. 9) are key transportation corridors in southwestern Oregon. US 101 is a north-south route in Coos, Douglas, and Curry Counties, and OR 42 is an east-west route in Coos and Douglas Counties. As important freight and tourism routes for Oregon residents and visitors alike, these routes are expected to see increased heavy vehicle traffic in the next twenty years. These highways are a high priority for investments to accommodate future growth and aid safe, efficient travel in Oregon's southwest region.

Figure 1 shows the study corridor segments. Segments in red are along OR 42, and segments in purple are along US 101.

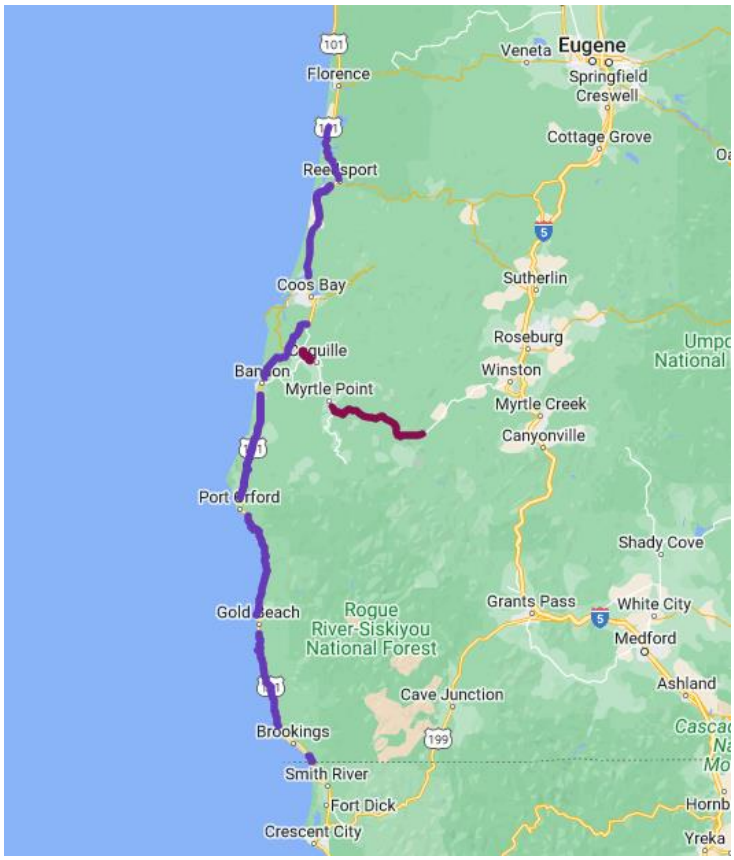

FIGURE 1: OR 42 AND US 101 STUDY CORRIDOR SEGMENTS

PURPOSE AND NEED

OR 42 is a key east-west corridor between Interstate 5 and the Oregon Coast, and US 101 is the primary north-south corridor along the Oregon Coast. These roadways serve a high percentage of tourism and freight traffic. To improve mobility and safety on these corridors, passing lanes are essential to allow passenger vehicles to safely pass heavy vehicles, such as semitrucks and recreational vehicles.

The purposes of this study are:

- **Determine where additional passing lanes would improve movement along the study corridors on OR 42 and US 101.** Along the study corridors, there are limited passing opportunities. Current spacing of passing lanes through this section of the corridor does not meet Highway Design Manual (HDM) recommendations.[1] In addition, as freight and tourism increase, many heavy vehicles such as semitrucks and recreational vehicles that travel at slower speeds cause passenger vehicles to platoon when they are unable to pass. This causes longer and more unreliable travel times between Myrtle Point and the Oregon coast and leads to vehicles making risky attempts to pass. Implementing additional passing lanes will improve traffic operations and safety through the corridor and reduce overall travel times.
- **Identify projects for funding and implementation.** The OR 38/OR 42 Corridor Plan, adopted in 2001, identifies several potential passing lane improvements along OR 42. There is no existing plan that identifies potential passing lane improvements on US 101. Over the years, passing lanes within the Study Area have been planned but were not constructed due to funding constraints. In addition, implementation of these projects would support lane reallocation in urbanized areas that allows for enhanced multimodal travel within the communities and aligns with state climate goals.

GOALS AND OBJECTIVES

The goals and objectives below will provide the project team with a lens to measure the performance of the existing travel corridor and assess future needs.

TABLE 1: GOALS AND OBJECTIVES

OBJECTIVE	DESCRIPTION
GOAL 1: CORRIDOR MOBILITY – PROVIDE MOBILITY FOR ALL TRAVELERS INCLUDING FREIGHT AND TOURISM	
1.1	Minimize traffic disruptions and platooning
1.2	Provide reliable travel times

[1] Oregon Department of Transportation, Highway Design Manual, January 2023.

OBJECTIVE	DESCRIPTION
1.3	Ensure future traffic operations: a) meet current HDM standards b) meet or improve upon existing conditions
GOAL 2: CORRIDOR SAFETY – PROVIDE SAFE TRAVEL OPPORTUNITIES FOR ALL USERS	
2.1	Reduce conflicts between heavy vehicles and passenger vehicles
2.2	Assess and improve locations with a high risk of sideswipe and head-on crashes
2.3	Plan for efficient and safe emergency response
GOAL 3: COST AND RISK – IDENTIFY LOCATIONS THAT MINIMIZE COST AND RISK	
3.1	Identify and prioritize feasible project locations
3.2	Maximize benefit-cost ratio on proposed projects
3.3	Ensure proposed passing lane spacing meets Highway Design Manual recommendations
3.4	Identify and minimize potential project risks related to environmental, geotechnical, archaeological, or other known factors