# Technical Memorandum

June 6, 2023

Project# 27003.011

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From: Matt Bell, Allison Woodworth, and Marc Butorac, PE, PTOE, PMP

Project: City of Reedsport Rail Crossing Study and Refinement Plan

Subject: Tech Memo #2: Purpose & Need, Goals, Objectives, and Evaluation Criteria

This memorandum provides a background and presents the purpose and need for the Reedsport Rail Crossing Study and Refinement Plan along with the goals, objectives, and evaluation criteria. The goals and objectives will help ensure key issues are addressed throughout the planning process while the evaluation criteria will be used to select and prioritize preferred transportation system improvements. The goals, objectives, and evaluation criteria may also inform recommendations for policy language that will serve as guidance for future development of the transportation system.

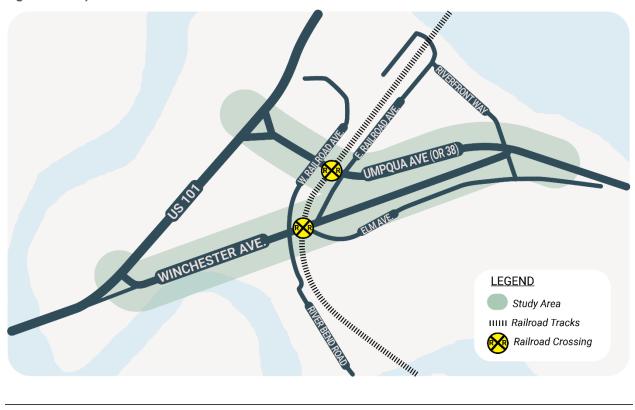
## Background

The Oregon International Port of Coos Bay is proposing to design, permit, and construct a new multi-modal container facility on the North Spit in Coos County. The container facility will be designed to accommodate 1 million in-bound and 1 million out-bound containers per year. These containers will be received in the first carbon-free marine terminal in the United States, as well as one of the only direct ship-to-rail container facilities in the United States. The Port expects six unit trains emanating from the container terminal daily, with the same number returning. The unit trains will travel from the Eco Port on the North Spit to Eugene and back. The unit trains will travel through the eastern part of Reedsport, crossing OR 38 (Umpqua Highway) and Winchester Avenue. The increase in train activity at these crossings is expected to impact traffic operations and safety on OR 38 and Winchester Avenue as well as throughout the eastern part of the city.

## Study Area

The study area includes the land located within the eastern part of Reedsport and is bordered by the Umpqua River to the north, Scholfield Creek to the west and south, and the OR 38/Riverfront Way and Winchester Avenue/Riverfront Way intersections to the east. The rail crossing on OR 38 is located within the study area and is bordered on the west by W Railroad Avenue and bordered on the east by E Railroad Avenue. The rail crossing on Winchester Avenue is also located within the study area and is bordered on the west by River Bend Road and bordered on the east by Elm Avenue. Figure 1 illustrates the study area.

Figure 1. Study Area



## **Purpose**

The purpose of this project is to prepare a Railroad Crossing Study and Refinement Plan to evaluate the impacts of the anticipated increase in rail activity on traffic operations and safety in Reedsport and to identify potential solutions at the OR 38 and Winchester Avenue rail crossings. The solutions are expected to include enhancements to the existing rail crossings, as well as other potential crossing locations, including grade-separation (e.g., a roadway overpass above the rail line). The solutions will be supported by local circulation improvements, including roadway, bicycle, pedestrian, rail, and transit improvements. They will also consider at a minimum access management, access to and response times from emergency services, and stormwater controls within the study area. The solutions will be adequate to support development of the Oregon International Port of Coos Bay container facility and the increase in rail activity on the Coos Bay Rail Line.

### Need

This project is needed to help the Oregon Department of Transportation (ODOT) and the City of Reedsport (City) prepare for the increase in rail activity on the Coos Bay Rail Line. The Railroad Crossing Study and Refinement Plan is likely to include recommendation for new and changes to existing transportation facilities that support access and circulation within the eastern part of Reedsport. These facilities need to be approved and incorporated into state and local plans, such as the Reedsport Transportation System Plan (TSP), and accounted for in local funding programs. In addition, the Port plans to complete construction of the container facility and begin operations within a 5-year timeframe, which increases the need to complete this project soon to start planning for the future.

## NEPA Approach

Transportation improvements identified in the Reedsport Rail Crossing Study and Refinement Plan will likely move forward to a Federal Highway Administration (FHWA)-led National Environmental Policy Act (NEPA) documentation and decision process, and a Project Design Acceptable Package (DAP) milestone. The Reedsport Rail Crossing Study and Refinement Plan will include the assessment of rail crossing solutions sets necessary for the NEPA process and DAP.

## Goals and Objectives

This section summarizes the proposed goals and objectives for the Reedsport Rail Crossing Study and Refinement Plan. The proposed goals and objectives are based on the goals and policies in the Reedsport Comprehensive Plan and TSP, which were developed as part of the last TSP update to guide the City's 20-year vision of transportation system needs. The proposed goals and objectives reflect the unique nature of this project as well as guidance from the project management team. The proposed goals and objectives will be revised based on input from the project advisory committee, the transportation users, and the community.

### **Proposed Goals and Objectives**

The proposed goals and objectives are summarized below. The objectives shown in grey are applicable to the overall transportation system but will not impact the development of the Reedsport Rail Crossing Study and Refinement Plan. The objectives shown in **bold** are new relative to the Comprehensive Plan and TSP.

## Goal #1: Develop a transportation system to enhance Reedsport's livability and meet federal, state, and local requirements.

#### Objectives:

- 1.a Maintain the livability of Reedsport through proper location and design of transportation facilities.
- 1.b Consider noise impacts in the design, redesign, and reconstruction of arterial streets immediately adjacent to residential neighborhoods.
- 1.C Protect neighborhoods from excessive through traffic and travel speeds while providing reasonable access to and from residential areas. Build streets to minimize speeding.
- 1.d New commercial and industrial development shall prepare traffic plans to minimize cut-through traffic on residential streets.
- 1.e Cooperate with ODOT to maintain and improve US 101 and OR 38 consistent with the Oregon Highway Plan (OHP).
- 1.f Ensure that transportation improvements minimize impacts to storm drainage, particularly in the City's downtown, which is located in a basin and surrounded by a levee.

#### Goal #2: Create a balanced transportation system.

#### Objectives:

- 2.a Implement street design standards that recognize the multi-purpose nature of the street right-of-way for utility, pedestrian, bicycle, truck, and vehicle traffic.
- 2.b Provide connectivity to each area of Reedsport to ensure pedestrian, bicycle, and vehicle access to schools, parks, employment, and recreational areas.

- 2.c Develop neighborhood and local connections to provide adequate circulation into and out of neighborhoods.
- 2.d Develop a pedestrian system of sidewalks and pathways to provide safe, attractive, efficient, and accessible routes that allows pedestrians to travel from residential areas to schools, parks, commercial areas, and major employment centers. All new streets shall have sidewalks.
- 2.e Develop a bikeway system of bike lanes, shared roadways, and multi-use paths that allows pedestrians to travel from residential areas to schools, parks, commercial areas, and major employment centers.
- 2.f Ensure that local connections are maintained or enhanced through redevelopment to minimize reliance on major street connections.
- 2.g Improve roadway connectivity and parallel routes on the local transportation network to redistribute local traffic volumes and reduce traffic demand on state facilities.

### Goal #3: Improve the safety of the transportation system.

#### Objectives:

- 3.a Improve traffic safety through a comprehensive program of engineering, education, and enforcement.
- **3.b** Where on-street pedestrian and bicycle facilities cannot reasonably be provided on highways and arterials, identify parallel routes that comply with state and City planning and design standards.
- 3.c Enhance safety by prioritizing and improving high accident locations within the city.
- 3.d Designate safe routes from residential areas to schools.
- 3.e Maintain access management standards for streets to reduce conflicts between vehicles and trucks, and between vehicles and bicycles and pedestrians.
- 3.f Ensure that adequate access for emergency services vehicles is provided throughout the city.
- 3.g Meet federal and state safety standards for rail crossings.
- 3.h Provide safe routing of hazardous materials consistent with federal guidelines

#### Goal #4: Develop an efficient transportation system that will handle future traffic growth.

#### Objectives:

- 4.a Designate roadway functional classifications that reflect the desired function and characteristics of different roadways.
- **4.b** Adopt land use development standards to reduce travel demand and encourage all modes of transportation.
- 4.C Encourage development that effectively mixes land uses to reduce reliance on vehicles.
- 4.d Implement the bicycle, pedestrian, and vehicle improvements to create a multi-modal transportation system.
- 4.e Maintain levels of service consistent with the Oregon Transportation Plan. Reduce traffic congestion and enhance traffic flow through such measures as intersection improvements, intelligent transportation systems, signal synchronization, and other similar measures.
- **4.f** Require comprehensive plan amendments and zone changes to demonstrate that the proposed changes will not significantly affect the transportation system and are consistent with the identified function, capacity, and performance standards of the transportation facility.
- 4.g Consider fluctuations in traffic volumes on weekends, holidays, and during the summer season when developing transportation improvements.

## Goal #5: Provide a transportation system that is accessible to all members of the community.

#### Objectives:

- 5.a Construct transportation facilities to meet the requirements of the Americans with Disabilities Act.
- 5.b Support service to respond to the transportation needs of disadvantaged individuals.

#### Goal #6: Develop a transportation system to provide for efficient freight movement.

#### Objectives

- 6.a Truck routes and highway access are essential for efficient movement of goods. Design these facilities and adjacent land uses to reflect the needs of freight movement.
- 6.b Consider the impact on railroad facilities in land use decisions.
- 6.C Protect the function of rail facilities and develop and implement strategies that minimize conflicts with other travel modes and adjacent land uses, including strategies that support a "No Horn Ordinance."

## Goal #7: Create a funding system to implement the recommended transportation system improvement projects.

#### Objectives

- 7.a Partner with ODOT and other jurisdictions to develop a long-range financial strategy to make needed improvements to the transportation system and support operational and maintenance requirements.
- 7.b Coordinate transportation projects, policy issues, and development actions with all affected governmental units in the area. Key agencies for coordination include Douglas County and ODOT.
- 7.c Provide adequate funding for maintenance of transportation facilities.
- 7.d Develop a funding program to pay for transportation improvements related to development impacts.
- 7.e Establish rights-of-way at the time of site development and, where appropriate, officially secure them by dedication of property.
- 7.f Monitor and update the Transportation System Plan so that issues and opportunities are addressed in a timely manner. Maintain a current capital improvement program that establishes the City's construction and improvement priorities, and allocate the appropriate level of funding.
- 7.g Consider the funding and implementation recommendations of the Reedsport Waterfront and Downtown Plan in prioritizing and implementing the City's capital improvement program.
- 7.h Ensure that the Transportation System Plan is consistent with other state and local plans and that it reflects the City's overall development plan.

## **Evaluation Criteria**

This section summarizes the proposed evaluation criteria for the Reedsport Rail Crossing Study and Refinement Plan. Given the unique nature of this project, the proposed evaluation criteria reflect only the goals and objectives that will result in a meaningful difference in the evaluation.

### **Proposed Evaluation Criteria**

The proposed evaluation criteria are summarized below. A qualitative process using the evaluation criteria will be used to consider potential solutions and prioritize projects developed through the planning process. The rating method used to evaluate the solutions is described below.

Most Desirable: The concept addresses the criterion and/or makes substantial improvements in the criteria category. (+2)

Desirable: The concept addresses the criterion and/or makes improvements in the criteria category. (+1)

No Effect: The criterion does not apply to the concept or the concept has no influence on the criteria. (0)

Less Desirable: The concept does not support the intent of and/or negatively impacts the criteria category. (-1)

Least Desirable: The concept substantially negatively impacts the criteria category. (-2)

At this level of screening, the criteria will not be weighted; the ratings will be used to inform discussions about the benefits and tradeoffs of each solution. Table 1 presents the evaluation criteria that will be used to qualitatively evaluate the potential solutions developed through the planning process.

Table 1. Reedsport Rail Crossing Evaluation Criteria

Objective	Evaluation Criteria	Evaluation Score	
Goal #1: Develop a transportation system to enhance Reedsport's livability and meet federal, state, and local requirements.			
Objective 1.a	Concept maintains the livability of Reedsport through proper location and design of transportation facilities.	(-2 to +2)	
Objective 1.b	Concept consider noise impacts in the design, redesign, and reconstruction of arterial streets immediately adjacent to residential neighborhoods.	(-2 to +2)	
Objective 1.c	Concept protects neighborhoods from excessive through traffic and travel speeds while providing reasonable access to and from residential areas.	(-2 to +2)	
Objective 1.e	Concept cooperates with ODOT to maintain and improve US 101 and OR 38 consistent with the Oregon Highway Plan (OHP).	(-2 to +2)	
Objective 1.f	Concept ensures that transportation improvements minimize impacts to storm drainage, particularly in the City's downtown.	(-2 to +2)	
Goal #2: Create a balanced transportation system			
Objective 2.b	Concept provides connectivity to each area of Reedsport to ensure pedestrian, bicycle, and vehicle access to schools, parks, employment, and recreational areas.	(-2 to +2)	
Objective 2.c	Concept develops neighborhood and local connections to provide adequate circulation into and out of neighborhoods.	(-2 to +2)	
Objective 2.f	Concept ensures that local connections are maintained or enhanced to minimize reliance on major street connections	(-2 to +2)	
Objective 2.g	Concept improves roadway connectivity and/or parallel routes on the location transportation network.	(-2 to +2)	
Goal #3: Improve the safety of the transportation system			
Objective 3.e	Concept maintains access management standards for streets to reduce conflicts between vehicles and trucks, and between vehicles and bicycles and pedestrians.	(-2 to +2)	

Objective 3.f	Concept ensures that adequate access for emergency services vehicles is provided throughout the city.	(-2 to +2)	
Objective 3.g	Concept meets federal and state safety standards for rail crossings.	(-2 to +2)	
Goal #4: Develop an efficient transportation system that will handle future traffic growth			
Objective 4.d	Concept implements the bicycle, pedestrian, and vehicle improvements to create a multi-modal transportation system.	(-2 to +2)	
Objective 4.e	Concept maintains levels of service consistent with the Oregon Transportation Plan.	(-2 to +2)	
Objective 4.g	Concept considers fluctuations in traffic volumes on weekends, holidays, and during the summer season when developing transportation improvements.	(-2 to +2)	
Goal #5: Provide a transportation system that is accessible to all members of the community.			
Objective 5.a	Concept constructs transportation facilities to meet the requirements of the Americans with Disabilities Act.	(-2 to +2)	
Objective 5.b	Concept supports service to respond to the transportation needs of disadvantaged individuals.	(-2 to +2)	
Goal #6: Develop a transportation system to provide for efficient freight movement.			
Objective 6.a	Truck routes and highway access are essential for efficient movement of goods. Concept designs these facilities and adjacent land uses to reflect the needs of freight movement.	(-2 to +2)	
Objective 6.b	Concept considers the impact on railroad facilities in land use decisions.	(-2 to +2)	
Objective 6.c	Concept protects the function of rail facilities and develop and implement strategies that minimize conflicts with other travel modes and adjacent land uses, including strategies that support a "No Horn Ordinance."	(-2 to +2)	
Goal #7: Create a funding system to implement the recommended transportation system improvement projects.			
Objective 7.a	Concept partners with ODOT and other jurisdictions to develop a long-range financial strategy to make needed improvements to the transportation system and support operational and maintenance requirements.	(-2 to +2)	
Objective 7.b	Concept is coordinated with transportation projects, policy issues, and development actions with all affected governmental units in the area. Key agencies for coordination include Douglas County and ODOT.	(-2 to +2)	
Objective 7.h	Concept ensures that the Transportation System Plan is consistent with other state and local plans and that it reflects the City's overall development plan.	(-2 to +2)	