DATE 11/02/2023

REEDSPORT RAIL CROSSING STUDY

PROJECT ADVISORY COMMITTEE (PAC) MEETING #3

KITTELSON & ASSOCIATES

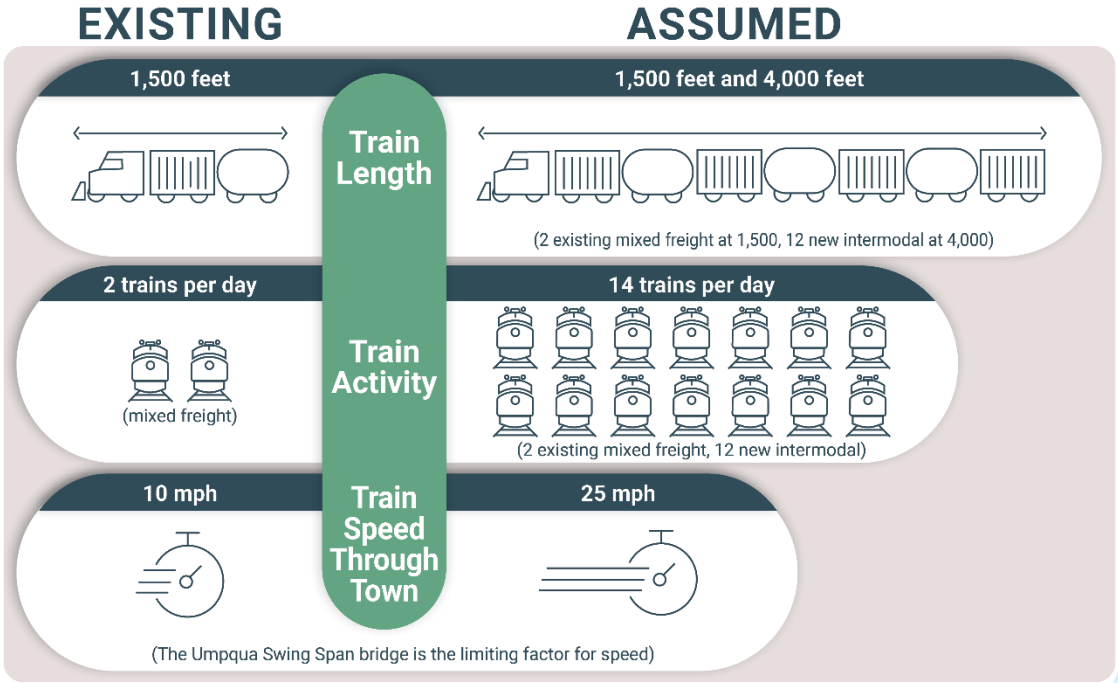
Agenda

- Project Overview (Refresh)
- Project Update
- Alternatives Analysis (Refresh)
- Preferred Improvements and Project Sheets (Tech Memo #7)
- Roundtable Discussion
- Next Steps
- Summary of Action Items

Project Overview

Project Background

- The Oregon International Port of Coos Bay is proposing a new multimodal container facility on the North Spit in Coos County,



- The trains are expected to impact traffic operations and safety at the at-grade rail crossings in Reedsport

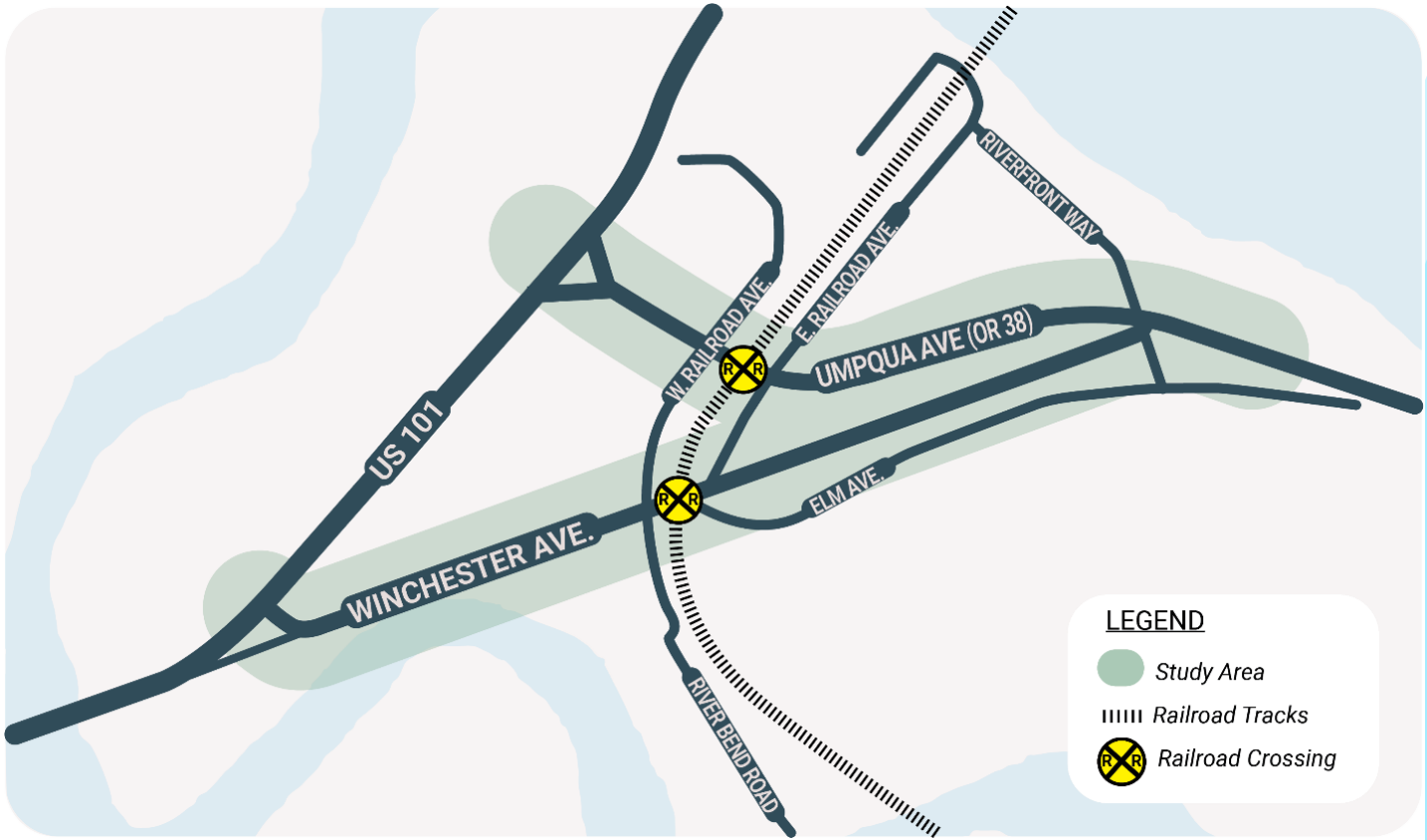
Project Overview

Project Background

- Prepare the Rail Crossing Study and Refinement Plan
  - Focus on the immediate area surrounding the rail line and rail crossings
  - Evaluate impacts of increased rail activity on the Umpqua Avenue (OR 38) and Winchester Avenue rail crossings
  - Identify solutions at the crossings, supported by other improvements

- Amend the City's Transportation System Plan to incorporate the rail crossing study by reference

Study Area


US 101
W. RAILROAD AVE.
E. RAILROAD AVE.
RIVERFRONT WAY
UMPQUA AVE (OR 38)
ELM AVE.
WINCHESTER AVE.
RIVER BEND ROAD
LEGEND
Study Area
Railroad Tracks
Railroad Crossing

Major Tasks and Deliverables

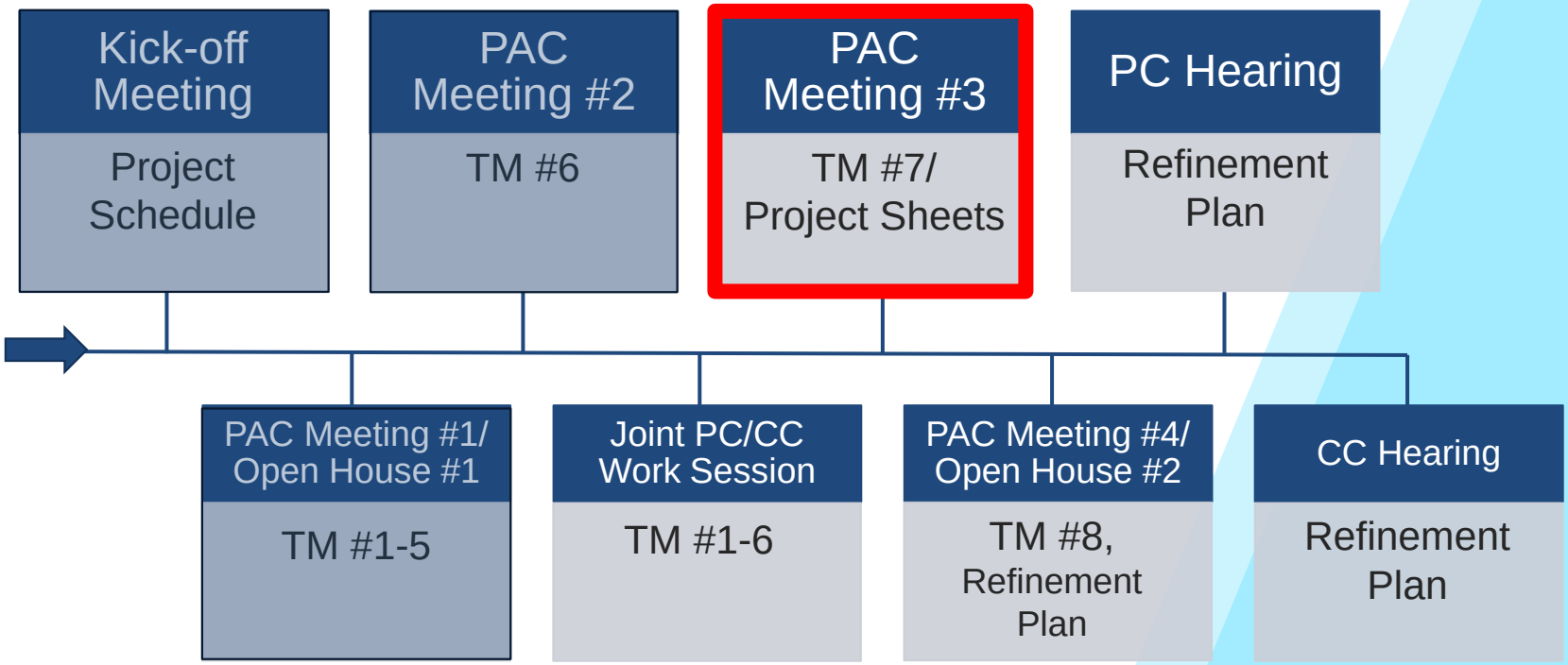
1. Project Management	• Project Schedule
2. Public And Stakeholder Involvement	• Public Involvement Plan • Project Website • Stakeholder Interviews
3. Goals And Objectives	• TM #1: Plan, Policy, and Code Review & Port of Coos Bay Expansion Review • TM #2: Purpose & Need, Goals, Objectives, and Evaluation Criteria
4. Existing And Future Conditions Analysis	• TM #3: Analysis Methodology Memorandum • TM #4: Existing Transportation Conditions • TM #5: Future Land Use and Transportation Conditions
5. Develop And Evaluate Transportation System Improvements	• TM #6: Transportation System Improvement Alternatives
6. Preferred Improvements And Funding Program	• TM #7: Preferred Improvement and Project Sheets
7. Prepare Refinement Plan and City TSP Update	• TM #8: Amendment & Implementing Measures • Rail Crossing Refinement Plan
8. Refinement Plan and City TSP Update Adoption	• Final Refinement Plan • Title VI Report

1
2
3
4

We are here

X PAC Meeting

Meetings and Milestones



Alternatives Analysis (Refresh): Needs Statement

Needs Statement

TM #6, Pg 1

- Rail crossing delays and access/circulation barriers (4,100-foot train at 10 mph)
  - Vehicle queues on OR 38 spill back to US 101
  - Cycle failure at OR 38/US 101 intersection
  - Delays of 5½ minutes or greater on OR 38 and Winchester Avenue
  - Local circulation and access delays exceeding 60 seconds
  - Traffic volume increases at Port Dock Road undercrossing

YEAR 2045

4,000 ft. TRAIN - 10MPH

Needs Statement (cont.)

- Increased train activity (2 to 14 trains per day)
  - Increased probability of delays to emergency service providers
  - Increase train horn noise during school or nighttime hours
  - Increased pedestrian/train conflicts
  - Increased peak hour queues on OR 38 and Winchester Avenue that create local circulation/access delay
  - Increased use of Port Dock Road undercrossing and related increases in cut-through traffic on local streets Increased frequency of issues

Other Factors

TM #6, Pg 2

- Degradation factors:
  - Longer trains – Exceeding 4,100 feet at 10 mph
  - Slower trains – Traveling at speeds less than 10 mph
  - Increased number of trains – Greater than 14 trains per day
  - Traffic conditions exceeding the 30th highest peak hour demand on OR 38 – Higher peak hour volumes and proportion of trucks and recreation vehicles

- Minimization factors:
  - Shorter trains – Less than 4,100 feet at 10 mph
  - Faster trains – Traveling in excess of 10 mph
  - Reduced number of trains – Less than 14 trains per day

Alternatives Analysis (Refresh): Most Promising Alternatives

Improvement Package #1

Package 1 Considerations

- 1C – Four Quadrant Gate
  - Addresses noise impacts from train activity on Winchester Ave
  - Feasible with minimal potential ROW or environmental impacts
  - Requires grade separated improvements on OR 38
  - Synergy with Alternative 2A1
- 2A – OR 38 Rail Overcrossing with Retaining Walls
  - Addresses rail crossing delay and circulation issues
  - Addresses increased train activity issues
  - Addresses queuing related impacts on OR 38
  - Partially addresses queueing related impacts on Winchester Ave
  - Addresses noise impacts from increased train activity at OR 38
  - Refinements needed to minimized impacts to ROW, environmental impacts, and assess construction costs
  - Synergy with Alternative 1C
- Tentatively Preferred by the PAC

Improvement Package #2

Package 2 Considerations

- 4A – Elevated Rail Line
  - Addresses queuing impacts to upstream and downstream cross streets on OR 38 and Winchester Ave
  - Addresses noise related to train activity at OR 38 and Winchester Ave
  - Refinements needed to understand constructability, visual barrier issues, and costs

Preferred Improvements and Project Sheets (Tech Memo #7)

Preferred Improvements and Project Sheets

TM #7, Pg 1-3

- Outstanding Issues and Feedback
  - Visual impacts of structures
  - Local roadway and driveway tie-ins
  - Local ped, bike, and transit enhancements
  - Stormwater
  - Title VI impacts
  - Potential NEPA 4F impacts
  - OR 38/US 101 intersection operations
  - Refined cost estimates

Preferred Improvements and Project Sheets

TM #7, Pg 3-4

- Preferred Improvement Package – **Package 1**

Key Differentiators	Improvement Package I	Improvement Package II
OR 38 Vertical Clearance	No vertical constraints.	Introduces the only vertical constraint between I-5 and US 101 (via OR 38 and OR 138)
Community Barrier Effect	The elevated OR 38 overpass creates an approximately 800-foot partial north-south visual barrier for homes along OR 38 to the west of the rail line.	The elevated rail line introduces an east-west visual barrier throughout the entire community, extending from the Scholfield Creek to Umpqua River.
Winchester Rail Crossing Queuing and Potential Cut-Through Traffic	The upgraded at-grade crossing would still create vehicular queues and potentially cut through traffic during train events.	The grade-separated rail overcrossing would eliminate vehicular queues and potentially cut through traffic.
Design and Construction Cost Opinions	$18.1M (Assumes retaining walls, embankment support, and bridges) $22.2M (Assumes viaduct between east and west Railroad Avenue)	$27M (Assumes retaining walls, embankment support, and bridges $61M (Assumes viaduct between Winchester and OR 38)

  - Alternative 1C1 – US 101 NB Dynamic Train Activity Warning Sign

Preferred Improvements and Project Sheets

TM #7, Pg 4-5

- Environmental Review – **Potential Impacts**

Improvement Package	Alternative	Section 4(f)	Section 6(f)	Historic Resources	Title VI
I	1C	None	None	Likely	Likely none
	1C1	None	None	None	Likely none
	2A1	Hahn Park	None	Likely	Likely none
	5B	None	None	Unknown	Likely none
II	4A	None	None	Likely	Likely none
	5A	Hahn Park	None	None	Likely none

  - Areas to Explore further during NEPA
    - Wetlands and waterbodies, threatened and endangered species, critical habitat, noise impacts, air quality impacts, archaeological resources, construction staging, hazardous materials
  - Anticipated NEPA Classification
    - Documented Categorical Exclusion

Preferred Improvements and Project Sheets

TM #7, Pg 5-6

- Preferred Alternative Recommendation
  - Alternative 1C – Four-Quadrant Gated Rail Crossing on Winchester Avenue
  - Alternative 1C1 – US 101 NB Train Activity Warning for Train Crossings at Winchester Avenue
  - Alternative 2A1 – OR 38 Rail Overcrossing with Retaining Walls

Preferred Improvements and Project Sheets

1C: Four-Quadrant Gated Rail Crossing on Winchester Avenue

Preferred Improvements and Project Sheets

1C1: US 101 NB Train Activity Warning Sign

Preferred Improvements and Project Sheets

TM #7, Pg 7

2A1: OR 38 Rail Overcrossing with Retaining Walls

Preferred Improvements and Project Sheets

TM #7, Pg 8

OR 38 Related Improvements and Proposed Roadway, Bicycle, and Pedestrian Tie-ins

Preferred Improvements and Project Sheets

TM #7, Pg 9-10

- Pedestrian and Bicycle Refinements
- Transit Enhancements
- Potential Stormwater Impacts
- Refined Cost Opinion
  - Potential right-of-way needs
  - 40% contingency and considerations for design
  - Design considerations
  - $18.1M to $22.2M

Preferred Improvements and Project Sheets

Railroad Crossing Study – 1 OR 38 Rail Overcrossing with Retaining Walls		City of Reedsport Transportation System Plan
		
Purpose	This project is intended to address the transportation-related impacts associated with the Port of Coos Bay's Pacific Coast Intermodal Port project and the anticipated increases in rail activity along the Coos Bay Rail Line and in downtown Reedsport.	
Description	This project will provide a grade-separated rail crossing (overcrossing) with retaining walls on OR 38. The overcrossing would extend from north of Laurel Street to east of 6th Street and require reconfiguration or closer of the Laurel Street and 6th Street intersections. Box culvert-type structures, a viaduct, or simple bridges could be provided to allow W Railroad Avenue and E Railroad Avenue to maintain connectivity.	
Location	OR 38 from north of Laurel Street to east of 6th Street.	
Roadway Characteristics	– **Jurisdiction:** ODOT – **Functional Classification:** Other Principal Arterial (Federal), Statewide Highway (State), Arterial (City) – **Freight Route Designation:** OHP Freight Route; Reduction Review Route – **Existing AADT:** 4,886 (Source: ODOT) – **Forecast AADT:** 5,600 (Source: ODOT)	– **Posted Speed:** 25 mph – **Pavement Width:** 34' – **Travel Lanes:** 2 (12' each way) – **Pedestrian Facilities:** Sidewalks (6' both sides) – **Bike Facilities:** Bike lanes (5' both sides) – **Transit Facilities:** None – **On-Street Parking:** None
How Improvement Addresses Deficiencies	**Existing/Future Need:** – The existing at-grade rail crossing on OR 38 is controlled by a two-quadrant gate system with flashing lights and cross buck "rail crossing" warning signs. – The Port project is expected to increase rail activity along the CBRL, including the frequency, length, and speed of trains. – The increase in rail activity will increase delays at the at-grade crossing as well as motor vehicle queues on OR 38 that block side streets and create access/circulation issues in downtown Reedsport.	**With Improvement:** – Addresses delays and access/circulation issues. – Addresses increased train activity issues. – Addresses queuing-related impacts to upstream and downstream cross-streets on OR 38. – Partially addresses queuing-related impacts to upstream and downstream cross-streets on Winchester Avenue. – Addresses noise-related issues with increased train activity at OR 38 by eliminating the need for train horn warnings at the crossing.
Additional Considerations	Further refinements are needed to minimize potential right-of-way and/or environmental impacts, address visual impacts associated with the vertical elements of the overcrossing structures, and identify local roadway and driveway tie-ins to the modified roadway.	
Cost Opinions	$12,000,000	
Implementation	Can work in tandem with Alternative 1C - Four-Quadrant Gate on Winchester Avenue.	

AADT = annual average daily traffic; CBRL = Coos Bay Rail Line; ODOT = Oregon Department of Transportation.

Project Title

Project Image

Project Purpose

Project Description

Roadway Characteristics

How improvement addresses deficiencies
(Existing/Future Need, With Improvements)

Additional Conditions, Cost Opinion, Implementation

Roundtable Discussion

- Any concerns and/or questions on the preferred improvement package?
- Any concerns and/or questions on the projects included in the package?
- What refinements would you like the project team to explore as part of the final package?

Next Steps

- City Council Work Session (Nov 6th, at 6 PM)
- Prepare Amendments and Implementing Measures
  - Preferred Improvement Package
  - Pedestrian and Bicycle Facility Enhancements
  - US 101 Refinement Plan
- Prepare Draft Rail Crossing Refinement Plan
- PAC Meeting #4 (January 25th, at 3:00 PM)
- Open House (February 1st, at 6 PM)