

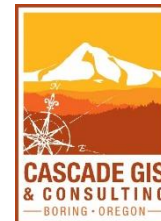
# Regional Emergency Transportation Routes Update

## East Multnomah County Transportation Committee Review of Phase 1 Draft Report

March 15, 2021



Project Team: RDPO, Metro  
Thuy Tu Consulting, LLC, Salus Resilience, Cascade GIS & Consulting, FLO Analytics



# Project Purpose



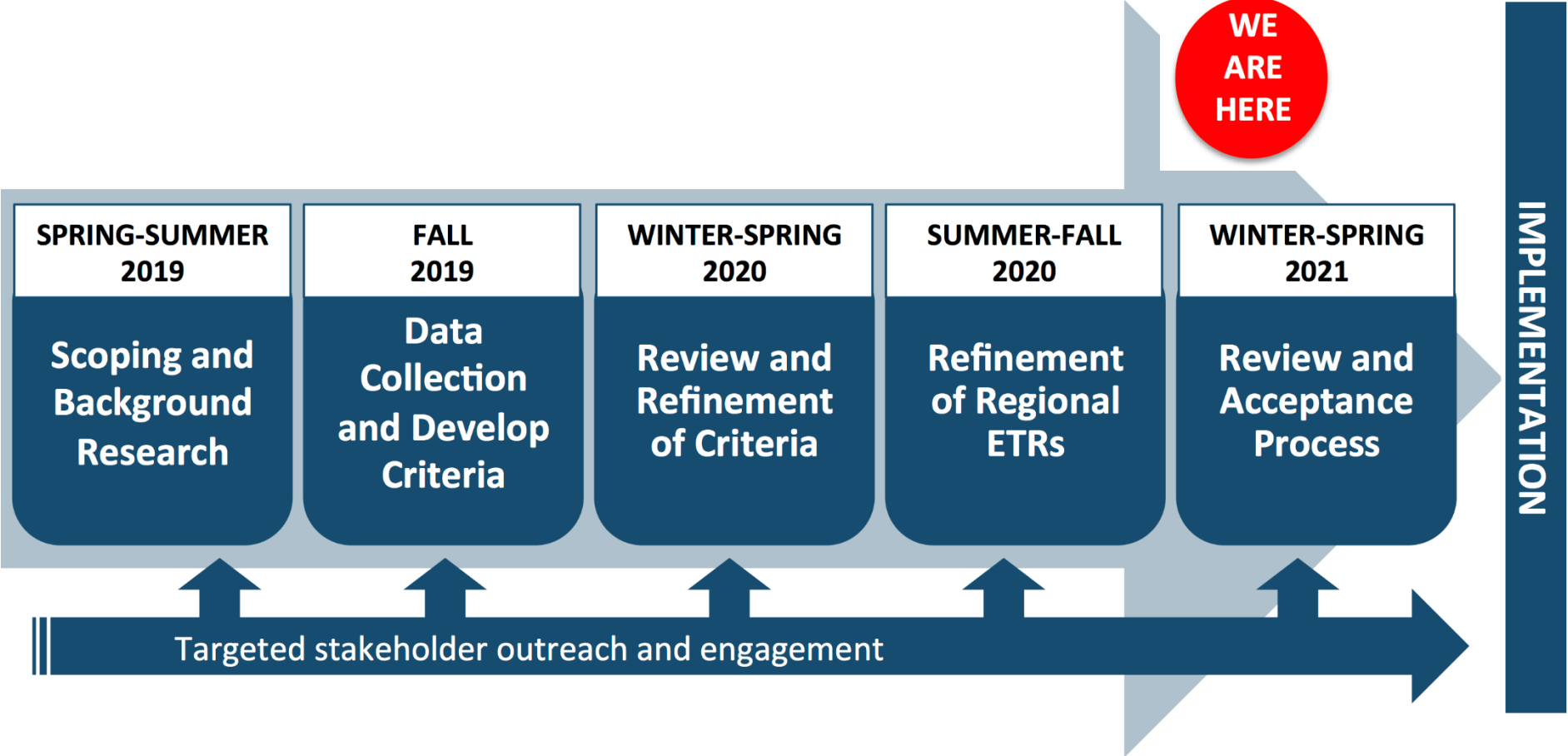
To update designated Regional Emergency Transportation Routes (RETRs) for the five-county region.

- Update 1996 and 2005/2006 ETRs
- Improve understanding of resilience of ETRs
- Raise visibility of ETRs
- Facilitate regional dialogue regarding resilience and recovery
- Set the stage for Phase 2 and future planning and investment

# Regional ETR Update Work Group



# Project Timeline



# Stakeholder engagement | 2019 and 2020

- 7 Regional ETR work group meetings (2019-2020)
- 2 TPAC/MTAC workshops (2019-2020)
- 1 community leaders' forum (2019)
- 10 county-level coordinating committee briefings (staff and policy) (2020)
- 3 county-level coordinating committee meetings (policy) (2020)
- 8 jurisdictional specific meetings to review draft maps (2020)
- 3 REMTEC briefings (2019-2020)
- 2 Public Works work group briefings (2020)
- 3 RDPO Steering Committee briefings (2019-2020)
- 1 Joint Policy Advisory Committee on Transportation briefing (2019)
- 1 Metro Council briefing (2020)
- 1 Southwest Washington Regional Transportation Council briefing (2020)



More than  
**40**  
touch points  
in 2019 and  
2020




zoom


# Overview of Draft Final Report


## Table of Contents

- 1 Introduction
- 2 Stakeholder Engagement
- 3 Background and History
- 4 Overview of Concepts and Methods
- 5 Data Collection and Analyses
- 6 Analysis Results & Recommendations
- 7 Updated Route Summary
- 8 Recommendations for Future Work

## Appendices




  
Consulting, LLC


 **SALUS RESILIENCE**

**DRAFT**

Phase I Draft Report  
**Regional Emergency  
Transportation Routes Update**  
for the Portland-Vancouver Metropolitan  
Region in Oregon and Washington

Prepared for

 **RDPO**  
Regional Disaster Preparedness Organization  
Unified. Prepared. Resilient.

 **Metro**

February 4, 2021  
154-035-016

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Portland, OR 97212  
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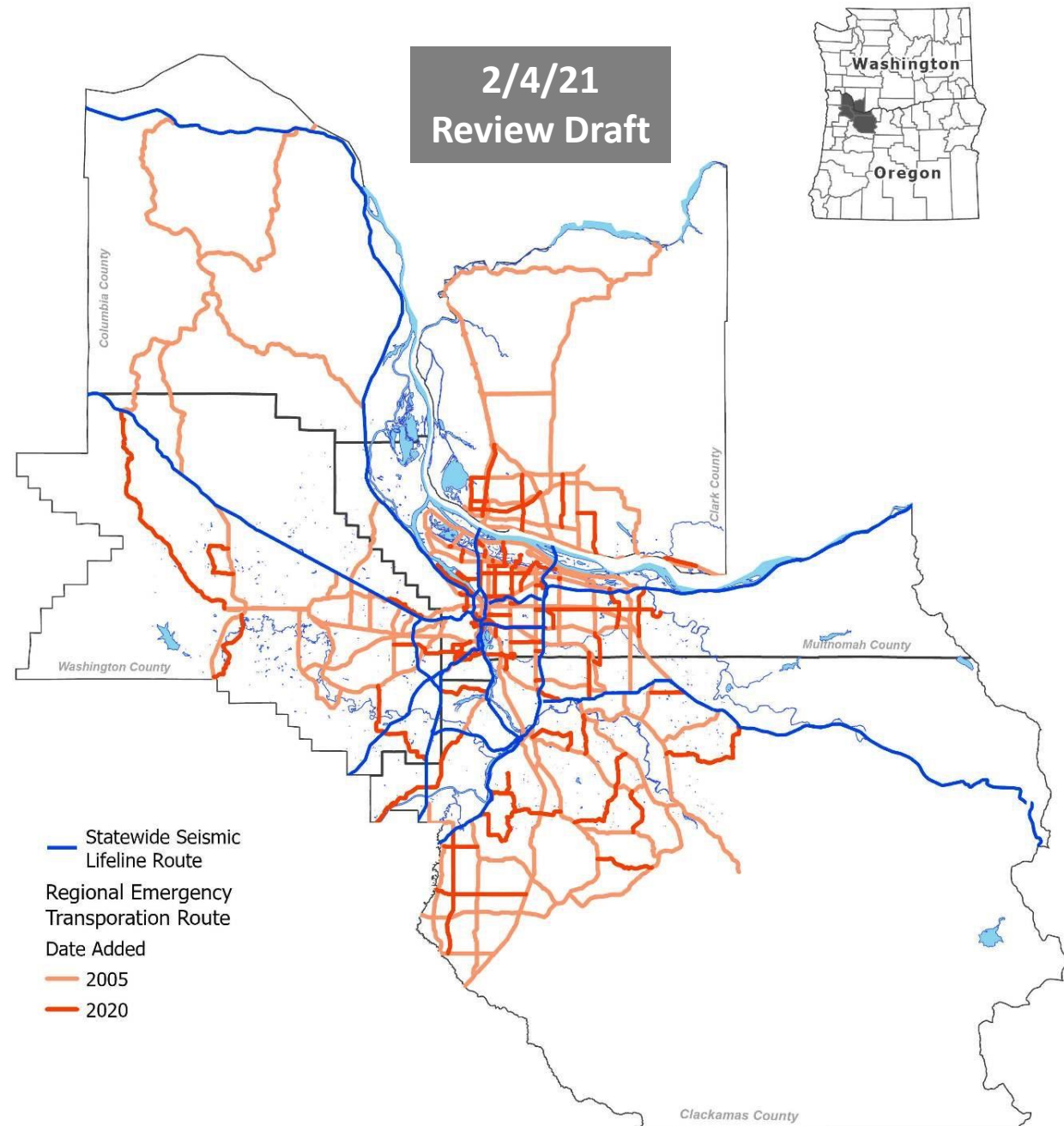
Salus Resilience  
6420 S Macadam Avenue, Suite 100  
Portland, OR 97239  
503.620.7264



# DRAFT Updated RETRs

~40 routes added by jurisdictional partners to:

- connect to more state/regional critical assets
- reflect updates recommended through local planning and ODOT/County seismic lifeline bridge detour reviews
- add new and improved facilities

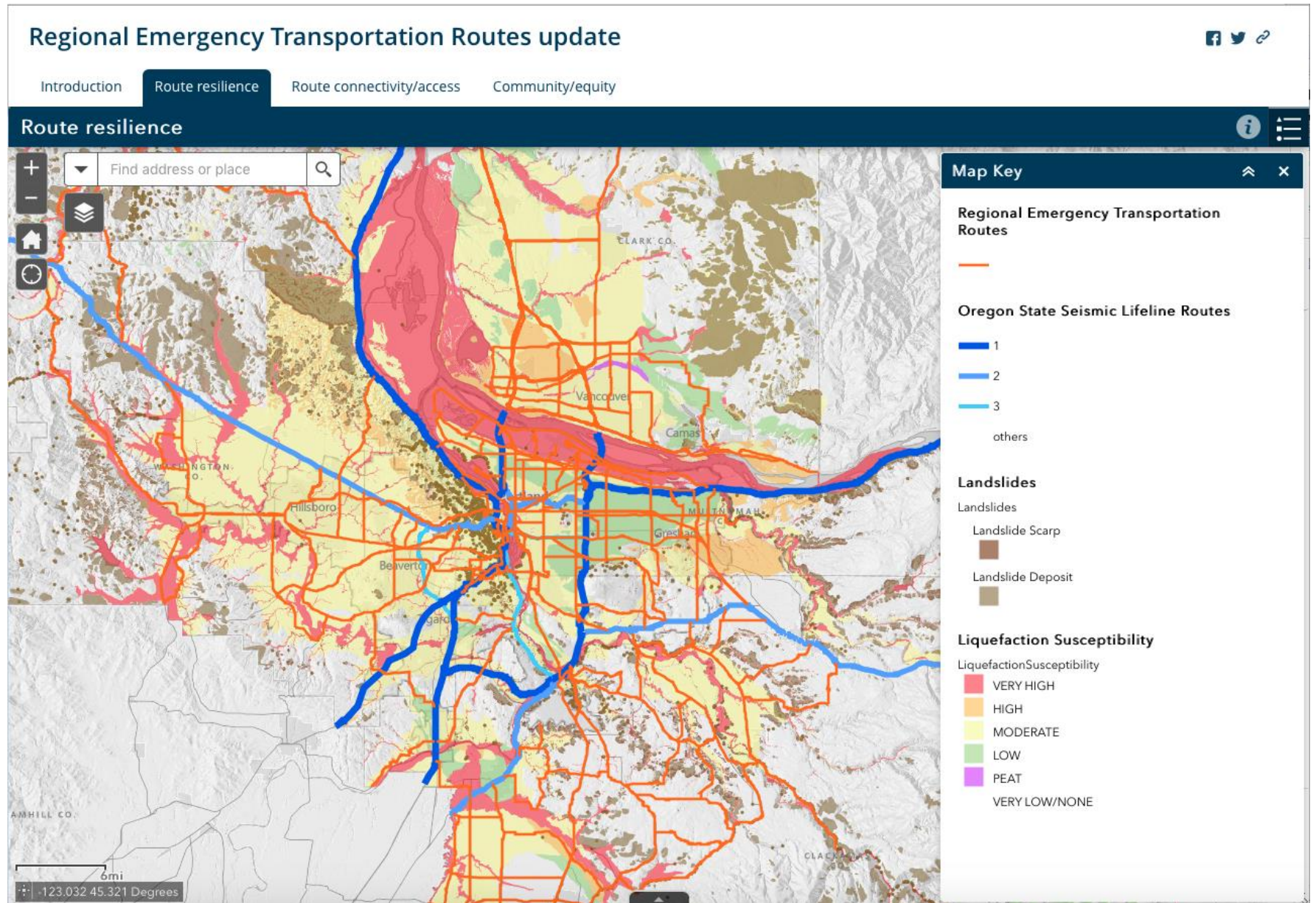




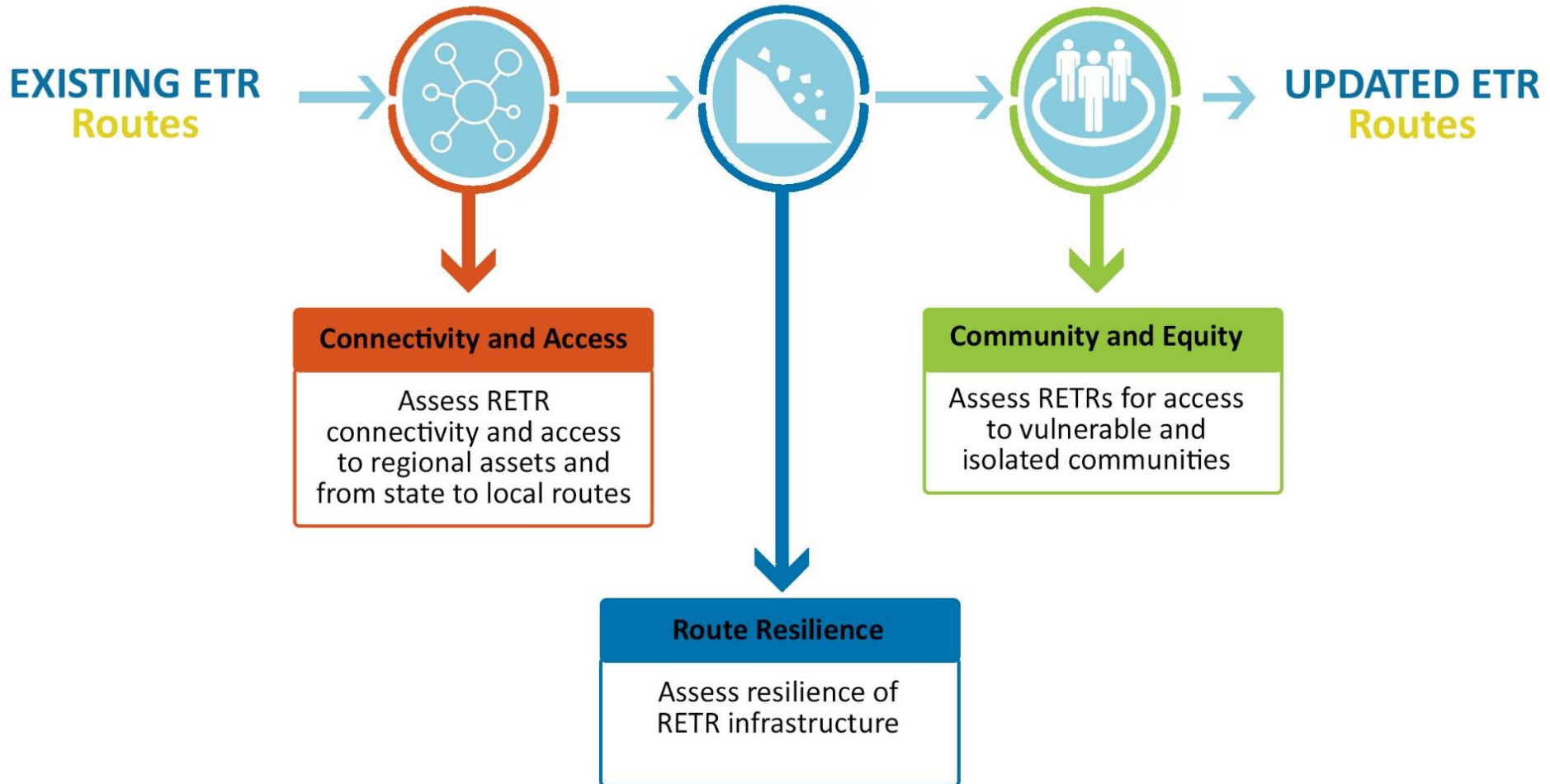


# On-line viewer

<https://arcg.is/0rWCX5>



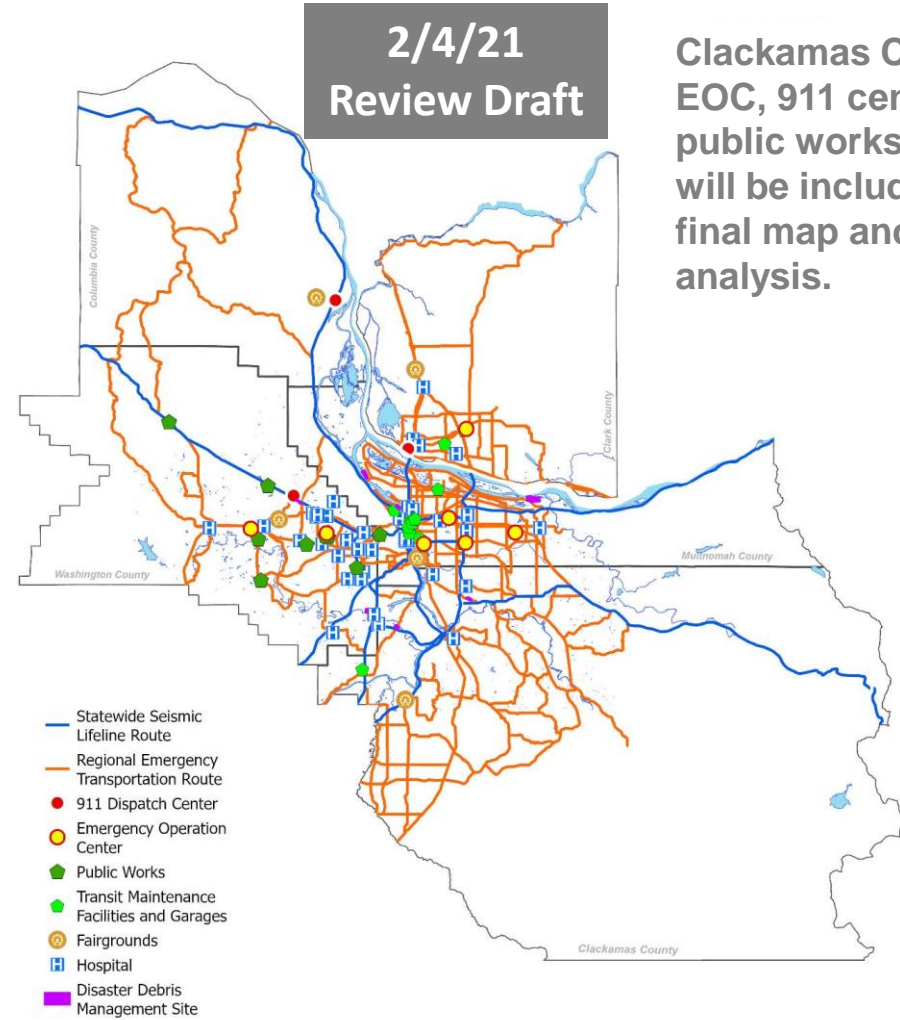
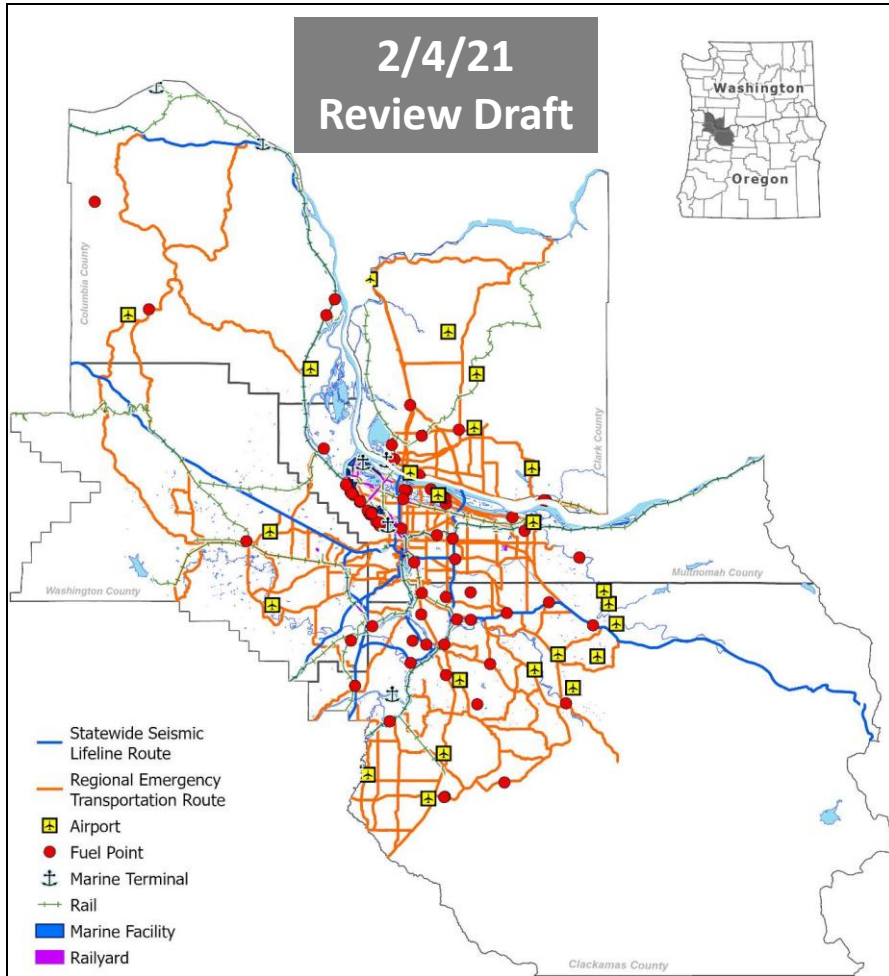
# Factors Applied in RETR Update



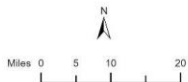


# RETR Connectivity and Access Findings

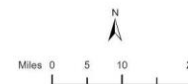
## State/Regional critical assets



Clackamas County EOC, 911 center and public works sites will be included in final map and analysis.



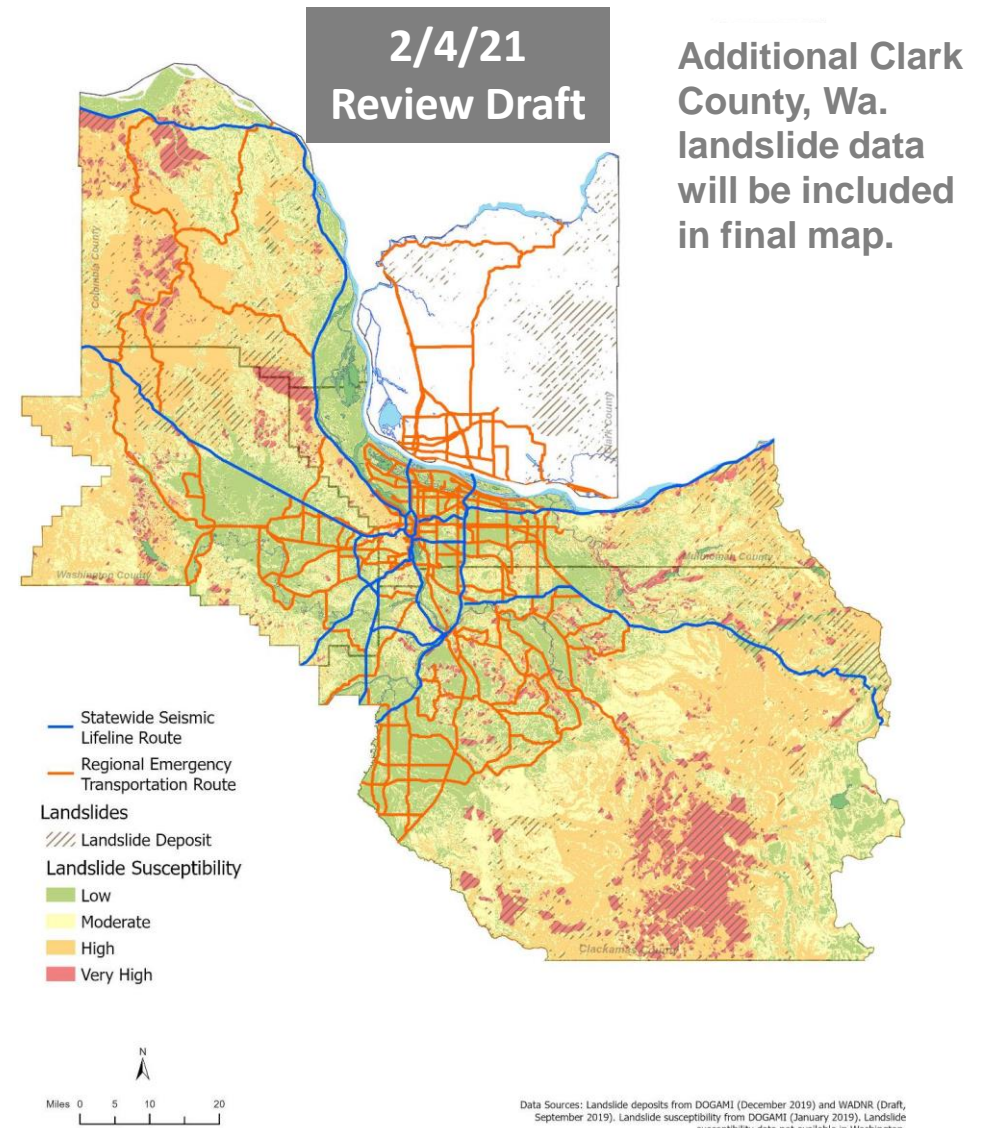
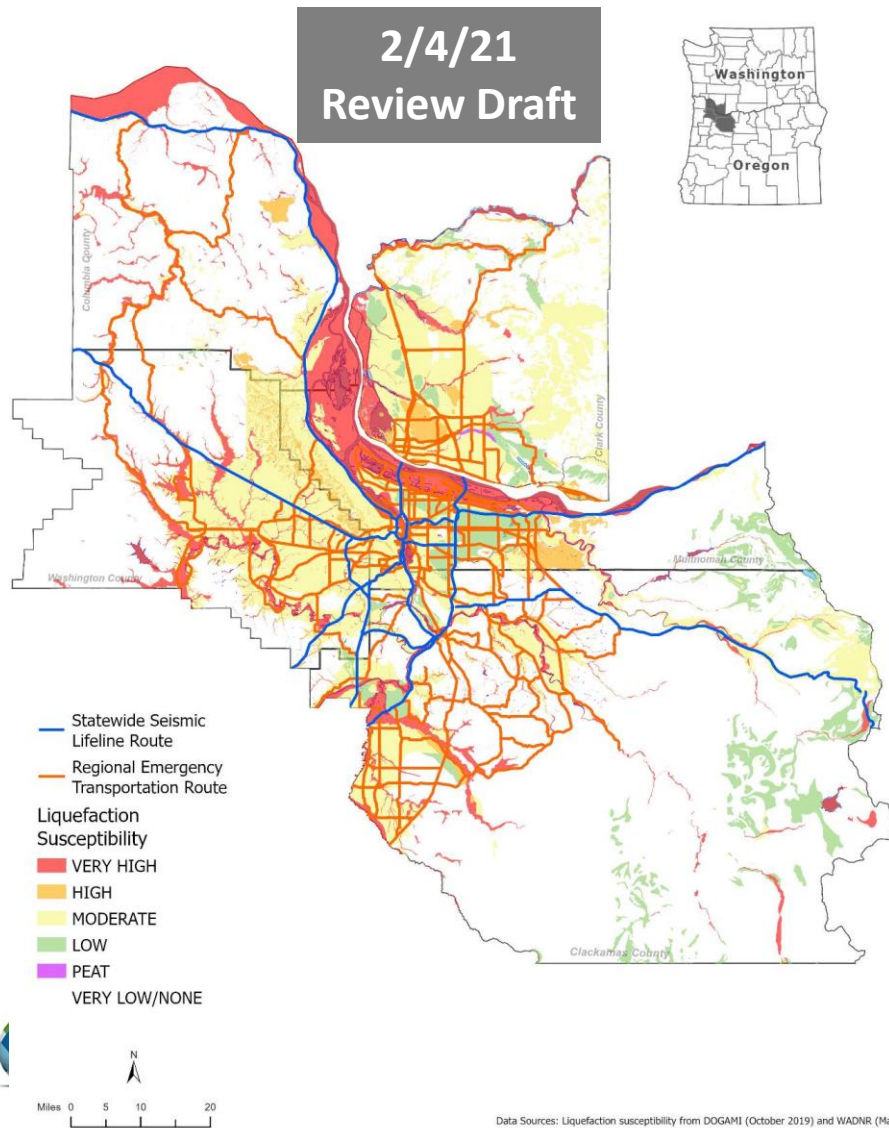
Data Sources: See Appendix E, Table 1 for complete list of critical infrastructure data and sources.



Data Sources: See Appendix E, Table 1 for complete list of essential facilities data and sources.

# RETR Resilience Findings

## Liquefaction and Landslide Hazards



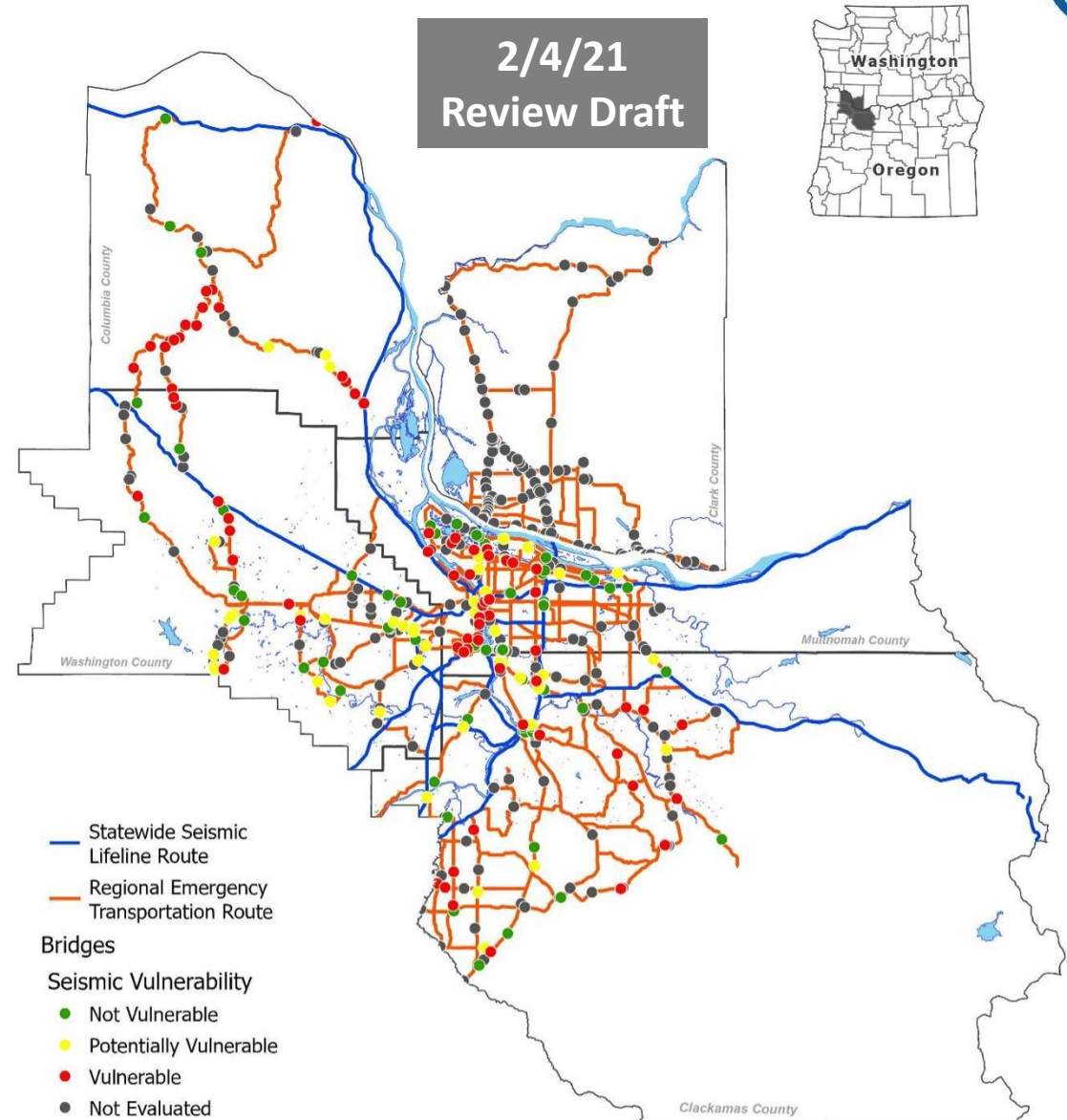
Additional Clark County, Wa. landslide data will be included in final map.



# RETR Resilience Findings

## Vulnerable Bridges

- Vulnerable bridges greatly increase risk in region.
- Crossings of the Columbia and Willamette rivers are very vulnerable.
- Seismic and landslide impacts to roads and bridges will likely hinder connectivity and access during an emergency.

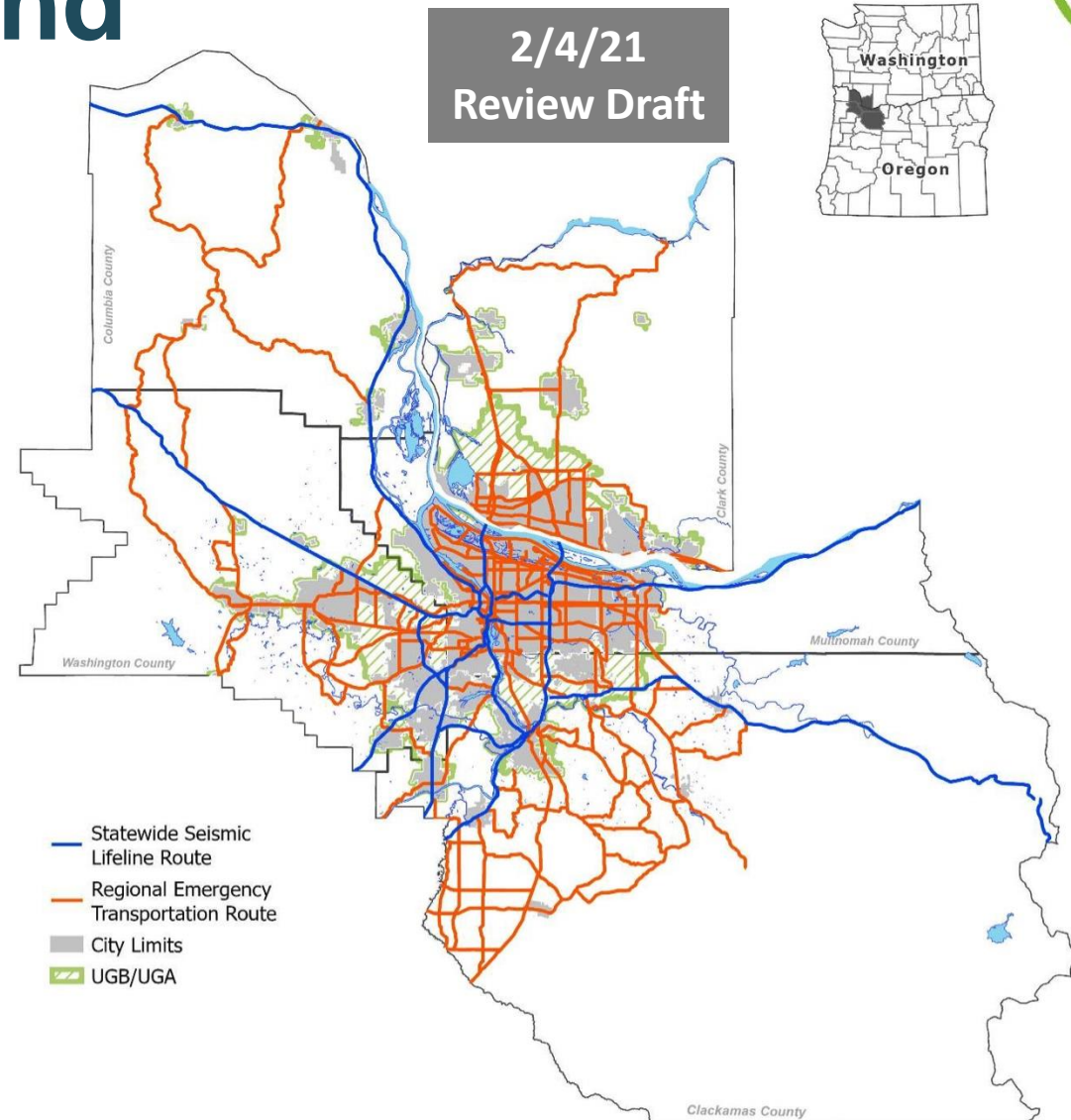


# RETR Community and Equity Findings

## Population Centers and Growth Areas



- provides adequate connectivity and access to communities
- limited alternate routes and transportation services in some rural areas with fewer travel options
- more in-depth equity analysis and community-specific engagement needed in future work

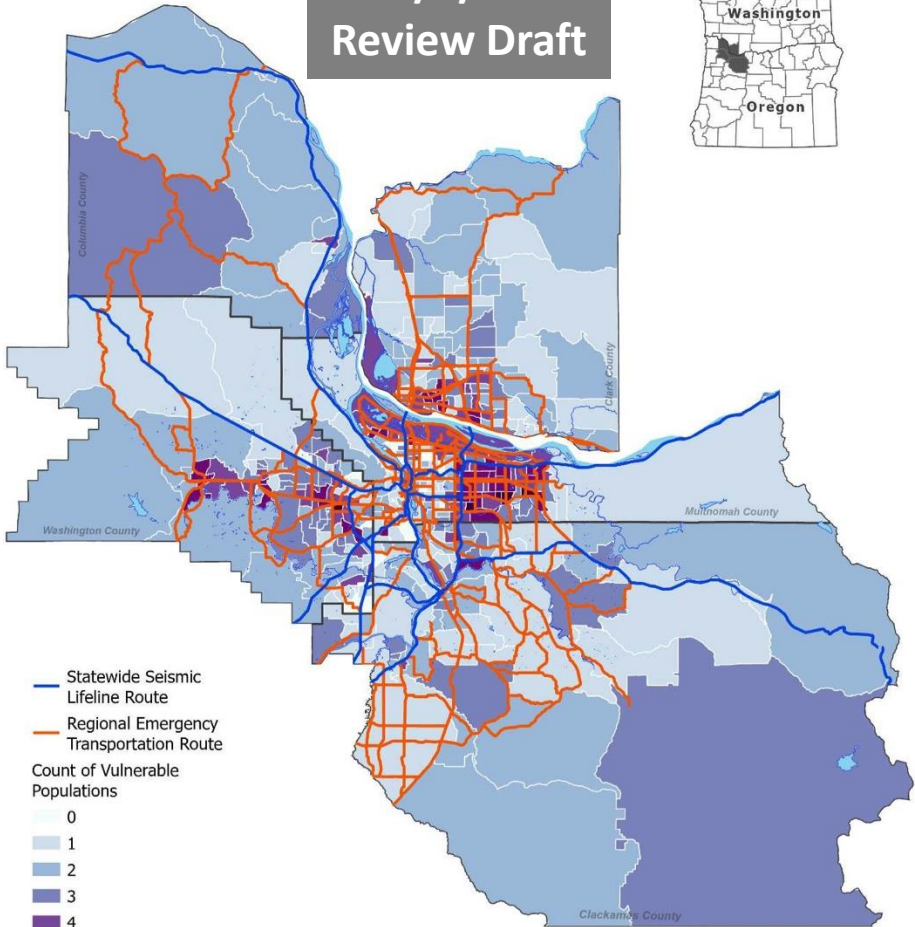




# RETR Community and Equity Findings

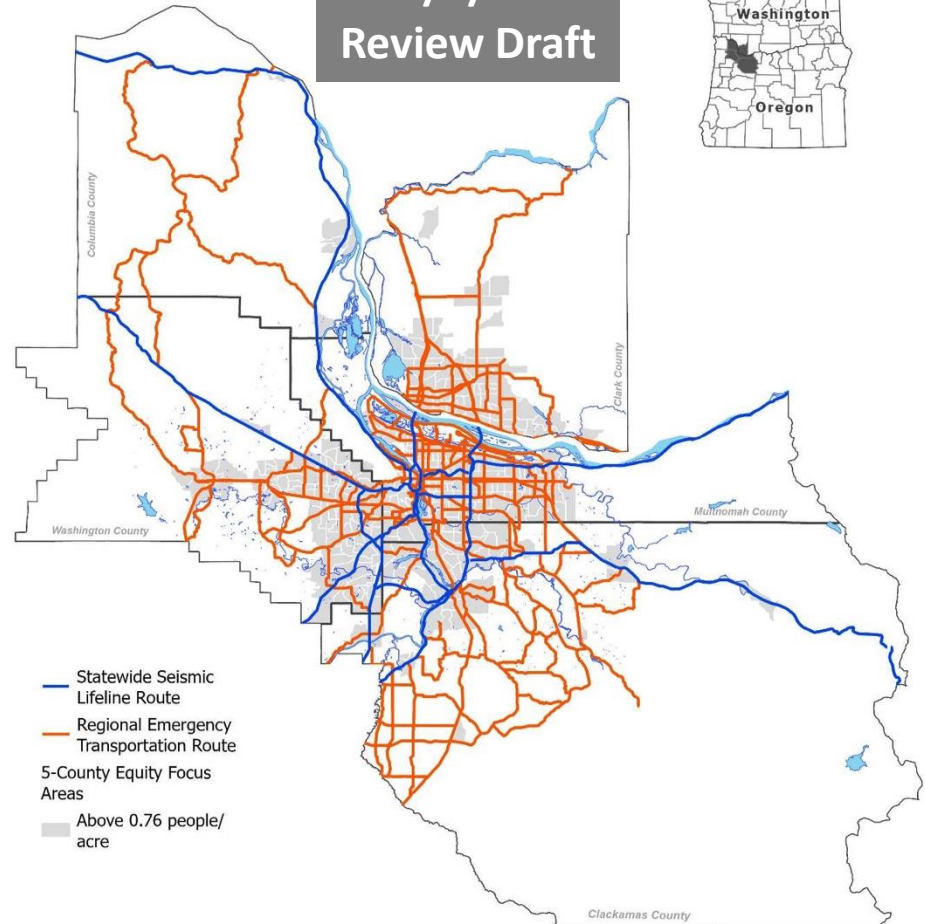
## Vulnerable Populations and Equity Focus Areas

2/4/21  
Review Draft



- Statewide Seismic Lifeline Route
- Regional Emergency Transportation Route
- Count of Vulnerable Populations
- 0
- 1
- 2
- 3
- 4
- 5
- 6

2/4/21  
Review Draft



- Statewide Seismic Lifeline Route
- Regional Emergency Transportation Route
- 5-County Equity Focus Areas
- Above 0.76 people/acre



# Recommendations for Future Work

Recommendation	Level	Lead/Key Partner(s)
1. Integrate regional ETRs into other planning and investment decision-making processes	Regional	Various
2. Prioritize or tier the regional ETRs	Regional	RDPO & Metro (RETR Phase 2)
3. Develop RETR management plans to include: RETR operations in an emergency, evaluation of specific hazard events, maintenance and coordination between jurisdictions and transition to recovery	Local with regional facilitation	Local jurisdictions with facilitation by RDPO & Metro (RETR Phase 2)
4. Better address vulnerable populations	Regional	RDPO & Metro (RETR Phase 2 and Social Vulnerability Tool)
5. Integrate RETR and LETRs into evacuation planning	Local and regional	Various
6. Formalize the RETRs and agree to a plan for consistent updates	Regional	RDPO & Metro (Phase 2)
7. Engineering evaluation of top priority/tier routes for seismic upgrades	Local and regional	TBD
8. Evaluate river routes	Regional/State	Ports, Coast Guard & State Resilience Office
9. Develop equity-centered public messaging for transportation in emergencies	Regional	RDPO Public Messaging Task Force
10. Evaluate bike and pedestrian options for emergency transportation	Local	Various



# RETR Update Phase 2 – Tiering and Operationalization of Routes

- **Tiering Methodology and Prioritization Framework**
  - Develop and apply a GIS-based tiering methodology for comparing the different RETR segments
  - Designate which routes should be evaluated, cleared and opened first, next and last, in a catastrophic scenario
- **Operationalization Guidelines and Agreement(s)**
  - Establish facility owner and operator roles and responsibilities and related coordination activities

# Next Steps

Feb. and March

Broad stakeholder review

March

Refine draft maps and report to address feedback

April/May

SW RTC, JPACT and the Metro Council consider action

May

RDPO Policy Committee considers action

Dissemination Webinar

# Thank you!

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[rdpo.net/emergency-transportation-routes](https://rdpo.net/emergency-transportation-routes)