

Regional Emergency Transportation Routes Update

Southwest Washington Regional Transportation Council

August 4, 2020

Project Team: RDPO, Metro

Thuy Tu Consulting, LLC, Salus Resilience, Cascade GIS & Consulting



SALUS RESILIENCE



Metro



RDPO

Regional Disaster Preparedness Organization

Unified. Prepared. Resilient.



Today's purpose



- Provide update on the Regional ETR Project
- Present process and evaluation framework for updating routes

Outcome: Receive feedback on process and evaluation framework.



Regional Disaster Preparedness Organization

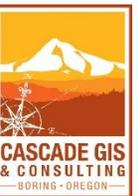
Vision: a secure and disaster resilient region

Mission: local and regional agencies, organizations and communities are prepared and coordinated

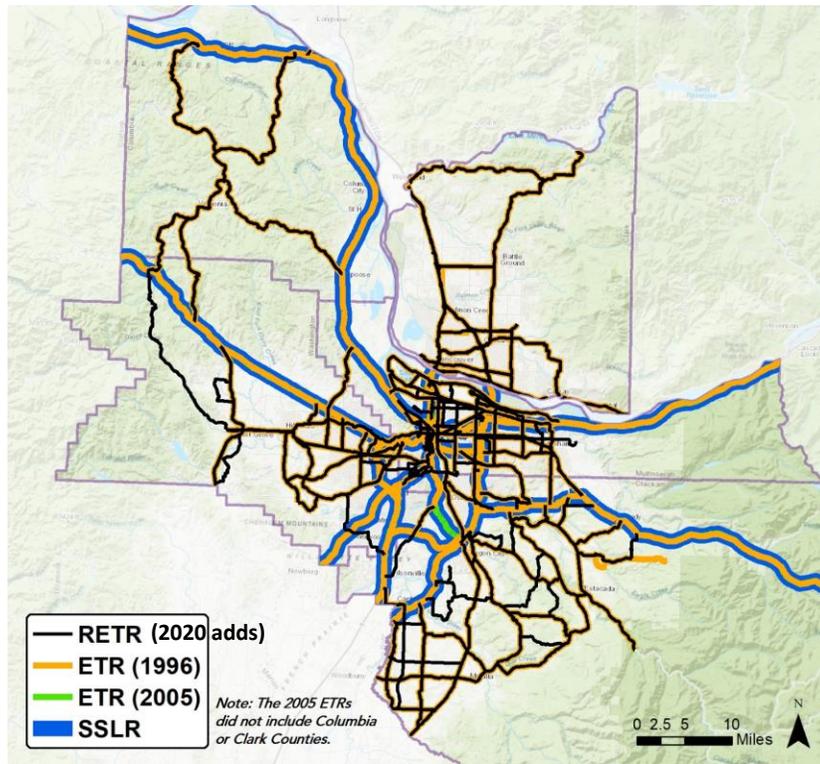
Investments in planning, communications, training and exercise, technology and specialized equipment



SALUS RESILIENCE



Regional ETR Update Project



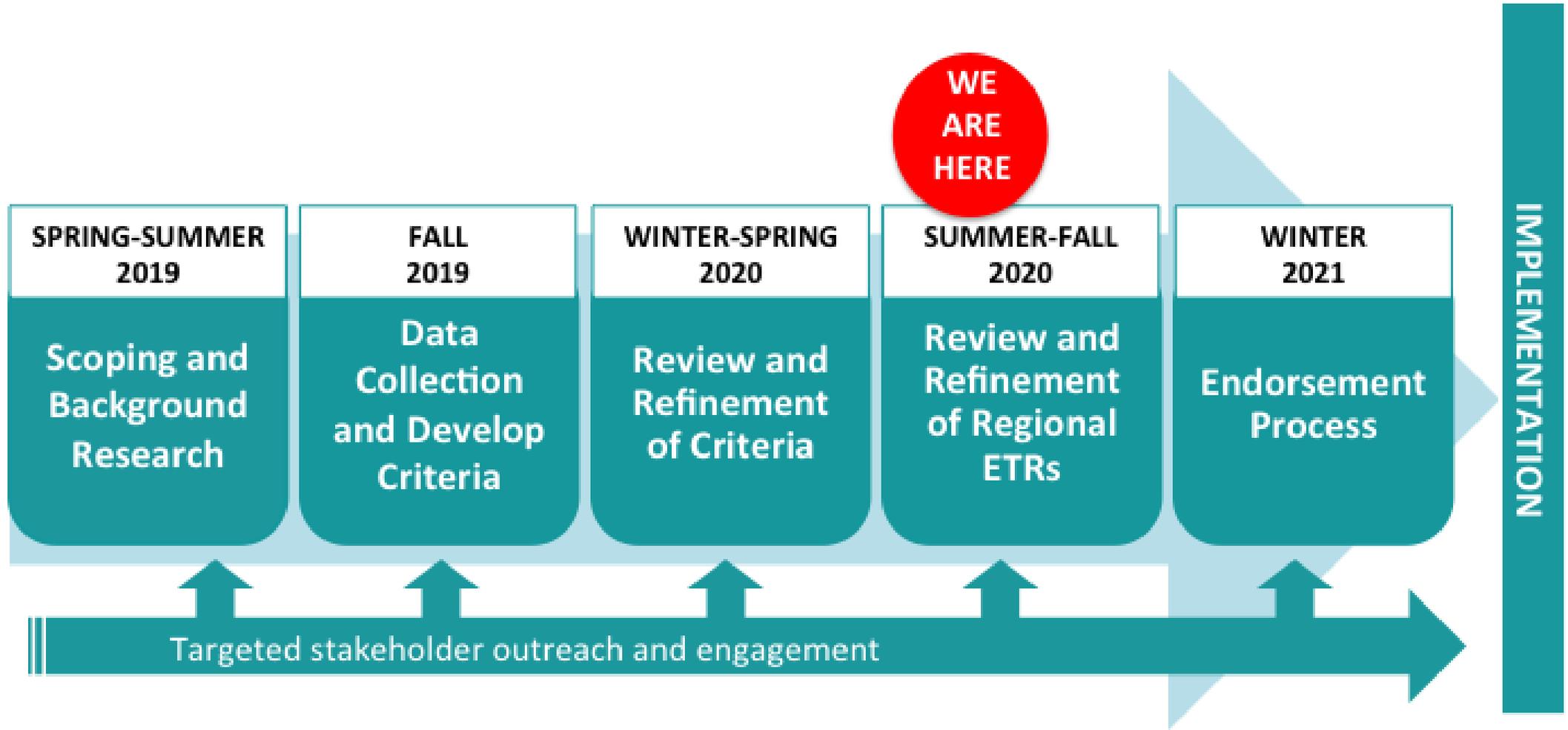
History of Regional ETRs

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



Project timeline



ETR Work Group



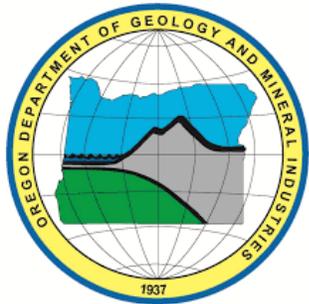
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DISASTER MANAGEMENT



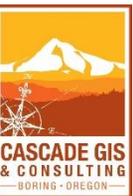
CITY OF GRESHAM OREGON



C-TRAN



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Briefings and presentations since Jan. 2020

JAN



23

ETR WG

FEB



19

TPAC/MTAC
Workshop

MARCH



2

East Multnomah County
Transportation
Committee TAC



6

REMTEC



10

Metro
Council
(Policy)

APRIL



13

East Multnomah County
Transportation
Committee (Policy)



30

Washington County
Coordinating
Committee TAC

MAY



18

Washington County
Coordinating
Committee (Policy)



20

Clackamas
County C-4 Metro
Subcommittee
(Policy)

JULY



9

REMTEC



17

Southwest
Washington
RTAC

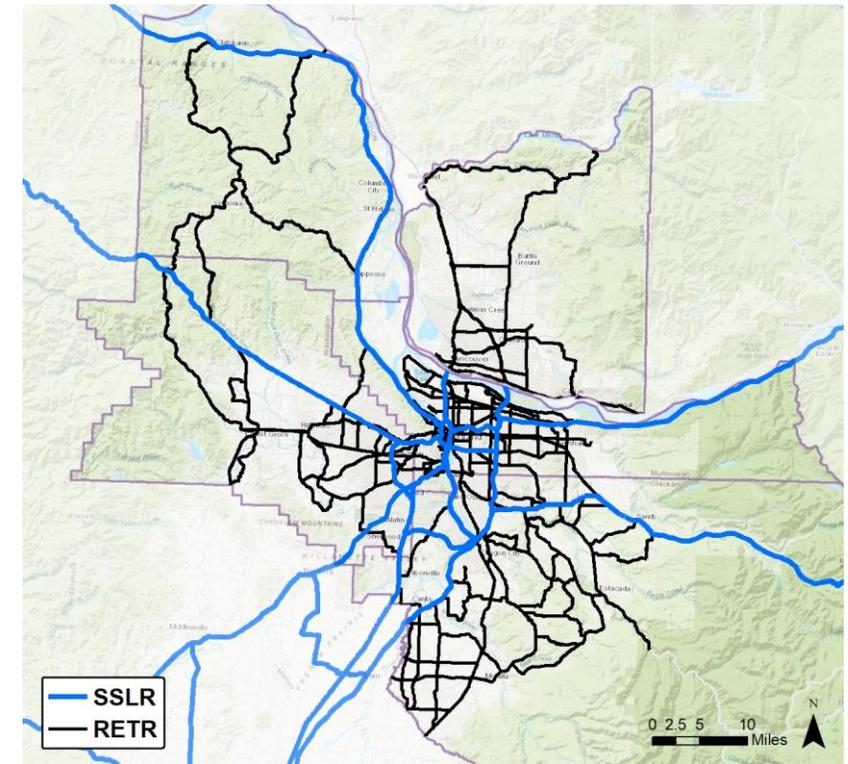


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ETR WG

Definition of emergency transportation routes

Routes used during and after a major regional emergency or disaster to move resources and materials including first responders, fuel, essential supplies, debris, equipment, personnel and patients.

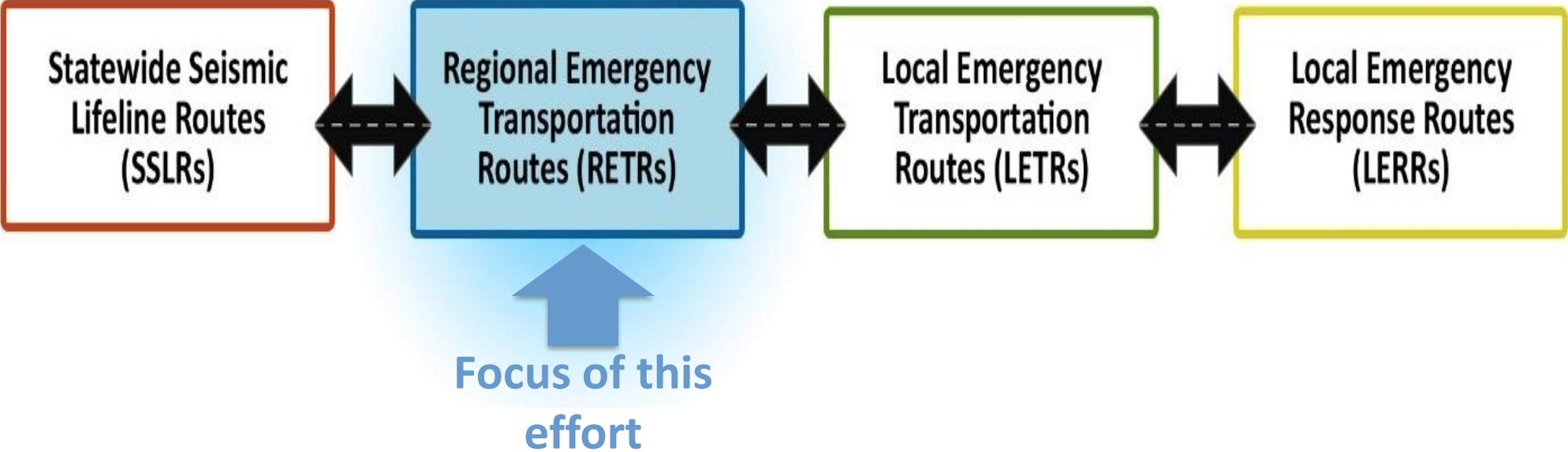


ODOT Statewide Seismic Lifeline Routes (blue)

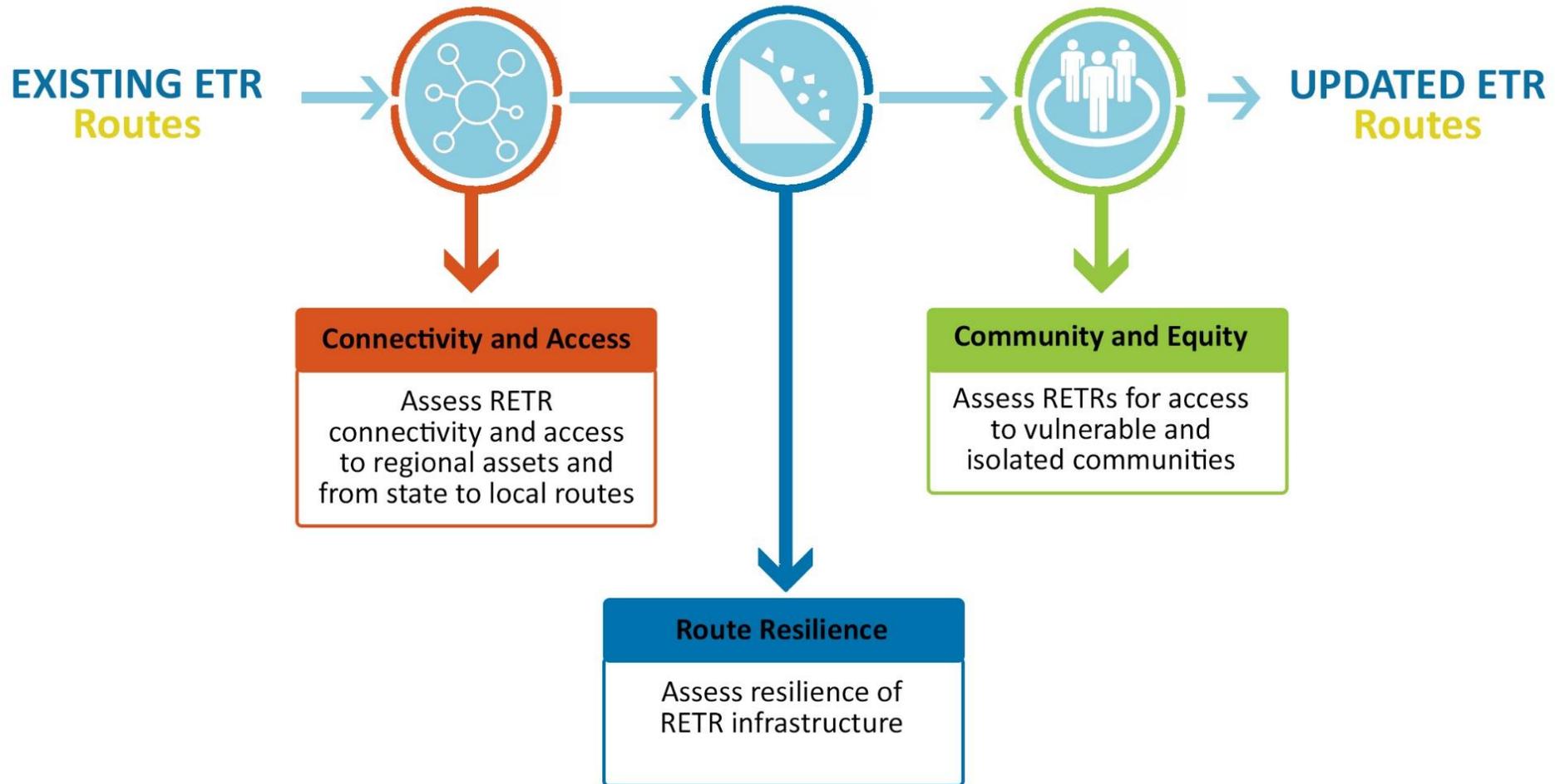
Potential RETRs to be included in the analysis (black)



Tiers of emergency transportation routes



RETR evaluation framework





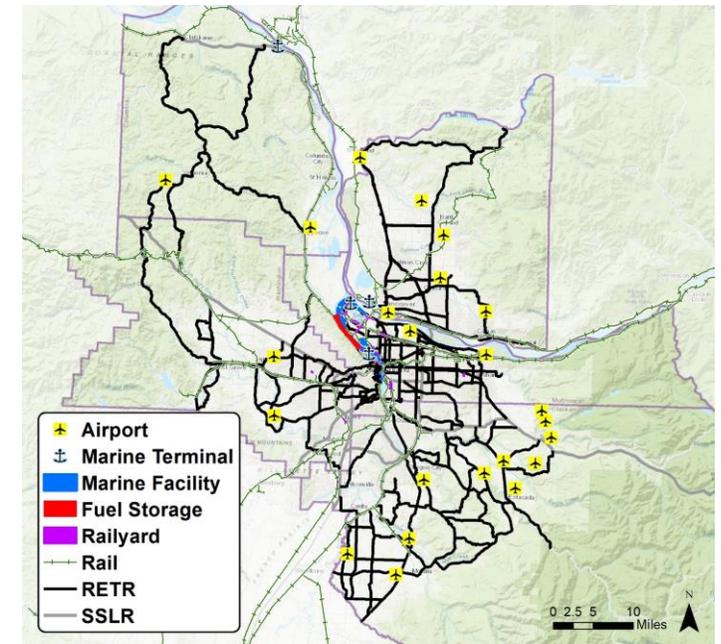
ETR Evaluation Criteria

Connectivity and Access – route proximity to key resources that are likely to be essential after a disaster/seismic event:

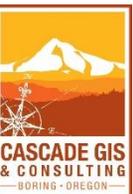
- from state routes to local routes
- from state routes to critical infrastructure, intermodal resources and essential facilities
 - State/Regional
 - County/City
 - Community/Neighborhood
- between local jurisdictions

Connectivity and Access

Assess RETR connectivity and access to regional assets and from state to local routes



Example: Connectivity/access to state and regional critical infrastructure





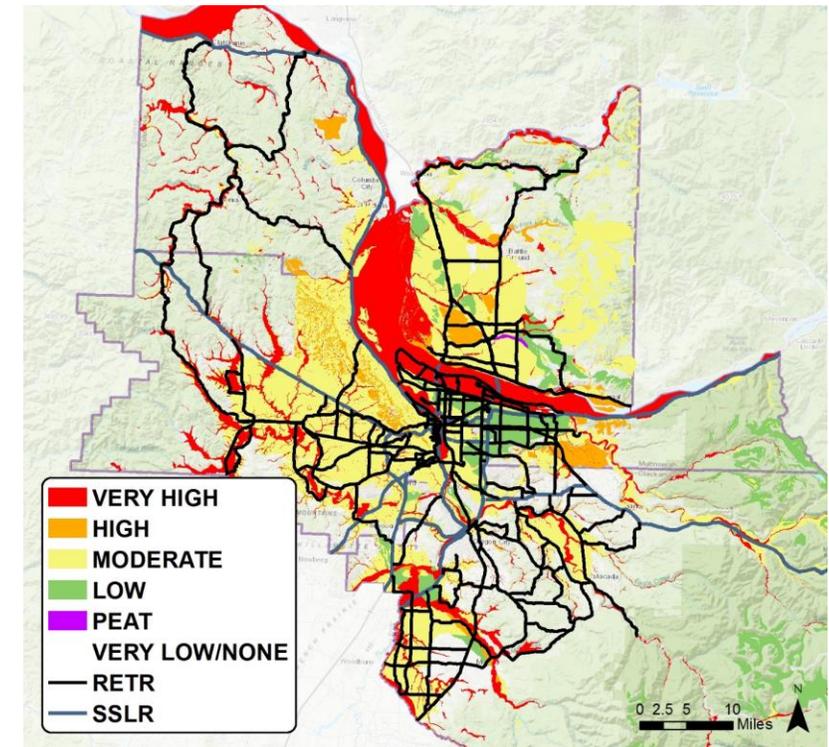
ETR Evaluation Criteria

Route Resilience – the vulnerability of the route (including bridges and culverts) to seismic and other natural hazards:

- Liquefaction and landslide hazards (DOGAMI and WADNR)
- Vulnerable bridges/culverts including overpasses
- Flood hazards
- Potential sources of debris (unreinforced masonry districts)
- Condition of pavement, tunnels, bridges and culverts
- Utility vulnerability

Route Resilience

Assess resilience of RETR infrastructure



Example: Liquefaction hazard



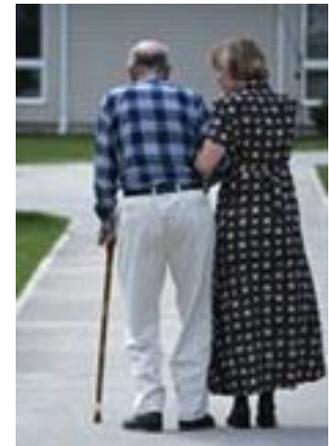
ETR Evaluation Criteria

Community and Equity

Assess RETRs for access to vulnerable and isolated communities

Community and Equity – route proximity to population centers, isolated populations and vulnerable populations for purposes of equitable rescue operations, emergency response or evacuation and providing equitable access to critical destinations (e.g., hospitals, temporary shelters).

This criteria will account for race, ethnicity, income, English proficiency, age, zero vehicle households and forecasted population and job growth across the five-county region.



Emerging recommendations for future work

- Integrate routes in future planning and investments and identify them in transportation and emergency plan
- Plan for management and operations of ETRs and transition from emergency response to recovery
- Evaluate vulnerability of RETRs for all hazards in more detail
- Develop public information and messaging
- Plan for bike and pedestrian access needs
- Evaluate river routes
- Address vulnerable populations in more detailed planning
- Update routes on a regular basis (every 5-10 years)
- Incorporate this effort into upcoming RDPO transportation recovery project



Next steps

Aug. to Oct. 2020

- Apply criteria and methodology to update RETRs
- Develop recommendations for future planning work

Oct. to Dec. 2020

- Report back and identify refinements to draft Regional ETR maps and report (*including recommendations for future work*)

2021

- Final review and endorsement process
- Regional dissemination workshop (data, maps and report)



Thank you!

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rdpo.net/emergency-transportation-routes