

Regional Emergency Transportation Routes Update

Draft criteria and approach for updating RETRs

Spring 2020

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SALUS RESILIENCE



Metro



RDPO

Regional Disaster Preparedness Organization

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Today's purpose



- Provide update on the Regional ETR Project
- Present process for updating routes
- Seek feedback on draft ETR definitions and criteria

Outcome: Receive feedback on draft ETR definitions, framework and criteria.



Regional Disaster Preparedness Organization

Vision: a secure and disaster resilient region

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

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



Regional ETR Update Project

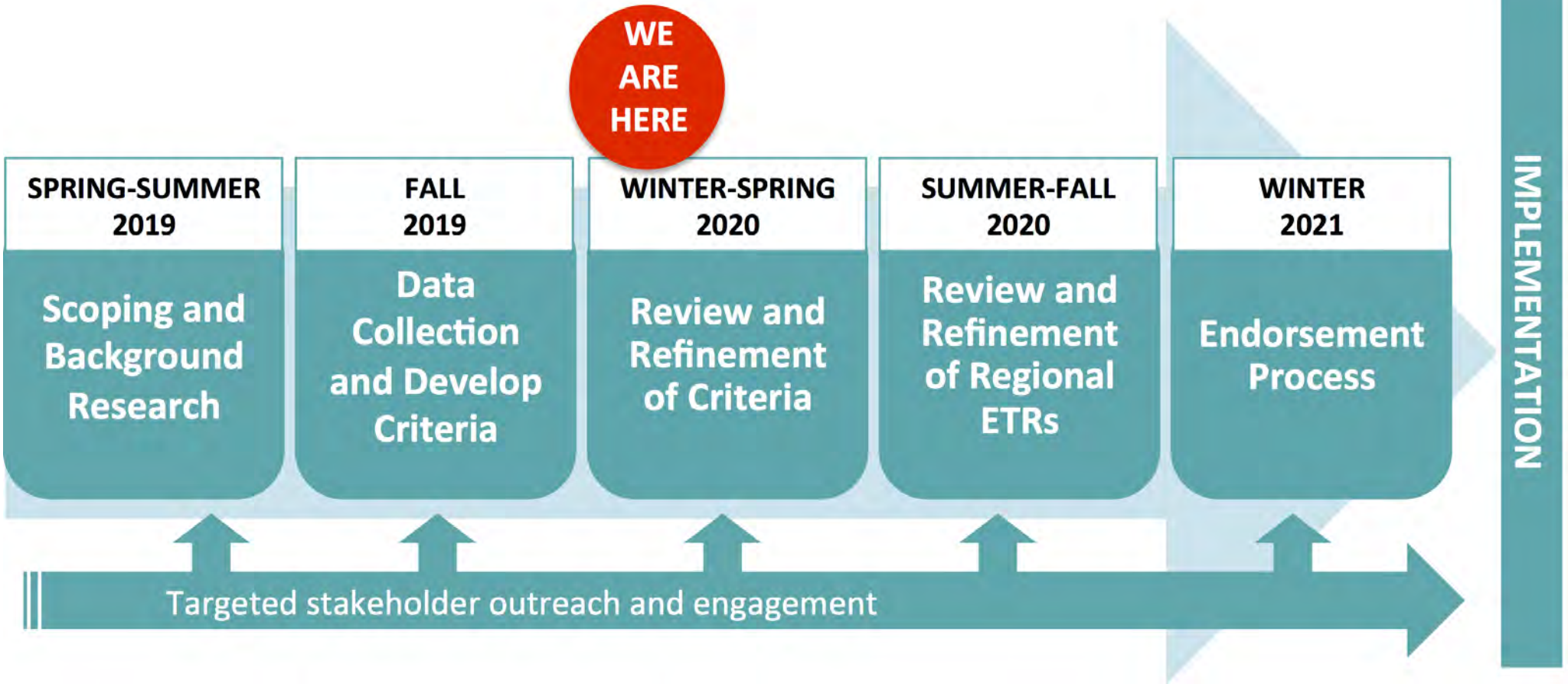


Purpose: To update designated regional Emergency Transportation Routes (ETRs) for the five-county region.

- Update 1996 and 2006 ETRs
- Improve understanding of resilience of ETRs
- Raise visibility of ETRs
- Facilitate regional dialogue regarding resilience and recovery



Project timeline



Key project deliverables

Today's focus

Evaluation Framework Memo - Memorandum outlining process and proposed evaluation framework for RETR update including methodology and evaluation criteria.



Data Collection Memo - Memorandum documenting data collection, formatting, and methodology.

Draft Maps and Report - Draft updated RETRs and report for stakeholder review.



GIS Dataset - GIS Dataset for current and future planning efforts.

Final Report and Maps - Final report and mapping, with recommendations for future work.



ETR Work Group



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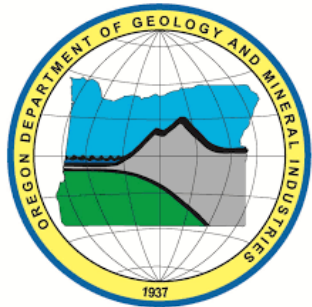


DISASTER MANAGEMENT



CITY OF GRESHAM OREGON

Always Here, Always Ready!

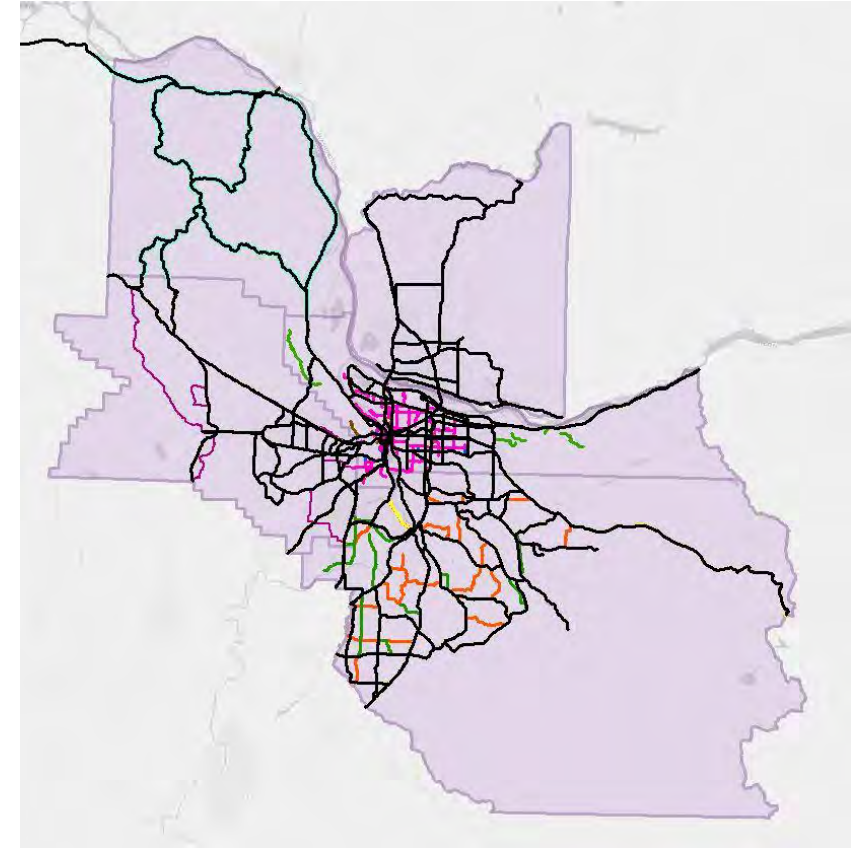


C-TRAN



Definition of emergency transportation routes

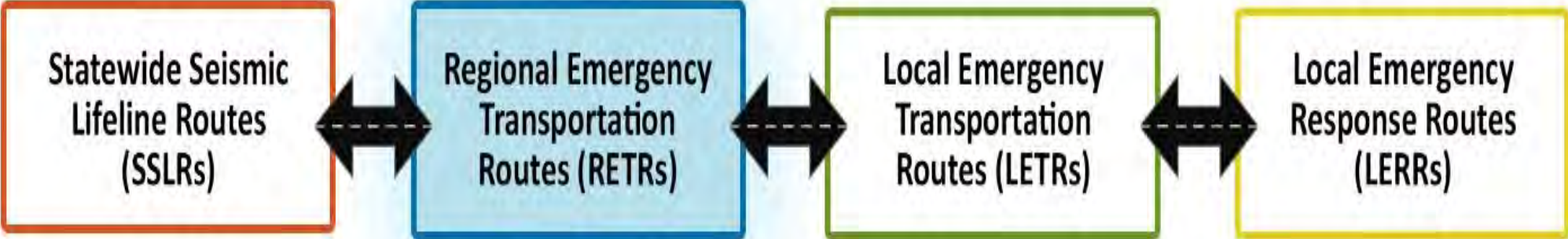
Routes used during and after a major regional emergency or disaster to move resources and materials including first responders, fuel, essential supplies, debris, equipment, personnel and patients.



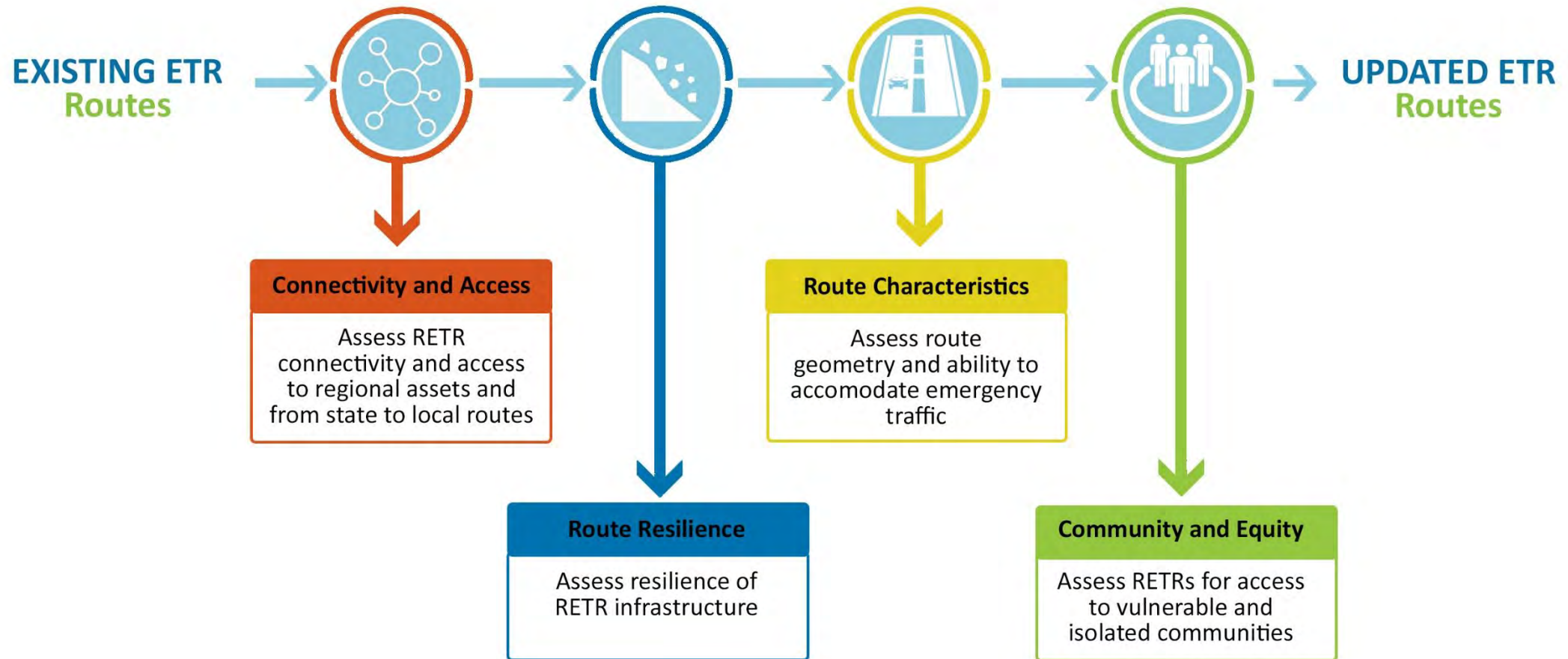
Inventory of potential regional routes



Tiers of emergency transportation routes



Proposed RETR evaluation framework





ETR Evaluation Criteria

Connectivity and Access

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

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
- between local jurisdictions





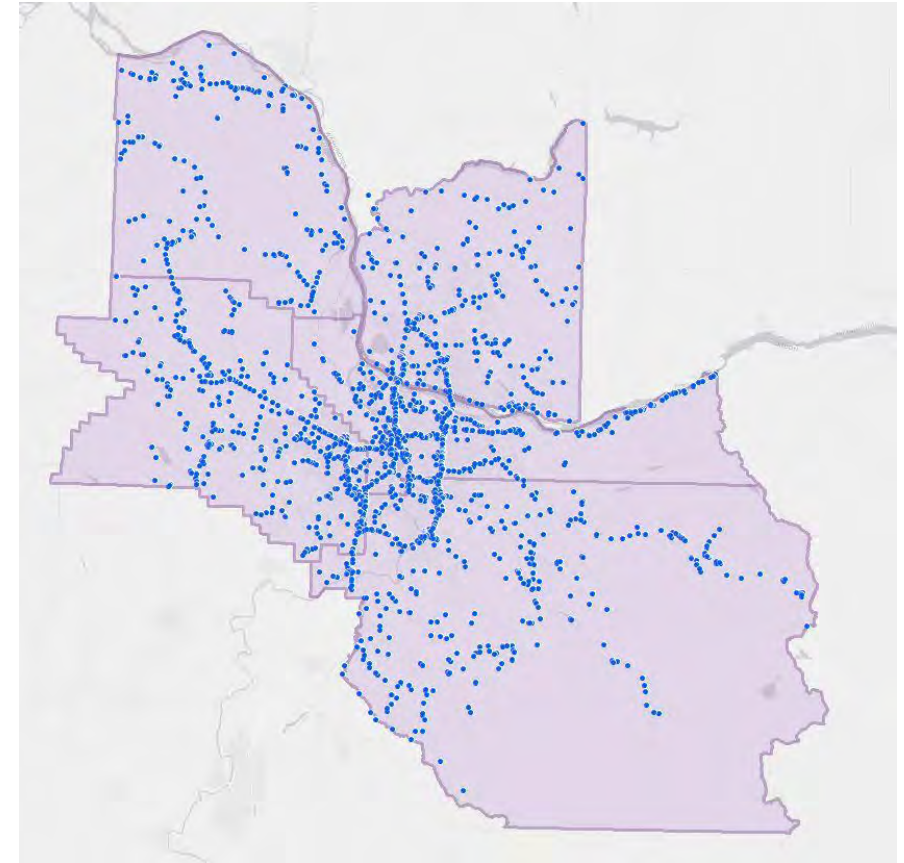
ETR Evaluation Criteria

Route Resilience

Assess resilience of RETR infrastructure

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

- Liquefaction and landslide hazards (DOGAMI and WADNR)
- Relatively flat routes without major gradients and at level alternatives
- Vulnerable bridges/culverts including overpasses
- Potential sources of debris (unreinforced masonry districts)
- Condition of pavement, tunnels, bridges and culverts
- Utility vulnerability



Inventory of bridges and culverts





ETR Evaluation Criteria

Route Characteristics

Assess route geometry and ability to accommodate emergency traffic

Route Characteristics – the characteristics of the route itself:

- Pavement width and geometry (number of travel lanes, turning radius, etc.)
- Ability to control use/access (on/off ramps, signalized intersections, presence of medians, etc.)
- Functional classification and roadway designation
- Average daily traffic (ADT) and traffic flow characteristics
- Freight access (e.g., heavy and oversized vehicles, regional freight route, over-dimensional route designation)





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
- Plan for management of ETRs and transition from emergency response to recovery
- Evaluate vulnerability of RETRs for all hazards
- 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)



Next steps

Spring /Summer 2020

- Finalize criteria and methodology based on input
- Apply criteria and methodology to update RETRs
- Develop recommendations for future planning work

Fall 2020

- Report back and refinement of Regional ETR Maps and Report



Thank you!

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rdpo.net/emergency-transportation-routes

