

APPENDIX E

Lane Inventory and Geometry

This appendix includes data sheets on the lane inventory and horizontal geometry of OR 22.

OR 22 (W) Evaluation Criteria for Alternatives

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This technical memorandum is largely based upon an existing document developed during earlier efforts of the project management team. Criteria are grouped according to three categories: Transportation Operations, Project Impacts, and Implementation. New to the list of evaluation criteria are Plan Consistency and Flexibility.

Evaluation Criteria

The evaluation criteria for the OR 22(W) EMP will be used by PMT/TAC to evaluate the performance of each alternative against a broad range of important project characteristics, representing a full range of stakeholder values. The evaluation criteria tie back to the project's problem statement, and need to highlight differences among alternatives.

The evaluation process is based on a comparison of quantitative data, such as for mobility, land use, economic data, and costs; and qualitative data with supporting facts, such as for operations, environmental impacts, and construction phasing. Alternatives will be ranked according to a "consumer reports" type of scale made up of the following four options:

- Alternative directly and positively addresses the intent of the criterion.
- ◐ Alternative partially meets the intent of the criterion, addressing some but not all of the objectives.
- Alternative does not support the intent of, or negatively impacts, the criterion.
- N/A Alternative neither meets nor does not meet the intent of the criterion. Criterion does not apply.

The final draft evaluation criteria are described as follows.

Transportation Operations

MOBILITY

Objective: To provide a viable transportation solution that accommodates future growth as described in the Salem and Polk County Comprehensive Plans, meeting appropriate mobility standards for the Statewide Expressway and Freight Route (measured as a ratio of volume to capacity (v/c) for state facilities), and addressing regional travel needs of residents, businesses, and industries. Relevant Oregon Highway Plan (OHP) mobility standards are 0.70 outside the MPO (west of the Oak Grove Road boundary) and 0.80 inside the MPO (east of the Oak Grove Road boundary); ODOT Highway Design Manual (HDM) mobility standards for the expressway are 0.65 outside the MPO and 0.75 inside the MPO.

Measure: OHP v/c for no-build, and HDM v/c for build alternatives.

- Alternative improves expected future traffic flow along OR 22(W) corridor when compared to the future no-build alternative. The corridor and highway approaches at all study intersections meet the relevant mobility standards.
 - ◐ Alternative improves expected future traffic flow along OR 22(W) corridor when compared to the future no-build alternative. The corridor and the majority of study intersections meet the relevant mobility standards.
 - Expected future traffic flow conditions along OR 22(W) corridor for alternative are the same or worse when compared to the future no-build alternative. The corridor and/or the majority of study area intersections do not meet the relevant mobility standards.
- N/A Alternative neither meets nor does not meet the intent of the criterion. Criterion does not apply.

ACCESS MANAGEMENT

Objective: Address relevant state access management standards as outlined in OAR 734-051 (Division 51) for the OR 22(W) corridor, including spacing between interchanges, between interchange tapers, between entrance and exit ramps along a highway segment, and between public and private approaches on statewide highways. The relevant spacing standards include 1.9 miles between interchanges (measured between crossroad centerlines), 1 mile between the start and end of tapers of adjacent interchanges, 1,320 feet between an interchange ramp terminal and the next access point, and 2,640 feet between public and private at-grade approaches along a statewide highway and expressway.

Measure: Spacing (feet) between interchanges and between access points.

- New access or improvements recommended by the alternative are consistent with state highway access management standards.
- ◐ New accesses or improvements recommended by the alternative contain access spacing provisions, or improve access management over existing conditions. Though access spacing standards are not met, spacing is moving toward meeting the standard.
- Alternative, through provision of new access or improvements, causes additional conflicts between the state highway, local roads, and/or private

- driveways.
- N/A Alternative neither meets nor does not meet the intent of the criterion.
Criterion does not apply.

CONNECTIVITY

Objective: Support ODOT, Polk County, SKATS, and City of Salem goals for providing direct and efficient access to and between industrial and commercial centers, regional intermodal freight facilities, and statewide transportation corridors.

Measure: Travel distance.

- Alternative provides new connection or facility that provides direct and efficient access; or substantially improves access of an existing connection point or facility.
 - ◐ Alternative has slight or no improvement to connection point or facility.,
 - Alternative limits or reduces transportation options or connectivity.
- N/A Alternative neither meets nor does not meet the intent of the criterion.
Criterion does not apply.

SAFETY

Objective: To reduce conflicts and improve operational safety for all current and future users of the corridor, including autos, freight, transit, bicyclists, and pedestrians. Minimize emergency response times.

Measure: Number of potential conflict points/movements, comparison of alternative with design standards, impact on Top 10% SPIS sites, qualitative assessment of change in emergency response times.

- Alternative addresses known operational safety issues, reduces potential conflicts, and does not add new operational safety concerns. Emergency response times are improved.
 - ◐ Alternative does not add new operational safety concerns, does not directly address or minimally address known safety issues, and/or neither improves nor harms emergency response times.
 - Alternative adds conflict points or otherwise creates additional safety problems for users, and may increase emergency response times.
- N/A Alternative neither meets nor does not meet the intent of the criterion.
Criterion does not apply.

Project Impacts

NATURAL ENVIRONMENT

Objective: To avoid, minimize, and/or mitigate impacts to environmentally sensitive areas.

Measure: Qualitative assessment of alternative's impact to farm, forest, and wetlands; qualitative assessment of alternative's impact on wildlife and air quality.

- Alternative enhances or has no adverse impacts to environmentally

- sensitive areas, on wildlife habitat, and air quality.
- Alternative has minimal adverse impacts on environmentally sensitive areas, on wildlife habitat, and air quality, which are expected to be not difficult to mitigate.
- Alternative has adverse impacts on environmentally sensitive areas, on wildlife habitat, and air quality that are considered substantial and/or may not easily be mitigated.
- N/A Alternative neither meets nor does not meet the intent of the criterion. Criterion does not apply.

BUILT ENVIRONMENT (LAND USE AND SOCIAL)

Objective: To avoid, minimize, and/or mitigate impacts to the built environment, including impacts to developable lands, historic properties, and low income, elderly, or minority populations.

Measure: Number of acres of developable lands displaced; number of low income, elderly, or minority populations displaced; number of residences displaced; amount and level of impact on historic properties; ability to appropriately mitigate impacts.

- Alternative avoids or contains minimal impacts to developable lands; residential parcels, and historic properties.
- Alternative has minor impacts to developable lands, residential parcels, and/or historic properties, which are expected to be mitigated.
- Alternative has impacts to developable lands, residential parcels, and/or historic properties that are considered substantial and/or may not easily be mitigated.
- N/A Alternative neither meets nor does not meet the intent of the criterion. Criterion does not apply.

BUSINESS (ECONOMIC DEVELOPMENT/DISPLACEMENT)

Objective: Recommended transportation improvements that are supportive of, and provide access to, business and industry in the area and will minimize need for business relocation or elimination.

Measure: Number of businesses to be impacted by alternative, including impacts such as relocation or elimination, reduced parking, limited access, and lower employment .

- Results in no relocation/elimination or other harmful impacts to an existing operating business.
- Minimal relocation/elimination (<5) of operating businesses or vacant buildings; or reduces parking, access, or employment.
- Significant relocation/ elimination (>5) of operating businesses or vacant buildings; or significantly reduces parking, access, or employment.
- N/A Alternative neither meets nor does not meet the intent of the criterion. Criterion does not apply.

Implementation

PLAN CONSISTENCY

Objective: To implement project(s) consistent with federal, state, county, regional, and city plans.

Measure: Statement of consistency from government authorities or note of inconsistent elements.

- Alternative is consistent with plans and no amendment is required.
- ◐ Alternative requires a straightforward plan amendment.
- Alternative requires a goals exception.
- N/A Alternative neither meets nor does not meet the intent of the criterion.
Criterion does not apply.

FLEXIBILITY

Objective: To implement project(s) with potential for phasing or separable components and fundable.

Measure: Number of phases or separable components possible and fundable.

- Alternative can be a phase of a larger project or separated into components in many ways and funded.
- ◐ Alternative can be a phase of a larger project or separated into components in only a few ways and funded.
- Alternative cannot be a phase of a larger project nor separated into components and funded.
- N/A Alternative neither meets nor does not meet the intent of the criterion.
Criterion does not apply.

COST

Objective: To serve as a strong steward of public funds, providing a balanced, fundable solution with opportunities for local funding leverage.

Measure: Planning-level cost estimates; comparison of project alternatives with other projects around the state for funding competitiveness purposes; cost-effectiveness; benefit-cost ratio.

- Alternative provides a balanced, fundable solution with opportunities for local funding.
- ◐ Alternative may be balanced but funding competitiveness is uncertain.
- Alternative is not competitive for state and/or federal funds, and/or does not provide opportunities to leverage local funds.
- N/A Alternative neither meets nor does not meet the intent of the criterion.
Criterion does not apply.