

Memo



Date: April 9, 2021
To: Kim Ellis, Metro, and Lidwien Rahman, ODOT
From: Susan Wright, PE, Molly McCormick, and Bryan Graveline, Kittelson & Associates, Inc.
Project: Regional Mobility Policy Update
Subject: Screening and Evaluation Criteria

Direction Received and Next Steps:

The revised draft of this memorandum was completed in December 2020. The memorandum identified 10 screening criteria categories, which were then pared down to five that were applied in the Draft Most Promising Mobility Measures for Testing Memorandum including access, travel choices, reliable and efficient mobility, safety, and other regional goals. The final screening criteria were selected based on feedback from stakeholders who participated in the December 2020 TPAC and MTAC workshop, the Project Management Team, and the Project Executive Team on the draft screening criteria described in this memorandum as well as the potential policy elements documented in the Potential Mobility Policy Elements Memorandum. Although equity is part of the “other regional goals” category, each measure that advances will be tested during the case studies to further determine if it can be utilized to verify equitable outcomes.

OVERVIEW

The Regional Transportation Plan (RTP), Oregon Transportation Plan (OTP), and Oregon Highway Plan (OHP) include a vision that acknowledges transportation has a role in the economy and people’s quality of life. The vision is for everyone to have access to an affordable transportation system with travel options.

Regional Transportation Plan (RTP)

RTP VISION

In 2040, everyone in the Portland metropolitan region will share in a prosperous, equitable economy and exceptional quality of life sustained by a safe, reliable, healthy, and affordable transportation system with travel options.

Vision approved by the Metro Policy Advisory Committee, Joint Policy Advisory Committee on Transportation and the Metro Council in May 2017.

The RTP identifies four policy priorities and defines transportation goals, objectives, and performance measures that provide an outcomes-based framework to guide transportation planning and decision making in the region. As part of the last RTP update, these goals, objectives, and performance measures were used to identify recommended investments and are now being used to monitor how the transportation system is performing between RTP updates. *Attachment A includes RTP goals and objectives. Attachment B includes the nine system performance measures that have aspirational targets and provide a basis for measuring expected performance of the RTP¹.* The RTP also addresses state-mandated targets for reducing per capita vehicle miles travel per capita greenhouse gas emissions and reliance on single-occupant vehicles (SOV) by including non-SOV mode split targets.

RTP POLICY PRIORITIES



RTP DESIRED OUTCOMES



Six desired outcomes for the greater Portland region

Equity

The benefits and burdens of growth and change are distributed equitably.

Vibrant communities

People live, work and play in vibrant communities where their everyday needs are easily accessible.

Economic prosperity

Current and future residents benefit from the region's sustained economic competitiveness and prosperity.

Safe and reliable transportation

People have safe and reliable transportation choices that enhance their quality of life.

Clean air and water

Current and future generations enjoy clean air, clean water and healthy ecosystems.

Climate leadership

The region is a leader in minimizing contributions to global warming.

— Adopted by Metro Policy Advisory Committee and the Metro Council in 2008.

¹ As part of this project, a memorandum will be prepared documenting performance of the existing RTP.

Oregon Transportation Plan (OTP) and Oregon Highway Plan (OHP)

OTP VISION

By 2030, Oregon's transportation system supports people, places and the economy. We travel easily, safely and securely, and so do goods, services and information. Efficient vehicles powered by renewable fuels move all transportation modes. Community design supports walking, bicycling, travel by car and transit wherever appropriate. Our air and water are dramatically cleaner, and community sensitive and sustainable transportation solutions characterize everything we do.

Oregonians and visitors have real transportation choices and transfer easily between air, rail, motor vehicles, bicycles and public transportation while goods flow just in time through interconnected highway, rail, marine, pipeline and air networks. Our communities and economies – large and small, urban and rural, coastal and mountain, industrial and agricultural – are connected to the rest of Oregon, the Pacific Northwest and the world. Land use, economic activities and transportation support each other in environmentally responsible ways.

We excel in using new technologies to improve safety and mobility. We maximize the use of existing facilities across traditional jurisdictions and add capacity strategically. Public/private partnerships respond to Oregonians' needs across all transportation modes. Transportation system benefits and burdens are distributed fairly, and Oregonians are confident transportation dollars are being spent wisely. By 2030, Oregonians fully appreciate the role transportation plays in their daily lives and in the region's economy. Because of this public confidence, Oregonians support innovative, adequate and reliable funding for transportation.

The OTP identified seven goals for establishing the vision, including:

1. Mobility and Accessibility
2. Management of the System
3. Economic Vitality
4. Sustainability
5. Safety and Security
6. Funding the Transportation System
7. Coordination, Communication and Cooperation

OTP Goal 1 shares the statewide vision around mobility and accessibility:

OTP GOAL 1 – MOBILITY AND ACCESSIBILITY

To enhance Oregon's quality of life and economic vitality by providing a balanced, efficient, cost-effective and integrated multimodal transportation system that ensures appropriate access to all areas of the state, the nation and the world, with connectivity among modes and places.

The OTP is supported by several modal plan, including the OHP.

“It is the policy of the State of Oregon to maintain acceptable and reliable levels of mobility on the state highway system, consistent with the expectations for each facility type, location, and functional objectives. Highway mobility targets will be the initial tool to identify deficiencies and consider solutions for vehicular mobility on the state system.” —1999 Oregon Highway Plan (OHP) mobility policy

Interim Mobility Policy History

While the region’s overall policies and decision-making framework is multi-modal, the interim mobility policy is vehicle-based, and the measure used is the volume-to-capacity ratio (v/c ratio²). Originally adopted into the RTP by the Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council in 2000 and amended into the OHP by the Oregon Transportation Commission (OTC) in 2002, the interim regional mobility policy reflects a level of motor vehicle performance in the region that JPACT, the Metro Council and the OTC deemed acceptable at the time of its adoption. At the time, policymakers recognized the policy as an incremental step toward a more comprehensive set of measures that consider system performance for all modes, as well as financial, social equity, environmental and community impacts.

The interim mobility policy broke from the historic practice of "one size fits all" congestion standards for roads and freeways to a more tailored approach that coordinates the region’s land use goals with the role of major streets, focuses auto and freight mobility expectations on the freeway system and emphasizes the role of transportation choices in moving people throughout the region. The policy allows for more congestion during the peak period in locations that have good travel options available, such as high capacity transit, while aiming to protect the off-peak period for freight mobility. This new emphasis on a tailored mobility policy and multimodal solutions was also incorporated into the OTP in 2006, the policy document that frames and organizes all of the state’s modal plans for transportation, including the OHP.

Subsequent updates to the RTP, and development of supporting topical and modal plans, continued that evolution and defined a broader set of performance measures that can provide a more comprehensive assessment of transportation system performance as reflected in the performance measures identified for each RTP goal and the regional performance targets, including the interim regional mobility policy, contained in Chapter 2 and Chapter 3 of the RTP and Table 7 of the Oregon Highway Plan. Recognizing the limitations of the current vehicle-focused mobility policy, the region has committed to updating the interim regional mobility policy

² V/C is the primary way of measuring vehicle congestion on roads and at intersections. The current policy measures the number of motor vehicles relative to the motor vehicle capacity of a given roadway during peak weekday travel times (currently defined as being from 4 to 6 p.m.).

to better align with the comprehensive set of goals and desired outcomes identified in the RTP. The purpose of this project is to update and replace the interim mobility policy adopted in the RTP and the OHP Policy IF3 (Highway Mobility Policy).

MOBILITY POLICY UPDATE PROCESS

Updating the mobility policy and its associated performance measures will be a multi-step process that starts with identifying the desired key elements of the updated mobility policy (e.g. What are the key policy elements and desired outcomes that should be reflected in the updated mobility policy for the Portland region?). Performance measures to support the mobility policy will be developed through a multi-step process that includes selecting mobility performance measures to test, testing the performance measures on case studies, and then selecting the preferred measures to implement the updated mobility policy. This memorandum presents draft screening criteria for selecting performance measures to test and draft evaluation criteria for evaluating the performance measures during the case studies.

SCREENING AND EVALUATION CRITERIA

The draft screening criteria are focused on the extent to which the performance measures accomplish the potential mobility policy elements and desired RTP outcomes and will need revision once the policy's key elements are identified.

The draft evaluation criteria are focused on attributes for the mobility performance measures to have; however, the screening criteria will also be applied in more depth during the evaluation phase to assess the effectiveness of the current interim mobility policy performance measure and evaluate the potential new performance measures.

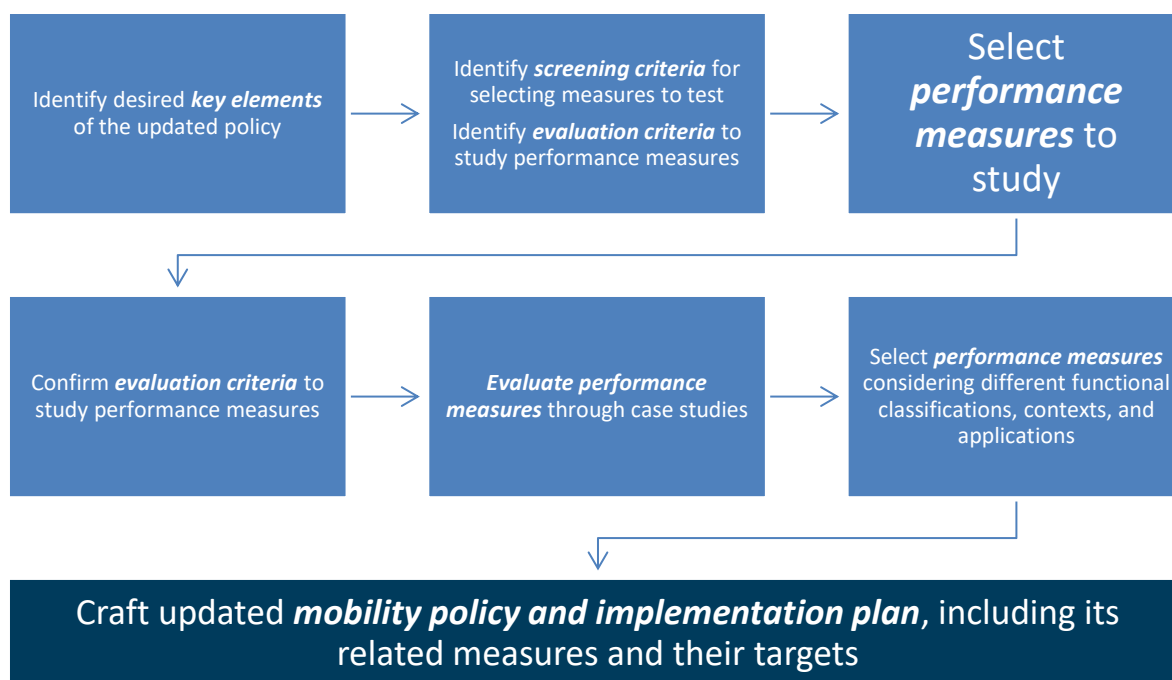
The draft screening and evaluation criteria were developed based on:

- the goals and outcomes in the 2018 RTP;
- State transportation and land use goals and policies;
- themes from past stakeholder engagement;
- background research provided by Portland State University;
- ODOT's Oregon Highway Plan (OHP) Mobility Policy White Paper³;
- best practices from other long-range planning projects; and,
- the Metro/ODOT Regional Mobility Policy (RMP) Update project objectives⁴.

³ https://www.oregon.gov/odot/Planning/Documents/OHP_Mobility_White_Paper.pdf

⁴ <https://www.oregonmetro.gov/sites/default/files/2020/08/05/Regional-mobility-policy-fact-sheet-summer2020.pdf>

MOBILITY POLICY UPDATE PROCESS



Screening Criteria

The following describes the proposed screening criteria for selecting performance measures for testing. The final screening criteria will be dependent in part upon which mobility-related policy elements are desired to be incorporated into the updated mobility policy. Potential performance measures will not need to address each of the criteria to be selected for testing but the set of measures for testing will need to be able to address the mobility policy elements collectively.

Screening Criterion #1: Addresses Multiple Desired Outcomes

Description:

- Does the measure help evaluate progress toward achieving desired outcomes for the Portland region?
- If so, which ones?
- Directly or indirectly?

Screening Criterion #2: Access to Opportunities, Social Connections, and Goods

Description

- Does the measure help evaluate increased access to key destinations and goods for all people?
- Does it evaluate access for people and/or for goods at the statewide, regional, and local levels?
- Does it measure if a transportation system provides meaningful⁵ access to travel choices for all people?

Screening Criterion #3: Travel Choices

Description:

- Does the measure help evaluate the availability, awareness and viability of modal choices for people where they live, where they work, and to other essential destinations and community places?
- Does the measure help evaluate the availability and viability of modal choices for goods?

Screening Criterion #4: Reliable and Efficient Mobility

Description:

- Does the measure help evaluate whether the transportation infrastructure and related services and programs are used efficiently?
- Does the measure help evaluate whether the people and/or goods at the statewide, regional, and local levels are able to travel efficiently?
- Does the measure help evaluate whether people and freight can conduct their regular travel in a predictable and reasonable amount of time?

Screening Criterion #5: Equity

Description:

- Does the measure help evaluate changes in the transportation-related disparities and barriers experienced by historically marginalized communities? *(Note that most criteria could have an equity lens applied by comparing the outcome for historically marginalized communities (HMC) vs. Non-HMC as defined in the 2018 RTP).*

⁵ Meaningful access means for all people means that it is provided across the full socioeconomic range. “Meaningful” requires definition but includes facilities that are safe and accessible, affordable, reasonably frequent for transit, and could also include access to charging infrastructure in the future.

Screening Criterion #6: Climate Change and Air Quality

Description

- Does the measure help evaluate changes in single-occupancy vehicle travel and vehicle miles traveled?
- Does it measure other changes that result in lower greenhouse gas emissions?

Screening Criterion #7: Safety

Description:

- Does the measure help evaluate changes in crashes, especially fatal and serious injury crashes?⁶

Screening Criterion #8: Land Use

Description:

- Does the measure help evaluate support for compact, urban form and planned land uses (including mixed use centers and industrial areas) as envisioned in the 2040 Growth Concept and implemented in local comprehensive plans?
- Can it be used to assess supportiveness to planned land uses and reduction of barriers to implementation of planned land uses?
- Does it evaluate consistency with Statewide Planning Goals and Oregon Transportation Plan goals and policies?

Screening Criterion #9: Fiscal Stewardship

Description:

- Does the measure allow solutions or mitigation measures, i.e. projects, services and programs that ODOT, Metro, cities, counties and transit providers can afford to build, operate and maintain?

Evaluation Criteria

The following describes the proposed evaluation criteria for evaluating the performance measures during the case studies. Some apply to an individual measure and some apply to multiple measures. The relevant screening criteria will also be applied in more depth during the evaluation phase to assess the effectiveness of the current interim mobility policy performance measure and evaluate the potential new performance measures.

⁶ A reduction of VMT generally leads to a reduction in crashes. Compared to other regions, the Portland Metro Region has a very low crash rate per capita which can be attributed to land use decisions and lower VMT per capita compared to the rest of the state and many other parts of the country. Regions with crash rates comparable to the Portland Metro Region include New York, Minneapolis, Boston, Chicago and Seattle, all of which have robust transit and dense land use development.

Evaluation Criterion #1: Technical Feasibility and Clarity

Description:

- Are the performance measures reasonably simple to analyze?
- Are they easy for both the public and practitioners to understand?
- Do they rely on readily available data and a proven analysis process?

Evaluation Criterion #2: Appropriateness for Intended Applications and Different Scales

Description:

- Can the measures be used for one or all intended applications (system planning, plan amendments, and development review)?
- What scales can it be applied to (system level impact or project/location level impact)?

Evaluation Criterion #3: Legal Defensibility

Description:

- Are the measures legally defensible with respect to legal mandates and decisions from the State of Oregon over the past 20 years?
- Can they document incremental changes or impacts and be compared to a standard?

Evaluation Criterion #4: Emerging Best Practice

Description:

- Is the measure in use by ODOT and/or Metro?
- Is the measure in use by other states, MPOs and/or jurisdictions⁷?

Evaluation Criterion #5: Ability for ODOT, Metro and Local Agencies (Alone or Working Together) Able to Impact Outcome/ Show Progress

Description:

- Does the measure provide a link between the mobility policy and the outcomes demonstrated by the performance measures?
- Are ODOT, Metro and local agencies (alone or working collectively toward the regional goals) able to impact these outcomes?

⁷ There are advantages of having a community of practitioners and researchers to collaborate with who are advancing the state of the practice for the data and modeling tools.

Evaluation Criterion #6: Comparison Between Alternatives

Description:

- Do the measures allow for meaningful comparison between system-level scenarios or plan amendment level before and after scenarios?

Evaluation Criterion #7: Flexibility Based on Geographical and Roadway Functional Context

Description:

- Is it focused on people, goods, or both?
- Does it appropriate for throughways, arterials, or both?
- Does it consider land use and roadway functional context?
- Does it apply to urban and suburban context or consider unique needs of suburban areas at the edge of the growth boundary?

ATTACHMENT A: RTP GOALS AND OBJECTIVES

Figure 2.3 RTP goals and objectives – At-A-Glance

Goal 1. Vibrant Communities

Objective 1.1 2040 Growth Concept Implementation
Objective 1.2 Walkable Communities
Objective 1.3 Affordable Location-Efficient Housing Choices
Objective 1.4 Access to Community Places

Goal 2. Shared Prosperity

Objective 2.1 Connected Region
Objective 2.2 Access to Industry and Freight Intermodal Facilities
Objective 2.3 Access to Jobs and Talent
Objective 2.4 Transportation and Housing Affordability

Goal 3. Transportation Choices

Objective 3.1 Travel Choices
Objective 3.2 Active Transportation System Completion
Objective 3.3 Access to Transit
Objective 3.4 Access to Active Travel Options

Goal 4. Reliability and Efficiency

Objective 4.1 Regional Mobility
Objective 4.2 Travel Management
Objective 4.3 Travel Information
Objective 4.4 Incident Management
Objective 4.5 Demand Management
Objective 4.6 Pricing
Objective 4.7 Parking Management

Goal 5. Safety and Security

Objective 5.1 Transportation Safety
Objective 5.2 Transportation Security
Objective 5.3 Preparedness and Resiliency

Goal 6. Healthy Environment

Objective 6.1 Biological and Water Resources
Objective 6.2 Historic and Cultural Resources
Objective 6.3 Green Infrastructure
Objective 6.4 Light pollution
Objective 6.5 Habitat Connectivity

Goal 7. Healthy People

Objective 7.1 Active Living
Objective 7.2 Clean Air
Objective 7.3 Other Pollution Impacts

Goal 8. Climate Leadership

Objective 8.1 Climate Smart Strategy Implementation
Objective 8.2 Greenhouse Gas Emissions Reduction
Objective 8.3 Vehicle Miles Traveled
Objective 8.4 Low and Zero Emissions Vehicles
Objective 8.5 Energy Conservation
Objective 8.6 Green Infrastructure

Goal 9. Equitable Transportation

Objective 9.1 Transportation Equity
Objective 9.2 Barrier Free Transportation

Goal 10. Fiscal Stewardship

Objective 10.1 Infrastructure Condition
Objective 10.2 Sustainable Funding

Goal 11. Transparency and Accountability

Objective 11.1 Meaningful Public and Stakeholder Engagement
Objective 11.2 Performance-Based Planning
Objective 11.3 Coordination and Cooperation

ATTACHMENT B: RTP PERFORMANCE MEASURES AND TARGETS

- 1



AFFORDABILITY Reduce the combined housing and transportation expenditure for lower-income households by 25%, compared to 2015
- 2



SAFETY Eliminate transportation fatalities and serious injuries for all users by 2035, with a 50% reduction by 2025 and a 16% reduction by 2020, compared to 2015
- 3



MULTIMODAL TRAVEL Reduce vehicle miles traveled per person by 10%, compared to 2015
- 4



MODE SHARE Triple walking, biking and transit mode shares, compared to 2015
- 5



SYSTEM COMPLETION Complete 100% of the regional network of sidewalks, bikeways and trails
- 6



CONGESTION Meet the Interim Regional Mobility Policy for throughways, arterials and the regional freight network
- 7



FREIGHT DELAY Reduce vehicle hours of delay per truck trip by 10%, compared to 2040 No Build
- 8



CLIMATE CHANGE Reduce per capita greenhouse gas emissions from cars and small trucks by 20% by 2035 and 25% by 2040, compared to 2005
- 9



CLEAN AIR Maintain or reduce air pollution from mobile sources, compared to 2015