Council work session agenda

Metro
600 NE Grand Ave.
Portland, OR 97232-2736

Tuesday, July 20, 2021 **2:00 PM** **https://zoom.us/j/471155552 or 877-853-5257 (toll free)**

Revised 07/19

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2:00 Call to Order and Roll Call

Work Session Topics:

2:05 Covid- 19 Relief Funding Work Session 21-5570

Presenter(s): Margi Bradway, Metro
Ted Leybold, Metro

Attachments: Work Session Worksheet
Proposal on allocation of COVID-19 Relief Funds Memo

3:05 Regional Mobility Policy Work Session 21-5577

Presenter(s): Margi Bradway, Metro
Kim Ellis, Metro

Attachments: Work Session Worksheet
Elements and Measures for Testing
Potential Measures Definitions
Criteria for Evaluating Measures
Case Study Locations
Spring 2021 Engagement Report
Engagement Summary Appendices

3:50 Chief Operating Officer Communication

3:55 Councilor Communication

4:00 Adjourn

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ការគោរពសិទ្ធិពលរដ្ឋរបស់ ។ សំរាប់ព័ត៌មានអំពីកម្មវិធីសិទ្ធិពលរដ្ឋរបស់ Metro ឬដើម្បីទទួលពាក្យបណ្តឹងរើសអើងសូមចូលទស្សនាគេហទំព័រ www.oregonmetro.gov/civilrights។
បើលោកអ្នកត្រូវការអ្នកបកប្រែភាសានៅពេលអង្គប្រជុំសាធារណៈ សូមទូរស័ព្ទមកលេខ 503-797-1700 (ម៉ោង 8 ព្រឹកដល់ម៉ោង 5 ល្ងាច ថ្ងៃធ្វើការ) ប្រាំពីរថ្ងៃថ្ងៃធ្វើការ មុនថ្ងៃប្រជុំដើម្បីអាចឲ្យគេសម្រួលតាមសំណើរបស់លោកអ្នក ។

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February 2017

Covid-19 Relief Funding
Work Session Topic

Metro Council Work Session
Tuesday, July 20, 2021

COVID 19 RELIEF FUNDING

Date: July 2, 2021
Department: Planning & Development
Meeting Date: July 20, 2021

Prepared by: Ted Leybold, 797-1759, Ted.Leybold@oregonmetro.gov
Presenters: Margi Bradway, Ted Leybold
Length: 60 minutes

ISSUE STATEMENT

The Coronavirus Response and Relief Supplemental Appropriations Act (CRRSAA) has provided approximately $12.16 million in transportation funding to Metro to address the impacts of the Coronavirus disease 2019 (COVID-19). Metro staff is seeking Council feedback on the spending of these funds.

ACTION REQUESTED

No action today. Council will be asked to include proposed spending in future requested Council budget actions as either amendments to the FY 2022 budget or in adoption of future fiscal year budgets. Council may also be requested to affirm that transportation planning activities included in the Unified Planning Work Program (UPWP) or transportation projects included in the Metropolitan Transportation Improvement Program (MTIP) utilizing these funds are consistent with federal regulations.

IDENTIFIED POLICY OUTCOMES

The CRRSAA funds are proposed to fund activities that will advance the policy outcomes adopted by Council in the 2018 Regional Transportation Plan (RTP) and to work with Council to develop new implementation strategies for consideration as a part of the 2023 RTP process.

POLICY QUESTION(S)

Proposed spending seeks to meet existing MPO commitments and advance the RTP policy objectives set forth by Council: improve safety, reduce climate emissions, advance equity, and provide congestion relief. Will the proposed investments of CRRSAA funds prepare Metro to advance the policy outcomes of the RTP?

POLICY OPTIONS FOR COUNCIL TO CONSIDER

Proposed spending options of CRRSAA funds are included in Attachment A. The attachment summarizes the financial implications and anticipated effects of the spending.

STAFF RECOMMENDATIONS

Staff recommended spending is included in Attachment A.

STRATEGIC CONTEXT & FRAMING COUNCIL DISCUSSION

This element of CRRSAA provides transportation funds to metropolitan areas for COVID-19 impact relief. Metro staff is proposing a spending plan on activities and projects that advance implementation of the region's priority transportation investment policies as defined in the RTP. The RTP and its associated topical and modal plans applies Metro's Strategic Plan, racial equity goals, climate action goals and other policy direction to the region's transportation system.

In addition to significant capital investments in the transportation system, the proposal also addresses losses to regional planning capacity due to budget cutbacks experienced during the pandemic. This will allow Metro to meet federal planning obligations and support implementation of the region's desired policy outcomes as the region continues to recover, invest and develop the transportation system moving forward. This proposal will support these efforts for approximately three years. See Attachment A for a full description of the proposal's budget impacts.

BACKGROUND

Federal CRRSAA funding is provided to State Departments of Transportation (DOTs), with a required proportion of funds sub-allocated directly to large metropolitan areas to mitigate the impacts of the COVID-19 pandemic. The funds have a wide range of eligible projects and activities. The Oregon Department of Transportation (ODOT) facilitated the use of a provision in the Act that allowed for a direct allocation of funds to the state, with a pass-through to the large Metropolitan Planning Organizations (MPOs), rather than having to utilize the typical reimbursement process for each individually funded project or planning activity. Approximately $12.16 million will be provided to Metro as the Portland metropolitan area MPO via ODOT through the use of this provision.

Attachment A summarizes the Metro staff proposal on how these funds will be spent on transportation related activities and projects in the region.

ATTACHMENTS

Attachment A is a Memorandum from Acting Planning & Development Director Margi Bradway to Chief Operating Officer Marissa Madrigal summarizing the proposed spending of CRRSAA funding.

[For work session:]

- Is legislation required for Council action? ☐ Yes ☒ No
- If yes, is draft legislation attached? ☐ Yes ☐ No
- What other materials are you presenting today? Attachment A – Memo from Margi Bradway, RE: Proposal on allocation of CRRSAA Funds

600 NE Grand Ave.
Portland, OR 97232-2736
oregonmetro.gov

TO: Marissa Madrigal, COO

FROM: Margi Bradway, Deputy Director, Planning, Development and Research Department

CC: Elissa Gertler, Director; Ted Leybold, Transportation Resource Development Manager; Rachael Lembo, Finance Manager

RE: ATTACHMENT A to Council Work Session Work Sheet: Proposal on allocation of COVID-19 Relief Funds

Date: Revised July 16, 2021

Background

In 2020, the Planning, Development and Research Department suffered losses from the economic downturn due to the COVID-19 pandemic. This required federal funds allocated to Metro as the regional Metropolitan Planning Organization (MPO) to be spread thin or reallocated for other uses. These financial changes resulted in a layoff of a senior planner on the Transportation Planning team with critical expertise and funds were unavailable to hire interns who play a critical role supplementing MPO needs in GIS, maps, graphics and layout of materials. In the Investment Areas team, the department lost the ability to pay an Engineer II who supported major projects and project development work throughout the department. These losses also impacted the Resource Development team because there was less staff support for joint efforts around project development. Federal funds for the Research team were also stretched thinner, making it difficult to pay for essential work items, such as a new database to improve efficiency and support modeling, data analysis and reporting work needed for the Regional Transportation Plan (RTP) update. Lastly funding for programs like Enhanced Transit, Transit Planning and Project Development were decreased, eliminated, or the funds simply ran out. In summary, the department experienced losses or decreases in staff capacity and/or resources in 2020 and 2021 in the following areas:

- Enhanced Transit Program (Better Bus Program)
- Transit Planning
- Project Development
- MPO Compliance
- Engagement, storytelling, graphics and GIS
- Emerging Technology Program

At the same time, the business needs for the Planning, Development and Research Department planning and program needs are the same and, in some cases, those needs have grown. For example, Metro Council has asked staff to perform more detailed climate change modeling and analysis of transportation investments and projects. Also, there is an increased expectation that Metro staff are engaged at the policy and technical level on the growing list of ODOT major projects in the region, including Rose Quarter, I-205, I-5 Bridge and Boone Bridge. In the past, this type of work would have been supported with project development funds. While staff have worked to obtain federal grants, request partner contributions, and establish Intergovernmental Agreement fund exchanges, those

efforts have not been enough to fill the financial gaps created by the pandemic. When comparing the 2019-20 budget to the 2020-21 budget, the Transportation Planning and Investment Areas teams individually have over a 10% deficit.

Fortunately, Congress is providing $12,160,987 million (referred to as $12.16 million in this memo) through the US Department of Transportation (US DOT) to Metro in "COVID-19 funds for MPOs" to make up for COVID losses. The federal funds are similar to Surface Transportation Block Grant (STBG) funds although US DOT made it clear in guidance that these funds can be used for staff and operations. In our federal consultation with the Federal Highway Administration (FHWA) and the Federal Transportation Administration (FTA), our federal partners encouraged Metro to use these funds for relief on impacted staff and MPO operations. There is no match for the funds, and they must be federally obligated by 2024. Staff are working with ODOT to try to de-federalize the $12.16 million and we expect to hear back soon. The funds will most likely be transferred to Metro in the late summer of 2021.

Proposed Allocation of Funds

Below is a proposal for the allocation of the COVID-19 Relief Funds. The proposed allocation takes into account previous policy direction from Metro Council and the Joint Policy Advisory Committee on Transportation (JPACT), as well as the Department's losses in 2019 and 2020. The programs and projects proposed for funding below are in the 2018 RTP and consistent with Unified Planning Work Program (UPWP) approved by Metro Council, JPACT and FHWA and FTA for 2021-22. The proposed allocation is also consistent with Metro Council's adopted goals of equity, climate, congestion relief and safety for the transportation system.

Summary of proposed allocations of **$12.16 million** to programs, spread out over 3 fiscal years:

- Better Bus Program - **$6.16 million**
- Transit Planning - **$2 million**
- Project Development - **$2.1 million**
- MPO Compliance - **$700,000**
- GIS, graphics, engagement and storytelling - **$650,000**
- Climate Tracking and Monitoring - **$600,000**

Staff are not currently proposing to restore the Emerging Technology Program; however, the hiring of a transit planner in the Transportation Planning section would allow more capacity for all staff to address emerging trends and emerging technology. Currently, transit planning, project development and emerging trends work are all delegated to a single planner and that is an unmanageable amount of work.

The business needs and proposed distribution of the COVID-19 Relief Funds are described in more detail below.

<u>Better Bus ($6.16 million)</u>

This allocation would restore funding for an extremely effective Better Bus program, also known as Enhanced Transit Concepts (ETC), administered by Metro in partnership with TriMet in 2018 and 2019. $5.11 million of the COVID-19 Relief Funds would be used to invest in ETC projects on local, county or

state streets that currently support bus transit. Metro staff would engage local cities and counties in the process. The programmatic funds can go towards ETC grants to local governments for capital projects or to provide local governments with technical capacity (engineering and project development) of ETC projects. The remainder covers the cost of a full-time existing FTE for a principal planner in the Investment Areas team for 3 years (approximately $650,000), other contributions of existing technical staff ($250,000), and materials and services to support the program ($200,000). TriMet recently agreed to match the $5.11 million in grant-like funds with another $5 million, making a total of $10 million available to our partners for Better Bus project development and projects.

Transit Planning ($2 million)

The Department laid off a senior transportation planner as part of the budget cuts of 2020. This position originally supported regional transit planning, and was responsible for developing and shaping the Regional Transit Strategy and coordinating closely with TriMet on their service planning. This position also worked with some of the smaller transit agencies on local transit plans. In addition, as Metro struggled to meet the demands of the project development needs in the region, this position also worked on major projects. Allocation of COVID-19 Relief Funds in this area would allow Metro to address emerging transit issues and needs identified by Metro Council and JPACT, restore the senior planner position, and potentially recall former employees to support these efforts. Approximately $570,000 would pay for a new full-time FTE for a senior planner on the Transportation Planning team for 3 years. The remaining $1.43 million would be used to fund a region-wide transit service study by a consultant to analyze and report on opportunities, issues and barriers to transit in suburban and rural areas of Metro, and other transit planning needs as identified by JPACT.

Project Development ($2.1 million)

The Department's budget for project development decreased in 2020 due to the reduction in Metro general funds. The overall funding for project development work decreased, but more importantly, Metro was unable to fill an FTE for an Engineer II that had been vacated. The Engineer II plays a critical leadership role in the Department and the region, leading design and input in corridor planning and project development for major projects as well as some of the smaller Regional Flexible Funding Allocation (RFFA) projects. Re-filling the Engineer II position for 3 years would require $600,000 of these funds. Funding is also needed to provide two years of funding for an Engineering I position that is providing technical support on the Rose Quarter, I-5 Bridge and is only funded through the current fiscal year. A third position, a full-time (limited duration) Associate Planner beginning spring 2022, would provide the remaining capacity needed to complete the project development work. The Investment Areas team also needs $500,000 in funding to staff and manage corridor studies, which can also be used to leverage federal or state funds for new corridor plans underway, like 82nd Avenue and TV Highway. Lastly, $200,000 of these funds would go to support a Risk Assessment Analysis, public engagement with our equity partners and project development of the Regional Flex Fund projects.

In summary:

- 82nd Avenue Corridor Plan - **$500,000** to City of Portland, **$300,000** for Metro staff to partner
- TV Highway Corridor Plan - **$500,000** for Metro staff to lead project and match federal grant
- I-205 and/or I-205 Tolling Project - **$300,000** for engineering staff to support project
- Rose Quarter - **$300,000** for engineering staff to support project
- Regional Flex Fund Projects - **$200,000** for risk assessment of project proposals

MPO Compliance ($700,000)

On April 12, 2021, the US DOT issued Metro's federal certification. The letter included corrective actions and recommendations to improve Metro's process for how Metropolitan Transportation Improvement Program (MTIP) funds are estimated and organized. The US DOT also recommended that Metro do a more detailed analysis in our Congestion Management Plan (CMP) as part of the next RTP update. For the MTIP, Metro staff have spent years identifying and researching Metro's needs for a new database which will improve efficiency of how the MTIP is managed and improve communication with US DOT and ODOT. This will require the MPO to purchase proprietary Software as a Service, and Metro plans to issue an RFP. Staff are expecting response to RFP to include a cost structure that is a combination of up-front development work and on-going annual fee for maintenance and tech support. Costs will be approximately $500,000, which includes an estimate of ongoing payment for 3 – 5 years. An additional $200K will allow the Research team to support the database and perform the additional modeling, data analysis and reporting work needed in the upcoming RTP for the CMP. In short, these funds will be used to respond to the US DOT corrective actions and recommendations. (No new FTE).

GIS, graphics, engagement and storytelling ($650,000)

The Storytelling Program was eliminated during the 2019 budget cuts. That program was key in reaching different audiences and relating technical work in understandable language to a wider audience, particularly to underserved and BIPOC communities. The Planning, Development and Research Department also relies on GIS maps and GIS visuals to communicate plans, policies and programs. In 2020, GIS analysts in the Research Center were laid off, and department did not have the funding to hire three intern positions. In the past, much of the MPO work has been solidly supported by temporary interns – one GIS intern and two interns in the planning section. Interns have provided support in GIS mapping, graphics, engagement, storytelling and layout of reports and communication materials. The Department has a need for more GIS and graphic support for all of projects and programs. The $400K could be used to re-hire interns that provided this type of support, or hire a limited term assistant position either as an Assistant Planner or an Assistant GIS Specialist to support our work. In addition, $250K would be used to fund half of a Program Coordinator for 3 years to support communication for department leadership, repurposing the part time administrative support capacity that was eliminated due to COVID-19 related budget cuts.

Climate Monitoring and Analysis ($600,000)

Metro's Climate Smart Strategy and meeting Metro's regional climate goals is a Council priority. Metro staff currently lack the resources and capacity to respond to the requests of Metro Council and stakeholders regarding the monitoring of GHG emissions. Furthermore, the practice and science of

climate modeling, analysis and monitoring continues to change and Metro needs resources to test new modeling and new tools. This $600,000 allocation would allow Metro to hire a consultant and/or acquire tools to monitor our progress on Climate Smart goals and/or measure the climate impacts of certain investments, putting Metro in a better position for the next RTP in 2023 and potential future transportation measures. (No new FTE).

Conclusion

In summary, the proposed allocation of the $12.16 million in COVID-19 Relief Funds will help the Department recover from some of the economic losses due to the COVID-19 pandemic and allow staff to be responsive to Metro Council, the US DOT, JPACT, and other key stakeholders in a manner that furthers Metro's goals around equity, climate, safety and congestion relief. All of the allocations above are in a 3-year time period, from July 1, 2021 to June 30, 2024. This allocation of the COVID-19 funds does not take into account other funding that may be available in the 2021-22 fiscal year.

REFERENCE: TABLE A

Budget Summary	Better Bus Program	Transit Planning	Project Development	MPO Compliance	GIS, Graphics, Engagement and Storytelling	Climate Monitoring and Analysis	Total
Personnel	900,000	570,000	1,400,000	200,000	650,000	-	**3,720,000**
Metro M&S	100,000	1,430,000	200,000	500,000	-	600,000	**2,930,000**
Payments to partners	5,010,000	-	500,000	-	-	-	**5,510,000**
Total	**6,010,000**	**2,000,000**	**2,100,000**	**700,000**	**650,000**	**600,000**	**12,160,000**

REFERENCE TABLE B

Proposed Allocation of COVID-19 Relief Funding				
Program	**Amount**	**External to partners**	**Metro FTE/ 3 years**	**M&S/3 years**
Better Bus/ETC Program	$6.11 M	$5.11 M	$650,00~~750,000~~ for existing FTE (transportation planning)	$150,000 -$200,000 administration of program, consultant
Transit Planning	$2.0 M		~~$1 M~~ $570,000- New/recall Senior Transportation Planner (Limited Duration)	$1.4 M ~~–~~ Regional transit planning study Transit Service Study, ~~micro-transit~~
Project Development	$2.1 M	$500,000	$ 1.1 M to support existing FTE (engineering) and	82nd Ave, TV Highway and other major projects

			new limited FTE planner	
MPO Compliance	$700,000		N/A	$700,000 - TIP database, asset management
Engagement, graphics and GIS support	$650,000		$ 400,000 for new assistant analyst (Limited Duration), and/or interns	$250,000 – materials and services for engagement, and/or GIS analysis and tools
Climate Tracking and Monitoring	$600,000		N/A	New tools and consultant support to model Climate Smart

Regional Mobility Policy
Work Session Topics

Work Session Topics
Tuesday, July 20, 2021

REGIONAL MOBILITY POLICY UPDATE: RECOMMENDATION TO TEST POTENTIAL MOBILITY POLICY MEASURES THROUGH CASE STUDIES

Date: July 1, 2021

Department: Planning and Development

Meeting Date: July 20, 2021

Prepared by:
Kim Ellis, kim.ellis@oregonmetro.gov

Presenters: Margi Bradway, Deputy Director and Kim Ellis, Project Manager

Length: 45 minutes

PRESENTATION PURPOSE & DESIRED OUTCOMES

- **Purpose:** Provide an opportunity to review JPACT's recommendation on the revised mobility policy elements and potential measures, input from Spring 2021 engagement activities and an overview of the case study research that will be completed in the next phase of the project.

- **Outcome:** Metro Council provides direction to staff on moving forward to the next phase of the project to test potential mobility policy measures through case studies.

TOPIC BACKGROUND & FRAMING COUNCIL DISCUSSION

Background

Metro and the Oregon Department of Transportation (ODOT) are working together to update the policy on how we define and measure mobility in the Portland region in the Oregon Highway Plan (OHP), Regional Transportation Plan (RTP), local transportation system plans (TSPs) and corridor plans, and during the local comprehensive plan amendment process.

The current 20-year old mobility policy is contained in both the 2018 Regional Transportation Plan (RTP) and Policy 1F (Highway Mobility Policy) of the Oregon Highway Plan (OHP). The policy relies on a vehicle-based measure of mobility (and thresholds) to evaluate current and future performance of the motor vehicle network during peak travel periods. The measure, also known as the v/c ratio, is the ratio of motor vehicle volume to motor vehicle capacity of a given roadway. [1]

The 2018 RTP is built around four key priorities of advancing equity, mitigating climate change, improving safety and managing congestion. The 2018 RTP failed to meet state requirements for demonstrating consistency with the OHP Highway Mobility Policy (Policy

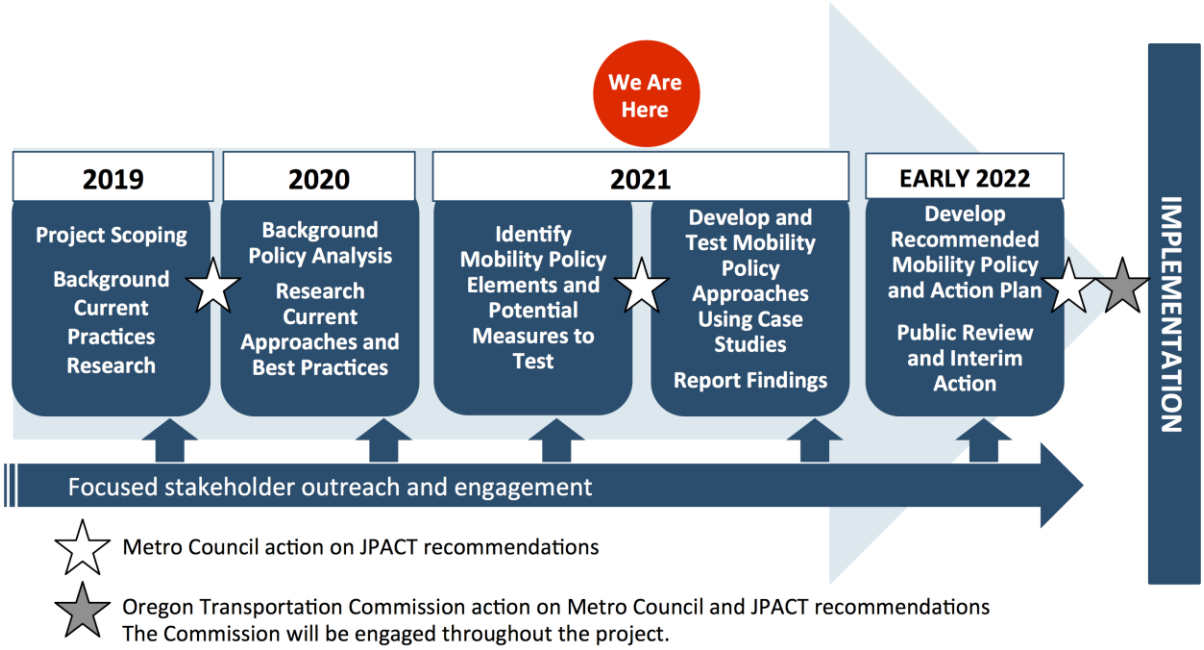
[1] For example, when the v/c ratio of a roadway equals 0.90, 90 percent of the roadway's vehicle capacity is being used. At 1.0, the vehicle capacity of the roadway is fully used.

1F) under the current mobility targets for the region. The plan recognizes that our growing and changing region needs an updated mobility policy to better align how we measure the performance and adequacy of the transportation system for both people and goods to serve planned land uses. The comprehensive set of shared regional values, goals and related desired outcomes identified in the RTP and 2040 Growth Concept, as well as local and state goals are guiding this effort.

Project timeline

Shown in **Figure 1**, the Regional Mobility Policy update began in 2019 and will be completed in Spring 2022.

Figure 1. Project Timeline



STRATEGIC CONTEXT & FRAMING COUNCIL DISCUSSION

When the mobility policy update was defined and adopted unanimously in Chapter 8 of the 2018 RTP, JPACT and the Metro Council recognized this work must holistically advance the RTP policy goals for addressing equity, climate, safety, and congestion as well as support other state, regional and local policy objectives, including implementation of the 2040 Growth Concept and the region's Climate Smart Strategy. This understanding and direction provided by the Metro Council is reflected in the project work plan and engagement plan adopted by the Metro Council in 2019.

RMP NEW INFORMATION AND RECOMMENDED NEXT STEPS

The elements and measures recommended for further evaluation and testing in the next phase of the project are provided in **Attachment 1**.

An overview of the process used to shape this recommendation and next steps follows.

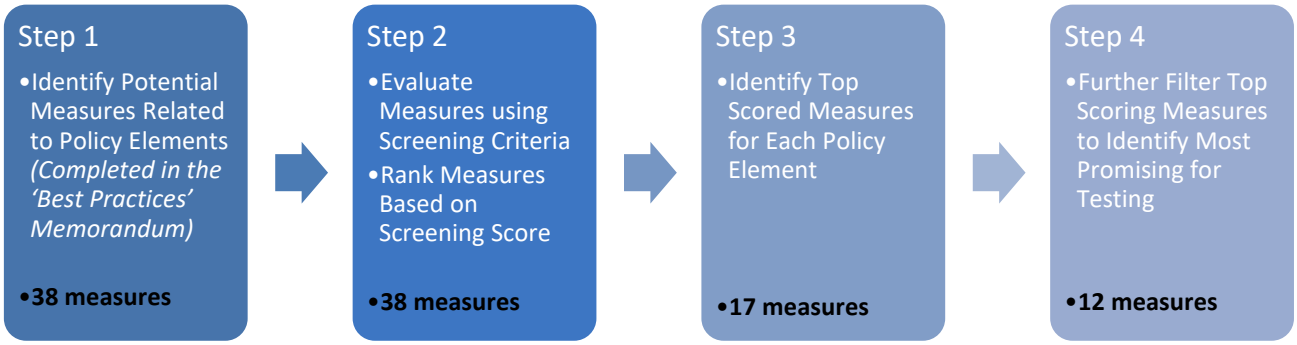
Mobility Policy Elements and Potential Measures Recommended for Testing Through Case Studies

From Fall 2019 to June 2020, the Transportation Research and Education Center (TREC)/Portland State University documented current mobility-related performance measures and methods being used in the Portland region, statewide and nationally. The Portland State University's Synthesis Research on Current Measures and Tools reviews the existing mobility policy and summarizes current practices in measuring multimodal mobility.

In 2020, the project team reviewed previous input from historically marginalized and underserved communities and other stakeholders from the 2018 Regional Transportation Plan update, development of the Get Moving 2020 investment package and the Scoping Engagement Process for this effort. Based on this review and additional feedback received through two workshops with the TPAC and Metro Technical Advisory Committee (MTAC) in fall 2020, five key transportation outcomes were identified as integral to how we view mobility in the Portland region.

In Fall 2020, TPAC and MTAC also provided feedback on criteria to be used to screen and select potential mobility performance measures for testing that address one or more mobility policy elements. Since January 2021, the Consultant team applied the screening criteria through a four-step process (shown in **Figure 2**) to narrow a list of 38 potential mobility measures to 12 potential mobility measures that appear most promising for testing and further evaluation through case studies this summer. A technical memo and supporting documents describing the screening process is available on the project website.

Figure 2: Screening Process to Inform Selection of Potential Mobility Measures for Testing



In spring 2021, the project team engaged policymakers, practitioners, community leaders and other stakeholders to review and provide feedback on the draft mobility policy elements and potential measures to include in the updated policy. Throughout May and June, the project team engaged stakeholders through online forums, briefings and committee meetings. The four online forums included two forums for planning, modeling and engineering practitioners, a forum for goods and freight professionals, and a forum for community leaders. A total of about 130 people participated in the forums.

Project staff also presented and received feedback at County Coordinating Committees (staff and policy), MTAC, TPAC, the Metro Policy Advisory Committee (MPAC), the Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council –

representing more than 350 individual points of input.

Key themes from Spring 2021 Stakeholder Input

- **Equity and climate should be explicit** in the updated mobility policy
- **Many aspects of access** are important to mobility:
    - Access to places
    - Access to travel options
    - Affordability is key to access
- **Efficient use of the transportation system** is important to mobility
- **Quality, seamless connections between travel options** are important to mobility
- **Ensure that all elements are reflected** across the measures
- **Ensure measures are focused on people and places**, many seem vehicle-focused
- **Avoid redundancy in the measures**
- **Ensure flexibility to allow for different measures in different contexts** (land use and transportation functions), **without being overly complex**

A Stakeholder Engagement Report documenting the engagement process and input received is included in the meeting packet for reference. The Report and supporting Appendices are also available on the project website: www.oregonmetro.gov/mobility.

Figure 3. The Climate Smart Strategy policies are adopted in the 2018 Regional Transportation Plan.

Together, past research and input, the technical screening process and subsequent stakeholder input helped shape the recommendation to JPACT and Metro Council on the revised mobility policy elements and measures to be further evaluated and tested through case studies. It is important to note that climate and emissions were not explicitly included in the revised mobility policy elements or mobility measures recommended to move forward. However, the revised elements and potential measures do support and advance the region's efforts to reduce greenhouse gas emissions and implement the Climate Smart Strategy and related climate leadership policies adopted in

the 2018 RTP as shown in **Figure 3**. This approach keeps the mobility policy focused on elements of mobility, and supports other RTP policies related to climate.

Overview of Case Studies Research

Pending JPACT and Metro Council support to move forward, the next phase of research will focus on learning more about each of the potential new mobility measures and potential ways in which the measures could be applied across different land use/transportation contexts and planning applications. The project team will further evaluate and test the potential measures through 4 to 6 case studies to see how well the measures assess the mobility elements for different contexts and planning applications and meet other needs.

Developed based on TPAC and MTAC feedback in fall 2020, the criteria listed in **Attachment 3** will be the focus of the case study research to consider:

- technical feasibility;
- flexibility for intended planning applications and different contexts;
- legal defensibility;
- current uses of the measures by ODOT, Metro, local governments and other states and metropolitan planning organizations (MPOs); and
- ability to show impact or progress toward desired mobility elements.

Consistent with OHP Policy 1F (Action 1F.3) and Operational Notice PB-02, the case study analysis must compare the current mobility policy measures and methods to other new potential measures and methods being tested. The measures will be tested at the system planning, and plan amendment scales; however, not all measures will be tested in all case studies. The Consultant team is currently developing a framework to identify which measures to test in different land use/transportation contexts and planning applications.

Considerations for the case studies include:

- Measures may be used differently for different planning applications (i.e. system planning versus plan amendments).
- Not all measures are easily applied as a standard. At the system planning-level, a measure may be applied as a target, with assessment whether a system is trending appropriately or if a project is projected to move the system closer to the target.

Findings will be developed for each case study and summarized in a report and supporting factsheets documenting this research, including:

- Map(s) showing the location of each case study
- Supporting contextual information and findings
- Conclusions and preliminary recommendations for an updated regional mobility policy, including measures, targets and methods for application to system planning and plan amendments.

The findings and preliminary recommendations from this research and subsequent stakeholder input and direction from JPACT and the Metro Council will be used by the project team to develop a recommended mobility policy for the RTP and proposed amendments to Policy 1F of the OHP, including measures, targets/standards and methodologies.

Case Study Locations

The recommended case study locations are listed below, and shown in **Attachment 4**. The locations are selected from the examples of current approaches studied earlier in the process to build on the information and materials developed during the previous research.

The case studies will focus on these system planning and plan amendment examples:

1. **Downtown Portland area**, which includes RTP Mobility Corridor #4 (I-405 loop/Portland Central City)
    - **Example #2:** Portland Central City 2035 Plan and MMA (Plan Amendment)
2. **Middle Columbia Corridor Industrial area,** which includes RTP Mobility Corridor #18 (US 30/Columbia/Lombard/Killingsworth, I-205 and I-5 and PDX Airport and other industrial lands)
    - **Example #3:** Colwood Industrial District (Plan Amendment)
3. **Oregon City area,** which includes RTP Mobility Corridor #8 (I-205 between Gateway and downtown Oregon city)
    - **Example #6:** Oregon City TSP and OR 213/Beavercreek Road (System Planning)
    - **Example #7:** Willamette Falls/Downtown District Plan/MMA (Plan Amendment)
4. **Tualatin Valley Highway area**, which includes RTP Mobility Corridor #14 (Tualatin Valley Highway and US 26 between Beaverton and Hillsboro)
    - **Example #10:** West End District Mixed-use Development (Development Review)
    - **Example #11:** Tualatin Valley Highway/OR 8 Corridor Plan (System Planning)
    - **Example #12:** South Hillsboro Community Development Plan (Plan Amendment)

The process for selecting case study locations included first selecting plan amendment examples in each county, and then selecting system planning examples and mobility corridor geographies that encompass the plan amendment locations. This approach allows for leveraging data and analysis to the extent possible and consideration of the relationship between system planning and plan amendment analysis needs. An effort was made to select areas that include different land use and transportation contexts – downtowns, major urban corridors and industrial areas that also include arterials and throughways designated in the RTP.

Next Steps

A summary of the remaining steps in the process (and anticipated schedule) follows.

Conduct Case Study Analysis and Prepare Findings **July to Sept. 2021**

Pending JPACT and Metro Council support to move forward in July, the project team will test the potential measures through 4 to 6 case studies to see how well the measures assess the mobility elements for different planning applications. As required by OHP Policy 1F (Action 1F.3) and Operational Notice PB-02, the case study analysis will compare the current mobility policy measures (volume-to-capacity ratio) and methods to other new potential measures and methods being tested for application at the system planning and plan amendment scales. The details of the analysis approach are under development.

Report Case Study Findings **Oct. to Nov. 2021**

In Fall 2021, staff will report research findings from the case studies to stakeholders and decision-makers which will help inform developing a recommended mobility policy for the RTP and proposed amendments to Policy 1F of the OHP. A schedule of engagement activities and opportunities for input is under development.

Draft Updated Mobility Policy and Action Plan to Implement Policy **Winter 2021/22**

Staff will continue to engage TPAC and MTAC in developing an updated regional mobility policy and implementation plan for public review and discussion in early 2022 by JPACT, MPAC, and the Metro Council. This work will include crafting draft policy language and guidance related to use and applicability of the recommended performance measures, targets/standard, data, methodologies and processes.

In addition, this project will develop guidance to jurisdictions on how to balance multiple policy objectives and document adequacy, i.e. consistency with the RTP and OHP, in both transportation system plans (TSPs) and plan amendments, when there are multiple measures and targets in place. Finally, the project will recommend considerations for future local, regional and state actions outside the scope of this project to implement the new policy and to reconcile differences between the new TSP and plan amendment measures and targets and those used in development review and project design processes.

Conduct "Tentative" Approval Process **Winter/Spring 2022**

A 45-day public comment period and hearings will be held in 2022. Additional refinements will be recommended to address feedback received during the public comment period for consideration by JPACT and the Metro Council during the approval process.
Pending "tentative" approval and direction by the JPACT, the Metro Council and expressed support from the OTC in Spring 2022, the updated policy will be applied in the next update to the RTP (due in Dec. 2023). In addition, the recommended policy will be forwarded to the OTC for consideration as an amendment to the OHP 1F (Table 7 and related policies for the state-owned facilities in the Portland region).

Pending adoption of the 2023 RTP by JPACT and the Metro Council and amendment of the OHP by the OTC, the updated policy will guide development of regional and local transportation plans and studies, and the evaluation of potential impacts of plan amendments and zoning changes subject to the Transportation Planning Rule.

REGIONAL MOBILITY POLICY UPDATE: RECOMMENDATION TO TEST POTENTIAL MOBILITY POLICY MEASURES THROUGH CASE STUDIES

ACTION REQUESTED
Direct staff to move forward to the next phase of the project and test the potential mobility policy measures in Attachment 1 through case studies.

QUESTIONS FOR COUNCIL CONSIDERATION
1. Does Metro Council have questions regarding the revised mobility policy elements or potential mobility measures recommended to move forward to the next phase?
2. Does Metro Council support moving forward to the next phase of the project and testing the potential mobility policy measures through case studies?

STAFF RECOMMENDATIONS
JPACT is scheduled to make a recommendation to the Metro Council on this topic at the July 16 JPACT meeting. Pending JPACT action on July 16, staff recommends Metro Council direct staff to move forward to the next phase of the project and to test the potential mobility policy measures shown in Attachment 1 through case studies.

Anticipated Effects
Pending Metro Council direction, staff will begin the case study research as previously described and report findings to Metro Council in the fall.

Financial Implications
This project is accounted for in the 2021-22 budget approved by the Metro Council in 2021 and the 2021-2022 Unified Planning Work Program (UPWP) approved by the Metro Council on May 20, 2021. The project will rely on a combination of Metro's federal transportation planning grants and ODOT resources per the intergovernmental agreement between Metro and ODOT.

ATTACHMENTS
- Is legislation required for Council action? Not at this time.
- What other materials are you presenting today?
  Attachment 1. Mobility Policy Elements and Potential Measures Recommended for Testing

  Attachment 2. Definitions of Potential Mobility Measures

  Attachment 3. Criteria for Evaluating Potential Mobility Measures in Case Studies

  Attachment 4. Case Study Locations to Test Potential Mobility Measures

  Attachment 5. Stakeholder Engagement Report

REVISED MOBILITY ELEMENTS AND MEASURES

DRAFT definition of urban mobility: *People and businesses can safely, affordably, and efficiently reach the goods, services, places and opportunities they need to thrive by a variety of seamless and well-connected travel options and services that are welcoming, convenient, comfortable, and reliable.*

Mobility **elements** to be reflected in updated policy

Equity
Black, Indigenous and people of color (BIPOC) community members and people with low incomes, youth, older adults, people living with disabilities and other historically marginalized and underserved communities experience equitable mobility.

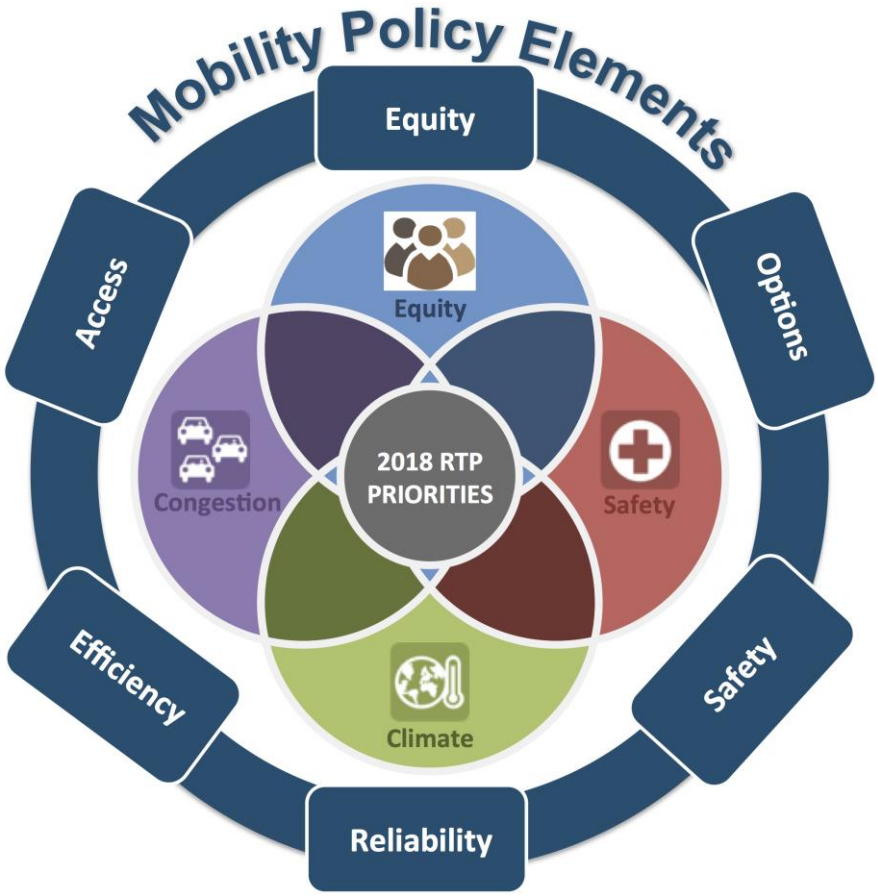
Access
People and businesses can conveniently and affordably reach the goods, services, places and opportunities they need to thrive.

Efficiency
People and businesses efficiently use the public's investment in our transportation system to travel where they need to go.

Reliability
People and businesses can count on the transportation system to travel where they need to go reliably and in a reasonable amount of time.

Safety
People are able to travel safely and comfortably and feel welcome.

Options
People and businesses can choose from a variety of seamless and well-connected travel modes and services that easily get them where they need to go.



Mobility **measures** recommended for testing

1. **Multimodal level of service**
   - Multimodal level of service (MMLOS)
   - Level of traffic stress
   - Pedestrian crossing index
   - System completion
   - Queuing
   - Volume to capacity ratio
2. **Access to destinations/opportunity**
3. **Vehicle miles traveled (VMT) per capita**
4. **Person and goods throughput**
5. **Travel time reliability**
   - Travel time reliability
   - Travel time
6. **Congestion**
   - Travel speed
   - Duration (hours)
   - Queuing
   - Volume to capacity ratio

Metro

Oregon Department of Transportation

Revised Draft Mobility Policy Elements

in track changes to address stakeholder input

NEW **Equity**	• Black, Indigenous and people of color (BIPOC) community members and people with low incomes, youth, older adults, people living with disabilities and other historically marginalized and underserved communities experience equitable mobility.
Access	• ~~All~~ People and ~~goods~~ businesses can conveniently and affordably reach the goods, services, places and opportunities ~~get where~~ they need to thrive ~~go~~.
~~Time~~ **Efficiency**	• People and businesses efficiently use the public's investment in our transportation system to ~~goods can~~ get where they need to go ~~in a reasonable amount of time~~.
Reliability	• People and businesses can count on the transportation system to get where they need to go reliably and in a reasonable amount of time. ~~Travel time is reliable or predictable for all modes.~~
Safety	• People are able to travel safely and comfortably, and feel welcome. ~~Available travel options are safe for all users.~~
~~Travel~~ **Options**	• People and businesses can choose from ~~can get where they need to go by~~ a variety of seamless and well-connected travel ~~options or~~ modes and services that easily get them where they need to go .

Regional Mobility Policy Update

Potential Mobility Performance Measures Recommended for Testing – Descriptions

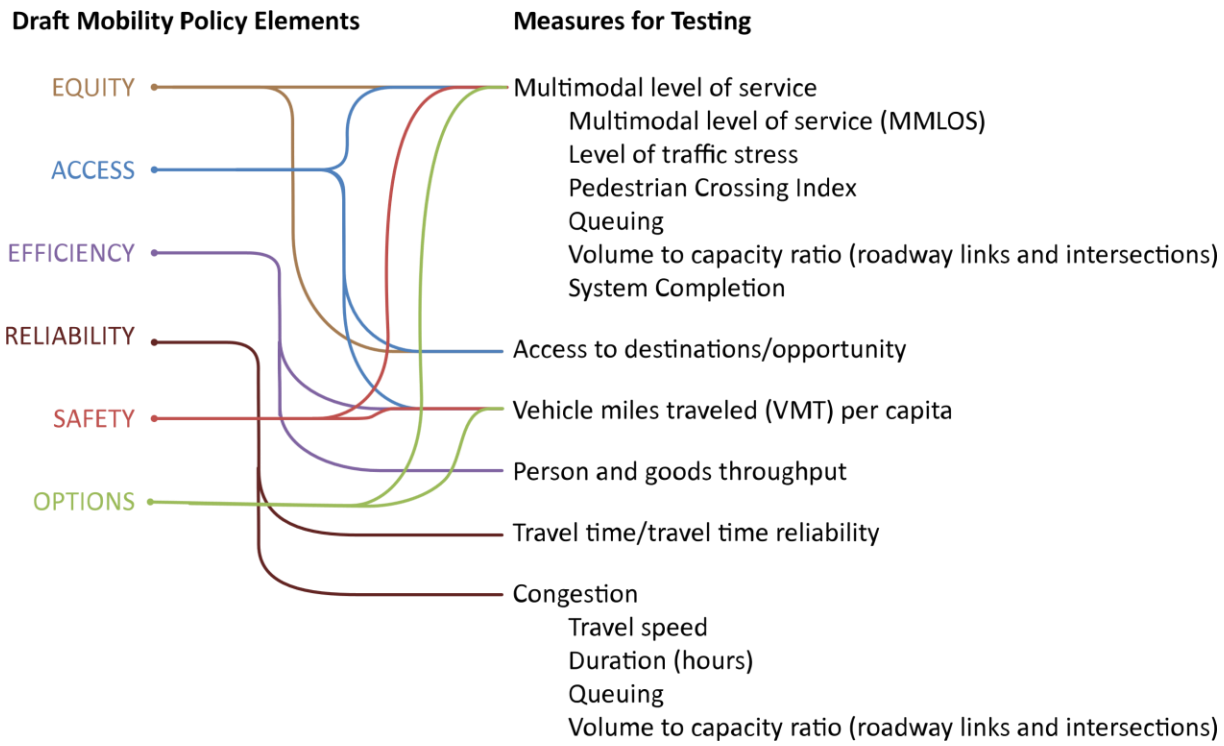
Measures are listed alphabetically. As a group, the measures cover all modes. Most measures relate to more than one mobility policy element and can be used for both system planning and plan amendments, the focus of the regional mobility policy update. Specific definitions, thresholds and methods for each potential measure will be developed and tested through the case studies research.

Measure	Description	Modes
Access to destinations/ opportunity	An aggregate measure of the ease by which a person can reach destinations, inclusive of all travel modes.	All modes
Duration of congestion	The number of hours within a time period, most often within a weekday, where a facility's congestion target is exceeded.	Vehicle, Freight, Transit
Level of Traffic Stress (LTS)	Level of traffic stress (LTS) classifies points and segments on routes into different categories of stress ranging from 1 (low stress) to 4 (high stress) based on factors that correlate to the comfort and safety of the bicyclist or pedestrian using that facility.	Bike, Pedestrian
Multimodal Level of Service (MMLOS)	MMLOS is an integrated level of service (LOS) system that measures the quality and level of comfort of urban streets per mode based on factors that impact mobility from the perspectives of pedestrians, cyclists, transit riders and auto drivers, respectively.	All modes
Pedestrian crossing index	The distance between pedestrian crossings compared to a target maximum distance.	Pedestrian
Person and goods throughput	The number of people or amount of goods, across modes, traveling through a segment, facility, or specified point in one direction over a specified time period.	All modes
Queuing	The extent of vehicles queued on intersection approach lanes, including on and off ramps, during a specified analysis period.	Vehicle, Freight
System completeness	The percent of planned facilities that are built within a specified network.	All modes
Travel speed	Average or a percentile speed for a network segment or between key origin-destination pairs, during a specific time period.	Vehicle, Freight, Transit
Travel time	Average or a percentile time spent traveling between key origin-destination pairs, during a specific time period.	All modes
Travel Time Reliability (TTR)	Indicators of congestion severity that assess on-time arrival and travel time variability.	Vehicle, Freight, Transit
Vehicle miles traveled per capita	The number of miles traveled by motorists within a study area, per the study area's population.	Vehicle, Freight, Transit
Volume-to-capacity ratio (V/C)	The ratio of motor vehicle volume to the motor vehicle capacity of a roadway link or an Intersection during a specified analysis period.	Vehicle, Freight

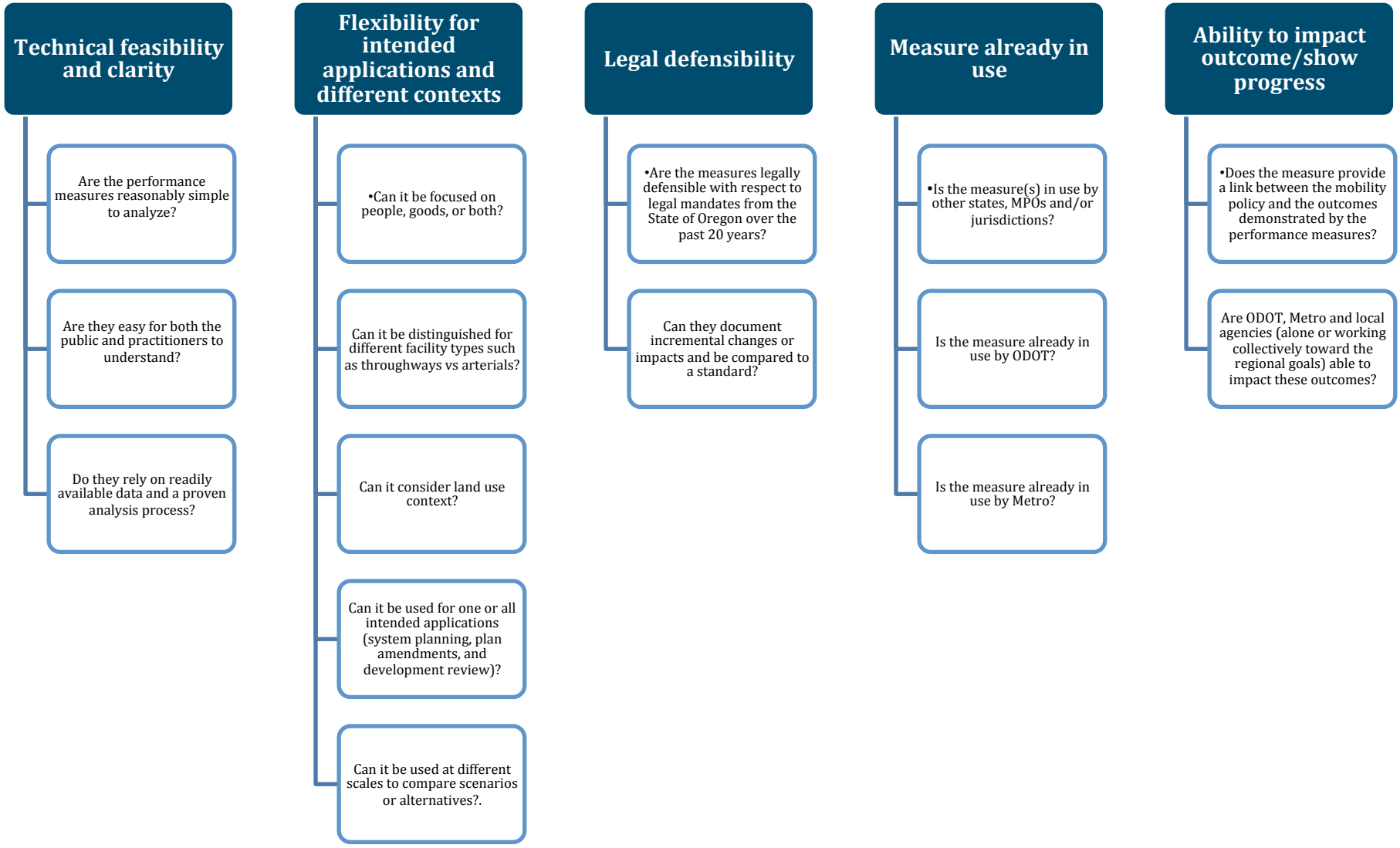
Note: The case studies will develop and test different methods and targets/standards for each potential measure for different land use and transportation contexts in selected case study locations.

Regional Mobility Policy Update

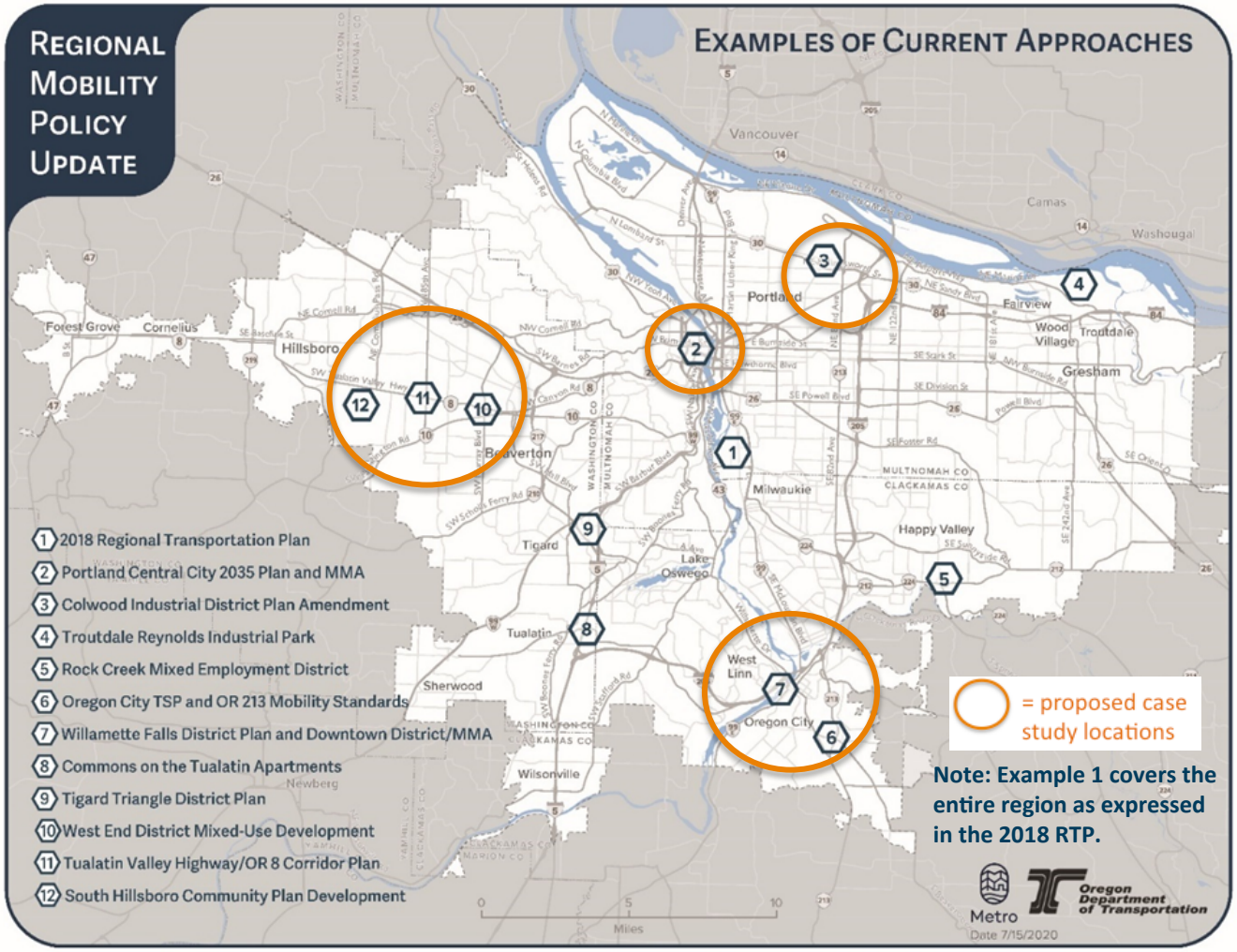
Relationship Between Elements of Mobility and Potential Mobility Performance Measures



Attachment 3: Criteria for Evaluating Potential Mobility Measures in Case Studies



Case studies to test mobility measures



= case study locations

- **Tualatin Valley Highway area**
- **Downtown Portland area**
- **Middle Columbia Corridor Industrial area**
- **Oregon City area**

Information about all twelve available on the project website

oregonmetro.gov/mobility

REGIONAL MOBILITY POLICY UPDATE

Stakeholder Engagement Report

A summary of engagement activities conducted in Spring 2021 by Metro and the Oregon Department of Transportation (ODOT) in support of updating the mobility policy for the Portland region

June 2021

Metro respects civil rights

Metro fully complies with Title VI of the Civil Rights Act of 1964 that requires that no person be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination on the basis of race, color or national origin under any program or activity for which Metro receives federal financial assistance.

Metro fully complies with Title II of the Americans with Disabilities Act and Section 504 of the Rehabilitation Act that requires that no otherwise qualified individual with a disability be excluded from the participation in, be denied the benefits of, or be subjected to discrimination solely by reason of their disability under any program or activity for which Metro receives federal financial assistance.

If any person believes they have been discriminated against regarding the receipt of benefits or services because of race, color, national origin, sex, age or disability, they have the right to file a complaint with Metro. For information on Metro's civil rights program, or to obtain a discrimination complaint form, visit www.oregonmetro.gov/civilrights or call 503-797-1536.

Metro provides services or accommodations upon request to persons with disabilities and people who need an interpreter at public meetings. If you need a sign language interpreter, communication aid or language assistance, call 503-797-1700 or TDD/TTY 503-797-1804 (8 a.m. to 5 p.m. weekdays) 5 business days before the meeting. All Metro meetings are wheelchair accessible. For up-to-date public transportation information, visit TriMet's website at www.trimet.org.

Metro is the federally mandated metropolitan planning organization designated by the governor to develop an overall transportation plan and to allocate federal funds for the region.

The Joint Policy Advisory Committee on Transportation (JPACT) is a 17-member committee that provides a forum for elected officials and representatives of agencies involved in transportation to evaluate transportation needs in the region and to make recommendations to the Metro Council. The established decision-making process strives for a well-balanced regional transportation system and involves local elected officials directly in decisions that help the Metro Council develop regional transportation policies, including allocating transportation funds. JPACT serves as the MPO board for the region in a unique partnership that requires joint action with the Metro Council on all MPO decisions.

Project website: www.oregonmetro.gov/mobility

The preparation of this report was financed in part by the U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration. The opinions, findings and conclusions expressed in this report are not necessarily those of the U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration.

TABLE OF CONTENTS

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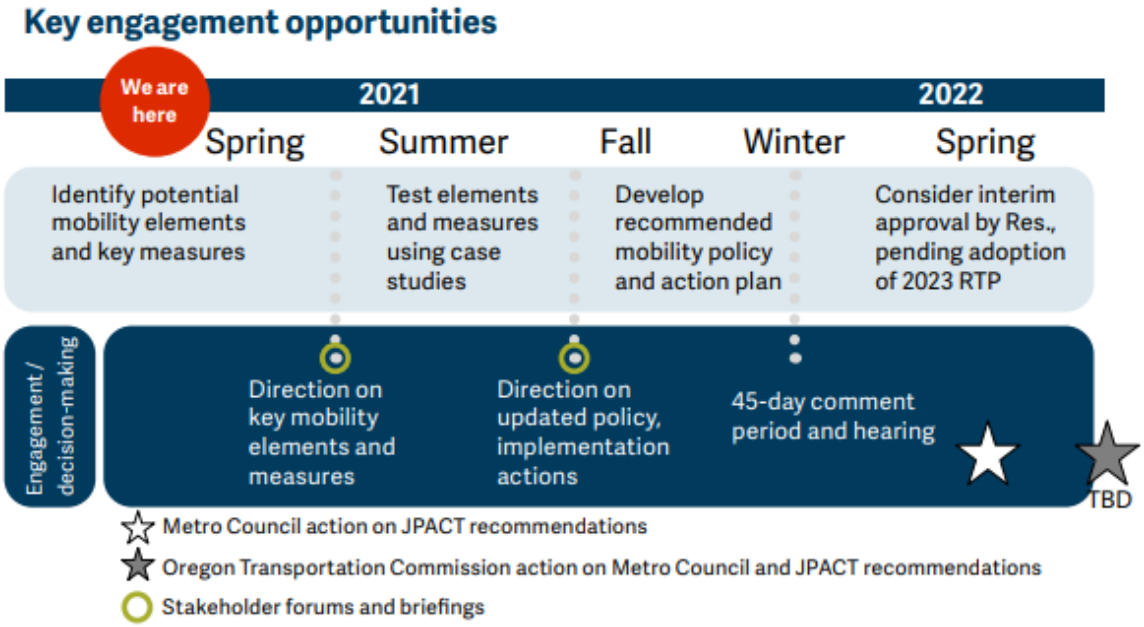
EXECUTIVE SUMMARY

Introduction

Metro and the Oregon Department of Transportation are working to update how mobility is defined and measured in greater Portland. The regional mobility policy update is focused on how mobility is defined and measured in the Regional Transportation Plan (RTP) and local transportation system plans (TSPs), and during local comprehensive plan amendment processes in the Portland area.

In spring 2021, the project team engaged policymakers, practitioners, community leaders and other stakeholders to help shape the proposed elements and measures to include in the updated policy. The draft policy elements and measures that were shared for feedback were informed by input from recent transportation planning efforts and the Regional Mobility Policy update scoping processes as well as feedback from two workshops with the Transportation Policy Alternatives Committee (TPAC) and Metro Technical Advisory Committee (MTAC) in 2020.

Regional mobility policy engagement timeline



Throughout May and June, the project team engaged stakeholders through online forums and committee meetings. The engagement activities included four online facilitated forums, including two forums for planning and engineering practitioners, a forum for goods and freight professionals, and a forum for community leaders. A total of about 130 people (not including the project team and facilitators) participated in the forums. Project staff also presented and received feedback at County Coordinating Committees (staff and policy), MTAC, TPAC, the Metro Policy Advisory Committee (MPAC), the Joint Policy Advisory

Committee on Transportation (JPACT) and the Metro Council. All forums and meetings are listed in Appendix A.

Stakeholders provided feedback on the following potential regional mobility policy elements and measures:

Potential policy elements

- **Access** – All people and goods can get where they need to go.
- **Time Efficiency** – People and goods can get where they need to go in a reasonable amount of time.
- **Reliability** – Travel time is reliable or predictable for all modes.
- **Safety** – Available travel options are safe for all users.
- **Travel Options** – People can get where they need to go by a variety of travel options or modes.

Potential policy measures (narrowed from a list of 38 measures through a technical screening process)

- Multimodal Level of Service (MMLOS)
- Level of Traffic Stress (LTS)
- Pedestrian Crossing Index
- System Completeness
- Travel Speed
- Accessibility to Destinations
- Hours/Duration of Congestion
- Travel Time Reliability (Planning and Buffer Travel Time Indexes)
- Vehicle Miles Traveled per Capita
- Travel Time
- Volume-to-Capacity Ratio (V/C) for Roadway Links
- Volume-to-Capacity Ratio (V/C) at Intersections

Key themes from stakeholder input

There were several themes that emerged across multiple stakeholder groups, including:

Overall Policy

- Climate and equity need to be explicit in the updated mobility policy.
- Define mobility policy to be flexible and responsive to different contexts.

Policy Elements

- Concept of equitable mobility is missing. It is important to acknowledge our transportation system is inequitable due to past policy and investment decisions, particularly for BIPOC community members and other historically marginalized and underserved communities

- Improved accessibility and making it safe, easy and convenient for people and business to reach the goods, services and activities they need to thrive are important elements of mobility.
- Seamless connections between travel options are important to mobility.
- Well-connected, high quality networks for all modes are important to mobility.
- Many aspects of access are important to mobility:
    - Access to places
    - Access to travel options
    - Affordability is key to access
    - Amenities are important to access
- Efficient use of the existing transportation system is important to mobility. This policy should encourage best use of the right of way and the public's investment in the existing transportation system, such as using demand management and operations strategies to improve traffic flow and reduce drive alone trips.

Policy Measures

- Ensure measures are focused on people, not vehicles.
- Ensure all elements and modes are reflected across the measures.
- Avoid redundancy in the measures; combine measures when possible.
- Allow for different measures for different applications and contexts (land use and transportation functions), without being overly complex.
- Ensure legal nexus for system development charges and mitigation can be established.
- Top measures: access to destinations, travel time reliability and system completeness.

Next steps

Input from this engagement will be shared with regional decision-makers as they work together to recommend the mobility outcomes and potential measures to move forward to the next step in the process. Together, the technical screening process and stakeholder input will help shape staff's recommendation to JPACT and Metro Council on the key policy elements and measures to be further evaluated and tested through case studies.

In June, staff will report back on stakeholder feedback received on the elements and measures. In July, JPACT and the Metro Council will be asked to direct staff on the measures to be tested through case studies this summer.

In summer 2021, the project team will test the elements potential measures through case studies. Through the case studies, the team will evaluate which measures are most feasible and useful in measuring mobility.

In Fall 2021, staff will report the results of the case studies to stakeholders and decision-makers. Staff will continue to engage TPAC and MTAC in developing an updated regional mobility policy and action plan for public review and discussion in early 2022 by JPACT, MPAC and the Metro Council. This work will include crafting draft policy language and guidance related to use and applicability of the recommended performance measures.

STAKEHOLDER FORUMS

In April and May, Metro and ODOT hosted four forums to provide participants with an update on the Regional mobility policy update process receive input on potential policy elements and approaches to measuring mobility. Each of the forums was designed for a specific stakeholder group whose expertise and perspectives are important to shaping an updated mobility policy. A total of about 130 people (not including the project team and facilitators) participated in the forums. A fifth forum for housing and land development practitioners was planned and cancelled due to low enrollment. A couple of representatives from the development industry attended other forums. The project staff will reach out to housing and land developers along with other stakeholders again in fall 2021.

- Practitioners Forum 1 – 10:00 AM to 12:00 PM, April 21, 2021
- Freight and Goods Forum – 9:00 AM to 11:00 AM, April 23, 2021
- Practitioners Forum 2 – 9:00 AM to 11:00 AM, April 30, 2021
- Community Leaders Forum – 9:00 AM to 11:00 AM, May 14, 2021

All forums were held using the Zoom online meeting platform. The forum formats varied slightly from group to group. All forums included:

1. Introductions and Workshop Purpose
2. Regional Mobility Policy Update & Policy Elements Presentation (PowerPoints are included in Appendices).
3. Facilitated Small Group Breakouts: Policy Elements and policy measures.
4. Overall Reflections
5. Next Steps and Close

Stakeholder forums key themes

Across all of the forums, there were a number of key themes that were highlighted in multiple discussions.

- There are critical missing elements that need to be explicit in the policy, including: equity and climate action.
- The policy needs to be flexible to allow variance based on jurisdictional needs and codes.

- Avoid redundancy in the measures. Travel speed, travel time reliability, and travel time need to be explored with intention of finding ways to consolidate these measures and reduce complicating the policy.
- Access is a very important part of mobility and needs to consider how it can be applied for all modes and in all jurisdictions through the policy.
- Multimodal Level of Service (MMLOS) needs to take into account all modes of transportation.
- MMLOS is an outcome, that is difficult to measure.
- Freight relies on connectivity between freight modes not included in the policy, i.e., rail, air travel, marine ports, etc.

Practitioner forums summary

For the practitioner forums, participants were placed in groups based on their focus of work. This summary reports input organized by the focus areas. These practitioner groups included:

- Development review/current planning
- Plan amendments
- Transportation engineering
- Transportation modeling/operations
- Transportation system planning

Practitioner forum #1 summary

On April 21, 2021 Metro and ODOT met with practitioners from within the Portland area to discuss the Regional Mobility Policy elements and measures. Including project staff, a total of 76 people registered for the first practitioner forum, 50 of the participants identified themselves as city, county, or state agency employees, 11 identified as consultants or employees of a private agency, two identified as employees of a non-profit, and ten selected the option "other" to explain their affiliation. (See Appendix B for the registration list.)

Highlights from the polls, small group discussions, and large group discussions are summarized as follows. Discussion notes are included in the Appendix B.

Poll Question 1: Do these feel like the right elements for the updated policy?
The 51 participants in the first poll question were split between answering "yes" and "unsure." A total of 26 answered "yes" and 23 answered "unsure." Only two people that participated in the poll answered "no" to this question.

Practitioners forum #1 policy elements small group discussions
The groups were asked to discuss the different policy elements, specifically regarding whether they were the right elements to include in the policy and if anything were missing.

Development Review and Current Planning Discussion Summary

- It's important that there is consistency in the elements across jurisdictions.
- Climate action is missing from the policy elements.
- The definition of mobility needs to be responsive to the needs of different areas in the region.
- Developers have concerns about how much is required of them in terms of right-of-way (ROW).

Plan Amendments Discussion Summary

- Consider innovation and emerging technology and services in the elements.
- The elements will naturally hold different value depending on the community and individuals. This will impact the motivations of those making planning and investment decisions. Consider incentivization to help meet the goals of the policy.
- Efforts to advance racial equity and address the mobility needs of underserved communities needs to be explicit in the elements.
- Connect the policy and the reduction of greenhouse gases to help meet climate goals.
- Incorporate the need for equitable access to destinations.
- "Place" needs to be preserved. Protect destinations from potential negative community impacts of transportation investments.
- Ensure the needs of school-age youth and seniors are addressed in the policy.
- Prioritize the need for reducing vehicle trips and trip length.
- Consider including growth in the policy.

Transportation Engineering Discussion Summary

- It's important to consider how the policy is applied to allow necessary flexibility to accomplish the goals of the region.
- Has ODOT successfully used their suite of measures in transportation system plans (TSPs)?
- Consider working with a consultant team to dig through the issues of the policy.
- Seek examples of other cities that have successfully implemented mobility policies.

Transportation Modeling and Operations Discussion Summary

- Consider affordability in terms of choice of transportation mode and how limited options impact mobility.
    - Affordability may be a part of the "access" element.
- Investing in reliability is cheaper than investing in efficiency and more proactive than investing in volume-to-capacity (v/c).
- Freight lacks flexibility in terms of mode options.

- Is equity an umbrella policy or is there a distinct equity category in the measures?
- How is environmental equity considered in the policy?
- Access and reliability are key elements.
- Consider how a person could find the bus a more rewarding way to travel and capitalize on why a user would choose the bus over another mode of transportation.

Transportation Planning Discussion Summary

- Ensure the policy is responsive to how various demographics use the transportation system – race, income, disability, age, gender identity, etc.
    - People with disabilities and seniors have unique issues traveling on certain types of public transit.
- Equity needs to be explicitly defined in the elements or included as a separate category.
- It's important to consider ways to reduce carbon emissions through the elements of the policy. Include carbon emission reduction as a separate element.
    - There is a need to be responsive to the community in terms of their vocal desire for climate action.
- Access needs to be explicitly called out in the policy.
    - Access is not equivalent to accessibility.
    - Mobility is inherently defined by access to destinations and options for travel.
    - "Need" is subjective in terms of access to destinations.
    - Mobility needs vary by person based on demographics. The mobility needs of a young person are different than the mobility needs of a senior. In addition, the current transportation system is inequitable – for some people, driving a vehicle is their only viable option.
    - Access is specifically about access to the system, not about access to destinations. Prioritize network/system quality and connection.
    - Consider access in terms of jobs and housing.
    - How does remote work impact need for access to destinations?
- Consider how land use impacts the purpose of a facility and its connection to equity.
- Consider including an element that addresses system efficiency.
    - Replace "time efficiency" with "system efficiency" with an intentional focus on spatial considerations and efficient use of the public's investment in the transportation system.
- Reliability is a critical component of mobility. People and goods need to travel with confidence in the time it takes to get from their location to their destination day-to-day.
- The mobility policy needs to consider ALL modes.
- Consider how to move travel away from peak hours to improve mobility.

- It's important to consider that future mobility may be focused more on delivery of goods to where people are.
- Integrate the desire for personal mobility and freedom to travel without excessive interference into the policy.
- Revise the definition of mobility to make it more applicable to how practitioners use the term.
- The policy needs to consider how people and goods will be moved as innovation is implemented into the transportation system. This includes non-traditional modes of delivery.
    - Build the policy in a way that can inspire how other cities develop and integrate climate and mobility policy.
- Consider ways to incorporate economic drivers into the policy without impacts to the accessibility of travel options throughout the region.
- Prioritize mobility options that are less expensive than owning a personal vehicle. This will have an economic benefit.

Practitioners forum #1 policy measures small group discussions

Development Review and Current Planning Discussion Summary
Multimodal Level of Service (MMLOS)

- This measure has the potential to help justify why mitigation is required.
- How will the dichotomy between pedestrian density/infrastructure quality and pedestrian safety and comfort be addressed?

Group members were asked that outcomes they would like to see as a result of the update. Responses are summarized below:

- The system will better support bike and pedestrian users.
- Explore how to use the policy to help guide where development takes place.
    - Public transit and other transportation amenities should be able to be purchased by developers for their properties.
- Measures need to have the flexibility to be applied at different scales across the region.

Plan Amendments Discussion Summary
Multimodal Level of Service (MMLOS)

- It's important to allow flexibility in how modes are measured, e.g., crowded sidewalks are not as much of an issue.
- Determine a method for collecting and measuring person-trip data.
- Include all modes in the MMLOS measurements.

- Consider methods for reconciling what is needed to address flexibility and labor needed to accomplish flexibility.
- Incorporate the comfort and appeal of travel in the system.

System Completeness

- A data collection method is needed to accomplish this measure.
- There are links to system development charges (SDCs) and development fees.
- Areas with vulnerable populations often lack the facilities to support new housing development. This has the potential to create a bias against these investments.

Access to Destinations

- This measurement can assist in revealing equity issues related to mobility.
- Access to destinations is inherently connected to land use. How can this be used to encourage and support the development of "20-minute-neighborhoods?"
- This measure can benefit land use when applied to plan amendments.
- Prioritize access for communities that have historically lacked access to important destinations.
- Land use needs to consider the houseless/homeless population and the changing nature of where they locate themselves.
- Time-of-day is an important element to consider for accessibility.
- Consider prioritizing existing mobility access issues rather than trying to forecast and plan/forecast future issues.
- Safety needs to be incorporated into this measure.

Vehicle Miles Traveled (VMT) per capita

- Use this measure to determine whether the system is improving.
- VMT can help demonstrate the overall impact/efficiency of the system and efficient land use – if destinations are closer together then trip lengths and the need for auto travel for daily trips is reduced.
- Consider using this measure as a proxy for climate and greenhouse gas emissions.
    - Ensure electric vehicles are included in this metric.

Transportation Engineering Discussion Summary

Level of Traffic Stress (LTS)

- How would this be applied in development review?

System Completeness

- Consider the various needs of different jurisdictions when applying this measure – some areas in the region have limited travel options available.

- It will be important to determine and factor in where trips are coming from and how to define those trips.
- This measure may be better defined as accessibility for desired modes, i.e., sidewalk completion, bike facilities, etc. in the nearby transportation system.
- Does "completeness" include vehicular capacity expansion?
- Will each mode be considered separately?
- This has the potential to be difficult to evaluate considering the various jurisdictions and plans that could govern what "completeness" means.

Travel Speed

- This seems ambiguous. Consider taking this from a mobility perspective, but not from a safety perspective.

Hours/Duration of Congestion

- Is this similar to Travel Time Reliability?

Volume to Capacity (V/C) at Intersections

- V/C is commonly limited by intersections.

Other key points that arose during the transportation engineering conversation include:

- Local TSPs may be outdated and therefore not responsive to the measures being considered for the updated policy.
- Most of the measures included have not been considered at a local level.
- There are existing difficulties for developers related to offsite improvements.
- Consider combining Travel Time and Travel Time Reliability into one measure. It doesn't seem like there is a need for both measures.
- Is there a critical need for V/C roadway links vs. V/C at intersections when evaluating a system?
- All the measures seem right, but it may be difficult to apply them.

Transportation Modeling and Operations Discussion Summary

Multimodal Level of Service (MMLOS)

- MMLOS needs to consider all modes and serve system completeness.

System Completeness

- Can this measure be used to identify future capital projects?
- System completeness seems more like an outcome or goal, rather than a measure.
- This measure does not adequately help inform assessment and prioritization of needs.

Access to Destinations

- Diverse land uses support access in a multimodal system.
- Consider including an access to opportunity index.

Travel Time Reliability

- Reliable has the potential for meaning "reliably bad."

Travel Time

- Prioritize reliability of transportation over speed.
- If travel time is included as a measure, it needs to include language about safety.

Other key points that arose during the group's conversation include:

- What measures were screened out during Phase 1?
- What hours have the most congestion?
- Make equity an encompassing component of the policy to help inform and implement equitable investments.
- Consult Vision Zero on how to improve safety in the policy.
- There is a lot of redundancy in the policy elements.
- Equity needs to be prioritized in both projects and investments.
- The policy would benefit from a public health perspective.

Transportation Planning Discussion Summary

Multimodal Level of Service (MMLOS)

- MMLOS needs to explicitly consider all modes of transportation and types of travel.
    - Pedestrian mobility needs to be prioritized, however, streetscape and MMLOS should not be conflated.
- MMLOS is an outcome while the other measures are quantifiable and used to reach the goal of MMLOS.
- How does this measure connect to ODOT? Provide more clarity in this definition.
- Consider a variety of options for guiding the calculation method for MMLOS.
    - Transportation Review Board and the National Association of City Transportation Officials
    - I-5 Value Pricing/Tolling Project
    - Level of Traffic Sense (LTS)
- Consider how emerging technology and innovation may impact pedestrian mobility.
- Inform the measure based on the level of comfort for each mode.

- Basing the measurements on the number of people using a mode will tip the scale towards an auto-centric system.
- The need for access to destinations is subjective.
- Define what is being measured.
- Ensure the MMLOS measure is not too focused on single-occupancy vehicles (SOV).
- The MMLOS measurement seems more effective for the local street systems and seems ineffective at addressing the issues impacting freeways.
    - The freeway system often impacts transportation in local communities.
- Consider how parking and right-of-way (ROW) are connected to the MMLOS.

Level of Traffic Stress (LTS)

- This measure will be helpful in creating a complete network.
- It's important to ensure the LTS measure considers safety.
- Provide examples of jurisdictions that have used legal defensibility.
- Bike and pedestrian infrastructure needs to be developed in a way that incentivizes use.
- It's crucial to include bike and pedestrian in LTS measurements.
- How will emerging technologies and innovation being included in LTS measurements?
- The ODOT Analysis Procedures Manual provides considerations for the context in which facilities are located.
- This measure shifts the metrics towards prioritizing people over vehicles.
- The results of this measure are easily presented on a map.

Access to Destinations

- Track the safety of transportation to and from schools and daycares including after hours of operation.
    - Consider the link between childcare and improving the economy.
- Include how newer technology is impacting access, i.e., bike share, electric scooters, etc.
- It's important to link the distribution networks and our local transportation system.
- Consider how destinations and need for access to destinations changes over time.
    - Access is linked to efficiency.

Vehicle Miles Traveled (VMT)

- Determine how to use this measure both at a local and system-wide level.
- VMT does not have an effective way to capture bike and pedestrian travel.
- It's important to ensure this measure accounts for the entire region and is not just applied at a local level.

- Addressing VMT is critical to climate action.
- Plan a transportation system that reduces the need for people to travel using single-occupancy vehicles (SOV).
- This measure is critical and needs to be included in the policy.

Travel Time

- Time is an important component for all transportation modes.
- Consider the connection between travel time and reliability.
- There is an inherent connection between land use and travel time.
- Travel time metrics need to be applied to public transit.
- Speed of travel can be difficult to address because of how it relates to safety.
- Capture the disparity of travel time between modes as it relates to speed.
- Throughput is a critical component of travel time.
- Seek ways to make transit a competitive option.
- Consider the inevitable shift of need for accessibility to different locations. Allow jurisdictions to develop local plans that address travel time in ways specific to their needs.

Volume to Capacity (V/C) for Roadway Links

- V/C is not enough to measure mobility without using other metrics.

Participants in this group discussed which measures they felt could be removed or need to be modified. These measures and reasoning are summarized as follows:

- Travel Speed – this has the potential to encourage higher speed of travel on the road.
- Travel Time – reliability is more important. Time and volume to capacity (v/c) are becoming more obsolete.
    - Another member responded: *Travel time is a key measure because users expect the transportation system to support regional travel and remove barriers to travelling throughout the region.*

Poll Question 2: What are your top three measures from the list we covered?
Participants were asked to select the top three measures they would like included in the Regional Mobility Policy. There were 45 people that participated in the second poll question, 25 selected Travel Time Reliability, 22 selected Access to Destinations, and 19 selected Complete Streets. All other measures received less than 15 votes.

Freight and goods forum summary

On April 23, 2021 Metro and ODOT met with representatives of the freight and goods industry within the Portland area to discuss the Regional Mobility Policy elements and measures. Including project staff, a total of 31 people registered for the freights and goods forum. (See Appendix B for the registration list.)

Participants at this meeting were broken into two groups and did not have a specific area of interest or specialty guiding their discussion. The summaries of the small group discussions have been combined. Highlights from the discussions are summarized as follows. Discussion notes are included in the Appendix B.

Freight and goods policy Elements Small Group Discussions
The freight groups provided very detailed comments.

- How will other modes of transportation be incorporated into the policy? i.e., air travel, rail, etc.
- Reliability is highly important for serving intermodal and freight needs.
- Consider the impacts that extend beyond the freight corridor but are directly impacted by the ability for freight to move efficiently, specifically e-commerce.
- It's important to include climate and air quality language and direction in the policy.
    - Residential areas may be impacted by increased emissions due to e-commerce.
- Small businesses cannot always pay for the technology upgrades that would reduce climate impact.
- Corporations in the region can influence and force practices to change and have impacts on the regional systems.
- Construction has a significant impact on freight access.
- The list is missing key components like equity, safety, public health, environment, and community vibrancy.
- Reduced vehicle capacity will have a negative impact on freight.
- Freight needs wider highways and freeways to support freight mobility.
- Travel time and efficiency are key components of improving freight mobility.
- Available parking is critical for deliveries.
- Freight needs easy connections to and from the freeway.
- Truck drivers need designated parking for them to rest.
- Capacity planning needs to prioritize efficiency for freight.
- Lack of space for trucks creates safety issues.
- Create a freight-only lane on freeways.

- The policy needs to reflect the complex nature of the freight industry. Modify the language to ensure the nuance is captured.
- Freight isn't singular, there is a diverse and varied nature to the industry.
- Accessibility is needed for freight. Trucks need access to all types of roads.
- Time of day is dependent of freight customers.
- Mixed-use centers need to consider access for delivery trucks.

Freight and goods policy measures small group discussions

Level of Traffic Stress (LTS)

- Consider the stress impact for trucks that share lanes with bikes.
- Consider performing a technical analysis of freight LTS.
- LTS could be reduced by mandates that incentivize businesses implementing electric vehicle chargers and electric vehicle carshare parking.
- This has different implications for freight, especially in terms of safety for the driver, vehicle, and other street users.

System Completeness

- Improve the definition by clarifying what "planned facilities" are.

Access to Destinations

- The Gateway district can serve as an example of the ideal accessibility for freight parking and access to destinations.
- Daily access needs vary from user to user. The policy needs to be responsive to those variations.
- Access is crucial for all road users, especially businesses, employers, and employees.
- Tracking access to destinations will mean different things to different people.

Travel Time Reliability

- It's important to consider freight travel hours.
- Consider locating origin facilities in neighborhoods based on zip code to improve predictability. Smaller distribution centers could increase efficiency.
- Consider linking access to destinations and access to origins for freight.
- If a system is unreliable, there may be a need to split loads into two trucks to deal with the variable travel times.
- Unpredictability on arterials and highways in more localized areas is important to consider.

Participants provided feedback that did not fall within the potential elements, summarized below.

- It's important to consider what innovation in the freight industry will require, i.e., power stations, capital investments, long-term planning investments, etc.

Practitioners forum #2 summary

Including project staff, a total of 69 people registered for the second practitioner forum, 45 of the participants identified themselves as city, county, or state agency employees, 10 identified as consultants or employees of a private agency, three identified as employees of a non-profit, two identified as employees of a federal agency, one identified as an employee of a transit agency, and eight selected the option "other" to explain their affiliation.

Practitioners forum #2 policy elements small group discussions

Development Review and Current Planning Discussion Summary

- Provide context of how we got to these policy elements is necessary.
- The volume to capacity ratio is calculated differently at the regional and local levels due to differences in the analysis tools being used. The regional level analysis uses the regional travel demand model while the analysis conducted for development review uses finer-grained analysis tools. Consider differentiating standards as they are calculated differently.
- There is a disconnect between long-range planning and how it get is implemented through transportation system and development plans.
- How are the elements applied at a local level?
- Travel options need to be applied using an equity lens.
- Connect the elements to other policy areas, specifically land use and housing. Each jurisdiction has different ways of applying the policy areas.
- Equity needs to be a critical component of the policy elements and implementation of the updated policy.
- Climate needs to be included as a policy element.
- Identify parts of the policy that jurisdictions can adopt into their code.

Plan Amendments Discussion Summary

- There is interest in determining how the technical aspects of this project will impact master planning, comprehensive planning, comprehensive planning, and urban growth boundary (UGB) planning going forward.
- How will the new criteria and definitions for mobility be applied to areas with expected growth?

- It's important to include considerations for safety and access, including access to goods to support businesses and restaurants.
- Include an overarching equity lens to address the issues related to access to travel options.
- Do not prioritize vehicles when developing transportation system designs.
- Address the issues of forced tradeoffs when developing transportation project, i.e., reduced travel time vs. safety improvements.
- The Home Builders Association (HBA) categorizes based on housing product.
- The definition of mobility needs to be more holistic and consider how and where vehicle mobility has higher importance in the balance of investment.

Transportation Engineering Discussion Summary

- Reliability is important for transportation system plans (TSPs) to incentivize use of other modes and improve safety.
- Measures need to include accessibility and network completion for all modes.
- It's important that the elements are simple and easily applied.
- Consider adding "travel options" as an element of the policy.

Transportation System Planning Discussion Summary

- It's important to consider how access is necessary for creating land use diversity.
- These elements need to take into account the context, including geography, location, and time-based traffic.
- Clarify whether there is a hierarchal framework for the different policy elements.
- Reliability is the most important element, but efficiency is critically linked, otherwise reliability can mean "reliably bad."
- Freight stakeholders have a vested interest in transportation system planning because of the inherent link to reliability and delivery of goods.
- The policy lacks an explicit reference to how mobility directly impacts livability and quality of life in neighborhoods.
- When thinking about how new elements apply to the mobility policy, V/C measure should still be included in the mix.
- Climate is not included enough, considering the impact that our transportation system has on it.
- This policy allows us to bring in the multimodal perspectives to mobility, which can help us find a good balance and better understand impacts.
- If travel options are provided, they must be viable, safe, and feasible.

- In understanding the practical applications of the measures, we want to address existing deficiencies in a manner that reduces existing disparities and inequities in the system.

Poll Question 1: Do these feel like the right elements for the updated policy?
A majority (20) of those that participated in the poll answered "yes," and 11 answered "unsure." Only one person answered "no."

Practitioners forum #2 policy measures small group discussions

Development Review and Current Planning Discussion Summary

Access to Destinations

- There needs to be an equitable approach to all areas of the city, including suburbs.
- This is a good measure that gets to the crux of what we want to do, but we still need to figure out how to do it.
- It is important to determine what "essential destinations" are and whether that will change over time.
- If we identify climate and equity clearly in the policy it removes an ambiguity that grants the ability to avoid things we really want to achieve.

Pedestrian Crossing Index

- We need to define enhanced crossing based on the type of road.
- Just looking at distance creates too narrow of a focus, may be better to include quality, connectivity, ADA, etc.

Travel Time

- Travel time needs to consider all modes, not just freight or vehicle travel.
- Consider the financial impacts of time for individuals using transit, biking, or walking.
- Suburban areas need to receive more TriMet funding to reduce travel time for transit users and increase transit ridership.

Plan Amendments Discussion Summary

Comments submitted via this group were not identified by measure and were discussed in an overarching manner.

Level of Traffic Stress (LTS)

- Mixed-use developments benefit from access to parks and ability to walk to destinations.

Pedestrian Crossing Index

- This is an important component of the policy for improving safety.

System Completeness

- This is a fundamental and critical measure in creating a multimodal system.
- Focus measures on system completeness and modal options.

Access to Destinations

- Access to destinations in highly important to the Homebuilders Association (HBA) because it directly impacts where people choose to live.

Other comments submitted by the group include:

- It's important to consider how these measures vary.
- In order to have successful testing there should be no more than 12 measurements with the goal of a total of three to four metrics when the policy update is finalized.
- Freeway enhancements are inherently and historically focused on vehicle-focused enhancements.
- Volume to capacity (v/c) is not a useful measure in dense areas like downtown because congestion is expected. It's important to be able to apply different measures depending on the context of the area.
- Clarify and refine the definition of "accessibility" as it relates to localized areas vs. the region or city.
- V/c can be met by making collaborative decisions between land use and transportation.
- The v/c measure is important for system planning by creating links.

Transportation Engineering Discussion Summary

Multimodal Level of Service (MMLOS)

- While a very effective measure, the metrics for collecting MMLOS data are difficult to develop and have shared agreement around.
- Consider the standards for pedestrian crossings included in the vehicle miles traveled (VMT) per capita.

Other comments submitted by the group include:

- Travel Time and Travel Speed seem redundant and the importance of each may vary depending on whether it is being applied in an urban, suburban, or rural area.
- The policy could benefit from a measure for tracking public transit efficiency.

Transportation System Planning Discussion Summary

System Completeness

- This is directly related to livability. There needs to be intentional action to address deficits across the region.

Travel Speed

- Clarify whether this is intended to create faster speed limits, or whether it's about connectivity and reliability.

Access to Destinations

- The tools used for this are usually a travel demand model and may not accurately measure all modes of transportation. Clarify the definition to make it more useful for jurisdictions.
- Provide mobility that enables access to the community.
- Develop a standard for assessing this data.
- Measuring access to destinations requires both the travel demand model and GIS.
- People need consistent access to destinations.

Hours of Congestion/Duration of Congestion

- Bikes, pedestrians, and transit users do not experience the same congestion as those using vehicles.
- It's important that congestion isn't too difficult to calculate.
- Right-of-way is critical for addressing congestion. Reduce lengthy signals.

Travel Time Reliability

- Reliability is more important than the duration of congestion or travel time.

Vehicle Miles Traveled (VMT) Per Capita

- Urban, suburban, and rural areas experience congestion vs. VMT in different ways. It's important to take this into consideration to ensure the policy is responsive and accurate.
- VMT provides a more transparent and flexible way to measure pollution and how much and how far people are driving.

Participants in the Transportation System Planning small groups contributed feedback that was outside the potential measures, summarized as follows:

- The policy lacks definitive language about safety.
- Consider including a metric that measures vulnerability.
- Past transportation investments have contributed to the barriers to mobility.
- Prioritize investments and improvements that make the system more equitable, specifically for historically underserved communities.
- Safety for pedestrians needs to be a top consideration when developing the policy in order to reduce fatalities for those not protected by a vehicle.

    - Coordinate planning with the Statewide Transportation System Plan (STIP) to address safety and equity issues.
- It's important to make the measures more human-centric.
- Highlight mode-split in the measures.
    - It's important to consider the pros and cons of mode-split before making decisions.

Poll Question 2: What are your top three measures from the list we covered?
Participants were asked to select the top three measures they would like included in the Regional Mobility Policy. There were 28 people that participated in the second poll question, 23 selected Access to Destinations, 17 selected Travel Time, and 16 selected Complete Streets. All other measures received 15 or less votes

Community leaders forum summary

Forum overview

On May 14, 2021, Metro hosted an online transportation forum for community leaders. Ten community leaders participated representing traditionally under-represented communities and environmental and multimodal interests. (See Appendix B for the registration list.) The forum included updates on several transportation policy and investment efforts underway at Metro:

- Investments in urban arterials presented by Councilor Gonzalez
- Regional congestion pricing study presented by project staff
- Regional mobility policy update presented by project staff

Project staff solicited feedback on potential mobility policy elements and measures through facilitated small group discussions. See Appendix B for the forum agenda and Regional mobility policy presentation. The results of the mobility policy related discussions are summarized in this document. Participants discussed the following questions.

- Do you have questions about the mobility policy elements or measures? Anything need clarification?
- Are these the most important elements to include in the updated mobility policy? Anything missing?
- Which elements are most important in these different contexts – centers, urban travel corridors, industrial areas and throughways?
- Do any of the measures stand out as being especially important to measuring mobility? Anything missing?

Key themes from community leader input

- The policy needs to be multimodal.
- Climate needs to be explicit in the updated mobility policy
- System connectivity/continuity needs to be considered; especially in suburban areas and between modes.
- Mobility should support the places and communities that we want to see by creating the conditions for desired land uses.
- Consider the impacts of transportation on the whole community.
- Climate and equity needs to be explicit in the updated mobility policy.

Summary of discussions

Policy elements

The comments are organized below by the element that was the primary focus of the comment/discussion. Many of the comments touched on multiple elements.

Time efficiency

- People in Washington County are traveling greater distances compared to people traveling in the City of Portland, so efficiency here seems like a tricky measure.
- Time efficiency in multi-modal transportation (transit, micro-mobility, bike, walking) matters for encouraging their use. They need to be viable.
- We tend to prioritize vehicle efficiency and movement, but there isn't the same for pedestrian movement, active transportation.

Safety

- Are there tradeoffs between safety and other outcomes/elements? What is the acceptable level of risk? Are we talking about fatalities and injuries or property damage?

Reliability

- Suburban and rural trips – transit needs to be reliable/frequent to achieve climate goals. One person on an hourly bus doesn't help.

Missing elements

In addition to providing input to refine the draft elements, community leaders highlighted ideas they felt were missing from the elements.

- Appreciate this work but it is still anchored in the status quo. This is an opportunity to reframe how we talk about transportation and its impact on the whole community.
- Transportation conversations tend to focus on users. The impacts of the transportation system and how it is used affects everyone (social impact). Transportation should benefit the community and state (not just the individual user). The single-occupancy vehicle trip is the "most anti-social choice." Need a hierarchy that prioritizes the most "pro-social" modes.

- Affordability is missing as an element. Cars may be more time efficient, but how do they impact people's budgets?

Climate
- Climate impacts seem to be missing.
- Need to consider unintended consequences of improving reliability. There could be unintended climate impacts-need to find a balance.

Land use
- Missing place-making as an element. Mobility policy should support communities/places.
- Land use context matters. Housing and businesses.
- Current vs. desired future land uses. This policy needs to contribute to the conditions for the desired future.
- It is important to remember people live along urban arterials; we are really talking about people's homes. There are a lot of mixed income residential communities living along these arterials.
- We need to address safety, but not only in the context of traffic violence. Recognize all that concrete means greater impacts to heat island; impervious cover related to rainwater; also noting the disparities people who live along the corridors and how their safety related to having cleaner air, open space, impacts of extreme weather, how that affects their safety and health.

Connections
- There isn't as much continuity when you travel by any other mode aside from a vehicle. There's a lack of sidewalk continuity so a person walking needs to zigzag; when riding transit people have to do a lot of trip chaining and transferring to get where you need to go
- First-and-last mile is so critical to the success of travel options and make it viable; the MAX is a spine; considering this as a connectivity issue; also look at connectivity not to the urban centers.
- What about a suburban context with poor connectivity? It seems missing.
- What about collectors in suburban areas? A lot of traffic diverts off of arterials to collectors. This matters for SRTS, access to parks, etc.
- Not sure why some elements would be more important in some contexts and not others. All the elements seem important in all the contexts.

Measures
- Travel speed seems more car related. Time related measures need to be specific to different modes; we don't want to set the bar relative to vehicles
- As more people use different modes, more amenities (such as a safe place to park a bike, nicer transit stops with shelter and lights) are needed. How do the amenities play into the people's use of multiple modes? Don't just focus on the park and ride; take the

barriers away like the questions of "where do I park my bike, charge my vehicle, etc." to be able to make that trip by a different mode viable.

- Consider e-bike charging and recognize that some parts of the region are deserts for bike shops. From a transit perspective, there is a lot of focus on travel time, but reliability is more important. The focus on travel time isn't getting at the system improvements needed, particularly for other modes and it skews towards vehicles.
- I want to see measures broken down by demographics and understand profiles of who and how they are getting around.
- Speed should not be a priority anywhere.

COUNTY COORDINATING AND ADVISORY COMMITTEE MEETINGS SUMMARY

Meetings overview

The project team briefed the county coordinating committees to answer questions about the mobility policy update and receive input on the potential policy elements and measures. The staff notes from each meeting are included in Appendix C.

- TransPort Subcommittee to TPAC (April 14, 2021)
- Clackamas County TAC (April 27, 2021)
- East Multnomah County Transportation Committee TAC (May 5, 2021)
- Washington County Coordinating Committee TAC (May 6, 2021)
- East Multnomah County Transportation Committee (policy) (May 17, 2021)
- Clackamas County C-4 subcommittee (policy) (May, 19 2021)
- Washington County Coordinating Committee (policy) (June 14, 2021)

County coordinating and advisory committee meetings key themes

- System completion and connectivity are important to mobility.
- It is important that the updated policy can continue to be used to make the case for nexus proportionality for System Development Charges and mitigation.
- Emissions and environmental impacts are missing.
- A number of comments pointed to the need for there to be different measures for different applications, including:
    - Planning uses where the mobility measures are applied. Arterials that serve as major connections are important to consider.
    - Land use contexts
    - Roadway applications

Metro Council, Metro Policy Advisory Committee (MPAC) and Joint Policy Advisory Committee on Transportation (JPACT)

Meetings overview

The project team presented and received feedback at a Metro Council work session (April 13, 2021), and meetings of JPACT (April 15, 2021) and MPAC (April 28, 2021). The notes for these meetings are captured in the meeting minutes on the Metro website (oregonmetro.legistar.com/Calendar.aspx).

Summary of Metro Council input

- The Metro Council wants to ensure the updated mobility policy better supports 2040 implementation and advances the Regional transportation plan priorities. Show how the updated policy relates to the regional priorities.
- Accessibility via density/diversity of destinations is very different than accessibility via speed/travel time. They are two very different types of access, and for different reasons. Also consider access on different roadway classifications and in different land use contexts.
- Efficiency policy element needs to be more than about time (but also include how efficiently the system is being used by people and goods). One idea is to measure energy efficiency or energy intensity of mobility in a corridor.
- Describe how we will evaluate/implement the policy and measures with a racial equity lens.
- Center work on achieving equitable mobility (not just evaluating whether policy and measures can measure benefits and impacts on equity focus areas). Does the policy (how it is implemented) improve equity? Is it addressing racial and economic disparities that people of color and other historically marginalized communities have/are experiencing?
- Similarly, does the policy (and how it is implemented) reduce carbon emissions? Improve safety? Manage congestion?

Summary of MPAC input

- There is an "in between" place missing from the three contexts that should be addressed – places like OR 43 – which serve as major travel routes between centers and are important transit corridors. They are different from throughways, often serve commuters and also connect to industrial areas and support transit.
- Expressed appreciation for the work. Broadly feel this is on-track – and seems to be good set of elements and measures to test.
- The more transparency documenting decisions, methods, etc. the better; it will also important to be transparent about how measures can be applied at different levels,

whether large or small scale, to make it useful to local governments when implementing the updated policy.

- Certain criteria make it more difficult to build support to acquire funding for projects that will result in a system that is viable and will accomplish their climate, safety, and equity goals.
- Emissions is missing as a policy element. Emissions is a way to show if meeting climate and equity goals, particularly from a public health perspective; should be reflected in elements to make it clear to the public that it is a priority.
- In terms of moving away from v/c – housing and 80% of infrastructure is built by private sector – development pays system development charges and for projects based on an nexus of proportionality – the outcome of this effort must be able to establish that nexus.
- How will autonomous and electric vehicles fit into this?

Summary of JPACT input

- Appreciation expressed that mobility is a major lens and goal for looking at transportation in the region.
- Concern with emphasis on congestion in the measures; congestion is a symptom (not a goal). Should focus be more on throughput in how we measure mobility.
- The number of vehicles on the road shows growth in the economy, but there are fewer emissions, and air quality has improved because of vehicle technology, indicating we are in a transition period from fossil fuels to electric and other means.
- Emissions are part of our key indicators and RTP priorities but are not reflected in these policy elements. Would like to see more of a focus on emissions.
- How is the region being thoughtful about emissions that disproportionately affect BIPOC communities? With more emissions in areas of POC, health impacts are important to consider.

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If you picnic at Blue Lake or take your kids to the Oregon Zoo, enjoy symphonies at the Schnitz or auto shows at the convention center, put out your trash or drive your car – we've already crossed paths.

So, hello. We're Metro – nice to meet you.

In a metropolitan area as big as Portland, we can do a lot of things better together. Join us to help the region prepare for a happy, healthy future.

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600 NE Grand Ave.
Portland, OR 97232-2736
503-797-1700

June 22, 2021

REGIONAL MOBILITY POLICY UPDATE

Stakeholder Engagement Report Appendices

A summary of engagement activities conducted in Spring 2021 by Metro and the Oregon Department of Transportation (ODOT) in support of updating the mobility policy for the Portland region

June 2021

REGIONAL MOBILITY POLICY

STAKEHOLDER ENGAGEMENT REPORT SPRING 2021

APPENDICES

Appendix A: Engagement schedule for Spring 2021

Appendix B: Stakeholder forums

- Stakeholder forums registration lists
- Stakeholder forum presentation
- Practitioners Forum #1: April 21, 2021
    - Agenda
    - Discussion group notes
- Freight & Goods Forum: April 23, 2021
    - Agenda
    - Discussion group notes
- Practitioners Forum #2: April 30, 2021
    - Agenda
    - Discussion group notes
- Community Leaders Forum: May 14, 2021
    - Agenda
    - Presentation
    - Discussion group notes

Appendix C: County Coordinating Committees and TransPort meeting notes

- TransPort Meeting: April 14, 2021
- Clackamas County Transportation Advisory Committee: April 27, 2021
- East Multnomah County Transportation Committee: May 5, 2021
- Washington County Coordinating Committee TAC Briefing: May 6, 2021
- East Multnomah County Transportation Committee (policy): May 17, 2021
- Clackamas County C-4 Metro Subcommittee (policy): May 19, 2021
- Washington County Coordinating Committee (policy): June 14, 2021

APPENDIX A

Regional mobility policy 2021 spring engagement schedule

REGIONAL MOBILITY POLICY UPDATE

2021 SPRING ENGAGEMENT SCHEDULE

Dates are subject to change pending availability of agenda time.

Metro Council and Regional Committees

Who	Date
Metro Council	April 13
TransPort Subcommittee to TPAC	April 14
Joint Policy Advisory Committee on Transportation (JPACT)	April 15
Metro Policy Advisory Committee (MPAC)	April 28
County Coordinating Committees	Various dates from April to June
Stakeholder Forums	
JPACT	June 17
TPAC/MTAC Workshop	June 23
TPAC (recommendation to JPACT)	July 9
JPACT (recommendation to Metro Council)	July 15
Metro Council	July 20

County Coordinating Committees

Who	Date
Clackamas County TAC	April 27
East Multnomah County Transportation Committee TAC	May 5
Washington County Coordinating Committee TAC	May 6
East Multnomah County Transportation Committee (policy)	May 17
Clackamas County C-4 subcommittee (policy)	May 19
Washington County Coordinating Committee (policy)	June 14

Stakeholder Forums

Who	Date
Practitioner Forum 1*	April 21, 10 a.m. - noon
Freight and Goods Forum	April 23, 9 - 11 a.m.
Practitioner Forum 2*	April 30, 9 - 11 a.m.
Community Leaders Forum	May 14, 9 - 11 a.m.

** The two practitioner forums will be the same format/content to provide an option for stakeholders to participate on the date that works best for their schedule.*

APPENDIX B

Stakeholder Forums

- Stakeholder forums registration lists
- Stakeholder forum presentation
- Practitioners Forum #1: April 21, 2021
    - Agenda
    - Discussion group notes
- Freight & Goods Forum: April 23, 2021
    - Agenda
    - Discussion group notes
- Practitioners Forum #2: April 30, 2021
    - Agenda
    - Discussion group notes
- Community Leaders Forum: May 14, 2021
    - Agenda
    - Presentation
    - Discussion group notes

FORUM PARTICIPANT ORGANIZATIONS, COMPANIES, AND AGENCIES

Practitioner Forum 1

Angelo Planning
Cascade Policy Institute
City of Beaverton
City of Gresham
City of Lake Oswego
City of Portland
City of Tualatin
City of Vancouver
City of Wilsonville
Clackamas County
DEA Inc.
Fehr and Peers
Happy Valley
Kittelson and Associates, Inc.
Marion County
Metro
Multnomah County
Nelson Nygaard
ODOT
Oregon City
Port of Portland
Portland State University
Street Trust
SW Washington Regional Transportation Council
Trimet
University of Oregon
Washington County
WSP

Freight and Business Forum

Central Eastside Industrial Council
City of Portland Bureau of Transportation
Columbia Distributing
Federal Highway Administration
Kittelson & Associates, Inc.
Legwork Local Delivery
Oregon Beer & Wine Distributors Association
Oregon Trucking Association
Port of Portland
Portland Freight Committee
Sorin Garber & Associates
Urban Land Institute Northwest
FedEx
Oregon Department of Transportation

Practitioner Forum 2

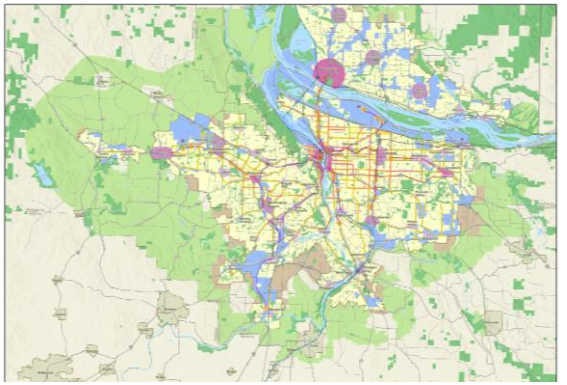
Chris Smith, Citizen Activist
City of Beaverton
City of Hillsboro
City of Portland
City of Tigard
City of Tualatin
City of Vancouver
City of Wilsonville
City of Wood Village
Clackamas County
Clark County
DEA, Inc.
DKS and Associates, Inc.
Fehr and Peers
Homebuilders Association of Metropolitan Portland
Kearns and West
Kittelson and Associates, Inc.
Metro
ODOT
Oregon City
Oregon Department of Environmental Quality
Portland State University
TriMet
Washington County
WSP

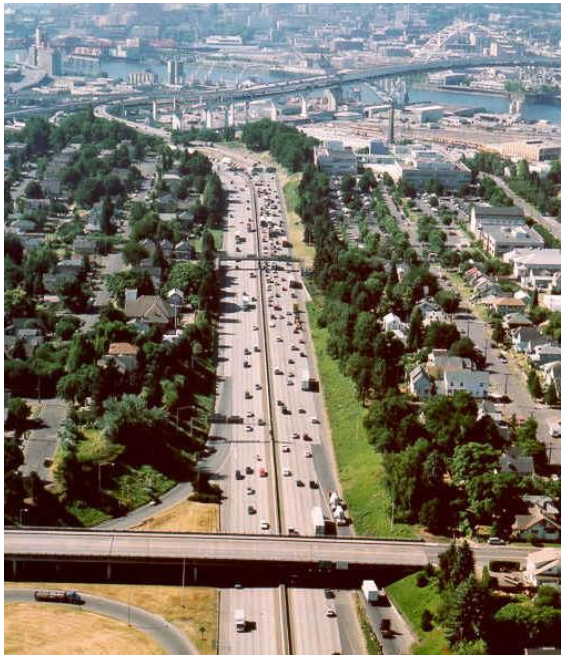
Community Leaders Forum

1,000 Friends of Oregon
Centro Cultural
Clackamas Community College
Clackamas County
Oregon Environmental Council
Oregon Walks
Safe Routes Partnership
The Street Trust
Urban Greenspaces Institute
Verde
Westside Transportation Alliance

Regional mobility policy update

Practitioner forum
April 21, 2021





Metro

Oregon Department of Transportation

Agenda

1. Welcome/workshop purpose
2. Project overview & policy elements
3. Breakouts: draft policy elements
4. Mobility measures overview
5. Breakouts: draft mobility measures to test
6. Recap and overall reflections
7. Next Steps

Workshop purpose

Hear your ideas and feedback about:

- Potential elements of updated mobility policy
- Approaches to measuring mobility

Project status & policy elements

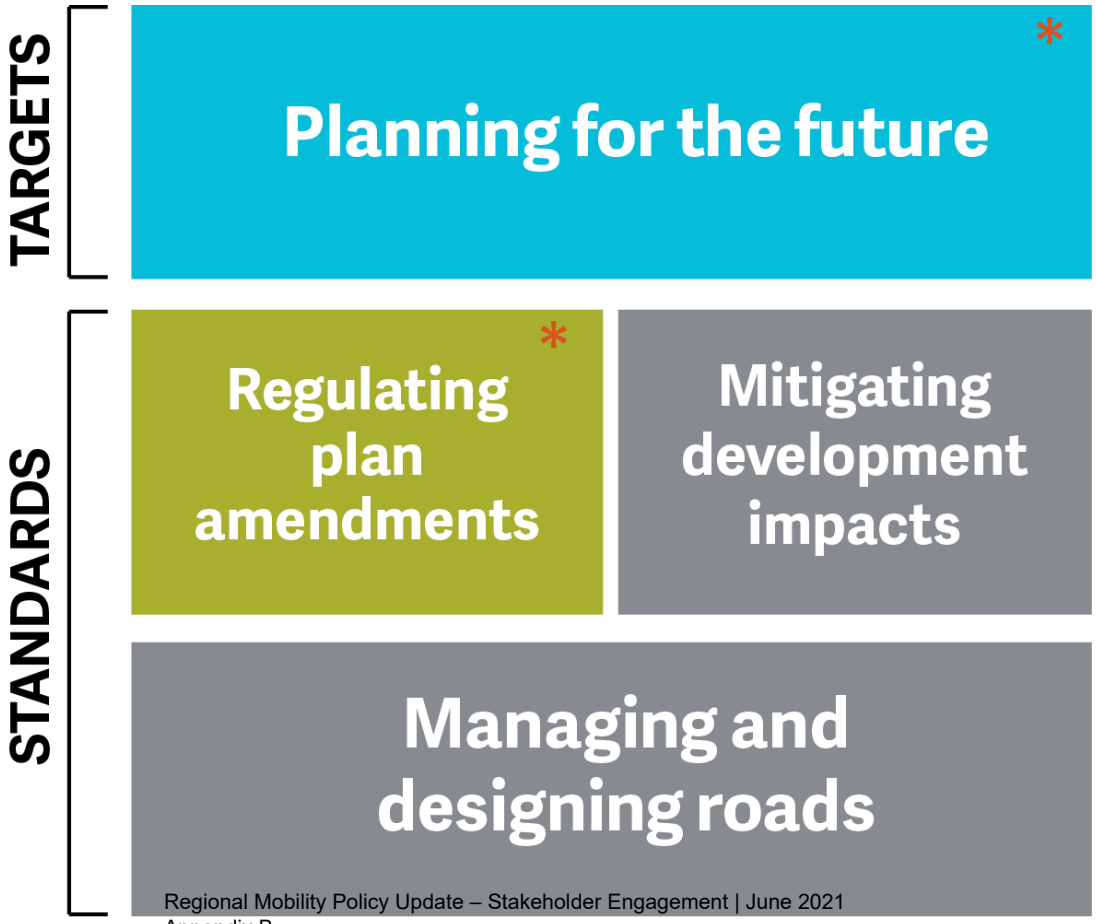
Kim Ellis, Metro
Lidwien Rahman, ODOT

Project purpose

- Update the policy on how we define and measure mobility for the Portland area transportation system
- Recommend amendments to the RTP and Oregon Highway Plan Policy 1F for the Portland area

Visit oregonmetro.gov/mobility

State, regional and local decisions



Transportation system plans, corridor and area plans, including concept plans to set performance expectations to identify needs as defined in the RTP and Oregon Highway Plan

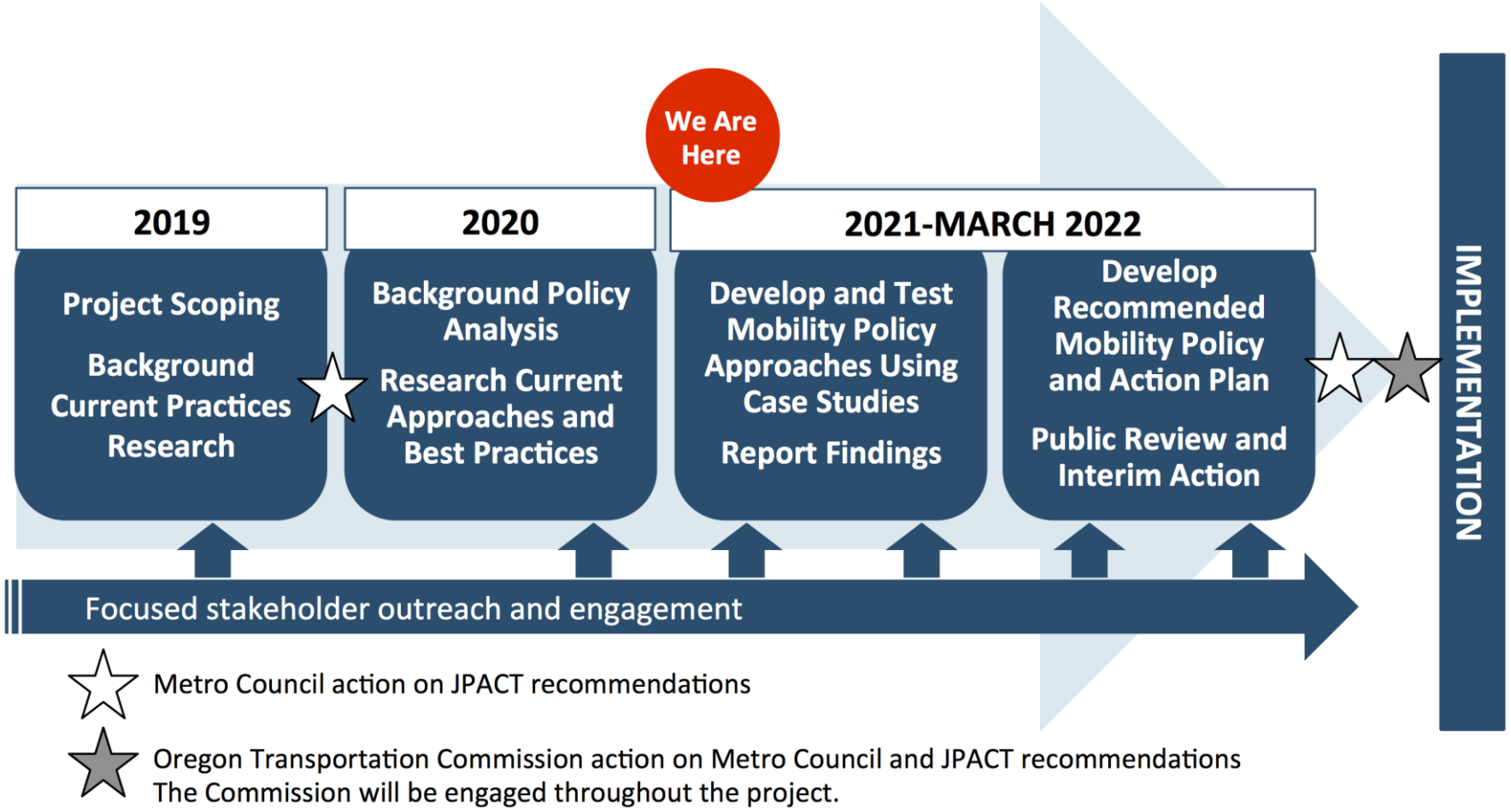
Zoning changes and land use plan amendments using transportation thresholds defined in the Oregon Highway Plan for state-owned roads and local codes for city- and county-owned roads

Development approval process to mitigate traffic impacts using thresholds defined in the OHP and local codes

Operational and road project designs as defined in the 2012 Oregon Highway Design Manual and local codes

* Focus of this effort

Project timeline



Where is this headed?

Plan 2020-23

2020-22

- Develop updated regional mobility policy (and associated measures)

This effort

2022-TBD

- Incorporate through OHP amendment/update (pending OTC approval)

2022-23

- Incorporate through RTP and functional plan updates (pending JPACT and Council approval)

Implement Post 2023

Post 2023

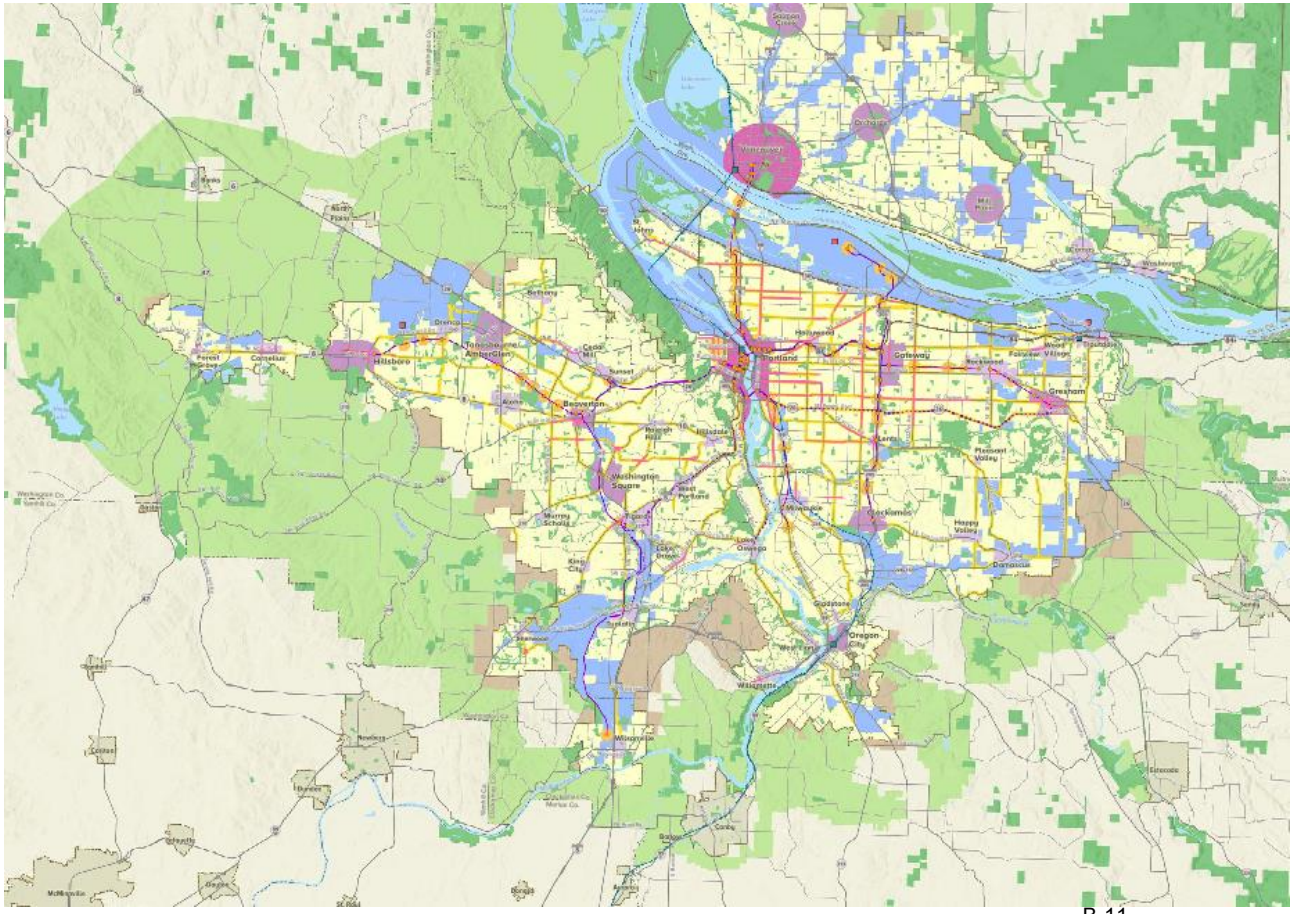
- Implement through TSPs and other local ordinances
- Update state and local standards, guidelines and best practices

2040 Growth Concept is our foundation

Adopted as the land use plan for the region under state law (ORS 197)

Transportation plans must be adequate to serve planned land uses

Codified in regional plans governing cities and counties



Adopted in 1995 and acknowledged by the Land Conservation and Development Commission under the statewide planning program

2018 Regional Transportation Plan priorities

Equity

Climate

Safety

Congestion

Oregon Transportation Commission Strategic Action Plan priorities

Equity

Prioritize diversity, equity, and inclusion by identifying and addressing systemic barriers to ensure all Oregonians benefit from transportation services and investments.

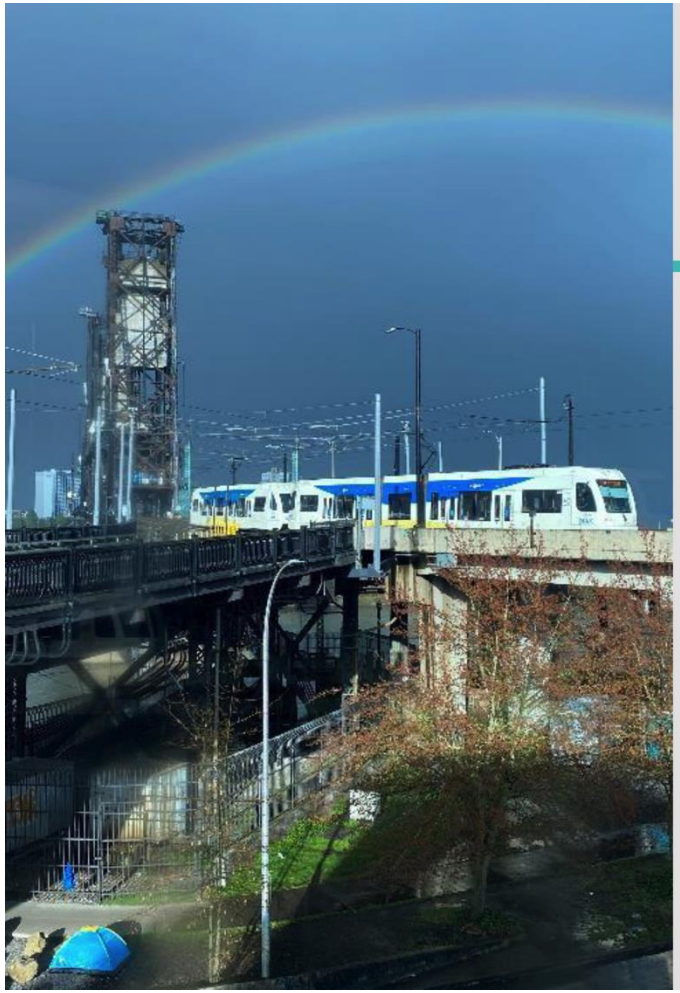
Modern Transportation System

Build, maintain, and operate a modern, multimodal transportation system to serve all Oregonians, address climate change, and help Oregon communities and economies thrive.

Sufficient and Reliable Funding

Seek sufficient and reliable funding to support a modern transportation system and a fiscally sound ODOT.

Oregon Transportation Commission Strategic Action Plan priorities



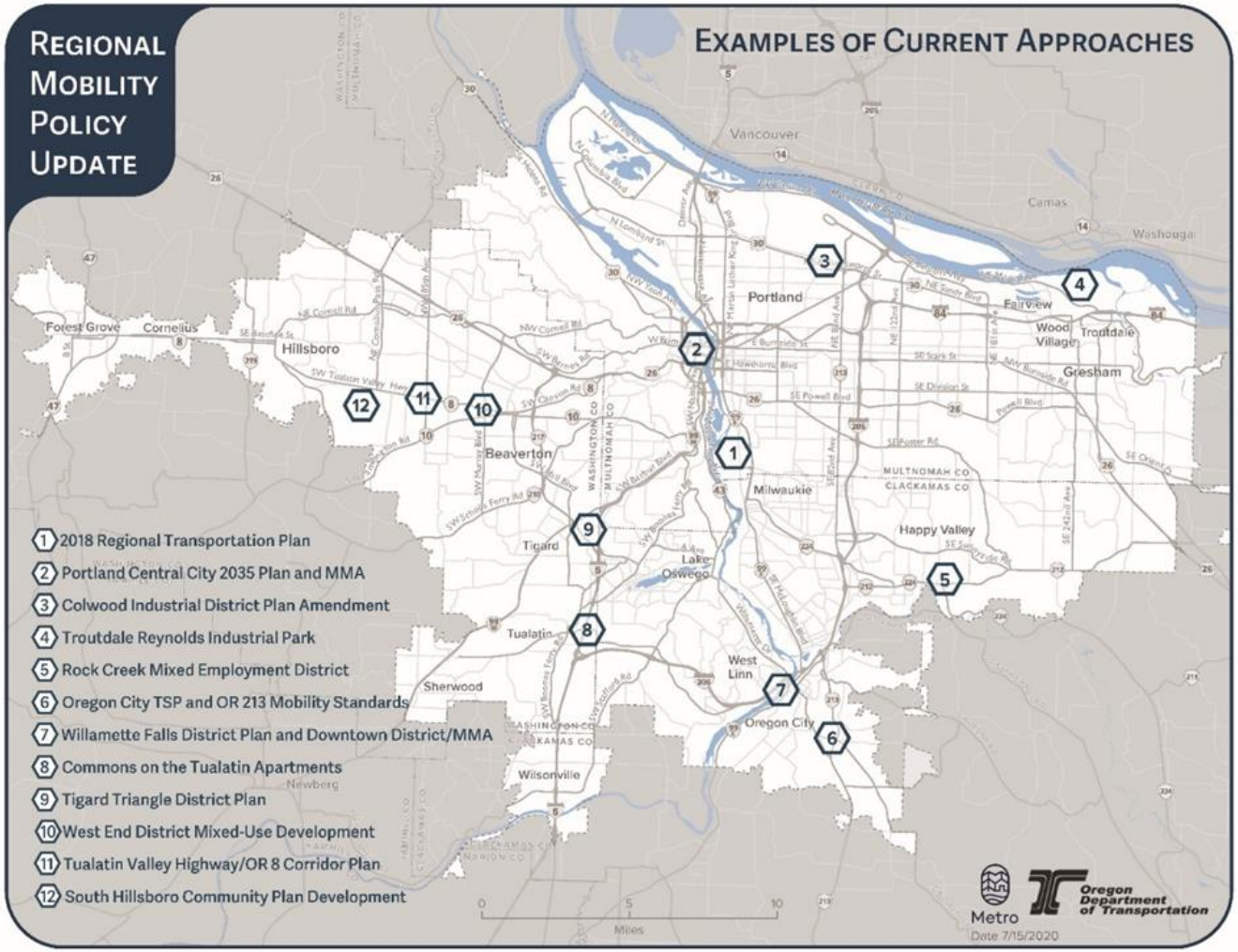
Modern Transportation System

Build, maintain, and operate a modern, multimodal transportation system to serve all Oregonians, address climate change, and help Oregon communities and economies thrive.

- **Preservation and Stewardship:** Preserve, maintain, and operate Oregon's multimodal transportation system and achieve a cleaner environment.
- **Safety:** Prevent traffic fatalities and serious injuries and ensure the safety of system users and transportation workers.
- **Accessibility, Mobility and Climate Change:** Provide greater transportation access and a broader range of mobility options for Oregonians and address climate change.
- **Congestion Relief:** Invest in a comprehensive congestion management strategy for the Portland metropolitan region to benefit all Oregonians. Implement system and operational innovations to reduce traffic congestion throughout Oregon.
- **Project Delivery:** Develop practical solutions to transportation problems in order to address community needs and ensure system reliability and resiliency.
- **Innovative Technologies:** Invest in and integrate technologies to improve transportation services and operations throughout Oregon.

B-14

Research on current approaches in the region



Information about all twelve available on the project website

oregonmetro.gov/mobility

B-15

Key themes and observations

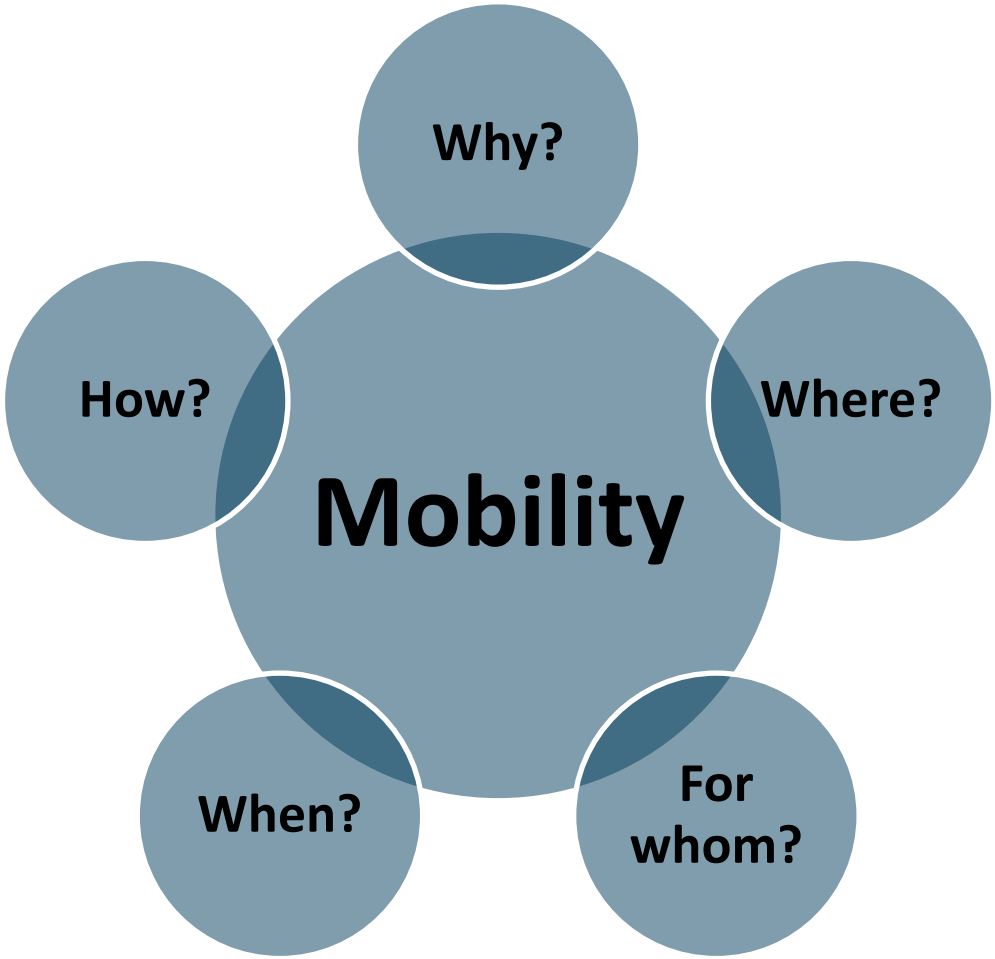
- V/C measure is a useful diagnostic tool
- V/C ratio is more strictly applied as we move from system planning to project design

- Mobility is one of many policies and measures considered in system planning
- ODOT and local agencies would like more multi-modal measures that could be applied to plan amendments and development review
- Plan amendments should focus more on consistency with the local plans than the v/c measure

Stakeholder definitions of mobility

- “Getting to where you need to go safely, affordably and reliably no matter your [mode of travel], age, gender, race, income level, ZIP code...”
- "Mobility – focus on moving people and moving goods predictably and efficiently.”
- "Efficient freight movement and access to industry and ports...play a key role in the state’s economic development."

How do you *define* mobility?



B-18

Draft Mobility Policy Elements

Access	• All people and goods can get where they need to go.
Time Efficiency	• People and goods can get where they need to go in a reasonable amount of time.
Reliability	• Travel time is reliable or predictable for all modes.
Safety	• Available travel options are safe for all users.
Travel Options	• People can get where they need to go by a variety of travel options or modes.

Small group breakouts:
draft mobility policy elements

Discussion

1. Do you have questions about the mobility policy elements? Anything need clarification?
2. Are these mobility policy elements right? Are these the most important elements to include in the updated mobility policy?
3. Is anything missing?

Mobility measures overview

Susie Wright, Kittelson

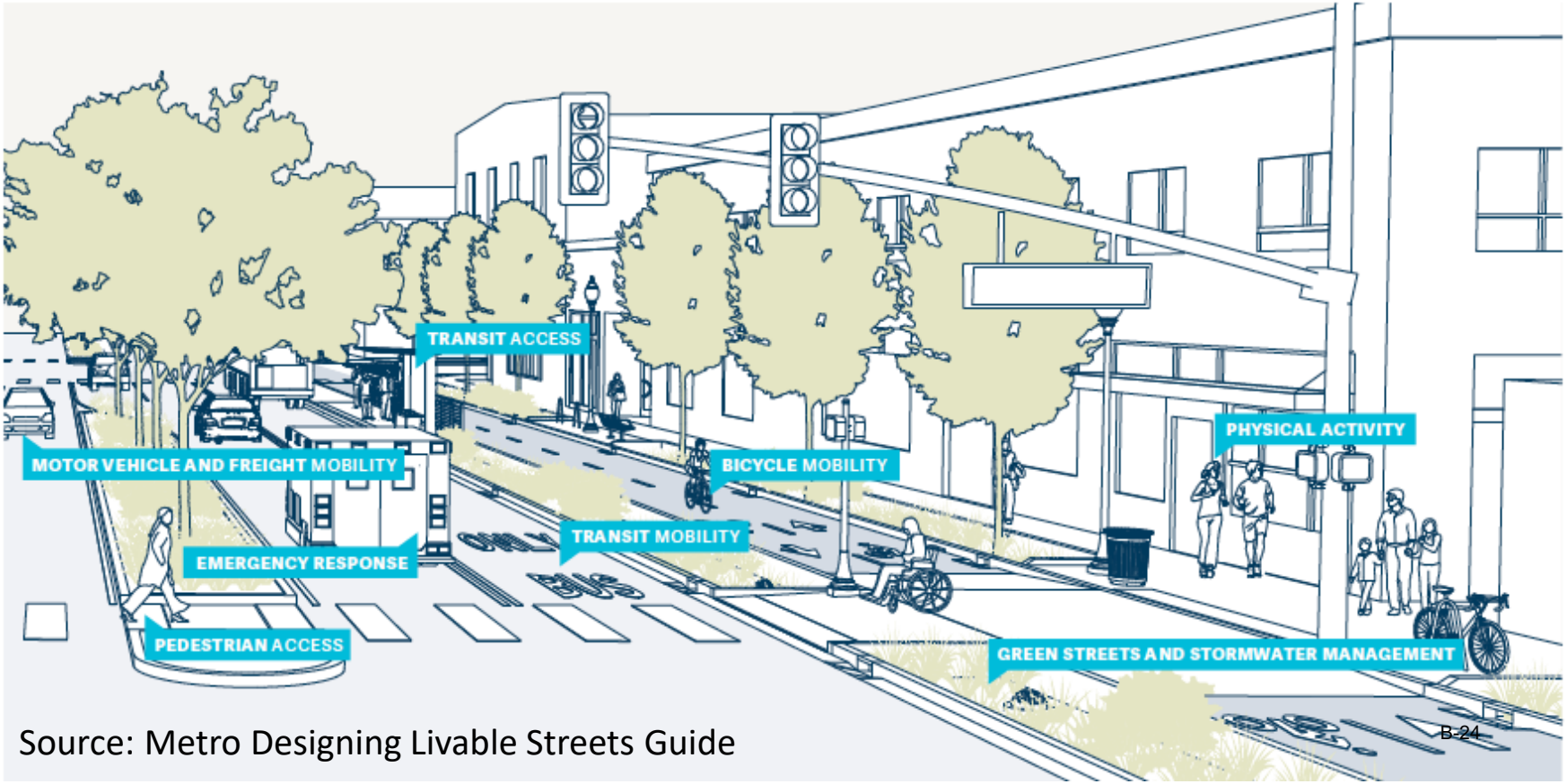
Mobility policy considerations

Updated policy needs to:

- Be equitable
- Consider who, why, when, where, how
- Include multiple measures that consider:
  - location and land use context
  - facility type and function(s)
  - user needs
  - time of day
  - travel options
- Consistently inform different planning applications

What does mobility look like?

Streets serve many different functions. Various functions and modes may be prioritized on different streets depending on planned land use context.

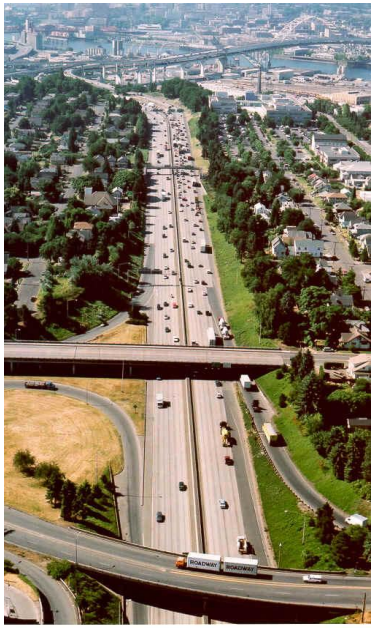


Source: Metro Designing Livable Streets Guide

B-24

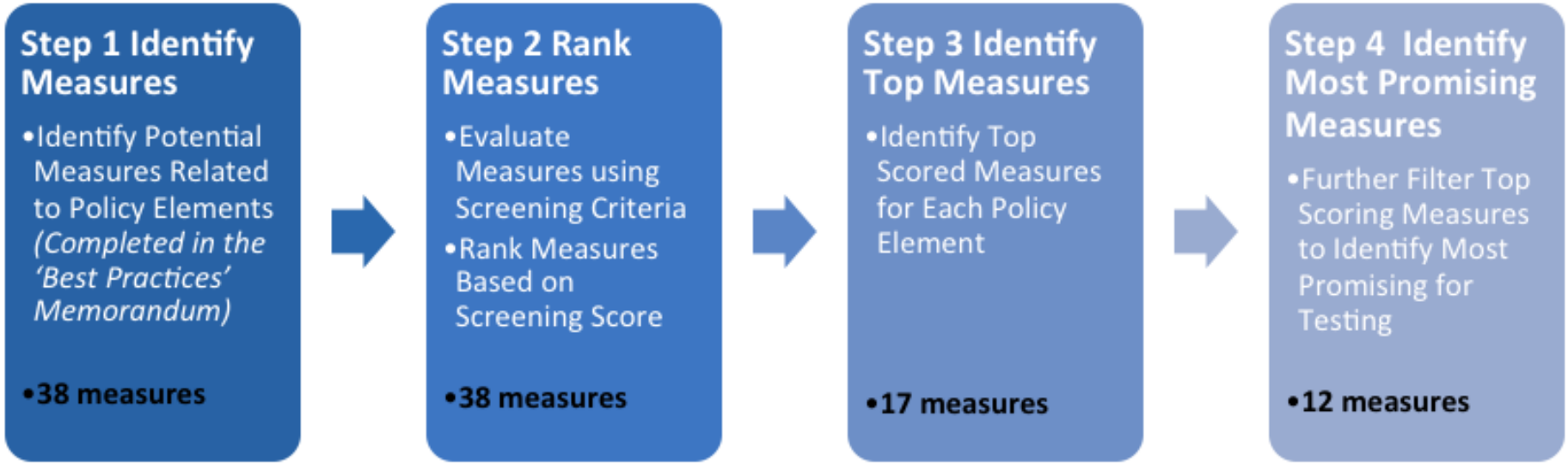
How should we measure mobility in different contexts?

Source: Metro Designing Livable Streets Guide




Source: Metro Designing Livable Streets Guide

Screening process



Screening criteria used in Steps 2 and 3 to rank and identify top measures by mobility policy element

Access	•Does the measure help estimate potential increase in access to opportunities, social connections, and goods for all people? •Does it evaluate access for people and/or for goods at the statewide, regional, and local levels, consistent with functional classification? •Does it measure if a transportation system provides meaningful access to travel choices for all people?
Travel choices	•Does the measure help evaluate the availability and viability of modal choices? •Does the measure help evaluate the availability and viability of modal choices for goods?
Reliable & efficient mobility	•Does the measure help evaluate whether the transportation system is used efficiently? •Does the measure help evaluate whether the people and/or goods 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?
Safety	•Does the measure help estimate potential reduction in crashes, especially fatal and serious injury crashes? •Does the measure correlate to factors that are known to increase or decrease safety?
Other regional goals	•Does the measure have a positive correlation to equity goals? •Does the measure have a positive correlation to climate change and air quality goals? •Does the measure have a positive correlation to land use goals and support 2040 land use implementation? •Does the measure have a positive correlation to fiscal stewardship goals?

Note: The screening process utilized the screening criteria established in **Supporting Document C**.
The memorandum identified 10 screening criteria categories, which were then pared down to those shown above.

Screening criteria used in Step 4 to identify most promising measures

Technical needs and feasibility

- ✓ Ease of analysis
- ✓ Direct correlation to mobility
- ✓ Overlap with other policy elements

Initial qualitative assessment of evaluation criteria that will be applied during the case studies.

Draft Potential measures

Being considered for testing and refinement

Listed in order from highest to lowest screening score

Measure	Mobility Policy Elements				
	Access	Time Efficiency	Reliability	Safety	Travel Options
Multimodal Level of Service (MMLOS)	●			○	All modes
Level of Traffic Stress (LTS)	●	○		●	Bike, Pedestrian
Pedestrian crossing index	●	●		●	Pedestrian
System completeness	●	○		○	All modes
Travel speed			○	●	Vehicle, Freight, Transit
Accessibility to destinations	●	○	○		All modes
Hours of congestion/ duration of congestion		●	●		Vehicle, Freight, Transit
Travel time reliability		○	●		Vehicle, Freight, Transit
Vehicle miles traveled (VMT) per capita	○	●		○	Vehicle, Freight, Transit
Travel time		●			All modes
Volume-to-capacity ratio for roadway links		●	○		Vehicle, Freight
Volume-to-capacity ratio at Intersections		●	○		Vehicle, Freight

● direct measure ○ indirect measure

B-29

Small group breakouts:
draft mobility measures to test

Discussion

Looking at the list of measures:

1. Which do you want to talk about today, and why?
2. Are these metrics going to produce the information needed to measure success on the five mobility elements?
3. Will these measures work for you in practice/in your community?
4. Do you have any advice we should think about before testing through case studies?
5. What measures make sense in what areas/contexts?

Recap and overall reflections

Allison Brown, JLA

Next steps

Kim Ellis, Metro

Next steps

April to May 2021 – Engage policymakers and stakeholders on potential mobility elements and related mobility measures for testing

June 2021 – Seek JPACT and Council direction on mobility elements and measures to test through case studies

Summer 2021 – Test mobility policy elements and measures through case studies

Fall 2021 – Report case studies findings and recommend updated mobility policy and measures for further public review

Thank you!

Kim Ellis, Metro

kim.ellis@oregonmetro.gov

Lidwien Rahman, ODOT

lidwien.rahman@odot.state.or.us

Metro

Oregon Department of Transportation

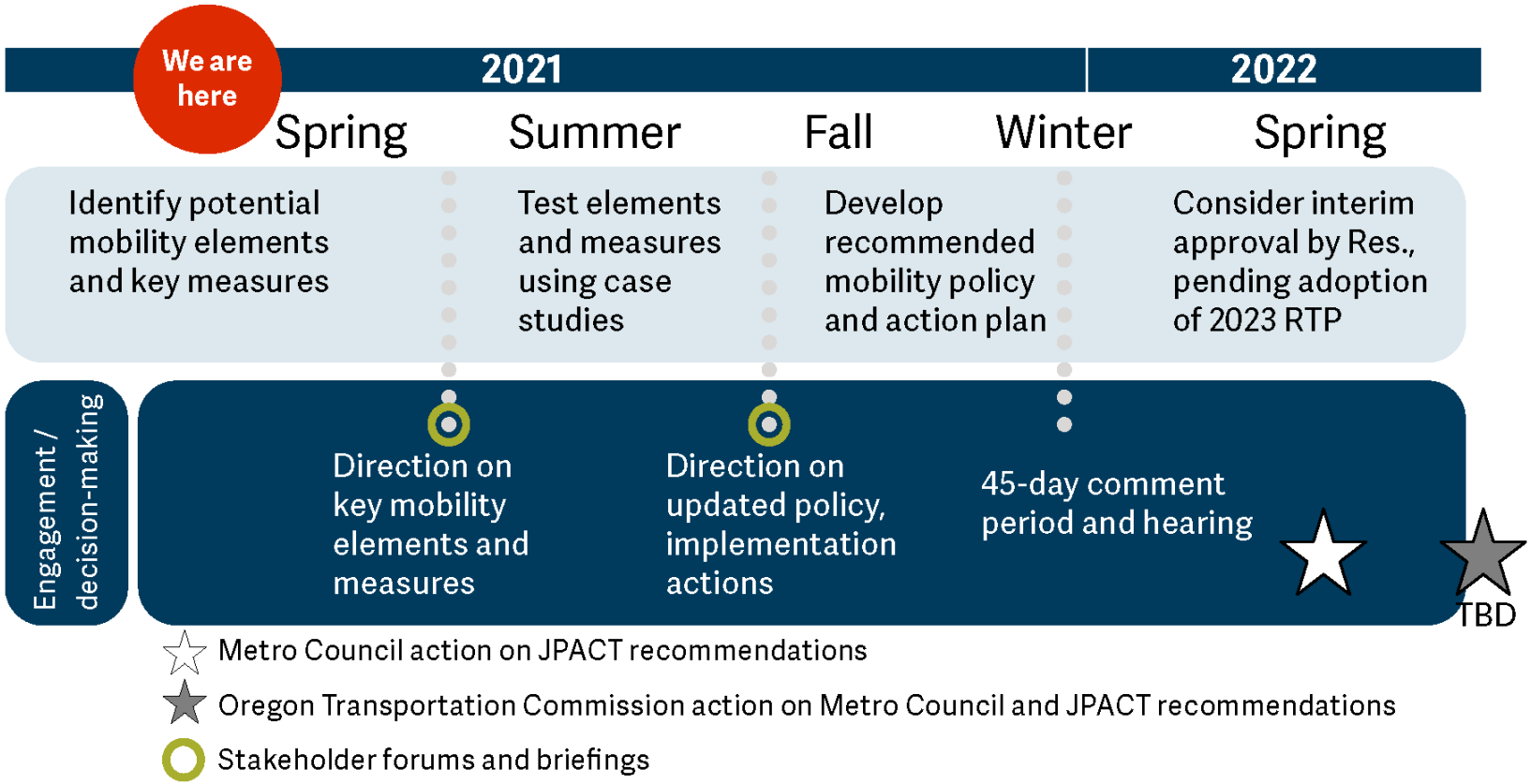





oregonmetro.gov /mobility

Engagement and outreach

Key engagement opportunities



Potential measures descriptions

Measure	Description
Multimodal Level of Service (MMLOS)	MMLOS is a level of service (LOS) system that measures the quality and level of comfort of facilities per mode based on factors that impact mobility from the perspectives of pedestrians, cyclists, and transit riders, respectively.
Level of Traffic Stress (LTS)	Level of traffic stress (LTS) classifies points and segments on routes into different categories of stress ranging from 1 (low stress) to 4 (high stress) based on factors that correlate to the comfort and safety of the bicyclist or pedestrian using that facility.
Pedestrian Crossing Index	The distance between pedestrian crossings compared to a target maximum distance.
System Completeness	The percent of planned facilities that are built within a specified network.
Travel Speed	Average or a percentile speed for a network segment or between key origin-destination pairs, during a specific time period.

Potential measures descriptions

Measure	Description
Accessibility to Destinations	The number of essential destinations within a certain travel time or distance, by different modes.
Hours of Congestion/Duration of Congestion	The number of hours within a time period, most often within a weekday, where a facility's congestion target is exceeded.
Travel Time Reliability	Indicators of congestion severity that assess on-time arrival and travel time variability.
VMT per Capita	The number of miles traveled by motorists within a specified time period and study area, per the study area's population.
Travel Time	Average or a percentile time spent traveling between key origin-destination pairs, during a specific time period.
Volume to Capacity Ratio (for roadway links and intersections)	The ratio of traffic volume to the capacity of a roadway link or intersection during a specified analysis period.

Agenda

Metro
600 NE Grand Ave.
Portland, OR 97232-2736

Meeting: Regional Mobility Policy – Practitioners Forum (Session 1)

Date: Wednesday, April 21, 2021

Time: 10:00 a.m. to noon

Place: Zoom virtual meeting

Click the link to join the meeting: https://us02web.zoom.us/j/87640371267?pwd=WlFaVW90eWxYYXZkeXZCYkppWWNGdz09
Passcode: 608690
Phone: (253) 215-8782

AGENDA

10:00 AM	**1. Introductions and Workshop Purpose**	**Allison Brown, facilitator**
10:15 AM	**2. Large Group: Metro/ODOT Regional Mobility Policy Update & Policy Elements** • Review of project goals, objectives and timeline • Grounding in RTP and OHP • Share mobility policy elements	**Kim Ellis, Metro** **Lidwien Rahman, ODOT**
10:30 AM	**3. Small Group Breakouts: Policy Elements**	**Allison Brown, facilitator**
10:50 AM	**4. Large Group: Mobility Measures** • Overview of the potential mobility measures	**Susie Wright, Kittelson & Associates**
11:05 AM	**5. Small Group Breakouts: Mobility Measures**	
11:45 AM	**7. Large Group: Re-cap and Overall Reflections**	**Allison Brown, facilitator**
11:55 AM	**8. Next Steps** • Additional practitioner forum coming up: tell your colleagues • Other outreach activities	**Kim Ellis, Metro**
12:00 PM	**9. Adjourn**	**Allison Brown, facilitator**

Transportation modeling/transportation operations group

Elements discussion:

Sophia Maletz – what about affordability in goals? People choose their transport by money. What about unbanked people? This affects their mobility and is something Trimet is thinking about.

Rhyan Schaub – asked question about alignment with regional goals.

Bob Hart – in regard to affordability, can that fit under "Access"? or is it a separate measure?

Molly – good question, we typically think of access as geography. Bob, includes affordability in addition to proximity.

Mike Coleman – there can be elements that are subsets of the five goals. E.g. mobility at an intersection vs. network level. Then a sixth could be connectivity, but see how they can collapse under theses five.

Mike, it's a challenge to make a right of way that is great for all. Efficiency and reliability can compete with each other. Reliability is probably the most important. Building to be efficient at all times will cost a lot more. V/C at peak hour – we can't do that anymore. Sometimes, it will be bad, but at least we know and can plan for it.

Molly - does efficiency still belong?

Sophtia – Efficiency is an important element of convenience. I like to think about convenience. Are you moving with kids, have a cold, …

Bob – Many times a car trip is a lot quicker, whereas a more efficient transit system would allow people to use transit instead of driving.

Mike – Mode Choice in the realm of freight isn't as flexible. Or any others that have to get to a place to do business, i.e. contractor, etc. Reliability ala just in time delivery. Efficiency is need for those that don't have mode choice options.

Rhyan question about data sharing and are these policy goals outward facing? When do the inward facing goals come into play – like data sharing. We are going to need these to implement the outward facing goals.

Moly, yes they re outward facing.

Bob, is equity an umbrella policy or is there a separate distinct equity category/ and measures.

Sophia, as we talk about equity, is there an environmental equity component?

Molly, what is number 1 ?

Sopia – At TriMet safety is often number 1. What do the City of Portland's Vision 0 team consider most important to safety?

Mike, Access rises above as number 1. It's an umbrella elements that captures some of the others. Then the others address the #2 "how to"

Bob – Accessibility is key, with reliability being the place we have access to influence the system via tools such as tismo.

Rhyan, to satisfaction, is it important that a trip is rewarding? This could be naturally rewarding—the joys of talking to neighbors on the bus or rewards such as incentives from employers. Example Rose lane – I got to go first—it's satisfying to go faster.

Mike – interesting vocabulary. We often think of consequence, but now talking about rewards – the positive, is great. TriMet does a great job with that.

How and are we talking into account the joy of moving, "moments of joy" from the trip".

Measures

- MMLOS
    - Bob, does MMLOS include system completeness? Intrigued by this one because it looks like it would cover a lot of needs. It seems the most comprehensive.
    - Mike, Table 7 however, shows that MMLOS only serves access, not the other goals, but am not sure how it's measured. I can see how in a comp plan level of mapping, there would be a transit master plan, bike ped, each mode etc. Could be a great way to evaluate large scale plans like comp plans, district plans, etc. Perhaps more so than for small areas or development.
    - General consensus is that people don't know enough about what goes into MMLOS though.
- System Completeness
    - Mike good tool, wonder about Use to identifying future capital projects.
    - Sophia, this one is tough in that it sounds like this defines the outcome or end goal.
    - Bob – this doesn't tell you how to prioritize to assess needs. Example, FourthPlain blvd has sidewalk gaps, does this help us identify and fix those?
- Travel time
    - Bob – the goal isn't to make it faster, but rather to improve reliability. As a single measure, it makes me uncomfortable. Example of congestion. Unrealistic to say we'll fix it, but we can manage it.
    - Are time and speed the same thing?
    - Molly pointed out link of Speed to safety.
    - Sophia would like to see a consolidated list to know if / how well the metrics are evaluated. E.g. there's nothing here that mentions safety. Is it only speed?

Bob, thinking about things that got screened out. Such as person throughput, hours of congestion. V/C alone doesn't address how long. Glen mentioned F%P Seat Utilization theory.

- Accessibility to destinations

    - Accessibility can be measured for all modes. Auto modes require speed for access increase. Diverse land uses support access in a multi-modal system
    - Sophia, likes access to opportunity index. Is there something established? Access sounds a little bit vague. Opportunities seems better
    - Bob also intrigued by opportunity index.
    - GB this was screened out likely because of lack of understanding. PMT should discuss
    - Mike, this also touches on land development.
- Travel time reliability
    - Mike, feels similar to hours of congestion. Could be reliably bad. Although in circumstances that might be the best we can do, especially in urban area. Might be a good measure for other modes beyond autos. This measure has some redundancy with others. Could lead to over counting . Is travel time captured in duration of congestion
    - Sophia, looking at the list, could we add some environment and equity factors such as cost burdens or affordability.

Group was curious about what got screened out. They were interested in hours of congestion and people throughput

Mike, Addressing equity via these measures is one thing. On top of that, if you evaluate the whole community considering equity will lead to decisions on how to implement and invest

Bob, Equity comes in when making investment decisions. Sort of the next step after this.

Sophia – interested to know what Portland's Vision Zero team thinks about this.

Bob, I can see how most of these can be applied to many modes, but a few are purely vehicle based.

Mike, even if each of these applied to each mode, there is overlap and redundancy. Is that intentional? Could over rate some things. For example, travel speed and travel time may not be distinct enough.

Equity discussion:

- Equity comes into the prioritization of projects and budgets.
- A public health perspective would help with the equity perspective – what needs to be measured from a public health perspective

Overall feedback on measures; Most of these feel like vehicle measures not multimodal measures

April 21 Forum Notes

Breakout Room Attendees: Kate Hawkins, Becky Steckler (Urbanism Next UO), Kelsey Lewis (Tualatin, policy analyst), Cody Meyer (DLCD, climate change/mitigation with metro areas across the state), Bill Holmstrom (DLCD, state lead for planning, working on the climate friendly equitable, coordinated transportation planning), Sarah Iannarone (new executive director for the Street Trust), Darci Rudzinski (APG, on the project team), Steve Kelley (Washington County, leads system planning), Lynda David (southwest Washington regional transportation council, focused on Clark County), Lucia Ramirez (ODOT-principal planner, on the project PMT), Molly McCormick (Kittelson, on the project team)

Breakout Session #1:

- With the emphasis on carbon emissions, why doesn't it prioritize lower carbon footprint modes? What about health impacts?
    - VMT would be useful for these points.
    - Would greenhouse gas emissions be part of the time efficiency element?
- Where does the equity area fall? If it is a high priority, it should be explicitly referred to in the mobility definition.
    - Equity should be mentioned in access or as its own category.
    - Same with greenhouse gas emissions.
- Context or community will be important.
    - What should be the purpose of a facility depending on its land use context? This could be tied to equity.
- A big problem with this policy is the name: mobility.
    - Getting people to where they need to go is the most important component.
    - Need a better definition of "mobility". The mobility groups around the state are generally freight-centric but that is not hoe practitioners use the term.
    - Don't conflate access and accessibility. Consider population with disabilities.
- What about different groups of people (age, gender, race, etc.) and how they use different travel modes? Is that considered?
- System efficiency is another idea – instead of counting cars, can we count people?
    - Take out "time efficiency" and replace with "system efficiency".
    - Time is one component, but there is also a spatial component. It can start to get at those emission impacts.
- Term "for people and goods" – how does the policy incorporate everything from deliveries by traditional truck vehicles to drones and other newer means of freight?
    - Good point that mobility in the future may be more about the movement of goods/services to where people already are.
    - But also do not want to miss that sense of personal freedom, personal mobility, etc. that is important to the region.
        - It seems like it is partially covered in some of the policy elements like travel options and time efficiency.
        - Need to capture the desire to travel about the region or community with limited interference.

- Appreciate the want to include climate change, but not sure that regional mobility is where we should focus our efforts to tackle that issue. The metro region's transportation impact is minor compared to impacts from coal mining in other countries, for example.
    - What we do around development and policy in Portland can influence how China or others develop. "Do what we do" not "do what we say". Our policy leadership is one of our best tools to combat climate change.
    - Its not that our emissions will move the global needle but how we lead can pave the way for others. It is also not just about carbon emissions but also the air particles coming out of tailpipes. Carbon emissions are just one way to measure the externalities.
    - Green leadership is not insignificant for our future economy.
    - To meet the climate issues, we still need to do our part. Don't just put it on others.
- Interested in including economic impacts into the mobility definition as well.
    - Don't want to price people out of travel options.
- Want to know more about if other regions are going through a similar effort.

Breakout Session #2:

- Will the mobility policy be used for capital projects or for influencing behavior at a programmatic level? For example, how does this relate to congestion pricing?
    - This project focus is at the system plan and plan amendment level. There are implications down to the development review level for local agencies.
- MMLOS
    - Sounds good in general but not clear what exactly is being measured. Needs to be better defined. Elaborate on how the measure is exactly applied.
    - How do concepts like Portland's transportation hierarchy factor in as consider levels of service to target for each mode?
    - Concerned this may be too much about congestion, how is this an advancement over today?
        - MMLOS focuses on modes outside of the private vehicle.
        - There are lots of different indexes that could be applied, like a walking score, which do not have to be directly congestion related. They can be based on quality and comfort of the system.
    - Seems like it would work well for a local street system. Seems unrelatable to highways.
        - We do have a lot of highways running through the communities. One of the paradoxes of our regional planning approach is the propensity of high-speed/safety risks in higher-density areas.
        - Congestion on highways could also become a factor for the local systems as people try to bypass delays.
    - We need to think about parking requirements and ROW allocation when considering mobility. Will the region continue to make ROW space useable for restaurants and other uses similar to what has been done during COVID? Might impede mobility but increases our sense of community.
    - Is MMLOS something you could use in your practice/community?

        - Is this easy to analyze? Or does it have to be kicked out to consultants every time it is evaluated?
    - Are LTS and MMLOS too similar to include both?
- VMT per capita
    - Critical to reduce VMT for climate and other reasons.
    - Need to plan a transportation system where we don't have to drive.
    - There was general group consensus around moving this measure forward. Pros include:
        - Seems like a helpful measure to support planning and project list development.
        - Good measures for assessing transportation system plans.
        - Supports several regional goals.
        - Easy to understand.
    - Difficult to measure existing conditions, apply to a development, or enforce.
    - Time is an important intervening variable. Be explicit about current demand versus targets.
- LTS
    - Need to take care to address unique needs of people walking, biking, scooting, and using mobility devices. They are not the same.
    - E-mobility use is going to change system demands. Are emerging technology vehicles encompassed in LTS evaluations?
    - The LTS procedure as currently defined in the ODOT Analysis Procedures Manual provides considerations for the context in which facilities are located.
    - Moves metrics toward focusing on the effects on people rather than on cars.
    - Can show easily on a map.
- Other measures of interest that the group did not have time to discuss:
    - Accessibility to destinations
    - System completeness
    - Hours/duration of congestion
- Measures to consider removing from the list for testing:
    - One member said that accessibility to destinations is problematic but did not have time to discuss fully. They noted that destinations will change over time.
    - Travel speed does not seem as important. Do not want to encourage high speeds.
    - Travel time could be removed. Reliability is more useful.
        - Travel time and v/c are measures that we are trying to move away from. We don't have the money to build all the roads to meet those service levels, nor do we want to try to build out of congestion as a region.
        - Other opinion: travel time is a key measure because people want to know how the planned system will support regional travel and remove barriers. It is easily understandable, an important measure at the system planning level, and good for transit and alternatives analysis.

RMP workshop notes

Breakout #1

- Attendees:
  - Keith Liden – LOS is OK but breaks down @ project level.
  - Susie, Kittelson
  - Matthew Berkow, Portland
  - Rick Nys, Clackamas County
  - Khoi Le, Wilsonville
- Policy elements
  - Keith: Need for consistency among jurisdictions – sometimes Metro policies
  - Matt: needs to be multimodal. Climate is not necessarily reflected here.
  - Susie: need definition of mobility that applies to urban environment. Metro and ODOT applies this policy differently – Metro focused on RTP/TSP connection, ODOT using it in the context of plan amendment review – review should be more about consistency with plans from a Metro perspective. ODOT not even on the same page internally about how they apply policy in development review.
  - Rick: A lot of local agencies haven't adopted Metro standard – different standards at play throughout the region. Getting more local agencies onboard with updating standards is important.
  - Keith: Standards are currently applied based on jurisdictional control, not based on context.
  - Matt: level of scale and effort is important. What works at development scale?
  - Susie: broader measures will still be used at system scale.
  - Khoi Le: goals all look good, but the practical impact is to take away ROW from developers. They all say we're asking for too much.
  - Clackamas County – v/c is easy to meet; doesn't require any mitigation right now.
- Measures
  - Eliot: how are measures applied @ development level to build the system we want to see?
    - Rick: good at adding sidewalk in front of a development and offsite intersection type of improvements. We've looked at these measures but the challenging thing is applying them offsite to a developer. Need ped trip generation.
    - Matt: question developers ask is what's my fair-share contribution? ITE is industry standard. What is developers' role in mitigating impacts on through traffic? Spatial constraints work against a lot of good mitigations.
  - Voting – lots of interest/concern on MMLOS, interest in, concern about
    - MMLOS:
      - Khoi: MMLOS seems helpful in justifying why we require mitigations. Impacts the development cross-section.
      - Rick: concerned with how MMLOW is measured – e.g., pedestrian density as measure of pedestrian quality. Has nothing to do w/ safety or comfort. Love the idea, but I don't think that the execution is very good.

        - Matt: trying to increase the amount of infrastructure, not the amount of analysis.
        - Rick: maybe there's some TSP-level work that needs to be done and then you break that down
        - Susie: TPR says that you have to design a facility to facility owner's standards. So this would mainly come up in ODOT's plan review. Might be a model for city's own code.
        - Rick: Clackamas county adopts City's standards when working on the facilities and ODOT's standards on
        - Susie: it creates an issue where govts sometimes expect development to meet a standard that they've decided is not relevant in their TSP.
    - Matt: what outcomes do we want to see?
        - Rick: currently not working for bikes and peds.
        - Eliot: can we use this work to guide where development occurs?
        - Matt: could make a similar argument here – ask developers to reduce VMT by location or mitigation. Could ask ppl to build less parking.
        - Rick: Amenities onsite that provide other transportation benefits could be part of this conversation. Transit is important - no role for transit. Developer should be able to pay for things that serve their site.
        - Susie: development drives implementation of our land use and transportation plans. How do we make sure that development is consistent with that vision?
    - Keith: important to have different measures at different scales. In principle, you would apply measures a little differently when you're doing a plan as opposed to when you're looking at the development proposal.

Mobility forum notes - Transportation System Planning 04.21.21

Choya (facilitator), Laura (note-taker)

First breakout notes - elements:
Kim provided clarification of what we are discussing:

- How we start to define the measures. When and where does it apply? There will be more of a measures discussion later.
- What are our mobility goals? What are the outcomes we are seeking to support the actual policy?

Comments included:

- Mobility is part of this list - one of these things. Mobility is the means to move around the system, access, where you want to go, time, reliability – same amount of time every time, safe no matter the rest, travel options – how you do that. Paradigm – not overarching. Mobility is parallel.
- Mobility is defined *by* access, needs to be plan efficient, involves multiple options to get somewhere, so these are the fundamental elements *of* mobility.
- As a 77 white guy uses public transportation on a regular basis, several issues are ignored – getting to a fixed route is very difficult if have physical disabilities. Fixed route can be life threatening. This list ignores needs of people with disabilities and seniors. Mobility is the primary concern for these two groups.
- Access piece needs to be explicitly included.
- Significance to the word "need" – where people need to go? Subjective definition? What is mobility? What are its attributes?
- In Washington County, mobility is a parallel goal to access. Goal 6 accessibility, goal 7 connectivity, goal 8 active transportation. Would be easier to move forward to see the framework laid out.
- How you might measure how well mobility is functioning?
- Functioning – or being provided? If you don't have access you don't have mobility. It is a paradigm shift, be more focused on all aspects, not just driving?
- Climate piece is not as explicit of a linkage.
- Where is regional conversation around climate? Challenge that we come up against is around major capital projects and climate – evaluating projects, call from community members to include climate in our decision making, yet is hard to quantify without major time consuming analysis.
- Thinking about the elements: seems like in the past, mobility was heavily weighted on time efficiency for autos. Now we are saying it includes more than time efficiency and the things that impact are these different elements. Mobility is also for it to be reliable, safe and accessible by ALL modes.
- This is challenging! Thinking ahead to how we apply these locally. We have more work to do.
- Regarding all modes – there is inherent conflict once you start evaluating. Which gets priority? Some modes get priority more – from a regulatory standpoint– like freight.

Second breakout notes - measures:
Participants were asked to indicate on the Jamboard two or three measures that they wanted to discuss.

Multimodal level of service:

- Informed, factors that help us judge the level of comfort. Lot of data and info needed to be able to use it as a measure. Do we have that info for our complete network that can then be evaluated?
- I'm a big fan, but how do you quantify? It's a broad term. Change used to be capacity for all modes. Not relevant, for example, are sidewalks or bike lanes. If it is defined very well and contextually specific, can say here is the kind of facility we want in our community. It IS data intensive, especially on non-motorized and access to transit fronts.
- Does multimodal mean everybody, including vehicles? There has to be a way to say what is most important at that location and benefitting the most people at that location.
- Everything else on this list is how we EVALUATE multimodal level of service. Then, how will we measure: e.g. travel time reliability, VMT. Multimodal level of service IS the outcome and goal, the others are quantifiable to know we are moving towards the goal.
- If we based on number of people, there are lots driving, it will be a more auto oriented equation. If we want to shift people to transit, bike, walk – how do we build the system to shift their modes?
- I like the meta scale, looks at multiple modes. On the positive, it is contact sensitive, but it's a liability because it's subjective depending on location.
- What will we be required to do next time we update? How will it translate to plan amendments and regulatory?
- Pedestrian comfort is a priority.
- Don't want us to get hung up on streetscape – that's different than mobility.
- Metrics in list could be a part of mobility. Modal hierarchy or layered network – this is a meta measure for some of the other things in here.

Travel time

- Travel time works with reliability. Reliability of trip is how I make a mode choice decision.
- Applies to transit as well as some of the other modes – the measure will look different. Understand that in relationship to other things – what makes a good travel time for transit?
- Regional model incorporates land use decisions. Forward looking – growth of jobs and housing.
- Accessibility to destinations change over time. What would a town measure compared to what Metro would measure? Hard to define. We are a region, but we jurisdictions develop local plans.
- Difficulty to quantify the right destinations.
- How would we use at a local level? How many measures can we put upon the development review process? Which ones to use at the local level?

Level of traffic stress
Big long pause….

- A lot of focus on network completeness. A useful measure.

- I like this, but under the concept of multimodal levels. We know the dangerous streets – but what attributes are we missing re: safety? We used speed, presence of a buffer (planter strip) and volume.
- As the analysis moves forward, would be helpful to know examples of legal defensibility, development review side, examples of other jurisdictions who has used this.
- We can make ped and bike voluntary but we can't require it. We are using it with developers as a carrot, not a stick. Think about what we are legally required to do.

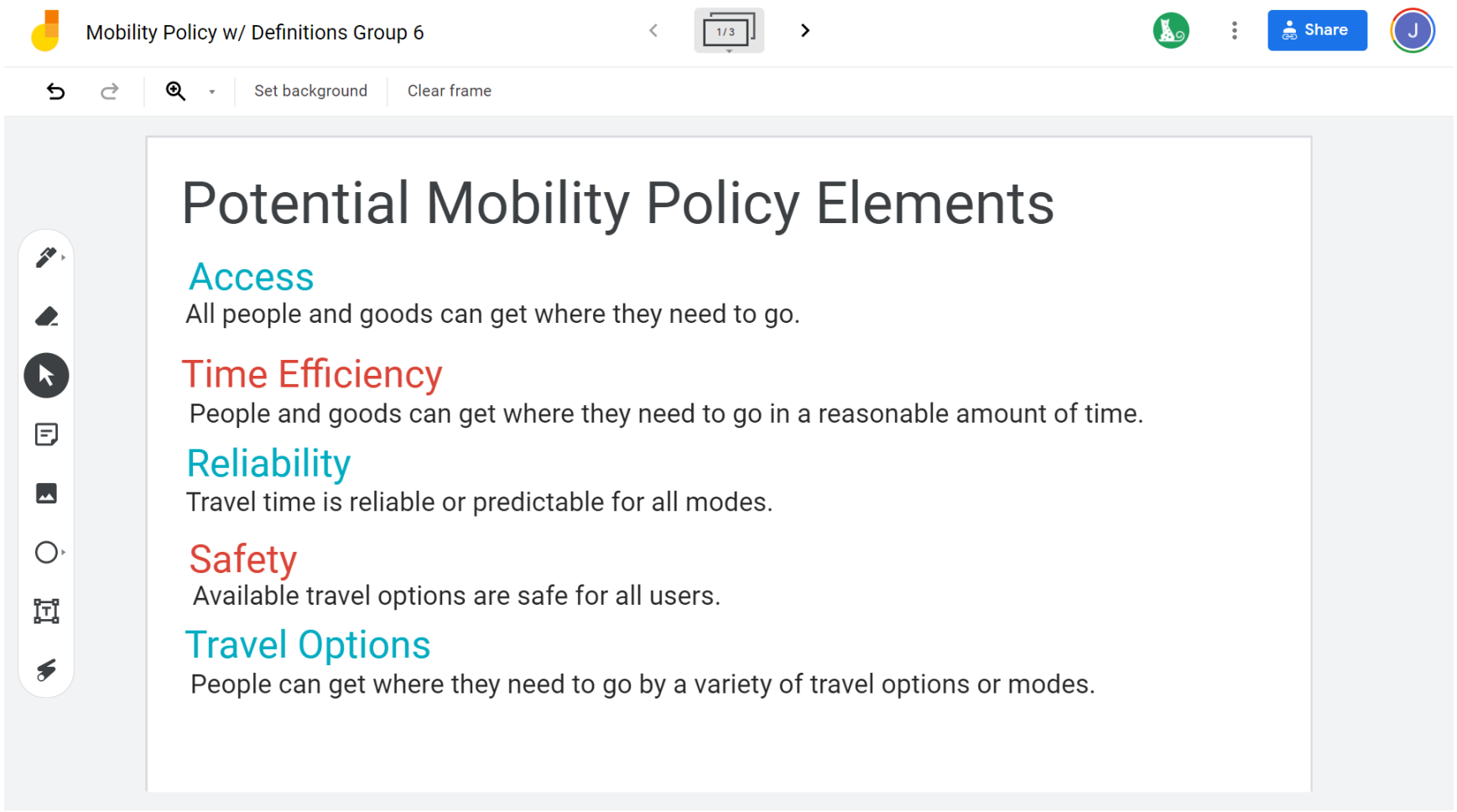
Accessibility to destinations

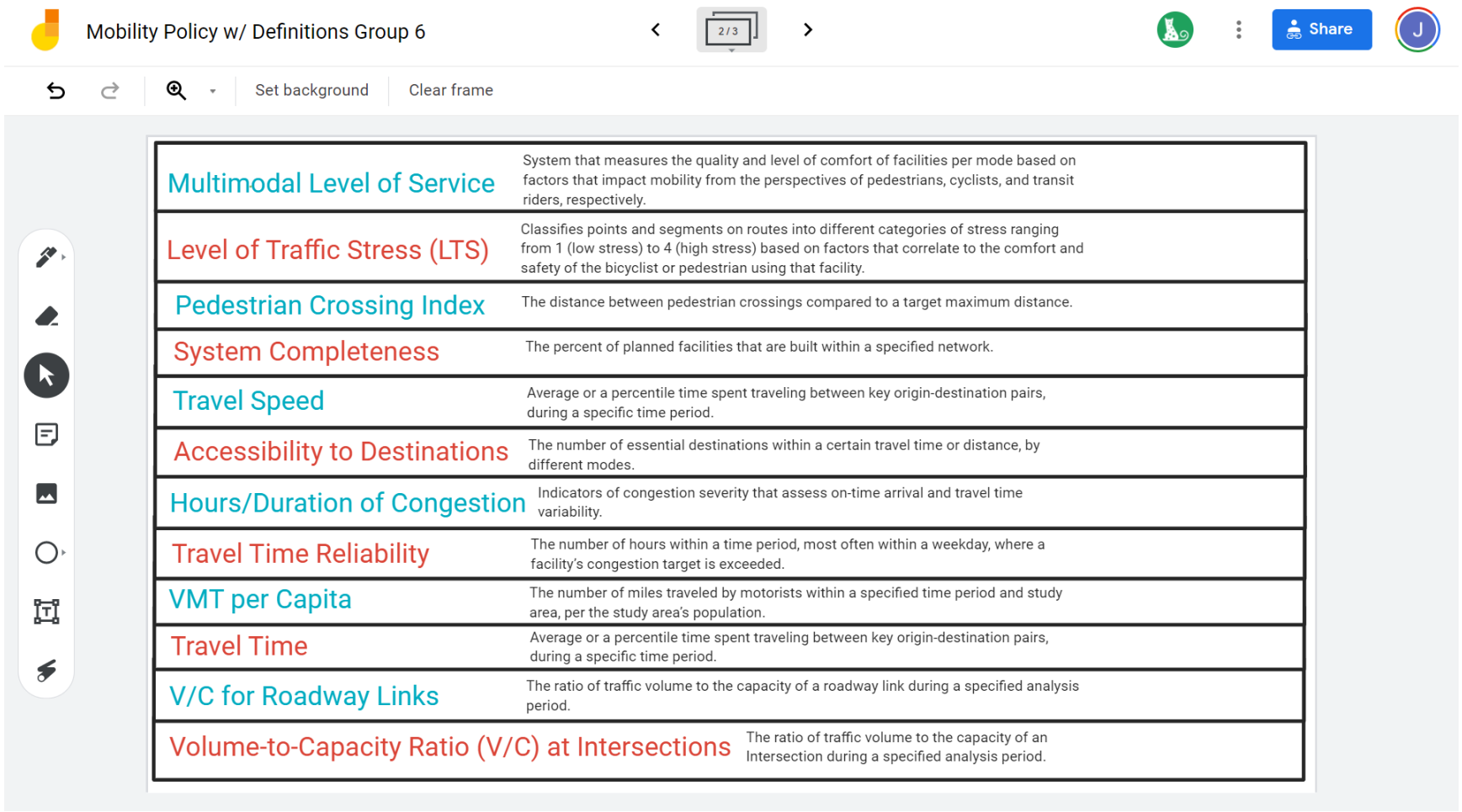
- Destinations change over time. Depending on community, have unique destinations. How to keep database of destinations so that you are using them consistently (like in zone changes)?
- Access, time efficiency. How do you look at accessibility to destinations on a system level?
- TSP plan, traffic zones, regional model – would have all kinds of destinations. Different at functional review level than at development review level.

VMT per capita

- Not that travel itself is bad. How can we use this as a valuation tool to evaluate local plans or system wide?
- Travel demand models, not good for things other than cars. Even specific types of vehicles – transit, or bikes, not accurate. Interesting, but not the best one to use here.
- Scale is a problem. We don't divide by study area per capita – we expect people to travel and work across the region. We are one region, we are not looking at sub regions.
- Unclear what this would do.
- California's per capita fundamental transportation planning measure – are we getting people to make more choices to not use cars to get around, because of environmental impacts? California requires using at the plan amendment level too. There is a lot of research happening there.

Focus Area	Facilitator	Note-taker	PMT Staff	JamBoard
6. Transportation system planning	Lakeeyscia Griffin	Jeff Raker		https://jamboard.google.com/d/1R18vhqW-2-ebDShkh20kZqggHGmAbwYNySXPcExn7Es/edit?usp=sharing




Mobility Policy w/ Definitions Group 6
2 / 3
Share
Set background
Clear frame
Multimodal Level of Service
System that measures the quality and level of comfort of facilities per mode based on factors that impact mobility from the perspectives of pedestrians, cyclists, and transit riders, respectively.
Level of Traffic Stress (LTS)
Classifies points and segments on routes into different categories of stress ranging from 1 (low stress) to 4 (high stress) based on factors that correlate to the comfort and safety of the bicyclist or pedestrian using that facility.
Pedestrian Crossing Index
The distance between pedestrian crossings compared to a target maximum distance.
System Completeness
The percent of planned facilities that are built within a specified network.
Travel Speed
Average or a percentile time spent traveling between key origin-destination pairs, during a specific time period.
Accessibility to Destinations
The number of essential destinations within a certain travel time or distance, by different modes.
Hours/Duration of Congestion
Indicators of congestion severity that assess on-time arrival and travel time variability.
Travel Time Reliability
The number of hours within a time period, most often within a weekday, where a facility's congestion target is exceeded.
VMT per Capita
The number of miles traveled by motorists within a specified time period and study area, per the study area's population.
Travel Time
Average or a percentile time spent traveling between key origin-destination pairs, during a specific time period.
V/C for Roadway Links
The ratio of traffic volume to the capacity of a roadway link during a specified analysis period.
Volume-to-Capacity Ratio (V/C) at Intersections
The ratio of traffic volume to the capacity of an Intersection during a specified analysis period.

NOTES: GROUP 6 – TRANSPORTATION SYSTEM PLANNING

- **Facilitator: Lakeeyscia Griffin**
- **Notetaker: Jeff Raker**
- **Participants:**
    - **Allison Boyd -**
    - **Jeff Owen - TriMet**
    - **Laura Dawson Bodner - Metro**
    - **Bob Kellett – PBOT**
    - **Katherine Kelly – City of Vancouver**
    - **Eric Hesse – PBOT**
    - **Kate Bridges – Steer**
    - **Jaime Huff – City of Happy Valley**
    - **Garet Prior – ODOT**
    -
- **BREAKOUT #1**
    - **What questions do you have about the policy elements? What needs additional clarification?**

      Jeff Owen – the word access usually refers to getting to a system vs. successfully getting to a destination – just first little piece, not the whole thing

      Jaime – Nexus to think about facility conditions – even if there is a sidewalk or bus stop or service… if that facility/service has gaps or is structurally unsound… You may have access to it, but it isn't very convenient.

      Eric – Network quality, not solely presence. Access to the networks are key, but not important if they don't connect anywhere. Overlay transit network with other things of community interest/destination… complete networks statement is needed.

      Katherine – Typically think about peak hours – how would this process look at different parameters – what are the hours of focus… Moving to less consistent peak hours… how are we addressing this?

    - **Are these right? Are these the most important elements to include in the updated mobility policy? Is anything missing?**

Eric – Lift up sticky – Portland would suggest efficiency considerations: reframe for time efficiency, not solely reliability – if it takes 2 hours to get somewhere it matters – Spatial efficiency in use of ROW – And reinforces other two – e.g Bus congestion on Hawthorne bridge…

Garet – Access and Equitable Access – Challenge is don't want to load with so many data points that it is so hard to determine – assumptions in modelling for jobs, social services, school, reduced lunch + other community conditions is important to drill down into. Larger gap between where people live and work in industrial areas and this doesn't show up in residential proximity + job adjacency that we usually do, but instead look at regional job center access.

Katherine – What are the actual destinations – Commute destinations and changes that come with COVID and hybrid virtual work…

Bob – Commute trips generally are actually making up smaller portion of trips…

Jeff O. – for slide 2 are these ranked? – THIS IS FOR NEXT BREAKOUT

Eric – Reference to RTP Equity Evaluation is essential to define destinations, etc…

- **BREAKOUT #2**
  - **Measures in need of adjustment:**

    1. **MMLOS – 4**
    2. **Travel Speed - 4**
    3. **Accessibility to Destinations - 4**
    4. System Completeness – 3
    5. V/C at intersections - 3
    6. Travel Time - 2
    7. Hours/Duration of Congestion - 1
    8. V/C roadway – 1

  - **MMLOS**

Kate – Not much clarity on usage here… Link to ODOT?

Eric – As published by TRB or NACTO? – Excellent thinking, but implementation is very challenging – Is Metro and ODOT able to calculate this? Develop our own version? Simplified version? Pedestrian area – fewer walking + higher LOS and could be counter to goals… Quality of service to other modes has merit.

Bob – Tolling project has an attempt at MMLOS – Challenging data and forecasting really difficult.

Garet - Level of Stress vs. service… How robust is this? Consistency of bike/walk counts and standardization would be needed.

Eric – Peter Ferth has simpler measure that could be leading… LTS may already capture what we really care about in an easier way… Links dropped:
https://nacto.org/docs/usdg/nchrp_rpt_616_dowling.pdf
http://www.northeastern.edu/peter.furth/research/level-of-traffic-stress/

Theoretically, could assess all emerging technology and would this impact pedestrian environment? Important to think of efficient use of space across modes. We think we know what we should be building – Are we building it? – Could be a form of getting at forecast? Movement to activity based model – how bring in quality concepts for multiple modes…

Katherine – Generalizing multimodal we think of bike/ped and access to transit – How explicitly is this looking at all modes? Vehicles and freight? Emerging technologies? Short haul delivery and automation? How deep go into this definition and how could you ever forecast this? Even ferries…

Garet – Multimodal does encompass umbrella of all modes…

- **Travel Speed**

Jeff O. - Harder to connect to Metro's pillars – Speed is problematic as it intersects with safety… speed itself

Katherine – More throughput than speed… speed is a challenging conversation… think of other ways to talk about this.

Bob – Really this policy is land use… if evaluating auto speed in densely populated areas with lots of movement – think about how policy supports growth objectives

Jeff O. – Combine with reliability of network…

Eric – Core function of access – should be embedded in discussions regarding disparity between modes – Could capture appropriate speed – clear that car/vehicle speed can diminish safety – reliability index – need understand relative to actual target

Jeff R. – Disparity between modes is key – should include discussion of delivery and freight efficiencies as well. Clear safety conflicts, but important to economic performance…

Allison – Need more writeup on what this includes – is safety part of this already?

Eric – More interest in reliability…

Jeff R. – Mostly reliability, but also some measure of longer haul trips from/to region and its distribution assets (e.g. PDX cargo)

Garet – Transit as competitive option…

- **Accessibility to Destinations**

Garet – Safe routes to daycare – With Multnomah County measure – tracking better data on this?

Katherine – side note on this – not just early education – 2-6th grade after care is essential as well. – AFTER Hours

Eric – Current practice… 30 NAICS codes for access to certain industry… Childcare draw out? Changing role in transportation? Understanding what the network lets you get to… Layering in of bike share and other tech…
https://www.oregonmetro.gov/sites/default/files/metro-events/Mobility-Measures-for-Testing-DRAFT_0.pdf

Jeff R. – Opportunity for additional information on childcare in economic development discussions and resources to support improved data… Important to link distribution networks to our local system – affiliated TAZs with EVA modelling data not included in final version.

Jeff O. Get closer to travel time and reliability when talking about destinations… spatial efficiency to/from destinations.

Eric – MISSED THIS – might need follow up.

- **CHAT Export:**
  - Eric: The RTP work I referenced previously on assessing access to jobs and community destinations (see .pdf p. 204: https://www.oregonmetro.gov/sites/default/files/2019/03/13/Transportation-Equity-Evaluation-Final-3.12.19.pdf

- **SEE Jamboard:**

Region Mobility Policy Forum Notes

Theresa Rohlfs (ODOT Traffic Ops)

Chris Strong (Trans. System Manager Gresham)

Dayna Webb (City Engineer – Oregon City)

Mike McCarthy (City of Tualatin Transportation Engineer)

Avi Tayar (Dev. Rev. Mgr. ODOT)

Will Farley (City of LO Traffic Engineer)

Peter Schuytema (ODOT trans. Analysis engineer)

I like the goals – devil is in the details and how it is applied. When we get into dev. Review we need a clear policy of whether something meets criteria or not. Say, can we require them to build a ¼ mile of sidewalk?

We need to have objective criteria we can use to apply.

It's a good start and encompassing from a high level

Question about multimodal level of service – ODOT has a suite of measures to address it. Has been used successfully in TSP's

Developers will fight it and agencies will end up in court about it.

Is there a consultant team involved digging into the issues? Kittelson primarily and Fehr and Peers?

Any examples of other metropolitan areas that have implemented this successfully?

Breakout room #2

I don't think we need both travel speed and travel time. They both have the same definition. There is overlap.

We need to see the actual formulas.

One category could be used for travel time and travel time reliability.

One of the key things I don't see here is how do you actually figure out the mode split.

I think we have very different perspectives around the region about this.

I think the key factor is the context of where the trips are coming from. Not sure how to define it though.

System completeness – local jurisdictions may have a different plan than ODOT. Look at general completeness – are we providing accessibility for everyone?

Also, local TSP's may be outdated and not updated to current desires.

IE – In and Out in Tualatin with 7 agencies involved.

Context and jurisdiction is very complex

Could see where a development is large and needing to connect to a relatively close path, etc. It is difficult to get any offsite improvements.

If there are a number of sidewalks within a general are, possibly contribute to a certain area. Come up with a big picture of completeness and then projects in order of priority.

Oregon City does proportional share and collects small amounts into a fund for these types of projects. They may only contribute 10%. Special area SDC.

Will travel time be defined for each mode or only vehicles?

It would be great to have a work group to work through all of these! Mike would love to be part of. Theresa as well.

Struggling to give feedback without more concrete details on how to apply these. What the limitations might be.

There is a lot of room for potential judgment calls as related to context.

Most of these measures haven't been considered in local context.

Potential Mobility Policy Elements

Access

All people and goods can get where they need to go.

Time Efficiency

People and goods can get where they need to go in a reasonable amount of time.

Reliability

Travel time is reliable or predictable for all modes.

Safety

Available travel options are safe for all users.

Travel Options

People can get where they need to go by a variety of travel options or modes.

Multimodal Level of Service	System that measures the quality and level of comfort of facilities per mode based on factors that impact mobility from the perspectives of pedestrians, cyclists, and transit riders, respectively.
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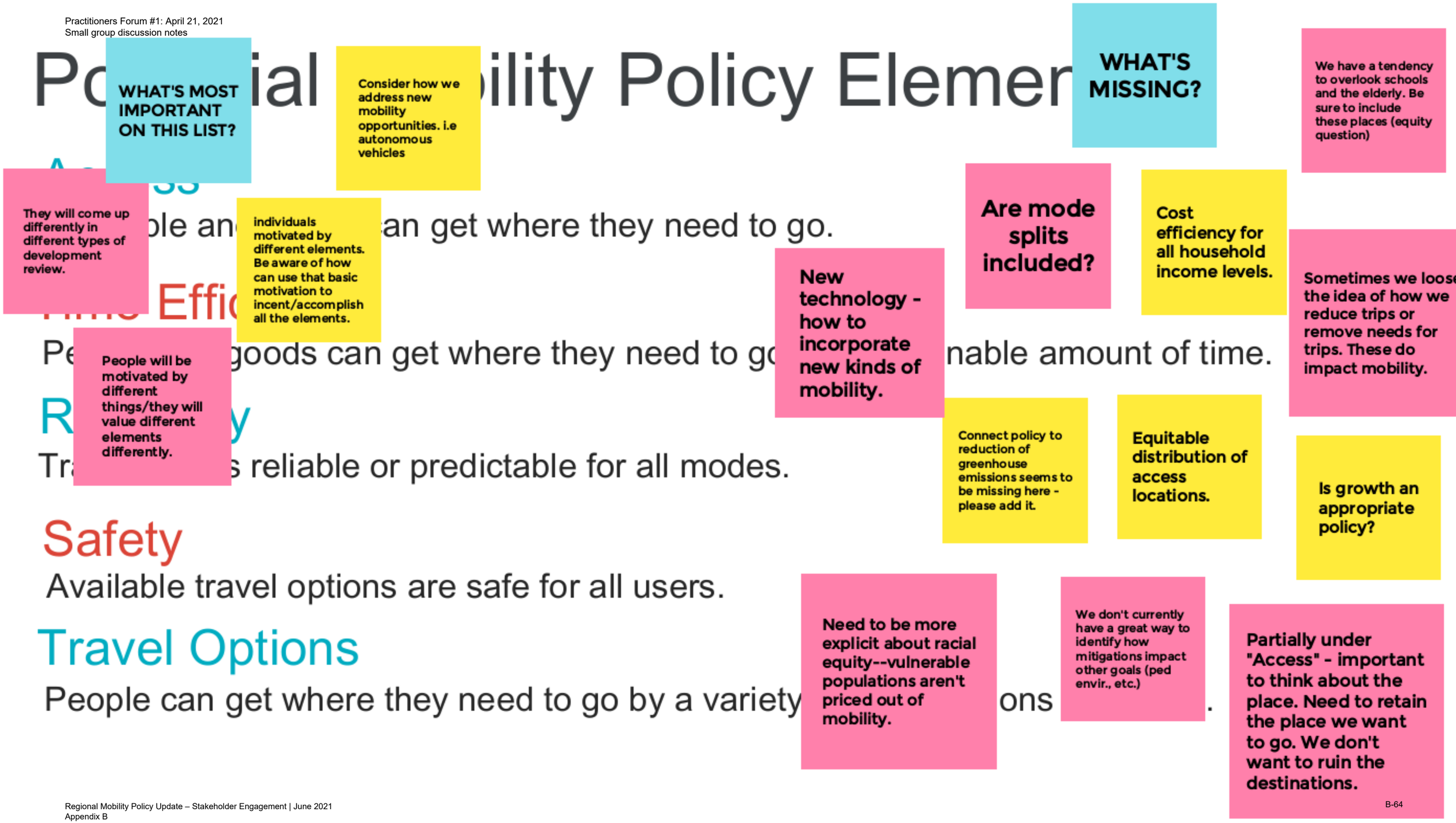
Jamboard Test: use the sticky note icon (the white square with two lines in it on the left-hand side of this window) to create a sticky note with your name, organization, and a sentence describing how you currently use mobility measures like v/c or LOS in your work.


Po ial bility Policy Elemer
WHAT'S MOST IMPORTANT ON THIS LIST?
Consider how we address new mobility opportunities. i.e autonomous vehicles
WHAT'S MISSING?
We have a tendency to overlook schools and the elderly. Be sure to include these places (equity question)
They will come up differently in different types of development review.
ple an an get where they need to go.
individuals motivated by different elements. Be aware of how can use that basic motivation to incent/accomplish all the elements.
Are mode splits included?
Cost efficiency for all household income levels.
Sometimes we loose the idea of how we reduce trips or remove needs for trips. These do impact mobility.
New technology - how to incorporate new kinds of mobility.
Effi
Pe goods can get where they need to g nable amount of time.
People will be motivated by different things/they will value different elements differently.
R y
Tr s reliable or predictable for all modes.
Connect policy to reduction of greenhouse emissions seems to be missing here - please add it.
Equitable distribution of access locations.
Is growth an appropriate policy?
Safety
Available travel options are safe for all users.
Travel Options
People can get where they need to go by a variety ons .
Need to be more explicit about racial equity--vulnerable populations aren't priced out of mobility.
We don't currently have a great way to identify how mitigations impact other goals (ped envir., etc.)
Partially under "Access" - important to think about the place. Need to retain the place we want to go. We don't want to ruin the destinations.

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Accessibility of destinations

Good at showing different equity issues around mobility (eg: east portland vs other parts of town. Don't know if it gets at safety though

This is a good measure because it opens the door to multiple travel options.

Ties in the land use better - we won't miss the destinations like we can currently ("20-min neighborhoods")

good application for plan amendments where it might be reflecting changes in land use

Specify groups that have historically not had adequate accessibility that we aim to improve access for with this measure and access to where (i.e. good schools, health services, parks and recreation, shopping etc.) ?

There is a transient nature of land uses (low-income population locations changes over time)

There is a time of day element to accessibility. Consider night time accessibility.

Maybe travel forecasting becomes less important? Focus on present mobility and not necessarily future (which can change).

Need to bring in the safety aspect

Multimodal Level of Service

The devil is in the details on this one --there have been so many attempts at this. Need to think about the need of that mode (eg: # of people on a sidewalk isn't a system failure)

Person-trip basis - need person trip generation numbers rather than vehicle trip numbers to make this work - its a data need.

Full range of multimodal needed to achieve accessibility for all.

Quasi-judicial plan amendments offer an opportunity for flexibility.

Include more opportunity for mini modal modes - importance emerging strongly during Covid.

I advocate for more flexibility --but how do you do that without creating more work?

Fun trip? /Happiness trip? measure (how pleasant is the trip?)

System Completeness

Portland did work on this (Kittleson, DKS and Fehr Peers involved)

There is a data need for this one -- hard to find a descrete measure--need to decide what is "good enough."

Linkages to SDCs and development fees

Hard in areas with vulnerable populations. could make it harder to develop housing in neighborhoods that need it because they are lacking facilities. Would this create a bias?

Big motivator for mode of travel. How encourage what we want

Is this one related to the system completeness measure??

VMT per Capita

See if overall, the system is working better. This is used in Central City MMA, could also work well in Tigard Triangle. Make sure we are looking at how we are operating the system (already developed areas).

How to you predict for the long-term?

For plan amendments, it can show whether the overall impact/efficiency for the system is improved, even if a specific intersection v/c is made worse.

There are software tools available that spit this out.

California uses this for system planning, project planning, and development review.

Can be a proxy for climate/ghg emissions, as long as increased EVs are accounted for

V/C for Roadway Links

Currently, developed areas require a lot of time/money to identify what is at capacity. This is a good early diagnostic tool --low cost at the beginning.

Travel Time

With travel time there is also an equity issue - longer the travel time has an impact, and a bigger inpact for those lower on the income scale. Tie to equity.

Potential Mobility Policy Elements

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Time Efficiency

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safety of the bicyclist or pedestrian using that facility.

Pedestrian Crossing Index

The distance between pedestrian cr get

System Completeness

f planned facilities tha d n

Travel Speed

percentile time spent t n-c
cific time period.

Accessibility to Destina

of essential destinatior ne or distanc
les.

Hours/Duration of Congestion

Indicators of congestion severity that assess im
variability.

Travel Time Reliability

The number of hours within a time period, mc wl
facility's congestion target is exceeded.

VMT per Capita

The numbe ts wit and study
area, per th

Travel Time

Average or ling between key origin-destination pairs,
during a sp

V/C for Roadway Links

The ratio of of a roadway link during a spe
period.

Volume-to-Capacity Ratio (V/C) at In

io of traffic volume to the capa
ction during a specified analys

How would LTS be applied in a development review case?

Most seem to be a good measures, but difficult to develop and apply

For system completeness, would facilities for each mode be considered separately?

System Completeness could be difficult to evaluate with multiple jurisdictions: RTP, STIP, TSPs, Neighborhood Plans, etc. could all govern "completeness"

System Completeness may better be defined as accessibility for desired modes. Does the nearby system have complete sidewalks? Does needed connections provide bike facilities?

Would "completeness" include vehicular capacity expansion that has been identified in various plans?

Travel speed is ambiguous: A higher value seems good from a mobility perspective, but not from a safety perspective.

I don't think we need both Travel Speed and Travel Time

It seems one category could be used for both 'Travel Time' and 'Travel Time Reliability'

Hours/Duration of Congestion & Travel Time Reliability similar to one another?

It seems it would be a good criteria that if a development generates x or more trips on a road with LTS>y they need to improve bike/ped facilities to z

I agree - V/C is almost always limited by intersections, so link V/C may not be needed as a criteria

Is there a critical need for V/C of roadway links vs V/C for intersections? Usually (I believe), V/C for intersections controls when evaluating a system

Potential Mobility Policy Elements

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Tim: My comment is ...

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Multimodal level of sevice

System that measures the quality and level of comfort of facilities per mode based on factors that impact mobility from the perspectives of pedestrians, cyclists, and transit riders, respectively.

frequency/coverage of services?

looks like it would cover a lot of needs

System completeness

The percent of planned facilities that are built within a specified network.

Use to identifying future capital projects

Travel speed

Average or a percentile time spent traveling between key origin-destination pairs, during a specific time period.

Accessibility to destinations

Travel time reliability

The number of hours within a time period, most often within a weekday, where a facility's congestion target is exceeded.

Potential Mobility Policy Elements

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Discussion questions:

1. What questions do you have about the policy elements? What needs additional clarification?

2. Are these right? Are these the most important elements to include in the updated mobility policy? Is anything missing?

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We don't want people driving quickly in most contexts

Accessibility to Destinations seems problematic- as a TSP gets older, the more possibility that the destinations are outdated.

V/C, by itself, is not good enough amymore

Policy Measures Discussion:

- Looking at the list of measures. Which one stands out to you; which do you want to talk about today, and why?
- Are these metrics going to produce the information needed to measure success on the five mobility elements
- Will these measures work for you in practice/in your community?
- Do you have any measures you feel should be added in??
- Do you have any advice we should think about before testing through case studies?
- What measures make sense in what areas/contexts?

Multimodal Level of Service

System that measures the quality and level of comfort of facilities per mode based on factors that impact mobility from the perspectives of pedestrians, cyclists, and transit riders, respectively.

Sounds good, but not clear what exactly is being measured. Which factors? Sounds like multiple measures combined.

Curious how concepts like Portland's transportation hierarchy might factor?

Concerned this may be too much about congestion, how is this an advancement over today?

We need to think about parking requirements when it comes to re/allocation of existing ROW.

Unsure how this would relate to the interstate highways.

Is this measure clear enough for people to understand?

How do we fix this if it is a problem?

VMT per Capita

The number of miles traveled by motorists within a specified time period and study area, per the study area's population.

Time is an important intervening variable. Need to be explicit about current demand vs targets we want to achieve and how we arrive at them.

Difficult to measure existing conditions, apply to a development or otherwise enforce. Good measure for assessing transportation system plans.

Gets at climate, system efficiency (reducing demand for roadways, safety, health, and lots of other goals.

Easy to understand

Critical to reduce VMT for climate and other reasons

Need consistent way to measure or estimate. What is in, what is out

I think this is a helpful measure. I did not have concerns about how to use or implement in my work.

Key for plan and project list development.

Need to plan a transportation system where we don't have to drive

Level of Traffic Stress (LTS)

Classifies points and segments on routes into different categories of stress ranging from 1 (low stress) to 4 (high stress) based on factors that correlate to the comfort and safety of the bicyclist or pedestrian using that facility.

Useful to understand where there are gaps in the system

LTS overlaps with MMLOS. The MMLOS measure is more sensitive to vehicle volumes. LTS is not sensitive to minor changes in traffic volumes.

We need a contiguity measure. One break in a low-stress network kind of defeats the point.

Moves measurements to focus on the effects on people rather than on cars.

Can be shown on a map easily

Need to be clear about how this is calculated

E-mobility use is going to change system demands. Need to be considered.

How can we plan for and reduce poor vehicle driver behavior (parking illegally (double parking) or otherwise behaving badly) that impacts LTS for pedestrians and bicyclists.

Need to take care to address unique needs of people walking, biking, scooting, and using mobility devices. They are not the same.

As mentioned, this one feels overlapping with the multimodal LOS measure. It might be helpful to use this and capture what is left in other measure.

How might emerging technology vehicles impact LTS? AVs on roads and sidewalks, scooters (in bikeways, sidewalks, trails), etc.

Like that it provides flexibility for the context in which facilities are located. Can set goals for increasing safe low stress facilities.

Potential Mobility Policy Elements

How can we better capture climate in these elements? We should be thinking about impacts on climate.

Jeff: We need a more direct tie to climate impacts

Move focus away from measuring peak hour trips or home to work trips to more of a look at trips where people need to go. Access is more than access to jobs. It is access to key places.

Jeff: "Access" to me often means only the first part - accessing a larger system, but not necessarily getting all the way to destinations.

Access

All people and goods can get where they go.

Eric: Access to (safe, attractive) multimodal networks and access from those networks to destinations (jobs and community places)

Access should take into account both access to destination and access to network, including the condition of the network (safe, comfortable, convenient)

Time Efficiency

People and goods can get where they need to go in a reasonable amount of time.

Eric: Very supportive of the efficiency concept, but wondering why not extended to Spatial Efficiency and Energy/Emissions efficiency.

Reliability

Travel time is reliable or predictable for all modes.

where we get trapped into looking primarily at peak hour trips and then we build to meet those hours. Increasingly we see reliability challenges that fall outside these hours and people's needs to get around reliably are outside

What are the parameters to define different levels of reliability?

Safety

Available travel options are safe for all users.

and perrormance measures, such as VMT reduction (can improve safety), improves equitable access (by addressing traffic safety and beyond traffic safety concerns), and makes more efficient travel options more attractive (supporting

Travel Options

People can get where they need to go by a variety of travel options or modes.

There is a quality element of travel options. Need to also take into account that a 45-minute headway bus line and a 4-foot bike lane on an arterial are not really options for most people.

Eric: This is where MMLOS might show up. Though implementation has been challenging.

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MMLOS is a good concept but it is very difficult to implement. There isn't a great track record of this working for cities and regions.

The system will never really be "complete", right? Can we instead focus on system effectiveness, with some aim for an effectiveness ratio of the network?

Wrap "Travel Speed" underneath "Travel Time Reliability" or "Accessibility to Destinations" instead of having Travel Speed on its own

We are trying to slow down auto speeds to improve safety. Anything that promotes faster auto speeds could negatively impact safety of system user Reliability should be prioritized over speed

Access to destination + access to multimodal networks.

Looks like the description of Travel Speed and Travel Time Reliability may be inadvertently duplicated

VMT per capita is good because it gets at climate, access, and safety

Travel time could include Travel Time Disparity (between modes and demographically)

If we continue to use v/c that will likely be the default because that is what people know how to measure. It will continue to trump everything else. This will undermine the movement away from just caring about cars at intersections.

Multimodal Level of Service

MMLOS is a good concept but it is very difficult to implement. There isn't a great track record of this working for cities and regions. especially the full NHCRP version).

MMLOS could be really difficult to forecast.

easier to implement and be more focused on reducing barriers for travel options (particularly walk, bike, roll and access to transit). Could also connect to system completeness and design guidelines of what we should be building to reduce

Need for improved bicycle and pedestrian data in order to monitor and forecast

Travel Speed

We are trying to slow down auto speeds to improve safety. Anything that promotes faster auto speeds could negatively impact safety of system users. Reliability should be prioritized over speed.

If we value travel speed then it could penalize growth in already built, denser environments where we auto speeds are going to be reduced.

Accessibility to Destinations

at all times (not just commute trips)

Balancing frequency, efficiency and reliability/travel time

Access to destination + access to multimodal networks.

kim

ten M y cy Elements

Chris D

Access

All people and goods can get where they need to go.

Access as defined here seems difficult to quantify and measure.

Climate not rising to the same level as other central themes - An element about mobility needing to "Support environmental health" could get at this.

Climate is a parallel high level policy that mobility options could be measured against. Similar to impacts to the built environment and social impacts of new mobility options.

Building off of Michael's comment, first and last mile transit to access

This is a good point!

Does cost effectiveness need to come into these? Or not? Does affordability need to be considered? How? ~ Jean

Time Efficiency

People and goods can get where they need to go in a reasonable amount of time.

Time efficiency may be challenging to quantify. It looks different depending on mode. Perhaps time efficiency for autos use to dominate how mobility was defined in the past.

n

Agree with challenges of time efficiency.

Reliability

Travel time is reliable or predictable for all modes.

Mobility make look different depending on how these different elements are emphasized

Do we claim that it's for ped, bike, transit first over the other modes? How do we manage the sometimes conflict with freight mobility? ~ Jean

Safety

Available travel options are safe for all users.

Travel Options

People can get where they need to go by a variety of travel options or modes.

Is this a variety (single mode per trip) or a mixture (potentially multiple modes per trip)

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Travel Time Reliability	The number of hours within a time period, most often within a weekday, where facility's congestion target is exceeded.
VMT per Capita	The number of miles traveled by motorists within a specified time period and stu area, per the study area's population.
Travel Time	Average or a percentile time spent traveling between key origin-destination pair during a specific time period.
V/C for Roadway Links	The ratio of traffic volume to the capacity of a roadway link during a specified analysis period.
Volume-to-Capacity Ratio (V/C) at Intersections	The ratio of traffic volume to the capacity of an Intersection during a specified analysis period.

LTS is an element of MMLOS. If we are looking to simplify, I think this could be deleted.

Travel Speed could be problematic....slow speeds in a downtown/mixed use area can make a great place for people walking and biking. How do we set what speed is right?

VMT does not need only apply to motorists - transit VMT (by person, not vehicle) and active transportation VMT are also quantifiable.

VMT / capita is a system measure, not a mobility measure

time and speed are two of the same coin. Probably only need one.

Multimodal level of service

System that measures the quality and level of comfort of facilities per mode based on factors that impact mobility from the perspectives of pedestrians, cyclists, and transit riders, respectively.

How do we quantify quality?

I am concerned that trying to weight which mode's LOS is most valuable by looking at current use furthers the current auto bias that most communities are trying to shift.

Yes! This is what I was trying to say

Travel time

Average or a percentile time spent traveling between key origin-destination pairs, during a specific time period.

Agree with Jean that this should tie to reliability. By itself doesn't seem useful.

I agree with challenge of how the "key OD pairs" are defined.

Like that this is future looking - includes land use and employment growth projections in the region (assuming using Regional Travel Demand Model)

Level of traffic stress

Classifies points and segments on routes into different categories of stress ranging from 1 (low stress) to 4 (high stress) based on factors that correlate to the comfort and safety of the bicyclist or pedestrian using that facility.

This is a data intensive measure, but it is good at identifying gaps in the system. Probably not as relevant for development review.

I think of this as a tool to measure project design...not sure how it works at the system level. Would help to see an example.

how do you measure stress

Typically influenced by traffic speeds, volumes, and the design of the non-motorized facility

ODOT has a defined approach. Ped and Bike are two separate measures

Good focus on network completeness and safety - crossings, buffers, even lighting (if included).

'comfort' is very user-defined. a confident cyclist may be comfortable with an on street bike lane, others may not.

true you do need to define it based on all ages - or vulnerable users

Accessibility to destinations

The number of essential destinations within a certain travel time or distance, by different modes.

I struggle with "destinations" - the more common measures I've seen are access to employment, transit and commercial

And community facilities

This is similar to the 20 minute neighborhood concept and provides a good link to land use decisions and promoting mixed use and strategic density

Could be tricky to use for system planning or development review

Off-site destinations likely to attract bicycle, pedestrian and/or micromobility trips to and/or from the proposed development and may include schools, transit stops, parks, commercial centers, medical facilities,

As a measure, destinations are "existing conditions" focused instead rather than looking towards future.

VMT per capita

The number of miles traveled by motorists within a specified time period and study area, per the study area's population.

VMT does not need only apply to motorists - transit VMT (by person, not vehicle) and active transportation VMT are also quantifiable.

VHT is equally important when looking at climate, equity and efficiency goals.

Is this used to measure existing system conditions? Or is it a predictive measure?

Seems to be more of an indicator than a evaluation tool

Agenda

Metro
600 NE Grand Ave.
Portland, OR 97232-2736

Meeting: Regional Mobility Policy – Freight & Goods Forum

Date: Friday, April 23, 2021

Time: 9:00 a.m. to 11:00 a.m.

Place: Zoom virtual meeting

Click the link to register for the meeting:
https://us02web.zoom.us/meeting/register/tZUrfuyorjIjHNGYHSNDQnK6nO51u-XWQdmK

AGENDA

9:00 AM	**1.**	**Introductions and Workshop Purpose**	**Allison Brown, facilitator**
9:15 AM	2.	**Metro/ODOT Regional Mobility Policy Update & Policy Elements**	**Kim Ellis, Metro** **Lidwien Rahman, ODOT**
9:35 AM	**3.**	**Discussion: Policy Elements** **Discussion questions:** • Are these the right elements? Are these the most important elements to include in the updated mobility policy? Is anything missing? • Which elements are most important in these three different contexts, especially regarding the movement of freight and goods?	**Facilitated discussion**
10:20 AM	**4.**	**Mobility Measures** • Overview of the potential mobility measures	**Susie Wright, Kittelson & Associates**
10:30 AM	**5.**	**Discussion: Policy Measures** **Discussion questions:** • Are these measures going to produce the information needed to measure success on the five mobility elements? • Is there anything missing that we should be measuring? • Which measures are most important in these three different contexts, especially regarding the movement of freight and goods?	**Facilitated discussion**
10:55 AM	**8.**	**Next Steps** • Other outreach activities • Technical work ahead	**Kim Ellis, Metro**
11:00 PM	**9.**	**Adjourn**	**Allison Brown, facilitator**

Mobility Policy – Freight movement group

Policy elements

Are these the right elements? Are these the most important elements to include in the updated mobility policy? Is anything missing?

- What about other modes like air, train, etc. – do their requirements get met if these are the policy elements? Is there a policy element that could reflect the needs of these other modes?
- Reliability at specific times of day is biggest concern for intermodal. Early morning, late afternoon and evening are crucial.
- E-commerce: impacts beyond freight corridors and districts across whole system, including residential areas.
- Emissions in residential areas from increased e-commerce.
- Movement of freight both in and out of region has implications.
- Need to include climate and air quality considerations in these elements.
- Draft Mobility Policy Elements should include (in its own bullet): CLIMATE -- All Transportation Modes are Environmentally Beneficial
- Small businesses have trouble paying for new technologies that help with environmental impacts/emissions.
- Corporations change practices and have impacts on regional systems (e.g., possibility of trains blocking transit).
- Trucks from construction trades have impact on freight access.

Which elements are most important in these three different contexts, especially regarding the movement of freight and goods?

- Reliability for deliveries: Last mile matters; signal delay impacts; finding parking at delivery destination (in corridors, downtowns, more dense mixed-use areas)
- Is it actually a policy problem to have delivery trucks parked in travel lane in residential areas? Maybe a safety issue, but doesn't seem to be an access issue.
- Getting to and from freeway is an issue for freight.
- Parking for truck drivers to rest (can only drive 11 hours out of 24).
- Access – parking matters for commercial districts; parking in neighborhoods is getting more constrained because of spillover from commercial districts.

Measures

Are these measures going to produce the information needed to measure success on the five mobility elements?

Is there anything missing that we should be measuring?

- Vehicle hours travelled – impacts on air quality and emissions. EPA models use VHT

- We need to think about how a no-carbon transportation system affects mobility and what to measure.
- Impediments (e.g., incomplete sidewalks, lack of bike lanes, weight restrictions, height restrictions, at grade rail crossing). Need to measure system completeness.
- Travel speed, reliability, travel time – redundant, but useful for communicating system completeness. Opinions: travel time and reliability most important.

Which measures are most important in these three different contexts, especially regarding the movement of freight and goods?

- System completeness
- Travel time
- V/C
- Reliability

Mobility forum notes – Freight and goods 04.23.21

Eryn (facilitator), Laura (note-taker)

Large group chat

What about planes and trains?

First breakout notes: Elements

- Equity, safety public health, environment, vibrant communities do not seem to be on this list.

Kim: Mobility is one of many policies in the plan and we need to do it in such a way to further the above goals.

- Looking at how the elements interconnect. Keeping highways small and narrow is not an effective strategy. When looking at climate impact, hope the plan is not to restrict vehicle travel.

Kim: Looking at options to have destinations closer to where they live and work, ways to use system them more efficiently, holistic approach to manage congestion.

- While we don't need wider highways for cars, we do need that for trucks.
- Time efficiency and reliability are key. Gave example of travelling across town at 3 p.m. during rush hour.
- Safety is also important. The top four are the most important. Reliability and time efficiency change because of congestion patterns. Example: If changing a truck's schedule from one truck with 14 stops to two trucks with 8 stops, there is an increase to congestion. To have optimization to stay within DOT regulations, have to have predictable travel time.
- Access is important. Example: looking at the slide of high density bus lane/car and industrial area, we have to be able to access all of those areas. Stores, where people live and shop, we have to go everywhere.
- Range of types and sizes of trucks play into access.
- Bike lanes were referenced.
- Safety is important. People depend more on e-commerce and they expect next day delivery. Increase in package delivery services. Look at transportation infrastructure in terms of freight mobility. Rate of e-commerce- induced delivery traffic is increasing due to people staying at home. How will this play out over the next few years?
- Travel options language should be more specific to delivery and trucks. Use the term vehicle operators (instead of people) to cover all types of vehicles. The current wording would apply to people getting to work, NOT getting into their truck to go make deliveries.
- Use the phrase "people and goods"

Eryn showed a slide of three images: arterials in mixed use and transit corridors, arterials in industrial areas and throughways.

- In a pedestrian friendly neighborhood – how to deliver, nowhere to park our trucks or vans, we are forced to park in suicide lanes: then have to cross traffic, bus lane, bike lane to complete the delivery. Safety is an issue. All three photos show what we encounter in one delivery route.
- In all three examples, capacity planning should strive for efficiency. We take 50% of the capacity so we constrain the use of the road, pushing freight demands into the space of personal travel. 90% of people travel on 50% of the capacity.

- Have experienced access for all shown in the slide of arterials in mixed use centers/transit corridors. I think we should expand access for freight specifically without removing access from other modes. For example, dedicating street parking for freight only.
- Big vehicles need more space. There is safety concern.
- Time efficiency and safety. Safety is very important.
- Access and reliability are subsets of time efficiency.
- Time efficiency applies to all scenarios. Take into account climate issues - the more congestion you have, the more carbon is emitted. Efficiency improves safety, climate and reduction in traffic.
- Apply time efficiency to freeways - having a freight only lane (like a carpool lane) could make a big difference. Reduce interaction with passenger vehicles.
- Regarding the mixed use slide: Time efficiency and access reliability may depend on creating access for different types of vehicles. Trike delivery downtown works well; ensure that they have access to roads and spaces.

Kim asked about times of day most important for doing business?

- Routes leave early, grocery stores are first stop at 4 a.m. through early morning. 90 routes in Portland metro area are done by 1:00-2:00 p.m. – but sometimes by 6 p.m. After 2:30 p.m. we have to add time to the base time.
- Downtown area stores are not open early so it gets tight there during the day. Worse time is the end of the day.
- Avoid southern California strategy of limiting the times trucks *can* enter cities. This increases the amount of congestion during those time periods. Planners think it's a great idea but don't look at the business cycle; it could push more freight traffic into the commuter cycle.
- Limiting trucks during commute time, there are big pushes in very early morning hours, many trucks during one time of day vs hours of service requirements. Trucks build up on outskirts, then there is a mad rush to make deliveries. Does not work.
- Customers may not be open early mornings so need to have all times of day available as it depends on their business hours.
- Avoid business operating constraints, for example no deliveries over noon hour.
- Long beach containers going out and back - delineate between over the road traffic delivery and appointment times when coming from far away. We can't get there three hours early and then wait for a delivery appointment.
- Some companies choose Portland peak hour time to avoid Seattle peak hour time; we have to watch out for unintended consequences.
- Freight is more nuanced than other travel. The materials for this project need to reflect this.

Chat comments from the breakout group:

Kim asked are there particular times of day that are most important to your business.
Our routes initiate out of Canby as early as 2am, but those are to get to outer markets. As you gravitate toward Portland proper, those routes get on the road at 5-6 am. Many return by 1-2 pm but several return as late at 6pm. Especially during our peak season from Memorial Day to Labor Day (speaking for Columbia Distributing).
From Kim Ellis, Metro (she/her) to everyone: 09:51 AM
People and goods can get whether they need to go by a variety of options?

From Glen Bolen to Everyone: 10:06 AM
Mark, do they limit trucks during the commute time, or during quiet zone hours?
From Becky Knudson to Everyone: 10:08 AM
Hours of service also impact demand for parking when they are required to stop for the day. Parking supply is short and illegal parking has safety implications as well.
From Mark Gibson to Everyone: 10:08 AM
Absolutely

From chat in the large group:
Becky
Travel time and speed are directly related, yet the policy elements identified do not overlap. These two also directly relate to travel time reliability. All three of these have time-of-day implications, but the time-of-day and day-of-week aspects are different for freight movement vs passenger movement.
From Bill Burgel to Everyone: 10:34 AM
If we are planning 20 years into the future and, according to Biden's recent policy and the State of California's planned mandate, gas & diesel propulsion will be phased out, shouldn't this group be discussing the implementation of these potential changes?
Becky
The fastest way to reduce VMT is to go into a major recession. We know Oregon will grow and so will the demands on our limited infrastructure. These measures should monitor performance with respect to policy goals and intent.

Second breakout notes: Measures
The group commented on the following measures.
Accessibility to destinations

- Gateway is an example of super accessible.
- In first discussion, we talked about downtown and focused more on vehicle access. A person's daily need access means different things for different people.
- Looking at people, and businesses/employers (access to goods and access to do their business) - this is a big one.

System completeness

- Struggling with the language. Planned facilities are limited by our budget. We will have an incomplete system which will impact our performance. We can complete the system but at a much slower pace given competing needs.
- This is an incomplete definition.

Level of stress

- Looking at definition of safety of bicyclists and pedestrians. Trucks that share a lane or bike lane with no buffer creates a great amount of stress for a truck driver and is a safety concern. Is this measure just about bikes/peds? This measure should include more than bikes.
- Technical analysis only done for bikes, and are now adding pedestrians. Would be awesome to do this for freight. If a workplace project could open this door that would be great.
- There is an ODOT and OSU simulator for bikes, cars and trucks to look at trucks and how they interact in roundabouts. Differences in how trucks operate and react - there are many different variables.
- Mandate to go to EVs cars and vans – businesses will have to put in car chargers - if technology changes in 5 years, there is a heavy burden on businesses.

Travel time/trip variability

- Reference to earlier discussion about truck driver operating hours.
- Where to locate origin facilities? Leaning towards neighborhood level, zip code based, smaller freight hubs because of unpredictability of travel times across the Metro area. Goal to complete deliveries in smaller zones to avoid traffic complications. In terms of land use – where could these origin facilities be located? There is a gap – closer in distribution facilities could offer efficiencies.
- Access to destinations could be a companion to accessibility to origins.

Chat comments from the breakout group

Kim
Very cool Dan. I've seen examples online of European cities that have small "breakdown" yards at the edge of old cities that weren't designed in the automobile age.
Glen
Kim, we should chat with Tim about this - possible TGM grant?

Potential Mo y Policy Elements

Access

All people and goods can get wher ed to go.

Time Efficiency

People and goods can get where they need to ble amount of tim

Reliability

Travel time is reliable or predictable odes.

Safety

Available travel options are safe for all users

Travel Options

People car re a v s

Freight isn't one thing - there is a diversity and variety of types

Travel Options in terms of freight: measure types and numbers of vehicles on the road.

ss is important s too. --we are ing trucks through ALL types of roads

Freight is increasing as a result.

Freight specific ones: time efficiency and reliability

The more congestion you have, the more climate impacts. Efficiency really impacts this.

get to outer markets. As you gravitate toward Portland proper, those routes get on the road at 5-6am. Many return by 1-2pm but several return as late at 6pm. Especially during our peak season from Memorial Day to

depend more more on mmerce. ety expects k (last mile) very.

Access and reliability are most important - in ALL contexts

CHANGE WORDING: "People and goods" can get whether they need to go by a variety of options

Safety is important for freight too

Starting the travel options starts with "people" diminishes the freight aspect. Could be "people and goods" instead.

time efficiency is really important in their business

me of day is portant (reliability and predictability changes)

yet the policy elements identified do not overlap. These two also directly relate to travel time reliability. All three of these have time-of-day implications, but the time-of-day and day-of-week aspects are different for

Time of day?

Highway context

Time efficiency is most important in the highway example -- how about a dedicated lane for freight.

Mixed-use area context

The mixed-use center: often there is no place to park the delivery truck in this environment. It's a safety issue.

The mixed-use has expanded access for bikes, buses and people walking. Can it expand access for delivery trucks too? Dedicate some parking areas to deliveries?

Hours of service also impact demand for parking when they are required to stop for the day. Parking supply is short and illegal parking has safety implications as well.

There are some companies will hit Portland traffic to avoid Seattle traffic.

Limiting times when freight can enter the city (like in CA) this has a negative impact on us.

Important times of day can depend on the customer's hours.

Multimodal Level of Service	System that measures the quality and level of comfort of facilities per mode based on factors that impact mobility from the perspectives of pedestrians, cyclists, and transit riders, respectively.
Level of Traffic Stress (LTS)	Classifies points and segments on routes into different categories of stress ranging from 1 (low stress) to 4 (high stress) based on factors that correlate to the comfort and safety of the bicyclist or pedestrian using that facility.
Pedestrian Crossing Index	The distance between pedestrian crossings compared to a target maximum distance.
System Completeness	The percent of planned facilities that are built within a specified network.
Travel Speed	Average or a percentile time spent traveling between key origin-destination pairs, during a specific time period.
Accessibility to Destinations	The number of essential destinations within a certain travel time or distance, by different modes.
Hours/Duration of Congestion	Indicators of congestion severity that assess on-time arrival and travel time variability.
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VMT per Capita	The number of miles traveled by motorists within a specified time period and study area, per the study area's population.
Travel Time	Average or a percentile time spent traveling between key origin-destination pairs, during a specific time period.
V/C for Roadway Links	The ratio of traffic volume to the capacity of a roadway link during a specified analysis period.
Volume-to-Capacity Ratio (V/C) at Intersections	The ratio of traffic volume to the capacity of an Intersection during a specified analysis period.

Pushing this has tangential impacts - EV's need power stations, powering up an EV' takes longer, power stations at businesses would create a significant capital investments and require long term planning (and

Travel Time Reliability

Travel time index does a good job measuring reliability.

Trip variability impacted by an accident or other unexpected delays.

Thinks a lot about location of origin facilities. They are considering smaller, neigh-based hubs because of the unpredictability of navigating the arterials and highways. To operate in smaller zones.

Travel time reliability has impications to how trucks move freight, if the system is unreliable, firms must split loads into two trucks to deal with the variable travel times.

This has a land use impact.

get to outer markets. As you gravitate toward Portland proper, those routes get on the road at 5-6am. Many return by 1-2pm but several return as late at 6pm. Especially during our peak season from Memorial Day to

The fastest way to reduce VMT is to go into a major recession. We know Oregon will grow and so will the demands on our limited infrastructure. These measures should monitor performance with respect to policy goals and intent.

V/C is becoming a less and less informative metric. AADT/C provides better information when congestion shifts from moderate to high.

Accessibility to Destinations

Be clear when we define and track measures that this means different things to different people.

Accessibility representing people - people need access to housing and jobs, and companies need access to where they do business.

System Completeness

Planned facilities - need to explain to people that budgets limit what we can build. The definition doesn't talk about this.

Level of Traffic Stress (LTS)

There can be a lot of stress on truck drivers when they are concerned about safety of themselves, their vehicle and the other street users. Can this one talk about freight driver street too?

Agenda

Metro
600 NE Grand Ave.
Portland, OR 97232-2736

Meeting: Regional Mobility Policy – Practitioners Forum (Session 2)

Date: Friday, April 30, 2021

Time: 9:00 to 11:00 a.m.

Place: Zoom virtual meeting

Click the link to register for this meting:
https://us02web.zoom.us/meeting/register/tZIpfuGvqDgtEtxkMuoAEpKN6M3GFw2EFSP7

AGENDA

9:00 AM	**1.**	**Introductions and Workshop Purpose**	**Allison Brown, facilitator**
9:15 AM	**2.**	**Large Group: Metro/ODOT Regional Mobility Policy Update & Policy Elements** • Review of project goals, objectives and timeline • Grounding in RTP and OTC priorities • Share mobility policy elements	**Kim Ellis, Metro** **Lidwien Rahman, ODOT**
9:30 AM	**3.**	**Small Group Breakouts: Policy Elements**	**Facilitated discussion**
9:50 AM	**4.**	**Large Group: Mobility Measures** • Overview of the potential mobility measures	**Susie Wright, Kittelson & Associates**
10:05 AM	**5.**	**Small Group Breakouts: Policy Measures**	
10:45 AM	**7.**	**Large Group: Re-cap and Overall Reflections** • Review the topics covered • Gather final thoughts and reflections from the group **Poll:** • What are your top 3 measures from the list we covered?	**Allison Brown, facilitator**
10:55 AM	**8.**	**Next Steps** • Other outreach activities • Testing measures and technical work	**Kim Ellis, Metro**
11:00 AM	**9.**	**Adjourn**	**Allison Brown, facilitator**

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April 30 Forum Notes

Breakout Room Attendees: Ted Reid (Metro's planning department, land use planner), Ryan Makinster (Home Builders Association [HBA] of Metro region, handles government collaboration), Roseann Johnson (HBA of Metro region), Susie Wright (Kittelson, on the project team), Molly McCormick (Kittelson, on the project team)

Breakout Session #1:

- Most interested in how the technical aspects of this project will impact master planning, comprehensive planning, UGB concept planning efforts into the future. Looking forward to walking through the case studies in the future to share more of these application impacts.
    - Interested in how the new criteria and definitions for mobility could be applied to potential areas with future housing and population growth.
- Want to update the mobility policy because it currently focuses on measuring mobility through by vehicle delay at intersections. To move forward, we need to define what is mobility and what the region wants the mobility policy to look at.
- For their more policy-focused work, more about community members voicing concerns about mobility and growth. Not part of the group that is considering if the v/c ratio target or standard is met.
    - If new homes come in, how will the existing community be impacted? More people that don't have sidewalks to use. More people to drive down a two-lane road.
- Rock Creek area in Happy Valley is one place where HBA is working. There is discussion of how this new policy will hopefully help get them past the finish line.
- Anything missing from this elements list? What are the ones that come up most when talking to the public?
    - Definitely hear a public focus on safety and access, including goods access for businesses/restaurants.
    - Travel options and access to travel options. As part of an equity lens, want to address needs for different people. Not everyone has the access to all modes.
    - Don't design just for cars, thinking about connections for mass transit, bikes, and other modes. Not just cars.
- Often forced to analyze in a trade-off perspective. Either shave off a few minutes of delay or make investments in safety enhancements. Will often hear from the community that safety is more important.
- HBA considers access in different buckets based on the housing product (mixed-use, ADUs, remodels, new single family detached, etc. they cover the full housing product spectrum)
    - Mixed use – access for both residents and site patrons. Long-term and short-term parking
    - Mixed income subdivision (attached and detached products such as Orenco Station) – more people having their own vehicles and wanting access to the roadways.
- As looking at a definition of mobility that is more holistic, we will still need to think about how and where that ability to move in a car is most important and how to balance that investment.

    - After defining mobility, there will be different priorities in different contexts. It will be focused on these five elements, but how are they applied in different land contexts.
    - And that is where the transportation experts can be very useful. Know how close a development is to a certain of transportation facility or how the network is laid out.
        - From a policy making perspective, it could change the rules for whether a development is feasible. Want it flexible enough so that can consider future growth in an already urban setting.
- Access and travel options seem to have some overlap. Both include "people can get where they need to go". Travel options may be more of an expansion of the access element.
- The actual home builders may have a different answer around the element consideration. HBA is involved more at a planning level.
- Access, safety, and travel options are the easier ones to define and work with developers on. They are simpler so can check the box. Reliability is a subjective term that will need to be well defined.

Breakout Session #2:

Added Brad Choi to the group (with DEA, previously with Hillsboro as a transportation planner)

- Measures most interested in discussing:
    - Accessibility to destinations is important to HBA. Where people live highly depends on access to the things they need.
    - LTS – this is a desire of mixed-use developments; access to parks is an emphasis and people would rather walk than drive to those recreational uses.
    - System completeness seems like a fundamental measure, and it will be important for different reasons in different settings.
    - Pedestrian crossing index will be important from a development perspective. Getting to the multimodal aspect.
    - Travel speed and hours of congestion are less important.
        - There are going to be so many changes around how/when/where people work in a post-pandemic world. Think these measures should be deemphasized considering don't know how many vehicles will be back for commuting reasons.
- Ease of measurement for these measures vary. It makes sense in spirit but some of them will be challenging to measure.
- How many measures is conceptually ideal?
    - Hoping for less than 12 for testing. Testing will think through how practitioners would use these measures and hopefully pare down to 3-4 with clear guidance around contexts: for the freeway system, X measures are most important; for the arterial system, Y are most important; in a specific land use, Z are most important, etc
- Already know that the freeway is focused on vehicular mobility.
- Echo note that different measures for different contexts is so important. When looking at a downtown, v/c isn't as useful a measure because already built out and expect congestion.
    - Want to be able to apply different measures depending on the context.
- What is the difference of v/c for roadway links versus at intersections?

    - Roadway links can look more at a network level and identify link bottlenecks in the system. Identifies roadway network needs such as better connectivity or additional thru capacity.
    - It is much easier for an intersection to be a bottleneck.
        - Could have a roadway that has plenty of capacity with one intersection that causes delay.
        - Sometimes don't want to build out an intersection because of it being very wide for pedestrian crossing or being a designed stop on the corridor.
- Accessibility to destinations will need further definition of "accessibility" when focused on a more localized area versus the whole region or city.
- System completeness only works if have a "complete" system in mind. Is it just a sidewalk and bike facility for certain roadway classifications? Is it a low-stress network? Will get more out of this measure when the planning gets more nuanced.
- See two buckets across the measures
    - Measures that are foundational – these need to be the starting point of our transportation system
        - There should be a complete system, it should not be stressful to travel, etc.
    - Measures that get at degradation of the system
        - v/c and travel speed
        - As there is regional growth, the same system starts to see degradation of the experience.
        - Considers how do you have growth pay for its fair share.
- The more those foundational measures are the focus, the more the region is looking ahead in terms of development in all its forms. Land is not just sitting as consider whether the v/c rat.
    - For example, the Rock Creek area is caught in a v/c-created travel cap that couldn't be addressed because it says that this is a car-dependent area.
        - Have to start building in measures that say system completeness and modal choices are a priority.
            - Want to be able to develop instead of having land sit there when so much effort has been put into planning. Waste of resources and time.
            - Should be are chasing the land use vision, not a v/c target.
- If can't afford the transportation facility to meet v/c for that land use, what do you do?
    - Sunrise corridor as an example. Planned land use and transportation system including this facility but was not always in the financially constrained plan. Then developments that try to meet the planned land use are unable to meet v/c standards.
    - Important to note the financially constrained list is still theoretical and not tied to a specific funding source.
- The v/c measure at the link level is important for system-planning. Example of sunrise phase 2 being in the constrained plan and that having important reasons for being included, one of which being future growth

Mobility Policy Forum 2 – Transportation System Planning Group2

FACILITATOR: LAKE McTIGHE

Breakout #1 – Policy Elements

What questions do you have about the policy elements? What needs additional clarification? Are these right? Are these the most important elements to include in the updated mobility policy? Is anything missing?

Scott: thinking about how new elements apply to the mobility policy, wanting to make sure that the volume and capacity measure is still proposed to be included in the mix, maybe it's weighed differently, maintaining some of the old; there's a fair amount of overlap with the elements, I'd like to see how VC is built in to some of these

Lake: sounds like you're saying that the policy elements are moving in the right direction, and want to include VC

Scott: open to seeing if other measures or a combination of those that encompasses it; fits within any of the policy elements

Lidwina: I agree Scott, there's a lot of overlap

Scott: Yeah and I think that's okay

Dave: it's been interesting thinking about all these over the last year; I think the elements are pretty comprehensive; I think you're covering important areas we need to cover; I don't know that I would say we need to change them

Lake: one thing we hear is that climate is not reflected enough in these elements

Dave: that's a good point to raise; when I think about performance measures and outcomes, I'm always thinking about climate; our transportation system has biggest impact on climate

Lake: what are your thoughts about folks saying access is the most important element for mobility?

Scott: at the state level, we have goal areas for each, for accessibility as a whole category and mobility separately; depending on how you define them and what context, they are absolutely tied together, but I think it depends on the context; like access through and within

Dave: often times we start to get into semantics; one of my interests in this whole process is when it gets down to the practicioner level, I'd like to see the ability to not rely on overseeing; having more tools to look at system impacts

Lake: I'd argue that safety is multifaceted; what we're seeing in the pandemic is that free flowing roads aren't always safe; for example more congested roads

Scott: I'd agree that the oversee isn't the only way to get at these categories; with this kind of set of policy elements, we're able to bring the multimodal perspectives to mobility; these policy elements can help us find a good balance to better understand impacts

Breakout #2 – Policy Measures

Dave: I like system completeness and thinking about all modes

Carl: I agree, I like system completeness; the bottom 5 or 6 are tried and true and have demonstrated their effectiveness; VMT, curious about this one and how we hope to apply it because the needle doesn't move very much

Dyami: I have questions about VMT as well; accessibility to destinations is another challenging one to potentially work through

Scott: I like the ones that have been mentioned; the only one I'm thinking of is travel speed; it's a data point that's important to be considered, but I'd like to know more about how it would be applies

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What's challenging about accessibility to destinations

Dyami: the tools used for this are usually a travel demand model; usually it's been a 30 minute travel time between destinations; I'm not sure if you can really get at all modes that way; you can use GIS for other network analysis; I think just providing a little more definition about what that is; there's a number of things in there; it's an interesting measure

Scott: In the effort to try to get at some of the regional goals, it could help provide some of that information; providing mobility that enables access to a community; it's a valuable one; a number of these measures will have the challenge of what data is available; there will have to be standard way to measure to apply it

Carl: it comes down to what questions you want to answer; we've used it as an equity analysis to measure job destination accessibility; you usually have to go to GIS; we find it helpful to find weakness in the systems; the other measures don't get at that; it's a layer of analysis that we typically haven't done it in the past (at the local planning area)

Scott: how are destinations expected to be categorized?

Carl: we had a checklist

Dyami: we used "essential destinations" which is the term we used

Scott: I wouldn't just want to leave it up to me or a practitioner; I'd like for the community to provide some feedback; I'd have my own biases; how does the community that it impacts feel about their essential destinations

Carl: I agree but there's probably a core set that we might have to start from; generalize across communities and how do they compare to each other; it'd be interesting to be able to compare community accessibility

Dyami: access to transit, is a potentially a key destination

Lidwina: I think we'll start with essential destinations in RTP, I agree you need to do both, travel demand model & GIS; one thing about access, when you get to smaller destinations like hospital or grocery it's difficult to forecast; when it comes to equity, if certain groups don't have access to certain destinations we need to work on that now; time is another dimension that I wanted to point out; switching to accessibility is a profound change because it gets to the why people drive, walk or take the bus

Scott: it also brings more attention to barriers besides congestion, I think that's a really good thing

Dyami: want to add that taking from the plan amendment and the impacts that it would have; set standards and parameters and be clear; reduce the amount of discretion and have some uniformity across the region; the challenge will be having those be clear by mode and time spent;

Lake: so another way to say that, clearly define the destinations and the area by which what is included in that

Dyami: so we think about school walk zones being a mile, is that realistic?

Lake: what is the travel shed that should be included in that analysis?

Scott: I'd be curious to see how this one pans out in the case studies (accessibility)

Scott: I'm thinking of some of the ones we deleted that have crossover; we could dwindle them down and collapse to address multiple outcomes depending on which mode you're thinking about; pedestrian crossing index & system completeness

Dyami: travel time & travel shed could also combine

Lidwina: and it depends on system planning or planning amendments; any particular system planning could have more amendments; there's more wiggle room for jurisdictions

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Lidwina: VMT; they use regional planning model, create spreadsheets, for plan amendments and travel models, find significant impacts to see if you're above or below average; the metro model can calculate VMT; question is how do we apply it at a smaller level

Lake: in vibrant downtown, you have high congestion but lower VMT, and in other places it's the opposite; so it's trying to bring in a little acceptability of congestion if VMT is lower

Scott: it seems like it would have to be combined with consideration of travel options and other levels; it might be hard to bring value from it in the way you want to, but if it's combined with accessibility, pedestrian crossing index

Dyami: it seems like an incomplete picture; mode switch could be more telling

Carl: is VMT to reduce emissions?

Lake: applies to safety, lower VMT = less traffic

Scott: could be in combination with speeds & VMT

Lake: urban areas/larger cities with low VMT have lower fatality rates

Notes from Mobility Policy Forum

What question do you have about the policy update?

Karen - Measures for getting to work fell off from Access. How will we take into account the background information where the points that ppl need to get to, the relationship, how will that influence mobility.

Glen – to get access you need to have diversity of land use, so you can have accessibility. It's an evolving category.

Dyami – a space and time issue. Behind this there is context, how will we apply these in context. Depending on time of day and local. Those are important to consider.

Glen – we are talking about more what do find important, then use the case studies to show how we can get there. We need to be looking at the roadway classifications. Where we use mobility now, so often in planning amendments. New policy is so we can look at that. Current policy can hinder a number of processes for UGB

Marty – is there a hierarchy or are they equally weighted. Access and Safety are the two that speak to equity. The other ones are about movement of vehicle. How she is organizing. How does Climate fit in, is TO the only one that addresses?

Karen – how is air quality factored in, a subset is climate pollutants. Not that it wasn't included, the impact are examine in other processes and required policies. While Mobility was related, it wasn't the place to measure air quality. I think it would be beneficial to call them out or explain where they fit.

Glen – there are a lot of goal, how we define this as the mobility policy?

Dyami – it kinda muddies the water. Mobilty warrants its own goal. Reliability is the most important in the list. He see other areas, being reached through Reliability.

Glen – we can be reliably bad. Freight is very interested in this.

Anna – encouraged to have WA in the group, good to have their perspective.

Hector – what are we missing?
Steve – a broader picture of mobility itself including livability of our neighborhoods. Cut-through neighborhood, through policies or tolls that impacts the quality of life. How do we capture that? It's implied, but not stated.

Session 2

Marty – system completeness is getting at the livability that Steve brought up. We have areas that have significant transportation deficits.

Will these metrics provide us with the right information?

Karen – how does hours of congestion include bikes, walking and transit. Can see a little with transit as they get stuck in traffic too, but others it's not much impact.

Will these measure be useful and will they capture community need?

Will these be too hard to calculate, secondary, primary?

Steve – TSP work says the hours of congestion is useful to understanding livability. It's a different story that peak time than it will be congested all day. We will soon have areas that will be congested all day, which can help tell that story. What's missing – something to identify safety, more than bike/ped safety. Majority is rear-ended are injury crashes.

Marty - questions about travel speed, travel time, and Multi-Modal Level of Service. Is this saying higher speeds are good or bad? Why measure speed rather than reliability?

Anna – the question is often "for whom". Disaggregating that data is important. Is it impacting folks who are already experiencing delays due to other factors?

Hector – what measure should be added?

Anna – one could be a vulnerability metric that could overlay, that could help get at the question for whom.

Marty – I like that idea, are there bands that address, or is there a hierarchy. I want to sort or rank them. And wants to see the direct connection for Climate, Mobility, Equity. We have a regional benefit – the MAX – and we can't access it because of LOS and mobility plan barriers. It was in 2008/09. There were also ODOT and some community opposition at SE 60th and Glisan is the example.

Glen – we don't know what wasn't adopted. That would be a case study. If we had accessibility as a factor we would have an easier path. It was an onramp on 60th that ODOT was able to block it.

Steve – (back to crashes). Someone is stopped in the right of way, and someone doesn't realize they are. I'm sure it applies to ODOT facilities. Congestion, turning. WE need to be aware of and consider how we incorporate those issues in this process. WashCo also have those issues, due to community opposition. Highest density allow is around the Sunset Transit Center.

Hector – previous implementations are a barrier.

Glen – there was a bill to make that development is allowed within a certain distance of transit.

Hector – what could we be more equitable? How do we increase benefits to areas that have been historically underserved.

Marty – like what Anna said. Ped deaths at crossings is really top of mind, maybe a case study on that highlights that.

Glen – social equity and pedestrian injury. This policy can help with STIP.

Karen – Maybe environmental impacts is an outcome/cost to enhance mobility. Hearing if phrased as an outcome from Susan. I can see VMT per capita. We can get those numbers elsewhere. VMT is probably the closest of what pollution implications. Important to keep that one. What data are we using? We

need to be transparent and flexible and be willing to consult different data sources. You can pick and choose your data to tell the story you want to tell.

Marty – Closing statement - Is this aggressive enough, when we think of equity and climate change? Just an overarching question.

Glen – what I'm hearing is different part of the region, and their priorities.

Hector – how innovative are we being.

Glen – a lot of folks say make it simple. It needs to be measurable. We have to trust the models. Diversity over Density wins, and it's complicated. You can put a value to things that are important and measure them.

Practitioner Forum #2
Small Group Discussion

Facilitator: Eryn Kehe, Metro
Notetaker: Kim Ellis, Metro

Steve Williams, Clackamas County
Jamie Stasny, Clackamas County
Matt Herman, Clark County
Peter Hurley, City of Portland
Jon Makler, ODOT Region 1

Elements Discussion

Peter Hurley, City of Portland

- Travel options – it is one thing to provide travel options, but the options must be viable (e.g., bike lane next to high volume/higher speed traffic vs. cycletrack that is separted from motor vehicles).
- Add modifier to travel options statement, e.g., "…variety of effective/viable travel options. The viability/effectiveness could be measured using mode share – if drive alone trips are shifting to other modes, then they must be viable.
- Trying to understand the practical applications of the measures and their implications. We want to address existing deficiencies in equitable way that reduces existing disparities/inequities in the system.
- Space efficiency is missing in the elements – without that we are unlikely to have travel time reliability or time efficiency.

Matt Herman, Clark County

- For whom is missing in the elements – we are trying to provide the same transportation system in all areas for all people but likely needs to be different in different areas based on user needs as well land use and transportation context.
- Elements so not reflect the integration of modes/connectivity between modes – this is an important element of mobility.
- Example given of walkshed to transit – who can get to transit within a 10-min. walk of homes and job centers.

Someone asked whether we should be bringing emergency preparedness into this work.

Measures Discussion

Peter Hurley, city of Portland

- Access throughout the day is more important than duration of congestion
- Reliability is more important than duration of congestion or travel time
- Missing: person throughput and mode split
- PT – if you are looking at a finer grain, it is more valuable than vehicle throughput - it gets to time and space efficiency

- Mode share – there are pros/cons but it is an effective measure to look at the quality and availability of options and whether we are using the system efficiently - tends to look at past investments and doesn't model future investments well
- How do you ensure you are measure the quantity and quality of system – system completeness – perhaps combining system completeness with some sort of quality measure.
- Is travel speed the right measure – shouldn't we be looking at the whole trip?
- Volume-to-capacity ratio doesn't measure time or space efficiency

Matt Herman, Clark County

- We know how to count cars - counting bikes and peds not yet standardized and needs to be
- Difficult to get the infrastructure in place to be able to count them – need to be practical about the data available
- Access to destinations – worry about going the other way – 15-min. drive time vs. 30-min walk time
- v/c issue – commercial to residential – the v/c improves under this zone change so they can't challenge the change which, in effect, takes away jobs

Steve Williams, Clackamas County

- Instead of having single multimodal LOS – have a LOS for each mode
- The LOS that is appropriate for each mode for different land uses varies
- Needs to be nuanced enough to tailor for different land use and transportation contexts

Jon Makler, ODOT Region 1

- Accessibility is my number 1 measure – converting industrial land to residential example – if you say in our region, how many people can get to work within 20-min., v/c test doesn't tell us that in a land use decision
- If we are talking about the throughway system - we need to ensure it is functioning well in terms of speed – for throughways, speed is a value. Speed isn't a high value in a downtown area.
- Inadequacy of basic transit service an issue in Clackamas county – within a certain transit commute you may have a lack of transit service and/or poor access to transit – how many people can get to work by different modes within a certain period of time. This is also applicable to freight in terms of access to ports, marine terminals, through the region

Matt Herman, Clark County

- Data collection is an issue but there are advances
- Out of direction travel is an impedance – having well-connected street, bike and pedestrian networks is important.

Jamie Stasny, Clackamas County

- Modeling – regional model doesn't get at queuing well – what tools will be used to support the transportation analysis needed?

Regional Mobility Policy – Practitioners Forum (Session 2) April 30, 2021 notes for transportation and engineering group.

1st Breakout – Policy Elements

- **What comments/questions do you have about the policy elements?**

Judith Grey: Transportation Systems Planning has lots of ther measures than volume to capacity ratios. Reliability is very important for TSPs and these plans encourage other modes and improved safety.

- **Are these right? Are these the most important elements to include in the updated mobility policy? Is anything missing?**

Brian Hurley (ODOT): All the elements listed are great and I can't think of anything that is missing. ODOT's climate office is looking at balancing economic and environmental goals. Measures should include access and network completeness for all modes of travel.

Dominque Huffman: We should keep elements as simple as possible to understand. For the different elements listed, I think they are great. Possible to combine some of the measures.

Chris Johnson: I would add to travel options – travel time, efficiency, and reliability. Some measures are hard to get at.

2nd Breakout – Policy Measures

- **Are these metrics going to produce the information needed to measure success on the five mobility elements?**

Judith Grey: MMLOS is a good measure and has been looked at in other places. The definition of this measure is hard to get to and have agreement around.

Dominque Huffman: I thought maybe the first three measures could be grouped, but now I'm thinking they are defined differently.

Judith Grey: The RTP has standards for pedestrian crossings that are important. VMT per capita is useful.

Aaron Breakstone: Yes, we also use VMT per capita.

Brian Hurley: I agree with this set of measures that has 3 pedestrian oriented categories and 8 more auto oriented categories. The one thing missing is a transit oriented measure. Are there data gaps in the Systems Completeness Measure?

Chris Johnson: That attribute is pretty locked down. While were not quite there on pedestrian measures.

Are travel time and speed redundant? In urban areas, travel time is likely more important, whereas speed might be more important in urban areas

- **Will these measures work for you in practice/in your community?**

Dominque Huffman: I think the elements capture the goals. The measures are quite a bit to cover. How are we determining if the measure has indirect or direct impact? (Grace asked the question in the chat)

Judith Grey: We will have to see how these measures work with development review and give our feedback.

- **What measures make sense in what areas/contexts (urban areas vs. industrial areas, for example?**

Judith Grey: We could add transit context to some of these measures, like including specific transit travel time.

Brian Hurley: Will there be benchmarks and targets for some of these measures? Geographic context could be a positive or negative. ODOT climate looks at a whole region for context.

Chris Johnson: I'm trying to see if travel time and travel speed may be redundant.

Aaron Breakstone: Accessibility is an important measure, but can be hard to model and measure. Shopping opportunities are a hard thing to quantify and are an example of something related to accessibility that is hard to get at.

Brian Hurley: Level of Traffic Stress combined with volume to capacity ratios for roadways would be a good set that shows a balanced approach.

Regional mobility policy practitioner forum – Group 1 (Kate & Noel)

Group members:

Laura – City of Oregon City

Marah – ODOT Development Review planning lead

Kate – City of Beaverton planning

Roseann – ODOT, OHP policy amendments

Joseph – City of Hillsboro

Discussion 1: Mobility policy elements

Discussion questions:

1. What questions do you have about the policy elements? What needs additional clarification?

   Context of how we got to these

   V/C measured differently at Metro travel demand model then Dev Review/Land Use – being treated as if it's the same. Should we be creating two different standards as they are calculated differently?

- State and local can strive to meet Metro policy. Locally we are looking at things at finer locations vs. regionally
- Disconnect between long range planning and how it gets implemented through TSPs and actual development – are they translating down?

   How do these trickle down to local level?

   Travel options – how to make them more equal to access, not just that they exist

2. Are these the right elements? Are these the most important elements to include in the updated mobility policy? Is anything missing?

   Might be missing larger connection to other policy areas like land use and housing, very specific to transportation.

   Missing equity as a policy element

   Climate

   Being able to pinpoint policy that we could adopt in our code – it is powerful to require in development review that is legally defensible

Discussion 2: Mobility policy measures

Discussion questions:

1. Looking at the list of measures. Which one stands out to you; which do you want to talk about today, and why? Then, for each measures selected ask:

Accessibility to destinations

- Will there be a bias against suburbs?
- Is this a land use thing or a transportation thing?
- How would this be implemented?
- This is a good measure – it gets to the crux of what we want to do; but how do we do it
- Which modes, what are 'essential destinations' – will that change over time
- Creates more questions than answers
- Let's say we are measuring for pedestrians: ½ mile walk on a 7 lane arterial vs. ¾ mile walk on separated paths? Perhaps the measure could be broken down by better assumptions
- Using travel time for destinations will be very difficult to do – where do you measure travel time from? Delay could be better
- Hillsides/streams – it might not make sense to add connections to make things more accessible
- If climate/equity was clear in policy – maybe this measure would only apply for modes outside of motor vehicles.
    - Ambiguity in the policy allows for us to wiggle around and not address what we actually want to achieve
- Transit service relies on density/destinations – gaps in the network could be useful for this. TriMet has it's way of measuring, how to bring that in as well.

Is Metro doing a look back – we've had these policies in place for awhile (2040 plan, RTP updates); what is the problem we are trying to solve and do we think we are actually going to get outcomes? What are the outcomes going to be as a result of this work? What are the lessons we have learned?

Pedestrian Crossing Index

- Fear of liability that we are setting in place – might be other reasons for not putting a crossing from an engineering perspective
- State law of every intersection being a crossing
- This is looking at enhanced crossings – correct?
- Need to define enhanced crossing based on the type of road
- Is it too narrowly focused by just looking at distance instead of quality/connectivity/ADA etc.
- Define an area and how many crossings should be in that area vs. specific distance between crossings

Travel Time

- Our minds often go straight to freight/vehicle travel times – is the idea to think broader about different modes? Not clear in current language
- Can have unintended consequences if not clear
- Interrelation between modes, too – if one goes up and one goes down, what does that mean?

- Could potentially be a good measure for equity – the amount of time people have to spend commuting, time/money spent on transportation.
- Time is a precious resource – it really matters if you are low income and traveling long distances, shift work, multiple jobs, etc.
- More transit is needed in suburban contexts – which is outside of control of local jurisdictions, need TriMet to expand. Would love to have more of a standard, but issue is getting TriMet on board and funding so we can expand it
- Systemwide – are we looking at gaps in transit?
- Looking at Portland's equity framework on transit gaps & PedPDX – is Metro doing that?

Potential area for case studies:

- Cooper Mountain planning area

Potential Mobility Policy Elements

Hi

Access

All people and goods can get where they need to go.

Time Efficiency

People and goods can get where they need to go in a reasonable amount of time.

test

Reliability

Travel time is reliable or predictable for all modes.

Nice to be with you.

Safety

Available travel options are safe for all users.

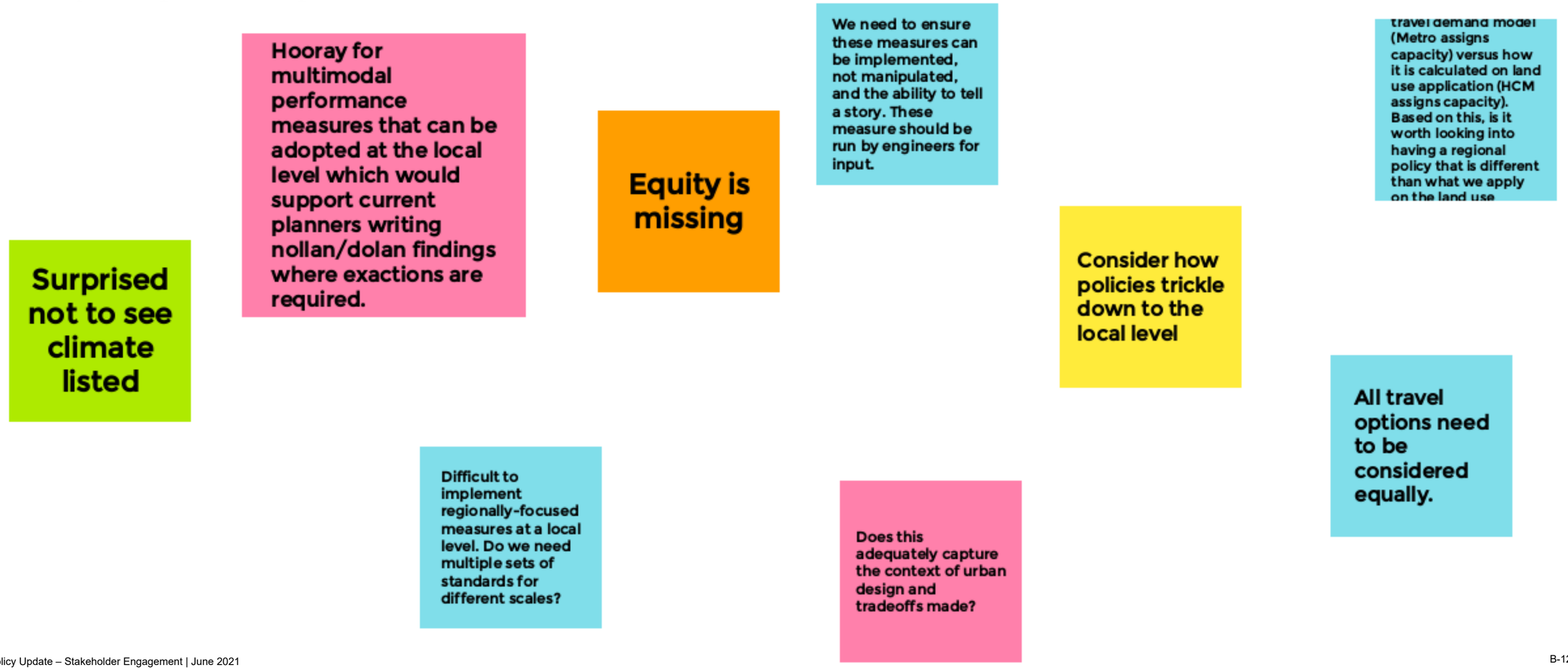
Travel Options

People can get where they need to go by a variety of travel options or modes.

Policy Element Discussion Questions

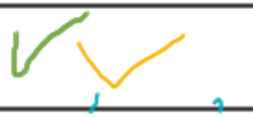
What questions do you have about the policy elements? What needs additional clarification?

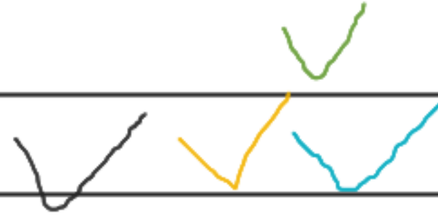
Are these the right elements? Are these the most important elements to include in the updated mobility policy? Is anything missing?



Multimodal Level of Service	System that measures the quality and level of comfort of facilities per mode based on factors that impact mobility from the perspectives of pedestrians, cyclists, and transit riders, respectively.
Level of Traffic Stress (LTS)	Classifies points and segments on routes into different categories of stress ranging from 1 (low stress) to 4 (high stress) based on factors that correlate to the comfort and safety of the bicyclist or pedestrian using that facility.
Pedestrian Crossing Index	The distance between pedestrian crossings compared to a target maximum distance.
System Completeness	The percent of planned facilities that are built within a specified network.
Travel Speed	Average or a percentile time spent traveling between key origin-destination pairs, during a specific time period.
Accessibility to Destinations	The number of essential destinations within a certain travel time or distance, by different modes.
Hours/Duration of Congestion	Indicators of congestion severity that assess on-time arrival and travel time variability.
Travel Time Reliability	The number of hours within a time period, most often within a weekday, where a facility's congestion target is exceeded.
VMT per Capita	The number of miles traveled by motorists within a specified time period and study area, per the study area's population.
Travel Time	Average or a percentile time spent traveling between key origin-destination pairs, during a specific time period.
V/C for Roadway Links	The ratio of traffic volume to the capacity of a roadway link during a specified analysis period.
Volume-to-Capacity Ratio (V/C) at Intersections	The ratio of traffic volume to the capacity of an Intersection during a specified analysis period.





essibility to Destinations

The number of essential destinations within a certain travel time or distance, by different modes.

Cities, like Hillsboro, is lacking transit due to limited funding. We may need a regional policy to focus on gaps of transit.

How do we determine what is an essential destination?

that benefits a certain party. The length of the travel time can also wash away a congested point that needs more focus by having a moving section and congested section within the same link making the link look

This is related to travel time. Where do you measure travel time from? Delay may be a more effective measure than accessibility.

Destinations will be different for different modes.

Love it. But this raises more questions than answers.

Frustrating to not see equity or climate being very explicitly called out as policy elements. If they were, we could say for sure that accessibility is about walking and walking (not improving accessibility for vehicles).

Natural barriers (hillsides, streams) will always impact accessibility. How do we factor that in?

Pedestrian Crossing Index

The distance between pedestrian crossings compared to a target maximum distance.

Is this too narrow focused?

Does this provide a new tool, allowing local govs to require developers to build new crossings as conditions of approval.

Plug to look at Cooper Mountain area as case study. Lots of hillsides and natural resource areas that create barriers to connectivity.

Creates a liability. What happens if someone is hit at a unmarked crosswalk. Attorneys can look at this index and say there should have been an enhanced crossing.

that benefits a certain party. The length of the travel time can also wash away a congested point that needs more focus by having a moving section and congested section within the same link making the link look

Travel Time

Average or a percentile time spent traveling between key origin-destination pairs, during a specific time period.

Need a measure that calls out areas lacking transit service.

This conversation typically revolves around vehicles and freight. How will we think more holistically to think about other modes?

This is a good measure for equity.

Agenda

Metro
600 NE Grand Ave.
Portland, OR 97232-2736

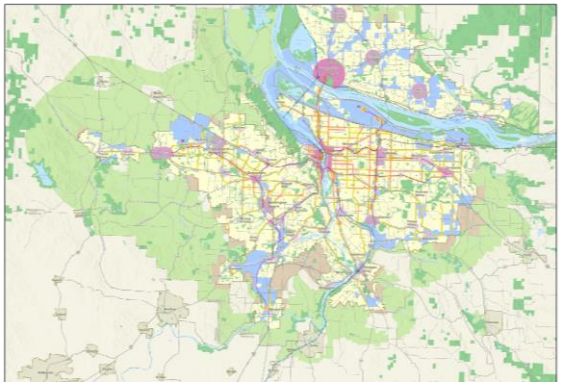
Meeting:	Community Leader's Forum—Transportation
Date:	Friday, May 14, 2021
Time:	9 to 11 a.m.
Place:	Zoom virtual meeting https://us02web.zoom.us/j/84674543701?pwd=SklaaHRXT3NpSnJvcDIwN2ozTmNCZz09 Meeting ID: 846 7454 3701 Passcode: 345307 888 475 4499 US Toll-free

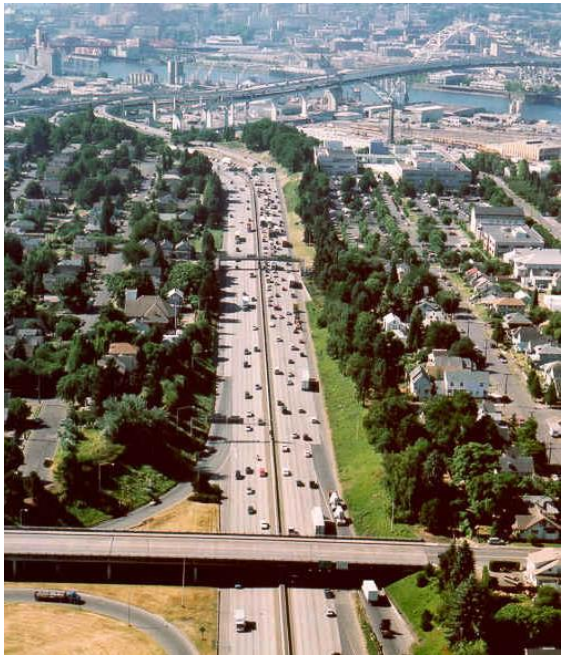
AGENDA

9:00 AM	**1. Introductions and forum purpose**	**Allison Brown, facilitator**
9:05 AM	**2. Opening remarks and urban arterials update** • Jurisdictional Transfer Study • Updates on regional legislative efforts • Q&A with participants	**Councilor Gonzalez, Metro**
9:30 AM	**3. Metro/ODOT Regional Mobility Policy Update & Policy Elements** • Review of project goals, objectives and timeline • Share mobility policy elements	**Kim Ellis, Metro** **Glen Bolen, ODOT**
9:45 AM	**4. Small Group Breakouts: Mobility policy**	**Allison Brown, facilitator**
10:25 AM	**5. Metro's Congestion Pricing Study** • Overview of the study purpose • Review of findings • Next steps • Q&A with participants	**Alex Oreschak, Metro**
10:55 AM	**6. Wrap-up and Adjourn**	**Allison Brown, facilitator**

Regional mobility policy update

Community Leaders Forum
May 14, 2021





Metro

Oregon Department of Transportation

Project overview & policy elements

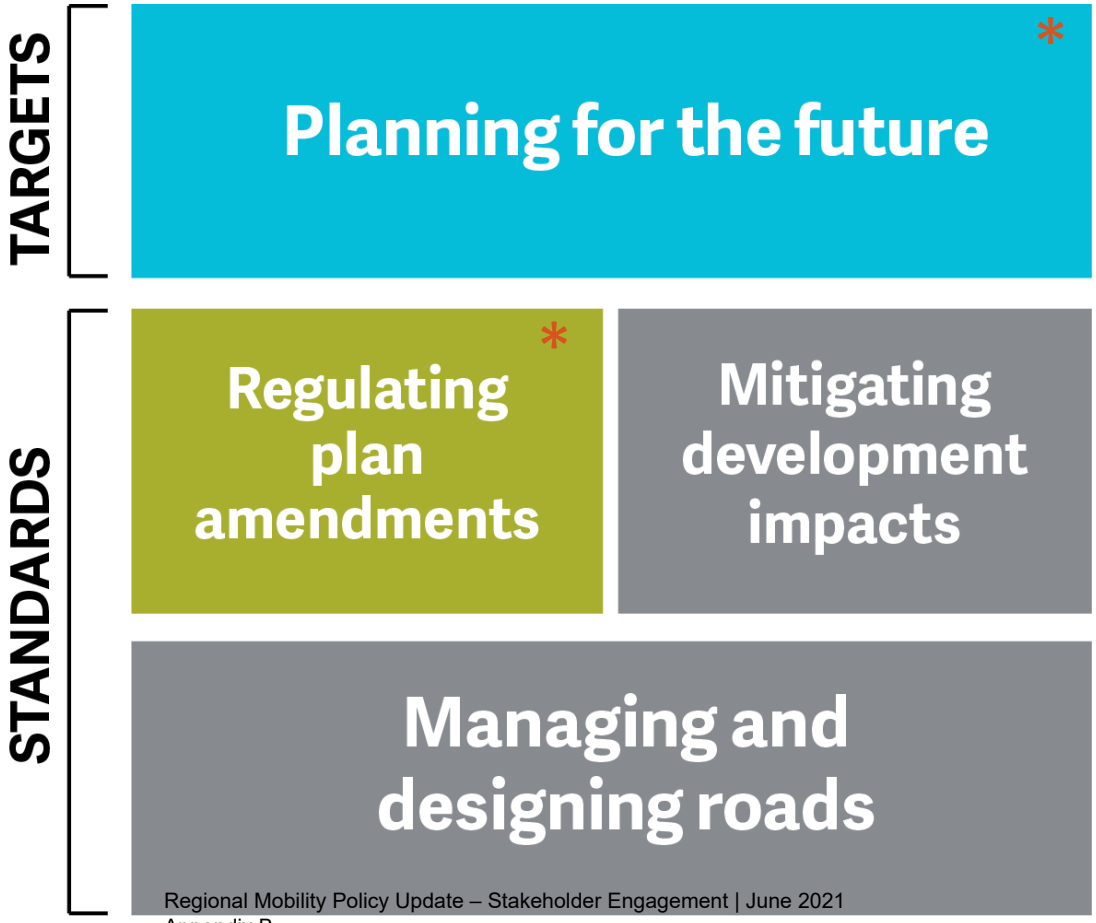
Kim Ellis, Metro
Glen Bolen, ODOT

Project purpose

- Update the policy on how we define and measure mobility for the Portland area transportation system
- Recommend amendments to the RTP and Oregon Highway Plan Policy 1F for the Portland area

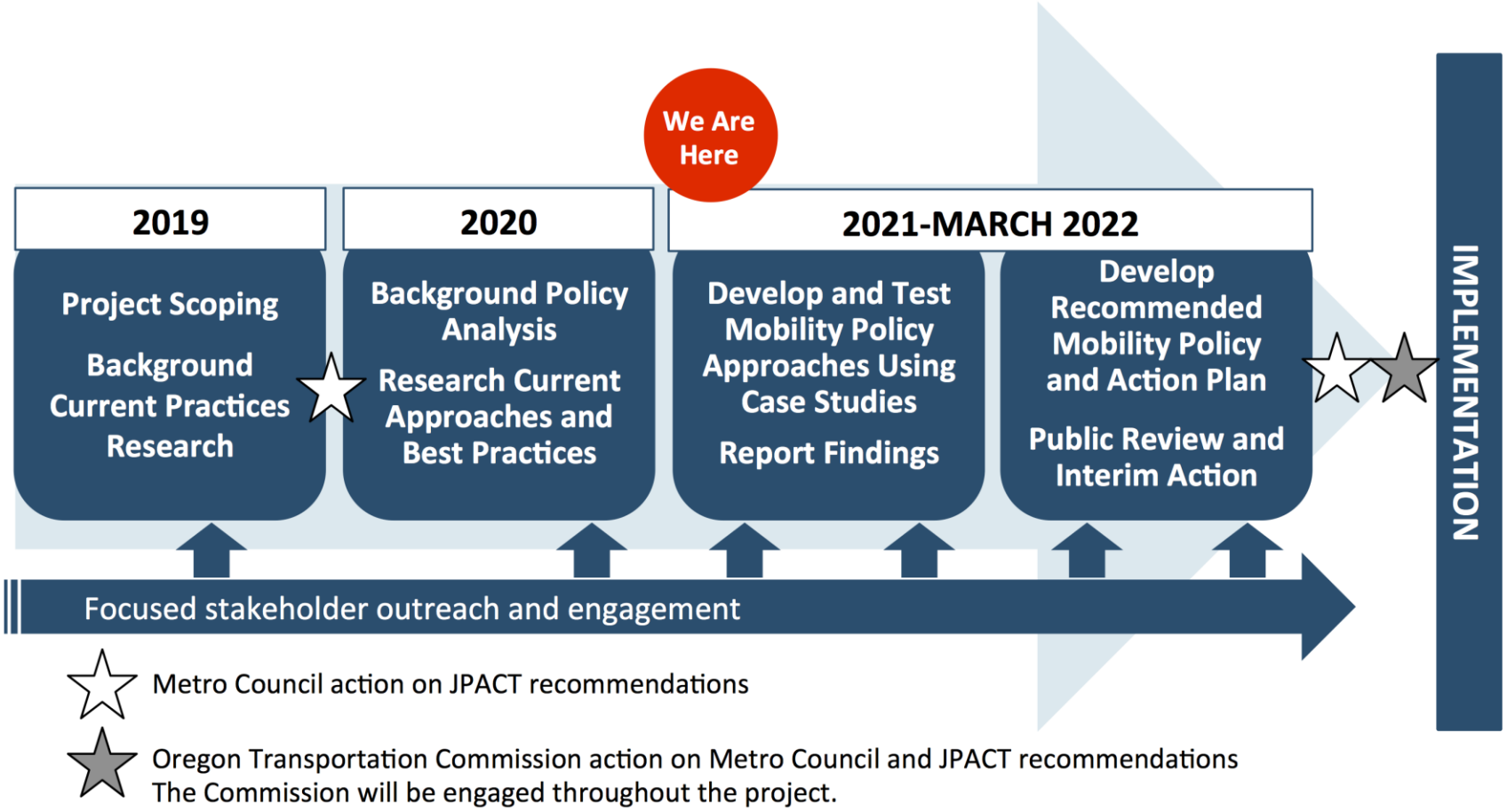
Visit oregonmetro.gov/mobility

State, regional and local decisions



* Focus of this effort

Project timeline

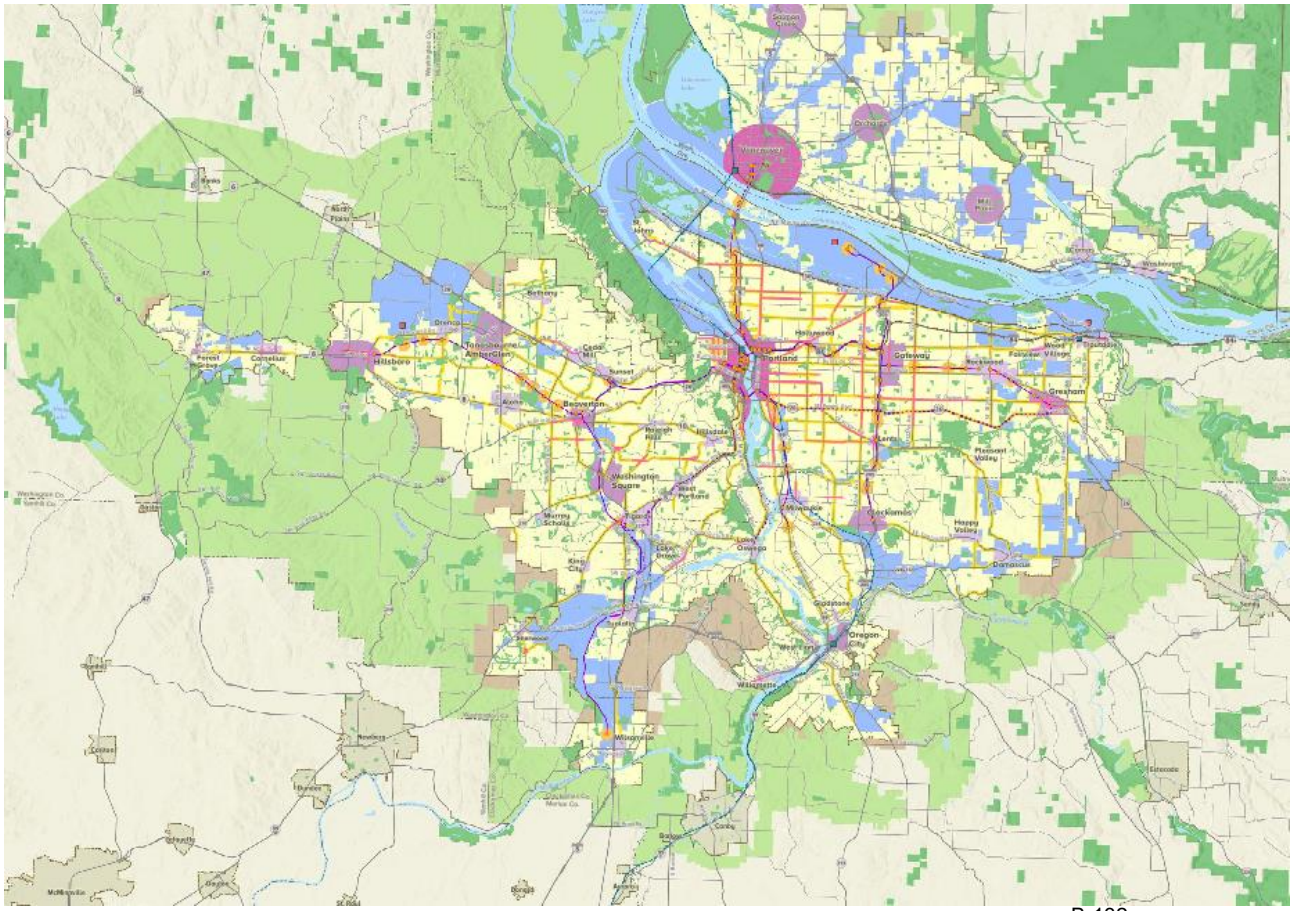


2040 Growth Concept is our foundation

Adopted as the land use plan for the region under state law (ORS 197)

Transportation plans must be adequate to serve planned land uses

Codified in regional plans governing cities and counties



Adopted in 1995 and acknowledged by the Land Conservation and Development Commission under the statewide planning program

2018 Regional Transportation Plan priorities

Equity

Climate

Safety

Congestion

Oregon Transportation Commission Strategic Action Plan priorities

Equity

Prioritize diversity, equity, and inclusion by identifying and addressing systemic barriers to ensure all Oregonians benefit from transportation services and investments.

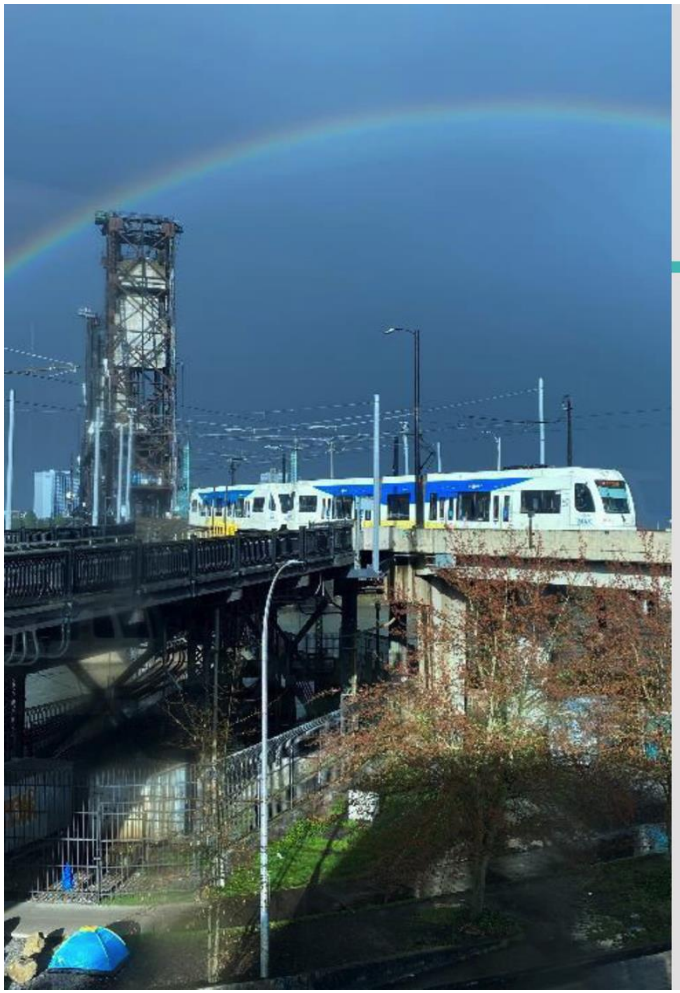
Modern Transportation System

Build, maintain, and operate a modern, multimodal transportation system to serve all Oregonians, address climate change, and help Oregon communities and economies thrive.

Sufficient and Reliable Funding

Seek sufficient and reliable funding to support a modern transportation system and a fiscally sound ODOT.

Oregon Transportation Commission Strategic Action Plan priorities



Modern Transportation System

Build, maintain, and operate a modern, multimodal transportation system to serve all Oregonians, address climate change, and help Oregon communities and economies thrive.

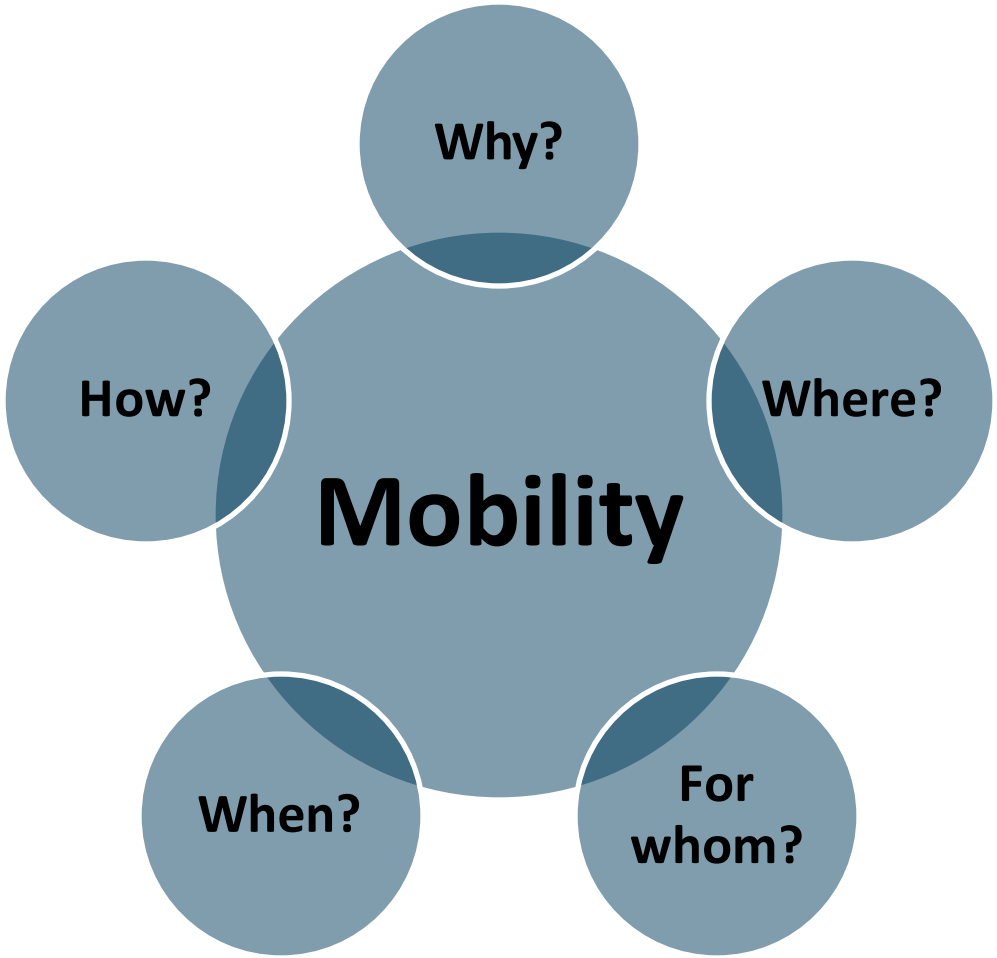
- **Preservation and Stewardship:** Preserve, maintain, and operate Oregon's multimodal transportation system and achieve a cleaner environment.
- **Safety:** Prevent traffic fatalities and serious injuries and ensure the safety of system users and transportation workers.
- **Accessibility, Mobility and Climate Change:** Provide greater transportation access and a broader range of mobility options for Oregonians and address climate change.
- **Congestion Relief:** Invest in a comprehensive congestion management strategy for the Portland metropolitan region to benefit all Oregonians. Implement system and operational innovations to reduce traffic congestion throughout Oregon.
- **Project Delivery:** Develop practical solutions to transportation problems in order to address community needs and ensure system reliability and resiliency.
- **Innovative Technologies:** Invest in and integrate technologies to improve transportation services and operations throughout Oregon.

B-135

Stakeholder definitions of mobility

- “Getting to where you need to go safely, affordably and reliably no matter your [mode of travel], age, gender, race, income level, ZIP code...”
- "Mobility – focus on moving people and moving goods predictably and efficiently.”
- "Efficient freight movement and access to industry and ports...play a key role in the state’s economic development."

How do you *define* mobility?



B-137

Draft Mobility Policy Elements

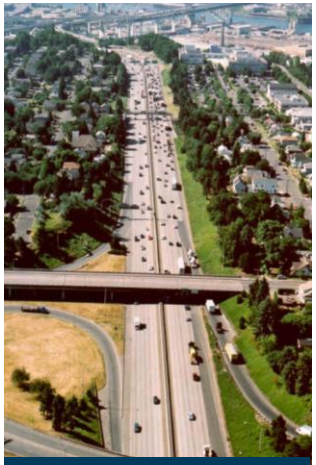
Access	• All people and goods can get where they need to go.
Time Efficiency	• People and goods can get where they need to go in a reasonable amount of time.
Reliability	• Travel time is reliable or predictable for all modes.
Safety	• Available travel options are safe for all users.
Travel Options	• People can get where they need to go by a variety of travel options or modes.

How should we consider mobility in different contexts?

Downtowns & business districts

Major urban corridors

Industrial areas



Throughways

Source: Metro Designing Livable Streets Guide

B-139

Mobility measures overview

Susie Wright, Kittelson

Mobility policy considerations

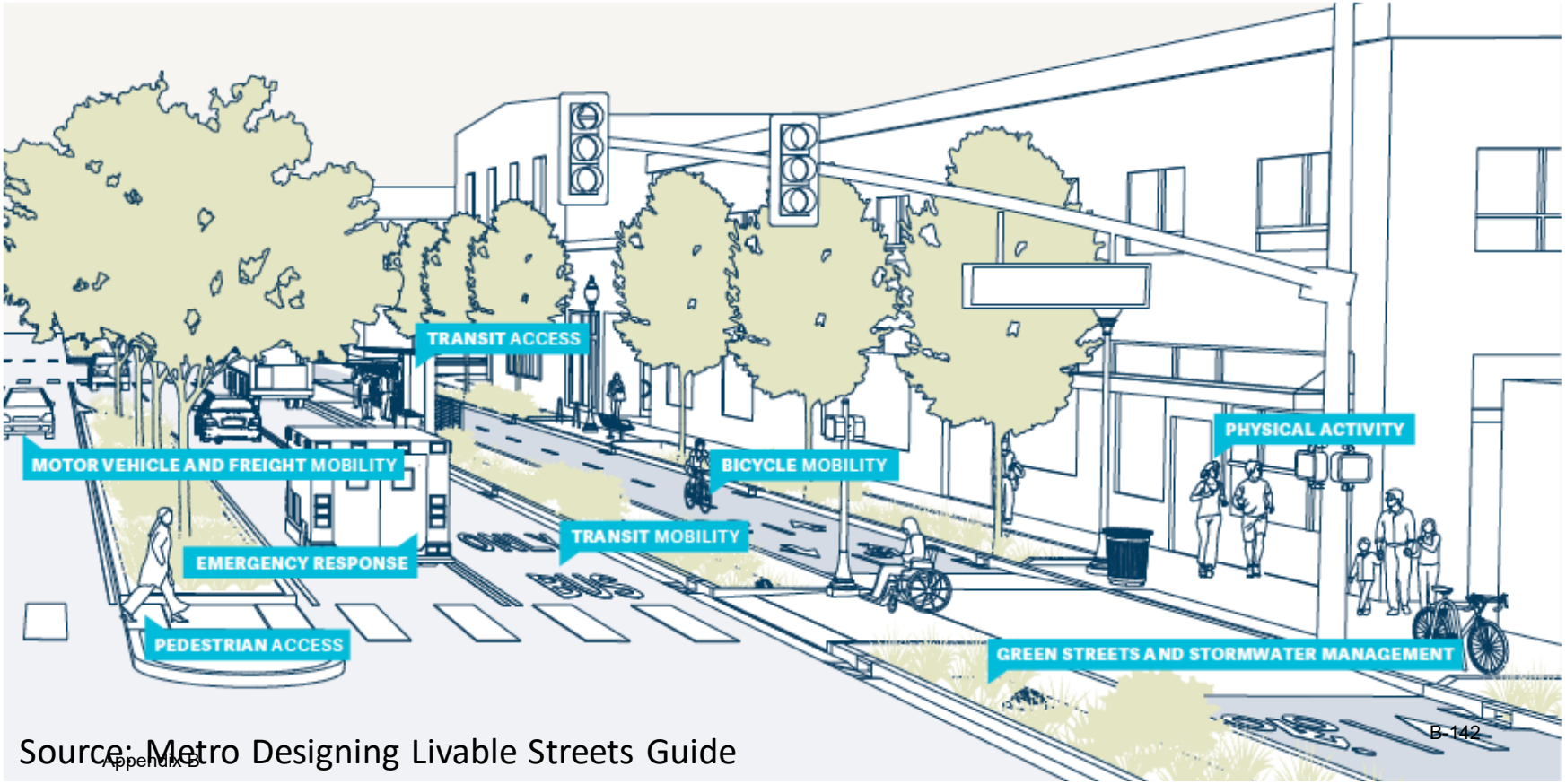
Updated policy needs to:

- Be equitable
- Consider who, why, when, where, how
- Include multiple measures that consider:
  - location and land use context
  - facility type and function(s)
  - user needs
  - time of day
  - travel options
- Consistently inform different planning applications

B-141

What does mobility look like?

Streets serve many different functions. Various functions and modes may be prioritized on different streets depending on planned land use context.



Source: Metro Designing Livable Streets Guide

How should we consider mobility in different contexts?

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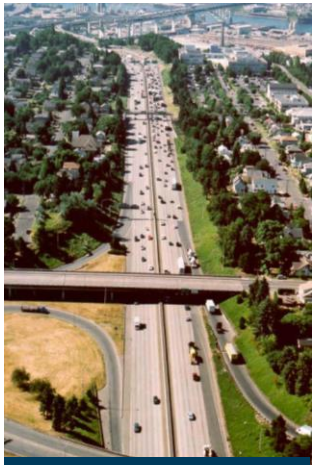

Throughways

Source: Metro Designing Livable Streets Guide

B-143

Draft Potential measures

Being considered for testing and refinement

Listed in order from highest to lowest screening score

Measure	Mobility Policy Elements				
	Access	Time Efficiency	Reliability	Safety	Travel Options
Multimodal Level of Service (MMLOS)	●			○	All modes
Level of Traffic Stress (LTS)	●	○		●	Bike, Pedestrian
Pedestrian crossing index	●	●		●	Pedestrian
System completeness	●	○		○	All modes
Travel speed			○	●	Vehicle, Freight, Transit
Accessibility to destinations	●	○	○		All modes
Hours of congestion/ duration of congestion		●	●		Vehicle, Freight, Transit
Travel time reliability		○	●		Vehicle, Freight, Transit
Vehicle miles traveled (VMT) per capita	○	●		○	Vehicle, Freight, Transit
Travel time		●			All modes
Volume-to-capacity ratio for roadway links		●	○		Vehicle, Freight
Volume-to-capacity ratio at Intersections		●	○		Vehicle, Freight

● direct measure ○ indirect measure

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Next steps

Kim Ellis, Metro

Next steps

April to May 2021 – Seek input on mobility policy elements and measures for testing

Stakeholder forums, briefings to Metro Council, regional advisory committees and county coordinating committees

June 2021 – Seek JPACT and Council direction on mobility elements and measures to test

Summer 2021 – Test mobility policy elements and measures through case studies

Fall 2021 – Report findings and develop draft mobility policy and measures for further review and input

Stakeholder forums, briefings to Metro Council, regional advisory committees and county coordinating committees

Small group breakouts

Discussion

- Do you have questions about the mobility policy elements or measures? Anything need clarification?
- Are these the most important elements to include in the updated mobility policy? Anything missing?
- Which elements are most important in these different contexts – centers, urban travel corridors, industrial areas and throughways?
- Do any of the measures stand out as being especially important to measuring mobility or is anything missing?

Recap and overall reflections

Allison Brown, JLA

Thank you!

Kim Ellis, Metro

kim.ellis@oregonmetro.gov

Lidwien Rahman, ODOT

lidwien.rahman@odot.state.or.us

Metro

Oregon Department of Transportation






Mobility Policy – Community Leaders Forum

Small group notes

Community leaders

- Kari Schlosshauer, Safe Routes to School National Partnership
- Ashton Simpson, Oregon Walks
- Abe , Clackamas County Public Health
- Sara Wright, Oregon Environmental Council
- Ray Atkinson, Clackamas Community College

Project Staff

- Héctor Rodríguez Ruiz (facilitator)
- Ted Reid (notetaker)
- Kim Ellis (knowledgeable project person)

Listener

- Joseph Auth, City of Hillsboro

Policy elements

Are these the right elements? Are these the most important elements to include in the updated mobility policy? Is anything missing?

- Time efficiency in multi-modal transportation (transit, micro-mobility, bike, walking) matters for encouraging their use. They need to be viable.
- Suburban and rural trips – transit needs to be reliable/frequent to achieve climate goals. One person on an hourly bus doesn't help.
- Climate impacts seem missing.
- Missing affordability as an element. Cars may be more time efficient, but how do they impact people's budgets?
- Appreciate this work but it is still anchored in the status quo. This is an opportunity to reframe how we talk about transportation and its impact on the whole community.
- Transportation conversations tend to focus on users. The impacts of the transportation system and how it is used affect everyone (social impact). Transportation should benefit the community and state (not just the individual user). Single-occupancy vehicle trip is the "most anti-social choice." Need a hierarchy that prioritizes the most "pro-social" modes.
- Missing placemaking as an element – mobility policy should support communities/places.
- Land use context matters. Housing and businesses.
- Current vs. desired future land uses. Need to create the conditions for the desired future.
- Tradeoffs between safety and other outcomes/elements. What is the acceptable level of risk? Are we talking about fatalities and injuries or property damage? (Kim's answer: "the RTP safety policies are focused on eliminating fatal and severe injury crashes – getting to Vision Zero – this policy needs to support that")
- Discussion of being careful of unintended consequences of improving reliability – there could be unintended climate impacts – need to find a balance.

Which elements are most important in these three different contexts, especially regarding the movement of freight and goods?

- What about a suburban context with poor connectivity? It seems missing.
- What about collectors in suburban areas? A lot of traffic diverts off of arterials to collectors. This matters for SRTS, access to parks, etc.
- Not sure why some elements would be more important in some contexts and not others. All the elements seem important in all the contexts.
- Speed should not be a priority anywhere.
- Are we just talking about speed for autos (Kim's answer: "no, all modes")
-

Community Leaders Forum

Regional Mobility Policy – Small Group Notes

- Vivian Satterfield
- Ted Labbe
- Jeff Pazdalski
- Bret Morgan

Project Staff

- Glen (knowledgeable project person)
- Molly (facilitator)
- Grace (notetaker)

Do the elements address the types of trips /trip purposes and destinations important to you and the people in your community?

Is anything missing? Reactions? Redundecies?

time efficiency, we tend to prioritize vehicle efficiency and movement, but there isn't the same for pedestrian movement, active transportation

continuity needs to be added; there isn't as much continuity when you travel by any other mode aside from a vehicle; lack sidewalk continuity so a person walking needs to zigzag; when riding transit people have to do a lot of trip chaining and transferring to get where you need to go

Time efficiency is a tricky measure when you talking about Washington County; people in Washington County is traveling a greater distance compared to a person traveling in the City of Portland; so time efficiency is tricky. Also in following up, first-and-last mile is so critical to the success of travel options and make it viable; the MAX is a spine; considering this as a connectivity issue; also look at connectivity not to the urban centers

Important to remember with urban arterials, people live along these facilities. A lot of people living along these arterials are also mixed income, so we are really talking about people's homes. We need to address safety, but not necessarily in the context of traffic violence; recognize all that concrete means greater impacts to heat island; impervious cover related to rainwater; also noting the disparities people who live along the corridors and how their safety related to having cleaner air, open space, impacts of extreme weather, how that affects their safety and health

Which elements are most important in these different contexts – Downtowns & business districts, major urban corridors (ex. McLoughlin Blvd between Milwaukie and Oregon city, TV Highway between Beaverton and Hillsboro, 82nd avenue), industrial areas and throughways. (You can screen share the PDF with illustrations of contexts.)

It seems like transportation agencies have an idea of what the dominant way a people should move through a space for a specific context and that is what takes over. But how do you change behavior. Aside from throughways, all these other context, people are moving in multiple ways. But

the models are not necessarily capturing the issue like the last 100 feet to get to a destination for a bus rider is terrifying. Capturing and measuring that nuance. Move through space in different ways.

Framing is a little problematic because it tries to make one element the focus of the facility; example with TV highway, the element can be this for one area of TV highway, but different say in downtown Corneilius.

Performance measures: which are the most important to you to get to the outcomes we want to see?
The measures have travel speed and travel time; travel speed seems way more car-related; travel time – what does that exactly mean; placing into the context of mode; don't want to set the bar relative to vehicles

Travel amenities, such as a safe place to park a bike, nicer transit stops with shelter and lights; as more people are using different modes, working in those travel amenities. How do the amenities play into the people's use of multiple modes. And not just focusing it on the park and ride; take the barriers away like the questions of "where do I park my bike, charge my vehicle, etc" to be able to make that trip by a different mode viable

Consider e-bike charging and recognize that some parts of the region are deserts for bike shops. From a transit perspective, there is a lot of focus on travel time, but reliability is more important. The focus on travel time isn't getting at the system improvements needed, particularly for other modes and it skews towards vehicles

want to see measures broken down by demographics and understanding profiles of who and how they are getting around.

Overarching Theme/Comment

- Needs to be multimodal and needs to be connected
- Few trips are only one mode

APPENDIX C

County coordinating and advisory committee meetings notes

- TransPort Meeting: April 14, 2021
- Clackamas County Transportation Advisory Committee: April 27, 2021
- East Multnomah County Transportation Committee: May 5, 2021
- Washington County Coordinating Committee TAC Briefing: May 6, 2021
- East Multnomah County Transportation Committee (policy): May 17, 2021
- Clackamas County C-4 Metro Subcommittee (policy): May 19, 2021
- Washington County Coordinating Committee (policy): June 14, 2021

Regional Mobility Policy Update – Stakeholder Engagement | June 2021
Appendix C

4/14/21 TransPort Meeting - Kim's DRAFT Notes

attendees:
Jason Spencer - Western Systems
Carl Olson, Clackamas County
Maggie Lin - DKS Associates
Caleb Winter, Metro
Tammy Lee - PSU/TREC
Ted Leybold, Metro
Brendan Williams - PSU/TREC
Jim Gelhar, Gresham/Multnomah County
Kate Freitag, ODOT
Bikram Raghubansh (PBOT)
Ryan Lowe - Coral Sales
Patrick Marnell - Q-Free
Alison Tanaka, PBOT
A.J. O'Connor TriMet
Damian Casados Coral Sales
Jana LaFrenier, PBOT
Shaun Quayle, Washington County
Jabra Khasho, City of Beaverton
Michael Burkart, ODOT
Scott Turnoy, ODOT
Adrian Pearmine, DKS
Dominique Huffman, City of Wilsonville
Tu Ho, DKS

Shaun Quayle (Washington Co.)

- Use the SMART acronym to vet candidate metrics. S = Specific, M = Measurable (at a reasonable cost with accuracy), A = Actionable, R = Realistic, and T = Time-bound
- large task to take on – in terms of PMs and how it is implemented in TSPs and land use and developers - Developers are always looking for lowest cost
- Flexibility will be key
- Data is changing so fast – a big challenge – there are new sources, but limited funding for verification and validation of PMs – we will want to have a good baseline before on reliability and accuracy of data before mainstreaming the new policy and measures

Caleb Winter (Metro)

- TSMO – isn't a modal system but is a system network strategy for a completeness –
- Touches on indirect measure – data networks are supporting managing and monitoring system real-time

- Optimal spacing standards for urban contexts – we know intersection density has a direct relationship to walkability
- If in system planning, we can identify what is needed to support development - crossings, etc. – this would allow it to be in capital improvement programs and then could be built out by development

Shaun Quayle (Washington Co.)

- queuing is an important metric for safety – it plays out in adjacent ped and bike travel. Trying to work with crowd source data - an important metric as we become more dense and people are trying to cross streets/intersections and walk and bike more - most is at plan amendment and system planning level and need to be able to model at that scale
- Calibrated model from – if we can demonstrate the spillback – then
- Should be talking about ranges – there are a variety of driver behaviors and users will change – which - want the developer to make the half street improvement but
- Arterial ARCTO – quantifying pedestrian and big delay
- If v/c stays – the cycle lengths can be adjusted –
- There is an inaccurate assumption that the signals are working with 100% detection and communication – need for funding to continue to maintain and bring on line signal upgrades and transition over time – as an implementation action – bike distinguishing detection – can help inform adjustments – counts peds and motorcycles as bikes – uses heat sensing technology that continues to improve

AJ (TriMet)

- looking at new technology that TransPort – ROT project to digitize the LRT vehicles to get better information on MAX train breakdowns to minimize impacts to reliability and system operations. Would also them to extend next gen TSP (transit signal priority) to MAX trains which would impact traveling and transit reliability
- Transit – accessibility to stops and security at stops – street lighting, crossings that develop near a transit stop

Kate Freitag (ODOT)

- connected pedestrian environment and crossing opportunities to/from stops that might not show up in a performance measure is important

Shaun (Washington Co.)

- Space efficiency is also important aspect of mobility – including pick-up/drop-off for transit, uber, bike share – and connection between land uses and use of ROW

Glen Bolen (ODOT)

- Seat utilization – as a efficiency – e.g., if a freeway is full, it is likely only carrying 25% of the seat capacity
- https://www.fehrandpeers.com/why-travel-efficiency-matters/

Shaun (Washington Co.)

- As tech changes and you have more fully autonomous vehicles on roads – it may be possible to squeeze more vehicles through
- Reasonable amount of time – Waze and google gives people predictive systems to identify when to travel and best route
- Portland Metro Arterial Performance management implementation guidance document and poster are among the docs here: https://www.oregonmetro.gov/public-projects/regional-tsmo-strategy/2010-2020-tsmo
- Is the Portland Arterial Performance Measures Concept of Operations Report reflected in this work? https://www.oregonmetro.gov/sites/default/files/2015/09/29/Arterial_Measures_Guide.pdf

Clackamas Transportation Advisory Committee (CTAC) Discussion Notes

April 27, 2021

Project staff: Kim Ellis (Metro) and Glen Bolen (ODOT)

Attendees: Trent Wilson, Karen Buehrig, Steve Williams (Clackamas County), Ray Atkinson, Jaimie Huff, (Happy Valley) Mat Dolata (WSP), Seth Brumley (ODOT), Eve Nilenders (TriMet), Dominique Huffman (Wilsonville), Chi Mai (ODOT), Will Farley (Lake Oswego), Kelsey Lewis (Tualatin), Brett Setterfield (Clackamas County), Jennifer Garbley (Milwaukie), Dan Kaempff (Metro), Donald DeRosia (Estacada) and Lance Calvert (West Linn).

- Karen Buehrig – VMT/capita seems more like an environmental measure and not necessarily a measure of mobility. Would like more information about how this is a measure of mobility and how it might be applied.
- Karen Buehrig – It would be helpful to hear what we heard at the freight forum and other briefings.
- Ray Atkinson – Will low traffic stress (LTS) measure consider intersections? ODOT's analysis methods includes intersections, so would like to ensure following the method developed by ODOT.
- Eve Nilenders – Glad to see pedestrian crossing index measure being considered. The measure doesn't speak to speed or number of lanes at those crossings. This measure would be a good complement to the LTS measure, which accounts for speed, number of lanes and motor vehicle volume.

EMCTC TAC Briefing Discussion Notes
May 5, 2021

Project team: Kim Ellis (Metro) and Glen Bolen (ODOT)

Jessica Berry, Multnomah County
Mary JoAnderso, Multnomah County
Allison Boyd, Multnomah County
Chris Strong, Gresham
Jay Higgins, Gresham
Lewis Lem, Port
Amber Shackelford, Troutdale
Eve Nilenders, TriMet
Glen Bolen, ODOT
Hector Rodriguez, ODOT
Kyler Roberts, Wood Village
Chris Damgen, Troutdale
Emily Miletich, Multnomah County
Sarah Selden, Fairview

Allison Boyd, Multnomah County

- What data available? Will that affect which case study locations we select?

Chris Damgen, Troutdale

- Glad to see us thinking about it more qualitatively, less abstract
- Desire to have a more localized mobility policy for TC and possibly broader community
- Policy is what you want to accomplish

www.troutdaletowncenter.info

Washington County Coordinating Committee TAC Briefing Discussion Notes
May 6, 2021

Project staff: Kim Ellis (Metro), Lidwien Rahman (ODOT), Glen Bolen (ODOT)

Chris Deffebach, Washington County
Erin Wardell, Washington County
Bob Galati, Sherwood
Brenda Martin, TriMet
Dave Roth, Tigard
Dominique Huffman, Wilsonville
Don Odermott, Hillsboro
Dwight Brahear, SMART
Dyami Valentine, Washington County
Jean Senechal-Biggs, Beaverton
Jeannine Rustad, THPRD
Jessica Pelz, Washington County
Julia Hajduk, Sherwood
Julie Sosnovske, Washington County
Kate Hawkins, ODOT
Katelin Vandehey
Kelsey Lewis, Tualatin
Richard Blackmun, Forest Grove
Terry Keyes, Cornelius
Jeff Pazdaslski, Westside Transportation Alliance
Jabra Khaso, Beaverton
Reza Farhoodi, Washington County
Steve Kelley, Washington County

Don Odermott (Hillsboro)

- This policy should tell us how well the system is moving.
- v/c measure is foundational to understanding how well it is moving, so happy to still see it on the list of measures being considered.
- v/c at regional level is less useful than at localized level
- it is important that our mobility policy meet expectations of the public – and helping them understand tradeoffs, particularly fiscal tradeoffs
- Arterials are important outside centers and industrial areas given Wash County has fewer throughways serving freight travel needs. This should be 4th land use/transportation context we consider.
- Cut-through traffic often occurs in significantly congested areas, which affects safety
- Surprised emissions and environmental impact is missing from the list of measures being considered – there should be an emissions measure to account for the effects of congestion and related queuing on the transportation system and air quality – gave example of 10th avenue queuing that resulted in 70% emissions increase; allowing for more congestion/lowering the bar of performance – while it helps achieve land use objectives, it is a public health and climate issue because of the increase in emissions that results from congestion.
- Nexus proportionality –need measurable data to place conditions of approval on development (which we have for h v/c measure); 80% of infrastructure is through development review, so important that this support that continued practice.
- Raised current challenge facing city with ODOT development review staff requiring them to redo past traffic analysis for South Hillsboro and request a design exception process because they cannot meet v/c .80 in ODHM. Don to follow-up with Glen and ODOT staff separately.

Kelsey Lewis (Tualatin)

- Has discussed the elements and measures with other staff
- Agree with many of Don's comments, including wanting v/c to stay in the mix.
- Planning staff particularly interested in VMT/capita
- Commented that MMLOS seems interesting but not sure how it will work; follow to send link to ODOT APM which defines methods for many of the measures being considered, including MMLOS
- Interested in seeing a 4th "land use context" to the mix – arterials that serve as major routes connecting centers and also connecting to industrial areas

Erin Wardell (Washington County)

- Want to express support and appreciation for work, and previous opportunities to share feedback.
- Would like to have follow-up conversations on some of the details of how this work would be adopted in the RTP and RTFP and the implications for local codes and procedures.

5/17/21 EMCTC

Project staff: Kim Ellis (Metro) and Glen Bolen (ODOT)

Attendees: Commissioner Lori Stegmann (Multnomah County), Metro Councilor Shirley Craddick (Metro Council), Mayor Travis Stovall (Gresham), Councilor John Miner (Wood Villlage), Councilor Jamie Kranz (Troutdale), Cary Stacey (Multnomah County), Chris Damgen (Troutdale), Amber Shackelford (Troutdale), Tom Bouillion (Port of Portland), Eliot Rose (Metro), Jeff Owen (TriMet), John Niiyama (wood Village), Chris Strong (Gresham), Brian Monberg (Gresham), Jon Henrichsen (Multnomah County), Allison Boyd (Multnomah County), Jessica Berry (Multnomah County), Jay Higgins (Gresham), MaryJo Andersen (Multnomah County), Nathan Clark (Multnomah County),Oscar Rincones (Multnomah County).

Lori Stegmann, Multnomah County

- How will this account for Vision zero and the high number of ped deaths/severe injuries region-wide?
- Rockwood – 45 mph streets that have evolved to downtown streets and need to have bike/ped facilities and slower speed – how will this address how we are using the facilities.
- Provided example of Chick-fil-a in Gresham – bumper to bumper traffic now and will get worse when the development opens.
- Dutch Brothers – significant 257th Avenue traffic backups – highlights that analysis leading to approval of the development didn't accurately forecast traffic impacts being experienced today.

Kim and Glen clarifications

- The mobility policy is one of many policies (including safety). We did not include crashe measures because those are used to measure whether we are achieving our Vision Zero safety goals. However, we will be looking to ensure the updated policy does not have unintended impacts and supports our safety goals.
- Transportation planning rule provides flexibility for defining measures for determining adequacy and this work will help inform how local governments determine that adequacy in local codes for their facilities.

Tom Bouillion, Port of Portland

- good process is taking multimodal perspective
- want to make sure the updated standards aren't so prescriptive that they lead to trying to have all modes on all routes
- safe bike ped connections to downtown Troutdale are important and off-street connections may make more sense when traveling through the Troutdale interchange area, for example
- need to allow for creative approach that provides safe bike/ped connection based on the context

Glen clarifications

- Referenced ODOT Blueprint urban Design standards and Metro's Livable Streets guidelines help inform balance user needs and priorities in the design of streets depending on land use context and function of the roadway

5/19/21 Clackamas County C-4 Metro Subcommittee Briefing

Project staff: Kim Ellis (Metro) and Glen Bolen (ODOT)
Members: Commissioner Savas (Clackamas County), Commissioner Martha Schrader (Clackamas County), Councilor Brett Sherman (Happy Valley), Metro Councilor Christine Lewis (Metro Council), Mayor Rachel Lyles Smith (Oregon City), Councilor Valerie Pratt (Tualatin), Ed Gronke, Councilor Joann Linville (Wilsonville), Mayor Joe Buck (Lake Oswego), Mayor Jules Walters (West Linn), Councilor Kathy Hyzy (Milwaukie), Dwight Brashear (SMART), and Martin Meyers (Redland CPO).

Attendees: Trent Wilson (Clackamas County), Chris Lyons (Clackamas County), Dayna Webb (Oregon City), Jaimie Huff (Happy Valley), Jamie Stasny (Clackamas County), Jeff Guman (Lake Oswego), Tom Markgraf (TriMet), John Lewis (Oregon City), John Williams (West Linn), Karen Buehrig (Clackmas County), Mayor Mark Gamba (Milwaukie), Mark Ottenad (Wilsonville), Mike Bezner (Clackamas County), Ramona Perrault (Metro), Sarah Allison, Tracey Moreland and Will Farley (Lake Oswego).

Commissioner Paul Savas (Clackamas County)

- Population is growing and as the state's economic engine, we need a certain amount of throughput – what metric best addresses throughput for our growing economic engine?
    - Kim described people throughput was a good measure of this and that it could be applied holistically to the network. It was not carried forward due to challenges of applying it at a plan amendment level. It is a good measure at the system planning level and allows for consideration of not just vehicles, but the number of people in buses, carpools, people biking and walking in corridors and on parallel routes.

Councilor Valerie Pratt (Tualatin)

- For Clackamas – system completeness is very important, especially for Clackamas County and should be included in measures carried forward.
- Asked question about how current trend of businesses moving from downtown Portland to different places in the region will be accounted for and how the increased transportation needs of these places will be addressed.
    - Kim explained that trends are accounted for in the analysis conducted as part of system planning during RTP updates and TSP updates. The updated mobility policy will be applied in future analysis and help inform identification of future needs.

Councilor Kathy Hyzy (Milwaukie)

- Expressed appreciation for system completion and feedback raising importance of having a connected transportation system. Asked if system completeness is embedded in the feedback we are receiving re: connectivity.
    - Kim explained yes, and that connectivity and system completion is a core measure in the RTP and local plans today and will move forward.
- Ones up at the top of the list seem to be the right ones and don't want to lose them (top 3-4) as the list of measures is narrowed.
- Final mile solutions are important as well as land use context. It is important to Clackamas County that the policy make sure people can take advantage of all the transportation system components for their whole trip – including all the way to their front door.

Councilor Brett Sherman (Happy Valley)

- Used transit to get to Hillsboro for a meeting – walk, bus, two trains, then to a bus – 2 hour process to get to a meeting.
- Supports the goal of system completeness.

061421 WCCC briefing

Project team: Kim Ellis (Metro) and Glen Bolen (ODOT)

Members: Roy Rogers (Washington County), Jeff Owen (TriMet), Jef Dalin (Cornelius), Marc San Soucie (Beaverton), Stephanie Jones (Banks), Teri Lenahan (North Plains), Ken Gibson (King City), Steve Callaway (Hillsboro), Pete Truax (Forest Grove), Frank Bubenik (Tualatin), Gery Schirado, Juan Carlos Gonzalez (Metro), Matt Freitag (ODOT), Jason Snider (Tigard), Keith Mays (Sherwood), Julie Fitzgerald (Wilsonville), Paul Savas (Clackamas County)

Attendees: Stephen Roberts, Erin Wardell, Chris Deffebach, Julia Hajduk, Whitney Hergert Jeff Gudman, Jeff Pazdalski, Jessica Pelz, Julie Sosnovske, Kelsey Lewis, Kim McMillan, Kristin Akerall, Lacey Beatty, Mark Ottenad, Nafisa Fai, Steve Kelly, Colin Cooper, Dave Roth, Don Odermott, Dyami Valentine, Greg Robertson and Jean Senechal-Biggs.

Councilor Marc San Soucie (Beaverton)

- Always been concerned about strong reliance on v/c ratio to determine transportation impacts
- Request for info that the study developed to better understand:
  - how capacity is defined
  - how congestion is defined
  - are these definitions community specific? Important that locales be able to define these in ways that support community goals.

Mayor Jef Dalin (Cornelius)

- Glad to see we are moving away from v/c ratio - travel time that is reasonable and reliable is important for mobility.
- Cannot afford to lose sight of what causes some of the capacity impediments – e.g. bus pull outs needed so that a bus isn't blocking vehicle travel.
- TV Highway – As we look at different criteria for different areas, TV Highway is a good example with multiple travel needs being served. It's a thoroughfare with a lot of vehicle travel and hazard of freight trucks parking in center turn lane to make their deliveries in the middle of TV Highway. Should think about not just how serviceable the roadway is but also how is it serving the different needs – freight delivery and transit are examples.
- Commented that OR 217 operates at 100% capacity during peak hour everyday.

Mayor Steve Callaway (Hillsboro)

- Appreciate hearing some of the feedback being reflected back and being included in the revised elements and measures.
- Emissions should be considered as a mobility measure; the emissions from mobility have direct impact on public health, esp. in equity areas. While VMT affects emissions, the speed of vehicles and congestion/delay has more of an impact on emissions.

- Engagement – how many of the individuals have been from Washington County – are we hearing from all parts of the region?
- What is definition of reasonable?
- Still want to see v/c ratio retained as one of the measures because of legal nexus that has been established for SDCs and mitigation.

Commissioner Roy Rogers (Washington County)

- Encourage staff to define equity and climate – everyone has different definitions for what it means and references it differently in different contexts.
- Encouraged project to focus on the regional system(s) that connect different parts of region to one another.
- Downtown/business districts, active transportation aren't always regional scale – don't want to silo – this work needs to focus on regional system to inform defining needs and projects that will eventually compete for limited funding.

Materials following this page were distributed at the meeting.

COVID-19 Relief Funds

Presentation to Metro Council

Margi Bradway

Ted Leybold

July 20, 2021

CRRSAA Act passed by Congress

- Title IV of the Coronavirus Response and Relief Supplemental Appropriations Act, 2021 (CRRSAA), division M, Public Law (Pub. L. No. 116-260), enacted on December 27, 2020.
- Appropriated **$12.16 M** to Metro
- Allocation based on status as an MPO

Funds MPO Losses and Activities

- For transportation-related planning, programs and projects administered by the MPO
- CRRSAA Act explicitly allows MPOs to backfill for losses in staffing and programming

Opportunity for Flexibility: De-federalizing Funds

- HIP-CRRSAA allows states an option to utilize the Special Authority/Reimbursement provision of the Act
- After declaring a “loss of revenue”, TMA-MPOs to receive state (de-federalized) funds passed through ODOT
- Working with FHWA on how to document our approach to administering the funds to assure appropriate fund management and internal controls

Losses in the Planning, Development, and Research Department within the MPO

Financial losses over the past two years have resulted in cuts or elimination of the following programs:

- Better Bus/Enhanced Transit Corridor Program
- Transit Planning
- Project Development/Engineering
- Storytelling/Outreach
- GIS capabilities
- Emerging Technology

Policy Lens: 2018 RTP Priority Areas

Equity

- Increased accessibility
- Increased access to affordable travel options

Climate

- Reduced emissions from vehicles
- Reduced drive-alone trips

Safety

- Reduced fatal and serious injury crashes for all modes

Reduce Congestion

- Increased reliability
- Increased travel efficiency
- Increased travel options
- Reduced drive-alone trips

Goals for Proposed Allocation

Restore MPO losses

- MPO regulatory responsibilities
- MTIP Database
- Transit Planning
- GIS Support

Align with Metro Council priorities

- Climate Change Monitoring
- Equity Outreach through storytelling
- Invest in projects in BIPOC communities

Support most urgent transportation needs

- Investing in transit system through Better Bus Program
- Capital projects on safety and transit investments in the pipeline

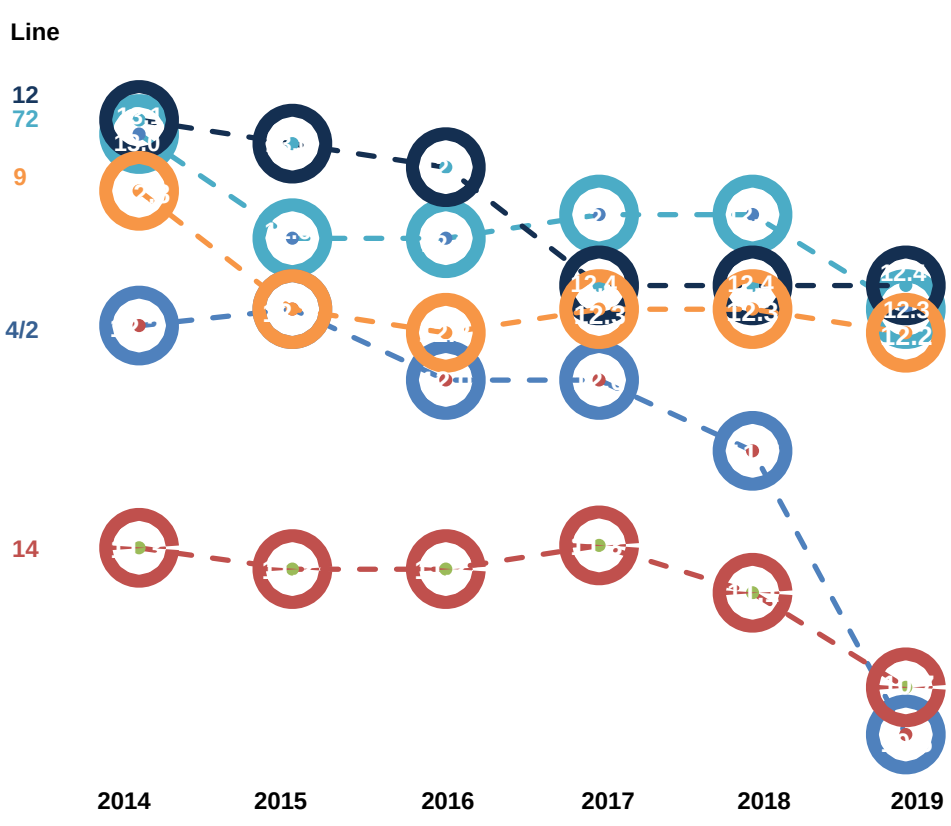
Proposed Allocation of Funds

- Better Bus Program - **$6.16 million (leverage $5 million)**
- Transit Planning - **$2 million**
- Project Development - **$2.1 million**
- MPO Compliance - **$700,000**
- GIS, graphics, engagement and storytelling - **$650,000**
- Climate Tracking and Monitoring - **$600,000**

Better Bus Program (Enhanced Transit)

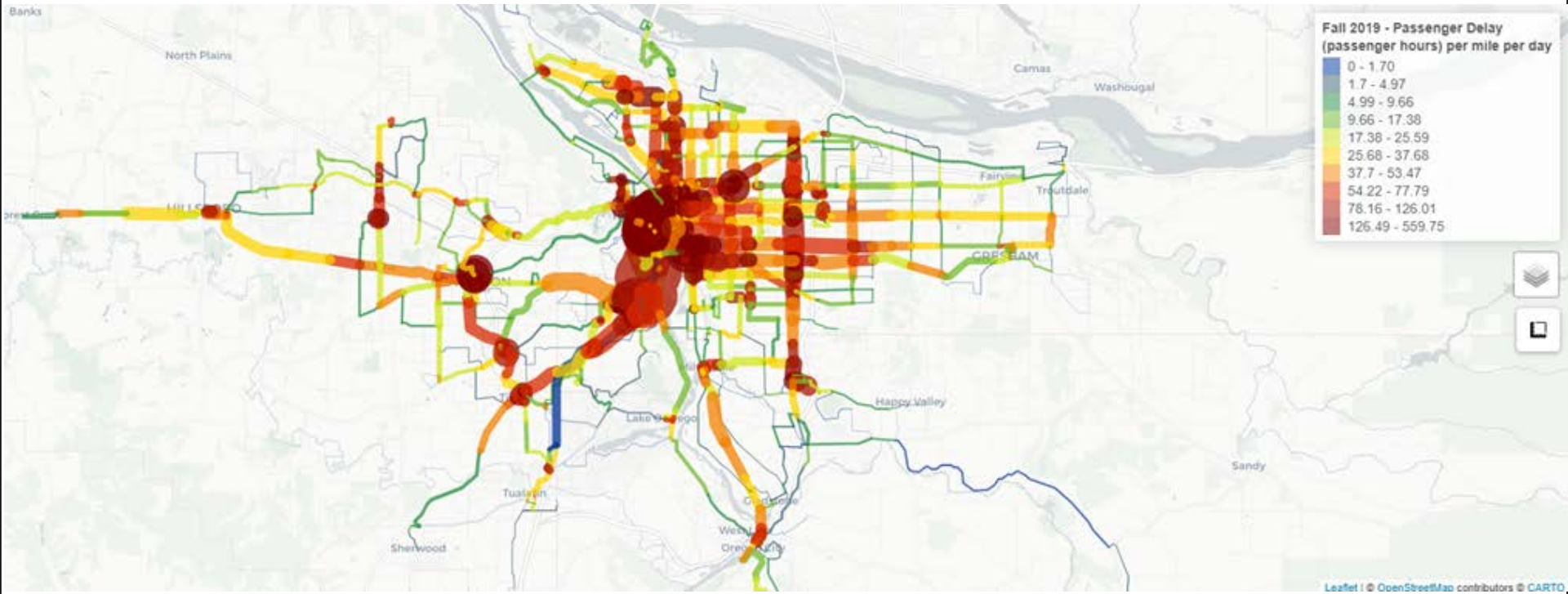
- **Leverage** - proposal to invest in $6.1M will leverage another $5 million from Tri-Met
- **Effective use of funds** - small amount of investment for large returns in system efficiency
- **Data-informed process** - for region-wide investments
- **Program funds go to communities/partners** - provide technical support and/or capital project funding

Buses are getting stuck in traffic, trips take longer



TRIMET

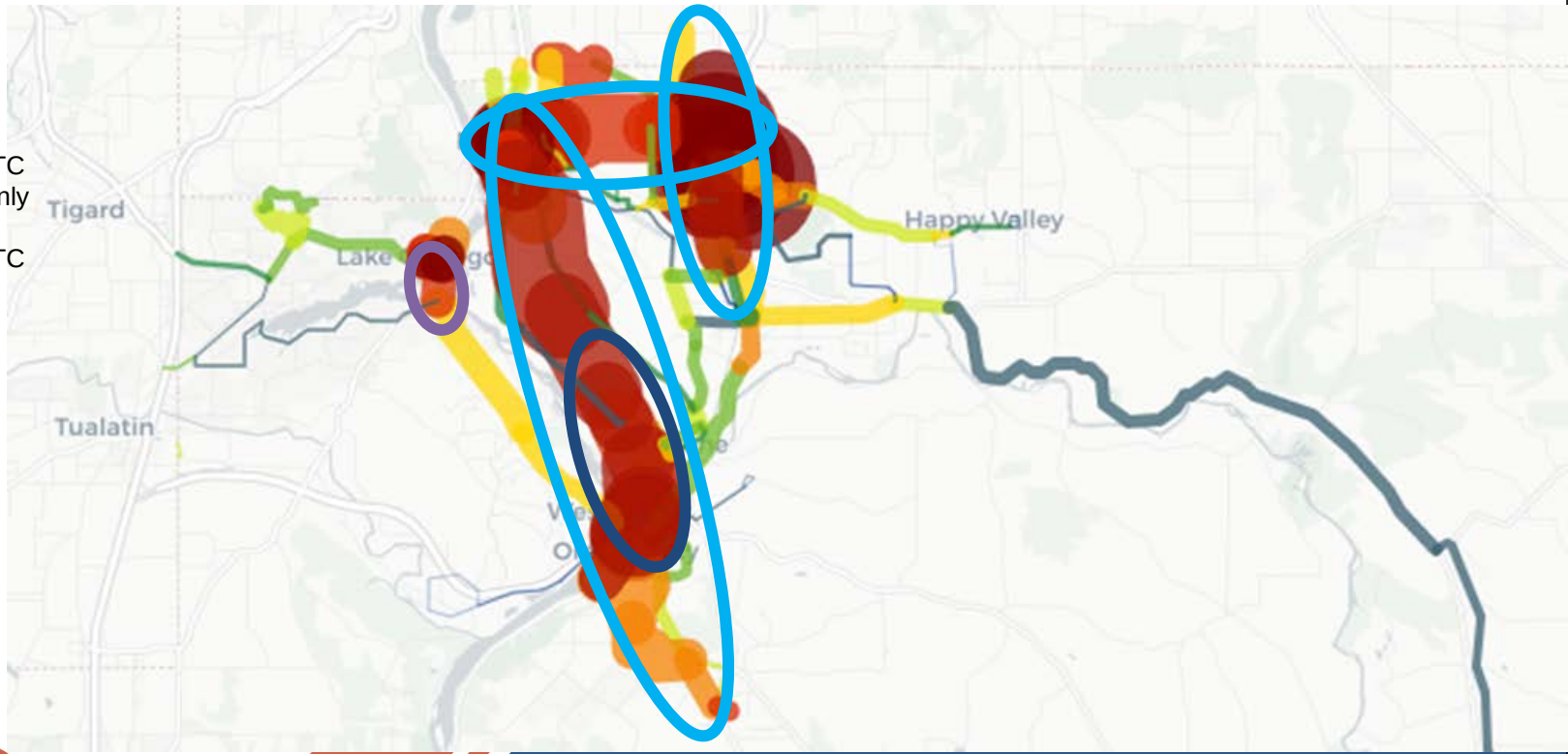
Regional transit delay map



Clackamas County - passenger delay

Concepts/designs developed through:

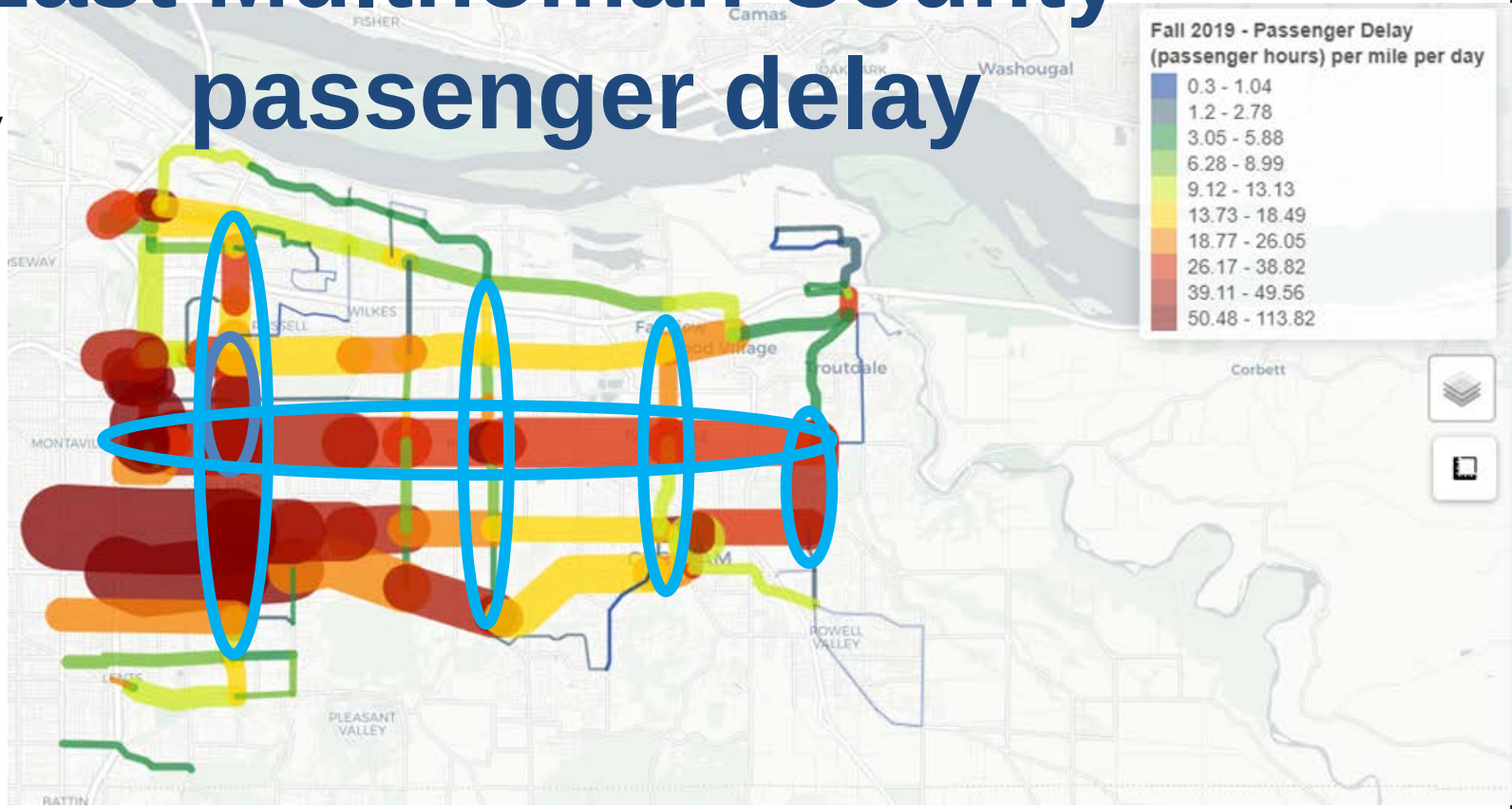
- Regional ETC workshop only
- Regional ETC program
- Regional Funding Measure



East Multnomah County – passenger delay

Concepts/designs developed through:

- Regional ETC workshop only
- Regional ETC program
- Regional Funding Measure
- Constructed ETC improvements



TRIMET

Travel Time Savings

Average PM Peak Travel time savings for 3 Rose Lane Projects in Portland:

- SW Madison: 40 seconds
- NW Everett: 1 minute 12 seconds
- Burnside Bridge: 1 minute 29 seconds

ETC Hawthorne and Steel Bridge projects Time Savings

Hawthorne	Delay Decrease (PM Peak)	Time Savings per Trip (sec)	Time Savings (All Day)	Peak Riders	Total Time Saved by Peak Riders (hr:min)
Line 2	68%	42	23:25	829	9:40
Line 6	26%	37	11:29	224	2:18
Line 10	60%	35	12:26	235	2:17
Line 14	76%	45	25:31	711	8:53
Total			1 hour, 13 min	1999	23 hr, 8 min

Steel	Delay Decrease (PM Peak)	Time Savings per Trip (sec)	Time Savings (All Day)	Peak Riders	Total Time Saved by Peak Riders (hr:min)
Line 4	26%	62	23:26	200	3:26
Line 8	34%	96	47:11	113	3:00
Line 35	29%	74	14:14	84	1:43
Line 44	27%	66	13:28	127	2:20
Line 77	25%	63	16:49	201	3:31
Total			1 hour, 55 min	725	14 hours

Proposal to invest in project development and corridor planning

Focus: **Safety, Equity and Climate (Transit)**

- 82nd Avenue Project
- TV Highway Corridor

Focus: **Equity, Safety and Congestion**

- Rose Quarter Improvement Project
- Regional Flex Fund Projects

Focus: **Congestion and Climate**

- I-205 Project
- ODOT Tolling Projects

Proposed Allocation to Project Development

- 82nd Avenue Corridor Plan - **$500,000** to City of Portland for transit corridor planning, **$300,000** for Metro partnerships (leveraging $185 M)
- TV Highway Corridor Plan - **$500,000** for Metro staff to lead project and match federal grant (leveraging $1 M in FTA grant)
- I-205 and/or I-205 Tolling Project - **$300,000** for engineering and planning staff to support projects
- Rose Quarter - **$300,000** for engineering staff to support project
- Regional Flex Fund Projects - **$200,000** for risk assessment of project proposals

Other sources of anticipated funds (not COVID-19 Relief)

- I-5 Bridge – currently negotiating IGA with WSDOT for $2.5 M
- Resiliency and Emergency Transportation Routes Phase II – in negotiations with RDPO
- Westside Multimodal Corridor Study (HWY 26) – negotiating IGA for a $1 M study with ODOT

Next Steps

- Final approval of reimbursement by FHWA
- Metro budget amendments

Appreciation

Thank you to the P,D, & R Management team, especially:

- Ted Leybold, Transportation Resources Manager
- Malu Wilkinson, Investment Areas Manager
- Tom Kloster, Transportation Planning Manager
- Rachel Lembo, P,D & R Finance Manager

Questions and Direction?

Shall staff proceed with implementation of the proposal?

Regional mobility policy update

Metro Council

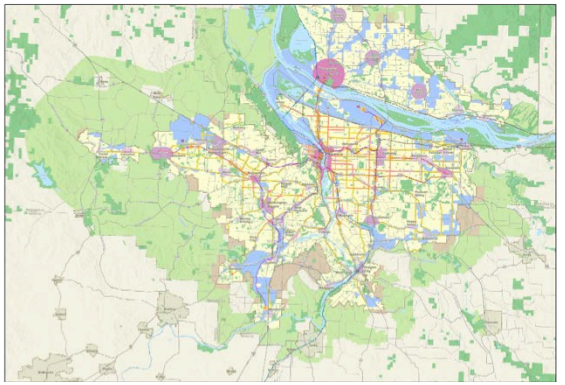
July 20, 2021

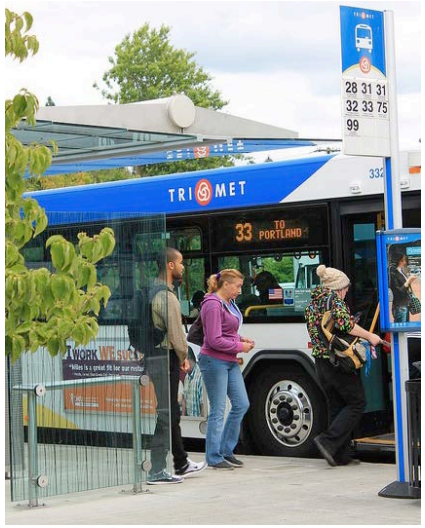
Margi Bradway

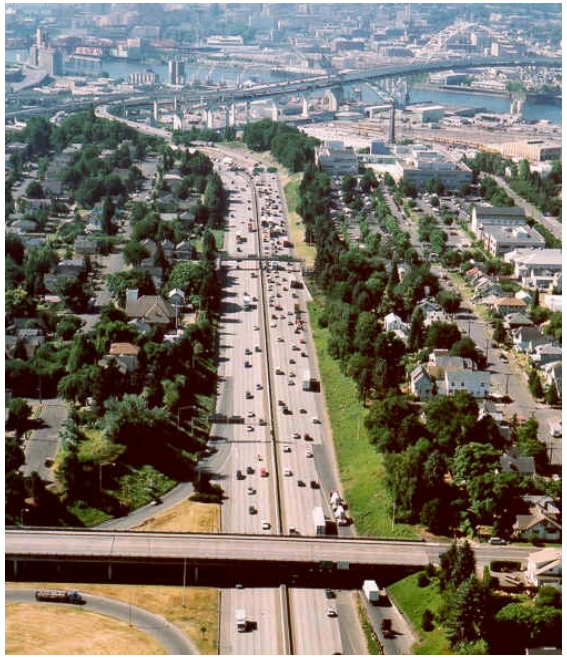
Kim Ellis

Metro

Oregon Department of Transportation







Today's purpose

As recommended by JPACT, **request Metro Council direction to staff to:**

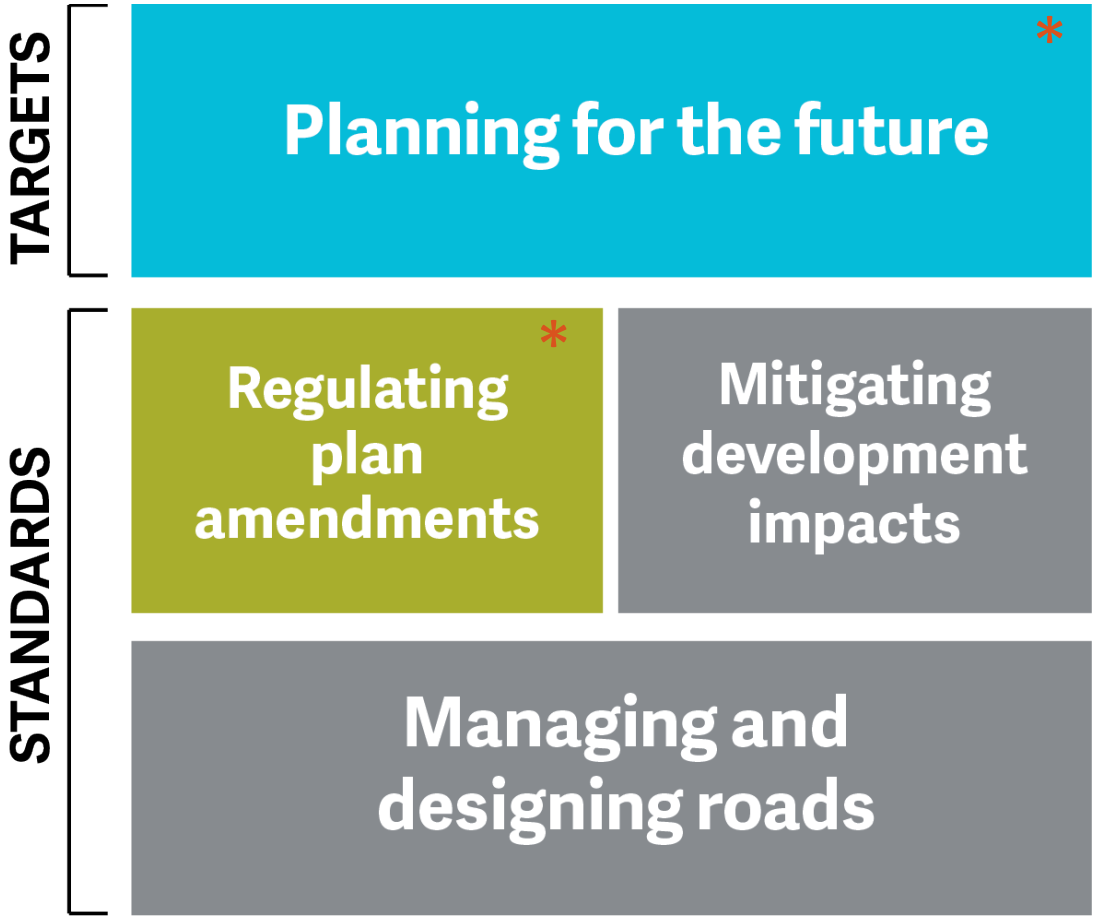
- **move forward to the next phase of research** for the project
- **test the potential mobility policy measures** in Attachment 1 **through case studies**
- **report the findings of the research** this Fall

Project purpose

- Update the policy on how we define and measure mobility for the Portland region
- Guide system planning and land use decisions
- Recommend amendments to the RTP and Oregon Highway Plan

Visit oregonmetro.gov/mobility

State, regional and local decisions



Transportation system plans, corridor and area plans, including concept plans to set performance expectations to identify needs as defined in the RTP and Oregon Highway Plan

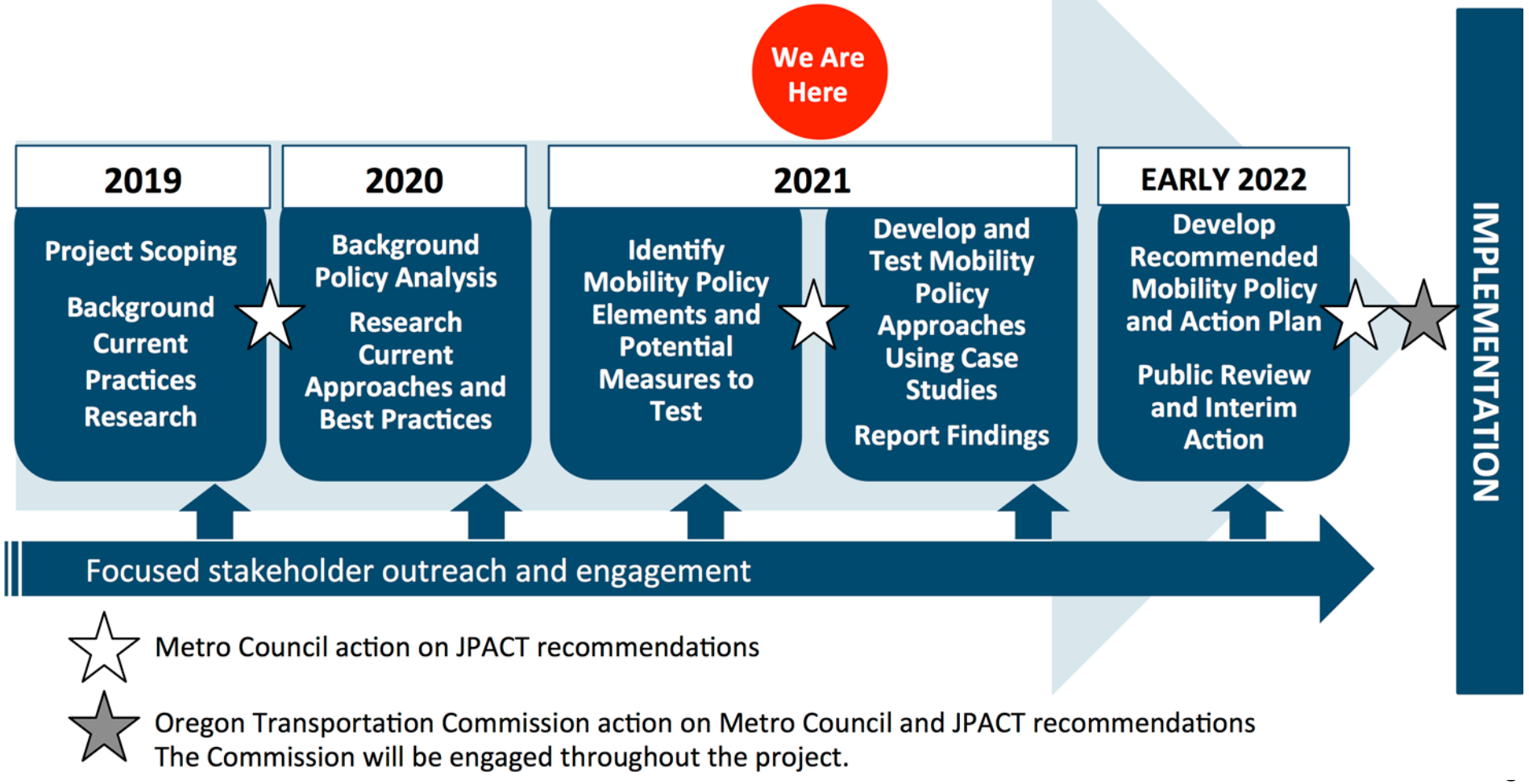
Zoning changes and land use plan amendments using transportation thresholds defined in the Oregon Highway Plan for state-owned roads and local codes for city- and county-owned roads

Development approval process to mitigate traffic impacts using thresholds defined in the OHP and local codes

Operational and road project designs as defined in the 2012 Oregon Highway Design Manual and local codes

* Focus of this effort

Project timeline



2018 Regional Transportation Plan priorities

The updated mobility policy must advance 2040 plan and these overarching RTP priorities.

Equity

Climate

Safety

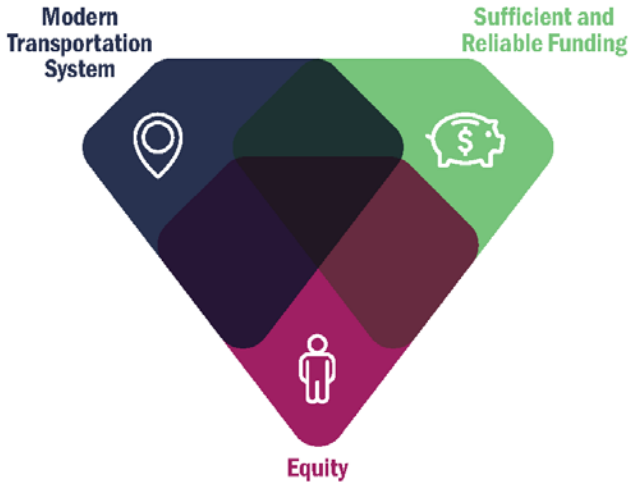
Congestion

Oregon Transportation Commission Strategic Action Plan priorities

Modern Transportation System

Build, maintain and operate a modern, multimodal transportation system to serve all Oregonians, address climate change and help Oregon communities and economies thrive.

- Preservation and stewardship
- **Safety**
- **Accessibility, mobility and climate change**
- **Congestion relief**
- Project delivery
- Innovative technologies



https://www.oregon.gov/odot/SAPDocs/Strategic-Action-Plan.pdf

Who we heard from **Spring 2021 Engagement**

Metro Council

County coordinating committees

Regional advisory committees

1 community leaders forum

1 freight and goods forum

2 practitioner forums – planners, engineers, modelers

More than 350 participants

zoom

Stakeholder Engagement Report and Appendices available at:
oregonmetro.gov/mobility

What we heard on shaping the **mobility policy elements**

Equity and climate should be explicit in the updated mobility policy

Many aspects of access are important to mobility:

- Access to places
- Access to travel options
- Affordability is key to access

Efficient use of the transportation system is important to mobility

Quality connections between travel options are important to mobility

https://www.oregonmetro.gov/sites/default/files/2021/06/22/RMP-Spring-2021-engagement-report%20-06222021.pdf

What we heard on shaping the **mobility measures**

Ensure that all elements are reflected across the measures

Ensure measures are focused on people and places, many seem vehicle-focused

Avoid redundancy in the measures

Ensure flexibility to allow for different measures in different contexts (land use and transportation functions), **without being overly complex**

https://www.oregonmetro.gov/sites/default/files/2021/06/22/RMP-Spring-2021-engagement-report%20-06222021.pdf

REGIONAL MOBILITY POLICY UPDATE

DRAFT definition of urban mobility: *People and businesses can safely, affordably, and efficiently reach the goods, services, places and opportunities they need to thrive by a variety of seamless and well-connected travel options and services that are welcoming, convenient, comfortable, and reliable.*

Mobility **elements** to be reflected in updated policy

Equity
Black, Indigenous and people of color (BIPOC) community members and people with low incomes, youth, older adults, people living with disabilities and other historically marginalized and underserved communities experience equitable mobility.

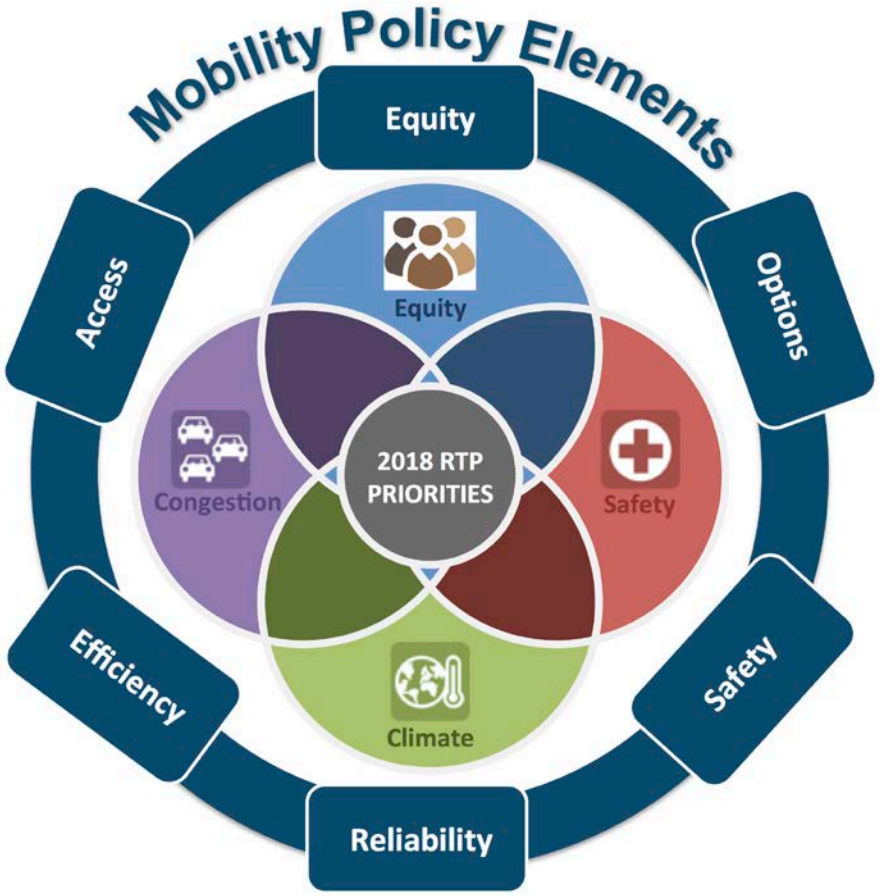
Access
People and businesses can conveniently and affordably reach the goods, services, places and opportunities they need to thrive.

Efficiency
People and businesses efficiently use the public's investment in our transportation system to travel where they need to go.

Reliability
People and businesses can count on the transportation system to travel where they need to go reliably and in a reasonable amount of time.

Safety
People are able to travel safely and comfortably and feel welcome.

Options
People and businesses can choose from a variety of seamless and well-connected travel modes and services that easily get them where they need to go.



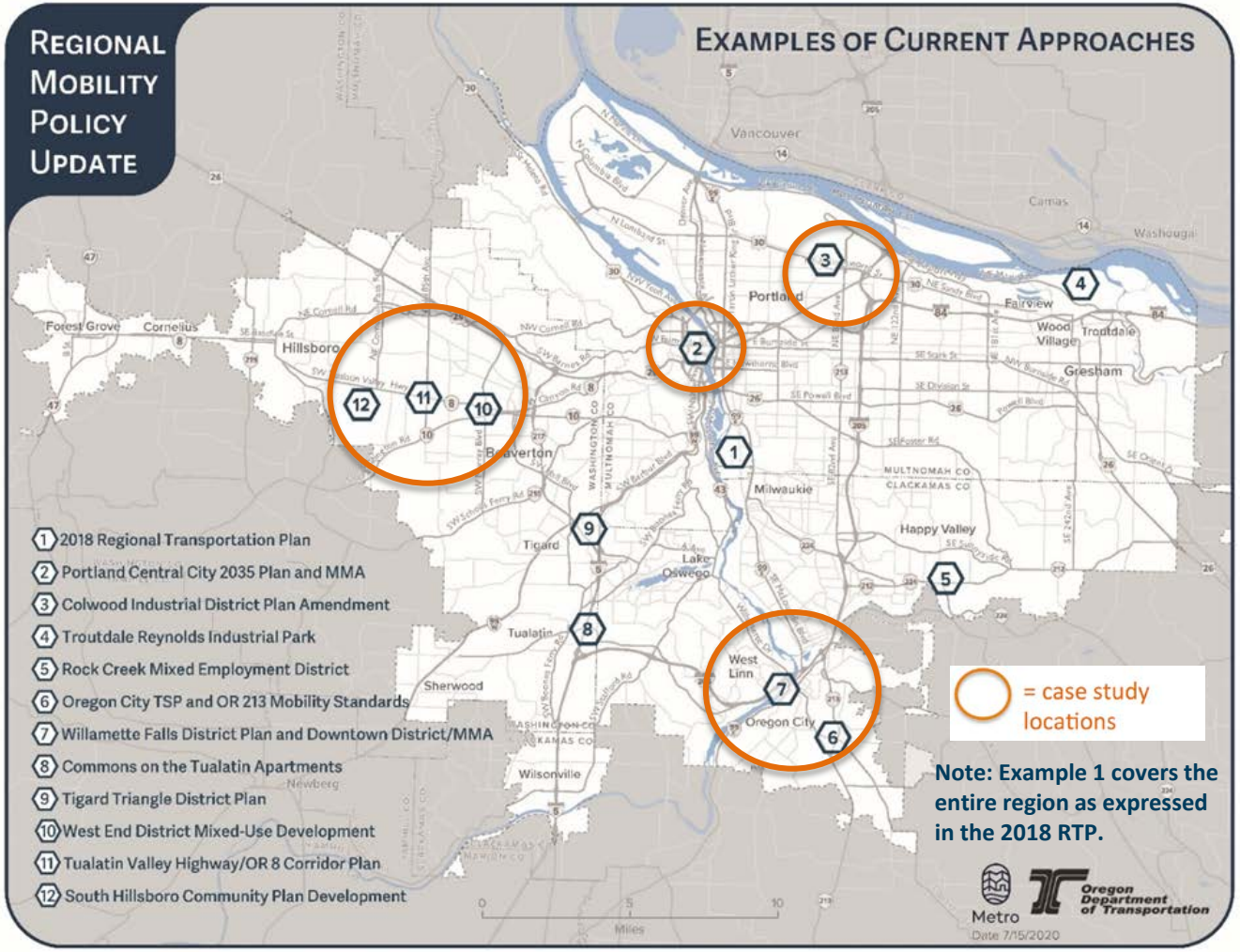
Mobility **measures recommended for testing**

1. **Multimodal level of service**
   - Multimodal level of service (MMLOS)
   - Level of traffic stress
   - Pedestrian crossing index
   - System completion
   - Queuing
   - Volume to capacity ratio
2. **Access to destinations/opportunity**
3. **Vehicle miles traveled (VMT) per capita**
4. **Person and goods throughput**
5. **Travel time reliability**
   - Travel time reliability
   - Travel time
6. **Congestion**
   - Travel speed
   - Duration (hours)
   - Queuing
   - Volume to capacity ratio

Metro

Oregon Department of Transportation

Case studies to test mobility measures



= selected case study locations

- **Tualatin Valley Highway area**
- **Downtown Portland area**
- **Middle Columbia Corridor Industrial area**
- **Oregon City area**

Information about all twelve current examples available on the project website:

oregonmetro.gov/mobility

Looking ahead: next 9 months

July 2021 – Seek JPACT and Metro Council direction to move forward with testing measures through case studies

Summer to Fall 2021 – Test mobility policy measures through case studies **and report findings** for further input

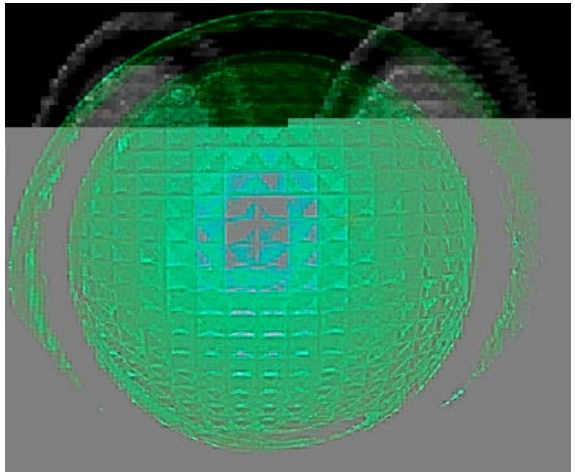
Late 2021 to Early 2022 – Seek input on recommended mobility policy (and measures)

Spring 2022 – Seek JPACT and Metro Council direction to carry recommended mobility policy forward to 2023 RTP

JPACT recommendation to the Metro Council

Direct staff to:

- **move forward to the next phase of research**
- **test the potential mobility policy measures** in Attachment 1 **through case studies**
- **report the findings** of the research this Fall



Thank you!

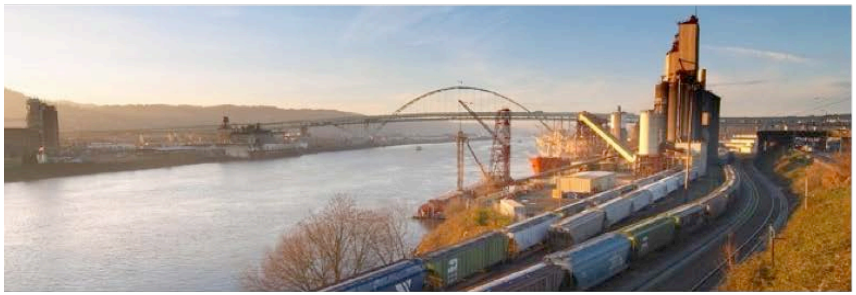
Kim Ellis, Metro

kim.ellis@oregonmetro.gov

Metro







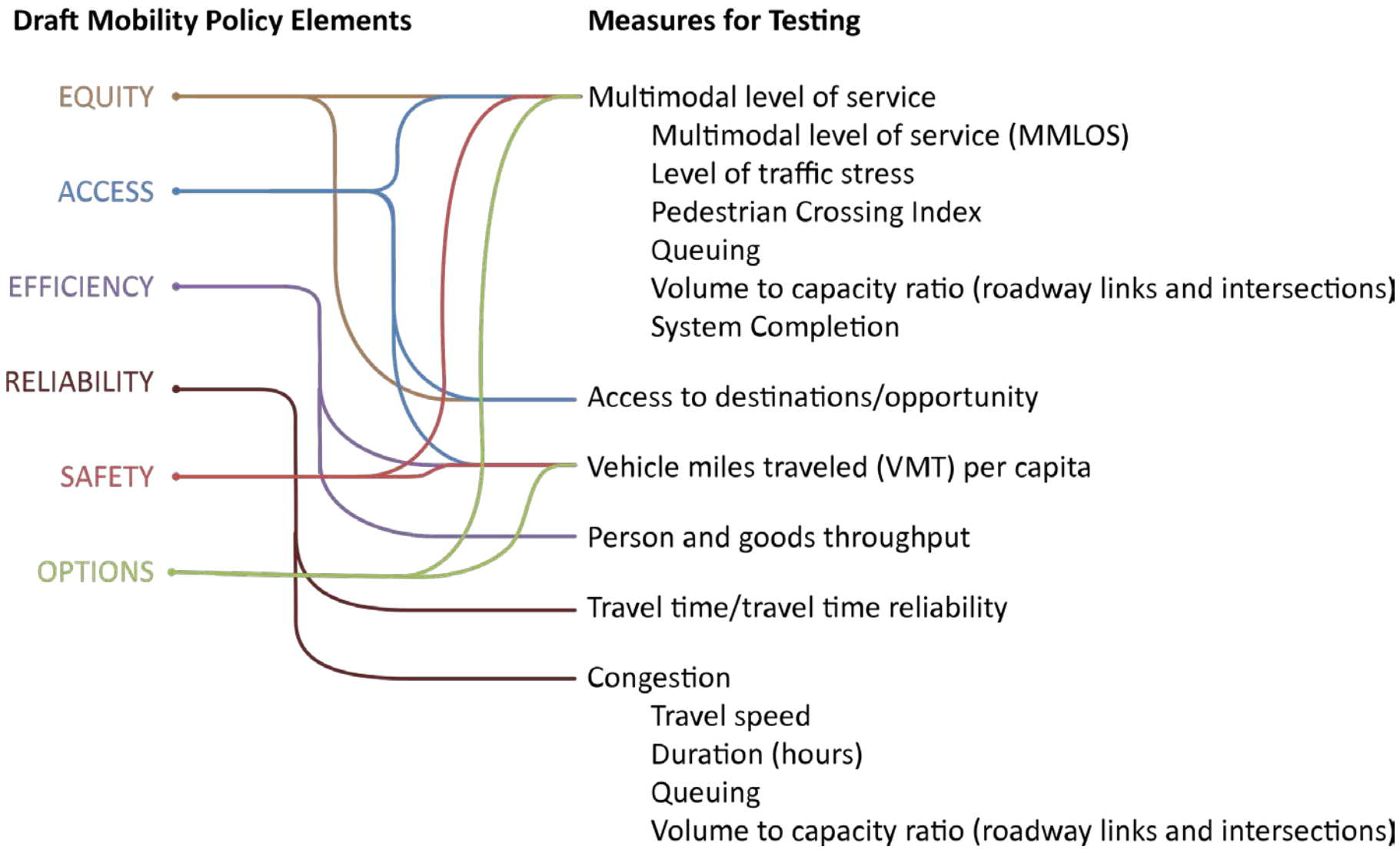

oregonmetro.gov /mobility

Revised Draft Mobility Policy Elements – track changes

NEW **Equity**	• Black, Indigenous and people of color (BIPOC) community members and people with low incomes, youth, older adults, people living with disabilities and other historically marginalized and underserved communities experience equitable mobility.
Access	• ~~All~~ People and ~~goods~~ businesses can conveniently and affordably reach the goods, services, places and opportunities ~~get where~~ they need to thrive ~~go~~.
~~Time~~ **Efficiency**	• People and businesses efficiently use the public's investment in our transportation system to ~~goods can~~ get where they need to go ~~in a reasonable amount of time~~.
Reliability	• People and businesses can count on the transportation system to get where they need to go reliably and in a reasonable amount of time. ~~Travel time is reliable or predictable for all modes.~~
Safety	• People are able to travel safely and comfortably, and feel welcome. ~~Available travel options are safe for all users.~~
~~Travel~~ **Options**	• People and businesses can choose from ~~can get where they need to go by~~ a variety of seamless and well-connected travel ~~options~~ or modes and services that easily get them where they need to go .

Revisions in response to stakeholder feedback

Draft Mobility Policy Elements and Measures



Metro

Oregon Department of Transportation

Climate Smart Strategy

Regional strategy for reducing emissions

Key policies and strategies

- Implement **adopted land use plans**
- Secure adequate **funding** for transportation investments
- Make **transit** convenient, frequent, accessible and affordable
- Make **biking and walking** safe and convenient
- Make **streets and highways** safe, reliable and connected
- Use **technology** to actively manage the transportation system
- Provide **information and incentives** to expand use of travel options
- Make efficient use of **parking** and land dedicated to parking
- Support Oregon's transition to **cleaner fuels and more fuel-efficient vehicles**

Adopted in 2014 and approved by LCDC in 2015

Criteria for evaluating measures