

2018 REGIONAL TRANSPORTATION PLAN UPDATE Transportation Equity Work Group - Meeting # 4

Date:	June 30, 2016
Time:	1 – 3 p.m.
Place:	Metro Regional Center, Council Chambers
	600 NE Grand Avenue, Portland, OR 97232



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Agenda items

1:00	Welcome, Introductions, and Quick Staff Updates	Cliff Higgins
1:05	Partner Updates	Everyone
	Who have you talked to about this work? What have you heard?	
1:20	2018 RTP Draft Transportation Equity Measures Research, Performance	Grace Cho,
	Targets, and Staff Recommendations	PSU/Everyone
	Present results of measures research and staff recommendations	
1:50	Break	
2:00	2018 RTP Draft Transportation Equity Measures Research, Performance	Everyone
	Targets, and Staff Recommendations (continued)	
2:30	Potential Products to Result from the Transportation Equity Analysis	Grace
	Where is all this work leading to? What are potential products?	Cho/Everyone
1:55	Next Steps	Cliff Higgins
2:00	Adjourn	

Meeting Packet	Next Meeting		
• Agenda			
Memorandum – Work Group Meeting #4 Overview	Thursday, July 28, 2016 Equity Measures Work Session		
2018 RTP Status Report			
Memorandum – 2018 RTP Performance Targets – Overview and Tasks	9:00 am – Noon, Room 370A/B, Metro		
 Memorandum – Transportation Equity Evaluation Measures - Findings and Staff Recommendations 	Thursday, September 15, 2016 2018 RTP Transportation Equity Work		
Attachment A - Recommended Equity Measures for Further Review	Group Meeting # 5		
 Memorandum – Outline of Potential Products (from work group #3) 	1:00 – 3:00 pm, Room 401, Metro		
Meeting Summary – Transportation Equity Work Group #3	······································		

Directions, travel options and parking information

Covered bike racks are located on the north plaza and inside the Irving Street visitor garage. Metro Regional Center is on TriMet bus line 6 and the streetcar, and just a few blocks from the Rose Quarter Transit Center, two MAX stations and several other bus lines. Visit our website for more information: http://www.oregonmetro.gov/metro-regional-center

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Date:	June 23, 2016
To:	Transportation Equity Work Group and interested parties
From:	Grace Cho, Associate Transportation Planner
Subject:	Transportation Equity Analysis Work Group Meeting #4 – Overview

Purpose

Provide the Transportation Equity working group an overview of the materials and agenda items to be discussed at the fourth working group meeting.

Materials Overview

To prepare for the next transportation equity working group meeting the following materials are attached to help provide background and information for discussion:

- Agenda
- Transportation Equity Working Group Meeting #4 Overview Memorandum
- 2018 RTP Status Report
- 2018 RTP Performance Targets and System Measures Overview and Work Group Tasks (from June 1st correspondence)
- Memorandum of Research Findings and Staff Recommendations for Transportation Equity System Evaluation Measures
- Attachment A Recommended Equity Measures for Further Review (from PSU)
- Memorandum Outlining Potential Products from the Transportation Equity Analysis Work (from work group meeting #3)
- Transportation Equity Working Group Meeting #3 Summary

Work group members are asked review these materials prior to the meeting and arrive with questions, comments, and feedback.

Next Steps

In addition to asking work group members review the materials, working group members are asked to come prepared to participate in group discussion around following questions:

- 1. What updates, if any, do you have to share for the working group? Who have you talked to in your networks and what information do they want to share back to this work group?
- 2. Is there agreement around the staff recommendation for the transportation equity system evaluation measures? Are there concerns pertaining to particular transportation equity measures?
- 3. Are there other methodological concerns for any of the system evaluation measures which need to be addressed which are not identified or reflected?
- 4. Are there questions about where the transportation equity work is headed and sense of the potential products and outcomes?



2018 REGIONAL TRANSPORTATION PLAN UPDATE STATUS REPORT FOR MAY - JUNE 2016

June 17, 2016

www.oregonmetro.gov/rtp

Safe • Reliable • Affordable

Our region's economic prosperity and quality of life depend on a transportation system that provides every person and business access to safe, reliable, healthy and affordable ways to get around. Through the 2018 Regional Transportation Plan update, the Metro Council is working with communities of the Portland metropolitan region to update the region's shared vision and strategy for investing in the transportation system for the next 25 years.

A list of accomplishments and activities that are underway for different elements of the update follows.

Outreach and public engagement	Accomplishments ✓ Summary and final report on Regional Leadership Forum #1 completed and posted online ✓ Summary report of 30-day winter 2016 online survey results completed and posted online ✓ Ongoing updates to regional technical and policy committees ✓ Project website maintained at oregonmetro.gov/rtp Underway □ □ Identification of future Regional Snapshots speaker series transportation topics and speakers (e.g., safety, technology, freight trends, seismic and disaster preparedness)
	 Planning for next two Regional Leadership Forums to be held on Sept. 23 and Dec. 2 Focused engagement with communities of color
Safety	Accomplishments ✓ First Safety Work Group meeting held to seek input on <i>draft</i> updated regional safety target ✓ Draft safety policy review available for comments ✓ Draft Status review of Regional Transportation Safety Plan available for comments
	UnderwayUpdating crash data analysisFinalizing Regional High Injury Network (HIN)Finalizing status review of Regional Transportation Safety PlanFinalizing Safety Policy framework reportDeveloping draft annual targets and performance measuresIdentifying draft actions and strategies
Transportation equity	 Accomplishments ✓ Work group review of draft transportation equity measures identified for further research ✓ Worked with PSU team through NITC grant on methods for evaluating draft measures ✓ Coordination between work groups, including specific coordination with performance measures, safety and transit work groups ✓ Focused engagement to validate community priority findings Underway
	 Development of draft transportation equity measures for the 2018 RTP Focused engagement activities with historically underrepresented communities to validate draft transportation equity measures

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Transit	 Accomplishments ✓ Reviewed draft transit related existing conditions measures ✓ Coordination between work groups, including specific coordination with performance measures and transportation equity work groups Underway □ Developing transit related system performance measures □ Continuo propering evicting conditions report on transit
Freight	 Continue preparing existing conditions report on transit Accomplishments
Freight	 Prepared Draft of Key Freight Trends and Logistics Issues Report Identified individual freight modal needs, for trucks, rail, air, freight, marine and river, and constraints in the freight system Convened second work group meeting on May 23, 2016 Reviewed existing freight action plan, freight vision and freight policies with work group Underway
	 Preparing final draft of Key Freight Trends and Logistics Issues Report Prepare draft work scope of Regional Freight Strategy for work group review Define BTD freight performance measures
Finance	 Refine RTP freight performance measures Accomplishments
Finance	 Completed Washington County agency local revenue templates Meetings with local agency staff to identify local revenue sources Prepared draft County revenue summaries for agency review Refined various federal and state revenue funding scenarios with the ODOT Long-Range Funding Assumptions (LRFA) workgroup to develop statewide funding assumptions for RTP
	 funding methodology ✓ Convened two work group meetings and briefed TPAC on RTP revenue forecast approach ✓ Initiated operations and maintenance (O&M) revenue versus costs discussions
	Underway
	 Developing Multnomah and Clackamas County agency local revenue templates Documenting local revenues to include in the RTP constrained revenue forecast Participation in ODOT Long-Range Funding Assumptions (LFRA) work group Identifying possible new revenue sources for inclusion in the RTP revenue forecast
Performance	Accomplishments
	 Coordination between 2018 RTP work groups Convened third Performance work group meeting on June 27, 2016 Completed Performance Measures Scoping report based on work group feedback and updated MAP-21 rulemaking Began review of 2014 RTP and Climate Smart Strategy modeling results
	<u>Underway</u>
	 Exploring new ways to measure congestion and reliability Reviewing modeling results of 2014 RTP and Climate Smart Strategy Investments Metro staff review of draft Federal System Performance rule released on April 22, 2016 at https://www.new.oke.com
Design	Accomplishments
	No new activity - work group anticipated to meet in winter 2016
	Underway Underway Developing visual library and calendar of forums, workshops and best practice tours
Policy actions	This work will begin in 2017.

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Date:	June 1, 2016
To:	Transportation Equity Working Group and interested parties
From:	Grace Cho, Associate Transportation Planner
Subject:	2018 RTP Performance Targets and System Measures – Overview and Work Group Task

Purpose

Provide the Transportation Equity work group an overview of existing regional transportation plan (RTP) performance targets and system evaluation measures in preparation to develop recommendations to put forward to the 2018 RTP Performance Measures work group.

Introduction

As part of the 2018 RTP and the 2018-2021 MTIP, Metro staff will develop a series of policy recommendations, refinements, and other potential products for region's policymakers to consider adopting which address the transportation needs, concerns, and priorities effecting:

- Communities of color;
- Households with lower-income;
- Communities with limited English proficiency;
- Older communities; and
- Youth

The policy recommendations, refinements, and potential other products will be informed by engagement activities and the evaluation of the 2018 RTP and the 2018-2021 MTIP investment packages. In looking forward, an identified potential product expected to result from the transportation equity analysis of the 2018 RTP include recommendations and/or refinements to the 2018 RTP performance targets and system evaluation measures. To help prepare for the discussion of potential performance targets and system evaluation measures recommendations, a brief overview of the existing targets and work group charge is discussed in the following sections.

Existing Regional Transportation Plan (RTP) Performance Targets

In 2010, Metro adopted its first outcomes-based long-range transportation plan. In transitioning to the outcomes-based approach, Metro adopted a set of performance targets to measure the progress of implementing the plan. Known as the RTP performance targets, these targets represent the aspirational outcomes and goals for the regional transportation system. In the update of the 2014 RTP, the majority of the RTP performance targets and measures remain unchanged. The only RTP performance target to be refined in the 2014 RTP was the safety performance target to reflect recommendations which emerged from the 2012 Regional Transportation Safety Plan. The 2014 RTP performance targets are listed in Table 1.

Table 1. 2014 RTP Performance Targets

ECONOMY
–By 2040, reduce the number of fatal and severe injury crashes for pedestrians, bicyclists, and
r vehicle occupants each by 50% compared to 2007 - 2011 average.
'

Congestion – By 2040, reduce vehicle hours of delay (VHD) per person by 10 percent compared to

2010.

Freight reliability – By 2040, reduce vehicle hours of delay per truck trip by 10 percent compared to 2010.

ENVIRONMENT

Climate change – By 2040, reduce transportation-related greenhouse gas emissions per capita below 2010 levels.

Active transportation – By 2040, triple walking, biking and transit mode shares compared to 2010.

Basic infrastructure – By 2040, increase by 50% the miles of sidewalk, bikeways, and trails compared to the regional networks in 2010.

Clean air – By 2040, ensure zero percent population exposure to at-risk levels of air pollution.

Travel – By 2040, reduce vehicle miles traveled per person by 10 percent compared to 2010.

EQUITY

Affordability – By 2040, reduce the average household combined cost of housing and transportation by 25 percent compared to 2010.

Access to daily needs – By 2040, increase by 50% the number of essential destinations accessible within 30 minutes by bicycling & public transit for low-income, minority, senior and disabled populations compared to 2005.

Since the adoption of the 2014 RTP performance targets, the landscape of performance management has evolved. Between the implementation of the federal performance management rules and challenges to emerge in measuring certain 2014 RTP targets, these changes necessitated the need to conduct a focused review and refinement to the regional performance management system, specifically the performance targets and measures. One of the guiding principles of the work is to simplify and reduce the number of targets and measures. Currently the performance-based planning framework is overly cumbersome and complicated to administer and be meaningfully used in the regional decision-making process. Any adjustments to the RTP targets and measures need to be easily understood by the public and elected official.

Transportation Equity Work Group Task and Charge

The 2018 RTP Performance Measures work group is leading the focused review of the RTP performance targets, system measures, and overall performance management approach. In efforts to coordinate and leverage the expertise across the different 2018 RTP work groups, the Performance Measures work group has requested the input and recommendations from several of the work groups.

For the Transportation Equity work group, assistance has been requested on the performance targets and system measures identified in Table 2. The Performance Measures work group would also like to know how to bring a social equity lens to these performance targets and system evaluation measures, as they align closely with the community findings.

2014 RTP Performance Target	2014 RTP System Performance Measure
CLEAR AIR – Ensure zero percent exposure to at-risk	Compare the total tons of transportation-
levels of air pollution	related air pollutants (carbon monoxide,
	nitrogen oxides, volatile organic compounds,
	and coarse particulate matter) from 2010 to
	the total tons of transportation-related air
	pollutants stemming from the 2040
	financially constrained transportation
	investment scenario and the 2040
	strategic/aspirational investment scenario.
ACCESS TO DAILY NEEDS – Increase by 50% the number	Undetermined at this time
of essential destinations accessible within 30 minutes	(Note – there are potential monitoring
by bicycling and public transit for low-income, minority,	measures)
senior and disabled populations compared to 2010	
AFFORDABILITY – Reduce housing and transportation	Compare the housing and transportation
costs as a share of household budgets by 25% below	costs (broken out by income groups) from
2010 levels	2010 to the projected housing and
	transportation costs (broken out by income groups) to the 2040 RTP financially
	constrained investment scenario. Look at the
	difference in costs and calculate the
	percentage of cost difference. (Can be
	negative or positive)
BASIC INFRASTRUCTURE – Increase by 50% the miles of	Compare the total miles of sidewalks,
sidewalk, bikeways, and trails compared to the regional	bikeways, and trails from the 2010 regional
networks in 2010	transportation network to the total miles of
	sidewalks, bikeways, and trails in the 2040
	financially constrained transportation
	investment scenario and the 2040
	strategic/aspirational investment scenario.

 Table 2. 2014 RTP Performance Targets for Transportation Equity Work Group

The request from the 2018 RTP Performance Measure work group falls within the charge, scope, and work plan for the Transportation Equity work group. As the Transportation Equity work group is currently considering different evaluation measures that reflect community priorities for the transportation system, to direct the assessment of the 2018 RTP transportation investment package, the intention is to align the transportation equity evaluation measures to support a set of recommendations and refinements to the 2018 RTP performance targets and system measures. The coordinated effort will help different elements of the 2018 RTP are bridgingand better address equitable outcomes.

The focus of the Transportation Equity work group will be to recommend refinements to the 2018 RTP performance targets and system evaluation for the requested four performance targets for the Performance Measures work group. The Transportation Equity work group is welcome to provide input and feedback on other performance targets beyond those requested, but the initial emphasis will be on the four performance targets and system evaluation measures. Work group members are asked to consider system evaluation measures which compare the base year conditions with

alternative investment packages to document how well each package of future transportation investments performs. The discussion of the monitoring measures, which tracks progress using observed data, will be part of Phase IV of the transportation equity analysis work and will also result in recommendations.

Next Steps for the Transportation Equity Working Group

The 2018 RTP Performance Measure work group requested a recommendation from the Transportation Equity work group at their September meeting.

For the June 30th Transportation Equity work group meeting, staff will provide a brief overview presentation of the existing RTP performance targets, system measures, and work group task. Metro staff will outline how the requested task fits within the 2018 RTP transportation equity evaluation measures work plan and start initial discussions. In the lead up to the June 30th meeting, Transportation Equity work group members interested in learning more about the 2014 RTP performance management approach, a scoping report was developed for the Performance Measures work group and is attached to this memorandum.

The Transportation Equity work group will provide final recommendations on the four performance targets and associated system evaluation measures, as well as any other performance target recommendations at the September 15th work group meeting. Metro staff will bring the recommendations forward to the Performance Measures work group at its September meeting.

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Date:	June 23, 2016
To:	Transportation Equity Working Group and interested parties
From:	Grace Cho, Associate Transportation Planner
Subject:	Research Findings and Staff Recommendations for Transportation Equity System Evaluation Measures

Purpose

Provide the Transportation Equity work group an overview of the research findings and subsequent staff recommendations for which transportation equity system evaluation measures to assess the 2018 RTP and the 2018-2021 MTIP.

Introduction

As the Portland region prepares to make its next set of investments in the transportation system, an equity analysis can help inform how transportation investments affect the communities where people have the fewest options for travel to meet everyday needs. Understanding these effects helps the region make more informed, equitable decisions about where transportation dollars go, especially as the region weighs many competing priorities for the transportation system. The Transportation Equity Analysis (TEA) for the 2018 RTP and the 2018-2021 MTIP focuses to provide a better understanding of how near and long-term transportation investments are effecting:

- Communities of color;
- Households with lower-income;
- Communities with limited English proficiency;
- Older communities; and
- Youth

Defining Evaluation Measures: Process to Date

The first step of the assessment is to define a set of measures to evaluate the 2018 RTP investments package against. To determine the measures, Metro staff used a multi-pronged approach to identify the different transportation needs, issues, and concerns expressed by historically underrepresented communities as well as older adults and youth. The multi-pronged approach resulted in the list of community priorities, which were then screened to filter those priorities which could be analyzed through an evaluation of a future transportation investment package. A draft set of transportation equity measures were proposed to the work group. These measures are shown in Table 1.

Theme	Sub-Themes			
Affordability	Housing and transportation costs		Transportation costs	
Accessibility	Access to places	Infrastructure	Travel options	Travel time and reliability
Transportation	Infrastructure		Infrastructure disparities	

Table 1. Proposed Draft 2018 RTP Transportation Equity Measures for Further Exploration

Safety					
Public Health	Disproportionate enviro	Disproportionate environmental and health impacts			
Transit*	Transit costs	Transit access		Transit reliability	
Community	Involuntary displacement	Involuntary displacement		Mitigation	
Stabilization**					

* Consolidates the transit-related community identified priorities, which were initially categorized under other themes.

**Represents work group recommendation for further review.

Following work group discussion, an additional draft measure, **community stabilization**, was proposed and put forward for additional research as members had interest in seeing what the research on the topic might reveal. Community stabilization was also identified as part of the community findings, but identified by Metro staff as a topic to be addressed through the other potential products from the transportation equity work. The work group expressed support for staff to move forward with researching the proposed transportation equity measures and report back on the results and recommendation at the June meeting.

System Evaluation Research and Findings

Since the May 12th work group meeting, Metro staff collaborated with a small team from PSU Nohad A. Toulan School of Urban Studies and Planning to define system evaluation measures associated with the proposed priorities identified in Table 1. The emphasis evaluation measures is driven by

the task to define how to assess the 2018 RTP and the 2018-2021 MTIP transportation investment packages with an equity lens. Recognizing this emphasis, the PSU work focused on the identification of *system evaluation measures* and was not asked to identify monitoring measures at this time. System monitoring measures will also be part of the recommendation package to emerge from the transportation equity analysis work, but the discussion of the system monitoring measures is scheduled to take place after the evaluation of the 2018 RTP investment package to determine what should be monitored to assess progress.

The PSU team presented a research paper which outlines 20 potential system evaluation measures which address the community identified priorities and fit within the context of the transportation equity analysis for the 2018 RTP and the 2018-2021 MTIP. Further information and detail about the research paper can be found as **Attachment A** – **Recommended Equity Measures for Further Review**.

System Evaluation vs. Monitoring Measures

System Evaluation Measure Compares the base year conditions with an alternative, future scenario to document how well that future scenario performs to the base year conditions.

System Monitoring Measure Relies on collected and observed data to compare past conditions with base year conditions to compare and assess progress.

Metro staff then reviewed the potential 20 system evaluation measures using a set of factors to determine whether the measure should be included in a staff recommended list of transportation equity system evaluation measures. These factors are:

- The strength of the system evaluation measure's ability to inform the priority outcome from an equity perspective (e.g. ability to parse the measure to look at differences across communities);
- The potential alignment with and ability to inform the 2018 RTP performance targets;
- The potential alignment with other2018 RTP focus areas (e.g. transportation safety, transit) and ability to inform those efforts; and
- Metro staff's ability to conduct analysis of the system evaluation measure in the timeframe of the 2018 RTP.

Metro staff also modified certain system evaluation measures which emerged from the research to tailor the measure more towards the community identified priorities. For example, the access to places measure was divided to separate jobs from other existing essential destinations because there was significant feedback from historically underrepresented communities about the importance of getting to work.

From the factors, Metro staff has narrowed the set of 20 potential measures to 11 recommended system evaluation measures to pursue as part of the transportation equity analysis for the 2018 RTP and 2018-2021 MTIP. The recommended system evaluation measures can be seen in Table 2. These recommended system evaluation measures are still in need of defining a number of methodology considerations and must undergo beta testing to see whether to determine how effectively the evaluation measures speak to measuring the community identified priorities. Nonetheless, through the research from PSU and initial discussions with technical staff, the 11 recommended system evaluation measures remain promising metrics to assess transportation equity in the proposed 2018 RTP investment package and the 2018-2021 MTIP.

In addition to the research work conducted by PSU, Metro staff has consulted with Multnomah County Public Health Department staff to coordinate and define the public health system evaluation measure. As a result of the conversations, Metro and Multnomah County Public Health Department staff are working together to look at a mix of two potential options to support the system evaluation:

- 1. Assessing directional change of health outcomes based on the 2018 RTP investment package and observe differences across communities; and/or
- 2. Assessing the magnitude of transportation impacts on population health resulting from the transportation investment package for the 2018 RTP.

Multnomah County Public Health Department staff has reached out to other public health partners to determine how the different entities may coordinate and participate on the two options. The details are yet to be finalized and therefore the two options are proposed as pending as part of the recommendation. Nonetheless, Metro staff is encouraged by the partnership with Multnomah County Public Health and the health lens which can be brought forward with the transportation equity analysis. In the interim, other public health-related transportation equity system evaluation measures have been proposed if the possibility of the partnership is unable to come to fruition given limited resources.

At this time not all the community identified priorities from the exploration phase will move forward for the transportation system evaluation of the 2018 RTP and the 2018-2021 MTIP. For several community identified priorities, the research findings did not produce a system evaluation measure which can meet the staff recommendation factors. For example, travel time reliability was an identified community priority, but the research findings put forward system evaluation measures which would not produce meaningful information when looked at a community geography. These priorities remain important and are not intended to be dismissed, but rather the discussion of these community identified priorities may take place further along in the 2018 RTP development process. For example, several priorities, such as community stabilization, can be a part of the system monitoring recommendations. Metro staff continues to track these different priorities and will look to identify where in the 2018 RTP development process to begin the discussion.

Table 2. Recommended Transportation Equity System Evaluation Measures for the 2018 RTP and	1
2018-2021 MTIP	

No.	Community Priority	System Evaluation Measure Description	Other Consideration
1.	FIDILY	Combined Housing and Transportation	Coordination with
		Expenditure: The sum of the housing and	other Metro
		transportation expenditures in a given geography	planning and
		and key communities. Determine a potential cost	development
		burden to assess which households are	efforts including
	Affordability	experiencing the greatest combined expenditure.	equitable housing
		Assess the change of the expenditures in the given	and urban growth
		geography and key communities with added	management
		transportation investments. Look at the change of	process.
		combined housing and transportation expenditure.	-
2.		Access to Jobs: The sum of the total number of	Must be
	Accessibility –	family wage jobs which are accessible to key	coordinated in
	Access to	community geographies by automobile, transit, and	detail with the
	Places*	bicycle in a given commute time window. Assess the	Regional Transit
	I laces	change in key community geographies with added	Strategy & Work
		transportation investments.	Group
3.		Access to Existing Essential Destinations OR	
		Existing Daily Needs: The sum of the total number	
		of existing essential destinations or existing daily	
	Accessibility –	needs which are accessible to key community	
	Access to	geographies by automobile, transit, and bicycle in a	
	Places	given travel time window. Depending on whether	
	T Ideeb	essential destinations or daily needs is selected, the	
		travel times will change. Assess the change in key	
		community geographies with added transportation	
		investments.	
4.		Transit Access Disadvantage: The sum of the total	
		<u>number of existing essential destinations or existing</u>	
		daily needs which are accessible to key community	
	Accessibility –	geographies by automobile and transit. For each key	
	Access to	community geography, look at the ratio of essential	
	Places	destinations accessible by transit compared to	
		automobile. Attention is paid to lower	
		transit/automobile access ratio community	
		geographies to determine how the ratio changes	
	Aggoggihilitza	with added future transportation investments.	Mustha
5.	Accessibility – Infrastructure	Intersection of Transportation Investments, Timing,	Must be coordinated with
	mirastructure	and Communities: Transportation investments are	coordinated with

No.	Community Priority	System Evaluation Measure Description	Other Consideration
		mapped to illustrate which overlap with key community geographies. Transportation investments are also categorized by timeframe to assess whether investments are being made evenly over time in certain communities and addressing near-term transportation needs.	the broad 2018 RTP work program.
6.	Safety – Infrastructure Disparities	Safety Investments on the High Injury Network: Identified transportation safety investments are mapped to illustrate which overlap with the high injury network and in key community geographies. Assess whether investments are being made evenly in certain communities with evident transportation safety issues (as indicated by the categorization as a high injury facility).	Must be coordinated in detail with the Regional Transportation Safety Action Plan & Safety Work Group
7.	Safety – Exposure	<u>Non-Interstate Vehicles Miles Traveled Exposure:</u> The sum of all non-interstate vehicle miles traveled (VMT) would be totaled for key community geographies and based on the transportation investment program, look at how VMT changes in key community geographies and correlate traffic safety exposure.	
8.	Public Health – Environmental and Health Impacts	<u>Vehicles Miles Traveled Exposure:</u> The sum of all vehicle miles traveled (VMT) would be totaled for a key community geographies and based on the transportation investment program, look at how VMT changes in the key community geographies and correlate air pollution emissions concentration exposure.	These measures may or may not move forward as part of the transportation equity analysis if the partnership
9.	Public Health – Environmental and Health Impacts*	Intersection of Transportation Investments, Resource Habitats, and Communities: Transportation investments are mapped to illustrate which overlap with key community geographies and resource habitats to determine whether environmental quality degradation from transportation is overly represented in certain communities.	with Multnomah County Public Health happens.
10.	Public Health – Environmental and Health Impacts**	<u>Assessing Directional Change:</u> Use public health literature findings to assess the transportation investments package and its role in directional change in health outcomes. Based on mapping of investments relative to key community geographies and the directional relationship, determine whether health outcome disparities would widen or narrow as a result.	These would be conducted in partnership with Multnomah County Public Health and others.
11.	Public Health – Environmental and Health	Assessing the Magnitude of Transportation Impact to Public Health (Burden of Disease and Premature Death): Utilize the Integrated Transportation ad	

No.	Community Priority	System Evaluation Measure Description	Other Consideration
	Impacts**	Health Impacts Model (ITHIM) to look at the transportation investment effects to public health under the lens of disease burden and premature death in the context of air quality, physical activity, and traffic safety conditions.	

*Indicates staff adjusted modification

**Indicates the system evaluation measure is pending based on potential partnerships and resources.

Key Assumptions for Transportation Equity System Evaluation Measures

To conduct the transportation equity analysis for the recommended evaluation measures, certain key assumptions must be made in order to carry out the work. Some of these assumptions apply specifically to a single measure, whereas others would apply to all measures. Several of these assumptions also remain as proposed, as they are undergoing review because of the implication it would have for the greater RTP. Of the assumptions known to date, they are identified and described in Table 3.

Key Assumption Title	Application	Description of Assumption
System Evaluation Measures	All Measures	All transportation equity system evaluation measures have the ability to assess and compare future (near or long-term) transportation investments scenarios with a base year scenario. All system evaluation measures can also have the ability to tease out differences between the region and historically underrepresented communities as well as older adults and youth. For several of these system evaluation measures, the assessment will utilize a combined modeled and off-model post-processing analysis.
Analysis Years	All Measures	The analysis years for the transportation equity system measures will include the following: Base Year - 2015; Interim Year - proposed 2025, but to be determined; Horizon Year - 2040.
Land Use Forecast	All Measures	The MetroScope land use, population, and employment forecast adopted at the end of 2016 will be used as the underlying future development conditions for the region.
Land Use for Analysis Years	All Measures	The 2016 adopted land use, population, and employment forecast will provide a base year and horizon year forecast and spatial distribution for population and employment. A method for interpolating the land use, population, and employment for the interim analysis will be developed. The interim analysis year will not undergo local review and adjustment process.
Considerations for Certain Communities	All Measures	Transportation equity system measures will project future population locations for income and age because these are metrics which can be derived from the MetroScope. Since

Table 3. Key Assumptions for Transportation Equity System Evaluation Measures

		race/ethnicity is not a metric from the MetroScope, the analysis for communities of color and people with limited English proficiency will focus on the base year and the interim year. The emphasis on the near-term analysis years are to: 1) recognize that over the long-term, it is unrealistic to assume a community will not have turn over and change; 2) emphasize the existing transportation needs and current disparities experienced by these communities.
Combined Housing and Transportation Expenditure	Combined Housing and Transportation Expenditure	The combined housing and transportation expenditure post processing model from MetroScope is proposed for use in this system evaluation measure. The MetroScope-based combined housing and transportation expenditure model is different from the Housing and Transportation cost model developed by the Center for Neighborhood Technology (CNT). The MetroScope model projects combined expenditures and accounts for proposed transportation investments for the future. The CNT-based model uses observed data and does not account for future transportation investments. Additionally, the MetroScope housing inputs include other expenditure items such as utilities and insurance, which are not included in the CNT-based model.
Access to Places	Access to Existing Essential Destinations OR Existing Daily Needs	An assumption that existing essential destinations and existing daily needs will remain in the same location in future years. This assumption recognizes that increased access to existing places will benefit historically underrepresented communities as well as older adults and young people. The future development conditions which bring new places for daily needs or essential destinations will increase access.
Access to Places	Transit Access Disadvantage	This measure is attempts to look at access gaps by transit relative to historically underrepresented communities as well as older adults and young people. Because this measure will define access gaps based on the ratio of transit access to places relative to automobile access to places, an assumption exists that most places in the region will likely show a low ratio of transit access to automobile access. Depending on how the threshold the transit access to automobile access (transit: automobile) is defined, this measure may only look at a subset of historically underrepresented communities or a subset of the community geographies of interest.

In addition to the key assumptions, there are a myriad of methodology considerations still in need of resolution for each system evaluation measure. These methodology considerations need to be finalized by autumn 2016 to inform the development the 2018 RTP project solicitation and also inform partners, including local jurisdictions and other 2018 RTP work groups for coordination purposes. Of those methodological considerations known to date, they are identified in Table 4.

Table 4. Methodology Considerations for Resolution Prior to Finalizing System Evaluation Measures

Recommended	Area in Need of Resolution
Transportation Equity	Ai ea lli Need of Kesolution

Measure	
All System Evaluation Measures	A definition of which community geographies will be used for comparisons purposes. Unlike in previous equity analyses, the intent will be to look at areas where there is a convergence of multiple historically underrepresented communities. While community definitions have been determined, the identification of the community geographies of focus on has not been developed.
Combined Housing and Transportation	A threshold of cost burden will need to be defined and agreed upon.
Expenditure	
Access to Jobs	Family wage jobs will need to be defined and identified within the region. The commute time windows for each mode will need to be defined. A decision as to whether this measure would be applied for certain age groups (e.g. older adults and young people).
Access to Jobs & Access to Existing Destinations OR Existing Daily Needs	Determine how transit frequency and service is defined for system evaluation measures with a transit component or comparison. For example, would any form of transit service be considered or would only frequent service all-day or frequent service for a majority of the day acceptable to apply in these evaluation measure. Also this definition is intended to recognize that transit usage is not restricted by the certain times of the day for communities which tend to rely on transit.
Access to Existing Essential Destinations OR Existing Daily Needs	An agreed upon definition for existing essential destinations OR existing daily needs will need to be developed and/or refined. A decision as to whether to conduct this measure for existing essential destinations (which may be further away and more periodic places communities access) OR existing daily needs (which are more regularly attended places). Additionally, the commute time windows for each mode will need to be defined.
Transit Access Disadvantage	An agreed upon threshold for what ratio of transit access to essential destinations relative to automobile access to essential destinations would need to be defined.
Access to Jobs, Access to Existing Destinations OR Existing Daily Needs & Transit Access Disadvantage	The transit service changes for an interim analysis year will need to be defined. There will likely be assumptions in service levels since for transit, service changes are proposed on an annual basis and not completed in 4-6 year increments like capital improvement programs.
Intersection of Investments, Timing, and Communities	Decision as to whether this analysis should focus only on active transportation and transit investments. Consideration of other approaches in determining how to assign benefits from the transportation investments which reflect the transportation priorities of historically underrepresented communities.
Non-Interstate Vehicles Miles Traveled (VMT) Exposure	Determining if and how does speed get accounted for in the VMT exposure measure to correspond to safety? Additionally, determining how does this system measure get normalized for population growth. Additionally, determine whether to include bicycle miles traveled in community geographies and assess what bicycle miles traveled relative to VMT implies about transportation safety.
Assessing the Magnitude	Because vehicle miles traveled is an input and determinate for several

of Transportation Impacts	of the measures, resolve whether there is redundancy between
on Population Health	measures.
(Burden of Disease and	
Premature Death) and	
Directional Change vs.	
Vehicles Miles Traveled	
Exposure	
	Determine whether this system evaluation measure is appropriate for
Transportation Effect to	the transportation equity analysis, as the Integrated Transport and
Public Health (Air Quality,	Health Impact Modeling (ITHIM) tool cannot report or address
Physical Activity and	disparities between communities. However, this may be an
Traffic Safety)	assessment for recommendation and coordination to be completed as
	part of the broader 2018 RTP work program.

In efforts to utilize the work group meetings effectively, Metro staff proposes to hold an informal work session to provide an opportunity for those work group members interested in shaping the technical details on these different methodology considerations. Through the technical work throughout the summer which will define the methodology for these measures and after a test run of the measures with the 2018-2021 MTIP, certain measures may be proposed for removal for the analysis of the 2018 RTP investment package because the technical process may show the evaluation measure as duplicative, not able provide meaningful information, or not effectively addressing the community priority. Metro staff will report back what is learned through the methodology development and the test run process. The work group will have an opportunity at future meetings to provide input on refinements or revisit whether to move forward with certain measures for the evaluation.

2018 RTP Performance Targets

In early June, work group members were provided a memorandum describing the existing RTP performance targets and system evaluation measures. As part of the 2018 RTP update, a performance measures work group will be reviewing and recommending modifications to the existing RTP performance targets, system evaluation measures, and monitoring measures. The performance measures work group asked for input and recommendations from the transportation equity work group on certain performance targets and system evaluation measures. (See memorandum from June 1st correspondence.) The performance targets and system evaluation measures requested for review are reflected in the recommended transportation equity system evaluation measures. At the September 12th work group meeting, Metro staff will bring back the recommended methodology as well as proposed refinement options for the 2018 RTP performance targets for work group discussion and agreement to forward to the performance measures work group.

Discussion Questions

Based on the research findings, Metro staff seeks input from the work group members on the following questions:

1. Do the staff recommended transportation equity system evaluation measures continue to reflect on the community identified priorities for the transportation system? Are the recommended measures evaluating the desired outcomes historically underrepresented communities, older adults, and young people seek from the transportation system?

- 2. Is there agreement around the staff recommendation for the transportation equity system evaluation measures? Are there concerns pertaining to particular transportation equity system evaluation measures?
- 3. Are there other methodological concerns for the system evaluation measures which need to be addressed that have not been identified or reflected?
- 4. If only a select number of transportation equity system performance measures could be evaluated in the 2018 RTP update, which system performance measures would be the priorities?

Work Group Request

Metro staff requests the work group support staff moving forward with the recommended transportation equity system evaluation measures and defining the methodology for each measure. The methodology definition work will take place over summer 2016 and the work group will be presented with the details of the recommended methodology at the September 12th work group meeting. The work group will have the opportunity at the September 12th meeting to provide input and recommend final refinements to the system evaluation measures. The work group will also have the opportunity to provide input to the recommended 2018 RTP performance targets refinements as well.

Next Steps

Prior to the September 15th work group meeting, Metro staff will undertake several activities to define the methodology for the measures to be used in the 2018 RTP transportation equity analysis. These activities include:

- 1. Finalize the targeted engagement activities to validate the priorities and themes with particular emphasis on the draft measures.
- 2. Hold informal work session(s) in summer 2016 to allow those work group members interested in shaping the details of the methodology for the transportation equity measures to dive in and advise staff on different considerations.
- 3. Brief the Transportation Policy Alternatives Committee (TPAC) and the Metro Technical Advisory Committee (MTAC) on the status of this work at their July 29th and August 3rd meetings, respectively.
- 4. Develop the recommended methodology for each measure for the work group to review at the September 15th meeting.
- 5. Continue to coordinate with the other 2018 RTP work groups to understand their approaches and recommendations on overlapping topics and developing a strategy to support analyses for both work groups. For example, work with the lead of the Transportation Safety work group to determine whether the proposed safety measures for the transportation equity work aligns with analysis work taking place as part of the update to the Transportation Safety Action Plan.



<u>Memorandum</u>

TO:	Transportation Equity Work Group and Interested Parties
FROM:	Aaron Golub, Associate Professor, Portland State University
DATE:	Katherine Selin, Masters of Urban Planning Masters Candidate, Portland State University June 23rd, 2016
SUBJECT:	Recommended equity measures for further review ¹

Introduction

This memorandum presents a set of equity measures recommended for further inquiry by Metro staff. These measures were selected by the PSU-NITC team to evaluate the 2018 regional transportation plan (RTP) along the themes and sub themes developed by Metro staff. Some background on equity measures is presented below, followed by a description of our selection process. Each measure is then presented, along with information about how it is calculated, the type of analysis it affords, specific data required, and any additional issues to consider when using the measure for equity analysis.

Background

Before diving into issues of measurement and projections we should first review the core purpose of carrying out an equity analysis for the regional plan. Our evaluation of equity is a response to concern by policymakers and the public that there is desire to understand the equity implications of our transportation investments, as well as meeting certain federal obligations.²

We note that Metro has developed a definition of communities which the equity analyses will address. These are defined as historically underrepresented communities including people of color, households (HH) with lower incomes (under \$50K annual regardless of HH size), and limited English proficiency populations, along with older adults (65+) and youth (17 and younger).

As part of the Transportation Equity work group charge, equity analysis measures must be able to compare the benefits from regional investments experienced by historically underrepresented communities to those experienced by other groups. Thus, measures should have the ability to evaluate the effects of the plan investments on communities located in specific subareas of the region. That is, it must be possible to calculate at the certain geographic scale. For this transportation equity evaluation work, the traffic analysis zone (TAZ) is the basic geographical unit employed in the regional travel model and generally coincides with census tract geography. Many measures will work by comparing data for TAZs from a focused sub-regional geography (i.e. the locations of historically underrepresented communities), with measures from the entire region.

Metro and Portland State University. This product will assist Metro staff in the social equity analysis of the 2018 RTP. ² As was presented in earlier memos to the work group, regulations from relevant transportation agencies addressing social equity in regional transportation planning rest on Title VI of the Civil Rights Act of 1964. Please refer to those memos for more specific guidelines regarding equity analyses.



¹ This is a product of a National Institute for Transportation and Communities (NITC) grant-funded partnership between



Measures will work in two basic formats – "off-model" or modeled. Off-model measures do not rely on transportation metrics created from the regional travel model. They may, for example, utilize geographic information systems (GIS) to sum up the number of RTP investments within a sub-region, or calculate nearby destinations to a sub-region. These measures are made from lists and mapped locations of investments. Modeled information includes travel times, mode choices, levels of congestion and other detailed transportation metrics modeled for a future RTP investment year. This information allow us to calculate a level of mobility for residents of specific TAZs in a future year.

Measures should ideally rest on demographic, land-use, and transportation projections that can be reliably forecasted into the future. Where the forecasted data required is less reliable, we recommend the measures be used for shorter-term analyses, for example in an interim year or as an initial baseline (base-year) assessment. In the next section, we describe briefly how we produced our list of recommended measures.

<u>Methodology</u>

Our list of recommended measures was culled from a larger list of existing measures from various sources including other regions, national advocacy groups, and academic literature. A list of these sources along with bibliographic information can be found in Appendix A. In all, we collected more than 120 measures which after reviewing and classifying, represented variations on approximately 30 different measures (e.g. many groups use the same or very similar measures). We then removed several of those because, in our assessment, they were essentially similar to others or too complicated to calculate or understand.

Next, we present our full list of recommended measures along with some information about the type of measure and the timeframe most suitable for the measure. Each measure is then presented in detail organized into the theme and sub theme that it addresses.





Measures List

	Affordability: Housing and transportation costs	Model or off-model	Factors difficult to project
1	Housing plus transportation costs	Modeled travel behavior	Housing costs
	Affordability: Transportation costs		
2	Travel time savings	Modeled travel behavior	
3	Transportation costs (travel time plus out-of-pocket costs)	Modeled travel behavior	Out-of-pocket costs
	Accessibility – Access to places		
4	Access to essential destinations and jobs	Modeled travel times	Location of destinations
5	Transit access disadvantage	Modeled travel times	Location of destinations
6	Affordable housing in locations of accessibility	Off-model mapping	Housing costs and destination locations
	Accessibility: Infrastructure		
7	Intersection of investments with community geographies	Off-model mapping	
	Safety: Infrastructure / Disparities		
8	Safety-related project investments	Off-model mapping	
9	Safety investments on the high-injury network	Off-model mapping	
10	Safe Routes to School (SRTS) investments	Off-model mapping	School demographics
	Safety: Exposure		
11	Total VMT/square mile in residential and commercial areas	Modeled RTP-year VMT	
	Public Health: Environmental and health impacts		
12	Proximity to roadways	Modeled RTP-year VMT	
13	Magnitude of Transportation Impact to Public Health	Modeled NMT travel plus post-processing models	
14	Measures of active travel	Modeled NMT travel	
	Transit: Transit Access		
15	Measure of transit supply	Off-model transit assessment	
16	Gaps between transit need and supply	Off-model transit assessment	
17	Gaps between transit need and level of service (LOS)	Off-model transit assessment	
18	Transit service deficiencies in areas of high need	Off-model transit assessment	
	Monitoring		
19	Displacement Risk	Off model data analysis	Housing costs
	Other		
20	Timing of investments	Off model mapping	





Presentation of Measures

Affordability: Housing and transportation costs

Measure	Housing plus transportation costs	
How it is	The total housing and transportation costs can consume a substantial	
calculated	portion of a household budget. A regional plan can affect the availability	
	and level of service for different transportation modes and thus affect the	
	way people travel and therefore their costs of travel. Housing costs are	
	projected using a different model based on projections of housing supply	
	and demand in each neighborhood. This measure will estimate the total	
	housing and transportation costs for households living in different	
	neighborhoods. The measure can be made at the TAZ scale and so can be	
	used to compare the cost burdens for different communities. The measure	
	illustrates where investments help to reduce costs. The measure can be	
	presented as an average cost per household, cost-saving compared to the	
	base year, or a cost burden (share of household income).	
Why this is an	The regional plan will affect how people travel and the costs of that travel	
equity measure	to their household. Different neighborhoods then will experience different	
	changes in their travel and housing costs. This measure will compare cost	
	changes between communities.	
Key assumptions	Housing and transportation costs are estimated based on location, and thus	
	rely heavily on modeling assumptions about vehicle ownership, travel	
	mode choice, and housing costs for different neighborhoods.	
Measurement	This measure can be made for any sub-region and relies on modeled travel	
type and	data. Because of uncertainties in the housing cost model it may be best	
timeframe	suited over the short term.	
Special	This is a commonly used measure to understand equity.	
considerations		

Affordability: Transportation costs

Measure	Travel time savings
How it is	A regional plan can affect the availability and level of service for different
calculated	transportation modes and thus affect the speed and travel time needed for
	residents to travel throughout the day. These speeds are modeled and can
	be translated into a time savings compared to the base year. So as
	transportation investments improve speed, travel times are reduced.
	The measure is made at the TAZ scale and so can be used to compare the
	time savings for different communities. The measure can be presented as
	time-saved per household, compared to the base year.
Why this is an	This measure will tell us how time savings are distributed among different
equity measure	communities and allow us to compare communities.
Key assumptions	None.
Measurement	This measure can be made for any sub-region and is made for the future





type and	RTP investment year. This measure relies on modeled travel times in
timeframe	future years.
Special	Time savings may be problematic because as people move from
considerations	automobile to other modes their travel times may increase, even as other
	transportation costs decrease. Additionally, this measure prioritizes travel
	speed which may reward investments in roadways and traffic
	improvements which may not correspond with other regional goals.

Measure	Transportation costs (travel time plus out-of-pocket costs)
How it is	This is similar to the previous measure, but here out-of-pocket costs are
calculated	added. These include estimates of parking, tolls, transit fare, gasoline or
	other costs incurred for each trip.
Why this is an	The regional plan will make investments that save travelers time, but also
equity measure	may allow some travelers to switch to lower-cost modes. These time
	savings and changes in out-of-pocket costs will vary by neighborhood
	depending on the proximity of investments and the changes in travel
	choices. This measure will tell us how travel times and out-of-pocket costs
	are distributed among different communities and allow us to compare
	communities.
Key assumptions	This measure relies on modeled travel times in future years, along with
	assumptions about future transportation costs like fuel prices and transit
	fares.
Measurement	This measure can be made for any sub-region, and is made for the future
type and	RTP investment year. Since fuel prices and transit fares may be hard to
timeframe	predict in the long-term, this may be a measure best suited for near-term
	evaluations.
Special	Time savings may be problematic because as people move from
considerations	automobile to other modes their travel times may increase, even as other
	transportation costs decrease. Additionally, this measure prioritizes travel
	speed which may reward investments in roadways and traffic
	improvements which may not correspond with other regional goals.





Accessibility – Access to places

Measure	Access to essential destinations and jobs ³
How it is	Accessibility here is defined as the ability to reach essential destinations
calculated	and jobs. The transportation network affords users the ability to move
	about in space. Depending on how well the transportation system works,
	that person can reach more things within a given time window.
	Accessibility calculations sum the total number of destinations reachable
	within a given time window. This calculation depends on the mode chosen
	and so the measure would need to be presented separately as access by
	auto, transit, and bike (as these are modeled modes). Typically a time
	window of 30 or 45 minutes is used to represent a typical commute trip or
	reasonable amount of time to reach destinations. Metro research staff can
	offer some data from survey work to help determine an appropriate time
	window.
Why this is an	Access is the main goal of a land use and transportation system. Therefore
equity measure	improvements in access which result from the regional plan are an
	important component of the plan's success. Access is improved for each
	mode (auto, transit and bike) and thus this measure is calculated separately
	for each mode. Similarly, access is improved differently in different areas
	depending on the proximity of those areas to investments. This measure
	will tell us how improvements in access (for each mode) are distributed
	among different communities and allow us to compare communities.
Key assumptions	Destinations just beyond the travel time window or completely out of
	reach. (While this is an unrealistic assumption, the measure is easy to
	understand when a simple cut off time is used instead of a decaying
	function.)
Measurement	This measure can be made for any TAZ or sub-region, and is made for the
type and	future RTP investment year using modeled travel times.
timeframe	
Special	This is a commonly used measure in other regions. While it is sometimes
considerations	complicated to understand because each TAZ has a different number of
	reachable destinations, it may be worth the complexity. The measures
	results will be very sensitive to the length of the travel time window.

³ Academics have worked to improve this measure by varying the travel time window by demographic group according to how the group actually travels. Using survey data from residents the travel time window is estimated using the actual travel information from residents. This generally means that low income households, for example, travel less and are already less accessible to destinations even before investments in the regional plan are made. This would implicate a need for even more investment in low income communities to overcome the fact that they are already mobility challenged. Unfortunately the analysis needed to develop these travel time windows is quite complex and so we removed it from our recommended measures.





Measure	Transit access disadvantage
How it is	This measure builds on the previous measure Access to essential
calculated	destinations and jobs by highlighting TAZs where access by transit is
	especially low compared to access by auto. This creates a map of areas
	where transit dependent populations are at a significant disadvantage
	compared to auto drivers. Access by transit and auto are calculated
	according to the previous measure. Then, the transit access is divided by
	the auto access for each TAZ. A low ratio is produced in areas where
	transit is relatively deficient. We can then map historically
	underrepresented communities within those transit deficient areas. This
	creates a sub-region of concern in which we look at RTP investments, or
	we can measure improvements in access due to the RTP investments in
	these areas.
Why this is an	Access to destinations by public transit is especially important for
equity measure	households dependent on transit. This measure highlights historically
	underrepresented communities living in areas where access to destinations
	by transit is low. These areas can be used as sub-regions for mapping
	investments or to measure improvements in access from the RTP
	investments. This measure will tell us whether transit improvements are
	increasing access to places for historically underrepresented communities.
Key assumptions	Assumptions here are similar to Access to essential destinations and jobs
	measure. Furthermore, we are assuming that transit is especially important
	to historically underrepresented communities.
Measurement	This measure can be made for any sub-region, and can be made for the
type and	base year or future RTP investment year. If used with the base year it can
timeframe	make a map of the sub-region of concern which can then be used to
	investigate the location of RTP projects or calculate improvements in
	access for the future RTP investment year.
Special	This is an important measure as historical patterns illustrate low-income
considerations	communities moving to outer areas with less transit access.

Measure	Affordable housing in locations of accessibility
How it is	Measuring accessibility near affordable housing is similar to calculating
calculated	the essential destination access measure presented above. Here, we would
	look at accessibility to essential destinations within a travel time window
	from TAZs with good housing affordability. In essence, housing
	affordability defines the sub-region. For local access to nearby services, we
	could develop a scoring system like bikescore, transitscore or walkscore.
	Alternatively, we can measure the amount of affordable housing in areas
	known to have good access, for example near high capacity transit or in
	job-rich areas (for all jobs or specific job types), or in areas with good local
	access (e.g. with high bikescore, transitscore or walkscore).
Why is this an	Similar to other access measures, but focuses on affordable housing instead
equity measure	of specific community characteristics as the comparison dimension. This





	measure can be calculated in two ways: measuring accessibility near
	affordable housing, or measuring affordable housing near accessibility.
Key assumptions	This measure uses similar assumptions to those used in the essential
	destination access measure above. It also assumes we know the location of
	affordable housing in the future, which is less reliable. It would also
	require an agreed upon definition for affordable housing (renter vs. owner)
Measurement	This measure can be made for any sub-region, and is made for the future
type and	RTP investment year. As a mapping exercise it is off-model.
timeframe	
Special	
considerations	

<u>Accessibility – Infrastructure</u>

Measure	Intersection of investments with community geographies
How it is	Projects in the RTP are mapped to show which investments overlap with
calculated	our sub-geographies. From there, we could then sum investments as a total
	project number or total project value (investment dollars), and compare
	these as per capita, or per area.
Why this is an	This measure identifies and sums investments made in sub-geographies
equity measure	(containing historically underrepresented communities) and looks the level
	of investment in among these communities and the entire region.
Key assumptions	The key assumption here is that projects located in a place benefit directly
	the people living in that place.
Measurement	This measure can be made for any sub-region, and is made for the RTP
type and	investment. As a mapping exercise it is off-model.
timeframe	
Special	This measure is a weak measure of equity because of the assumption that
considerations	projects located in an area benefit people living in that area. Typically,
	project benefits accrue to those living "downstream" of a project and
	having an investment go through a community doesn't necessarily mean it
	benefits that community.





Safety: Infrastructure / Disparities

Measure	Safety-related project locations
How it is	Safety–related projects in the RTP are mapped to show which investments
calculated	overlap with our sub-geographies. From there, we could then sum
	investments as a total project number or total project value (in terms of
	investment dollars), and compare these as per capita, or per area.
Why this is an	This measure would look at the distribution of safety–related investments
equity measure	among different communities.
Key assumptions	The key assumption here is that projects located in a place benefit directly
	the people living in that place.
Measurement	This measure can be made for any sub-region, and is made for the future
type and	RTP investment. As a mapping exercise it is off-model.
timeframe	
Special	Safety-related projects probably do correspond with local benefits better
considerations	than general transportation investments (an issue mentioned in an earlier
	mapping- based measure above). The question here however is, what is a
	fair distribution of safety improvements? Do communities which typically
	experience higher traffic danger burdens deserve more investment? These
	questions should be addressed alongside the choice between a per capita,
	or per area measure.
Measure	Safety investments on the high-injury network

Measure	Safety investments on the high-injury network
How it is	Safety–related projects in the RTP are mapped to show which investments
calculated	overlap with the high-injury network. This would create some kind of
	proportional measure where higher proportions of projects in high-injury
	locations are better.
Why this is an	This measure would look at safety-related investments on the high injury
equity measure	network. The measure would compare this rate of investment with the rate
	of investment overall. Presumably the investment in the high-injury
	network would be higher than the average investment overall. Particular
	focus is on a high injury network investments which corresponds to
	locations of importance to historically underrepresented communities.
Key assumptions	We assume that historically underrepresented communities travel often in
	high injury parts of the network.
Measurement	This measure can be made for the RTP investment. As a mapping exercise
type and	it is off–model.
timeframe	
Special	
considerations	





Measure	Safe Routes to School (SRTS) investments
How it is	This measure identifies and sums SRTS investments made in sub-regions
calculated	or alternatively, schools with high representation of low income students
	(with high representation of students who qualify for meal assistance). We
	could then compare overall investment (per school or per pupil) between
	the schools and all schools.
Why this is an	The measure would compare this rate of investment in schools of concern
equity measure	with the rate of investment overall.
Key assumptions	This measure assumes we have an accurate inventory of S RTS
	investments into the future.
Measurement	This measure can be made for any sub-region or set of schools, and is
type and	made for the future RTP investment. As a mapping exercise it is off-
timeframe	model.
Special	
considerations	

Safety: Exposure

Measure	Total Vehicle Miles Traveled (VMT)/square mile in residential and
	commercial areas
How it is	All vehicle travel (measured as vehicle-miles traveled (VMT)) is modeled
calculated	for the RTP and can be summed within any given TAZ. This VMT per
	square mile is calculated for the sub-region and compared with the
	measure for the rest of the region and for future RTP investment years.
Why this is an	This measure would look at vehicle miles traveled (VMT) exposure by
equity measure	particular communities and how that may change with future RTP
	investments. It would allow us to identify areas with a much higher
	exposure than others.
Key assumptions	VMT is a proxy for traffic danger and emissions exposure.
Measurement	This measure can be made for any sub-region, and is made for the future
type and	RTP investment year. This measure relies on modeled travel data.
timeframe	
Special	
considerations	





Public Health: Environmental and health impacts

Measure	Proximity to roadways	
How it is	This measure calculates the share of housing within a certain distance	
calculated	buffer from high-volume roadways which is affordable. Using a mapping tool, affordable housing resources and all housing resources, within distance buffers (e.g. 500 feet) from high-volume roadways are summed. This is used to create a share of housing which is affordable within these buffers.	
Why this is an	The share of housing which is affordable within this distance buffer should	
equity measure	be similar to the share of other housing. In overrepresentation of affordable	
	housing means that those households are over burdened with exposure to	
	the impacts of roadways.	
Key assumptions	Proximity to high-volume roadways is proxy for emissions exposure.	
Measurement	This measure is made for the future RTP investment year and as a mapping	
type and	exercise is off-model.	
timeframe		
Special	The buffer distance and the definition of "high-volume" will be important	
considerations	for this measure. The definition of affordable housing will also be	
	important for this measure.	

Measure	Magnitude of Transportation Impacts to Public Health	
How it is	The Integrated Transport and Health Impacts Model (ITHIM) model	
calculated	using modeled travel data and a special health impacts model to estimate	
	three components of health impacts due to changes in non-motorized	
	travel: 1. lives saved due to improvements in health; 2. lives lost due to	
	increases in bike/walk (due to safety and emissions exposure); and 3. lives	
	saved due to emissions reductions for the general population.	
Why this is an	The ITHIM model could be used to estimate the health impacts of specific	
equity measure	populations, such as historically underrepresented communities. These	
	could be analyzed in isolation or compared with other communities or the	
	total impacts for the region to insure that positive health impacts are shared	
	by historically underrepresented communities.	
Key assumptions		
Measurement	This measure is made for the future RTP investment year and relies on	
type and	modeled travel data.	
timeframe		
Special	While non-motorized travel is held up as a benefit of progressive planning,	
considerations	many transportation disadvantaged communities bike and walk not out of	
	choice but out of necessity. Therefore, this measure may overstate the	
	benefits of increases in non-motorized travel in some communities.	





Measure	Measures of active travel	
How it is	The regional model will predict non-motorized travel mode share, and this	
calculated	can be modeled for any sub-region and compared with the rest of the region.	
	legion.	
Why this is an	The choice of non-motorized travel (walking or cycling) is assumed to be a	
equity measure	benefit of RTP investments. Thus, increases in non-motorized travel	
	should be shared equally between communities if the RTP is equitable.	
Key assumptions		
Measurement	This measure can be made for any sub-region, and is made for the future	
type and	RTP investment year. This measure relies on modeled travel data.	
timeframe		
Special	While non-motorized travel is held up as a benefit of progressive planning,	
considerations	many transportation disadvantaged communities bike and walk not out of	
	choice but out of necessity. This measure may overstate the benefits of	
	increases in non-motorized travel in some communities.	

Transit: Transit Access

Measure	Measures of transit supply	
How it is	There are various measures of transit supply, including total service-hours,	
calculated	or service-miles, or transit vehicle trips within a given timeframe such as	
	day, week, month, etc. For the RTP, transit service can be calculated	
	within sub- geographies and then used to get a per-capita or per-area	
	measure.	
Why this is an	Transit supply distribution among different communities. For this measure,	
equity measure	therefore, we would look for equal supply per-capita, or per-area, for	
	different communities.	
Key assumptions		
Measurement	This measure relies on projections of transit service for the RTP year. It	
type and	can be made for any sub-region, and as a mapping exercise it is off-model.	
timeframe		
Special		
considerations		





Measure	Gaps between transit need and supply	
How it is	See the Measures of transit supply measure for a description of	
calculated	calculation. For transit need, measures typically look at factors such as	
	vehicle ownership and income to predict transit dependency. A	
	combination of these factors could be used to create a need index, and this	
	can be calculated based on existing travel survey data. One can then	
	calculate the transit supply for high and low need areas.	
Why this is an	This measures looks at transit supply distributed towards communities	
equity measure	which need services more than others. For this measure, therefore, we	
	would look for a match between transit supply and measures of transit	
	need.	
Key assumptions	Assumptions about need based on the demographic factors are important.	
Measurement	This measure relies on projections of transit service and transit need for the	
type and	future RTP investment year. It can be made for any sub-region, and as a	
timeframe	mapping exercise it is off-model.	
Special		
considerations		

Measure	Gaps between transit need and level of service (LOS)	
How it is	This measure is similar to the Gaps between transit need and supply	
calculated	measure, except that transit speed or travel times are used instead of basic	
	measures of supply. Speed or travel times can be calculated from the	
	transit trips taken from each TAZ for the RTP model. Higher-speed, or	
	lower travel times, would indicate a better performing transit system for	
	that TAZ. For transit need, measures typically look at factors such as	
	vehicle ownership and income to predict transit dependency. A	
	combination of these factors could be used to create a need index, and this	
	can be calculated based on existing travel survey data. One can then	
	calculate the transit LOS for high and low need areas.	
Why this is an	This measures looks at transit LOS distribution with an emphasis on more	
equity measure	heavily towards communities with higher needs. For this measure,	
	therefore, we would look for a match between transit LOS and measures of	
	transit need.	
Key assumptions	Assumptions about need based on the demographic factors are important.	
Measurement	This measure relies on projections of transit service and transit need for the	
type and	future RTP investment year. It can be made for any sub-region, and uses	
timeframe	modeled transit LOS.	
Special	Level of service measure (which reflect service speed) may be problematic	
considerations	because suburban services may operate at higher speeds but not offer	
	additional accessibility to destinations. Likewise, core urban services may	
	be slower but offer better connectivity. Additionally, this measure	
	prioritizes travel speed which may reward investments in roadways and	
	traffic improvements which may not correspond with other regional goals.	





Measure	Transit service deficiencies in areas of high need	
How it is	Projections of transit service levels can reveal times of the day, or days of	
calculated	the week when service is minimal or nonexistent for certain TAZs (for	
	example: hours per week with headways greater or equal to 30 minutes).	
	This measure would tally those hours for each TAZ within sub-	
	geographies. Transit need would be calculated similarly to the measures	
	Gaps between transit need and supply and Gaps between transit need	
	and level of service (LOS). Absent or minimal transit service can then be	
	calculated for high and low need TAZs to pinpoint where services are	
	needed.	
Why this is an	Variations, especially major absences, in transit services can be harmful to	
equity measure	transit dependent populations. Investments to reduce the amount of time	
	where transit services are minimal or absent will support populations who	
	use transit. Thus, reductions in gaps and improvements in off-peak service	
	will be important to measure.	
Key assumptions	None.	
Measurement	This measure relies on projections of transit service for the future RTP	
type and	investment year. It can be made for any sub-region, and uses mapped	
timeframe	service projections which are off-model.	
Special		
considerations		

Monitoring

Measure	Displacement risk	
How it is	There are various types of displacement risk estimations. Most measure	
calculated	compounding factors of housing cost burden, rapid increases in housing	
	prices and rents, the percent of area residents who rent, among other	
	things. The risk can be calculated for a specific TAZ and can be mapped.	
	RTP projects can then be mapped for their correspondence with high	
	displacement risk areas to signal the need for more attention in those areas.	
Why this is an	Low income renting populations struggle to remain in areas of the region	
equity measure	where rents and sale prices increase rapidly. Measuring displacement risk	
	can inform which investments are in need of additional housing strategies	
	in order to preempt situations where RTP investments could exacerbate	
	existing displacement risks.	
Key assumptions	The current geography of displacement risk remains relevant out to the	
	future RTP investment year.	
Measurement	This measure relies on projections of the factors which predict	
type and	displacement risk. These may be less robust out to the future RTP	
timeframe	investment year and better as a short-term monitoring measure.	
Special		
considerations		





Other: Timing of Investments

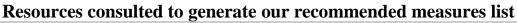
Measure	Displacement risk	
How it is	The RTP investments would be phased into several periods, and the	
calculated	distribution of these projects in each phase would be mapped. The projects	
	in sub-geographies would then be summed and a share of the total would	
	be calculated to confirm that all communities are receiving some projects	
	during all phases of the RTP.	
Why this is an	Look at the share of investment during the initial stages of the RTP in	
equity measure	historically underrepresented communities.	
Key assumptions	Timeframe of when an RTP investment plans for its completion.	
Measurement	This is a mapping exercise and would not involve the model. The	
type and	timeframe would depend on the phasing used in the measurement and what	
timeframe	is indicated as the timeframe of when an individual project is completed.	
Special		
considerations		





Appendix A – Source list and bibliographic information

Resources consulted to generate our recommended measures list	
Organization	Source
SCAG (Los Angeles)	2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (2012)
NYMTC (New York)	Plan 2040: NYMTC Regional Transportation Plan (2013)
CMAP (Chicago)	GO TO 2040: Comprehensive Regional Plan (2013)
MTC (San Francisco Bay Area)	2035 Regional Transportation Plan Equity Analysis (2009) and Plan Bay Area (2013) and Plan Bay Area (2016)
NJTPA (Newark and Northern New Jersey)	 PLAN 2035: Regional Transportation Plan for Northern New Jersey (2005) PLAN 2040: Regional Transportation Plan for Northern New Jersey (2013) Together North Jersey Fair Housing and Equity Report (2015)
NCTCOG (Dallas - Fort Worth)	Mobility 2035 Update (2013 Update)
H-GAC (Houston)	2035 Regional Transportation Plan (2011 Update)
DVRPC (Philadelphia)	Connections 2040 Plan for Greater Philadelphia (2013)
NCRTPB (Washington DC)	2010 Constrained Long-Range Transportation Plan (2010)
ARC (Atlanta)	Plan 2040 (2012)
PSRC (Seattle)	Transportation 2040 Update Report (2014)
MAG (Phoenix)	2035 Regional Transportation Plan (2014)
Hampton Roads Transportation Planning Organization	EJ Methodology Tool (2014)
PolicyLink (Transportation Equity Caucus)	Comments on USDOT Proposed State and Metro Planning Guidance (2014)
Transportation for America	Measuring What We Value: Setting Priorities and Evaluating Success in Transportation (2015)
Various academic research	Currie (2010); El-Geneidy et al. (2015); Farber et al. (2014); Foth et al. (2013); Golub & Martens (2014); Karner & Niemeier (2013); Martens & Golub (2014).







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Metropolitan Transportation Commission (MTC) (2013). Plan Bay Area: Equity

Analysis Report Including Title VI, Environmental Justice and Equity Analysis for Plan Bay Area. http://onebayarea.org/pdf/final_supplemental_reports/FINAL_PBA_Equity_Analysis_Report.pdf

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Date:	May 5, 2016
То:	Transportation Equity Working Group and interested parties
From:	Grace Cho, Associate Transportation Planner
Subject:	Outline of Potential Products from the Transportation Equity Analysis Work

Purpose

Provide the Transportation Equity work group an introduction to potential products that are anticipated from the Transportation Equity Analysis work to help focus future work group discussions.

Introduction

As part of the 2018 RTP and the 2018-2021 MTIP, Metro staff will develop a series of policy recommendations, refinements, and other potential products to provide recommendations to the region's policymakers on addressing the transportation needs, concerns, and priorities effecting:

- Communities of color;
- Households with lower-income;
- Communities with limited English proficiency;
- Older communities; and
- Youth

The policy recommendations, refinements, and potential other products will be informed by engagement activities and the evaluation of the 2018 RTP and the 2018-2021 MTIP investment packages. Looking at the evaluation results of the two investment packages will provide a sense of what refinements and actions are needed in the short- and long-term to address the community identified priorities for the transportation system and, therefore, better address equitable outcomes.

Additionally, Metro staff is aware there are a number of transportation needs, concerns, and priorities that are not as well addressed through the evaluation of the transportation investment package of the 2018 RTP and 2018-2021 MTIP. These needs, concerns, and priorities expressed by community members address less quantifiable aspects, such as the planning process, communications, and coordination across intersecting fields (e.g. transportation, public health, housing) or agencies. As part of the potential products, the priorities that cannot be addressed by the evaluation will also be included as part of the policy refinement discussion. By including the less quantifiable priorities in the policy discussion recognizes the importance and necessity for these priorities to be addressed concurrently in order for the transportation system to better address equitable outcomes.

Potential Products from the Transportation Equity Analysis

To date, the following potential products are anticipated from the Transportation Equity Analysis work and would be part adopted as part of the final 2018 RTP.

- Transportation Equity Analysis report as a component of the 2018 RTP
- Potential policy language refinements to the 2018 RTP
- Potential policy language refinements for the Regional Transportation Functional Plan (RTFP) and/or Urban Growth Management Functional Plan (UGMFP)
- Potential performance targets (new targets and/or refinements to existing targets)
- Potential performance monitoring measures (new measures and/or refinements to existing measures)
- Potential recommendations to be included in a short list of actions
- Title VI and Environmental Justice Compliance documentation (for federal partners)

The identified potential products will be developed with input from the Transportation Equity work group, as well as input from other 2018 RTP work groups, the Transportation Policy Advisory Committee (TPAC), the Metro Technical Advisory Committee (MTAC), and public involvement efforts for consideration by the Metro Policy Advisory Committee (MPAC), the Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council. The input to the potential products from the different sources (e.g. work groups, TPAC, MTAC) would be coordinated through Metro staff.

As the 2018 RTP transitions from Phase 2 (Framing trends and challenges) into Phase 3 (Looking forward), staff has enough information to see which topics areas repeatedly emerging. Therefore, Metro staff is working to develop a coordination strategy between work groups to inform analyses and work products. For example, transportation safety is a topic being addressed in the Transportation Safety work group, the Performance Measures work group, and potentially the Policy Actions work group. Staff will produce these products collaboratively with the work groups and review them with TPAC and MTAC prior to asking policymakers to consider them.

As a means of providing greater clarity on the potential products, a sample draft outline of the <u>Transportation Equity Analysis Report</u> is provided to illustrate where the transportation equity analysis work may lead. Please see **Attachment A – Transportation Equity Analysis Report Outline** for detail. The draft outline is subject to change as work continues to progress.

Timeline for Development of Potential Products

The identified potential products are scheduled to be developed in Phase 4 of the Transportation Equity Analysis (Conduct Analysis and Prepare Findings and Recommendations). Phase 4 is intended to take the results of the system evaluation of the 2018 RTP to help inform potential policy refinements and actions. Phase 4 is scheduled to take place after February 2017.



2018 RTP | Transportation Equity Analysis Work Plan and Timeline

Feedback Requested from the Transportation Equity Work Group

Based on the introduction and outline of potential products from the Transportation Equity Analysis work, Metro staff seeks input from the work group members on the following questions:

- 1. Are the potential products from the Transportation Equity Analysis work proposed a reasonable approach? Do they provide enough of information to work group members to visualize or conceptualize the potential products?
- 2. Are there potential products missing (new or refinements to existing)?
- 3. Would it be helpful for work group members to see additional illustrative sample work products? For example, would it be helpful for the work group members to see what is envisioned for potential recommendations to comprise a short list of actions?

Next Steps

Metro staff is welcoming comments and suggestions about the potential work products. The work group may request further discussion of this agenda item at the June 30th work group meeting. As the Transportation Equity Analysis work continues, the Metro staff plans to undertake several activities to help further the discussion and help the work group make recommendations on the measures for the 2018 RTP transportation equity analysis.



2018 RTP Transportation Equity Work Group – Meeting #3 Thursday, May 12, 2016 1:00 – 3:00 p.m. Metro Regional Center, Room 401

Committee Members	Affiliation	Attendance
Duncan Hwang	APANO	Present
Jessica Berry	Multnomah County	Present
Stephanie Caldera	Oregon Department of Environmental Quality	Present
Brad Choi	City of Hillsboro	Present
Brendon Haggerty	Multnomah County Health Department	Present
Zan Gibbs	City of Portland – Transportation	Present
Jared Franz	Amalgamated Transit Union	Present
Aaron Golub	Portland State University	Present
Heidi Guenin	Transportation Council	Present
Scotty Ellis	Metro	Present
April Bertelsen	City of Portland – Transportation	Present
Jake Warr	TriMet	Present
Cora Potter	Ride Connection	Present
Steve Williams	Clackamas County	Present
Kari Schlosshauer	National Safe Routes to School Partnership	Present
Karen Savage	Washington County	Present
Kay Durtschi	Citizen Member of MTAC	Present
Terra Lingley	ODOT	Present
Interested Parties		
Katie Selin	Portland State University	Present
Eliot Rose	ICF	Present
Radcliffe Dacanay	City of Portland – Planning and Sustainability	Present
Metro Staff		
Grace Cho	Metro	Present
Lake McTighe	Metro	Present
Cliff Higgins	Metro	Present
Ted Leybold	Metro	Present
Jamie Snook	Metro	Present
Dan Kaempff	Metro	Present
John Mermin	Metro	Present
Peggy Morell	Metro	Present

I. <u>WELCOME</u>

Cliff Higgins welcomed meeting attendees and walked through the agenda for the work group meeting.

II. WORK GROUP MEMBERS INTRODUCTIONS AND PARTNER UPDATES

All those present introduced themselves and provided a brief update on who they've discussed the transportation equity work with since the last meeting and what they heard in response.

III. SPRING ENGAGEMENT UPDATE

Mr. Higgins and Peggy Morell provided an overview of the upcoming spring engagement strategy to help support the efforts for the transportation equity analysis for the Regional Transportation Plan (RTP). Mr. Higgins explained the change in approach Metro has taken in engaging the broader public. He explained in previous practice, a public comment period may have asked for comments on the material in a planning document, which had proved to be a barrier to participation, especially for historically underrepresented communities. He followed up by explaining the new approach is to ask the public more value and opinion-oriented questions which would be less barrier of entry for participation.

Following Mr. Higgins comments about Metro's change in engagement approach, Mrs. Morell provided an update on planned spring engagement activities. Mrs. Morell told the work group Metro plans to build off of the community summit model conducted in spring 2015. The engagement would entail partnering with community organizations that serve historically underrepresented communities to hold 3-5 discussion groups. The questions for the discussion groups would follow up on questions asked at the community summit in 2015 as well as reaffirm the findings of community priorities identified for the transportation equity work. Mrs. Morell emphasized Metro staff has been applying the different recommendations and strategies heard from community organizations in designing the spring engagement approach. She also mentioned there will be an online engagement opportunity which will look to focus on gathering further input from historically underrepresented communities.

At the end of the presentation, Mr. Higgins and Ms. Morell paused to take any questions.

A work group member asked if Metro is employing a best practice of compensating community organizations which facilitate or host discussion groups and whether participants are compensated.

Mr. Higgins and Mrs. Morell responded Metro has been moving in that direction and the spring engagement plan will be compensating facilitators and participants.

A work group member made a comment regarding the necessity for public agencies to be better coordinated when it comes to engagement efforts. While he applauded that public agencies are

engaging historically underrepresented communities, he also stressed the lack of coordination between internal departments or even between external agencies are over taxing the ability of community organizations and community members. He also mentioned the numerous engagement touch points are frustrating communities because of the lack of immediate results.

Another work group member noted the necessity for having a strong communication strategy with members of the public and with decision-makers. The work group member stressed that much of the work done in planning is on a long-range time scale which can frustrate community members who are experiencing challenges in need of more immediate attention. The work group member also stressed recognizing the shorter timeframe community members are on and the work being conducted in the 2018 RTP should also balance and strategize the short-term actions with long-term actions.

IV. <u>BREAK</u>

Mr. Higgins excused everyone for a short stretch break.

V. SYNTHESIS OF FEEDBACK AND FINDINGS OF COMMUNITY PRIORITIES

For the second item of business, Ms. Cho presented the process Metro staff used to determine the findings of community priorities. She walked through how three main public comment approaches, which included the public comment retrospective, an online questionnaire which focused on transportation and equity, and the work group exercise from February, was qualitatively assessed to determine major reoccurring themes. She gave a brief recap of each public comment approach and then explained which reoccurring themes resulted from looking at all three approaches. Ms. Cho then explained the major reoccurring themes and key subthemes became the findings of community priorities.

VI. 2018 RTP DRAFT TRANSPORTATION EQUITY EVALUATION MEASURES FOR FURTHER EXPLORATION

After the discussion of the community priorities findings, Ms. Cho then launched into a presentation of how the findings of community priorities informed the development of 2018 RTP draft transportation equity evaluation measures. She started off by reminding the work group that its charge is to recommend to Metro staff how to consider and assess equity in the 2018 RTP investment package. She also mentioned it was the work group charge which defined how the draft transportation equity measures were selected to present before the work group.

Once Ms. Cho reminded the work group of its charge, she explained the simplified screening and categorization process employed narrow down the list of findings to a set of draft recommended measures. She briefly discussed the two main questions which were used. These questions were:

• Would this community priority be further informed through a transportation system evaluation?

• Can this priority be measured across the transportation system of investments? Ms. Cho also explained the findings of community priorities addressed a variety of transportation and equity concerns in which the evaluation of the 2018 RTP investment package may not be the best arena for addressing the concern. Ms. Cho presented a set of discussion questions to kick off the conversation with the work group. She also asked that at the end of the discussion, she is seeking an informal action to move forward into a research and exploration phase with the 2018 RTP draft transportation equity measures.

A work group member asked for clarification if the draft measures are intended to reflect outcomes. Metro staff clarified the draft measures are intended to measure outcomes.

A work group member made a comment that while she thought the draft measures for exploration were positive, she wanted to recognize the level of effort potentially needed for several of them and the lack of ability to measures others. She suggested for Metro staff not to overpromise on the measures.

Another work group member asked how would the allocation of resources be connected to the measures and the analysis? Metro staff did not answer this question at the meeting, but since meeting, staff has come to identify that since the draft transportation equity measures will be evaluating the system of investments identified in the 2018 RTP, the will be an inherent consideration of resource allocation. Some of the discussion may come to considering and prioritizing transportation projects which will serve historically underrepresented communities in the near-term.

Another work group member made a comment saying the Metro staff decision to call out transit as an individual measure may not make sense as it is a means to an end and not an outcome. Metro staff is willing weave transit into the broader measures, but asked permission for the research and exploration phase to take a strong look at transit.

A work group member commented that the presentation of the draft transportation equity measures are too general and therefore it is hard to provide comments which may help "move the dial" or direct the region towards equitable outcomes. Metro staff clarified the draft measures being presented at the May meeting are in need of further exploration to define the methods and details. However, in presenting the measures at this stage, Metro staff looked to get a gauge of whether the measures are moving in the right direction.

A comment made by a work group member noted the draft transportation equity measures did not address any policies, particularly the policy pieces to address affordability. Added to the same comment by another group member was that the measures did not address intersecting issues. Metro staff responded in saying the next item on the agenda, which outlines the potential products from the TEA work, will outlining an approach for the policy considerations and recommendations for the 2018 RTP.

Another comment asked about data, particularly around safety and the risk factors. The work group member suggested these pieces should be addressed in the exploration.

The comments on how to communicate the transportation equity work was brought up again for the work group to think about. The transportation equity measures should be consumable for all audiences and be responsive.

Another work group member agreed with the public health measure that avoids further burdening historically underrepresented communities, but also expressed the measure should look to remedy past disparities. A follow on to this comment suggested being specific and define the term disproportionate.

Several work group members noted there was a lack of a call out of active transportation in the draft transportation equity measures. Work group members noted that active transportation modes are critical for underrepresented communities and that it might be worth reframing some of the measures. Metro staff responded in saying inherently the measures include active transportation modes and infrastructure.

Another work group member suggested reframing the public health measure as a lens. To the same point, another work group member asked that public health not be limited to the consideration of air quality, but also include land consumption and water quality.

There were some questions from work group members of whether the measures will be focused on the system level or focused geographically. Work group members supported the notion of measuring transportation investments in the places where specific needs exist. Metro staff responded saying the work will likely need to address both the system and geographic areas in order to understand the how future transportation investments support the desired outcomes of historically underrepresented communities.

Another work group noted there will be some interesting challenges with the exploration of the draft transportation equity measures as certain topics, such as transportation safety, can be approached from a less tangible means like behavior whereas others are more easily measured like infrastructure.

A comment was made to prioritize an accessibility measure which addresses access to good jobs.

Following on to the access to good jobs comment, another work group member expressed disappointment in the lack of discussion about workforce development in the draft transportation equity measures. The work group member continued with different workforce development examples which are connected to transportation, particularly around procurement. The work group member expressed good jobs as a topic which resonates with community as it improves overall household income and alleviates poverty conditions.

Another work group member noted that another intersecting issue of education is not being addressed as part of the transportation equity work.

A work group member asked to have involuntary displacement measure put into consideration for further exploration. Another work group member seconded the request with interest in knowing the tipping point with transportation investments and correlating displacement. Metro staff responded by asking that the work group take an action at the end of the discussion, in the form of a thumbs up/thumbs down, on whether to include involuntary displacement.

A work group member asked that if involuntary displacement measure is selected by the work group for further exploration and consideration, that it be rethought as community stabilization. The rationale for the comment was to suggest that a major transportation investment should not be discounted in an area with high need because of its potential for displacement.

Mr. Higgins asked the work group to vote on whether to include displacement/community stabilization on the list of measures for further exploration. The work group members voted and community stabilization was passed by work group members for further exploration. A small number of work group members expressed strong concern about the ability to measure displacement, the political palatability of the topic, and the resource allocation needs which would draw away from attending to developing the other measures.

Another work group member commented that other public agencies are researching the topic of displacement and not to lose faith in the possibility that displacement/community stabilization can be measured.

Another work group member asked for clarification regarding community stabilization vs. affordability.

There was some further discussion about how active transportation will be included in the draft measures. One work group member suggested calling active transportation out as part of public health.

The final comments of the discussion of the draft transportation equity measures continued to reiterate the necessity for staff to boil down the measures which matters to communities and elected officials. There was also a discussion of the significance of storytelling that is needed as part of this work. Work group members also emphasized that staff recognize the different factors which can influence the draft transportation equity measures. Because the measures are framed as outcomes, recognizing the influences help to frame the work broadly and not in isolation.

The work group also gave Metro staff approval to move forward with further exploring the draft transportation equity measures and to bring back a discovery memorandum to the June meeting with staff recommendations.

VII. POTENTIAL PRODUCTS

Due to time constraints, Ms. Cho proposed to the work group moving the Potential Products agenda item to the June work group meeting. The work group agreed to this proposal.

VIII. QUESTIONS AND ANSWERS/NEXT STEPS

Ms. Cho walked through a preview of the material to be covered at the June and September work group meetings. She also walked through the homework assignments for the work group. She asked between the May and June work group meeting, for members to complete the following "homework" assignments:

- Report back to your people what was discussed at the work group meeting and bring any feedback.
- Review the forthcoming memorandum about the 2018 RTP Performance Targets.
- Lastly come prepared at the next work group meeting to make recommendations on the draft transportation equity evaluation measures for the 2018 RTP investment package.

IX. <u>ADJOURN</u>

There being no further business, Ms. Cho and Mr. Higgins adjourned the meeting at 3:00 p.m.

Meeting summary prepared by: Grace Cho, Transportation Equity Project Manager

Meeting materials:

		Document	
Item	Торіс	Date	Description
1	Agenda	05/12/16	Meeting Agenda
2	Meeting Overview	05/12/16	Overview of what is covered in the packet
	Memorandum		of materials and anticipated for the
			meeting.
3	Work Group	02/18/16	Summary of transportation equity work
	Meeting 2		group meeting #2.
	Summary		
4	2018 RTP Status	04//16	Summary of 2018 RTP activities to date.
	Report		
5	Updated Schedule	05/12/16	Updated schedule of Transportation
			Equity work group meetings.
6	Federal, State, and	04/06/16	Background information about federal,
	Regional Policy		state, and regional policies which address
	Overview		transportation and social equity.
	Memorandum		
7	Memorandum	05/12/16	Overview of findings of community
	Synthesizing		priorities and process for defining draft
	Feedback,		transportation equity measures.
	Findings, and Draft		
	Measures		
8	Memorandum	05/12/16	Overview of potential products to result
	Outlining Potential		from the Transportation Equity work.
	Products		
9	Presentation	05/12/16	TE Work Group Presentation
10	Mtg. Evaluation	05/12/16	TE Meeting #3 Meeting Evaluation

Materials following this page were presented at the meeting.

Getting there



Transportation Equity Work Group Meeting #4 – Measures

Recommendations

Transportation Equity Work Group June 30, 2016

Grace Cho, Transportation Equity Project Manager



Agenda Review

- Welcome, Introductions, Updates
- Partner Updates
- □ Transportation Equity Measures
- Stretch Break
- □ Transportation Equity Measures (continued)
- Potential Products
- Q&A and Next Steps

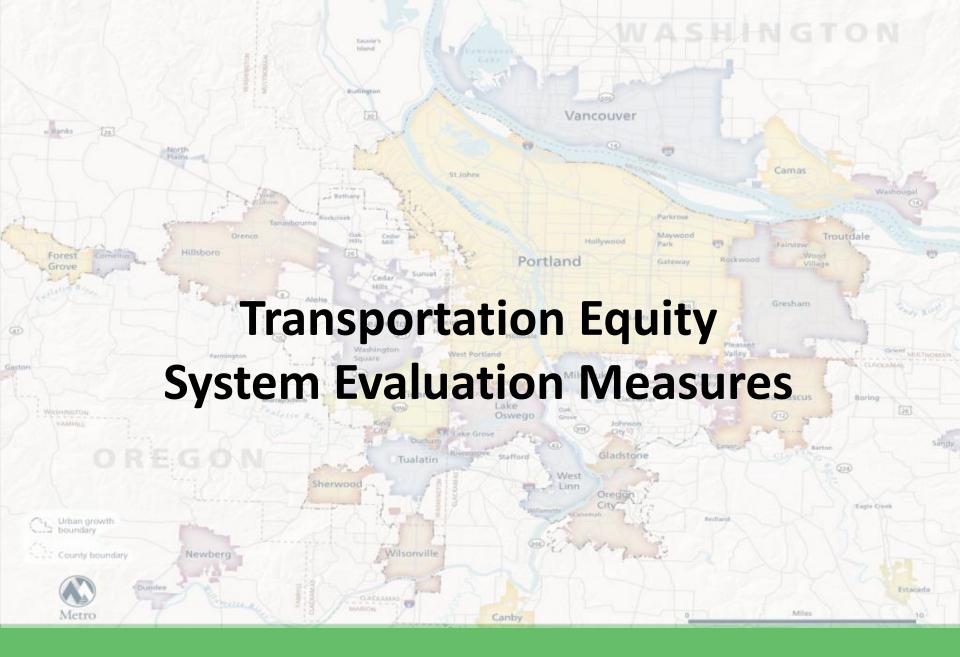


Introductions and Partner Updates



Tell us...

- Name and organization or community represented
- Who have you talked to and what feedback have you received?



Last time on...Transportation Equity Work Group

WORK GROUP CHARGE:

Provide technical input and make clear recommendations to Metro staff on:

- Demographic changes, trends, transportation challenges, and equity implications;
- Trends and priorities of historically underrepresented communities, older adults, and younger persons;
- Evaluation methods of transportation investments;
- Analysis results and findings; and
- Policy and investment strategy refinements and implementation.

Research Areas for Measures

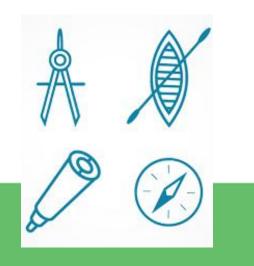
Theme	Sub-Themes					
Affordability	Housing a	nd		Transportation costs		
	transporta	ation o	costs			
Accessibility	Access to Infrastructure			Travel		Travel time
	places		options		and reliability	
Transportation	Infrastructure			Infrastructure disparities		
Safety						
Public Health	Disproportionate enviror			nmenta	land	health impacts
Transit*	Transit costs Transit ad		ccess Transit reliability		sit reliability	
Community	Involuntary Displacemen			t Mitig	ation	
Stabilization**						

*Transit was not a specific theme called out, but it was a prevalent theme throughout each theme. **Indicates work group added measure for further exploration.

Research Results

- Over 120 system evaluation and monitoring measures
 - Variation on approximately 20 system evaluation and monitoring measures
- Screened for system evaluation measures only





Screening Process (again)

- Four screening questions:
 - Can it tell us something from an equity perspective?
 - Can it inform the 2018 RTP performance targets or system evaluation?



- Does it align and inform other 2018 RTP focus areas?
- Can we pull it off in the timeframe?

Recommended Evaluation Measures

Community Priority	System Evaluation Measure				
Affordability	Combined Housing and Transportation Expenditure				
	Access to Jobs in a Given Commute Time				
Accessibility – Access to Places	Access to Existing Essential Destinations OR Existing Daily Needs in a Given Travel Time				
	Transit Access Disadvantage				
Accessibility – Infrastructures	Intersection of Transportation Investments, Timing, and Communities				
Transportation Safety – Infrastructure	Safety Investments on the High Injury Network				
Transportation Safety – Exposure	Non-Interstate Vehicles Miles Traveled Exposure				

Pending Evaluation Measures

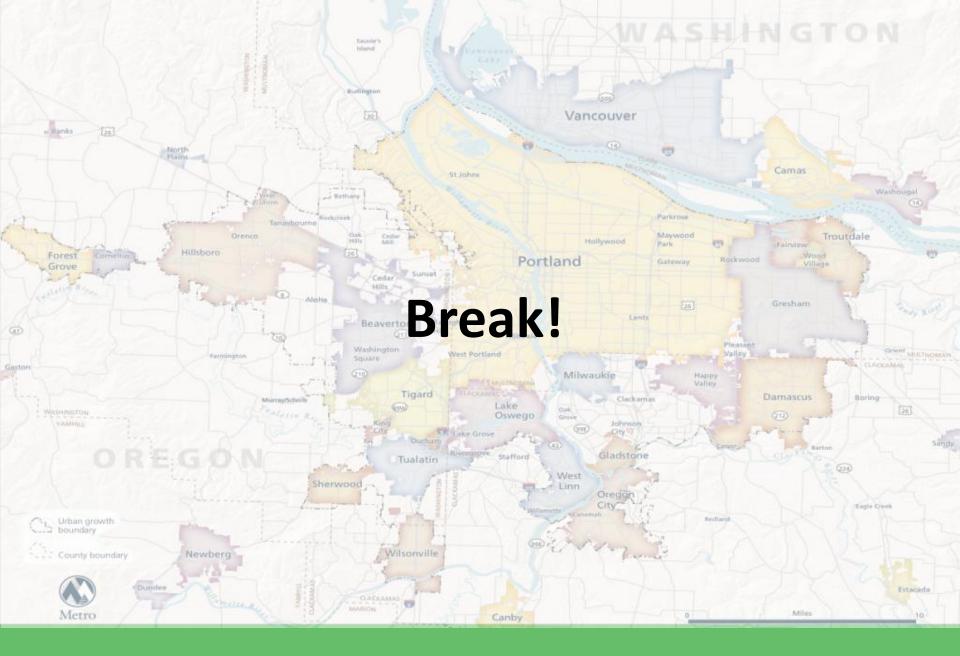
Community Priority	System Evaluation Measure
Public Health – Air Quality	Vehicles Miles Traveled/Emissions Exposure
Public Health — Environmental Impacts	Intersection of Transportation Investments, Resource Habitats and Communities
Public Health – Transportation and Health Disparities	Assessing Directional Change
Public Health – Environmental and Health Impacts	Assessing the Magnitude of Transportation Impact to Public Health (Burden of Disease and Premature Death)

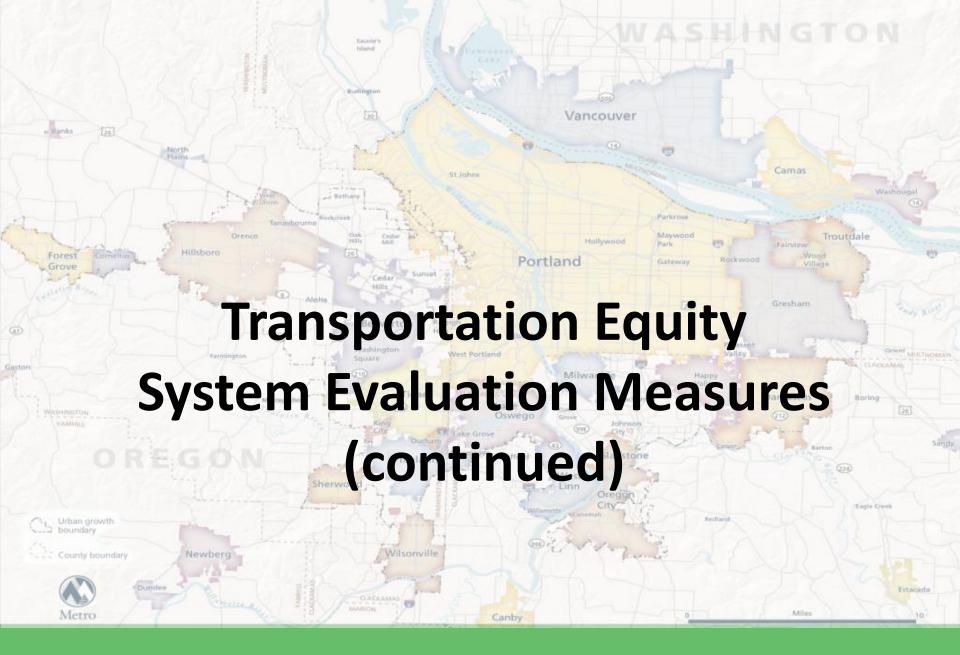




Key Assumptions

Assumption Area	Brief Description				
System Evaluation	All evaluation measures can compare the base year conditions to proposed future year projected conditions. Measures can reflect differences between community geographies				
Analysis Years	Base Year – 2015 Interim Year – 2025 (Proposed) Horizon Year – 2040				
Land Use	Adopted land use, population, and employment forecast (2016)				
Key community geographies	Define places with greatest concentration of historically underrepresented communities, older adults, and youth; this may get separated by forecasting ability				
Consideration of Communities of Color and LEP communities	Communities of color and LEP populations will be evaluated mainly for the base year conditions and the interim year projected conditions.				





In Need of Resolution

Known areas in need of resolution (to-date)

- Pending partnership on public health measures
 - Potential redundancy of certain measures
- Define community geographies
- Define family wage jobs
- Define transit service for accessibility evaluation
- Define essential destinations or daily needs

Fitting this work into Performance Measures

- Help with refining:
 - Affordability
 - Clean Air
 - Access to Daily Needs
 - Basic Infrastructure/System Completion
- Messages and recommendations to 2018 RTP system evaluation measures and/or targets for September

For Future Conversations

Theme	Sub-Themes					
Affordability	Housing a	nd		Transportation costs		
	transporta	ation o	costs			
Accessibility	Access to	ccess to Infrastructure				Travel time
	places	aces		option	S	and reliability
Transportation	Infrastructure			Infrastructure disparities		
Safety						
Public Health	Disproportionate enviror			nmenta	land	health impacts
Transit*	Transit costs Transit ad		ccess	ess Transit reliability		
Community Stabilization**	Involuntary Displacemen			t Mitig	ation	

Red indicates the topic is better served as a monitoring measures or policy refinement.

*Transit was not a specific theme called out, but it was a prevalent theme throughout each theme. **Indicates work group added measure for further exploration.

Discussion Questions

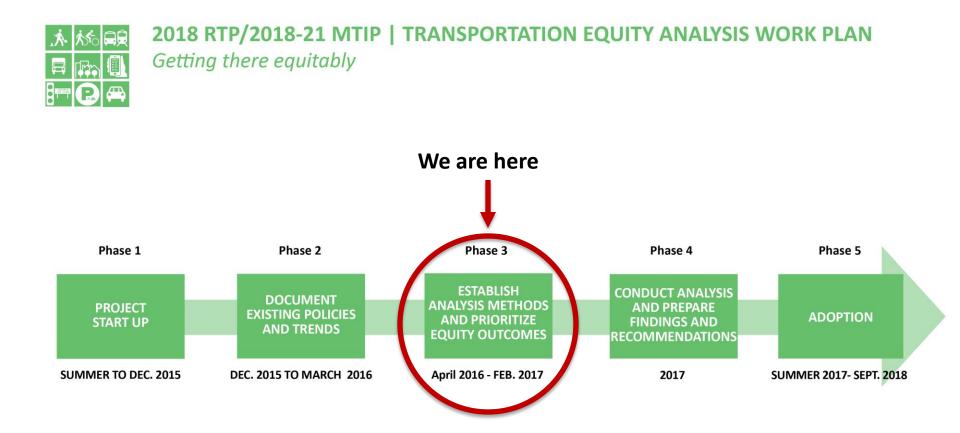
 Do the evaluation measures continue to reflect the desired outcomes communities seek from the transportation system?

• Are the staff recommendations on the right track? Are there concerns? Method concerns?

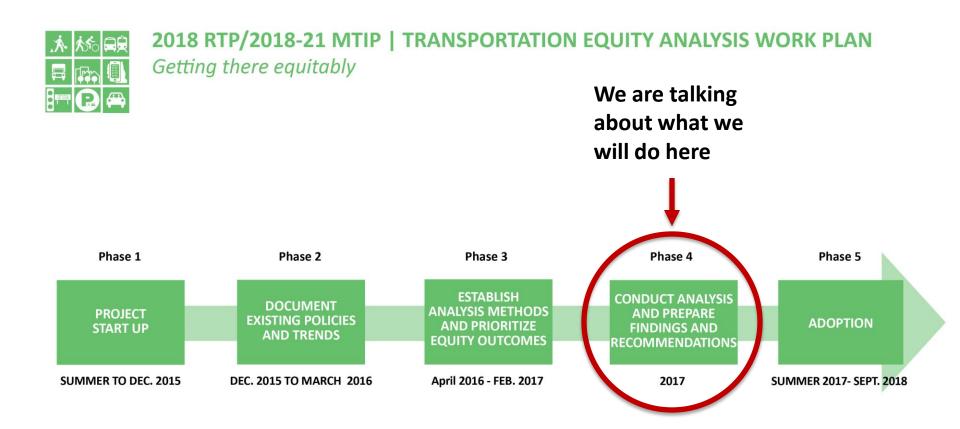
• If measures had to be reduced, which recommended measures would remain?



Transportation Equity Timeline

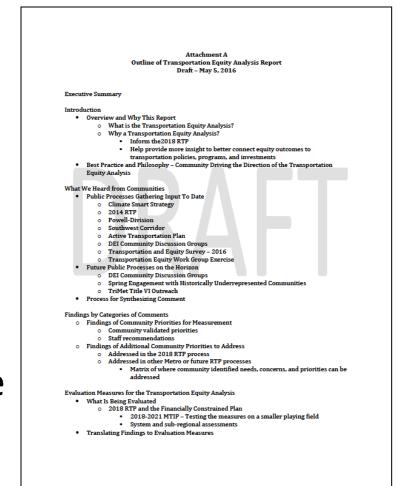


Transportation Equity Timeline



Proposed Products

- Transportation Equity Analysis Report
- 2018 RTP Performance
 Target and Measures
 Refinement
 Recommendations*
- 2018 RTP Policy Language Refinement Recommendations



*Performance targets and measures to be discussed at the June work group meeting.

Proposed Products

- **Policy Language Refinements** Recommendations for the RTFP and/or UGMFP
- **Recommendations for a Short List of Actions**
- Title VI and Environmental Justice Compliance Documentation RECOMMENDED TOOLBOX OF POSSIBLE ACTIONS December 9, 2014 TOOLBOX OF POSSIBLE ACTIONS (2015-2020)



BACKGROUND | The Climate Smart Communities Scenarios Project responds to a state mandate to develop and implement a strategy to reduce greenhouse gas emissions from cars and small trucks by 2035. Working together, community, business and elected leaders developed a Climate Smart Strategy that exceeds the mandate and will contribute to creating healthy and equitable communities and a strong economy The strategy relies on implementing the plans and visions that have already been adopted by communities and the region, along with anticipated advancements in cleaner, low carbon fuels and more fuel-efficient vehicles. The strategy does more than just meet the target. It supports many other local, regional and state goals, including clean air and water, more transportation choices, improved access to jobs and services educed delay on the transportation system, and reduced travel and healthcare costs for households and businesses

No Metro Building on existing local, regional and statewide activities and priorities, the project partners have developed an advisory toolbox of actions with meaningful steps that can be taken to implement the Climate Smart Strategy. The actions support implementation of adopted local and regional plans and, if taken, will reduce greenhouse gas emissions and minimize the region's contribution to climate change in ways that support community and economic development goals. The toolbox builds on the research, analysis, community engagement and discussion completed during the past four years and was developed with the recognition that some tools and actions may work in some locations but not in others. It emphasizes the need for many diverse partners to work together to begin implementation of the Climate Smart Strategy and that each partner retains flexibility and discretion in pursuing the strategies most appropriate to local needs and conditions. Inclusion of an action was primarily driven by advisory committee and public feedback.

HOW TO USE THE TOOLBOX | The toolbox is focused on possible near-term (within the next 5 years) actions that the Oregon Legislature, state agencies and commissions, Metro, cities and counties and special districts are encouraged to take to begin implementing the broader policies and strategies identified in the Climate Smart Strategy. The near-term actions include a combination of existing actions and new ideas and approaches that will lay the foundation for longer term action. The toolbox does not require Metro. local governments, special districts, or state agencies to adopt any particular policy or action, and is intended to allow for flexibility so any action can be tailored to best support local, regional and state plans and visions. The toolbox is intended to be a living document, subject to further review and refinement by local governments, ODOT, TriMet and other stakeholders as part of regularly-scheduled updates to the Regional Transportation Plan to reflect new information and approaches to reducing greenhouse gas emissions from land use and transportation.

Local, state and regional partners are encouraged to review the toolbox and identify actions they have already taken and any new actions they are willing to consider or commit to in the future. Updates to local comprehensive plans and development regulations, transit agency plans, port district plans and regional growth management and transportation plans present ongoing opportunities to consider implementing the actions recommended in locally tailored ways. Medium and longer-term actions will be identified during the next update to the Regional Transportation Plan (scheduled for 2016-18).

	TOOLBOX OF POSSIBLE ACTIONS (2015-2020)							
				WHAT CAN SPECIAL DISTRICTS DO? (e.g., transit providers, Port districts, parks providers, etc.				
L. Implement the 2040 Growth	Immediate (2015-16)	Immediate (2015-16)	Immediate (2015-16)	Immediate (2015-16)				
Concept and local adopted land	Reattorice Oregon Brownfield Redevelopment Fund Support brownfield redevelopment-reliefed legislative proposals programs to ensure communities have a ful engand programs to ensure communities have a ful engand opportunities for housebook of modest means to live Colser to werk, services and transit means to live Colser to be the total visions. Near-term (2017-20) Seek opportunities to leave local visions of Provide Integrade Induffi and Incentives to local Provide Incensed Induffi and Incentives to local visions.	Contrue implementing 2006 growth Concept Implement policies and investments that align with regional and community visions to focus growth in elicipance centres, control of housing policies and programs to ensure communities have a full range of tools available to meet the housing needs of all residents and increme levels and expand opportunities for households of metry and the second of the second second of the destination of the dest to vol. services and expand opportunities of households of metry and the second of the second second destination of the dest to vol. services and expanding and the second second second destinations of the second second second destinations of the second second second develop legislate proposal and encrease resources available in the region for brownfield Metritia second second second second destinations and the second second second destinations and the second second second destination of the second second second develop legislate proposal and encrease resources values in the region for brownfield Metritia second second second second destinations and the second second second destination and destination and destination and destination destination and destination and destination and destination destination and destination and destination and destination destination and destination and destination and destination and destination and destination and destination and destination and destination and destinatin and destination and destination and destination and destination	Continue implementing adopted and use plans Implement policies and investments that align with community visions, focus prowth in designated centres, corridors and employment designated centres, corridors and employment designated centres, corridors and employment designated centres, corridors and employment have a full range of tools available to meet the housing needs of all residents and income levels and expand opportunities for households of medications of the vision for any strength medications of the vision of the strength of the vision medications of the vision of the strength of the vision medications of the vision of the vision of the vision medications of the vision of the vision of the vision medications of the vision of the vision of the vision medications of the vision of the vision of the vision medications of the vision of the vision of the vision medications of the vision of the vision of the vision medications of the vision of the vision of the vision medications of the vision of the vision of the vision medications of the vision of the vision of the vision medications of the vision of the vision of the vision of the vision medication of the vision	 Implement policies and investments that sign with community vision, focus growth in designated centers, control on a employment area and programs to ensure communities have a bill range of tools vaniable to meet the housing needs of all residents and income levels and expand opportunities for housiable of meet means to live clean to every, services and transit housing the clean to every, services and transit and the region beam for a service of the too of the service of the service of the service of the Sector term (2017-20) Beak toportunities to leverage local, regional, state and federal funding to achieve local vision and the region's desired outcomers with meaking bowened in desired on every service with meaking bowened with disk development regards 				

Discussion Questions

• Questions about the potential products?

Anything missing (new or refinements to existing)?



Questions and Answers

 Are there any additional questions, comments, or clarifications around the materials discussed today?





Next Steps

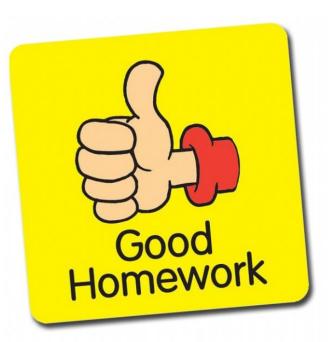
- June Recommend/confirm draft evaluation measures, start methods and performance target discussions
- July Work session on methodology for the system evaluation measures
- September Defined evaluation methods, recommend performance targets, and inform partners
- November Continued performance targets discussion, work group updates

Next Steps

September Agenda Preview (tentative)

- Report back from summer engagement activities
- Recommended methodology for transportation equity system measures
- Recommended refinements to 2018 RTP performance targets
- Continued Potential Products Discussion

Homework



- 1. Report back to your people!
- 2. Participate in the July work session optional
- 3. Come prepared to the September work group meeting to discuss performance targets and system evaluation measures methodology.