

# Agenda



**Metro**

600 NE Grand Ave.  
Portland, OR 97232-2736

Meeting: 2018 RTP Transportation Equity Work Group Meeting #10  
Date: Thursday, November 30, 2017  
Time: 1:00 p.m. to 4:00 p.m.  
Place: Metro Regional Center, Room 501

- 1:00 p.m. Welcome and Introductions
- 1:10 p.m. Partner Updates  
*Who have you talked to about this work? What feedback have you heard?*
- 1:25 p.m. 2018 RTP Transportation Equity Analysis – Results and Findings  
*Provide an overview of the results from the transportation equity system evaluation. Discuss preliminary findings and recommendations.*
- 2:50 p.m. Break
- 3:00 p.m. 2018 RTP Transportation Policy Framework – Proposed Revisions  
*Provide an overview of the 2018 RTP policy framework proposal based on work group discussions from June and September. Discuss the policy framework proposal for transportation equity.*
- 3:50 p.m. Next Steps
- 4:00 p.m. Adjourn

Meeting Packet	Next Meeting
<ul style="list-style-type: none"> <li>• Agenda</li> <li>• Memorandum – 2018 RTP Transportation Equity Analysis – Results and Preliminary Findings</li> <li>• Appendix I – 2018 RTP Transportation Equity Evaluation – Evaluation Methods Background, Tools, and Assumptions</li> <li>• Attachment III – Maps of Historically Marginalized Communities</li> <li>• Memorandum – 2018 RTP – Proposed Policy Framework for Equity</li> <li>• Attachment 1 – Summary of 2014 RTP Policy Framework</li> <li>• Attachment 2 – 2014 RTP Goals and Objectives</li> <li>• Meeting Summary – Transportation Equity Work Group – September 19, 2017</li> <li>• Meeting Summary – Transportation Equity Work Group – June 28, 2017</li> </ul>	<p><b>Thursday, January 11, 2018</b> 2018 RTP Transportation Equity Work Group Meeting # 11 <b>Final Work Group Meeting</b> 9:00 a.m. – 12:00 p.m., Room 401 Metro Regional Center</p>
<p>Forthcoming Attachments:</p> <ul style="list-style-type: none"> <li>• Attachment II – 2018 RTP Project List and Transportation Equity Evaluation Measure Crosswalk</li> </ul>	

<ul style="list-style-type: none"><li>• Transportation Equity Analysis – Maps for Accessibility and Safety Evaluation Measures</li><li>• List of flagged 2018 RTP projects for monitoring for habitat impact</li></ul>	
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# Memo



600 NE Grand Ave.  
Portland, OR 97232-2736

Date: Thursday, November 30, 2017  
To: Transportation Equity Work Group and Interested Parties  
From: Grace Cho, Associate Transportation Planner  
Subject: 2018 RTP Transportation Equity Evaluation – Results and Preliminary Findings

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## Introduction

As part of the 2018 RTP, a Transportation Equity Assessment is conducted to look at how well the region's planned long-range transportation investments will perform relative to equity goals and demonstrate compliance with regional responsibilities toward federal civil rights laws as they relate to transportation planning. The assessment takes a programmatic look at the region's long-term investment strategy, to determine whether: 1) progress is being made towards desired equity outcomes expressed by historically marginalized communities; 2) to determine whether the financially constrained long-range transportation investment strategy, in totality, is disproportionately impacting historically marginalized communities and if mitigation measures are necessary; and 3) continue to learn from the assessment to propose technical refinements for future transportation equity evaluations.

In a literature review across the nation, equity assessments at a program scale are few and far between. Nonetheless, advocacy and think-tank organizations have put forward best practices to guide and formulate the methods for conducting a transportation equity assessment. The 2018 RTP Transportation Equity Assessment does its best to incorporate and reflect the best practices in the field in measuring equity within the context of the transportation system. The following memorandum discusses the draft results and initial staff findings for the 2018 RTP investment strategy. Metro staff seeks gathering feedback on the draft results and initial staff findings to help shape the narrative to take forward to technical and policy committees in December 2017 and January 2018. Additional background documentation on the 2018 RTP transportation equity system evaluation are attached to this memorandum as Attachments X – X.

## Context for the 2018 RTP Transportation Equity System Evaluation

The 2018 RTP transportation equity evaluation looks at how the region's proposed long-term transportation investment strategies are likely to affect outcomes which historically marginalized communities identified as priority issues to address in the transportation system, which were accessibility, affordability, safety, and environment.<sup>1</sup> For the evaluation of each 2018 RTP investment strategy, the entire package of investments was evaluated in combination to look at how these investments interacted to advance outcomes historically marginalized communities identified.<sup>2</sup>

To provide context for viewing the results of the 2018 RTP transportation equity analysis, the following tables provide

### Transportation Equity Analysis Primer

The analysis purpose is to see whether the RTP investment scenarios advance accessibility, safety, and environmental outcomes for historically marginalized communities at a greater rate than the overall region.

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<sup>1</sup> As recommended as part of the September meeting of the Transportation Equity work group, the affordability analysis of the 2018 RTP investment strategies is being deferred to the 2023 RTP in order to build out the evaluation tool and in the interim, results from the Center for Neighborhood Technology will be reported out as part of the monitoring metrics.

<sup>2</sup> Individual projects were not evaluated as part of 2018 RTP transportation equity system evaluation.

information about the 2018 RTP investment scenarios and the population and employment growth assumptions.

*Table 1. Contextual Population Information for the 2018 RTP Transportation Equity Assessment*

<b>Geography</b>	<b>2015</b>	<b>2027 Projected</b>	<b>2040 Projected</b>
Region-wide (Metropolitan Planning Area) <sup>3</sup>	1,605,672 <sup>4</sup>	1,904,815	2,178,848
Households	636,467	776,202	896,451
Employment	895,094	1,071,017	1,240,653
Historically Marginalized Communities	1,058,220	1,319,254	1,510,591
Focused Historically Marginalized Communities	630,388	746,662	852,112
People of Color	697,457	789,225	869,587

The 2018 RTP system evaluation assessed three investment strategies: 1) a RTP 10-year investment strategy; 2) a 2040 RTP financially constrained investment strategy; and 3) a 2040 RTP strategic investment strategy. Each investment strategy builds on the previous. For example, the 2040 RTP financially constrained strategy includes the RTP 10-year investment strategy. The RTP 10-year investment strategy and the 2040 RTP financially constrained represents those transportation priorities which are expected to be completed by 2027 and 2040 respectively under reasonable expected revenues. The 2040 RTP strategic represents those investments to address all the region's transportation gaps and deficiencies whether or not reasonably expected revenue is available. A summary of the investment level and type of investment are shown in Table 2.

In addition to the three investment strategies which were evaluated, two additional scenarios were developed for the purposes of comparisons. These include: 1) the 2015 base year scenario; and 2) a 2040 no-build scenario. The 2015 base year scenario represents transportation projects completed and open for service as of 2015. The no-build scenario represents a future condition where no further investment is made into the region's transportation system aside from those which are fully funded as of 2017.

*Table 2. Summary of 2018 RTP Investments in Each of the Scenarios Under Evaluation*

	<b>10-Year Strategy (2018-2027)</b>	<b>Financially Constrained RTP (2018-2040)</b>	<b>Strategic RTP (2018-2040)</b>
Amount of Investment <sup>5</sup>	\$6.2 billion	\$14.7 billion	\$21.3 billion
Percentage of Total 2018 RTP Investment*	29.4%	69.2%/100%	100%/N/A
Number of Projects	374	762	1057

<sup>3</sup> Region-wide is defined as the metropolitan planning area (MPA) boundary. An interactive map gallery which includes the MPA can be found at:  
<http://drcmetro.maps.arcgis.com/apps/webappviewer/index.html?id=d83c2455ea10433bb2d6901dd1f4f564>

<sup>4</sup> For consistency purposes, this represents the population estimates in the 2016 adopted landuse forecast. This number differs slightly from the decennial census population counts which as of 2010 the region was just over 1.5 million people.

<sup>5</sup> Reflects 2016 dollars.



	<i>Level of Investment, Number of Projects, &amp; Percentage by Investment Category</i>								
	\$	#	%	\$	#	%	\$	#	%
Active Transportation	\$642 M	133	10%	\$1.5 B	293	10%	\$2.5 B	393	12%
Freight	\$132 M	20	2%	\$213 M	36	1%	\$462 M	48	2%
Other	\$5 M	1	<1%	\$15 M	3	<1%	\$53 M	5	<1%
Roads and Bridges	\$1.2 B	149	20%	\$2.7 B	309	19%	\$4.6 B	432	22%
Throughways	\$650 M	14	10%	\$4.6 B	24	31%	\$6.1 B	38	29%
Transit	\$3.3 B	29	54%	\$5.2 B	46	36%	\$6.3 B	71	30%
TSMO/TDM/TOD	\$179 M	28	3%	\$361 M	51	2%	\$754 M	70	4%

*\*Reflects the total cost of the 2018 RTP as the federally required financially constrained RTP.*

### Results of the 2018 RTP Transportation Equity System Evaluation

Table 3. illustrates a summary of how the 2018 RTP transportation equity system evaluation performs across the outcomes identified for historically marginalized communities.

*Table 3. Summary of Transportation Equity System Evaluation Measures Results – At a Glance*

Primary RTP Goal	Measure	10-Year			2040 FC			2040 Strategic		
		H	F	P	H	F	P	H	F	P
Economy	Access to Jobs	TBD*								
Expand Transportation Choices	Access to Community Places	TBD*								
Expand Transportation Choices	Access to Travel Options – Connectivity and Completeness	TBD*								
Enhance Safety and Security	Share of Safety Projects									
Enhance Safety and Security	Exposure to Non-Freeway Vehicle Miles Traveled	TBD *								
Promote Environmental Stewardship	Habitat Impact									
Public Health	Clean Air <sup>6</sup>									
Economy	Affordability	--			--			--		

**Green = Target achieved. Yellow = performance moving in desired direction Red = Performance moving in wrong direction from desired outcome**

*\*To be discussed with the work group before making an overall finding.*

<sup>6</sup> Due to the limitation of the emissions modeling tool, emissions and air pollution is unable to be reported at a geographic scale smaller than region wide. Therefore results reported are not specific to the locations of historically marginalized communities. As recommended at the September work group meeting, the technical improvements are recommended for the clean air measure to be implemented by the 2023 RTP. Results for clean air will be brought forward with broader 2018 RTP system evaluation results.

## **2018 RTP Transportation Equity System Evaluation Results – Discussion and Findings**

A key focus of the 2018 RTP transportation equity analysis is to look whether there are gains in advancing the accessibility, safety, and environmental outcomes and whether those gains are outpacing the region in historically marginalized communities. Data has shown there are disparities experienced by marginalized communities as it relates to the transportation system and gains alone or being on pace with the region may not be enough to make progress towards addressing the disparities gap. Therefore, in the discussion of the results of several of the 2018 RTP transportation equity system evaluation measures, findings are being framed around the investment strategy performance in historically marginalized communities relative to the region. The desire is to see the 2018 RTP investment strategies advancing outcomes in these communities at a greater rate than as the region overall, even if the region and the historically marginalized communities are seeing positive results.

### Access to Community Places

#### **Evaluation Measure Summary**

To look at how many existing community places (e.g. schools, libraries, grocery stores, pharmacies, medical facilities, general stores, etc.) can be reached within a certain travel time window for transit (30 minutes), bicycling (15 minutes), and walking (20 minutes) region wide and in historically marginalized communities (in aggregate) and understand if the 2018 RTP investment strategies are further increasing access to community places for historically marginalized communities.

### Preliminary Findings

- The 2018 RTP 10-year investment strategy tends to perform at a greater rate for historically marginalized and communities of color compared to the region in increasing the number of community places which can be reached by transit, biking, and walking.
  - But in the 2018 RTP 10-year investment strategy access to community places increases or decreases based on the type of community place trying to be reached (i.e. medical services or a grocery store or a library) and community. For example, focused historically marginalized communities see decreases in access to medical services by transit (off-peak), biking, and walking, but see an increase in access to food.
- The 2018 RTP financially constrained and 2018 RTP strategic investment strategies tends keep the rate of access steady access to community places in biking, and walking.
  - The exception is in the 2018 RTP strategic investment strategy where historically marginalized communities see slight decrease in access relative to the region to food by a 20 minute walk.
- The 2018 RTP financially constrained investment strategy increases access to community places at a greater rate for focused historically marginalized communities and communities of color compared to the region during the off-peak transit.
  - The increase ranges from 1% - 4% in access to community places within 30 minutes by transit during the off-peak and gets better in reaching medical facilities.
- In the 2018 RTP strategic investment strategy, the areas with greater density of people of color, people in poverty, and language isolation (a.k.a. focused historically marginalized

communities) and communities of color tend to see increased rate of access to community places by transit and increases tend to be different between the peak and off-peak period.

- In particular access to community places overall (includes food, medical, civic, and general stores) increases by 3% - 7% by transit, depending on peak or off-peak period travel.
- Historically marginalized communities tend to see decreased rate of access to community places relative to the region in the 2018 RTP financially constrained and strategic investment strategies.
  - But in general access to community places is increasing overall.
- The mixed results observed in access to community places make it difficult to make a determination as to whether there is a disproportionate impact on historically marginalized communities.
- The travel demand model may not be the strongest analytical tool for understanding accessibility for bicycling and walking for time-based travel sheds because investments may increase more active travel.

*Table 4. Access to Community Places*

<b>All Community Places</b>												
	<b>RTP 10-Year (2018-2027)</b>				<b>RTP Financial Constrained (2018-2040)</b>				<b>RTP Strategic (2018-2040)</b>			
	<b>T-P</b>	<b>T-OP</b>	<b>Bike</b>	<b>Walk</b>	<b>T-P</b>	<b>T-OP</b>	<b>Bike</b>	<b>Walk</b>	<b>T-P</b>	<b>T-OP</b>	<b>Bike</b>	<b>Walk</b>
Region	25%	43%	1%	2%	26%	27%	0%	1%	43%	51%	0%	1%
HMC	29%	44%	5%	5%	25%	24%	0%	1%	41%	47%	0%	1%
FHMC	26%	42%	0%	0%	29%	30%	0%	1%	46%	57%	0%	1%
POC	31%	48%	2%	3%	28%	30%	0%	1%	46%	58%	0%	1%
<b>Access to Food</b>												
	<b>RTP 10-Year (2018-2027)</b>				<b>RTP Financial Constrained (2018-2040)</b>				<b>RTP Strategic (2018-2040)</b>			
	<b>T-P</b>	<b>T-OP</b>	<b>Bike</b>	<b>Walk</b>	<b>T-P</b>	<b>T-OP</b>	<b>Bike</b>	<b>Walk</b>	<b>T-P</b>	<b>T-OP</b>	<b>Bike</b>	<b>Walk</b>
Region	26%	45%	0%	0%	26%	29%	0%	1%	44%	55%	0%	2%
HMC	30%	47%	3%	4%	24%	27%	0%	1%	41%	52%	0%	1%
FHMC	25%	49%	1%	2%	26%	30%	0%	1%	43%	56%	0%	2%
POC	31%	44%	-1%	-1%	25%	30%	0%	1%	43%	58%	0%	2%
<b>Access to Medical Services</b>												
	<b>RTP 10-Year (2018-2027)</b>				<b>RTP Financial Constrained (2018-2040)</b>				<b>RTP Strategic (2018-2040)</b>			
	<b>T-P</b>	<b>T-OP</b>	<b>Bike</b>	<b>Walk</b>	<b>T-P</b>	<b>T-OP</b>	<b>Bike</b>	<b>Walk</b>	<b>T-P</b>	<b>T-OP</b>	<b>Bike</b>	<b>Walk</b>
Region	25%	43%	2%	3%	26%	25%	0%	1%	44%	50%	0%	1%
HMC	28%	44%	6%	6%	24%	22%	0%	1%	41%	45%	-1%	1%
FHMC	24%	38%	0%	1%	28%	28%	0%	1%	46%	57%	0%	1%
POC	29%	49%	3%	4%	27%	29%	0%	1%	47%	57%	0%	1%

*T-P = Transit Peak Period; T-OP = Transit Off-Peak Period*

*Green = Performance greater than the region*

## Discussion

### *2018 RTP 10-Year Investment Strategy (2018-2027)*

In the 2018 RTP 10-year investment strategy, access to community places overall tends to perform well in increasing the number of community places historically marginalized communities and communities of color can reach by transit, bicycling, and walking during the peak and off-peak period compared to the overall region. While the region saw increased access to community places (combined) of 43% more places by transit, 1% more by bicycling, and 2% more by walking, historically marginalized communities and communities of color saw increases of 44% and 48% by transit, 5% and 2% by bicycle, and 5% and 3% by walking, respectively. However, in focused historically marginalized communities, which represent those communities with a higher density of people of color, people in poverty, and language isolation, there is a slight decrease in the number of community places which can be reached by transit (42%), bicycling (0%) and walking (0%). The decrease in access to community places varies a bit by category. For example, access to the number of grocery stores and medical facilities which can be reached within a certain timeframe (30 minutes for transit, 15 minutes for bicycling, and 20 minutes for walking) during peak and off-peak period across transit, bicycling, and walking decreased for those areas with a higher density of people of color, people in poverty, and language isolation, but access to places like pharmacies, hardware stores, schools, libraries, banks or general stores like Fred Meyer increased specifically by transit regardless of peak or off-peak period.

#### *2018 RTP Financially Constrained Investment Strategy (2018-2040)*

In the 2018 RTP financially constrained strategy, areas with a greater density of people of color, people in poverty, and language isolation and communities of color tend to see greater access to community places by transit in the peak and off-peak period, with the exception of accessing grocery stores during the peak period. Additionally, some under performance in transit access to community places is observed in historically marginalized communities in aggregate in both the peak and off-peak periods. During the peak period, performance in accessing grocery stores by transit is less than the overall growth of the region in areas where there is a greater rate of historically marginalized communities, focused historically marginalized communities, and communities of color.

In terms of the access to community places by walking with the 2018 RTP financially constrained plan, what is observed is that access by walking for historically marginalized communities, communities of color, and places where there is a greater density of these communities and language isolated communities tend to see the same rate of access to these places like libraries, pharmacies, schools, medical services and grocery stores. Access to community places by bicycling with the 2018 RTP financially constrained strategy also see the same rate of access for historically marginalized communities, focused historically marginalized communities, and communities of color relative to the region.

#### *2018 RTP Strategic Investment Strategy (2018-2040)*

In the 2018 RTP strategic investment strategy, access to community places grows quite significantly for transit. Within a 30 minute transit trip, the region has gone from seeing 26% (peak) or 27% (off-peak) of the community places reached to 43% (peak) and 51% (off-peak) with the strategic investments. While the 2018 RTP strategic investment strategy significantly increases access by transit, mainly those areas with a greater density of people of color, people in poverty, and language isolation and communities of color tend to see a greater rate of access to community places by transit in the peak and off-peak period than the region. Some of the accessibility by transit does underperform relative to the region specifically during the transit peak period when trying to get to grocery stores for focused historically marginalized communities and communities of color. What is

also interesting that in general, historically marginalized communities see not as much access to community places compared to the region regardless when looking across different community place subsets (i.e. specifically looking at access to grocery stores or medical services) or all community places. Lastly, similarly to the 2018 RTP financially constrained investment strategy, access by bicycling tends to be unchanged from the region with the exception of slightly less access in historically marginalized communities compared to the region to medical facilities. A similar pattern is observed with access to community places by walking where access remains unchanged from the region with the exception of access to food in historically marginalized communities.

### *Key Thoughts and Observations*

A key assumption to highlight in the access to community places system evaluation is that the land use forecast does not spatially allocate for community places (e.g. libraries, grocery stores, medical facilities, etc) to a small enough geography to measure increased access as a result new capital improvements to the regional transportation system. Therefore, unlike with the compendium evaluation measure – access to middle and low-wage jobs – the investments are not being realized against the likely growth in the number of these community places emerging because of population and household growth. Essentially, the access to community places was measured based on the existing locations of community places. The benefit in conducting the evaluation using existing community places helped to isolate the performance of the investment strategy in terms of access, but it is also not a full picture of the access because the future investment strategy were unable to recognize the likelihood of growth of these community places as a result of population growth and demand, especially in existing less developed areas expected to grow. There is an underlying assumption that access will be further realized with the anticipation of new community places opening for service.

Another element to consider is access to community places is how to interpret the results for walking and bicycling. Because the accessibility measure is time-based, improvements to the active transportation system which encourages further or longer travel to get to a separated or protected facility makes it appear there is under performance of the investment program because more time is spent in active travel. Recognizing this unique challenge of the travel demand model, increases or decreases in access to community places or jobs can be viewed in a positive manner and that the investment program is making some impact.

Overall, the three 2018 RTP investment strategies do provide an increase in access to community places in an absolute sense, but again the purposes of the transportation equity analysis is to look at the performance in historically marginalized communities, focused historically marginalized communities, and communities of color relative to the region to assess a sense of “fairness” for historically marginalized communities.

In general, each of the 2018 RTP investment strategies see some underperformance in access to community places relative to the region in different profile types of historically marginalized communities (i.e. in areas where there is a greater density or higher than the regional rate of communities of color). There could be some very reasonable rationale to the underperformance relative to the region. For example, in the decrease in transit access to community places in 2040 is likely attributed to traffic congestion, especially during the peak period where it is harder to get to as many places in a 30 minute travel window. But what is interesting in the 2018 RTP financially constrained scenario is that for transit, focused historically marginalized communities and communities of color saw a greater rate of access to medical services or civic places, like schools,

libraries, etc. Some of the rationale may relate to the population density of the focused marginalized communities, but nonetheless, the projected population and employment growth in the region by 2040 means there will be more trips taken and congestion will be a challenge to the entire transportation system.

## Access to Jobs

### **Evaluation Measure Summary**

To look at how many jobs, particularly low and middle-wage jobs can be reached within a certain travel time window for transit (45 minutes), bicycling (30 minutes), and walking (20 minutes) region wide and in historically marginalized communities (in aggregate) and understand if the 2018 RTP investment strategies are further increasing access to jobs for historically marginalized communities.

### Preliminary Findings

- All three of the 2018 RTP investment strategies show variable results in access to middle and low-wage jobs by transit, bicycling, and walking for historically marginalized communities, focused historically marginalized communities, and communities of color.
  - In general job access increases overall because of the region's land use strategy and local land use plans assumes an increase in population and employment growth by 2040. However, the rate of increased job access varies among the RTP investment strategies where in certain circumstances (e.g. historically marginalized communities access to middle-wage jobs by transit during the peak travel period) underperform relative to the region rate of access.
- The 2018 RTP 10-year investment strategy sees the greatest variability of increases and decreases in access relative to the region to low and middle-wage jobs by transit, bicycling, and walking.
  - Historically marginalized communities tend to see consistently a greater rate of access to low and middle-wage jobs relative to the region, where areas with greater density of people of color, people in poverty, and language isolation (a.k.a. focused historically marginalized communities) see underperformance relative to the region in accessing low and middle-wage jobs by transit, bicycling, and walking within a given travel time.
- The 2018 RTP financially constrained and 2018 RTP strategic investment strategies tends keep the rate of access to low and middle-wage jobs for all marginalized communities by biking, and walking steady.
  - The exception is in the 2018 RTP strategic investment strategy where focused historically marginalized communities see slight increase relative to the region in access to low-wage jobs by a 20 minute walk.
- Access to low and middle-wage jobs by transit in the 2018 RTP financially constrained and 2018 RTP strategic investment strategies in historically marginalized communities, focused historically marginalized communities, and communities of color varies in terms of increasing at a greater rate relative to the region or the rate of access decreasing relative to the region.
  - Focused historically marginalized communities tend to see more consistent increases in access to low and middle-wage jobs by transit relative to the region in the long-term investment strategies.
- The travel demand model may not be the strongest analytical tool for understanding accessibility for bicycling and walking for time-based travel sheds because investments may increase more active travel.

Table 5. Access to Low, Middle Wage and All Jobs

<b>All Jobs</b>												
	<b>RTP 10-Year (2018-2027)*</b>				<b>RTP Financial Constrained (2018-2040)</b>				<b>RTP Strategic (2018-2040)</b>			
	<b>T-P</b>	<b>T-OP</b>	<b>Bike</b>	<b>Walk</b>	<b>T-P</b>	<b>T-OP</b>	<b>Bike</b>	<b>Walk</b>	<b>T-P</b>	<b>T-OP</b>	<b>Bike</b>	<b>Walk</b>
Region	57%	78%	22%	23%	28%	31%	0%	1%	47%	57%	0%	2%
HMC	61%	79%	24%	26%	27%	28%	0%	1%	45%	54%	-1%	1%
FHMC	58%	77%	24%	24%	29%	32%	0%	1%	47%	61%	-1%	1%
POC	64%	83%	21%	21%	27%	31%	-1%	1%	46%	61%	-1%	2%
<b>Middle-Wage Jobs</b>												
	<b>RTP 10-Year (2018-2027)*</b>				<b>RTP Financial Constrained (2018-2040)</b>				<b>RTP Strategic (2018-2040)</b>			
	<b>T-P</b>	<b>T-OP</b>	<b>Bike</b>	<b>Walk</b>	<b>T-P</b>	<b>T-OP</b>	<b>Bike</b>	<b>Walk</b>	<b>T-P</b>	<b>T-OP</b>	<b>Bike</b>	<b>Walk</b>
Region	58%	80%	24%	24%	28%	31%	0%	1%	47%	57%	0%	2%
HMC	62%	80%	26%	27%	27%	28%	0%	1%	45%	54%	0%	1%
FHMC	58%	78%	22%	21%	29%	32%	0%	1%	47%	62%	-1%	2%
POC	64%	83%	25%	25%	28%	31%	-1%	1%	46%	61%	-1%	1%
<b>Low-Wage Jobs</b>												
	<b>RTP 10-Year (2018-2027)*</b>				<b>RTP Financial Constrained (2018-2040)</b>				<b>RTP Strategic (2018-2040)</b>			
	<b>T-P</b>	<b>T-OP</b>	<b>Bike</b>	<b>Walk</b>	<b>T-P</b>	<b>T-OP</b>	<b>Bike</b>	<b>Walk</b>	<b>T-P</b>	<b>T-OP</b>	<b>Bike</b>	<b>Walk</b>
Region	55%	75%	20%	21%	28%	31%	0%	1%	47%	57%	0%	1%
HMC	59%	76%	22%	24%	26%	28%	0%	1%	44%	54%	-1%	1%
FHMC	56%	74%	19%	19%	28%	32%	0%	1%	46%	61%	-1%	2%
POC	62%	80%	22%	23%	27%	31%	-1%	1%	46%	61%	-1%	1%

T-P = Transit Peak Period; -OP = Transit Off-Peak Period

\* 2018 RTP 10-year investment strategy has not been controlled for land use changes, whereas the RTP investment strategies looking at 2040 have controlled for land use changes.

Green = Performance greater than the region

## Discussion

### 2018 RTP 10-Year Investment Strategy (2018-2027)

In the 2018 RTP 10-year strategy, transit access to jobs in the peak period performs better than the overall region across all wage profiles (e.g. low, medium, high wage) in terms of the number and percentage jobs within a 45 minute travel window for historically marginalized communities, as well as communities of color. Focused historically marginalized communities, which are those communities with a greater density of people of color, people in poverty, and language isolation see slightly less access to middle-wage jobs relative to the region. The result is nearly identical for the off-peak period as well with the exception for focused historically marginalized communities and in one case where access to middle-wage jobs underperforms relative to the region in historically marginalized communities.

For walking access to jobs within a 20 minute travel window, the performance of the 2018 RTP 10-year investment strategy generally saw a greater rate of low and middle wage job access than the overall region by walking in historically marginalized communities and in one case in communities of color to access low-wage jobs. Bicycle access middle-wage jobs is at a greater rate than the region in historically marginalized communities. Otherwise, bicycling and walking access to middle and



low-wage jobs tend to underperform relative to the region in areas where there is a greater density of people of color, people in poverty, and language isolation..

#### *2018 RTP Financially Constrained Investment Strategy (2018-2040)*

When observing the impact of the 2018 RTP financially constrained package of investments, access to middle and low-wage jobs by transit tends to underperform relative to the region for historically marginalized communities and communities of color during the peak and off-peak period. Access to middle and low-wage jobs tends to outpace the region when in those areas with the higher density historically marginalized communities in the off-peak period.

For bicycling, access to middle and low wage jobs tend to stay steady with the overall region for historically marginalized communities and in areas where there is a greater density of historically marginalized communities. Slight underperformance is observed with bicycle access to middle and low-wage jobs for communities of color. Access to middle and low wage jobs by walking all perform at the same rate as the overall region in all historically marginalized communities, focused historically marginalized communities and in communities of color.

#### *2018 RTP Strategic Investment Strategy (2018-2040)*

With the 2018 RTP strategic investment strategy, focused historically marginalized communities and communities of color see a greater rate of access by transit to middle and low-wage jobs relative to the region. The result is limited to the off-peak travel period. When looking across all jobs, focused historically marginalized communities and communities of color see a greater rate of job access compared to the overall region during the peak and off-peak period. Access to low and middle-wage jobs tend to stay at pace with the overall region or decreases for historically marginalized communities, focused historically marginalized communities, and communities of color when it comes to bicycling and walking. Only in one instance in focused historically marginalized communities, access to low-wage jobs outpaces the region.

#### *Key Observations and Thoughts*

The simple rationale for the underperformance in transit access to low and middle wages jobs is likely due to the future projected congestion. With an estimated 573,000 people, 260,000 households, and 345,000 jobs in the region by 2040, there are more travelers sharing the same roads and buses are still stuck with passenger vehicles and trucks. As a result, less jobs are reached within that 45 minute travel time window by transit for the historically marginalized communities. The pattern only further gets exacerbated during the off-peak period where the frequency becomes reduced and combination of the traffic congestion being observed in the off rush hours impact the number of middle and low wage jobs historically marginalized communities can reach within the 45 minute transit travel window. What the 2018 RTP investment strategies show that building out of congestion is not possible and more transit investment combined with intensive street treatments are needed to move buses.

Additionally, there are some potential different reasons for slight underperformance of transit in accessing low and middle-wage jobs in focused historically marginalized communities. Namely focused historically marginalized communities include a lot of undeveloped areas around the western edge of the region, the far northern side (aka the Columbia corridor) and the eastern side of the region. During the off-peak, these less developed areas generally may not see as much transit service because development has not been fully realized in these areas by 2027 and less mixed activity (i.e. day and night land uses etc.). Additionally, some of the transit solutions slated for these

areas, like the Columbia corridor and in western Hillsboro, are community connector solutions, which are not currently represented in the travel demand model. Nonetheless, the result is to be mindful of in the 2018 RTP investment strategies because of a number of communities being pushed farther away from the core of the region.

Generally gains or underperformance in low and middle wage jobs by bicycling or walking fell within a range of 1 to 2%, which demonstrate the results for bicycling or walking may be somewhat inconclusive as to whether there access to jobs were increased or decreased for these communities. This is partially due to the travel demand and behavioral model because of capital improvements made to the regional transportation system may increasing travel time for walking and bicycling. For example, when a new facility is added (e.g. a new protected bicycle lane or sidewalk) the attractiveness of the new facility will divert a number of trips. Specifically for bicycling, the new facilities which make it more comfortable to ride, because of protection or lower automobile vehicle volumes, generates travel behaviors where a person may travel a little bit farther or slightly out-of-direction and therefore travel longer. Since the access to jobs system evaluation measure looked at the number of jobs accessible within a certain time window (i.e. 30 minutes by bicycle), the results for this system measures for biking and walking does not fully capture or illustrate the positive gains or impacts in middle and/or low-wage accessibility unless there is a significant swing in the numbers.

Lastly, the current results do not reflect the new low-income fare structure as a result of the state legislature passing a major new revenue package for transportation. The new funding to support transit operations and the commitment by the region's largest transit agency to implement a low-income fare program will likely result in some gains in transit access to jobs for marginalized communities and communities of color because the reduced fare may induce different travel behavior for certain trips.

## Access to Travel Options – System Connectivity and Completeness

### **Evaluation Measure Summary**

To look at how more miles (and ultimately the amount of gaps) and connectivity of the region's active transportation infrastructure (sidewalks, bicycle routes) is getting completed region wide, around transit, and in historically marginalized communities (in aggregate), and understand if the 2018 RTP investment strategies are further increasing the completeness and connectivity of the regional active transportation network for historically marginalized communities. Additionally further look at the timing of the active transportation investments in the 2018 RTP investment strategies.

### Findings

- In general, the three 2018 RTP investments are increasing or keeping pace in completing the regional active transportation network in historically marginalized communities, areas where there is a greater density of people of color, people in poverty, language isolation, and in communities of color compared to the overall region.
  - There is only two instances in the 2018 RTP strategic investment strategy where sidewalks are not increasing at a lesser rate in historically marginalized communities and communities of color than the region overall.
- In instances where the 2018 RTP investment strategies are outpacing the region, such as sidewalks in communities of color in the 2018 RTP financially constrained strategy, the increment of outpacing is usually within 1% – 2%.
- Nonetheless, all three 2018 RTP investment strategies are making progress in completing the active transportation network region wide.
- All three 2018 RTP investment strategies are also making progress in furthering connectivity of the bicycle network.
- While investment is increasing overall, the rate of active transportation investment in the 2018 RTP is slightly higher in the outer years of the plan compared to the 10-year investment strategy.

### *Discussion*

#### *System Completeness*

In general, all three 2018 RTP investment strategies increase the miles of sidewalks, trails, and on and off-street bikeways. The additional miles of system completeness for active transportation ranges from 1% - 2% for trails and off-street bikeways to 12% - 17% for sidewalks. These increases demonstrate the 2018 RTP investment strategies are making capital investments into the active transportation network, which is the least complete of the different modal networks (e.g. roads, transit, etc.) Some of the larger increases of additional active transportation network miles are observed in areas where there is a greater density of people of color, people in poverty, and language isolation. The result of the increased miles of sidewalks, bikeways, and trails demonstrates progress in completing the active transportation network in areas with historically marginalized communities.

There are two instances where the 2018 RTP investment strategy does not perform at the same rate as the region in historically marginalized communities. In the 2018 RTP strategic investment November 22, 2017

strategy, the region's increase in sidewalk miles is 15% greater than the base year. In historically marginalized communities and communities of color, the sidewalk miles increase is 14%.

*Table 6. 2018 RTP Investment Strategies – Additional Miles and Completeness of the Active Transportation Network*

		Base Year (2015)		2018 RTP 10-Year (2018-2027)			2018 RTP Financially Constrained			2018 RTP Strategic		
		Mi.	% complete	Mi.	% complete	% Change	Mi.	% complete	% Change	Mi.	% complete	% Change
<b>Side walks</b>	Region	478	60%	532	67%	7%	570	72%	12%	598	75%	15%
	HMC	360	64%	400	71%	7%	426	76%	12%	440	78%	14%
	FHMC	209	66%	238	75%	9%	253	80%	14%	261	83%	17%
	POC	242	66%	274	75%	9%	292	80%	14%	295	81%	14%
<b>On-street bike</b>	Region	545	55%	598	60%	5%	628	63%	8%	664	67%	12%
	HMC	398	58%	434	63%	5%	453	66%	8%	472	68%	11%
	FHMC	225	61%	250	68%	7%	259	70%	9%	268	73%	12%
	POC	253	62%	278	68%	6%	290	71%	9%	300	73%	12%
<b>Trails</b>	MPA	183	36%	189	38%	1%	196	39%	3%	197	39%	3%
	HMC	126	38%	131	39%	1%	136	41%	3%	136	41%	3%
	FHMC	67	39%	71	41%	2%	74	43%	4%	74	43%	4%
	POC	84	43%	88	45%	2%	92	47%	4%	92	47%	4%

### *Connectivity*

Additionally, all three 2018 RTP investment strategies are increasing the connectivity of the regional bicycling network.<sup>77</sup> In looking at the intersection density of the region's planned bikeways, a greater rate of 3-way or more intersections completeness with bicycling facilities are observed in historically marginalized communities, areas with a higher density of people of color, people in poverty, and language isolation, and communities of color. The greater rate indicates increased connectivity of the bikeway system.

*Table 7. 2018 RTP Investment Strategies – Additional 3-Way or More Bicycle Intersections*

Percentage of 3-Way Intersection Completeness							
	Base Year (2015)	2018 RTP 10-Year (2018-2027)		2018 RTP Financially Constrained		2018 RTP Strategic	

<sup>77</sup> Due to a lack of information about the regional roadway network, the intersection density assessment looking at the roadway network and ultimately of the sidewalk network was unable to be completed.  
November 22, 2017

Region	69%	76%	7%	81%	12%	87%	18%
HMC	72%	79%	8%	84%	12%	90%	18%
FHMC	78%	89%	10%	94%	16%	99%	21%
POC	73%	83%	10%	88%	15%	94%	21%

#### *Access to Transit*

The results of the Access to Transit measure are still underway. The results will be brought forward to the Transportation Equity work group meeting on November 30<sup>th</sup> or at the RTP work groups, TPAC and MTAC workshop on December 4<sup>th</sup>.

#### *Timing of Active Transportation Investments*

Finally, an issue identified by work group members is the necessity to look at the timing of the active transportation investments to ensure a balance or even a greater level of investment in active transportation, particularly in historically marginalized communities, throughout the 2018 RTP. Recognizing the 2018 RTP represents the investment strategy for the regional transportation system for the next 20 years, the issue identified by the work group is the ensure active transportation investments are not getting slated for the outer years of the plan. In looking at the investment summary of the three 2018 RTP investment strategies, there is a slight increase in the annual amount of investment of the 2018 RTP financially constrained investment strategy (approximately \$68.2 million per year) compared to the 2018 RTP 10-year investment strategy (approximately \$64.2 million per year). While the increased amount of investment in the 2018 RTP financially constrained investment strategy is a positive sign, the result indicates slightly more active transportation investment is slated for the outer years of the plan. In addition, when looking at the 2018 RPT strategic investment strategy, the amount of active transportation investment increases by nearly \$1 billion, which is also an indicator of active transportation investment being more conservative in the 2018 RTP 10-year and financially constrained investment strategies.

*Table 8. Summary of 2018 RTP Active Transportation Investment\**

	10-Year Strategy (2018-2027)			Financially Constrained RTP (2018-2040)			Strategic RTP (2018-2040)		
	\$	#	%	\$	#	%	\$	#	%
RTP Investment Strategy	\$6.2 B	374	29%	\$14.7 B	762	69%	\$21.3 B	1057	100%
Active Transportation	\$642 M	133	10%	\$1.5 B	293	10%	\$2.5 B	393	12%
Average Annual Active Transportation Investment	\$64.2M			\$68.2 M			\$113.6 M		
Expected Rate**	--			\$1.48 B			--		

*\*Includes all identified active transportation investments in the 2018 RTP.*

*\*\*If the 2018 RTP 10-Year investment strategy annual rate of active transportation investment is carried forward.*

#### *Key Thoughts and Observations*

In conducting the analysis of system completion and connectivity based on the investments identified for the 2018 RTP, there were two key issues which emerged which may have a significant November 22, 2017

implication to the results. One key issue is that a number of active transportation investments identified in the 2018 RTP either: 1) provided geospatial data which was not in alignment with the regional active transportation network; or 2) the active transportation investment is not on the regional active transportation network. As a result, these investments were not evaluated in the analysis, leaving nearly 414 miles not analyzed. For the number of active transportation investments which provided geospatial data slightly out of alignment, the alignment issue is a technical error which will look to get resolved during the refinement period. In likelihood, the out-of-alignment active transportation investments will increase the overall system connectivity and completeness of the system which may also address the decrease in 1% less sidewalk mileage in historically marginalized communities and communities of color in the 2018 RTP strategic investment strategy. Nonetheless, the result is worthy of monitoring because of the existing disparities in active transportation infrastructure in historically marginalized communities.

The second key issue to emerge from the system completeness and connectivity evaluation is addressing the completeness and connectivity of the roadway network. The analysis of the regional roadway network was unable to be completed, and therefore not discussed in the results. The significant issue encountered with the roadway system completeness and connectivity was defining the planned regional roadway network to get a better understanding of the gaps, deficiencies, and the existing level of completeness for the roadway network. Otherwise the roadway completeness and connectivity is viewed as additions to an already complete system. The impact of not having the planned regional roadway network is being able to speak to the sidewalk and ultimately pedestrian system connectivity in the connectivity analysis. As a result, the connectivity analysis only is able to speak to the intersection density of the bicycle network.

## Share of Transportation Safety Projects and Per Capita Spending in Transportation Safety

### Evaluation Measure Summary

To look at the number of projects and the per capita investment level focused on reducing fatal and serious injury crashes region wide and in historically marginalized communities (in aggregate), and understand if the 2018 RTP investment strategies are further increasing safety outcomes for historically marginalized communities.

### Finding

- All three 2018 RTP investment strategies illustrate the share of safety projects and investments levels are at a greater rate in historically marginalized communities compared to the region.
- The majority of safety investments proposed are located in all permeations of historically marginalized communities and on high injury corridors located in historically marginalized communities.
- The 2018 RTP 10-year investment strategy has the largest proportion of projects and investment level in safety compared to the financially constrained and strategic investment strategies.
- Nonetheless, for the region to achieve its Vision Zero goal, then greater investment in safety may be necessary as the level of safety investment proposed across all three 2018 RTP investment strategies makes up a range of 3% – 8%.
- There are a number of transportation investments (327) within the 2018 RTP investment strategy which identified reducing fatalities or serious injuries or reducing crashes as a secondary purpose of the project. Recognizing transportation projects aim to achieve multiple objectives, there may be a greater level of safety investment in the 2018 RTP investment strategies than represented in the analysis.
  - Metro staff will work with the individual sponsoring jurisdictions which identified safety as a secondary purpose during the refinement period to resolve the number of safety projects and the investment level prior to the release of the 2018 RTP public comment draft in June 2018.
- As a result, there is not a disproportionate impact in the level of safety investments in historically marginalized communities, focused historically marginalized communities, and communities of color.

### Discussion

Table 9. 2018 RTP – Summary of Identified Transportation Safety Projects

	Total Projects	Estimated 2018 RTP cost	Safety projects	Estimated 2018 RTP safety cost	% Projects	% Investment
2018 RTP – 10 Year Investment Strategy	374	\$6.3 B	30	\$484 M*	8%	8%
2018 RTP Financially Constrained	762	\$14.7 B	45	\$598 M*	6%	4%

2018 RTP Strategic <sup>8</sup>	1057	\$21.2 B	53	\$664 M*	5%	3%
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\*Includes the Rose Quarter project at \$325 million.

Within the entire 2018 RTP, a total of 53 of the 1057 transportation projects submitted (approximately 5% in total) have been identified as safety projects.<sup>9</sup> While only 5% of transportation projects are identified as safety projects, approximately 3% of the overall 2018 RTP investment strategy comprises of safety investment.<sup>10</sup> The portion of the RTP investment strategy focused on transportation safety is stark result knowing that the entire RTP represents all the transportation investments needed to address the needs and deficiencies due to population and employment growth in a financially unconstrained environment. When looking closer at the financially constrained 2018 RTP, which represents the amount of funding to be reasonably expected to be available, the overall proportion does improve relative to the entire 2018 RTP investment strategy. In the 2018 RTP financially constrained strategy, 6% of projects representing 4% of the financially constrained investment strategy is towards safety.

Nonetheless, what monitoring data has shown is a trending increase in crashes, particularly those which resulted in serious injuries or fatalities in the Portland metropolitan region. Knowing that transportation safety needs to be addressed in the nearer term, looking more in depth at what is planned for the first 10-years of the RTP helps illustrate what is expected to come next. The 2018 RTP 10-year investment strategy (2018-2027) shows brighter promise when it comes to safety investment. Nearly 8% of the projects and the investment level in the 10-year investment strategy focus on safety. The 30 safety projects slated for completion in between 2018-2027 represents over half (56%) of all the safety projects identified in the entire 2018 RTP.

Transportation safety was a key identified concern by historically marginalized communities and a clearly stated desired outcome historically marginalized communities wish to see from the region's transportation system are facilities which reduce crashes that result in fatal and serious injuries. In looking at the 53 safety projects identified in the 2018 RTP, a breakdown of these projects are viewed from where these projects are located relative to historically marginalized communities and the per capita investment in safety.

*Table 10. Transportation Safety Investment Levels in Historically Marginalized Communities, Focused Communities, and Communities of Color and Per Capita Expenditure by Investment Scenario*

10-Year Investment Strategy (2018-2027)					
	Total projects	% of project total	safety cost	% of investment total	Cost per person
Total 2018 RTP Safety Projects (10-year strategy only)	30 (of 374)	8%	\$484 M	8%	\$254

<sup>8</sup> See footnote 10.

<sup>9</sup> In guidance provided to RTP project submissions, safety projects are those which meet the region's definition of a safety project. The region defines a safety project as: a project with the primary purpose of addressing a documented safety problem at a documented high injury or high risk location with one or more proven safety countermeasure(s).

<sup>10</sup> Note, the total number of 2018 RTP projects are from the RTP call-for-projects which was held from June 1 – July 21, 2017. The total number of projects are subject to change during the refinement period and prior to the release of the 2018 RTP public comment draft in June 2018.



Within HMC (transportation safety only)	29	97% (of 8%)	\$475 M	7.6%/(95% of 8%)	\$360
Within FHMC (transportation safety only)	24	80% (of 8%)	\$479 M	7.7%/(96% of 8%)	\$642
Within Communities of Color (transportation safety only)	24	80% (of 8%)	\$468 M	7.5%/(94% of 8%)	\$593
<b>Financially Constrained RTP (2018-2040)</b>					
	<b>Total projects</b>	<b>% of project total</b>	<b>safety cost</b>	<b>% of investment total</b>	<b>Cost per person</b>
Total 2018 RTP Safety Projects (2018-2040 constrained)	45 (of 762)	6%	\$598 M	4%	\$274
Within HMC (transportation safety only)	43	96% (of 6%)	\$552 M	3.7%/(93% of 4%)	\$366
Within FHMC (transportation safety only)	34	76% (of 6%)	\$517 M	3.5%/(88% of 4%)	\$607
Within Communities of Color (transportation safety only)	37	82% (of 6%)	\$525 M	3.6%/(90% of 4%)	\$612
<b>Financially Constrained RTP (2018-2040)</b>					
	<b>Total projects</b>	<b>% of project total</b>	<b>safety cost</b>	<b>% of investment total</b>	<b>Cost per person</b>
Total 2018 RTP Safety Projects	53 (of 1057)	8%	\$664 M	3%	\$304
Within HMC (transportation safety only)	47	87% (of 8%)	\$617 M	2.9%/(97% of 3%)	\$409
Within FHMC (transportation safety only)	37	70% (of 8%)	\$526 M	2.5%/(83% of 3%)	\$617
Within Communities of Color (transportation safety only)	40	75% (of 8%)	\$545 M	2.6%/(87% of 3%)	\$627

A more focused look shows that the majority of safety investments are being made in areas where there is a greater presence of people of color, people in poverty, people uncomfortable speaking English, older adults, and young people. Represented in the 10-year investment strategy, the financially constrained long-range investment strategy, and the additional long-range strategic investments are 70% – 90% of safety projects and 83% - 97% are being made in historically marginalized communities, focused historically marginalized communities, and communities of color.<sup>11</sup> Additionally the per capita rate of spending in these communities is outpacing the region

<sup>11</sup> At the time of the 2018-2021 MTIP data request, some transportation safety projects were unable to provide exact locations of where the investments would be made. These investments provided programmatic areas (e.g. City of Gresham or City of Portland), but due to the lack of defined spatial information, they were therefore excluded from the geographic assessment looking at transportation safety investments in historically marginalized and focused historically marginalized communities. The number of projects affected in this way includes 16 projects representing approximately \$32 million of investments. These 16 projects were included as part of the region-wide per capita spending on transportation safety investments.

wide per capita rate significantly. The safety projects are also addressing safety issues on the high injury corridors in historically marginalized communities. (See table X) This positive trend shows that while safety projects and investments make up a small part of the long-range transportation investment strategy, the safety investments proposed are slated to address and reduce crashes occurring in these communities. These results appear to indicate a level of transportation safety investment is being targeted in historically marginalized communities at a per capita level greater than the region. The results show transportation safety investments levels moving in the direction desired by historically marginalized communities and the assumed outcome would be of these investments would be safer streets for all users.

*Table 11. Transportation Safety Projects Located on the High Injury Corridors and within Historically Marginalized Communities, Focused Historically Marginalized Communities, and Communities of Color*

<b>Investment Strategy</b>	<b>HMC</b>	<b>FHMC</b>	<b>Communities of Color</b>
<b>2018-2027</b>	24 of 30/80%	21 of 30/70%	21 of 30/70%
<b>2028-2040 (FC)</b>	31 of 45/69%	28 of 45/62%	28 of 45/62%
<b>2028-2040 (S)</b>	33 of 53/62%	30 of 53/57%	30 of 53/57%

#### *Key Thoughts and Observations*

There are some different reasons for the overall number and investment level of safety projects in the 2018 RTP is a small proportion of the investment strategy, regardless whether it is the 10-year strategy, the 2018 RTP financially constrained, or the 2040 RTP strategic investment strategy. In general, transportation safety-oriented capital improvements, such as countermeasures, are not as costly as other transportation investments, such as building an additional lane of a freeway, rehabilitating a bridge, or adding a new rail line to the transit system. Additionally, in a review of the projects proposed for the 2018 RTP investment program, local jurisdictions provided an inconsistent response asking whether a project is a “safety project,” but then selecting and identifying a non-safety-related primary purpose. There was also a number of projects in the 2018 RTP investment strategy which identified reducing crashes as a secondary purpose. Recognizing the region’s definition of a safety project is driven by what the sponsoring jurisdiction views as the primary purpose of the project, these were not included in the analysis. However, in initial review, Metro staff suspects there are more safety projects than what has been represented in the assessment. As a result, Metro staff plans to work through the refinement period to work with the individual sponsoring jurisdictions to resolve these “miss-matched” responses projects and further look at projects which identified safety as a secondary purpose. A rerun of the evaluation for the investment strategy will be conducted prior to the release of the 2018 RTP public comment draft in June 2018.

## Exposure to Vehicle Miles Traveled (VMT) and Crash Risk

### **Evaluation Measure Summary**

To look at the amount of non-freeway vehicle miles traveled (VMT) exposure region wide and in historically marginalized communities (in aggregate), and understand if the 2018 RTP investment strategies are further reducing vehicle miles traveled exposure, which is correlated to crashes, for historically marginalized communities.

### Findings

- In the 2018 RTP 10-year investment strategy, VMT is increasing in focused historically marginalized communities and communities of color faster than the region overall. However, the 2018 RTP 10-year investment strategy has not been controlled for population growth and employment.
- The 2018 RTP financially constrained and 2040 strategic investment strategies see a decrease in VMT in historically marginalized communities, focused historically marginalized communities and communities of color.
  - In general, the overall VMT is expected to increase due to the growth of population and employment, therefore decreases in VMT observed are based on the performance of the constrained and full investment strategy having an impact to travel behavior and ultimately the exposed VMT.
- But because VMT is correlated with and one of many factors contributing to crashes on the transportation system, the increase in overall projected and rate of VMT growth means the region must be diligent in implementing countermeasures and the other principles of transportation safety (the six E's – engineering, education, encouragement, enforcement, equity, and evaluation), to reduce the overall exposure and risk of crashes.
- Some form of mitigation may be necessary to address the greater increase in VMT growth in historically marginalized communities, particularly in the first 10-years.

### Discussion

The region has a goal to reduce vehicle miles traveled (VMT) per capita as a means to address multiple desired outcomes and goals for the transportation system. However, similarly to traffic congestion, VMT is an indicator of numerous other factors such as economic activity and risk of crashes. In general, VMT is expected to grow as the region anticipates seeing an additional estimated 573,000 people (35.6% increase), 260,000 households (40.8% increase), and 345,000 jobs (38.6% increase) in the region by 2040.

### *2018 RTP 10-Year Investment Strategy*

*Table 12. Aggregate Vehicle Miles Traveled (VMT) – Base Year (2015) compared with 10-Year RTP Investment Strategy*

Base Year (2015) Region wide VMT	RTP Region wide VMT (2018-2027)	Difference in VMT (RTP – Base Year)	Percent Difference
21,441,274	25,579,276	4,138,002	19.3%
Base Year (2015) HMC VMT	RTP HMC VMT (2018-2027)	Difference in VMT (RTP – HMC Base Year)	Percent Difference

14,260,189	16,968,580	2,708,391	19.0%
Base Year (2015) FHMC VMT	RTP FHMC VMT (2018-2027)	Difference in VMT (RTP – FHMC Base Year)	Percent Difference
8,317,834	9,965,249	1,647,415	19.8%
Base Year (2015) POC VMT	RTP POC VMT (2018-2027)	Difference in VMT (RTP – POC Base Year)	Percent Difference
8,814,291	10,580,265	1,765,974	20.0%

What is observed with the 10-year RTP investment strategy is that VMT is expected to grow region wide by 19.3%. There are several reasons for this anticipated growth in VMT. By 2027, the region is expected to grow an additional estimated 300,000 people (18.6% increase), 140,000 households (21.9% increase), and 175,000 jobs (19.6% increase). This growth would anticipate that overall that travel across all different modes (e.g. walking, bicycling, transit, and driving) would increase. A 19.3% increase in overall VMT relative to 18.6% increase in population and 19.6% increase in jobs seems to indicate the growing rate of vehicle-based trips for getting to work and other trip purposes are increasing, whether in length or in frequency. Despite this rate of vehicle growth, there is a somewhat positive trend; the anticipated growth in VMT is slightly lower in historically marginalized communities than the anticipated region wide growth of 19% and 19.3% respectively. What this result indicates is the mix in transportation investments across different modes in historically marginalized communities is providing other transportation choices which is influencing the rate of growth in VMT. For the purposes of transportation safety, the less exposure to VMT is a way to address the potential for crashes since VMT is correlated with and one of many factors contributing to crashes on the transportation system.

Nonetheless, it is concerning that in areas with greater than the regional average of people of color and where there is a greater density of people of color, people in poverty, and in language isolation, the rate of VMT growth is outpacing the VMT growth of the region. While the difference in VMT relative to the region may be less than 1%, the anticipated increase in VMT exposure in these communities is concerning since marginalized communities in general experience a disproportionate number of crashes in their communities and a significant amount of the region's identified high injury corridors travel through these communities.

*2018 RTP Financially Constrained and Strategic Investment Strategies*

*Table 13. Aggregate Vehicle Miles Traveled (VMT) – 2040 No-Build compared with 2040 RTP Financially Constrained*

2040 No Build Region wide VMT	Constrained RTP Region wide VMT (2018-2040)	Difference in VMT (RTP – No Build)	Percent Difference
29,963,906	29,198,802	-765,104	-2.6%
2040 No Build HMC VMT	Constrained RTP HMC VMT (2018-2040)	Difference in VMT (RTP – HMC No	Percent Difference

		<b>Build)</b>	
19,869,637	19,316,297	-553,340	-2.8%
<b>2040 No Build FHMC VMT</b>	<b>Constrained RTP FHMC VMT (2018-2040)</b>	<b>Difference in VMT (RTP – FHMC No Build)</b>	<b>Percent Difference</b>
11,661,297	11,356,738	-304,558	-2.6%
<b>2040 No Build POC VMT</b>	<b>Constrained RTP POC VMT (2018-2040)</b>	<b>Difference in VMT (RTP – POC No Build)</b>	<b>Percent Difference</b>
12,387,947	12,047,468	-340,479	-2.7%

Table 14. Aggregate Vehicle Miles Traveled (VMT) – 2040 No-Build compared with 2040 RTP Financially Constrained

<b>2040 No Build Region wide VMT</b>	<b>2040 Strategic RTP Region wide VMT</b>	<b>Difference in VMT (RTP – No Build)</b>	<b>Percent Difference</b>
29,963,906	28,949,905	-1,014,001	-3.4%
<b>2040 No Build HMC VMT</b>	<b>2040 Strategic RTP HMC VMT</b>	<b>Difference in VMT (RTP – HMC No Build)</b>	<b>Percent Difference</b>
19,869,637	19,145,298	-724,339	-3.6%
<b>2040 No Build FHMC VMT</b>	<b>2040 Strategic RTP FHMC VMT</b>	<b>Difference in VMT (RTP – FHMC No Build)</b>	<b>Percent Difference</b>
11,661,297	11,232,549	-428,747	-3.7%
<b>2040 No Build POC VMT</b>	<b>2040 Strategic RTP POC VMT</b>	<b>Difference in VMT (RTP – POC No Build)</b>	<b>Percent Difference</b>
12,387,947	11,912,851	-475,095	-3.8%

While the 2018 RTP 10-year investment strategy anticipates seeing an overall increase in VMT region wide and in certain historically marginalized communities, what the 2018 RTP financially constrained and 2018 RTP strategic investment strategies show that overall VMT is anticipated to decrease with the implementation of a full set of transportation investments. Additionally, historically marginalized communities, communities of color, and areas where there is a greater density of historically marginalized communities see the same rate or greater VMT reduction. Albeit the reduction of VMT in historically marginalized communities relative to the region tends to stay

within 1%, this result shows the trend and direction for getting to the transportation safety outcomes historically marginalized communities desire to see. But the exposure to VMT will likely be experienced as incremental or unchanged by these communities.

The VMT results also indicate the 2018 RTP financially constrained and 2040 strategic investment strategies are having an overall impact to reducing vehicle miles traveled despite population and job growth. By looking at the performance of the 2018 RTP financially constrained and 2040 strategic investment strategies relative to the No-Build, the results show when growth have been controlled for, anticipated VMT decreases with further investment and contributing to travel behavior changes.<sup>12</sup> The 2018 RTP financially constrained and 2018 RTP strategic investment strategies do represent a greater investment in transit and active transportation, which by providing other viable transportation options for different types of travel trips, VMT is being reduced. For the purposes of transportation safety, this means the 2018 RTP investment strategy is reducing one of the correlated factors contributing to crashes and therefore working to increase safety outcomes. More specifically for historically marginalized communities, the greater reduction in VMT from the region, once controlled for population growth, suggests safety outcomes to be further realized in these historically marginalized communities.

#### *Key Observations and Thoughts*

There is recognition exposure to absolute VMT (i.e. # of VMT) will increase regardless of investment in the transportation system due to projections in economic activity and population growth. The increase in absolute VMT means that all communities will experience a higher exposure to VMT and ultimately have some increased risk of exposure to crashes. There is also recognition the growth in VMT experienced will differ throughout the region, including between different historically marginalized communities. For example, some of the region's focused historically marginalized communities have been identified because of the presence of significant language isolation. These areas tend to be on the underdeveloped edges of the region. The absolute VMT in these underdeveloped areas compared to historically marginalized communities closer in to central Portland may look significantly different due to travel options once controlling for size and growth.

Many different factors may help explain the increase in VMT in focused historically marginalized communities and communities of color the 2018 RTP 10-year investment strategy. A significant portion of the funding in the 2018 RTP 10-year investment strategy is committed toward four major megaprojects, which limits the amount of local investment into the region's transportation system to address travel demands and needs.

Additionally, because the 2018 RTP 10-year investment strategy results are uncontrolled for the impacts of population and employment growth, being able to speak towards the impact of the 10-year strategy is limited since there is not a 10-year no-build scenario which would show the anticipated growth in VMT solely based on population growth. Nonetheless, the rate of growth in areas where there is a greater density of marginalized communities, language isolated communities, and communities of color is outpacing the region, meaning there is increased exposure and risk of crashes for these communities. Additional attention and monitoring may be warranted because marginalized communities in general experience a disproportionate number of

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<sup>12</sup> The No-Build represents a future scenario if there were no further capital investment in the region's transportation system beyond those transportation projects which are fully funded.  
November 22, 2017

crashes in their communities and a significant amount of the region's identified high injury corridors travel through these communities.

## Habitat Impact

### Evaluation Measure Summary

To look at the number of roadway projects which overlap with high value habitat areas region wide and in historically marginalized communities (in aggregate), and understand if the 2018 RTP investment strategies are potentially impacting high value habitats at a greater rate in historically marginalized communities.

### Finding

- All three 2018 RTP investment strategies increase the number of roadway investments which overlap or intersect high value habitats at a greater rate in historically marginalized communities, focused historically marginalized communities, and communities of color at a greater rate than the region.
- This means there is a greater rate of high value habitat with a risk of a potential impact in historically marginalized communities.
- Because the environmental impacts are determined during the project development and design of the project, the known impact and potential options to avoid, minimize, and mitigate are not yet determined.
- As a result, there is a potential disproportionate impact which will require monitoring the implementation of the transportation investments overlapping high value habitats in historically marginalized communities.

*Table 15. 2018 RTP Investments Intersecting High Value Habitats and Historically Marginalized Communities & Focused Historically Marginalized Communities<sup>13</sup>*

	High Value Habitat (HVH) Units		10-Year Strategy Intersect (2018-2027)		2018 RTP Constrained Intersect (2018-2040)		2018 RTP Strategic (2018-2040)	
	Total	%	Total	%	Total	%	Total	%
<b>Region wide</b>	14452	100%	1278	9%	2016	14%	2844	20%
<b>Historically Marginalized Communities (HMC)</b>	8882	61%	955	11%	1433	16%	2021	23%
<b>Focused HMCs</b>	4241	29%	564	13%	829	20%	1108	26%
<b>People of Color</b>	2480	17%	349	14%	578	23%	773	31%

### *Discussion*

Overall, the 2018 RTP investments strategies intersect with high value habitats in areas where there are historically marginalized, focused historically marginalized communities, and communities of color at a greater rate than the region. The habitat analysis results illustrate typically historically marginalized communities, focused historically marginalized communities, and communities of color see a higher potential of nearby high value habitat areas impacted by the region's proposed transportation investments.

<sup>13</sup> Indicates 2018 RTP which detailed spatial information was provided.  
November 22, 2017



### *Key Thoughts and Observations*

The results of the habitat analysis are not surprising. Because the region wide rate of high value habitats potentially impacted by the region's transportation investment strategy includes a number of the high value habitats in protected areas and/or natural areas (e.g. Forest Park, Cooper Mountain) where transportation-related development is limited or prohibited, the number of overall high value habitat units potentially impacted is unlikely to rise at a greater rate when looking at potential impact to high value habitats within historically marginalized communities generally. This is because the general pattern of historically marginalized communities being in urban areas and more transportation infrastructure proposed in the urban area for the investment strategy.

Nonetheless, high value habitats in urban areas, particularly in historically marginalized communities, remain critically important to monitor and work to ensure these areas remain as intact as possible because of the functions high value habitats serve. Additionally, for historically marginalized communities, the role of impacts to natural and environmental features is particularly acute because of the historical pattern of transportation infrastructure and public investments destroying historically marginalized communities and surrounding resources.

While the potential impact to the high value habitat is greater in these communities, many of the projects have not underwent project planning, design, and the environmental analysis process to determine what those impacts to the high value habitats may be and determine the best course of action for the project (i.e. develop a design which avoids the impact or implement mitigation strategies in tandem). Jurisdictional partners will be required to undergo this process if they seek federal funding or need any form of federal approval to implement the project. Recognizing this step in transportation project development, Metro recommends undertaking a monitoring strategy for these projects, notifying the jurisdictions to be aware of this potential disproportionate impact, and also conducting further programmatic assessment to help identify those projects with the greater potential for high value habitat impact.

### **2018 RTP Transportation Equity Evaluation – Preliminary Findings and Discussion Questions**

The results of the 2018 RTP transportation equity evaluation demonstrate the region's long-range transportation investment strategies tend to perform in mixed way in advancing accessibility, safety, and environmental outcomes expressed by historically marginalized communities. The transportation equity results also raise the significant interconnectivity of broad transportation issues such as traffic congestion and increases in vehicle miles traveled, will pose on the region and impact in different ways. In addition, undertaking the analysis with different investment strategies uncovered new methodology issues which were not observed during the beta testing period with the 2018-2021 MTIP. Metro staff has developed the following preliminary findings, but seeks work group feedback in shaping the findings.

#### *Preliminary 2018 RTP Transportation Equity Analysis Findings*

- There is not a disproportionate impact in the share of safety projects and per capita level of investment in safety in historically marginalized communities compared to the region.
- There is a potential disproportionate impact to high value habitats in historically marginalized communities which need further monitoring.
- Population and employment growth will lead to further congestion which will impact accessibility by transit for historically marginalized communities.

- Increased vehicle miles traveled will pose safety-related risk which need to be monitored.
- More of the region's active transportation network is getting completed and becoming more connected, but the 2018 RTP 10-year investment strategy is conservative in active transportation investment relative to the 2018 RTP financially constrained strategy.

#### *Technical Findings and Discovery*

- A no-build scenario for the interim analysis year (2027) may be needed to better look at the 2018 RTP 10-year investment strategy and understand the implications of the investments slated in the first ten years of the 2018 RTP.
- Time-based accessibility measures for bicycling and walking may not be the most appropriate active transportation accessibility measure based on the existing tools available. Within the existing tool, a refined measure may look at the additional trips being made on higher quality activity transportation facilities from historically marginalized communities.
- The evaluation measures are limited by the data and information provided by partners in the RTP call-for-projects. As a result, certain transportation equity evaluation measures are not fully representative of the performance of the investment strategy.

Based on the analysis of the 2018 RTP investments and the results of the transportation equity system evaluation measures, the following discussion questions are being asked for discussion with the work group:

1. Based on results of transportation equity analysis, what are your reactions to the preliminary staff findings?
2. The transportation equity analysis represents what outcomes we'd anticipate seeing if the entire investment program identified for each scenario gets implemented. Knowing this, do the results seem to ring true to your experiences? Are there concerns which are not being reflected in the results?
3. What are key messages that should be expressed as part of the findings from the transportation equity system evaluation?
4. When the historically marginalized communities are seeing results which are at pace with the region, is there still a disproportionate impact?
  - Is the same rate as the region fair in advancing accessibility, safety, and environmental outcomes for historically marginalized communities?
5. When historically marginalized communities are seeing results with slight, but increased gains, is there still a disproportionate impact?
  - Is a slightly greater rate compared to the region fair in advancing accessibility, safety, and environmental outcomes for historically marginalized communities?
6. What recommendations do you have for the transportation equity system evaluation? More specifically, what would you like to see different with the investment strategies to better advance the four outcomes identified by historically marginalized communities?

#### **Next Steps**

Metro staff will look to incorporate feedback from the work group in shaping the discussion and findings of the 2018 RTP transportation equity evaluation. Metro staff will present the results and revised findings to the technical work groups in December for discussion. The work group will meet in January 2018 to finalize the draft results, findings, and recommendations for the 2018 RTP transportation equity evaluation. Work group recommendations and findings directed towards refinements of the investment scenarios will be discussed with partners in the early part of 2018.

Negotiated refinements are expected to be reflected in the RTP investment strategy and a second round of a system performance assessment which will be included public comment draft. The public comment draft is expected to be released in summer 2018.

# Memo



**Metro**

600 NE Grand Ave.  
Portland, OR 97232-2736

## Appendix I – 2018 RTP Transportation Equity Evaluation – Evaluation Methods Background, Tools, and Assumptions

### 2018 RTP Transportation Equity Evaluation Methods

The 2018 RTP transportation equity evaluation is an equity-focused scenario planning analysis looking at base-year conditions and comparing to future-year conditions, which are based on a proposed package of transportation investments. In performing a scenario analysis, the core methodological components to the 2018 RTP transportation equity evaluation are:

1. Community definitions
2. System evaluation metrics
3. Evaluation tools
4. Evaluation inputs and scenarios

The following section discusses the definitions, data, and assumptions for each of the core components of the 2018 RTP transportation equity evaluation.

#### Community Definitions

Communities included as part of the 2018 RTP transportation equity evaluation include:

- People of Color
- People with Lower-Incomes
- People with Limited English Proficiency
- Older Adults
- Young Persons

The identification of the five communities came from stakeholders desire to see communities which have historically experienced challenges with the transportation system. Additionally, certain communities were identified as demographic groups to address in transportation planning as part of federal civil rights and environmental justice regulations. Demographic data is supplied by the U.S. Census Bureau to help identify communities and general spatial distribution. The regional rate for the individual historically marginalized community (with the exception for age) serves as the threshold for determining the locations of historically marginalized communities. For older adults and younger people, the regional rate must be realized for both communities as the spatial distribution. If just based on the regional rate, younger people and older adults would illustrate patterns where every area in the region would be considered a historically marginalized community.

#### *Historically Marginalized Communities*

Community	Definition	Geography Threshold	Date Source
People of Color	Persons who identify as non-white.	Census tracts above the regional rate (26.5%) for people of color.	2010 Decennial Census
Low-Income	Households with incomes equal to or less than 200% of the Federal Poverty Level (2016); adjusted for household size	Census tracts above the regional rate (31.1%) for Household with Lower-Income	American Community Survey, 2011-2015
Limited English Proficiency	Persons who identify as unable “to speak English very well.”	Census tracts above the regional rate (8.5%) for Limited English Proficiency (all languages combined).	Oregon Education Department School

			Enrollment Data (LEP only)
Older Adults	Persons 65 years of age and older	Census tracts above the regional rate for Older Adults (11%) AND Young People (22.8%)	2010 Decennial Census
Young People	Persons 17 years of age and younger		

By request of stakeholders and recently adopted Metro agency-wide direction to advance racial equity, a more focused look at the transportation investments is being made in areas in which there are high concentrations of historically marginalized communities, namely those communities identified through civil rights and environmental justice legislation. As a result a population density threshold was applied to define geographic areas with high concentrations of People of Color, Low-Income, and Limited English Proficiency. This request recognizes the wish of stakeholders that with limited amounts of investment, in what areas can the greatest concentration of historically marginalized communities be reached. There was also a request to assess small pockets of concentrated language isolation. Therefore, identified areas of safe harbor communities were also included as part of the focused look.

Additionally, through agency-wide direction a focused look of the analysis will look solely at areas with greater than the regional rate of communities of color. This is to help inform and understand how the outcomes of a programmatic package of transportation investments serve communities of color.

#### *Focused Historically Marginalized Communities*

Community	Geographic Threshold
People of Color	The census tracts which are above the regional rate for people of color AND the census tract has twice (2x) the population density of the regional average (regional average is .48 person per acre).
Low-Income	The census tracts which are above the regional rate for low-income households AND the census tract has twice (2x) the population density of the regional average (regional average is .58 person per acre).
Limited English Proficiency	The census tracts which are above the regional rate for low-income households AND the census tract has twice (2x) the population density of the regional average (regional average is .15 person per acre) OR those census tracts which have been identified as “safe harbor” tracts for language isolation. <sup>1</sup>

<sup>1</sup> Safe Harbor is a provision within Title VI of the Civil Rights Act of 1964 which addresses for when and how agencies are to provide language assistance to limited English proficiency persons to ensure access to all public resources. The safe harbor provision mainly addresses translation of documents and language assistance, however for analysis purposes; it may help to identify areas where additional attention is warranted because of a concentration of language isolation. Safe harbor applies when a language isolated group constitutes 5% or 1,000 persons of the total population in the given area.

The transportation equity analysis will run the assessment using three tiers to address the desire to capture where there are higher rates of historically marginalized communities and where there is a concentration and/or pockets of historically marginalized communities.<sup>2</sup> The tiers are described below.

*Tier I Analysis – Historically Marginalized Communities*

The transportation equity evaluation used the regional rate as the first assessment to look at how well the 2018 RTP investments perform on priority outcomes identified by historically marginalized communities.

*Tier II Analysis – Focused Historically Marginalized Communities*

The transportation equity evaluation conducted a secondary assessment using a subset of historically marginalized communities, namely people of color, people with lower-incomes, and people with limited English proficiency, and look at how well the 2018 RTP investments perform on priority outcomes identified by historically marginalized communities in areas with the greatest concentration.

*Tier III Analysis – Communities of Color*

In recognition of Metro's recently adopted agency-wide direction to advance racial equity, the transportation equity evaluation conducted tertiary assessment using the regional rate for people of color and looking at how well the 2018 RTP investments perform on priority outcomes for communities of color.

See attached maps to visualize historically marginalized communities, focused historically marginalized communities, and communities of color.

Transportation Equity System Evaluation Measures

In following a best practice to have historically marginalized communities lead the assessment, the system evaluation measures for the transportation equity evaluation reflect the priorities historically marginalized communities identified to see from the region's transportation system.

The common themes identified by historically marginalized communities include: increased access, affordability, safety, and public health.<sup>3</sup> These themes translated into the following system evaluation measures (in no particular order):

- Access to travel options – system connectivity & completeness
- Access to jobs
- Access to community places
- Habitat impact
- Share of safety projects
- Exposure to crash risk

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<sup>2</sup> A third assessment tier has been added to the transportation equity assessment which focuses on race and ethnicity as a means of looking at how the RTP investment packages perform for communities of color. The third assessment tier has been added by advisement from the transportation equity work group and through direction from Metro's *Strategic Plan to Advance Racial Equity, Diversity, and Inclusion*.

<sup>3</sup> More information about the process undertaken to gather input from historically marginalized communities to identify the system evaluation measures can be found at: <http://www.oregonmetro.gov/public-projects/2018-regional-transportation-plan/equity>

- Affordability<sup>4</sup>
- Clean air<sup>5</sup>

These were identified as the priority transportation issues by historically marginalized communities.<sup>6</sup> As a result, the system evaluation took a closer look to see how well these transportation investments perform relative to these priority transportation issues in areas where there is a residential presence of historically marginalized communities. The results compare the base-year conditions to the future-year conditions for the region and for historically marginalized communities to see if there are disproportionate results. Individual methodology sheets, which outline criteria and other factors for each system evaluation measure can be found as part of the appendix.

#### Transportation Equity Assessment Inputs and Scenarios

The transportation equity evaluation includes those projects/investments which effect the regional transportation system and may seek federal or state funding in the future. The projects/investments are those which were identified through the 2018 RTP call-for-projects which took place from June 1 – July 21, 2017. Local jurisdictions as well as TriMet, ODOT, Port of Portland, and other regional and state partners submitted transportation investment priorities to comprise of the investment strategy. Each nominated transportation investment priority had to identify key pieces of information, such as costs, when the project planned to be open for service, whether the project wants to be considered for the financially constrained project list, a detailed project description, and other details. The information provided helped to shape the different scenarios for evaluation. There were three scenarios which were evaluated: 1) a RTP 10-year investment strategy; 2) a 2040 RTP financially constrained investment strategy; and 3) a 2040 RTP strategic investment strategy. The list of 2018 RTP investments assessed in the transportation equity evaluation and in each scenario can be found online with the 2018 RTP interactive project list tool. [www.oregonmetro.gov/2018projects](http://www.oregonmetro.gov/2018projects)

As part of the assessment, information provided by the nominating agency helped in identifying which transportation equity system evaluation measure would be applicable for each/individual investment priority. For example, in nominating investment priorities, local jurisdictions had to identify whether the priority met the criteria and definition of a safety project to be applicable for the share of safety projects evaluation measure. In addition each project/investment was reviewed to confirm and determine which transportation equity system evaluation measure would be applicable. The list of 2018 RTP investments, found in Appendix II illustrates which investments were applied to the different transportation equity system evaluation measures.<sup>7</sup>

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<sup>4</sup> The methodology for the affordability measure is being deferred to be built by the 2022 RTP. Some initial prototyping of this measure is currently under way.

<sup>5</sup> The methodology for the clean air measure is being deferred to be built by the 2022 RTP. At this time, the emissions model will report out region-wide results, but will not be able to report out localized air quality results.

<sup>6</sup> Reflects the priority issues within the limits the 2018 RTP system evaluation can analyze. Other transportation priorities were raised which included displacement and racial profiling in enforcement, which cannot be addressed through the system evaluation, but acknowledged in the assessment findings.

<sup>7</sup> Appendix II forthcoming.

As anticipated with the 2018 RTP system evaluation, there are a suite of transportation investments identified within the 2018 RTP which were unable to be assessed as part of the transportation equity evaluation. For many of these projects, the programmatic nature prevented being able to capture the investment the travel demand model or not enough spatial detail was available. For example, listed within the 2018 RTP are bus purchase and replacement programs and demand management programs. These programs are not represented in the travel demand model and spatial detail is unavailable since the deployment of buses travel all over the transit system and demand management programs are undertaken throughout the network. Additionally, the travel demand model does not capture a number of tools used for system management and operations, including variable message signs, rapid flashing beacons, or communications architecture. These projects are also identified in Appendix II.<sup>8</sup>

### Summary of Tools

Scenario planning requires the use of tools which are able to anticipate what behaviors or effects may occur with investments or policy decisions in the future. As part of Metro's metropolitan planning organization (MPO) function, the Data and Research department has developed a suite of tools to perform the 2018 RTP transportation equity evaluation to analyze future conditions once a certain suite of transportation investments are put into place. The following are brief descriptions of the scenario planning tools.

#### *Metroscope*

Metroscope is a suite of decision support tools used to model changes in measures of economic, demographic, land use and transportation activity within the Portland metropolitan area. Three of the tools relevant to the 2018 RTP transportation equity evaluation are:

- The economic model predicts employment by type of industry and the number of households by demographic category.
- The residential real estate location model predicts the locations of households.
- The non-residential real estate location model predicts the locations of employment. Both real estate models measure the amount of land consumed by development, the amount of built space produced and prices of land and built space by zone in each time period.

The Metroscope tool is being used to look at changes in access to employment areas and In 2016, the region adopted a new land use, population, and employment forecast. The 2016 adopted forecast serves as an input into the economic and real estate (residential and non-residential) models to inform the 2018 RTP transportation equity evaluation.

#### *Travel Demand Model*

The travel model predicts travel activity levels by mode (bus, rail, car, walk or bike) and road segment, and it estimates travel times between transportation analysis zones (TAZ) by time of day. The travel demand model also produces a measure of the cost perceived by travelers in getting from any one TAZ to any other. For the 2018 RTP transportation equity evaluation, the transportation investments were organized into four different travel modeled networks, which essentially continued to build on each other. These include: 1) the 2015 base-year, which includes those project which have been built and open for service as of 2015; 2) the 10-year investment strategy, which includes those projects which are anticipated to be built and open for service between 2017 – 2027; 3) the financially constrained plan, which includes those projects to be built

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<sup>8</sup> See footnote 20.  
November 22, 2017



and open for service by 2040; and 4) the strategic, which includes those projects that were not included in the financially constrained RTP, but are projects which address all transportation deficiencies and needs regardless of potential revenue to fund the capital improvement. The four identified travel model networks were assessed to represent future conditions.<sup>9</sup>

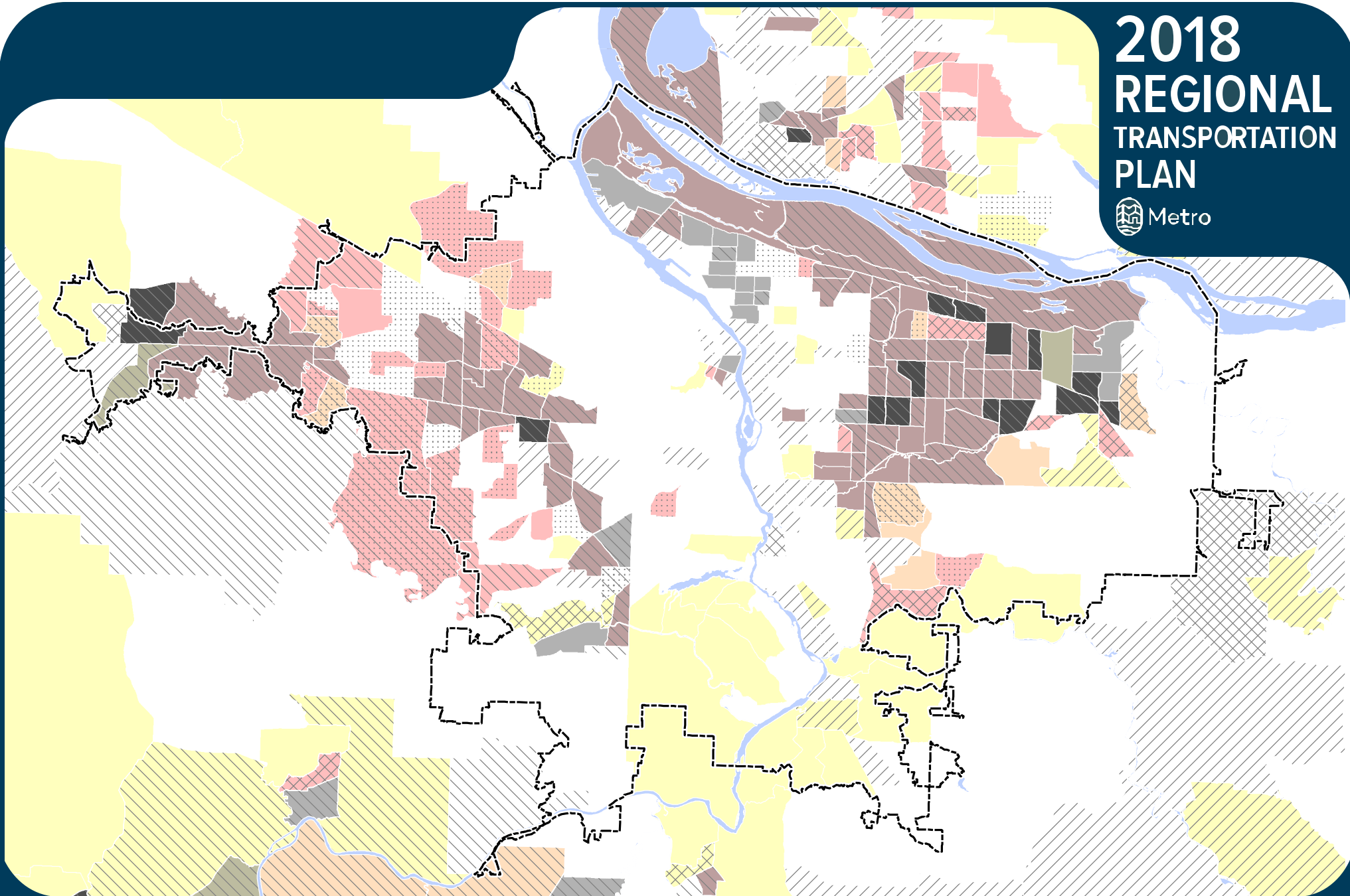
#### *Geographic Information Systems (GIS)*

Geographic Information Systems (GIS) uses spatial data to determine relationships between different data elements and map data. For the 2018 RTP transportation equity evaluation, the transportation investments are mapped to assess the spatial relationships between historically marginalized communities. In particular, access to a connected transportation system and safety considerations are being assessed through GIS.

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<sup>9</sup> Due to the nature of how the travel demand model operates, certain types of transportation investments cannot be reflected in the travel demand model tool. Some examples include roadway maintenance investments (e.g. repaving) and operations and system management (e.g. variable message signs, variable speed control, signal timing). Transportation investments which have macro-level effects to travel behavior (i.e. widening a roadway, adding a separated or protected bicycling facility, or increasing transit service) are those which the travel demand model can assess. Other “off-model” methods, namely geographic information systems (GIS), are used to assess the transportation investments which are unable to be captured as part of the model assessment.

# 2018 REGIONAL TRANSPORTATION PLAN

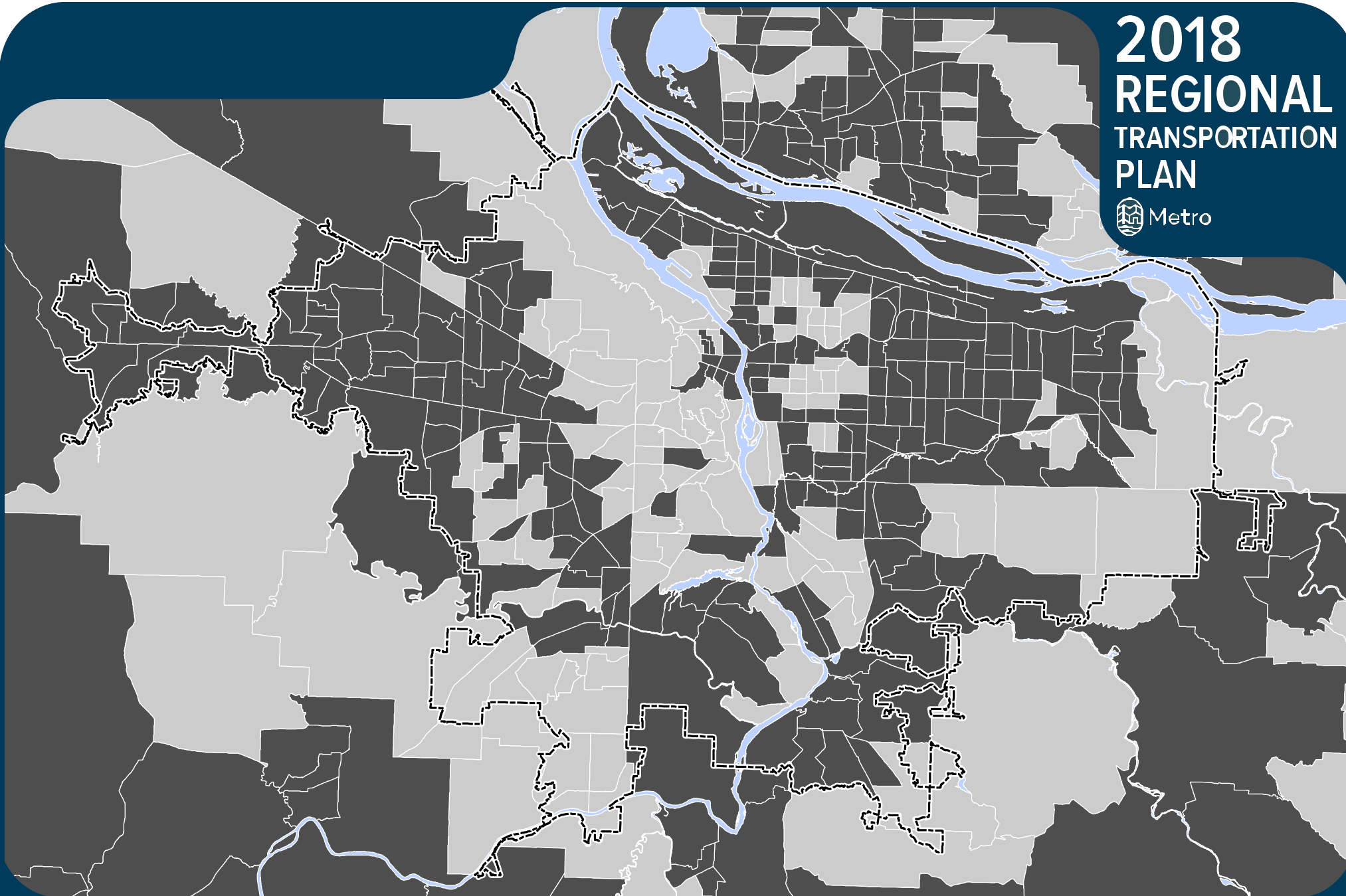


## Historically Marginalized Communities



Limited English Proficiency (LEP) and Poverty  
Data Source: American Community Survey  
2011-2015 5-Yr. Average  
Age and People of Color (POC) Data Source:  
Census 2010  
Map Publication: 4/21/2017

# 2018 REGIONAL TRANSPORTATION PLAN



## Historically Marginalized Communities

Not included in HMC

Included in HMC

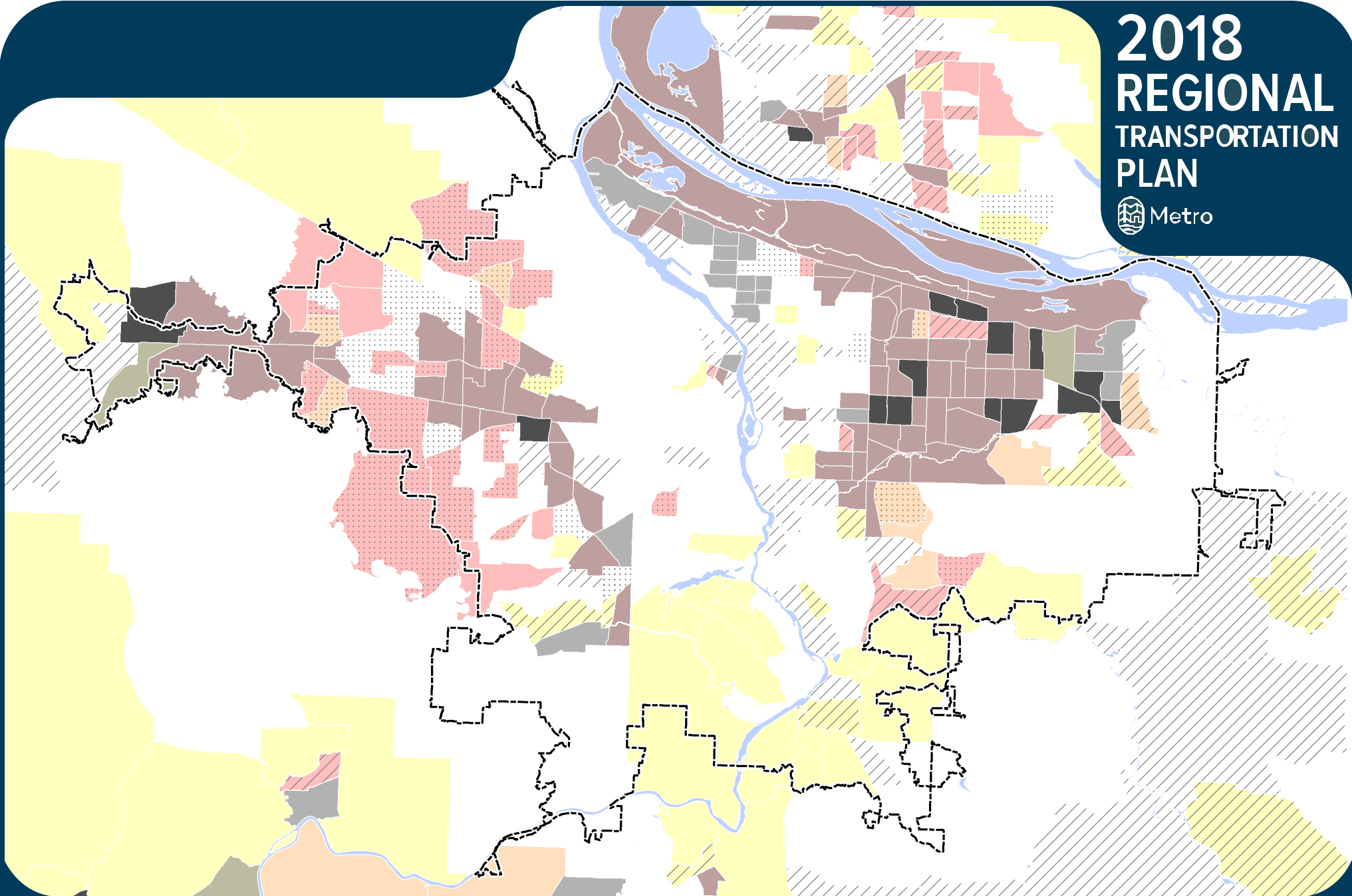
MPA boundary

Rivers and water bodies

A historically marginalized community (HMC) is defined as exceeding regional rates for low income, people of color or limited English proficiency (LEP), or exceeding regional rates for under 18 or over 65 years of age.

Limited English Proficiency (LEP) and Poverty  
Data Source: American Community Survey  
2011-2015 5-Yr. Average  
Age and People of Color (POC) Data Source:  
Census 2010  
Map Publication: 4/21/2017

# 2018 REGIONAL TRANSPORTATION PLAN



## Historically Marginalized Communities above Regional Rates

< 200% Poverty, not POC  
 POC, not < 200% Poverty

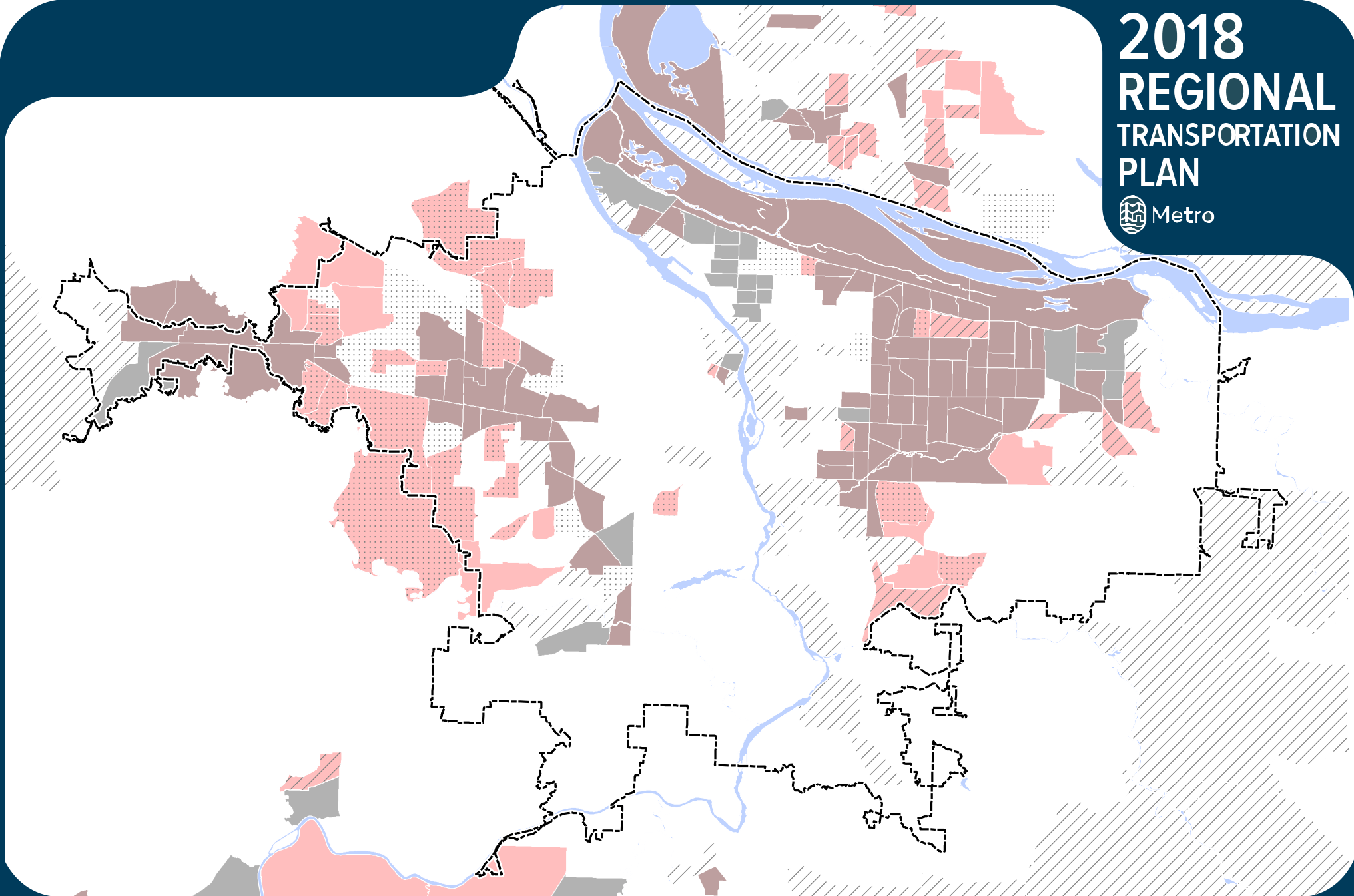
POC and < 200% Poverty  
 LEP  
 POC, <200% Poverty, and LEP

< 18 and > 65 Years of Age  
 < 18, > 65, and LEP  
 < 18, > 65, < 200% Poverty, and POC

All 5 Categories  
 MPA boundary  
 Rivers and water bodies

Limited English Proficiency (LEP) and Poverty  
Data Source: American Community Survey  
2011-2015 5-Yr. Average  
Age and People of Color (POC) Data Source:  
Census 2010  
Map Publication: 4/20/2017

# 2018 REGIONAL TRANSPORTATION PLAN



## Historically Marginalized Communities Assessed for Access to Jobs

< 200% Poverty, not POC  
 POC, not < 200% Poverty

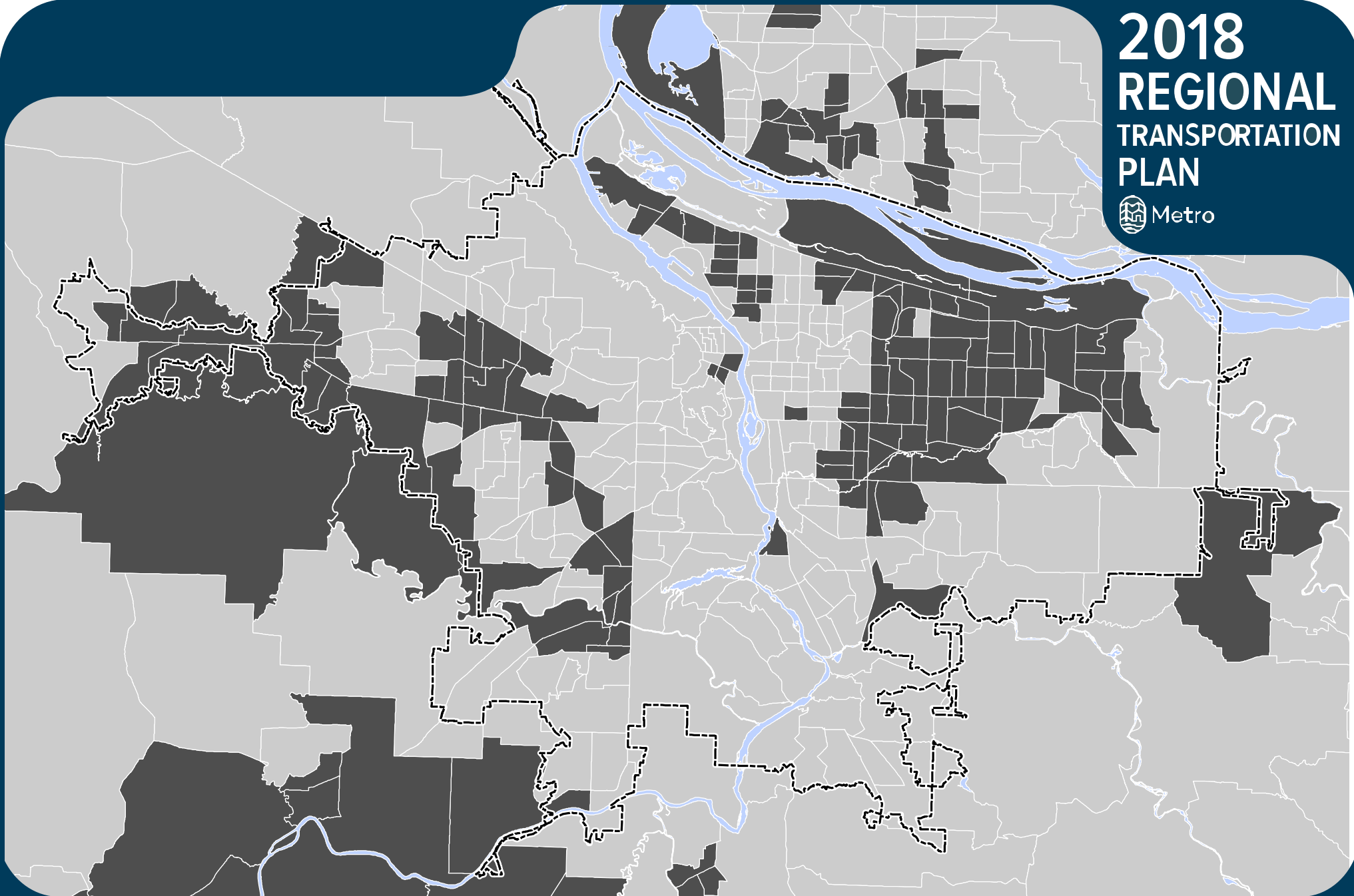
POC and < 200% Poverty  
 LEP

POC, < 200% Poverty, and LEP

MPA boundary  
 Rivers and water bodies

Limited English Proficiency (LEP) and Poverty  
Data Source: American Community Survey  
2011-2015 5-Yr. Average  
People of Color (POC) Data Source:  
Census 2010  
Map Publication: 4/20/2017

# 2018 REGIONAL TRANSPORTATION PLAN



## Focused Historically Marginalized Communities



A focused historically marginalized community (FHMC) is defined as exceeding regional rates for low income, and exceeding regional rates for people of color or limited English proficiency (LEP), as well as exceeding regional density rates for each variable. An additional federal safe harbor screen is applied in order to include areas with at least 5% or 1000 LEP persons for individual languages.

Limited English Proficiency (LEP) and Poverty  
Data Source: American Community Survey  
2011-2015 5-Yr. Average  
Age and People of Color (POC) Data Source:  
Census 2010  
Map Publication: 4/21/2017



# Memo



**Metro**

600 NE Grand Ave.  
Portland, OR 97232-2736

Date: Thursday, November 30, 2017  
To: 2018 RTP Transportation Equity Work Group and Interested Parties  
From: Grace Cho, Associate Transportation Planner  
Subject: 2018 Regional Transportation Plan – Proposed Updates to the 2018 RTP Policy Framework to Advance Equity

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## **Purpose**

The purpose of this memorandum is to summarize proposed updates to the RTP policy framework to address direction from the Metro Council, findings from Metro staff review of the framework, and input provided by the transportation equity work group in June.

The proposed updates to the RTP policy framework are organized as follows:

- Proposed updates to RTP equity definition
- Proposed updates to the RTP equity goal
- Proposed updates to the RTP equity-related objectives
- Proposed updates to RTP equity-related performance targets

## **Introduction**

The Portland metropolitan region's economic prosperity and quality of life depend on a transportation system that provides every person and business in the region with equitable access to safe, efficient, reliable, affordable and healthy travel options. Through the 2018 RTP update, the Metro Council is working with the Joint Policy Advisory Committee on Transportation (JPACT), the Metro Policy Advisory Committee (MPAC) and community and business leaders throughout the region to plan the transportation system of the future by updating the region's shared transportation vision and investment strategy for the next 25 years.

In late May 2017, the Metro Council directed staff to initiate the 2018 Regional Transportation Plan (RTP) call-for-projects. In opening the call-for-projects, the Metro Council directed staff to use development of the 2018 RTP to clearly and realistically communicate our transportation funding outlook and develop a pipeline of priority projects for the regional transportation system for Metro and other partners to work together to fund and build. The Council also directed the RTP project list and RTP modal and topical strategies be developed in a transparent way that advances adopted regional goals, supports regional coalition building efforts, and emphasizes equity, safety, and climate change.

As a result, Metro staff reconvened the Transportation Equity work group in June 2017 to discuss how the 2014 RTP policies can better express and advance equity. The discussions included an overview of existing RTP policies as they relate to equity and the RTP performance targets related to the transportation equity evaluation measures. As Metro staff begins reporting the evaluation results of the draft transportation investment strategy submitted by jurisdictions through the 2018 RTP call-for-projects, findings from the assessment and the work group feedback on the results will inform recommendations for refinements to the 2014 RTP policy framework. The recommended refinements may result in adjustments the draft investment strategy, if necessary, to ensure equity and other RTP policy goals are addressed adequately.

## **2018 Regional Transportation Plan – Approved Vision**

In May 2017, the policy advisory committees, JPACT and MPAC, as well as the Metro Council endorsed the following updated vision statement for the 2018 RTP:

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

The updated vision statement represents the region's shared vision for the transportation system and is a reflection of the values and desired outcomes expressed by the public, policymakers and community and business leaders engaged in the development of the 2018 RTP. With this updated vision for the region's transportation system, the jurisdictions submitting transportation investment priorities through the 2018 RTP call-for-projects were asked to consider and nominate projects which will further progress towards this aspirational vision and the adopted RTP goals.

### **Regional Transportation Plan Policy Framework – Proposal – Redefining Equity**

The 2010 RTP established the region's outcomes-based policy framework to inform transportation planning and investment decisions. The outcomes-based framework uses the triple bottom line (economy, environment, and equity) to create a balanced approach that looks at the system outcomes more comprehensively and embraces a concept which focuses on people, place, and prosperity. The framework establishes how equity is applied in the RTP and creates a lens through which each and all of the region's transportation investments must consider and account for in order to meet the RTP goals comprehensively. Currently the RTP defines equity as:

***Equity** – Responsibility of the plan to the people of the region. The plan identified an interconnected and multimodal transportation system that provides safe and affordable travel choices for everyone and equal access to work, education and nature for the region's residents. The implementation of the plan must ensure that the benefits and impacts of transportation decisions are fairly distributed to all people, regardless of race, national origin, or income, and that everyone has access to meaningful participation.*

After thorough discussion with the work group and conducting a workshop exercise, there was agreement that the current definition of equity should be revised to reflect missing elements and to provide greater clarity. There was general agreement to continue to emphasize a multimodal and interconnected system. Thematically, some key elements the work group felt the revised definition needed to better reflect are:

- Update the definition of equity which leads with race and explains how a definition which focuses on race is more broadly inclusive of other marginalized communities;
- Emphasize as a core statement that the region's system must be interconnected and multimodal while also equitable, healthy, safe, accessible, and affordable;
- Update the definition to recognize the way in which the system has been developed over time, the system has created or perpetuated disparities;
- Provide clarity on what is meant by "fair" and distinguish the difference between equity and equality.

Additionally, in June 2016, Metro adopted the Strategic Plan to Advance Racial Equity, Diversity, and Inclusion (Strategic Plan). The Strategic Plan's purpose is to provide clarity as to how Metro looks to achieve equity, one of the six desired outcomes for the region. In the Strategic Plan, the definition equity is the following:

***Equity** – Race can no longer be used to predict life outcomes and outcomes for all groups are improved.*



In defining equity as racial equity, the purpose of the Strategic Plan is to tackle the greatest challenge posed by systemic and institutional racism and ultimately dismantle barriers experienced by all marginalized communities.

As a result of the workgroup input to Metro staff and subsequent direction by the Metro Council, Metro staff proposes the 2018 RTP redefine equity with a racial equity framework. Two potential definition options are provided for discussion.

Proposed Refined Definition No. 1 for the RTP

**Equity** – *The responsibility of the plan to ensure one's racial and/or ethnic identity cannot predict disparities experienced with the transportation system, particularly for people of color, and outcomes for all groups are improved.*

Proposed Refined Definition No. 2 for the RTP

**Equity** – *Where one's racial and/or ethnic identity cannot predict disparate outcomes in access, safety, affordability, and health when it comes to the region's multimodal transportation system, and outcomes for all groups are improved.*

Metro staff deliberated how to best balance work group input on the redefined equity framework for the 2018 RTP. The differences in the two proposed definitions are focused towards how broad and how specific the equity definition should be for the 2018 RTP. Recognizing the input provided by the work group in June, Metro staff seeks work group input on the following questions.

1. Which proposed definition of equity is desired for the RTP?
  - a. Is a broader definition desired to support other important disparities experienced with the transportation system?
  - b. Or is a more specific definition desired to focus on the four main areas in which historically marginalized communities have expressed seeing improved?

In proposing a racial equity definition for the 2018 RTP and to better support a focus on race across all the region's communities, Metro staff recommends refining the threshold for how communities of color were geographically identified for the purposes of analysis. The anticipated timeframe for redefining the thresholds will be applied to the next transportation equity assessment, either for the 2023 RTP or the 2021-2024 MTIP.

**What Does Racial Equity Mean for My Community?**

A racial equity framework does not exclude different marginalized communities. Rather a racial equity framework shifts the focus and pays additional attention on the disparities experienced by people of color to better address the challenges and barriers experienced by all marginalized communities.

**Regional Transportation Plan Policy Framework – Proposed Revised Equity Goal**

With an established vision for the regional transportation system, the goals and objectives outlined as part of the adopted RTP express specific outcomes to work towards in order to achieve the vision. The RTP goals and objectives are intended to guide the region's investments to achieve the

overarching RTP vision.<sup>1</sup> In building the long-range investment strategy for the 2018 RTP, policymakers agreed to use the adopted 2014 RTP goals and objectives as a starting point for the 2018 RTP call-for-projects, the first step in building the 2018 RTP investment strategy, recognizing additional work is needed to more fully address transportation safety, equity, and climate change.<sup>2</sup>

The current RTP equity goal describes the outcomes sought and identifies four objectives to achieve the equity goal. Additionally objectives across other goals also support the outcome of the equity goal.<sup>3</sup>

2014 RTP Goal 9: Ensure Equity states:

*“The benefits and adverse impacts of regional transportation planning, programs, and investment decisions are equitably distributed among population demographics and geography, considering different parts of the region and census block groups with different incomes, races, and ethnicities.”*

### **Federal Rules: Title VI & Environmental Justice**

The region proposes focusing on a racial equity framework 2018. This framework is consistent with federal mandates related to addressing the needs of underserved and marginalized communities. All RTP assessment work will continue to comply with all federal mandates by looking at lower-income populations and language isolation.

Several themes emerged from the work group discussion, related to the 2014 RTP equity goal. Thematically, elements which were considered missing from the current equity goal include:

- Orient the goal around people and lead with race;
- Orient the goal to include core statement about the major themes expressed by historically marginalized communities: healthy, safe, accessible, and affordable;
- Have the goal express the transportation system is interconnected and the multimodal system must be equitable by addressing disparities and segregation experienced by different users;
- Provide clarity in the goal that “equitable” means “fair” and not “same” to get past the equity vs. equality narrative, and provide a policy basis for prioritization

Based on the discussion and feedback, Metro staff proposes to update the RTP glossary to distinguish the differences between equality and equity, as well as reinforce for the purposes of the 2018 RTP that when the term equity is used, it refers to racial equity and fairness, unless otherwise specified (i.e. geographic equity – fairness).

In looking to balance the feedback and input provided, the following reflects Metro staff proposed revision the 2014 RTP Equity goal.

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<sup>1</sup> See Attachment 1 “Summary of the 2014 RTP Policy Framework”. Within the summary, footnoted are specific comments provided by different members of MPAC, JPACT, and Metro Council in directing Metro staff to further focus on transportation safety, equity, and climate change. Relevant footnotes include: 3, 5, 6, and 7.

<sup>2</sup> See Attachment 2 “2014 RTP Goals and Objectives”.

<sup>3</sup> See Table 1 in this memorandum which lists the other RTP goals which align to equity-related outcomes.

### Proposed Revised Ensure Equity Goal for the 2018 RTP

#### *Advance Equity*

*An equitable interconnected multimodal transportation system is safe, accessible and affordable to use and reduces disparities experienced by people of color as the means of addressing the most challenging barriers and disparities experienced and ultimately provide benefits to all users of the transportation the system.*

Metro staff deliberated how to best balance work group input on the Ensure Equity goal for the 2018 RTP in June. Metro staff seeks work group input on the following question.

1. Does the revised Ensure Equity goal reflect the balance of input, feedback, and intent from the work group? Are there additions or missing elements?

### **Regional Transportation Plan Policy Framework – Proposed Revised Equity Objectives**

As a means to achieve the RTP goal, Ensure Equity, four identified objectives are currently a part of the RTP. These four objectives provide further direction on different areas transportation investments can aim to implement to achieve the equity goal. Additionally, throughout the RTP policy framework there are a number of RTP goals and objectives which have an association to the priority desired outcomes expressed by historically marginalized communities. The different RTP goals and objectives which are associated or directly related to equity are listed in Table X.

*Table 1. Equity Related RTP Goals and Objectives*

<b>Equity Related RTP Goals and Objectives</b>
Goal 1: Foster Vibrant Communities; Objective 1.3 Affordable Housing
Goal 2: Sustain Economic Competitiveness and Prosperity; Objective 2.5 Job Retention and Creation
Goal 3: Expand Transportation Choices; Objective 3.2 Vehicle Miles of Travel
Goal 3: Expand Transportation Choices; Objective 3.3 Equitable Access and Barrier Free Transportation
Goal 4: Emphasize Effective and Efficient Management of the Transportation System; Objective 4.4 Demand Management
Goal 5: Enhance Safety and Security; Objective 5.1. Operational and Public Safety
Goal 6: Promote Environmental Stewardship; Objective 6.1 Natural Environment
Goal 6: Promote Environmental Stewardship; Objective 6.2 Clean Air
Goal 7: Enhance Human Health; Objective 7.2 Active Living
Goal 7: Enhance Human Health; Objective 7.2 Pollution Impacts
Goal 8: Demonstrate Leadership on Reducing Greenhouse Gas Emissions; Objective 8.3 Regional and Community Transit Network and Access
Goal 8: Demonstrate Leadership on Reducing Greenhouse Gas Emissions; Objective 8.4 Active Transportation Network
Goal 9: Ensure Equity; Objective 9.1 Environmental Justice
Goal 9: Ensure Equity; Objective 9.2 Coordinated Human Services Transportation Needs
Goal 9: Ensure Equity; Objective 9.3 Housing Diversity
Goal 9: Ensure Equity; Objective 9.4 Transportation and Housing Costs
Goal 11: Deliver Accountability; Objective 11.1 Meaningful Input Opportunities

In a review of the RTP goals and objectives, Metro staff identified a number of redundancies across different goals and objectives. Additionally, as part of the review, Metro staff noted many of the objectives do not fit the definition of an objective (specific, measurable, achievable, realistic, and time-bound). Recognizing these issues, Metro staff is in the process of identifying updates to the RTP policy framework that will streamline the goals and objectives, as well as reshaping the objectives to make them specific, measurable, achievable, realistic, and time-bound. The purpose of the update is to have the objectives function as direction for transportation investments to make progress towards for achieving the goals set forth for the RTP.

To support the reshaping and revising of the RTP policy framework, as represented by the goals and objectives, several different exercises were undertaken to help shape the RTP policy framework proposal. These different exercises included the following:

- Gathered input through the transportation equity work group on the objectives specific to the RTP Ensure Equity goal;
- Conducted an internal screening to identify redundancies and propose collapsing of various RTP objectives; and
- Assessed the alignment of the transportation equity system evaluation measures to the RTP goals and objectives to ensure that analysis of the plan reflects and measures progress towards the objectives and the goals of the RTP.

The following sections illustrate a summary of the different exercises undertaken and the results to lead to the proposal.

#### Feedback from the Transportation Equity Work Group on Objectives for RTP Goal 9: Ensure Equity

At the June meeting, Metro staff held a discussion with the work group as to what resonated and what is missing from each of the Equity specific objectives. The purpose of the discussion was to help facilitate that objectives be shaped in way to achieve the equity goal. For each objective the main thematic comments were identified from the work group discussion specific to each objective and summarized below.

*Objective 9.1 Environmental Justice* – Ensure benefits and impacts of investments are equitably distributed by population demographics and geography.

Thematic feedback provided by the work group:

- Reorient this objective to be the “distribution” oriented objective
- Have it speak to the key themes of safety, access, affordability, and health
- But also include environmental benefits and address mitigating burdens

*Objective 9.2 Coordinated Human Services Transportation Needs* – Ensure investments in the transportation system provide a full range of affordable options for people with low income, elders and people with disabilities consistent with the Coordinated Transportation Plan.

Thematic feedback provided by the work group:

- Simplify to be more inclusive
- Reframe language to recognize racial disparities
- Cross over the language from other RTP goals and objectives which overlap

*Objective 9.3 Housing Diversity* – Use transportation investments to achieve greater diversity of housing opportunities by linking investments to measures taken by the local governments to increase housing diversity.

Thematic feedback provided by the work group:

- Link this objective to affordable housing and provide specific measurable language
- Jobs and housing balance
- Orient towards people and racial justice
- Potentially reframe/retitle objective to reflect “connection to opportunity”

*Objective 9.4 Transportation and Housing Costs* – Reduce the share of households in the region spending more than 50 percent of household income on housing and transportation combined.

Thematic feedback provided by the work group:

- Continue to reflect the housing and transportation relationship
- Broaden the objective to certain percent income spent on transportation rather than transportation and housing; meaning develop a specific target to transportation
- Reduce the combined expenditure percentage from 50% to 45% which is more recognized across the county
- Reflect jobs and housing balance; recognize the balance of closer in housing to jobs and commercial and lead to reduced transportation costs

#### Assessment of Transportation System Evaluation Measures and the RTP Policy Framework

One of several reasons for updating the RTP policy framework is to assess and align what is measured in the plan (i.e. the RTP system and equity evaluation) to the RTP goals and objectives to ensure what is being measured is informing whether or not the region is making progress towards achieving the RTP goals and objectives. As a result, Metro staff reviewed the five transportation equity system evaluation measures for the 2018 RTP. These include those two system evaluation measures which are being recommended to be developed by the 2023 RTP.

The assessment exercise looked to align the transportation equity system evaluation measures as closely as possible to the associated RTP goal and objective, recognizing some revisions and reshaping on both the RTP goal and objective and system evaluation measure may be needed.

*Table 2. 2018 RTP Transportation Equity System Evaluation Measures & RTP Policy Framework Links*

<b>Transportation Equity System Evaluation Measure</b>	<b>Associated RTP Goal and Objective</b>
Access to Jobs	<u>RTP Goal 2</u> : Sustain Economic Competitiveness and Prosperity; Objective 2.5 Job Retention and Creation
Access to Community Places	<u>RTP Goal 3</u> : Expand Transportation Choices; Objective 3.3 Equitable Access and Barrier Free Transportation
Access to Travel Options – System Connectivity and Completeness	<u>RTP Goal 3</u> : Expand Transportation Choices; Objective 3.3 Equitable Access and Barrier Free Transportation <u>RTP Goal 4</u> : Emphasize Effective and Efficient Management of the Transportation System: Objective 4.4 Demand Management <u>RTP Goal 8</u> : Demonstrate Leadership on Reducing Greenhouse Gas Emissions; Objective 8.4 Active Transportation Network <u>RTP Goal 9</u> : Ensure Equity; Objective 9.2 Coordinated Human Services Transportation Needs
Share of Safety Projects	<u>RTP Goal 5</u> : Enhance Safety and Security; Objective 5.1. Operational and Public Safety

Exposure to Non-Freeway Vehicle Miles Traveled/Crash Risk	RTP Goal 3: Expand Transportation Choices; Objective 3.2 Vehicle Miles of Travel RTP Goal 5: Enhance Safety and Security; Objective 5.1. Operational and Public Safety
Habitat Impact	RTP Goal 6: Promote Environmental Stewardship; Objective 6.1 Natural Environment
Affordability	RTP Goal 4: Emphasize Effective and Efficient Management of the Transportation System: Objective 4.4 Demand Management RTP Goal 8: Demonstrate Leadership on Reducing Greenhouse Gas Emissions; Objective 8.3 Regional and Community Transit Network and Access RTP Goal 8: Demonstrate Leadership on Reducing Greenhouse Gas Emissions; Objective 8.4 Active Transportation Network RTP Goal 9: Ensure Equity; Objective 9.4 Transportation and Housing Costs
Clean Air	RTP Goal 6: Promote Environmental Stewardship; Objective 6.2 Clean Air RTP Goal 7: Enhance Human Health; Objective 7.2 Pollution Impacts

Based on the assessment and alignment what has been observed is that each transportation equity system evaluation measure has one or more associated RTP goal(s) and objective(s). However, none of the RTP goal(s) and objective(s) associated with the system measures aligns perfectly with the system evaluation measure. There were also a handful of RTP goals and objectives which did not align to a specific transportation equity measure.

*Table 3. Outlier Equity Related RTP Goals and Objectives without a Transportation Equity System Evaluation Measure*

<b>Outlier of Equity Related RTP Goals and Objectives without a System Evaluation Measure</b>
Goal 1: Foster Vibrant Communities; Objective 1.3 Affordable Housing
Goal 7: Enhance Human Health; Objective 7.2 Active Living
Goal 9: Ensure Equity; Objective 9.1 Environmental Justice
Goal 9: Ensure Equity; Objective 9.3 Housing Diversity
Goal 11: Deliver Accountability; Objective 11.1 Meaningful Input Opportunities

These objectives in the RTP are considered critical to the success of the region's transportation system. Metro staff proposes that these RTP objectives without an associated transportation equity system evaluation measure continue to move forward as part of the plan's policy framework. As a result, Metro staff consulted with key planning department staff working in these areas to gather a sense of what recommendations would be appropriate for the long-range transportation plan and the region's investment strategy to help advance the objective outcomes.

#### Internal Screening of the RTP Policy Framework

In the Metro staff screening of the RTP goals and objectives, the purpose is to revise and reframe the goals and objectives to reduce redundancies, better reflect the intended outcomes stated by the goal, and provide greater clarity for the purposes of policy direction. Recognizing the main

outcomes staff looks to achieve with the RTP goals and objectives revision, Table 4 summarizes Metro staff proposed actions and recommendations for the 2018 RTP policy framework for the equity-related goals and objectives.

*Table 4. Summary of Proposed Actions and Recommendations for the 2018 RTP Policy Framework*

<b>Original 2014 RTP Goal &amp; Objective</b>	<b>Proposed Action</b>
Goal 1: Foster Vibrant Communities; Objective 1.3 Affordable Housing	Combine with Goal 9, Objective 9.3: Housing Diversity; revise using input from work group and from Metro equitable housing and transit-oriented development program staff.
Goal 2: Sustain Economic Competitiveness and Prosperity; Objective 2.5 Job Retention and Creation	Revise objective to reflect equitable construction industry workforce aspirations and outcomes. Create new objective to reflect Access to Middle and/or Low-Wage Jobs system evaluation measure. Relocate Goal 9, Objective 9.4 Housing and Transportation Costs; revise objective according to work group input.
Goal 3: Expand Transportation Choices; Objective 3.2 Vehicle Miles of Travel	Modify and reference other aligned goals and objectives.
Goal 3: Expand Transportation Choices; Objective 3.3 Equitable Access and Barrier Free Transportation	Combined with Goal 9, Objective 9.2: Coordinated Human Services Transportation Needs;
Goal 4: Emphasize Effective and Efficient Management of the Transportation System: Objective 4.4 Demand Management	Revise to incorporate equity element.
Goal 5: Enhance Safety and Security; Objective 5.1. Operational and Public Safety	Revise and reframe to focus specifically on transportation safety and supporting Vision Zero framework recommended by the Safety work group and Metro staff.
Goal 6: Promote Environmental Stewardship; Objective 6.1 Natural Environment	Revise to support other related goals and objectives.
Goal 6: Promote Environmental Stewardship; Objective 6.2 Clean Air	Combine with Goal 7, Objective 7.2 Pollution Impacts; revise according to work group input and develop work program for implementation as part of the 2023 RTP
Goal 7: Enhance Human Health; Objective 7.2 Active Living	Revise to support other related goals and objectives.
Goal 7: Enhance Human Health; Objective 7.2 Pollution Impacts	See Goal 6, Objective 6.2 Clean Air
Goal 8: Demonstrate Leadership on Reducing Greenhouse Gas Emissions; Objective 8.3 Regional and Community Transit Network and Access	Incorporate Goal 8 into other RTP aligned goals and revise to advance the Climate Smart objectives (included as Goal 8) and other related RTP goals.

Goal 8: Demonstrate Leadership on Reducing Greenhouse Gas Emissions; Objective 8.4 Active Transportation Network	See Goal 8, Objective 8.3 Regional and Community Transit Network and Access
Goal 9: Ensure Equity; Objective 9.1 Environmental Justice	Revise objective to reflect work group input and align to on-going transportation equity assessment of transportation investment strategy
Goal 9: Ensure Equity; Objective 9.2 Coordinated Human Services Transportation Needs	See Goal 3, Objective 3.3 Equitable Access and Barrier Free Transportation
Goal 9: Ensure Equity; Objective 9.3 Housing Diversity	See Goal 1, Objective 1.3 Affordable Housing
Goal 9: Ensure Equity; Objective 9.4 Transportation and Housing Costs	See Goal 2; moved because it seemed better aligned to Goal 2; new objective created
Goal 11: Deliver Accountability; Objective 11.1 Meaningful Input Opportunities	Revise according to work group input (non-specific) and consultation with Metro communications staff.

### **Regional Transportation Plan Policy Framework – Proposed Revised Equity Goals and Objectives**

Metro proposes the following revised RTP goals and objectives based on the previously described review of the RTP policy framework, equity work group input, and the desire to better align the RTP goals and objectives to the outcomes reflected in transportation equity system evaluation measures. Metro staff requests feedback from the transportation equity work group on the proposed revisions that follow. The adopted 2014 RTP goals and objectives are provided for reference in Attachment 2.

#### **Goal 1: Foster Vibrant Communities and Efficient Urban Form**

**Objective 1.3 Affordable Housing and Transportation Coordination** – Coordinate the investment of affordable transportation options to support the preservation and production of affordable housing in the region by increasing the number, percentage and diversity of regulated affordable housing units within walking distance of frequent service transit.

#### **Goal 2: Sustain Economic Competitiveness and Prosperity**

**Objective 2.5 Construction Trade Job Creation and Retention** – Utilize the public investment of regional transportation projects to support family-wage construction job opportunities and growing a diverse construction workforce that better reflects the demographics of the community.

**NEW Objective 2.X Access to Jobs and Talent** – Increase the number, percentage, and types (i.e. wage, other) of jobs the region’s residents can reach by transit, walking, and bicycling with a focus on increasing job access for historically marginalized communities.

**Objective 2.X Transportation and Housing Costs** – Reduce the share of lower-income households in the region spending more than 45 percent of household income on housing and transportation combined and aim to maintain household transportation costs at 15% or less particularly for lower-income households of color and renters of color.



*Goal 3: Expand Transportation Choices*

*Objective 3.3 Equitable Access and Barrier Free Transportation* – Increase affordable and equitable access to travel choices that serve the needs of all people and businesses, particularly for people of color, people in poverty, youth, older adults and people with disabilities, to connect with jobs, education, and community places.

*Goal 4: Emphasize Effective and Efficient Management of the Transportation System*

*Objective 4.4 Demand Management* – TBD with input from Metro RTO staff and strategic plan.

*Goal 5: Increase Safety and Security*

*Objective 5.1 Operational and Public Transportation Safety* – Eliminate fatal and serious injury crashes for all modes of travel.

*Goal 6: Promote Environmental Stewardship*

*Objective 6.1 Natural Environment and Cultural Resources* – Avoid or minimize undesirable impacts on fish and wildlife habitat conservation areas, wildlife corridors, significant flora, open spaces, protected water features, and cultural resources identified through planning process.

*Goal 7: Enhance Public Health*

*Objective 7.2 Pollution Impacts* – Reduce transportation-related vehicle emissions to improve air quality and to reduce negative health effects, particularly for historically marginalized communities who often experience greater exposure to air pollution.

*Goal 9: Advance Equity*

*Objective 9.1 Desired Outcomes to Advance Equity* – Make progress towards the desired outcomes historically marginalized communities, particularly those of color, have expressed for the regional transportation system by evaluating regional transportation plans, programs, and investments effect in making progress.

**NEW** *Objective 9.2: Reduce Racial Disparities* – Use transportation investments to reduce racial disparities in access – for both physical barriers and socioeconomic – to affordable travel options to jobs, education, services, recreation, and social and cultural activities.

*Goal 11: Ensure Transparency and Accountability*

*Objective 11.1 Meaningful Input Opportunities* – TBD with input from Metro communications staff input.

**Regional Transportation Plan Policy Framework – Initial Proposed Framework for RTP Performance Targets**

At the September work group meeting, members provided robust feedback on the Metro staff proposal for the RTP performance targets. Key themes Metro staff heard from the September work group meeting about the RTP performance targets overall were (in no particular order):

- Continue to be aspirational with the RTP performance targets;
- Be aggressive with the RTP performance targets in and for historically marginalized communities;
- Orient the RTP performance targets in a way which prioritizes eliminating the disparities gap experienced by communities of color with the transportation system;

- Be intentional with how the performance target becomes oriented to prevent the possibility of manipulation to show better performance
- Have appropriate monitoring measures to better understand progress; and
- Recognize historically marginalized communities have pressing needs today and that the RTP performance targets will not advance equitable outcomes unless more aggressive actions are taken immediately.

In addition, there were a number of specific comments made towards individual RTP performance targets.

At this time, other RTP work groups including the performance measures, safety, transit, and freight, are discussing the RTP investment strategy system evaluation results relative to the adopted RTP performance targets.

Based on the September work group feedback, Metro staff proposes the revisions to the RTP performance targets which address the key outcomes of accessibility, affordability, safety, and health all be framed in a manner which would eliminate the disparate outcomes experienced by historically marginalized communities, particularly people of color. For Metro staff to reframe the RTP performance targets in this manner, this may mean the reporting of the progress of the 2018 RTP 10-year and financially constrained investment strategy may not be able to report progress towards the updated targets because it may require additional baseline work which will not be completed prior to the adoption of the 2018 RTP. Also, as discussed briefly under the revised RTP definition of equity, Metro staff recommends revising the thresholds used to identify historically marginalized communities, particularly communities of color, to better capture the direction to focus on race and better measure how the 10-year and long-range investment strategies are closing the disparities gap.

To date, Metro staff has proposed specific language to two RTP performance targets based on feedback and input from the different work groups. The rationale for proposing the specific language for these RTP performance targets is because of the relative straightforward proposal they represent. These are:

<b>Transportation Equity System Measure</b>	<b>RTP Performance Target</b>	<b>Metro Staff Proposed RTP Performance Target</b>
Access to Travel Options – System Connectivity and Completeness	Basic Infrastructure	100% completion of regional biking and walking network by 2040
Share of Safety Projects & Exposure to Non-Freeway VMT	Safety	Eliminate fatalities and serious injuries by 2035; 50% reduction by 2025; 16% reduction by 2020

The full RTP performance target proposal will come forward to the work group at the January 11<sup>th</sup> meeting.

### **2018 RTP Policy Framework – Questions for Discussion**

1. What are your reactions to the overall proposed RTP policy framework and the 2018 RTP? (Reframed and revised equity definition, revised equity goals, revised RTP objectives with a related equity objective)

2. Are there refinements to the RTP goals and objectives which would make the objective specific, measurable, achievable, realistic, and time-bound (SMART)?
3. Are there refinements to the RTP goals and objectives which would better focus on and advance outcomes for people of color?

**Next Steps**

Metro staff will compile the input provided by the work group discussion to bring back revised the revised RTP policy framework to the work group for discussion at the last work group meeting scheduled for January 11, 2018. Until then, Metro staff will also be presenting the revised RTP policy framework to MTAC and TPAC as part of a broader discussion of the 2018 RTP policy framework beginning in January 2018. Following the input from the various work groups and committees, Metro staff will revise the RTP policy framework in time for a public comment period planned for June-August 2018. At that time, work group members, committee members, community and business leaders, and others interested in the development of the RTP are encouraged to provide additional feedback and input.



## Summary of 2014 Regional Transportation Plan Policy Framework

### Overview and purpose

The Regional Transportation Plan establishes a policy framework that guides transportation planning and investment decisions in the region, including identifying, evaluating and prioritizing project and program investments to be included in the plan.

This document summarizes the adopted Regional Transportation Plan policy framework (last amended in December 2014). Key elements of the policy framework are:

- a vision and mission for the region's transportation system that reflects community values and desired land use, economic, equity and environmental outcomes;
- eleven supporting goals and objectives and related performance targets; and
- a network vision and supporting policies that along with the regional mobility corridor framework guide planning and investment in each part of the regional transportation system to provide a seamless and fully interconnected system.<sup>1</sup>

Together these key elements define the outcomes the plan is trying to achieve by 2040 and will guide development of the 2018 RTP Investment Strategy.

The 2018 RTP Call for Projects will use the adopted 2014 RTP Policy Framework as a starting point, recognizing this RTP update has an increased focus on addressing safety, equity and climate change and that the current policy framework will be subject to further review and refinement to more fully address these and other issues of concern through the 2018 RTP update (e.g., congestion, emerging technologies and funding).

### Our shared vision for the future of transportation

The following statement reflects an updated vision for the region's transportation system:

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

The vision reflects the values and desired outcomes expressed by the public, policymakers and community and business leaders engaged in development of the 2018 Regional Transportation Plan.

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<sup>1</sup> Reflecting the network vision for each part of the system, the RTP System Maps designates facilities that are part of the regional transportation system based on the function they serve and where they are located. The 2014 RTP regional system maps are included in Attachment 2 for reference and can be viewed on-line at: [gis.oregonmetro.gov/rtp/](http://gis.oregonmetro.gov/rtp/).

## Regional goals and objectives for transportation<sup>2</sup>

*Our shared vision for the future of transportation is further described through eleven goals and related objectives. The goals are broad statements that describe a desired outcome or end result toward which efforts are focused. The goals and supporting objectives provide a basis for evaluating investments to inform priorities and track progress toward achieving the outcomes expressed in the RTP vision. Note: These will be subject to further review and refinement through the 2018 RTP update.*

### GOAL 1: Foster Vibrant Communities and Efficient Urban Form

Land use and transportation decisions are linked to optimize public investments, reduce greenhouse gas emissions and support active transportation options and jobs, schools, shopping, services, recreational opportunities and housing proximity.

- **Objective 1.1 Compact Urban Form and Design** - Use transportation investments to focus growth in and provide multi-modal access to 2040 Target Areas and ensure that development in 2040 Target Areas is consistent with and supports the transportation investments.
- **Objective 1.2 Parking Management** – Minimize the amount and promote the efficient use of land dedicated to vehicle parking.
- **Objective 1.3 Affordable Housing** – Support the preservation and production of affordable housing in the region.

### GOAL 2: Sustain Economic Competitiveness and Prosperity

Multi-modal transportation infrastructure and services support the region's well-being and a diverse, innovative, sustainable and growing regional and state economy.

- **Objective 2.1 Reliable and Efficient Travel and Market Area Access** - Provide for reliable and efficient multi-modal local, regional, interstate and intrastate travel and market area access through a seamless and well-connected system of thoroughways, arterial streets, freight services, transit services and bicycle and pedestrian facilities.
- **Objective 2.2 Regional Passenger Connectivity** – Ensure reliable and efficient connections between passenger intermodal facilities and destinations in and beyond the region to improve non-auto access to and from the region and promote the region's function as a gateway for tourism.
- **Objective 2.3 Metropolitan Mobility** - Maintain sufficient total person-trip and freight capacity among the various modes operating in the Regional Mobility Corridors to allow reasonable and reliable travel times through those corridors.
- **Objective 2.4 Freight Reliability** – Maintain reasonable and reliable travel times and access through the region, as well as between freight intermodal facilities and destinations within and beyond the region, to promote the region's function as a gateway for commerce.
- **Objective 2.5 Job Retention and Creation** – Attract new businesses and family-wage jobs and retain those that are already located in the region.

### GOAL 3: Expand Transportation Choices

Multi-modal transportation infrastructure and services provide all residents of the region with affordable and equitable options for accessing housing, jobs, services, shopping, educational, cultural and recreational opportunities, and facilitate competitive choices for goods movement for all businesses in the region.

- **Objective 3.1 Travel Choices** - Achieve modal targets for increased walking, bicycling, use of transit and shared ride and reduced reliance on the automobile and drive alone trips.
- **Objective 3.2 Vehicle Miles of Travel** - Reduce vehicle miles traveled per capita.
- **Objective 3.3 Equitable Access and Barrier Free Transportation** - Provide affordable and equitable access to travel choices and serve the needs of all people and businesses, including people with low income, youth, older adults and people with disabilities, to connect with jobs, education, services, recreation, social and cultural activities.

<sup>2</sup> First adopted in 2010 and amended in 2014 to reflect the Regional Active Transportation Plan and Climate Smart Strategy.



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- **Objective 3.4 Shipping Choices** – Support multi-modal freight transportation system that includes air cargo, pipeline, trucking, rail, and marine services to facilitate competitive choices for goods movement for businesses in the region.

**GOAL 4: Emphasize Effective and Efficient Management of the Transportation System**

Existing and future multi-modal transportation infrastructure and services are well-managed to optimize capacity, improve travel conditions for all users and address air quality and greenhouse gas emissions reduction goals.

- **Objective 4.1 Traffic Management** – Apply technology solutions to actively manage the transportation system.
- **Objective 4.2 Traveler Information** – Provide comprehensive real-time traveler information to people and businesses in the region.
- **Objective 4.3 Incident Management** – Improve traffic incident detection and clearance times on the region's transit, arterial and throughways networks.
- **Objective 4.4 Demand Management** – Implement services, incentives and supportive infrastructure to increase telecommuting, walking, biking, taking transit, and carpooling, and shift travel to off-peak periods.
- **Objective 4.5 Value Pricing** – Consider a wide range of value pricing strategies and techniques as a management tool, including but not limited to parking management to encourage walking, biking and transit ridership and selectively promote short-term and long-term strategies as appropriate.

**GOAL 5: Enhance Safety and Security**

Multi-modal transportation infrastructure and services are safe and secure for the public and goods movement.

- **Objective 5.1 Operational and Public Safety** - Reduce fatal and severe injuries and crashes for all modes of travel.
- **Objective 5.2 Crime** - Reduce vulnerability of the public, goods movement and critical transportation infrastructure to crime.
- **Objective 5.3 Terrorism, Natural Disasters and Hazardous Material Incidents** - Reduce vulnerability of the public, goods movement and critical transportation infrastructure to acts of terrorism, natural disasters, climate change, hazardous material spills or other hazardous incidents.

**GOAL 6: Promote Environmental Stewardship**

Promote responsible stewardship of the region's natural, community, and cultural resources.

- **Objective 6.1 Natural Environment** – Avoid or minimize undesirable impacts on fish and wildlife habitat conservation areas, wildlife corridors, significant flora and open spaces.
- **Objective 6.2 Clean Air** – Reduce transportation-related vehicle emissions to improve air quality so that as growth occurs, the view of the Cascades and the Coast Range from within the region are maintained.
- **Objective 6.3 Water Quality and Quantity** – Protect the region's water quality and natural stream flows.
- **Objective 6.4 Energy and Land Consumption** - Reduce transportation-related energy and land consumption and the region's dependence on unstable energy sources.
- **Objective 6.5 Climate Change** – Reduce transportation-related greenhouse gas emissions and meet adopted targets for reducing greenhouse gas emissions from light vehicle travel.

**GOAL 7: Enhance Human Health**

Multi-modal transportation infrastructure and services provide safe, comfortable and convenient options that support active living and physical activity, and minimize transportation-related pollution that negatively impacts human health.

- **Objective 7.1 Active Living** – Provide safe, comfortable and convenient transportation options that support active living and physical activity to meet daily needs and access services.

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- **Objective 7.2 Pollution Impacts** – Minimize noise, impervious surface and other transportation-related pollution impacts on residents in the region to reduce negative health effects.

**Goal 8: Demonstrate Leadership on Reducing Greenhouse Gas Emissions**

It is the policy of the Metro Council to implement the regional strategy to meet adopted targets for reducing greenhouse gas emissions from light-duty vehicle travel while creating healthy and equitable communities and a strong economy.

- **Objective 8.1 Land Use and Transportation Integration** - Continue to implement the 2040 Growth Concept to support a compact urban form to reduce vehicle miles traveled and increase the use of transit and zero or low carbon emission travel options, such as bicycling, walking, and electric vehicles.
- **Objective 8.2 Clean Fuels and Clean Vehicles** - Support state efforts to transition Oregon to cleaner, low carbon fuels and increase the use of more fuel-efficient vehicles, including electric and alternative fuel vehicles.
- **Objective 8.3 Regional and Community Transit Network and Access** - Make transit convenient, frequent, accessible and affordable by investing in new community and regional transit connections, expanding and improving existing transit services, improving bicycle and pedestrian access to transit, and implementing reduced fare programs for transit-dependent communities, such as youth, older adults, people with disabilities and people with low income.
- **Objective 8.4 Active Transportation Network** - Make biking and walking the safest, most convenient and enjoyable transportation choices for short trips for all ages and abilities by completing gaps and addressing deficiencies in the region's bicycle and pedestrian networks.
- **Objective 8.5 Transportation Systems Management and Operations** - Enhance fuel efficiency and system investments and reduce emissions by using technology to actively manage and fully optimize the transportation system.
- **Objective 8.6 Transportation Demand Management** - Implement programs, services and other tools that provide commuters and households with information and incentives to expand the use of travel options, including carsharing, and reduce drive alone trips.
- **Objective 8.7 Parking Management** - Implement locally-defined approaches to parking management in Centers, Corridors, Station Communities and Main Streets served by frequent transit service and active transportation options to make efficient use of vehicle parking and land dedicated to parking.
- **Objective 8.8 Streets and Highways Network** - Invest strategically in streets and highways to make them safe, reliable and connected to support the movement of people and goods.
- **Objective 8.9 Metro Actions** - Take actions to implement the regional strategy to meet adopted targets for reducing greenhouse gas emissions from light-duty vehicle travel.
- **Objective 8.10 Partner Actions** - Encourage local, state and federal governments and special districts to consider implementing actions in the Toolbox of Possible Actions in locally tailored ways to help the region meet adopted targets for reducing greenhouse gas emissions from light-duty vehicle travel

**GOAL 9: Ensure Equity<sup>3</sup>**

The benefits and adverse impacts of regional transportation planning, programs and investment decisions are equitably distributed among population demographics and geography, considering different parts of the region and census block groups with different incomes, races and ethnicities.

- **Objective 9.1 Environmental Justice** – Ensure benefits and impacts of investments are equitably distributed by population demographics and geography.

<sup>3</sup> This goal and related RTP policies will be subject to further review and refinement by the RTP Transportation Equity Work Group through the 2018 RTP update.



## Summary of 2014 Regional Transportation Plan Policy Framework – Subject to Further Review and Refinement

- **Objective 9.2 Coordinated Human Services Transportation Needs** - Ensure investments in the transportation system provide a full range of affordable options for people with low income, elders and people with disabilities consistent with the Tri-County Coordinated Human Services Transportation Plan (CHSTP).
- **Objective 9.3 Housing Diversity** - Use transportation investments to achieve greater diversity of housing opportunities by linking investments to measures taken by the local governments to increase housing diversity.
- **Objective 9.4 Transportation and Housing Costs**– Reduce the share of households in the region spending more than 50 percent of household income on housing and transportation combined.

**GOAL 10: Ensure Fiscal Stewardship<sup>4</sup>**

Regional transportation planning and investment decisions ensure the best return on public investments in infrastructure and programs and are guided by data and analyses.

- **Objective 10.1 Asset Management**– Adequately update, repair and maintain transportation facilities and services to preserve their function, maintain their useful life and eliminate maintenance backlogs.
- **Objective 10.2 Maximize Return on Public Investment** - Make transportation investment decisions that use public resources effectively and efficiently, using a performance-based planning approach supported by data and analyses that include all transportation modes.
- **Objective 10.3 Stable and Innovative Funding** – Stabilize existing transportation revenue while securing new and innovative long-term sources of funding adequate to build, operate and maintain the regional transportation system for all modes of travel at the federal, state, regional and local level.

**GOAL 11: Deliver Accountability and Transparency<sup>5</sup>**

The region's government, business, institutional and community leaders work together in an open and transparent manner so the public has meaningful opportunities for input on transportation decisions and experiences an integrated, comprehensive system of transportation facilities and services that bridge governance, institutional and fiscal barriers.

- **Objective 11.1 Meaningful Input Opportunities** - Provide meaningful input opportunities for interested and affected stakeholders, including people who have traditionally been underrepresented, resource agencies, business, institutional and community stakeholders, and local, regional and state jurisdictions that own and operate the region's transportation system in plan development and review.
- **Objective 11.2 Coordination and Cooperation** - Ensure representation in regional transportation decision-making is equitable from among all affected jurisdictions and stakeholders and improve coordination and cooperation among the public and private owners and operators of the region's transportation system so the system can function in a coordinated manner and better provide for state and regional transportation needs.

**RTP Performance Targets**

Table 1 summarizes the current adopted RTP performance targets. The performance targets are numerical benchmarks to assess the region's progress in carrying out the RTP vision and goals. The targets draw from federal and state legislation. They are aspirational and begin moving the region towards outcome-based decision-making. As in past RTP updates, the performance targets provide policy direction for developing the RTP investment strategy.

<sup>4</sup> This goal and related objectives will be subject to further review to ensure the policy concept of a well-maintained system is reflected.

<sup>5</sup> The language identified in underscore was recommended by MPAC on April 26, 2017, and will be subject to further review and refinement to ensure transparency of the decision-making process is more explicit.



## Summary of 2014 Regional Transportation Plan Policy Framework – Subject to Further Review and Refinement

Table 1. 2014 RTP Performance Targets<sup>6</sup>

ECONOMY
<b>Safety</b> – By 2040, eliminate transportation related fatalities and serious injuries for all users of the region's transportation system, with a 16% reduction by 2020 (as compared to the 2015 five year rolling average) and a 50% reduction by 2025. <del>reduce the number of fatal and severe injury crashes for pedestrians, bicyclists, and motor vehicle occupants each by 50% compared to 2007 – 2011 average.</del> <sup>7</sup>
<b>Congestion</b> – By 2040, reduce vehicle hours of delay (VHD) per person by 10% compared to 2010.
<b>Freight reliability</b> – By 2040, reduce vehicle hours of delay per truck trip by 10% compared to 2010.
ENVIRONMENT
<b>Climate change</b> – By 2040, reduce transportation-related greenhouse gas emissions per capita below 2010 levels.
<b>Active transportation</b> – By 2040, triple walking, biking and transit mode shares compared to 2010.
<b>Basic infrastructure</b> – By 2040, increase by 50% the miles of sidewalk, bikeways, and trails compared to the regional networks in 2010.
<b>Clean air</b> – By 2040, ensure zero % population exposure to at-risk levels of air pollution.
<b>Travel</b> – By 2040, reduce vehicle miles traveled per person by 10 percent compared to 2010.
EQUITY
<b>Affordability</b> – By 2040, reduce the average household combined cost of housing and transportation by 25 percent compared to 2010.
<b>Access to daily needs</b> – 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.

**Other RTP Performance Standards (from adopted 2014 RTP)**

The RTP must demonstrate that it defines an adequate transportation system to serve planned land uses to meet state planning requirements. The targets in the previous section, the interim standards in this section and performance measures described in Chapter 4 of the 2014 RTP serve as the basis for determining whether the proposed transportation system adequately addresses the RTP goals and planned land uses during the plan period.<sup>8</sup>

**Interim Regional Mobility Policy (first adopted in 2000 RTP)**

The interim mobility policy shown in **Table 2** describes operational conditions that are used to evaluate the quality of service of the auto network, using the ratio of traffic volume to planned capacity (referred to as the volume/capacity ratio) of a given roadway. The measures are used to diagnose the extent of auto congestion during different times of the day in order to identify deficient roadway facilities and services in the plan. The interim regional mobility policy in **Table 2** shows the minimum performance level desired for auto transportation facilities and services within the region. Originally adopted in 2000 and amended into the Oregon Highway Plan in 2002, the interim regional mobility policy reflects a level of performance in the region that the Oregon Transportation Commission (OTC) deemed tolerable at the time of its adoption, but is also recognized as an incremental step toward a more comprehensive set of measures that consider system

<sup>6</sup> The 2014 RTP performance targets will be reviewed and updated in Fall 2017. Updates will be informed by federal performance-based planning requirements identified in by MAP-21 and the FAST Act and the 2018 RTP system performance and transportation equity analysis.

<sup>7</sup> The strikethrough/underscore reflects the revised target recommended by the RTP Safety Work Group and supported by the Metro Council, the Metro Policy Advisory Committee and the Joint Policy Advisory Committee on Transportation in Spring 2017.

<sup>8</sup> The Oregon Transportation Planning Rule, subsection 0060, requires the RTP to include performance measures that ensure the transportation system is adequate to serve planned land uses.

## Summary of 2014 Regional Transportation Plan Policy Framework – Subject to Further Review and Refinement

performance, as well as financial, environmental and community impacts. The OTC has indicated a desire for Metro to advance beyond the traditional mobility performance measure used to guide investment decisions. Metro, ODOT and other regional partners will continue to work together to update the current regional mobility policy to better align with RTP outcomes.

This evaluation helps the region develop strategies to address roadway congestion in a more strategic manner, given limited transportation funding and potential environmental and community impacts. Past system analysis described in Chapter 4 of the 2014 RTP finds that the region cannot achieve the mobility policy listed in **Table 2** within current funding levels or with the mix of investments included in the analysis.

**Table 2. Interim Regional Mobility Policy | Deficiency Thresholds and Operating Standards (from adopted 2014 RTP)**

Location	Standard Mid-Day One-Hour Peak <sup>A</sup>	Standard PM 2-Hour Peak <sup>A</sup>	
		1st Hour	2nd Hour
Central City Regional Centers Town Centers Main Streets Station Communities	.99	1.1	.99
Corridors Industrial Areas Intermodal Facilities Employment Areas Inner Neighborhoods Outer Neighborhoods	.90	.99	.99
I-84 (from I-5 to I-205)	.99	1.1	.99
I-5 North (from Marquam Bridge to Interstate Bridge)	.99	1.1	.99
OR 99E (from Lincoln Street to OR 224 interchange)	.99	1.1	.99
US 26 (from I-405 to Sylvan interchange)	.99	1.1	.99
I-405 <sup>B</sup> (I-5 South to I-5 North)	.99	1.1	.99
<u>Other Principal Arterial Routes</u> I-205 <sup>B</sup> I-84 (east of I-205) I-5 (Marquam Bridge to Wilsonville) <sup>B</sup> OR 217 US 26 (west of Sylvan) US 30 OR 8 (Murray Boulevard to Brookwood Avenue) <sup>B</sup> OR 212 OR 224 OR 47 OR 213	.90	.99	.99

A. The demand-to-capacity ratios in the table are for the highest two consecutive hours of weekday traffic volumes. The mid-day peak hour is the highest 60-minute period between the hours of 9 a.m. and 3 p.m. The 2<sup>nd</sup> hour is defined as the single 60-minute period, either before or after the peak 60-minute period, whichever is highest.

## Summary of 2014 Regional Transportation Plan Policy Framework – Subject to Further Review and Refinement

- B. A corridor refinement plan is required in Chapter 5 of the RTP, and will include a recommended mobility policy for each corridor.

### Regional Modal Targets

Non-drive alone modal targets are established the 2014 RTP as shown in **Table 3**. The targets are intended to be goals for cities and counties to work toward as they implement the 2040 Growth Concept at the local level. Increases in walking, bicycling, ridesharing and transit mode shares will be used to demonstrate compliance with per capita travel reductions required by the state Transportation Planning Rule. The most urbanized areas of the region will achieve higher non-drive alone modal shares than less developed areas closer to the urban growth boundary.

**Table 3 Regional Modal Targets (from adopted 2014 RTP)**

2040 Design Type	Non-drive alone modal target
Portland central city	60-70%
Regional centers	45-55%
Town centers	
Main streets	
Station communities	
Corridors	
Passenger intermodal facilities	40-45%
Industrial areas	
Freight intermodal facilities	
Employment areas	
Inner neighborhoods	
Outer neighborhoods	

*Note: The targets apply to trips to and within each 2040 design type. The targets reflect conditions needed in the year 2040 to comply with Oregon Transportation Planning Rule objectives to reduce reliance on single-occupancy vehicles.*

### State greenhouse gas emissions reduction target for the Portland metropolitan region

In December 2014, JPACT and the Metro Council adopted the Climate Smart Strategy that achieves a 29 percent reduction in per capita greenhouse gas emissions from light-duty vehicles by 2035, exceeding the 20 percent mandated target set by the Land Conservation and Development Commission in May 2011. In 2016, the Commission reviewed targets for Oregon's metropolitan areas. On January 27, 2017, the Commission adopted targets for the years 2040 through 2050 for each metropolitan area.<sup>9</sup> The Portland area greenhouse gas emissions reduction targets for the years 2040, 2045 and 2050 are:

- By 2040, a 25 percent reduction
- By 2045, a 30 percent reduction
- By 2050, a 35 percent reduction

The RTP must include the final targets and report on whether satisfactory progress is being made toward implementing the Climate Smart Strategy, identify reasons for a lack of progress, and identify possible corrective actions to make satisfactory progress to ensure the targets are being met.

<sup>9</sup> More information can be found at: [www.oregon.gov/LCD/Pages/GHGTargetReview.aspx](http://www.oregon.gov/LCD/Pages/GHGTargetReview.aspx)



## Summary of 2014 Regional Transportation Plan Policy Framework – Subject to Further Review and Refinement

## Vision for each part of the regional transportation system

The RTP also defines a vision (as reflected in the network map) and supporting policies to guide investments in each part of the regional transportation system (shown in Attachment 2):

<b>Arterial and Throughway Network Map Vision<sup>10</sup></b>	<ul style="list-style-type: none"> <li>• Build a well-connected network of complete streets that prioritize safe and convenient pedestrian and bicycle access.</li> <li>• Improve local and collector street connectivity.</li> <li>• Maximize system operations by implementing management strategies prior to building new motor vehicle capacity, where appropriate.</li> </ul>
<b>Regional Transit Network Map Vision<sup>11</sup></b>	<ul style="list-style-type: none"> <li>• Build the total network and transit-supportive land uses to leverage investments.</li> <li>• Expand high capacity transit.</li> <li>• Expand regional and local frequent service transit.</li> <li>• Improve local service transit.</li> <li>• Support expanded commuter rail and intercity transit service to neighboring communities</li> <li>• Improve pedestrian and bicycle access to transit.</li> </ul>
<b>Regional Freight Network Map Vision<sup>12</sup></b>	<ul style="list-style-type: none"> <li>• Use a systems approach to plan for and manage the freight network.</li> <li>• Reduce delay and increase reliability.</li> <li>• Protect industrial lands and freight transportation investments.</li> <li>• Look beyond the roadway network to address critical marine and rail needs.</li> <li>• Pursue clean, green and smart technologies and practices.</li> </ul>
<b>Regional Bicycle Network Map Vision</b>	<ul style="list-style-type: none"> <li>• Make walking and bicycling the most convenient, safe and enjoyable transportation choices for short trips less than three miles.</li> <li>• Build an interconnected regional network of bicycle routes and districts integrated with transit and nature that prioritizes seamless, safe, convenient and comfortable access to urban centers and essential daily needs, including schools and jobs, for all ages and abilities.</li> <li>• Build a green ribbon of bicycle parkways as part of the region's integrated mobility strategy.</li> <li>• Improve bike-transit connections.</li> <li>• Ensure that the regional bicycle and pedestrian network equitably serves all people.</li> </ul>
<b>Regional Pedestrian Network Map Vision</b>	<ul style="list-style-type: none"> <li>• Make walking and bicycling the most convenient, safe and enjoyable transportation choices for short trips less than three miles.</li> <li>• Build a well-connected network of pedestrian routes, including safe street crossings, integrated with transit and nature that prioritize seamless, safe, convenient and comfortable access to urban centers and essential daily needs, including schools and jobs, for all ages and abilities.</li> <li>• Create walkable downtowns, centers, main streets and station communities that prioritize safe, convenient and comfortable pedestrian access for all ages and abilities.</li> <li>• Improve pedestrian access to transit.</li> <li>• Ensure that the regional pedestrian network equitably serves all people.</li> </ul>
<b>Transportation System Management and Operations Map Vision<sup>10</sup></b>	<ul style="list-style-type: none"> <li>• Use advanced technologies, pricing strategies and other tools to actively manage the transportation system.</li> <li>• Provide comprehensive real-time traveler information to people and businesses.</li> <li>• Improve incident detection and clearance times on the region's transit, arterial and throughway networks.</li> <li>• Implement incentives and programs to increase awareness of travel options and incent change.</li> </ul>

<sup>10</sup> The Throughway and arterial network vision and policies and TSMO vision and policies will be subject to further review and refinement as part of the 2018 RTP update.

<sup>11</sup> The Regional Transit Network Vision and policies are in the process of being updated as part of development of Regional Transit Strategy. This table reflects policies in the 2014 RTP.

<sup>12</sup> The Regional Freight Network Vision is in the process of being updated as part of updating the Regional Freight Strategy.

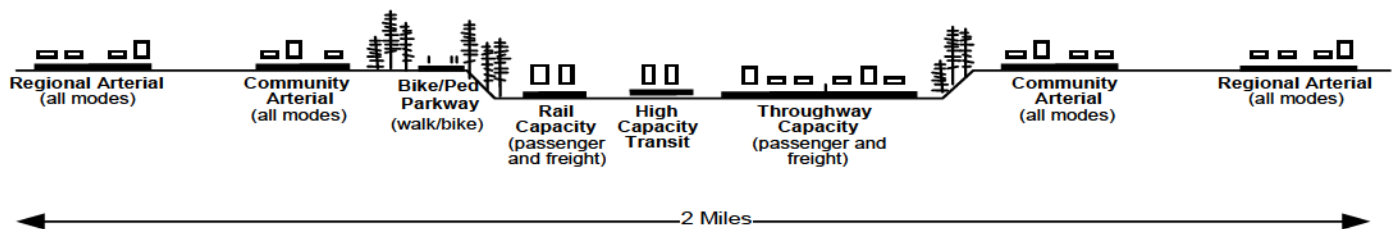
## Regional Mobility Corridor Framework

The regional mobility corridor policy concept in Chapter 2 of the 2014 RTP calls for consideration of multiple facilities, modes and land use when identifying needs and most effective mix of land use and transportation solutions to improve mobility within a specific corridor area. More information from the 2014 RTP is provided below. Note: These will be subject to further review and refinement through the 2018 RTP update.

## Regional Mobility Corridor Concept

Mobility corridors represent sub-areas of the region and include all regional transportation facilities within the subarea as well as the land uses served by the regional transportation system. This includes freeways and highways and parallel networks of arterial streets, regional bicycle and pedestrian parkways, high capacity transit, and frequent bus routes. The function of this network of integrated transportation corridors is metropolitan mobility – moving people and goods between different parts of the region and, in some corridors, connecting the region with the rest of the state and beyond. This framework emphasizes the integration of land use and transportation in determining regional system needs, functions, desired outcomes, performance measures, and investment strategies. The concept of a regional mobility corridor is illustrated in Figure 1.

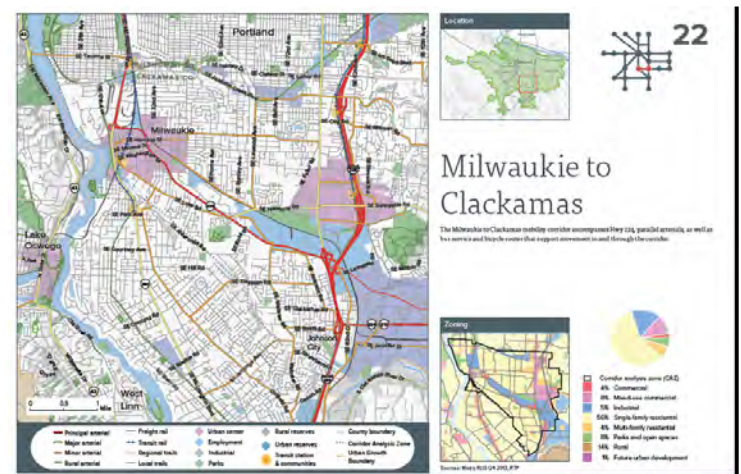
Figure 1. Regional Mobility Corridor Concept (transportation element)



*Note: Idealized concept for illustrative purposes showing recommended range of system analysis for the evaluation, monitoring, management and phasing of investments to throughways, arterial streets and transit service in the broader corridor. The illustration is modeled after I-84 between 12th and 60th avenues in Northeast Portland.*

Since the 1980s, regional mobility corridors have had throughway travel supplemented by high capacity transit service that provides an important passenger alternative. Parallel arterial streets, heavy rail, bus service, bicycle parkways and pedestrian/bicycle connections to transit also provide additional capacity in the regional mobility corridors.

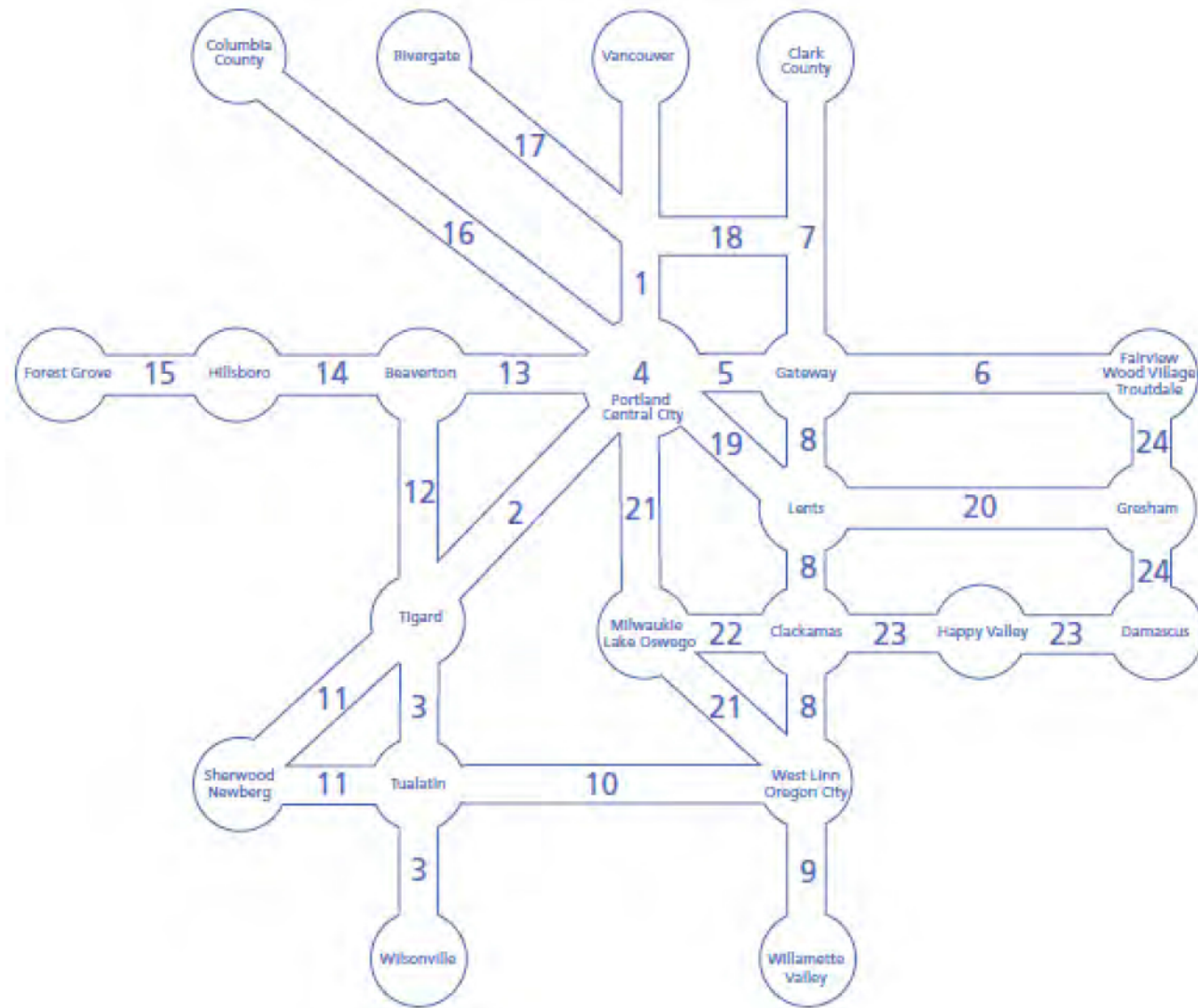
The full array of regional mobility corridor facilities should be considered in conjunction with the parallel throughways for system evaluation and monitoring, system and demand management and phasing of physical investments in the individual facilities. Bicycle and pedestrian travel and access to transit are also important as we plan and invest in regional throughways and arterial streets. New throughway and arterial facilities, such as freeway interchanges or widened arterial streets, should be designed and constructed in such a



manner as to support bicycling, walking and access to transit.

Figure 2 shows the general location of mobility corridors in the region.

**Figure 2. General Location of Mobility Corridors in the Portland Metropolitan Region**



The Mobility Corridor Strategies provided in Section 3.1 of the 2014 RTP Technical Appendix serve as a scoping tool to document land use and transportation needs, function and potential solutions for each of the region's 24 mobility corridors. A strategy has been identified in the 2014 RTP Technical Appendix for each corridor that includes:

- Integrated statement of mobility corridor function and purpose defined at a corridor-area level
- Proposed land use and transportation solutions after consideration of land use, local aspirations, pedestrian, bike, management and operations, freight, highway, road and transit solutions.

The 2014 RTP Technical Appendix and can be downloaded at: [www.oregonmetro.gov/regional-transportation-plan](http://www.oregonmetro.gov/regional-transportation-plan). The document is located at the bottom of the web page.

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# Regional goals and objectives for transportation<sup>1</sup>

*Our shared vision for the future of transportation is further described through eleven goals and related objectives. The goals are broad statements that describe a desired outcome or end result toward which efforts are focused. The goals and supporting objectives provide a basis for evaluating investments to inform priorities and track progress.*

## GOAL 1: Foster Vibrant Communities and Efficient Urban Form

- Land use and transportation decisions are linked to optimize public investments, reduce greenhouse gas emissions and support active transportation options and jobs, schools, shopping, services, recreational opportunities and housing proximity.
- **Objective 1.1 Compact Urban Form and Design** - Use transportation investments to focus growth in and provide multi-modal access to 2040 Target Areas and ensure that development in 2040 Target Areas is consistent with and supports the transportation investments.
  - **Objective 1.2 Parking Management** – Minimize the amount and promote the efficient use of land dedicated to vehicle parking.
  - **Objective 1.3 Affordable Housing** – Support the preservation and production of affordable housing in the region.

## GOAL 2: Sustain Economic Competitiveness and Prosperity

- Multi-modal transportation infrastructure and services support the region’s well-being and a diverse, innovative, sustainable and growing regional and state economy.
- **Objective 2.1 Reliable and Efficient Travel and Market Area Access** - Provide for reliable and efficient multi-modal local, regional, interstate and intrastate travel and market area access through a seamless and well-connected system of throughways, arterial streets, freight services, transit services and bicycle and pedestrian facilities.
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- Multi-modal transportation infrastructure and services provide all residents of the region with affordable and equitable options for accessing housing, jobs, services, shopping, educational, cultural and recreational opportunities, and facilitate competitive choices for goods movement for all businesses in the region.
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  - **Objective 3.3 Equitable Access and Barrier Free Transportation** - Provide affordable and equitable access to travel choices and serve the needs of all people and businesses, including people with low income, youth, older adults and people with disabilities, to connect with jobs, education, services, recreation, social and cultural activities.
  - **Objective 3.4 Shipping Choices** – Support multi-modal freight transportation system that includes air cargo, pipeline, trucking, rail, and marine services to facilitate competitive choices for goods movement for businesses in the region.

## GOAL 4: Emphasize Effective and Efficient Management of the Transportation System

- Existing and future multi-modal transportation infrastructure and services are well-managed to optimize capacity, improve travel conditions for all users and address air quality and greenhouse gas emissions reduction goals.
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  - **Objective 4.2 Traveler Information** – Provide comprehensive real-time traveler information to people and businesses in the region.
  - **Objective 4.3 Incident Management** – Improve traffic incident detection and clearance times on the region’s transit, arterial and throughways networks.
  - **Objective 4.4 Demand Management** – Implement services, incentives and supportive infrastructure to increase telecommuting, walking, biking, taking transit, and carpooling, and shift travel to off-peak periods.
  - **Objective 4.5 Value Pricing** – Consider a wide range of value pricing strategies and techniques as a management tool, including but not limited to parking management to encourage walking, biking and transit ridership and selectively promote short-term and long-term strategies as appropriate.

## GOAL 5: Enhance Safety and Security

- Multi-modal transportation infrastructure and services are safe and secure for the public and goods movement.
- **Objective 5.1 Operational and Public Safety** - Reduce fatal and severe injuries and crashes for all modes of travel.
  - **Objective 5.2 Crime** - Reduce vulnerability of the public, goods movement and critical transportation infrastructure to crime.
  - **Objective 5.3 Terrorism, Natural Disasters and Hazardous Material Incidents** - Reduce vulnerability of the public, goods movement and critical transportation infrastructure to acts of terrorism, natural disasters, climate change, hazardous material spills or other hazardous incidents.

## GOAL 6: Promote Environmental Stewardship

- Promote responsible stewardship of the region’s natural, community, and cultural resources.
- **Objective 6.1 Natural Environment** – Avoid or minimize undesirable impacts on fish and wildlife habitat conservation areas, wildlife corridors, significant flora and open spaces.
  - **Objective 6.2 Clean Air** – Reduce transportation-related vehicle emissions to improve air quality so that as growth occurs, the view of the Cascades and the Coast Range from within the region are maintained.
  - **Objective 6.3 Water Quality and Quantity** – Protect the region’s water quality and natural stream flows.
  - **Objective 6.4 Energy and Land Consumption** - Reduce transportation-related energy and land consumption and the region’s dependence on unstable energy sources.
  - **Objective 6.5 Climate Change** – Reduce transportation-related greenhouse gas emissions and meet adopted targets for educing greenhouse gas emissions from light vehicle travel.

<sup>1</sup> First adopted in 2010 and amended in 2014 to reflect the Regional Active Transportation Plan and Climate Smart Strategy.



## GOAL 7: Enhance Human Health

Multi-modal transportation infrastructure and services provide safe, comfortable and convenient options that support active living and physical activity, and minimize transportation-related pollution that negatively impacts human health.

- **Objective 7.1 Active Living** – Provide safe, comfortable and convenient transportation options that support active living and physical activity to meet daily needs and access services.
- **Objective 7.2 Pollution Impacts** – Minimize noise, impervious surface and other transportation-related pollution impacts on residents in the region to reduce negative health effects.

## Goal 8: Demonstrate Leadership on Reducing Greenhouse Gas Emissions

It is the policy of the Metro Council to implement the regional strategy to meet adopted targets for reducing greenhouse gas emissions from light-duty vehicle travel while creating healthy and equitable communities and a strong economy.

- **Objective 8.1 Land Use and Transportation Integration** - Continue to implement the 2040 Growth Concept to support a compact urban form to reduce vehicle miles traveled and increase the use of transit and zero or low carbon emission travel options, such as bicycling, walking, and electric vehicles.
- **Objective 8.2 Clean Fuels and Clean Vehicles** - Support state efforts to transition Oregon to cleaner, low carbon fuels and increase the use of more fuel-efficient vehicles, including electric and alternative fuel vehicles.
- **Objective 8.3 Regional and Community Transit Network and Access** - Make transit convenient, frequent, accessible and affordable by investing in new community and regional transit connections, expanding and improving existing transit services, improving bicycle and pedestrian access to transit, and implementing reduced fare programs for transit-dependent communities, such as youth, older adults, people with disabilities and people with low income.
- **Objective 8.4 Active Transportation Network** - Make biking and walking the safest, most convenient and enjoyable transportation choices for short trips for all ages and abilities by completing gaps and addressing deficiencies in the region’s bicycle and pedestrian networks.
- **Objective 8.5 Transportation Systems Management and Operations** - Enhance fuel efficiency and system investments and reduce emissions by using technology to actively manage and fully optimize the transportation system.
- **Objective 8.6 Transportation Demand Management** - Implement programs, services and other tools that provide commuters and households with information and incentives to expand the use of travel options, including carsharing, and reduce drive alone trips.
- **Objective 8.7 Parking Management** - Implement locally-defined approaches to parking management in Centers, Corridors, Station Communities and Main Streets served by frequent transit service and active transportation options to make efficient use of vehicle parking and land dedicated to parking.
- **Objective 8.8 Streets and Highways Network** - Invest strategically in streets and highways to make them safe, reliable and connected to support the movement of people and goods.
- **Objective 8.9 Metro Actions** - Take actions to implement the regional strategy to meet adopted targets for reducing greenhouse gas emissions from light-duty vehicle travel.
- **Objective 8.10 Partner Actions** - Encourage local, state and federal governments and special districts to consider implementing actions in the *Toolbox of Possible Actions* in locally tailored ways to help the region meet adopted targets for reducing greenhouse gas emissions from light-duty vehicle travel

## GOAL 9: Ensure Equity

The benefits and adverse impacts of regional transportation planning, programs and investment decisions are equitably distributed among population demographics and geography, considering different parts of the region and census block groups with different incomes, races and ethnicities.

- **Objective 9.1 Environmental Justice** – Ensure benefits and impacts of investments are equitably distributed by population demographics and geography.
- **Objective 9.2 Coordinated Human Services Transportation Needs** - Ensure investments in the transportation system provide a full range of affordable options for people with low income, elders and people with disabilities consistent with the Tri-County Coordinated Human Services Transportation Plan (CHSTP).
- **Objective 9.3 Housing Diversity** - Use transportation investments to achieve greater diversity of housing opportunities by linking investments to measures taken by the local governments to increase housing diversity.
- **Objective 9.4 Transportation and Housing Costs**– Reduce the share of households in the region spending more than 50 percent of household income on housing and transportation combined.

## GOAL 10: Ensure Fiscal Stewardship

Regional transportation planning and investment decisions ensure the best return on public investments in infrastructure and programs and are guided by data and analyses.

- **Objective 10.1 Asset Management**– Adequately update, repair and maintain transportation facilities and services to preserve their function, maintain their useful life and eliminate maintenance backlogs.
- **Objective 10.2 Maximize Return on Public Investment** - Make transportation investment decisions that use public resources effectively and efficiently, using a performance-based planning approach supported by data and analyses that include all transportation modes.
- **Objective 10.3 Stable and Innovative Funding** – Stabilize existing transportation revenue while securing new and innovative long-term sources of funding adequate to build, operate and maintain the regional transportation system for all modes of travel at the federal, state, regional and local level.

## GOAL 11: Deliver Accountability

The region’s government, business, institutional and community leaders work together in an open and transparent manner so the public has meaningful opportunities for input on transportation decisions and experiences an integrated, comprehensive system of transportation facilities and services that bridge governance, institutional and fiscal barriers.

- **Objective 11.1 Meaningful Input Opportunities** - Provide meaningful input opportunities for interested and affected stakeholders, including people who have traditionally been underrepresented, resource agencies, business, institutional and community stakeholders, and local, regional and state jurisdictions that own and operate the region’s transportation system in plan development and review.
- **Objective 11.2 Coordination and Cooperation** - Ensure representation in regional transportation decision-making is equitable from among all affected jurisdictions and stakeholders and improve coordination and cooperation among the public and private owners and operators of the region’s transportation system so the system can function in a coordinated manner and better provide for state and regional transportation needs.

# Meeting minutes



**Metro**

600 NE Grand Ave.  
Portland, OR 97232-2736

Meeting: **2018 RTP Transportation Equity work group meeting**  
Date/time: Tuesday, September 19, 2017  
Place: Metro Regional Center, Room 370A&B  
Purpose: Recap RTP Transportation Equity Performance Management Recommendations

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## **Work Group Attendees**

Stephanie Caldera  
Grace Cho, work group lead  
Scotty Ellis  
Scott France  
Kathryn Levine  
Aaron Golub  
Brendon Haggerty  
Jay Higgins  
Talia Jacobson  
Noel Mickelberry  
Gregg Snyder  
Kari Schlosshauer  
Carl Green  
Steve Williams  
Karen Savage  
Kathleen Johnson  
Nicole Phillips

## **Affiliate**

Oregon Department of Environmental Quality  
Metro  
Metro  
Clackamas County Public Health  
City of Portland  
Portland State University  
Multnomah County Public Health  
City of Gresham  
Oregon Department of Transportation  
Oregon Walks  
City of Hillsboro  
Safe Routes to School Partnership  
TriMet  
Clackamas County  
Washington County  
Washington County Public Health  
Bus Riders Unite - OPAL

## **Work Group Interested Parties Attendees**

Steve Kountz

## **Affiliate**

City of Portland

## **Staff Attendees**

Clifford Higgins	Metro
Lake McTighe	Metro
Ted Leybold	Metro
John Mermin	Metro
Ben Kahn	Metro

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## **Welcome, Introductions, and Staff Updates**

Clifford Higgins called the meeting to order at 1 p.m. Higgins welcomed everyone and invited everyone to introduce themselves.

Grace Cho provided a brief update on the 2018 RTP process and provided materials, including a timeline and call-for-projects summary sheet to give members a sense of what major milestones are upcoming in the process and provide a brief gauge of the composition of the RTP investment strategy.

## **2018 RTP Outcomes-Based Framework Refresher**

Ms. Cho began the meeting by discussing the 2018 RTP outcomes-based framework for the plan. She gave a brief refresher and explained how the outcomes-based framework sets the direction for the

performance management program and helps to establish the performance targets for the plan and the monitoring measures.

Ms. Cho noted at the June meeting of the Transportation Equity work group, the work group discussed updates to the RTP goals and objectives which relate to equity, in order to help align the goals to the transportation equity system evaluation measures. She mentioned that in order to bring back a full proposal as to how to align the RTP outcomes-based framework and the transportation equity system evaluation measures, the September work group meeting will continue the discussion by focus in on gathering feedback on the RTP performance targets and the monitoring measures. Ms. Cho proposed bringing back the full proposal for the RTP outcomes-based framework to the work group for discussion at the October meeting.

### **2018 RTP – Transportation Equity Assessment and Performance Management Alignment**

Following the brief refresher on the RTP outcomes-based framework, Ms. Cho launched into a presentation about the RTP performance targets and the monitoring measures. She reminded the work group of the importance of the RTP performance targets and monitoring measures. She mentioned they serve as the way staff know whether the investment program is moving in the desired direction towards outcomes communities want to see from the transportation system and how the investment program is doing as it gets implemented.

Ms. Cho explained Metro staff began the process of looking at the transportation equity system evaluation measures and assess whether there was an associated performance target and/or monitoring measure with system evaluation measure. In conducting this review of the transportation equity system evaluation measures and the existing RTP performance management program, Metro staff came to the following findings:

- Not all transportation equity measures have associated targets or monitoring measures
- Targets or monitoring measures are not aligned to transportation equity measures.
- System performance measures are needed for affordability and clean air.
- Additional monitoring measures are needed to address certain priority issues.

As a result of the findings and to help kick start a discussion about aligning the transportation equity system evaluation measures to the RTP performance targets and monitoring, Metro staff develop a set of recommendations for the RTP performance management program. The recommendations are the following:

- Commit to developing system performance measures for affordability and clean air
- Transportation equity measures which have existing performance targets and/or monitoring measures, align accordingly.
- Develop a performance target and monitoring measure for the Access to Jobs system evaluation.
- Develop a monitoring measure for market-based involuntary displacement

Ms. Cho then pointed out the attachment which was sent out as part of the work group materials, which illustrates review process of the transportation equity system evaluation measures and the RTP performance targets and the monitoring measures. She noted that in the attachment, suggestions to bring the transportation equity measures which have an existing performance target and/or monitoring measure into alignment are shown in red and strike outs.

To help facilitate the discussion around the alignment of the transportation equity system measures to the RTP performance targets and/or monitoring measures, Ms. Cho outlined the following discussion questions:

- Does the work group agree with the general approach?
- How far should the region go with the performance targets?
  - Aspirational vs. incremental targets?
  - Should performance targets be more “aggressive” in historically marginalized communities

Before opening the floor to discussion, she gave the work group members time to look at the attachment and the suggested revisions.

#### Discussion Items:

Ms. Talia Jacobson asked whether there has been a policy decision/statement in the RTP regarding equity? Ms. Cho responded the current discussion will help inform the policy.

Ms. Karen Savage asked a clarifying question as to whether the system evaluation results were being comparatively? She wanted to understand how different communities, particularly marginalized communities, would be compared? Ms. Cho responded the comparisons to be used are a base year and future year scenarios to evaluate against.

Mr. Carl Green made a comment that the RTP performance targets and monitoring measures appears to be using lag measures, meaning those indicators which show results or effects. He said the system evaluation measures are not using lead measures, which are more upstream and preventative in addressing systemic and broader issues of social equity.

Mr. Aaron Golub commented that a risk of specifying an increase in something for marginalized communities, while not specifying the general system of measurement can lead to ways to game the numbers in terms of showing performance targets are met. He suggested the performance target language place a qualifier, such as “at least greater than the regional change.”

Mr. Steve Kountz made a comment specific to the affordability system evaluation measure. He suggested that “median” or “distribution” are more relevant than “average” (table 1, line 1) for the performance target. His point being that the investment program should serve to reduce the percentage of cost-burden households, not total cost, for historically marginalized communities.

Ms. Stephanie Caldera asked for clarification about the Clean Air performance target. She asked for the definition of “at risk levels?” She also asked if the process to identify mobile source pollution in historically marginalized communities been established? Ms. Cho responded the Clean Air performance target was written that way to give some flexibility at this time and the intention is to engage with DEQ staff on how to craft the evaluation of this performance target before the next RTP (2022).

Ms. Noel Mickelberry reiterated her support for more aggressive targets for historically marginalized communities and thinks the focus of the performance targets should be more aspirational and high-reaching. She also expressed wanting to see more than half of the metro area to be accessible by transit for marginalized communities. In addition to her comments, Ms. Mickelberry asked why there would be

monitoring measures without targets and want to gather a better understanding as to what Metro is doing for those performance targets without existing targets or measures.

Mr. John Mermin and Ms. Cho responded to the question related to measures without targets and the role of monitoring. Ms. Cho tried to explain that the system evaluation measure is looking at a future package of transportation investments, which have not been implemented yet. The role of monitoring helps track whether the results of system evaluation are coming to fruition.

Ms. Lake McTighe also responded to Ms. Mickelberry's question about why some measures would not have performance targets in stating that some targets require political consideration and action.

Ms. Kathryn Levine asked for clarification on "access to jobs," system evaluation measure and proposed performance target. She commented the performance measure should be focused on measuring improvement to access of jobs over time, not simply the access of jobs. Ms. Cho responded that is the aim for the system evaluation measure and that can be clarified.

Ms. Jacobson expressed favor for more aggressive targets. She also commented that in having more aggressive targets, it would help support the prioritization of transportation investments that aim to close the inequality and inequity gap. In following on, she commented that the targets should be set to close disparities gaps for historically marginalized communities.

Ms. Caldera agreed with the comment on the targets getting reframed to close the disparities gap.

Ms. Kari Schlosshauer commented that walking needs to be further called out in the performance targets.

Mr. Scotty Ellis commented he supports Stephanie on closing the gap. He also expressed that the region should be explicit about monitoring race and closing the gap on racial disparities.

Mr. Gregg Snyder commented that affordability will be a big focus in the near future. Consider how tolls will impact affordability.

Mr. Steve Williams made a general comment that the RTP performance targets are not consistent or realistic for time periods in a number of targets. He also expressed the language is unclear on the "affordability" targets.

Mr. Golub commented using percent change is dangerous way to look at performance targets because of the many different factors and influences which can lead to change.

Mr. Brendon Haggerty seconded Mr. Ellis' comment about closing the gap on racial disparities.

Mr. Kountz commented the Access to Jobs is not appropriate because it is only looking proximity to jobs and not at the type or quality of jobs. Ms. Cho provided clarification on what the Access to Jobs evaluation measure is measuring,

Ms. Kathleen Johnson asked a clarifying question about data sources.

Ms. Nicole Phillips commented that while the exercise of listening to specific numbers for targets is interesting, from the perspective of the community, the discussion does not make sense. She broadly pushed and questioned the group about “how do we ensure that people already in a hole don’t end up in a deeper hole?” She commented that needs are pressing today for marginalized communities and the discussion and fights over future targets are not creating action on the ground.

Mr. Higgins provided a summary of the discussion before going into the break.

*The meeting took a break, and resumed at 3:10 p.m.*

### **Regional Transportation Safety Action Plan**

Before introducing and turning the floor over to Lake McTighe, Ms. Cho provided a brief reminder to the work group of all the major areas seeing updates as part of the 2018 RTP process. She mentioned how at the June meeting, the work group received a presentation about the Regional Transit Strategy. She explained that at today’s meeting the work group will receive a presentation about the Regional Transportation Safety Action Plan and how equity considerations have influenced the draft actions and strategies. Ms. Cho also mentioned TriMet is looking at expanding the City of Portland’s work around Enhanced Transit and looking for volunteers from the Transportation Equity work group to participate in a work session to review and provide feedback around the equity criteria being used to help prioritize Enhanced Transit improvements. Ms. Cho asked that members interested in participating in the work session let her know so she can follow up.

Following, Ms. McTighe provided an overview of the Regional Transportation Safety Action Plan (RTSAP). She discussed that the RTSAP is built around a Vision Zero framework and she further explained what that meant. Then Ms. McTighe discussed how work and recommendations around the transportation equity system performance measures helped to define several elements of the RTSAP.

#### **Discussion Items:**

Ms. Savage asked does crash data indicate potential causes for crashes. Like road design. Ms. McTighe responded that yes, during the investigation, a cause of crash is usually indicated. She also referred the work group to handout called the Crash Factor Overlaps table.

Mr. Green asked for more refinement and information on the specific crash factors in order to better design strategies and actions.

Mr. Golub asked whether investments proposed for the 2018 RTP are being flagged for safety and how people know how many safety investments are being made. Ms. McTighe responded with how safety investments in the RTP are being flagged. An item she noted that the investment main primary purpose is centered on addressing serious injuries and fatalities.

Mr. Kountz made a comment that much of the strategies proposed around safety will impact middle-wage incomes and income earners. He specifically mentioned road diets, for instance, will adversely impacts low-income individuals because road diets are typically done on arterials, which are freight

route and are highly-used by low-income commuters. Therefore middle-wage jobs are impacted and as are low-income commuters.

Ms. McTighe responded that Case studies show that safety design elements improve safety for all modes, and all users. Lowering vehicle miles traveled is a way to reduce crash rates. Portland is the third safest MPO over 1,000,000 people.

### **Next Steps**

Ms. Cho reported on the next steps with the 2018 RTP. She mentioned she will take the feedback provided on the RTP performance targets and monitoring measures to develop a proposal which will be brought back for discussion at the October meeting. Ms. Cho also mentioned at the October meeting, early results and initial findings of the 2018 RTP transportation equity system evaluation will be reported. Ms. Cho also mentioned there are upcoming RTP workshops where members of TPAC, MTAC, and all the work groups are invited. The purpose of the RTP workshops are to provide further opportunity for discussion on the many different arenas of the RTP, including the Transportation Equity Analysis results and work group recommendations (when available). Additionally Ms. Cho announced there will be one last meeting of the work group in early December to wrap up. Ms. Cho thanked the members for their efforts and time with this work.

### **Adjourn**

There being no further business, meeting was adjourned at 4:00 p.m. by Cliff Higgins.





# Meeting minutes

Meeting: **2018 RTP Transportation Equity work group meeting**  
Date/time: Wednesday, June 28, 2017  
Place: Metro Regional Center, Room 401  
Purpose: Discussion of 2018 RTP Vision, Goals, and Objectives & Regional Transit Strategy

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## Work Group Attendees

Stephanie Caldera  
Grace Cho, work group lead  
Scotty Ellis  
Scott France  
Zan Gibbs  
Cora Potter  
Aaron Golub  
Brendon Haggerty  
Jon Makler  
Noel Mickelberry  
Dan Rutzick  
Kari Schlosshauer  
Eric Hesse  
Steve Williams  
Karen Savage  
Kate McQuillan  
Jenn Scola

## Affiliate

Oregon Department of Environmental Quality  
Metro  
Metro  
Clackamas County Public Health  
City of Portland  
Ride Connection  
Portland State University  
Multnomah County Public Health  
Oregon Department of Transportation  
Oregon Walks  
City of Hillsboro  
Safe Routes to School Partnership  
TriMet  
Clackamas County  
Washington County  
Multnomah County  
City of Wilsonville

## Staff Attendees

Clifford Higgins	Metro
Lake McTighe	Metro
Ted Leybold	Metro
John Mermin	Metro
Jamie Snook	Metro
Cindy Pederson	Metro
Marie Miller	Metro
Nicholas Simmons	Metro
Amanda Sears	Metro

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## Welcome, Introductions, and Staff Updates

Clifford Higgins called the meeting to order at 9 a.m. Higgins welcomed everyone and invited everyone to introduce themselves.

Grace Cho provided a brief update on the 2018 RTP process and provided materials, including a timeline and call-for-projects summary sheet to give members a sense of what major milestones are upcoming in the process and provide a brief gauge of the composition of the RTP investment strategy.

## 2018 RTP Outcomes-Based Framework

Ms. Cho began the meeting by discussing the 2018 RTP outcomes-based framework for the plan. She gave explained how the outcomes-based framework sets the direction and what is measured in the



plan. She explained how the outcomes-based framework was established as part of the 2010 RTP and carried over in the 2014 RTP. Ms. Cho further went on to discuss how the entire outcomes-based framework serves a significant role for the RTP in that it give the region direction for the long-range investment program (ultimately serving as the guideposts of what all investments should look to address comprehensively), sets the basis for performance management and measuring the plan as well as the actions and strategies for implementation. Following the background on the outcomes-based framework, she framed the discussion by explaining that as part of the work group discussion for today, the work group would be reviewing the RTP goals and objectives which pertain to equity. Additionally, the work group would be reviewing the current definition of equity in the plan. Ms. Cho provided a handout which defined and differentiated what a vision, goal, objective and performance target are.

Following the background information, Ms. Cho moved into a discussion of the RTP vision, the current equity related goals and objectives and the definition of equity being used in the plan. She walked through the RTP vision and explained that the vision had been recently updated and adopted by MPAC, JPACT, and Metro Council after discussion and deliberation at the regional forums and at committee meetings. Ms. Cho then walked through the current RTP equity definition, goals, and objectives. At the end of walking through the current RTP language, Ms. Cho reminded the work group in the early meetings of the work group, the members defined the list of transportation priorities from the perspective of historically marginalized communities. Ms. Cho showed a list of priorities. Following, she posed several discussion questions around the current RTP equity definition, goals, and objectives. She asked:

- Equity definition: What works? What is missing? Are safety, access, and affordability characterized well enough?
- RTP equity goal and objectives: What works? What is missing? Do they talk to each other? Are safety, access, and affordability characterized well enough?

Before opening the discussion, Ms. Cho noted there are large posters taped to the walls. She explained that instead of having a “popcorn” like discussion around the questions, work group members each have post-it notes at their seats. Work group members will be given time to post their responses to the questions for the current equity definition, goals, and objectives. The work group has around 25 minutes to complete the exercise before coming back together for discussion. Following the instructions, Ms. Cho and Mr. Higgins released the work group members to participate in the exercise and staff stayed available to answer questions.

After the work group members had enough time to participate in the post-it exercise, Ms. Cho and Mr. Higgins briefly summarized what was posted on the different equity goals, objectives, and definition. In particular, Ms. Cho noted there seems to be a lot that is missing with each. Ms. Cho explained for next steps staff would summarized and process the feedback provided to return to the work group with a proposal on revised equity goal, objectives, and definition for the 2018 RTP.

*The meeting took a break, and resumed at 10:40 a.m.*

### **Regional Transit Strategy**

Before introducing and turning the floor over to Jamie Snook, Ms. Cho provided a brief reminder to the work group of all the major areas seeing updates as part of the 2018 RTP process. She mentioned how explained that at today’s meeting the work group will receive a presentation about the Regional Transit Strategy. She mentioned at upcoming future work group meetings the work group will get a briefing on

the Regional Transportation Safety Action Plan and how equity considerations have influenced the draft actions and strategies.

Following, Ms. Snook provided an overview of the Regional Transit Strategy (RTS). She discussed the factors and criteria to comprise the transit system expansion policy and asked the work group for feedback on equity considerations which should be incorporated into the system expansion policy.

#### Discussion Items:

Mr. Haggerty mentioned that considerations of health outcomes are not reflected well in the system expansion policy. He also expressed general concern that the transportation equity analysis will not be doing a focused assessment of air quality impacts on historically marginalized communities. He asked to see health disparities get represented into the goals, objectives, and definition of equity.

There was a comment that there remain areas of disinvestment which still need investment because ultimately these are the places in which people are getting displaced. An emphasis of the transit system expansion policy should be to achieve the basic infrastructure goal.

There was another comment pertaining to the system expansion policy which focused on the process and the discussion. The comment focused on being deliberate in asking “how have we identified who is impacted and has the transit project dug into working with community to understand the impacts.” There were follow up comments on how to frame the question, when to ask, and recognizing the intersection of other issues which can really swag the impacts. An example was given about the underlying market dynamics.

The discussion led to a greater discussion about gentrification and displacement. There were some comments asking whether there is an ability with each transit project or with the jurisdictions to create some form of “rapid response” fund which could respond to market dynamics and support towards project acquisition and infrastructure.

There was a general comment for the system expansion policy to focus on the transit supportive elements.

#### **Next Steps**

Ms. Cho reported on the next steps with the 2018 RTP. She mentioned she will take the feedback provided on the RTP goals, objectives and definitions to develop a proposal which will be brought back for discussion at the September meeting. Ms. Cho also walked through an outline of the agenda for both the September and October work group meetings. Lastly, Ms. Cho walked through homework assignments and encouraged work group members stay connected to the 2018 RTP by participating in the call-for-projects which are currently underway. Ms. Cho thanked the members for their efforts and time with this work.

#### **Adjourn**

There being no further business, meeting was adjourned at 12:00 p.m. by Cliff Higgins.

# Memo



**Metro**

600 NE Grand Ave.  
Portland, OR 97232-2736

Date: October 20, 2017  
To: Transportation Policy Alternatives Committee (TPAC) and interested parties  
From: Kim Ellis, RTP Project Manager  
Subject: 2018 RTP Investment Strategy Development

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## PURPOSE

The purpose of this memorandum is to update the Transportation Policy Alternatives Committee (TPAC) on 2018 RTP update related work that is planned or underway, and the timing of upcoming discussions.

## ACTION REQUESTED

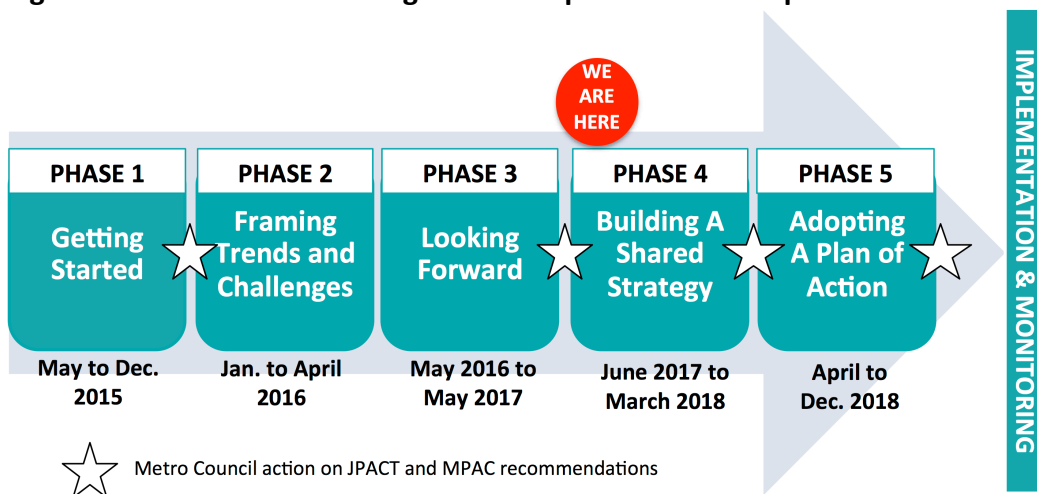
No formal action is requested. This is an opportunity for TPAC to ask questions about the work underway and provide feedback on the sequence and timing of future discussions. Planned upcoming discussions for the remainder of 2017 and the first half of 2018 are provided in **Attachment 1**.

## BACKGROUND

The Portland metropolitan region's economic prosperity and quality of life depend on a transportation system that provides every person and business in the region with equitable access to safe, efficient, reliable, affordable and healthy travel options. Through the 2018 RTP update, the Metro Council is working with leaders and communities throughout the region to plan the transportation system of the future by updating the region's shared transportation vision and investment strategy for the next 25 years.

Shown in **Figure 1**, the plan update is in Phase 4 and on schedule.

**Figure 1. Timeline for 2018 Regional Transportation Plan Update**



In December 2016 and February 2017, the Council reaffirmed their direction to staff to use development of the 2018 RTP to clearly and realistically communicate our transportation funding outlook and align the financially constrained project list with updated financial assumptions. This direction included developing a pipeline of priority projects for the regional transportation system for Metro and other partners to work together to fund and build. The Council also directed the RTP project list and RTP modal and topical strategies be developed in a transparent way that advances adopted regional goals, supports regional coalition building efforts, and emphasizes equity, safety

and climate change. On May 30, the Council further directed staff to move forward with the 2018 RTP Call for Projects as recommended by the Metro Policy Advisory Committee (MPAC) and the Joint Policy Advisory Committee on Transportation (JPACT).

Since May 30, staff continued to implement the adopted work plan and public engagement plan, consistent with previous Council policy direction. A summary of accomplishments and activities that are underway follows.

### **Project list development and performance evaluation**

- **Call for Projects completed in August.** Staff completed the initial RTP Call for Projects, working with the counties and cities, TriMet, ODOT and other agencies to update the region's project priorities based on direction provided by the Metro Council and JPACT. On-line project information will be posted soon in preparation for the 30-day comment opportunity planned for Jan. 8 to Feb. 9, 2018.
- **System level and transportation equity performance evaluation underway.** Metro staff is completing the technical evaluation, using the updated evaluation framework agreed upon by JPACT and the Metro Council in May.

Through the end of the year, staff will review the results with the technical work groups, TPAC and MTAC, and develop findings for public review and discussion by JPACT, MPAC and the Metro Council in early 2018. The RTP work groups, TPAC and MTAC will discuss preliminary findings and recommendations from the performance evaluation at the November and December meetings. In addition, a joint MTAC/TPAC work workshop is planned for December 4. Staff are available to brief county-level coordinating committee TACs this fall/winter if desired.

- **Assessment of the pilot project evaluation underway.** Metro staff is summarizing comments received from partner agency on the pilot evaluation. Through the end of the year, staff will review the assessment and agency comments with the Performance Measure work group, TPAC, and MTAC, and develop recommendations for refinements to the project evaluation criteria for discussion by policymakers in early 2018 in advance of the second call for projects and final evaluation. As recommended last May, the updated project evaluation criteria will be applied to all capital projects greater than \$10 million in cost that are anticipated to seek regional, state or federal funding, unless otherwise exempt in the updated criteria. Staff are available to brief county-level coordinating committee TACs in 2018, if desired.

### **Policy and technical updates**

- **Goals, objectives, performance targets and policies review underway.** Recognizing this RTP update has an increased focus on addressing safety, equity and climate change, the adopted work plan calls for the policy framework to be subject review and refinement to more fully address these and other issues of concern identified through the process (e.g., congestion, maintenance, emerging technologies and funding). In May, JPACT and the Metro Council directed staff to review and refine the RTP policy chapter, including:
  - **Review of RTP goals and objectives,** particularly goals related to safety, equity, climate change, accountability, transparency, congestion, maintenance, emerging technologies and funding. The review will seek to:



**Updated RTP Evaluation Framework**  
advances how we measure outcomes to inform priorities

- clarify the distinction between the vision, goals, objectives, performance targets and policies and their role in performance-based planning and decision-making
- reduce redundancy between the goals and objectives
- reflect priority outcomes identified through the process
- better align the objectives with existing or desired data, including updated system evaluation and transportation equity measures and updates to the RTP performance targets to meet federal requirements
- **Review of performance targets** to meet regional policy goals and federal and state requirements. The review will seek to:
  - clarify and update definitions and terms related to performance-based planning and measurement;
  - identify gaps in existing performance targets and opportunities to reduce redundancy;
  - update performance targets;
  - streamline how the 2018 RTP addresses state and federally-required target-setting and on-going performance monitoring, and reporting; and
  - define an action plan for system monitoring, including an approach to data collection, maintenance, sharing, and methods development.
- **Review of modal policies and maps**, particularly the throughways/arterials, transit, and freight policies and networks. This review will seek to:
  - compile recommended changes to RTP system maps;
  - add a new freight safety policy;
  - expand policies for transit to reflect desired ridership, accessibility, convenience, frequency, reliability, and affordability performance outcomes;
  - expand policies for throughways and arterials to reflect desired access/connectivity, reliability and safety performance outcomes;
  - update relevant design policies;
  - draft new policy sections related to address safety, equity, climate change, and emerging technologies; and
  - clarify the distinction between the modal policies in the RTP and modal strategies in the Regional Transit Strategy, Regional Freight Strategy and Regional Safety Strategy that are being developed concurrent with updating the RTP.

The regional bike and pedestrian network policies will not be subject to this review because they were extensively reviewed and updated as part of the 2014 Regional Active Transportation Plan. The system maps may be updated to reflect additions or updated functional classification designations stemming from local transportation plan updates and the RTP Call for Projects.

From Sept. to Dec. 2017, staff will review the existing policy framework to identify and recommend potential refinements to the 2014 RTP policy chapter for consideration by JPACT, MPAC and the Metro Council. TPAC and MTAC will discuss initial findings and recommendations from this review at their December meetings. Discussions are expected to continue in early 2018.

- **Financially constrained funding assumptions updates to reflect House Bill 2017 underway.** Metro staff will participate in an ODOT-led working group tasked with updating the state transportation revenue forecast this fall. An updated forecast is anticipated in early 2018. TPAC will discuss the updated forecast when available.
- **Update to RTP implementation chapter.** Metro staff will begin work to update the implementation chapter in early 2018. This chapter outlines future studies and other work needed to advance implementation of the RTP or resolve issues that could not be fully addressed during the update. This will include updating sections on needed regional mobility corridor refinement plans, planned project development activities (e.g., Southwest Corridor and

Division Transit Project), performance monitoring, and other implementation activities to be undertaken post-RTP adoption. TPAC and MTAC will discuss staff recommendations for updates to this chapter in March 2018.

- **Development of a transportation recovery and disaster preparedness element underway.** Metro staff will partner with Portland State University and the Regional Disaster Preparedness Organization (RPDO) to map previously identified regional emergency transportation routes and prepare recommendations for future work and partnerships needed to more fully address this issue prior to the next RTP update (due in 2023). TPAC and MTAC will discuss the identified regional emergency transportation routes and recommendations for future work in early 2018.

#### **Modal and topical strategies development**

- **Development of the Regional Transit Strategy continues.** Staff continue to work with the Transit Work Group to develop a draft strategy, update the System Expansion Policy and define Enhanced Transit Concept (ETC) pilot corridors to advance to project development funded by the 2019-21 Regional Flexible Funds Allocation (RFFA). TPAC will discuss a proposed approach to the ETC pilot work at the October meeting, including working with County Coordinating Committees to identify the potential universe of Enhanced Transit locations to inform upcoming jurisdictional workshops. Staff are available to brief county-level coordinating committee TACs this fall/winter on development of the regional transit strategy if desired. TPAC and MTAC will discuss a technical review draft transit strategy at their January 2018 meetings and receive periodic updates on the ETC work.
- **Update to the Regional Transportation Safety Strategy continues.** Staff continue to work with the Safety Work Group to develop a draft strategy. Staff are available to brief county-level coordinating committee TACs this fall/winter if desired. TPAC and MTAC will discuss a technical review draft safety strategy at their November 2017 meetings.
- **Update to the Regional Freight Strategy continues.** Staff continue to work with the Safety Work Group to develop a draft strategy. Staff are available to brief county-level coordinating committee TACs this fall/winter if desired. TPAC and MTAC will discuss a technical review draft freight strategy at their December 2017 meetings.
- **Development of a policy framework and strategy for transportation technologies continues.** TPAC and MTAC discussed a proposed approach to this work at their September meetings, and will discuss draft policies and strategies at their February 2018 meetings, and a draft strategy in May 2018.
- **Update to Livable Streets design best practices continues.** Staff continue to work with the Design Work Group to update existing design practices. TPAC and MTAC will receive updates at their November meetings. Staff are available to brief county-level coordinating committee TACs this fall/winter if desired.

#### **Engagement and outreach**

- **Planning for 2018 public engagement and outreach activities underway.** In Jan. 2018, the draft investment priorities submitted by agencies along with findings from the evaluation will be shared with the general public for input during a planned 30-day comment opportunity. The fourth (and final) Regional Leadership Forum is planned for early 2018 (tentatively Friday, March 2, 2018) to discuss public input, updated funding information and the results of the technical evaluation. Policy makers will be asked to provide additional policy direction to staff on refining the RTP project priorities and policies. More information about planned 2018 engagement and outreach activities will be provided at the December TPAC and MTAC meetings.

## 2018 RTP UPDATE | Council and Regional Advisory Committees Briefings *(dates are subject to change)*



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2017	June-August	September	October	November	December
<b>Council</b>		<b>Sept. 26</b> <ul style="list-style-type: none"><li>• Project update</li></ul>	<b>Oct. 10 <i>(requested)</i></b> <ul style="list-style-type: none"><li>• Regional Transportation Technology Strategy (RTX)</li></ul>	<b>Nov. 7 <i>(requested)</i></b> <ul style="list-style-type: none"><li>• Project update</li></ul>	<b>Dec. 12 <i>(requested)</i></b> <ul style="list-style-type: none"><li>• Draft RTP Investment Strategy</li><li>• RTP policy chapter review findings</li><li>• 2018 RTP engagement activities and RLF #4</li></ul>
<b>JPACT</b>			<b>Oct. 19</b> <ul style="list-style-type: none"><li>• Regional Transportation Technology Strategy (RTX)</li></ul>		<b>Dec. 21</b> <ul style="list-style-type: none"><li>• Project update</li></ul>
<b>MPAC</b>	<b>July 12</b> <ul style="list-style-type: none"><li>• Regional Transit Strategy</li></ul>		<b>Oct. 25</b> <ul style="list-style-type: none"><li>• Regional Transportation Technology Strategy (RTX)</li></ul>		<b>Dec. 13</b> <ul style="list-style-type: none"><li>• Project update</li></ul>
<b>TPAC</b>	<b>June 30</b> <ul style="list-style-type: none"><li>• Regional Transit Strategy</li></ul> <b>July 28</b> <ul style="list-style-type: none"><li>• Call for Projects update</li><li>• Designing Livable Streets</li></ul> <b>Aug. 25</b> <ul style="list-style-type: none"><li>• RTP work plan next steps</li></ul>	<b>Sept. 29</b> <ul style="list-style-type: none"><li>• Regional Transportation Technology Strategy (RTX)</li></ul>	<b>Oct. 27</b> <ul style="list-style-type: none"><li>• RTP Investment Strategy update</li></ul>	<b>Nov. 17</b> <ul style="list-style-type: none"><li>• Draft RTP Investment Strategy findings</li><li>• Designing Livable Streets</li><li>• Overview of technical review draft of safety strategy <i>(key issues identified for discussion)</i></li></ul>	<b>Dec. 15</b> <ul style="list-style-type: none"><li>• RTP policy chapter review findings</li><li>• Draft RTP Investment Strategy &amp; Transportation Equity Analysis Findings</li><li>• 2018 RTP engagement activities and RLF #4</li><li>• Technical review draft of freight strategy <i>(key issues identified for discussion)</i></li></ul>
<b>MTAC</b>	<b>Aug. 2</b> <ul style="list-style-type: none"><li>• Designing Livable Streets</li></ul>		<b>Oct. 4</b> <ul style="list-style-type: none"><li>• Regional Transportation Technology Strategy (RTX)</li></ul>	<b>Nov. 15</b> <ul style="list-style-type: none"><li>• Draft RTP Investment Strategy findings</li><li>• Designing Livable Streets</li><li>• Overview of technical review draft of safety strategy <i>(key issues identified for discussion)</i></li></ul>	<b>Dec. 6</b> <ul style="list-style-type: none"><li>• RTP policy chapter review</li><li>• Draft RTP Investment Strategy &amp; Transportation Equity Analysis Findings</li><li>• 2018 RTP engagement activities and RLF #4</li><li>• Technical review draft of freight strategy <i>(key issues identified for discussion)</i></li></ul>

Updated 10/19/17

## 2018 RTP UPDATE | Council and Regional Advisory Committees Briefings *(dates are subject to change)*



[www.oregonmetro.gov/rtp](http://www.oregonmetro.gov/rtp)

2018	January	February	March	April	May
<b>Council</b>		<b>February 6</b> <ul style="list-style-type: none"> <li>Draft RTP Policy Chapter</li> <li>Draft Freight Strategy</li> <li>Draft Safety Strategy</li> </ul> <b>February 13</b> <ul style="list-style-type: none"> <li>Draft Transit Strategy</li> <li>Draft RTX policies and strategies</li> </ul>	<b>March 27</b> <ul style="list-style-type: none"> <li>Direction on finalizing draft 2018 RTP for public review</li> </ul>		<b>May 1</b> <ul style="list-style-type: none"> <li>Draft RTX (<i>key issues identified for discussion</i>)</li> </ul>
<b>JPACT</b>	<b>January 18</b> <ul style="list-style-type: none"> <li>2018 RTP engagement activities and RLF #4</li> <li>RTP Investment Strategy &amp; Transportation Equity Analysis Findings</li> </ul>	<b>February 15</b> <ul style="list-style-type: none"> <li>Draft RTP Policy Chapter</li> <li>Draft RTX policies and strategies</li> </ul>	<b>March 15</b> <ul style="list-style-type: none"> <li>Draft Transit Strategy</li> <li>Draft Freight Strategy</li> <li>Draft Safety Strategy</li> <li>Direction on finalizing draft 2018 RTP for public review</li> </ul>	<b>April 19</b>	<b>May 17</b> <ul style="list-style-type: none"> <li>Draft RTX (<i>key issues identified for discussion</i>)</li> </ul>
<b>MPAC</b>	<b>January 25</b> <ul style="list-style-type: none"> <li>2018 RTP engagement activities and RLF #4</li> <li>RTP Investment Strategy &amp; Transportation Equity Analysis Findings</li> </ul>	<b>February 28</b> <ul style="list-style-type: none"> <li>Draft RTP Policy Chapter</li> <li>Draft RTX policies and strategies</li> </ul>	<b>March 14</b> <ul style="list-style-type: none"> <li>Draft Transit Strategy</li> <li>Draft Freight Strategy</li> <li>Draft Safety Strategy</li> <li>Direction on finalizing draft 2018 RTP for public review</li> </ul>	<b>April 25</b>	<b>May 23</b> <ul style="list-style-type: none"> <li>Draft RTX (<i>key issues identified for discussion</i>)</li> </ul>
<b>TPAC</b>	<b>January 26</b> <ul style="list-style-type: none"> <li>Draft RTP Policy Chapter</li> <li>Technical review draft of transit strategy and system expansion policy (<i>key issues identified for discussion</i>)</li> <li>Draft RTX policies and strategies</li> </ul>	<b>February 23</b>	<b>March 30</b> <ul style="list-style-type: none"> <li>Draft RTP Implementation Chapter (<i>key issues identified for discussion</i>)</li> </ul>	<b>April 27</b> <ul style="list-style-type: none"> <li>Draft RTX (<i>key issues identified for discussion</i>)</li> </ul>	<b>May 25</b> <ul style="list-style-type: none"> <li>Livable streets and design classification map update</li> </ul>
<b>MTAC</b>	<b>January 17</b> <ul style="list-style-type: none"> <li>Draft RTP Policy Chapter</li> <li>Technical review draft of transit strategy and system expansion policy (<i>key issues identified for discussion</i>)</li> <li>Draft RTX policies and strategies</li> </ul>	<b>February 21</b>	<b>March 21</b> <ul style="list-style-type: none"> <li>Draft RTP Implementation Chapter (<i>key issues identified for discussion</i>)</li> </ul>	<b>April 18</b> <ul style="list-style-type: none"> <li>Draft RTX (<i>key issues identified for discussion</i>)</li> </ul>	<b>May 16</b> <ul style="list-style-type: none"> <li>Livable streets and design classification map update</li> </ul>

30-day comment opportunity on draft project list and evaluation findings planned for Jan. 8 to Feb. 9, 2018

45-day public comment period on draft 2018 RTP and modal/topical strategies planned for June 29 to Aug. 13, 2018

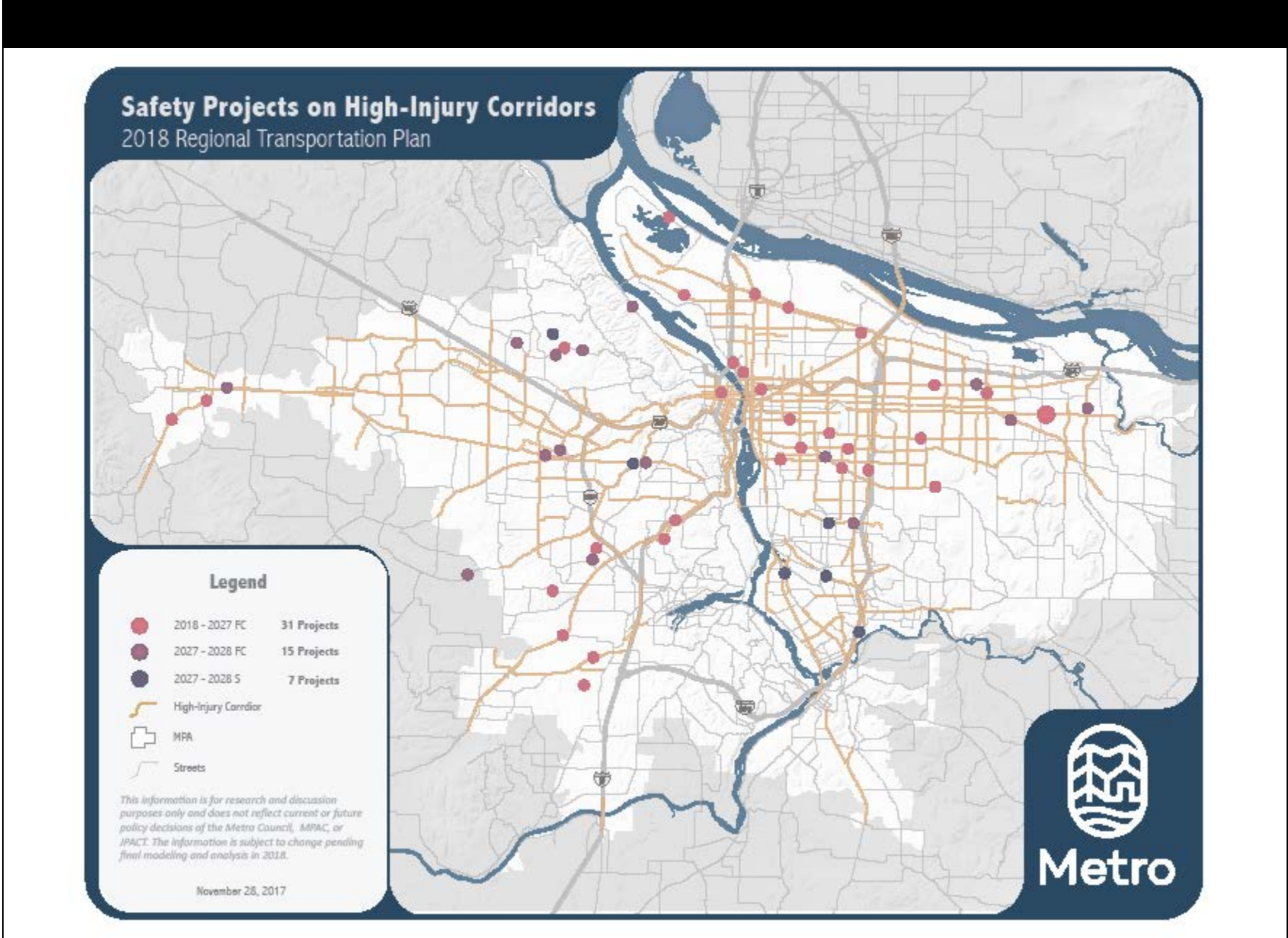
Updated 10/19/17



ID	Name of RTP System Evaluation Measure
How much do people and goods travel in our region?	
1.	<b>Multimodal travel</b> System-wide # of miles traveled (total and share of overall travel), sub-region # of miles (total and share of overall travel) A) Vehicle Miles Traveled (VMT) <i>(total, per capita, and per employee)</i> B) Bicycle miles traveled <i>(total and per capita)</i> C) Freight miles traveled <i>(total)</i> D) Pedestrian miles traveled <i>(total and per capita)</i> E) Person miles traveled <i>(total)</i>
2.	<b>Active transportation and transit mode share</b> System-wide <i>(total and share)</i> : A) walking B) bicycling C) transit Non-driving travel <i>(total and share)</i> : A) Central City B) Regional centers C) Mobility corridors D) Sub-regions (three counties and city of Portland)
How much do households spend on housing and transportation in our region?	
3.	<b>Affordability*</b> Combined cost of housing and transportation (Development of this measure has been deferred to next RTP update)
How safe is travel in our region?	
4.	<b>Share of safety projects*</b> Percent of number and cost of safety projects in the RTP investment packages region-wide, in areas with historically marginalized communities, in areas with focused historically marginalized communities, in census tracts with greater than the regional rate of people of color, and per person in each area
5.	<b>Exposure to crash risk*</b> The sum of all non-freeway vehicle miles traveled (VMT) in Transportation Area Zones (TAZ) for RTP investment packages region-wide, in historically marginalized communities, in focused historically marginalized communities, and in census tracts with greater than the regional rate people of color.
How easily, comfortably and directly can we access jobs and destinations in our region?	
6.	<b>Access to travel options – system connectivity &amp; completeness*</b> Miles, network percent complete, connectivity, density and timing of sidewalk, bikeway, trail and new street investments region-wide, in historically marginalized communities, in focused historically marginalized communities, in census tracts with greater than 26.5% people of color, and within 1/2-mile of transit A) Completeness of the regional active transportation and roadway networks (additional miles) B) Access to transit (miles of additional pedestrian and bicycle infrastructure within .25, .33, and .5 mile of frequent transit) C) Connectivity of the regional active transportation and roadway networks (increases in intersection density) D) Timing of active transportation investments
7.	<b>Access to jobs*</b> Number of jobs (classified by wage groups – low, middle, and high) accessible within A) 30 minutes by auto B) 45 minutes by transit C) 30 minutes by bike D) 20 minutes by walking E) Look at number of jobs region-wide, in areas with historically marginalized communities, in areas with focused historically marginalized communities, in census tracts with greater than the regional rate of people of color
8.	<b>Access to community places*</b> Number of community places (classified by medical, food, and other services) accessible within A) 30 minutes by transit B) 15 minutes by bicycle C) 20 minutes by walking Definition of community places consistent with other similar efforts, including the TriMet Equity Index. Look at number of community places region-wide, in areas with historically marginalized communities, in areas with focused historically marginalized communities, in census tracts with greater than the regional rate of people of color
9.	<b>Access to bicycle and pedestrian parkways</b> Number and percent of households within 1/4-mile of a bicycle or pedestrian parkway.
10.	<b>Access to transit</b> Number and share of households, low-income households and employment within 1/4-mile of high capacity transit or frequent service transit
11.	<b>Access to industry and freight intermodal facilities</b> Extent that industrial land and freight intermodal facilities are transportation constrained
How efficient is travel in our region?	
12.	<b>Multi-modal travel times</b> Between key origin-destinations for mid-day and 2-hr PM peak
13.	<b>Congestion</b> A) Vehicle hours of delay per person B) Interim Regional Mobility Policy - Locations of throughways, arterials, and regional freight network facilities that that exceed interim LOS threshold C) Freight truck delay D) Total cost of delay on freight network
14.	<b>Transit efficiency</b> A) Boarding rides per revenue hour for HCT & bus B) Revenue hours by transit mode C) Transit ridership system-wide by each transit service type
How will transportation impact climate change, air quality and the environment?	
15.	<b>Climate change</b> Tons of transportation-related greenhouse gas emissions <i>(total and per capita)</i>
16.	<b>Clean air</b> Tons of transportation related air pollutants <i>(e.g. CO, ozone, PM-10)</i>
17.	<b>Habitat impact*</b> Look at number and percentage of roadway projects that intersect high value habitats and region-wide and overlap in areas with historically marginalized communities, in areas with focused historically marginalized communities, in census tracts with greater than the regional rate of people of color. Check to see if a roadway projects are potentially intersecting high value habitats in historically marginalized communities, focused historically marginalized communities, and community of color at a greater rate.

\* Reflects the transportation priorities identified by historically marginalized communities and will serve as the basis for the federally-required Title VI Benefits and Burdens analysis.

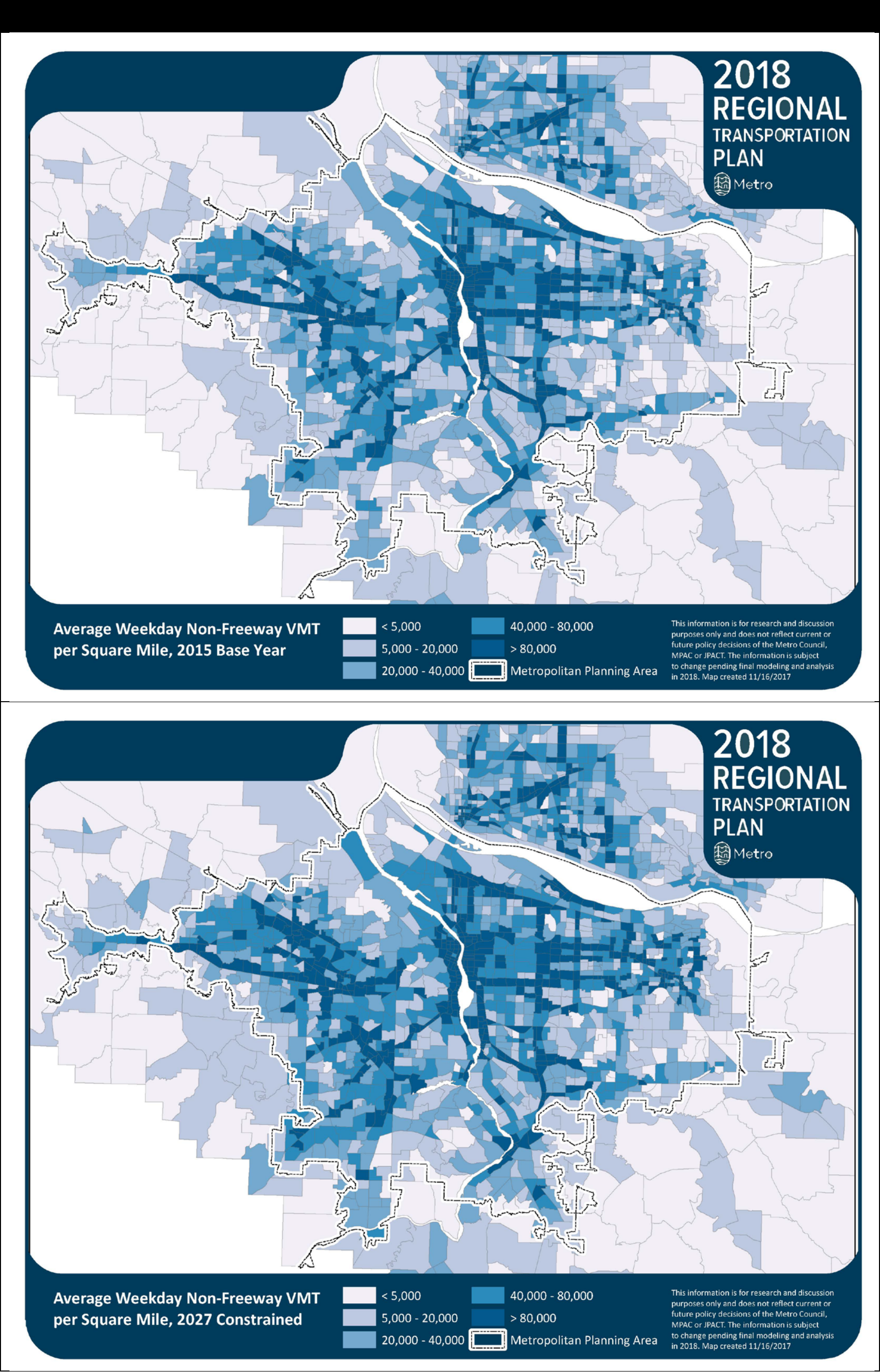
2018 REGIONAL TRANSPORTATION PLAN UPDATE  
SHARE OF SAFETY PROJECTS (NO. 4)



*This information is for research and discussion purposes only and does not reflect current or future policy decisions of the Metro Council, MPAC or JPACT. The information is subject to change pending final modeling and analysis in 2018.*



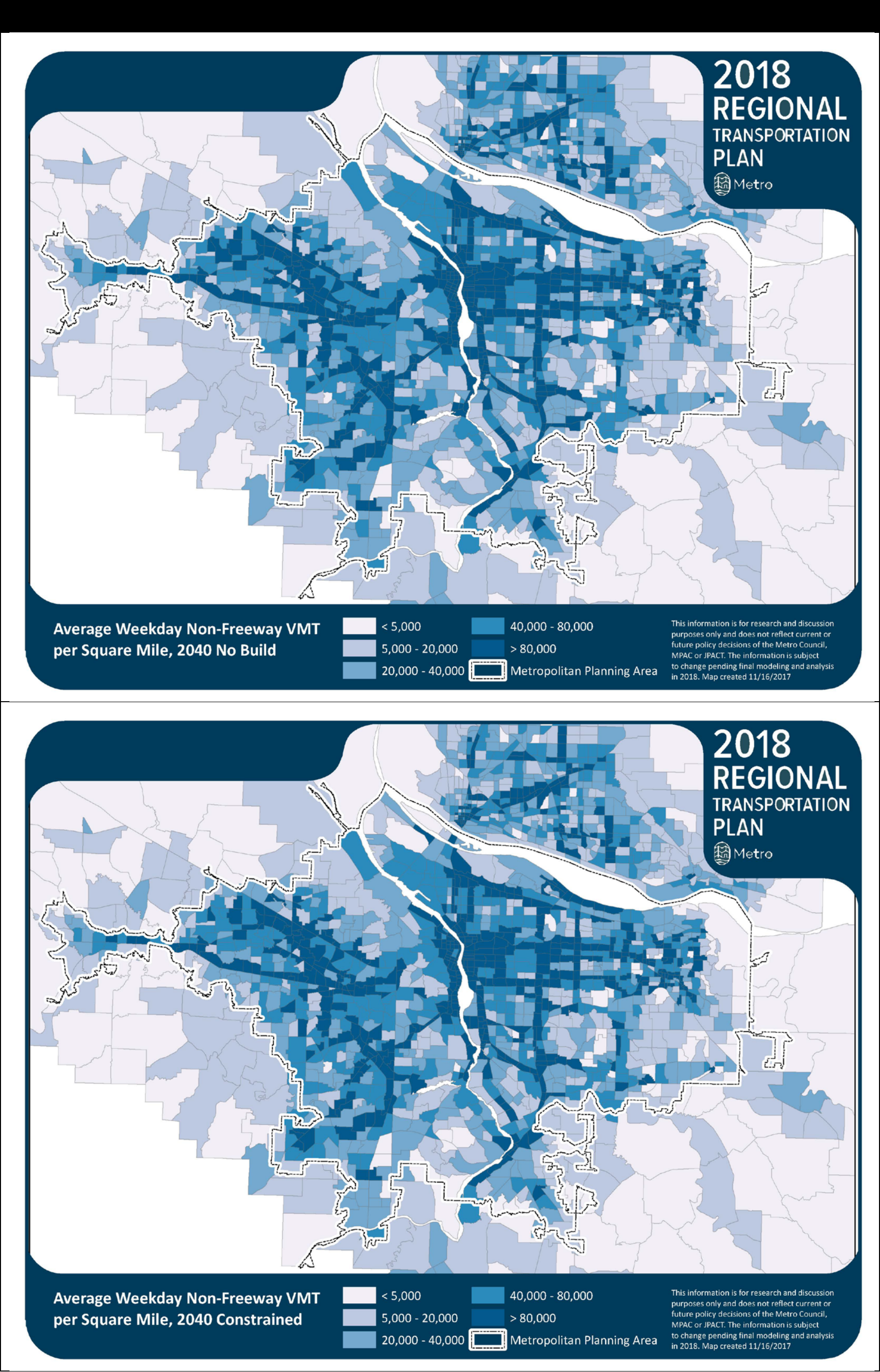
2018 REGIONAL TRANSPORTATION PLAN UPDATE  
NON-FREEWAY VEHICLE MILES TRAVELED EXPOSURE (NO. 5)



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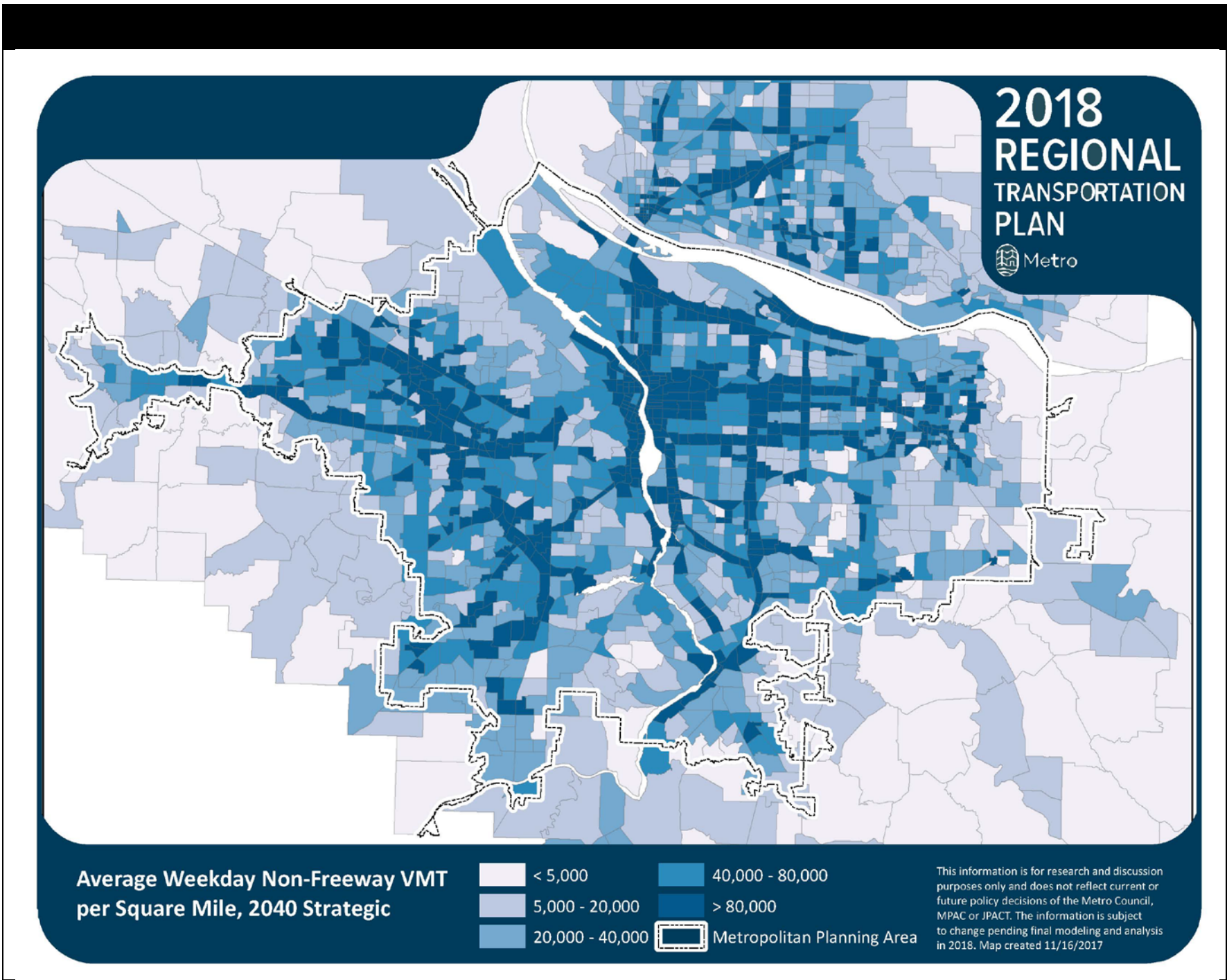
2018 REGIONAL TRANSPORTATION PLAN UPDATE  
NON-FREEWAY VEHICLE MILES TRAVELED EXPOSURE (NO. 5)



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2018 REGIONAL TRANSPORTATION PLAN UPDATE  
NON-FREEWAY VEHICLE MILES TRAVELED EXPOSURE (NO. 5)



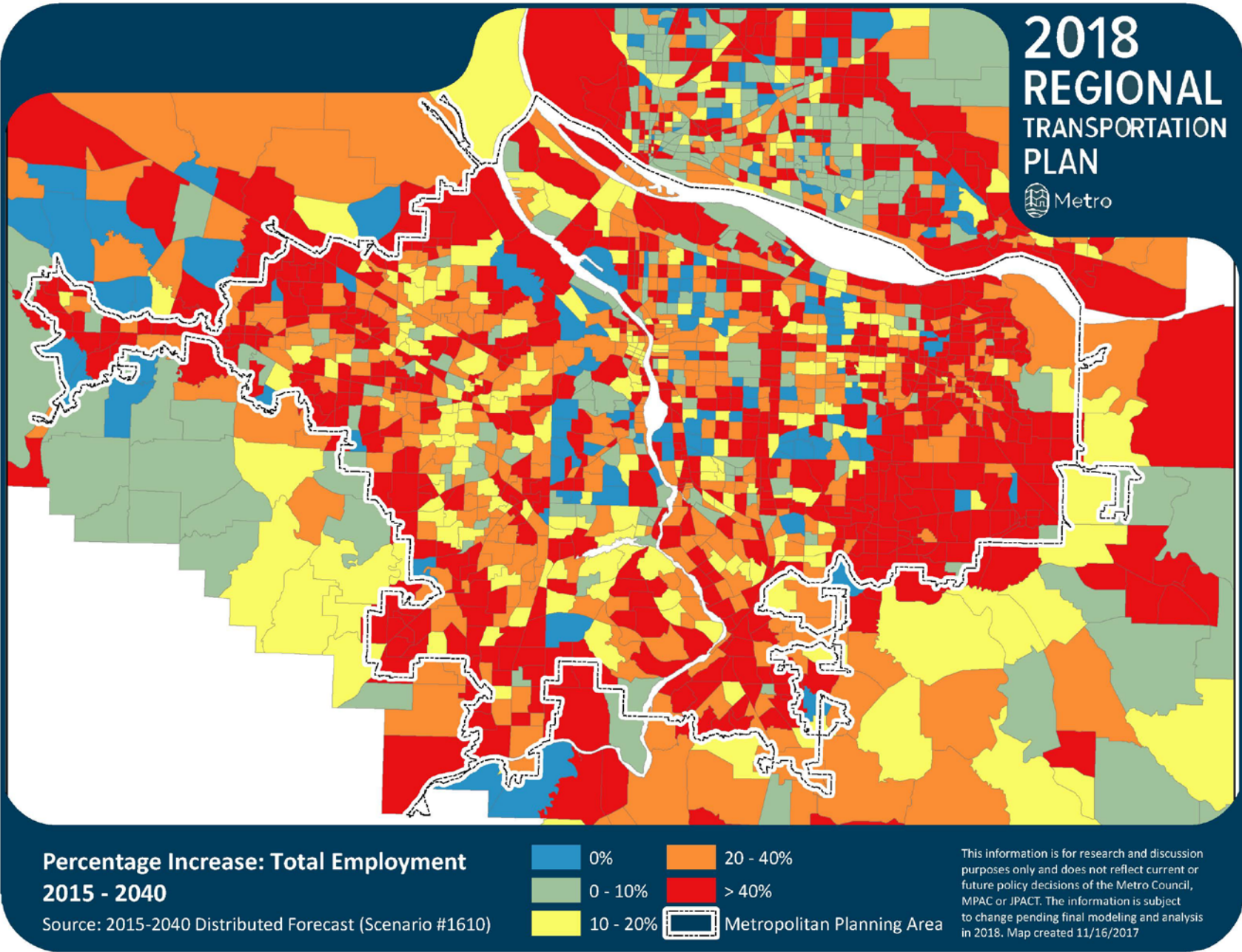
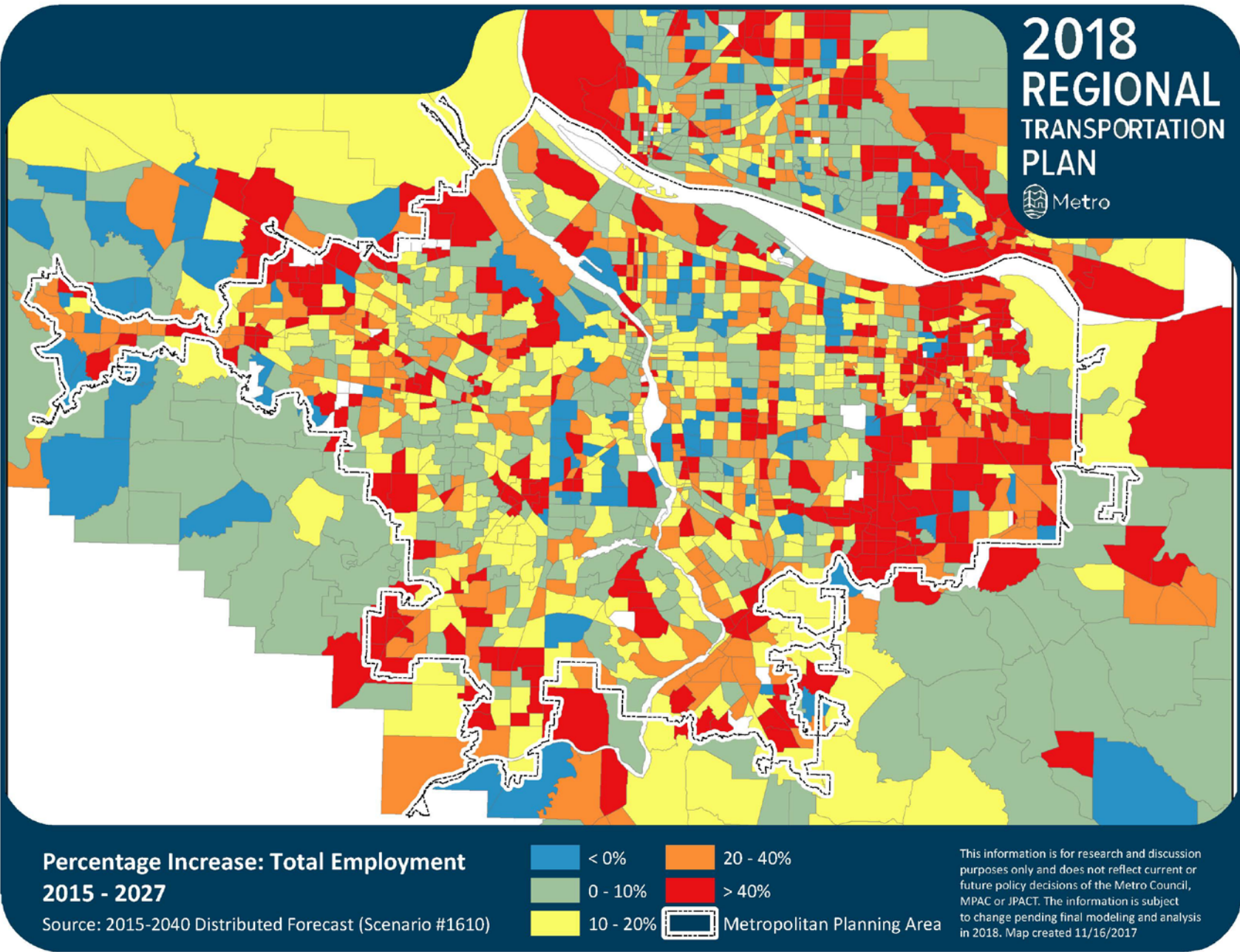
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2018 REGIONAL TRANSPORTATION PLAN UPDATE

NON-FREEWAY VEHICLE MILES TRAVELED EXPOSURE (NO. 5)

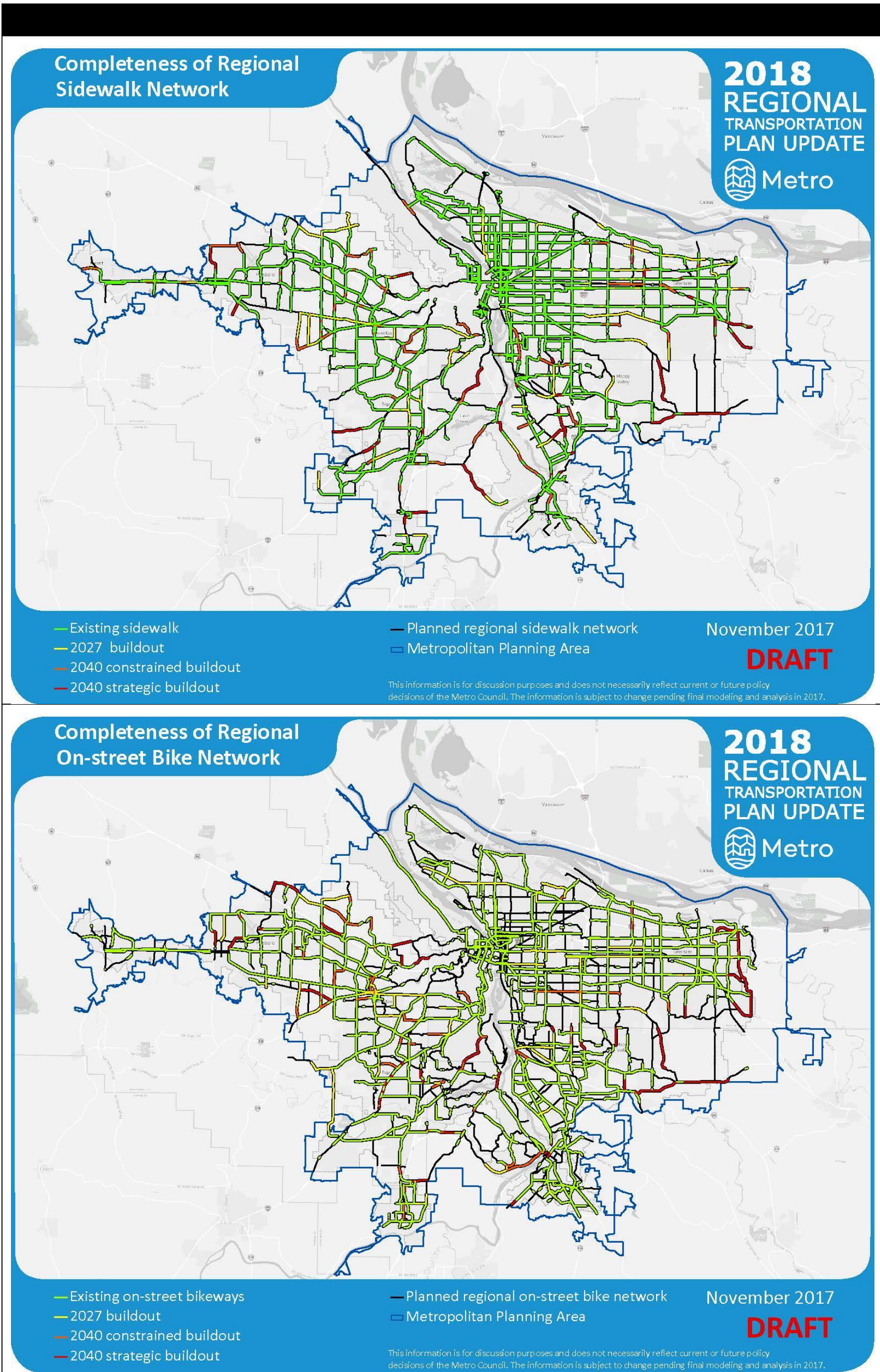
Changes in Employment (2016 Adopted Land Use Forecast)



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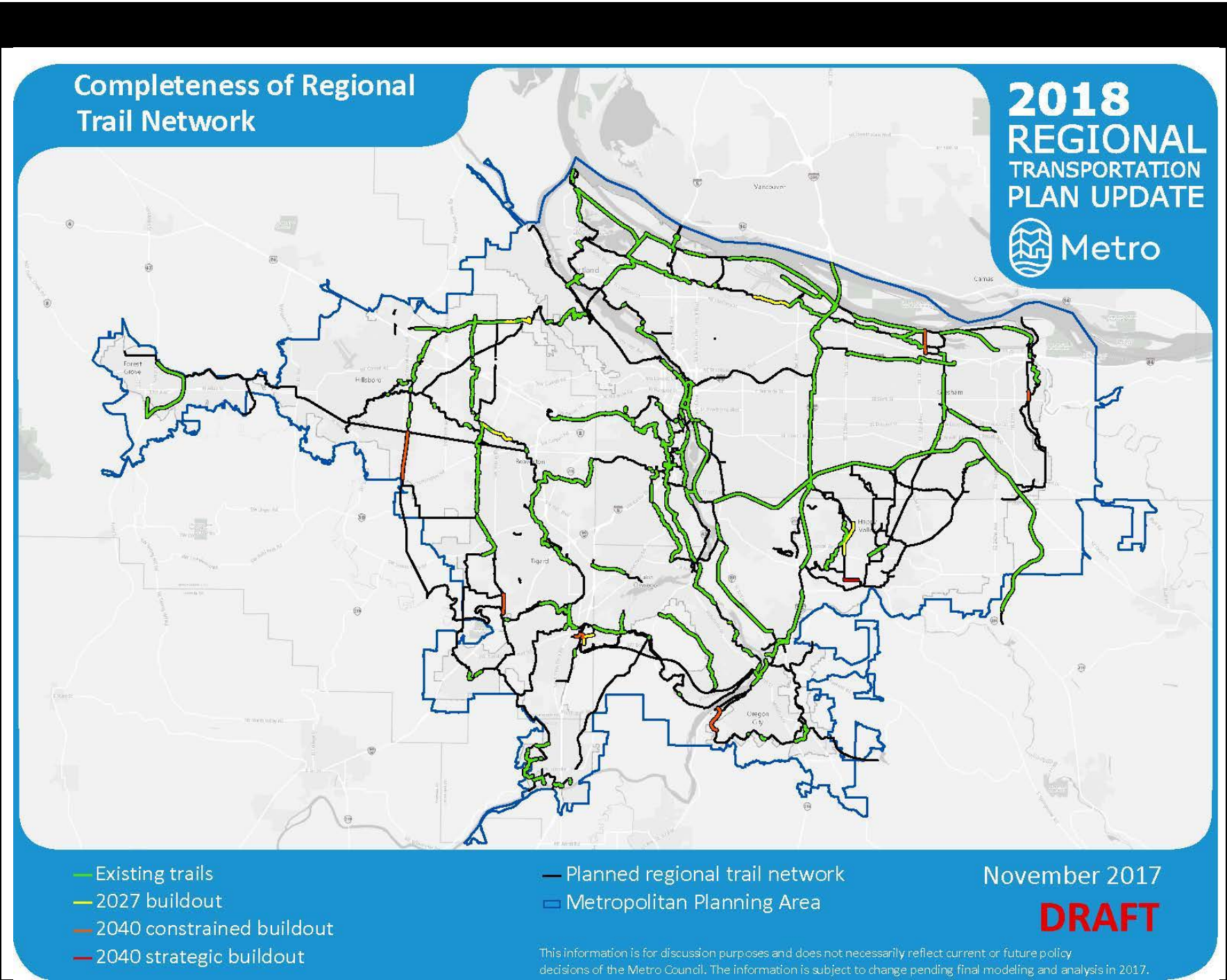


2018 REGIONAL TRANSPORTATION PLAN UPDATE  
ACCESS TO TRAVEL OPTIONS – COMPLETENESS & CONNECTIVITY (NO. 6)





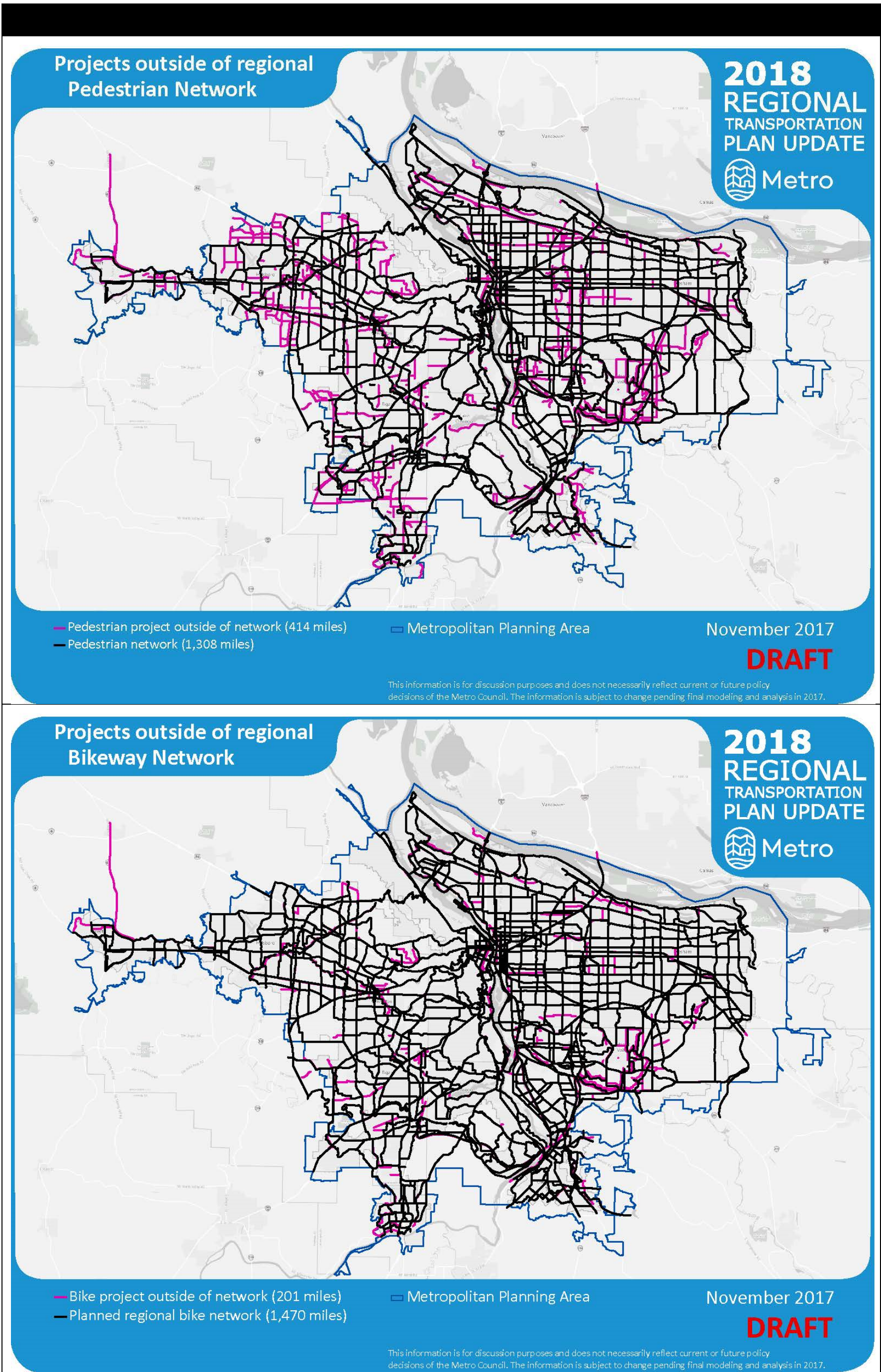
2018 REGIONAL TRANSPORTATION PLAN UPDATE  
ACCESS TO TRAVEL OPTIONS – COMPLETENESS & CONNECTIVITY (NO. 6)



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2018 REGIONAL TRANSPORTATION PLAN UPDATE  
ACCESS TO TRAVEL OPTIONS – COMPLETENESS & CONNECTIVITY (NO. 6)



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2018 REGIONAL TRANSPORTATION PLAN UPDATE  
ACCESS TO JOBS (NO. 7)

Weighted Average Accessibility																				
All values are averaged by total # of TAZs meeting criteria AND weighted by # of households in those TAZs																				
Job Access -- All Jobs																				
	2015 Base				2027 Constrained				2040 No Build				2040 Constrained				2040 Strategic			
	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk
Region	19,622	14,473	25,447	3,742	30,805	25,777	31,137	4,605	29,420	24,041	35,928	5,325	37,644	31,413	35,955	5,398	43,258	37,801	35,929	5,406
HMC	24,520	18,433	27,947	4,422	39,546	33,002	34,758	5,572	38,984	32,006	40,733	6,574	49,383	40,950	40,532	6,639	56,377	49,306	40,515	6,652
FHMC	26,048	19,022	28,941	4,402	41,072	33,637	35,045	5,322	38,552	30,521	40,229	6,109	49,540	40,252	40,046	6,192	56,525	49,265	39,932	6,209
Communities of Color	25,445	18,769	27,556	4,188	41,657	34,292	34,162	5,206	40,630	32,179	39,874	6,107	51,726	42,257	39,660	6,171	59,235	51,866	39,643	6,189
Job Access -- Low-Wage Jobs																				
	2015 Base				2027 Constrained				2040 No Build				2040 Constrained				2040 Strategic			
	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk
Region	9,496	7,023	12,355	1,836	14,675	12,298	14,835	2,220	13,930	11,391	16,993	2,545	17,792	14,876	17,002	2,579	20,441	17,879	16,988	2,582
HMC	11,860	8,949	13,592	2,174	18,850	15,758	16,594	2,691	18,473	15,174	19,303	3,147	23,357	19,415	19,208	3,176	26,663	23,335	19,196	3,181
FHMC	12,508	9,180	13,978	2,124	19,479	15,978	16,653	2,537	18,182	14,416	18,960	2,881	23,319	18,980	18,872	2,917	26,590	23,201	18,812	2,925
Communities of Color	12,253	9,069	13,361	2,033	19,830	16,350	16,312	2,500	19,238	15,245	18,900	2,905	24,445	20,006	18,804	2,932	27,991	24,527	18,787	2,940
Job Access -- Medium-Wage Jobs																				
	2015 Base				2027 Constrained				2040 No Build				2040 Constrained				2040 Strategic			
	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk
Region	5,330	3,924	6,888	1,005	8,429	7,045	8,528	1,251	8,067	6,600	9,878	1,455	10,347	8,614	9,888	1,476	11,891	10,380	9,882	1,478
HMC	6,670	5,001	7,565	1,189	10,820	9,022	9,513	1,514	10,684	8,788	11,190	1,798	13,566	11,224	11,137	1,818	15,490	13,537	11,136	1,821
FHMC	7,116	5,177	7,874	1,209	11,247	9,203	9,609	1,466	10,568	8,381	11,078	1,697	13,617	11,051	11,029	1,721	15,556	13,543	11,002	1,726
Communities of Color	6,948	5,114	7,492	1,146	11,394	9,373	9,348	1,427	11,126	8,831	10,948	1,686	14,197	11,584	10,888	1,705	16,273	14,239	10,888	1,710
Job Access -- High-Wage Jobs																				
	2015 Base				2027 Constrained				2040 No Build				2040 Constrained				2040 Strategic			
	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk
Region	4,796	3,525	6,203	900	7,701	6,433	7,774	1,134	7,422	6,050	9,057	1,325	9,506	7,923	9,066	1,343	10,925	9,543	9,059	1,345
HMC	5,990	4,483	6,790	1,058	9,876	8,223	8,652	1,366	9,828	8,044	10,239	1,628	12,460	10,311	10,187	1,646	14,224	12,434	10,184	1,649
FHMC	6,424	4,665	7,089	1,068	10,346	8,456	8,783	1,319	9,803	7,724	10,192	1,531	12,604	10,221	10,145	1,554	14,379	12,521	10,118	1,558
Communities of Color	6,244	4,586	6,704	1,008	10,432	8,569	8,502	1,278	10,266	8,104	10,026	1,516	13,085	10,667	9,968	1,533	14,971	13,101	9,968	1,538

This information is for research and discussion purposes only and does not reflect current or future policy decisions of the Metro Council, MPAC or JPACT. The information is subject to change pending final modeling and analysis in 2018.

2018 REGIONAL TRANSPORTATION PLAN UPDATE  
ACCESS TO COMMUNITY PLACES (NO. 8)

Weighted Average Accessibility

All values are averaged by total # of TAZs meeting criteria AND weighted by # of households in those TAZs

Access to Community Places -- All Community Places

	2015 Base				2027 Constrained				2040 No Build				2040 Constrained				2040 Strategic			
	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk
Region	309	235	360	66	387	335	364	68	323	277	364	68	408	352	365	69	463	418	364	69
HMC	374	291	393	78	485	419	411	82	419	359	422	84	523	446	421	85	589	528	420	85
FHMC	337	254	327	59	426	360	327	59	345	286	324	58	444	372	324	59	503	448	323	59
Communities of Color	341	258	335	58	448	381	342	60	376	310	346	61	480	404	346	62	548	490	345	62

Access to Community Places --

Food

	2015 Base				2027 Constrained				2040 No Build				2040 Constrained				2040 Strategic			
	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk
Region	10	7	12	2	12	11	12	2	10	8	11	2	13	11	11	2	15	13	11	2
HMC	12	9	13	2	16	13	13	2	14	11	14	2	17	14	14	3	19	17	14	3
FHMC	12	9	12	2	15	13	12	2	12	10	12	2	16	13	12	2	18	16	12	2
Communities of Color	12	9	12	2	16	14	12	2	14	11	12	2	17	14	12	2	19	17	12	2

Access to Community Places --

Medical

	2015 Base				2027 Constrained				2040 No Build				2040 Constrained				2040 Strategic			
	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk
Region	113	86	129	25	141	123	131	26	117	103	131	26	148	128	132	26	169	154	131	26
HMC	137	107	138	29	175	153	145	31	152	133	150	32	189	162	150	32	214	193	149	32
FHMC	119	90	107	20	148	125	107	20	120	100	106	20	153	129	106	20	176	157	106	20
Communities of Color	120	91	109	19	155	132	112	20	130	109	114	20	166	140	114	20	191	171	113	20

Access to Community Places -- All Others

	2015 Base				2027 Constrained				2040 No Build				2040 Constrained				2040 Strategic			
	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk	Rush	All Day	Bike	Walk
Region	187	142	220	39	234	202	222	40	195	166	222	40	247	212	222	40	279	251	221	40
HMC	226	175	242	46	294	253	252	49	254	215	258	50	317	270	258	50	356	318	257	51
FHMC	206	154	208	38	262	222	208	37	212	175	206	37	275	230	206	37	309	275	206	37
Communities of Color	208	157	213	37	277	235	218	38	232	191	220	39	298	250	220	39	338	301	220	39

RTP ID	Nominating Agency	Project Name	Time Period	Financially Constrained	Estimated Cost 2016\$
10000	Milwaukie	LinwoodHarmony Rd. Lake Rd. Intersection	2028-2040	Yes	\$ 21,300,000
10002	Clackamas County	Johnson Creek Blvd. Improvements	2028-2040	Yes	\$ 14,237,510
10023	Clackamas County	82nd Dr. Improvements	2028-2040	No	\$ 18,521,712
10026	Oregon City	Beavercreek Road Improvements, Phase 3A	2018-2027	Yes	\$ 6,950,000
10033	Happy Valley	172nd Ave & 190th Connector	2028-2040	Yes	\$ 39,841,240
10035	Happy Valley	Upper Foster Rd. Improvements	2028-2040	No	\$ 6,271,700
10036	Happy Valley	145th Ave.	2028-2040	No	\$ 8,300,000
10037	Happy Valley	162nd Ave.	2018-2027	Yes	\$ 2,763,800
10040	Happy Valley	162nd Ave. Extension North	2028-2040	Yes	\$ 29,732,110
10041	Happy Valley	162nd Ave. Extension South Phase 1	2018-2027	Yes	\$ 5,315,000
10045	Happy Valley	Clatsop St.	2028-2040	No	\$ 8,291,400
10048	Oregon City	Holly Lane Bike & Pedestrian Improvements	2028-2040	No	\$ 17,000,000
10054	Clackamas County	65thElligsenStafford Intersection Roundabout	2028-2040	No	\$ 5,846,500
10057	Clackamas County	Redland Road	2028-2040	No	\$ 13,091,908
10060	Happy Valley	SE 132nd Ave.	2028-2040	No	\$ 4,900,000
10061	Happy Valley	142nd Ave.	2028-2040	No	\$ 11,027,569
10076	Happy Valley	SE Sunnyside Rd East Extension	2018-2027	Yes	\$ 25,945,000
10082	Happy Valley	Mt. Scott Blvd.King Rd. Improvements	2028-2040	No	\$ 22,131,660
10084	Happy Valley	King Rd.	2018-2027	Yes	\$ 1,222,450
10101	Milwaukie	Kellogg Creek Dam Removal and OR 99E Underpass	2028-2040	No	\$ 10,500,000
10118	Oregon City	McLoughlin Blvd Bike & Pedestrian Improvements excluding Viaducts	2028-2040	Yes	\$ 7,600,000
10119	Oregon City	OR 213 & Redland, Phase 2	2028-2040	Yes	\$ 9,800,000
10132	Wilsonville	Boeckman Rd.I-5 Overcrossing Improvements	2018-2027	Yes	\$ 15,766,000
10135	West Linn	19th St. Improvements	2028-2040	Yes	\$ 1,275,600
10140	Oregon City	OR 213 Widening	2028-2040	Yes	\$ 5,200,000
10144	Oregon City	Hwy 99E & I-205 SB Interchange Access	2028-2040	No	\$ 3,000,000
10156	Wilsonville	Boeckman Rd. at Boeckman Creek	2018-2027	Yes	\$ 12,220,000
10166	Portland	BurnsideSkyline Intersection Improvements	2028-2040	Yes	\$ 1,850,716
10180	Portland	Sandy Blvd Corridor Safety Improvements	2018-2027	Yes	\$ 5,000,000
10218	Portland	Burgard-Lombard Street Improvements	2018-2027	Yes	\$ 2,635,000
10242	Portland	Interstate-Larrabee Overpass	2028-2040	Yes	\$ 5,000,000
10259	Portland	Inner Powell Blvd Corridor Improvements: Local Contribution to State-owned Arterial	2018-2027	Yes	\$ 10,000,000
10274	Portland	B-H HwyBerthaCapitol Hwy Improvements	2028-2040	Yes	\$ 1,403,300
10299	Portland	N Lombard Corridor Improvements: Local Contribution to State-owned Arterial	2018-2027	Yes	\$ 5,000,000
10303	Portland	Outer Capitol Hwy Corridor Improvements	2018-2027	Yes	\$ 2,000,000
10315	Portland	Cesar Chavez Corridor Improvements	2018-2027	Yes	\$ 5,000,000
10318	Portland	Outer Glisan Corridor Improvements, Segment 1	2018-2027	Yes	\$ 2,000,000
10330	Portland	NE 148th Ave Corridor Improvements, Segment 1	2028-2040	Yes	\$ 3,000,000
10331	Portland	Columbia Blvd Railroad Bridge Replacement	2028-2040	Yes	\$ 4,000,000
10335	Portland	NE 42nd47th Ave Bridge & Corridor Improvements	2018-2027	Yes	\$ 12,000,000
10336	Portland	Columbia & Cully Intersection Improvements	2028-2040	Yes	\$ 5,000,000
10337	Portland	Marine Dr & 33rd Intersection Improvements	2018-2027	Yes	\$ 1,000,000
10340	Portland	Cornfoot Rd Corridor Improvements	2018-2027	Yes	\$ 7,000,000
10347	Portland	Pleasant Valley Foster Rd Extension	2028-2040	No	\$ 2,525,400
10363	Port of Portland	SW Quad Access	2018-2027	Yes	\$ 6,290,303
10376	Portland	Columbia Blvd Freight Improvements: DesignConstruction	2028-2040	No	\$ 14,000,000
10379	Port of Portland	Marine Dr. Improvement Phase 2	2018-2027	Yes	\$ 14,503,785
10382	Multnomah County	Reconstruct Stark St. to arterial standards	2018-2027	Yes	\$ 3,348,450
10386	Multnomah County	Glisan St. Multi-modal Improvements	2028-2040	No	\$ 12,224,500
10388	Multnomah County	Reconstruct 223rd Ave.	2028-2040	Yes	\$ 2,230,990
10389	Multnomah County	Reconstruct 223rd Ave.	2028-2040	Yes	\$ 2,206,819
10394	Multnomah County	Replace RR Over-crossing on 223rd Ave.	2018-2027	Yes	\$ 7,441,000
10395	Multnomah County	Replace RR over crossing at Historic Columbia River Hwy	2028-2040	No	\$ 7,441,000
10399	Multnomah County	Reconstruct Sandy Blvd.	2018-2027	Yes	\$ 7,906,594
10401	Multnomah County	Reconstruct Marine Dr.	2028-2040	No	\$ 14,882,000
10406	Multnomah County	Reconstruct Stark St. to arterial standards	2028-2040	Yes	\$ 1,924,030
10412	Multnomah County	Morrison Bridge Rehabilitation - Phase 1	2018-2027	Yes	\$ 19,554,972

RTP ID	Nominating Agency	Project Name	Time Period	Financially Constrained	Estimated Cost 2016\$
10413	Multnomah County	Hawthorne Bridge Rehabilitation	2028-2040	Yes	\$ 22,730,193
10416	Gresham	Hogan Corridor Improvements	2028-2040	No	\$ 20,346,310
10417	Gresham	Hogan: Palmquist to Rugg New Principal Arterial Connection	2028-2040	No	\$ 36,152,117
10421	Gresham	Burnside: 181st to 197th Boulevard Improvements	2028-2040	Yes	\$ 8,370,051
10424	Gresham	Wallula212th: Division to Stark Widening	2028-2040	No	\$ 8,873,911
10425	Gresham	1stBull Run: 242nd to 257th Reconstruction	2028-2040	Yes	\$ 4,747,690
10427	Gresham	Regner: Roberts to Southern City Limits Reconstruction	2028-2040	No	\$ 31,109,301
10430	Gresham	Orient: South City limits to Kane Dr Widening	2028-2040	No	\$ 9,567,000
10431	Gresham	190thHighland: 11th to 30th Widening	2028-2040	Yes	\$ 20,884,252
10434	Gresham	Burnside: 212th to Hogan Boulevard	2028-2040	No	\$ 34,595,974
10443	Gresham	Sandy: 181st to 202nd Widening	2018-2027	Yes	\$ 5,000,000
10447	Gresham	162nd: Glisan to Halsey Widening & BikePed Improvements	2028-2040	No	\$ 8,413,967
10450	Gresham	202ndBirdsdale: Division and Stark Intersections	2028-2040	Yes	\$ 1,462,157
10454	Gresham	181st: Glisan to Yamhill Boulevard Improvements	2028-2040	Yes	\$ 12,160,785
10460	Gresham	174th NS Improvements	2028-2040	Yes	\$ 29,231,052
10462	Gresham	Butler: 190th to Binford	2028-2040	Yes	\$ 5,900,000
10463	Gresham	Foster: Jenne to 172nd Extension	2028-2040	Yes	\$ 16,388,938
10464	Gresham	Giese: 182nd to 172nd Extension	2028-2040	Yes	\$ 19,120,428
10465	Gresham	172nd: Giese to Foster	2028-2040	Yes	\$ 12,246,147
10466	Gresham	172nd: Cheldelin to Foster	2028-2040	Yes	\$ 7,561,096
10469	Gresham	Foster in Pleasant Valley: Bridge Crossing	2028-2040	Yes	\$ 2,808,680
10471	Gresham	Butler: Binford to Towle Extension and Bridge	2028-2040	Yes	\$ 13,041,840
10493	Gresham	181st: I-84 to Sandy Widening	2028-2040	No	\$ 1,000,000
10503	Gresham	Burnside: at Powell	2028-2040	Yes	\$ 1,000,000
10505	Gresham	Civic Neighborhood: 16th and Norman TOD	2018-2027	Yes	\$ 5,065,428
10512	Gresham	Hogan: Powell to Burnside Boulevard Design + Intersection Improvements	2018-2027	Yes	\$ 9,289,906
10527	Gresham	Hogan: Powell to Palmquist Widening	2028-2040	No	\$ 13,228,630
10533	Gresham	190th: 30th to Cheldelin	2018-2027	Yes	\$ 30,448,832
10536	Portland	Clatsop Street Extension	2028-2040	No	\$ 4,202,582
10538	Happy Valley	Sager	2028-2040	No	\$ 16,795,400
10541	Gresham	182nd: Giese to Cheldelin	2028-2040	No	\$ 12,540,944
10545	Washington County	OR 10: Oleson Rd. Improvement Ph. 1	2028-2040	Yes	\$ 40,000,000
10546	Washington County	170th Ave. Improvements	2028-2040	Yes	\$ 16,200,000
10548	Washington County	174th Ave. Improvements	2028-2040	Yes	\$ 9,000,000
10549	Washington County	Cornell @ 143rd Improvements	2028-2040	Yes	\$ 13,200,000
10550	Washington County	185th Avenue Improvement	2018-2027	Yes	\$ 6,000,000
10553	Hillsboro	209th Ave Widening and Improvements, Phase 1	2018-2027	Yes	\$ 22,327,000
10558	Washington County	Cornell Rd. Improvements	2018-2027	Yes	\$ 5,000,000
10559	Washington County	Cornell Improvements	2028-2040	Yes	\$ 25,000,000
10560	Washington County	Farmington Rd. Improvements	2028-2040	Yes	\$ 29,000,000
10561	Washington County	Jenkins Rd. Improvements	2018-2027	Yes	\$ 7,000,000
10563	Washington County	Kaiser143rd Ave. Improvements	2028-2040	Yes	\$ 20,000,000
10564	Washington County	Kaiser Improvements	2028-2040	Yes	\$ 6,500,000
10565	Washington County	Springville Rd. Improvements	2018-2027	Yes	\$ 11,800,000
10566	Washington County	Springville Rd. Improvements	2018-2027	Yes	\$ 3,800,000
10567	Washington County	Taylor's Ferry Extension	2028-2040	Yes	\$ 4,700,000
10568	Washington County	Tualatin-Sherwood Rd. Improvements	2018-2027	Yes	\$ 35,000,000
10569	Washington County	Walker Rd. Improvements	2028-2040	Yes	\$ 18,700,000
10571	Washington County	West Union Rd. Improvements	2028-2040	Yes	\$ 20,000,000
10572	Washington County	Barnes Rd. Improvements	2028-2040	No	\$ 9,500,000
10573	Washington County	Barnes Rd. Improvements	2028-2040	No	\$ 18,400,000
10575	Washington County	West Union Rd.	2018-2027	Yes	\$ 22,000,000
10578	Washington County	Merlo158th Improvements	2028-2040	Yes	\$ 13,000,000
10580	Washington County	Butner Rd. Improvements	2028-2040	No	\$ 19,700,000
10582	Washington County	185th Ave. Improvements	2028-2040	Yes	\$ 12,900,000
10587	Washington County	Cornelius Pass Rd. Improvements	2018-2027	Yes	\$ 16,000,000
10588	Wilsonville	Grahams Ferry Road Improvements	2028-2040	Yes	\$ 13,200,000
10590	Washington County	Tonquin Rd. Improvements	2018-2027	Yes	\$ 11,400,000
10591	Washington County	Glencoe Rd. Improvements	2028-2040	No	\$ 27,700,000

RTP ID	Nominating Agency	Project Name	Time Period	Financially Constrained	Estimated Cost 2016\$
10592	Washington County	205th Ave. Improvements	2028-2040	Yes	\$ 33,000,000
10593	Washington County	Kinnaman Rd. Improvements	2028-2040	No	\$ 28,500,000
10595	Washington County	Hall Blvd. Improvements	2028-2040	Yes	\$ 2,600,000
10596	Washington County	Scholls Ferry Rd. Improvements	2028-2040	No	\$ 21,000,000
10598	Washington County	Southern Arterial	2028-2040	No	\$ 116,000,000
10618	Beaverton	Cedar Hills BoulevardDawson WayWestgate Drive Intersection Realignment	2028-2040	Yes	\$ 9,500,000
10619	Beaverton	Crescent Street Extension	2028-2040	Yes	\$ 4,300,000
10620	Beaverton	Millikan Way Extension	2028-2040	Yes	\$ 14,700,000
10623	Beaverton	Hall Boulevard Street Extension	2028-2040	Yes	\$ 15,300,000
10624	Beaverton	120th Avenue Extension	2028-2040	Yes	\$ 9,500,000
10626	Beaverton	115th Avenue Extension	2028-2040	Yes	\$ 10,600,000
10633	Beaverton	Allen Boulevard Multimodal Improvements OR Highway 217 to Western Avenue	2018-2027	Yes	\$ 6,700,000
10635	Beaverton	125th Avenue Extension	2018-2027	Yes	\$ 14,800,000
10638	Beaverton	Davies Road Extension	2028-2040	Yes	\$ 5,200,000
10674	Sherwood	Oregon-Tonquin Intersection Improvements	2018-2027	Yes	\$ 2,400,000
10680	Sherwood	Elwert-99W-Sunset Intersection Improvements	2018-2027	Yes	\$ 12,000,000
10681	Sherwood	Elwert Road Improvements	2018-2027	Yes	\$ 7,500,000
10682	Sherwood	Brookman Road Improvements	2018-2027	Yes	\$ 15,300,000
10684	Sherwood	Cedar Brook Way	2028-2040	No	\$ 6,000,000
10689	Sherwood	Old Town Arterials-Collectors	2028-2040	No	\$ 5,800,000
10691	Sherwood	Sherwood Blvd Improvements	2028-2040	Yes	\$ 2,100,000
10692	Sherwood	Edy Rd Improvments	2018-2027	Yes	\$ 8,800,000
10693	Sherwood	Ladd Hill Road Improvements	2028-2040	Yes	\$ 6,300,000
10698	Sherwood	Sunset Blvd.	2028-2040	No	\$ 8,300,000
10699	Sherwood	Oregon Street Improvements	2018-2027	Yes	\$ 5,700,000
10700	Sherwood	Arrow Street Improvements	2028-2040	No	\$ 8,200,000
10709	Tualatin	Sagert	2018-2027	Yes	\$ 2,923,250
10712	Tualatin	Boones Ferry	2028-2040	No	\$ 18,940,534
10714	Tualatin	105th Ave	2018-2027	Yes	\$ 3,500,000
10715	Tualatin	Herman	2018-2027	Yes	\$ 5,300,000
10716	Tualatin	Myslony	2018-2027	Yes	\$ 10,000,000
10717	Tualatin	Cipole Street Reconstruction	2028-2040	No	\$ 21,291,890
10738	Tualatin	Teton	2028-2040	Yes	\$ 5,151,298
10748	Tigard	Greenburg Road Improvements - N Dakota to Cascade	2018-2027	Yes	\$ 6,400,000
10751	Tigard	OR 217 Overcrossing - Beveland to Hunziker	2028-2040	Yes	\$ 30,000,000
10768	Tigard	Durham RdUpper Boones Ferry Intersection Improvements	2028-2040	No	\$ 5,000,000
10773	Forest Grove	Thatcher Road Improvement	2028-2040	Yes	\$ 18,800,000
10774	Forest Grove	23rd Avenue Extension	2028-2040	Yes	\$ 4,000,000
10780	Forest Grove	OR 47 Pacific Avenue Intersection Improvements	2028-2040	Yes	\$ 4,000,000
10784	Forest Grove	David Hill Road Improvement	2018-2027	Yes	\$ 10,000,000
10795	Cornelius	Holladay Street Extension - West	2028-2040	Yes	\$ 2,657,500
10796	Cornelius	Holladay Street Extension - Central	2028-2040	No	\$ 3,212,711
10797	Cornelius	Holladay Street Extension - East	2028-2040	No	\$ 3,424,538
10799	Cornelius	Davis Street Extension - East	2028-2040	No	\$ 10,529,421
10817	Hillsboro	Aloclek Dr Gap Completion	2028-2040	No	\$ 2,126,000
10818	Hillsboro	Century Blvd Extension and Improvements Baseline to Lois	2018-2027	Yes	\$ 14,111,000
10819	Hillsboro	Century Blvd Turn Lanes and BikePed Gaps Baseline to Alder	2028-2040	Yes	\$ 5,315,000
10820	Hillsboro	Brookwood Ave Improvements	2018-2027	Yes	\$ 1,807,100
10821	Hillsboro	Huffman St Extension, Phase 1	2018-2027	Yes	\$ 8,387,070
10822	Hillsboro	Starr Blvd Reconstruction and Improvements, Phase 1	2018-2027	Yes	\$ 5,315,000
10823	Hillsboro	Amberwood Dr Turn Lanes and BikePed Improvements	2028-2040	Yes	\$ 1,594,500
10824	Hillsboro	Cornell Rd Turn Lanes and BikePed Improvements Main to Arrington	2028-2040	No	\$ 9,830,624
10825	Hillsboro	Amberglen Pkwy Extension	2018-2027	Yes	\$ 1,913,400
10826	Hillsboro	Jackson School Rd Turn Lanes and BikePed Improvements	2018-2027	Yes	\$ 7,441,000
10827	Hillsboro	Quatama Rd Turn Lanes and BikePed Gaps	2028-2040	No	\$ 1,913,400
10828	Hillsboro	Edgeway Dr Extension	2028-2040	Yes	\$ 4,252,000
10829	Hillsboro	Wilkins St Extension	2028-2040	Yes	\$ 17,008,000

RTP ID	Nominating Agency	Project Name	Time Period	Financially Constrained	Estimated Cost 2016\$
10831	Hillsboro	Century Blvd Extension and Over-Crossing North Hillsboro	2028-2040	Yes	\$ 13,733,960
10832	Hillsboro	Quatama Rd Improvements and 69th Ave Extension	2028-2040	No	\$ 1,913,400
10836	Hillsboro	Evergreen Rd Widening and BikePed Improvements	2028-2040	Yes	\$ 5,782,720
10837	Hillsboro	Cherry Dr Extension	2018-2027	Yes	\$ 1,594,500
10838	Hillsboro	Davis Rd Turn Lanes and BikePed Improvements	2018-2027	Yes	\$ 2,870,100
10839	Hillsboro	Century Blvd Turn Lanes and Bike Lanes Witch Hazel	2018-2027	Yes	\$ 4,252,000
10853	Wilsonville	Garden Acres Road Extension	2018-2027	Yes	\$ 14,260,000
10867	ODOT	I-5 from I-405 to I-84 Rose QuarterLloyd District PE, NEPA, ROW	2018-2027	Yes	\$ 15,000,000
10890	ODOT	OR 212224 Sunrise Hwy Phase 2: I-205 to SE 172nd PE, ROW	2018-2027	Yes	\$ 70,000,000
10893	ODOT	I-5 Columbia River Bridge	2028-2040	Yes	\$ 3,169,866,000
11045	Washington County	185th AvenueMAX Grade Separation	2028-2040	No	\$ 26,256,000
11081	Lake Oswego	Boones Ferry Rd bike lanes	2028-2040	Yes	\$ 11,140,000
11096	Gresham	Cleveland: Burnside to Stark Reconstruction	2018-2027	Yes	\$ 4,188,181
11117	Portland	Willbridge Industrial Area Rail Overcrossing	2028-2040	No	\$ 23,113,022
11128	Multnomah County	Morrison Bridge Rehabilitation - Phase 2	2018-2027	Yes	\$ 22,288,463
11129	Multnomah County	Earthquake Ready Burnside Bridge Phase 1	2018-2027	Yes	\$ 17,000,000
11135	Happy Valley	Rock Creek Blvd. improvements	2018-2027	Yes	\$ 23,673,010
11140	Hillsboro	Brookwood Pkwy Widening	2028-2040	Yes	\$ 9,567,000
11141	Hillsboro	Brogden St Extension and BikePed Improvements	2028-2040	No	\$ 3,189,000
11147	Hillsboro	Schaaf Rd Reconstruction	2018-2027	Yes	\$ 4,252,000
11149	Hillsboro	Helvetia Rd Turn Lanes and BikePed Improvements	2028-2040	No	\$ 4,252,000
11150	Hillsboro	Jacobson Rd Turn Lanes and BikePed Improvements	2028-2040	No	\$ 2,657,500
11170	Hillsboro	Cornell Rd & Brookwood Pkwy and Cornell & 48th Ave Intersection Improvements	2018-2027	Yes	\$ 4,704,000
11176	ODOT	I-5 from I-405 to I-84 Rose QuarterLloyd District Construction	2018-2027	Yes	\$ 375,000,000
11183	Oregon City	LinnLelandMeyers Road Roundabout	2018-2027	Yes	\$ 3,600,000
11190	Port of Portland	Sundial Road Improvements	2018-2027	Yes	\$ 3,401,600
11217	Tigard	McDonald Street Improvements	2018-2027	Yes	\$ 8,500,000
11223	Tigard	HallHunzikerScoffins Intersection Realignment	2028-2040	Yes	\$ 15,000,000
11224	Tigard	North Dakota Tiedeman Realignment	2018-2027	Yes	\$ 10,000,000
11233	Washington County	Walker Rd. Improvements	2018-2027	Yes	\$ 14,400,000
11236	Washington County	Cedar Hills Boulevard Multimodal Improvements Celeste Lane to Butner Road	2028-2040	Yes	\$ 3,100,000
11242	West Linn	I-205 10th Street Improvements	2018-2027	Yes	\$ 7,800,000
11243	Wilsonville	Day Road Improvements	2018-2027	Yes	\$ 10,560,000
11251	Cornelius	N. 29th Avenue	2028-2040	No	\$ 4,501,205
11271	Happy Valley	Misty Drive	2028-2040	No	\$ 29,604,550
11273	Hillsboro	Blanton Street Extension	2018-2027	Yes	\$ 7,441,000
11274	Hillsboro	Century Blvd Extension South Hillsboro	2018-2027	Yes	\$ 3,189,000
11275	Hillsboro	Walker Rd Extension and Realignment	2018-2027	Yes	\$ 2,657,500
11276	Hillsboro	Stucki Ave Extension and Realignment	2028-2040	Yes	\$ 10,630,000
11277	Hillsboro	194th AveAmberglen Pkwy Extension and Realignment	2018-2027	Yes	\$ 3,189,000
11280	Hillsboro	Ronler Dr Extension	2028-2040	No	\$ 1,000,000
11284	Hillsboro	Farmington Rd Widening and BikePed Improvements, Phase 1	2018-2027	Yes	\$ 8,000,000
11285	Hillsboro	Farmington Rd Widening and BikePed Improvements, Phase 2	2028-2040	Yes	\$ 7,000,000
11286	Lake Oswego	Tryon Creek Bridge @ Hwy 43 Terwilliger	2028-2040	No	\$ 10,000,000
11301	ODOT	OR 212224 Sunrise Hwy Phase 2: I-205 to SE 172nd CON	2028-2040	Yes	\$ 100,000,000
11302	ODOT	I-5OR 217 Interchange Phase 2	2028-2040	No	\$ 53,000,000
11304	ODOT	I-5 South Operational Improvements	2018-2027	Yes	\$ 15,000,000
11305	ODOT	I-205 Active Traffic Management	2018-2027	Yes	\$ 15,000,000
11307	Port of Portland	T6 Suttle Road entrance	2028-2040	Yes	\$ 3,189,000
11309	Port of Portland	Cully Blvd. Grade separation	2028-2040	No	\$ 37,205,000
11341	Hillsboro	West Union Rd Widening and Improvements	2028-2040	No	\$ 12,000,000
11346	Happy Valley	162nd Ave. Extension South Phase 2	2028-2040	Yes	\$ 16,582,800
11350	ODOT	OR 224 Milwaukie Expressway improvements	2018-2027	Yes	\$ 12,000,000
11353	Port of Portland	West Hayden Island Rail Access	2028-2040	Yes	\$ 3,189,000

RTP ID	Nominating Agency	Project Name	Time Period	Financially Constrained	Estimated Cost 2016\$
11354	Port of Portland	West Hayden Island Rail Yard	2028-2040	Yes	\$ 10,098,500
11355	Port of Portland	Barnes to Terminal 4 Rail	2018-2027	Yes	\$ 4,543,000
11363	Hillsboro	Gibbs Dr Extension	2018-2027	Yes	\$ 2,126,000
11364	Hillsboro	Starr Blvd Reconstruction and Improvements, Phase 2	2018-2027	Yes	\$ 4,252,000
11370	ODOT	I-205 Northbound Auxiliary Lane Powell to I-84	2018-2027	Yes	\$ 15,000,000
11373	Multnomah County	NE 238th Drive Freight and Multimodal Improvements	2018-2027	Yes	\$ 9,567,000
11375	Multnomah County	Stark Street Bridge	2028-2040	No	\$ 15,945,000
11376	Multnomah County	Earthquake Ready Burnside Bridge Phase 2	2028-2040	No	\$ 105,000,000
11379	Beaverton	Canyon Road Multimodal Improvement	2018-2027	Yes	\$ 17,100,000
11383	Hillsboro	New North-South Collector North Hillsboro	2018-2027	Yes	\$ 2,657,500
11384	Hillsboro	Murphy Rd Construction	2028-2040	Yes	\$ 8,822,900
11385	Hillsboro	67th Ave Railroad Crossing Closure, Turn Lanes and BikePed Improvements	2018-2027	Yes	\$ 5,600,000
11388	Hillsboro	30th Ave Construction	2028-2040	Yes	\$ 10,500,000
11389	Hillsboro	Imbrie Dr Widening	2028-2040	No	\$ 2,657,500
11393	Hillsboro	US 26 Widening - Brookwood to Cornelius Pass	2028-2040	Yes	\$ 26,575,000
11394	Hillsboro	Century Blvd Turn Lanes and BikePed Improvements South Hillsboro	2028-2040	Yes	\$ 9,779,600
11402	ODOT	I-5 Northbound: Auxiliary Lane Extension Nyberg to Lower Boones Ferry	2028-2040	Yes	\$ 13,500,000
11404	Sherwood	Baler Way Extension	2018-2027	Yes	\$ 3,800,000
11407	Tigard	Ash Avenue Extension	2018-2027	Yes	\$ 10,000,000
11408	Tigard	Atlanta Street Extension to 74th Ave	2028-2040	Yes	\$ 8,000,000
11417	Tualatin	Blake Street Extension	2018-2027	Yes	\$ 11,161,500
11419	Tualatin	Boones Ferry Road	2028-2040	Yes	\$ 1,063,000
11420	Tualatin	Nyberg	2028-2040	No	\$ 1,138,473
11422	Tualatin	Boones Ferry Road	2018-2027	Yes	\$ 1,182,056
11423	Tualatin	Avery	2028-2040	Yes	\$ 3,826,800
11430	Tualatin	Helenius	2018-2027	Yes	\$ 1,491,389
11431	Tualatin	Norwood	2028-2040	Yes	\$ 3,172,000
11436	Washington County	East-West Arterial Overcrossing	2028-2040	No	\$ 40,400,000
11451	Washington County	Saltzman Rd	2018-2027	Yes	\$ 8,000,000
11456	Washington County	Shackelford Rd	2028-2040	No	\$ 12,800,000
11457	Washington County	Shackelford Rd Bridge	2028-2040	No	\$ 15,600,000
11458	Washington County	Shackelford Rd	2018-2027	Yes	\$ 10,000,000
11459	Washington County	Shackelford Rd	2018-2027	Yes	\$ 6,000,000
11460	Washington County	OR 10: Oleson Rd. Improvement Ph. 2	2028-2040	No	\$ 40,000,000
11463	Washington County	Thompson Rd Realignment	2028-2040	Yes	\$ 6,000,000
11464	Washington County	Jenkins Rd. Improvements	2028-2040	Yes	\$ 10,600,000
11466	Washington County	Laidlaw Improvements	2028-2040	No	\$ 10,600,000
11469	Washington County	124th Ave Improvements	2028-2040	No	\$ 14,900,000
11470	Washington County	Basalt Creek Parkway	2028-2040	Yes	\$ 31,700,000
11471	Washington County	Laidlaw Improvements	2028-2040	Yes	\$ 5,400,000
11472	Washington County	160th Ave Improvements	2028-2040	No	\$ 15,900,000
11474	Washington County	113th Ave	2028-2040	No	\$ 6,400,000
11476	Washington County	Saltzman Rd	2028-2040	Yes	\$ 9,700,000
11477	Washington County	Kaiser	2018-2027	Yes	\$ 5,000,000
11478	Washington County	185th	2028-2040	No	\$ 60,600,000
11480	Washington County	185th Ave	2028-2040	Yes	\$ 15,600,000
11486	Washington County	Roy Rogers Rd.	2018-2027	Yes	\$ 21,300,000
11487	Washington County	Boones Ferry Improvements	2028-2040	Yes	\$ 1,200,000
11489	Wilsonville	Boones Ferry I-5 off ramp improvements	2028-2040	Yes	\$ 1,063,000
11490	Washington County	Day Rd Overcrossing	2028-2040	No	\$ 46,900,000
11514	Clackamas County	82nd DriveStrawberry Lane Intersection	2028-2040	Yes	\$ 1,520,870
11529	Happy Valley	Armstrong Extension	2028-2040	No	\$ 15,200,900
11530	Happy Valley	Troge Extension West	2028-2040	No	\$ 24,661,600
11532	Milwaukie	Linwood Ave Capacity Improvements south	2028-2040	No	\$ 10,300,000
11537	Milwaukie	Group 4--Pedestrian Improvements at Hwy 224	2028-2040	Yes	\$ 3,100,000
11538	Milwaukie	Linwood Ave Capacity Improvements north	2028-2040	No	\$ 12,800,000
11539	Milwaukie	Intersection Improvements at McLoughlin Blvd and River Rd	2028-2040	Yes	\$ 1,000,000



RTP ID	Nominating Agency	Project Name	Time Period	Financially Constrained	Estimated Cost 2016\$
11540	Milwaukie	Group 8--Street Connectivity & Intersection Improvement Projects	2018-2027	Yes	\$ 2,500,000
11542	Milwaukie	Harrison St Capacity Improvements	2028-2040	Yes	\$ 3,800,000
11544	Oregon City	Meyers Road Extension West	2018-2027	Yes	\$ 4,500,000
11545	Oregon City	Holly Lane Extension North	2028-2040	Yes	\$ 4,800,000
11547	Oregon City	Clairmont Drive Extension	2028-2040	No	\$ 2,000,000
11550	Oregon City	Holly Lane Extension South	2028-2040	No	\$ 4,800,000
11551	Oregon City	South End Road	2028-2040	No	\$ 7,700,000
11557	Wilsonville	Brown Road Extension Phase 2	2028-2040	Yes	\$ 3,500,000
11568	Portland	St. Johns Truck Strategy Phase II	2018-2027	Yes	\$ 4,000,000
11570	Portland	ColumbiaAlderwood Intersection Improvements	2018-2027	Yes	\$ 5,050,654
11574	Washington County	Cornell Road	2028-2040	No	\$ 22,300,000
11576	Washington County	Bull Mountain Rd	2028-2040	No	\$ 36,100,000
11577	Washington County	Beef Bend Rd	2028-2040	No	\$ 41,900,000
11581	Washington County	Thompson Rd	2028-2040	Yes	\$ 4,000,000
11582	ODOT	OR 217 Capacity Improvements	2028-2040	No	\$ 398,500,000
11583	ODOT	I-5 Northbound: Lower Boones Ferry to Carman Auxiliary Lane Extension	2028-2040	No	\$ 22,500,000
11585	ODOT	I-205 Abernethy Bridge PE and ROW	2018-2027	Yes	\$ 8,000,000
11586	ODOT	I-205 Southbound and Northbound widening PE, ROW	2018-2027	Yes	\$ 8,000,000
11600	Multnomah County	Marine Drive at 223rd	2028-2040	No	\$ 10,630,000
11603	Gresham	Hogan: Powell to Division	2028-2040	No	\$ 26,575,000
11614	Sherwood	Pine St Phase 2	2028-2040	No	\$ 2,100,000
11623	Milwaukie	Group 11--Intersection Improvements in North Industrial Area	2028-2040	No	\$ 2,300,000
11624	Milwaukie	Local Street Improvements in Tacoma Station Area	2028-2040	No	\$ 5,600,000
11649	Port of Portland	T2 Redevelopment	2018-2027	Yes	\$ 4,783,500
11651	Port of Portland	T2 Track Reconfiguration and Siding	2018-2027	Yes	\$ 9,460,700
11652	Port of Portland	Bonneville Rail Yard Build Out	2018-2027	Yes	\$ 3,826,800
11653	Port of Portland	Ramsey Yard Utilization	2018-2027	Yes	\$ 1,807,100
11654	Port of Portland	Time Oil Road Reconstruction	2028-2040	Yes	\$ 9,567,000
11659	Port of Portland	Rivergate Blvd. Overcrossing	2018-2027	Yes	\$ 22,263,790
11661	Forest Grove	OR 47 Martin Road Intersection Improvements	2018-2027	Yes	\$ 5,000,000
11662	Forest Grove	OR 47 B St. Intersection Improvements	2018-2027	Yes	\$ 2,000,000
11667	Forest Grove	OR 47 Fernhill-Maple St. Intersection Improvements	2018-2027	Yes	\$ 2,000,000
11669	Happy Valley	Middle Foster Rd. Improvements	2028-2040	No	\$ 11,055,200
11670	Clackamas County	OR 212 widening to 5 lane boulevard	2028-2040	No	\$ 24,500,000
11682	Gresham	181st: Stark to I-84 Rockwood Safety Corridor	2018-2027	Yes	\$ 2,019,700
11683	Gresham	Halsey: 162nd to 181st Safety Corridor	2028-2040	Yes	\$ 2,551,200
11684	Multnomah County	Safety corridor: Cherry Park257th {Cherry Park - Division}	2028-2040	Yes	\$ 2,763,800
11687	Gresham	Powell at Eastman: Left Turn Lane Addition	2028-2040	Yes	\$ 1,000,000
11737	Washington County	Cornell @ 185th Intersection Improvements	2028-2040	No	\$ 22,300,000
11739	Washington County	Hall Blvd. Improvements	2028-2040	Yes	\$ 14,700,000
11742	ODOT	Powell, SE I-205 to 174th Multi-Modal Improvements, Phase 2	2018-2027	Yes	\$ 90,000,000
4175381	West Linn	Ostman RoadBlankenship Road Improvements	2028-2040	Yes	\$ 1,320,000
4176823	Hillsboro	209th Ave Widening and Improvements, Phase 2	2018-2027	Yes	\$ 17,912,000
4176824	Hillsboro	209th Ave Widening and Improvements, Phase 3	2028-2040	Yes	\$ 13,787,000
4177440	Oregon City	OR 213 & Beaver Creek Road WB Right-Turn Merge Lane	2018-2027	Yes	\$ 2,800,000
4177529	Wilsonville	Boones Ferry Road Urban Upgrade Phase 1	2028-2040	Yes	\$ 5,900,000
4177888	Wilsonville	Weideman Road Extension - West	2028-2040	No	\$ 4,300,000
4177891	Wilsonville	Weideman Road Extension - East	2028-2040	No	\$ 8,800,000
4177899	Wilsonville	Stafford Road Urban Upgrade	2018-2027	Yes	\$ 4,200,000
4177908	Wilsonville	Parkway Ave Urban Upgrade	2028-2040	No	\$ 5,000,000
4177913	Wilsonville	Printer Parkway Urban Upgrade	2028-2040	No	\$ 3,600,000
4177923	Wilsonville	Boones Ferry Road Urban Upgrade Phase 2	2028-2040	Yes	\$ 5,900,000
4178700	Portland	North Portal Street Improvements	2028-2040	Yes	\$ 9,250,000
4178717	Portland	SW Broadway Traffic Improvements	2028-2040	Yes	\$ 2,000,000
4178719	Portland	Vista Bridge Renovation	2028-2040	Yes	\$ 3,000,000
4178726	Portland	SE Yamhill Taylor Couplet	2028-2040	Yes	\$ 3,000,000

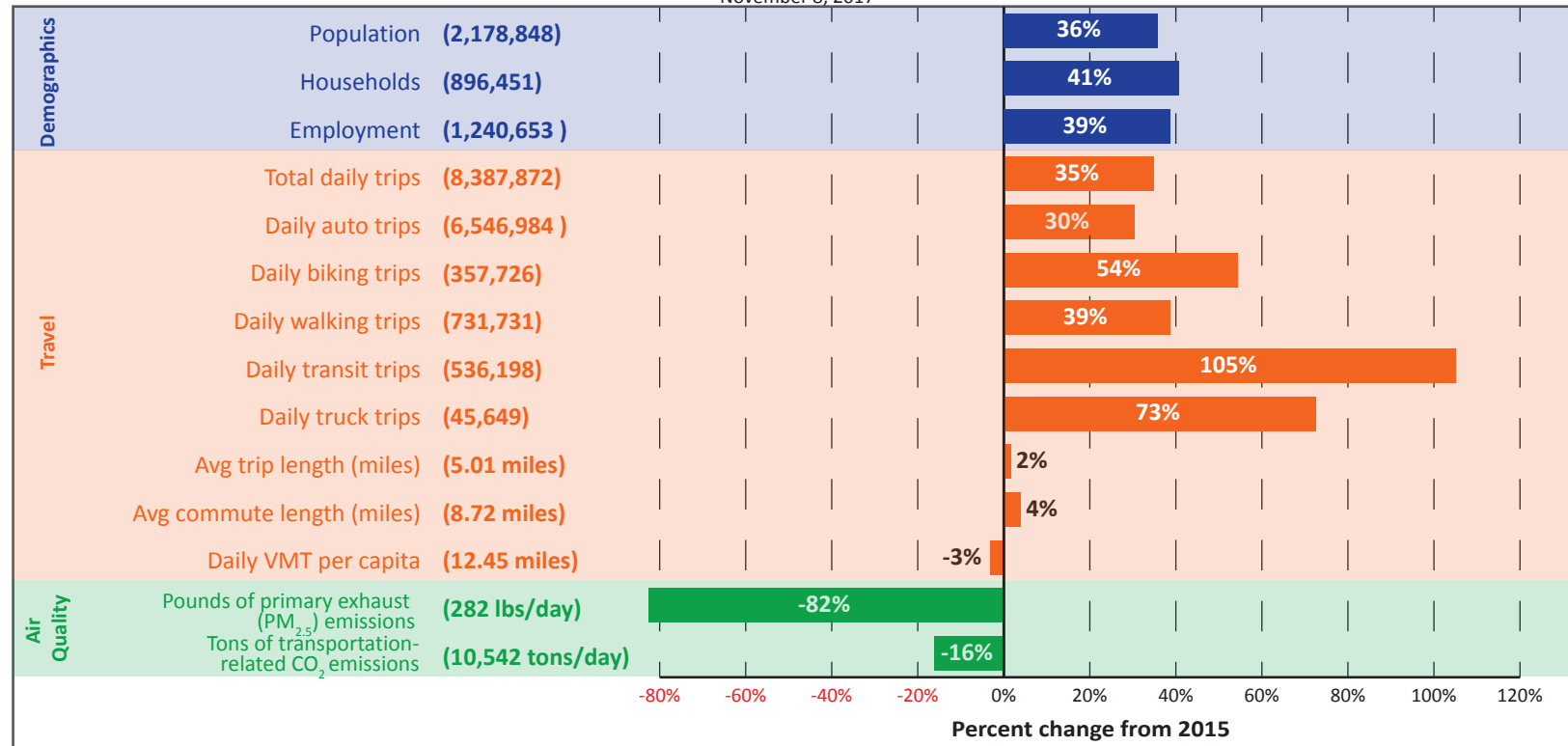
RTP ID	Nominating Agency	Project Name	Time Period	Financially Constrained	Estimated Cost 2016\$
4178727	Portland	GrandMLK Lloyd District Traffic Signals	2028-2040	Yes	\$ 2,000,000
4178816	Portland	Going St ConnectedAutomated Vehicle Connection	2028-2040	Yes	\$ 5,000,000
4178839	Portland	Suttle Rd Freight Street Improvements	2028-2040	Yes	\$ 9,000,000
4178843	Portland	Columbia Blvd Railroad Undercrossing Improvement	2028-2040	Yes	\$ 3,000,000
4178850	Portland	N Portland Rd over Columbia Slough Bridge Replacement	2028-2040	Yes	\$ 7,500,000
4178891	Wilsonville	Java Road Connection and Signal	2028-2040	No	\$ 1,500,000
4178892	Portland	Outer Sandy Blvd Corridor Improvements: Local Contribution to State-owned Arterial	2018-2027	Yes	\$ 5,000,000
4178895	Portland	NE Airport Way Safety and Access to Transit	2018-2027	Yes	\$ 3,000,000
4178896	Portland	NE 105thHolman Corridor Improvements	2028-2040	Yes	\$ 10,000,000
4178965	Portland	NW St Helens Rd Corridor Safety Improvements	2028-2040	Yes	\$ 5,000,000
4178991	Portland	Tacoma Main Street Improvements	2028-2040	Yes	\$ 6,000,000
4179019	Portland	SW Terwilliger Corridor Improvements, Segment 1	2028-2040	Yes	\$ 4,000,000
4179026	Portland	Capitol Hwy Bridge Seismic Retrofit	2028-2040	Yes	\$ 3,705,915
4179068	Portland	82nd Ave Corridor Safety Improvements: Local Contribution to State-owned Arterial	2018-2027	Yes	\$ 10,000,000
4179152	Portland	NE 162nd Ave Corridor Improvements	2018-2027	Yes	\$ 5,000,000
4179166	Portland	Outer Halsey Corridor Improvements	2018-2027	Yes	\$ 2,000,000
4179175	Portland	NE 158th Ave Corridor Improvements	2018-2027	Yes	\$ 2,000,000
4179208	Portland	Outer Foster Corridor Safety Improvements	2018-2027	Yes	\$ 1,000,000
4179256	Portland	MarineLombard Corridor Safety Improvements	2018-2027	Yes	\$ 2,000,000
4179258	Portland	NE Lombard Corridor Safety Improvements	2018-2027	Yes	\$ 2,000,000
4179283	Portland	Moody Ave Extension	2028-2040	Yes	\$ 34,168,374
4179295	Portland	GoingGreeley Interchange Improvements	2028-2040	No	\$ 16,750,000
4179304	Portland	N Fessenden St Bridge Replacement	2028-2040	No	\$ 4,700,000
4179306	Portland	N Willamette Blvd Bridge Replacement	2028-2040	No	\$ 9,750,000
4179307	Portland	Hayden Island Bridge	2028-2040	No	\$ 80,000,000
4179314	Portland	NE Argyle Street Extension	2028-2040	No	\$ 11,397,579
4179326	Portland	Cully Blvd Rail Overcrossing	2028-2040	No	\$ 35,000,000
4179336	Portland	Capitol Hwy Bertha Blvd Bridge Replacement	2028-2040	Yes	\$ 5,326,682
4179709	Hillsboro	Huffman St Extension, Phase 2	2018-2027	Yes	\$ 6,500,000
4179826	Oregon City	OR 99E & I-205 NB Interchange Access	2028-2040	No	\$ 3,000,000
4179832	Beaverton	Barrows Road Extension at South Cooper Mountain	2018-2027	Yes	\$ 22,800,000
4179862	Beaverton	Cedar Hills BoulevardJenkins Road Intersection Improvements	2028-2040	Yes	\$ 3,000,000
4179863	Beaverton	Farmington RoadHocken Avenue Intersection Improvements	2028-2040	Yes	\$ 4,900,000
4179864	Beaverton	Nora RoadBeard Road Extension and Multimodal Improvements	2028-2040	Yes	\$ 11,500,000
4179865	Beaverton	Allen Boulevard Multimodal Improvements Murray Boulevard to OR Highway 217	2028-2040	No	\$ 51,200,000
4179930	Happy Valley	177th Ave. ROW Acquisition and Planning	2028-2040	No	\$ 3,243,300
4180505	Multnomah County	Broadway Bridge Rehabilitation 2	2028-2040	Yes	\$ 12,919,350
4180525	Washington County	Roy Rogers Rd.	2018-2027	Yes	\$ 11,000,000
4180543	ODOT	I-205 Southbound and Northbound widening CON	2028-2040	Yes	\$ 200,000,000
4180616	Hillsboro	25th Ave Extension	2028-2040	Yes	\$ 4,000,000
4180617	Hillsboro	Jackson School Rd Improvements	2028-2040	Yes	\$ 11,400,000
4180619	Hillsboro	47th Ave, Ihly Wy BikePed and Safety Improvements	2028-2040	Yes	\$ 5,000,000
4180620	Hillsboro	Hidden Creek Dr Extension	2018-2027	Yes	\$ 8,000,000
4180622	Hillsboro	Meek Rd Improvements, Phase 2	2028-2040	Yes	\$ 3,000,000
4180624	Hillsboro	Rosedale Rd Turn Lanes and BikePed Improvements	2028-2040	Yes	\$ 10,000,000
4180655	Washington County	Roy Rogers Rd	2018-2027	Yes	\$ 25,000,000
4180669	Washington County	Scholls Ferry Rd	2018-2027	Yes	\$ 8,300,000
4180822	Cornelius	S. Alpine Street Extension	2018-2027	Yes	\$ 1,000,000
4180851	Hillsboro	Cornelius Pass Rd Extension, Phase 2	2018-2027	Yes	\$ 19,718,650
4180852	Hillsboro	Cornelius Pass Rd Extension, Phase 3	2028-2040	Yes	\$ 8,450,850
4180951	Washington County	Grahams Ferry Road Helenius to Tonquin	2028-2040	No	\$ 4,000,000
4180954	Washington County	Grahams Ferry Road Tonquin to Day	2028-2040	No	\$ 6,000,000
4180984	Washington County	Brookman Rd	2028-2040	No	\$ 20,000,000
4181009	Lake Oswego	Lakeview Boulevard Improvements	2018-2027	Yes	\$ 2,915,000

RTP ID	Nominating Agency	Project Name	Time Period	Financially Constrained	Estimated Cost 2016\$
4181119	King City	Fisher Rd. Extension	2028-2040	No	\$ 21,200,000
4181127	Forest Grove	OR 47 at David Hill Road Intersection Roundabout Improvement	2028-2040	Yes	\$ 2,500,000
4181270	Port of Portland	North Portland Junction: Undoing the "X"	2028-2040	No	\$ 33,598,000
4181282	Forest Grove	OR 47 at Purdin RoadVerboort Road Intersection Roundabout Improvement	2028-2040	Yes	\$ 4,000,000
4181288	Port of Portland	Columbia Boulevard Rail Overcrossing	2028-2040	No	\$ 28,935,000
4181289	Port of Portland	Columbia River Rail Bridge Improvements	2028-2040	No	\$ 35,548,800
4181296	Port of Portland	Six mph Curves Railroad Improvements	2028-2040	No	\$ 23,600,000
4181302	Port of Portland	Rivergate Columbia Slough Rail Bridge	2028-2040	No	\$ 10,840,000
4181304	Milwaukie	Lake Rd Capacity Improvements	2028-2040	No	\$ 6,300,000
4181317	Multnomah County	Morrison Bridge Rehabilitation - Phase 3	2028-2040	Yes	\$ 13,014,918
4181354	Tualatin	Grahams Ferry Road	2028-2040	Yes	\$ 5,048,800
4181368	ODOT	I-205 Abernethy Bridge CON	2028-2040	Yes	\$ 200,000,000
4181370	ODOT	US 26 Sunset Highway Operational Improvements	2028-2040	No	\$ 50,000,000
4181372	Multnomah County	Hawthorne, Burnside, and Broadway Control Systems Rehabilitation	2028-2040	Yes	\$ 3,000,000
4181375	ODOT	I-405 Operational Improvements	2028-2040	No	\$ 50,000,000
4181381	ODOT	OR 217 Northbound Auxiliary Lane Extension Scholls Ferry to AllenDenney	2028-2040	No	\$ 50,000,000
4181389	ODOT	OR 217 Interchange, Safety, and Operational Improvements	2028-2040	No	\$ 75,000,000
4181395	ODOT	I-205 Northbound Auxiliary Lane, Sunrise Expressway Entrance to Sunnybrook	2018-2027	Yes	\$ 7,000,000
4181457	ODOT	I-5 Southbound Truck Climbing Lane	2028-2040	Yes	\$ 100,000,000
4181460	ODOT	OR 217 Northbound Auxiliary Lane 99W to Scholls Ferry CON	2018-2027	Yes	\$ 50,000,000
4181461	ODOT	OR 217 Southbound Auxiliary Lane Beaverton Hillsdale Hwy to 99W CON	2018-2027	Yes	\$ 45,000,000
4181463	ODOT	OR 217 Southbound Braided Ramps Beaverton-Hillsdale Hwy to Allen Blvd	2028-2040	Yes	\$ 50,000,000
4181464	ODOT	I-5 Northbound Braided Ramps I-205 to Nyberg	2028-2040	Yes	\$ 50,000,000
4181465	ODOT	I-5 Southbound: Wilsonville Rd to Wilsonville-Hubbard Hwy	2028-2040	Yes	\$ 80,000,000
4181466	ODOT	I-5 Freight Operational Improvements	2028-2040	No	\$ 200,000,000
4181467	ODOT	I-205 Operational Improvements	2028-2040	No	\$ 20,000,000
4181468	ODOT	I-84 Operational Improvements	2028-2040	No	\$ 20,000,000
4181539	Tigard	Hunziker Core Industrial Street	2018-2027	Yes	\$ 8,000,000
4181544	Tigard	Fanno Creek Bridges Upgrades	2018-2027	Yes	\$ 10,000,000
4181548	Tigard	74th Ave extension in Triangle	2018-2027	Yes	\$ 5,200,000
4181605	Portland	Columbia Blvd Freight Improvements: Project Development	2018-2027	Yes	\$ 1,000,000
4181663	ODOT	OR 217 Northbound Auxiliary Lane 99W to Scholls Ferry PE, ROW	2018-2027	Yes	\$ 7,500,000
4181664	ODOT	OR 212224 Sunrise Project Phase 3	2028-2040	No	\$ 475,000,000
4182059	Clackamas County	Beavercreek Rd Phase 3	2028-2040	Yes	\$ 6,866,980
4182313	Sherwood	Langer Farms Parkway Extension	2028-2040	Yes	\$ 3,200,000
4182322	Sherwood	Edy-Elwert Intersection Improvements	2028-2040	Yes	\$ 2,600,000
4182336	Sherwood	Tonquin Area East-West Collector	2028-2040	Yes	\$ 10,500,000

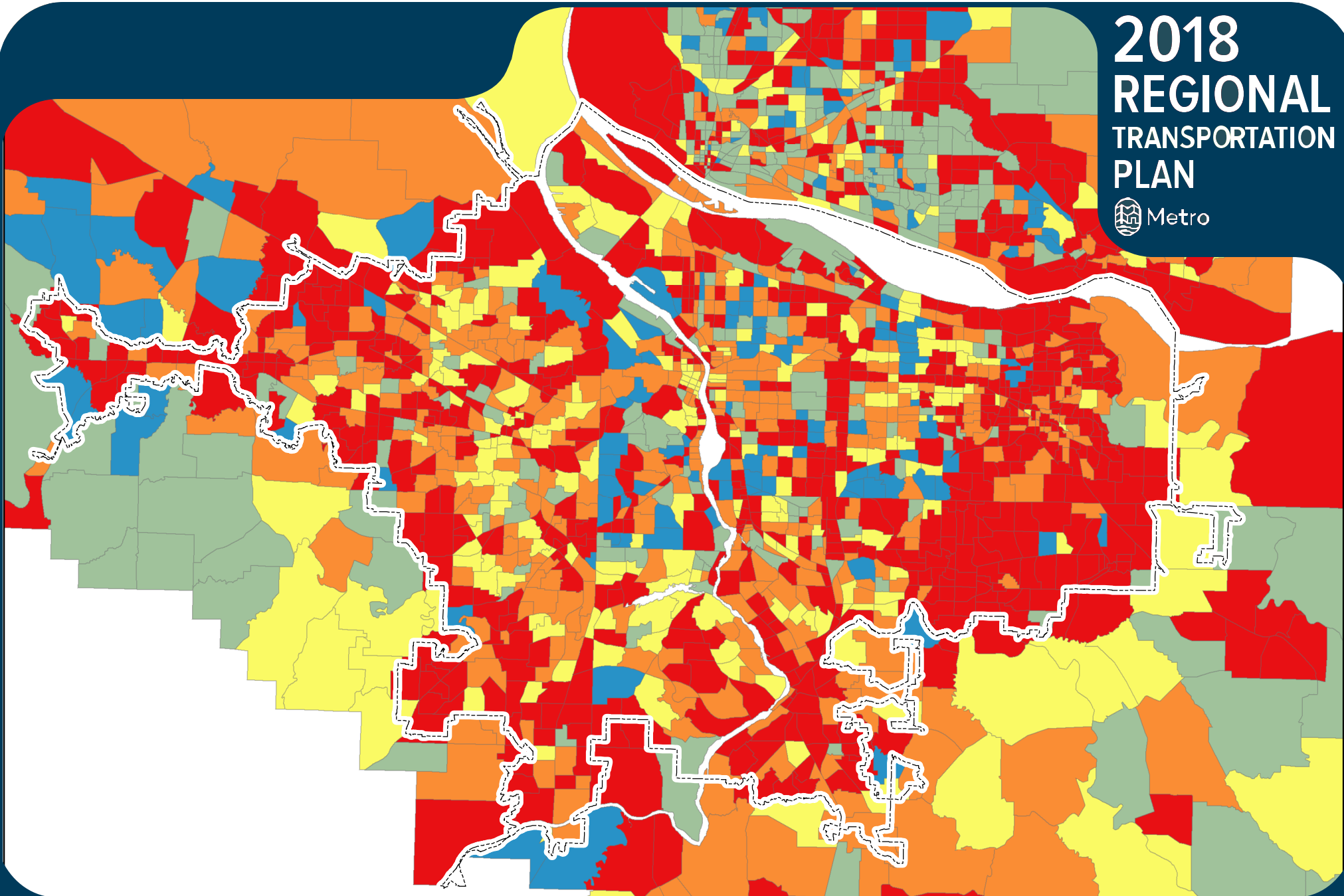
## Attachment 1 - 2018 RTP Draft System Evaluation Results Summary

Totals are for travel within the Metropolitan Planning Area for the Portland region and assume the 2040 Financially Constrained System of Projects.

November 8, 2017

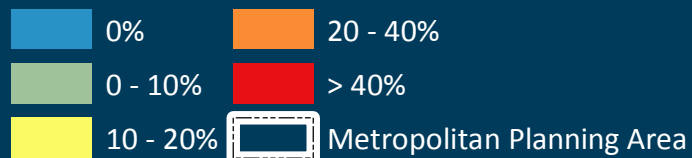


# 2018 REGIONAL TRANSPORTATION PLAN



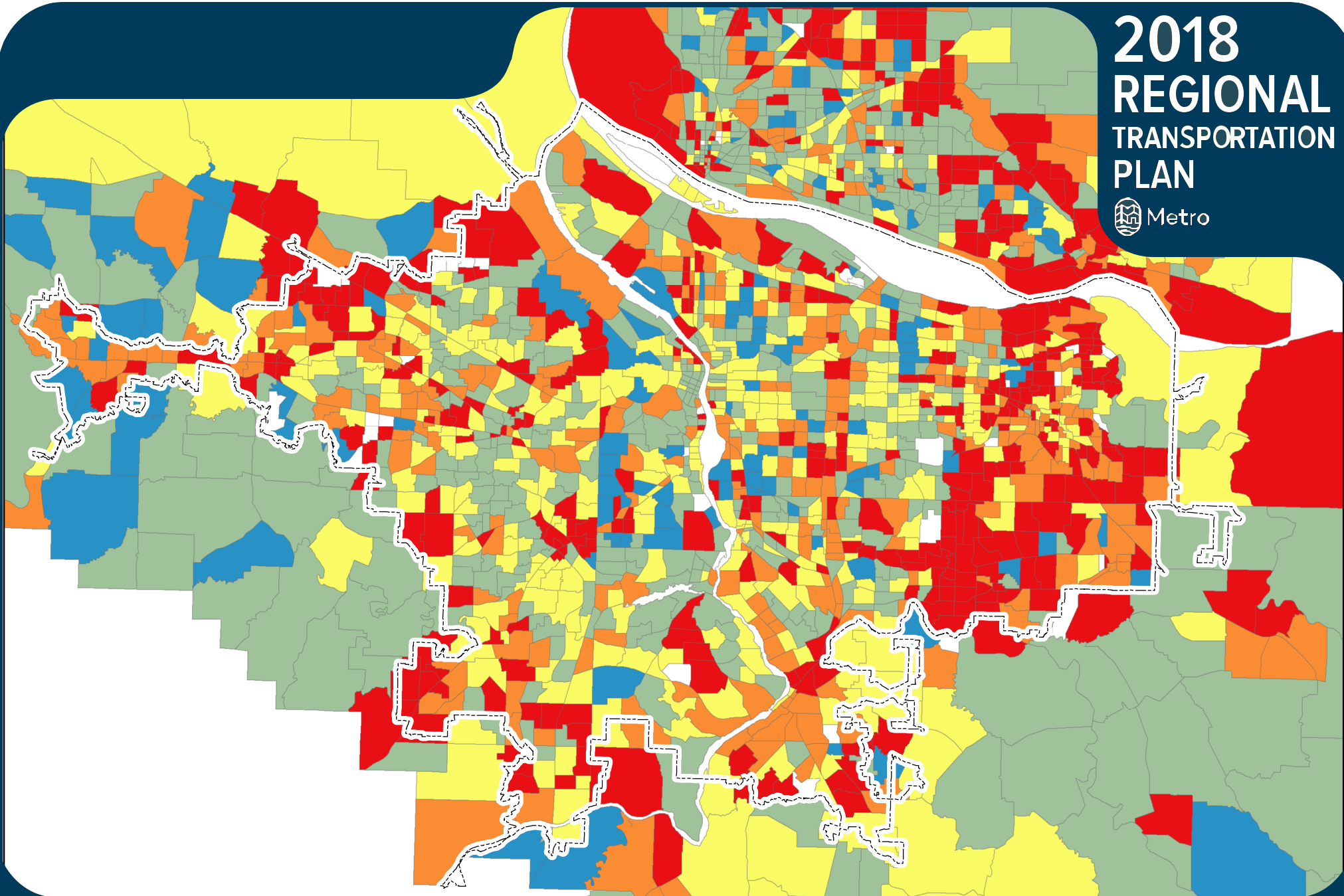
## Percentage Increase: Total Employment 2015 - 2040

Source: 2015-2040 Distributed Forecast (Scenario #1610)



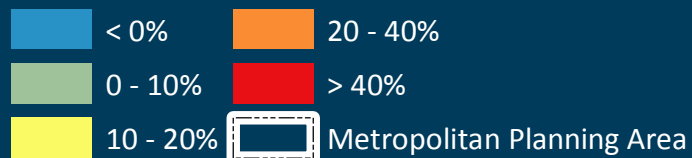
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# 2018 REGIONAL TRANSPORTATION PLAN



## Percentage Increase: Total Employment 2015 - 2027

Source: 2015-2040 Distributed Forecast (Scenario #1610)



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