Agenda

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

Meeting:	**RTP Transit work group meeting**
Date:	Wednesday, May 24, 2017
Time:	1-3 p.m.
Place:	Metro Regional Center, Room 401
Purpose:	For Transit Work Group to discuss the transit vision, transit supportive elements and the potential system expansion policy criteria
Outcome(s):	Highlight potential prioritization criteria for the system expansion policy; provide an updated transit vision map; and start the discussion regarding the transit supportive elements.

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1 p.m. **Welcome & introductions** — Jamie Snook

1:05 p.m. **Partner Updates** — Everyone
Who have you talked to about this work? What have you heard?

1:15 p.m. **Regional Transit Strategy timeline** — Jamie Snook
Share the project timeline leading up to draft and final Regional Transit Strategy reports and documentation

1:30 p.m. **Transit supportive elements** — Jamie Snook
Discuss transit supportive elements and how to include these elements into the regional transit vision, strategies and system expansion policy

1:45 p.m. **Transit vision map** — Jamie Snook
Discuss the various elements included on the transit vision map and timeline for providing input

2:00 p.m. **Potential System Expansion Policy suggestions** — Mathew Berkow
Based on the Consultants review and expertise, discussion at our last transit work group and the peer review, discuss potential criteria that seems to be rising to the top

2:55 p.m. **Next steps** — Jamie Snook
Discuss next steps and meeting schedule over the summer

3:00 p.m. **Adjourn**

Meeting Packet	Next Meeting
• Transit Work Group Agenda	June, TBD
• April 2017 RTS meeting summary	
• Proposed Regional Transit Strategy/System Expansion Policy Criteria Table	

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

Meeting minutes

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

Meeting:	**RTP Transit work group meeting**
Date/time:	Wednesday, April 26, 2017 | 1-3 p.m.
Place:	Metro Regional Center, room 401
Purpose:	Highlight potential prioritization criteria for the system expansion policy; provide an updated transit vision map; and start the discussion regarding the transit supportive elements.

Work Group Attendees	**Affiliate**
Dan Bower	Portland Streetcar, Inc.
April Bertelsen	City of Portland
Dwight Brashear	SMART
Karen Buehrig	Clackamas County
Teresa Christopherson	Clackamas County
Mike Coleman	Port of Portland
Eric Hesse	TriMet
Jay Higgins	City of Gresham
Jon Holan	City of Forest Grove
Andi Howell	City of Sandy
Mauricio Leclerc	City of Portland
Alex Page	Ride Connection
Jamie Snook, Work Group Lead	Metro
Gregg Snyder	City of Hillsboro
Charlie Tso	City of Wilsonville
Dyami Valentine	Washington County

Interested Parties	**Affiliate**
Radcliffe Dacanay	City of Portland
Katherine Kelly	City of Gresham
Carly Rice	City of Gresham
Kari Schlosshauer	Safe Routes to Schools Partnerships

Presenter
Matt Berkow, Nelson Nygaard, Inc.

Staff Attendees
Grace Cho, Metro
Marie Miller, Metro
Cindy Pederson, Metro

Welcome & introductions
The meeting was called to order by Jamie Snook at 1:15 p.m. Alex Page announced that he was leaving Ride Connection for a new position.

Snook provided an overview of the agenda; peer review of other region's prioritization process, discuss potential criteria for prioritization, updated transit vision map, transit supportive elements. A graphic showing the draft transit policy process was shown. Snook reported that work with Nelson Nygaard consultants would end in August, following the Call for Projects June – July 21 timeline, and evaluation of projects. The final recommendation list of projects is expected June 2018, with approved adoption December 2018. Both the Regional Transit Strategy draft and RTP should be completed December 2018.

System Expansion Policy Peer Review

Matt Berkow, Nelson Nygaard, Inc. was introduced. Berkow presented an overview of transit investment prioritization research with initial proposal of revised criteria based on best practices. The object of the review was to understand the process for prioritizing transit investments in other regions, how the process was developed, the criteria used and how they are measured, and any lessons learned on experiences with applying the prioritizations processes. There are 26 criteria in the existing process, some of which can be difficult for local jurisdictions to apply. As such, opportunities to simplify and reduce the number of criteria were made.

Berkow presented peer process comparisons findings from 5 cities/regions:

Important project types are not included in prioritization process.

- Operations and programs (e.g. system management) could greatly increase the efficiency of the system.
- Focus on dedicated guideway can limit investments in other beneficial projects (e.g. BRT lite or enhanced bus).
- As systems mature and age, priorities can shift from expansion to investment in existing system.

Locally focused transit plans and funding sources:

- A city-focused transit plan can help a regional transit agency understand local needs and desires
- Local transit funding sources can help a City implement local priorities

Prioritization processes are seen as providing objective assessment of project value.

- Data driven project evaluation, though time consuming, ensures the process remains independent of politics

Opportunities to streamline evaluation process

- Several peers use a multi-stage prioritization process, including considering funding after project scoring.

Opportunities to refine Equity criterion

- WFRC (Salt Lake City region) uses "Ladders of Opportunities", term often used by USDOT to refer to opportunities for the economically disadvantaged to achieve success
- Two components of this measure: 1. Disadvantaged communities, and 2. regionally significant job, education and health centers to which they should be connected to find opportunities.

Berkow provided a handout "Criteria Common among Peer Agencies" listing 26 evaluation criteria, under categories named Community, Environment, Economy and Deliverability. With this evaluation, peer agencies matching criteria results:

Most common Criteria:

- C1 Supportiveness of existing land uses
- C4 Ridership generators
- C9 Equity benefit

- C10 Health (promotion of physical activity)
- C13 Travel time benefits
- D1 Capital costs
- D3 Operating and maintenance costs
- D4 Ridership

Least common Criteria:

- C3 Placemaking and urban form
- C7 Integration with other land uses (freight)
- C11 Safety and security
- C12 Housing and transportation benefit
- EN2 Risk of impacts to sensitive habitats and natural resources
- EN3 Risk of school and parkland disturbance
- D5 Funding potential

A question was asked regarding C12 in Community, housing and transportation benefit, why rated lower in criteria. It may be that agencies felt it was incorporated in other programs. A question was asked regarding C1, supportiveness of existing land uses, and if this measure was a combination of buildings or land use. The findings showed population and employment are the primary ways agencies measure how well existing land use supports a project. It could be evaluated for existing or future land use.

Preliminary Proposed Criteria
What informed the proposed criteria?

- Existing HCT Criteria
- FTA process and its current criteria
- Regional priorities: Climate Smart, Six Desired Outcomes
- Best practice review of peer processes

The FTA Section 5309 Program under FAST Act was reviewed.
New Starts Project Types:

- New fixed guideway system
- Extension to existing fixed guideway system
- BRT operating in a fixed guideway

Funding Thresholds:

- Total project costs equal or greater than $300m
- New Starts funding equal or greater than $100m and no more than 60% of total project budget

Small Starts Project Types:

- New fixed guideway system
- Extension to existing fixed guideway system
- BRT operating in a fixed guideway; or
- Corridor-based BRT system

Funding Thresholds:

- Total project cost less than $300m
- Small Starts funding less than $100m and no more than 80% of total project budget

Core Capacity Project Types:

- Substantial corridor-based investments within existing fixed guideway system
- Corridor must currently be at or over capacity, or projected to meet or exceed capacity within five years
- Must increase capacity by at least 10%
- Cannot include project elements designated for maintaining a state of good repair

Funding Thresholds:

- Core Capacity funding no more than 80% of total project budget

New and small starts have a rigorous evaluation process, with 50% project justification, and 50% local financial commitment of overall project rating. Applying these criteria alignments to projects:

- Each HCT criteria corresponds to at least one criteria from other initiatives
- Six Desired Outcomes – less aligned with "Deliverability" criteria
- Climate Smart – Service hours, Transit access (HH within ¼ mile), Transit fares
- CIG – 3 considered in FTA's environmental process

Applying the criteria to wider range of projects with corridor transit capital improvements projects, examples were given as light rail, BRT operating in a fixed guideway, streetcar, and core capacity.

Discussion was held on the Federal process and how transit applies with this funding. The project type of improvement separates the Federal and local funding. There are more intensive decisions with larger projects, with Federal dollar threshold matched to type of investment. Local investment need to make the project decisions and type of level to present information to decision makers.

It was suggested that outlining the process with advance planning that identifies each project on the system expansion map can help decide what is required. Most agreed with the study findings, and felt it would be necessary to be ready to make the Federal ask for funding. But questions remain on what local, regional and Federal requirements will be asked, and if local studies were possible for part of this. It was suggested that the process outline could include local, corridor refinement specifics, data from ACT map, local jurisdictions, and Metro priorities and resources.

Comments regarding the criteria evaluations were reported as being helpful for making assessments with Federal projects. They were easily measured and what we needed to know. It was suggested that arranging priorities with expansions that include maintenance projects will match core capacity projects. Questions on eligibility with replacements and facilities in projects were discussed. The importance of meeting evaluation criteria was given matched with funding potential and local commitment.

A question was asked if the criteria were weighted. Berkow responded there was variation in the documentation. Proposed evaluation criteria with six categories will help develop this.

- Mobility and Ridership
- Land Use Supportiveness and Market Potential
- Cost Effectiveness
- Equity Benefit
- Environmental Benefit
- Funding Commitment/Partnerships/Local Support (Readiness)

The testing phase and scoring will help also. Further comments on the study:

- Showing other agencies in the criteria mix with examples of reducing travel time is helpful
- The reduction of criteria is good
- The four values of regional transit vision (Frequent, Convenient, Accessible, Affordable) can be applied to the survey, and how we advance project evaluations.
- A good project planned well will meet Federal criteria.
- Reliability and convenience is harder to find in project evaluations.
- We shouldn't advance projects if this makes it harder for the rider; there being no benefit.
- Simply making a Federal ask for funding is useless unless match with purpose and design.
- Balance the projects with Federal dollars, a very competitive process, for the most benefit
- Question on cities in the peer study and how their implementation with criteria was evaluated or came to fruition.
- A before/after study is worth doing, providing proof of results for Federal funding
- Not matching expectation could mean a loss of funds next time
- The criteria we have matches our region, and we do well, and will continue to do so!

Berkow handed out "Proposed Evaluation Criteria" and discussed the proposed evaluation approach to each. Under Mobility and Ridership, current/future ridership, and transit rider travel time benefit were listed as recommended criteria. Ridership is a core measure of transit project benefit. A proposed change to consider is allowing existing ridership to be used for the mobility and cost-effectiveness ratings in corridors with strong existing ridership. This would also reflect the major travel investment balance with the base level measured.

Supportiveness with current land uses was questioned, with the inclusion of emission consideration. This provides supporting data with population density, and could be considered in a separate criterion. Further discussion may help define this. A question was asked if ridership defines existing and/or new riders.

The former criteria to travel time benefit was measured by transportation efficiency or travel time benefit to individual user/all corridor users. The proposed change would measure travel time benefit per rider, but not measure distribution of benefit across all corridor users, demonstrating effectiveness of the project.

The committee discussed the possible measure of current delay, and the benefit of savings of time/travel. A faster transportation time could be shown, but a question of reliability is harder to measure. The committee agreed on naming cost effectiveness as a good distinction and keeping land use separate in the criteria.

Other comments on the proposed evaluation criteria:

- Regarding relevant FTA criteria; are we asking for this also?
- The risk to natural resource disturbance; this might not be as valuable for project justification.
- On why risk of resource disturbance moved to less priority in the evaluation criteria, their impacts are better measured in environmental issues, and not necessarily relevant for evaluating the effectiveness of the transit investment

- Question on if the Transportation Equity committee was asked to make a recommendation on the equity benefits seen here. Preliminary ideas are coming from the Equity Work Group could dovetail into the proposed evaluation criteria with transit here.

Berkow presented a summary of proposed evaluation approach:
Existing Criteria moved to Project Justification

- Ridership Generators
- Integration with regional transit system
- Risk of natural resources disturbance
- Risk of 4(f) resource disturbance

Transit Evaluation Criteria

- Mobility and Ridership
    - Current and/or future ridership
    - Transit rider travel time benefit
- Land Use Supportiveness and Market Potential
    - Land use policy supportiveness
    - Supportiveness of urban form
    - Enhances connections to and between 2040 Growth Areas
    - Rebuilding/redevelopment opportunity
- Cost Effectiveness
    - Operating Cost (Operating Cost per Rider)
    - Capital Cost (Capital Cost per Rider)
- Equity Benefit
    - Low income access to jobs and services
    - Affordable housing
- Environmental Benefit
    - Reduction in emissions and disturbance

Project Readiness Criteria

- Funding Potential
- Local Commitment and Partnerships

Discussion on this criterion:

- Eleven is a difficult number; could we get it to ten?
- Ridership is measurable and reliability is more difficult to measure
- How does core capacity work with these; we need to show this factor as well.
- Jurisdictions will need Metro's help
- Local commitment is needed, matched with Federal requirements
- Still concerned with reductions in emissions tied to disturbance issue, and where equity evaluations fit in. These priorities with evaluations are still evolving with other factors i.e. jobs. The system will not model every individual project.
- Four plans included with equity criteria not included in RTP. Amendments to address this can be included with further discussion.
- Part of the transit driving forces relate to low income housing areas. With evaluations, should this be celebrated or not?

- Density studies and displacement from homes/housing need to be considered.
- Expansion policy can go beyond this evaluation of projects.
- Affordable housing/housing affordability; how are we defining and meeting this criteria.
- Narrowing the number of criteria is a good idea.
- Travel time and reliability lumped together may not work together as a measure
- Criteria number 4 & 5 (Supportiveness of urban form and Enhances connection to and between 2040 Growth areas) with land use can be combined
- Affordable housing new criteria agreed important.
- We need to share this information with others/agencies. Define how it aligns with current measures. Streamline the information for clarity and refinement.

Jamie Snook asked the committee to share more thoughts and comments with her directly as we continue the process. She briefly provided information on the Transit Vision Map, Transit supportive elements, shared mobility/ride sourcing, technology updates, programs and plans in the growing transit communities, developments in access to transit and land use issues.

Adjourn
There being no further business, meeting was adjourned at 3 p.m. by Jamie Snook.

Meeting summary respectfully submitted by
Marie Miller, Administrative Specialist

Next meeting of RTP Transit work group
Wednesday, May 24, 2017 | 1-3 p.m.
Metro Regional Center, room 401

Attachments to the Record:

Item	Topic	Document Date	Description
1	Agenda	4/26/2017	April 26, 2017 Meeting Agenda
2	Meeting Minutes	2/23/2017	RTP Transit Work Group Minutes, Feb. 23, 2017
3	Handout	4/26/2017	Building a Regional Transit Strategy Graphic
4	Handout	4/21/2017	Building the RTP Investment Strategy
5	Handout	4/10/2017	Scheduled and timeline for Building the 2018 RTP Investment Strategy
6	Handout	3/20/2017	2018 Regional Transportation Plan Timeline
7	Handout	3/2017	Regional transit strategy vision and strategies for achieving vision
8	Handout	2/2017	Existing HCT Plan Criteria
9	Handout	4/2017	Metro Transit System Expansion Policy; Transit Investment Prioritization Practices. Prepared by Nelson Nygaard, Inc.
10	Handout	4/26/2017	Criteria Common among Peer Agencies
11	Handout	4/26/2017	Proposed Evaluation Criteria
12	Handout	4/26/2017	Summary of Proposed Evaluation Approach
13	Presentation	4/26/2017	Metro Transit System Expansion Policy Presentation by Nelson Nygaard, Inc.
14	Presentation	4/26/2017	Regional Transit Strategy Presentation by Jamie Snook

				Alignment				Regional Transit Strategy Goals			
#	Recommended Criteria	Notes	Method of Evaluation	System Performance Measures	6 Desired Outcomes	Climate Smart Policy #2	Federal CIG	Frequent	Convenient	Accessible	Affordable
Mobility and Ridership											
1	Current and/or future ridership	▪ **Rationale:** Ridership is a core measure of transit project benefit. ▪ **Former Criteria #:** D4. Ridership ▪ Current and/or future population (formerly C1) and jobs (formerly EC3) provided as supporting data. ▪ **Alignment with RTP system performance measure** as data point: Proximity of households, low-income households and employment with a ¼ mile of transit and frequent service transit. ▪ **Metro Model Output**	▪ Total daily ridership for the entire project corridor; generated from the Regional Travel Demand Model. ▪ Consider allowing existing ridership to be used for the mobility and cost-effectiveness ratings in corridors with strong existing ridership (e.g., similar to warrants in the FTA process). ▪ Existing ridership will be used in initial evaluation; future ridership will be incorporated once the modeling begins in October 2017 ▪ Consistent with FTA, average existing and future ridership	X	X	X	X				
2	Transit rider travel time benefit	▪ **Rationale:** Travel time benefit to the user (former C13) demonstrates the effectiveness of the project and is an important part of attracting ridership. ▪ **Former Criteria #:** C13/C14. Transportation efficiency or travel time benefit to individual user/all corridor users ▪ **Alignment with RTP system performance measure** as data point: 'Motor vehicle and transit travel time parity between key origin-destination for mid-day and 2-hour PM peak' calculated as ratio of transit to auto travel time. ▪ **Metro Model Output**	▪ Average travel time benefit per rider	X	X		X		X		
Land Use Supportiveness and Market Potential											
3	Land use supportiveness	▪ **Rationale:** Align with FTA Land Use evaluation measure. ▪ **Former Criteria #:** N/A; new criterion. ▪ Propose incorporating C10, which measured the comprehensiveness of pedestrian and bicycle networks.	▪ New criterion aligned with FTA Land Use evaluation measure: – Existing corridor and station area development and character [pop. and empl. as well as urban design characteristics that exist today] – Comprehensiveness of existing and planned pedestrian and cycling networks (source: RLIS data and submitted RTP projects). FTA evaluates existing station area pedestrian facilities, including access for person with disabilities [direct routes, continuous sidewalks, crossings]. – Existing corridor and station area parking supply [consolidated parking supply and parking pricing are indicators of transit success]; [depending on data availability] – Proportion of existing "legally binding affordability restricted" housing within ½ mile of station areas to the proportion of "legally binding affordability restricted" housing in counties through which the project travels [local or national data]		X		X				
4	Supportiveness of urban form	▪ **Rationale:** Street and block density impacts transit access. ▪ **Former Criteria #:** C3. Place-making and urban form; renamed to be more intuitive	▪ Quality of urban composition and public space function to support transit access; Possible measures include: Street Density (street miles per corridor mile), Block Density (blocks per corridor mile)		X	X	X			X	
5	Enhances connections to and between 2040 Growth Areas	▪ **Rationale:** Transit is a key component of supporting the 2040 Growth Concept. ▪ **Former Criteria #:** C5. Support of regional 2040 Growth Concept; Re-named C5 to be more explicit in what it measures. ▪ **Metro Model Output**	▪ Central City, Regional Centers, Town Centers, Freight and Passenger Intermodal facilities ▪ Employment areas, Industrial areas ▪ Consider adapting measure to evaluate network connections using HCT + frequent network. This approach could illustrate how the corridor investment benefits the major O-D pairs between the growth centers connected, (e.g., weight by actual travel demand between growth centers rather than counting the number of centers served by the project).		X		X	X			

				Alignment				Regional Transit Strategy Goals			
#	Recommended Criteria	Notes	Method of Evaluation	System Performance Measures	6 Desired Outcomes	Climate Smart Policy #2	Federal CIG	Frequent	Convenient	Accessible	Affordable
6	Rebuilding/ redevelopment opportunity	▪ Rationale: Catalyzing redevelopment is a benefit of investment in high quality transit. ▪ Former Criteria #: EC4. Rebuilding/redevelopment opportunity	▪ Measure of the total area of vacant and rebuildable land within a half mile buffer of project corridors ▪ Consider aligning with existing Metro GIS data sources (e.g., TOD Strategic Plan).		X		X	X			
Cost Effectiveness											
7	Operating Cost (Operating Cost per Rider)	▪ Rationale: Aligns with FTA Cost-Effectiveness criterion. ▪ Former Criteria #: EC1. Transportation efficiency (operator); Total operating cost (D3) is no longer a separate measure. This eliminates a duplicative measure. ▪ Metro Model Output	▪ Operating cost per rider, based on operating and maintenance costs and Ridership (Criteria #1) ▪ If mode and/or operating plan has not been determined, use typical operating cost per hour for a range of potential modes (LRT, BRT, Arterial BRT, and Streetcar) and an assumed service plan				X				
8	Capital Cost (Capital Cost per Rider)	▪ Rationale: Aligns with FTA Cost-Effectiveness criterion. ▪ Former Criteria #: EC2. Transportation efficiency (user); Total capital cost (D1) and total capital cost per mile (D2) are no longer separate measures. This eliminates duplicative measures. ▪ Metro Model Output	▪ Annualized capital cost per rider; based on total project capital cost and Ridership (Criteria #1) ▪ If mode has not been determined, use typical capital cost per mile for a range of potential modes (LRT, BRT, Arterial BRT, and Streetcar) ▪ Federal measure is only based on federal share; so could have an assumed federal share for the purposes of evaluation.				X				
Equity Benefit											
9	Low income access to jobs and services	▪ Rationale: The equity benefit of transit investments is an important value in the Portland and peer regions and CIG evaluation. ▪ Former Criteria #: C9. Equity Benefit ▪ Measure revised to consider not only equity populations near project, but also whether a project connects people to jobs and services. ▪ Alignment with RTP system performance measure: The access to jobs and services will align with the following two system performance measures - Daily needs accessible within 30 minutes by public transportation for the region and historically under-represented communities; Jobs accessible within 45 minutes by public transportation for the region and historically under-represented communities ▪ Metro Model Output	▪ Does project serve areas with large concentrations of disadvantaged people? – Previous TSEP criteria considered three communities of concern: Low-income or very low income; Minority and/or Hispanic populations; Disabled and senior populations – Align with RTP System Performance Measure ▪ Does the project link people to regionally significant job, education and health care centers? – SLC Ladders of Opportunity (see TM#3) identified regionally significant centers based on (1) ratio of current health care workers as surrogates for health care, (2) forecast public college enrollment, (3) forecast employment; – Align with RTP System Performance Measure ▪ During testing phase, consider if #9 is sufficient to indicate if there are populations on the corridor we want to serve	X	X	X	X				X
Environmental Benefit											
11	Reduction in emissions	▪ Rationale: Aligning transit service with demand and land use is cost-effective way to reduce emissions. ▪ Former Criteria #: EN1. Reduction in emissions and disturbance. ▪ This criterion is directly related to ridership but is maintained as a separate measure to reflect the relationship to the Climate Smart Strategy. ▪ Metro Model Output	▪ Change in annual VMT and resulting emission levels for CO2 and other harmful pollutants such as NOx and SOx.		X		X	X			

				Alignment				Regional Transit Strategy Goals			
#	Recommended Criteria	Notes	Method of Evaluation	System Performance Measures	6 Desired Outcomes	Climate Smart Policy #2	Federal CIG	Frequent	Convenient	Accessible	Affordable
Funding Commitment/Partnerships/Local Support											
12	Local Commitment and Partnerships	▪ Rationale: Local commitment and partnerships between jurisdictions and agencies are essential for the implementation of large regional transit projects. ▪ Former Criteria #: C2 Local Aspirations; Partnerships are added as an element of this criteria.	Political desire for corridor communities (in aggregate) to accommodate land use density and to promote urban form that is supportive of HCT and meets the region's 2040 growth management objectives. Qualitative scoring based on the following four equally weighted points: ▪ Is there documented community and local support for the proposed high capacity transit project? ▪ Does the jurisdiction have adopted population and employment growth aspirations for that would support the high capacity transit project? ▪ Does the local jurisdiction have plans to update land use policies to help support the high capacity transit project? ▪ Are partnerships in place with the various agencies and municipalities that will need to be involved to implement the project? ▪ Is a corridor currently or at risk of gentrification and displacement of residences and businesses? Local or regional analysis? – Are partnerships, policies, and tools in place to prevent displacement of local residents and businesses?		X		X	X			
13	Funding Potential	▪ Rationale: For projects that would seek federal funding, assess project strength based on the CIG program criteria. ▪ Former Criteria #: D5. Funding Potential ▪ As identified in the Federal CIG column, the CIG program includes criteria similar to many of the proposed criteria. ▪ This measure will only be evaluated for a limited set of the highest scoring projects that are seeking federal funds.	This is an assessment of each corridor's potential to qualify for federal funding under Federal Transit Administration (FTA) program guidelines. FTA funding of guideway capital investments requires demonstration of cost-effectiveness, mobility improvements, and congestion relief potential of the project. Data generated for the following four other evaluation criteria are part of the inputs of this measure: ▪ Ridership (Criteria 1) ▪ Operating and maintenance costs (Criteria 7 data point) ▪ Project capital cost (Criteria 8 data point)								

Figure 1 Summary of Proposed Evaluation Approach

Transit Evaluation Criteria	Project Readiness Criteria	Existing Criteria Considered in Subsequent Phases
Mobility and Ridership ▪ (1) Current and/or future ridership ▪ (2) Transit rider travel time benefit Land Use Supportiveness and Market Potential ▪ (3) Land use ~~policy~~ supportiveness ▪ (4) Supportiveness of urban form ▪ (5) Enhances connections to and between 2040 Growth Areas ▪ (6) Rebuilding/ redevelopment opportunity Cost Effectiveness ▪ (7) Operating Cost (Operating Cost per Rider) ▪ (8) Capital Cost (Capital Cost per Rider) Equity Benefit ▪ (9) Low income access to jobs and services ▪ ~~(10)~~ Affordable housing (Move to #3 Land use supportiveness) Environmental Benefit ▪ (11) Reduction in emissions ~~and disturbance~~	▪ (12) Funding Potential ▪ (13) Local Commitment and Partnerships incorporate equity readiness (i.e., anti-displacement)	▪ Incorporated into FTA Process "Purpose & Need" – Ridership Generators – Integration with regional transit system ▪ Considered in Environmental Review process: – Risk of natural resources disturbance – Risk of 4(f) resource disturbance

Alignment with RTP System Performance Measures

RTP System Performance Measure	TSEP Criteria Alignment
FREQUENT	
▪ Increase daily transit service revenue hours per mode	▪ Not relevant for project level comparisons.
▪ Transit productivity (transit boarding rides per revenue hour) for mode or service characteristics	▪ The TSEP cost effectiveness criterion achieves the productivity objectives of this system performance measure and is more effective for comparing projects.
CONVENIENT	
▪ Motor vehicle and transit travel time parity between key origin-destination for mid-day and 2-hour PM peak	▪ Incorporated into TSEP criterion #2 as supporting data rather than part of the criteria (i.e., provided for informational purposes). Calculated as the ratio of transit to auto travel time.
▪ Non-Drive alone mode share system-wide and for central city and individual regional centers (% of daily walking, bicycling, shared ride and transit trips)	▪ Not relevant for project level comparisons, as all transit projects are evaluated together in the RTP modeling process.
ACCESSIBLE	
▪ Number or percent of bike or pedestrian projects or mileage that improve access to transit or fill in identified gaps in the system to access transit.	▪ This is a subset of a broader performance measure that looks at closing bike and pedestrian gaps region wide. More relevant in evaluation of transit supportive elements.
▪ Daily needs accessible within 30 minutes by public transportation for the region and historically under-represented communities ▪ Jobs accessible within 45 minutes by public transportation for the region and historically under-represented communities	▪ To simplify and reduce the number of measures, population and jobs were eliminated as criterion as they are reflected in Ridership (Criterion #1) ▪ These performance measures support the modification of the former equity criteria to a 'ladders of opportunity' equity measure that evaluates access to jobs and services. The access to jobs and daily needs aspect of this measure will be aligned with these system performance measures.
▪ Proximity of households, low-income households and employment with a ¼ mile of transit and frequent service transit	▪ Current and/or future population (formerly C1) and jobs (formerly EC3) are provided as supporting data for Ridership (Criteria #1).
AFFORDABLE	
▪ Housing + Transportation costs relative to cost burdened designation	▪ Fine as a system performance measure. The ladders of opportunity proposed as criteria #9 is a more understandable equity measure.

Metro Transit System Expansion Policy

Presented by:
Matt Berkow
Tom Brennan
Jamie Snook

May 2017

Metro

NELSON NYGAARD

Preliminary Proposed Criteria

Proposed Process and Criteria (Handout)

Figure 1 Summary of Proposed Evaluation Approach

Transit Evaluation Criteria	Project Readiness Criteria	Existing Criteria Considered in Subsequent Phases
Mobility and Ridership ▪ (1) Current and/or future ridership ▪ (2) Transit rider travel time benefit Land Use Supportiveness and Market Potential ▪ (3) Land use ~~policy~~ supportiveness ▪ (4) Supportiveness of urban form ▪ (5) Enhances connections to and between 2040 Growth Areas ▪ (6) Rebuilding/ redevelopment opportunity Cost Effectiveness ▪ (7) Operating Cost (Operating Cost per Rider) ▪ (8) Capital Cost (Capital Cost per Rider) Equity Benefit ▪ (9) Low income access to jobs and services ▪ ~~(10)~~ Affordable housing (Move to #3 Land use supportiveness) Environmental Benefit ▪ (11) Reduction in emissions ~~and disturbance~~	▪ (12) Funding Potential ▪ (13) Local Commitment and Partnerships incorporate equity readiness (i.e., anti-displacement)	▪ Incorporated into FTA Process "Purpose & Need" – Ridership Generators – Integration with regional transit system ▪ Considered in Environmental Review process: – Risk of natural resources disturbance – Risk of 4(f) resource disturbance

Criteria Review: Mobility and Ridership

- Criteria 1 - Current and/or future ridership

Evaluation Method	Changes or Clarifications	Discussion Items
▪ Total daily ridership for project corridor	▪ Existing ridership will be used in initial evaluation ▪ Future ridership will be incorporated once modeling begins in October 2017 ▪ Consistent w/FTA, existing and future ridership will be averaged	

Criteria Review: Mobility and Ridership

- Criteria 2 - Transit rider travel time benefit

Evaluation Method	Changes or Clarifications	Discussion Items
▪ Average travel time benefit per rider		

Criteria Review: Land Use Supportiveness & Market Potential

- Criteria 3 - Land use supportiveness

Evaluation Method	Changes or Clarifications	Discussion Items
▪ Station area development & character ▪ Existing & planned ped/bike networks ▪ Parking policy & management ▪ Affordable housing	▪ Aligned with FTA Land Use evaluation measure ▪ Includes Affordable Housing (formerly criteria #10)	▪ Source of information on parking policies, pricing and supply?

Criteria Review: Land Use Supportiveness & Market Potential

- Criteria 4 – Supportiveness of Urban Form

Evaluation Method	Changes or Clarifications	Discussion Items
▪ Street density or block density		

Criteria Review: Land Use Supportiveness & Market Potential

- Criteria 5 - Enhances connections to and between 2040 Growth Areas

Evaluation Method	Changes or Clarifications	Discussion Items
2040 Concept Types ▪ Central City, Regional Centers, Town Centers ▪ Freight and Passenger Intermodal Facilities ▪ Employment areas, Industrial areas	▪ Main Streets, Station Communities, Neighborhoods, and Corridors are not included	▪ What types should be included? ▪ Weighting and/or network analysis (e.g., by # of network connections served rather than only types)

Criteria Review: Land Use Supportiveness & Market Potential

- Criteria 6 - Rebuilding/ redevelopment opportunity

Evaluation Method	Changes or Clarifications	Discussion Items
▪ Area of vacant or redevelopable land	▪ Modify, align with Metro market analysis, depending on data availability.	

Criteria Review: Cost-Effectiveness

- Criteria 7 - Operating Cost (Operating Cost per Rider)
- Criteria 8 - Capital Cost (Capital Cost per Rider)

Evaluation Method	Changes or Clarifications	Discussion Items
▪ Operating cost per rider ▪ Capital cost per rider	▪ Based on a determined mode and operating plan for the project, or… ▪ If mode and/or operating plan have not been determined, use typical operating cost per hour and capital cost per mile for a range of potential modes (LRT/BRT, Arterial BRT, Commuter Rail and/or Streetcar) ▪ Use standardized assumptions for service span and frequency	▪ Is it reasonable to expect applicants to select between 4 mode categories?

Criteria Review: Equity Benefit

- Criteria 9: Low-income access to jobs and services

Evaluation Method	Changes or Clarifications	Discussion Items
▪ Previous TSEP criteria considered three communities of concern: – Low-income or very low income; – Minority and/or Hispanic populations; – Disabled and senior populations	▪ SLC: Assessed whether project links these communities to regionally significant job, education, and health care centers? ▪ Align with RTP System Performance Measures: – Access to Community Places by transit in 30 minutes – Jobs accessible by 45 minutes by public transportation	▪ Should criteria name be 'low income' or 'under-represented'?

Criteria Review: Equity Benefit

- Criteria 10: Affordable Housing

Evaluation Method	Changes or Clarifications	Discussion Items
▪ Affordable housing units	▪ Eliminated - now measured as part of Criteria 3 – Land Use Supportiveness ▪ An equity-related Readiness criteria looks at displacement potential and mitigation measures	

Criteria Review: Environmental Benefit

- Criteria 11: Reduction in Emissions

Evaluation Method	Changes or Clarifications	Discussion Items
▪ Change in annual VMT and emission levels for CO2 and other harmful pollutants		

Criteria Review: Funding Commitment (Readiness)

- Criteria 12: Local Commitment and Partnerships

Evaluation Method	Changes or Clarifications	Discussion Items
▪ Community & local support ▪ Adopted population & employment growth targets to support project ▪ Plans to update land use policies to support project	▪ **Partnerships** between agencies & municipalities that will need to be involved to implement the project? ▪ **Equity**: – Is a corridor currently at risk of gentrification and displacement? – Are partnerships, policies, and tools in place to prevent displacement of local residents and businesses?	▪ Should displacement potential be a regional or local analysis?

Criteria Review: Funding Commitment (Readiness)

- Criteria 13: Funding Potential

Evaluation Method	Changes or Clarifications	Discussion Items
▪ Simulated scoring of projects that are likely to seek FTA funding in the near term (e.g., within this RTP cycle), e.g. cost-effectiveness, mobility improvements, congestion relief, etc.	▪ Evaluated for highest scoring projects seeking federal funds	

System Performance Alignment Table (Handout)

Alignment with RTP System Performance Measures

RTP System Performance Measure	TSEP Criteria Alignment
FREQUENT	
▪ Increase daily transit service revenue hours per mode	▪ Not relevant for project level comparisons.
▪ Transit productivity (transit boarding rides per revenue hour) for mode or service characteristics	▪ The TSEP cost effectiveness criterion achieves the productivity objectives of this system performance measure and is more effective for comparing projects.
CONVENIENT	
▪ Motor vehicle and transit travel time parity between key origin-destination for mid-day and 2-hour PM peak	▪ Incorporated into TSEP criterion #2 as supporting data rather than part of the criteria (i.e., provided for informational purposes). Calculated as the ratio of transit to auto travel time.
▪ Non-Drive alone mode share system-wide and for central city and individual regional centers (% of daily walking, bicycling, shared ride and transit trips)	▪ Not relevant for project level comparisons, as all transit projects are evaluated together in the RTP modeling process.
ACCESSIBLE	
▪ Number or percent of bike or pedestrian projects or mileage that improve access to transit or fill in identified gaps in the system to access transit.	▪ This is a subset of a broader performance measure that looks at closing bike and pedestrian gaps region wide. More relevant in evaluation of transit supportive elements.
▪ Daily needs accessible within 30 minutes by public transportation for the region and historically under-represented communities	▪ To simplify and reduce the number of measures, population and jobs were eliminated as criterion as they are reflected in Ridership (Criterion #1) ▪ These performance measures support the modification of the former equity criteria to a 'ladders of opportunity' equity measure that evaluates access to jobs and services. The access to jobs and daily needs aspect of this measure will be aligned with these system performance measures.
▪ Jobs accessible within 45 minutes by public transportation for the region and historically under-represented communities	
▪ Proximity of households, low-income households and employment with a ¼ mile of transit and frequent service transit	▪ Current and/or future population (formerly C1) and jobs (formerly EC3) are provided as supporting data for Ridership (Criteria #1).
AFFORDABLE	
▪ Housing + Transportation costs relative to cost burdened designation	▪ Fine as a system performance measure. The ladders of opportunity proposed as criteria #9 is a more understandable equity measure.

System Performance Alignment: Frequent

- Alignment with RTP System Performance Measures

RTP System Performance Measures	TSEP Criteria Alignment
FREQUENT	
▪ Increase daily transit service hours	▪ Not relevant for project-level comparisons
▪ Productivity (transit boardings per revenue hour)	▪ Criteria 7 & 8 – Cost-effectiveness – look at ridership return on operating and capital investment

System Performance Alignment: Convenient

- Alignment with RTP System Performance Measures

RTP System Performance Measures	TSEP Criteria Alignment
CONVENIENT	
▪ Comparable auto and transit travel time – midday and PM peak	▪ Criteria 2 compares auto and transit travel times
▪ Non drive-alone mode share – System, Central City, Regional Centers	▪ Not relevant/feasible for project-level comparisons

System Performance Alignment: Accessible

- Alignment with RTP System Performance Measures

RTP System Performance Measures	TSEP Criteria Alignment
ACCESSIBLE	
▪ Bike/pedestrian projects that improve transit access or fill gaps	▪ Land use criteria (3) and urban form (4)
▪ Access to community places within 30 minutes by transit – region and 'historically under-represented' communities	▪ Modified equity criteria (10) measures access to daily needs (aligned with this measure)
▪ Jobs accessible within 30 minutes by transit – region and 'historically under-represented' communities	▪ Modified equity criteria (10) measures access to jobs (aligned with this measure)
▪ Proximity of households, low-income households & employment to transit & frequent transit	▪ Modified equity criteria (10) measures project's ability to connect people to services & jobs

System Performance Alignment: Affordable

- Alignment with RTP System Performance Measures

RTP System Performance Measures	TSEP Criteria Alignment
AFFORDABLE	
▪ Housing + Transportation costs relative to cost-burdened designation	▪ Modified equity criteria (10) is a more understandable equity measure at the project-level

Next Steps

Next Steps

- Inform June 1 Call for Projects
- Recommended Criteria (Tech Memo #5)
- Transit supportive elements (Tech Memo #6)

Thank You!

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Getting there

by transit

Regional Transit Strategy

a component of the 2018 RTP

Metro

Transit Work Group Meeting #12

May 24,2017

Today's agenda

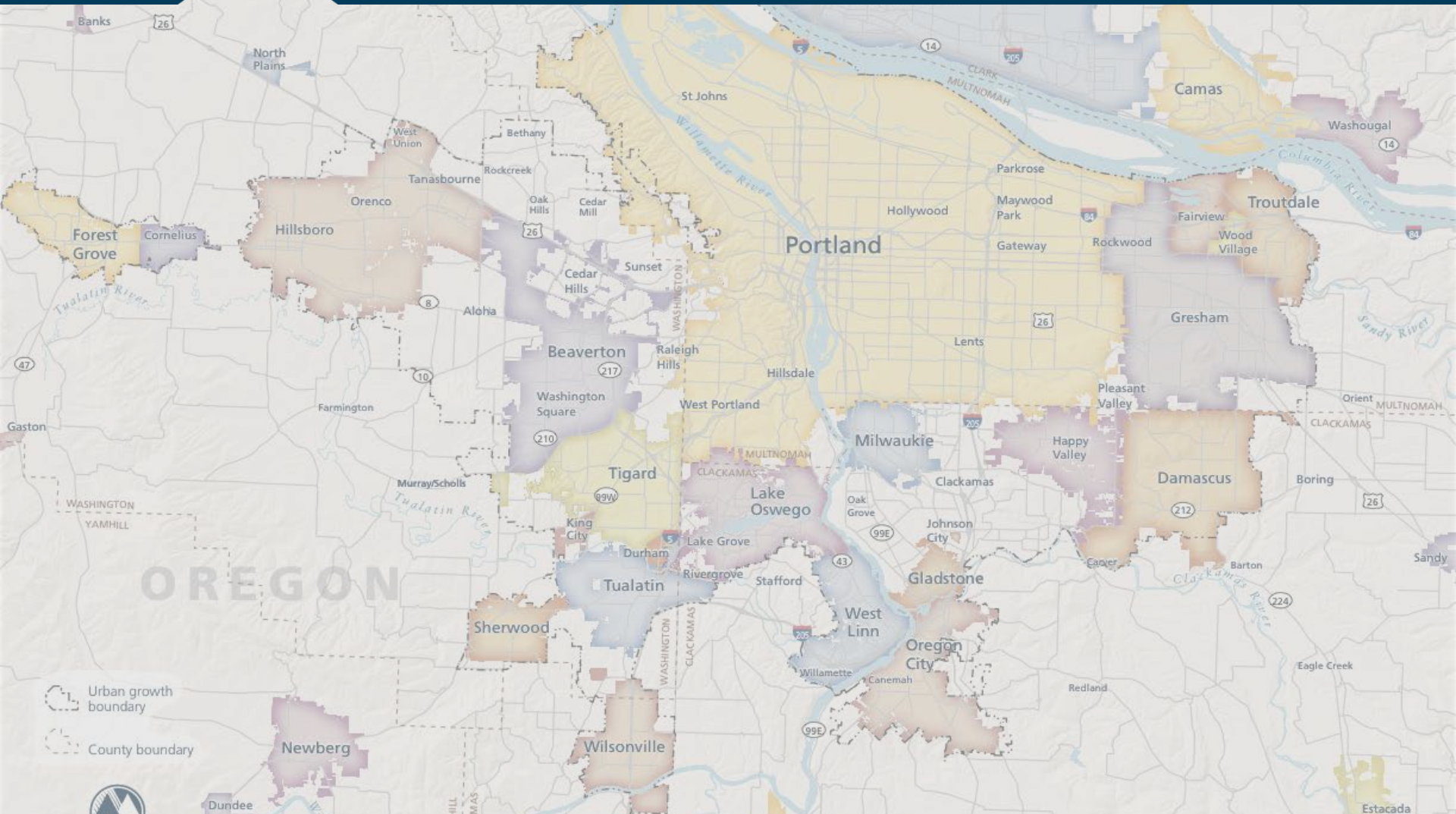
Project timeline

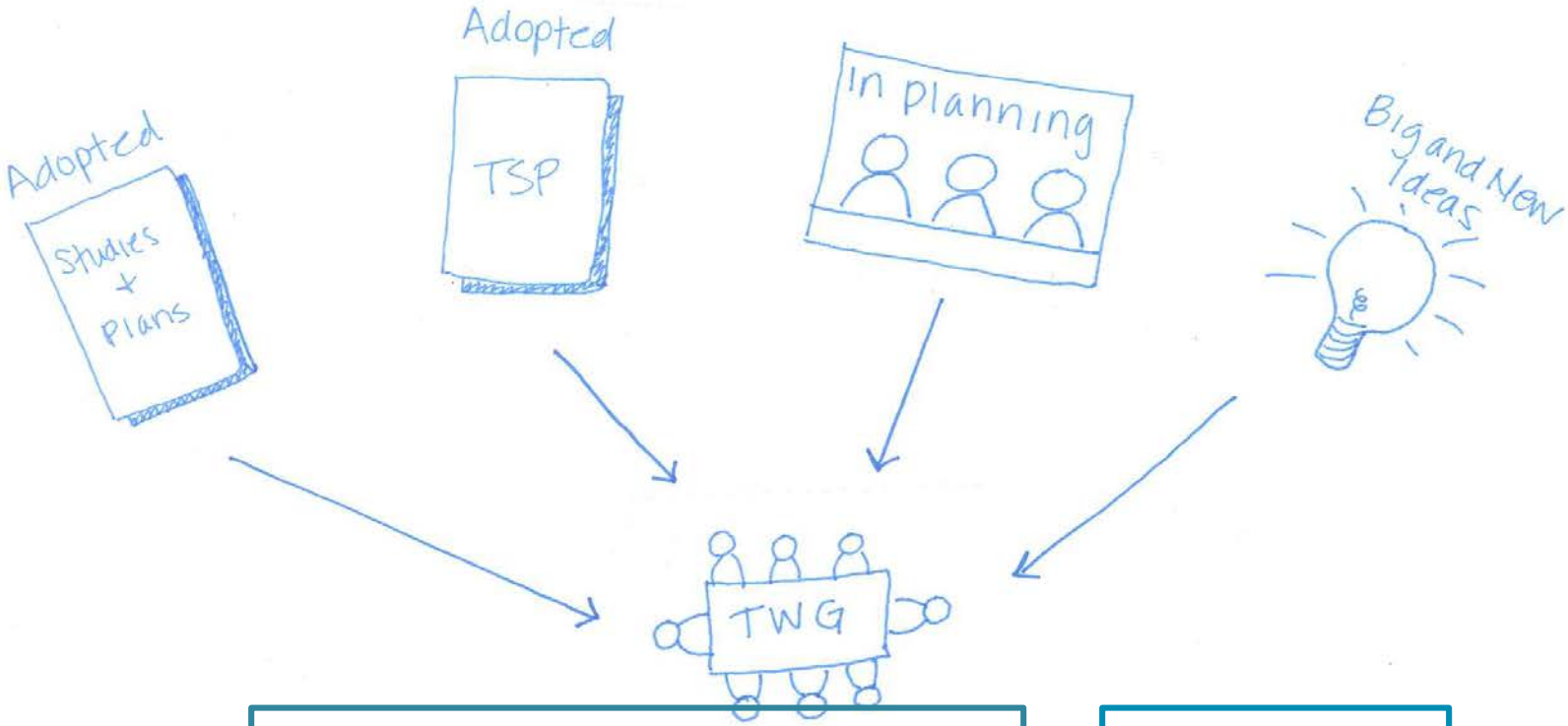
Transit vision – Priorities and ETC

Transit supportive elements

Transit system expansion policy

Project timeline





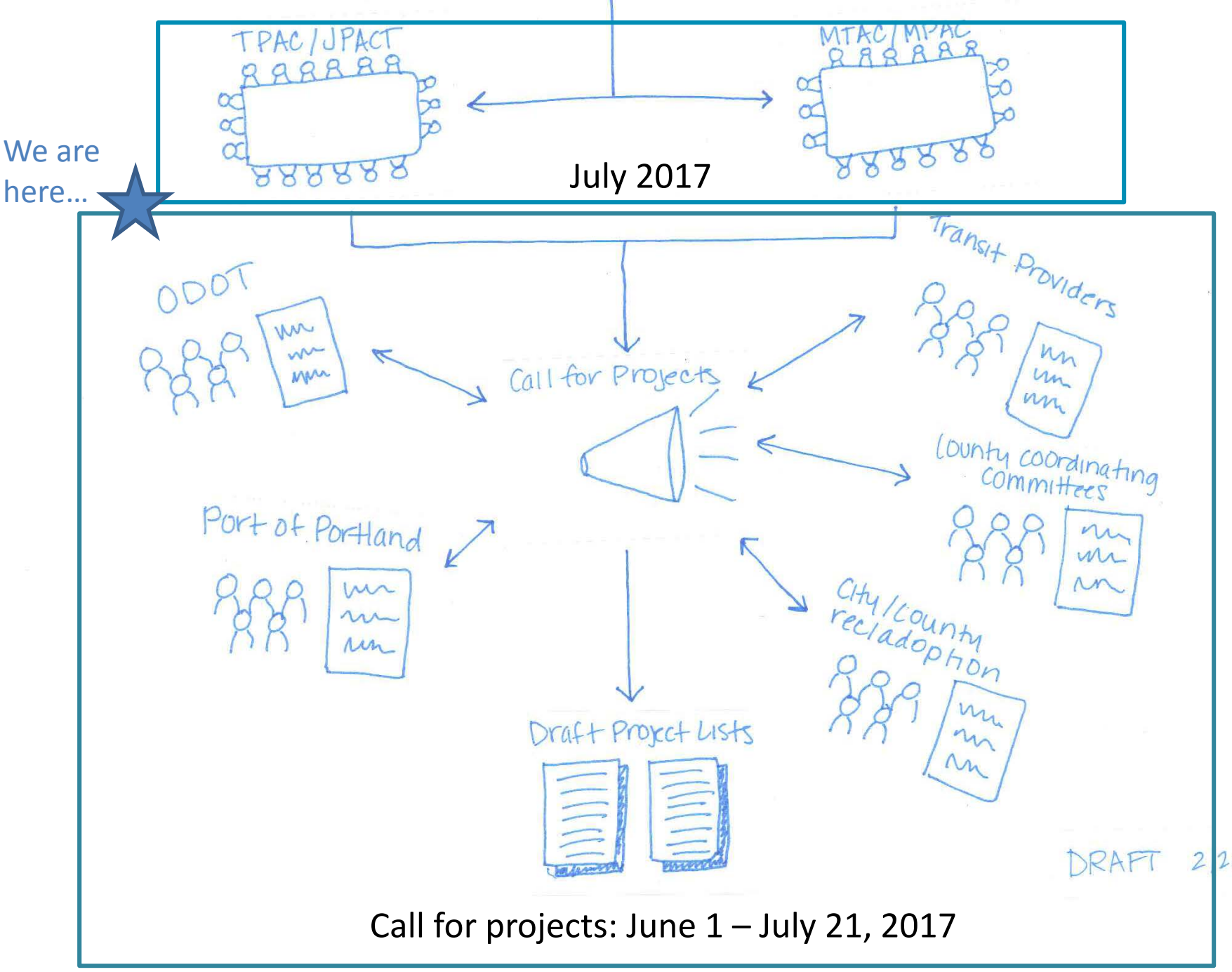
Through Dec 2017

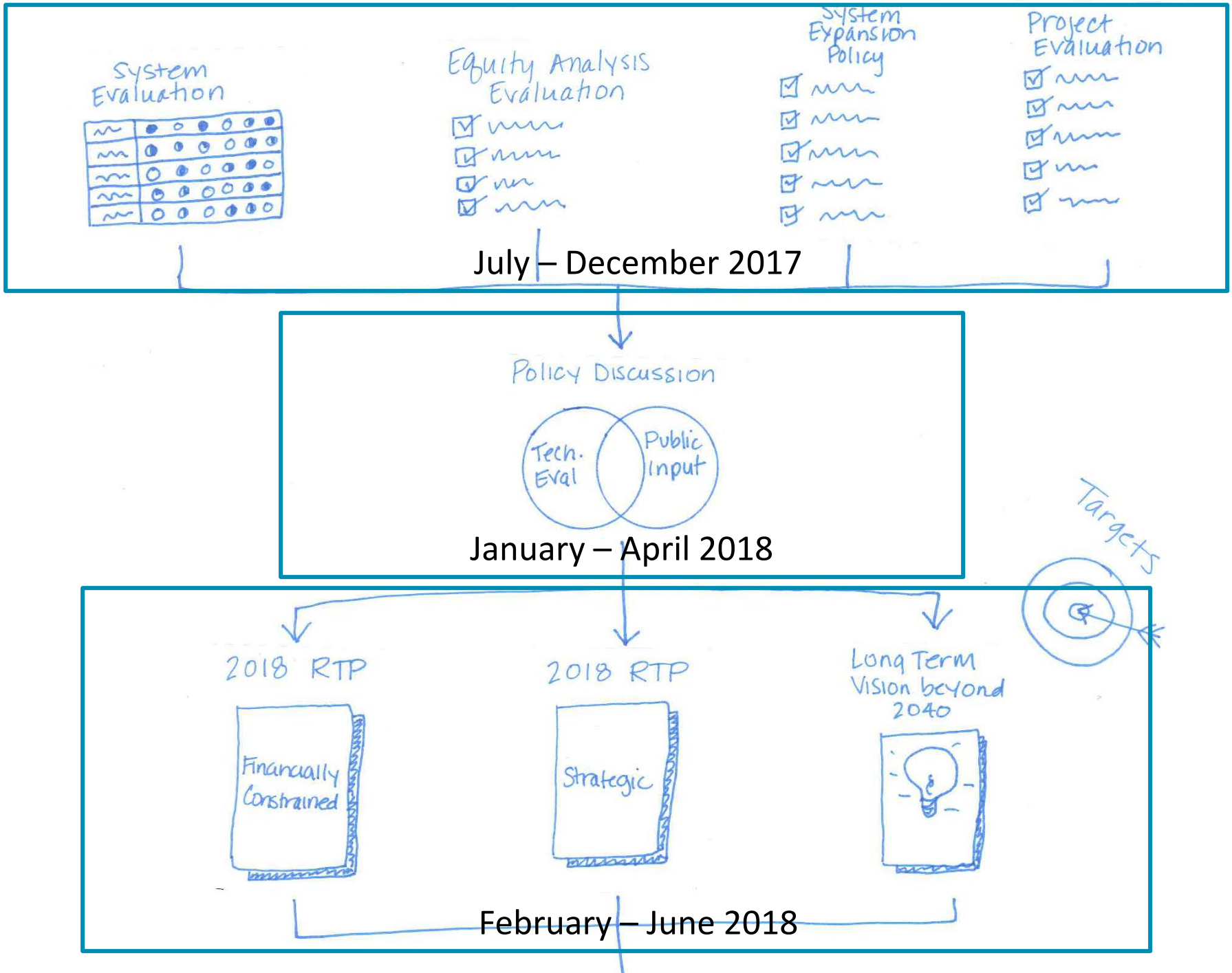
Draft Policies

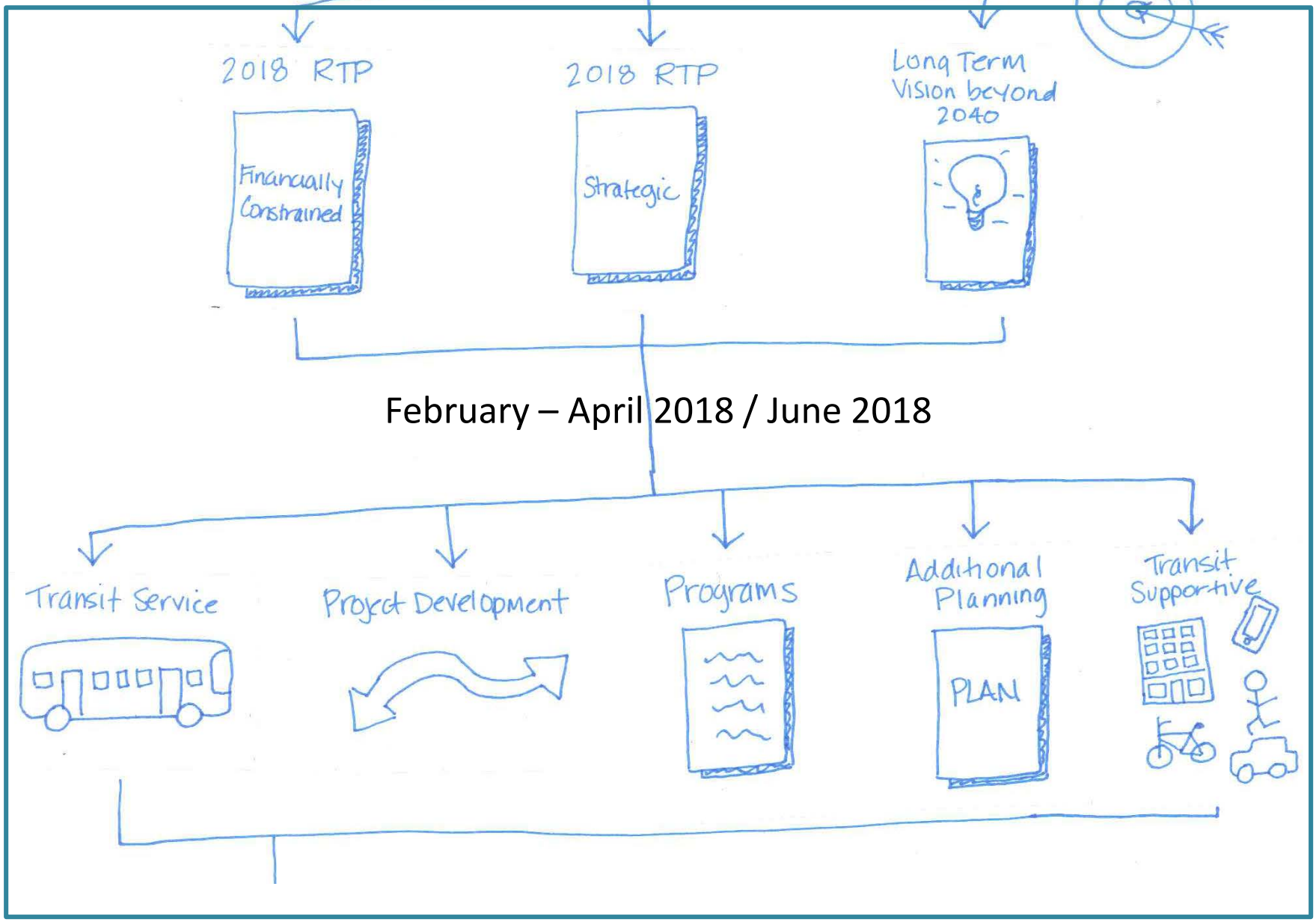
Draft Vision

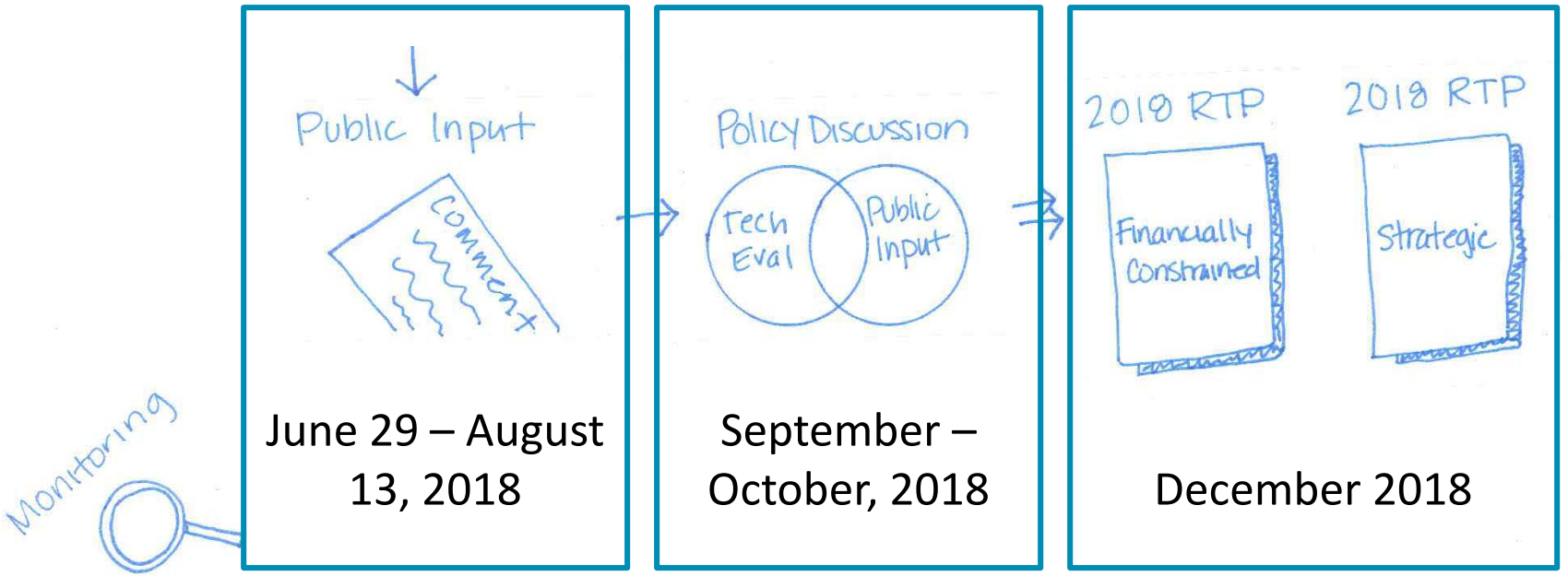
Through August 2017

System Expansion Policy

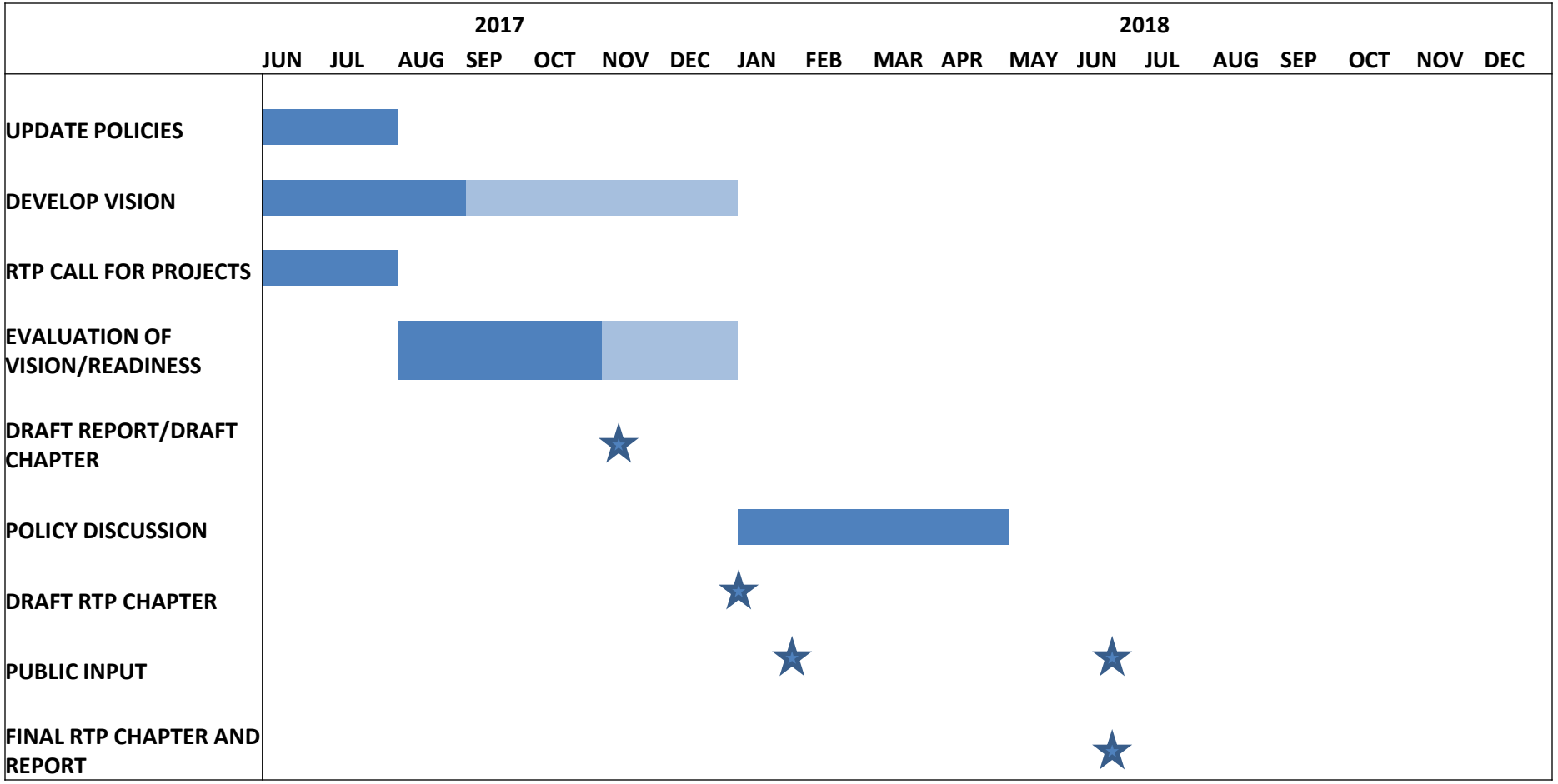

TPAC / JPACT
MTAC / MPAC
July 2017
We are here…
ODOT
Transit Providers
Call for Projects
County coordinating committees
Port of Portland
City / County rec adoption
Draft Project Lists
DRAFT 2/2017
Call for projects: June 1 – July 21, 2017


System Evaluation
Equity Analysis Evaluation
System Expansion Policy
Project Evaluation
July – December 2017
Policy Discussion
Tech. Eval
Public Input
January – April 2018
Targets
2018 RTP
Financially Constrained
2018 RTP
Strategic
Long Term Vision beyond 2040
February – June 2018


2018 RTP
Financially Constrained
2018 RTP
Strategic
Long Term Vision beyond 2040
February – April 2018 / June 2018
Transit Service
Project Development
Programs
Additional Planning
PLAN
Transit Supportive


Public Input
Comment
June 29 – August 13, 2018
Policy Discussion
Tech Eval
Public Input
September – October, 2018
2018 RTP
Financially Constrained
2018 RTP
Strategic
December 2018
Monitoring

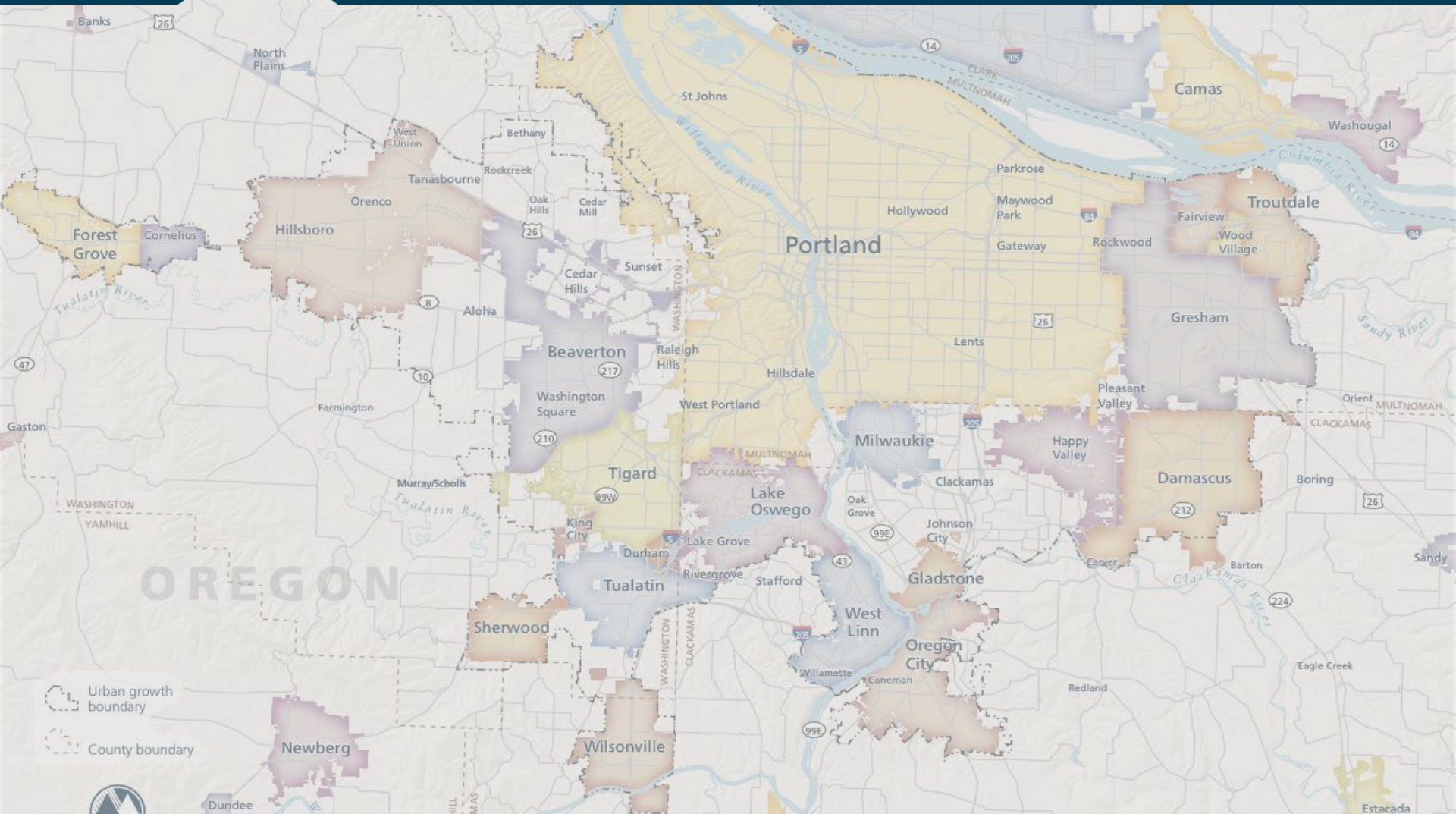
Milestones


2017
2018
JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
UPDATE POLICIES
DEVELOP VISION
RTP CALL FOR PROJECTS
EVALUATION OF VISION/READINESS
DRAFT REPORT/DRAFT CHAPTER
POLICY DISCUSSION
DRAFT RTP CHAPTER
PUBLIC INPUT
FINAL RTP CHAPTER AND REPORT

Upcoming Transit Work Group meetings

MAY	JUN	JUL	AUG	SEP	OCT	NOV
Cont. vision discussion Cont. Transit System Expansion Policy (TSEP)	Policy update/ changes Cont. vision discussion Cont. Transit System Expansion Policy	NO TWG MEETING Testing TSEP Running evaluation	NO TWG MEETING Testing TSEP Running evaluation	Vision update TSEP update Evaluation update Policy updates – DRAFTS	DRAFT vision DRAFT TSEP DRAFT evaluation	Cont. of OCT meeting, if needed
		Small group meetings	*Small group meetings*	*Small group meetings*	*Small group meetings*	

Regional transit vision



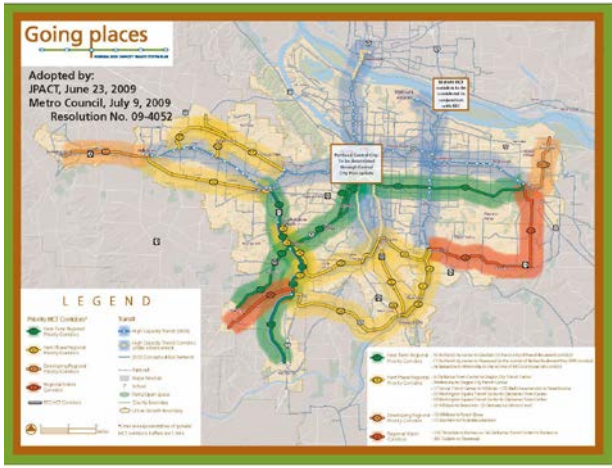
Transit vision

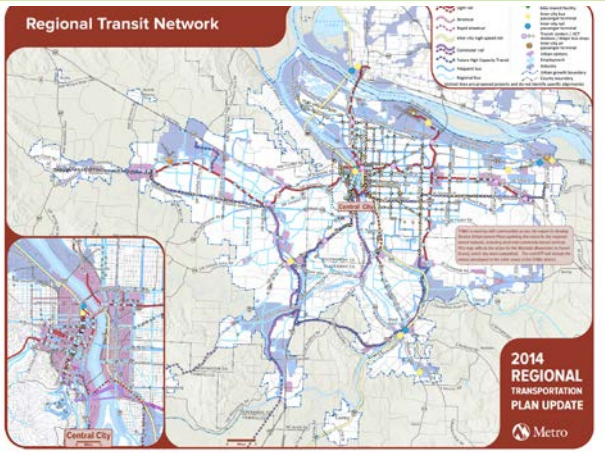
Operation improvements +

Capital investments +

Transit supportive elements +

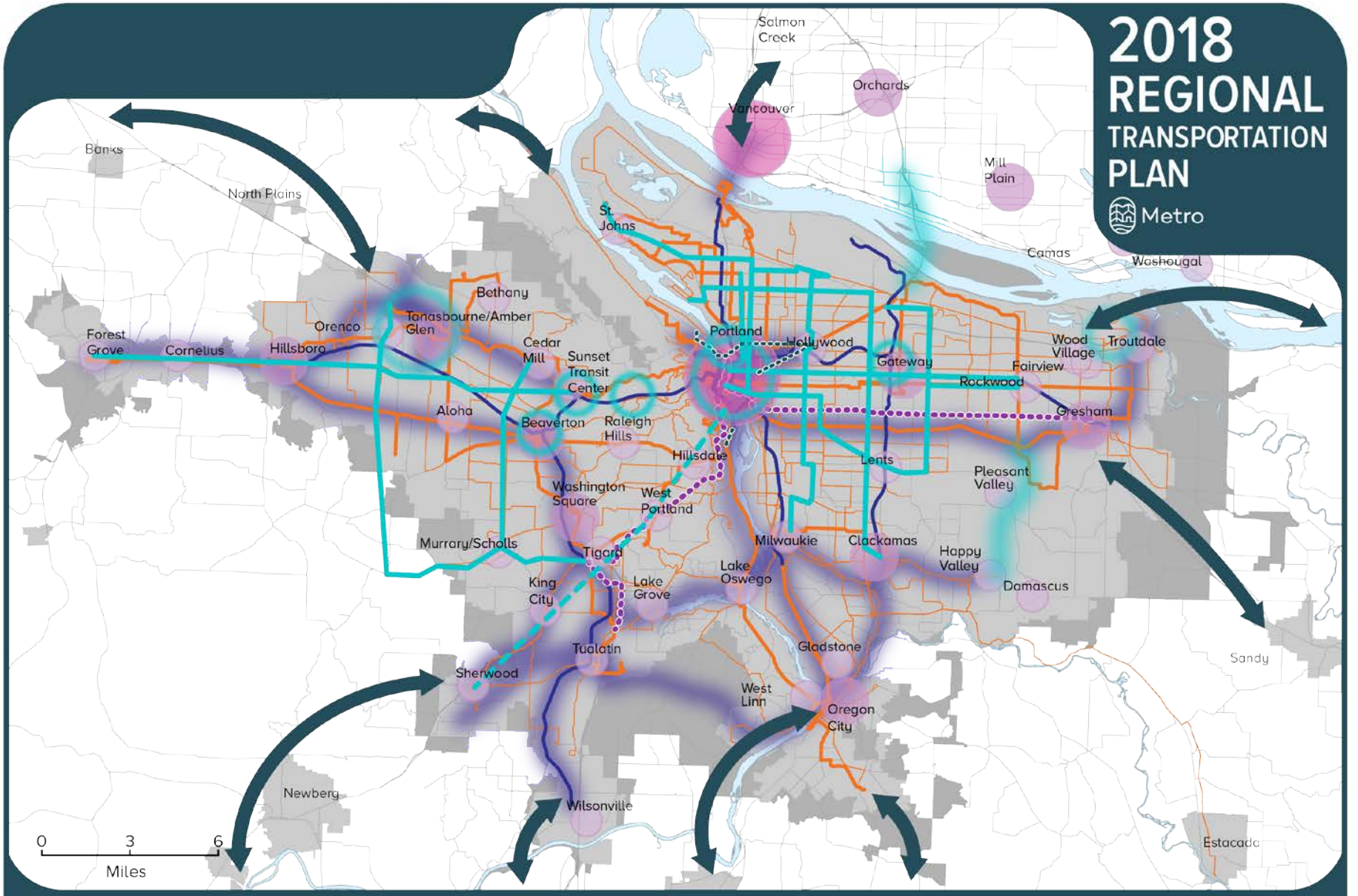
= Total transit strategy





2018 REGIONAL TRANSPORTATION PLAN

Metro



Metropolitan planning area
Urban growth boundary
City center
Regional center
Town center

High capacity transit
HCT Project Development
HCT corridor

Future bus
Future frequent bus
Neighboring transit

Transit Workgroup suggestions 2/23/17

Future Portland Streetcar
Potential enhanced transit corridors
Future HCT corridors

Needs
Express service

Note: Includes HCT Corridors and Tri Met's Service Enhancement Plans

Capital investments

Previously defined HCT corridors

Additional proposed high capacity/enhanced transit corridors

Major maintenance projects

Bottleneck improvements

Locally funded transit improvements

NEW

Enhanced transit corridors…

Enhanced Transit service could include elements such as:

- More frequent service
- Articulated buses or streetcar
- Wider stop spacing
- Improved shelters and amenities
- Level or near level boarding
- Transit signal priority
- queue jumps
- bus-only signals, and bypass lanes
- Right-turn-except-bus lanes or Business Access and Transit (BAT) lanes
- Exclusive transit lanes where feasible
- Access to Transit investments
- Policy commitments to support transit ridership

NEW

Enhanced Transit corridors

Transit service that provides increased capacity and reliability yet is relatively low-cost to construct, context-sensitive, and able to be deployed more quickly throughout the region where needed.

Scale and Level of Investment:

Level 0: Service Enhancement Plan Partnerships with Local Jurisdictions

Level 1: Small Scale Enhanced Transit $10-50 Million

Level 2: Medium to large scale enhanced transit Scale Enhanced Transit $50-300 Million

NEW

Enhanced transit concepts

Enhanced transit concept could be an array of different types of improvements:

- Local enhanced transit improvements
- System wide enhanced transit improvements
- Regional enhanced transit investments
- Enhanced transit network

Local enhanced transit improvements

Locally funded transit improvements targeted at specific transit (or transit related) needs and opportunities at specific spot locations, along a corridor or a portion of a transit line. These are more likely to fit into Level 0 and 1 of Enhanced transit investments.

(local funding, local process, low level of investments, points or shorter segments on a map)

Examples may include:

- Bus stop consolidation
- Queue jumps
- Sidewalk improvements
- Bike access improvements

Systems enhanced transit improvements

Locally or regionally funded transit improvements targeted at specific transit system performance at specific locations or for specific needs. Such improvements may be a package of improvements to address multiple hot spots on multiple transit lines in the system. These are more likely to fit into Level 1 of Enhanced transit investments.

(local or regional funding, local or regional process, low to moderate level of investments, systems of investments, multiple points on a map)

Examples may include:

- Bus bottlenecks
- Transit signal priority
- Technology advancements

Regional enhanced transit investments

Regional or federally funded longer corridor or full transit line improvements targeted at transit investments likely to seek FTA Small Starts funding. These are more likely to fit into Level 2 of Enhanced transit investments.

(regional or federal funding, regional process, moderate to high level of investments, line on a map)

Examples may include:

- Enhanced transit corridors
- Division BRT
- Streetcar projects

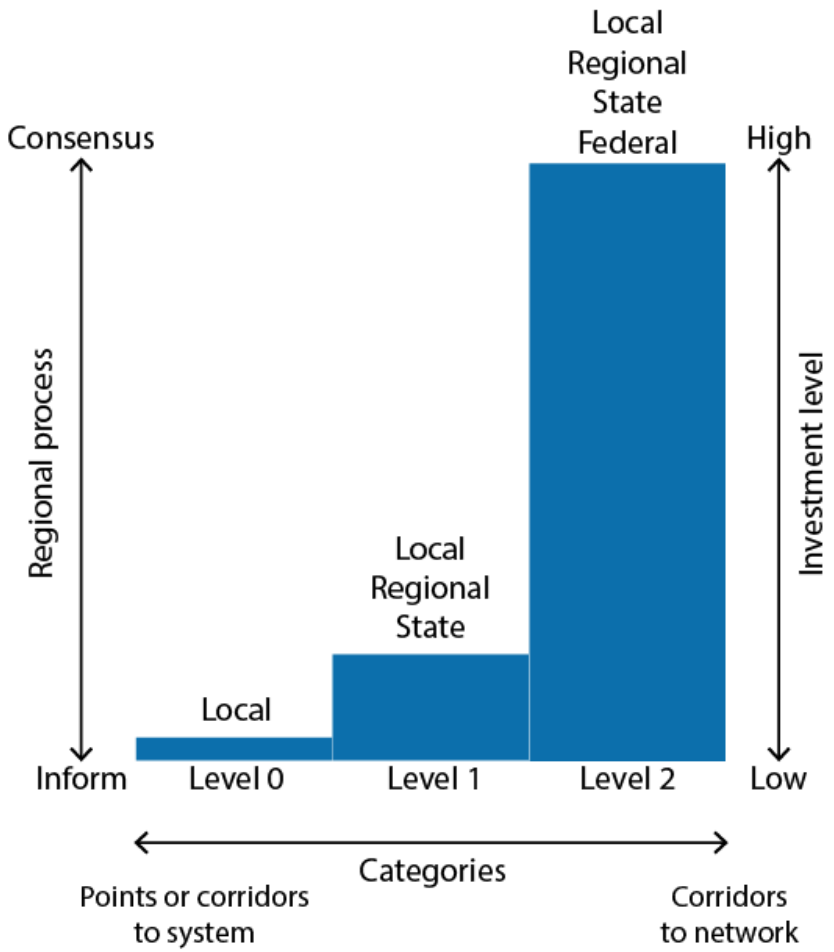
Enhanced transit network

A branded network of enhanced transit to provide a network of transit lines that operate frequently, with wider stop spacing and faster boarding, above the TriMet Frequent Service network.

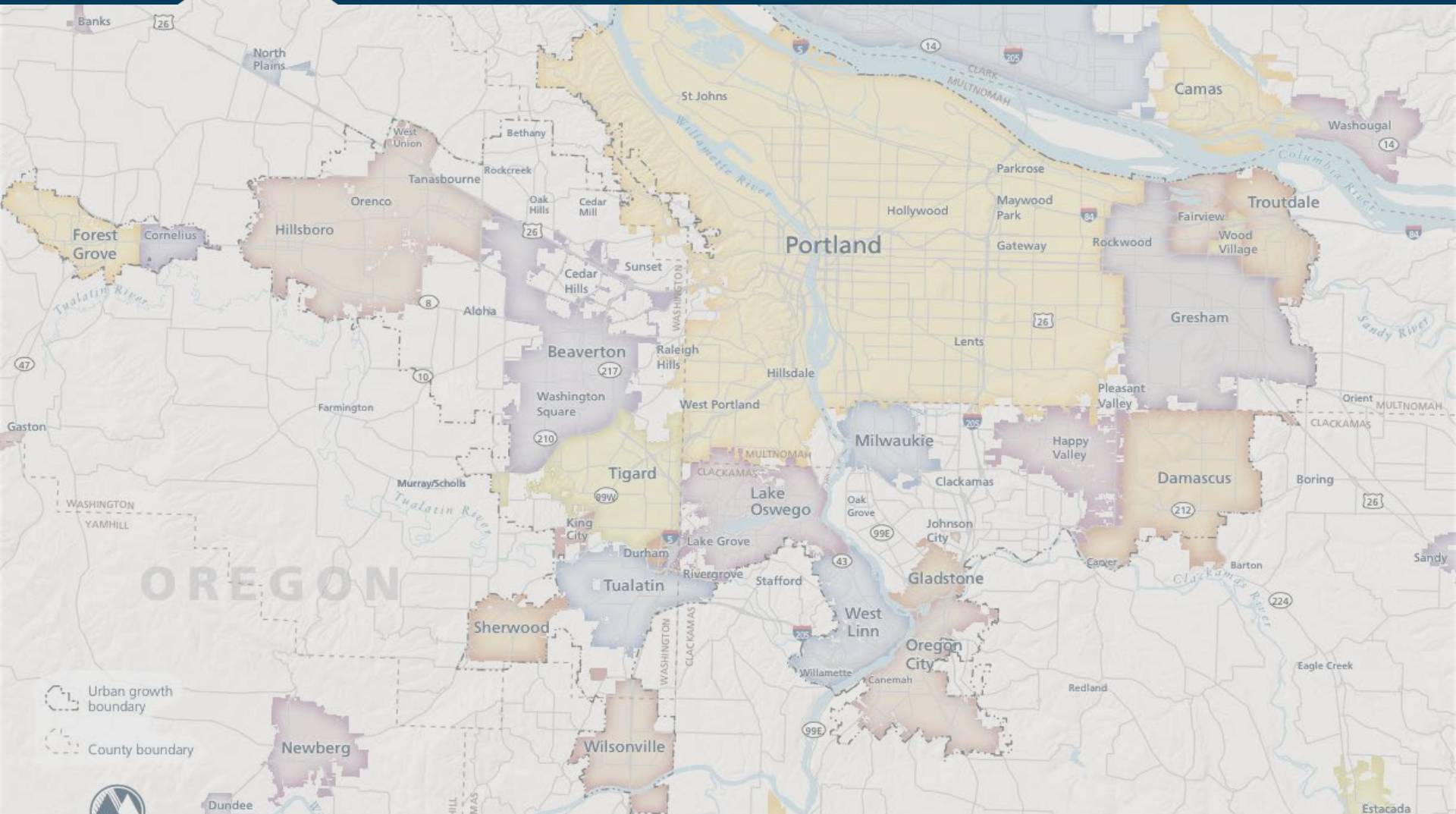
(local, regional or federal funding, local or regional process, low to high level of investments, multiple lines on a map)

Example is Seattle Rapid Ride

Enhanced transit concept



Transit supportive elements

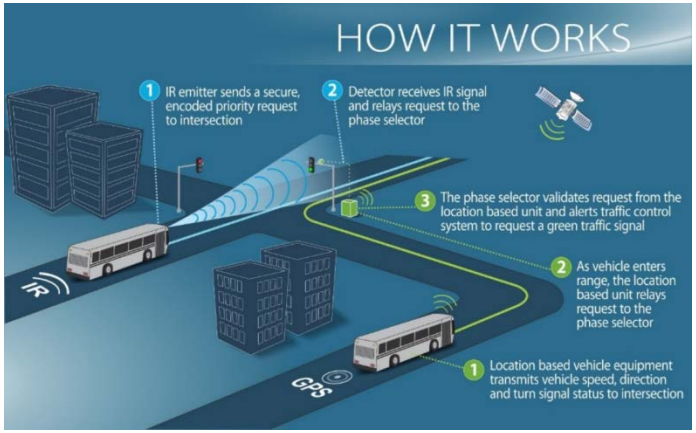


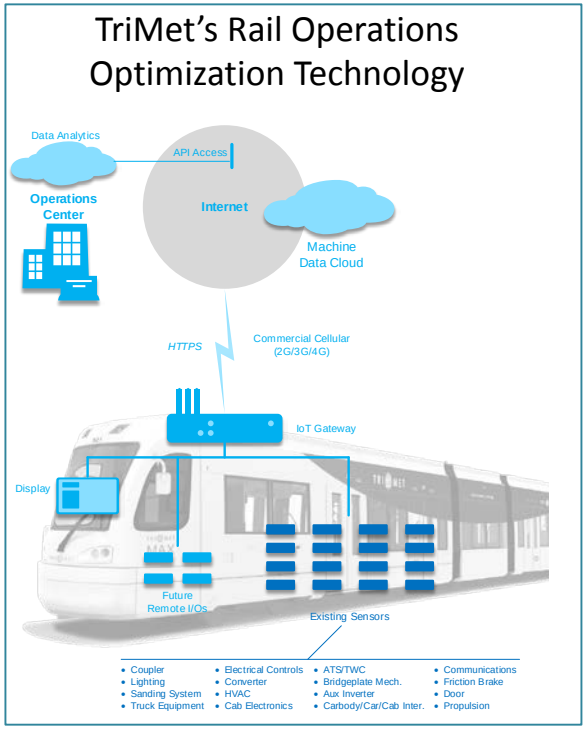
Shared mobility/ridesourcing

Technology

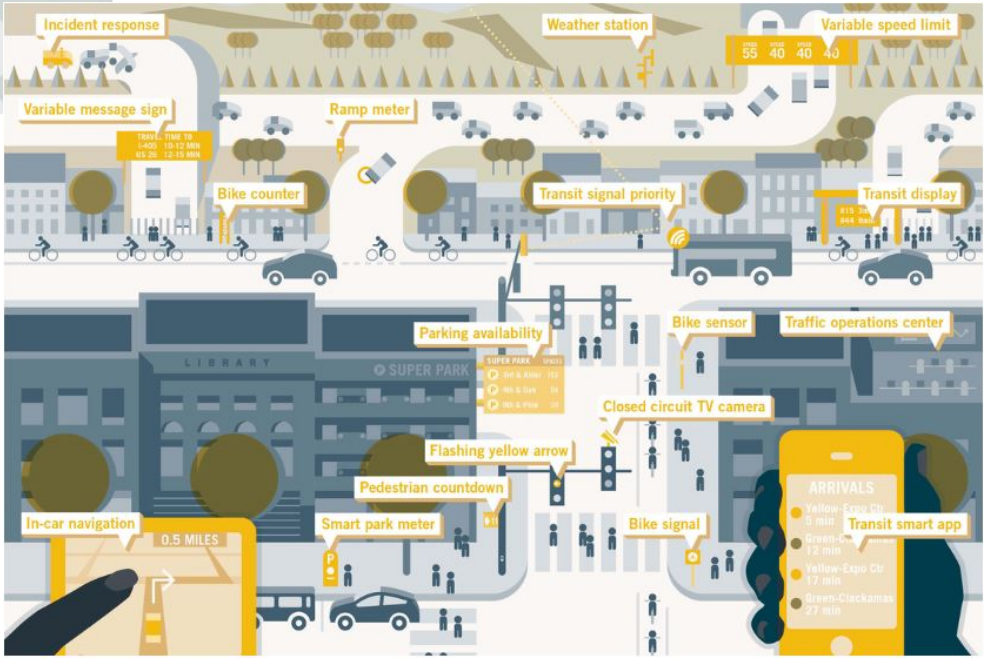
MOD

MOBILITY ON DEMAND



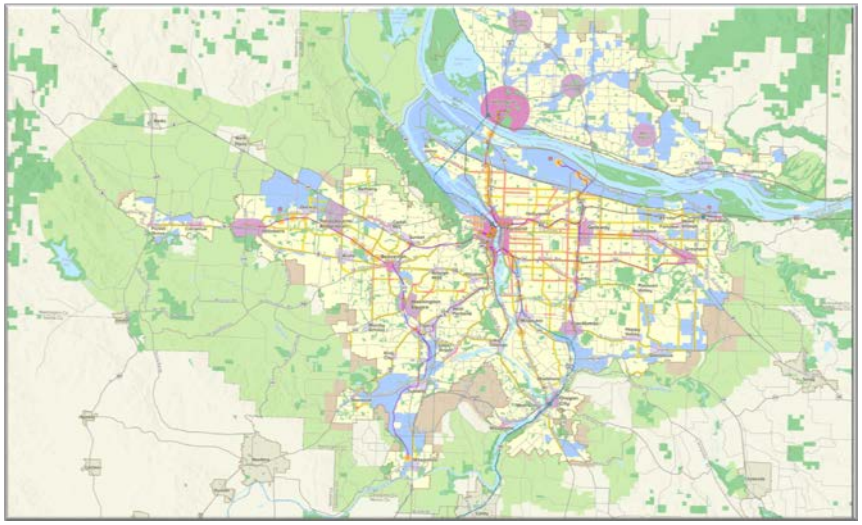


Programs and plans

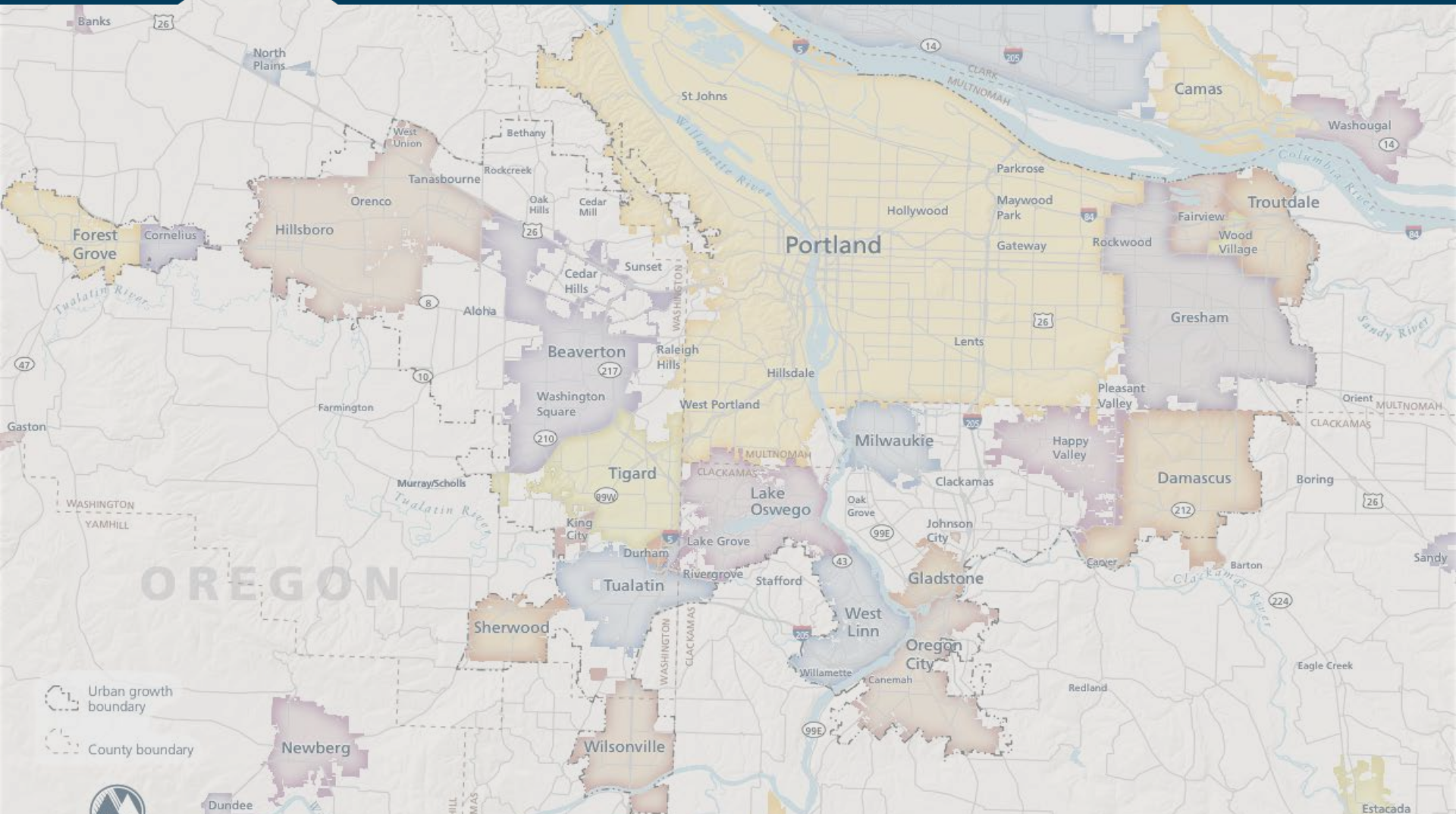


Access to transit

Land use



Transit system expansion policy



Thank you

oregonmetro.gov