Agenda

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

Meeting:	**RTP Transit work group meeting**
Date:	Thursday, February 23, 2017
Time:	1-4 p.m.
Place:	Metro Regional Center, Room 401
Purpose:	For Transit Work Group to share and discuss transit priorities, vision ideas and introduction to the Transit System Expansion policy
Outcome(s):	Start developing a coordinated transit vision for our Regional Transit Strategy and to support the 2018 Regional Transportation Plan Update; and introduce the Transit System expansion policy

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1 p.m.	**Welcome & introductions**	Jamie Snook
1:05 p.m.	**Partner Updates** *Who have you talked to about this work? What have you heard?*	Everyone
1:20 p.m.	**Policy Framework** *Discuss potential new transit policies based on the goals and objectives*	Jamie Snook
1:35 p.m.	**Transit vision and maps** *Provide definition for the Total Transit Map and the Transit Capital Investment Map*	Jamie Snook
1:45 p.m.	**Transit vision map exercise** *Share and discuss transit and transit related priorities and vision for the short, mid and long term strategy*	Everyone
2:40 p.m.	**Break**	
2:55 p.m.	**Introduction to the Transit System Expansion Policy** *Introduce the transit System Expansion Policy*	Jamie Snook/Mathew Berkow
3:00 p.m.	**Overview of existing HCT criteria and regional trends** *Provide an overview of the existing HCT criteria and recent policies and trends that may relate to those criterions*	Mathew Berkow
3:30 p.m.	**Discussion of current HCT criteria relationship to vision** *Discuss the existing HCT criteria relates to our Regional Transit Vision and potential policies*	Mathew Berkow
4:00 p.m.	**Adjourn**	

Meeting Packet	Next Meeting
• Transit Work Group Agenda	April, TBD
• January 2017 RTS meeting summary	Metro, TBD
	May, TBD
	Metro, TBD

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, January 25, 2017 | 1-3 p.m.
Place:	Metro Regional Center, Room 501
Purpose:	Identify specific policies, programs and projects to include in the Regional Transit Vision and to share with the Transportation Policy Alternatives Committee (TPAC)

Work Group Attendees	**Affiliate**
Dan Bower	Portland Streetcar, Inc.
April Bertelsen	City of Portland
Karen Buehrig	Clackamas County
Brendon Haggerty	Multnomah County
Roger Hanson	C-Tran, Clark County Public Transit
Eric Hesse	TriMet
Jay Higgins	City of Gresham
Nancy Kraushaar	City of Wilsonville
Mauricio Leclerc	City of Portland
Alex Page	Ride Connection
Luke Pelz	City of Beaverton
Lidwien Rahman	Oregon Department of Transportation
Dyami Valentine	Washington County
Dayna Webb	City of Oregon City

Transit Work Group Interested Parties	
Matt Berkow	Nelson Nygaard

Staff Attendees
Marie Miller, Metro
Thaya Patton, Metro
Jamie Snook, Metro

Welcome & introductions
Jamie Snook called the meeting to order at 1:05 p.m. Members and staff introduced themselves and shared snow day stories. An overview of the agenda was given. The Regional Transit Strategy objectives were reviewed:

- Implement the 2040 Growth Concept and Climate Smart Strategy
- Update RTP transit-related policies and performance measures
- Update the current Regional Transit Network Map and High Capacity Transit Map
- Update the Transit System Expansion Policy
- Recommend a coordinated strategy for future transit investments and identify potential partnerships, strategies and funding sources for implementation.

Regional Transit Vision: Organizing Principles
The Regional transit strategy vision matrix was reviewed. on one side of the hand out was the regional transit vision, to make transit more frequent, convenient, accessible and affordable and various strategies to accomplish that vision. . The other side of the handout illustrated the types of who would be responsible, how projects could be prioritized.

Capital Investment Transit Funding
A discussion was held on proposed capital transit investment funding assumptions for the 2018 RTP Update. Jamie Snook referred to the memo, dated Sept. 19, 2016 to the Finance Work Group Lead, on 2018 RTP: Proposed New Starts/Small Starts Transit Funding Assumptions.

The purpose of the memo was to summarize best estimates regarding what could be available in New Starts and Small Starts transit projects in the Portland region between 2018 and 2040 to support the 2018 RTP update. he table example of potential funding of New Starts and Small Starts projects across the RTP planning year (2018-2040) aims for a projected 5 small projects and 2 core capacity projects. The Memo, showing potential new funding estimates over the next 25 years of future planning for new small starts and core capacity projects is desirable. There is a potential for changes with the new Federal administration. We can only operate on what we know now, and consider risks with assumptions in future planning.

It was suggested that there be a comparison of the RTP list of projects and the assumptions made through the Climate Smart Strategy.

Regional Transit Vision
Discussion began with the urgency to align our transit strategies to needs; the Portland metro region is one of the two worst transportation congestion places currently in the U.S. What are our top priorities in making transit more frequent, convenient, accessible and affordable with our projects?

- Expand and improve service
- Maintain our existing aging system
- Improve the capacity of our existing system
- Invest in capital improvements on our system
- Coordinate investments with other land use and transportation improvements
- Policy changes?
- Short, mid and long term priorities?
- Specific transit projects?
- Transit supportive projects?
- Updates to HCT plan; Transit Capital Investment Plan?

Comments from the work group included:

- Metro has been making transit more equitable with projects completed and planned
- Adding capacity would be the lowest priority
- Making the system complete where there are gaps
- We have to make it a priority to maintain our existing aging system.
- Before expanding, address bottlenecks that have grown since the policy was drafted.

Outside of the work group, bigger picture conversations at Metro with public engagement, possible surveys, and clarifying budgets could help identify priorities. A more fluid program plan designed, with tier 1 financially constrained funding, and tier 2 the next level of strategic planning, could help gain local jurisdiction support for project priorities.

Discussion was held on our growing population, and impact to land use. We need a combination of policies capacity plans to get us the biggest return on investment for transit strategy. An expansion plan is needed that works with our partners that identifies project targets, performance measures, and ways to monitor/evaluate the expected increase with transit.

The group was shown two maps: Going Places, Regional High Capacity Transit System Plan, and the Regional Transit Network Map. Comments on the map:

- Enhanced corridors need to be shown on the map
- The HCT map lacked locations of what is under construction, where long-term need projects are, advising to keep Willamette Shoreline project on the map, and where mobility corridors would be placed.
- I-5 transit need is both OR and WA priorities. How to show this in a multi-jurisdiction project?
- Multimodal vs. transit specific project
- Modeling to show higher needs, highlights these areas on the map, with readiness of projects, eligible for funding possible.
- Inner city connections between Portland and Salem. If future increased traffic, could this be part of transit planning?
- Large maintenance projects are large investments that should be shown on the map
- It was agreed that Powell Division Corridor and Southwest Corridor projects stay on the map
- Studies with future growth need to capture now what will be needed in future planning

Next steps
The work group was asked to send Jamie Snook map additions with all possible information known for map updates. February 6 was chosen as the requested submission date. At the Feb. 23 meeting, named and defined functional transit will be shown on the two maps.

Adjourn
There being no further business, meeting was adjourned by Jamie Snook at 3:03 p.m.

Meeting summary respectfully submitted by:
Marie Miller, Administrative Specialist

Next meeting of RTP Transit work group
Thursday, February 23, 2017, 1-3 p.m.
Metro Regional Center, Room 401

Attachments to the Record:

Item	Topic	Document Date	Description
1	Agenda	1/25/2017	Jan. 25, 2017 Meeting Agenda
2	Handout	1/25/2017	Updated Regional Transit Strategy Vision: Organizing Principle Matrix
3	Memorandum	9/19/2016	Memorandum on proposed HCT funding assumptions for 2018 RTP

Regional Transit Strategy

a component of the 2018 RTP

Transit Work Group Meeting #10

February 23,2017

Today's agenda

Building a transit strategy process

Draft transit related policies

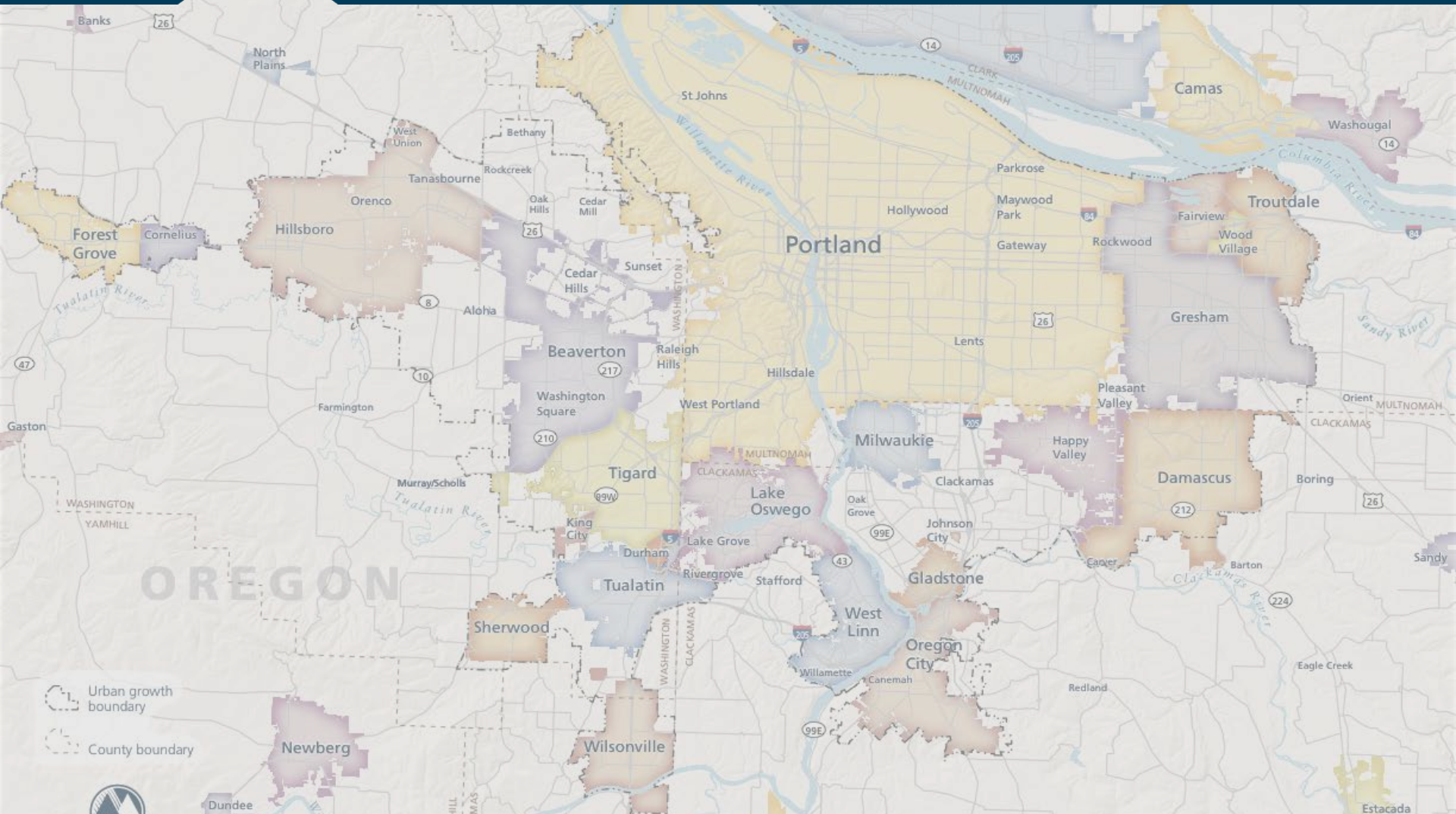
Draft transit vision

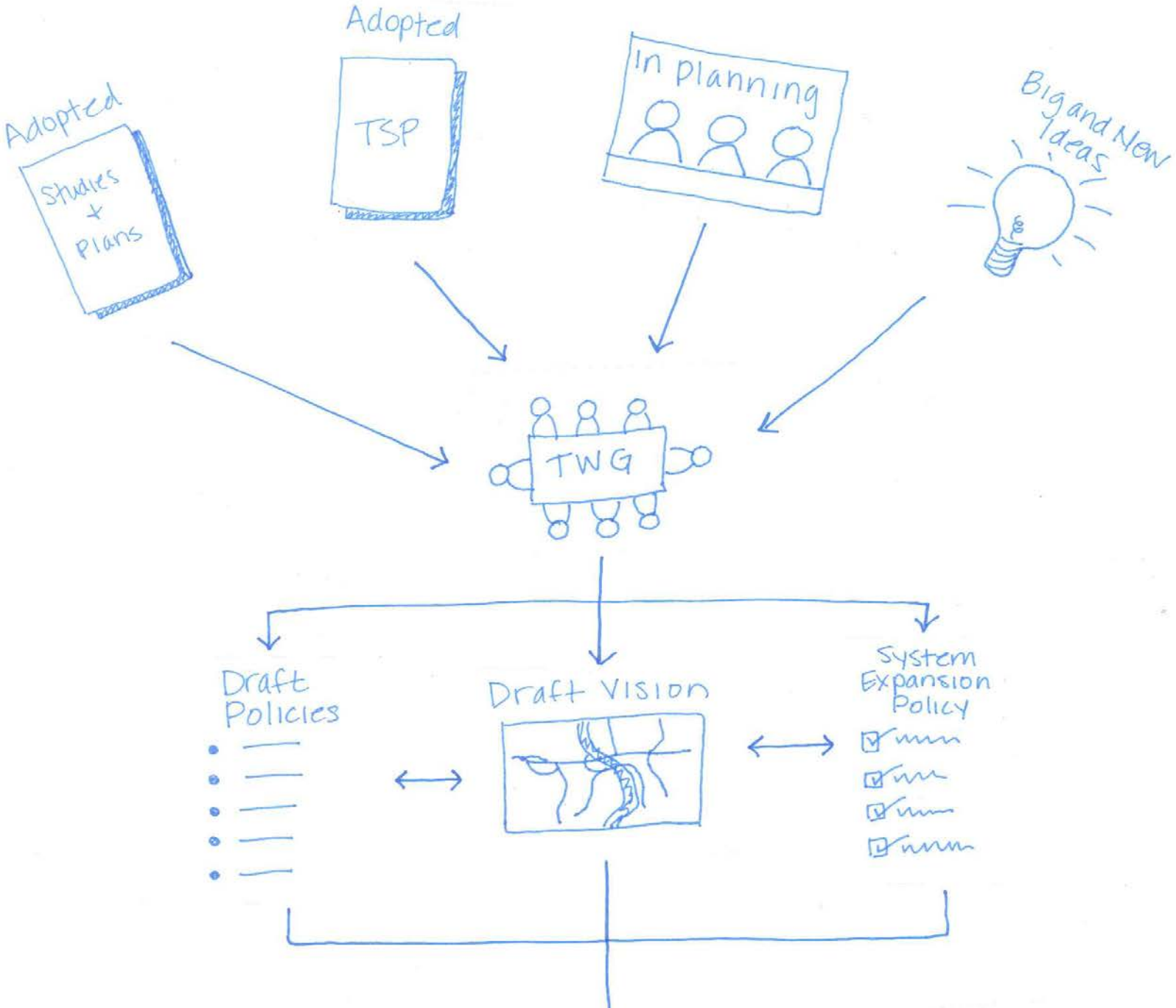
Transit System Expansion Policy

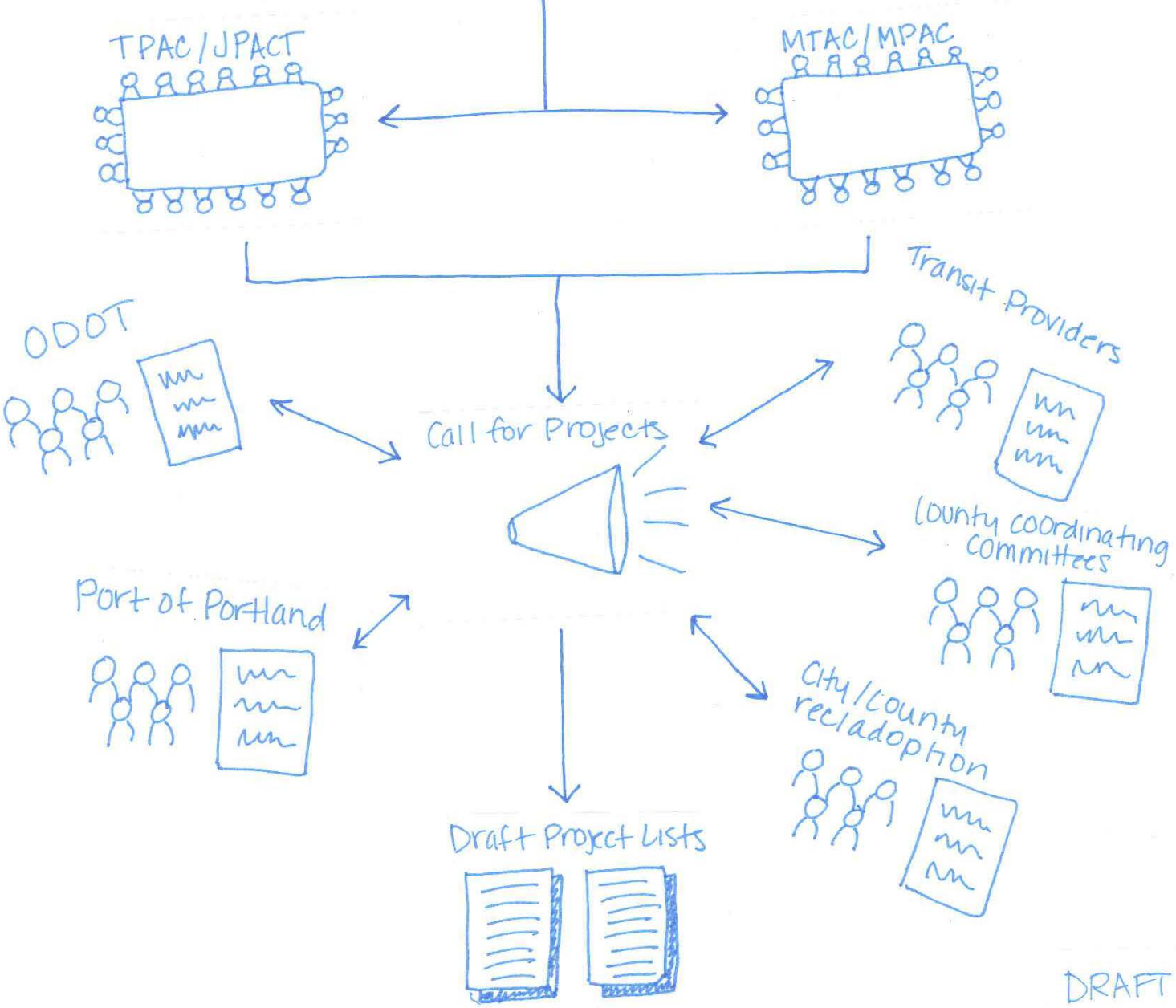
Regional Transit Strategy objectives

- Implement the 2040 Growth Concept and Climate Smart Strategy
- Update RTP transit-related policies and performance measures
- Update the current Regional Transit Network Map and High Capacity Transit Map
- Update the Transit System Expansion Policy
- Recommend a coordinated strategy for future transit investments and identify potential partnerships, strategies and funding sources for implementation.

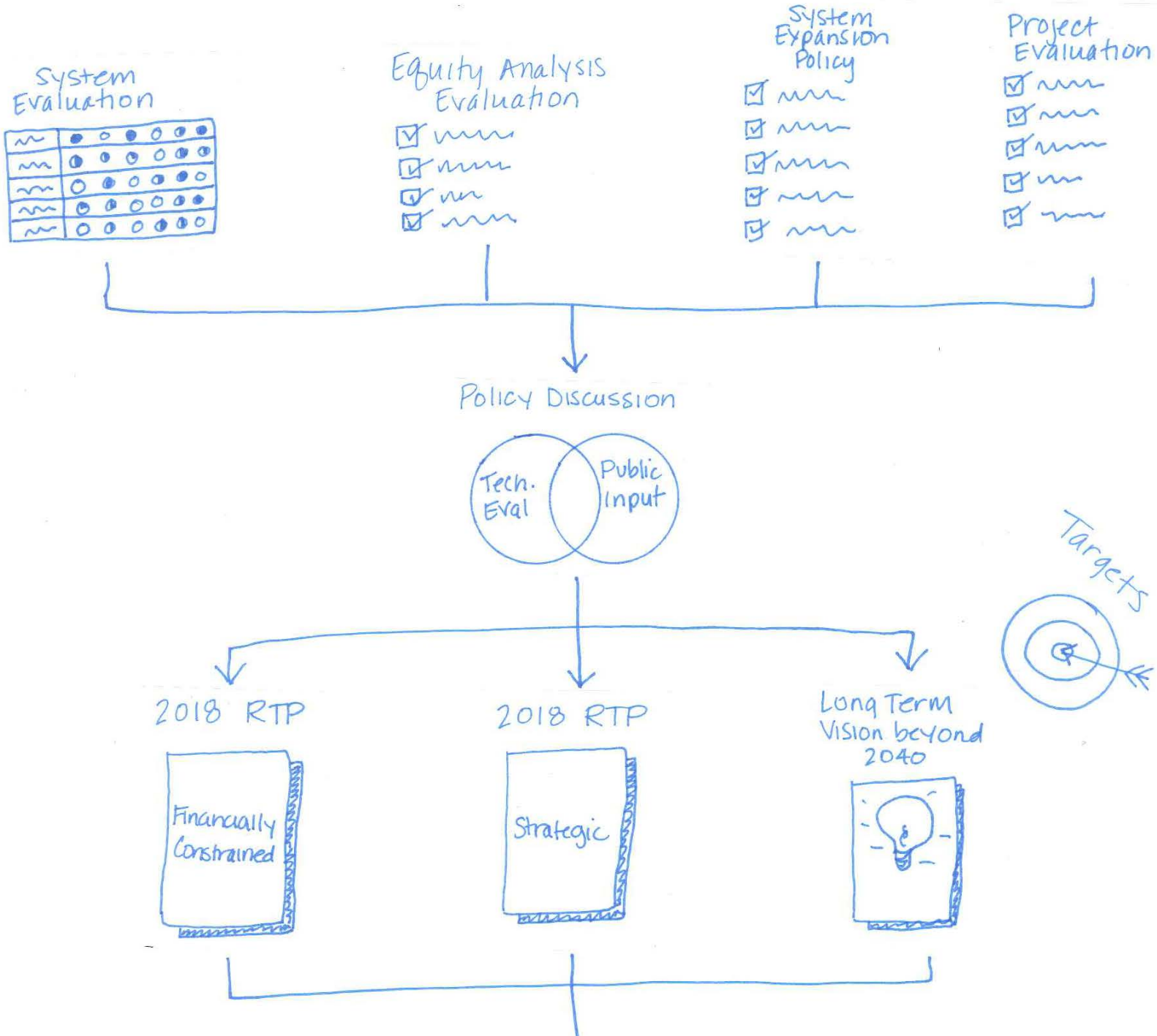
Building a transit strategy

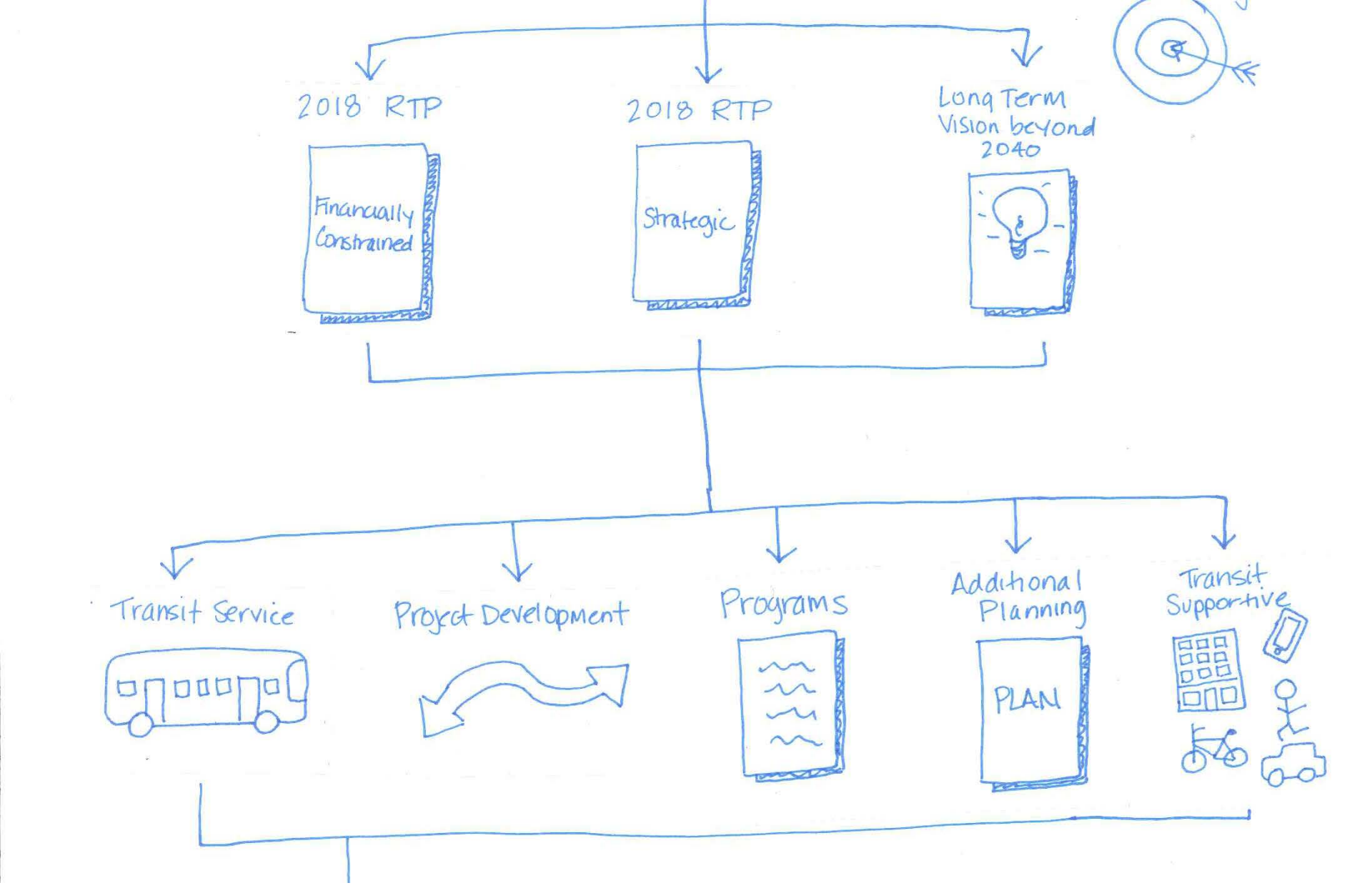


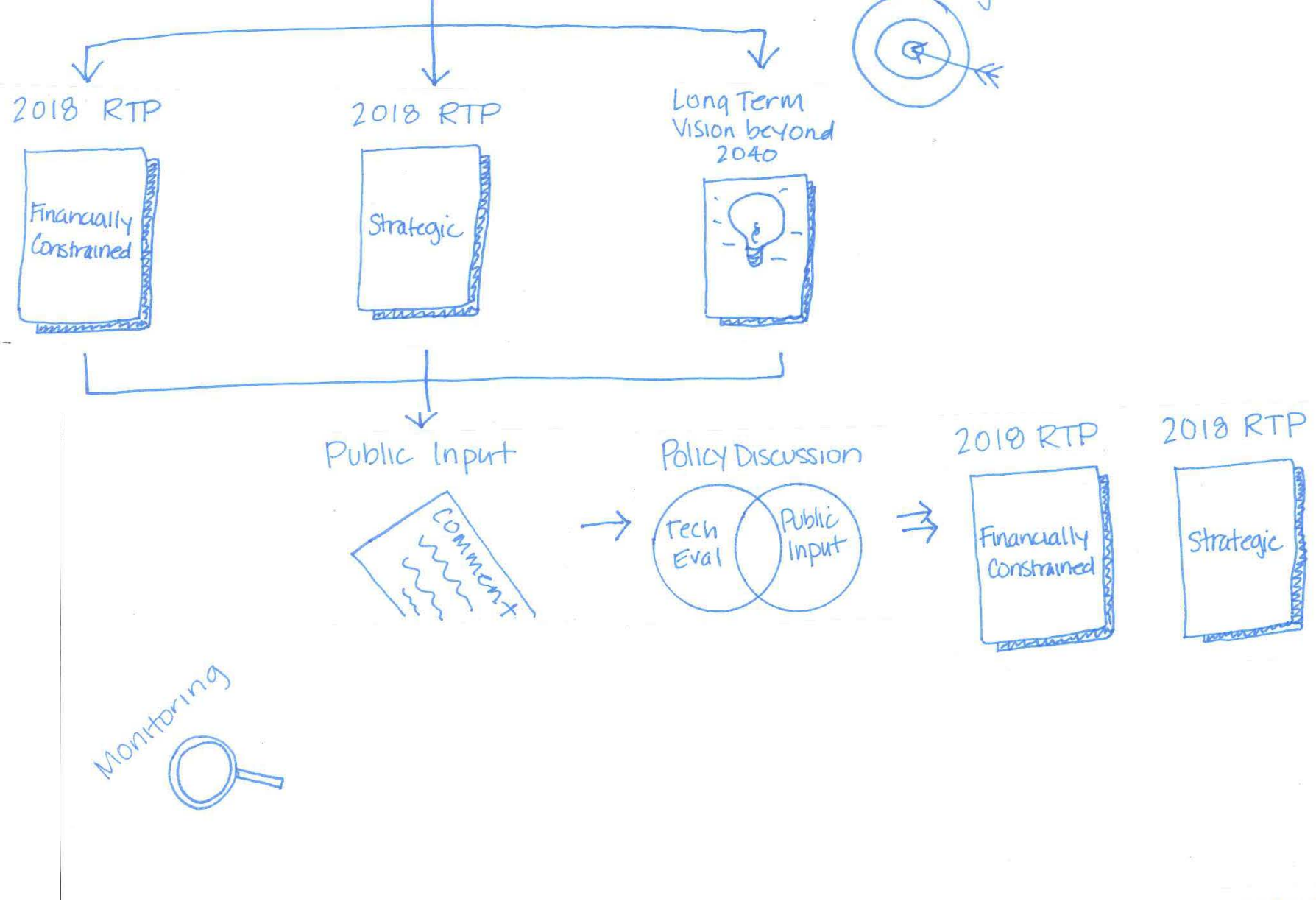

Adopted
Studies + Plans
Adopted
TSP
In planning
Big and New Ideas
TWG
Draft Policies
Draft Vision
System Expansion Policy


TPAC / JPACT
MTAC / MPAC
ODOT
Transit Providers
Call for Projects
County coordinating committees
Port of Portland
City / County rec/adoption
Draft Project Lists

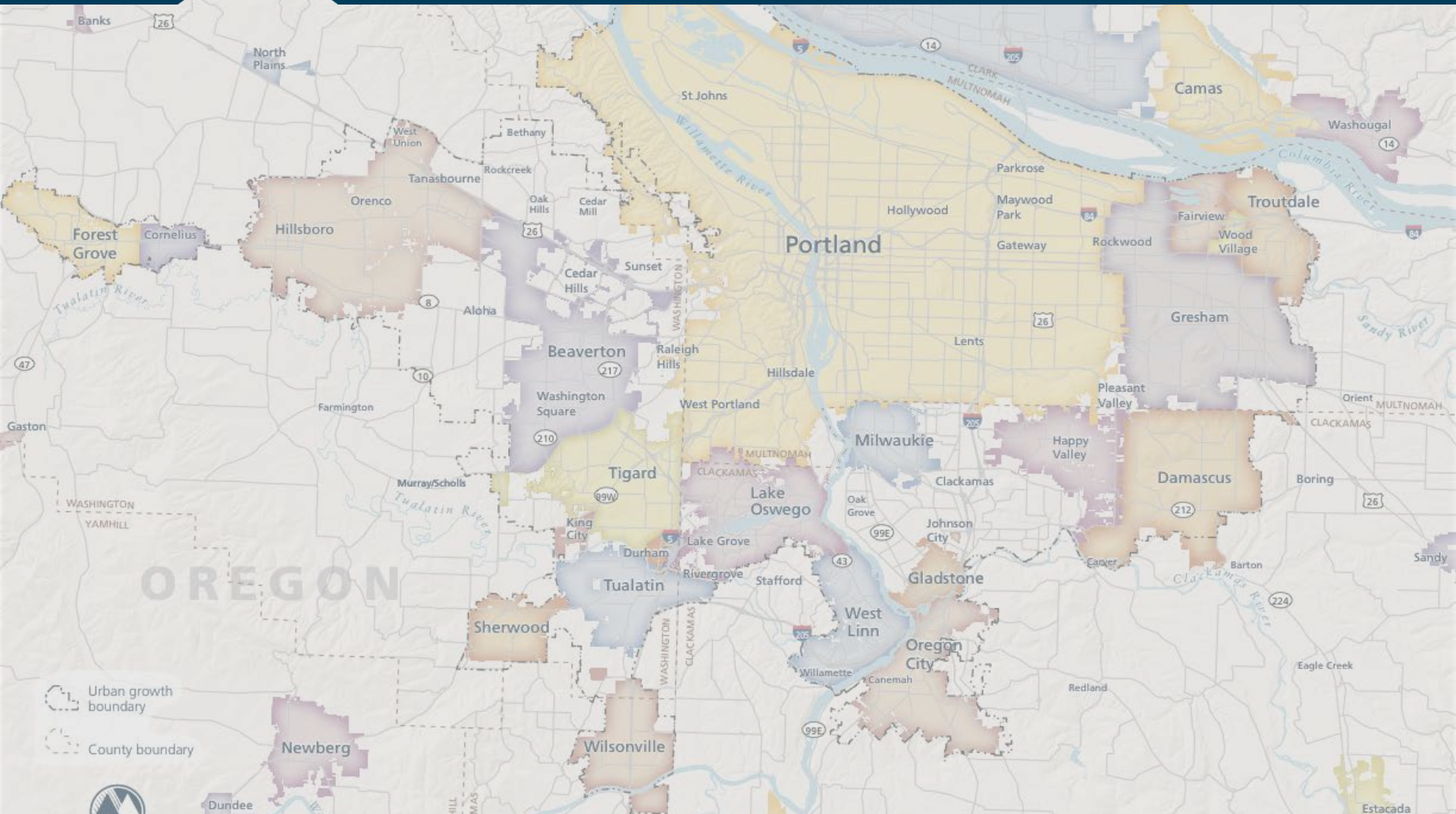
DRAFT 2/2017


System Evaluation
Equity Analysis Evaluation
System Expansion Policy
Project Evaluation
Policy Discussion
Tech. Eval
Public Input
Targets
2018 RTP
Financially Constrained
2018 RTP
Strategic
Long Term Vision beyond 2040


2018 RTP
Financially Constrained
2018 RTP
Strategic
Long Term Vision beyond 2040
Transit Service
Project Development
Programs
Additional Planning
PLAN
Transit Supportive


2018 RTP
Financially Constrained
2018 RTP
Strategic
Long Term Vision beyond 2040
Public Input
COMMENT
Policy Discussion
Tech Eval
Public Input
2018 RTP
Financially Constrained
2018 RTP
Strategic
Monitoring

Transit Policies



What we have heard

Student passes

Funding

Affordable housing

Diverse needs

ITS & technology

Faster service

Equity

Elderly & persons with disabilities

First/last mile

Support growth

Unified fare collection

Affordable

partnerships

Seamless connections

UBER/LYFT

Transit priorities?

- Expand and improve service
- Maintain our existing aging system
- Improve the capacity of our existing system (fix bottlenecks)
- Invest in capital improvements on our system
- Coordinate investments with other land use and transportation improvements

RTP Transit Policies

1. Build the total transit network and transit – supportive land uses to leverage investments
2. Expand high capacity transit
3. Expand regional and local frequent transit service
4. Improve local transit service
5. Support expanded commuter rail and intercity transit service to neighboring communities
6. Improve pedestrian and bicycle access to transit

Goals

FREQUENT

Align frequency and type of transit service to meet existing and projected demand and in support of local and regional land use and transportation visions.

CONVENIENT

Make transit more convenient and competitive with driving by improving transit speed and reliability through priority treatments (e.g., signal priority, bus lanes, queue jumps, etc.) and other strategies. Improve customer experience by ensuring seamless connections between various transit providers, including transfers, information and payment.

Goals

ACCESSIBLE

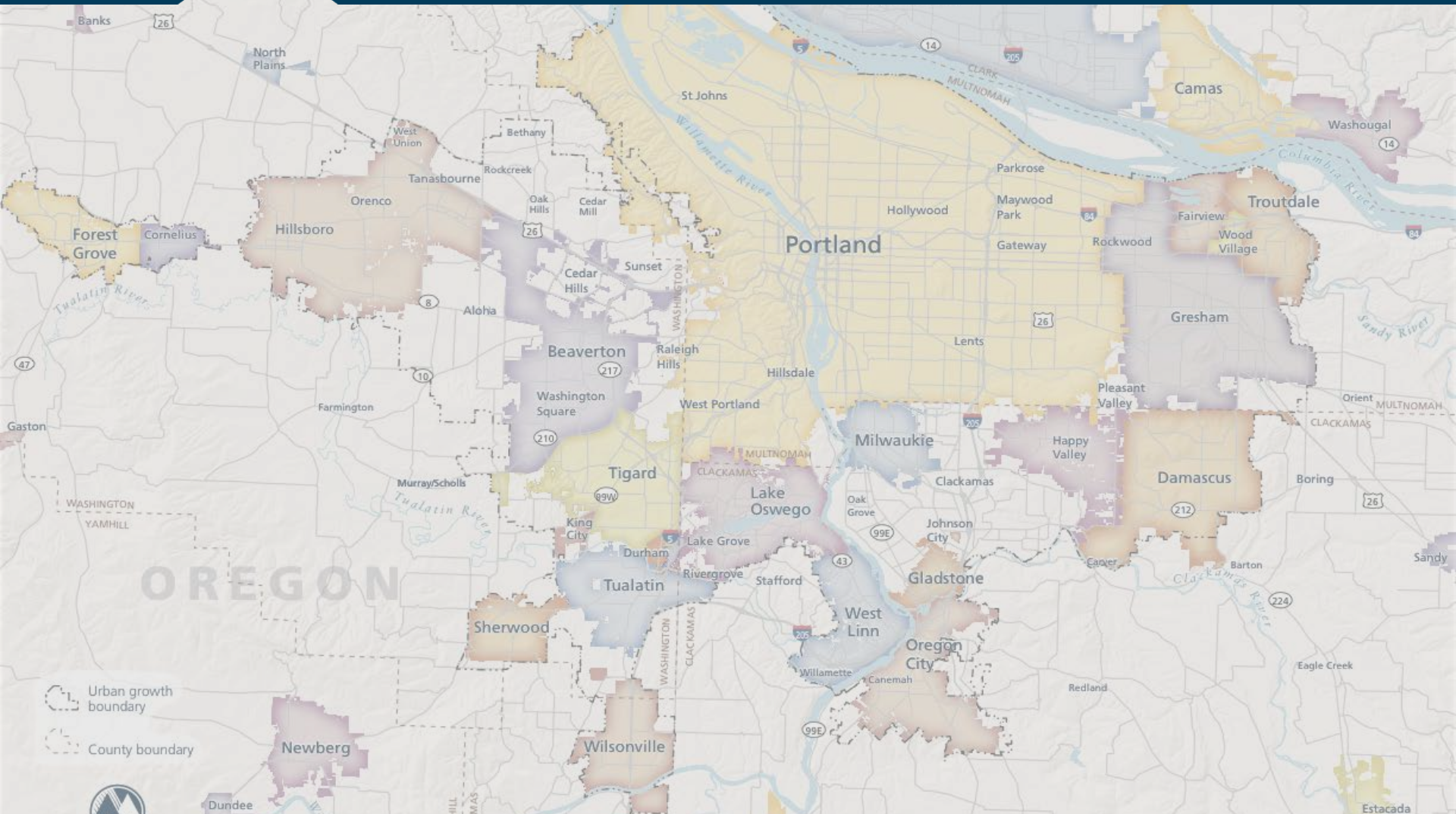
Provide safe and direct biking and walking routes and crossings that connect to stops to make transit more accessible. Expand the system to improve access to jobs and essential destinations/daily needs.

AFFORDABLE

Ensure transit remains affordable, especially for those dependent upon it.

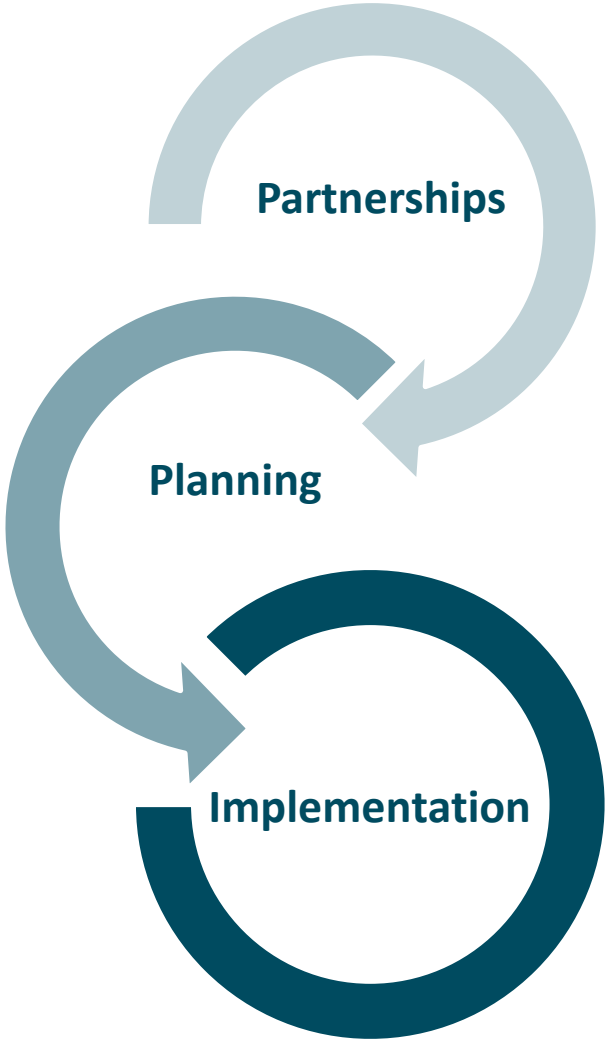
Existing policies		Potential new policies
Build the total transit network and transit – supportive land uses to leverage investments Improve local transit service		• Align frequency and type of transit service to meet existing and projected demand and transit needs. • Support the implementation of local and regional land use and transportation visions.
Expand high capacity transit Expand regional and local frequent transit service		• Make transit more convenient for everyone and competitive with driving by improving transit speed and reliability through priority treatments (e.g., signal priority, bus lanes, queue jumps, etc.) and other strategies. • Improve customer experience by ensuring seamless connections between various transit providers, including transfers, information and payment.
Improve pedestrian and bicycle access to transit		• Provide safe and direct biking and walking routes and crossings and other visibility amenities that connect to stops to make transit more accessible. • Expand the system to improve access to jobs and essential destinations/daily needs for everyone.
Support expanded commuter rail and intercity transit service to neighboring communities		• Support expanded commuter rail and intercity transit service to neighboring communities
		• Maintain, replace and improve critical elements to the system to maintain safe and reliable operations
		• Ensure that transit remains affordable, particularly for those who rely on it the most

Regional Transit Vision



Regional Transit Vision

To make transit more frequent, convenient, accessible and affordable for everyone



Transit typologies

- Commuter rail
- Light rail
- Streetcar
  - Streetcar
  - Rapid streetcar
- Bus Rapid Transit
  - Corridor-based BRT
  - Exclusive BRT
- Regional Bus
  - Peak only service
  - Standard service
  - Express bus
  - Frequent service
- Local bus/Community job connectors
- Paratransit
- Tram

Commuter Rail

Shared freight and commuter railroad tracks

15 miles

5 stations

Light Rail

Exclusive guideway/ shared transitway

60 miles

97 stations

Streetcar

Mixed traffic with some exclusive lanes

13 miles

76 stations

TWO BRT STREET CONFIGURATIONS

A rendering of the two street configurations: a 'dedicated-lane' proposal versus a 'mixed-flow curb lane." Rendering by the city of Palo Alto.

Bus Rapid Transit (BRT)

Majority of exclusive guideway

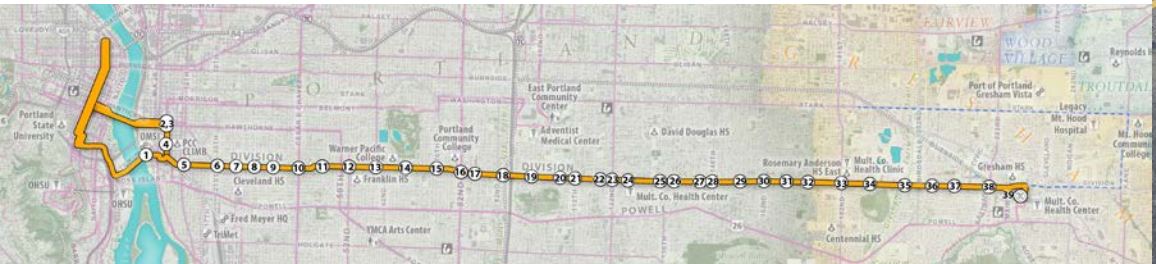
Source: The Rockefeller Foundation

Corridor based BRT

Mix of priority treatments and mixed traffic

Currently being planned for the Division Street Corridor

Planned: 14 miles
~ 40 stations



Bus

Mixed traffic with some priority treatments

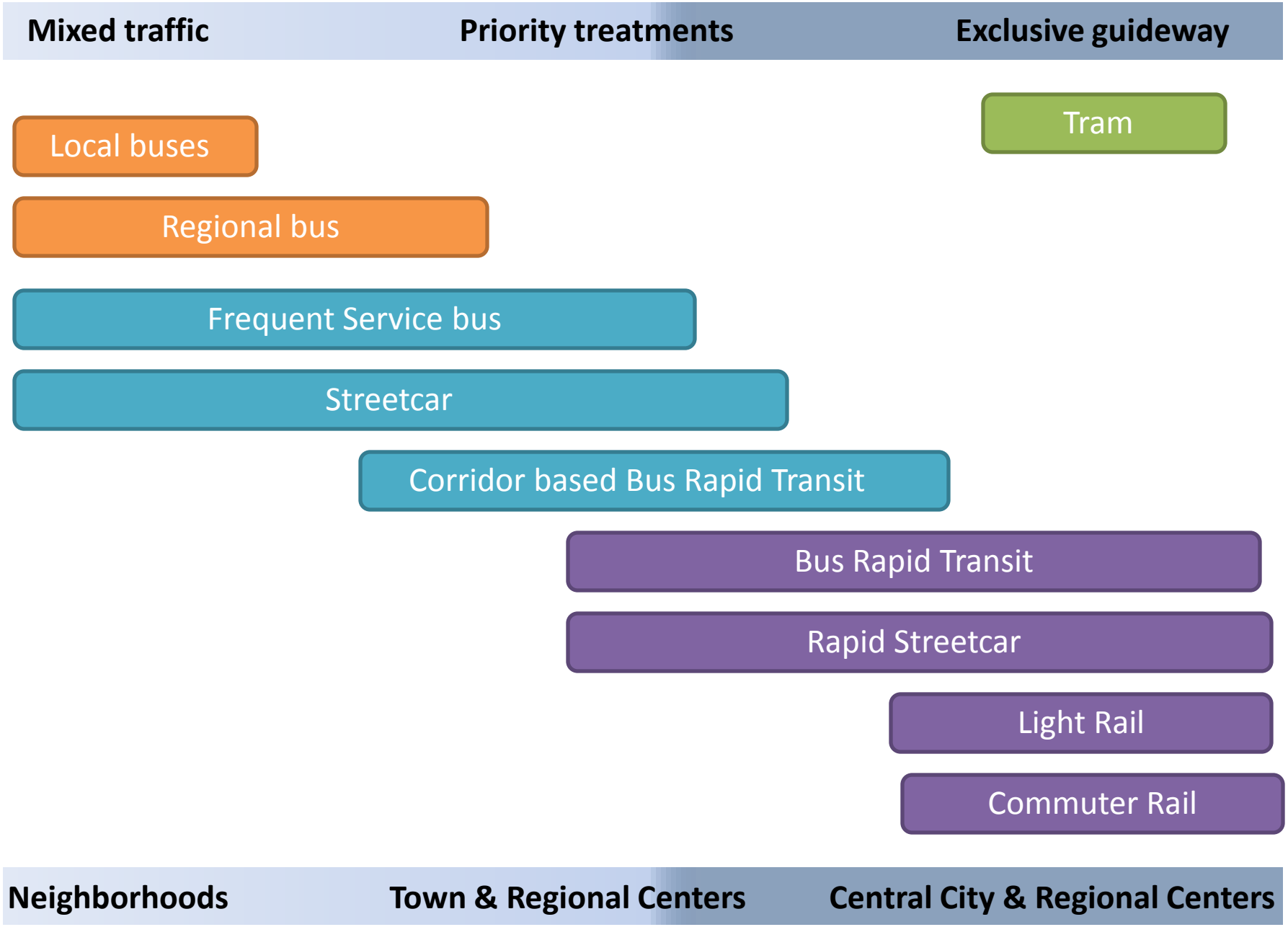
- Peak only service
- Standard service
- Express bus
- Frequent service

822 miles

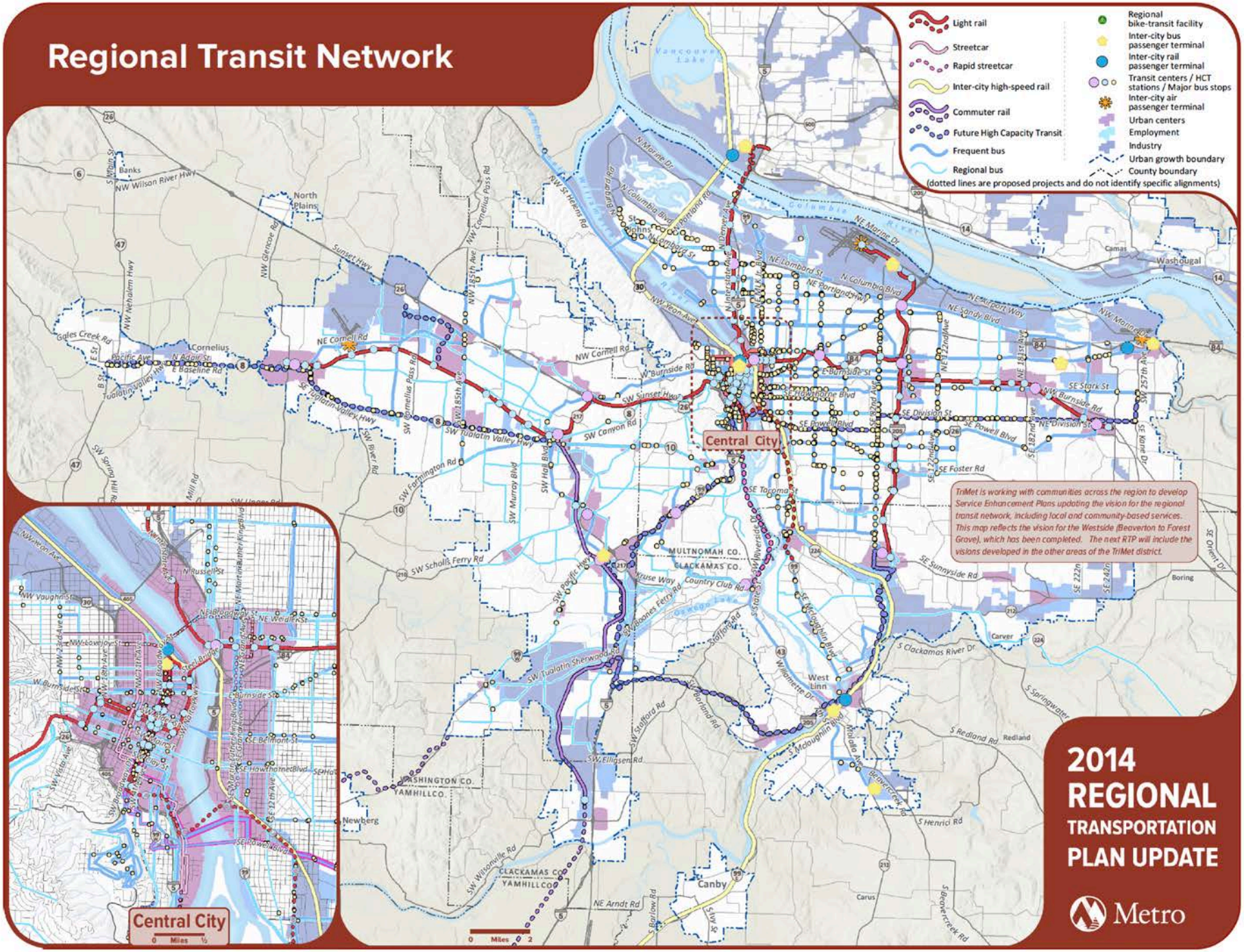
8,710 stops

Local bus/community and job connector

REGIONAL TRANSIT SPECTRUM



Regional Transit Network



2014 REGIONAL TRANSPORTATION PLAN UPDATE

Metro

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.

Level 1: Service Enhancement Plan Partnerships with Local Jurisdictions $2-10 Million

Level 2: Small Scale Enhanced Transit $10-40 Million

Level 3: Medium Scale Enhanced Transit (Shorter Corridor Center to Center Connections) $40-80 Million

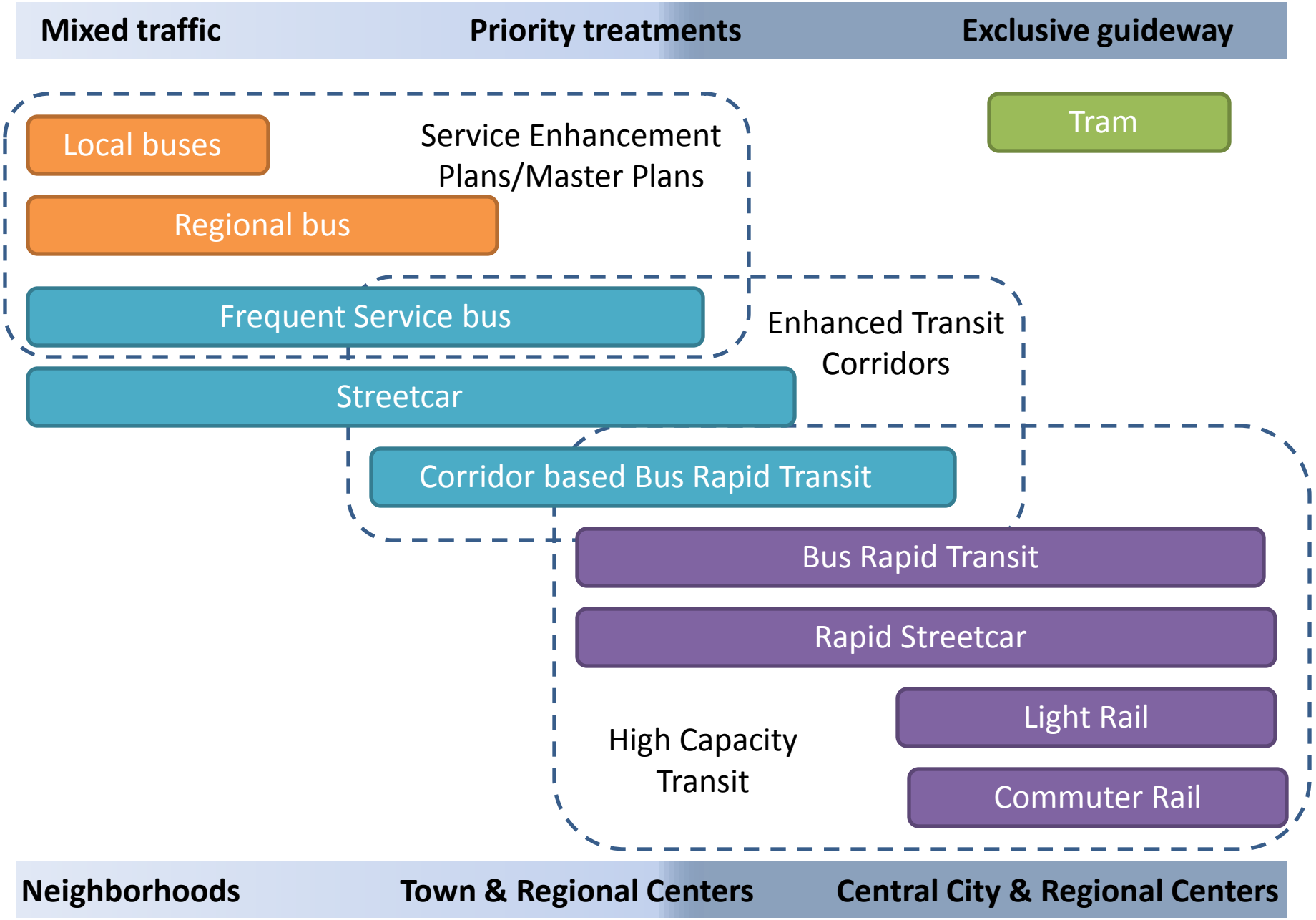
Level 4: Large Scale Enhanced Transit (Longer Corridors Connecting Multiple Centers) $80-200 Million

High Capacity Transit

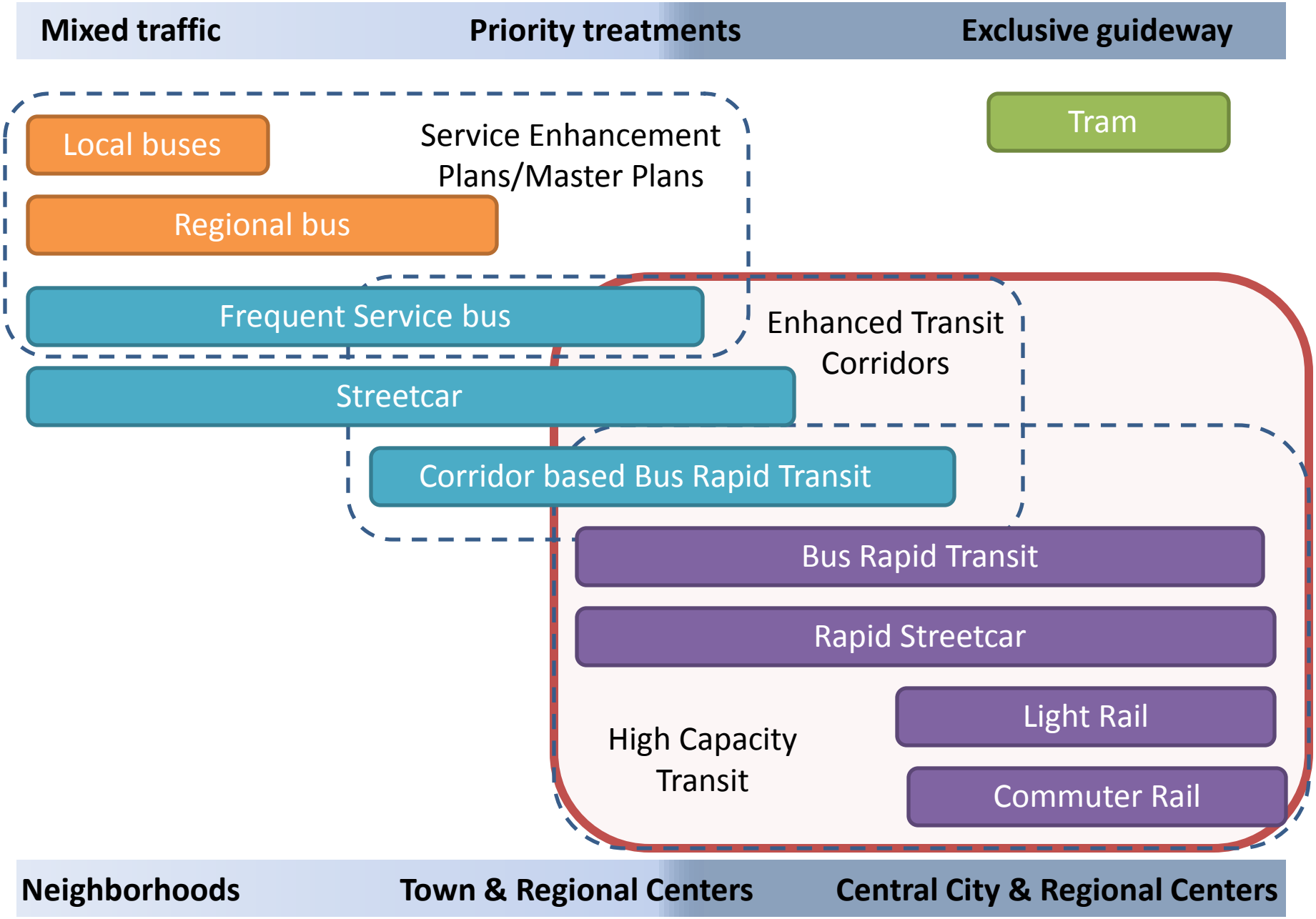
"To carry high volumes of passengers quickly and efficiently from one place to another. Other defining characteristics of HCT service include the ability to bypass traffic and avoid delay by operating in exclusive or semi-exclusive rights of way, faster overall travel speeds due to wide station spacing, frequent service, transit priority street and signal treatments, and premium station and passenger amenities."

Metro, 2035 Regional High Capacity Transit System Plan, 2009.

REGIONAL TRANSIT SPECTRUM



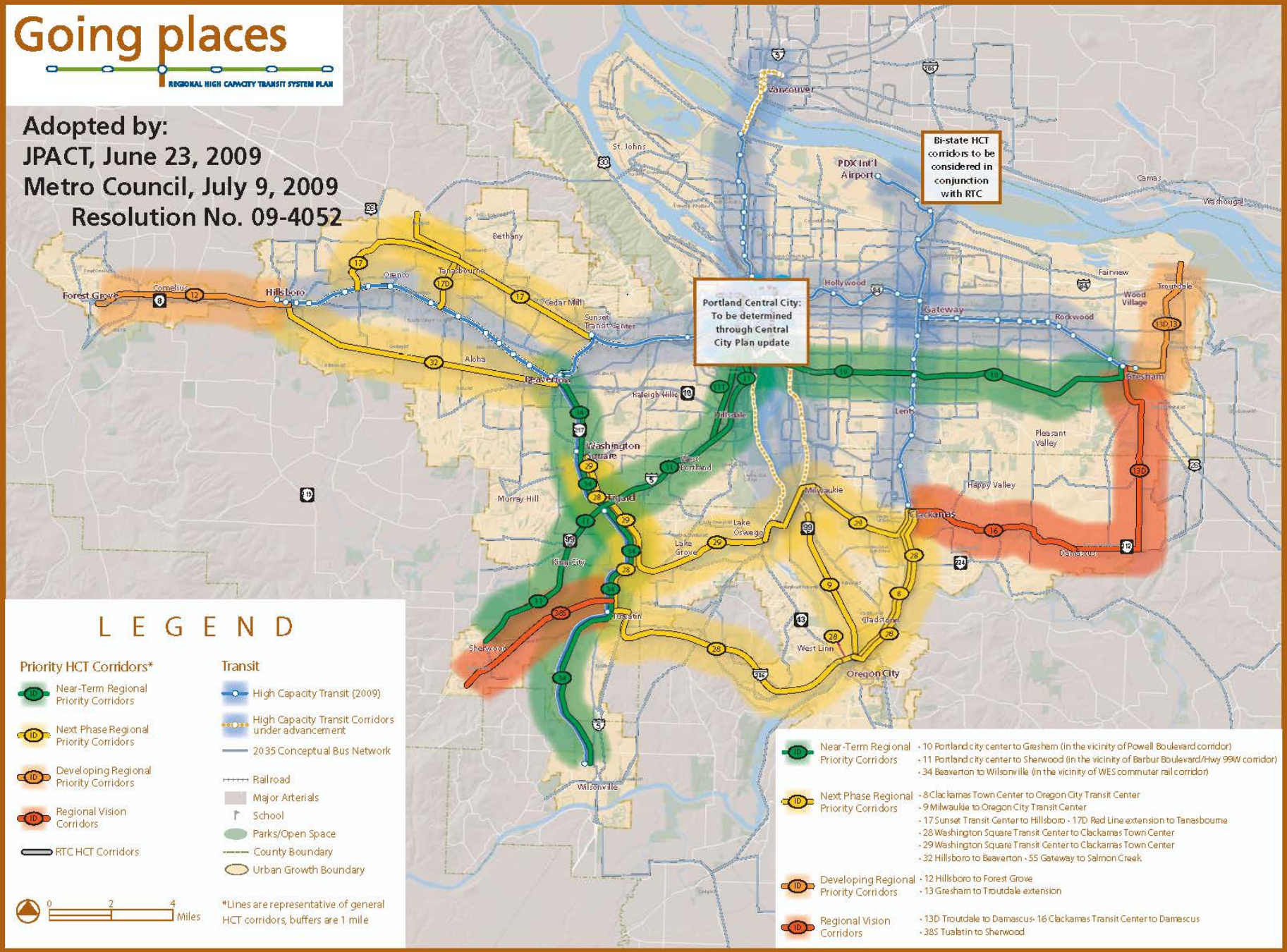
REGIONAL TRANSIT SPECTRUM



Going places

REGIONAL HIGH CAPACITY TRANSIT SYSTEM PLAN

Adopted by:
JPACT, June 23, 2009
Metro Council, July 9, 2009
Resolution No. 09-4052



LEGEND

Priority HCT Corridors*

- Near-Term Regional Priority Corridors
- Next Phase Regional Priority Corridors
- Developing Regional Priority Corridors
- Regional Vision Corridors
- RTC HCT Corridors

Transit

- High Capacity Transit (2009)
- High Capacity Transit Corridors under advancement
- 2035 Conceptual Bus Network
- Railroad
- Major Arterials
- School
- Parks/Open Space
- County Boundary
- Urban Growth Boundary

0 2 4 Miles

*Lines are representative of general HCT corridors, buffers are 1 mile

Near-Term Regional Priority Corridors
- 10 Portland city center to Gresham (in the vicinity of Powell Boulevard corridor)
- 11 Portland city center to Sherwood (in the vicinity of Barbur Boulevard/Hwy 99W corridor)
- 34 Beaverton to Wilsonville (in the vicinity of WES commuter rail corridor)

Next Phase Regional Priority Corridors
- 8 Clackamas Town Center to Oregon City Transit Center
- 9 Milwaukie to Oregon City Transit Center
- 17 Sunset Transit Center to Hillsboro · 17D Red Line extension to Tanasbourne
- 28 Washington Square Transit Center to Clackamas Town Center
- 29 Washington Square Transit Center to Clackamas Town Center
- 32 Hillsboro to Beaverton · 55 Gateway to Salmon Creek

Developing Regional Priority Corridors
- 12 Hillsboro to Forest Grove
- 13 Gresham to Troutdale extension

Regional Vision Corridors
- 13D Troutdale to Damascus· 16 Clackamas Transit Center to Damascus
- 38S Tualatin to Sherwood

Update to transit vision

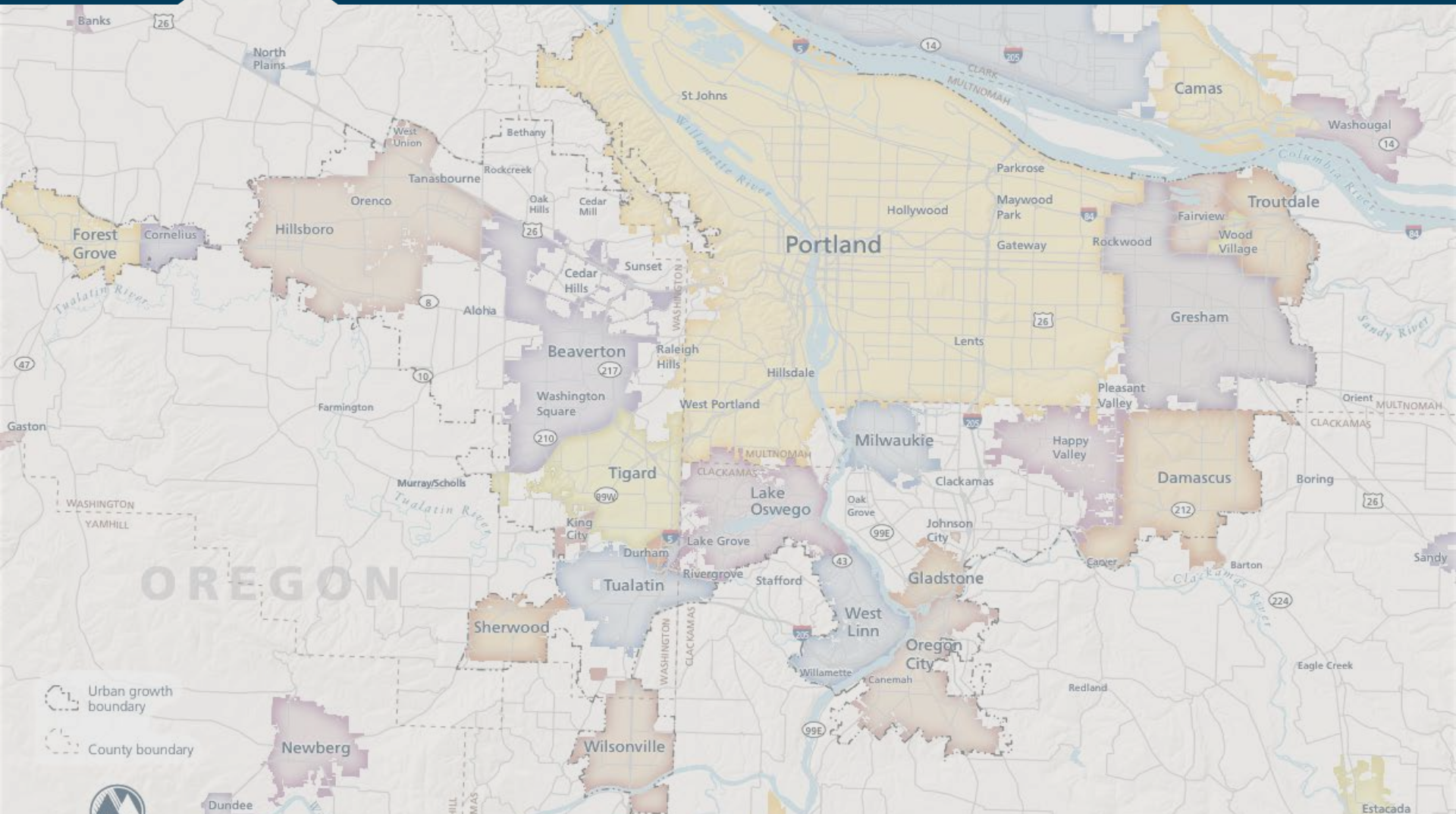
Map exercise:

What are the transit needs in the regions?

What is our regional transit vision?

Where do we want to see improvements?

Transit System Expansion Policy



Thank you

oregonmetro.gov

Memo

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

Date: Thursday, February 23, 2017
To: Regional Transit Work Group
From: Jamie Snook, Metro Principal Planner
Subject: February 2017 Transit Work Group Meeting Discussion Guide

The purpose of this memorandum is to provide some background and context to the Transit Work Group meeting this week on February 23, 2017. The meeting will focus on four items:

- Regional Transit Strategy process
- Draft transit related policies (for the 2018 Regional Transportation Plan (RTP) Update),
- Draft transit network vision, and
- Transit System Expansion Policy framework.

Regional Transit Strategy process

The Regional Transit Strategy is a collaborative effort to create a single coordinated transit vision and implementation strategy. The objectives of the Regional Transit Strategy are:

- Implement the 2040 Growth Concept and Climate Smart Strategy
- Update RTP transit-related policies and performance measures
- Update the current Regional Transit Network Map and High Capacity Transit Map
- Update the Transit System Expansion Policy
- Recommend a coordinated strategy for future transit investments and identify potential partnerships, strategies and funding sources for implementation.

The attached work flow diagram, Building a Regional Transit Strategy (see attachment A) shows how the regional transit strategy fits within the context of the RTP. The Transit Work Group will discuss the potential updates to the transit related policies, transit network and the transit system expansion policies.

The Regional Transit Strategy is building off previous plans and studies to develop a coordinated transit vision. The vision can also include new ideas emerging such as enhanced transit corridors concept that meet a regional transit need. All of these combined create a transit vision for the future. The Transit Work Group will develop draft transit policies, a draft transit vision and updates to the Transit System Expansion Policy prior to the call for projects phase (June 1 – July 21, 2017) of the 2018 RTP.

Projects identified through the call for projects phase of the RTP will be evaluated based on the system wide performance and equity measures. Major transit investments, such as enhanced transit corridors and high capacity transit, will be evaluated through the System Expansion Policy readiness criteria. An individual project assessment will be conducted a small subset of projects, to be defined. This information plus public input will be the basis for the RTP policy discussion which includes the technical analysis and public input.

Draft Transit Related Policies

We are building a strong Regional Transit Vision and Strategy towards implementation. As a group, we have come together around a future vision to make transit more frequent, convenient, accessible and affordable for everyone. In addition, we have started to identify strategies to bring this vision to life. The attached table (see attachment B) identifies the specific goals and associated strategies.

The goals and strategies are comparable to our existing transit policies. Updating our existing transit policies with our regional transit vision and goals provides a framework for how we see and implement our transit vision. The following goals could be framed as policies.

To make transit more frequent:

- Align frequency and type of transit service to meet existing and projected demand and transit needs.
- Support the implementation of local and regional land use and transportation visions

To make transit more convenient:

- Make transit more convenient for everyone and competitive with driving by improving transit speed and reliability through priority treatments (e.g., signal priority, bus lanes, queue jumps, etc.) and other strategies.
- Improve customer experience by ensuring seamless connections between various transit providers, including transfers, information and payment.

To make transit more accessible:

- Provide safe and direct biking and walking routes and crossings and other visibility amenities that connect to stops to make transit more accessible.
- Expand the system to improve access to jobs and essential destinations/daily needs for everyone.

To make transit more affordable:

- Ensure that transit remains affordable, particularly for those who rely on it the most

These goals or potential new policies do not include the existing policy: **Support expanded commuter rail and intercity transit service to neighboring communities.** This is still an important part of our transit system and is proposed to remain as a policy.

Additionally, we discussed at our last meeting the need to maintain our existing aging system and improve existing transit bottlenecks. While our current policies do identify this as a need, it is not specifically called out as a policy. A recommendation could be to add a policy such as: **Maintain, replace and improve critical elements to the system to maintain safe and reliable operations.**

Table 1 presents how potential new transit policies relate to our existing policy framework.

Table 1: Existing and Potential Transit Policies

Existing policies		Potential new policies
Build the total transit network and transit –supportive land uses to leverage investments Improve local transit service	→	• Align frequency and type of transit service to meet existing and projected demand and transit needs. • Support the implementation of local and regional land use and transportation visions.
Expand high capacity transit Expand regional and local frequent transit service	→	• Make transit more convenient for everyone and competitive with driving by improving transit speed and reliability through priority treatments (e.g., signal priority, bus lanes, queue jumps, etc.) and other strategies. • Improve customer experience by ensuring seamless connections between various transit providers, including transfers, information and payment.
Improve pedestrian and bicycle access to transit	→	• Provide safe and direct biking and walking routes and crossings and other visibility amenities that connect to stops to make transit more accessible. • Expand the system to improve access to jobs and essential destinations/daily needs for everyone.
Support expanded commuter rail and intercity transit service to neighboring communities	→	• Support expanded commuter rail and intercity transit service to neighboring communities
		• Maintain, replace and improve critical elements to the system to maintain safe and reliable operations
		• Ensure that transit remains affordable, particularly for those who rely on it the most

To summarize, these are proposed draft transit related policies for our discussion:

1. Align frequency and type of transit service to meet existing and projected demand and transit needs.
2. Support the implementation of local and regional land use and transportation visions.
3. Make transit more convenient for everyone and competitive with driving by improving transit speed and reliability through priority treatments (e.g., signal priority, bus lanes, queue jumps, etc.) and other strategies.
4. Improve customer experience by ensuring seamless connections between various transit providers, including transfers, information and payment.
5. Provide safe and direct biking and walking routes and crossings and other visibility amenities that connect to stops to make transit more accessible.
6. Expand the system to improve access to jobs and essential destinations/daily needs for everyone.

7. Ensure transit remains affordable, especially for those dependent upon it.
8. Maintain, replace and improve critical elements to the system to maintain safe and reliable operations
9. Support expanded commuter rail and intercity transit service to neighboring communities.

Draft transit network vision

As part of the 2018 RTP update, the transit work group is charged with updating the Regional Transit Vision and Total Transit Network Map (see attachment C). The Total Transit Network Map presents the long term vision for transit in the region. This includes future transit service improvements and major capital investments. The Regional Transit Strategy will identify the transit need and solutions based on the planning efforts conducted by regional partners. The Transit Strategy will look to develop solutions for transit needs that are unmet.

Together we can coordinate all of these efforts into one unified transit vision and network map. We need the Transit Work Group's help in identifying changes and additions to make transit more frequent, convenient, accessible and affordable. We need help from our partners around the region to help identify where there are needs not being met and where there should be changes to the vision.

Typically, the RTP only includes projects and plans that have been adopted in a TSP, subarea plan, topical or modal plan, or transit service plan through a public process that provided opportunities for the public and stakeholders. We rely on agencies to conduct the local public engagement needed for all projects to come into the RTP. This is still true; however, the Regional Transit Strategy provides an opportunity to identify transit related needs not being met and new improvements or investments that can meet those needs. Any new projects submitted to the RTP will still need to have an agency's governing body approval to be submitted to the RTP, through the call for projects.

Transit System Expansion Policy framework

The Regional High Capacity Transit (HCT) System Plan and transit System Expansion Policy were adopted in 2009. The HCT Plan identified a HCT network and prioritized transit investments into tiers. Tier 1 of the network included the Southwest and Powell-Division corridors, which are moving forward into project development and environmental review under the National Environmental Policy Act (NEPA). The System Expansion Policy is designed to help jurisdictions move projects towards implementation. The purpose of the System Expansion Policy is to:

1. Clearly articulate the decision-making process by which future HCT corridors will be advanced for regional investment
2. Establish minimum requirements for HCT corridor working groups to inform local jurisdictions as they work to advance their priorities for future HCT
3. Define quantitative and qualitative performance measures to guide local land use and transportation planning and investment decisions
4. Outlines the process for updating the 2035 RTP, including Potential future RTP amendments, for future HCT investment decisions

The HCT Plan, and System Expansion Policy support the region's vision defined by the 2040 Growth Concept. Since the adoption f the HCT Plan and the System Expansion Policy, the region adopted the Six Desired Outcomes and completed the Climate Smart Strategy, while TriMet completed their Service Enhancement Plans and SMART embarked upon their Transit Master Plan. Other jurisdictions have continued to develop localized plans and policies that support transit improvements and investments in the region. Additionally, the Federal Transit Administration

(FTA) Capital Investment Grant (CIG) program, which provides federal funding support for high capacity transit projects, has evolved as part of the Fixing America's Surface Transportation (FAST) Act. Based on these events, it makes sense to evaluate if there are any changes needed to the system expansion policy to support the most current plans and policies.

Next Steps

Next steps for the Regional Transit Strategy are:

- March:
  - 3/15/17 - Presentation/update to MTAC
  - Discussions with regional partners, as needed
  - 3/31/17 - Presentation/update to TPAC
- April:
  - TBD - Transit work group meeting to further discuss transit policies, transit vision and system expansion policy
  - 4/11/17 - Presentation/update to Metro Council
  - 4/12/17 - Presentation/update to MPAC
  - 4/20/17 - Presentation/update to JPACT
  - TBD - Presentation/update to TriMet Board
- May:
  - TBD - Transit work group meeting to further discuss transit policies, transit visoion and system expansion policy
- June:
  - Call for projects
- Late summer/early fall:
  - TBD - Transit work group meeting to further discuss transit policies, transit vision and system expansion policy

Attachment A

Building a Regional Transit Strategy

Adopted
Studies + Plans

Adopted
TSP

In planning

Big and New Ideas

TWG

Draft Policies

Draft Vision

System Expansion Policy

TPAC/JPACT

MTAC/MPAC

ODOT

Transit Providers

Call for Projects

County coordinating committees

Port of Portland

City/County recladoption

Draft Project Lists

DRAFT 2/2017

System Evaluation

Equity Analysis Evaluation

System Expansion Policy

Project Evaluation

Policy Discussion

Tech. Eval

Public Input

Targets

2018 RTP

Financially Constrained

2018 RTP

Strategic

Long Term Vision beyond 2040

Transit Service

Project Development

Programs

Additional Planning

PLAN

Transit Supportive

Public Input

COMMENT

Policy Discussion

Tech Eval

Public Input

2018 RTP

Financially Constrained

2018 RTP

Strategic

Monitoring

DRAFT 2/2017

Regional transit strategy vision

To make transit more frequent, convenient, accessible and affordable for everyone

FREQUENT	CONVENIENT	ACCESSIBLE	AFFORDABLE
Align frequency and type of transit service to meet existing and projected demand and transit needs. Support the implementation of local and regional land use and transportation visions.	Make transit more convenient for everyone and competitive with driving by improving transit speed and reliability through priority treatments (e.g., signal priority, bus lanes, queue jumps, etc.) and other strategies. Improve customer experience by ensuring seamless connections between various transit providers, including transfers, information and payment.	Provide safe and direct biking and walking routes and crossings and other visibility amenities that connect to stops to make transit more accessible. Expand the system to improve access to jobs and essential destinations/daily needs for everyone.	Ensure transit remains affordable, especially for those dependent upon it.
• Implement TriMet's Future of Transit/Service Enhancement Plans • Implement SMART Master Plan • Implement Portland Streetcar expansion plans • Implement and coordinate with C-TRAN's future plans • Invest in High Capacity Transit corridors/Enhanced Transit Corridor improvements • Implement and coordinate with other transit providers future service plans • Implement Coordinated Transportation Plan, in conjunction with STFAC and service providers • Coordinate transit investments with local and regional land use and transportation visions as service improvements are prioritized • Monitor existing and projected transit demands to determine if adjustments may be needed.	• Implement transit providers future service increases • Invest in State of Good Repair and Core Capacity needs to ensure existing system functions effectively and efficiently • Invest in Enhanced Transit Corridor improvements • Invest in High Capacity Transit corridors • Facilitate service connections at transit hubs • Implement and coordinate the HOP Fastpass program across multiple service providers • Invest in next-generation transit signal priority and right of way improvements, especially in congested corridors where transit experiences delay and reliability issues • Provide programs and adopt policies that support transit usage and manage demand for single occupancy vehicle (SOV) travel, such as travel training, employer outreach, parking and zoning codes • Coordinate efforts between transportation providers to increase information sharing and ease of use (e.g., transfers and payment integration	• Coordinate transit investments with improvements to pedestrian and bicycling infrastructure that provide access to transit as service improvements are prioritized, in line with Regional Active Transportation Plan • Enhance transit access to jobs and other daily needs, especially for communities of color, lower-income households, communities with limited English proficiency, older adults, and youth • Coordinate efforts with shared mobility and ride-sourcing providers to support better first and last mile connections • Coordinate transit-oriented development strategies with transit investments • Coordinate transit investments with the regional Equitable Housing strategies • Coordinate transit investments with local and regional land use and transportation visions as service improvements are prioritized • Continue to implement community and job connector transit services to establish a transit seed for potential new routes and services.	• Develop a low-income fare program, in line with TriMet Task Force recommendation • Expand student pass program • Continue to support funding efforts to further expand special transportation services • Support strategic deployment of expanded special transportation services • Implement and coordinate with the HOP Fastpass program across multiple service providers

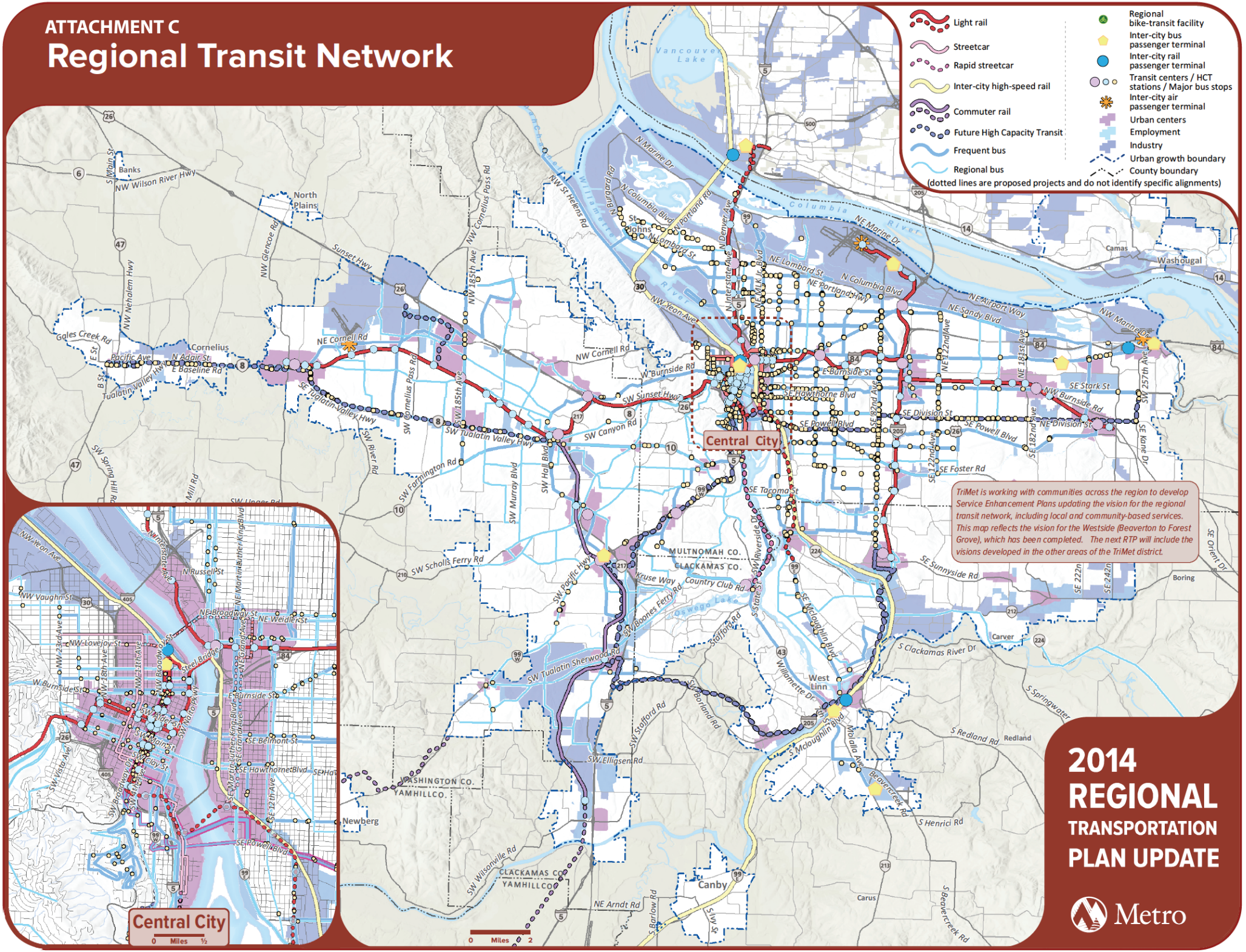
Regional transit strategy vision

WHAT | WHO | HOW

	TRANSIT SERVICE	PROJECTS	SUPPORTIVE ELEMENTS
	What does this include?		
WHAT	• Increase and expand transit service • Provide access to community places and jobs, particularly for those who depend on transit service to reach these places on a regular basis • Coordinate between transit service providers	• Invest in major capital transit projects (ETC and HCT type projects) • Invest in State of Good Repair and Core Capacity needs to ensure existing system functions effectively and efficiently • Invest in pedestrian and bicycle infrastructure that provides access to transit as service improvements are prioritized, in line with the Regional Active Transportation Plan and increase access for communities of color, households with lower-incomes, communities with limited English proficiency, older adults, and youth • Invest in technology and other system management and operations strategies (TSMO) to support transit effectiveness • Invest in educational and other travel demand management (TDM) programs and policies to support transit effectiveness	• Coordinate with local and regional land use and transportation visions as service improvements are prioritized • Coordinate transit oriented development opportunities • Coordinate with affordable and equitable housing strategies opportunities • Coordinate efforts with shared mobility and ride-sourcing providers to support better first and last mile connections • Invest in pedestrian and bicycle infrastructure that provides access to transit as service improvements are prioritized, in line with the Regional Active Transportation Plan • Invest in TSMO and TDM • Implement HOP Fastpass, in coordination among multiple transit service providers • Implement low-income fare programs • Expand student pass programs
	Who is the lead?		
WHO	• Transit providers, in coordination with local jurisdictions, community organizations and business groups, riders and general public	• Local jurisdictions • Transit providers • Regional agencies • State and Federal	• Transportation Management Associations (TMAs) • Local jurisdictions • Transit providers • Regional agencies • State and Federal
	How does this get prioritized?		
HOW	• Annual service planning prioritization processes	• Local Transportation System Plans (TSP) • Local, regional and state Transportation Improvement Plans (TIP) • Transit System Expansion Policy • Regional Transportation Plan • Oregon Public Transportation Plan	• Local Transportation System Plans (TSP) • Local, regional and state Transportation Improvement Plans (TIP) • Transit System Expansion Policy • Regional Transportation Plan • Oregon Public Transportation Plan

ATTACHMENT C

Regional Transit Network



2014 REGIONAL TRANSPORTATION PLAN UPDATE

Metro

Timeline | 2018 Regional Transportation Plan

Key
- Materials to support decision-making
- Public engagement incorporated and addressed
- Metro Council direction incorporated

Key Steps in Process
1. Confirm vision and goals
2. Determine regional priorities funding level
3. Conduct call for projects
4. Assess performance
5. Recommend plan and investment strategy

2018 RTP Chapters
1. Regional challenges
2. Vision and policies
3. Funding
4. Investments
5. Performance
6. Implementation

Metro

2016: APR SEP OCT NOV DEC
2017: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
2018: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
2019: JAN FEB

Public engagement

Public information and targeted engagement opportunities

- Online poll (Apr 2016)
- Leadership forum 1 (Apr 2016)
- Leadership forum 2 (Sep 2016)
- Leadership forum 3 (Dec 2016)
- Online poll (Feb 2017)
- Online poll (Jul 2017)
- Leadership forum 4 (Dec 2017)
- **45-day public review and comment** (Apr–Jun 2018)
- Leadership forum 5 (Jul 2018)

Policy and technical updates

- **Document regional challenges** (Apr 2016 – Feb 2017)
- **Update vision and goals** (Dec 2016 – Mar 2017)
- **Update financial assumptions and revenue forecast** (Apr 2016 – Mar 2017)
  - Draft forecast and recommended regional priorities funding level (Mar 2017)
- **Update performance targets and monitoring measures** (Jul 2017 – Jan 2018)
  - Regional targets recommendation (Jan 2018)
- **Develop policy proposal on digital mobility** (Jul 2017 – Jan 2018)
  - Policy recommendations (Jan 2018)
- **Modal and topical plans** (Sep 2016 – Nov 2018)
  - Update Regional Transportation Safety Plan
  - Develop Regional Transit Strategy
  - Update Regional Freight Plan
  - TPAC/MTAC review drafts October (Oct 2017)
  - Discussion drafts April (Apr 2018)
  - Recommendation drafts September (Sep 2018)
  - Adoption drafts November (Nov 2018)
- **Update plan chapters** (Jun 2017 – Nov 2018)
  - TPAC/MTAC review drafts October (Oct 2017)
  - Discussion draft April (Apr 2018)
  - Recommendation draft September (Sep 2018)
  - Adoption draft November (Nov 2018)

RTP investment strategy

- **Update outcomes-based evaluation framework** (Apr 2016 – Mar 2017)
  - System performance measures
  - Transportation equity measures
  - Project performance measures
  - *To be tested during modeling and analysis*
- **Call for projects** (Feb 2017 – Jan 2018)
  - Draft constrained list
  - Draft regional priorities list
- **Test evaluation framework** (Jul 2017 – Jan 2018)
- **Perform modeling and analysis of projects and programs** (Jul 2017 – Jan 2018)
- **Compile capital, operations and maintenance costs and potential funding tools** (Jul 2017 – Jan 2018)
  - Findings and recommendations report November (Nov 2017)
- **Review and refine projects, programs and funding tools** (Dec 2017 – Apr 2018)
  - Discussion draft constrained list
  - Discussion draft regional priorities list
- **Review and refine evaluation framework** (Dec 2017 – Apr 2018)
  - Refined evaluation framework measures
- **Finalize recommended projects, programs and funding tools** (Apr 2018 – Nov 2018)
  - Recommended constrained list
  - Recommended regional priorities list

Decision milestones

Metro Policy Advisory Committee action
Joint Policy Advisory Committee on Transportation action
Metro Council action

- Recommendation for building RTP investment strategy May (May 2017)
- Direction for building RTP investment strategy May (May 2017)
- Recommendation for discussion draft RTP and modal/topical plans March (Mar 2018)
- Direction for discussion draft RTP and modal/topical plans April (Apr 2018)
- Recommendation for adoption of 2018 RTP and modal/topical plans September/October (Sep–Oct 2018)
- Adopt 2018 RTP and modal/topical plans December (Dec 2018)
- **Adopted 2018 RTP** Submitted for state and federal review (Dec 2018 – Feb 2019)

Regional funding discussion

Identify 2017 legislative priorities

Jan. 30, 2017

Exhibit A

www.oregon**metro.gov**

High Capacity Transit System Expansion Policy

Implementation Guidance

for the Portland metropolitan region

A guidebook for local implementation

July 2011

Metro | *Making a great place*

Exhibit A

About Metro

Clean air and clean water do not stop at city limits or county lines. Neither does the need for jobs, a thriving economy, and sustainable transportation and living choices for people and businesses in the region. Voters have asked Metro to help with the challenges and opportunities that affect the 25 cities and three counties in the Portland metropolitan area.

A regional approach simply makes sense when it comes to making decisions about how the region grows. Metro works with communities to support a resilient economy, keep nature close by and respond to a changing climate. Together we're making a great place, now and for generations to come.

Stay in touch with news, stories and things to do.

www.oregonmetro.gov

HIGH CAPACITY TRANSIT SYSTEM EXPANSION POLICY GUIDELINES

In June 2010, the Portland Metropolitan region adopted the 2035 Regional Transportation Plan (RTP) that included an outline for developing a high capacity transit (HCT) system expansion policy. The system expansion policy emphasizes fiscal responsibility by ensuring that limited resources for new HCT are spent where local jurisdictions have committed supportive land uses, high quality pedestrian and bicycle access, management of parking resources and demonstrated broad based financial and political support.

One of the first post-adoption implementation steps included in Chapter 6 of the RTP called for developing regional guidance for the system expansion policy[1]. With adoption of the 2035 RTP, Metro committed to developing guidance and bringing it forward for discussion to MPAC, JPACT and Metro Council. The purpose of the system expansion policy implementation guidance is to:

1) Clearly articulate the decision-making process by which future HCT corridors will be advanced for regional investment.

2) Establish minimum requirements for HCT corridor working groups to inform local jurisdictions as they work to advance their priorities for future HCT.

3) Define quantitative and qualitative performance measures to guide local land use and transportation planning and investment decisions.

4) Outlines the process for updating the 2035 RTP, including potential future RTP amendments, for future HCT investment decisions.

Following the system expansion policy guidelines will enhance support for transit investments, but does not guarantee a regional investment in HCT. The ultimate decision rests with JPACT and the Metro Council. The purpose of this document is to help local jurisdictions and consultants understand and implement recent regional policy and regulatory changes with adoption of the 2035 Regional Transportation Plan, Regional Transportation Functional Plan (RTFP), and amendments to the Urban Growth Management Functional Plan (UGMFP). Additional implementation guidelines have been developed for the changes in the RTFP and UGMFP.

1.0 INTRODUCTION

Transit is necessary to implement the 2040 Growth Concept, which calls for focusing future growth in regional and town centers, station communities, main streets, and 2040 corridors. Investments in transit, particularly high capacity transit (HCT) help the region concentrate development and growth in centers and corridors, achieve local aspirations and serve as the region's most powerful tools for community building. The 2035 Regional Transportation Plan (RTP) lays out the region's transportation concepts and policies that will result in a complete and interconnected transportation system that supports all modes of travel and implementation of the 2040 Growth

[1] Section 6.7.3 of the 2035 RTP, Page 6-29 and is listed in Attachment 1.

Concept. Chapter 2 of the RTP details the policies for the regional transit system aiming to optimize the existing system, attract future riders and ensure transit-supportive land uses are implemented to leverage the region's current and future transit investments.

In 2008 the Metro Council, with guidance from the Metro Policy Advisory Committee (MPAC), agreed that our planning efforts should start with defining the desired outcomes that the residents of this region have consistently expressed when asked. To that end, the Metro Council and our regional partners adopted six desired outcomes to guide regional planning for the future. The 2035 RTP establishes an outcomes-based planning and decision-making framework to ensure transportation decisions support the six desired outcomes.

WHAT OUTCOMES ARE WE TRYING TO ACCOMPLISH?

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

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

SAFE AND RELIABLE TRANSPORTATION – People have safe and reliable transportation choices that enhance their quality of life.

LEADERSHIP ON CLIMATE CHANGE – The region is a leader in minimizing contributions to global warming.

CLEAN AIR AND WATER – Current and future generations enjoy clean air, clean water and healthy ecosystems.

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

As adopted by the Metro Council and MPAC.

The ability of this region to grow toward the 2040 Growth Concept vision hinges upon the ability to develop and sustain high capacity transit. However, the number of additional high capacity transit corridors that can be implemented in this region are limited by several factors, including:

- Local funding and community support.
- Competition with other regions for scarce federal funding.
- Institutional and financial capacity to develop, build and operate additional high capacity transit corridors.

Because this region cannot implement all of the desired high capacity transit corridors in the near term and we want to ensure we invest limited resources in the best way possible, it is necessary to prioritize which corridors are completed first. The High Capacity Transit System plan and system expansion policy provide a framework for the region to understand how transit can best deliver on the six outcomes for a successful region and the outcomes-based framework of the 2035 RTP.

1.1 HIGH CAPACITY TRANSIT SYSTEM PLAN

As part of the RTP, the region undertook a comprehensive assessment of the existing and potential future high capacity transit network. In July 2009, the Metro Council adopted the Regional High

Capacity Transit (HCT) System Plan. The HCT Plan identifies corridors where new HCT is desired over the next 30 years. It prioritizes corridors for implementation, based on a set of evaluation criteria, and sets a framework to advance future corridors, consistent with the goals of the RTP and the region's 2040 Growth Concept. The HCT system plan provides the framework for transit investments to be implemented as part of a broad corridor strategy that includes supportive land use and transit-oriented development (TOD), comprehensive parking programs, access systems for pedestrians and cyclists, park and rides and feeder bus networks. It assigned near- and long-term regional HCT priorities one of four priority tiers:

- Near-term regional priority corridors: Corridors most viable for Federal Transit Administration (FTA) alternatives analysis in the next four years (2010-2014).
- Next phase regional priority corridors: Corridors where future HCT investment may be viable if recommended planning and policy actions are implemented.
- Developing regional priority corridors: Corridors where projected 2035 land use and commensurate ridership potential are not supportive of HCT implementation, but which have long-term potential based on political aspirations to create HCT supportive land uses.
- Regional vision corridors: Corridors where projected 2035 land use and commensurate ridership potential are not supportive of HCT implementation.

To help simplify future analyses, the *next phase regional priority corridors* and *developing regional priority corridors* have been consolidated into *Emerging Corridors*. The HCT System Plan corridors are shown in **Table 1** and on the map in **Attachment 2.**

Table 1 – HCT System Plan Corridors	
Tier	**Corridors[2]**
Near-term regional priority corridors	10 – Portland Central City to Gresham (in general Powell Boulevard corridor) 11 – SW Corridor (advanced toward implementation per Resolution 10-4118) 34 - Beaverton to Wilsonville (in general WES commuter rail corridor)[3]
Emerging Corridors (Next Phase and Developing Regional Priority Corridors)	8 - Clackamas Town Center to Oregon City Transit Center via I-205 9 - Milwaukie to Oregon City TC via McLoughlin Boulevard 12 - Hillsboro to Forest Grove 13 - Gresham to Troutdale extension 17 – Sunset Transit Center to Hillsboro 17D - Red Line extension to Tanasbourne 28 - Washington Square Transit Center to Clackamas Town Center (via I- 205) 29 - Washington Square Transit Center to Clackamas Town Center (via abandoned railroad) 32 - Hillsboro to Hillsdale
Regional vision corridors	13D - Troutdale to Damascus 16 - Clackamas TC to Damascus 38S - Tualatin to Sherwood

1.2 SYSTEM EXPANSION POLICY OVERVIEW

The System Expansion Policy (SEP) provides the framework to advance future regional HCT corridors by establishing performance measures and defining regional and local actions that will guide the selection and advancement of those projects. The SEP framework is designed to provide a transparent process to advance high capacity transit projects and the key objectives are to:

- Promote transit supportive land uses in future HCT corridors
- Promote local policies that increase value of future HCT investments (i.e., parking management, street design and connectivity, Transportation Demand Management, etc)
- Provide local jurisdictions with a fair and measurable process for developing future HCT corridors
- Provide Metro with a tool to allocate limited planning resources to the most supportive, prepared communities
- Ensure that transit serves cost-burdened households

[2] Corridors presented in each tier are sorted by numeric order only; corridor numbers refer to identifications used in the HCT System Plan technical evaluation processes.

[3] Corridor 34: WES frequency improvements to 15-minute all day service are included in the 2035 RTP list of projects. The project as included in the 2035 RTP represents this level of improvement phased in over time, not construction as light rail as evaluated in the HCT System Plan technical evaluation processes.

The SEP is designed to provide clear guidance to local jurisdictions and community partners in identified HCT corridors about the key elements that support high capacity transit system investments. It is designed to protect public investments and ensure limited resources are used to maximize adopted regional transportation and land use outcomes. The SEP is designed to provide:

- *Flexibility* (responsive to local aspirations) – no two communities or corridors in the region face the same set of land use and transportation planning conditions. Nor do any two communities have the same aspirations for future community form and land development. The SEP is flexible and allows communities and corridors an opportunity to promote transit development within the context of local priorities.
- *Local control* – the SEP process provides a framework for local jurisdictions in a corridor to initiate a corridor working group. While no jurisdiction is required to participate, those desiring HCT investments will need to work with local partners to establish a working group and to develop a corridor purpose and needs statement. The SEP creates a new level of transparency in decision making, which provides local jurisdictions a clearer path to project advancement that has been available in the past.
- *Corridor level cooperation* – since most HCT projects cross jurisdictional boundaries and since both HCT itself and HCT-supportive land uses potentially affect State facilities, the SEP requires cooperation between local jurisdictions, TriMet, ODOT and Metro by establishing a Corridor Working Group. By requiring local jurisdictions to work together to meet SEP targets, the policy helps guide local jurisdictions to set joint priorities and balance tradeoffs associated with meeting land use and financial targets. Through the Corridor Working Group, local jurisdictions can take the lead in identifying the extent of a future HCT corridor, identifying possible future stations areas, and revising zoning policies.
- *Simplicity* – the SEP is straightforward and uncomplicated to enable local jurisdictions to work through the process easily.

The SEP is not intended to dramatically increase administrative requirements; rather it provides a fair and flexible process for corridor advancement and prioritization.

1.3 USING THE TRANSIT SEP HANDBOOK

The purpose of this handbook is to provide local jurisdictions that are located within one of the 18 corridors included in the 2009 HCT System Plan (**Figure 1** and **Attachment 2**) a path to move their HCT corridor toward a regionally supported project development and funding process. The handbook is divided into four sections:

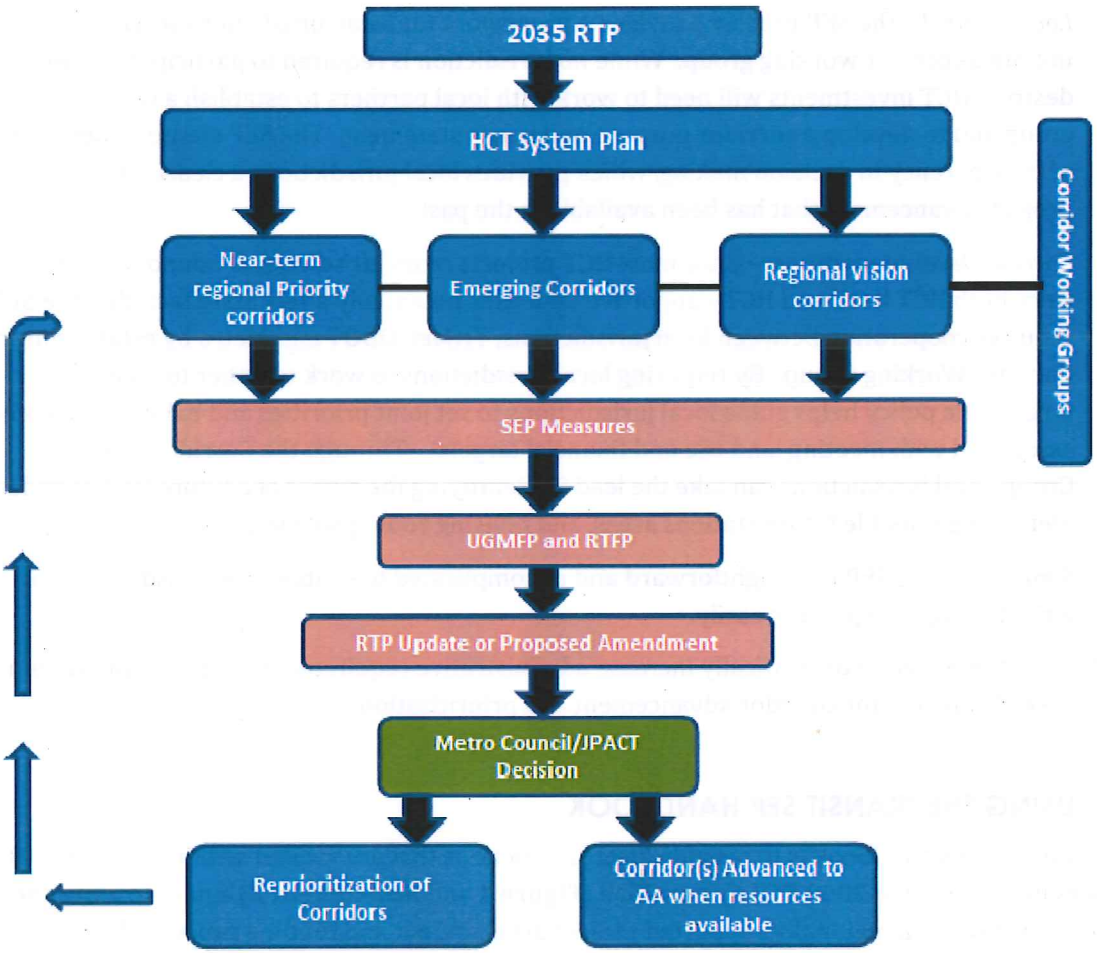
1. SEP Decision-making framework
2. Corridor Working Groups
3. Evaluating performance
4. Updating the 2035 RTP

The handbook also serves as a tool to educate local jurisdiction staff and policymakers about the investments needed to support transit.

1.3.1 SEP Decision-Making Framework

At the foundation of the SEP is a clear and transparent decision-making process for both local land use and transportation planning, and for future RTP amendments. As depicted in **Figure 1** below, the 2035 RTP serves as the umbrella for the HCT System plan and the SEP.

Figure 1 – SEP Decision-Making Framework



All of the HCT corridors will be evaluated using the measures in section 1.3.3 as well as requirements from the Urban Growth Management Functional Plan (UGMFP) and Regional Transportation Functional Plan (RTFP) applied to them as part of the SEP. Every four years as part of RTP updates, Metro will run the multiple account evaluation (MAE) technical analysis that was as part of the HCT System Plan for all of the HCT Corridors. The results of the analysis will be used to inform Metro Council and JPACT's decision on prioritizing and advancing corridors to the FTA

alternatives analysis (AA) process based on available resources. Section 1.3.3 discussed the details of the MAE analysis.

Should additional resources for HCT investment become available between RTP updates, the MAE analysis will be conducted to inform potential RTP amendments. Section 1.3.4 details the process for local governments to propose amendments to the RTP. Corridors that are not selected for advancement will be reprioritized and will continue to work through the SEP for future RTP updates or amendments.

1.3.2 Corridor Working Groups

Corridor Working Groups (CWG) are the core organizational body that will be working to implement the SEP and develop HCT corridors. All local jurisdictions seeking to advance HCT priorities must utilize the following minimum requirements for CWGs:

Formation of a Corridor Working Group

1. All of the local jurisdictions in the HCT corridor as defined in the 2035 RTP and HCT System Plan must be invited to participate in the CWG. Participation of all local jurisdictions is not mandatory.
2. Assembled using the Mobility Corridors framework identified in Chapter 4 of the 2035 RTP. All of the HCT corridors are part of a larger Mobility Corridor and should coordinate with work underway as part of Metro's Congestion Management Process and any Mobility Corridor Refinement Plans.
3. Initiated by the local jurisdictions but must coordinate with staff from Metro, Tri Met and ODOT. This coordination includes, but is not limited to, inclusion on meeting notices and correspondence. The responsibility for organizing, staffing and coordinating CWGs rests with local jurisdictions. Once corridors are selected by Metro Council and JPACT for advancement for a regional investment, Metro will assume staffing and coordination responsibilities. The Southwest Corridor is the most recent example of when Metro will assume staffing responsibility for developing the HCT Corridor.

The following are minimum activities expected to be carried out by CWGs.

A) *Develop HCT Corridor Purpose & Needs Statement* – The CWG is responsible for developing a purpose and needs statement that establishes the purpose and need for the proposed high capacity transit investment (i.e., congestion mitigation, economic development, etc.). It assesses the role of the project in addressing other regional land use and transportation priorities and identifies opportunities for integration with other transportation system improvements in the corridor. It will need to reference how the HCT corridor investment would help the region address multiple desired outcomes.

B) *Develop an IGA or MOU* - This to get agreement on scope of work for the HCT-supportive corridor plan and the necessary state, regional and local actions needed to

advance the HCT corridor. The IGA or MOU would be between the local jurisdictions participating in the CWG.

C) *Recognition from JPACT & Metro Council* – Once local jurisdictions have completed steps A and B of the CWG process, they will need to have their designated elected officials make a presentation to JPACT and Metro Council to discuss their aspirations to develop and advance their HCT Corridor as a regional priority. This will not require a formal resolution, but will allow the CWG to receive regional recognition and acknowledgement of local jurisdiction(s) intent to advance their HCT Corridor.

D) *Identification of High Capacity Transit Focus Areas.* Defining focus areas is important to conduct evaluation against the measures, but also helps local jurisdictions to begin planning for future areas that are highly supportive of a transit investment. It should be recognized that these "focus areas" do not represent a formal decision to site a HCT station, a decision that would be made at a later phase of planning. A basic principle should be to plan for one to two focus areas per mile on average along the corridor.

The CWG structure would carry forward as corridors move into the FTA alternatives analysis process.

1.3.3 Evaluating Corridor Performance

The 2035 RTP emphasizes measurable performance and linking investments in land use and transportation to support local community aspirations. Because of a combination of limiting factors, this region cannot implement all of the desired transit expansion in a short time. The SEP establishes a set of measures for evaluating performance. This analysis will assist in the prioritization of corridors for future high capacity transit expansion by Metro Council and JPACT.

There are two different kinds of performance measures to evaluate the performance of HCT Corridors. The first set of measures was developed as part of the HCT System Plan and will be used to evaluate HCT Corridors as part of each RTP update and with potential RTP amendments. The second set of measures focus more on existing conditions and are intended to help guide local jurisdiction planning and investment decisions to become more transit supportive in the future. The following provides details on both these sets of quantitative and qualitative performance measures.

HCT System Plan and the Multiple Account Evaluation (MAE) Analysis

For the Regional HCT System Plan, Metro and its agency and jurisdictional partners used a Multiple Account Evaluation (MAE) approach to evaluating project potential to deliver desired regional outcomes. Twenty-five evaluation criteria were developed to measure potential HCT corridor attainment across four outcome categories: Community, Environment, Economy and Deliverability. Intensive involvement by regional stakeholders, including local jurisdictions and agencies, was

used to develop the evaluation framework and to guide the evaluation of corridors against the multiple criteria.

The MAE approach was adopted and refined from a standardized methodology employed in the United Kingdom for evaluation of major transportation projects. The approach was chosen for the HCT System Plan because of its ability to provide decision makers with data in a number of key areas, allowing them to assess the cost and benefits of proposed HCT investments. **Figure 2** shows how the MAE process aligns closely with the RTP policy framework.

Figure 2: 2035 RTP evaluation approach and deliverability

Figure 3 summarizes the specific criteria under each account: community, environment, economy and deliverability. More detailed description of all of these criteria are available as part of the HCT System Plan available on Metro's website[4].

[4] http://www.oregonmetro.gov/index.cfm/go/by.web/id=25038

Figure 3: Adopted evaluation accounts and criteria

Community	
C1	Supportiveness of Existing Land Uses
C2	Local Aspirations
C3	Placemaking and Urban Form
C4	Ridership Generators
C5	Support of regional 2040 Growth Concept
C6	Integration with Regional Transit System
C7	Integration with Other Road Uses*
C8	Congestion Avoidance Benefit (M)
C9	Equity Benefit
C10	Health (Promotion of Physical Activity) (M)
C11	Safety and Security (*discussed later in this report*)
C12	Housing + Transportation Affordability Benefit
C13	Transportation Efficiency or Travel Time Benefit to Individual User (M)
C14	Transportation Efficiency or Travel Time Benefit to All Corridor Users (M)
Environment	
EN1	Reduction in Emissions and Disturbance (M)
EN2	Risk of Natural Resource Disturbance
EN3	Risk of 4(f) Resource Disturbance (*discussed later in this report*)
Economy	
EC1	Transportation Efficiency (Operator) (M)
EC2	Transportation Efficiency (User) (M)
EC3	Economic Competitiveness
EC4	Rebuilding/ Redevelopment Opportunity
Deliverability	
D1	Total Project Capital Cost (Exclusive & Non-Exclusive ROW Options)
D2	Capital Cost Per Mile (Exclusive & Non-Exclusive ROW Options)
D3	Operating & Maintenance Cost (M)
D4	Ridership (M)
D5	Funding Potential (M)

(M) Denotes criteria which are evaluated, at least in part, using Regional Travel Demand outputs

* Addressed through the Mobility Corridor work in Coordination with ODOT

The MAE measures listed in **Figure 3** will analyzed as part of each RTP update to inform JPACT and Metro Council HCT investment decisions. Additionally, if additional HCT resources become available in between RTP updates, these measures will be used to inform JPACT and Metro Council decisions on potential HCT-related RTP amendments.

2040 Context Tool

The MAE analysis conducted as part of the HCT plan was an expensive and resource-intensive process and is currently not easily replicable for evaluating corridor performance over time. As Metro staff started the process of creating this guidance, it was clear that a simpler method was needed to supplement the MAE measures to better inform local jurisdictions planning and investment decisions between RTP cycles. Building on the HCT plan analysis framework, Metro has been exploring new tools to measure *existing conditions* that contribute towards a transit supportive environment. Using Metro's Regional Land Information System (RLIS), Metro's Data Resource Center staff have developed an innovative GIS based analysis tool that measures specific aspects of the built and natural environment to help illustrate the character of a place.

Known as the 2040 Context Tool, the idea came about as Metro staff thought of new ways to engage policy makers, community groups, and others to better understand how to achieve their aspirations using objective measures to evaluate elements that can be controlled with policy. The 2040 Context Tool can be used to measure existing conditions, perform diagnostics on a given area and track change over time. Even more importantly, the RLIS Data used by the 2040 Context Tool is updated region-wide, on a quarterly basis by all subscribers, allowing for the best data to be used in any analysis.

Specifically, the 2040 Context Tool is a walk accessibility model where a one minute walk time is the spatial resolution of the data. This is a simple additive model where each location knows its distance from individual land use, transportation and environmental variables. Taken together, the model gives a quantitative measure of the characteristics of a place based on a defined outcome. This analysis was developed as part of the TOD Strategic Plan to help prioritize station areas for future TOD investment that can best leverage additional private investment to increase land use efficiency and increase transit ridership. **Table 2** below shows the2040 Context Tool measures.

Table 2 – SEP 2040 Context Tool Measures

Measure	Description (within distance of HCT Corridor)
Density of People	Current households and jobs per net acre within ½ mile
Density of ULI Businesses	Number of ULI Businesses within ½ mile
Transit Oriented Zoning	Assigning values to regional zoning classifications within ½ mile
Average Block Size	Density of acres of blocks within ½ mile
Sidewalk Coverage	Completeness of sidewalk infrastructure within ½ mile
Bicycle Facility Coverage	Access to bicycle infrastructure measured as distance to nearest existing bicycle facility within ½ mile
Transit Frequency	Transit frequency within ½ mile of corridor

Household and employment density is a primary determinant of transit ridership and have been combined as *density of people.*[5] As demonstrated in Metro's State of the Centers Report, there is a basic relationship between the number of people living and working in a district and the number of urban amenities. The Urban Living Infrastructure (ULI) amenities are a set of land use amenities that together comprise an active urban environment and are captured in *density of ULI businesses.* To measure the transit supportive land use that is currently adopted by local governments, Metro's TOD group developed a *transit-oriented zoning* measure. A summary of the methodology behind each quantitative measure and the 2040 Context Tool can be found in Attachment 3.

As part of the UGMFP and RTFP there are also a number of qualitative measures that will need to be considered as part of the development of HCT Corridors. A list of qualitative measures is provided in **Table 3.**

Table 3 – Qualitative SEP Measures

Measure	Description
Housing & Transportation Affordability	Demonstrating that potential transit investment will serve communities with high rate of cost burdened households
Parking Requirements	Implement parking requirements in corridor that meet or exceeds Title 4 of the RTFP.
Local Funding Mechanisms	Implement funding mechanisms in corridor communities that could help fund capital or operations to support transit investment and station area development, including urban renewal, tax increment financing, local improvement district, parking fees, or other proven funding mechanisms.
Equity	Improving options for serving low-income, minority, senior and disabled populations within corridor.

The measures in **Table 3** are of equal importance to the quantitative measures in **Table 2.** However, at this time, the region does not have a documented process for evaluating these measures. Work is currently underway to better define how to measure equity and affordability.

[5] Here in the Portland region, a 1995 study by Nelson\Nygaard Consulting Associates found that 93 percent of the variation of transit demand is explained by employment and housing density. These findings were the result of a regression analysis that controlled for 40 land use and socio-demographic variables. A study of 129 San Francisco Bay Area rail stations found that the commute mode split was 24.3 percent in neighborhoods with densities of 10 housing units per gross acre. This figure jumps to 43.4 percent and 66.6 percent, respectively, in station areas with densities of 20 and 40 housing units per gross acre.

Once this work is completed, the SEP guidance will need to be updated to reflect these changes. CWGs will need to document changes to each of these measures and work with Metro, ODOT, and TriMet to track changes over time.

The intent of this group of quantitative and qualitative measures is to ensure that a minimum level of density, pedestrian and bicycle connectivity, urban form, zoning and urban living infrastructure is in place or planned for proposed corridors/station areas. The measures from the 2040 Context Tool are to be used as a regional yardstick for a relative comparison of all of the HCT corridors. Local governments can use the results of each measure to prioritize different elements requiring local investment. Improving the 2040 Context Tool measures is likely to improve a corridor's MAE score because they are strongly linked with the MAE outcome categories of Community, Environment, and Economy.

1.3.4 RTP Updates and Initiating an RTP Amendment

The RTP establishes a comprehensive policy direction for the regional transportation system and recommends a balanced program of transportation investments to implement that policy direction. However, the recommended investments do not solve all transportation problems and are not intended to be the definitive capital improvement program on the local transportation system for the next 20 years.

Rather, the RTP identifies the projects, programs, refinement plans, and project development activities required to adequately meet regional transportation system needs during the planning period based on known available funding levels. The RTP is updated every four years to comply with federal and state regulations. As part of each RTP update all of the HCT corridors will be evaluated using the MAE performance measures. The analysis will be considered for potential action by Metro Council and JPACT as part of the RTP update.

If between RTP updates additional HCT resources become available or a CWG wishes to advance a HCT corridor it can request an RTP amendment. The CWG will need to draft a written application to Metro that demonstrates a set of actions adopted and work performed that would improve performance against both the MAE and 2040 Context Tool evaluation measures.

Metro staff would conduct a reevaluation of the HCT corridor using the MAE evaluation measures, as well as schedule consideration of the proposed amendment by resolution using the Metro advisory committee process. A Metro staff report would be prepared including a ridership forecast, land use forecast and input from TriMet. Metro Council and JPACT would then decide whether or not to take action and reprioritize and/or advance the corridor for alternatives analysis. Requests for RTP amendments and reevaluation using the SEP may be done no more than once a year or during an RTP update.

Exhibit A

Attachment 1

The following is excerpted from Chapter 6 of the 2035 RTP that was adopted in June 2010. This language can be found on pages 6-29 and 6-30 of the RTP.

6.7.3 High Capacity Transit System Expansion Policy (SEP) Guidebook

In June and July 2009, the Joint Policy Advisory Committee on Transportation and the Metro Council adopted the Regional High Capacity Transit (HCT) System Plan. The HCT Plan identifies corridors where new HCT is desired over the next 30 years. It prioritizes corridors for implementation, based on a set of evaluation criteria, and sets a system expansion policy (SEP) framework to advance future corridors by setting targets and defining regional and local actions, consistent with the goals of the Regional Transportation Plan (RTP) and the region's 2040 Growth Concept.

More work is needed to define how the SEP policy will be implemented. This work is underway and will be brought forward for future policy discussion by JPACT, MPAC and the Metro Council.

The SEP is intended to provide policy direction on the range of factors that should be considered when determining the next high capacity transit corridor to pursue, including:

- Community factors that center on local land use aspirations, transit-supportive land uses, building-orientation and block sizes, transportation infrastructure (e.g., sidewalks, bicycle facilities and street connectivity) parking and demand management policies, and design factors that will leverage HCT investments and increase ridership potential within a particular corridor. Generally, these factors are under the control of local governments and are implemented through local land use and transportation plans. If successfully implemented, these factors would bring a given HCT corridor and the communities connected by that corridor closer to the 2040 Growth Concept vision.
- Readiness factors such as political commitment, community support and partnerships needed to pursue the long and sometimes difficult process that even the most popular transportation investments must work through.
- Regional factors such as financial capacity and regional consensus on the appropriate next corridor.

To aid this decision-making, the HCT Plan focuses on technical factors. It will be updated with each RTP update, though the specific measures and methodologies are expected to evolve over time through a collaborative regional decision-making process. Potential HCT corridors can move closer to implementation, advancing from one tier to the next through a set of coordinated TriMet, Metro, ODOT and local jurisdiction actions that address the remaining factors.

More work is needed to define how the SEP policy will be implemented. This work is underway and will be brought forward for future policy discussion by JPACT, MPAC and the Metro Council. This section and the Regional Transportation Functional Plan will include guidance to help local jurisdictions, Metro and TriMet work together to achieve the community, readiness and regional factors listed above. This can include Memorandum of Understandings (MOUs) and eventually Intergovernmental Agreements (IGAs) that harness the synergy between community aspirations, the ability to develop high capacity transit to further those aspirations and other needed local, regional and state actions. It will also include specific targets to measure corridor readiness and contribution to regional goals.

The factors are complex and stem from the interactions of private individuals and businesses, local jurisdictions, and regional agencies. The intention of the guidance is that those jurisdictions which are achieving positive outcomes in these factors and/or have the aspiration to create the most improvement on these factors are simultaneously improving their own communities, creating more transit-friendly environments, and also may be able to pursue a near-term high capacity transit project along with the other jurisdictions in the corridor.

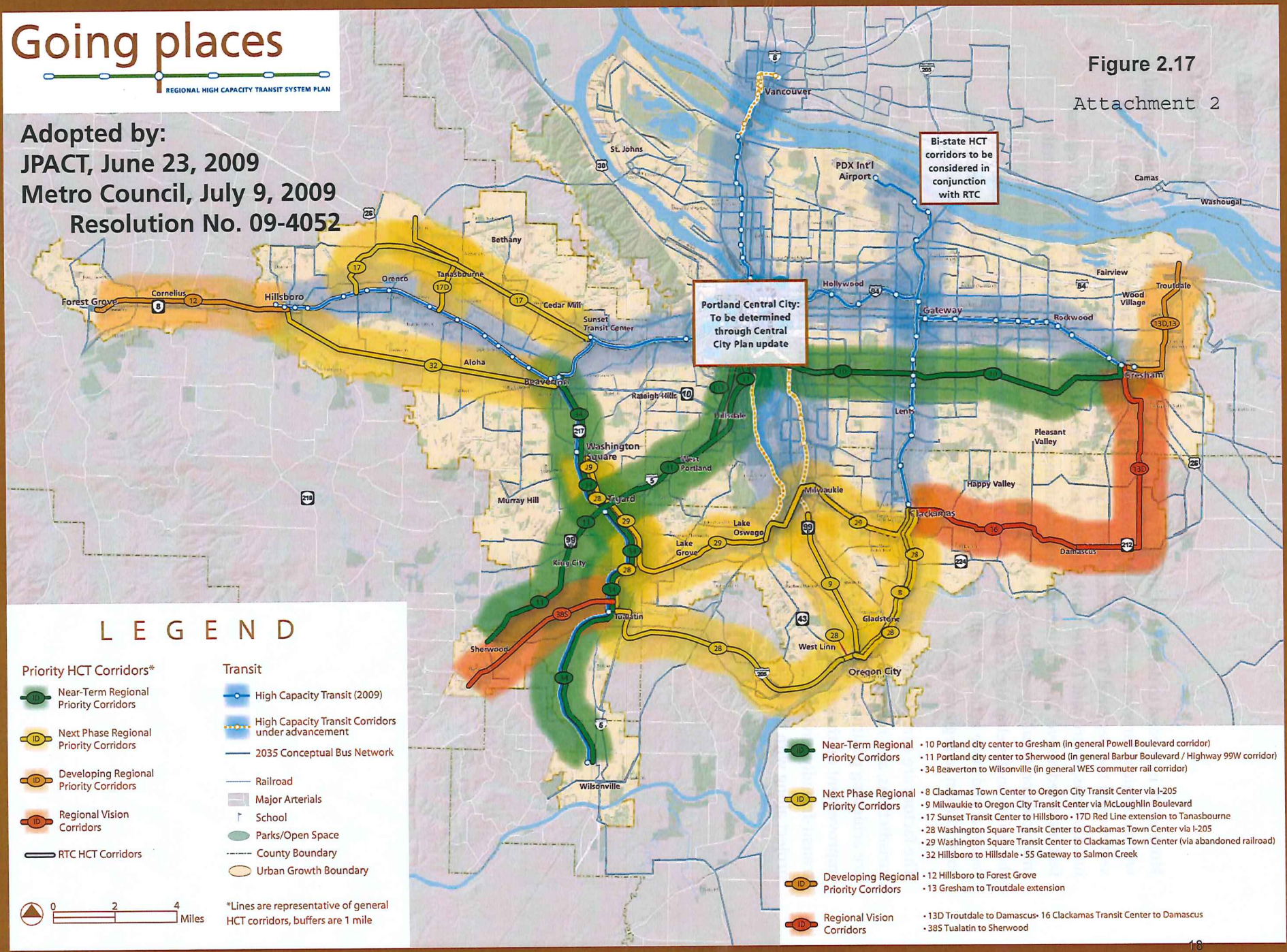
Going places

REGIONAL HIGH CAPACITY TRANSIT SYSTEM PLAN

Figure 2.17

Attachment 2

Adopted by:
JPACT, June 23, 2009
Metro Council, July 9, 2009
Resolution No. 09-4052



LEGEND

Priority HCT Corridors*

- Near-Term Regional Priority Corridors
- Next Phase Regional Priority Corridors
- Developing Regional Priority Corridors
- Regional Vision Corridors
- RTC HCT Corridors

Transit

- High Capacity Transit (2009)
- High Capacity Transit Corridors under advancement
- 2035 Conceptual Bus Network
- Railroad
- Major Arterials
- School
- Parks/Open Space
- County Boundary
- Urban Growth Boundary

0 2 4 Miles

*Lines are representative of general HCT corridors, buffers are 1 mile

Near-Term Regional Priority Corridors
- 10 Portland city center to Gresham (in general Powell Boulevard corridor)
- 11 Portland city center to Sherwood (in general Barbur Boulevard / Highway 99W corridor)
- 34 Beaverton to Wilsonville (in general WES commuter rail corridor)

Next Phase Regional Priority Corridors
- 8 Clackamas Town Center to Oregon City Transit Center via I-205
- 9 Milwaukie to Oregon City Transit Center via McLoughlin Boulevard
- 17 Sunset Transit Center to Hillsboro
- 17D Red Line extension to Tanasbourne
- 28 Washington Square Transit Center to Clackamas Town Center via I-205
- 29 Washington Square Transit Center to Clackamas Town Center (via abandoned railroad)
- 32 Hillsboro to Hillsdale
- 55 Gateway to Salmon Creek

Developing Regional Priority Corridors
- 12 Hillsboro to Forest Grove
- 13 Gresham to Troutdale extension

Regional Vision Corridors
- 13D Troutdale to Damascus
- 16 Clackamas Transit Center to Damascus
- 38S Tualatin to Sherwood

Sample user indicators

People per acre
A measure of the density of people within a ¼ mile distance. The indicator counts both residents and employees and is a measure of the relative activity of an area.

Urban Living Infrastructure
A measure of the density of certain types of urban amenities that contribute to the livability of an area.[1]

Access to Parks
A measure of the linear distance to parks as measured by a pedestrian network.

Transit Access
A measure of the density of transit within a ¼ mile. The indicator looks at the frequency of trip options at a given stop. This indicator provides a means of comparing trip options as well as frequency.

Bicycle Access
A measure of the relative "bikeability" of an area using the bike lane classifications in Metro's "Bike There!" map - based on the density of bike routes within one mile of a designated area.

Sidewalk Density
A measure of the density of sidewalks within ¼ mile of a location. The indicator provides a means of assessing the accessibility of safe walking paths.

Block Size
A measure of the block sizes within ¼ mile distance. Block size is an indication of the relative walkability of an area with smaller blocks being more walkable than larger blocks.

[1] Values defined by Johnson Gardner (2007), *An assessment of the marginal impact of urban amenities on residential pricing*

The Context Tool is a web-based visualization tool that maps various physical characteristics to describe the built environment that, in combination with each other, can illustrate the character of a place. This simple, but innovative tool can be used to help partners, community groups and others to provide a sense of scale for how an area performs compared to a goal or expected outcome; provide a foundation or baseline to evaluate change over time; and to diagnose current conditions. The Context Tool is an adaptive evaluation tool with numerous applications, such as identifying high performing or underserved areas and evaluating the effectiveness of various design and investment strategies relative to the user's objectives.

Users first select the indicators and geographies they need (see sample indicators at left). The Context Tool then calculates an average relative score for each indicator. By computing average values for each indicator, the Context Tool provides perspective on the relationship of existing conditions for a given geographic area. The averages range from 1 to 5, with 5 representing the highest performance level, as determined by the user.

A key feature of the Context Tool is that all maps are scaled to a unit of 264 feet, which is the approximate distance a person can walk in one minute. Each unit of the map displays the average value of an indicator for the surrounding area – usually within a five minute walk (¼ mile) In addition, this means users can visually compare local averages to regional averages for each of the indicators.

Three easy steps to running the Context Tool

1. **Determine what geography you want to analyze.** Users can choose from a series of default geographies (station areas, corridors, centers, census tracts and voter districts). Or, users can upload a unique geography if needed. Once the geographic unit is defined, a map will open displaying the entire region at the specified geography (e.g. all regional centers). The default map setting is a composite of all user defined indicators.
2. **Choose which of the indicators are relevant to your analysis.** Any combination of the defined indicators can be selected at any time.
3. **Adjust the value, or weight, of the indicators** that are most important to your analysis. Each indicator can be manually adjusted to represent various weighting or priority schemes depending on user needs. After adjusting the weights, the Context Tool can be re-run easily with a single click.

Analysis features

A number of features help to make analyses and comparisons quick and intuitive.

- The Context Tool provides the option to sort and zoom to specific features or geographic locations, such as a specific regional center.
- The Context Tool offers a variety of chart types so you can choose the most effective display of how your geography compares to the regional average (see sidebar).
- All maps, graphs and attribute tables can be exported and used to conduct additional analysis.

Indicator values generated by the Context Tool should not be treated as precise scores. Instead, they provide a sense of scale for quick comparisons across the region.

For additional details, contact Clint Chiavarini at clinton.chiavarini@oregonmetro.gov.

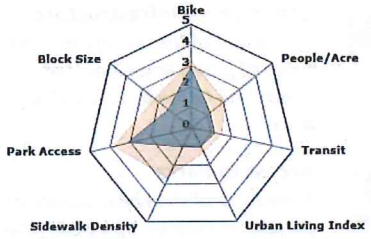
Chart illustrations

The charts below illustrate how the Context Tool provides a "sense of scale" snapshot of how a specific geography performs with respect to other indicators and geographies. (The beige or gray areas below represent regional averages.)

The charts can also be used to pinpoint areas that need more detailed analysis.

Examples

Low performing area

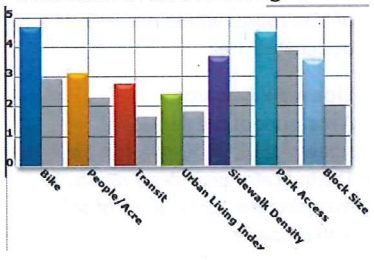


* Beige line area represents regional averages

High performing area

* Beige line area represents regional averages

Performance relative to regional averages



* Grey bars represent regional averages

Conception, design and workflow
Mark Bosworth
Clint Chiavarini

Application development
Ben Sainsbury

Existing Criteria - Potential Additional Criteria

- 2018 RTP Transit performance measure recommendations
  - Frequent
    - Increase daily transit service revenue hours per mode
    - Transit productivity (transit boarding rides per revenue hour) for mode or service characteristics
  - Convenient
    - Motor vehicle and transit travel time parity between key origin-destination for mid-day and 2-hour PM peak
    - Non-Drive alone mode share system-wide and for central city and individual regional centers (% of daily walking, bicycling, shared ride and transit trips)
  - 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.)
    - 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
    - Proximity of households, low-income households and employment with a ¼ mile of transit and frequent service transit
  - Affordable
    - Housing + Transportation costs relative to cost burdened designation

Criteria	Is each criterion relevant and meaningful to Regional Transit Strategy Goals?				Criterion addresses deliverability account?	Opportunity to consolidate criteria?	Comments
Regional Transit Vision Goals >>>>	**FREQUENT**	**CONVENIENT**	**ACCESSIBLE**	**AFFORDABLE**			
EN1: Reduction in emissions and disturbance [2]	✓						Aligning transit service with demand and land use is likely the most cost-effective way to reduce emissions. This is directly related to ridership D4.
EN2: Risk of natural resources disturbance						✓	EN2 and EN3 could be combined. Natural resource impacts are also considered in environmental process.
EN3: Risk of 4(f) resource disturbance [2]						✓	See above.
EC1: Transportation efficiency (operator) [2]					✓	✓	Measure of operating costs per rider. Could be combined with EC2.
EC2: Transportation efficiency (user) [2]					✓	✓	Measure of operating and capital costs per rider. Could be combined with EC1.
EC3: Economic competiveness			✓				
EC4: Rebuilding/redevelopment opportunity	✓						
D1: Total project capital cost (exclusive and nonexclusive right of way options)					✓	✓	Could be combined with D2.
D2: Capital cost per mile (exclusive and nonexclusive right of way options)					✓	✓	Could be combined with D1.
D3: Operating and maintenance cost[2]					✓		
D4: Ridership[2]					✓		Used in C13, C14, EC1, EC2, D5,
D5: Funding potential[2]					✓		Based on C13, D1, D2, D3, and D4.
CRITERIA FROM RECENT LOCAL/REGIONAL PLANS							
Transit access							
Transit affordability (fares)							
Travel time reliability							
Labor force access to jobs							
Explicit consideration of walk/bike access							
OTHER CRITERIA YOU WOULD LIKE TO SUGGEST							

Regional transit strategy vision

Relationship to HCT Plan prioritization criteria

Criteria	Is each criterion relevant and meaningful to Regional Transit Strategy Goals?				Criterion addresses deliverability account?	Opportunity to consolidate criteria?	Comments
Regional Transit Vision Goals >>>>	**FREQUENT**	**CONVENIENT**	**ACCESSIBLE**	**AFFORDABLE**			
Regional Transit Vision Goal Statements >>>>	Align frequency and type of transit service to meet existing and projected demand and transit needs. Support the implementation of local and regional land use and transportation visions.	Make transit more convenient for everyone and competitive with driving by improving transit speed and reliability through priority treatments...and other strategies. Improve customer experience by ensuring seamless connections between various transit providers...	Provide safe and direct biking and walking routes and crossings and other visibility amenities that connect to stops to make transit more accessible. Expand the system to improve access to jobs and essential destinations/daily needs for everyone.	Ensure transit remains affordable, especially for those dependent upon it.			
EXISTING HCT PLAN CRITERIA							
C1: Supportiveness of existing land uses	✓						
C2: Local aspirations	✓						
C3: Placemaking and urban form			✓				
C4: Ridership generators			✓				
C5: Support of regional 2040 Growth Concept	✓					✓	Related to C1, C2, C4, and C6. Could be consolidated with C6
C6: Integration with regional transit system		✓					Related to C5. Could be consolidated with C5.
C7: Integration with other land uses [1,3]						✓	Assessment of freight impacts may be more appropriate during corridor refinement and environmental processes
C8: Congestion avoidance benefit [2]		✓				✓	Related to C13 and C14. Could be consolidated.
C9: Equity benefit				✓			This measures population groups (e.g. low-income, minority, zero vehicle households) more likely to depend on transit
C10: Health (promotion of physical activity) [2]			✓				Measures pedestrian and bicycle network serving corridor
C11: Safety and security [3]						✓	More appropriate to address in design standards
C12: Housing and transportation benefit			✓				This measure looks at the need for access to high quality transit, rather than transit affordability
C13: Transportation efficiency or travel time benefit to individual user [2]		✓					Recommend combining C13 and C14
C14: Transportation efficiency or travel time benefit to all corridor users [2,4]		✓				✓	

Account	Criteria	Method of Evaluation
		▪ Analysis of % of households with no vehicle available
	C10: Health (promotion of physical activity) [2]	▪ Comprehensiveness of pedestrian and cycling network ▪ Increase in average bicycle and pedestrian mode share
	C11: Safety and security [3]	This criterion was adopted to assess personal safety or users on the system and those using facilities that support system operations (i.e., streets and stations); Qualitative, based on adherence to good design standards
	C12: Housing and transportation benefit	Analysis of housing and transportation costs as percent of total household income.
	C13: Transportation efficiency or travel time benefit to individual user [2]	Average travel time benefit per rider and distribution of benefits across the line and the system. This measure will also determine whether HCT is an effective mode compared to non-HCT transit through congested areas
	C14: Transportation efficiency or travel time benefit to all corridor users [2,4]	
Environment	EN1: Reduction in emissions and disturbance [2]	Change in VMT and resulting emission levels for CO2 and other harmful pollutants such as NOx and SOx. (Potentially for the full project life-cycle)
	EN2: Risk of natural resources disturbance	Length of alignment impacting identified sensitive habitats and/or natural resources
	EN3: Risk of 4(f) resource disturbance [2]	Acres of 4(f) resources impacted; intended to assess the risk of encountering school and park lands in aligning high capacity corridors.
Economy	EC1: Transportation efficiency (operator) [2]	Operating cost per rider, based on Operating and maintenance costs (D3) and Ridership (D4)
	EC2: Transportation efficiency (user) [2]	Annualized capital and operating cost per rider; based on Total project capital cost (D1), Capital cost per mile (D2), Operating and maintenance costs (D3), and Ridership (D4)
	EC3: Economic competiveness	Change in employment catchment; uses GIS to estimate the percentage of 2035 employment in TAZs within a half mile buffer of project corridors
	EC4: Rebuilding/redevelopment opportunity	Measure of the total area of vacant and rebuildable land within a half mile buffer of project corridors
Deliverability	D1: Total project capital cost (exclusive and nonexclusive right of way options)	Capital cost; based on actual construction costs from TriMet for South Corridor (I-205), and adjustments as necessary. Tunnel and elevated costs based on cost per mile estimates from other comparable projects around the country. Two options are: Solely in new right-of-way; Use existing right-of-way (to the extent possible)
	D2: Capital cost per mile (exclusive and nonexclusive right of way options)	Capital cost per mile, calculated to normalize overall capital cost based on length of the corridor. Two options are: Constructed solely in new right-of-way; Use existing right-of-way (to the extent possible)
	D3: Operating and maintenance cost[2]	Operating cost; estimate provides a fully loaded annual cost to operate and maintain the proposed HCT line. It does not consider cost savings on other routes that might be replaced or need for new service to feed the line.
	D4: Ridership[2]	Total daily ridership for the entire project corridor; generated from the Regional Travel Demand Model
	D5: Funding potential[2]	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 of the project. For FTA purposes, cost effectiveness is determined by comparing the costs, ridership, and travel times of the project to the costs, ridership, and travel times of a comparable non-HCT mode. This comparable non- HCT mode is referred to as the Baseline Alternative. The following five other evaluation criteria are used as inputs: ▪ Transportation efficiency or travel time benefit to individual user (C13) ▪ Total project capital cost (D1) ▪ Capital cost per mile (D2) ▪ Operating and maintenance costs (D3) ▪ Ridership (D4)

Notes: [1] Addressed through the mobility corridors work in coordination with Oregon Department of Transportation. [2] Criteria which are evaluated, at least in part, using regional travel demand outputs. [3] Criteria not evaluated at the corridor-level during 2009 HCT System Plan Corridor Evaluation. [4] C13 and C14 were combined during the 2009 HCT System Plan Evaluation.

Existing HCT Plan Criteria

Evaluation Accounts, Criteria, and Methods

Account	Criteria	Method of Evaluation
Community	C1: Supportiveness of existing land uses	Readiness of existing local land use plans and policies to support a HCT investment, quantitative analysis using the Transit Orientation Index , which estimates transit demand based on the land use characteristics of household density, employment density and retail employment density.
	C2: Local aspirations	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 a form of HCT desired by the local jurisdiction? ▪ Did the jurisdiction attend and participate in the HCT/Local Aspiration Workshops? ▪ Does the jurisdiction have adopted population and employment growth aspirations for that would support HCT? ▪ Does the local jurisdiction have plans to update land use policies to help support HCT?
	C3: Placemaking and urban form	Identification of impacts on urban composition and public space function; factors included: ▪ Street Density (street miles per corridor mile) ▪ Block Density (blocks per corridor mile) ▪ Urban Living Infrastructure (urban amenities per corridor mile)
	C4: Ridership generators	Identification of major activity centers served, e.g. ▪ Hospital & medical centers ▪ Major retail sites I Major social service centers ▪ Colleges / universities ▪ Major Federal / State Government offices ▪ Employers > 500 employees ▪ Sports sites / venues
	C5: Support of regional 2040 Growth Concept	▪ Central City, Regional Centers, Industrial areas, Freight and Passenger Intermodal facilities ▪ Employment areas, Town Centers, Station Communities, Corridors, Main Streets ▪ Inner and Outer Neighborhoods
	C6: Integration with regional transit system	Identification of full trip benefits due to integration with transit transfer centers and interchange opportunities, including: ▪ Does the corridor make a new system connection? ▪ Is the corridor compatible with the existing HCT system? ▪ Does the corridor further the completion of the HCT system? ▪ Does the corridor expand the coverage of the HCT system and does this further the goals of the 2040 Growth Concept? ▪ Does the new corridor contribute to capacity relief of other transit services in the region? ▪ Does the new corridor improve routing choice in the region? ▪ Does the new corridor contribute to regional mobility?
	C7: Integration with other land uses [1,3]	This criterion was intended to assess the impact of HCT on freight corridors.
	C8: Congestion avoidance benefit [2]	Consider HCT ability to bypass congested areas compared to comparable non-HCT transit in mixed traffic
	C9: Equity benefit	▪ Catchment analysis for social groups (low income and minority census tracts) within walking access (1/4 mile) to a stop

Metro Transit System Expansion Policy

Presented by:
Tom Brennan
Jamie Snook

February 2017

Metro

NELSON NYGAARD

Overview

- High Capacity Transit System Plan and Transit System Expansion Policy Overview
- Regional Transit Plans Review
- Federal Capital Funding Process
- Existing HCT Prioritization Criteria
- Group Exercise: Rethinking Prioritization Criteria

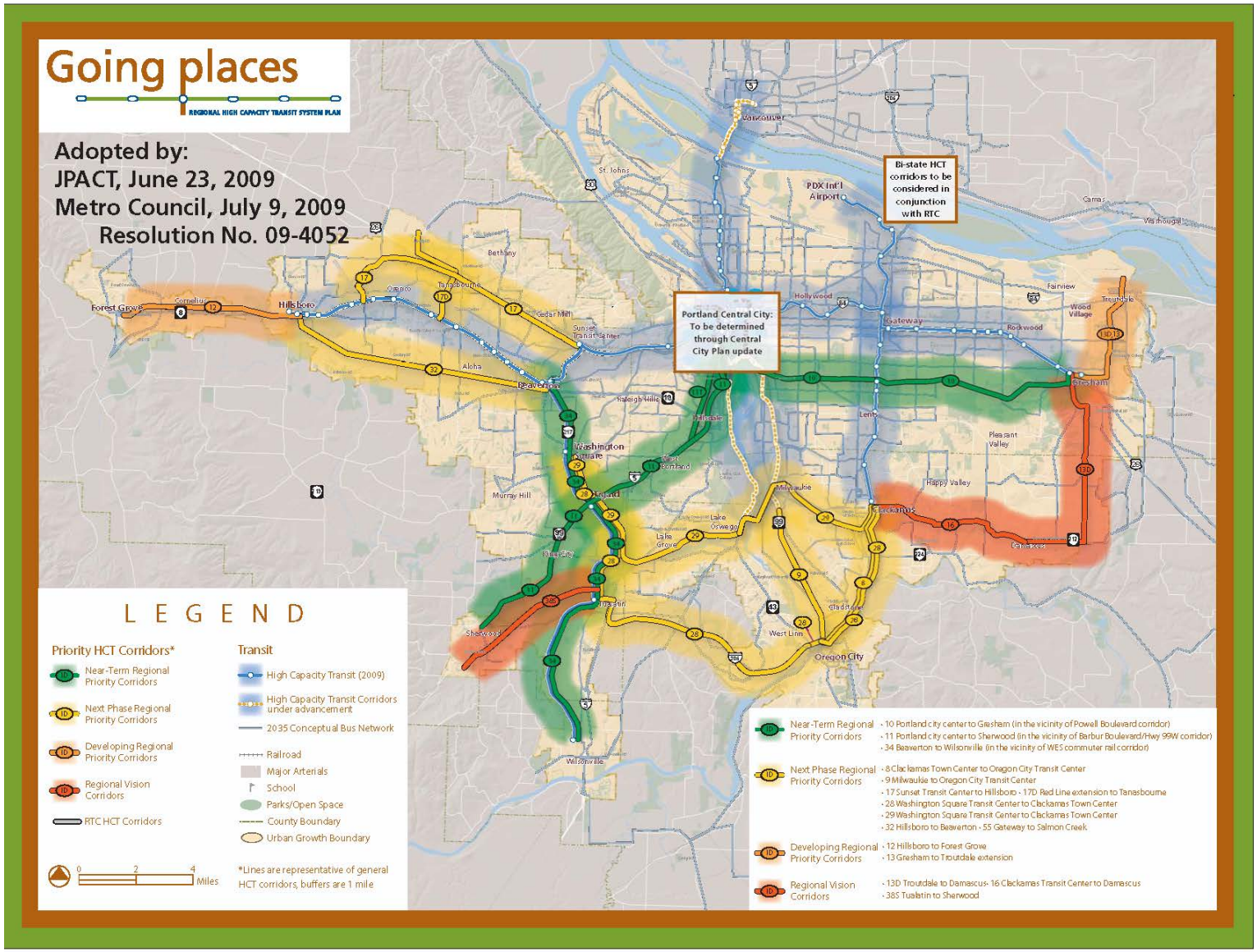
HCT Plan / Transit System Expansion Policy Overview

High Capacity Transit (HCT) System Plan - 2009

- Used multiple account evaluation (MAE) approach
  - 26 evaluation criteria grouped into four accounts:
    - Community
    - Environment
    - Economy
    - Deliverability (near-term readiness)

- Provided decision-makers with information on costs/benefits of proposed HCT corridors
  - 16 HCT projects prioritized into 4 tiers of readiness
    - Near-term regional priority corridors
    - Next phase regional priority corridors
    - Developing regional priority corridors
    - Vision corridors

HCT Plan – Priority Tiers

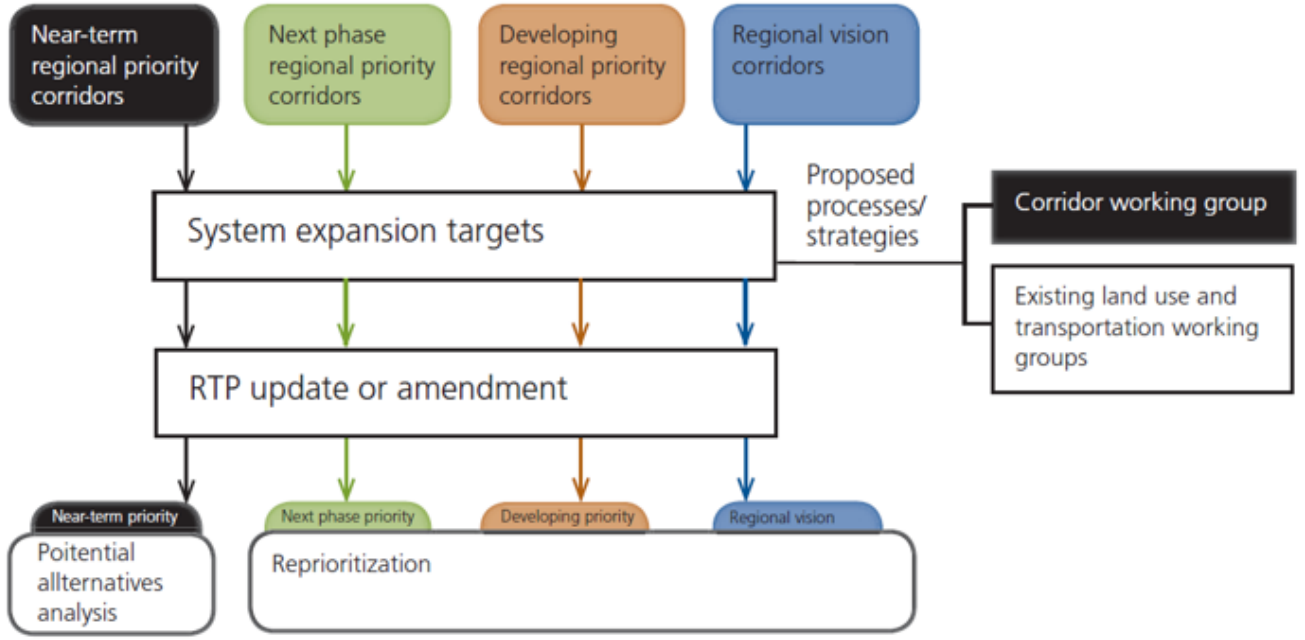


Tier	Tier description	Corridors** (not listed in order of performance)
Near-term regional priority corridors	Corridors that are most viable for implementation in next four years.	10 – Portland city center to Gresham (in general Powell Boulevard corridor) 11 – Portland city center to Sherwood (in general Barbur Boulevard / Highway 99W corridor) 34 – Beaverton to Wilsonville (in general WES commuter rail corridor)*
Next phase regional priority corridors	Corridors where future HCT investment may be viable if recommended planning and policy actions are implemented.	8 – Clackamas Town Center to Oregon City Transit Center via I-205 9 – Milwaukie to Oregon City Transit Center via McLoughlin Boulevard 17 – Sunset Transit Center to Hillsboro 17D – Red Line extension to Tanasbourne 28 – Washington Square Transit Center to Clackamas Town Center via I-205 29 – Washington Square Transit Center to Clackamas Town Center (via abandoned railroad) 32 – Hillsboro to Hillsdale 55 – Gateway to Salmon Creek**
Developing regional priority corridors	Corridors where projected 2035 land use and commensurate ridership potential are not supportive of HCT implementation, but which have long-term potential due to political aspirations to create HCT supportive built form.	12 – Hillsboro to Forest Grove 13 – Gresham to Troutdale extension
Regional vision corridors	Corridors where projected 2035 land use and commensurate ridership potential are not supportive of HCT implementation.	13D – Troutdale to Damascus 16 – Clackamas Transit Center to Damascus 38S – Tualatin to Sherwood

Transit System Expansion Policy (TSEP)

- Component of HCT Plan
  - Framework to advance future regional HCT corridors
  - Process for jurisdictions in regional priority corridors to work locally to advance project's regional priority status

Figure 3 Local Jurisdiction System Expansion Target Process



Source: Metro, High Capacity Transit System Plan, 2009.

Transit System Expansion Policy (TSEP)

- Targets, regional and local actions that guide selection
- RTP updates: opportunity to reprioritize regional funding for HCT based on interim actions taken by local jurisdictions

System Expansion Targets	Priority Tier		
	Near-term regional priority corridors	Next phase regional priority corridors	Developing regional priority corridors
Transit Supportive Land Use / Station Context	X	X	X
Community Support	X	X	X
Partnership / Political Leadership	X	X	X
Regional Transit Network Connectivity	X	X	X
Housing Needs Supportiveness	X	X	-
Financial Capacity (Capital and Operating Finance Plans)	X	X	-
Integrated Transportation System Development	X	-	-

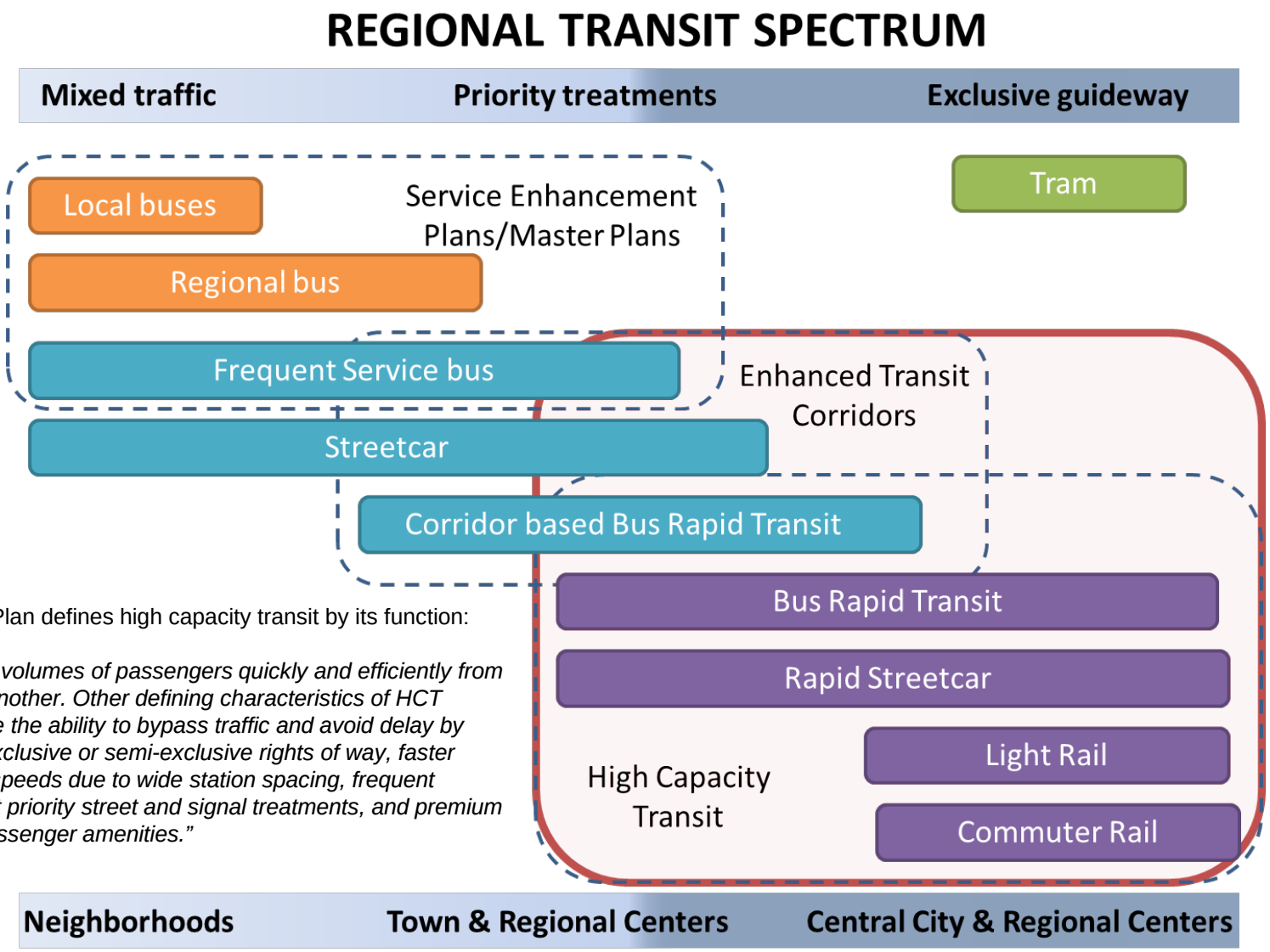
TSEP Lessons Learned

- Criteria were effective for ranking the HCT corridors but…
  - Have not been applied since
  - TV Highway project wants to use TSEP but does not know what to do

- Issues and opportunities to address with this update
  - Difficult to apply
  - Locals can't calculate themselves
  - Simplify and reduce the number of criteria
  - Expand the types of projects to which they apply

To What Types of Projects Will Criteria be Applied?

Expanding the Transit Investment Map: Categories of Capital Investments



HCT System Plan defines high capacity transit by its function:

"To carry high volumes of passengers quickly and efficiently from one place to another. Other defining characteristics of HCT service include the ability to bypass traffic and avoid delay by operating in exclusive or semi-exclusive rights of way, faster overall travel speeds due to wide station spacing, frequent service, transit priority street and signal treatments, and premium station and passenger amenities."

Technical Memorandum #2

- Reviews transit plans in the region since 2009 HCT plan

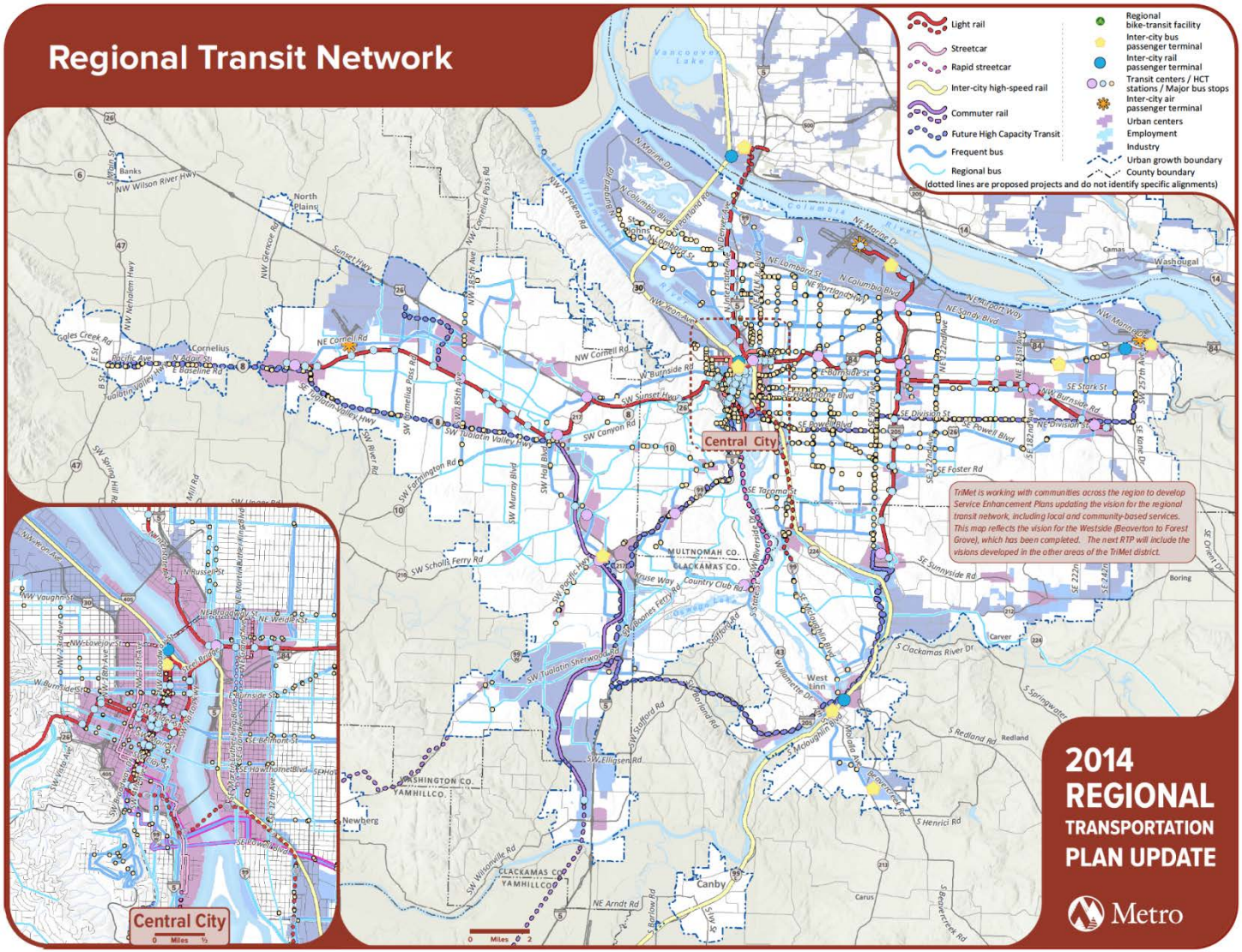
Agency	Plan	Year
Metro	Southwest Corridor Plan	2016
Metro / TriMet	Powell-Division Transit and Development Project	2014 – Present
TriMet	Pedestrian Network Analysis	2011
TriMet	TriMet Bike Plan	2016
TriMet	Service Enhancement Plans ▪ Westside ▪ Southwest ▪ North/Central ▪ Eastside ▪ Southeast	2013 – Present
PBOT	Growing Transit Communities	In Progress
PBOT	Enhanced Transit Corridor Plan	In Progress
SMART	Wilsonville Transit Master Plan	In Progress
Washington County	Washington County Transportation Futures Study	2016
Portland Streetcar	Streetcar system investment planning	In Progress

Technical Memorandum #2

Plan	HCT or HCT Related Projects
Southwest Corridor Plan	SW Corridor LRT - EIS in process (in New Starts Approval Process)
Powell-Division Transit and Development Project	Division Transit Project - TriMet beginning design phase in 2017 (in Small Starts Approval Process)
Pedestrian Network Analysis	5 of 10 focus areas connect to existing or planned HCT • Clackamas Town Center Transit Center – MAX Green Line • SE Division St. & SE 182nd Ave. (Gresham) – Division Transit Project • SE Division St. & SE 122nd Ave. (Portland) – Division Transit Project • Hillsdale (Portland) - SW Corridor LRT • Tigard Transit Center (Tigard) - SW Corridor LRT
TriMet Bike Plan	14 bike access focus areas connect to existing or planned or HCT • SW Corridor LRT (2) • MAX Blue, Red, & Green Lines (11) • BRT/HCT on TV Highway (1) • WES Commuter Rail (2)
Streetcar	• Increase frequency on all existing lines • Hollywood to Montgomery Park Streetcar Project • Macadam/John's Landing Streetcar • NE Sandy Blvd Streetcar • NE MLK King JR Blvd Streetcar

Plan	HCT or HCT Related Projects
Service Enhancement Plans ▪ Westside ▪ Southwest ▪ North/Central ▪ Eastside ▪ Southeast	Westside • Extend MAX Red Line (Hillsboro to PDX) • BRT/HCT in Line 57 Corridor (TV Highway) Acknowledges HCT planning underway • SW Corridor LRT (SW SEP) • Division Transit Project (Eastside SEP)
Growing Transit Communities	Upgrade 3 lines to frequent service; link land use and infrastructure improvements, policies & programs; stop access; transit supportive development • Outer Stark-Burnside (Line 20) • Airport Way (Line 87) • Middle Halsey (Line 77)
Enhanced Transit Corridor Plan	Identify at least two corridors in City of Portland where higher transit capacity needed to accommodate future growth and support city goals
Wilsonville Transit Master Plan	WES upgrades including all-day service with an extension to Salem
Washington County Transportation Futures Study	• MAX Extension to Forest Grove • BRT/HCT in Line 57 Corridor, with express service to Portland along Beaverton-Hillsdale Highway • WES upgrades including all-day service with an extension to Salem • MAX Expansion - Hillsboro to Portland w new alignment along US 26 • MAX Expansion - Tualatin and Sherwood • WES Extension - Beaverton and Hillsboro

Existing Regional Transit Network



Overview of Federal Funding

Federal Funding Options

- FTA:
  - Capital Investment Grant Program:
    - New Starts
    - Small Starts
    - Core Capacity
- US DOT:
  - TIFIA Loan Program (Financing Approach)
  - TIGER
- FHWA
  - Technology and ITS Opportunities

FTA Capital Investment Grant Program

- Discretionary & Highly Competitive
  - FAST authorizes $2.3 B each year through 2020 (no growth is assumed)
  - Historically $1.8-$2.1B authorized
  - Average federal share of currently competing projects is approximately 50%
  - Demand for funds exceeds supply
- Projects rated based on equal footing
- Monitored closely by FTA
- Readiness is a requirement

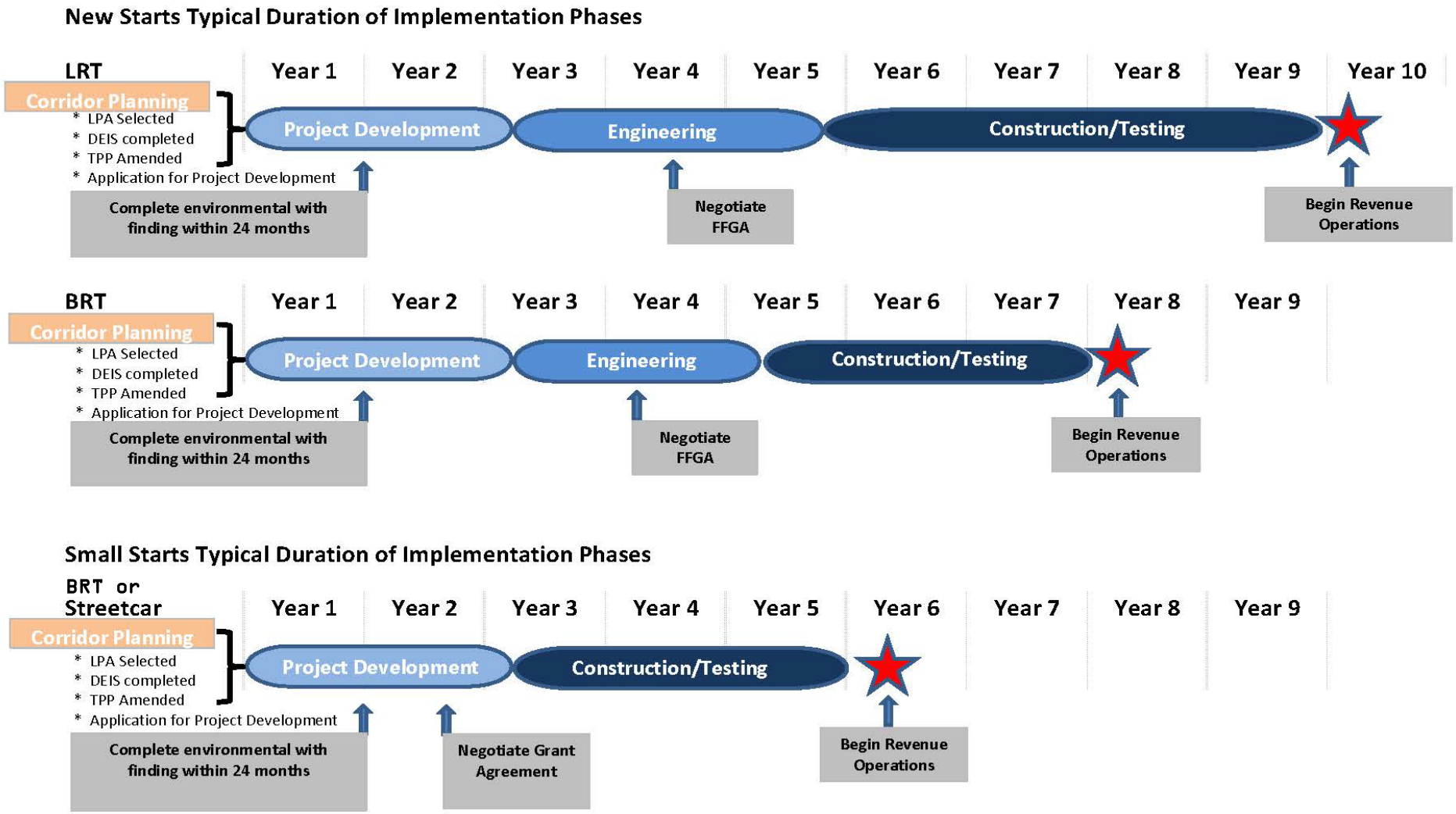
FTA Section 5309 Program under FAST Act

Grant	Project Types	Funding Thresholds
New Starts	▪ New fixed guideway system ▪ Extension to existing fixed guideway system ▪ BRT operating in a fixed guideway	▪ Total project cost ≥ $300 M ▪ New Starts funding ≥ $100 M and no more than 60% of total project budget
Small Starts	▪ New fixed guideway system ▪ Extension to existing fixed guideway system ▪ BRT operating in a fixed guideway; or ▪ Corridor-based BRT system (doesn't require separated right-of-way for full corridor)	▪ Total project cost < $300 M ▪ Small Starts funding < $100 M and no more than 80% of total project budget
Core Capacity	▪ 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	▪ Core Capacity funding no more than 80% of total project budget

Demand Growing

- CIG Pipeline
  - 69 projects
  - 70% growth in projects since FY2013
  - 33% BRT
  - 23% LRT
  - 13% Streetcar
  - Approximately 34 under $300 million

Schedule Implications of Federal Process



Scoring and Project Rating

- New and Small Starts have a rigorous evaluation process

Criteria	Definition
Project Justification (50% of Overall Project Rating)	
Mobility Improvements (16.66%)	Total linked trips on the proposed project
Environmental Benefits (16.66%)	Dollar value of the anticipated direct and indirect benefits to human health, safety, energy, and the air quality environment
Congestion Relief (16.66%)	New transit trips
Cost-Effectiveness (16.66%)	Annual capital and operating and maintenance cost per trip
Economic Development (16.66%)	▪ Transit supportive plans and policies ▪ Affordable housing policies
Land Use (16.66%)	▪ Existing corridor and station area development and character ▪ Existing corridor and station area parking supply ▪ Affordable housing
Local Financial Commitment (50% of Overall Project Rating)	
Current Condition (25%)	Sound financial condition of project sponsor
Commitment of Funds (25%)	▪ Amount of committed, budgeted, or planned funds ▪ Whether there are significant private contributions to the project
Reliability/Capacity (50%)	▪ Historical revenues and expenses ▪ Reasonableness of project capital cost estimate ▪ State of good repair ▪ Financial capacity

Warrants

- FAST specifies eligibility for established transit corridors
  - CIG share must be < $100 M or < 50% federal share
  - Automatic medium in 3 categories
    - Mobility Rating
    - Cost Effectiveness
    - Congestion Relief

Total Proposed New Stars Project Capital Cost	Existing Daily Transit Ridership in Corridor
$0 to <$50 million	3,000 or more
$50 to <$100 million	6,000 or more
$100 to <$175 million	9,000 or more
$175 to <$250 million	12,000 or more
$250 to <$500 million	15,000 or more
$500 million or more	Not warranted; estimates required

Considerations for seeking federal funding

- Any federal dollar triggers federal requirements
- Schedule and cost implications
- Continued uncertainty on funding commitment and timing
- Alternative project delivery methods
- Overall funding strategy
- Lead agency of the project

What Does FTA Like to See?

- Existing corridor strength
- Political/community support
- Strong Land Use and Economic Development
- Zero car households
  - Not tied to income
- Operating improvements = higher ridership
- Strong local financial commitment
- Agency experience/ technical capability
- Equity and environmental outcomes

Overview of Existing Criteria – Tech Memo #1

Existing HCT Plan Criteria

C1	Supportiveness of existing land uses
C2	Local aspirations
C3	Placemaking and urban form
C4	Ridership generators
C5	Support of regional 2040 Growth Concept
C6	Integration with regional transit system
C7	Integration with other land uses [freight corridor impacts]
C8	Congestion avoidance benefit
C9	Equity benefit
C10	Health (promotion of physical activity)
C11	Safety and security
C12	Housing and transportation benefit
C13	Transportation efficiency or travel time benefit to individual user
C14	Transportation efficiency or travel time benefit to all corridor users
EN1	Reduction in emissions and disturbance
EN2	Risk of natural resources disturbance
EN3	Risk of 4(f) resource of disturbance
EC1	Transportation efficiency (operator)
EC2	Transportation efficiency (user)
EC3	Economic competiveness
EC4	Rebuilding/redevelopment opportunity
D1	Total project capital cost (exclusive and nonexclusive right of way options)
D2	Capital cost per mile (exclusive and nonexclusive right of way options)
D3	Operating and maintenance cost
D4	Ridership
D5	Funding potential

Technical Memorandum #1

- Briefly describes
  - HCT Plan and TSEP
  - Federal Capital Investment Grant (CIG) Program

- Describes the 26 evaluation criteria
  - Compares the criteria to recent planning initiatives
    - Metro's Six Desired Outcomes for the region
    - Climate Smart Strategy Policy #2
  - Compares the criteria to revised CIG criteria and process

Technical Memorandum #1

- 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

2009 HCT System Plan		Comparison to Criteria from Other Plans/Programs		
#	Criteria	6 Desired Outcomes	Climate Smart Policy #2	Federal CIG
C1	Supportiveness of existing land uses	✓		✓
C2	Local aspirations	✓		✓
C3	Placemaking and urban form	✓	✓	✓
C4	Ridership generators	✓		✓
C5	Support of regional 2040 Growth Concept	✓		✓
C6	Integration with regional transit system	✓		✓
C7	Integration with other land uses [freight corridor impacts][1]	✓		
C8	Congestion avoidance benefit[2]	✓		✓
C9	Equity benefit	✓	✓	✓
C10	Health (promotion of physical activity)[2]	✓		✓
C11	Safety and security	✓		✓
C12	Housing and transportation benefit	✓		✓
C13	Transportation efficiency or travel time benefit to individual user[2]	✓		✓
C14	Transportation efficiency or travel time benefit to all corridor users[2]	✓		✓
EN1	Reduction in emissions and disturbance[2]	✓		✓
EN2	Risk of natural resources disturbance	✓		
EN3	Risk of 4(f) resource of disturbance[2]	✓		
EC1	Transportation efficiency (operator)[2]			✓
EC2	Transportation efficiency (user)[2]			✓
EC3	Economic competiveness	✓	✓	✓
EC4	Rebuilding/redevelopment opportunity	✓		✓
D1	Total project capital cost (exclusive and nonexclusive right of way options)			✓
D2	Capital cost per mile (exclusive and nonexclusive right of way options)			✓
D3	Operating and maintenance cost[2]			✓
D4	Ridership[2]	✓		✓
D5	Funding potential[2]			

Existing Criteria - Potential Additional Criteria

- TM 1 (Regional Policies)
  - Transit Access (HHs)
  - Transit Affordability (fares)
- TM 2 (Regional Plans)
  - Travel time reliability
  - Labor force access to jobs
  - An explicit consideration of walk/bike access
- 2018 RTP Transit performance measure recommendations
- Peer Practices (future task)
- Consolidation Opportunities

Small Group Exercise

Small Group Exercise

- Each table takes 1-2 Transit Vision goals and talks about the existing criteria under light of selected goal(s)

- Handout of current evaluation criteria
  - Which criteria are most important for each Transit Vision goal?

- What new criteria could be considered?
  - What criteria matter most to your goal?
  - How can we measure it?
  - Can it be meaningful in determining between projects/investments?

- Opportunities for consolidation

Small Group Exercise

Regional transit strategy vision

Relationship to HCT Plan prioritization criteria

Criteria	Is each criterion relevant and meaningful to Regional Transit Strategy Goals?				Criterion addresses deliverability account?	Opportunity to consolidate criteria?	Comments
Regional Transit Vision Goals >>>>	FREQUENT	CONVENIENT	ACCESSIBLE	AFFORDABLE			
Regional Transit Vision Goal Statements >>>>	Align frequency and type of transit service to meet existing and projected demand and transit needs. Support the implementation of local and regional land use and transportation visions.	Make transit more convenient for everyone and competitive with driving by improving transit speed and reliability through priority treatments...and other strategies. Improve customer experience by ensuring seamless connections between various transit providers...	Provide safe and direct biking and walking routes and crossings and other visibility amenities that connect to stops to make transit more accessible. Expand the system to improve access to jobs and essential destinations/daily needs for everyone.	Ensure transit remains affordable, especially for those dependent upon it.			
EXISTING HCT PLAN CRITERIA							
C1: Supportiveness of existing land uses	✓						
C2: Local aspirations	✓						
C3: Placemaking and urban form			✓				
C4: Ridership generators			✓				
C5: Support of regional 2040 Growth Concept	✓					✓	Related to C1, C2, C4, and C6. Could be consolidated with C6
C6: Integration with regional transit system		✓					Related to C5. Could be consolidated with C5.
C7: Integration with other land uses [1,3]						✓	Assessment of freight impacts may be more appropriate during corridor refinement and environmental processes
C8: Congestion avoidance benefit [2]		✓				✓	Related to C13 and C14. Could be consolidated.
C9: Equity benefit				✓			This measures population groups (e.g. low-income, minority, zero vehicle households) more likely to depend on transit
C10: Health (promotion of physical activity) [2]			✓				Measures pedestrian and bicycle network serving corridor
C11: Safety and security [3]						✓	More appropriate to address in design standards
C12: Housing and transportation benefit			✓				This measure looks at the need for access to high quality transit, rather than transit affordability
C13: Transportation efficiency or travel time benefit to individual user [2]		✓					Recommend combining C13 and C14
C14: Transportation efficiency or travel time benefit to all corridor users [2,4]		✓				✓	

Small Group Exercise

Criteria	Is each criterion relevant and meaningful to Regional Transit Strategy Goals?				Criterion addresses deliverability account?	Opportunity to consolidate criteria?	Comments
Regional Transit Vision Goals >>>>	FREQUENT	CONVENIENT	ACCESSIBLE	AFFORDABLE			
EN1: Reduction in emissions and disturbance [2]	✓						Aligning transit service with demand and land use is likely the most cost-effective way to reduce emissions. This is directly related to ridership D4.
EN2: Risk of natural resources disturbance						✓	EN2 and EN3 could be combined. Natural resource impacts are also considered in environmental process.
EN3: Risk of 4(f) resource disturbance [2]						✓	See above.
EC1: Transportation efficiency (operator) [2]					✓	✓	Measure of operating costs per rider. Could be combined with EC2.
EC2: Transportation efficiency (user) [2]					✓	✓	Measure of operating and capital costs per rider. Could be combined with EC1.
EC3: Economic competiveness			✓				
EC4: Rebuilding/redevelopment opportunity	✓						
D1: Total project capital cost (exclusive and nonexclusive right of way options)					✓	✓	Could be combined with D2.
D2: Capital cost per mile (exclusive and nonexclusive right of way options)					✓	✓	Could be combined with D1.
D3: Operating and maintenance cost[2]					✓		
D4: Ridership[2]					✓		Used in C13, C14, EC1, EC2, D5,
D5: Funding potential[2]					✓		Based on C13, D1, D2, D3, and D4.
CRITERIA FROM RECENT LOCAL/REGIONAL PLANS							
Transit access							
Transit affordability (fares)							
Travel time reliability							
Labor force access to jobs							
Explicit consideration of walk/bike access							
OTHER CRITERIA YOU WOULD LIKE TO SUGGEST							

Next Steps

Next Steps

- Inform June 1 Call for Projects
- Peer review (Tech Memo #3)
- Recommended Best Practices for Transit Investment Prioritization (Tech Memo #4)
- Recommended Criteria (Tech Memo #5)
- Transit supportive elements (Tech Memo #6)

Thank You!

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