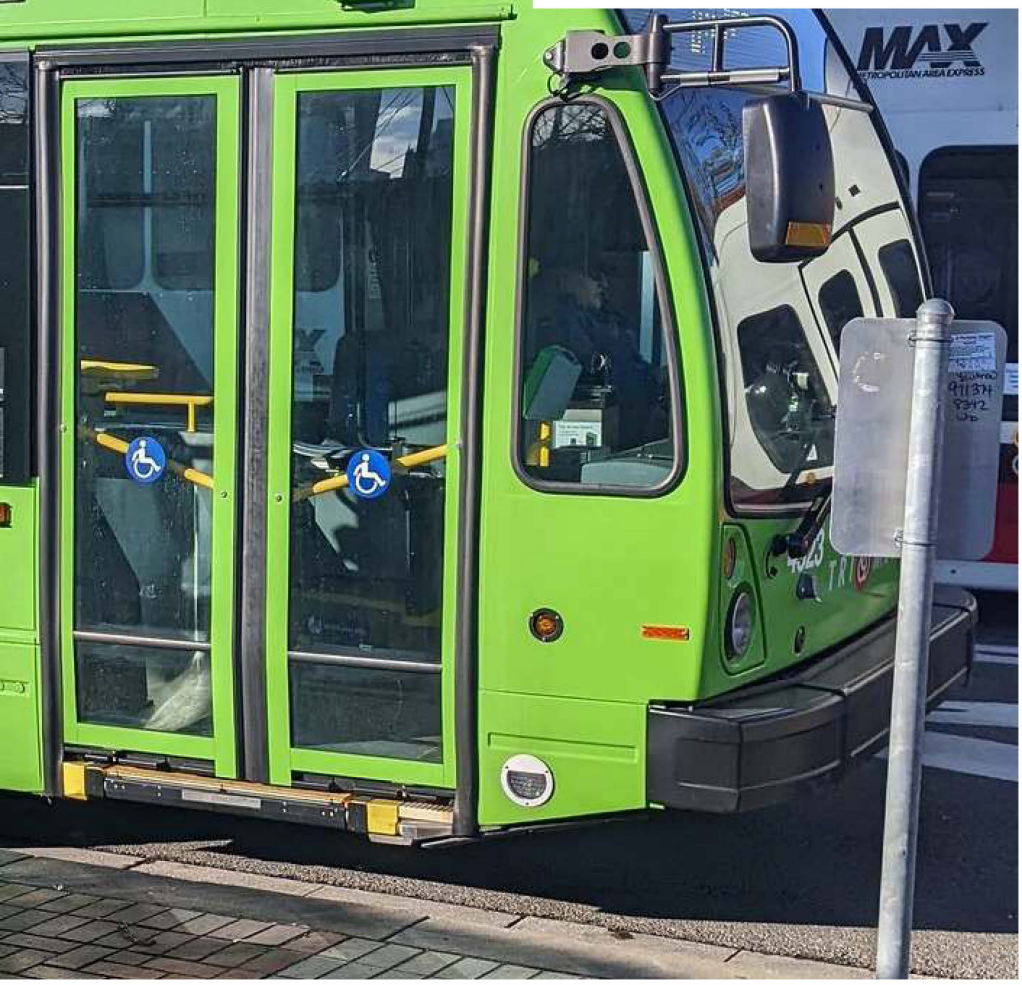
Exhibit A to Resolution No. 23-5348

Metro

HIGH CAPACITY TRANSIT
Strategy



REPORT

PUBLIC REVIEW DRAFT - July 10, 2023

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

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

Project web site: oregonmetro.gov/rtp

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

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INTRODUCTION

Renewed commitment

The Portland metropolitan area is an incredible place. Our region has vibrant communities, neighborhoods with distinctive personalities, and a world-class transit system. The communities of the Portland metropolitan region have worked together over the past decades to create one of the most livable regions of the country and strive to make our region the greatest place to live, work and play.

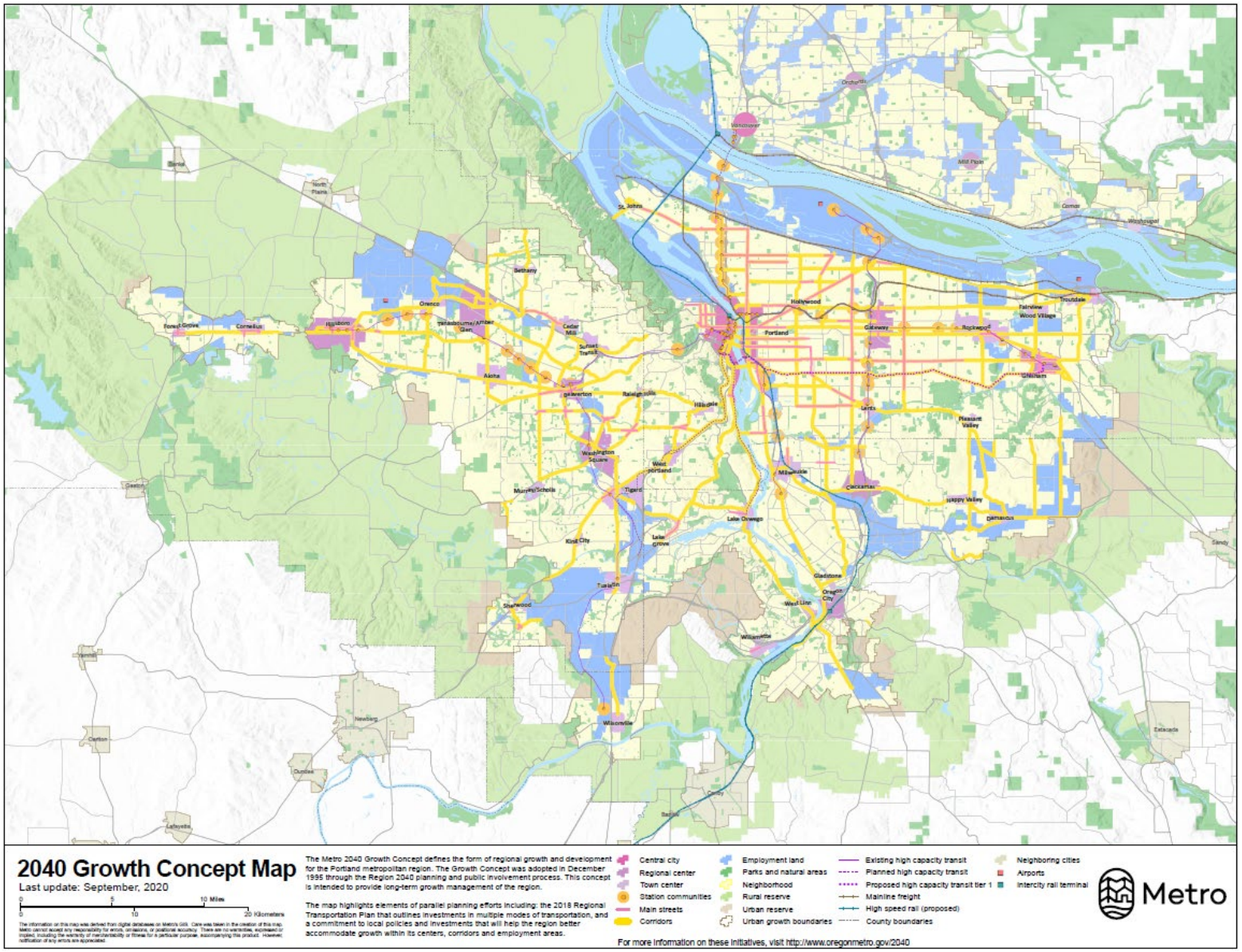
Rapid bus

This term refers to rubber-tired HCT modes that include bus rapid transit (BRT) and frequent express (FX)-style HCT services. In general, these services offer the core elements of HCT including exclusive guideways, enhanced amenities, and frequent, branded service. Rapid bus is distinct from "better bus" improvements that focus on spot treatments for speed and reliability.

Since Portland's MAX light rail Blue Line service from Portland to Gresham began in 1986 and the 2040 Growth Strategy was adopted in 1995, high capacity transit (HCT) has served as the backbone of the region's growth and prosperity. Despite periodic downturns in the economy, competition for resources among many regional needs, and most recently a global pandemic, HCT continues to play a vital role in achieving the region's goals. With many investments completed and continued work needed to achieve regional land use, economic, climate and safety goals, the region is doubling down on its commitment to HCT. HCT is a proven tool for achieving thriving, compact communities, furthering equity goals, and connecting people to opportunity every day. **This 2023 HCT strategy update reaffirms our regional commitment to HCT as a cornerstone of community development** and provides an actionable vision and plan for advancing HCT across the region**.** This strategy update recognizes that the region needs to adapt its approach to HCT investments — **rapid bus is a newer approach in this region that presents major opportunities to achieve HCT outcomes in a funding-constrained environment.**

HCT helps the greater Portland region grow in a way that supports healthy, vibrant communities and that preserves farmland and forestland. As envisioned in the 2040 Growth Concept (Figure 1) — the blueprint for how the Portland region grows — HCT plays a key role in connecting people with services, places to shop, work and school. High-quality transit connections also provide viable and affordable alternatives to driving, thus creating better transportation options and making greater Portland more equitable and climate friendly.

Figure 1. Regional 2040 Growth Concept



This HCT strategy update is part of the Metro Regional Transportation Plan (RTP), which is being updated in 2023. This strategy update:

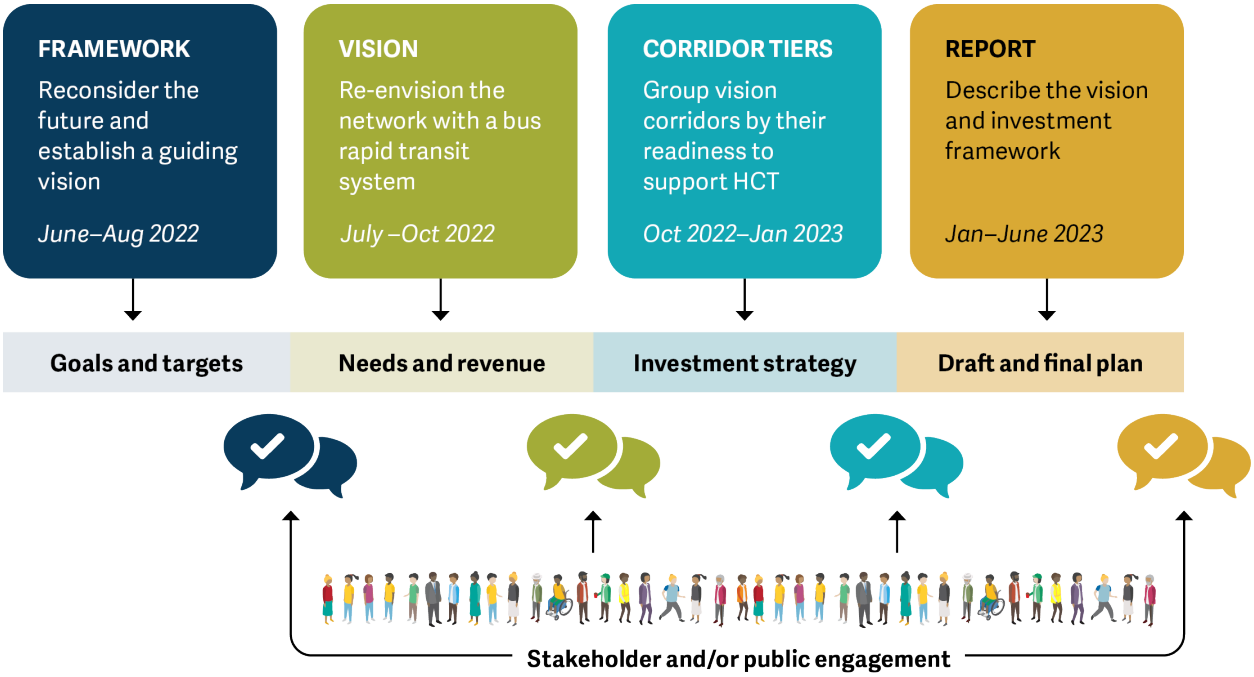
- summarizes the regional vision for HCT investment, strategies for moving HCT corridors forward, and a shared policy framework for supporting and implementing HCT
- identifies and prioritizes corridors to envision where a higher quality of transit service would provide the most benefit to the greatest number of people
- provides a roadmap for realizing the vision for HCT investment to guide near- and long-term decision-making related to HCT investments
- takes into account how the region has grown, how communities and their needs have changed, how transit and travel are different, and how the funding landscape has evolved
- establishes a pipeline of corridor investments helping the region to be competitive for federal funding for HCT
- identifies the steps needed to advance corridor investments working in close partnership with local agencies.

This HCT strategy update is not a comprehensive review of the regional transit structure or its management or a complete service analysis of the existing HCT system. Rather, it provides a vision for continued HCT investment that aligns with the RTP and the regional 2040 Growth Concept. Much future work and commitment are needed to advance the investments described in this strategy.

Project process and timeline

Metro began the HCT strategy update process in the summer of 2022. Figure 2 describes the overall timeline for the project. Metro and TriMet co-led development of this strategy update with significant participation from a working group composed of regional stakeholders: Clackamas, Multnomah, and Washington Counties; Clark County Public Transit Benefit Area Authority (C-TRAN); Oregon Department of Transportation; City of Portland; Portland Streetcar; South Metro Area Regional Transit (SMART); and Southwest Washington Regional Transportation Council.

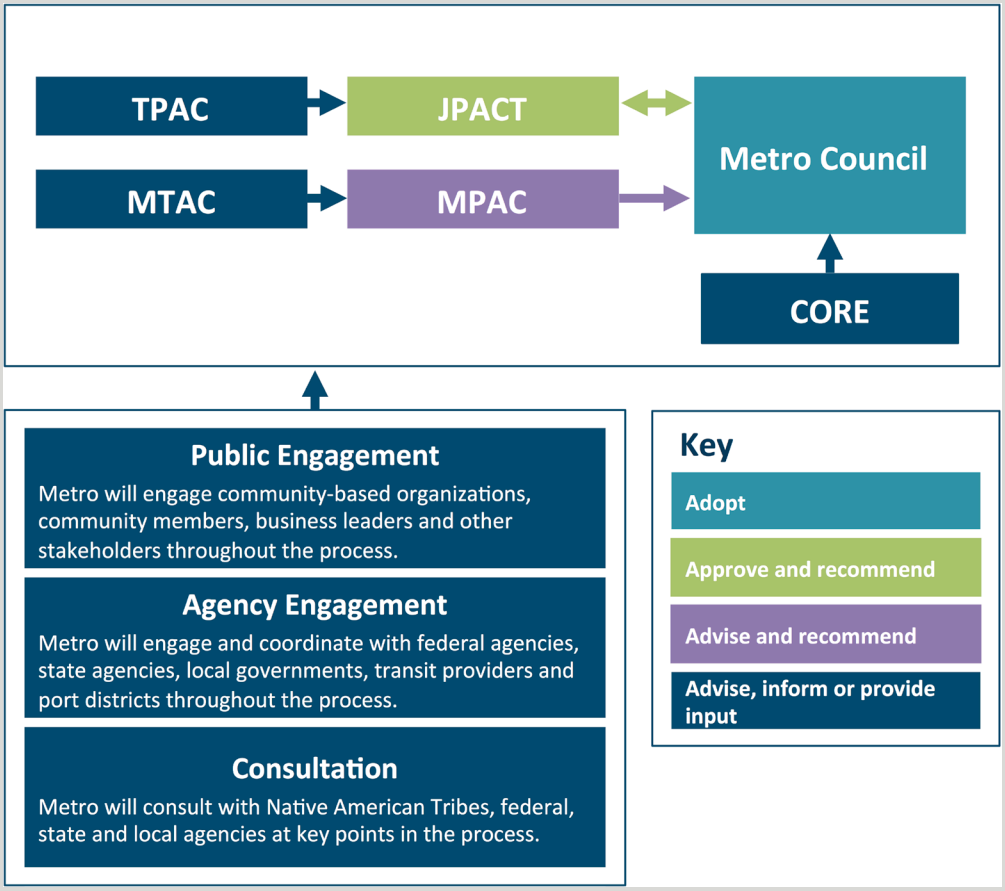
Figure 2. Update timeline



This strategy update was informed throughout by public engagement through tools such as online surveys and open houses, presentations and discussions at dozens of local meetings, and community-led events and workshops. Appendix A includes a summary of this outreach and the input provided. Metro committees were also informed by public and agency engagement when providing input and advising at each milestone in the process.

Decision-making process

The chart below shows how different groups guided the HCT strategy update process. Ultimately, the Metro Council approves the final 2023 Regional Transportation Plan, which this strategy is a component of.



CORE = Committee on Racial Equity; JPACT = Joint Policy Advisory Committee; MPAC = Metro Policy Advisory Committee; MTAC = Metro Technical Advisory Committee; TPAC = Transportation Policy Alternatives Committee

Engaging community

Community input influenced all major milestones for this strategy through the following activities.

Surveys

- RTP summer MetroQuest survey
- winter storymap survey

Focus groups and forums

- three joint events: RTP Community Leaders Forum and Business Forum and Westside Multimodal Improvement Study Business Forum
- three meetings with TriMet's Transit Equity Advisory Committee and two meetings with TriMet's Committee on Accessible Transportation
- two meetings with Clackamas County small transit providers
- two agency lessons learned focus groups: Metro/TriMet and C-TRAN
- one small business focus group and two presentations to the Washington County Chamber of Commerce

Public events

- nine tabling events held at various locations throughout the region
- four community events and activities held by community-based organization partners such as Centro Cultural, OPAL, The Street Trust and Verde.

Advisory committee meetings

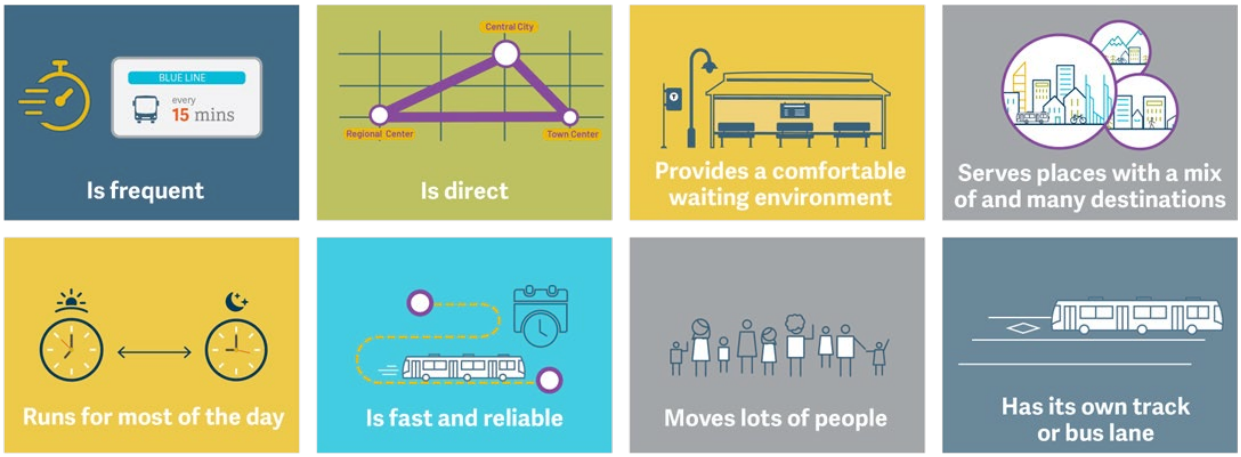
- eight meetings with the HCT Working Group, plus additional office hours
- nineteen meetings with partner jurisdictional staff (Transportation Policy Alternatives Committee; Metro Technical Advisory Committee; Clackamas, East Multnomah, and Washington County Technical Coordinating Committees)
- nineteen meetings with elected officials (Metro Policy Advisory Committee; Joint Policy Advisory Committee; East Multnomah, and Washington County Policy Coordinating Committees)

HIGH CAPACITY TRANSIT

Defining high capacity transit

HCT is a type of public transportation that moves a lot of people quickly and often. It provides a higher quality of service with greater benefits to more people with improved convenience and travel time. See Figure 3 for the characteristics of high capacity transit.

Figure 3. Characteristics of high capacity transit



High capacity transit modes

Train-based HCT includes:

- rapid streetcar and streetcar (depending on context)
- light rail transit
- commuter rail and heavy rail.

Rapid bus-based HCT options include:

- bus rapid transit (BRT)
- corridor-based BRT

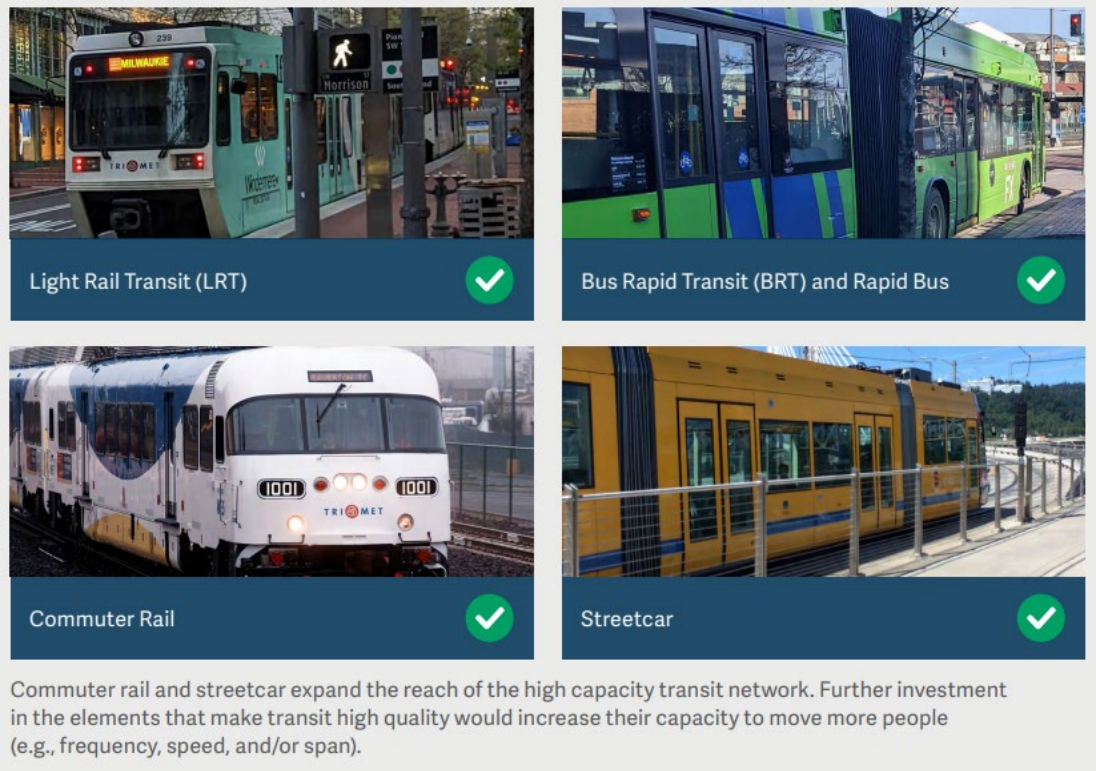
Bus rapid transit is a strategy for serving high-volume corridors with rail-like capacity for a smaller investment. These systems feature distinctive branding, a majority of dedicated bus-only lanes, and passenger amenities such as real-time information systems.

Regardless of mode, HCT investments include:

- some degree of roadway priority
- fast boarding due to off-board payment and multiple-door boarding
- comfortable waiting spaces with real-time information

- limited stops
- improvements to the surrounding streetscape for better pedestrian access.

Figure 4. High capacity transit modes



Commuter rail and streetcar expand the reach of the high capacity transit network. Further investment in the elements that make transit high quality would increase their capacity to move more people (e.g., frequency, speed, and/or span).

Additionally, this strategy update encompasses other system elements including:

- light rail transit operations improvements
- existing HCT corridor "state of good repair" investments.

While not defined as HCT, TriMet's Better Bus program (also known as enhanced transit corridor investments), as well as investments in operating the regional frequent service bus network are closely related to and support HCT. These investments include elements of HCT such as high frequency service or speed and reliability improvements, but they are not directly addressed by this strategy update. Many frequent transit corridors and better bus corridors are candidates for HCT investments.

Elements that make a transit investment high capacity

High capacity transit has both a level of enhanced amenities and transit priority — which work together to move more people more comfortably than other types of regional or local transit — that are implemented as part of a corridor-level capital project. The type or mode varies and can include light rail, commuter rail, rapid streetcar, bus rapid transit or corridor-based rapid bus.

Enhanced amenities are features that improve efficiency and enhance the user experience. These include vehicles that are larger and allow boarding from all doors, stations with near level boarding, and frequent service (15 minutes or better). It also refers to amenities such as covered waiting areas, real-time bus or train arrival information, schedules, ticket machines, enhanced lighting, benches, bicycle parking, and even civic art and commercial services. Together, these features make high capacity transit more convenient and comfortable.

Enhanced priority investments are a package of physical features along much or most of a corridor that get people to destinations faster and on time. These include dedicated transit space or lanes in the street, also known as "exclusive guideway." In our region, MAX light rail vehicles operate on tracks with exclusive guideway while rapid buses operate in a mix of dedicated and shared street space. Rapid bus investments provide priority space for buses on the roadway and/or priority at traffic signals to achieve the transit speed and reliability characteristic of high capacity transit. These investments make transit more attractive for current and future riders.

History of regional high capacity transit planning

In 1974, there was a paradigm shift in how the Portland region addressed growth and approached transportation policy. Following public outcry over the expected cost and the destruction of neighborhoods required for its construction, elected leaders rejected the Mt. Hood Freeway project. Instead, the region set aside plans for 54 new highway projects in favor of a robust network of HCT and developed the 1982 Light Rail System Plan. The region's first light rail line — the MAX Blue Line — opened in 1986 and heralded in this new era in transportation for the region.

After several expansions in the 1990s and early 2000s, including the MAX Red and Yellow Lines, the Regional High Capacity Transit System Plan was developed in 2009 to guide future regional HCT capital investments. The HCT plan provided a framework on where to spend limited transportation dollars: where local jurisdictions had committed to supportive land uses, high-quality pedestrian and bicycle access, management of parking resources, and broad-based financial and political support. As a result, the region has seen the addition of the MAX Green and Orange Lines and will soon see both the MAX Red and Yellow Lines extended through the A Better Red MAX improvements project (under construction) and the Interstate Bridge Replacement Program MAX Yellow Line extension to Vancouver, Washington (planning). At the same time, planning for the new Southwest Corridor MAX line is moving forward.

The 2018 Regional Transit Strategy (an element of the 2018 RTP) refreshed the region's HCT strategy in advance of a major regional funding measure put to the voters in 2020. This funding measure was ultimately not successful, and funds are still needed to support expansion of the transit network. Since that time, greater Portland's first rapid bus project (FX2-Division) opened, and planning began for two additional rapid bus projects: 82nd Avenue and Tualatin Valley Highway. Rapid bus has provided a new opportunity to think differently about what the region's HCT network could look like in the future. It can be more flexible and cost-effective to implement than light rail and has the potential to move projects more quickly through the federal project development process. Further, it is an opportunity to leverage federal funding. The 2021 Bipartisan Infrastructure Law authorized $109 billion for transit infrastructure and made more funding available for Small Starts Capital Investment Grant rapid bus projects.

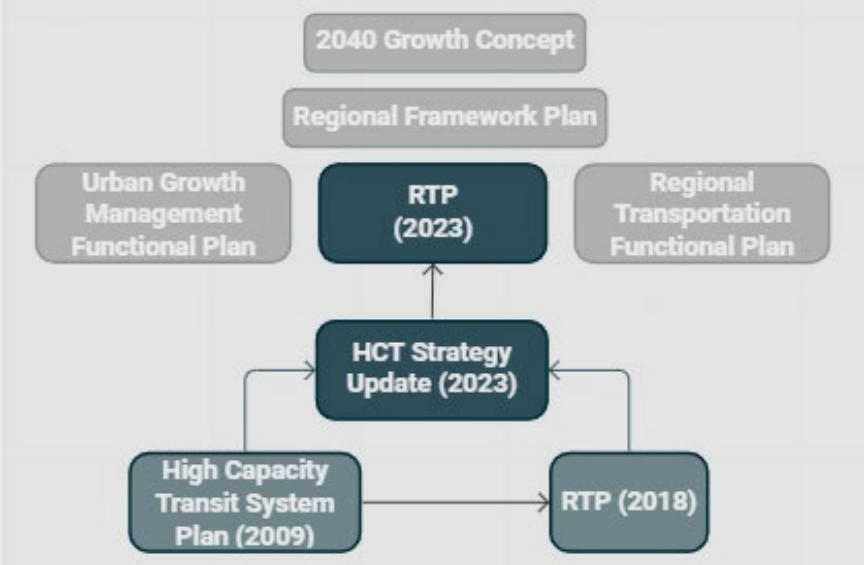
HIGH CAPACITY TRANSIT POLICY FRAMEWORK

Role of HCT strategy update within the regional transportation plan process

The Metro 2023 RTP update is the process to refine the region's transportation investment blueprint for the next 20 years and beyond. The RTP process evaluates the available revenues for transportation spending, assesses the region's needs, and presents a list of prioritized projects and programs to achieve the Portland metropolitan region's transportation goals. The RTP recognizes that demand for transportation investments exceeds existing financial capacity; prioritization is necessary to demonstrate fiscal constraint for federal reporting processes and to ensure we take intentional steps in expanding our transportation system.

This HCT strategy update sets the vision and priorities for regional HCT corridors. It falls under the Regional Transit Strategy, which is a part of the RTP that provides the region's overall vision for meeting future transit needs. As shown in Figure 5, the RTP continues to support the 2040 Growth Concept: the region's long-range land use and transportation plan for managing growth. The Regional Framework Plan identifies regional policies to implement the 2040 Growth Concept goals.

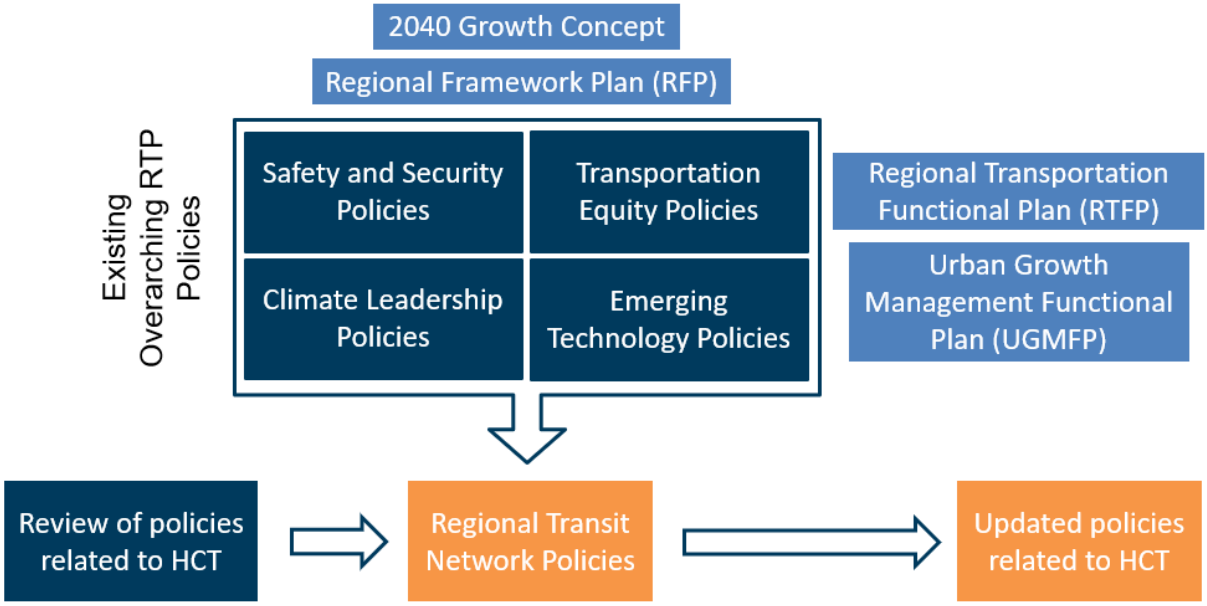
Figure 5. Related regional plans and policies



As shown in Figure 6 below, the RTP includes overarching policies that guide the Regional Transit Network Policies.[1] This HCT strategy update recommends updates to these policies; the updates will guide how Metro evaluates transportation projects including identifying and prioritizing investments that will advance the regional HCT network in a fashion that benefits the most people.

[1] Two "functional plans" – the Regional Transportation Functional Plan and the Urban Growth Management Functional Plan – provide additional guidance to local jurisdictions to implement the policies in the RTP.

Figure 6. Regional transit network policies in relation to the RTP and other Metro plans



As part of this HCT strategy update, plans and policies from state and federal agencies; transit providers including TriMet, SMART, and C-TRAN; and cities and counties in the region were reviewed to document relevant policies or efforts. Appendix C, Policy Framework, provides additional detail on the local and regional plans that were reviewed and their respective relationships to the update.

Regional transit strategy

High capacity transit is one part — a key part, but still one part — of the broader transit strategy. It plays a specific role in moving many people quickly along major travel corridors. The regional transit strategy is implemented by improving transit service, investing in transit infrastructure, collaborating between transit providers and local jurisdictions, and expanding transit-supportive elements.

Transit service improvements Local and regional transit service improvements designed to meet current and projected demand in line with local and regional visions and plans.

Capital investments in transit New enhanced transit strategies such as signal priority, dedicated lanes or HCT options such as rapid bus, light rail, commuter rail or high speed rail.

Transit supportive elements Includes programs, policies, capital investments and incentives such as travel demand management and physical improvements such as sidewalks, crossings and complementary land uses.

Incorporating community feedback in the policy framework

Community stability Strong support for investments in corridors to maintain housing and business affordability and avoid displacement.

Safe access to transit Support for safe and comfortable facilities for walking and biking to transit and for waiting at the transit stop (crosswalks, sidewalks, lighting, bus stop amenities).

Transit service Support for more frequent and reliable service. Support for expanding service, particularly to growing areas and town centers in the broader Metro region.

Broaden access Better serve community members who are older, who do not speak English, who have mobility challenges or other disabilities, who have health conditions, who are travelling with children, or who are in school.

Priority corridors for transportation investments include:

- Multnomah: 82nd Ave., Powell Blvd., 122nd Ave., Downtown Portland
- Clackamas: McLoughlin Blvd., 82nd Ave., Highway 212/Sunrise, Clackamas to Columbia/181st Ave.
- Washington: Tualatin Valley Highway, SW 185th Ave., Burnside/Barnes Road.

Other related regional work

Other recent regional studies, planning efforts or work underway informed development of this strategy and include:

- Mobility Corridors Atlas (2014)
- Strategic Plan to Advance Racial Equity, Diversity and Inclusion and Equity Framework (2016)
- Southwest Corridor Equitable Development Strategy (2017) and Locally Preferred Alternative (2018)
- Division Transit Locally Preferred Alternative (2019)
- Designing Livable Streets and Trails Guide (2019)
- Regional Framework for Highway Jurisdictional Transfer (2021)
- Regional Congestion Pricing Study (2021)
- Transportation System Management and Operations Strategy Update (2021)
- Regional Mobility Policy (2019-22)
- Tualatin Valley Highway Corridor Study (2022-23)
- 82nd Avenue Corridor Study (2023)
- Transit-Oriented Development Strategic Plan Update (2022)
- Emerging Transportation Trends Study (2022)
- Climate Smart Strategy Update (2022)

Challenges/opportunities

This strategy update revisits investment priorities based on new and emerging regional issues, challenges and opportunities including the possibilities presented by rapid bus, the transit priorities identified through recent work by Metro and partners, and the lessons learned from the work of peer regions and in the wake of the COVID-19 pandemic. This strategy update considers and responds to these recent trends through the updated policies and the HCT vision described in later sections.

What issues were considered in the 2009 plan?

Our Place in the World

In 2008, Metro developed the document, Our Place in the World, which highlighted global issues that were creating challenges for the Portland metropolitan region at the time.[2] While these challenges were central to the 2009 HCT plan, many are still relevant today and to this strategy update:

- Growth has brought opportunity and prosperity to the region, but it has also Brought growing pains.
- Uncertain energy supplies and the rising price of petroleum products affect transportation project costs and household transportation expenses. Increasing costs will make travel more difficult for those of modest means and make it imperative that our transportation system provides affordable transportation choices across the region.
- Expanded transit service will be necessary to reduce the region's impact on climate change and improve air quality.
- Current sources of transit funding are not enough to support system expansions needed to serve the region's rapidly growing ridership.

System design considerations

The 2009 HCT plan documented a number of considerations regarding the design of the HCT system, many of which continue to be relevant today.

Grid versus radial system The 2009 plan identified corridors that would continue to build out a radial HCT network. New cross-region routes that would create a grid connection between markets may become priorities for the region once the radial system is fully realized and/or markets generate enough riders to justify an HCT investment. Grid systems provide additional person-carrying

[2] Metro, Our Place in the World, October 2008. Pages 23-24 are specific to integrated transportation networks and travel options.

capacity and travel choices but are only feasible if there are enough riders to support parallel lines that are high frequency to minimize transfer time. The FX2-Division line illustrates corridor-based rapid bus as a strategy that can build out the HCT grid.

Appendix B: Regional Transit Modes summarizes the characteristics of HCT and other regional transit modes

Passenger capacity (network density versus coverage) Transit vehicle capacity and frequency determine person-carrying capacity. Light rail provides a higher passenger capacity per hour of service. The MAX system was developed to fit downtown Portland's 200-foot blocks; this limits the light rail trains to two cars. The 2009 plan identified strategies to increase passenger-carrying capacity including increasing frequency on existing lines, adding new lines serving existing corridors, adding parallel lines with minimum one-mile spacing, and considering a tunnel under downtown that would allow longer trains and support faster travel across the region; the region has continued to study a tunnel solution.

Branching As the region expands, branching lines from a common route could be considered to serve multiple end-of-line destinations. This strategy remains applicable, particularly for rapid bus lines.

Rail interoperability The potential to build streetcar tracks to accommodate MAX trains in specific segments was identified as a consideration to provide system redundancy. Streetcar design standards typically do not allow MAX trains to operate on streetcar tracks. Streetcar and MAX currently interoperate on the Tilikum Crossing bridge, which is also shared with buses. Shared rail and bus segments can maximize the utility of investments in constrained corridors.

Vehicle features Low floors, fare payment at stations or on board, multiple wide doorways, and other "universal design" features streamline boarding and alighting and maximize accessibility. As with the frequent express FX2-Division project, an iconic vehicle can become a symbol of the HCT brand that makes it easier for riders to identify and use.

Service quality considers the total customer system experience. HCT includes:

- moderate to full transit priority, i.e., speed and reliability
- very frequent service (every 15 minutes or more often)
- long hours of service on weekdays and weekends
- longer station spacing of one-third to one-half mile or more for fast travel time
- high-quality station access is important since HCT stations are farther apart
- high-quality station amenities including shelters and real-time information.

Land use and urban form Mixed land uses concentrated within walking distances of HCT stations are critical to fostering walkable communities and successful HCT performance. High-quality transit service and pedestrian access must be in place to realize a significant drop in per capita vehicle miles traveled that occurs as neighborhoods and regional centers transition from a character of closer to 10 persons and employees per acre to one of 25 to 50 persons per acre — an environment supporting rapid bus and light rail investment.

Transit system constraints The 2009 plan identified that the Steel Bridge, the Rose Quarter Transit Center and at-grade light rail crossings increase transit delay.

What has evolved since the 2009 HCT plan?

Since 2009, the region's awareness and level of urgency has heightened around issues including social equity-related disparities based on people's race and income, housing affordability and displacement, the impacts of climate change and eliminating traffic deaths and serious injuries through the Vision Zero program. The pandemic brought additional transformation around how and where people travel. It has also resulted in more urgent personal safety and health concerns, and has continued to impact how transit is utilized and delivered. This section summarizes takeaways from several recent efforts that analyzed these trends.

An evolving approach to high capacity transit

Since the 2009 plan was adopted, the regional funding landscape has changed. Federal funding now requires a much more significant match than in the past — typically, 50% as opposed to 10% in past decades. With few dedicated local funding sources, funding for major HCT investments presents a substantial challenge. Rapid bus and related "rubber-tire" HCT investments can provide all the benefits of HCT, often at a reduced cost compared to other modes. While each HCT corridor will go through a refinement process that examines the most appropriate HCT mode, the region recognizes that rapid bus and similar investments represent a cost-effective path forward for introducing HCT in the face of uncertain funding.

Metro and TriMet Forward Together and Emerging Trends Studies

In preparation for the 2023 RTP and the Forward Together service plan, Metro and TriMet, respectively, conducted research into current and emerging trends for transportation in the region.[3] Key trends related to HCT that were identified through these efforts are described below.

[3] Metro, Emerging Trends, Executive Summary, October 2022. TriMet, Forward Together, Existing Conditions and Market Analysis Reports, April/May 2022.

Declining transit ridership and a gradual recovery Nationally and on TriMet, transit ridership declined by 4% between 2010 and 2019, although ridership began to increase in the year before the COVID-19 pandemic. Between February and April 2020, regional transit ridership dropped by nearly 70%, and TriMet reduced service by 20%. As of early 2023, ridership is recovering and is expected to be at pre-pandemic levels by 2026 supported by the service plan envisioned in Forward Together (see Figure 7).

Shifts in when and where transit is needed Peak commute demand has declined since the pandemic as many people continue to work from home (see Figure 8). But not everyone is able to work remotely, and lower-wage workers are less likely to have that option. The pandemic showed that people in lower-income areas continued to ride transit at higher rates.

Figure 7. Estimated Service and Ridership Changes, 2021

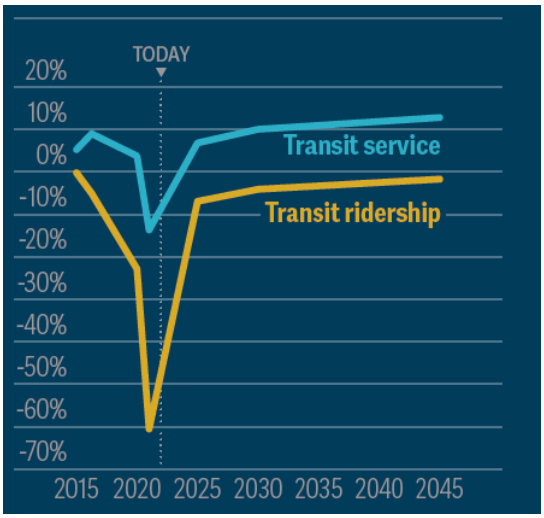
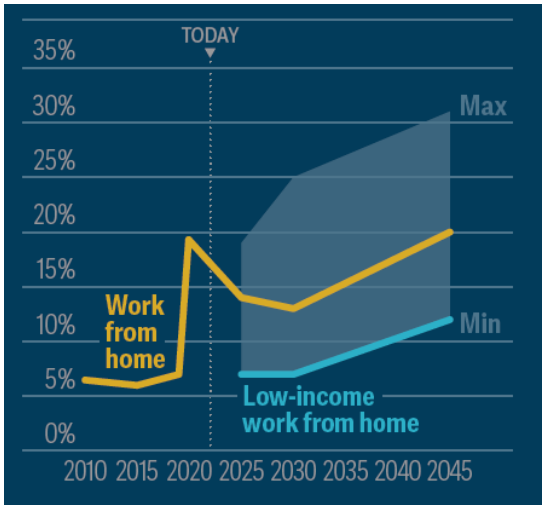


Figure 8. Oregon Remote Work Levels



Disparities in access to jobs and services. Even before the pandemic, housing costs had pushed lower income- residents and people of color to more affordable outlying areas that tend to be farther from transit and require longer trips to access jobs and services (see Figure 9 from the Portland Metro Congestion Pricing Study).

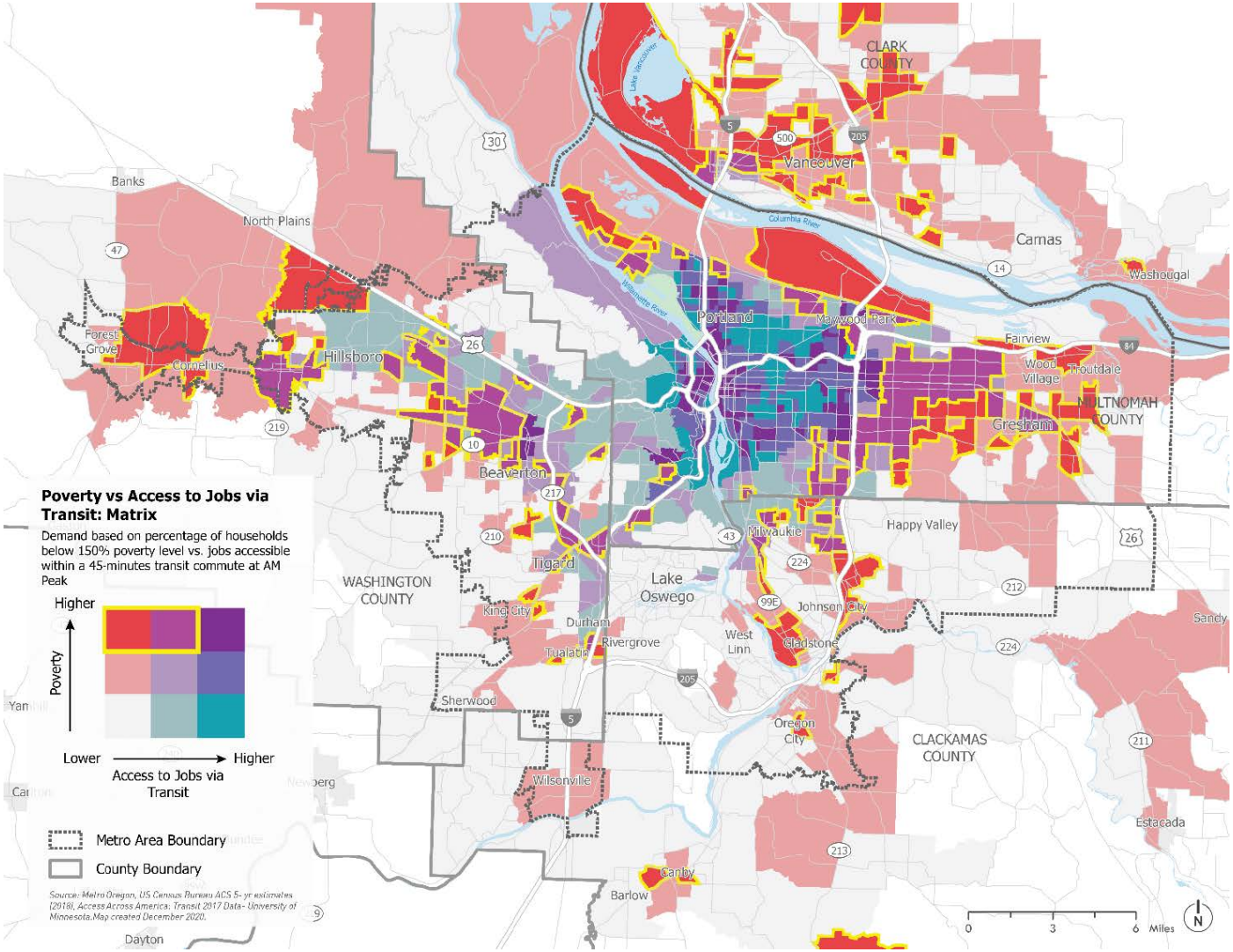


Figure 9. People with low incomes in relation to transit service

Impacts of climate change

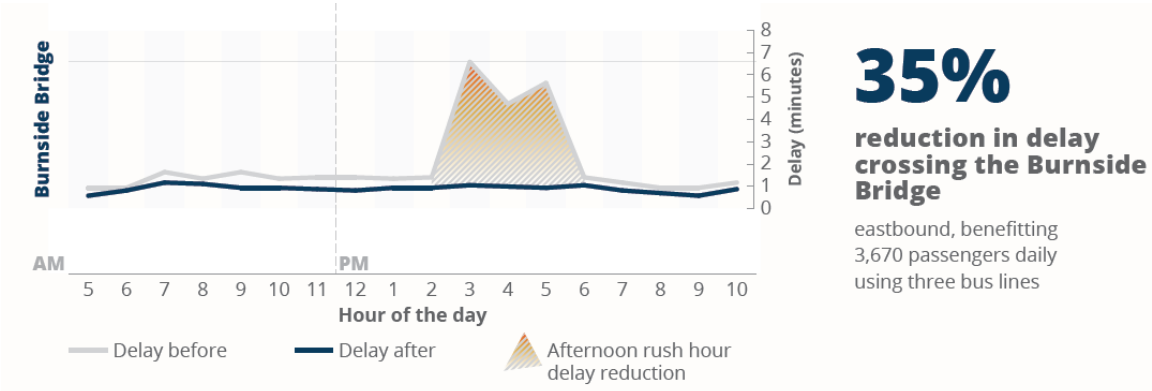
Reducing the impacts of climate change can benefit low-income communities and communities of color who are more likely to live in areas of high flood risk and areas that experience urban heat island effects from a sparse tree canopy.

Growing and lingering personal safety concerns Personal safety on transit vehicles is now a top concern of riders. Some potential riders remain concerned about their health and choose not to use transit. The number of people experiencing houselessness has grown, including the numbers of unhoused residents at or near transit stops. Severe injuries and traffic fatalities have also increased in recent years.

Similarly, pedestrian and cyclist safety has declined during and post pandemic. Regional agencies are focused on addressing the root causes, which include an increase in traffic speeding, facility gaps, poor lighting and other issues.

Improvements to make transit faster, more reliable, and more attractive TriMet, Metro, the City of Portland (including its Rose Lane Plan) and other jurisdictions have studied hundreds of bus-priority lane and spot improvement projects between 2018 and 2022; more than 50 were implemented. Figure 10 provides an example of the effectiveness of one of these investments: the Burnside Bridge.

Figure 10. Before-and-after effects of Burnside Bridge bus-priority improvements



Safe and Healthy Urban Arterials

In preparing for the RTP, Metro developed this RTP policy brief describing existing conditions, challenges and policy considerations for urban arterials in the region, which are of high importance for transit.[4] Eight of the 10 highest-ridership TriMet

[4] Metro, Safe and Healthy Urban Arterials Policy Brief, October 2022.

bus routes are on urban arterials that carried 25% of TriMet's ridership in 2020. Takeaways from the report are included below.

- Urban arterials represent 5% of roadway miles but have over 40% of serious and fatal crashes, as well as a disproportionate number of serious bicycle and pedestrian crashes and fatalities.
- Two-thirds of urban arterials are in areas with higher populations of people of color and people with lower incomes; fatal and severe injury crashes disproportionately affect these communities.
- Urban arterials are critical for implementing the regional growth concept since they serve many of the region's regional centers, town centers and station communities where the most housing and job growth will occur.
- Existing zoning, design and safety deficiencies, outdated standards, lack of funding, and complex coordination are among the challenges to addressing needs and creating thriving centers along urban arterials.

The policy brief identified policy, design and funding challenges for the RTP to address in defining a new approach for urban arterials that addresses equity and safety issues. HCT investments identified for urban arterial corridors could be a key mechanism for coordinating improvements on these streets.

Synthesis of challenges and opportunities to be addressed

Figure 11 below illustrates the five pillars of the 2023 RTP goals and how they relate to HCT opportunities.

Figure 11. HCT opportunities related to 2023 RTP goals

Equity

- Address transportation system disparities including increasing access to high-quality service, providing faster travel across the region, and improving localized air quality for people of color, people with low incomes, and other underserved communities.
- Consider the importance of trips outside of the peak commute times for people of color and low-income people, who are more likely to hold multiple jobs.
- Employ strategies that stabilize low-income households and community-serving small businesses and provide affordable housing ahead of major transit investment.

Climate

- Make using transit an attractive choice to shift trips that are currently made by single occupancy vehicles. This will reduce VMT, improve air quality, and reduce greenhouse gas emissions.
- Link roadway pricing to opportunities to reduce greenhouse gas emissions and prioritize project funding for corridors along and within congestion pricing areas.
- Prioritize HCT projects to improve local air quality and integrate electrification or other clean fuel strategies to reduce emissions from transit.

Mobility

- Connect regional and town centers as part of the 2040 Growth Concept. HCT will serve as the backbone of the regional transit system, providing the necessary capacity
- Ensure a safe, welcoming system with high quality infrastructure and service to retain and attract new transit riders and to reverse ridership trends that were compounded by the pandemic.
- Integrate corridors and station areas with active transportation facilities, to make HCT projects accessible and allow more people to fulfill their travel needs by walking and bicycling.
- Consider investments to address MAX system capacity constraints that limit current system speed, affect system resiliency, and preclude future expansion, including over the Steel Bridge, at the Rose Quarter Transit Center, and through downtown Portland.

Economy

- Prioritize access to in person jobs and essential services, recognizing the potential for fast, reliable service to increase access to economic opportunities for people of color and people with lower incomes.
- Minimize wait times by making efficient and convenient transfer opportunities that will benefit lower-income workers, women, and essential workers who have a greater tendency to make multiple trips
- Employ strategies to accommodate growth while alleviating displacement risk with equitable transit oriented development investments along major corridors that welcome people across all income brackets.

Safety

- Prioritize personal safety– on board transit vehicles (including continued concern about health risks), at stations, and along streets (including street lighting). Rethink safety interventions, including education, communication, and encouragement to make all people feel safe on transit, and address the threat that people of color may feel regarding transit security personnel.
- Design streets to be safer for all people. HCT projects are an opportunity to partner with local jurisdictions. Fatal and severe injury crashes are disproportionately on urban arterials which often run through communities of color and lower-income communities. All people must feel safe using transit if HCT investments are to have the intended climate and social equity benefits. Race, gender, and age play a role in perceived safety when traveling.

High capacity transit policy framework updates

High capacity transit is the backbone of both the 2040 Growth Concept and Climate Smart Strategy,[5] as well as the foundation for the transit network in the RTP which is a key tool for implementing both documents. The 2040 Growth Concept sets forth a vision for connecting the central city to regional centers such as Gresham, Clackamas and Hillsboro with fast and reliable HCT; these connections will help greater Portland concentrate development and growth in its centers and corridors.

Based on a review of existing regional, state and federal policies; evaluation of the challenges and opportunities described above; and review of policies in similar regions; this strategy update refined the policy framework to better reflect current and future regional priorities and desired outcomes for HCT. Key considerations included:

- prioritizing social equity in transit investments by emphasizing the importance of high-quality service to make transit work for everyone
- addressing climate change as another key priority for transit investment, recognizing that climate and equity are interrelated challenges for the region
- prioritizing maintenance as key to preserving a resilient and reliable system, and
- more clearly addressing the role of the better bus program as a distinct tool for increasing reliability of the transit system.

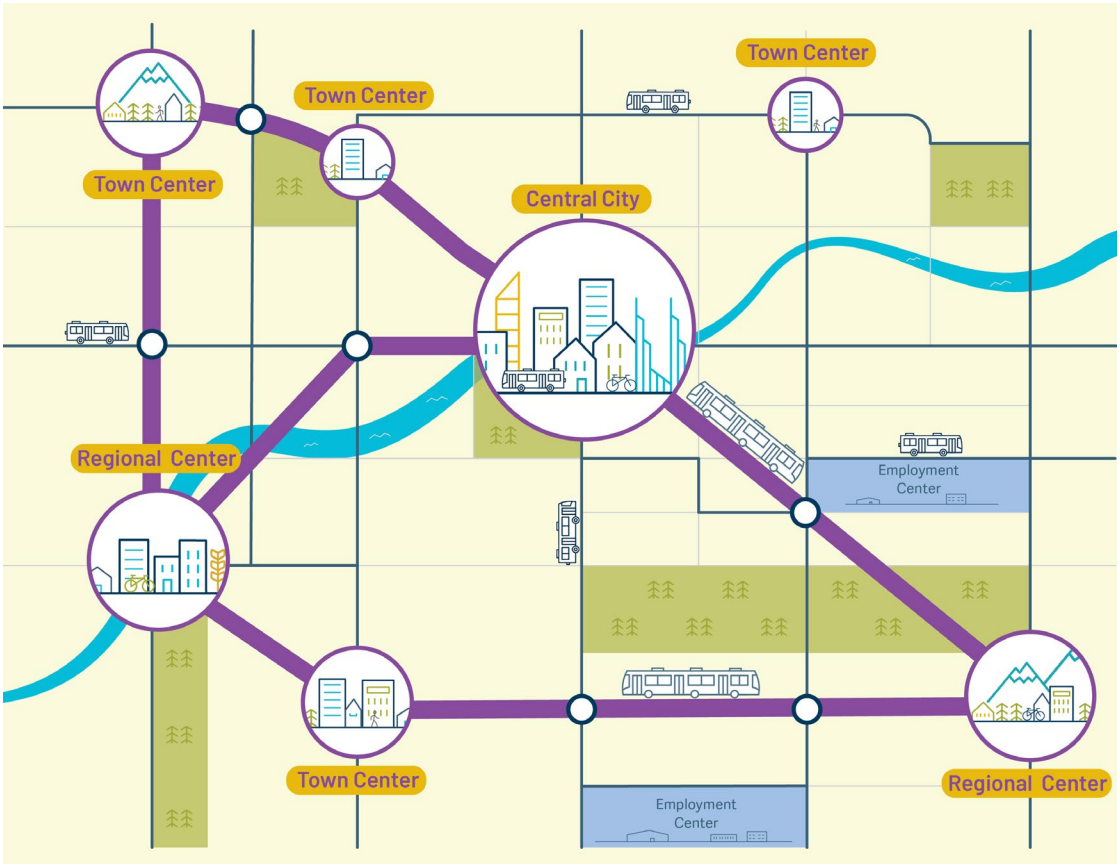
A key element of the policy framework is defining what HCT looks like in greater Portland and the role that it plays in the regional transportation network. This strategy update recharacterized high capacity transit to:

- lead with the *purpose* of HCT, which is to serve as the backbone of the regional transportation (not just transit) network
- expand the *role* of HCT to connecting regional centers and major town centers (see Figure 12)
- integrate *social equity* by emphasizing that HCT should connect people who are marginalized by society (e.g., communities of color), suffer from institutional or structural discrimination or rely on transit (i.e., people of color, limited English proficiency, 18 or under, 65 or over, low-income, differently abled) with high-quality transit
- define the *essential attributes* of high-quality transit as fast, frequent, safe and reliable

[5] https://www.oregonmetro.gov/climate-smart-strategy

- emphasize that HCT provides the needed *capacity* to serve the region's highest demand corridors
- specify the *levels of transit priority,* aspiring to operate in exclusive guideway to the extent possible
- specify the *transit modes* that may be considered, which include corridor-based rapid bus such as the FX2-Division line, that may not have majority exclusive guideway.

Figure 12. Regional transit network concept



Defining bus rapid transit

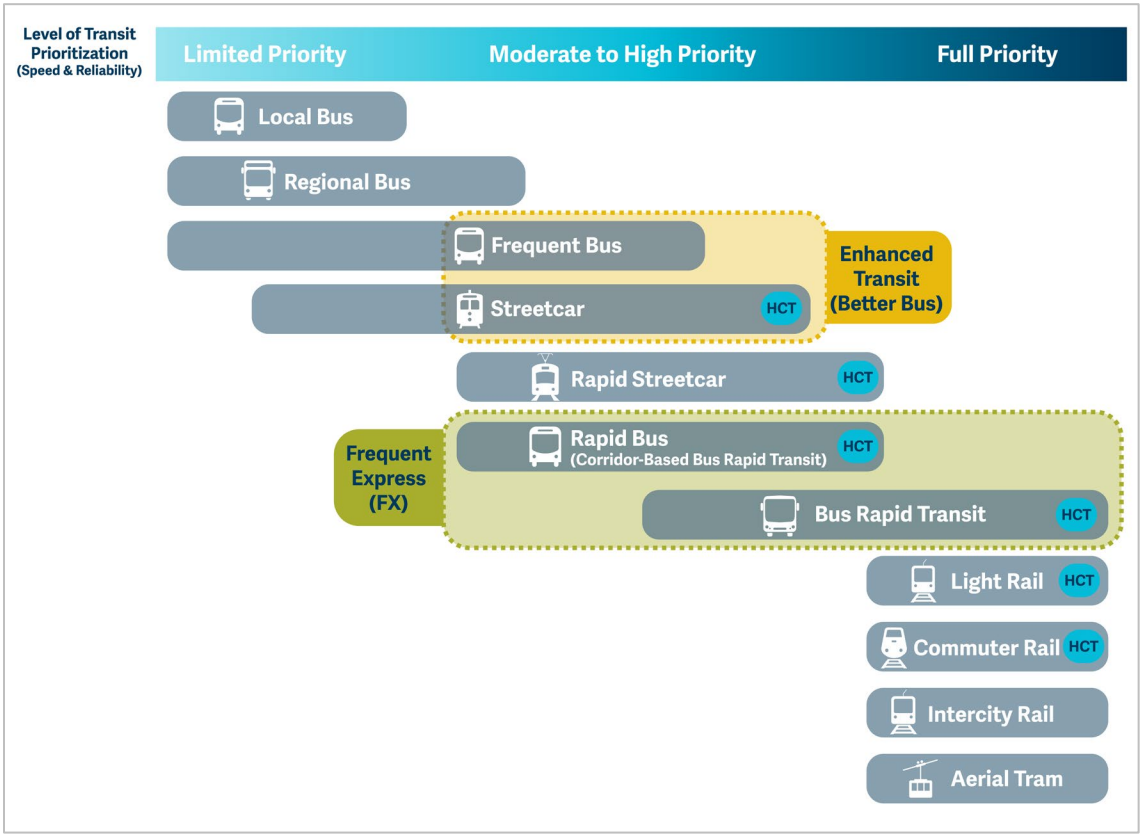
Federal funding has been and will continue to be essential to advancing most HCT corridors. BRT, as defined by the Federal Transit Administration's Capital Investment Grant program, must include:

- more than 50% of the route is in a fixed, separated guideway dedicated for public transportation during peak periods
- defined Americans with Disabilities Act-compliant stations with shelters and route schedules
- solutions for faster travel time at congested intersections
- bi-directional weekday service for at least 14 hours a day arriving at least every 15 minutes all day or 10 minutes at peak and 20 minutes at all other times
- weekend service for at least 10 hours a day arriving at least every 30 minutes all day
- unique branding.

The program also considers projects that are corridor-based BRT. These projects do not have requirements for weekend service, and the corridor does not need to have exclusive guideway. Corridor-based BRT projects must still include the other elements noted above.

Figure 13 below illustrates the modes that are HCT, ranging from light rail or rapid bus (bus rapid transit) with majority exclusive guideway to corridor-based rapid bus with a mix of exclusive and shared right of way (such as the FX2-Division high capacity bus service) to a streetcar mode.

Figure 13. Spectrum of regional transit modes



Better bus: Example of a city-led initiative

Cities all over Greater Portland can work with TriMet to support shared goals.

The City of Portland developed an Enhanced Transit Toolbox that describes many types of speed and reliability improvements that can be implemented as part of better bus enhancements.

Better bus investments complement HCT by improving the speed and reliability of regional transit and improving access to jobs, services, recreation and other essential destinations in the Metro area. Better bus includes spot treatments that enhance bus speed and reliability, but it does not include the comprehensive corridor investments of HCT. The diagram to the right compares common better bus and frequent express (FX) rapid bus treatments.

HIGH CAPACITY TRANSIT VISION DEVELOPMENT PROCESS

High capacity transit vision

The HCT vision is the comprehensive future network of HCT corridors with enhanced amenities and transit priority that work together to move more people, more quickly than other types of regional or local transit. Well-connected and people focused, the vision will create convenient connections between people and jobs, services, commerce and other major destinations (e.g., colleges, hospitals, affordable housing). The vision prioritizes those who depend on transit or lack travel options, particularly communities of color and other marginalized communities.

Reflecting local and community visions

Community feedback show strong support for the following corridors. This feedback was essential to refining the HCT vision:

- Lombard/Killingsworth
- Martin Luther King Jr. Blvd.
- Cesar Chavez
- Clackamas to Columbia
- Halsey
- Burnside
- Powell
- Highway 212/Sunnyside
- I-205
- McLoughlin
- WES/Route 76 - Beaverton to Wilsonville
- Highway 26
- 185th Avenue
- Highway 99W

The vision builds on prior work and:

- reflects the vision and goals adopted as part of the 2023 RTP Update process, described in the HCT policy framework section
- carries forward regional goals and investment priorities using the 2018 RTP HCT Readiness and Assessment criteria developed based on those priorities in partnership with regional stakeholders
- connects regional and town centers to support the 2040 Growth Concept
- maintains consistency with the Federal Transit Administration's Capital Investment Grant Program project justification criteria
- reflects the greater Portland region's history of success with the Federal Project Development process (advancing one corridor every 3 years)
- considers investments within the RTP horizon and beyond (thinking toward the next growth concept horizon of 2070)
- contemplates optimal network design (e.g., radial, grid, multihub) and character (e.g., coverage, spacing, intensity).

The vision will take years to achieve, but significant progress has been made in the last 35 years. Some HCT corridors identified are not ready to move forward today; they lack the population density or number of jobs to warrant a major transit investment such as HCT. However, the vision recognizes that these places are where future growth is focused and that as time goes on, they will become viable and important corridors for HCT investment. Other corridors are already clear regional priorities — such as the Southwest Corridor project — where all of the

right ingredients are in place today. The vision combines all of these corridors, representing the full buildout of the region's HCT system.

Evaluation approach

Metro enacted a two-step process, very similar to the 2018 Regional Transit Strategy process. The first step considered a broad universe of potential future HCT corridors and narrowed to those best aligned with regional goals. The second step focused on readiness, or the ability for a given corridor to move forward in the near versus long term. Once the prioritized short list of corridors was identified, community feedback and discussions with regional stakeholders refined the list of corridors and priorities.

Core evaluation criteria

Mobility Ridership and travel time

Land use and market support Urban form, centers and land use

People and job density Cost effectiveness

Operating and capital project cost per rider Equity benefit and access to jobs and services

Environmental benefit Vehicle miles traveled

The following sections provide a brief summary of the evaluation process; for more details, please see Appendix D, Level 1 Screening, and Appendix E, Readiness Evaluation. The process is illustrated in Figure 14.

Figure 14. Regional HCT plan update process

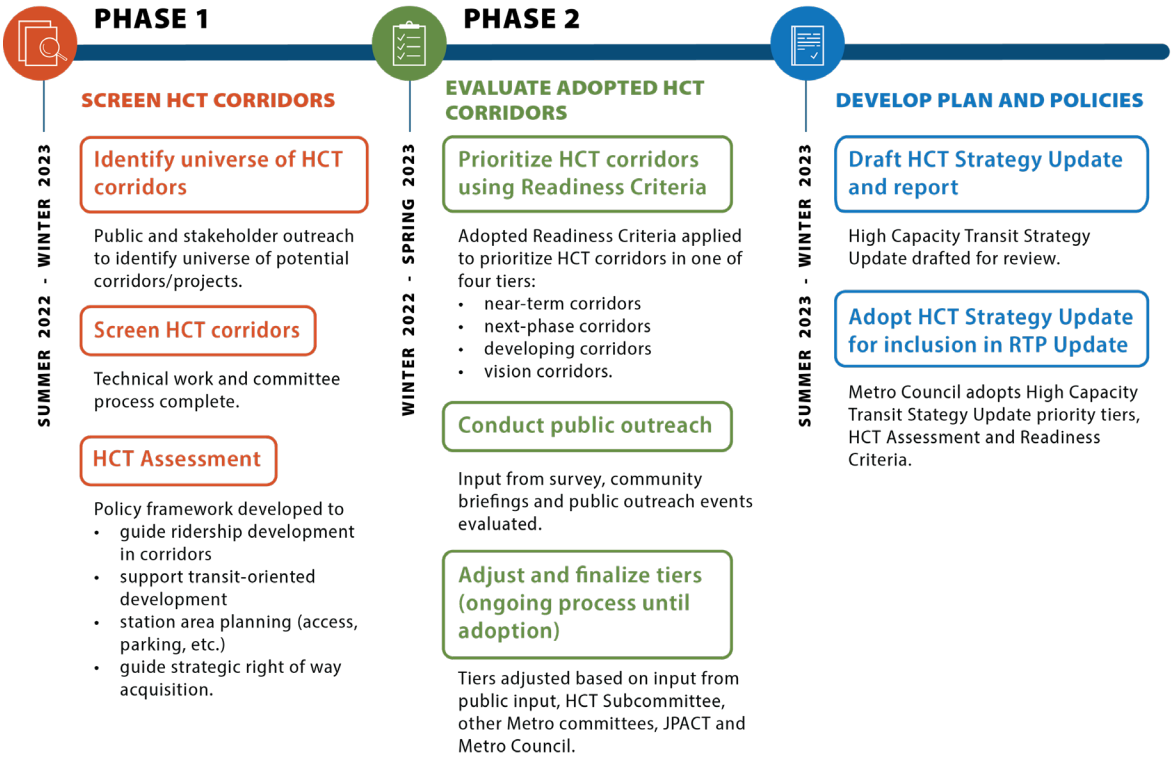
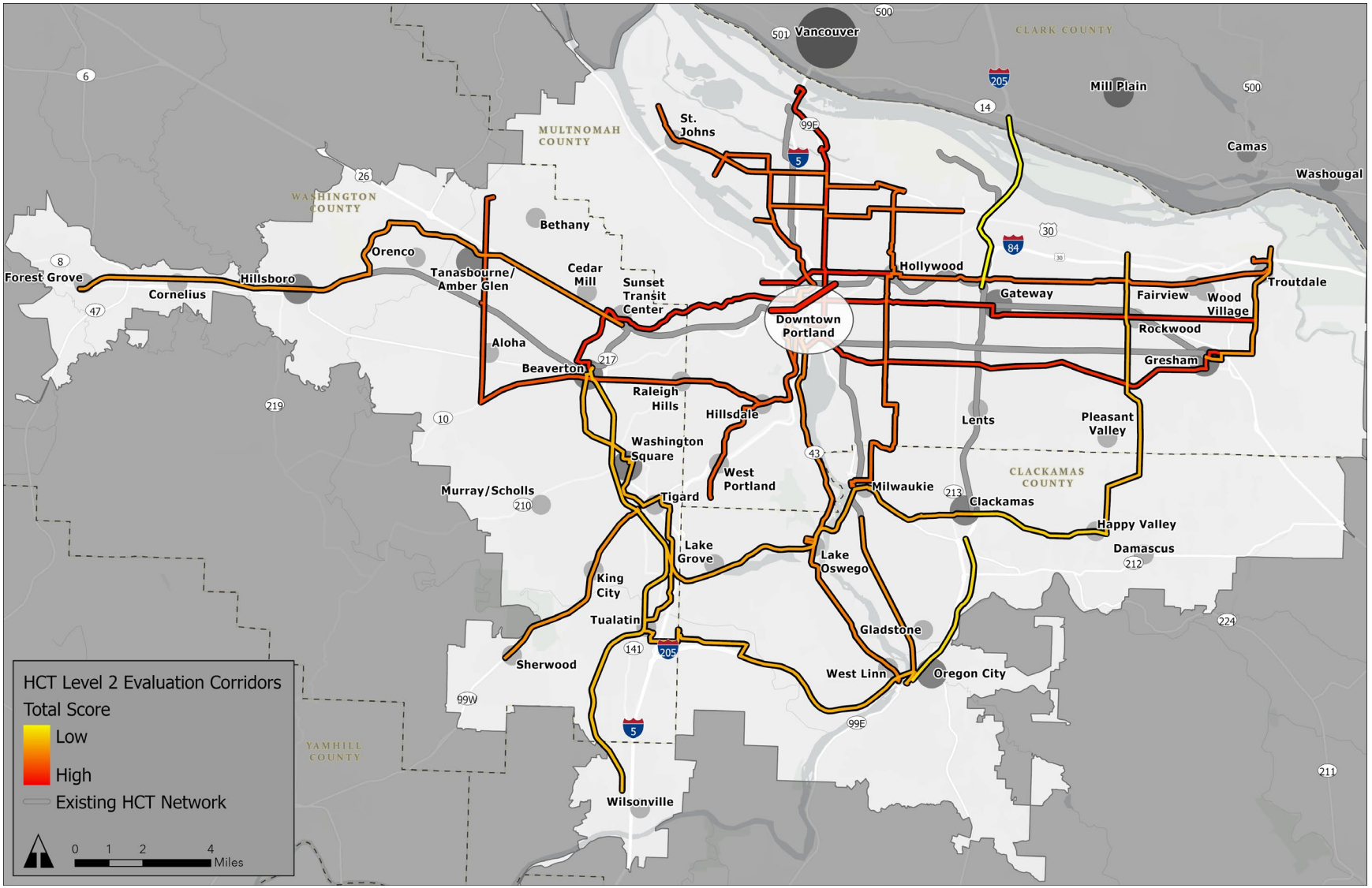


Figure 15 shows the initial scoring from the evaluation which considered the following:

1. Where are more people traveling today and where will they want to travel in the future?
2. What connections link the most people and historically marginalized communities to jobs, essential services and other major destinations?
3. How long does a transit trip in a certain area currently take compared to other travel options? How much could an investment in high capacity transit improve travel?
4. What are the needs and priorities voiced by community members and organizations, businesses, agency partners and elected officials.

The HCT corridors shown are representative; that is, they do not necessarily represent the exact corridor that would advance. Additional work outside of this strategy update is required to define the exact corridor, termini and mode.

Figure 15. Level 2 evaluation corridor scores



Readiness assessment

To use resources cost-effectively and consistent with regional mobility, equity and environmental priorities, HCT is a tool for connecting centers of activity where a high number of people live, work, and visit. The readiness assessment considered the following factors that are known to contribute to successful HCT corridor implementation and that reflect federal funding priorities:

- very compact urban form (e.g., grid, small blocks) that places destinations and affordable housing options near transit (with limited parking)
- very dense mix of uses and a balance of jobs and housing that create a place where activity occurs at least 18 hours a day
- mix of many and diverse essential services near transit: grocery stores, medical clinics and educational institutions
- well-designed streets and buildings that encourage walking and rolling
- streets with space to accommodate larger buses or trains and that are designed to include elements prioritizing transit
- good street connectivity with safe, direct and convenient access to walk and roll to, from, and beyond transit stops and stations
- local plans, strategies and partnerships that underpin transit-supportive places.

Table 1 shows the readiness criteria used for corridor evaluation.

Table 1. Readiness criteria

Category	Metric
Documented Support	Community support Transit-supportive land use Work completed to date
Physical Conditions in the Corridor	Physical space Miles of sidewalks within one-half mile of the corridor, normalized Miles of street with bike facility present within one-half mile corridor, normalized
Implementation Complexity	Corridor length Freight corridor

HIGH CAPACITY TRANSIT CORRIDOR INVESTMENT PRIORITIES

The strategy update prioritizes corridors to create a pipeline for implementation over time. In the past 30 years, Metro and TriMet have taken on a major investment analysis about every 3 years. This number has increased in recent years as four regional corridor planning efforts have been initiated since the 2018 Regional Transit Strategy was adopted, including two rapid bus projects. More corridors could potentially move forward if additional resources are devoted.

Prioritized investments

This strategy update identifies near- and long-term regional HCT investment priorities. Mode decisions will be made as corridors enter into the FTA alternatives analysis process, but most corridors assume rapid bus as the primary investment mode.

To distinguish near-term regional priorities from corridors that will need time to develop, a simple set of priority tiers was established. Funding is a major constraint in moving corridors forward both because of federal funding timelines and requirements, as well as a lack of local funding to move projects forward. Obtaining funding through the FTA Capital Investment Grants program, whether Small Starts or New Starts funded, takes 7 or 8 years or more from initiation of a federal alternatives analysis to completion of a full funding grant agreement and construction. Additionally, only those HCT corridors that meet strict federal funding criteria are eligible for federal funding. In most cases, lower-tier corridors do not have sufficient land use, population, and employment density in place to be competitive for increased investment in the short term.

Table 2 shows the HCT vision corridors ranked by priority tier. Near-term regional priority corridors (Tier 1) should be advanced first and work on these corridors is already underway. However, no corridor is guaranteed advancement, and every corridor has the opportunity for rapid advancement by meeting the High Capacity Transit Assessment and Readiness Criteria in the 2023 RTP.

Table 2. HCT regional priority investment corridors by tier

Tier		Tier description	Explanation	ID	Corridor
1	Near-term corridors	Corridors most viable to advance into implementation in next 4 years.	Tier 1 corridors include those with adopted locally preferred alternatives or have active work underway. They were *not* included in the evaluation detailed in the HCT vision development process section above because the region has already identified these corridors as a priority.	C7	82nd Ave
				C16	Tualatin Valley Highway
				C29	Southwest Corridor
				C30	Interstate Bridge Replacement
				C28	Montgomery Park Streetcar
2	Next-phase corridors	Corridors in which implementation may be viable if recommended land use planning and policy actions are implemented.	Tier 2 corridors scored well on Level 2 and Readiness criteria; they are candidates for HCT investment and could be ready to advance toward implementation in the next 5 years.	C14	Central City Tunnel
				C19	Portland to Gresham via Burnside
				C21	Hayden Island to Downtown Portland via MLK
				C23	Bethany to Beaverton via Farmington/SW 185th
				C25	Beaverton to Portland via Hwy 10 (BH Hwy)
				C20	St. Johns to Milwaukie via Cesar Chavez
				C24	Swan Island to Parkrose via Killingsworth
3	Developing corridors	Corridors in which implementation may be viable if: 1. There is additional land use investment; and 2. There is a local champion to support corridor development; or 3. There is interest in development, but land use and ridership potential are not yet supportive.	Tier 3 corridors were those in which more work would be needed before they become candidates for investment. Some scored well on Level 2 but not on Readiness criteria, which may mean that corridors may not yet have sufficient population density/land use policies in place. Alternatively they could have scored moderately on Level 2 and Readiness criteria. These corridors have a longer-term path to implementation.	C1	Portland to Gresham in the vicinity of Powell Corridor
				C22S	PCC Sylvania to Downtown Portland via Capitol Hwy
				C18E	Hollywood to Troutdale
				C11	NW Lovejoy to Hollywood via Broadway/Weidler
				C17S	Oregon City to Downtown Portland via Hwy 43
				C5	Sunset Transit Center to Hillsboro via Hwy 26/ Evergreen
				C27	Park Ave MAX Station to Oregon City in the vicinity of McLoughlin Corridor
				C4	Beaverton - Tigard - Lake Oswego - Milwaukie - Clackamas Town Center
				C6	Beaverton - Tigard - Tualatin - Oregon City

Tier	Tier description	Explanation	ID	Corridor
4	Vision corridors	Corridors in which implementation may be viable when projected land use, policy outcomes and projected ridership is in line with HCT investment.	C2	Tigard to Sherwood via Hwy 99W Corridor
		Tier 4 corridors are those that scored lower on Level 2 or Readiness criteria. Additional planning work, and increased land use and population density would be needed to support HCT investment. These corridors may be candidates for other types of investments.	C9	Hillsboro to Forest Grove LRT extension
			C10	Gresham to Troutdale LRT extension
			C15	Happy Valley to Columbia Corridor via Pleasant Valley
			C3	Beaverton to Wilsonville in the vicinity of WES
			C12	Clackamas Town Center to Happy Valley
			C26	Clackamas Town Center to Oregon City
			C8	Gateway to Clark County in the vicinity of I-205 Corridor

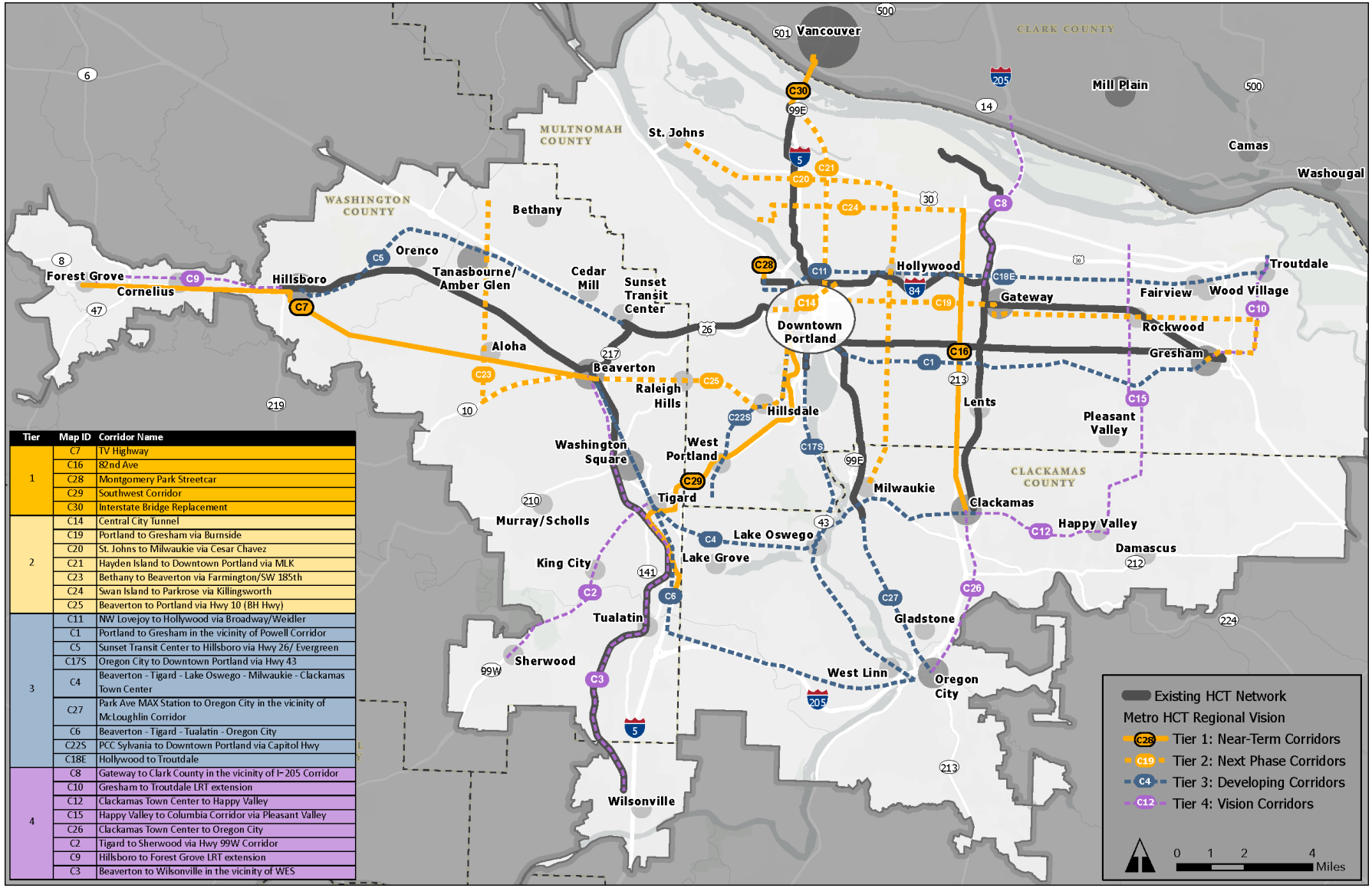
Figure 16 shows the corridors by tier. The corridors shown on this map were used to define and analyze potential HCT investments, but do not necessarily represent the ultimate corridor or termini of any given corridor. Much additional work, described in the next sections of this report, is required to further define and refine these corridors, their HCT modes, and many other components.

Community priorities

These vision tiers also reflect community investment priorities which indicated clear need for and interest in high capacity transit solutions for near-term and next-phase corridors for better access to neighborhoods, jobs, and community places. Additional community priorities are focused on making high capacity transit for comfortable to use:

- increasing capacity to reduce crowding
- reducing bus travel and waiting time
- providing lighting, especially at the stop
- installing shelters offering protection from the weather
- ensuring stops are safe to access and comfortable to wait at
- increasing feeling of safety and security on the bus.

Figure 16. HCT regional vision corridors by tier



Tier	Map ID	Corridor Name
1	C7	TV Highway
	C16	82nd Ave
	C28	Montgomery Park Streetcar
	C29	Southwest Corridor
	C30	Interstate Bridge Replacement
2	C14	Central City Tunnel
	C19	Portland to Gresham via Burnside
	C20	St. Johns to Milwaukie via Cesar Chavez
	C21	Hayden Island to Downtown Portland via MLK
	C23	Bethany to Beaverton via Farmington/SW 185th
	C24	Swan Island to Parkrose via Killingsworth
	C25	Beaverton to Portland via Hwy 10 (BH Hwy)
3	C11	NW Lovejoy to Hollywood via Broadway/Weidler
	C1	Portland to Gresham in the vicinity of Powell Corridor
	C5	Sunset Transit Center to Hillsboro via Hwy 26/ Evergreen
	C17S	Oregon City to Downtown Portland via Hwy 43
	C4	Beaverton - Tigard - Lake Oswego - Milwaukie - Clackamas Town Center
	C27	Park Ave MAX Station to Oregon City in the vicinity of McLoughlin Corridor
	C6	Beaverton - Tigard - Tualatin - Oregon City
	C22S	PCC Sylvania to Downtown Portland via Capitol Hwy
	C18E	Hollywood to Troutdale
4	C8	Gateway to Clark County in the vicinity of I-205 Corridor
	C10	Gresham to Troutdale LRT extension
	C12	Clackamas Town Center to Happy Valley
	C15	Happy Valley to Columbia Corridor via Pleasant Valley
	C26	Clackamas Town Center to Oregon City
	C2	Tigard to Sherwood via Hwy 99W Corridor
	C9	Hillsboro to Forest Grove LRT extension
	C3	Beaverton to Wilsonville in the vicinity of WES

IMPLEMENTING THE VISION

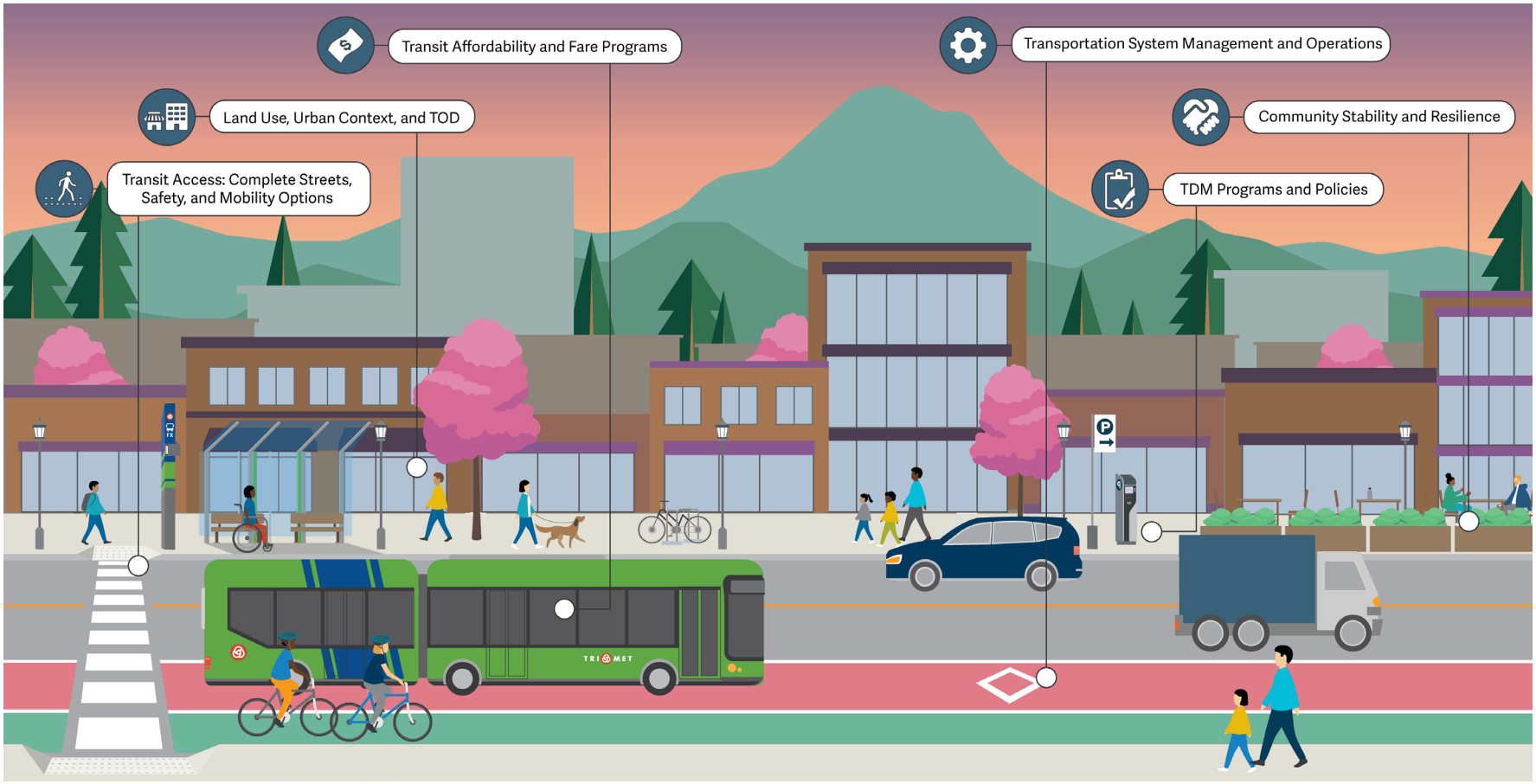
Supporting high capacity transit development

High capacity transit investments take existing strong transit connections to the next level in accessibility and priority on the roadway and at the signal – while shining a light on the corridor in which it travels to improve safety, access and livability for current and future riders. For transit investments to meet success and be utilized to its fullest potential, other elements and improvements around the transit service and infrastructure are needed. The following general types of transit supportive elements factor into creating an environment that encourages transit ridership while meeting regional objectives around equity and affordability:

- land use, urban context, and transit-oriented development
- community stability and resilience
- complete streets: transit access and safety
- transportation demand management policies and programs
- transportation system management and operations
- transit affordability and fare programs.

Figure 17 presents these transit supportive elements and the strategies that can be considered under each.

Figure 17. Overview of transit-supportive elements



	Land use, urban context, and transit-oriented development	Community stability and resilience	Transit access: complete streets, safety, and mobility options	Transportation demand management programs and policies	Transit affordability and fare programs	Transportation system management and operations
Why does it matter?	Density and mixed uses support high-frequency service and modeshare goals	Strategies to ensure existing residents and small businesses benefit from HCT investments	Multimodal streets help people get to and from transit safely	Incentivize alternatives to driving, and increase attractiveness and awareness of transit options	Make transit more affordable and accessible to all people	Make transit a competitive alternative to driving
What does it include?	• Supportive land uses including mixed use developments • Transformation potential through transit-oriented development and higher-density development aligned with 2040 Growth Concept and the community's vision for growth • Supportive planning and policies • Local commitment to corridor investment	• Community-led discussions in partnership with local jurisdictions • Equitable development and affordable housing strategies • Anti-displacement policies and actions • Targeted support for small businesses	• Pedestrian network completion (sidewalks, crossings, accessibility, lighting, etc.) • Bicycle network connections • Transit-supportive street design • Transit stop and station amenities • Mobility hubs • Shared mobility options • First/last mile connections • Shuttles • Bicycle parking and storage	• Parking policies • Education and outreach • Employer benefits programs • Transportation wallet programs • University/school affiliate programs (i.e., student passes, education programs)	• HOP Pass • Reduced Fare Programs: Youth, Low-income, Honored Citizen, and Veterans • Free fare grant programs • Employer-sponsored transit discount programs	• Optimize existing transit system operations and performance • Transit-priority treatments • Passenger information technology
When is it done?	All stages	Pre-project and ongoing	All stages	Pre-project and ongoing	Pre-project and ongoing	Pre-project, as part of implementation, and ongoing
Who is responsible?	• Local jurisdictions • Metro • Transit service providers • DLCD	• Local jurisdictions • Local Housing Authorities • Metro • *CBOs* • *Chambers of Commerce / business organizations*	• Local jurisdictions • Metro • Transit service providers • *Shared mobility providers* • ODOT	• Local jurisdictions • Metro • Transit service providers • ODOT • *Employers and schools/ universities* • *CBOs*	• Transit service providers • Metro • *Employers and schools/ universities* • *CBOs*	• Local jurisdictions • Transit service providers • Metro • ODOT

Notes: Partners shown in *italics*. CBO: Community-based organization. DLCD: Oregon Department of Land Conservation and Development. ODOT: Oregon Department of Transportation.

The role of community engagement

Community engagement is a core priority of Oregon communities; it is the first goal in Oregon's statewide land use goals. Intentional and authentic community engagement conducted throughout the HCT planning process informs project development and can galvanize lasting community support. Engagement improves projects and outcomes by helping hone the problems addressed by HCT corridor investments, avoiding or mitigating impacts, and identifying how the investment can best meet needs.

Buy-in from residents, employees, and other stakeholders living in and around a transit corridor is crucial, underlying each of the six elements presented above. Community engagement creates opportunities for co-creation, giving both agency staff and residents an equal stake in decision-making — jointly designing, planning, and executing project work. A key component of co-creation is centering events designed and led by residents, including **street design workshops, walk audits,** and **charrettes**. These events cement residents' ownership of the narrative surrounding their communities and the changes they wish to see.

Land use, urban context, and transit-oriented development

The value of HCT lies in its ability to move large numbers of people at high frequencies. The land uses and development context around station areas are critical to realizing HCT's full potential. Higher density zoning allows for more people to live, work, and play in proximity to transit, while mixed use developments create a variety of destinations for people to access in one place. This makes transit a convenient and attractive option for large numbers of people, effectively reducing the number of trips needed to be taken by car.

There are many considerations when designing transit-supportive land uses and urban contexts, from local community support to government policies.

Existing conditions and context. Many communities feel strongly about the character and role of their neighborhood against the wider urban context, especially those who are at risk of displacement. Existing anchor institutions such as major employment centers or regional destinations will also heavily impact ridership potential. Understanding the needs and concerns of existing residents, businesses, and other stakeholders is crucial to project success.

Planning for transit-oriented development

Both Metro and TriMet are working on updates to transit-oriented development plans.

Metro's Transit-Oriented Development Strategic Plan Update is exploring opportunities for better implementing regional racial equity strategies and furthering climate mitigation and resilience goals, including contracting and workforce, community-based organization development partnerships, inclusionary investment decision-making, urban heat island mitigation design requirements, energy efficiency standards, and parking ratios and other traffic demand management incentives. The plan guides transit-oriented development program activities to acquire land and provide gap funding for nonprofit and for-profit private developers to support the construction of higher density buildings in areas served by frequent service bus, streetcar or light rail. Similarly, Metro's Affordable Housing Bond Program allocated 10% of its funds to a site acquisition program where access to transit was identified as the top desired nearby amenity by community.

TriMet's draft Regional Transit-Oriented Development Plan builds on the guidelines approved by the Board of Directors in May 2020 to provide clarity and structure to the Transit-Oriented Development Program. The plan includes information and guidelines for the inventory, evaluation and prioritization of TriMet sites in the transit-oriented development program. It details how TriMet promotes transit-oriented development across the region. Most importantly, the plan empowers communities and partners to provide feedback regarding where transit-oriented development projects are located, how sites are selected, and how decisions are made. The plan is designed to provide transparency to all elements of TriMet's transit-oriented development work and is focused on creating equitable transit-oriented development projects for everyone.

Future transformation potential as imagined under the 2040 Growth Concept and the community's vision for growth. Planning solely based on the existing land use and urban context isn't enough, especially when considering the time and cost of developing transit infrastructure. Supportive land use decisions should be visionary in their approach, factoring in the unrealized potential for further density or growth. Considering the long-term land use vision helps future-proof HCT investments, ensuring the infrastructure can accommodate future needs, which can save resources in the long term.

Supportive local planning and policies. Local and regional jurisdictions can create the legislative space for transit-supportive decisions to be made. The state's Climate Friendly and Equitable Communities amendments to the Transportation Planning Rule require policies such as eliminating parking minimums with new development. Developing station area plans are an early action in corridor development that help tailor local zoning codes and policies to the local context and community-supported vision.

Commitment to corridor HCT delivers economic potential to entire corridors, and local jurisdictions should be ready to leverage the opportunities that will

develop along the route that transit services will take. This could mean matching local investments, zoning, and redevelopment opportunities to the rights-of-way and urban streetscape throughout the corridor.

Community stability and resilience

HCT infrastructure brings new and improved travel options to our region. HCT is an important element of our regional transit system and providing people with access to jobs and other opportunities. However, HCT investments can incentivize redevelopment of property along project corridors and have historically been one of several contributors to ongoing land value and rent increases. Taking intentional steps to prevent the displacement of local residents and small businesses, particularly those of lower income backgrounds and historically marginalized communities, is an important part of equitably investing in HCT. Building community resilience to change is a complex and multifaceted process and is not limited to one stage of an HCT project's lifecycle. Many elements should be put in motion during early planning, but require ongoing reassessment and engagement.

Rapid Bus and Community Stability

High capacity transit-induced gentrification is an outcome that many places including greater Portland have seen with the implementation of light rail. Recent work by UC Berkeley's Urban Displacement Project has analyzed these trends in San Francisco, Los Angeles and San Diego and found a contributing factor to be an overall lack of housing development, particularly transit-oriented development, in transit-adjacent and gentrifying areas constrained by zoning preventing intense, high density development. This is one of many reasons why the recommendations in this report include aligning high density zones with HCT vision corridors and the project pathway highlights equitable development strategy development.

However, many studies of cities and metropolitan areas across the nation have found that rapid bus investments generally have less risk for significant effects on housing prices or residential or commercial property values. This is a key opportunity to provide high quality transit to those who rely on it the most and have experienced historic inequities in investment that persist today.

Sources: Brown, A. 2014. Neighborhood Change Along the Orange Line (BRT) Applied Planning Research Project; Cervero, R. & Duncan, M. 2004. Neighbourhood composition and residential land prices: Does exclusion raise or lower values? Urban Studies 41: 299–315; Chapple, K., P. Waddell, D. Chatman, A. Loukaitou-Sideris and P. Ong. 2016. Developing a New Methodology for Analyzing Displacement. Report to the California Air Resources Board under Agreement13-310.

Understanding demographic and market trends. Trends in demographics and market indicators can identify whether a corridor is currently undergoing gentrification and displacement (residential and commercial), and help jurisdictions evaluate the potential risk for further gentrification and displacement

that may accompany proposed transit investments, and prioritize policies and programs to mitigate potential impacts.

Equitable development and affordable housing strategies. Creating an equitable development framework that guides all land use and development planning in a project corridor helps a community evaluate its guiding principles to ensure that equity is an ongoing part of the planning and development conversation, and includes affordable housing and anti-displacement strategies. The Southwest Corridor Equitable Development Strategy and Equitable Housing Strategy (see callout below) are recent local examples. Metro's transit-oriented development program is one resource providing funding to stimulate private development of higher-density, affordable and mixed-use projects near transit.

Local anti-displacement policies and actions Cities have policy tools that they can deploy to prepare for potential gentrification and displacement**.** Readiness for HCT includes steps to mitigate that risk through community input, partnerships with local organizations, and allocating funds to support or subsidize projects/programs. Metro is currently scoping an agency-wide, cross-departmental anti-displacement action plan that will also be a resource to regional partners looking to implement local strategies.

Southwest Corridor Equitable Development Strategy and Equitable Housing Strategy

Thanks to a Federal Transit Administration grant, Metro worked with partners from the community to explore how a proposed light rail and other investments in the Southwest Corridor could support community development and improve the quality of life for people of all incomes and backgrounds. This process built relationships among government and community members, employers, affordable housing providers, business leaders, philanthropic organizations and educational institutions. It established a new group, the Southwest Equity Coalition, and a pilot project grant program to support continued implementation of the strategy. One element nested within the broader effort is the Equitable Housing Strategy. A joint effort between the cities of Portland and Tigard, the strategy laid the groundwork for early actions to prevent displacement, and plan for more housing options and opportunities in the corridor. It also includes actions for building capacity in under-represented communities for advocacy and public involvement — one example being the SW Community Grants Program funding community-based partners to organize and engage low-income tenants related to affordable housing and transit issues.

These innovative tools can be replicated to create more equitable outcomes as greater Portland plans expansions to the HCT network.

Targeted support for small businesses As communities change, small businesses benefit from outreach and designated support to ensure they understand the changing market, potential rent changes, and have access to programs that may help them stay in an area. Additionally, support is needed

during construction to avoid disrupting local businesses and keep customers coming in the doors.

Transit access: complete streets, safety, and mobility options

Most transit trips begin and end with active transportation. The quality of access to transit stops and stations can make a marked difference in the usefulness of transit services. This means investing in the streetscape around transit station areas, completing pedestrian and bicycle networks and to HCT stations, and partnering with mobility service providers to ensure people can safely reach HCT services.

Safe and healthy urban arterials

Another focus area for the 2023 Regional Transportation Plan update is developing safe and healthy urban arterial roadways. State and local transportation agencies have been working to enhance safety on urban arterials for decades. While these corridors serve an important regional mobility function in connecting centers, they are typically more dangerous due to higher speeds, volumes and more travel lanes than minor arterials and are the most complicated roads to make improvements on because they require a lot of coordination and planning. Successful high capacity transit projects have illustrated the capacity of regional partners to coordinate effectively to complete complex, multimodal corridor projects. The safe and healthy urban arterial policy brief identifies strategic actions that regional partners can take to support developing urban arterials as complete streets and increase access to current and planned transit routes.

Multimodal and Complete Streets Completing the local sidewalk and bicycle facility network, providing wayfinding and street lighting will make it safer for all people to access transit. Promoting disability-friendly transit services means committing to Americans with Disabilities Act-compliant crossings, sidewalks, and curb ramps, as well as transit platforms that offer level boarding onto vehicles. Resources including the National Association of City Transportation Officials Transit Street Design Guide provide guidance on how city streets can be adapted to serve the needs of all people accessing transit facilities. The Oregon Department of Transportation has also developed updated guidance for accommodating all modes on state highways, the Blueprint for Urban Design.

First and last mile mobility options Bikeshare, carshare, circulator shuttles, and rideshare are all travel options that can be made available at HCT stations, allowing riders to easily switch between modes and complete the first or last part of their trips. Providing secure bicycle storage encourages bicycle owners to consider riding to and from transit. These travel options and amenities can be integrated with Complete Streets efforts and integrated into mobility hubs — locations where transportation services come together providing options for people to access and comfortably make connections to and from transit.

Transportation demand management programs and policies

For many people, driving (alone) is the default means of travel, especially if existing systems and policies incentivize and subsidize driving and parking. Transportation demand management programs seek to shift trips to travel modes such as transit, active transportation (walking and biking), and ridesharing through incentives that make them more attractive and feasible for everyday trips. A lack of knowledge and understanding of transit is a common barrier to transit use, making strategic distribution of transit information and resources an important element of transit success. Transportation demand management programs come in many different shapes and sizes depending on design and context.

Access to transit study

An emerging trend in local transit services is using smaller vehicles that range from vans and shuttles to small buses with fixed to flexible routes to fill the gap between traditional bus and rail services, as well as local destinations. In some cases, these services use ride-hailing and other new technologies to provide on-demand micro transit services.

In close coordination with public transit service providers in the region, Metro will explore how these emerging trends improve transit access and convenience, and how they might fit into a broader strategy to fill gaps in transit service that connect people in more suburban areas. This study will make recommendations for consideration in the 2028 RTP update.

Employer-based programs Employers can offer commuter benefits such as subsidized transit passes or bikeshare credit instead of parking permits, which encourages employees to make their regular trips without their cars. Employers are also an important stakeholder to partner with in raising awareness of transit options, and encouraging ridership.

Municipal and agency policies Jurisdictions can manage parking supply and parking costs to support the competitiveness of transit. Parking policies that support transit include matching parking pricing to demand, shared parking between uses, unbundling parking from rental and for-sale residential and commercial space, and removing minimum parking requirements for new developments. Transportation wallet programs in the City of Portland are another successful example that incentivizes transit and active transportation use over driving and parking. Establishing parking districts around station areas can be a helpful policy and planning tool to achieve transportation demand management goals.

Transit affordability and fare programs

For lower-income people, the cost of transportation can be a substantial if not disproportionate financial burden. Per trip transit fares can be high especially for families and for those making frequent short trips. Part of making HCT accessible lies in establishing fare policy that enable more people to choose transit as a regular option. The following considerations can further help price transit competitively to make it an attractive choice for all riders.

Student and youth fare programs The majority of students are not in the workforce, and thus lack substantial regular income. Both TriMet and SMART offer reduced fares for students, including community college students. Portland Public School students can ride TriMet free during the school year and there are free summer programs. Partnering with schools, universities, and other community organizations can help publicize fare programs for young people, and encourage more to ride transit and navigate transit.

Low-income fare programs TriMet currently offers an Honored Citizen Fare Card, and people with low incomes can apply to use this fare with proof of income and government-issued ID to be submitted either through an online portal or at a designated enrollment location. While TriMet has taken numerous steps to make transit fares more accessible, barriers may still remain particularly those who lack access to a smartphone or availability during weekday business hours. Exploring partnerships with convenience stores and local retailers could help make low-income fare programs more accessible.

Transportation system management and operations

Improvements to the speed and reliability of transit services is one of the most crucial ways to make transit more competitive with driving. Convenience is a key value for many people, and this can be achieved by reducing bus travel times, making transfers more seamless, and providing real time information for people to plan their trips.

Optimize existing transit network Many local bus services connect neighborhoods to key corridors, providing a feeder service for HCT. Timing transfers and right-sizing the amount of line duplication will help increase the transit travelshed, optimizing transit coverage and enhancing the rider's experience.

Transit priority treatments The Portland Metro region's framework for speed and reliability spot improvements, known as the Better Bus Program, partners with local jurisdictions to make capital investments. Improvements such as transit signal priority, transit-only lanes, queue jumps, and optimizing bus stops can

reduce the amount of delay that transit vehicles experience and improve overall travel times.

Passenger information technology Real-time passenger information, either presented in a mobile application or on station displays, allow passengers to know when a transit vehicle will arrive. Information is important in helping people make travel decisions, and reduces the uncertainty faced by passengers who are transferring between services.

Project development and funding

Federal funding and eligibility

Federal funding will continue to be an essential component of HCT investment for many corridors in the Portland region. Some rapid bus projects could be delivered sooner and more cost-effectively if new revenues were available. FTA administers several Capital Investment Grants programs including Small Starts, New Starts, and Core Capacity grants. Roughly $2 billion is allocated annually across all FTA Capital Investment Grant programs:

- Small Starts projects must be less than $400 million in total cost and seek less than $150 million in total Small Starts funding
- New Starts projects are greater than $400 million in total cost and are seeking more than $150 million in total funding.

Projects must be commuter (heavy) rail, light rail, streetcar, BRT or corridor-based BRT — the primary difference being that rail and BRT projects with fixed-guideway investments must have more than 50% of the route in dedicated transit lanes or other separated right of way. Corridor-based BRT projects do not need to have exclusive guideway, but must have other elements. To be eligible investments, projects must:

- involve a “substantial” investment on a single route within a defined corridor
- include defined stations
- include features such as traffic signal priority for buses, off-board fare collection, park and ride facilities, etc.
- have short headways, including a maximum of 15 minute headways all day on weekdays and for BRT only, a maximum 30 minute headways on weekends. Corridor-based rapid bus is not required to operate on weekends
- use a separate and consistent brand identity for the service.

Since 1986, the region has been very successful in obtaining New Starts and Small Starts funding through the FTA 5309 Capital Investment Grants program. Partnerships in the region have resulted in approximately $4.2 billion in transit investments, which includes $2.29 billion from the FTA 5309 Capital Investment Grants program and nearly $500 million from other federal sources. New

Starts/Small Starts funding are a key part of the financial plan for major transit capital projects in the region. The FTA Capital Investment Grants program has historically contributed between 50% and 90% of project funding through Full Funding and Small Starts Grant Agreements.

Current assumptions and future projections for the 2023 RTP assume that Capital Investment Grants-eligible projects will pursue approximately 50% of project funding from the FTA 5309 New Starts/Small Starts program. This means that local matching funds must be allocated. Additional federal funding may be allocated to cover project costs through the allocation of financially constrained MPO-directed funding (e.g., Urban Surface Transportation Program, Congestion Mitigation and Air Quality, or Transportation Alternatives Program); however, total federal funding for a project cannot exceed 80% of the total project cost.

The Business Case for High Capacity Transit

In addition to the many mobility benefits of transit for community members and workers, there is also a significant economic benefit gained from these types of investments. Transit routes support the local economy as the majority of destinations served and trips taken are to work, expanding the labor pool available to employers, and commercial and retail businesses and services, increasing community access to grocery stores, shopping, restaurants, and childcare. In a nationwide study, the American Public Transportation Association found that an investment in transit produces a 5 to 1 return in economic activity long-term and creates more than 50,000 jobs per $1 billion invested.

For example, in measuring the economic impact from adding two additional lines to the rapid bus network, Omaha's Metropolitan Area Planning Agency found that by 2050 they could expect returns of up to:

- $1 billion in annual business revenue;
- $750 million in annual labor income;
- 8,000 jobs;
- $1.4 billion in value from travel time and reliability savings and $1.3 billion in fuel cost savings for riders;
- $85 million in labor cost savings, $1 billion in travel time and reliability savings, and $1 million in fuel cost savings for freight operators and businesses; and
- Potential for a 9 to 1 return on investment and a $26 billion cumulative impact when rapid bus investments are coupled with complementary compact, transit-supportive land use development.

Sources: American Public Transportation Association (APTA). 2020. Economic Impact of Public Transportation Investment: 2020 Update; APTA. 2022. Public Transportation Fact Book; Metropolitan Area Planning Agency and ConnectGo. Spring 2020. Transit Return on Investment: Examining the Business Case for Transit in the Omaha Region.

The local funding commitment typically includes contributions from state, regional and local projects partners. Contributions are discussed and budgeted during the planning and project development phases and range in type from dedication of right of way, lottery-backed bond proceeds, local improvement districts, general fund contributions and others. Non-federal funding contributions are negotiated project by project and typically consider facility jurisdiction, project needs and benefits and opportunities for partnership.

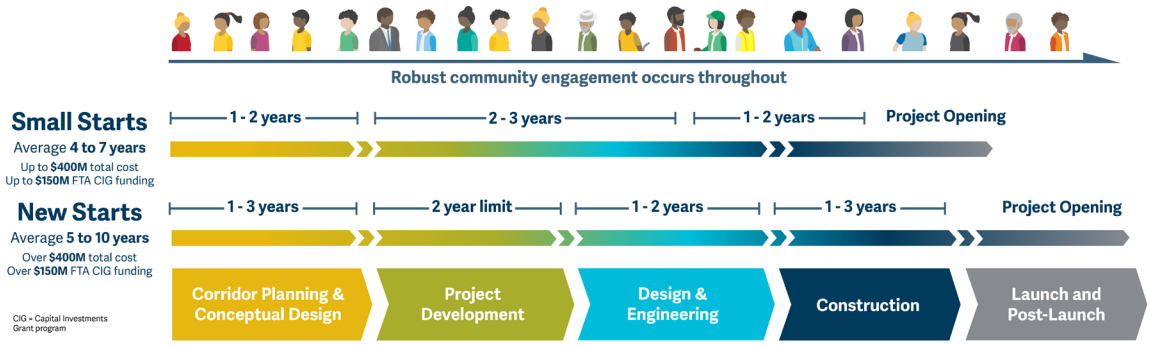
Operations Funding

Funding to design and construct HCT corridors is only part of the funding story. Long-term funding is also needed for operations of HCT corridors – ongoing dollars to pay drivers, keep systems maintained, and supported. There are several dedicated sources of funding for transit capital projects, but fewer grant sources for ongoing operations. All HCT corridor projects will need to establish a solid plan, working with TriMet and others, for long term operations and maintenance of these investments.

Federal funding process

Projects follow a stepwise process to obtain New Starts or Small Starts funding (Figure 18). The first major step in the process is submitting a request to formally enter Project Development to the FTA. Prior to making this request, project sponsors typically have completed early planning work in the corridor, have arrived at a locally preferred alternative, and may have started on the environmental review process. The National Environmental Policy Act process is the environmental review, which evaluates the environmental impacts of a project and documents the required mitigations. There is no specific requirement around completing certain activities prior to entering the project development phase.

Figure 18. Small Starts and New Starts project development timelines



The project development phase is when substantial design work and the National Environmental Policy Act process are completed, the Small Starts Rating application is submitted, and the funding commitments finalized prior to award of construction funding. Sponsors must show that they have funds available to complete this phase within a reasonable timeframe. FTA also requires submittal of

additional information once preliminary design is completed, including a project management plan, refined cost estimates, identification of needed right of way, and completion of value engineering.

Once project sponsors have submitted information to support rating and evaluation of the project, FTA makes recommendations for which projects to fund in the Annual Report on Funding Recommendations. Funding is not guaranteed until Congress and the president have approved the funding requests. Typically, once a project makes it to the annual report, it will receive funding, though it may take several budget cycles to be allocated funding by Congress.

Project development includes:

- locally preferred alternative and RTP adoption, if not completed
- sufficient design and engineering
- National Environmental Policy Act clearance
- project evaluation and rating
- critical third-party agreements
- Requirement that 50% of non Capital Investment Grants funding is committed within 3 years of entering project development
- risk assessment/readiness.

Figure 18 shows a hypothetical timeline for an HCT project that uses federal Capital Investment Grants program funds after completing the process to get to project development. The process can take a minimum of 5 years to complete and typically extends to 7 or more years.

Moving corridors forward

Figure 19 illustrates the general actions needed to prepare HCT corridors for and advance them through the development process to construction, categorized into five phases. Timelines for each phase will vary depending on project type and complexity.

1. **Pre-project** actions involve improving readiness.
2. **Corridor planning** including determining a preferred alignment and mode, early concept design, and applying to enter into the federal project development process, if applicable.
3. **Project development** includes advancing design, completing environmental review (e.g., National Environmental Policy Act) and securing project funding.
4. **Final design and construction** will result in a completed project.
5. **Post-project** actions may include fostering transit-oriented development, transit network changes, and anti-displacement actions

Elevating local voices

HCT investments don't happen without the leadership and engagement of local jurisdictions and partners. Local champions are needed to see projects through, all the way from "good idea" to station construction. Local partners are needed for the long haul, too – projects take years to come to fruition, meaning consistent engagement is key. Local champions and partners are also critical to ensuring transformative HCT investments maximize benefits to the local community, and to guide approaches to mitigating potential impacts likes displacement.

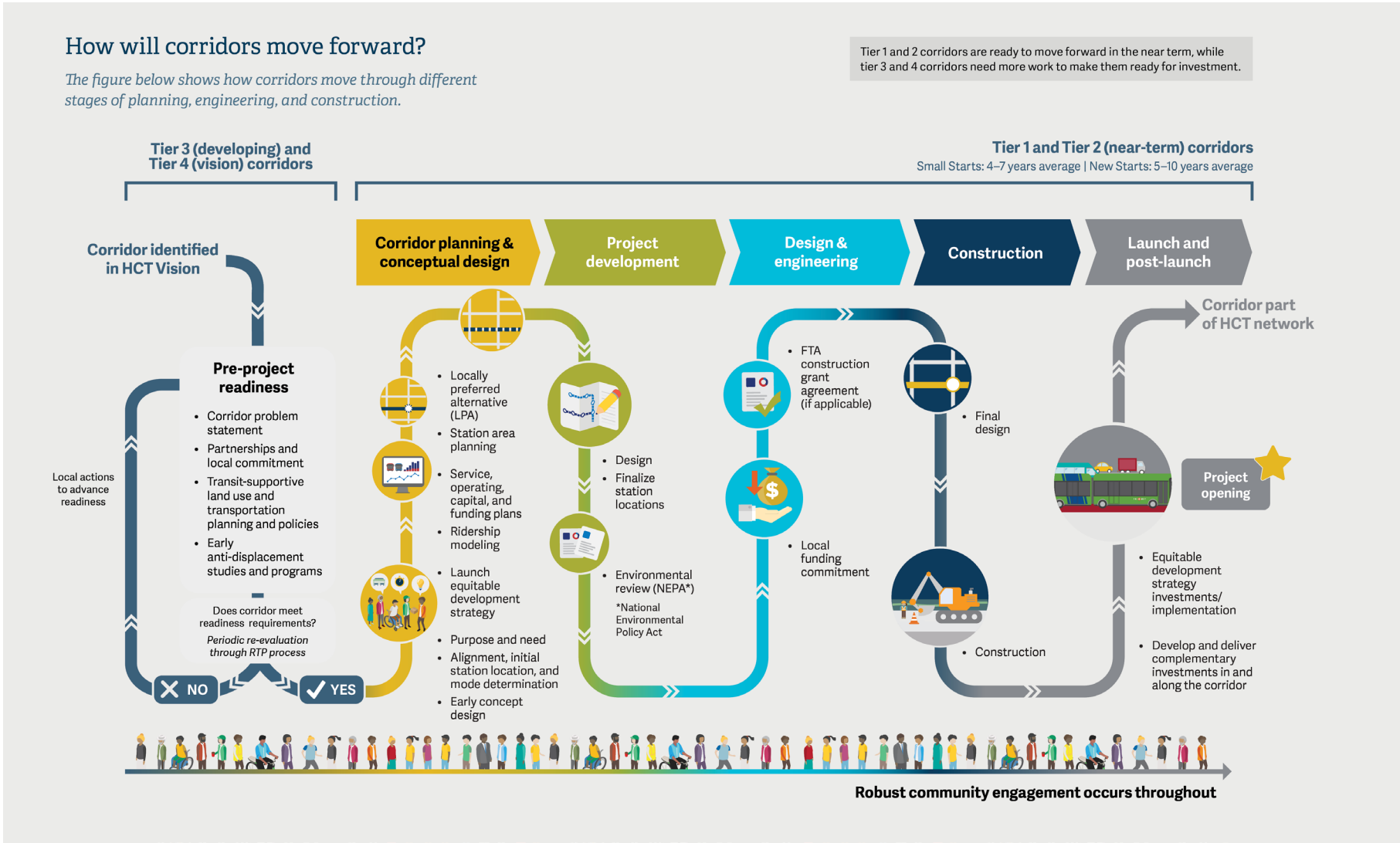
Figure 19 also illustrates conceptually where HCT corridors are in the project development lifecycle based on readiness tier.

Tier 1 corridors are already engaging in corridor planning and/or early project development actions.

Tier 2 corridors are generally ready to proceed with HCT corridor studies, although they may be completing some readiness actions.

Tier 3 and Tier 4 corridors, in general, are not yet ready to proceed. These recommendations focus on actions to increase the readiness of a given corridor including securing commitments from project partners and early land use planning.

Figure 19. HCT project development lifecycle



The general recommendations and actions needed to advance corridors based on readiness tier are broken out by 5-year increments below.

Recommendations

Tier 4 and Tier 3 corridors, in general, have more work to do around land use and development, ridership potential and identification of local champions before they become candidates for HCT investment. These recommendations focus on actions within these areas to increase the readiness of a given corridor.

Tiers 4 and 3 corridor advancement, ongoing

- Establish project champions, partnerships and political leadership.
- Create ridership development, land use and transit-oriented development plans for key centers and station areas.
- Conduct market analyses and identify potential investment strategies for transit and land use improvements.
- Initiate a right-of-way preservation program.
- Assess financial feasibility. Conduct early analysis to understand how the corridor aligns with federal Capital Investment Grants funding program criteria and identify areas where improvement or changes are needed.

Tier 3 corridor advancement, near term

- Identify transit corridors in transportation system plans and ensure roadway classification design supports transit-supportive elements. Identify constraints or barriers that will need to be addressed to make the corridor HCT-ready, such as freight designations, traffic volumes, and presence of cycling and walking facilities. As land use or comprehensive plan updates occur, consider how they can focus growth in key corridors to support HCT investment (and vice versa). Consider the presence of access to transit improvements and the mix of uses and destinations that are supportive of density thresholds that are supportive of HCT and federal Capital Investment Grants funding program criteria. Consider how HCT would support the local land use vision.
- Work with community to identify needs, issues and opportunities, as well as develop corridor problem statements and corridor extents.
- Assess corridor against HCT Assessment and Readiness Criteria and look for opportunities to support readiness.
- Build a coalition of local and regional stakeholders to support continued work on the corridor.
- Engage the diverse communities in the corridor to identify and prioritize transportation safety and connectivity needs through an equity, safety and climate lens,

- Invest in anti-displacement and housing stabilization before major transportation investments add displacement pressure.

Tier 2 and Tier 1 corridors, in general, are ready to proceed with HCT studies and investment. The recommendations for these corridors are centered on concrete actions to further define the corridors, establish project champions and determine funding.

Tier 2 corridor advancement, near term

- Update functional classifications in transportation system plans to be consistent with the RTP design classifications to support implementing the 2040 Growth Concept and planned land uses. Commit to applying urban design standards (Blueprint for Urban Design, National Association of City Transportation Officials, Metro's Designing Livable Streets Guide, approved local standards) on identified corridors in policies and projects. Apply an outcomes and performance-based process that prioritizes safety, transit, walking and bicycling in trade-offs.
- Identify transit corridors in transportation system plans as candidates for HCT investment. Identify constraints or barriers that would need to be addressed to make the corridor "HCT-ready," such as freight designations, traffic volumes, and presence of cycling and walking facilities.
- Revisit land use plans and zoning to align higher-density uses with planned HCT corridors. Also consider development code and regulations that support transit usage, such as parking standards.
- Conduct market analyses and create station area/TOD plans.
- Work with community to define corridor problem statement, refinement planning, and conceptual design to better understand the specific needs in the corridor and establish a shared vision with partners. There are usually corridor needs beyond the HCT investment – project partners must coordinate with other corridor planning processes to understand how improvements will be coordinated.
- Assess corridor against HCT Assessment and Readiness Criteria and make any needed adjustments to support Capital Investment Grants competitiveness.
- Begin identifying funding sources and/or commitments and engaging community about corridor transit needs.
- Begin establishing the coalition of local and regional stakeholders to support continued work on the corridor, including to support development of an equitable development strategy.

Tier 2 corridor advancement, medium term

- Conduct alternatives analysis to develop and vet HCT and related multimodal improvements that address the identified problems (e.g., right-of-way). Through this process, consider capacity opportunities from transit investment and further define the preferred HCT mode, corridor termini, routing, potential station/stop locations, etc.
- Advance design work in support of alternatives analysis and NEPA.
- Gain further clarity on cost.
- Determine the locally preferred alternative with partners and community.
- Collaborate with Metro, TriMet, and partners to determine the appropriate funding approach. If federal funding is likely, review Capital Investment Grants program criteria and determine areas where the corridor could improve performance with respect to the criteria. This could mean additional changes to development code, adopting policies that encourage development of affordable housing, and others.
- Secure funding and start construction for projects.

Tier 1 corridor advancement, near term

- Complete alternatives analysis and select locally preferred alternatives as appropriate.
- Complete NEPA process.
- Collaborate with local and regional partners, including Metro and TriMet, to determine funding approach.
- Foster continued community support and interest by providing regular updates to communities about the status of HCT investments.
- Collaborate with TriMet and Metro on sequencing of major HCT capital investments to ensure adequate staffing capacity is available to move projects forward.
- Collaborate with TriMet to determine operating funding and staffing needs to support the long-term operations of new HCT investments.
- Co-create an equitable engagement and development strategy with key community stakeholders.

Capital Investment Grants land use criteria

The Capital Investment Grants program assigns a rating to each project based on multiple criteria, spanning land use to financial performance. In general, a project must achieve an overall "medium" rating to be considered for funding.

Capital Investment Grants funding criteria include specific thresholds for employment and household density that contribute to how well a project scores. Additionally, project sponsors must demonstrate that the investment will create new ridership above and beyond the existing corridor ridership.

Lessons learned from Division Transit and The Vine

Fourth Plain in Vancouver, Washington, and Division Transit in Portland, Oregon, are the first rapid bus routes in the region. As the trailblazers, there is much to learn from these projects in looking ahead to building out the rapid bus network.

While rapid bus is a catalyst for other much needed investments in the corridor (e.g., sidewalks, housing), there are trade-offs to consider when packaging these investments. To be most successful, these projects should focus on key gaps and mobility needs to be most competitive for federal funding and efficient with local match dollars. Cost capping can be an effective tool for pursuing rapid implementation. Being clear about these trade-offs when identifying an approach is critical at the outset of the process.

Understand the problems rapid bus is trying to solve Is it problems with capacity and full buses or with speed and travel time? Knowing that at the outset will help identify the right tools to focus on in the solution in order to set the project up for success.

Determine what decisions need to be made and who makes those decisions early on to improve processes and provide greater transparency. Create a funding strategy and address environmental, right-of-way and utility needs earlier than you think you need to. Engage community-trusted stakeholders in decision-making and provide a clear process of two-way communication to influence the process.

Be context-specific in the approach used and the solutions considered Rapid bus along Division may look different than rapid bus along Tualatin Valley Highway. Consider opportunities for bus only lanes that can carry more people, more efficiently on a congested corridor. Consider what future transfers might be needed or leveraged.

Consider how transitioning to electric buses will factor into the needs of the future transit network and how the network can respond to and create opportunities for more multi-modal trips (e.g., more spaces for mobility devices and bikes on board).

Plan for a seamless continuity of service during construction and identify a traffic control plan early on. Be clear with contractors on specifications and how to manage construction to avoid or minimize impacts to communities and businesses. Reach out early and often to communicate any impacts that are expected or do arise.

Looking forward

The region's multi-decade investment in MAX light rail will continue to be the backbone of the regional transit system, connecting the central city and regional centers. As we look forward to advancing new HCT corridors to serve growing population and employment, while meeting our land use goals, new approaches like rapid bus present major opportunities. Rapid bus provides the benefits of HCT at a cost that is more in line with the current constraints on the regional funding landscape, as well as imparting benefits like lower construction complexity and lower risk of displacement. It provides an opportunity to broaden the network and expand connections to town centers and strengthen connections to regional

centers — allowing us to fill the gap where corridors are indicating a readiness for high capacity transit investment in their ability to further the region's mobility, safety, equity, climate and economy goals. This framework will inform future updates to the region's long-standing 2040 Growth Concept as we look toward continuing to support compact urban development.

However, in all cases, the best HCT mode for all corridors will be developed through robust corridor planning. Different HCT tools are appropriate depending on context; streetcar in urban corridors, light rail extensions to serve new centers, and rapid bus in constrained corridors, are a few examples. All of these approaches will be considered in light of evolving regional goals and other priorities, including the recently adopted statewide Climate Friendly and Equitable Communities rules, to influence what HCT tool is determined to best for the needs of a given corridor.

The strategy update renews our regional commitment to HCT as an essential tool for achieving many regional goals. To realize these investments and all the benefits they bring, the region will need strong partnership, local champions, and engaged communities to ensure HCT maximizes value to everyone in our region.

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

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

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

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July 2023

Appendix A
Summary of Outreach and Input

Public and stakeholder engagement and consultation summary

High Capacity Transit Strategy Update
2023 Regional Transportation Plan

REVISED June 2023

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INTRODUCTION

This report provides a high-level summary of the public and stakeholder engagement and consultation that was conducted to support the High Capacity Transit (HCT) Strategy Update for the 2023 Regional Transportation Plan (RTP). The project team organized or participated in dozens of outreach activities, and the feedback from these activities was used to shape and refine the HCT Strategy Update. This summary lists these outreach activities, outlines the groups of community members, stakeholders, and regional leaders that were involved, and summarizes the salient points of feedback received through the planning process.

HCT is a key element of the 2040 Growth Concept, a long-range plan adopted by the Metro Council in 1995. As a part of the 2023 RTP, the HCT Strategy will identify priority areas for investments that would provide the most benefit to the most people.

Public and stakeholder outreach for the HCT Strategy Update was closely coordinated with the overall planning and engagement for the 2023 RTP process.

Outreach for the HCT Strategy Update was built on a foundation of recent public and stakeholder outreach initiatives, including the 2009 HCT Plan, the 2018 Regional Transit Strategy, and the 2023 RTP Phase 1 scoping conversations, among others. The project team considered this feedback and engagement when deciding how to tailor outreach efforts for this Strategy Update.

Engagement Goals

HCT engagement goals were the same as those for the broader 2023 RTP planning process, and are as follows:

- Learn about the transportation needs and priorities of communities across greater Portland.
- Reflect the priorities identified through community engagement and prioritize the input provided by communities of color, the disability community and communities with limited English proficiency, in the elements of the 2023 RTP that guide investment decisions.
- Build support for and momentum to achieve community-driven objectives and build public trust in Metro's transportation planning process.
- Strengthen existing and build new partnerships with local, regional, state and federal governments, Tribes, business and community leaders, academic institutions and historically underrepresented communities including Black, Indigenous and people of color, people with disabilities, people with low incomes and people with limited English proficiency, as well as youth and older adults for sustained involvement in decision-making.

The public engagement process was organized by four major milestones, which aligned with the development phases of the HCT Strategy Update. These milestones are described here, and detailed further below:

- **Milestone 1** focused on the policy framework for HCT and reflected on changes since developing the 2018 RTP.
- **Milestone 2** refined the network vision and discussed corridor readiness factors.
- **Milestone 3** reviewed the corridor prioritization, organized by "tiers," and evaluated whether the corridors meet the readiness factors.
- **Milestone 4** gathered feedback on the Draft HCT Strategy.

PUBLIC ENGAGEMENT OVERVIEW

Feedback through the engagement and consultation process spanned a variety of topics, including general requests for service improvements, suggestions for improving access to transit, and interest in prioritizing specific corridors. However, several overarching themes emerged through the process. These include the desire to:

- **Improve regional HCT connections without routing through downtown Portland.** Demand to travel to the city center has been waning with the reduction in commuter traffic and the growth of other regional centers. Instead, people want to travel between regional centers directly, without passing through downtown Portland.
- **Improve safety and security while accessing and using the transit system.** Responses frequently mentioned concern for personal safety while riding transit, waiting at transit stops, and when traveling on streets and sidewalks to access transit stops.
- **Locate transit corridors and stops convenient for accessing job centers.** Responses affirmed that HCT access to employment opportunities is good for both employers and employees, improving access to talent and jobs.
- **Improve existing transit service.** Faster and more frequent service along existing routes would make transit more attractive to potential riders.
- **Align HCT investments with future tolling.** Feedback suggested HCT could provide an alternative to driving tolled routes, and could be a tool to mitigate traffic diversion.
- **Define clearly what HCT includes and HCT's objectives.** The public may not always understand what "high capacity transit" means or what it includes. A clear definition will help with planning efforts, and understanding its objectives will better frame the priority corridors.

STAKEHOLDERS

Metro partnered with standing committees throughout the process, including:

Agency Partners

- City of Portland
- Clackamas County
- C-TRAN
- Multnomah County
- Oregon Department of Transportation (ODOT)
- Southwest Washington Regional Transportation Council (RTC)
- South Metro Area Regional Transit (SMART)
- TriMet
- Washington County

Partner Agency Staff

- Clackamas Transportation Advisory Committee (CTAC)
- Clackamas County Small Transit Providers Group
- East Multnomah County Transportation Committee Technical Advisory Committee (EMCTC TAC)
- Metro Technical Advisory Committee (MTAC)
- Transportation Policy Advisory Committee (TPAC)
- Washington County Coordinating Committee Transportation Advisory Committee (WCCC TAC)

Partner Elected Officials (Regional Leaders)

- Clackamas County Coordinating Committee (C4):Metro Subcommittee
- Washington County Coordinating Committee (WCCC)
- East Multnomah County Transportation Committee (EMCTC)
- Joint Policy Advisory Committee on Transportation (JPACT)
- Metro Policy Advisory Committee (MPAC)

Stakeholder Advisory Committees

- Active Transportation Return on Investment (ATROI)
- 2023 RTP Community Leaders Forums
- TriMet's Committee on Accessible Transportation (CAT)
- TriMet's Transit Equity Advisory Committee (TEAC)
  Included representatives from:

    - Africa House
    - APANO
    - Asian Family Center (a project of IRCO)
    - Bus Riders Unite! (a group within OPAL Environmental Justice Oregon)
    - Central City Concern
    - Centro Cultural
    - Clackamas Community College
    - Clackamas Workforce Partnership
    - Immigrant and Refugee Community Organization (IRCO)
    - Join PDX
    - Latino Network
    - Milwaukie High School
    - Multnomah County Youth Commission
    - Oregon Food Bank
    - Portland Community College
    - The Street Trust
    - TriMet
- Westside Multimodal Improvement Study Business Roundtable

Community and Business Organizations

- Centro Cultural
- Gresham Chamber of Commerce
- OPAL Environmental Justice Oregon
- Portland Business Alliance
- The Street Trust
- Tigard Chamber of Commerce
- Unite Oregon
- Verde
- Washington County Chamber of Commerce Transportation Task Force (TTF)
- Westside Economic Alliance
- Westside Transportation Alliance

STRATEGIES

The project team consulted a broad spectrum of community members through various activities, as listed in Table 1. When practical, outreach for the HCT Strategy Update was integrated with activities for the 2023 RTP, including events, meetings, and surveys. At other times, outreach for the HCT Strategy Update was focused solely on HCT to target feedback related to the HCT vision.

Table 1. Public and Stakeholder Engagement Overview

Activity	Events	
Public Online Surveys	1	Survey as part of an RTP survey (summer 2022).
	1	HCT online open house and survey (winter 2022-2023).
Focus Groups and Forums	3	Meetings with RTP Community Leaders Forum and Westside Multimodal Improvement Study Business Forum (joint events).
	2	Meetings with Clackamas County Small Transit Providers.
	2	Meetings with TriMet's CAT.
	3	Meetings with TriMet's TEAC.
	2	Agency Lessons Learned Focus Groups (one on Division Transit Project with Metro/TriMet and one on the Vine with C-TRAN).
	2	Meetings with Washington County Chamber of Commerce Transportation Task Force.
	1	Meeting with the Portland Business Alliance.
	1	Business Focus Group (with representatives from the Gresham Chamber of Commerce, Tigard Chamber of Commerce, and Westside Economic Alliance).
	1	Small Business Focus Group with ATROI.
Partnerships with Community-Based Organizations	21	Interviews led by Unite Oregon.
	1	Focus group led by Centro Cultural.
	2	Focus groups led by Verde: one with adults and one with youth.
	1	Survey led by OPAL Environmental Justice Oregon.
Public Tabling Events with TriMet's *Forward Together*	5	Events in Multnomah County: Rosewood Initiative (2 events), PCC Cascade, St. Philip Nieri, and Fairview City Hall.
	2	Events in Clackamas County: CCC Harmony (2 events).
	3	Events in Washington County: Shute Park Library, Washington County Conference Center, and Muslim Educational Trust.

Activity	Events
Advisory Committee Meetings	8 HCT Working Group meetings *convened with stakeholders from around the region, including Clackamas County, Multnomah County, Washington County, Portland Bureau of Transportation, TriMet, Portland Streetcar, C-TRAN, Oregon Department of Transportation, Southwest Washington Regional Transportation Council (SW RTC), and Metro.*
	5 Meetings with WCCC.
	5 Meetings with CTAC.
	5 Meetings with EMCTC.
	5 Meetings with EMCTC TAC.
	5 Meetings with JPACT.
	5 Meetings with TPAC.
	5 Meetings with WCCC TAC.
	4 Meetings with C4.
	4 Metro Council Work Sessions.
	4 Meetings with MPAC.
	5 Meetings with MTAC.

MILESTONE 1: FRAMEWORK

In Milestone 1, the project team introduced the HCT Strategy Update to the public, stakeholders, and leaders in the region. Outreach focused on shaping the HCT policy framework and considering regional transportation changes related to HCT since developing the 2018 RTP. Feedback was used to help shape the HCT policy framework.

Milestone 1 Feedback Summary

Feedback from Milestone 1 highlighted a desire to strengthen the transit network with HCT connections between regional centers. Suggestions included growing the network to serve areas of expected growth and prioritizing equity areas with BIPOC (Black, Indigenous, and People of Color) communities. Feedback indicated the importance of making HCT accessible to people with mobility impairments and of providing pedestrian and biking connections to HCT stops. Safety and security were mentioned multiple times as a perceived barrier to transit use.

Access to and from the Transit System

- Stakeholders emphasized how streets, transit stations, and transit vehicles need to be more accessible for people in wheelchairs. Station elevators are often broken, making the station inaccessible to someone using a wheelchair. Improve

maintenance with existing elevators and provide ramps instead or to supplement elevators.

- Stakeholders suggested educating the community and Metro employees about disability and accessibility issues.
- Community members expressed concern about the existing biking and pedestrian connections to transit.
- Stakeholders expressed desire to improve transit connections at the ends of transit lines by connecting to other transit providers or to transit hubs.
- Stakeholders suggested improving amenities at transit stops toward the ends of transit lines to make them more comfortable for people who may be waiting a while.

Environmental Impacts

- Stakeholders and regional leaders were interested in using HCT to help meet the requirements for Climate Friendly Equitable Communities.
- Stakeholders were concerned about transit's negative impacts to air quality and the climate crisis.

HCT Network

- Regional leaders and stakeholders expressed a desire to connect regional centers without going through downtown Portland.
- Stakeholders suggested growing the transit network to support where people are traveling now and where the region is expected to grow, with a focus on areas zoned for mixed use.
- Stakeholders recommended prioritizing equity areas and areas with BIPOC communities.
- Regional leaders expressed a desire to improve WES Commuter Rail service as an HCT corridor and to extend it to Salem.
- Regional leaders expressed a desire to extend HCT along I-205 to Tigard Triangle, Wilsonville, and Tualatin.
- Regional leaders suggested using bus-on-shoulder (or light rail on ODOT right of way) to make connections on highways. They suggested pursuing funding from the Statewide Transportation Improvement Fund (STIF) and considering how it could align with congestion pricing.
- Stakeholders suggested considering effects from tolling when defining corridors.
- Stakeholders suggested connecting with Clark County.
- Stakeholders suggested creating an express light rail line to downtown Portland.
- Regional leaders mentioned that Powell Boulevard was not an attractive corridor because it had already been studied for HCT and was passed over.

Planning for HCT Investments

- Regional leaders recommended using this process to position for FTA funding.
- Stakeholders recommended focusing on outcomes as opposed to a specific mode.
- Stakeholders recommended coordinating with concurrent projects, such as the Westside Multimodal Improvements Study and the Climate Smart Strategy.
- Stakeholders suggested Metro incorporate restorative justice and BIPOC leaders in the planning process.

Transit Service

- Regional leaders and the public expressed desire for faster transit service. The public also expressed desire for improved frequency. Survey results revealed that travel time is the primary factor for deciding which transportation mode the public chooses for a given trip.
- Regional leaders suggested improving transit service to destinations as well as improving service in the outer areas of the region.
- Stakeholders expressed a desire for improving night and evening service to help employees get to and from late shifts.
- Stakeholders suggested that this would be a good time to improve transit to entice people back after COVID.
- Feedback was mixed on how to prioritize service improvements. Public comments suggested improving service on existing routes or corridors, while regional leaders emphasized prioritizing new routes where none currently exist.

Transportation and Safety Concerns

- Regional leaders and the public expressed concern about safety and security on transit.
- The public also expressed concern about safety and security while walking or biking.
- The public and stakeholders expressed concern about regional traffic congestion.
- Stakeholders suggested improving curb management to help local businesses. They suggested establishing dedicated loading zones and dedicated parking for mobile businesses and local residents.
- Stakeholders expressed frustration about the cost of transit.

Milestone 1 Engagement Activities

Activities for Milestone 1 were conducted from June through October 2022.

- June 30 – HCT Working Group #1

- July 6 – EMCTC TAC
- July 7 – WCCC TAC
- July 13 – TPAC Intro and Overview
- July 18 – EMCTC
- July 20 – MTAC Intro and Overview
- July 26 – Metro Council Intro and Overview
- August 4 – Presentation to C4 TAC
- August 10 – ATROI Small Business Study Listening Session
  A listening session to assess the transportation needs of BIPOC business owners and business leaders as a follow-up to the ATROI Study conducted in the spring of 2021. Seventeen participants attended the two-hour session to share concerns and suggestions regarding accessibility, public transit, and other issues that affect their ability to do business.
- August 15 – Presentation to WCCC
- August 16 – HCT Working Group #2
- August 18 – JPACT Intro & Overview
- August 24 – MPAC Intro & Overview
- September and October - RTP Public Survey 2
  An online survey for the RTP open from September 7 through October 17, 2022. Questions in the survey helped inform the HCT Strategy Update, including questions about transportation needs and priority investment. The survey was available in 5 languages (English, Spanish, Vietnamese, Simplified Chinese, and Russian) and collected input from 1,191 participants.

MILESTONE 2: VISION

In Milestone 2, the project team shared the draft vision for the HCT Strategy Update. Outreach focused on refining this vision and better understanding what factors make a corridor ready for an HCT investment. Feedback was used to shape the initial tiers of corridors, which were later shared in Milestone 3.

Milestone 2 Feedback Summary

Stakeholders, the public, and regional leaders often had similar ideas for the HCT vision. Many expressed a desire to expand the transit service area, with a particular focus on more connections in Washington and Clackamas counties. People suggested connecting HCT investments to better serve equity populations and target employment hubs. Many were interested in how HCT investments might relate to future tolling. The vision for HCT

generally centered around an expanded network that provided faster trips to job centers while strengthening existing connections.

Access to and from the Transit System

- The business community and stakeholders from Clackamas County suggested that shuttles could provide first- and last-mile transit connections.
- The business community raised concerns about congestion slowing drivers and creating problems for private shuttles that transport employees to work.

Economic Considerations

- The business community, stakeholders, and regional leaders expressed a desire to locate transit stops near job centers.
- Members of the public and business community mentioned that many people have security concerns on transit, which has led to business losses near the MAX.
- The business community mentioned that transit does not meet the needs of some job fields, such as construction, where workers need to carry tools.
- Stakeholders noted how HCT could act as a lever for future development and potentially aid in reaching the 2040 Growth Concept.
- A stakeholder stated that economic opportunity should be more fully reflected in HCT policies and objectives.

HCT Network

- Regional leaders, stakeholders, and the public asked for stronger north-south connections in Washington County and Clackamas County.
- Regional leaders, stakeholders, and the public suggested expanding the transit service area to provide more people with the option to take transit.
- Regional leaders wanted HCT corridor investments to be balanced through the three counties in the region.
- Stakeholders are interested in aligning HCT with future tolling.
- Stakeholders expressed interest in investing in HCT connections, including:
    - To Montgomery Park.
    - Along NE MLK Jr. Boulevard.
    - Along NE Halsey Street.
    - WES Commuter Rail.
    - To Lents.
    - Between Hillsboro and Wilsonville.
    - Within East Portland and Gresham.
- The public expressed desire for better connections between rail systems, particularly the Yellow Line and Red Line, and the Green Line and Orange Line.

Planning for HCT Investments

- Stakeholders and regional leaders emphasized the need to support people with mobility challenges and People of Color in the planning and implementation process.
- Stakeholders emphasized that the HCT definition and objectives should be clear, and that people should know why HCT is needed in a particular corridor.
- Stakeholders mentioned the importance of partnering with cities early to improve collaboration and the quality of the future investment.
- A stakeholder mentioned that it was important to plan for continued transit service during the construction of HCT projects.

Transit Service

- The public and stakeholders expressed desire for faster transit speeds and suggested investing in prioritization, such as dedicated lanes, signal priority, bus-on-shoulder, and queue jumping.
- The public and stakeholders were interested in grade separation of transit to provide faster connections, including a tunnel through downtown.
- The public and stakeholders called for further investment in commuter rail.
- The business community and stakeholders raised concerns about insufficient frequency during non-peak hours.
- The business community mentioned interest in having more one- or two-seat rides to reduce transfers and increase ease of access to large campus sites for employees.
- A stakeholder wanted to measure HCT investments to see how they could improve current transit.

Milestone 2 Engagement Activities

Activities for Milestone 2 were conducted from September 2022 through November 2022.

- September 27 – HCT Working Group #3
- October 4 – EMCTC TAC
- October 6 – WCCC TAC
- October 13 – HCT Working Group #3.5: Vision Workshop
- October 17 – EMCTC
- October 18 – Portland Community College Cascade Tabling
- October 19 – C4
- October 19 – Rosewood Initiative Tabling
- October 19 – TPAC/MTAC Policy Framework and Vision
- October 20 – Shute Park Library Tabling

- October 24 – Clackamas County
- October 24 – WCCC PC
- October 26 – Clackamas Community College Harmony Tabling
- October 26 – MPAC Policy Framework and Vision
- October 27 – JPACT/Council Policy Framework and Vision Workshop Feedback
- November 8 – TEAC
- November 9 – Division Transit Project Focus Group
- November 10 – The Vine Focus Group
- November 16, 2022 – TriMet CAT

- November 17 – HCT Working Group 3.5 Vision Review Session
- November 30 – Clackamas County Small Transit Providers Meeting

MILESTONE 3: CORRIDOR TIERS

In Milestone 3, the project team shared the draft prioritization of corridors to the public, stakeholders, and leaders in the region. The prioritization organized HCT corridors in four "tiers," as follows:

- Tier 1: near-term corridors.
- Tier 2: next-phase corridors.
- Tier 3: developing corridors.
- Tier 4: vision corridors.

Feedback was used to refine corridor priorities and finalize tiers.

Milestone 3 Feedback Summary

Feedback from Milestone 3 was largely centered on corridor prioritization and refining the corridor alignments. Stakeholders and community members also suggested other improvements that would make transit a more viable transportation option, such as improved security, service, and amenities. Public input was largely supportive of the HCT vision, with a majority of survey respondents indicating they would use HCT more often if the vision were implemented.

Access to and from the Transit System

- Stakeholders emphasized how transit vehicles need to be more accessible, particularly articulated buses: not all ramps can be deployed for all-door boarding,

these buses cannot accommodate courtesy stops during inclement weather, and they have reduced functionality for mobility devices.

- Community members suggested using wheel guides at bus stops to make it easier for buses to stop at a consistent location at the edge of the platform.
- Community members expressed a desire for improved pedestrian connections to transit.
- Stakeholders expressed concerns about sidewalk obstructions from people experiencing houselessness.

Amenities

- Community members expressed interest in amenities, such as better lighting, better ticket vending, real-time traveler information, better shelters, and more seating options for single riders.

Economic Considerations

- Regional leaders recommended talking to business leaders and thinking about density and jobs.
- Stakeholders recommended focusing on workforce development, especially with young workers who need transit to get from their schools to their jobs.

Equity

- Regional leaders expressed a desire for more north-south connections to improve options for underserved community members.
- Stakeholders mentioned that honored citizens can have difficulty finding priority seating.

HCT Prioritization

- Regional leaders suggested elevating the priority of certain corridors, especially:
    - OR 99W corridor.
    - WES Commuter Rail corridor.
- Regional leaders and stakeholders expressed support for the Southwest Corridor.
- Regional leaders and community members expressed desire for prioritizing HCT investments in WES Commuter Rail and for HCT improvements along 82nd Avenue.
- Youth community members prioritized locations and routes to improve transit connections, including:
    - Along 82nd Avenue.
    - To Clackamas Town Center.
    - Downtown Portland to Rockwood/Gresham.

    - Along Killingsworth Street.
- Public survey feedback indicated the Central City Tunnel, Interstate Bridge MAX, and Southwest Corridor as the top three HCT priorities for respondents.

HCT Network

- Regional leaders, stakeholders, and community members expressed desire for a light rail extension to Forest Grove.
- Regional leaders expressed interest in tolling, and specifically how HCT could align with tolling and expected traffic diversion.
- Regional leaders discussed transit improvements along Sunnyside Road and in Happy Valley.
- Community members expressed interest in improving regional HCT connections. Examples include:
    - A MAX line loop connecting all three counties.
    - Through Milwaukie, Oak Grove, and wider Clackamas.
    - Through Tigard, Tualatin, and Wilsonville.
    - More direct bus connections to Cully and Gresham.
    - Adding an express connection to Forest Grove.
    - Through Milwaukie, Oak Grove, and wider Clackamas.
    - Through Tigard, Tualatin, and Wilsonville.
- Stakeholders expressed interest in improved transit access to recreational facilities, medical facilities, and retirement communities.
- Stakeholders recommended connecting HCT with future housing trends and plans.
- Public survey results indicate strong support for the HCT vision, with 70 percent of respondents stating they would use the HCT network “somewhat” or “much” more often if the network looked like the planned vision.

Safety and Security

- Community members and stakeholders expressed concerns about safety and security. Community members mentioned safety and security is a significant barrier to young people taking transit.
- Community members expressed personal safety concerns eastbound from Hollywood Transit Center.
- Community members encouraged Metro to convene jurisdictions to improve roadway safety.

Transit Service

- Regional leaders expressed an interest in other transit modes, such as shuttle service. They mentioned adding a shuttle service on the OR 99E corridor, as an example.
- Community members expressed desire for more frequent transit service and more FX2 buses.
- Stakeholders emphasized not removing regular transit as rapid transit is implemented.
- Stakeholders would like to evaluate how effective the Division Transit project improvements have been.
- Stakeholders expressed concerns with at-grade rail crossings for HCT, which can create reliability issues, and suggested a tunnel or car-free streets to improve HCT speeds.
- Community members expressed an interest in roadway improvements to bus lines to allow buses to more easily share the road with cars.
- Stakeholders suggested limiting MAX stops between Hillsboro and Sunset Transit Center to improve time travels.

Planning for HCT Investments

- Regional leaders and stakeholders expressed interest in funding and emphasized being grant-ready.
- Stakeholders were interested in the assumptions used for modeling.
- Stakeholders recommended involving the Halsey business community in the small business focus group.
- Community members suggested Metro reach out to Sandy Area Metro (SAM) and the community in Sandy.
- Stakeholders shared concerns about funding transportation infrastructure.

Milestone 3 Engagement Activities

Activities for Milestone 3 were conducted from November 2022 through February 2023.

- November 23, 2022 – HCT Working Group #4
- December 8, 2022 – TriMet CAT
- January 4, 2023 – EMCTC TAC
- January 5, 2023 – C4 TAC
- January 5, 2023 – WCCC TAC
- January 9, 2023 – WCCC

- January 10, 2023 – TEAC
- January 11, 2023 – TPAC Workshop
- January 18, 2023 – C4
- January 18, 2023 – MTAC
- January 18, 2023 – St. Philip Nieri Tabling
- January 19, 2023 – Rosewood Initiative Tabling
- January 24, 2023 – Clackamas Community College Harmony Tabling
- January 25, 2023 – Washington Street Conference Center Tabling
- January 26, 2023 – Fairview City Hall Tabling
- January 30, 2023 – Washington County Chamber of Commerce Transportation Task Force
- January 31, 2023 – Verde Adult Focus Group
- February 2, 2023 – Verde Youth Focus Group
- February 2, 2023 – Business Focus Group
- February 13, 2023 – Business Roundtable
- January through March 2023 – HCT Online Open House and Survey
  A public online open house and survey specifically for HCT was open from January 17 through March 15, 2023. The online open house shared the HCT vision and priorities. The survey asked participants if they supported the vision and what they would like to prioritize. The online open house was viewed over 800 times and the survey collected 354 responses.

MILESTONE 4: DRAFT STRATEGY UPDATE

In Milestone 4, the project team shared the Draft HCT Strategy Update along with the Draft 2023 RTP.

Milestone 4 Feedback Summary

Feedback from Milestone 4 highlighted a desire from the public and regional leaders to improve access to transit for walking, biking, and using mobility devices. Safety and security on transit was a common theme from community members. Feedback included concerns over costs and funding. Regional leaders and stakeholders were concerned with the cost of transit investments and community members were concerned with fare increases. Stakeholders and regional leaders often mentioned the importance of connecting to workplaces.

Access to and from the Transit System

- Community members indicated that a lack of safe and connected walking and rolling routes to reach transit is a major barrier.
- Community members expressed desire for improved ADA-accessible routes for people using wheelchairs to reach transit, including crosswalks and level sidewalks.
- Community members expressed desire for transit stops closer to residential areas.
- Stakeholders recommended being thoughtful about stop consolidation to not negatively impact transit access.

Amenities

- Community members expressed desire for improved amenities at bus stops and transit centers.

Economic Considerations

- Community members emphasized how transit fare and transit affordability are important factors that impact accessibility and equity.
- Stakeholders and regional leaders expressed concern about the capital and operating costs of transit. Stakeholders suggested considering investment priorities and the long term return on investment.
- Regional leaders recommended thinking about the HCT finance strategy, and stakeholders suggested studying revenue models and funding opportunities.

HCT Network

- Community members recommended prioritizing bus lines that serve high schools.
- Regional leaders expressed interest in raising the priority for these corridors:
    - Highway 26.
    - Highway 99W (mentioned in multiple committees).
    - Extending the WES.
- Regional leaders expressed interest in improving HCT connections for these areas:
    - Beaverton Hillsdale Highway to Raleigh Hills.
    - Beaverton to Tigard.
    - Murray Boulevard/Scholls Ferry Road to Bethany.
    - Nature and parks.
    - Outside of the region (also mentioned in stakeholder committees).
- Stakeholders and regional leaders discussed better serving employment areas and working with employers to contribute to transit operations.
- Regional leaders expressed concern about the equity impacts of potential displacement from new investment along a corridor.

Safety and Security

- Safety and security on transit was a common theme from community members. Top concerns were:
    - Behavior and violence from other riders.
    - Reckless driving by non-transit vehicles.
    - Lack of lighting, shelters, and other infrastructure.
    - Enforcement presence on transit.
    - Walking around tent encampments to reach transit.
- Community members suggested increasing transit service to improve safety by reducing the amount of time people would have to wait at the stop.
- Community members expressed a desire for more safety employees on transit (but not police officers).

Transit Service

- Community members indicated transit frequency is a top priority for improvement.
- Community members identified these areas as most needing transit service improvement: SE Portland, NE Portland, and N Portland.
- Community members expressed desire for bus-only lanes and other service improvements, and stakeholders mentioned how bus service is compromised when space is prioritized for cars.
- Stakeholders expressed interest in how tolling delays would affect transit.
- Regional leaders expressed interest in the potential of shuttles for making transit connections and in the potential of using heavy rail (like WES).
- Regional leaders emphasized the importance of improving transit beyond HCT.

Planning for HCT Investments

- Stakeholders expressed interest in coordinating HCT priorities with Regional Flexible Fund Allocations.
- Stakeholders emphasized the importance of aligning the HCT priorities of the region, specifically:
    - Building partnerships.
    - Aligning HCT with local transportation system plans.
    - Coordinating with county priorities.
- Stakeholders stated a desire to look closer at Tier 3 and Tier 4 priorities when moving forward with other studies.

- Regional leaders and stakeholders questioned the modeled ridership, specifically riders that take multiple trips for their jobs and how well the FTA model holds up for Tier 3 and 4 projects.
- Stakeholders discussed the importance of land use for HCT and how to improve access to transit by tying in transit-oriented development.
- Regional leaders in Tigard stated their commitment to partnering with TriMet and fostering appropriate land use.
- Stakeholders emphasized the benefits of nimble, flexible approaches, such as using bus for HCT, and studying closely large, costly investments, such as a tunnel.

Milestone 4 Engagement Activities

Activities for Milestone 4 were conducted from March through June 2023.

- March 2023 – Unite Oregon Interviews
- March 2023 – OPAL Survey
- April 13, 2023 – RTP Community Leaders Forum
- April 19, 2023 – Working Group #6
- April 24, 2023 – Washington County Chamber Transportation Task Force
- May 3, 2023 – EMCTC
- May 4, 2023 – WCCC
- May 4, 2023 – CTAC
- May 13, 2023 – TriMet TEAC
- May 15, 2023 – WCCC
- May 15, 2023 – EMCTC
- May 17, 2023 - MTAC
- May 18, 2023 – JPACT
- May 24, 2023 – MPAC
- May 25, 2023 – Portland Business Alliance
- June 2, 2023 – TPAC
- June 13, 2023 – C4 Metro Subcommittee
- June 26, 2023 – Washington County Chamber of Commerce Transportation Task Force

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TECHNICAL MEMORANDUM

DATE:	November 1, 2022
TO:	Ally Holmqvist
FROM:	Jason Nolin, Parametrix
SUBJECT:	REVISED Summary of Feedback from Previous Outreach
CC:	
PROJECT NAME:	Metro High Capacity Transit (HCT) Strategy Update

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This document summarizes themes related to the High Capacity Transit Strategy Update from these documents:

2023 Regional Transportation Plan
- Stakeholder Interviews Report (March 2, 2022)
- Community leaders' forum report (November 17, 2021)

Get Moving 2020
- Summary of Public Input on the Get Moving Regionwide Program Concepts (May 2020)
- Final Report on APANO T2020 Community Engagement (July 2020)
- PAALF Community Engagement Report Back (May 2020)
- Unite Oregon Community-Led Engagement Presentation (2020)
- Local Investment Team (LIT) corridor review (September 2019)

2018 Regional Transportation Plan
- Public and stakeholder engagement and consultation summary (December 6, 2018)

Division Transit Project
- Presentation on feedback from key groups (September 2016)

SUMMARIZED OVERALL FEEDBACK

These themes were heard through all of these outreach efforts:

- **Community stability**: strong support for investments in corridors to maintain housing and business affordability and avoid displacement.
- **Safe access to transit:** support for safe and comfortable facilities for walking and biking to transit and for waiting at the transit stop (crosswalks, sidewalks, lighting, bus stop amenities).
- **Transit service:** support for more frequent and reliable service. Support for expanding service, particularly to growing areas and town centers in the broader Metro region.
- **Broaden access:** better serve community members who are older, who do not speak English, who have mobility or other disabilities, who have health conditions, who are travelling with children, or who are in school.
- **Priority corridors** for transportation investments, as interpreted from feedback from county Local Investment Teams (LITs) during planning for Get Moving 2020:

  - Multnomah corridors where improving transit service is identified as a major theme (the Multnomah LIT did not prioritize corridors): 82nd Ave, Powell Blvd, 122nd Ave, Downtown Portland.
  - Clackamas: (1) McLoughlin Blvd, (2) 82nd Ave, (3) Hwy 212/Sunrise, (4) C2C/181st Ave.
  - Washington: (1) TV Hwy, (2) SW 185th Ave, (3) Burnside/Barnes Rd.

2021-2022: SCOPING FOR RTP 2023

Stakeholder Interviews Report

- 2018 priorities still make sense.
  - Priorities seem overly focused on conventional vehicle travel and big investments. They do not seem focused on people, local transportation options, and last-mile connections.
- Equity
  - Better access to jobs, education, shopping.
  - Affordability.
  - Eliminate barriers.
  - Transportation for urban and suburban communities.
  - Anti-displacement plans.
- Congestion
  - Prioritize freight and transit.
  - Consider the other impacts of focusing on congestion: climate, safety, opportunity cost.
- Climate
  - Requires more emphasis.
- New elements and considerations
  - Be more explicit about providing access and support for jobs, freight, and commerce.
  - If transit is a priority transportation mode, then it needs more emphasis.
  - System efficiency.
  - Active transportation.
  - Land use.

Community Leaders Forum

- 2018 RTP priorities of equity, safety, climate, and congestion management remain important priorities for the 2023 RTP.
- Safety and accessibility
  - Pedestrian facilities (sidewalk gaps, lack of crosswalks, insufficient pedestrain lighting)
  - Transit doesn't feel welcome and safe.
  - Growing concern about personal safety.
- Transit
  - More frequency, routes, and connections are needed.
  - Consider BRT on TV Highway.
- Displacement
  - Invest in community stability before new infrastructure.
  - Invest in commercial and housing affordability.
- Community values
  - Change the status-quo of auto-dependency.
  - Lock in long-term changes to address climate change.

- Engagement recommendations
    - Use plain language (avoid jargon).
    - Communicate what has been done since the last RTP.
    - Make data available to community organizations.

2020: FROM GET MOVING 2020

Overall themes

- Safety is important for accessing transit.
- Increased transit access to more places, increased frequency, and increased reliability.
    - Invest in transit in growth areas.
    - Focus on North Portland and other areas missing from Tier 1.
    - Connect to destinations such as major stores, health care services, parks and natural areas.
    - Connect with community hubs beyond Portland, such as Oregon City, and with more neighborhoods, such as those in East Multnomah County
    - Express bus service is needed for long distances and connecting towns in the greater Portland area.
    - Expand transit service for people with disabilities.
- Investment in anti-displacement strategies, housing affordability, and business stability.
    - New MAX lines reduce nearby bus access, reducing housing options for transit-dependent residents.

APANO

- Top program priorities were:
    - Anti-displacement
    - Affordable Housing
    - Safety Hot Spots
    - Safe Routes to School
    - Affordable Student Fare
- Recommendations
    - Commercial affordability needs a funding mechanism to avoid business displacement.
    - Community Benefit Agreements would be a powerful tool in implementation to address potential impacts of displacement.
    - Prioritize safety, anti-displacement, and affordable fares for students.

Imagine Black (PAALF)

- Anti-displacement and affordable housing programs across all T2020 programs.
    - Annual funding to support the anti-displacement efforts of Black-led and indigenous organizations.
    - Invest in affordable housing along future transit lines.
- Safety improvements.
    - Lighting, flashing beacons at crossings, sidewalks to bus stops.
- Bus priority lanes.
- Increased frequency.
- Outreach desires:

  - Project leadership (planning through implementation) from BIPOC, low income, disabled, sick folks, trans, queer, and gender non-binary folks.
  - Direct updates about the project after engagement.
  - Allow more time for meaningful engagement.

Unite Oregon

- Affordable housing that is equitable and accessible to all
  - Communities should be able to stay where they are.
  - Residents should have access to quality housing and amenities
  - More affordable housing options are needed for people at risk for being displaced, especially people with disabilities, elders, and students
- Safe, comfortable, and efficient transportation experience for all
  - More and better streetlights
  - Safety at transit stops and access to transit stops
  - More frequent and closer transit service to schools
  - Buses should reach more neighborhoods
  - Express buses for long distances and to connect towns in the greater Portland area.
  - Bus stops should have shelters, lighting, and amenities
- Provide technical assistance and have resources available to support non-English speakers and elderly to help navigate our transportation system

Local Investment Team (LIT) corridor review

- Teams from Multnomah, Clackamas, and Washington Counties reviewed Tier 1 corridors.
- Multnomah County LIT did not prioritize corridors and instead focused on prioritizing values and outcomes.
  - Relevant common themes from Multnomah County:
    - Provide improved transit as a climate strategy. Focus on efficient, reliable, and accessible transit.
    - Create a safe transit system that also improves safety for walking and biking.
    - Unify safety/road standards.
    - Approach projects with a framework to support local business using a racial equity lens.
    - Apply anti-displacement and housing stability strategies where applicable.
  - 82nd Ave
    - LIT considered this one of the highest priority corridors. High opportunity to improve safety and equity outcomes.
    - This corridor impacts many communities of color.
    - Improve safety near schools and educational facilities.
    - Improve bike facilities and connect bike routes through corridor.
    - Transit improvement is a high priority: more frequent service, improved service to schools and educational facilities.
    - LIT had mixed feelings about the Airport Way interchange: improved airport access for drivers also encourages more driving.
  - 162nd Ave

        - Invest in East Portland to help build a sense of neighborhood identity and improve outcomes for people of color. Create spaces where people want to walk, opportunities for rest and connection, art and greenery.
        - Safety is a key priority. Improve safety for people walking and taking transit. Better lighting, crosswalks.
        - Enhance transit. Add transit amenities (including shelters).
        - Improve wayfinding and clarify intersections.
        - Transportation hubs at key connections (162nd, 122nd, 82nd)
    - 122nd Ave
        - Create a sense of neighborhood identity.
        - Prioritize safety and transit. Provide extra protection for walking and biking in high crash areas. Align investment with schools and youth.
        - Street parking is underutilized and could be repurposed.
        - Corridor would benefit from street trees (shade, traffic calming).
        - The neighborhood is changing, so investments should be proactive in ensuring access to affordable housing and mitigating gentrification.
    - Powell Blvd
        - Build a sense of community and improve outcomes for communities of color and people with lower incomes. Prioritize economic growth and transit-oriented development.
        - Safety and transit are the most important priorities.
        - Create safe places for walking and biking, anticipating future growth (expecting an increase in traffic between Gresham and Happy Valley). Improved crosswalks, longer crossing times, sidewalks.
        - Transit should be more reliable.
        - Several parking strips are under used and could be repurposed for transit.
        - Improve pedestrian connections to Ross Island Bridge/Downtown Bridgehead and Powell Butte.
    - Clackamas to Columbia (C2C)/181st Ave
        - LIT did not consider this a high priority corridor.
        - Invest in East Portland and consider economic development. Anti-displacement strategies would need to be a key component.
        - Prioritize safety of residents. Create safe bike routes (more than just painted bike lanes). Focus on pedestrian security where density is higher. Provide safe crossings at schools.
    - Burnside St
        - Invest in East Portland and Gresham, focusing on small businesses owned by people of color. Focus on town centers along the corridor.
        - Create safer routes for people walking and taking transit (crossings, lighting, near MAX stops). Pedestrian safety and crossings need to be drastically improved.
        - Safe and continuous bike lanes.
        - Improve wayfinding and clarify intersections.
        - Address the frequency of automobile/MAX collisions.
    - Downtown Portland
        - Create opportunities that get people out of cars, and into fast and reliable transit options. Transit service must be competitive with driving for investments to be effective.
        - Downtown transit investments have the potential to better serve riders in East Portland.

        - Consider an express bus service through Downtown, dedicating bridges and streets for transit only.
        - Ross Island Bridgehead could include affordable housing, mitigation for poorer air quality near busy roads, mitigating the impacts of heavy traffic on the neighborhood, and integrating the transit station to ease congestion.
- Clackamas County LIT prioritized (1) McLoughlin Blvd, (2) 82nd Ave, (3) Hwy 212/Sunrise, (4) C2C/181st Ave
    - Relevant common themes from Clackamas County:
        - Most LIT members emphasized the importance of improving safety, focusing on equity outcomes, particularly transit investments and safety improvements, or providing options for people living and working in the county.
        - Some LIT members emphasized economic growth and future development.
    - McLoughlin Blvd
        - Safety is a top priority. Needs safe pedestrian crossings, bicycle infrastructure and increased visibility for all users.
        - Prioritize transit access, options, and frequency over cars through infrastructure investments, and create options for the future extension of the MAX line.
        - Connectivity of this corridor, for people and freight, to jobs and city centers creates regional economic opportunity.
        - Prioritize the needs of historically marginalized communities and make this a livable place for people living and working in this corridor.
    - 82nd Ave
        - [See summary in Multnomah County section.]
    - Hwy 212/Sunrise
        - Create safer pedestrian and cyclist routes and intersections.
        - Prioritize connectivity to make it easier to get around, especially for low income communities who may not have cars.
        - Support freight access and road connections to employment lands; reduce urban sprawl.
        - Two members mentioned that this corridor was an inappropriate use of funds because it would build a highway that bypasses low-income communities instead of supporting them.
    - C2C/181st Ave
        - Create safer pedestrian and cyclist routes and crossings/intersections.
        - Provide access to multi-modal transportation options and creating walkable, livable spaces. Create opportunities for cars and freight to move through the region.
        - Build transportation infrastructure to support expanding development and provide access to future employment.
        - Develop a transportation infrastructure that encourage transportation choices that reduce reliance on single-occupancy vehicles and car travel.
        - Find ways to make impacts in underserved communities and implement strategies to avoid involuntary displacement of people with lower incomes (especially renters) in area.

- Washington County LIT prioritized (1) TV Hwy, (2) SW 185th Ave, (3) Burnside/Barnes Rd
    - Relevant themes from Washington County:

        - Prioritize outcomes for safety, equity, and access to transit.
        - Need to balance the immediate, critical needs of safety and access to transit, while thoughtfully planning for the future growth of Washington County.
    - TV Hwy
        - This corridor provides the greatest opportunity to improve safety, equity, and access to transit, and affects many different communities (including communities of color).
        - Make this corridor safer for people walking, driving, cycling, and taking transit is of critical importance. Pedestrian security in particular is an urgent need.
        - This corridor has a major impact on many historically underserved communities in Washington County, especially high-density areas. Use anti-displacement strategies in project investments and consider impacts to people and small businesses along the corridor.
        - Prioritize projects that make transit competitive with driving to ease congestion, reduce reliance on cars, and help transit-dependent people move through and around the region. Make transit competitive with driving, consider express service, improve the comfort of transit (access, shelters, lighting, etc), and rapid transit.
        - Develop a transportation infrastructure to encourage transportation choices that reduce reliance on single-occupancy vehicles (SOVs) and car travel.
    - SW 185th Ave
        - Create safe places for people to cross the road, whether they are walking, cycling or rolling. Improve sidewalks along the corridor. Separate bike lanes and sidewalks from driving lanes. Add more access points near businesses for walking, cycling, and rolling.
        - Use anti-displacement strategies in project investments and consider impacts to people, especially people of color, as well as small businesses along the corridor.
        - Make it easier for people to choose transit options (including investment in bus shelters and rider amenities), and more frequent transit service.
        - Find ways to ease congestion and consider adding additional north-south corridors.
        - Look for ways to link projects to affordable housing investments to ensure thoughtful development.
    - Burnside/Barnes Rd
        - Invest in projects that make it safer for people driving (including better visibility and lighting), walking (potentially adding sidewalks), and taking transit (which would include adding bus shelters and rider protections).
        - This corridor has less of an impact to historically underserved communities in Washington County and is not a high priority corridor for LIT members. Some suggested investing in monitoring this corridor as the area grows with future development. Some suggested investing in other corridors instead of this, such as north-south cooridors.
        - Provide multi-modal options for people to reduce the use of single-occupancy vehicles and provide safe access to key locations (like hospitals).

2015-2018: 2018 RTP

- Congestion is a top concern for commuters and freight.
- Support travel needs for low-income populations and avoid gentrification.
- 2017 online survey priorities:
    - Maintenance, safety, walking and biking projects

- 2018 online survey themes:
    - Improve safety with better street design
    - More frequent MAX and bus service
    - Better walk and bike connections
    - Better support communities of color and other historically marginalized communities.

2016: DIVISION TRANSIT PROJECT

Better reliability is the most important service improvement people would like to see.

- The majority of participants would like a safe, reliable, fast and affordable transit option that provide convenient access to work, school and the surrounding community.
- A majority of participants from all focus groups said they would prefer walking further for faster service as opposed to having more bus stops but slower service.
- Every member of the People with Disabilities focus group preferred to travel farther for a faster trip with accessibility features and improvements and underlying bus service remaining.
- African American participants want better pedestrian access.
- African Immigrant participants want more reliable service and safety and security improvements for both personal concerns and protection from the elements.
- Bhutanese participants want reliable service and more BRT stations to give equal opportunity to ride.
- Chinese participants want safety improvements. Specifically they would like more crosswalks, lighting and lower entry ramps to minimize accidents. They would also like to see information screens with arrival times and public restrooms at bus stations. They want seniors to get free bus services.
- Latino participants want safety and health considerations, especially on the bus for vulnerable populations. The participants are excited about faster service with fewer stops to navigate. They would like wayfinding enhancements including consistent BRT themes and an overlay map to decide which option of travel will be best for them.
- Native American participants want street improvements including lighting, sidewalks and crosswalks. They would also like to see broader community engagement efforts to include people with mobility issues.
- People with Disabilities participants want review and analysis of the public Right of Way conditions. Good curb conditions for the ramp, crosswalks at each bus stop and flashing signal lights with auditory signal and Braille signage. They also would like more wheelchair space on buses, real time information without glare on the screens, more lighting and benches instead of leaners. They also indicate a preference for the bridge plate over the swing ramp.
- Russian-speaking participants want more reliable and faster access to PCC and PSU than MAX. They also want better accommodations and safety improvements. Specifically they would like to see better access for people with children and strollers and for people with disabilities. They would like sheltered bus stops with video cameras for safety and benches to sit on. They would like BRT stops to be located every 20 or 40 streets, with schedules and information displayed both at bus stations and on BRT buses. They recommend scaling bus fares to assist those with lower incomes. They also mention wanting more welcoming bus drivers.

- Tongan participants want faster service and safety improvements, including lighting and shelter at the bus stops. They would also like to see a Pacific Island design for one of the stations to make other Pacific Islanders comfortable using public transit.
- Vietnamese participants want safety enhancements, clean restrooms at new stations and reliable service without sacrificing safety for older riders. They would like a stop at SE 101st Avenue and at 112th Avenue. They also found the survey to be unintelligible and spent a lot of time interpreting the meaning of the materials.
- Youth participants want safety improvements and frequent, reliable service. Specifically they would like to see better lighting, sidewalks and crosswalks, late night service and screens with real time updates.

Appendix B
Regional Transit Modes

Mode	Aerial Tram	Intercity Rail	Commuter Rail HCT	Light Rail HCT	BRT HCT	Rapid Bus (Corridor-Based BRT) HCT	Rapid Streetcar HCT	Streetcar HCT [4]	Frequent Bus	Regional Bus	Vanpool, Microtransit, etc.
Level of Transit Prioritization (Speed & Reliability)	Full Priority Fully dedicated space where transit vehicles run/operate that is not shared with general traffic.	Full Priority	Full Priority	Full Priority	High Priority (>50% Exclusive Guideway)	High to Moderate Priority	Full to Majority Priority	Moderate to Low Priority	Moderate to Low Priority (Spot Treatments)	Limited to No Priority	
Frequency	Most Frequent < 10 mins	Varies	Frequent (Peak Hours) 15-30 mins	Most Frequent ~ 10 mins	Very Frequent ≤15 mins	Very Frequent ≤15 mins	Very Frequent ≤15 mins	Frequent 15 mins	Frequent 15 mins	Less Frequent (Varies)	Less Frequent (Varies)
Market Demand/Activity Density [1]	Serves major activity centers	35+ Connections between cities and regions	25+ Serves medium or higher volume corridors with commute-oriented demand	50+ Serves high volume corridors	25+ Serves medium-high volume corridors	25+ Serves medium-high volume corridors	25+ Serves medium-high volume corridors	25+ Serves dense urban areas	12.5 Serves medium volume corridors	Serves low to medium volume corridors	To be addressed in Metro Access to Transit Study (2024+)
Passenger Capacity [2]											
Transit Access Shed	1/2 Mile	> 1/2 Mile	1/2 Mile	1/2 Mile	1/2 Mile	1/2 Mile	1/2 Mile	1/3 Mile	1/4 Mile	1/4 Mile	
Stop/Station Amenities											
Capital Cost per Passenger [3]											
Operating Cost per Passenger [3]											

1.people per acre
2. based on vehicle capacity and frequency
3. per passenger capacity
4. depending on context

Appendix C

Policy Framework Technical Memorandum

Metro High Capacity Transit Strategy and Regional Transportation Plan Transit Update

HCT Policy Framework – Regional Transit Network Policy Review

December 2022

Parametrix

NELSON NYGAARD

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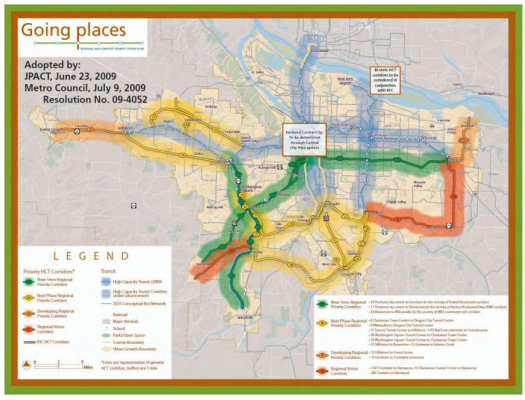
METRO HCT POLICY FRAMEWORK - REGIONAL TRANSIT NETWORK POLICY REVIEW

INTRODUCTION



In 2009, Metro adopted the first 30-year Regional High Capacity Transit (HCT) System Plan that guided investments in light rail, commuter rail, bus rapid transit and rapid streetcar in the Portland metropolitan region. The 2009 HCT Plan identified and ranked 16 corridors into four priority tiers using a multi-phase evaluation process and created the System Expansion Policy (SEP) framework for prioritizing future system expansion. The SEP framework is a process agreed to by Metro and local jurisdictions to advance high capacity transit projects as a regional priority. The framework:

- Identifies which corridors should move into the federal project development process
- Establishes a process for other corridors to advance toward development
- Measures a corridor's readiness for investment using targets such as transit supportive land use policies, ridership development plans, community support and financial feasibility.

In 2018 as part of the Regional Transportation Plan (RTP) update, the Regional Transit Strategy (RTS) was also updated and provided the following definition of HCT:

> *Our high capacity transit (HCT) system operates with the majority or all of the service in exclusive guideway. The high capacity transit system is meant to connect to regional centers and carry more transit riders than the local, regional and frequent service transit lines. HCT could include rapid streetcar, corridor-based bus rapid transit, bus rapid transit, light rail or commuter rail.*

The 2018 RTS also revised the SEP with a streamlined set of HCT Assessment and Readiness Criteria and updated the corridors included on the Regional Transit Network map. Finally, the 2018 RTS introduced the Enhanced Transit Concept (ETC), which improves transit speed and reliability on the

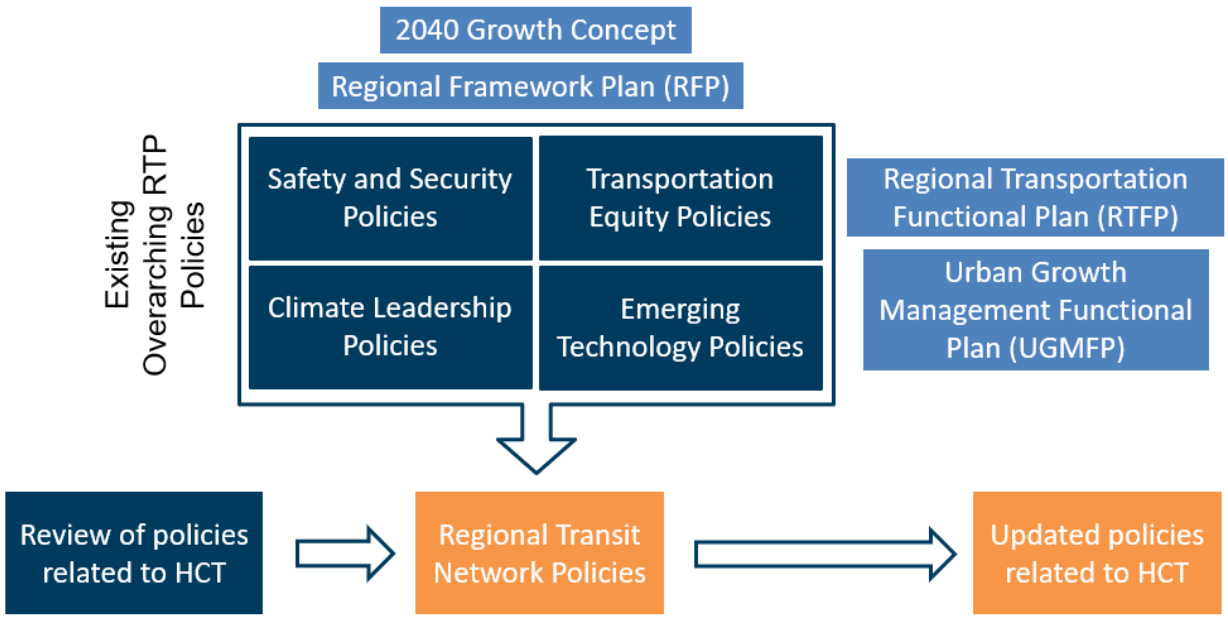
most congested existing and planned frequent service bus or streetcar lines. ETC is now known as "Better Bus."

As part of the 2023 Regional Transportation Plan update, **this HCT Policy Framework memo** provides an important first step in updating the Regional High Capacity Transit Strategy, a component of the Regional Transit Strategy. This memo focuses on a review of local, regional, state and federal policies as they relate to High Capacity Transit and suggests policy updates to reflect the region's current and future priorities and desired outcomes related to Equity, Safety, Climate and Mobility. To provide context and guidance as part of this policy review, this memo also identifies emerging trends impacting HCT and provides key takeaways from peer regions throughout the country. The suggested policy updates at the end of this memo will ultimately inform the evaluation criteria used to prioritize HCT corridors that will be included in the 2023 RTP update.

This memo focuses on reviewing and updating the existing transit-specific policies included in the Regional Transit Network, which will be an element of the 2023 Regional Transportation Plan. The 2023 RTP update continues to support the **2040 Growth Concept**, the region's long-range land use and transportation plan for managing growth, and the **Regional Framework Plan (RFP)** identifies regional policies to implement the 2040 Growth Concept. As part of Metro's code, two functional plans – the **Regional Transportation Functional Plan (RTFP)** and **Urban Growth Management Functional Plan (UGMFP)** – provide additional guidance to local jurisdictions to implement the policies in the RTP.

In addition to the transit-specific policies included as part of the Regional Transit Network, the RTP includes four overarching system policies related to **safety and security**, **transportation equity**, **climate leadership**, and **emerging technologies**. These policies will guide all other policies included in the RTP, including for High Capacity Transit. The relationship of each of the foundational plans that helped frame this policy review is summarized in **Figure 1** below.

Figure 1 Regional Transit Network Policies in Relation to the RTP and Other Metro Plans



The HCT Policy Framework memo is organized into the following sections:

- Existing Regional Transit Network Policies
- Regional, State, and Federal plans and policy review
- Local plans and policies related to HCT
- Current issues and trends, identified through regional, state, or federal plans or initiatives
- Long-range plans and policies in peer regions
- Other key issues and trends impacting transit infrastructure and investments

This memo concludes with suggested updates to the definition of HCT and considerations for updating and expanding the eight existing Regional Transit Network policies as they relate to HCT.

PLAN AND POLICY REVIEW

Existing Regional Transit Network Policies

This section provides a brief assessment of the existing RTP Regional Transit Network policies. **Figure 2** identifies:

- **A proposed "Headline" for each policy** that succinctly communicates the theme addressed.
- **Each policy's relationship to 2023 RTP priority outcomes**, which include Equity, Safety, Climate, and Mobility.[1]
- **Each policy's relationship to HCT**. The relationships are identified in one of three ways:
  - **Foundational to Role** of HCT in the region and the definition of HCT (Policy 4).
  - **Directs Investments** by directly influencing key evaluation/readiness measure(s) used for HCT decision making.
  - **Influences Outcomes** of HCT system investments.

Examples for how the policies were determined to relate to HCT include:

- Policy 1 can direct HCT investments to address disparities such as travel time for equity priority communities, through the criteria used to prioritize potential HCT projects. Policy 1 can also influence the outcomes of HCT projects through assessing displacement risk and putting into place partnerships and policies to prevent displacement.
- Policy 6 is not identified as directing HCT investments – using existing quality of the pedestrian and bicycling environment to prioritize investments may exclude projects that could help advance improvements. However, Policy 6 can influence HCT outcomes through improvements to walking and biking access around HCT stations in advance of or as part of a project.

[1] Metro, 2023 Regional Transportation Plan Update Work Plan, May 2022

Based on this assessment of existing Regional Transit Network policies, those that are most directly relevant to identifying and prioritizing HCT investments – and thus the focus of this memo – include:

- Policy 1: **System Quality and Equity**
- Policy 2: **Maintenance and Resiliency**
- Policy 3: **Coverage and Frequency**
- Policy 4: **High Capacity Transit**

The following two Regional Transit Network policies influence outcomes but are not foundational to the role of HCT nor direct investments:

- Policy 5: **Intercity and Inter-Regional Transit**
- Policy 6: **Access to Transit**

Finally, the last two policies are important to the overall transit network but are neither foundational to the role of HCT, direct investments, nor influence overall outcomes:

- Policy 7: **Mobility Technology**
- Policy 8: **Affordability**

Figure 2 Existing Regional Transit Policies and Relationship to 2023 RTP Outcomes and to HCT

Existing Regional Transit Network Policy (2018 RTP)	*Proposed* Policy Headline(s)	2023 RTP Outcomes	Relationship to HCT
Policy 1: Provide a seamless, integrated, affordable, safe and accessible transit network that serves people equitably, particularly communities of color and other historically marginalized communities, and people who depend on transit or lack travel options.	Service Quality and Equity	☒ Equity ☐ Safety ☒ Climate ☒ Mobility	☐ Foundational to Role ☒ Directs Investments ☒ Influences Outcomes
Policy 2: Preserve and maintain the region's transit infrastructure in a manner that improves safety, security and resiliency while minimizing life-cycle cost and impact on the environment.	Maintenance and Resiliency	☐ Equity ☒ Safety ☒ Climate ☐ Mobility	☐ Foundational to Role ☒ Directs Investments ☐ Influences Outcomes
Policy 3: Make transit more reliable and frequent by expanding regional and local frequent service transit and improving local service transit options.	Coverage and Frequency*	☐ Equity ☐ Safety ☒ Climate ☒ Mobility	☐ Foundational to Role ☒ Directs Investments ☒ Influences Outcomes
Policy 4: Make transit more convenient by expanding high capacity transit; improving transit speed and reliability through the regional enhanced transit concept.	High Capacity Transit	☐ Equity ☐ Safety ☒ Climate ☒ Mobility	☒ Foundational to Role ☐ Directs Investments ☐ Influences Outcomes
Policy 5: Evaluate and support expanded commuter rail and intercity transit service to neighboring communities and other destinations outside the region.	Intercity / Inter-Regional Transit	☐ Equity ☐ Safety ☒ Climate ☒ Mobility	☐ Foundational to Role ☐ Directs Investments ☒ Influences Outcomes
Policy 6: Make transit more accessible by improving pedestrian and bicycle access to and bicycle parking at transit stops and stations and using new mobility services to improve connections to high-frequency transit when walking, bicycling or local bus service is not an option.	Access to Transit	☐ Equity ☒ Safety ☒ Climate ☒ Mobility	☐ Foundational to Role ☐ Directs Investments ☒ Influences Outcomes
Policy 7: Use technology to provide better, more efficient transit service – focusing on meeting the needs of people for whom conventional transit is not an option.	Mobility Technology	☒ Equity ☐ Safety ☐ Climate ☒ Mobility	☐ Foundational to Role ☐ Directs Investments ☐ Influences Outcomes
Policy 8: Ensure that transit is affordable, especially for people who depend on transit.	Affordability	☒ Equity ☐ Safety ☐ Climate ☐ Mobility	☐ Foundational to Role ☐ Directs Investments ☐ Influences Outcomes

Note: * A proposed change in policies would create a new policy around reliability

Regional, State, and Federal Plans and Policies Related to HCT

This section identifies regional and statewide plans relevant to the HCT Policy Framework for the region. Similar to the previous section, each applicable policy in these plans is categorized by the Metro RTP outcomes (Equity, Safety, Climate, and Mobility) and its relationship to high capacity transit (HCT).

Other state or federal plans or initiatives that are relevant to the region's HCT Policy Framework were reviewed but were not included in the plan and policy review table:

- **Regional High Capacity Transit System Plan (2009).** This is the previous HCT plan for the Portland region, which is being updated through this effort, and is assumed to be reflected in more recent documents such as the Regional Transit Strategy (RTS).
- **Climate-Friendly and Equitable Communities (CFEC) Rulemaking (Ongoing)**. Rulemaking by the Department of Land Conservation and Development (DLCD) to strengthen transportation and land use planning for regions including the Portland Metro area; key outcomes including equity, climate, and housing will be addressed in the issues/trends section.
- **USDOT Equity and Justice40 in Transportation Planning**. Federal initiative to address racial equity and climate priorities, including delivering 40% of federal investments to disadvantaged communities; will be addressed in the issues/trends section.

Figure 3 Regional, State, Federal Plan Hierarchy and Policy Summary

Plan	2023 RTP Outcomes	Relationship to HCT	Considerations for Updating Regional Transit Network Policies (Foundational Considerations Bolded)
Portland Metro Transportation System Management and Operations Strategy	☒ Equity ☒ Safety ☒ Climate ☒ Mobility	☒ Foundational to Role ☒ Directs Investments ☒ Influences Outcomes	▪ Harm reduction ▪ Alleviating transportation system disparities ▪ **Connecting people to goods, services, and places** ▪ **Equitable transit reliability improvements** ▪ Transit system resiliency
Portland Metro and ODOT Regional Mobility Policy Update	☒ Equity ☒ Safety ☒ Climate ☒ Mobility	☒ Foundational to Role ☒ Directs Investments ☒ Influences Outcomes	▪ Land use and transit decision-making efficiency in movement of people and goods ▪ **Seamless, well-connected, low-carbon, convenient, and affordable mode share** ▪ **Transit system travel predictability and travel time reasonableness** ▪ Safe and comfortable mode share; equitable mobility experiences among Black, Indigenous, and People of Color (BIPOC) communities and people with low incomes, youth, older adults, and people living with disabilities
Portland Metro Regional Freight Strategy	☐ Equity ☒ Safety ☐ Climate ☒ Mobility	☐ Foundational to Role ☒ Directs Investments ☒ Influences Outcomes	▪ Coordinating for seamless movement and better access, with less conflict with transit ▪ Delay reduction, with increases in reliability and improvements in safety, for reliable transit planning ▪ Integrating issues with planning and communicating movement issues ▪ Eliminating traffic fatalities and serious injuries caused with other modes
Portland Metro Regional Transportation Safety Strategy	☒ Equity ☒ Safety ☐ Climate ☐ Mobility	☐ Foundational to Role ☒ Directs Investments ☐ Influences Outcomes	▪ Achieve Vision Zero goals using transit as a safety mechanism ▪ Safety investments to reduce speeds and speeding at high-risk areas, increase security, and reduce crime, with prioritization of vulnerable communities ▪ Equitable safety investments to benefit people with higher crash risk, such as vulnerable communities ▪ Safety increases across modes through planning, designing, constructing, operating, and maintaining the transit system with focus on speed reduction ▪ Avoidance of repeating and/or exacerbating safety issues ▪ Consideration of safety as an adequacy metric.
Portland Metro Emerging Technology Strategy	☒ Equity ☐ Safety ☐ Climate ☒ Mobility	☐ Foundational to Role ☒ Directs Investments ☒ Influences Outcomes	▪ Accessibility, availability, and affordability of new technologies to progress equity ▪ Usage of new technologies to improve transit, providing shared modes regionwide, and supporting transit, biking, and walking ▪ Empowering travelers with data for planning, decision-making, and managing transit ▪ Advancing public interest by preparing for, learning from, and adapting to new technological developments

Plan	2023 RTP Outcomes	Relationship to HCT	Considerations for Updating Regional Transit Network Policies (Foundational Considerations Bolded)
Portland Metro Strategic Plan to Advance Racial Equity, Diversity and Inclusion (Racial Equity Framework)	☒ Equity ☒ Safety ☐ Climate ☐ Mobility	☐ Foundational to Role ☐ Directs Investments ☒ Influences Outcomes	▪ Engaging communities of color ▪ Hiring, training, and promoting a racially diverse workforce ▪ Creating safe, welcoming services, programs, and destinations ▪ Allocating resources to advance racial equity
Portland Metro Climate Smart Strategy	☐ Equity ☒ Safety ☒ Climate ☒ Mobility	☒ Foundational to Role ☒ Directs Investments ☐ Influences Outcomes	▪ **Making transit convenient, accessible, and affordable** ▪ Making walking and biking safe and convenient ▪ Making streets safe, reliable, and connected ▪ Using technology to manage transit ▪ Providing information and incentives to increase mode share ▪ Securing funding for transit
Portland Metro Regional Active Transportation Plan	☒ Equity ☒ Safety ☒ Climate ☒ Mobility	☐ Foundational to Role ☒ Directs Investments ☒ Influences Outcomes	▪ Making walking and biking the most convenient, safe, and preferrable choices for trips less than three miles ▪ Developing well-connected regional pedestrian and bicycle routes integrated with transit to prioritize safe, convenient, accessible, comfortable pedestrian and bicycle access for all ages and abilities ▪ Ensuring that regional transit and active transportation intersections equitably serve all people ▪ Complete the regional active pedestrian and bicycle networks where transit transfers are common ▪ Use data and analyses to guide transit and active transportation investments

Plan	2023 RTP Outcomes	Relationship to HCT	Considerations for Updating Regional Transit Network Policies (Foundational Considerations Bolded)
ODOT Strategic Action Plan 2021-2023	☒ Equity ☒ Safety ☒ Climate ☒ Mobility	☐ Foundational to Role ☒ Directs Investments ☒ Influences Outcomes	▪ Supporting equitable operations and policies and establishing an informed and inclusive culture ▪ Promoting opportunities through transit investments, such as by working with BIPOC communities, women, and other historically and/or are currently marginalized communities ▪ Utilizing the perspectives of people who reside in communities served by Metro and who are likely to be affected by Metro decision-making ▪ Investing in the protection of vulnerable communities from environmental hazards ▪ Preserving, maintaining, and operating a multimodal transportation system and achieving a cleaner environment ▪ Ensuring the safety of transit riders and operators ▪ Providing greater transit access and broader range of mobility options while addressing climate change ▪ Investing in transit as a mechanism to manage and reduce congestion ▪ Enhancing multimodal options ▪ Implementing road usage charging to ensure revenue to maintain and improve the transit system and manage congestion
ODOT Climate Action Plan 2021-2026	☐ Equity ☒ Safety ☒ Climate ☒ Mobility	☐ Foundational to Role ☒ Directs Investments ☒ Influences Outcomes	▪ Integrating climate change and emissions reductions considerations in policy and investment frameworks ▪ Providing transit options to manage demand and reduce congestion ▪ Transitioning to an efficient transit fleet, supporting adoption of alternative fuels ▪ Maintaining and operating transit and recovering from climate impacts by using sustainable funding ▪ Increasing efficiency through investments in safety, and operations practices ▪ Utilizing sustainable products and fuels ▪ Reducing energy consumption, and reducing Metro's carbon footprint

Local Plans and Policies Related to HCT

In addition to reviewing regional, state, and federal plans and policies, relevant plans from or related to Metro area cities and/or counties were reviewed at a high level to document any policies that should be considered as part of the HCT Policy Framework. As shown in **Figure 4**, these plans included local transportation system plans (TSPs), comprehensive plans, or transit development/master plans (TDPs/TMPs), or HCT-specific plans, including the Clark County/CTRAN High Capacity Transit System Plan.

Specific plans that have recently been completed (or are currently underway) that relate to HCT and/or ETC include:

- Clackamas County completed its TDP in 2021.
- Washington County is conducting a Transit Study (completion anticipated in 2023), which will integrate the County's recent TDPs and shuttle planning study.
- The City of Portland developed the Rose Lane Vision in 2020 and the Enhanced Transit Corridors Plan in 2018, which are advancing projects to provide bus and streetcar lines with additional transit priority and help achieve the City's climate and transportation justice goals.
- TriMet is conducting the Forward Together Comprehensive Service Analysis, which will recommend a revised bus network concept to reflect shifts in ridership and travel demand that have occurred since the COVID-19 pandemic. TriMet also completed an Express and Limited Stop Bus Study (2021) to identify where these services could improve ridership and access to jobs, including for equity priority populations. These studies will shape the agency's FY2023 Service Plan.
- TriMet is also completing its first FX (Frequent Express) line in the Division Street corridor; Metro, TriMet, and the City of Portland are working on planning for the 82nd Avenue corridor; and TriMet is leading the Tualatin Valley (TV) Highway BRT Study, connecting Beaverton, Hillsboro, and Forest Grove, where TriMet's Line 57 operates today.
- The Southwest Corridor project, connecting downtown Portland with SW Portland, Tigard and Tualatin, has a Locally Preferred Alternative and Record of Decision from the FTA.
- Metro and TriMet are continuing the ETC program, now known as Better Bus, to improve transit speed and reliability across the region. Where the previous implementation of this program focused on the most congested locations on the system with the highest ridership, the next phase will look at other locations across the region to improve bus operations.

Outside of the TriMet service district:

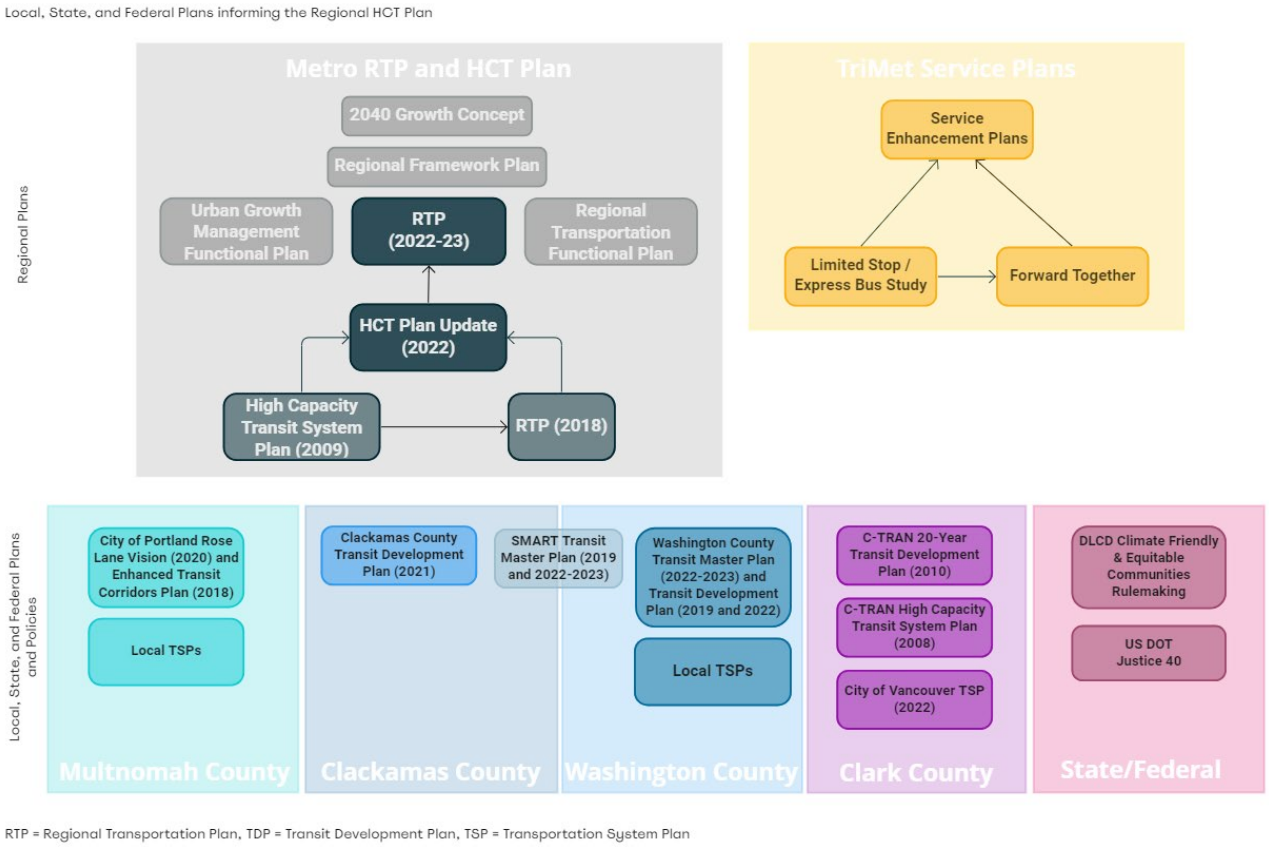
- The Interstate Bridge Replacement's Locally Preferred Alternative recommends a MAX Yellow Line extension from Expo Center across the Interstate Bridge to Evergreen in Vancouver, connecting to C-TRAN's Vine Bus Rapid Transit system.
- The City of Wilsonville (SMART) is updating its TMP (completion anticipated in 2023).

- The Clark County (C-TRAN) High Capacity Transit System Plan was completed in 2008; a TSP update for the City of Vancouver, which includes Enhanced Transit Corridors, is underway (completion anticipated in late 2022).
- C-TRAN has also completed development of several BRT corridors in recent years and others are in the planning stages.

As noted above, the Department of Land Conservation and Development (DLCD) has been conducting Climate-Friendly and Equitable Communities (CFEC) rulemaking, filed on August 22, 2022, to help local governments revise plans to reduce greenhouse gas emissions. Similarly, the US DOT has undertaken the Justice 40 initiative with a goal of delivering 40% of the overall benefits of federal investments in climate and clean energy, including sustainable transportation, to disadvantaged communities.

In addition to informing the HCT policy framework, these plans and studies can also be consulted to validate the universe of potential HCT projects considered in the HCT Plan update as well as inform criteria used in the evaluation.

Figure 4 Regional Plan Hierarchy and Policy Summary



Review of Plans and Policies from Peer Regions or other Agencies

This section includes a high-level review of long-range planning documents from peer regions. The purpose of the peer review is to inform the HCT Policy Framework, but key findings from the peer review could also be utilized in other dimensions of the HCT Plan and/or RTP updates, such as the development of corridor evaluation criteria.

Peer Identification

Key criteria for selecting the peer regions or agencies included:

- Preference for plans/policies developed after 2020 that address current issues and trends such as recovery from the COVID-19 pandemic.
- Identify high capacity transit in their goals and policies.
- Include/address multiple HCT modes (e.g., rail and bus).
- Potential HCT lessons learned related to RTP investment priorities (safety, equity, climate and mobility).
- Geographic distribution.

Thirteen regions were identified in **Figure 5** below (See also **Figure A-1 in Appendix A** for more detail). These were narrowed to seven for high-level consideration and the project team then focused on four peers for more detailed review.

Figure 5 Selected Peers

Region	Agency	Document	Year Published	HCT Modes
Seattle	Puget Sound Regional Council (PSRC), and/or Sound Transit (ST)	Regional Transportation Plan (2022-2050)	2021	Link and RapidRide
	King County Metro	Metro Connects Long-Range Plan		
San Francisco	Metropolitan Transportation Commission (MTC) and/or SFMTA/ConnectSF	Plan Bay Area 2050	2021	BART, LRT (e.g., Muni Metro), BRT and RapidBus (e.g., Muni Rapid)
Los Angeles	LA County MTA (Metro)	Long Range Transportation Plan	2020	BRT and LRT
Minneapolis-St. Paul	Metropolitan Council	Transportation Policy Plan	2020	LRT and BRT
Austin	Capital Area MPO (CAMPO)	2045 Transportation Plan (and Regional Transit Study)	2020	LRT MetroRail) and BRT (MetroRapid)
Boston	Metropolitan Area Planning Council (MAPC), Massachusetts Bay Transportation Authority (MBTA), The Greater Boston BRT Study Group	MetroCommon 2050 | Better Rapid Transit for Greater Boston | Focus40	2015-2021	BRT (Silver Line and additional prioritized corridors) and LRT and Heavy Rail (Commuter Rail, Blue, Green, Orange, and Red Lines)
Philadelphia	Delaware Valley Regional Planning Commission	Connections 2050 | StoryMap | Policy Manual | Process and Analysis Manual | Major Regional Projects	2021	BRT, Streetcar, LRT, Heavy Rail, High-Speed Rail
	City of Philadelphia, Southeastern Pennsylvania Transportation Authority	The Philadelphia Transit Plan		

Summary of Common Themes and Key Takeaways

Common themes and notable examples from the peer review are summarized below, organized by the four RTP priority outcomes. Examples include cases where policy shifts had a clear impact of prioritization criteria and plan outcomes.

- **Equity considerations for vulnerable communities and transit riders**
  - All peer regions have goals or objectives regarding the transit needs of women, people of color, people with low incomes, or people experiencing houselessness.
  - Direct feedback from community groups representing vulnerable populations (such as the Equity Cabinet for King County Metro) was critical in identifying specific policy areas to address in plan updates.
  - Many regions are also addressing affordability, such as through implementation of a means-based fare for low-income transit riders in the Boston region, funded with legislative support for consistent funding for operations.
  - All regions address how equity can be achieved by transit investments for priority communities, such as how communities access transit and destinations via transit.
  - In the City of San Francisco's ConnectSF program, the pandemic refocused investment priorities on serving essential trips citywide, including through quick-build capital improvements to maximize scarce resources. Model-based criteria used to prioritize investments (including access to jobs and services, ridership, cost-effectiveness, and travel time) looked at both equity priority communities and at low-income households earning below 200% of the federal poverty level, in addition to overall performance citywide.
- **State of good repair and safety / HCT system maintenance and reliability**
  - All regions seek to achieve safety goals in terms of how people wait for, access, or experience transit, some with a focus on Vision Zero targets systemwide.
  - 6 of 7 regions emphasize the need for transit infrastructure maintenance, preservation, reliability, or lifecycle expansion.
  - Prioritizing equity outcomes in the greater Philadelphia region included universal design and user experience, such as implementation of full ADA access, all-door boarding, safer and cleaner services, and better amenities at stops and for passengers.
- **System-level climate goals or objectives**
  - All regions specify climate goals or objectives that are part of other climate-related goals, such as stewardship or safety. Five regions prioritize a net-zero emissions transit fleet, such as procuring battery-electric buses and implementation of associated charging infrastructure, with a policy goal to achieve procuring 100% renewable electricity.

  - All regions prioritize VMT reduction goals, with Los Angeles and Philadelphia introducing concepts for VMT fees to generate revenue for transit investments and lower the dependence on the federal gas tax.
  - The urgency of addressing climate change was an impetus and key message around prioritizing transit improvements and related programs and initiatives, to attract additional trips to transit and other sustainable modes. For example, greater Boston has a goal to achieve a net-zero carbon region, which has an objective that all land travel is by carbon-free modes, such as walking, biking, and electrified public transit

- **Quality of service and mobility improvements for bus or rail**
  - All regions are pursuing bus or rail expansions or infrastructure improvements; for example, Seattle, Los Angeles, Boston, and greater Philadelphia have specific HCT and ETC enhancement goals, such as increasing the capacity of the transit fleet for new and existing services, expanding the HCT network to meet and respond to changing needs, or adding bus lanes and other features to speed up service and eliminate delay.
  - All regions emphasize the importance of transit and transportation system integration to expand travel choices and mode share; enhance local and regional transit connectivity; or improve transit frequencies, operations, or safety.

Peer Review Details

Please see **Appendix A** for additional peer review details.

Additional Key Issues and Trends

In addition to exploring how peer regions have structured their long-range transportation plans focused on HCT, it is important to note that several recent issues and trends have emerged over the past five years that are directly impacting local, state, and federal transportation policies. Metro and TriMet have recently summarized some of these issues and trends in separate but related memos: Metro Emerging Trends and TriMet Forward Together Emerging Trends. In addition, very recent policies related to climate change and the economy continue to shape how regions will adapt their transportation policies in the coming years.

The following is a summary of these issues and trends that were considered when conducting the HCT Policy Framework analysis:

- Transit service and ridership declines, including the decrease in peak commute demand
- Inequities and social justice
- Sustained reliance or preference for remote work
- Continued expansion of e-commerce
- Continued advancements in vehicle electrification (EVs and e-bikes)
- Issues with personal safety, especially for BIPOC riders
- Increases in severe and fatal crashes
- Increases in recreational cycling
- Challenges associated with agency recovery and innovation
- Continued gentrification and affordability issues, including people experiencing houselessness
- Inflation and increases in fuel prices
- Staffing shortages across many industries, including transit

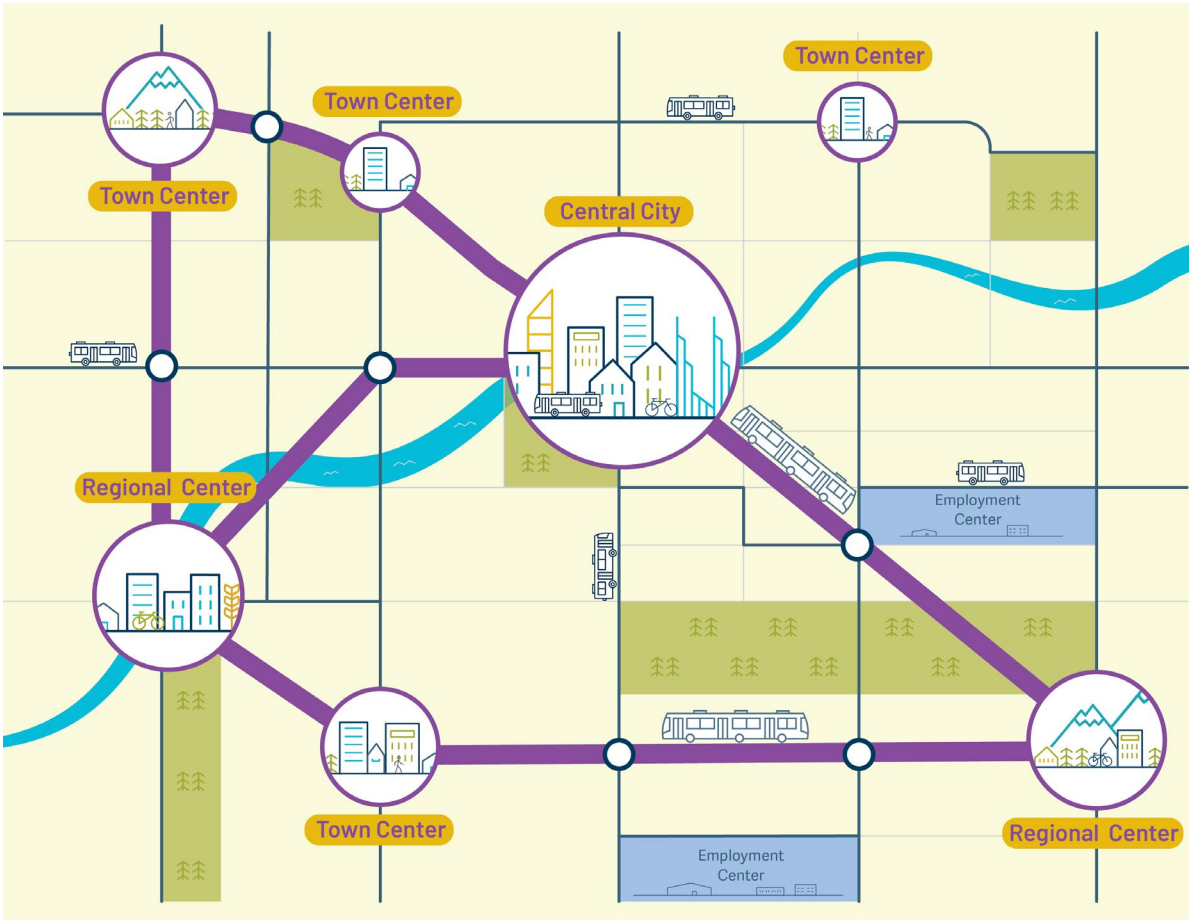
HCT DEFINITION AND POLICY GAP ANALYSIS

The HCT Policy Framework Analysis concludes with considerations for how High Capacity Transit is defined in our region as well as considerations for updating the eight Regional Transit Network policies. This analysis considers not only the review of local, regional, state, and federal policies, but also key findings from the peer regions, as discussed above.

High Capacity Transit Definition Considerations

The 2040 Growth Concept sets forth a vision for connecting the central city to regional centers like Gresham, Clackamas, and Hillsboro with fast and reliable high capacity transit (HCT), helping the region concentrate development and growth in its centers and corridors. High capacity transit carries high volumes of passengers quickly and efficiently, and serves a regional travel market with relatively long trip lengths to provide a viable alternative to the automobile in terms of convenience and travel time.

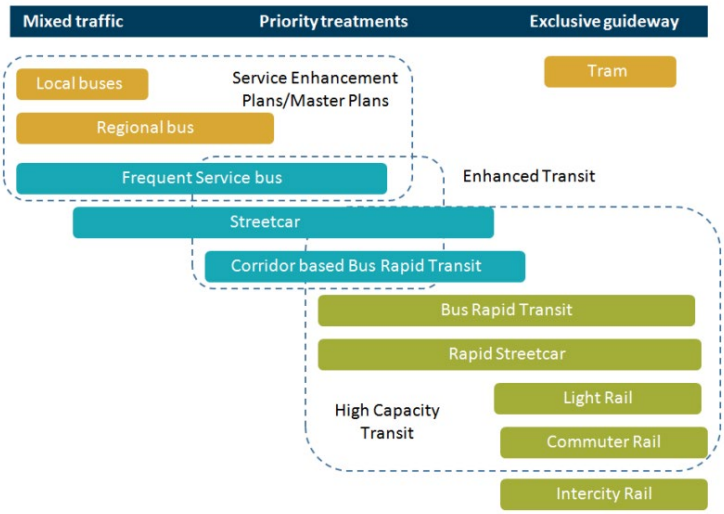
Figure 6 Regional Transit Network Concept



High capacity transit is defined in multiple places in the 2018 Regional Transportation Plan, including in the System Policies chapter (pages 3-77, 3-88), in Glossary of Terms (page G-4), and in the multiple sections of the separate Regional Transit Strategy. While there are minor differences in how HCT is defined, the following introductory paragraph is perhaps the most direct at defining HCT (from page 4-10 of the Regional Transit Strategy):

> **"Our high capacity transit (HCT) system operates with the majority or all of the service in exclusive guideway. The high capacity transit system is meant to connect to regional centers and carry more transit riders than the local, regional and frequent service transit lines. HCT could include rapid streetcar, corridor-based bus rapid transit, bus rapid transit, light rail or commuter rail."**

As illustrated in the following graphic (from page 4-6 of the Regional Transit Strategy), there is also some overlap between Enhanced Transit and HCT, where some streetcar or corridor-based Bus Rapid Transit applications could be considered either High Capacity Transit or Enhanced Transit. Other modes, including Commuter Rail, Light Rail, Rapid Streetcar and Bus Rapid Transit are exclusively defined as HCT. It is important to note that the term "corridor-based Bus Rapid Transit" is not fully defined in the 2018 RTP.



To clarify how we define High Capacity Transit, the following considerations are offered for this update of the High Capacity Transit Strategy:

- Consider leading with the *purpose* of HCT in the regional transit network, and to integrate equity into the definition by emphasizing that it connects *people* to regional centers
- Consider stating that HCT is *high-quality transit* (i.e., fast, frequent, safe, and reliable) before its physical attributes (operating with the majority or all of the service in exclusive guideway)

The first half of the HCT definition in **blue** could be updated as follows:

> **"The high capacity transit system is meant to serve as the backbone of the transportation network, connect people to**

> **regional centers *and major town centers* with high-quality service (fast, frequent, safe and reliable), and carry more transit riders more comfortably than the local, regional and frequent service transit lines. HCT operates in exclusive guideway, to the greatest extent possible, and could include light rail, commuter rail, rapid streetcar, streetcar, bus rapid transit, and corridor-based bus rapid transit"**

The last half of the definition in **green** emphasizes that HCT provides the needed capacity to serve the region's highest demand corridors with a variety of modes and levels of transit priority, ranging from light rail or BRT with "majority exclusive guideway" to corridor-based BRT or streetcar modes that have a mix of exclusive and shared right of way (such as the FX2-Division high capacity bus service).

Enhanced Transit Concept (ETC) / Better Bus

Another important part of defining High Capacity Transit and reviewing the Regional Transit Network policies related to HCT is clarifying the role of the Enhanced Transit Concept (ETC), now known as Better Bus. ETC was introduced in the 2018 Regional Transit Strategy and is defined as follows (from page 4-9 of the RTS):

> ***The purpose of ETC is to improve transit speed and reliability on our most congested existing and planned frequent service bus or streetcar lines.***

The RTP Glossary further clarifies that:

- "Enhanced transit is a set of street design, signal, and other improvements that improve transit capacity, reliability and travel time along major Frequent Service bus lines…" (RTS page G-9)
- "…Enhanced Transit encompasses a range of investments comprised of capital and operational treatments of moderate cost. It can be deployed relatively quickly in comparison to larger transit capital projects, such as building light rail." (RTS page G-9)

While no changes to how ETC is defined are suggested, several policy considerations are provided to strengthen and clarify the role of ETC in the Regional Transit System.

Transit Mode Characteristics and Relationships to Land Use

The graphic below identifies the transit modes that are part of the regional transit system, including their general service quality characteristics, and the land use density that is typically appropriate to warrant a capital investment in building a HCT project. The graphic identifies the characteristics of regional transit modes (both HCT and other modes serving the region) and shows which modes fall into the high-capacity transit category. It includes:

- **Transit Modes:**
  - HCT Modes: Commuter Rail, Light Rail, BRT, Corridor-Based BRT (e.g., RapidBus), Rapid Streetcar, and Streetcar; Streetcar may be considered HCT depending on the context
  - Non-HCT Bus Modes: Frequent Bus, Regional Bus
  - Other modes:
    - Aerial Tram, Intercity Rail
    - Vanpool, microtransit, etc. are included as potential modes to be considered in the future Metro Access to Transit Study.
- **Transit Characteristics:**
  - Level of Transit Prioritization (e.g., Speed & Reliability), Frequency, Market Demand, Passenger Capacity, Transit Access Shed, Stop/Station Amenities, Capital Cost (per passenger), Operating Cost (per passenger)

The following graphic illustrates the essential characteristics of high-capacity transit that work together to provide high-quality connections around the region, consistent with the HCT definition and vision.

Figure 6 What is High Capacity Transit?

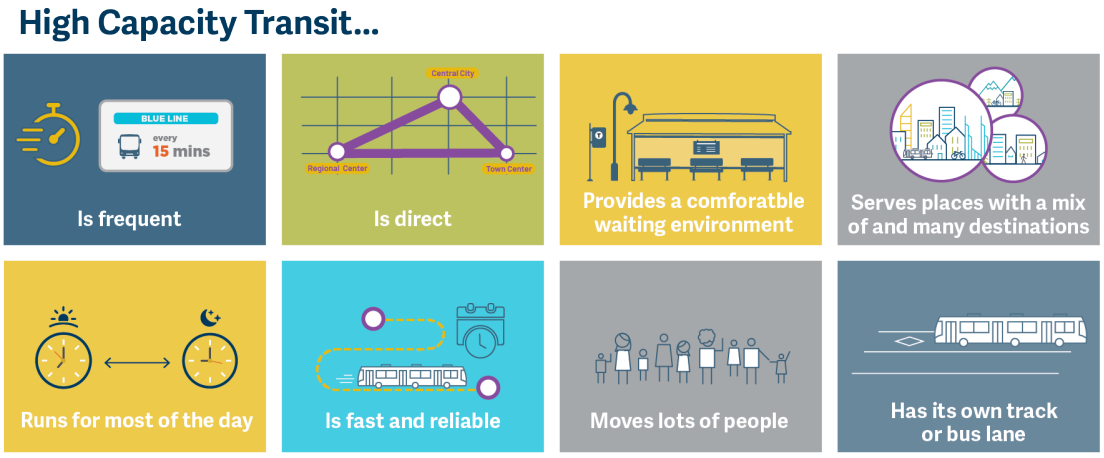


Figure 7 Characteristics of High-Capacity Transit

Mode	Aerial Tram	Intercity Rail	Commuter Rail HCT	Light Rail HCT	BRT HCT	Rapid Bus (Corridor-Based BRT) HCT	Rapid Streetcar HCT	Streetcar HCT [4]	Frequent Bus	Regional Bus	Vanpool, Microtransit, etc.
Level of Transit Prioritization	Full Priority Fully dedicated space where transit vehicles run/operate that is not shared with general traffic.	Full Priority	Full Priority	Full Priority	High Priority (>50% Exclusive Guideway)	High to Moderate Priority	Full to Majority Priority	Moderate to Low Priority	Moderate to Low Priority (Spot Treatments)	Limited to No Priority	
Frequency	Most Frequent < 10 mins	Varies	Frequent (Peak Hours) 15-30 mins	Most Frequent ~ 10 mins	Very Frequent ≤15 mins	Very Frequent ≤15 mins	Very Frequent ≤15 mins	Frequent 15 mins	Frequent 15 mins	Less Frequent (Varies)	Less Frequent (Varies)
Market Demand/Activity Density [1]	35+	25+	50+	25+	25+	25+	25+	12.5			
	Serves major activity centers	Connections between cities and regions	Serves medium or higher volume corridors with commute-oriented demand	Serves high volume corridors	Serves medium-high volume corridors	Serves medium-high volume corridors	Serves medium-high volume corridors	Serves dense urban areas	Serves medium volume corridors	Serves low to medium volume corridors	To be addressed in Metro Access to Transit Study (2024+)
Passenger Capacity [2]											
Transit Access Shed	1/2 Mile	> 1/2 Mile	1/2 Mile	1/2 Mile	1/2 Mile	1/2 Mile	1/2 Mile	1/3 Mile	1/4 Mile	1/4 Mile	
Stop/Station Amenities											
Capital Cost per Passenger [3]											
Operating Cost per Passenger [3]											

1. people per acre
2. based on vehicle capacity and frequency
3. per passenger capacity
4. depending on context

Regional Transit Network Policy Considerations

Based on the review of local, regional, state, and federal plans and policies, as well as the peer review and overview of key issues and trends, several areas have emerged as a focus of the Regional Transit Network policy updates:

- **System Quality and Equity.** Equity has long been a priority in making transportation planning decisions in the region and was one of the overarching policies included in the 2018 RTP. The 2023 RTP includes equity as one of the four desired outcomes and all network policies will be updated to further strengthen equity as a regional priority. The importance of dignified, high-quality service should also be emphasized to make transit work for everyone. As such, **Policy 1: Service Quality** is updated and clarified; **Policy 2: Equity** is updated and separated into a new policy.
- **Climate change.** While climate leadership is one of the overarching policies from the 2018 RTP, and one of the desired outcomes for the 2023 RTP update, there are no specific Regional Transit Network policies focused exclusively on sustainability and the environment. A new policy (**Policy 3: Climate Change**) is proposed focusing on how the Regional Transit Network should address climate change.
- **Maintenance and Resiliency.** Reliability is integrated into **Policy 4: Maintenance and Resiliency** to better integrate it as a key outcome of a system that is preserved and maintained in a state of good repair.
- **HCT and ETC.** The current **Policy 4: High Capacity Transit** (renumbered to Policy 5) includes both HCT and ETC in a single policy. To strengthen and clarify the role of both HCT and ETC in the regional transit network, creating **Policy 7: Reliable and Enhanced Transit** addresses the separate role of ETC as a tool for increasing reliability of the transit system.
- **Clear policy headlines.** All of the suggested modifications to the Regional Transit Network policies focus on a primary theme, so simple headlines are offered for each.

Figure 8 below lists each of the 2018 Regional Transit Network policies and provides suggested updates to the policies most related to high capacity transit.

Figure 8 Policy Framework Gap Analysis

Existing #	Revised #	Proposed Headline	Existing Policy Text	Gaps / Considerations Addressed	Updated Policy Text Considerations
1	1	**System Quality**	*Provide a seamless, integrated, affordable, safe and accessible transit network that serves people equitably, particularly communities of color and other historically marginalized communities, and people who depend on transit or lack travel options.*	▪ Separated existing Policy 1 into two policies ▪ Aligned with overarching Transportation Equity Policy 3 ▪ Integrated quality of service into policy language	Provide a high-quality, safe, and accessible system that makes transit a convenient and comfortable transportation choice for everyone to use.
	2	**Equity**			Ensure that the regional transit network equitably prioritizes service to those who rely on transit or lack travel options; makes service, amenities, and access safe and secure; improves quality of life (e.g., air quality); and proactively supports stability of vulnerable communities, particularly communities of color and other historically marginalized communities.[2]
N/A	3	**Climate Change**	*N/A*	▪ Strengthen policies to focus on transit's role in addressing climate change	Prioritize our investments to create a transit system that encourages people to ride transit rather than drive alone and to support transitioning to a clean fleet that aspires for net zero GhG emissions, enabling us to meet our state, regional, and local climate goals.
2	4	**Maintenance and Resiliency**	*Preserve and maintain the region's transit infrastructure in a manner that improves safety, security and resiliency while minimizing life-cycle cost and impact on the environment.*	▪ Incorporated reliability into State of Good Repair	Preserve and maintain the region's transit infrastructure in a manner that improves safety, reliability, and resiliency while minimizing life-cycle cost and impact on the environment.

[2] Historically marginalized communities are areas with high concentrations (compared to regional average) of people of color, people with low-incomes, people with limited English proficiency, older adults and/or young people.

Existing #	Revised #	Proposed Headline	Existing Policy Text	Gaps / Considerations Addressed	Updated Policy Text Considerations
4	**5**	**High Capacity Transit**	*Make transit more convenient by expanding high capacity transit; improving transit speed and reliability through the regional enhanced transit concept.*	▪ Align with equity and climate outcomes and HCT definition ▪ Reframe "convenient" around equity ▪ Revise description of capacity	Complete and strengthen a well-connected high capacity transit network to serve as the backbone of the transportation system. Corridors should generally be spaced at least one half-mile to one mile or more apart and serve mobility corridors with the highest travel demand. High capacity transit prioritizes transit speed and reliability to connect regional centers with the Central City, link regional centers with each other, and link regional centers to major town centers.[3]
3	**6**	**Coverage and Frequency**	*Make transit more reliable and frequent by expanding regional and local frequent service transit and improving local service transit options.*	▪ Moved reliability and the Enhanced Transit Concept to a new policy (see Policy 7)	Complete a well-connected network of local and regional transit on most arterial streets – prioritizing expanding all-day frequent service along mobility corridors and main streets linking town centers to each other and neighborhoods to centers.
3 and 4	**7**	**Reliability**	*See Policy #4*	▪ Created a separate policy focused on reliability that clarifies the role of ETC in the regional transit network	Through the Better Bus program, prioritize capital and traffic operational treatments identified in the Enhanced Transit Toolbox in key locations or corridors to improve transit speed and reliability for frequent service.
5	**8**	**Intercity / Inter-Regional Transit**	*Evaluate and support expanded commuter rail and intercity transit service to neighboring communities and other destinations outside the region.*	▪ No proposed changes	

[3] The regional "mobility corridor" concept refers to a network of integrated transportation corridors that moves people and goods between and within subareas of the region. These transportation corridors influence the development and function of the land uses they serve and are defined by the major centers set forth in the Region 2040 Growth Concept. High capacity transit, along with frequent bus service and pedestrian/bicycle connections to transit, play an important role in moving people in these corridors. (2018 Regional Transportation Plan, Section 3.4.1)

Existing #	Revised #	Proposed Headline	Existing Policy Text	Gaps / Considerations Addressed	Updated Policy Text Considerations
6	**9**	**Access to Transit**	*Make transit more accessible by improving pedestrian and bicycle access to and bicycle parking at transit stops and stations and using new mobility services to improve connections to high-frequency transit when walking, bicycling or local bus service is not an option.*	▪ No proposed changes	
7	**10**	**Mobility Technology**	*Use technology to provide better, more efficient transit service – focusing on meeting the needs of people for whom conventional transit is not an option.*	▪ No proposed changes	
8	**11**	**Affordability**	*Ensure that transit is affordable, especially for people who depend on transit.*	▪ No proposed changes	

Notes:

Green – proposed update or addition

APPENDIX A. REVIEW OF PEER REGION RELATED TRANSPORTATION PLANS AND POLICIES

The review of HCT policies included plans from other regions. The purpose of the peer review is to inform the HCT policy analysis, but the peers could be utilized in other dimensions of the HCT Plan and/or RTP update.

Peer Identification

Key criteria for selecting the peer regions or agencies include:

- Preference for plans/policies developed after 2020 that address current issues and trends including recovery from the COVID-19 pandemic.
- Identify high-capacity transit in their goals and policies.
- Include/address multiple HCT modes (e.g., rail and bus).
- Potential HCT lessons learned related to RTP investment priorities (safety, equity, climate, and mobility).
- Geographic distribution.

Thirteen regions were identified in the table below (**Figure A-1**). These were narrowed to seven for high-level consideration and the project team focused on four peers for more detailed review.

Figure A-1 Potential Peer Regions and Planning Documents

Region	Agency	Document	Selection Criteria			Preliminary Recommendation to Include in Policy Review	Recommendation Notes	Key pages/elements related to HCT or issues/trends of interest
			Addresses Current Issues? (Year Published)	Includes Policy or Goal with Relation to HCT?	Region has Multiple HCT Modes (Rail and Bus)?			
Seattle	Puget Sound Regional Council (PSRC), and/or Sound Transit (ST)	Regional Transportation Plan (2022-2050)	2021	Yes	Yes – Link and RapidRide	Yes	▪ Included PSRC, Sound Transit, City of Seattle in 2018 RTP best practices review (focused on criteria) ▪ Focus on King County; strong equity focus in Metro Connects plan	▪ Chapter 2 Performing for People, Environment, and Mobility: p. 118-170 includes engagement, equity, climate and environment, and mobility goals.
	King County Metro	Metro Connects Long-Range Plan						▪ Metro Connects: See p. 105 of PDF for RapidRide prioritization framework
San Francisco	Metropolitan Transportation Commission (MTC) and/or SFMTA/ConnectSF	Plan Bay Area 2050	2021	Yes	Yes – BART, LRT (e.g., Muni Metro), BRT and RapidBus (e.g., Muni Rapid)	Yes	▪ Included BART in 2018 best practices review (focused on criteria) ▪ Equity approach in ConnectSF evaluation (SF focused)	▪ p. vi-x, 5 Guiding Principles, ▪ Notably Transportation Strategies, specifically T10, on p. ix & 81.
Salt Lake City	Wasatch Front Regional Council (WFRC)	Regional Transportation Plan (2019-2050)	2019	Yes	Yes -- LRT (TRAX) and MAX BRT (1 line)		▪ Included WFRC and Salt Lake City in 2018 best practices review (focused on criteria) ▪ Limited existing BRT lines	▪ p. 37, origin to destination travel mode share as regional goal. ▪ p. 40-44, high-capacity and -frequency transit mentioned multiple times in relation to outcomes of scenarios of goals. ▪ p. 49, high-capacity transit mentioned as performance measure for scenarios of quality transportation choices.
Los Angeles	LA County MTA (Metro)	Long Range Transportation Plan	2020	Yes	Yes – BRT and LRT	Yes	▪ Clear transit investment allocations, with implementation timetables ▪ A couple transit strategies, each with multiple sub-strategies to glean from. ▪ Bond measure (confirm).	▪ p. 4, better transit mentioned as priority. ▪ p. 18, expansions of transit operations and implementation of fixed-guideway transit mentioned, including I-5 North Capacity Enhancements project. ▪ p. 20, expanded programs via LRTP mentioned, including Express Lanes, off-peak transit services. ▪ p. 22, BRT mentioned. ▪ p. 29, BRT mentioned again, w/ BRT investment allocations on p. 30 Figure 8. ▪ p. 32, note Strategy 1.2: Improve the frequency, speed and reliability… ▪ p. 33, note capacity-enhancing transit projects.
Minneapolis-St. Paul	Metropolitan Council	Transportation Policy Plan	2020	Yes	Yes -- LRT and BRT	Yes	▪ Included in 2018 best practices review (focused on criteria)	▪ p. 10, 2020 TPP Principle, Bullet 3 Implement increased transit service ▪ p. 16, frequent transit mentioned as method for congestion relief. ▪ p. 17-19, BRT mentioned under The Regional Transit System and again under Overview and after Benefits of Transit before Strategies to Encourage Alternatives.

Region	Agency	Document	Selection Criteria: Addresses Current Issues? (Year Published)	Selection Criteria: Includes Policy or Goal with Relation to HCT?	Selection Criteria: Region has Multiple HCT Modes (Rail and Bus)?	Preliminary Recommendation to Include in Policy Review	Recommendation Notes	Key pages/elements related to HCT or issues/trends of interest
San Antonio	Alamo Area MPO (AAMPO)	Metropolitan Transportation Plan (Mobility 2045)	2019	Yes	No – Main focus on BRT, rapid bus, shuttles, demand response		▪ HCT service (Primo) launched in 2012 ▪ HCT corridors identified by VISION 2040 for implementation that year	▪ p. 1.5-1.6, Goals
Austin	Capital Area MPO (CAMPO)	2045 Transportation Plan (and Regional Transit Study)	2020	Yes	Yes -- LRT MetroRail) and BRT (MetroRapid)	Yes	▪ Extensive expansion planned, bus and rail ▪ Project Connect funding measure passed by voters	▪ p. 8-9 Vision, Goals, and Objectives
Nashville	Greater Nashville Regional Council (GNRC)	Regional Transportation Plan	2021	Yes	No – Main focus on bus and BRT		▪ Expanded and Modernized Transit Options part of Long-Term Vision ▪ New Technologies to Improve Safety, Traffic Operations, and Traveler Information part of Core Strategies	▪ p. 16-17, Plan Recommendations: Long-Term Vision and Goals and Objectives
Sacramento	SACOG	Next Generation Transit Strategy	2021	Yes	Yes – bus and LRT		▪ Extensive Recommended Transit Strategies, with sensible vision, goals and KPIs, and trends in common with Metro/TriMet	▪ p. 10-11, Vision, Goals, and Key Performance Indicators ▪ p. 20-54, Recommended Strategies
Vancouver, BC	TransLink	Transport 2050	2022	Yes	Yes – SkyTrain and RapidBus		▪ Implementing and prioritizing frequent, fast, reliable transit and TOD/TAD listed as transformative actions ▪ Universal basic mobility transformative action directive of HCT	▪ p. 7, How We'll Act: Creating the Transportation Future We Want – Strategies
Denver	City and County of Denver (CCD)	Denver Moves	2019	Yes	Yes – LRT and BRT [1 line]		▪ City Denverright / DenverMoves process had extensive equity component ▪ Extensive study of BRT by the regional provider (RTD) as well as CCD	▪ p. 1-9, Denver Moves: Transit Goals ▪ p. 3-3, Denver's Big Moves and Strategies
Boston	Metropolitan Area Planning Council (MAPC), The Greater Boston BRT Study Group	MetroCommon 2050 | Better Rapid Transit for Greater Boston | Focus40	2015-2021	Yes	Yes – BRT (12 potential corridors) and LRT (for comparison with BRT)	Yes	▪ Recent regional plan, east coast ▪ Strong data-driven, equity-focused approach to BRT implementation in applicable corridors, with QOS/LOS comparisons across modes and places. ▪ MBTA Better Bus Project and bus network redesign and concurrent rail expansion.	▪ p. 11, BRT's Potential in Boston – Under Methodology and within the last two paragraphs before Travel Time Analysis and Routing, corridor prioritization criteria are defined. ▪ p. 38, Under Conclusion, HCT-related, BRT-specific Recommendations are given
Philadelphia	Delaware Valley Regional Planning Commission	Connections 2050 | StoryMap | Policy Manual | Process and Analysis Manual | Major Regional Projects	2021	Yes	Yes –	Yes	▪ Recent regional plan, east coast ▪ Relevant thinking on current trends and issues ▪ SEPTA bus/rail redesigns underway along with expansion projects	▪ p. 26-33, long range planning goals, their definitions, and their objectives. ▪ Major Regional Projects Table, filterable by transit to include 84 out of 255 entries for proposed projects, viewable also as a map
	City of Philadelphia	The Philadelphia Transit Plan						▪ p. 7, Goals & Strategies; p. 92-98, Bus Corridors; p. 110-132, High Capacity Transit

Peer Review Findings

The following slides summarize the following information for each peer:

- Plan(s) reviewed, geographic focus, purpose
- Related plans (if applicable) – in several cases, a local plan was reviewed in addition to the regional plan
- Policy priorities within each RTP priority area (Climate, Equity, Safety, Mobility)
- Key highlights related to the four outcomes for the Portland Metro RTP update (Equity, Safety, Climate, and Mobility)
- Additional examples highlighted from selected peers

HCT PLAN UPDATE
PEER REVIEW
REFERENCE SLIDES

September 20, 2022

Peer Regions Policy Review

- Seattle
- San Francisco
- Los Angeles
- Twin Cities
- Austin
- Boston
- Philadelphia

RTP Priorities

- ☑ Equity
- ☑ Safety
- ☑ Climate
- ☑ Mobility

Peer Review Common Themes Related to RTP Outcomes

- **Equity** considerations for vulnerable communities and transit riders
  - All peer regions have goals or objectives regarding the transit needs of women, people of color, people with low incomes, and/or people experiencing houselessness
  - Direct feedback from community groups representing vulnerable populations (such as the Equity Cabinet for King County Metro) was critical in identifying specific policy areas to address in plan updates.

- State of good repair and **safety** / HCT system maintenance and reliability
  - 6 of 7 regions emphasize the need for transit infrastructure maintenance, preservation, reliability, or lifecycle expansion.

- System-level **climate** goals or objectives
  - All plans specify climate goals or objectives that are a part of other climate-related goals (such as stewardship or safety).
  - For example, 5 of 7 regions prioritize a net-zero emissions transit fleet.

- Quality of service and **mobility** improvements for bus or rail
  - All plans pursue bus or rail expansions or infrastructure improvements, with Seattle, LA, Boston, and greater Philadelphia having specific HTC and ETC enhancement goals.

Initial Peer Review

- Name of plan reviewed; date, horizon year, geographic focus, purpose
- Related plans (if applicable) – in several cases, a local plan was reviewed in addition to the regional plan
- Policy priorities
- Key highlights related to the four outcomes for the Metro RTP update (Equity, Safety, Climate, and Mobility)

Peer Review Additional Topics Being Explored

- Highlight how equity and/or climate-specific policies affected the peer region's priorities from the previous plan
- Identify specific equity and climate-focused policy language related to HCT and/or corridor-level evaluation criteria used to prioritize investments
- Assess alignment with RTP definitions of HCT and ETC

Seattle

Central Puget Sound Region

Alignment w/ RTP Priorities

- ☑ Equity
- ☑ Climate
- ☑ Safety
- ☑ Mobility

Plan: Regional Transportation Plan – 2050

- Designed to implement region's growth plan, VISION 2050

Geographic focus: King, Pierce, Snohomish, and Kitsap counties

Purpose: Regional transportation investment strategy

Related Plan: King County Metro Long-Range Transit Plan (Metro Connects) – 2050

Policy Priorities:

- Greenhouse gas reductions; safety improvements; community growth investments; maintenance and promotion of economic vitality; and transit and travel choice expansion

Building on VISION 2050

GOAL: The region has a sustainable, equitable, affordable, safe, and efficient multimodal transportation system, with specific emphasis on an integrated regional transit network that supports the Regional Growth Strategy and promotes vitality of the economy, environment, and health.

- VISION 2050 (PSRC 2020)

Seattle

Central Puget Sound Region

Alignment w/ RTP Priorities

- ☑ Equity
- ☑ Climate
- ☑ Safety
- ☑ Mobility

Alignment with RTP Priorities (highlights):

Equity:

- Prioritizes HCT access for people of color and with low incomes compared to the regional average.
- Pursues services with less delay and shorter travel time for people of color and with low incomes.

Safety:

- Promises a state of good repair and safe systems approach.
- Considers timely replacement of bridges and ferries.

Climate:

- Incorporates a Four-Part Greenhouse Gas Strategy aligning with VISION 2050.
- Sets GHG reduction targets for 2030 (50% below 1990 levels) and 2050 (83% below 1990 levels).

Mobility:

- Seeks to triple transit boardings by 2050.
- Pushes for more than half of households to live within a half-mile of HCT.

Seattle

Central Puget Sound Region - Highlights

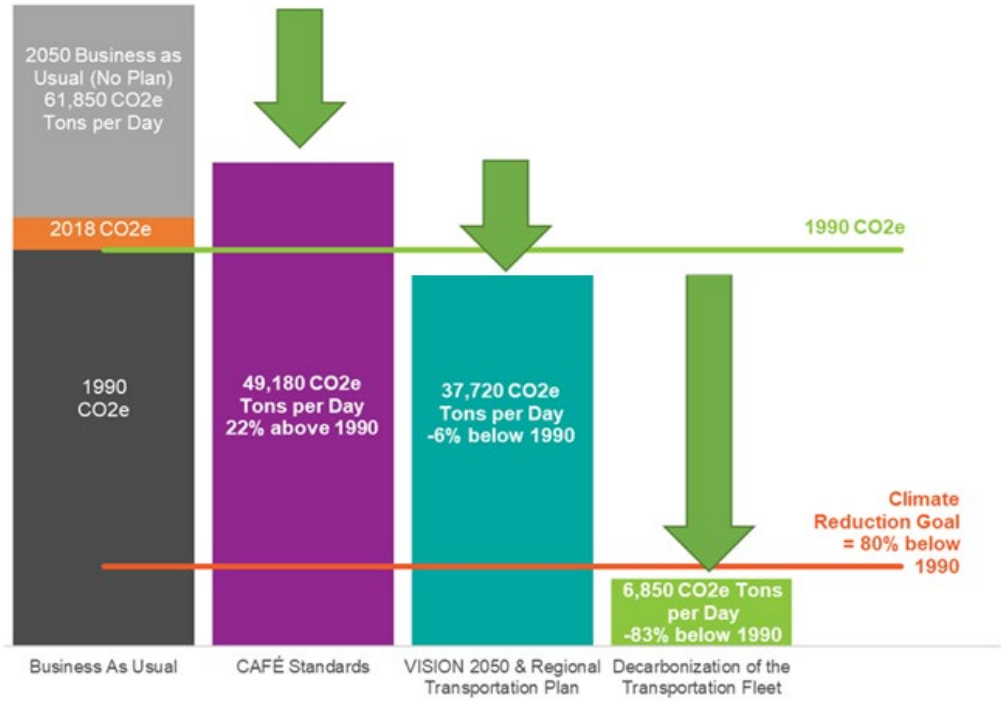
- Seattle – 2050 Regional Transportation Plan
  - Inter-regional high-speed rail to be implemented, connecting the Vancouver, BC; Seattle; and Portland areas.
  - 41 BRT, 9 LRT, 2 commuter rail, and 84 frequent bus HCT services planned for implementation in 2050.

Seattle

Central Puget Sound Region - Highlights

Four-Step GHG Reduction Model

Figure 36 - Steps to Meet Greenhouse Gas Reduction Goals



Seattle

King County

Alignment w/ RTP Priorities

- ☑ Equity
- ☑ Climate
- ☑ Safety
- ☑ Mobility

Plan: King County Metro Long-Range Transit Plan (Metro Connects) – 2050

- Influences 2050 RTP for Puget Sound

Geographic focus: King County (includes City of Seattle)

Purpose: Frequent, reliable, fast, safe, equitable, and sustainable 24-hour bus service running all days throughout an innovative and regionally integrated network

Policy Priorities:

- Service increases, HCT-connecting services increases, QOS improvements, and fleet and operations growth

Seattle

King County

Alignment w/ RTP Priorities

- ☑ Equity
- ☑ Climate
- ☑ Safety
- ☑ Mobility

Alignment with RTP Priorities (highlights):

Equity:

- Provides service in areas with unmet need.
- Implements target approach to fare discounts to balance fare subsidies and revenues.

Safety:

- Builds safe and well-designed transit stops, stations, and centers.
- Prioritizes safety and security on agency vehicles and at shared stops, stations, and centers

Climate:

- Makes transit more competitive to driving alone.
- Procures zero-emissions vehicles and supporting infrastructure.

Mobility:

- Meets current and future transit needs and move toward an all-day service network.
- Adds flexible services to connect to key locations and fixed-route networks, such as Sound Transit.

San Francisco

Bay Area Region

Alignment w/ RTP Priorities

- ☑ Equity
- ☑ Climate
- ☑ Safety
- ☑ Mobility

Plan: Plan Bay Area – 2050

- Outlines $1.4 trillion spending plan across 30 years

Geographic focus: Bay Area region

Purpose: Improve housing, transportation, the economy, and the environment in the Bay Area

Policy Priorities:

- A collection of goals and associated strategies for housing, transportation, the economy, and the environment

San Francisco

Bay Area Region

Alignment w/ RTP Priorities

- ☑ Equity
- ☑ Climate
- ☑ Safety
- ☑ Mobility

Alignment with RTP Priorities (highlights):

Equity:

- Implements a statewide universal basic income program.
- Expands job training, incubator programs, and internet access in underserved communities.

Safety:

- Builds a Complete Streets network to promote mode share.
- Advances regional Vision Zero policy with better street design and reduced speeds.

Climate:

- Shifts commuters to telecommuting, transit, walking and/or biking.
- Grows transportation demand management programs, such as vanpool and bikeshare.

Mobility:

- Enhances transit frequency, capacity, and reliability, and expand the regional rail network.
- Integrates new regional express lanes and an express bus network.

San Francisco

City of San Francisco

Alignment w/ RTP Priorities

- ☑ Equity
- ☑ Climate
- ☐ Safety
- ☑ Mobility

Plan: ConnectSF Transit Strategy – 2050

Geographic focus: City of San Francisco

Purpose: Identify local HCT investment priorities (LRT and BRT) and priority regional rail investments from City perspective

Related Plan: Informs SF Transportation Plan Update (in progress)

Policy Priorities:

- Meet six key transit challenges
- Link transit to meeting housing challenges and climate/air quality goals
- Mix of major capital projects and lower cost citywide bus/rail reliability investments to maximize funding

San Francisco

City of San Francisco

Alignment w/ RTP Priorities

- ☑ Equity
- ☑ Climate
- ☐ Safety
- ☑ Mobility

Alignment with RTP Priorities (highlights):

Equity:

- Prioritization measures: citywide, 200% low-income, and Equity Priority Community trips
- Focused bus service recovery on essential, non-traditional commute trips
- Citywide bus network improvements through MuniForward quick-build program

Safety:

- Emphasis on State of Good Repair and reliability
- Within transit context, deliver safety improvements alongside transit priority projects
- Support Vision Zero and Slow Streets and Safe Spaces programs

Climate: Shifting trips to transit to meet 2040 goal of zero emission transportation system

Mobility:

- Key local LRT (Central Subway Extension) and regional rail priorities (Geary/19th Rail via Link21 program)
- New Caltrain regional rail station in equity priority neighborhood
- Bus and rail system reliability

Los Angeles
LA County MTA

Alignment w/ RTP Priorities

- ☑ Equity
- ☑ Climate
- ☑ Safety
- ☑ Mobility

Plan: Our Next LA (LRTP) – 2050

- Informs LA Metro's SRTP (forthcoming)

Geographic focus: LA County and MTA/Metro Area

Purpose: Identify HCT investment priorities, strategies and actions (LRT and BRT) and priority regional rail investments and associated timelines

Related Plans: Metro Strategic Plan (Vision 2028) & NextGen Bus Plan – 2028

Policy Priorities:

- Achieve four priority areas
- Expand public/active transportation programs and related partnerships, progress freight partnerships, implement transit-supportive/SOV-trip-reducing policies
- Transit and highway projects (Measure M & R)

Los Angeles

LA County MTA

Alignment w/ RTP Priorities

- ☑ Equity
- ☑ Climate
- ☑ Safety
- ☑ Mobility

Alignment with RTP Priorities (highlights):

Equity:

- Integrates Gender Action Plan and Transit Homelessness Action Plan.
- Supports transit-oriented communities on Metro-owned lands to facilitate access to land uses.

Safety:

- Optimizes station safety/security, including lighting, monitoring, space.
- Integrates safety/security plans/policies, including for emergencies.

Climate:

- Operationalizes system-level transition to zero-emission buses by setting present targets.
- Considers conservation, life-cycle, efficiency in operations policies.

Mobility:

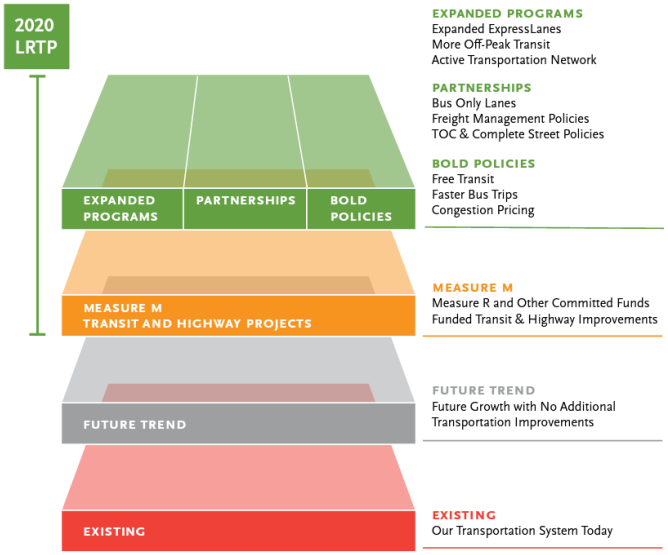
- Prioritizes the expansion of rail countywide.
- Emphasizes improving frequency, speed, reliability of bus and rail.

Los Angeles

LA County MTA - Highlights

- Los Angeles – 2050 Long Range Transportation Plan
  - NextGen Bus Plan to implement all-day service with 15-minute or better headways for 80% of all bus services, with a bus stop within a quarter-mile of current riders.
  - A Transit First approach to speed up buses with capital improvements, such as bus lanes and signal priority.

Figure 4
Elements of the 2020 LRTP



Minneapolis-St. Paul

Twin Cities Region

Alignment w/ RTP Priorities

- ☑ Equity
- ☐ Climate
- ☑ Safety
- ☑ Mobility

Plan: Transportation Policy Plan - 2040

- Progresses Thrive MSP 2040, 30-year regional plan

Geographic focus: Twin Cities Metro Area

Purpose: Maintain a safe, effective, reliable, equitable, affordable, environmentally-conscious, and prosperous transportation system

2040 TRANSPORTATION POLICY PLAN (2020 UPDATE) PRINCIPLES

- Support the needs of the region's mature highway system, including dedicating significant resources to maintaining and rebuilding the existing system and using preservation projects to rethink major regional corridors
- Manage congestion in an innovative, cost-efficient manner and provide reliable alternatives to travel in congested corridors
- Implement increased transit service and an expanded transitway system; support higher demand for development (housing, shops, jobs) along transit lines and around stations
- Support more opportunities for other travel modes; include bicycle and pedestrian elements in comprehensive transportation and land development plans; provide tools needed to implement them
- Plan for the long-term needs of freight modes such as trucks, barges, and railroads
- Balance the needs of the aviation system with local land use decisions

Related Plan: 2040 Transportation Policy Plan (originally adopted 2015)

Policy Priorities:

- Align with six principles
- System stewardship, safety/security, access, economic growth, health equity, and transportation-land use guidance and balance

Minneapolis-St. Paul

Twin Cities Region

Alignment w/ RTP Priorities	
☑ Equity	☐ Climate
☑ Safety	☑ Mobility

Alignment with RTP Priorities (highlights):

Equity:

- Pursues a transportation system that promotes community cohesion.
- Reduces construction and operations impacts on natural, human, and built environments.

Safety:

- Prioritizes state of good repair of the transportation system.
- Focuses on achieving Vision Zero targets across modes, including freight.
- Considers transportation system's vulnerability to natural and human-caused threats.

Climate:

- Does not explicitly define climate goals but conveys it as a safety/security issue.

Mobility:

- Ensures reliability of travel by freight, highway and transit, and availability of multimodal options.
- Seeks to increase mode share by setting associated measures.

Austin

Central Texas

Alignment w/ RTP Priorities

- ☑ Equity
- ☐ Climate
- ☑ Safety
- ☑ Mobility

Plan: Regional Transportation Plan – 2045

- A collation of transportation plans, studies and infrastructure inventories
- Amended every five years

Geographic focus: Greater Austin area

Purpose: A multimodal approach to alleviate congestion, address transportation needs, coordinate activities, prioritize projects and programs, and identify financial constraints

Related Plan: 2045 Regional Transit Study

Policy Priorities:

- Safety, mobility, stewardship, economy, equity, innovation

Austin
Central Texas

Alignment w/ RTP Priorities

- ☑ Equity
- ☐ Climate
- ☑ Safety
- ☑ Mobility

Alignment with RTP Priorities (highlights):

Equity:

- Pursues mitigation of negative impacts on vulnerable populations
- Considers vulnerable populations' multimodal access opportunities

Safety:

- Focuses on reducing the number and severity of crashes.
- Prioritizes Vision Zero metrics collaboratively with local government and transit agencies.

Climate:

- Seeks to avoid, minimize, and mitigate negative impacts to water, air, and habitat quality
- Does not explicitly define climate goals but makes climate objectives a part of stewardship goal.

Mobility:

- Made up of connectivity, reliability, choice, implementation, and regional coordination objectives.
- Enhances reliability by improving incident management, ITS, and TDM

Boston

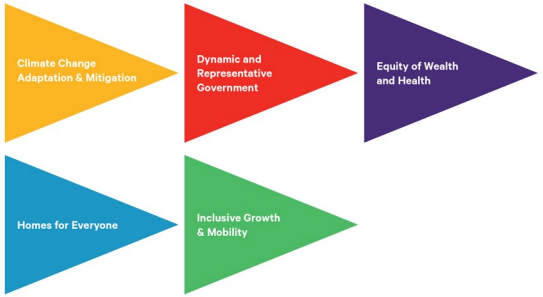
Boston Metro Area

Alignment w/ RTP Priorities

- ☑ Equity
- ☑ Climate
- ☑ Safety
- ☑ Mobility

Plan: MetroCommon – 2050

- Land-use and policy plan, with interactive website in progress



Geographic focus: Greater Boston area

Purpose: Long-range regional plan to address cost of housing, racial inequity, and climate change

Related Plan: Focus40 (MBTA long range investment plan)

Policy Priorities:

- Achieve five action areas
- Values of the plan are equity, stewardship, resiliency, and prosperity

Boston

Boston Metro Area

Alignment w/ RTP Priorities

- ☑ Equity
- ☑ Climate
- ☑ Safety
- ☑ Mobility

Alignment with RTP Priorities (highlights):

Equity:

- Focuses on neighborhoods historically underserved by high quality transit.
- Seeks to make public and active transportation affordable among people least able to pay.

Safety:

- Proposes to achieve zero transportation-related fatalities per year across all modes.
- Ensures that people can travel without risk of violence, discrimination, or crime.

Climate:

- Emphasizes that transportation systems are designed to function during, or rebound after, climate events.
- Pursues net-zero carbon emissions across all regional transportation options.

Mobility:

- Prioritizes transit infrastructure maintenance, funding, and capacity as a top-line objective.
- Concentrates growth around transit and services on demand.

Boston

Boston Metro Area - Highlights

Example

Goal A: Getting Around the Region

Traveling around Metro Boston is safe, affordable, convenient, and enjoyable.

In 2050, the ways we get around are reliable, adequately-funded, and well maintained. Travel is safe, efficient, pleasant, and affordable to all households regardless of income. New transportation technologies and services operate on our roads, underground, and on the water. These new travel options help alleviate congestion and pollution, rather than adding to it. Public transit and shared trips are often more convenient and affordable than solo trips. Auto congestion still exists, but it is predictable and avoidable.

People with mobility limitations and those without a car can get around easily, and can afford to do so. Low-income residents and residents of color enjoy high quality transit to more parts of the region, improving access to opportunity. People of all ages walk or bike more frequently for short trips because conditions make that option safe and enjoyable. The transportation system has a minimal impact on the local and global environment, with reduced pollution and runoff, drastically reduced GHG, and less land set aside for roadways and parking.

1. Transit infrastructure is well-maintained and funded, and its capacity is greatly expanded through the improvement of existing service and the strategic addition of new service so that daily travel is convenient, pleasant, and reliable. The transit system provides more opportunity for circumferential travel throughout the region and reverse commutes between the inner core and suburbs.
2. The transportation system is designed and operated to ensure access to opportunity for everyone, with a particular emphasis on neighborhoods historically underserved by high quality transit.
3. Local land use policies and new development support increased mobility by encouraging concentrated growth around transit and the services people need.
4. Bicycle, pedestrian, and other personal mobility infrastructure is safe, extensive, high quality, and linked to other modes, so that people frequently use active transportation as a preferred mode of travel.
5. Transportation options in the region are net zero for carbon emissions, contributing to improved air quality and reducing negative climate impacts.
6. Public and active transportation options are affordable for those least able to pay.
7. All modes of transportation, including innovative technologies, are safely integrated resulting in few transportation-related injuries and zero fatalities annually.
8. State and local governments work together with businesses and property owners and advocates to create seamless travel throughout the region, including "first mile, last mile" connections.

https://www.mapc.org/wp-content/uploads/2021/12/12.-MC2050-Goals.pdf

Boston

Boston Metro Area - Highlights

Example

Goal C: A Climate-Resilient Region

Metro Boston is prepared for –– and resilient to – the impacts of climate change.

In 2050, the Metro Boston region is prepared for the extremes of a changing climate. We are prepared for more high-heat and extreme-cold days, increased rainfall, extended periods of drought, stronger storms, and a rising sea. Homes, schools, workplaces, facilities storing or producing hazardous materials, and infrastructure are located away from serious threats or are designed to withstand them. When major climate events interrupt critical services, the response is managed to minimize disruption and speed recovery. People have the resources, networks, and supports to withstand climate emergencies and to recover when disaster strikes. Older adults, children, residents with lower incomes, Environmental Justice communities, and other vulnerable populations can live safely and fully enjoy outdoor activities. Neighborhoods are designed and improved to protect the health of residents, with ample shade, drainage, and green space. Wetlands, water bodies, forests, and plant and animal communities are restored and protected, and are able to adapt to climate change impacts.

1. Residents and workers, especially those most vulnerable to climate impacts, live and work in neighborhoods designed to minimize climate-related health effects such as asthma, heat-related illness, and other diseases.
2. All neighborhoods and municipalities have updated emergency response and communication plans in anticipation of climate-related emergencies. Communities have adequate supplies, trained professionals, and volunteers ready to respond in a coordinated and effective manner.
3. Critical systems, including energy supply and distribution, communications, water, and transportation are designed to continue functioning during, or quickly rebound after, severe storm events.
4. New homes, institutions, businesses, and hazardous facilities are built away from ecologically sensitive areas or areas vulnerable to climate impacts, or they are built in such a way as to withstand those impacts. Existing homes, institutions, businesses, and hazardous facilities in the most vulnerable locations are relocated or modified to absorb impacts.
5. Green infrastructure beautifies neighborhoods. It is included in all developments, providing multiple co-benefits, such as stormwater filtration, shade, cleaner air, carbon storage, and cooling.
6. Vulnerable populations affected by climate-related events like storms, floods, or droughts are able to avoid major financial, educational, and social disruptions, and are supported in their decisions to move out of harm's way or to make their properties more resilient.

https://www.mapc.org/wp-content/uploads/2021/12/12.-MC2050-Goals.pdf

Boston

Boston Metro Area - Highlights

Example

Goal D: A Net Zero Carbon Region

The Metro Boston region is highly energy efficient and has reduced its greenhouse gas (GHG) emissions to net zero.

In 2050, Metro Boston is deeply energy efficient and climate-smart. We power our communities, buildings, and vehicles with renewable energy. The region benefits from having made deep cuts in GHG before 2030, and reaching net zero emission by 2050, as part of the state and global effort to avoid the worst impacts of the climate crisis. Making zero-emissions choices for food, clothing, and other goods is easy, affordable, and convenient for everyone. The public health, resiliency, and other benefits of a net-zero carbon future are distributed equitably, lifting up all communities, particularly those who had historically borne greater burdens. The new energy economy is affordable, even for those with limited incomes or other economic burdens.

1. Energy demand is significantly reduced and energy efficiency is maximized across the region.
2. Affordable carbon-free energy powers our modernized and smarter electricity grid, and heating and cooling are fully decarbonized.
3. Renewable energy, including centralized, district-scale, and distributed generation and storage composes the region's primary sources of energy.
4. All new construction and major renovation projects meet net zero emissions standards for heating, cooling, and electricity needs by 2030. Existing buildings meet this standard by 2050.
5. All land travel in the region is by carbon-free modes including walking, biking, electrified public transit, and electrified passenger vehicles. Air, heavy-duty freight, and marine transportation have significantly reduced carbon emissions, and are providing carbon offsets.
6. The "Green Economy" supports local workforce development, entrepreneurs, and living wage jobs that foster more widespread economic opportunity.
7. The benefits and impacts of new energy infrastructure are distributed equitably across the region, with all groups benefiting and no location or population bearing a disproportionate burden.

https://www.mapc.org/wp-content/uploads/2021/12/12.-MC2050-Goals.pdf

Boston

Boston Metro Area - Highlights

Example

Goal F: A Healthy Environment

Greater Boston's air, water, land, and other natural resources are clean and protected – for us and for the rest of the ecosystem.

In 2050, our air is pure, indoors and out. Our cities and towns are healthy, with beautiful parks and natural areas accessible to all. And our cities and neighborhoods are quieter, with less polluting and more efficient transportation technologies. Contaminated sites are cleaned up and turned to new uses. There is less waste overall, but unavoidable waste produces energy, fertilizes soil, or is reprocessed. We have enough fresh water from our wells, streams, and reservoirs to meet the needs of people and wildlife. Our farms and fisheries produce plentiful and healthy yields, and are sustainable. Habitats, forests, wetlands, and other natural resources are protected and enhanced.

1. Water is clean and sustainably managed. Waterways exceed Clean Water Act standards and meet the appropriate needs of residents, industry, forests, farms, and wildlife.
2. A robust network of protected open space, waterways, farms, parks, and greenways provide wildlife habitat, ecological benefits, recreational opportunities, and scenic beauty.
3. Farms, fisheries, community gardens, and natural landscapes are prevalent, and able to adapt and thrive in the face of the changing climate. They offer residents access to fresh, affordable, healthy, and local food.
4. Populations who experienced historic environmental injustices enjoy air, energy, and water as clean as any other residents enjoy.
5. The region produces very little solid waste. What it does create is reused, composted, recycled, or turned into energy within the region.
6. Few contaminated sites exist. Former contaminated sites have been redeveloped to create jobs or homes, or restored to support green infrastructure and habitat, and to mitigate climate impacts.
7. The use and exposure to toxic chemicals have been greatly reduced in manufacturing, products, and throughout the environment.

https://www.mapc.org/wp-content/uploads/2021/12/12.-MC2050-Goals.pdf

Boston

Boston Metro Area - Highlights

Example

FOCUS40 PROGRAMS

Service	We're Doing (Commitments through 2023)	We're Planning (Next Priorities through 2040)	We're Imagining (Big Ideas)
Bus 2040	• Better Bus Project: Current Route Network Improvements • Bus Network Redesign Process • Partnerships for Bus Priority • Accessible Bus Stops • Modern Bus Stops and Amenities • Bus Fleet Replacement and Expansion (Procurement and Maintenance Facility Reconfiguration) • Zero-Emission Bus In-Service Testing ***Total Programmed Commitment through 2023: $650 million***	• Phased Conversion to Zero-Emissions Fleet and Facilities (Maintenance Facilities and Fleet Procurement) • Implementation of Bus Network Redesign (New or Enhanced Services and Expanded Fleet) • Priority Bus Rapid Transit Corridors	• Autonomous Bus Shuttles
Silver Line 2040	• Silver Line Fleet Replacement (Procurement and Maintenance Facility Reconfiguration) • Silver Line Washington Street Improvements • Transit Priority Infrastructure in the Seaport ***Total Programmed Commitment through 2023: $150 million***	• Expanded Silver Line Fleet • Bus Rapid Transit through Everett • Infrastructure Upgrades in Silver Line Tunnel	• Silver Line Tunnel Extension Under D Street in the Seaport
Blue Line 2040	• Resiliency: Planning and Early Actions • Reliability Centered Vehicle Maintenance Program ***Total Programmed Commitment through 2023: $47 million***	• Blue Line Capacity and Reliability Improvements • Resiliency: Further Implementation • Red–Blue Connector	• Blue Line Connection to Red Line and Beyond • Blue Line Extension to Lynn
Green Line 2040	• Green Line Transformation: State of Good Repair (SGR) Projects • Green Line Transformation: Fleet Planning • Green Line Extension to Somerville and Medford • Surface Green Line Stop Consolidation • Surface Green Line Transit Signal Priority • Green Line Train Protection • Accessibility Upgrades at Hynes and Symphony Stations • Green Line Extension to Mystic Valley Parkway Final Environmental Impact Report ***Total Programmed Commitment through 2023: $1.9 billion***	• Green Line Transformation Phase 2: New Fleet, Upgraded Infrastructure and Maintenance Facilities • Green Line Transformation Phase 3: Expanded Capacity on D and E Branches (2-Car Trains) • Surface Green Line Optimization	• Green Line Transformation Phase 4: Expanded Capacity on B and C Branches (2-Car Trains) • Green Line Extension to Hyde Square • Downtown Superstation • Green Line Extension to Mystic Valley Parkway, Somerville/Medford
Orange Line 2040	• Orange Line Systemwide Improvement Program: Fleet Replacement and Maintenance Facility Upgrades • Orange Line Systemwide Improvement Program: Capacity and Reliability Improvements (4.5-Minute Headways) ***Total Programmed Commitment through 2023: $613 million***	• Additional Capacity Improvements (3-Minute Headways)	• Sullivan Square Superstation (Commuter Rail/ Orange Line/Silver Line) • Orange Line Extensions (Everett, Roslindale) • Downtown Superstation
Red Line 2040	• Red Line Systemwide Improvement Program: Fleet Replacement and Maintenance Facility Upgrades • Red Line Systemwide Improvement Program: Capacity and Reliability Improvements (3-Minute Headways) • Red Line South Improvements: Wollaston Station, Transit-Oriented Development, Parking Garages • Mattapan High-Speed Line: Reimagining and Short-Term Improvements ***Total Programmed Commitment through 2023: $998 million***	• Strategic Improvements to Support Future Capacity Increases • Mattapan High-Speed Line: Implementation of Reimagining • Red–Blue Connector	• Blue Line Connection to Red Line and Beyond • Downtown Superstation
Commuter Rail 2040	• *Rail Vision* (Study and Decision on Service Alternatives) • South Coast Rail Phase 1 • North Station Drawbridge • Bi-Level Coach Procurement • Locomotive Upgrade and Replacement • Ruggles Station Upgrades • Positive Train Control ***Total Programmed Commitment through 2023: $1.9 billion***	• Tower 1 Upgrade • Exploration of Commuter Rail Electrification Pilot Programs • Station Investments (Infill Stations, Connections to Rapid Transit) • Regional Multi-Modal West Station and Midday Train Layover • Double and Triple Tracking to Add Capacity	• Full Electrification of Commuter Rail
Water Transportation 2040	• Hingham Infrastructure Improvements • New Ferry Service Pilot Programs • Fleet Expansion to Four Ferries ***Total Programmed Commitment through 2023: $30 million***	• Expanded and Better Integrated Multi-Provider Water Transportation Network	• Full Implementation of an Expanded, Comprehensive, Multi-Provider Ferry Network

Boston

Boston Metro Area - Highlights

Example

FOCUS40 PROGRAMS

Systemwide	We're Doing (Commitments through 2023)	We're Planning (Next Priorities through 2040)	We're Imagining (Big Ideas)
Accessibility and Paratransit	• *Plan for Accessible Transit Infrastructure* (PATI) Completion • PATI Early Action Bus Improvements • PATI Early Action Rapid Transit and Commuter Rail Improvements ***Total Programmed Commitment through 2023: $384 million***	• PATI Improvements at Surface Green Line Stops • PATI Accessibility Improvements for Commuter Rail • Vertical Transportation Program	• Leveraging Emerging Technologies
Resiliency	• Systemwide *Climate Change Vulnerability Assessments* • Blue Line Resiliency and Adaptation • Green Line Portal Protection at Fenway • Charlestown Seawall • Adaptation Strategies for Priority Infrastructure, in Collaboration with Municipalities ***Total Programmed Commitment through 2023: $58 million***	• Resilient Power Supply • Incremental Implementation of the Systemwide *Climate Change Vulnerability Assessments*	• Full Systemwide Climate Resilience
Customer Experience	• Automated Fare Collection (AFC 2.0) • Stop and Station Improvements (Wayfinding, Communications, and Lighting) Phase 1 • Digital MBTA (Travel Planning and Performance Enhancements) Phase 1 • Partnerships for Improved First-Mile/Last-Mile Connections ***Total Programmed Commitment through 2023: $250 million***	• Digital MBTA (Travel Planning and Performance Improvements) Phase 2 • Stop and Station Improvements (Wayfinding, Communications, and Lighting) Phase 2 • Platform Barriers and Doors Pilot Program • Multi-Modal System Access and Parking Improvements	• Comprehensive and Cutting Edge Digital MBTA
Place-Based Service Additions	• Studies: Transit Action Plans for Priority Places (Seaport, Allston, Lynn) • Service Pilot Programs • Green Line Extension to Somerville/Medford • South Coast Rail Phase 1 ***Total Programmed Commitment through 2023: $1.2 billion***	• Place-Based Service Expansions Based on Pilot Programs and Transit Action Plans • Implementation of Bus Network Redesign • Commuter Rail Station Investments • Regional Multi-Modal West Station • Bus Rapid Transit through Everett • South Coast Rail Full Build • Red-Blue Connector	• Full Implementation of Place-Based Transit Expansion Programs • Green Line Extension to Mystic Valley Parkway • Green Line Extension to Hyde Square • Orange Line Extension to Roslindale • Orange Line Spur to Everett • Blue Line Extension to Lynn • Blue Line Connection to Red Line and Beyond

Boston

Boston Metro Area - Highlights

Boston's Transit Action Plans and Place-Based Service Additions

MassDOT and MBTA launched Transit Action Plans to identify and expedite the implementation of transit improvements in targeted communities, such as the city of Lynn and the Seaport and Allston neighborhoods, that can benefit from extra transit capacity. The plans seek to inform short-term improvements and service pilot programs, providing guidance on longer-term projects and investments in such communities recognized as Priority Places.

The objective of Place-Based Service Expansions is to prioritize new services and expansion projects on providing high frequency, reliable service to better achieve the needs of people who live and work in and travel to Priority Places that can support high quality transit.

Place-Based Service Expansions were determined by the Transit Action Plans and related programs, where transit improvements will be slowly introduced. Low-cost interventions will be initially implemented to realize the expected benefits, and higher-cost actions will follow thereafter if the demand for transit service is apparent. In real time, this will begin with bus improvements, with incrementally complex supportive roadway infrastructure to match successful services, making a future network of bus rapid transit service attainable.

Source: Allston Brighton Health Collaborative

Philadelphia

Philadelphia Metro Area

Alignment w/ RTP Priorities

- ☑ Equity
- ☑ Climate
- ☑ Safety
- ☑ Mobility

Plan: Connections – 2050

- Includes a Municipal Implementation Toolbox to guide implementation of goals

Geographic focus: Greater Philadelphia area

Purpose: Seeks to achieve a more equitable, resilient, and sustainable region for Greater Philadelphia

Related Plan: The Philadelphia Transit Plan – 2045

Policy Priorities:

- Achieve four focus areas (see graphic at right)
- Reduce barriers and protect civil rights
- Reduce GHGs
- Strengthen communities' infrastructures or move them away from harm

Philadelphia

Philadelphia Metro Area

Alignment w/ RTP Priorities

- ☑ Equity
- ☑ Climate
- ☑ Safety
- ☑ Mobility

Alignment with RTP Priorities (highlights):

Equity:

- Fosters racially and socioeconomically integrated neighborhoods.
- Advance environmental justice for everyone in the region.
- Implement fare-capping structure like Portland region's (Philadelphia Transit Plan).

Safety:

- Sets Vision Zero goal of zero fatalities and serious injuries by 2050.
- Strengthens transportation network security and cybersecurity.

Climate:

- Protects one million acres of open space by 2040.
- Attains net-zero GHG emissions by 2050 and prepares communities for climate change impacts.

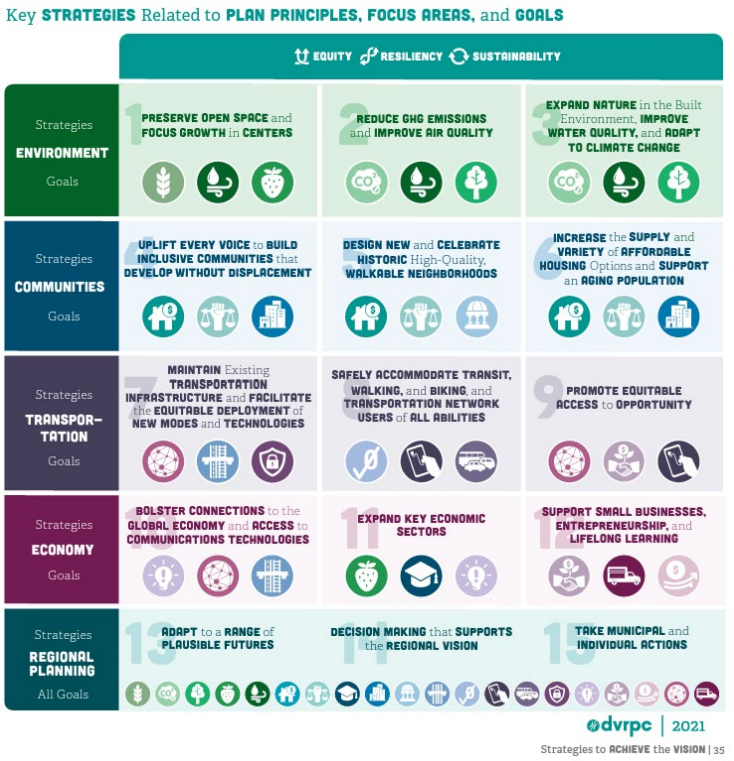
Mobility:

- Prioritizes state of good repair explicitly, including comprehensive ADA accessibility.
- Directly links transit mobility and reliability with reducing congestion and VMT.

Philadelphia

Philadelphia Metro Area - Highlights

- Philadelphia – 2050 Long Range Plan
  - US 1 BRT; South Jersey BRT; bus priority corridors; fixed-guideway shuttle service; zero-emission fleet infrastructure procurement
  - High-speed rail, heavy rail, light rail, and street -car service expansions and improvements



Peer Relevance to Region

Peer Region	Alignment w/ RTP Desired Outcomes			
	Equity	Safety	Climate	Mobility
Seattle	✓	✓	✓	✓
San Francisco	✓	✓	✓	✓
Los Angeles	✓	✓	✓	✓
Twin Cities	✓	✓	✓	✓
Austin	✓	✓	✓	✓
Boston	✓	✓	✓	✓
Philadelphia	✓	✓	✓	✓

Additional Focused Review

(In Progress)

- How do peer HCT and ETC definitions align with our region?
- For a selection of peers (e.g., San Francisco, Seattle, Boston), did equity and/or climate policy shifts change direction from previous plan, and if so, in what way?

San Francisco

City and County of San Francisco and/or Bay Area Region

HCT Definition/Modes: Regional Rail (BART, Caltrain, Capitol Corridor), Light Rail (Muni Metro), BRT (Van Ness BRT, AC Transit Tempo)

ETC Definition/Modes: Rapid Bus (Muni Rapid) limited stop service; Muni Forward program includes smaller-scale bus and light rail speed & reliability projects citywide

Equity Policy Shift: Pandemic refocused priorities on serving essential trips citywide

Climate Policy Shift: Prioritization of transit to help address climate change; expansion of programs and initiatives to reduce emissions

Shift in priorities: Mix of major capital projects and lower cost citywide bus/rail reliability investments to maximize limited funding resources

Seattle

Central Puget Sound Region / King County

HCT Definition/Modes: Commuter Rail (Sounder), Light Rail (Link), BRT (Stride), Arterial BRT (RapidRide)

ETC Definition/Modes: Ranges from RapidRide arterial BRT (no specific exclusive right-of-way requirement) to coordinating capital improvements on the frequent service network

Equity Policy Shift: Change in future stop locations from 80% in Seattle to 60% to allow City to buy-up service for routes serving areas to the south, where residents had been displaced

Climate Policy Shift: GHG reductions modeled by land use, mode choice, pricing, or decarbonization technology, with respective future targets and capital/infrastructure goals

Shift in priorities: Bus service expansions, inter- and intra-regional rail infrastructure, regional high-capacity transit

Boston

Boston Metro Area

HCT Definition/Modes: Commuter Rail (Purple Line Commuter Rail), Light and Heavy Rail (Blue, Green, Orange, and Red Lines), BRT (Silver Line) - additional corridors prioritized in Bus 2040 vision

ETC Definition/Modes: Bus network improvements, priority treatments, stop accessibility, and service enhancements and expansions, along designated corridors

Equity Policy Shift: Means-based fare for low-income transit riders, with legislative support for operating funds

Climate Policy Shift: Induced demand and VMT analyses integrated into MEPA

Shift in priorities: Higher cost investments in capital for rail, and lower cost investments in capital, accessibility, and reliability for bus

Philadelphia

Philadelphia Metro Area

HCT Definition/Modes: Commuter Trolley, BRT, People Mover, Frequent Regional Rail, Heavy Rail (Subways/Elevated Lines)

ETC Definition/Modes: Quantitative metrics include riders per mile, low-income riders per mile, service hours per mile, average speed, and coefficient of variance of average speed, among qualitative metrics

Equity Policy Shift: Universal design and user experience, such as implementation of full ADA access

Climate Policy Shift: Procurement of battery-electric buses and implementation of associated charging infrastructure

Shift in priorities: Specific focus on implementing high capacity transit and realizing its transit system benefits

oregonmetro.gov

Additional Peer Investigation

This section provides tables with additional informational on the peer regions, which has also been incorporated into the presentation slides included above.

Examples of HCT or ETC-Related Policies

The table below provides examples of HCT or ETC-Related Policies or Mode Definitions in the Portland Region.

Figure A-2 Examples of Local Jurisdictions with HCT or ETC-Related Policies or Definitions

Jurisdictions	HCT or ETC Related Policies	HCT Definition and/or Modes	ETC Definition
City of Portland	ETC: See City of Portland Enhanced Transit Corridors Plan	N/A	▪ Increased capacity, reliability and transit travel speed ▪ Moderate capital and operational investments ▪ Context sensitive ▪ Deployed relatively quickly ▪ Can include buses and streetcar
City of Hillsboro	POLICY T 2.6 High-Capacity Transit. Coordinate with local and regional partners to expand high-capacity transit service where consistent with the City's needs and interests, to enhance mobility options, increase overall transit use, and better connect local and regional employment, commercial, and residential areas.	Not defined specifically	▪ Not defined specifically

Jurisdictions	HCT or ETC Related Policies	HCT Definition and/or Modes	ETC Definition
CTRAN		HCT Modes: ▪ BRT-Lite (bus rapid transit in mixed traffic) ▪ BRT-Hybrid: BRT full concepts, but could maintain the ability to save significant bus travel time ▪ BRT-Full (bus rapid transit in exclusive guideway) ▪ Streetcar ▪ Light Rail ▪ Commuter Rail	None, but City of Vancouver TSP will include Enhanced Transit Corridors.

The table below provides examples of HCT or ETC-Related Policies or Mode Definitions for Peer Regions.

Figure A-3 Peer Region Policy Examples and HCT and ETC Definitions

Peer Region	HCT or ETC Related Policies	HCT Definition and/or Modes	ETC Definition
Seattle Region (Puget Sound Regional Council, Sound Transit, and King County Metro)		BRT: ▪ Bus service that operates as part of the region's high-capacity transit system, with frequent service most of the day; articulated buses; stops at half-mile intervals; operation in improved roadways, bus lanes, or segregated right of way; shelters with real-time arrival signs; and offboard fare payment. ▪ Includes RapidRide Arterial BRT and Stride BRT (two highway corridor lines opening starting in 2026)	No specific definition, but frequent service definition includes: ▪ Coordinate service, capital, and customer information investments. Develop an investment framework to align capital improvements with service growth and needs as frequent transit expands. Frequent routes and stops will be easy for customers to identify, and information will be consistent and accessible at the stop, online, and other avenues. ▪ Work with city partners to invest in capital improvements and ensure transit-supportive policies. Prioritize transit over other modes, construct features that improve speed, reliability, and access to transit, and address

Peer Region	HCT or ETC Related Policies	HCT Definition and/or Modes	ETC Definition
			existing needs and gaps. The level of investments will vary depending on the need and right-of-way conditions. Metro will work with cities to adopt transit-supportive land use policies, such as appropriate zoning, reduced parking requirements, and affordable housing incentives, along corridors with frequent service.
San Francisco Bay Area		▪ Regional Rail (BART, Caltrain, Capitol Corridor), Light Rail (Muni Metro), BRT (Van Ness BRT, AC Transit Tempo)	▪ Rapid Bus (Muni Rapid) limited stop service; Muni Forward program includes smaller-scale bus and light rail speed & reliability projects citywide
Boston	MetroCommon 2050 Strategy 2: Reimagine roadway corridors that connect into downtown Boston to encourage higher-occupancy modes to discourage single-occupancy vehicle travel. Action 2.1: The Legislature should require MassDOT to implement a congestion pricing pilot and use the revenue to expand complementary transit services. Action 2.2: MassDOT should incentivize cities and towns to dedicate more roadway space exclusively for buses and cyclists through competitive grant programs funded in the state's Capital Investment Plan. Action 2.3: Update Massachusetts Environmental Policy Act (MEPA) regulations to include an analysis of induced demand and vehicle miles traveled (VMT) generated by new roadway capacity expansion projects.	HCT Modes, with specific lines from MBTA Focus40 Plan ▪ BRT: Silver Line, with additional bus to BRT conversions – faster, more convenient, more comfortable service through higher-capacity vehicles, higher frequencies, exclusive bus lanes, transit signal priority, amenity-rich stations with level all-door boarding and station spacing up to a half-mile apart. ▪ LRT/Heavy Rail: Blue, Green, Orange, and Red Lines ▪ Commuter Rail: Purple Line Commuter Rail	Bus Corridors: ▪ Bus priority treatments in high-demand, high-delay corridors ▪ New buses for new routes and higher capacity for existing services ▪ Expansion of the proportion of the available per-day fleet. Place-Based Transit and Service Expansion Plans and Programs (overlapping with HCT modes)
Philadelphia	Connections 2050 GOAL: Maintain a safe, multimodal transportation system that serves	HCT Modes, specifically called out in Philly 2045 Transit Plan High Capacity Transit section	Bus corridors ranked based on: 1. Quantitative Metrics

Peer Region	HCT or ETC Related Policies	HCT Definition and/or Modes	ETC Definition
	everyone. Notable sub-goal: Increase MOBILITY AND RELIABILITY, while reducing congestion and VMT. Philly Transit Plan Policy 3: Frequent and connected service The City of Philadelphia has identified expanded access to frequent service, particularly frequent weekend bus service, as critical to achieve the vision and goals of this plan.	▪ Trolley: faster, safer, more reliable service with larger vehicles, better ADA accessibility, updated signals, transit priority treatments ▪ BRT (Lite, Hybrid, and Full) ▪ People Mover: To and from airport ▪ Frequent regional rail: planned for two-car trains every 15 minutes, carrying 856 passengers per hour, with at-level boarding for high-level ADA accessibility ▪ Subways/elevated lines/heavy rail	▪ Riders per Mile ▪ Low Income Riders per Mile ▪ Service Hours per Mile ▪ Average Speed ▪ Coefficient of Variance of Average Speed 2. Qualitative Metrics ▪ Ability to leverage other investments ▪ Geographic equity ▪ Connections to high capacity transit stations (Market-Frankford Line and Broad Street Line stations), and propensity for corridor to remain or become more important through Comprehensive Bus Network Redesigns ▪ Ability for near-term collaboration with another agency's capital project
Minneapolis	Transportation Policy Plan GOAL: Access to destinations. A reliable, affordable, and efficient multimodal transportation system supports the prosperity of people and businesses by connecting them to destinations throughout the region and beyond.	HCT Modes ▪ Commuter rail: wider stop spacing with fewer stops, longer travel distances, and faster travel time, in comparison to LRT ▪ LRT: fast, reliable, and frequent fixed-guideway service ▪ BRT (Lite, Hybrid, and Full), including Arterial BRT: faster trip, more frequent and convenient service, signal priority, and specialized train-like vehicles, in comparison to other bus services ▪ Commuter bus: Usually similar to commuter rail but with lower capital costs and carrying capacity	ETC elements include: ▪ Context-sensitive design ▪ Targeted investments ▪ Technological advancement areas ▪ VMT reduction areas ▪ Congested areas ▪ Areas with mix of land uses Examples include: Riverview Corridor, Rush Line Corridor, West Broadway Transit Corridor, Snelling Ave, and Penn Ave

Peer Region	HCT or ETC Related Policies	HCT Definition and/or Modes	ETC Definition
		▪ Express bus: Limited-stop service between downtown and suburban park-and-rides	

Examples of Equity and/or Climate-Related Policies, Criteria, or Outcomes

Policy Highlights from Peer Regions

Most of the peer agencies have policies/strategies to reduce emissions from transit vehicles. Several of the peer regions have specific policies to integrate climate change into their policies in other dimensions, either explicitly or implicitly. Three with the strongest climate-related policies are listed below along with selections from policy language:

King County Metro integrates climate and equity throughout their long-range plan, Metro Connects.

- Metro will strive to support and strengthen the communities it serves with transit. It recognizes the importance of integrating land use and transit service to advance equity and address climate change. Evidence shows that it is the combination of increased transit service, increased land use density, and equitable pricing of vehicle usage together that drives down car travel, no one strategy alone will get there.[21]"
- Advance equity and address climate change by providing additional service in areas with unmet need[11] and making transit a more competitive option to driving alone.
  - [11] Per the adopted Mobility Framework, unmet need is defined as areas with high-density, a high proportion of priority populations, and limited midday and evening service.

Plan Bay Area also integrates climate and equity, focusing strategies on mode shift from employers through trip reduction and TDM, while noting synergies with other strategies including transit that are required to enable these changes.

- Bold strategies that go beyond prior regional planning efforts to reduce climate emissions by higher margins and advance equity at the same time can demonstrate that climate and equity goals can go hand-in-hand.
- The plan seeks to mitigate emissions and reduce future climate impacts at the employer level by expanding commute trip reduction programs at major employers. On an individual level, the plan encourages Bay Area residents to drive less through transportation demand management initiatives. When people do choose to drive, Plan Bay Area 2050's strategy to expand clean vehicle initiatives could help them purchase and power their cars with the most environmentally friendly options.

- The following environmental strategies work in concert with other strategies described in the housing, transportation and economy chapters of Plan Bay Area 2050 to reduce climate emissions. When implemented together as one package of policies and investments, the 35 plan strategies reduce GHG emissions by focusing housing and commercial construction in walkable, transit-accessible places; investing in transit and active transportation; and shifting the location of jobs to encourage shorter commutes.

Boston has strong policy language related to transit. It recognizes transit's role more implicitly compared to the Seattle example in particular, but the language emphasizes the role of land use policies and development.

- The Metro Boston region is highly energy efficient and has reduced its greenhouse gas (GHG) emissions to net zero. All land travel in the region is by carbon-free modes including walking, biking, electrified public transit, and electrified passenger vehicles.

Local land use policies and new development support increased mobility by encouraging concentrated growth around transit and the services people need.

Examples of Policy Shifts and Outcomes and Evaluation Criteria or Performance Measures

The table below provides examples of peer region equity and climate policy shifts and outcomes.

Figure A-4 Examples of Peer Region Equity and Climate Policy Shifts and Outcomes

Peer	Equity Policy Shift?	Climate Policy Shift?
Seattle Region (Puget Sound Regional Council, Sound Transit, and King County Metro)	▪ Change in policy to look beyond ridership to who is served (previously 80% of stops on a route needed to be in Seattle in order for the City to buy-up service, but didn't cover majority of ridership – changed to 60% threshold to allow Seattle to invest.)	▪ Procurement of zero-emission vehicles and infrastructure. ▪ Prioritization of mode share away from SOV travel. ▪ GHG reduction targets for 2030 and 2050, respectively. ▪ GHG reductions model disaggregated by land use, transportation choice, pricing, and technology and decarbonization categories
San Francisco Region	▪ Equity Priority Communities, where people are disproportionately underserved, are the focus of how and where the benefits of transit investments are realized.	▪ Prioritization of transit to mitigate climate change effects by increasing mode share and decreasing emissions. ▪ Expansion of commute SOV trip reduction program, clean vehicle initiatives, and transportation demand management initiatives.

Boston Region	▪ Means-based fare for low-income households, aligning with peer regions such as MTC (San Francisco), MTA (New York), and Metro (D.C.), reducing up to 100% of transit trip costs for people making up to 200% of the federal poverty level.	▪ Reductions in SOV travel and VMT by increasing TODs, walkable centers, and related areas. ▪ Reductions in emissions by decarbonizing the building and transportation sectors.

The table below provides examples of peer region equity and climate-related evaluation criteria or performance measures.

Figure A-5 Equity or Climate Focused Evaluation Criteria or Performance Measure Definitions

Peer	Equity	Safety	Climate	Mobility (including Access)
Seattle (Region)	▪ People of color and people with low incomes will experience less delay and shorter travel times than the regional average ▪ Areas with higher concentrations of people of color and people with low incomes in 2050 will have higher rates of access to HCT (82% and 79% respectively) compared to the regional average		▪ Greenhouse gases will be reduced by 50% below 1990 levels by 2030 and by over 83% from 1990 levels by 2050	▪ Households on average will experience a 15% reduction in delay from current conditions ▪ Average household VMT are reduced by 23% ▪ 59% of households will be within a half-mile of HCT ▪ Percentage of existing population near high-frequency transit service
San Francisco (City)	For people with low-incomes and people in Equity Priority Communities: ▪ Number of people who live within a ¼-mile of very frequent and frequent service bus routes, and within ½-mile of rail investments. ▪ Number of total jobs reachable by transit in 45 minutes of less (30 minutes also evaluated, and 75 minutes for regional transit trips).	▪ Share of project corridor overlapping with high-injury network (informational only)	▪ Change in share of residents who are live within ½-mile of high-capacity transit with a project compared to the baseline (screening measure) ▪ VMT and GhG reduced, and change in transit mode share	▪ Daily transit trips using a project ▪ Reduction in crowding ▪ Change in travel time ▪ Change in access to jobs and activity centers

Peer	Equity	Safety	Climate	Mobility (including Access)
	Utilized City travel demand model to analyze metrics for all trips, trips by low-income persons (200% of poverty), and equity priority populations ▪ Change in access to jobs within 45 minutes ▪ Change in access to activity centers and services within 45 minutes ▪ Change in ridership ▪ Cost-effectiveness (change in low-income or equity priority population ridership divided by capital cost) ▪ Change in travel time			
Minneapolis	▪ Miles traveled by biking and walking ▪ VMT per person	▪ Condition of transit infrastructure (state of good repair)	▪ Air emissions from on-road vehicles	▪ Percentage of existing population near high-frequency transit service ▪ Access to jobs ▪ Percentage of projected population and job growth near high-frequency transit service ▪ Non-SOV mode share percentages ▪ Peak hour excessive delay[1]

[1] Peak delay: Travel time at 20 MPH or 60% of the posted speed limit travel time, whichever is greater, measured in 15-minute intervals during peak hours. https://rosap.ntl.bts.gov/view/dot/53718

Appendix D

Level 1

Screening

Parametrix
ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES

700 NE MULTNOMAH, SUITE 1000 | PORTLAND, OR 97232 | P 503.233.2400, 360.694.5020

TECHNICAL MEMORANDUM

DATE:	August 23, 2022; Revised August 31, 2022; Revised September 7, 2022; Revised October 10, 2022
TO:	Ally Holmqvist, Metro
FROM:	Eddie Montejo, Parametrix Ryan Farncomb, Parametrix Kelly Betteridge, Parametrix Sam Erickson, Parametrix Oren Eshel, Nelson/Nygaard
SUBJECT:	Revised Corridor Evaluation Criteria
CC:	Project file
PROJECT NAME:	Metro High Capacity Transit (HCT) Strategy Update

1 INTRODUCTION

The High Capacity Transit (HCT) System Strategy Update (HCT Update) project is reviewing and updating the region's HCT network vision. The original HCT Plan was developed in 2009 and has been updated several times since then, with the most recent review of HCT corridors occurring in 2018 as part of the Regional Transit Strategy. This memorandum documents the existing regional HCT corridor vision and proposes potential additional corridors for inclusion. The project team proposes evaluation criteria for screening candidate HCT corridors for inclusion in the regional HCT system vision as well as results of the initial screening.

1.1 Defining High Capacity Transit

For purposes of this project, "high capacity transit (HCT)" refers to the following modes and/or services:

- Bus Rapid Transit (BRT)
- Rapid Streetcar
- Light Rail Transit (LRT)
- Commuter Rail/Heavy Rail

Additionally, the HCT Update encompasses other high capacity or enhanced system elements including:

- Enhanced Transit Corridor (ETC) and "better bus" enhancements that enhance bus speed and reliability
- Frequent Service fixed route bus investments
- LRT operating improvements
- Other existing HCT corridor "state of good repair" investments

2 HCT CORRIDOR NETWORK UPDATE

The region's HCT system vision was established in 2009 in the original HCT System Plan. HCT corridor investments were identified and prioritized based on their readiness to proceed. This framework was updated as part of the 2018 Regional Transit Strategy. The HCT corridor investments identified in 2009 and updated in 2018 form the initial baseline of corridors that are considered as part of the 2023 HCT Strategy Update. The Strategy Update effort will retain corridors previously advanced, but will

- Update the "readiness" evaluation of each (see separate memorandum on readiness evaluation),
- Remove corridors from the Vision that have been constructed or are currently advancing, and
- Consider new corridors for inclusion in the Vision.

The project team then developed a comprehensive "universe" of potential HCT corridors that included the 2009 and 2018 corridors, as well as corridors identified as part of the T2020 regional ballot initiative. Finally, the universe of potential corridors also includes those proposed for future frequent bus service in the 2018 Regional Transit Strategy Vision. Frequent Service corridors operate at service levels of "15 minutes of better" much of the day and experience high transit travel demand. Frequent Service corridors represent natural corridors for considering HCT investments. Figure 1 shows TriMet's current Frequent Service network.

Figure 1. TriMet Frequent Service Network

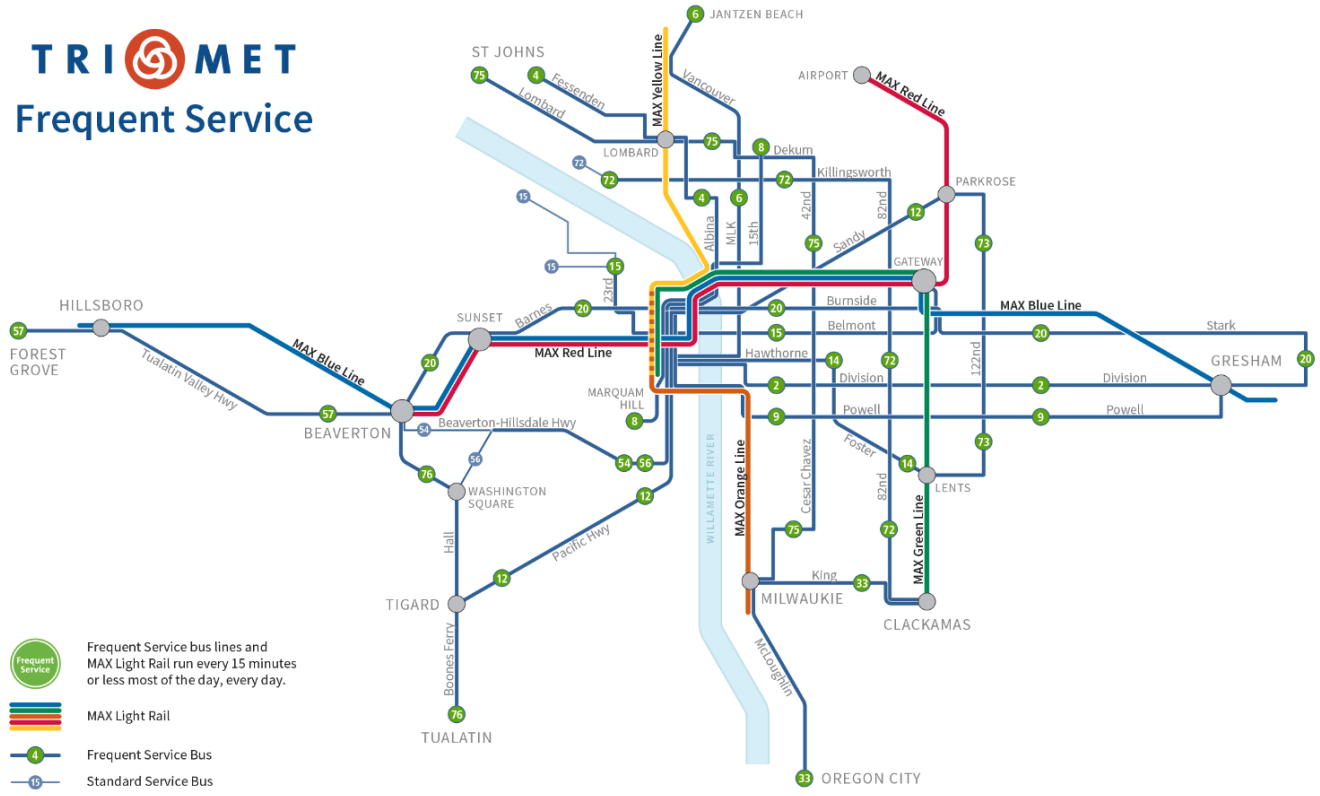
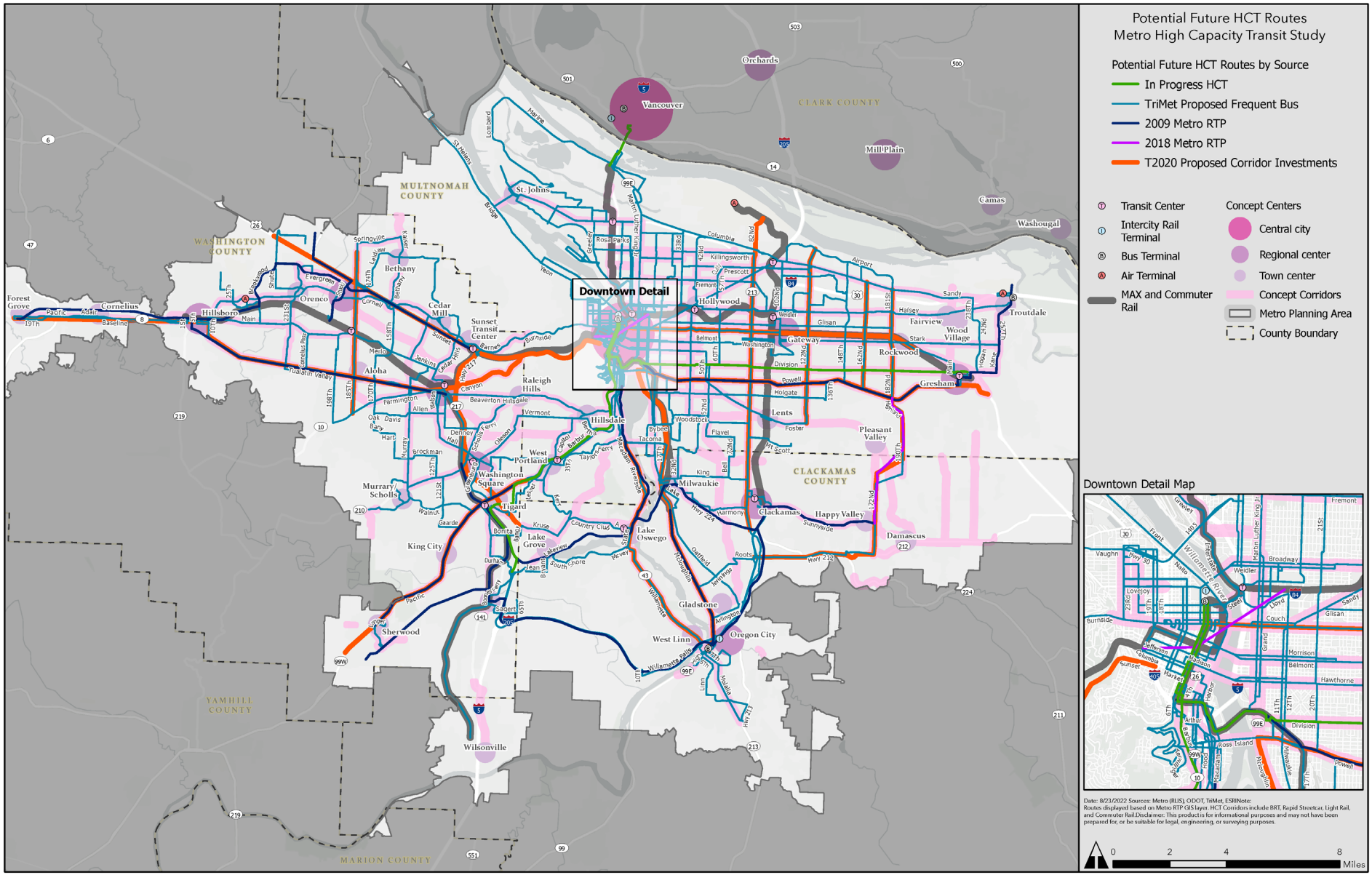


Figure 2 shows all potential HCT candidate corridors in the region. The corridors included in this figure represent the first draft of the HCT network vision that will be evaluated through the process described in this memorandum. In addition to the corridors shown in Figure 2, the project team will apply a standalone "big moves" analysis to identify additional corridors that should be considered for advancement.

Figure 2. HCT Network - "Universe" of Corridors



3 APPROACH TO CORRIDOR EVALUATION

3.1 Draft Policy Framework

The corridor evaluation builds upon work completed to date for the Regional Transportation Plan (RTP) 2023 Update, which developed a draft updated policy framework based on a review of existing regional transit network policy as well as peer agency policies to identify gaps and priorities for HCT now and in the future. Building from this work, the corridor screening and evaluation criteria were developed to reflect the updated 2023 RTP policy framework to ensure that the analysis reflects current and future regional priorities and desired outcomes for HCT. Some of the key policy areas and drivers influencing the development of screening and evaluation criteria include focus on:

- **Developing specific policies to address equity and climate.** The screening and evaluation criteria evaluate corridor-level impacts to equity and climate based on the RTP draft policy framework. These equity and climate criteria will be used to prioritize investments in the HCT plan.
- **Connecting regional centers.** As part of the 2040 Metro Growth Concept, current RTP network policy focuses on HCT with a majority or all of the service in exclusive guideway connecting Regional Centers and City Centers. With the additional consideration of corridor-based HCT that includes many of the same elements, but without the majority exclusive guideway, an expansion of the network policy was proposed to connect Regional Town Centers to Regional Centers and the Central City. In that case, the evaluation criteria include a policy screen to ensure HCT investments connect Regional Town Centers to Regional Centers and the Central City.
- **Higher capacities.** The RTP currently defines HCT as carrying more transit riders than local, regional, and frequent transit lines. The screening and evaluation criteria consider a range of ridership and operational factors to identify corridors with the highest potential for needing greater transit capacity.
- **Frequency and reliability.** The draft policy framework is also focused on improving access to the regional network by making local transit more frequent, faster, and more reliable through the Enhanced Transit Concept (ETC). Although Enhanced Transit or "better bus" improvements may not always qualify as corridor-based HCT investments, ETC investments supports complimentary investments to HCT by improving access to regional transit, jobs, services, parks, and other essential destinations in the Metro area.

3.2 Two-Phase Corridor Evaluation Process

The HCT Plan update will replicate the two-phase analysis process done in the 2018 HCT Plan. Level 1 refers to a corridor screening process, which applies criteria to sort and organize the initial universe of potential HCT corridors. As a first step, the screening process is intended to refine the universe of potential HCT corridors by identifying the lowest-performing corridors. The remaining corridors will then be evaluated using the Level 2 criteria and readiness evaluation. The Level 2 criteria and readiness evaluation will prioritize corridors into "tiers" based on the technical analysis and corridor readiness criteria. The following subsections summarize the draft Level 1 criteria; Level 2 screening and readiness criteria are documented separately.

3.2.1 Level 1 Corridor Screening Criteria

The Level 1 Corridor Screening Criteria is intended as a broad analysis step for sorting and screening out potential HCT corridors based on key evaluation criteria. The Level 1 analysis intentionally uses few criteria to home in on the most important characteristics for successful HCT corridors according to the draft policy framework. The Level

1 Screening also includes a "Policy Screen" that refers to qualitative determinations about where to invest in future HCT based on feedback from the Project Management team and Working Group. For example, the Policy Screen pulls out corridors that are already substantially underway (i.e., advanced design or environmental work underway) such as the I-5 Interstate Bridge Replacement Program and Division Transit Project. Table 1 below summarizes the proposed Level 1 Screening Criteria.

Table 1. HCT Level 1 Corridor Screening Criteria

Criteria	Approach to measurement	Data Source/Notes	Methodology
Existing Ridership	• Average Daily Boardings by Route (2019)[1]	• TriMet ridership data • Meets HCT Plan (2018) Core Criteria • Only applied to existing routes	• Assess TriMet Average Daily Boardings by TriMet Route IDs • Aggregate route-level boardings and classify using 20th percentile breaks
Future Ridership	• 2040 Person Productions + Attractions of TAZs within ½ mile of corridors • Average 2040 Person Productions + Attractions of TAZs within ½ mile of corridors[2]	• Metro Travel Model • Meets HCT Plan (2018) Core Criteria • Applied to existing and proposed routes • Person trips account for all modes • Productions + Attractions is a proxy measure for total activity	• Select TAZ boundaries within ½ mile of corridors as baseline geography for calculation • Sum existing 2040 Person Productions and 2040 Person Attractions for selected TAZs as a proxy for total future activity for corridors; • Calcualate the average of the sum of 2040 Person Productions and Attraction by TAZ to account for shorter corridors • Aggregate route-level future productions and attractings using 20th percentile breaks
Equity	• Metro Equity Focus Areas (EFAs) – EFAs within ½ mile of corridors	• Metro RTP Update (2022) • Meets HCT Plan (2018) Core Criteria • Metro Equity Focus Areas are measured at the Census Tract Level	• Select Census Tracts within ½ mile of potential HCT corridors • Identify Metro Equity Focus Areas (EFAs) within ½ mile of potential HCT corridors • Aggregate route-level EFAs based on 20th percentiles

[1] The Level 1 Corridor Screen will screen existing routes and planned/proposed routes separately to account for the fact that planned/proposed routes do not yet have ridership. Existing average weekday corridor ridership (2019) was only factored into the scoring for existing routes.

[2] Summing the *total* productions and attraction of all TAZs within a ½ mile of corridors accounts for longer corridors with higher potential demand for trips along the length of the route. Using the *average* of the sum of productions and attractions by TAZ within a ½ mile of corridors accounts for shorter corridors that may have concentrated activity but lower total person trips.

Criteria	Approach to measurement	Data Source/Notes	Methodology
Policy Screen (Qualitative)	• *Supports Metro Regional Concept:* Connects at least one (1) Town Center to a Regional Center/Central City. • *Remove Duplicity:* Remove corridors where HCT improvements are already planned such as Interstate Bridge Replacement Program and Southwest Corridor. • Remove C-TRAN routes, tram, and existing streetcar. Remove Division Transit since revenue service will start soon.	• Policy screens are conditional checks to qualify potential HCT routes from the starting universe of corridors.	• Qualitative assessment. Corridors are not scored based on the policy screen, but some candidate corridors will be eliminated based on the application of this criterion.

The “Big Moves" analysis complements the approach for screening candidate HCT corridors (HCT Screening) for inclusion in the regional HCT system vision. The HCT Screening process analyzed existing and planned frequent service corridors as well as corridors identified through the original HCT Plan in 2009. However, since the screening is primarily based on corridors aligned with the existing TriMet service network, it may not identify travel “desire lines” where the existing transit network does not provide a convenient connection that people would choose for their trip. Applying another lens allows for assessing additional connections that may not have been identified through the screening process:

- where current and future travel demand are strong and
- where the current transit system does not provide a high quality connection.

This approach is documented in a separate memorandum.

Appendix E
Level 2 and Readiness Evaluation

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TECHNICAL MEMORANDUM

DATE: November 17, 2022
TO: Ally Holmqvist, Metro
FROM: Ryan Farncomb, Kirsten Pennington (KLP Consulting), Oren Eshel (Nelson\Nygaard)
SUBJECT: Approach to assessing HCT corridor readiness, modes, and tiering
CC: Metro High Capacity Transit (HCT) Strategy Update

This memorandum documents the proposed approach to determining high capacity transit (HCT) corridor "readiness," corridor ranking, and discussion of factors that will influence future mode choice in each corridor. Metro will use this assessment to shape the HCT Strategy update, including identifying which corridors are priorities for implementation. The approach in this memo builds on the evaluations conducted previously for the 2009 and 2018 iterations of the HCT Strategy.

CORRIDOR READINESS EVALUATION

The prior *Revised Corridor Evaluation Memorandum* describes the overall approach to identifying the preliminary vision of possible HCT corridors and evaluating them through a two-step process. Corridors that emerge from this "Levell 1" screening, including previously identified corridors from 2009 and 2018 HCT system planning work that have not yet advanced, will be evaluated with this Level 2 screening. The Level 1 evaluation identified the preliminary HCT vision corridors that are subject to further screening and evaluation. Corridors with existing regional commitments – such as Southwest Corridor LRT, 82nd Avenue, and the Interstate Bridge Project, will not be evaluated further and are assumed to be included in the final vision as "Tier 1" corridors (see Corridor Ranking section below).

This memo describes the Level 2 screening which focuses on corridor "readiness;" meaning, whether the right conditions are in place to support advancing a given corridor for HCT investment. The Level 2 criteria are shown in Table 1. Attachment A shows an example evaluation using these criteria. These criteria are refined based on the 2018 evaluation and include criteria related to climate and equity, among other RTP policy priorities, and federal funding. The project team added these criteria to reflect regional policy priorities.

The federal funding criteria are based on the Federal Transit Administration's (FTA) Capital Investment Grants (CIG) program. This program is the most substantial non-local source for HCT funding in the Portland-Vancouver region and has funded many HCT investments, including much of the existing LRT system. Because of the outsize influence this program has on funding viability, the Level 2 screening criteria were revised to reflect the CIG program's criteria, thereby helping to ensure readiness of project corridors.

Table 1. Level 2 Corridor Evaluation Criteria

Criteria	Measure	Data Source/Notes	Methodology
Transit Travel Time Benefit	Ratio of personal vehicle travel time to transit travel time	HCT Plan (2018) Core Criteria Meets Section 5309 Capital Investments Grants (CIG) Small Starts Program "Mobility Improvements"	The team will compare the average travel time at 3:00 PM on a typical weekday for personal vehicles versus transit; the higher this ratio, the greater the opportunity to improve transit travel times.

Criteria	Measure	Data Source/Notes	Methodology
		Travel model data	
Productivity + Cost Effectiveness	Existing boardings per revenue hour in a given corridor Capital Cost per Rider (range to account for modal options)	HCT Plan (2018) Core Criteria Input to 5309 Capital Investments Grants (CIG) Program "Cost Effectiveness" measure	Boardings per revenue hour will be calculated based on 2019 and modeled 2040 boardings and transit revenue hours. Capital cost per rider will be presented as a range, based on average per-mile costs for two HCT modes (LRT and BRT).
Environmental Benefit	Change in GHG emissions associated with HCT investment in a given corridor.	"Reduction in emissions" meets HCT Plan (2018) Core Criteria VMT used as key performance measure in Metro 2021 TSMO Strategy	Using established transit elasticities, estimate the change in ridership that is likely occur in a given corridor by investing in HCT and the corresponding change in auto VMT that would be expected. Convert this change in VMT to GHG emissions using an average fleet emissions factor for year 2030.
Equity Benefit	Access to employment – Essential Jobs and Essential Services by Census Block within ½ mile of corridors Relative proportion of historically marginalized populations in each corridor, based on Metro's Focus Areas	TriMet and Metro Essential Destinations data. Remix Online Tool for Existing Routes Consider specific impact to in-person jobs in the region (data from TriMet *Forward Together* project)	The team will rely on data from TriMet's Forward Together program. Forward Together included location analysis of in-person jobs in the Metro region. The team will assess the relative number of in-person jobs within ½ mile of corridors using 20th percentiles. The relative proportion of historically marginalized populations within ½ mile of each corridor will be reported.
Land Use Supportiveness and Market Potential	2040 Population Density by TAZ within ½ mile of corridors 2040 Employment Density by TAZ within ½ mile of corridors Presence of higher education institutions, multi-family and affordable housing	Metro Travel Model HCT Plan (2018) Core Criteria "Land Use Supportiveness and Market Potential" Meets Section 5309 Capital Investments Grants (CIG) Small Starts Program "Land Use" and "Economic Development" criteria	Using existing 2040 Metro travel model data, the team will develop population densities within ½ mile of each corridor and rank by 20th percentiles. The project team will also provide for purposes of comparison the average density within 1/2 mile of (1) the average existing frequent service bus line and (2) average light rail line. The same approach will be applied for total employment within ½ mile of the corridors. The presence of multi-family and affordable housing, and higher education institutions will be applied as an additional land use check.

Jurisdictional Readiness Evaluation

After screening the corridor with the quantitative criteria, the project team will conduct a "jurisdictional readiness" evaluation to provide additional context. This next evaluation will be conducted on those corridors that score highly on the quantitative evaluation. This evaluation will be qualitative and based on the following factors:

- **Documented community support**, as determined by inclusion of a given corridor in local plans, supportive language in local Comprehensive Plans, etc.
- **Political support,** as determined by an identified jurisdictional "champion" for a given corridor. HCT corridors require strong political support and usually a local agency(s) that is strongly supportive of the project and that will maintain that support over the long-term.
- **Transit-supportive local policies**, such as those encouraging multifamily housing, minimum land use densities, mixed uses, affordable housing, employment, and other areas.
- **Local anti-displacement strategies or policies**
- **Identified local funding** for implementation (either as match or as a locally-funded project).
- **Physical conditions in the corridor,** looking at the likely availability of ROW broadly within a given HCT corridor or the need for mobility solutions that could require additional ROW within a high travel and constrained corridor; known environmental constraints, and presence of sidewalks and cycling facilities. Corridors with major physical constraints would score lower relative to this criterion. However, a major influx of funding could influence the readiness of corridors with major physical constraints.
- **Assessment of work conducted to-date,** meaning, the level and amount of planning, design, environmental, or other work that has been completed to define and advance the HCT investment in a given corridor.

CORRIDOR RANKING

After both evaluation steps have been completed, the project team will conduct an initial sort of corridors into one of four tiers based on their performance. These tiers are based on the original 2009 HCT System Plan Report:

- **Tier 1 – Regional Priority Corridors**: these include corridors with an adopted Locally Preferred Alternative (LPA) under the National Environmental Policy Act (NEPA), or those where determination of the LPA is already underway (such as 82nd Avenue). These corridors are likely to score well with respect to the Federal Transit Administration's (FTA) Capital Investment Grant (CIG) program. These corridors already have regional consensus and so were not evaluated with the Level 2/readiness criteria described above.
- **Tier 2 – Emerging Regional Priority Corridors**: Tier 2 includes corridors that score highest based on the quantitative and qualitative assessment where additional policy or planning actions may elevate the corridor to advance within the next five years. With steps taken to advance regional discussion on these corridors and/or some changes in the corridor itself, Tier 2 corridors may score well with respect to the Federal Transit Administration's (FTA) Capital Investment Grant (CIG) program.
- **Tier 3 – Developing Corridors**: corridors that scored in the middle relative to others based on the quantitative evaluation and where the qualitative assessment shows multiple issues or needs that must be addressed, or where land use or employment and population density is marginal for HCT investment. These corridors likely require more time before advancing.
- **Tier 4 – Future Corridors**: these corridors score lowest on the quantitative and qualitative evaluation and lack policy or land use conditions that warrant near-term HCT investments.

Funding considerations will be an important "lens" applied to the initial tiering that emerges from this assessment. Available funding is fundamental to the number of corridors the region is able to advance in the

near-term and as such is an important final screen on the initial tiering. The project team will also conduct a final "policy check" to ensure the corridors that emerge from the analysis align with the HCT policy framework and the intended regional outcomes. The final funding and policy check reviews are qualitative in nature; limited modifications, additions, removals, or changes in assigned Tier may result.

Finally, the project team will describe conditions that are likely to influence future discussions on the appropriate HCT mode for each corridor. A specific mode may not be assigned to corridors, given that further study and evaluation is required to determine the appropriate mode in each corridor, as well as the final corridor routing, as part of further studies outside of this process. The team will review the following factors that contribute toward mode selection, including:

- Existing corridor ridership.
- The personal vehicle to transit travel time ratio, determined for each corridor previously (Table 1). The greater this ratio, the greater the need for corridor investment in transit priority or other interventions (e.g., stop consolidation) to improve travel times.
- Existing roadway capacity and available right-of-way: this qualitative assessment will look at the likely availability of ROW broadly within a given HCT corridor or the need for mobility solutions that could require additional ROW within a high travel and constrained corridor. This assessment aims to understand the relative difficulty of implementing HCT.

These criteria will be used to determine if they likely require <50% priority or >50% priority.

However, the project team will assign a **representative corridor and mode** for purposes of modeling corridors only to understand the high-level impacts of HCT investments on regional transit ridership and mode split. The project team will determine these representative modes based on ridership and connections to the existing HCT system. Future corridor refinement studies will make alignment and mode determinations.

AREAS SUBJECT TO FURTHER REFINEMENT

This evaluation will result in high-level information useful for confirming the vision for HCT and ranking corridors based on readiness to advance. However, identifying and tiering corridors is the first step toward advancing HCT. Detailed study and public involvement is required to advance corridors through the various phases of project development, design, construction, and implementation. An **important early step** in advancing corridors is a detailed look at alignments, potential termini, and segmentation to further define the corridor and project; it may be that only part of a corridor is ready to proceed, or that segmenting a given corridor is the preferred approach to move forward. Additional work that would occur outside of the HCT Strategy Update process and would define elements of the project further includes:

- Mode and vehicle type
- Exact alignment and termini
- Level of transit priority needed
- Station locations
- Roadway design
- Pedestrian and bicycle facilities
- Integration with the broader transportation system, including first/last mile considerations, park and rides, traffic impacts, etc.

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TECHNICAL MEMORANDUM

DATE:	November 17, 2022
TO:	Ally Holmqvist, Metro Metro HCT Strategy Update PMT
FROM:	Chad Tinsley, Parametrix Ryan Farncomb, Parametrix Kelly Betteridge, Parametrix Oren Eshel, Nelson/Nygaard Tomoko Delatorre, Nelson/Nygaard Paul Lutey, Nelson/Nygaard
SUBJECT:	HCT Corridor Analysis Approach to Identify "Big Moves"
CC:	Project file
PROJECT NAME:	Metro High Capacity Transit (HCT) Strategy Update

1 INTRODUCTION

This memo describes an approach to identify "Big Moves" as part of the corridor identification and screening process for the High Capacity Transit (HCT) System Strategy Update (HCT Update) project. This analysis would complement the Level 1 screening to identify candidate HCT corridors (HCT Screening) for inclusion in the regional HCT system vision, as described in previous memos. The HCT "Level 1" Screening process analyzed existing and planned frequent service corridors as well as corridors identified through the original HCT Plan in 2009 to help identify the universe of corridors to consider in the HCT Evaluation. However, since the screening is primarily based on corridors aligned with the existing TriMet service network, it may not identify travel "desire lines" where the existing transit network does not provide a convenient connection that people would choose for their trip. The project team is proposing an approach to help confirm needs identified through the screening process and assess additional connections that may not have been identified through the screening process:

1. Where current and future travel demand are strong
2. Where the current transit system does not provide a connection or a high quality connection

Connections with strong demand and lower-quality transit may be high priorities to evaluate for HCT, or other types of transit service (HCT may not be the most suitable mode for all areas). This analysis could confirm the need for corridors already identified through the screening process as well as suggest additional connections that should be evaluated as part of the HCT Strategy Update. Connections with strong demand and a low-quality transit connection could suggest additional corridors to evaluate for HCT. HCT projects could also be identified to strengthen existing parts of the HCT system that are only of moderate quality.

2 "BIG MOVES" CORRIDOR IDENTIFICATION APPROACH

2.1 Travel Demand Analysis Zones

Analysis zones were developed based on the following approach:

- Start with Metro Concept Analysis Center (2040) geographies
- Include City of Portland Town Center designations, based on the City of Portland Centers GIS layer and/or the map in Chapter 3 of the Comprehensive Plan (page 30): Belmont-Hawthorne-Division, Interstate/Killingsworth, Midway, and Northwest District
- Select Transportation Analysis Zones (TAZs) overlapping with the above geographies
- Identify additional TAZs as either additions to the above geographies or as additional geographies, including:
  - Major institutions (major hospitals, universities, etc.), such as OHSU.
  - Major employment areas, based on Longitudinal Household Employment Dynamics (LEHD) data and Metro model 2040 projections, using a threshold of 4,000 jobs in a TAZ and grouping adjacent TAZs with employment at or close to the threshold.
- Portland Central City Zones were disaggregated as follows for initial analysis, given the high concentration of trips, but could be reaggregated at a later stage of the process or for representation purposes.
  - Downtown – South, Central, and North
  - West of Downtown (west of I-405, north of Burnside)
  - Northwest Portland – Northwest District (corresponding to the City of Portland Town Center), Outer Northwest, and Northwest Industrial area
  - South Waterfront (with the OHSU Marquam Hill Campus as a separate geography)
  - Central Eastside – South and North
  - Rose Quarter/Albina West
  - Lloyd District
  - Albina East

Figure 1 shows the analysis zones.

2.2 Travel Demand

Travel demand data was aggregated to the above centers-based travel demand zone structure. The data was normalized using the area of the zones to account for the varying geographic size (and density of travel demand) of each area.

The primary travel demand measure used was future travel demand from the Metro model:

- Future (2040) Person Trips, both directions, Total and Normalized for area of the zone (per square mile)

Secondary travel demand measures were used to provide an understanding of more recent changes to travel demand, including effects of the pandemic:

- Fall 2021 person trips from Replica data,[1] both directions, Total and Normalized for area of the zone (per square mile), including trips by people earning less than 200% of the federal poverty level and estimate transit person trips
- Fall 2019 person trips for comparison with current (baseline) person trips from the Metro model

Travel demand measures were classified into five categories.

2.3 Service Quality

For purposes of this analysis, travel time was used as a proxy for service quality. Transit travel time was compared to auto travel times to understand the relative convenience of making a particular trip by transit versus driving.

- A representative point was selected for each analysis zone. If existing high capacity transit service was present, a HCT station was selected so that access time to/from destinations was not considered in evaluating how well a geography is generally served by the HCT system.
- Google Maps was used (via an automated query) to determine: 1. Auto travel time and 2. Transit travel time for each zone-to-zone connection. A trip time of 3 pm on a weekday (Wednesday) was specified. Analysis was run in both directions and the highest ratio used.
- A ratio of the transit travel time to the auto travel time was calculated. A ratio of 2.0 would mean that a transit trip takes twice as long as a trip made by driving.

The transit to auto travel time ratio was classified into five categories using the following breakpoints:

- Up to 1.1 (Transit competitive with auto)
- > 1.1 to 1.5
- > 1.5 to 2.4
- 2.5 to 3.9
- 4.0 or more (Transit takes significantly longer than driving)

[1] Replica is an activity-based transportation model in which travel demand is derived from people's daily activity patterns, including de-identified mobile location and demographic data sources.

Figure 1 Map of Analysis Zones

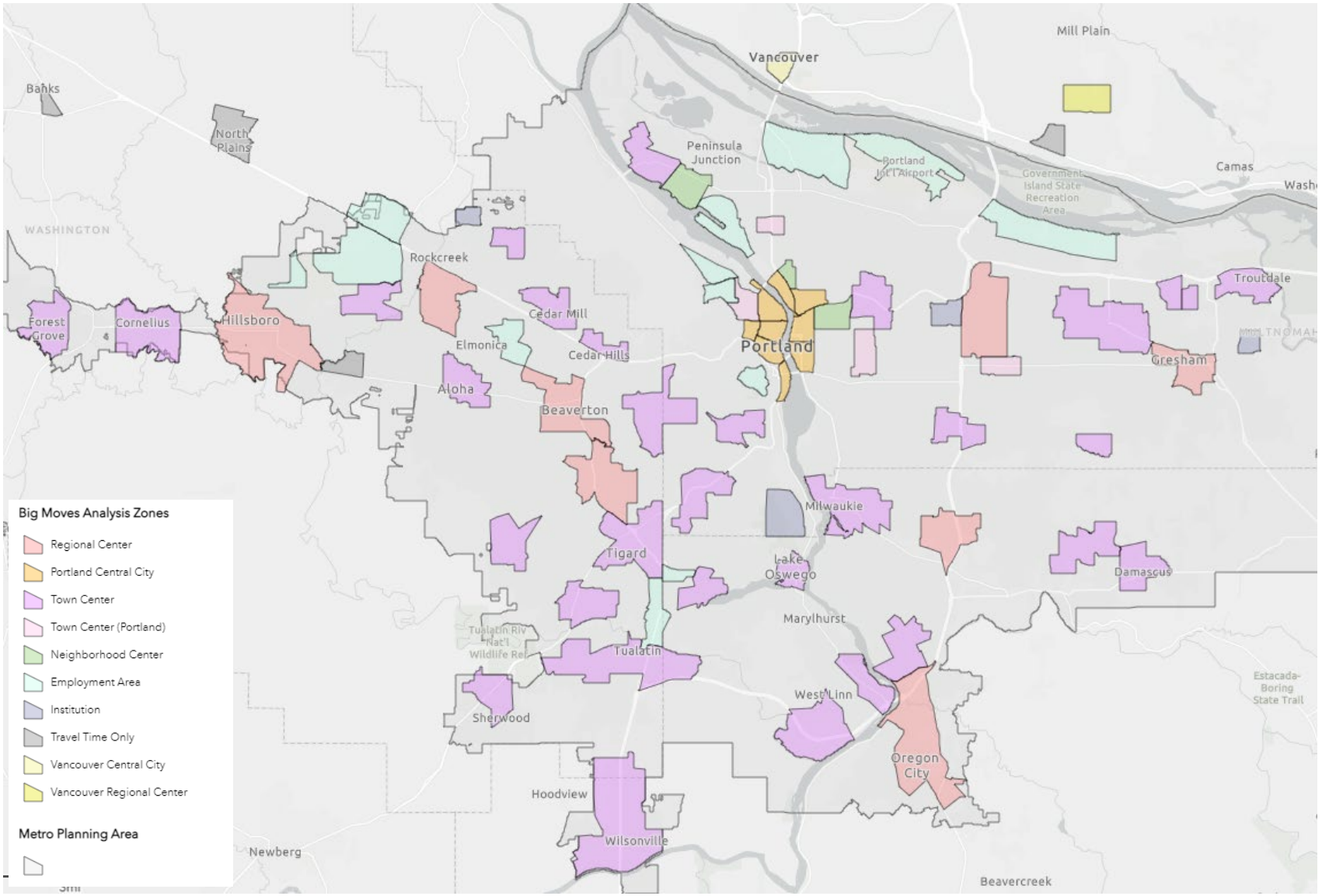
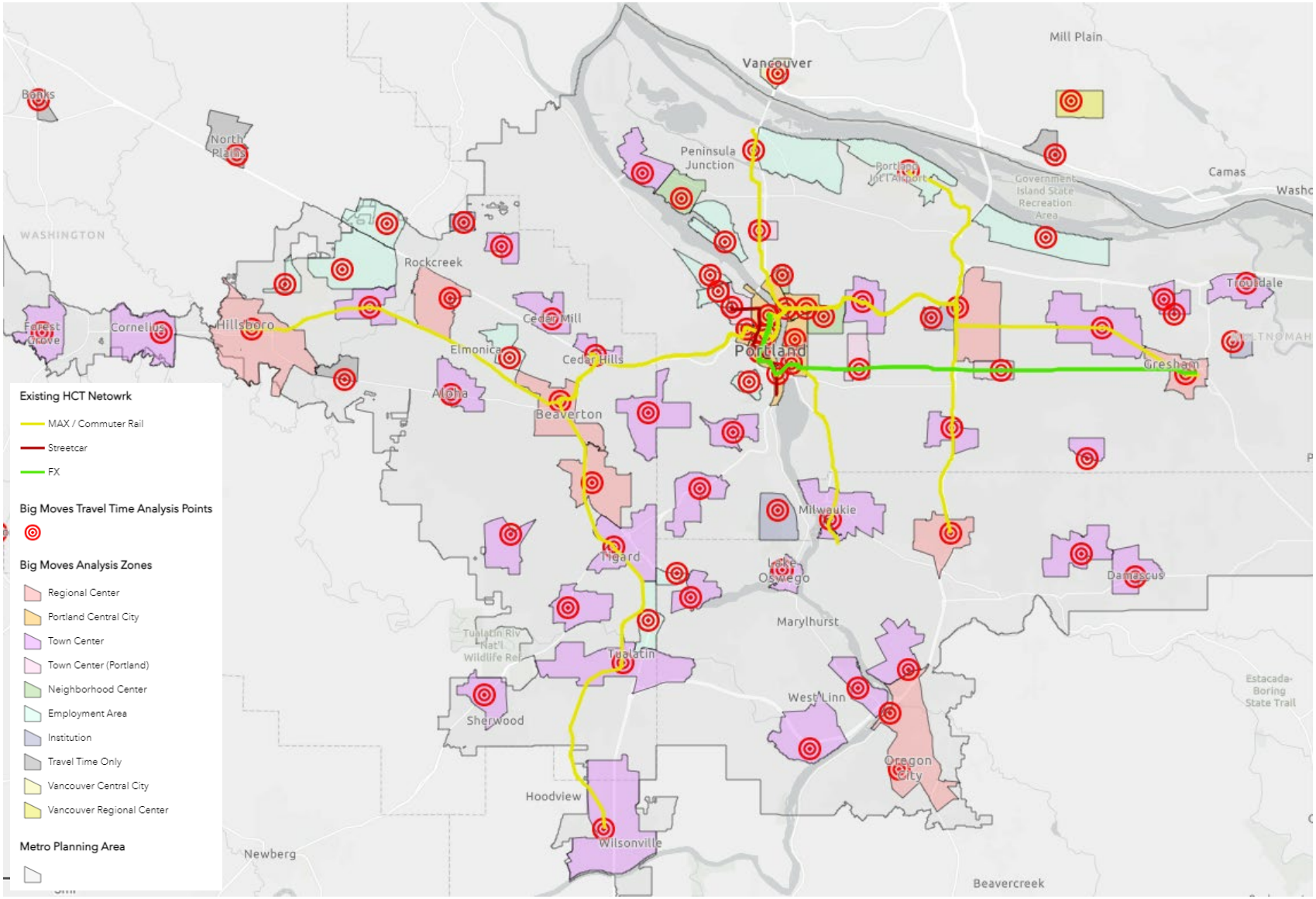


Figure 2 Map of Analysis Zones, Travel Time Analysis Points, and Existing HCT Network



3 ANALYSIS RESULTS

3.1 Analysis Results

The analysis was utilized as a tool to further explore and understand possible additional connections identified through the Level 1 Screening analysis and identify additional connections to consider in the next phases of the evaluation (e.g., Level 2 and Readiness Evaluation). **Figure 3** illustrates travel demand and the transit to auto travel time ratios for a representative set of connections between regional and town centers, including the additional employment and major activity centers included in the analysis. Line color illustrates the travel time ratio. Line weight illustrates travel demand. Travel demand in this schematic representation reflects only the demand between the specific centers connected, not the total travel demand between multiple centers that might utilize a particular connection (aggregating that demand was beyond the scope of this analysis). This analysis also did not consider demand outside of these centers.

- Connections shown in dark or lighter blue have a transit travel time that is competitive with driving. These include many parts of the existing light rail network, such as:
  - Between Gresham, Gateway, Hollywood, and Lloyd District
  - Between Clackamas and Gateway
  - Between Downtown Portland, Beaverton, and Hillsboro

  They also include some centers connected by bus links today.
- Connections shown in yellow, orange, and red range from moderately less competitive by transit to significantly longer.

The regional high capacity transit system is intended to be the backbone of the transit system. As such, this analysis focuses on longer-distance connections between regional centers, major town centers, and central cities with the highest travel demand and person capacity needs, that have gaps in service quality identified through this analysis. Focusing on these types of connections, this analysis identified the potential to improve transit travel times for corridors such as the following:

- Between multiple town and regional centers in a generally southeast to northwest arc through the Hwy 217 corridor between south and north/northwest Washington County, including connections from southwest Clackamas County. Since WES commuter rail operates between Wilsonville, Tualatin, Tigard, and Beaverton, but only during AM and PM peak hours, there is a gap in HCT service quality.
- The Tualatin Valley (TV) Highway corridor, between Beaverton, Hillsboro, Cornelius, and Forest Grove. There is an active planning project in this corridor (TV Hwy BRT).
- The Beaverton-Hillsdale (BH) Highway corridor, between Beaverton, Raleigh Hills and Hillsdale
- The Hwy 99W corridor, including Tigard, Tualatin, and Southwest Portland
- In South Clackamas County, between Oregon City and Clackamas Town Center (CTC) as well as along the Hwy 99E and Hwy 43 corridors, and between CTC and both Milwaukie and Happy Valley
- Town centers in East Multnomah County, including Troutdale, Fairview, and Wood Village, both east-west and north-south
- Across the Columbia River to/from Clark County

- Between St. Johns and various parts of Multnomah County

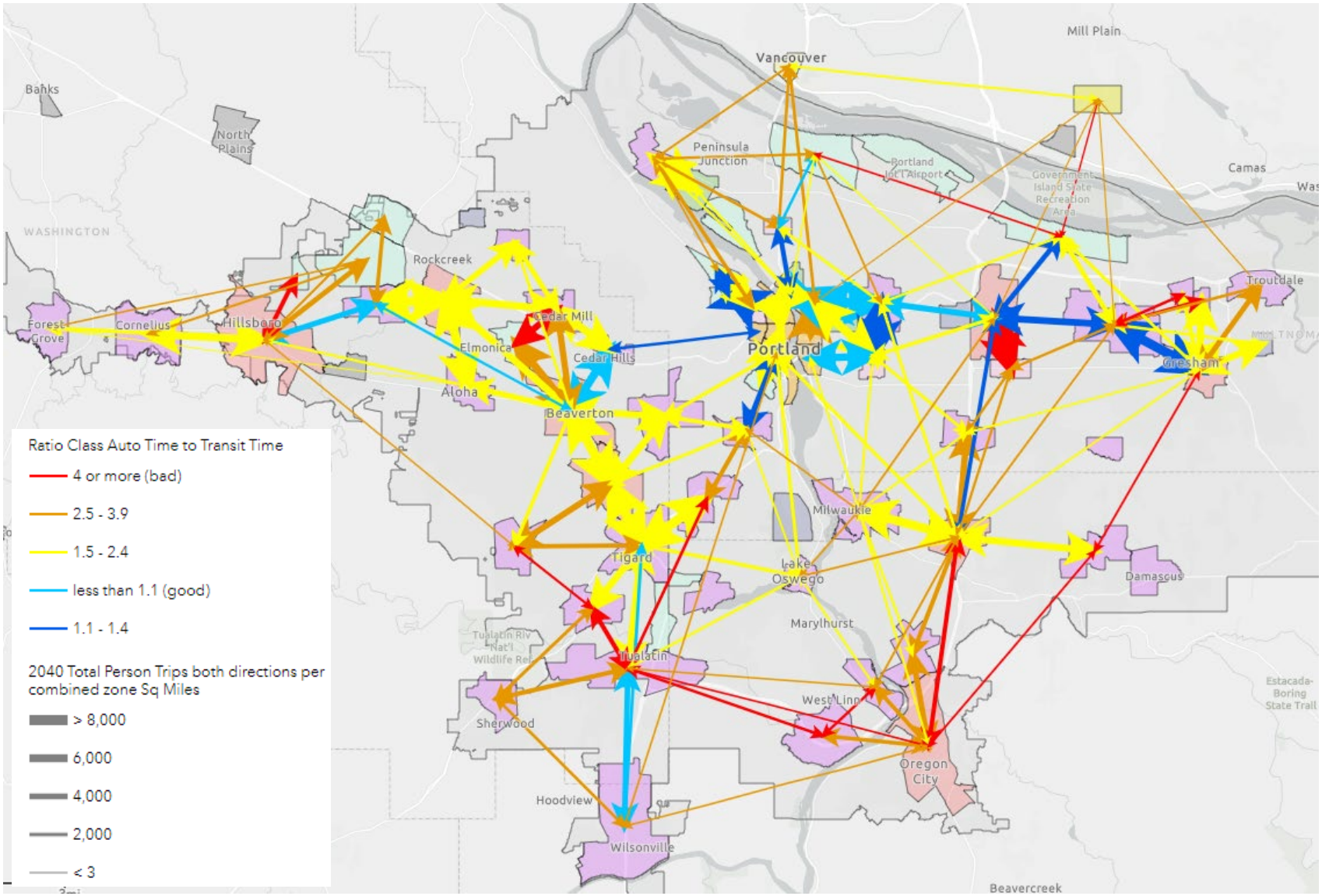
Figure 4 summarizes the connections identified above, along with existing HCT in these corridors, existing HCT priorities that were identified (in the 2009 HCT Plan/RTP or 2018 RTP), and active HCT planning efforts.

The analysis also highlights additional connections that are shorter in length or affect smaller or more isolated town centers. Examples of these types of gaps include:

- Employment areas north of Hillsboro, including along Evergreen Pkwy and Cornelius Pass Road.
- Town Centers in Washington County that are not along major travel corridors, such as Bethany, Murray/Scholls, and Sherwood.
- Columbia Corridor Employment Area in Multnomah County
- Between Midway and Gateway

However, these connections may be better addressed through other transit investments, such as frequent service fixed route, Better Bus enhancements, or enhanced connections to existing HCT service, and/or first and last mile improvements. These connections are likely outside the primary focus of the HCT system in connecting regional and major town centers and creating the backbone of the transit network.

Figure 3 Illustration of Travel Demand and Travel Time Ratio for Regional Zone-to-Zone Connections



3.2 Summary of Potential System Gaps and Previous/Active HCT Planning

Figure 4 Summary of Identified Major HCT Service Quality Gaps and Previous/Active HCT Planning

Major Travel Corridor / Connections	Counties	Existing HCT	Previously Identified HCT Priorities	Active HCT Planning
OR 217 Corridor (SW Clackamas Cty and SE Washington County – N/NW Washington County)	Washington, Clackamas	WES Commuter Rail (Peak Hours Only)	• Upgrades to WES, Wilsonville-Beaverton • Clackamas Town Center to Washington Square • Oregon City to Washington Square	-
TV Hwy Corridor	Washington	-	• TV Hwy BRT	TV Hwy BRT Study
US 26 Corridor (Sunset TC – Hillsboro)	Washington	-	• US 26 Corridor, Sunset TC – Hillsboro	-
BH Hwy Corridor	Washington, Multnomah	-	• 2010 Mobility Corridors Atlas	-
Hwy 99W / I-5 Corridor	Washington, Clackamas, Multnomah		• Southwest Corridor LRT • Sherwood – King City – Tigard	Southwest Corridor LRT Project
Hwy 43 Corridor	Clackamas, Multnomah		• Lake Owego – Portland (Rapid Streetcar)	-
Hwy 99E Corridor	Clackamas	MAX Orange Line (north of Park Ave)	• Milwaukie – Oregon City (Extension)	-
I-205 Corridor	Clackamas		• CTC – Oregon City – Washington Square	-
Hwy 224/Sunnyside Road Corridor	Clackamas	-	• CTC- Milwaukie – Washington Square • CTC – Happy Valley	-
East Multnomah County (Troutdale / Fairview / Wood Village)	Multnomah	MAX Blue Line (south of identified communities)	• LRT Extension, Gresham – Troutdale	-
St. Johns	Multnomah	-	• 2010 Mobility Corridors Atlas	-
I-5 (Interstate Bridge)	Multnomah, Clark	-	• Interstate Bridge	Interstate Bridge Replacement Project
I-205 Corridor	Multnomah, Clark	-	• 2010 Mobility Corridors Atlas	-

3.3 Portland Central City Analysis Results

Although the focus of this analysis is trips around the region, regional transit trips are affected by service quality through downtown Portland. **Figure 5** illustrates travel demand and the transit to auto travel time ratios for a representative set of connections within the Portland Central City. Although the transit is relatively time competitive for some trips, HCT system speed into and through the Central City is slow, which affects travel time competitiveness both for transit trips into downtown and for transit trips that cross the region through downtown Portland. **Figure 6** summarizes these connections along with existing HCT lines, existing HCT priorities that have been identified (in the 2009 HCT Plan/RTP or 2018 RTP), and active HCT planning efforts.

Figure 5 **Illustration of Travel Demand and Travel Time Ratio for Portland Central City**

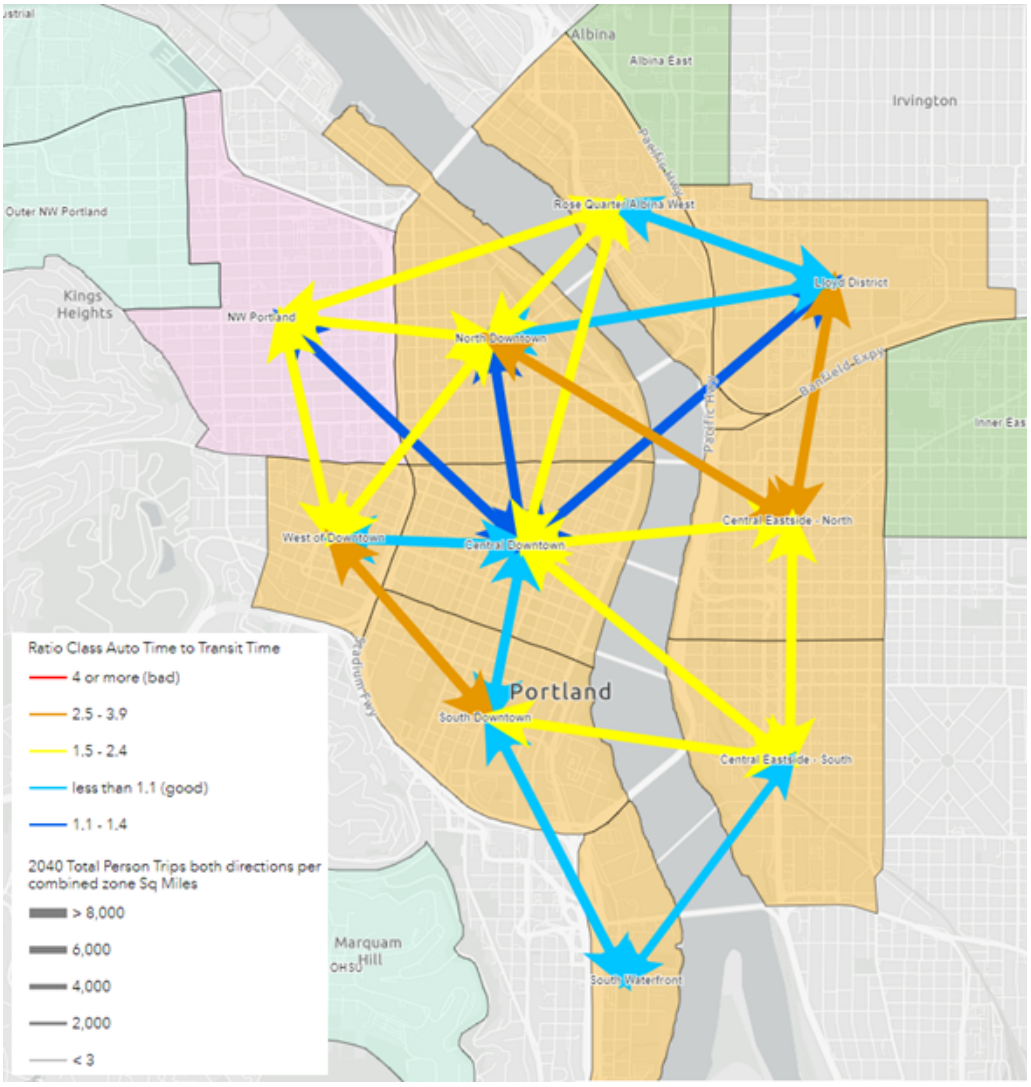


Figure 6 Summary of Identified Major HCT Service Quality Gaps and Previous/Active HCT Planning – Portland Central City

Major Travel Corridor / Connections	Counties	Existing HCT	Previously Identified HCT Priorities	Active HCT Planning
MAX into downtown and through Portland Central City	Multnomah	MAX	• Central City Tunnel Study	
Central Eastside (north-south and between Downtown)	Multnomah	Streetcar	• 2010 Mobility Corridors Atlas	-
Northwest Portland and parts of Downtown	Multnomah	Streetcar	• 2010 Mobility Corridors Atlas	-

3.4 Next Steps

This analysis provides additional information about the potential HCT connections identified in the Level 1 HCT Screening and helps identify additional gaps in regional transit connections and/or service quality (travel time). This analysis was used to shape the set of HCT corridors that will be considered in the Readiness step of the HCT Evaluation.

12/8/22 Level 2 and Readiness Assessment Addendum

The following provides more details on the analysis conducted as part of the Level 2/Readiness Assessment for the HCT Strategy Update. This addendum is subject to revision as the evaluation approach and results are refined based on agency and stakeholder feedback.

Level 2 Evaluation

Metric	Approach
Transit-Auto Travel Time Ratio	Results represent the estimated ratio of transit travel time to personal car travel time in a given corridor. This ratio is calculated using Google Maps travel times during the same hour for all corridors (trip departing at approximately 3:00 PM on a Wednesday), average of both directions, including transfer time (if applicable). Corridors were scored relative to each other based on quartiles.

Productivity and Cost Effectiveness	• **Boardings per revenue hour:** calculated based on 2019 fall quarter average ridership and revenue hours on TriMet lines associated with each corridor. For those corridors where no transit line exists today, the team used the following assumptions:
	  ○ Corridor 14, Central City Tunnel: productivity estimated using combined MAX Red and Blue line boardings and revenue hours. This project would affect corridor-wide travel times, and therefore the team used the corridor-wide ridership for this factor.
	  ○ Corridor 8, Parkrose to Clark County: the team was not able to develop a ridership estimate for this route.
	• **Capital cost per rider:** this metric was estimated similarly to how it would be estimated as part of the FTA CIG program evaluation. It represents the *annualized federal capital cost per rider*. Because the HCT Strategy Update is not going to assign a specific mode to most corridors, the team developed a range of capital cost estimates based on BRT and LRT costs to feed into this metric. A low and high capital cost was generated for each corridor as follows:
	  ○ Low: using the per-mile capital cost for the Division BRT project, multiplied by the representative corridor length to yield a total corridor cost.
	  ○ High: using the per-mile capital cost for the SW Corridor LRT project, multiplied by the representative corridor length to yield a total corridor cost.
	To align with CIG criteria, the cost was then annualized based on an average annualization factor of 30 years and 50 years for the low-end and high-end, respectively. These factors represent the average lifespan of all of the capital elements of a representative BRT and LRT project; some elements have shorter life spans (e.g., vehicles) while others have longer life spans (e.g.,

Metric	Approach
	trackway). Finally, the project team assumed that each corridor would receive 50% federal funding, such that effectively half of the capital cost for each corridor contributes to the federalized share. This annualized federal cost share was then divided by the number of annual riders on transit in each corridor, based on 2019 ridership data. Exceptions to the above methodology include: o Corridor 14- Central City Tunnel: assumed a single capital cost based on the capital cost developed as part of Metro's Central City Transit Capacity Analysis project (2019). o Corridor 18W- Montgomery Park to Hollywood: this corridor is assumed to be "streetcar." The project team used the per-mile cost of the eastside streetcar project (from 2011), inflated using the construction cost index to 2022 dollars. o Corridor 6- Beaverton to Oregon City: no existing service on this line. Used the estimate of new riders that was modeled as part of the TriMet Express and Limited Stop Study (2020) for this corridor. o Corridors 3, 9, 10, 27 were assigned LRT as representative mode based on prior planning (2009 HCT Strategy) for purposes of scoring capital cost.
Environmental Benefit	**GHG reduction benefit:** the methodology uses an assumed change in transit headways and research on transit elasticities to result in an estimated change in ridership based on implementing HCT, a corresponding reduction in VMT based on this increase in ridership, and in turn a reduction in GHG emissions on an annual basis in metric tons. No ridership modeling was conducted for this assessment, so the team used headway elasticities to generate a high-level estimate of change in ridership from implementing HCT in each corridor. Research shows that headway improvements are responsible for a substantial share of the ridership impact of HCT; however, the project team recognizes that this does not account for the other elements of BRT (such as improved stations, etc.) that also contribute to ridership increases. Additional assumptions for the GHG calculation are as follows: • Used existing weekday transit ridership, average trip length, and average headways for each corridor based on 2019 TriMet data • Assumed that corridors improved to an average of 12-minute headways all day, based on Division Transit headways. • Headway elasticity is estimated at 0.5 per Victoria Transport Policy Institute (VTPI), meaning every 10% improvement in headway results in a 5% increase in ridership. For some corridors, an estimate of future ridership already exists (e.g., Central City Tunnel) and was used in place of the headway elasticity method. • The assumed increase in ridership was multiplied by the average transit trip length to generate an average increase in transit person miles travelled (PMT). • The increased transit PMT was assumed to result in a corresponding decrease in personal vehicle VMT; however, this VMT change was discounted by 50% to account for induced demand (based on research findings). When people

Metric	Approach
	shift to transit from driving, some increase in driving occurs as a result of newly freed up roadway space. • The reduction in VMT was then converted to a reduction in GHG, based on the average fleet efficiency (23 miles per gallon) and average GHG content of gasoline (9 kg/gallon) in 2020 to yield an annual reduction in GHG emissions.
Equity Benefit	• **Key destinations within a ½ mile of each corridor**: this metric looks at the average number of key destinations within ½ mile of each corridor. Key destinations include city halls, community centers, hospitals, libraries, and schools. The total was normalized using corridor length. • **Share of marginalized populations within ½ mile of each corridor:** this metric uses Metro equity focus areas based on Census tracts to report the percentage of the population that are marginalized populations in each corridor. Equity focus areas are Census tracts that represent communities where the rate of Black, Indigenous, or People of Color (BIPOC), people with limited English proficiency (LEP), or people with low income (LI) is greater than the regional average. Additionally, the density (persons per acre) of one or more of these populations must be double the regional average.
Land Use Supportiveness	• **Population density:** population density, per square mile, within ½ mile of each corridor based on 2040 projections from the Metro model by TAZ. Corridors with a population density above 7,000 persons per square mile are considered most supportive of HCT. • **Employment density:** number of jobs, per square mile, within ½ mile of corridor based on 2040 projections from the Metro model by TAZ. • **Number of affordable housing units:** number of units, per linear mile of corridor, within ½ mile of each corridor. • **Presence of higher education:** scored based on the presence of one or more higher education institutions within ½ mile of each corridor.

Readiness Criteria

Metric	Approach

Documented Support	• **Community support:** this was scored based on whether HCT or similar investment capital project is identified in local TSPs or related documents.
	• **Local champion/local funding:** *this criterion requires further discussion and is not scored at this time.*
	• **Transit-Supportive Policies:** this criterion looks at local jurisdiction policies that support HCT and align with the types of policies identified through the CIG program:
	  ○ Local jurisdiction anti-displacement policies
	  ○ Local jurisdiction policies that align with CIG funding criteria, including transit-supportive population and employment policies, housing policies, etc.

	• **Work completed to-date:** scored based on whether local jurisdictions and partners have performed work to advance a given corridor, beyond inclusion in long-range plans. This may include additional studies, projects, investments, or recent planning work supportive of advancing a given corridor. • **Tolling:** *this measure requires further discussion and is not scored at this time. The intent of this measure is to identify HCT corridors that overlap with tolling corridors.*
Physical Conditions in the Corridor	• **"Physical space":** the project team determined the share of each representative corridor that is less than or equal to three lanes or greater than three lanes (four or more lanes), in addition to the share of the corridor that is railroad ROW. This criterion provides a high level understanding of how constrained a given corridor is; corridors that are predominantly along roads that are less than three lanes would likely require greater capital investments and/or ROW acquisition in order to achieve transit priority lanes or separate guideways, and in turn, may have more complex planning and design processes that require more time. Corridors that are predominantly along roads that are four or more lanes wide potentially have more opportunity to re-purpose existing roadway space for transit priority lanes/separate guideways, and in turn, may require less complex planning and design processes to advance. • **Miles of sidewalks and miles of bicycle facility within ½ mile of each corridor:** these metrics look at the density of the existing cycling and walking networks as a way of understanding the robustness of the first-/last-mile network in each corridor. These metrics are normalized by the length of each corridor. Corridors were scored based on whether they are higher or lower than the median across all corridors.
Implementation Complexity	• **Length of corridor:** based on TriMet experience, lengthier HCT corridors become more complex and take more time to implement. Shorter corridors were assigned a higher score. • **Freight corridor**: this criterion assigns a score based on whether a corridor is a designated freight corridor or not. Corridors having a freight designation are scored lower, the need maintain freight mobility can present obstacles to developing HCT.

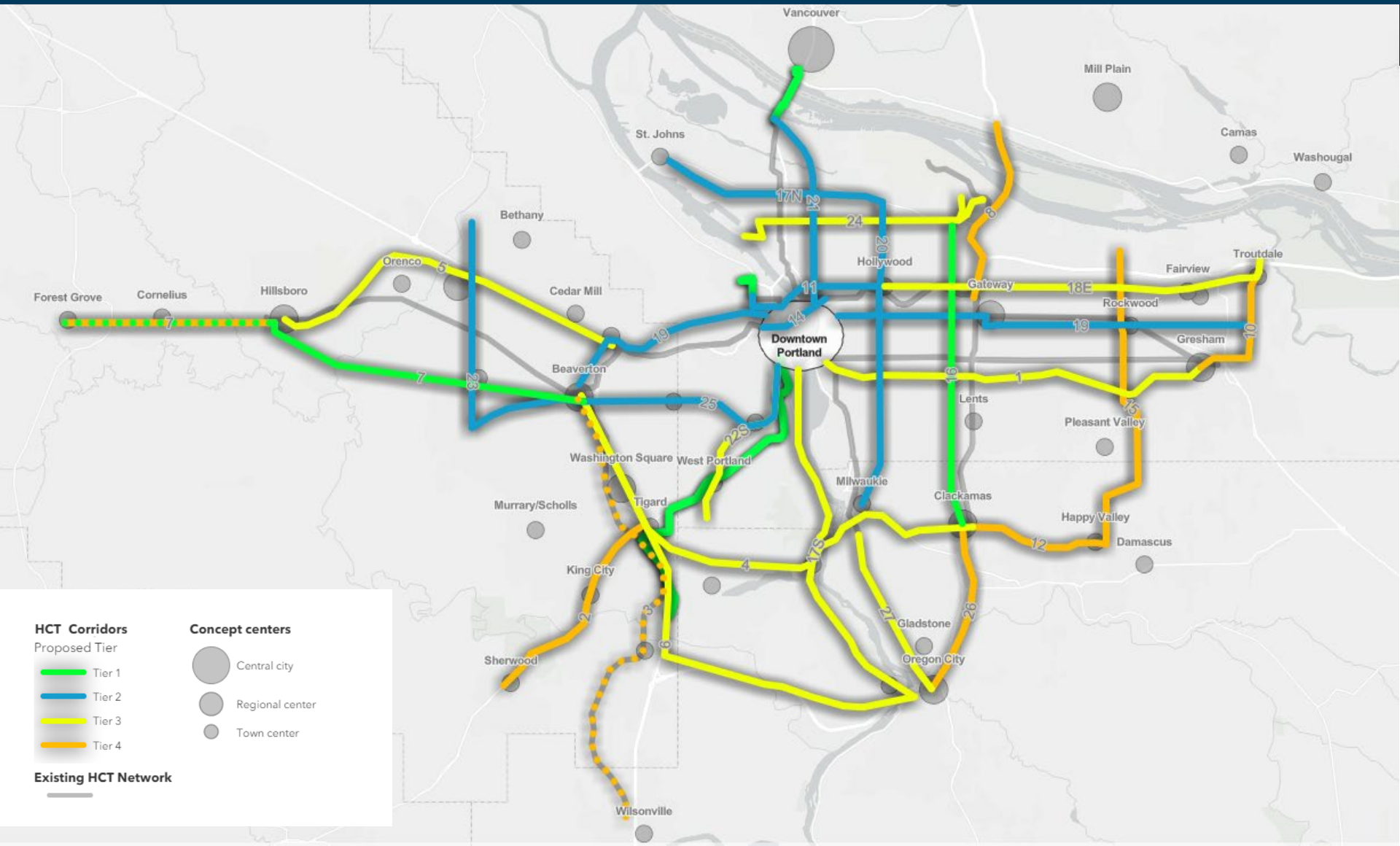
Map ID	Potential Project and Representative Corridor	Mobility	Productivity and Cost Effectiveness		Environmental Benefit	Equity Benefit		Land Use Supportiveness and Market Potential				Level 2 Evaluation Total Score	Documented Support			Physical Conditions in the Corridor			Implementation Complexity		Readiness Total Score	Total Score	Proposed Tier	Geography / Jurisdiction
		Transit Travel Time to Car Travel Time Ratio	Boardings per Revenue Hour	Capital Cost per Rider	GHG Reduction Benefit, Annual CO2e	Key Destinations within 1/2 Mile, Normalized	Share of Marginalized Populations within ½ Mile	Population Density	Employment Density	Number of Affordable Housing Units, Normalized	Presence of Higher Education		Community Support	Transit Supportive Land Use Policies	Work completed to-date	Physical Space	Miles of Sidewalks within 1/2 mile of Corridor, Normalized	Miles of street with Bike Facility Present within 1/2 mile of Corridor, Normalized	Corridor Length	Freight Corridor				
11	NW Lovejoy to Hollywood via Broadway/Weidler																						2	Portland/Multnomah
14	Central City Tunnel																						2	Portland/Regional
19	Beaverton - Portland - Gresham via Burnside																						2	Washington/Portland/Multnomah
21	Hayden Island - Downtown Portland via MLK																						2	Portland
23	Bethany to Beaverton via Farmington/SW 185th																						2	Washington
25	Beaverton to Portland via Hwy 10 (BH Hwy)																						2	Washington/Multnomah
22N	St Johns - Downtown Portland via Vancouver/Williams, Rosa Parks																						2	Portland
20	St. Johns - Milwaukie via Cesar Chavez																						2	Portland
1	Portland to Gresham in the vicinity of Powell Corridor																						3	Multnomah
22S	PCC Sylvania to Downtown Portland via Capitol Hwy																						3	Portland
5	Sunset Transit Center to Hillsboro via Hwy 26/ Evergreen																						3	Washington
24	Swan Island to Parkrose																						3	Portland
17S	Oregon City to Downtown Portland via Hwy 43																						3	Clackamas/Multnomah
18E	Hollywood to Troutdale																						3	Portland/Multnomah
27	Park Ave MAX Station to Oregon City via the McLoughlin Corridor																						3	Clackamas
6	Beaverton - Tigard - Tualatin - Oregon City																						3	Clackamas/Washington
4	Beaverton - Tigard - Lake Oswego - Milwaukie - Clackamas Town Center																						3	Clackamas/Washington
9	Hillsboro to Forest Grove																						4	Washington
10	Gresham to Troutdale																						4	Multnomah
2	Tigard to Sherwood via Hwy 99W Corridor																						4	Washington
3	Beaverton to Wilsonville in the vicinity of WES																						4	Washington
15	Happy Valley to Columbia Corridor via Pleasant Valley																						4	Multnomah/Clackamas
12	Clackamas Town Center to Damascas																						4	Clackamas
26	Clackamas Town Center to Oregon City																						4	Clackamas
8	Gateway to Clark County in the vicinity of I-205 Corridor																						4	Multnomah/Clark

Legend

High

Low

Corridor Tiers



Appendix F
Corridor-level Background and Readiness Needs Matrix

CORRIDOR-LEVEL BACKGROUND AND READINESS NEEDS

Several past regional policy and planning processes (e.g., 2040 Growth Concept, Atlas of Mobility Corridors, 2009 High Capacity Transit Plan, Regional Transportation Plan and Regional Transit Strategy) have identified travel corridor high capacity transit needs and readiness. As corridors have been identified as high capacity transit investment opportunities, these plans have also begun the process of outlining needs for future corridor policy and planning work to support the potential investment. Partners have taken the next step to embark on refinement planning for many of these corridors (e.g., Get Moving 2020, Clackamas to Columbia Project), working closely with community to identify the list of corridor needs, opportunities and constraints and planning to identify corridor investments, including transit enhancements that will improve transit speed and reliability and complementary multimodal transportation infrastructure projects that improve access to transit on the corridor. Through additional analysis and engagement with local partners and community, the 2023 High Capacity Transit Strategy update has also identified additional corridor needs, opportunities and constraints. This appendix compiles these together in one place as a resource and reference for future refinement work. An alternatives analysis takes the next step to categorize and coordinate investments and develop the high capacity transit project as well as make recommendations to implement the preferred multimodal package (e.g., amendments to local Transportation System Plans and the Regional Transportation Plan). While some active transportation access improvements are done as part of the high capacity transit project, most of these investments are beyond the project and rely on prioritization and funding in regional and local transportation plans. As outlined in the 2023 High Capacity Transit Strategy actions and recommendations, pursuing opportunities for completing multimodal access to transit projects *prior to* high capacity investment is a key part of demonstrating readiness.

	Tier	Corridor	Background and Needs Context
1	***Near-term corridors***	82nd Avenue Rapid Bus	Building from the 2019 82nd Avenue Plan, Get Moving 2020 conceptualized the high capacity transit needs and complementary access improvements for people walking and bicycling on the corridor. The 82nd Avenue Transit Project is currently underway to conduct an alternatives analysis towards coordinating investments and developing the high capacity transit project. Additionally, this corridor is within a mile of a highway proposed for tolling and part of the broader travelshed.
		Tualatin Valley Highway Rapid Bus	Building from the 2013 Tualatin Valley Highway Corridor Plan, Get Moving 2020 conceptualized the high capacity transit needs and complementary access improvements for people walking and bicycling on the corridor. The Tualatin Valley Highway Transit Project is currently underway to conduct an alternatives analysis towards coordinating investments and developing the high capacity transit project.
		Southwest Corridor Light Rail	The Southwest Corridor Plan was developed through a planning process that began in 2013 and concluded when a Record of Decision was issued by the Federal Transit Administration on April 8, 2022. In addition to linking several regional and town centers, the line connects people to Marquam Hill/OHSU and PCC Sylvania through just a short walk and Lewis and Clark College through a short 39 bus ride. The Shared Investment Strategy outlines the high capacity transit and other complementary investments needed to support land use, transportation, and community-building in the corridor to implement the transit-supportive vision. It is also supported by the Southwest Corridor Equitable Development Strategy to support community development in a way that improves quality of life for people of all incomes and backgrounds. Additionally, this corridor is within a mile of a highway proposed for tolling and part of the broader travelshed.
		Interstate Bridge MAX Yellow Line Extension	The Interstate Bridge Replacement Program is currently underway and is conducting an alternatives analysis towards developing the high capacity transit project. A modified locally preferred alternative has begun to outline the high capacity transit and other complementary investments needed to create a transit-supportive environment in the project area, as well as identify additional commitments of the program conditions of endorsing partners towards this goal. The process is also supported by an Equity Framework which guided equity analysis work that informed the alternatives. Additionally, this corridor is within a mile of a highway proposed for tolling and part of the broader travelshed.
		Montgomery Park Streetcar	The 2009 Streetcar System Concept Plan envisioned an extension to Montgomery Park. In 2019 a planning process kicked off, analyzing alternatives towards developing the locally preferred alternative, drafting an equitable development strategy and identifying an implementation package. The Montgomery Park to Hollywood Transit and Development Strategy currently in development will further support creating a transit-oriented environment, as well as the complementary investments identified in the Enhanced Transit Corridors Plan and Central City in Motion. Additionally, this corridor is within a mile of a highway proposed for tolling and part of the broader travelshed.
2	***Next-phase corridors***	Central City Tunnel	TriMet identified the need to study the Steel Bridge Transit Bottleneck and the 2018 Regional Transportation Plan included a study to improve speed and reliability of MAX light rail service and address the region's most significant transit bottleneck. Preliminary analysis by TriMet identified more than 20 concepts that were consolidated into representative alternatives and evaluated to understand the potential benefits and drawbacks. Initial study showed that a tunnel with approximately four underground stations would increase system ridership by 7,500 to 15,200 riders and decrease travel time by approximately 15 minutes between Lloyd Center and Goose Hollow, reducing greenhouse gas emissions while improving systemwide reliability, resiliency and redundancy. The MAX tunnel accommodates growth for an anticipated 50% increase in rail traffic over the next 15 years and maintains capacity on the Steel Bridge. Get Moving 2020 further supported planning and design work to develop this project. A project of this magnitude could take a decade or more to plan, design and construct, including the steps necessary to comply with the National Environmental Policy Act (NEPA) and the Federal Transit Administration's Project Development process. The next step is beginning a regional conversation about solutions, opportunities and funding strategies. Planning of a tunnel would need to evaluate the locations of portals and determine the optimal number and locations of stations. This work would build upon the preliminary analysis completed by TriMet in order to define a single preferred project and identify the scope and resources needed to complete the future environmental review process as well as the risks that could impact planning. Increasing speed and reliability of trips through the Portland Central City was a clear priority identified by businesses and community. Additionally, this corridor is within a mile of a highway proposed for tolling and part of the broader travelshed.
		Swan Island to Parkrose via Killingsworth	The 2018 Regional Transportation Plan and the City of Portland's Enhanced Transit Corridors Plan both identify Killingsworth as a priority congested corridor in need of near-term enhanced transit treatments (from better to rapid bus) to improve reliability and multi-dwelling and mixed-use land use designations in the Comprehensive Plan support the transit environment. As part of expanding the high capacity vision to include rapid bus, analysis completed as part of the 2023 High Capacity Transit Strategy update indicated this corridor's readiness as a candidate for high capacity improvements, reflecting community priorities. A potential connection of Swan Island to Parkrose Transit Center via Killingsworth could create a high capacity connection of the remainder of the Line 72, one of the highest ridership bus routes that builds off the work done as part of and leveraging a connection with the 82nd Avenue Transit Project. Streetscape improvements to enhance sidewalks, lighting, crossings and signals are included in the City of Portland's Transportation System Plan, with more detail for the west end provided in the draft North Portland in Motion Plan.

	Tier	Corridor	Background and Needs Context
2	***Next-phase corridors (continued)***	Portland to Gresham via Burnside	Burnside is included in mobility corridor analysis zones 5 and 6 for an east-west high capacity transit connection from Portland to Gateway to Fairview. The 2018 Regional Transportation Plan and the City of Portland's Enhanced Transit Corridors Plan both identified Burnside as a key congested corridor in need of enhanced transit treatments (from better to rapid bus) to improve reliability and multi-dwelling and mixed-use land use designations in the Comprehensive Plan support the transit environment. Get Moving 2020 identified the need for high capacity transit on this corridor that were confirmed by analysis completed as part of the 2023 High Capacity Transit Strategy update indicated this corridor's readiness as a candidate for high capacity improvements. This corridor is also within a mile of a highway proposed for tolling and part of the broader travelshed. Additionally, this corridor is particularly long and will likely need to be addressed in sections as part of the corridor planning process. Get Moving 2020 conceptualized the high capacity transit needs and complementary access improvements for people walking and bicycling on the corridor: • ***Bus Rapid Transit:*** Improvements to improve transit (Line 20) speed, reliability, station access, amenities and rider experience; including enhancements to transit stations, and bus priority/queue bypass lanes. o Strive to add 3 or more miles of bus priority (BAT)/queue bypass lanes compared to year 2020 conditions. o 10 or more signals upgraded with transit signal priority. o 65 or more enhanced stations, with improvements such as wider platforms, bus pads, improved shelters, real time travel information displays and lighting. o Strive to add 5 or more new safe, marked pedestrian crossings W Burnside/Barnes at transit stops without existing marked crossings. o Consider fiber optic communication if budget allows. o Approximately 35 new electric articulated buses and associated charging infrastructure. o Improvements to bus layover facilities at both ends of the corridor. • ***Gresham and Sunset Transit Centers:*** Design multimodal access improvements such as sidewalks, crossings, bike facilities, plaza, and transit service capacity. o Plan to improve pedestrian and bicycle access to and transit and multimodal operations at Gresham Transit Center and Sunset Transit Center. o Plan to accommodate expected growth of transit service including transit vehicle types and frequency. • ***Safety and Access to Transit Improvements (Gresham):*** Add sidewalks, crossings, lighting to reduce severe injury and fatal crashes. 10'-11' lane widths and 0'-1' shy permissible to achieve multimodal improvements. o 6 or more new safe, marked pedestrian crossings of Burnside (beacon or signal) with pedestrian refuge islands. o Continuous Americans with Disabilities Act accessible sidewalks, minimum 8-feet wide (including buffer) where new or widened. o Pedestrian scale street lighting at intersections, crosswalks and transit stops. o Consider completing Gresham-Fairview Trail connection if right-of-way is available. o Pedestrian friendly corner radii when corners are modified. Max 25' (15' preferred) for modified curb radii except at collectors/arterials where max is 35' (25' preferred). Exception for intersecting designated freight routes. o Center median islands for access management may be added. Consider planted medians. o Restripe to upgrade existing bicycle lanes to buffered bicycle lanes from Portland city limits to 181st and from 199th to Powell. o Consider roadway reorganization between 181st and Stark to provide bicycle facilities. • ***Safety and Access to Transit Improvements (Portland):*** Add crossings and lighting to reduce severe injury and fatal crashes. o 20 or more new or enhanced marked pedestrian crossings of Burnside with appropriate treatment for the context (beacon, signal, refuge islands and/or high visibility markings). Strive to provide marked crossings at all transit stops. o Additional marked crossing at NE/SE 94th Avenue to improve access to I-205 Path. o Pedestrian-scale street lighting at intersections, crosswalks, transit stops and trail crossing. o Safety features such as roadway lighting upgrades, bicycle facility improvements, signal improvements, and access management. o Pedestrian friendly design treatments including corner radii where corners are modified. • ***Earthquake Ready Burnside Bridge:*** Replacement or seismic upgrade of Burnside Bridge to improve safety and lifeline route. o Walkways and bikeways physically protected from motor vehicle traffic if bridge is replaced. o Pedestrian scale street lighting along bridge. o Consider protected bike facilities at intersections and bike/bus stop treatments. • ***Anti-displacement Strategies:*** Displacement indicators at the corridor level give mixed signals – home prices are increasing similar to the regional median but incomes are increasing faster than the region and the share of renters is decreasing. Corridor-wide the share of people of color is increasing, though some neighborhoods along the corridor see a loss in people of color. Beyond a future equitable development strategy as part of high capacity transit project development, applying some of the racial equity strategies identified through the Get Moving 2020 process would maximize benefits and minimize harm to marginalized communities.
		Hayden Island to Downtown Portland via MLK	Martin Luther King Jr. Boulevard is included in mobility corridor analysis zone 1 for a north/south high capacity transit connection from Portland to Vancouver. Enhanced transit on Martin Luther King Jr. Boulevard was identified as a near-term enhanced transit priority corridor for streetcar investment in the 2018 Regional Transit Strategy and Regional Transportation Plan and City of Portland Enhanced Transit Corridors Plan. The HCT Strategy Update identified this corridor as ripe for high capacity investment, reflecting community priorities. Community feedback also identified the need for travel along the Yellow Line/Interstate corridor to be faster, particularly as it is extended to Vancouver, WA. A parallel rapid bus connection on Martin Luther King, Jr. Boulevard could provide additional opportunities to strengthen corridor connections while improving travel time. This corridor is within a mile of a highway proposed for tolling and part of the broader travelshed.

	Tier	Corridor	Background and Needs Context
2	***Next-phase corridors (continued)***	Bethany to Beaverton via Farmington/SW 185th	The 2018 Regional Transit Strategy and Regional Transportation Plan identified 185th as a key congested corridor in need of enhanced transit treatments (from better to rapid bus) to improve reliability and much of the corridor is identified for higher density in local Comprehensive Plans (mixed use in Hillsboro, medium density/commercial neighborhood center/mixed use station community in Beaverton, and medium-density residential/TOD station area in Washington County). Get Moving 2020 conceptualized the high capacity transit needs, which the Washington County Transportation Study will designate when adopted later this year, as well as complementary access improvements for people walking and bicycling on the corridor: • ***Transit:*** Bus enhancements for Line 52 such as operations, station enhancements, targeted bus lanes, and signal priority to improve speed and reliability throughout corridor. Originally envisioned as Better Bus plus, the needs below should be revisited and reconsidered with high capacity investment in mind (at minimum looking to the example of Division Transit). o 5-10 major enhanced stops and approximately 10 minor enhanced stops, including wider station platforms, bus pads and improved shelters o Half mile or more of bus priority (BAT)/queue bypass lanes added. Consider curb-protected bikeways adjacent to BAT lanes and bus stop treatments. o 15-20 signals upgraded with NextGen transit priority treatments. o Fiber optic communication added for length of project. o Where corners are reconstructed, minimize curb radii where possible to provide a pedestrian friendly design. o If the northbound BAT lane approaching Cornell widens roadway over Bronson Creek, it should improve wildlife corridor. • ***MAX Overcrossing:*** Build grade-separated bridge for MAX Line over SW 185th to reduce traffic and bus delays and reduce pedestrian and bicycle conflicts. o Reconstructed intersections will consider improvements to pedestrian crossings such as hi-visibility markings or lead pedestrian intervals. • ***Enhanced Crossings (West Union Road to Kinnaman Road):*** Add enhanced, marked pedestrian crossings to improve access for people walking and address bikeway gap near TV Highway. o Provide 10 new enhanced, marked pedestrian crossings of 185th with pedestrian refuge islands at priority locations such as transit stops and trail crossings. Coordinate with TriMet on transit stop locations. Includes signalized crossings at Blanton and Alexander. Other potential locations include Sandra, Pheasant, Cascade, Adrian/Westview HS, Pike, Ewan, Longacre, and/or Jay, subject to Washington County consideration. o Provide street lighting to enhance pedestrian safety for pedestrians at intersections, crosswalks and transit stops. o Fill in the gap between Alexander and TV Highway to create a continuous bike facility on 185th. • ***Complete Street (Kinnaman to Farmington):*** Widen to 3 lanes, add curbs, sidewalks, enhanced marked crossings, lighting, bike and stormwater facilities to improve safety, mobility and visibility for all modes, especially for pedestrians accessing transit stops, and support a growing community. o Provide Americans with Disabilities accessible sidewalks, minimum 10-foot total width of sidewalk and buffer from street where new or widened. o Provide separated bikeways, minimum 8-foot total width of facility and buffer. Consider protected bike intersection treatments. o Auto lane width selection will maintain preferred design widths for bike facilities and sidewalks. o Provide marked pedestrian crossings of 185th with refuge island at all transit stops. Refuge island does not apply where in conflict with intersection left-turn lane. o Provide street lighting to enhance pedestrian safety at intersections, crosswalks and transit stops. o Minimize curb radii where possible to provide a pedestrian friendly design. • ***Anti-displacement Strategies:*** At the corridor level, displacement indicators suggest minimal displacement activity. Property values and incomes are increasing, though less quickly than the regional median. The percent of people of color along the corridor increased significantly more than the region and the change in % renters has increased slightly more. Beyond a future equitable development strategy as part of high capacity transit project development, the racial equity strategies identified through the Get Moving 2020 process could still be applied to maximize benefits to marginalized communities.
		Beaverton to Portland via Hwy 10 (Beaverton-Hillsdale Hwy)	Beaverton-Hillsdale Highway is included in mobility corridor analysis zone 13 for an east-west high capacity transit connection from Portland to Beaverton. The 2018 Regional Transit Strategy and the City of Portland's Enhanced Transit Corridors Plan identified Highway 10 as a key congested corridor in need of enhanced transit treatments (from better to rapid bus) to improve reliability and much of the corridor is identified for higher density in local Comprehensive Plans (mixed use in Hillsboro, medium density/commercial neighborhood center/mixed use station community in Beaverton, and medium-density residential/TOD station area in Washington County). Get Moving 2020 recognized the need for a study to consider a new enhanced bus route to Hillsdale and downtown Portland to connect these centers beyond the Tualatin Valley Highway rapid bus project. The draft Washington County Transportation Study documents the high capacity transit designation for this corridor identified through the 2023 High Capacity Transit Strategy. This corridor is also within a mile of a highway proposed for tolling and part of the broader travelshed.
		St. Johns to Milwaukie via Cesar Chavez	Lombard is included in mobility corridor analysis zone 1 for an east-west high capacity transit connection from I-5 to Rivergate and southern Cesar Chavez is included in mobility corridor analysis zone 19 for a north-south high capacity transit connection from Portland to Lents. ODOT's Lombard Multimodal Safety Project recently improved this corridor supported by the 2004 St. Johns Lombard Refinement Plan. Lombard is designated primarily as commercial mixed use and residential multi-dwelling in the City of Portland's Comprehensive Plan and Cesar Chavez connects many (and even turns into) mixed use corridors and centers to the south including Milwaukie (though the northern and southern ends of Cesar Chavez are more low density residential). This is the representative alignment for three different alignments from the St. Johns area to the Central City and/or Milwaukie. The other two include the University of Portland to Downtown Portland via Greeley (north portion of TriMet's line 35) and St Johns - Downtown Portland via Vancouver/Williams, Rosa Parks, Willamette (north portion of TriMet's line 44). All three alignments for the corridor are also within a mile of a highway proposed for tolling and part of the broader travelshed. The St. Johns to Milwaukie corridor was identified as a near-term enhanced transit priority in the 2018 Regional Transit Strategy and Regional Transportation Plan and the City of Portland Enhanced Transit Corridors Plan. The 2023 HCT Strategy Update identified this corridor as ripe for high capacity investments, reflecting community priorities. Additionally, this corridor is particularly long and will likely need to be addressed in sections as part of the corridor planning process.

	Tier	Corridor	Background and Needs Context
3	***Developing Corridors***	Portland to Gresham in the vicinity of Powell Corridor	The Powell-Division Transit and Development Strategy envisioned a suite of investments to getting around in Southeast Portland, East Portland and Gresham will be safer, easier and more reliable, including the Portland region's first rapid bus project – FX 2 Division Transit. Land and development opportunities and constraints are documented by street segment and the corridor strategy and equitable development resource kit, plus City of Portland and Gresham action plans support the shared vision for the transit corridor. This is also one of the most promising candidates for jurisdictional transfer and related implementation activities for safe and healthy urban arterials. Given the complexity of this corridor (e.g., freight route, limited number of lanes) and the continued need for a fast connection on this travel corridor (and for farther southeast Portland/Multnomah County), grade-separated light rail will be a key opportunity for consideration. Additionally, this corridor is within a mile of a highway proposed for tolling and part of the broader travelshed. Get Moving 2020 further conceptualized the high capacity transit needs and complementary access improvements for people walking and bicycling on the corridor: • ***Transit Planning:*** Design for longer-term high capacity transit enhancements such as Bus Rapid Transit or MAX. ○ Explore alternatives for bus rapid transit and light rail. ○ Selection of mode, route, and terminus. ○ Focus on accommodation of dedicated transitway between Tillikum Crossing and I-205. ○ Identify solutions to increase access to stations, including sidewalks, bicycle access and crossings, and enhance and improve stations. ○ Include strategies to prevent displacement, maintain affordability. ○ Draft Environmental Impact Statement (DEIS) and Locally Preferred Alternative. ○ Upgrades traffic signals with NextGen transit signal priority. ○ Improving transit stops along the corridor with such enhancements as bus pads, improved shelters, lighting, and other amenities. ○ May include relocation of transit stops to align with marked crossing locations. ○ Consideration of installing bus priority (BAT) lanes, particularly at critical intersections. ○ Consideration of adding fiber optic communication to improve bus and traffic signal communication. • ***Safety and Access to Transit Improvements (Portland):*** Add sidewalks, lighting, enhanced pedestrian crossings and parallel greenway connections to reduce severe injury and fatal crashes. ○ Deliver new marked pedestrian crossings of Powell or enhancements to existing pedestrian crossings of Powell at 11 locations to provide more enhanced marked crossing frequency in the corridor. Strive to provide marked crossings at all transit stops. May relocate transit stops to support alignment with marked crossings. ○ Provide Americans with Disabilities Act (ADA) accessible sidewalks where sidewalk replacement occurs. ○ Provide pedestrian scale street lighting to enhance pedestrian safety at intersections, crosswalks and transit stops. ○ Improve connections to and wayfinding on parallel bicycle greenways. ○ Consider access management strategies. ○ If corners are modified, minimize curb radii where possible to provide a pedestrian friendly design. • ***Safety and Access to Transit Improvements (Gresham):*** Add sidewalks, crosswalks, medians and lighting to reduce severe injury and fatal crashes. ○ 5 or more safe, marked pedestrian crossings of Powell (beacon or signal) with pedestrian refuge islands included except where in conflict with a left-turn lane. ○ Pedestrian scale street lighting at intersections, crosswalks and transit stops. ○ Consider median islands and driveway modifications for access management. ○ Pedestrian friendly design treatments including corner radii where corners are modified. 15' preferred (20' maximum) for modified curb radii except at collectors/arterials where 25' is preferred (maximum 30'). Exception for intersecting designated freight routes. ○ Addition of a northbound bike lane on the east side of Hogan. ○ Americans with Disabilities Act compliant signal and ramps at Powell & Hogan with marked pedestrian crossings on all 4 legs of intersection. ○ Provide Americans with Disabilities accessible sidewalks on Hogan (south of Powell to Burnside), minimum 10-foot total width including sidewalk plus buffer from street where new or replaced, except at corner (Burlingame) property, where a 6-foot minimum would be used to avoid building impacts. • ***Downtown Gresham Bikeway:*** Add two-way curb-protected bikeway along Powell to connect downtown Gresham to Powell Valley neighborhoods. ○ Construct two-way curb-protected bikeway following regional design guidelines. ○ Pedestrian scale street lighting at intersections and crosswalks. ○ Enhanced intersection pedestrian and bicycle crossing treatments. ○ Signal modifications to create protected signal phase for bicycles. • ***Anti-displacement Strategies:*** Displacement indicators at the corridor level are on par with the region and show mixed signals: racial diversity is increasing, share of renters is remaining constant, while incomes and property values are increasing at the same rate as the region. However, certain areas, like parts of Centennial, are showing signs of displacement with a high increase in renters, and wide income disparity. Beyond a future equitable development strategy as part of high capacity transit project development, applying some of the racial equity strategies identified through the Get Moving 2020 process would maximize benefits and minimize harm to marginalized communities.
		PCC Sylvania to Downtown Portland via Capitol Hwy	Capitol Highway is included in mobility corridor analysis zone 2 for an east-west high capacity transit connection from Portland to Tigard/Tualatin. The 2018 Regional Transit Strategy and Regional Transportation Plan identified it as a key congested corridor in need of enhanced transit treatments (from better to rapid bus) to improve reliability. In addition to affordable housing and essential jobs, the 2023 High Capacity Transit Strategy update also considered travel to and from higher education institutions. A connection of PCC Sylvania via Capitol Highway could complement Southwest Corridor to strengthen the system in southwest-providing more direct connections to Hillsdale and the PCC Sylvania that were identified as community needs through engagement activities for the 2023 High Capacity Transit Strategy Update. Analysis of the feasibility of another potential or alternative high capacity transit connection or for this corridor in the future is needed, which could capitalize on the work done by Southwest Corridor and Southwest Portland in Motion.

	Tier	Corridor	Background and Needs Context
3	***Developing Corridors (continued)***	NW Lovejoy to Hollywood via Broadway/Weidler	Broadway/Weidler is included in mobility corridor analysis zone 5 for an east-west high capacity transit connection from Portland to Gateway. The 2018 Regional Transit Strategy and Regional Transportation Plan identified Broadway for future streetcar improvements (in the 2040 constrained scenario). The Montgomery Park to Hollywood Transit and Development Strategy currently in development will further support creating a transit-oriented environment for this future extension, as well as the complementary investments identified in the Enhanced Transit Corridors Plan and Central City in Motion. This corridor is also within a mile of a highway proposed for tolling and part of the broader travelshed. Additionally, Albina Vision Trust is currently working on a Community Investment Plan identifying the strategies to guide implementation of the Albina Vision, including urban design guidelines, plans for the Rose Quarter Transit Center and Broadway Bridgehead, and plans to improve multimodal connections to the river. Additional complementary improvements identified through Get Moving 2020 to support Albina Vision safety and access to transit improvements Broadway Weidler between the Broadway Bridge and 7th Ave include: • Bus stop enhancements, such as wider station platforms, bus pads, improved shelters and lighting. • Public art and placemaking (e.g., distinctive materials, special lighting, public space elements, planted medians, and street trees) at transit stops and other locations (Multnomah St under the I-5 Bridge). • Streetscape investments including sidewalk or bikeway widening where feasible to improve separation from traffic and create a more cohesive, family-friendly walking/biking environment. • Pedestrian scale street lighting at intersections, crosswalks and transit stops. 30 or more new or enhanced marked pedestrian crossings, such as at transit stops. • Enhancements to existing signalized intersections to improve safety. • Sidewalk extensions at corners and side-street crossings.

		Oregon City to Downtown Portland via Hwy 43	Highway 43 is included in mobility corridor analysis zone 21 for a north/south high capacity transit connection from Portland to Oregon City/West Linn. There are two potential project opportunities to be considered: rapid bus on Highway 43 and Willamette Shore Line streetcar, both about a mile walk from Lewis and Clark College and within a mile of a highway proposed for tolling and part of the broader travelshed. The right of way for the Willamette Shore Line was purchased from the Southern Pacific Railroad in 1988 by a consortium of local jurisdictions and agencies including Metro, the cities of Lake Oswego and Portland, Clackamas and Multnomah counties, the Oregon Department of Transportation and TriMet. The 2018 Regional Transit Strategy and Regional Transportation Plan identified the northern portion for high capacity transit investment and for streetcar improvements in the future (in the 2040 strategic scenario) based on the refinement study analysis leading to the locally-preferred alternative adopted in March 2011. While the project was put on hold, partners remain committed to retaining the Willamette Shore Line as a public resource for future transit use and engaging in future planning efforts furthering this work.
			
			Get Moving 2020 started the process of conceptualizing multimodal needs for the broader corridor to Oregon City, recognizing the need for a more comprehensive corridor planning process towards maximizing outcomes in line with regional goals. That process would include planning, community engagement, project development, and design for investments and policies necessary to improve multimodal safety, transportation system management, economic activity, and land use potential. As part of expanding the high capacity vision to include rapid bus, analysis completed as part of the 2023 High Capacity Transit Strategy update indicated the broader corridor's developing capacity for high capacity transit – though it's particularly long length will likely need to be addressed in sections as part of the corridor planning process (building off of the work already done for the Willamette Shore Line to the north). The corridor begins in a mixed use environment in the Central City and ends in a mixed use regional center in Oregon City but is mainly low density residential in-between, with a few mixed use or commercial nodes. Future corridor planning work could look at opportunities for mixed uses in station areas and town centers and nodes for transit-oriented development. The corridor is also one of the most promising candidates for jurisdictional transfer and related implementation activities for safe and healthy urban arterials. Additional complementary transit access improvements for people walking and bicycling on the corridor include:
			• ***Transit:*** Enhance Line 35 to improve speed and reliability, station access and amenities throughout the corridor, including electric buses, bus priority lanes and new bus stations with real-time arrival. Originally envisioned as Better Bus plus, the needs below should be revisited and reconsidered with high capacity investment in mind (at minimum looking to the example of Division Transit).
			  ○ Consider new bus priority lanes. Consider enhanced pavement and pavement markings in new lane areas.
			  ○ Upgraded with NextGen transit signal priority.
			  ○ Provide enhancements to transit stations, such as wider station platforms, bus pads, improved shelters, real time travel information displays and lighting.
			  ○ Added electric articulated buses and associated bus charging infrastructure.
			  ○ Improvements to bus layover facilities at both ends of the corridor.
			• ***Complete Street (Arbor Drive to I-205):*** Reconstruct roadway to redesign intersections and include continuous sidewalks, safer marked crossings, pedestrian refuge islands, and increased street lighting. Add continuous separated bikeway, planted medians and street trees.
			  ○ Complete sidewalk and bicycle facilities (4-8+ miles) and add lighting.
			  ○ 5 or more (9+) added safe, marked pedestrian crossings with pedestrian refuge island at transit stops. Strive to provide marked crossings at all transit stops. Refuge islands may not apply where in conflict with turn lane.
			  ○ Protected new traffic signal installations at McKillican, A Street and Pimlico. Pedestrian scale street lighting at intersections and crosswalks.
			  ○ Continuous Americans with Disabilities Act accessible sidewalks, standard 10-feet wide (including buffer).
			  ○ Pedestrian friendly design treatments including corner radii.
			  ○ Continuous grade-separated bikeways (cycle track), minimum 6 ft. wide. Protected bike intersection and bus stop treatments.
			  ○ Placemaking elements like planted medians and street trees as appropriate. Protect or enhance tree canopy, along roadway adjacent to Hammerle Park. Retain and install as many Oregon white oak trees and native plantings as possible along the corridor.
			• ***Anti-displacement Strategies:*** Displacement indicators suggest displacement pressure may be higher than the region as a whole—property values and income are increasing faster than the region. However, the percent of growth in people of color is higher than the region at 4.1% compared to 3.5%. Beyond a future equitable development strategy as part of high capacity transit project development, applying the racial equity strategies identified through the Get Moving 2020 process is recommended to maximize benefits and minimize harm to marginalized communities.

	Tier	Corridor	Background and Needs Context
3	***Developing Corridors (continued)***	Sunset Transit Center to Hillsboro via Hwy 26/ Evergreen	Highway 26/Evergreen is included in mobility corridor analysis zone 14 for an east-west high capacity transit connection from Beaverton to Hillsboro. Both the 2018 Regional Transit Strategy and Get Moving 2020 recognized the need for a study to identify a set of potential Transportation Demand Management (TDM) improvements that would be subsequently advanced for further study and potential transit project development and funding for improvements on the Hwy 26 corridor, including enhanced transit from Sunset to Hillsboro Transit Center on Cornell/Barnes (in the 2040 constrained investment strategy). The City of Hillsboro's Transportation System Plan Update also identified an aspirational Sunset Highway Express Bus solution. As part of expanding the high capacity vision to include rapid bus and supported by analysis underway as part of the Westside Multimodal Improvements Study, the 2023 High Capacity Transit Strategy Update identified this corridor as a developing candidate for high capacity investments. In addition to a rapid bus/express bus on shoulder solution being explored for Highway 26, a potential Amberglen Streetcar envisioned by the City of Hillsboro (and identified in the Transportation System Plan Update) could provide a circulator between Orenco and Tanasbourne/Amberglen to extend the reach of the network. Both improvements would strengthen connections to the Intel campuses in Hillsboro, key priorities identified by jurisdiction partners and business and community members during outreach for the High Capacity Transit Strategy update. However, this corridor is mainly designated for industrial use, with some commercial nodes and town and station mixed use areas at Hillsboro Transit Center, Fair Complex, Tanasbourne, Cedar Mill and Sunset Transit Center. Future corridor planning work could look at opportunities for expanding mixed uses on the corridor and/or for transit-oriented development. High capacity transit and other complementary access improvements for people walking and bicycling on the corridor identified by Get Moving 2020 included: • Extension of high capacity transit service from Portland to north Hillsboro along Sunset Highway including additional park-and-ride locations west of Highway 217. This improvement could consider use of paid parking at park-and-ride locations and public-private partnership funding. Increased frequency of MAX Blue Line and MAX Red Line and potential extension of the Red Line. • Transit service route that connects US 26 from Powell Boulevard to Sunset Highway to better accommodate demand between SE Portland/Clackamas County and northern Washington County. • Expanded transit service including provision of a Sunset Highway express bus service between the Portland Central City via the SW Jefferson Street interchange and Hillsboro (or Forest Grove). • Bus-on-shoulder operations for bypassing of traffic queues on US 26 during periods of congestion. • Improved transit connections to MAX/HCT in the corridor, including Columbia County Rider connectivity and better local access to Sunset TC. • Beaverton-Milwaukie Regional Trail connection along Sunset Highway between Knights Boulevard and SW Jefferson Street. • Demand management options to expand travel options, including employer shuttle buses and carpools and on-demand ride sharing. • Pricing mechanisms such as congestion pricing to manage demand, in coordination with Metro's Regional Congestion Pricing Study. • Intelligent Transportation Systems infrastructure including variable speed signs, traveler information signs, corridor Bluetooth origin/destination tracking, and improved ramp meter algorithms. • Operational improvements at the US 26 and I-405 bottleneck which may include modifications or full/part-time closures of I-405 ramps to NW Everett Street and from SW Montgomery Street and modifications to lane channelization on US 26 approaching the interchange. Potential ramp meter bypasses for freight and transit use along the Sunset Highway corridor.
		Hollywood to Troutdale	Halsey is included in mobility corridor analysis zone 6 for an east-west high capacity transit connection from Gateway to Troutdale. The 2018 Regional Transportation Strategy and Regional Transportation Plan identified Halsey for frequent service improvements (planned to be implemented in 2024 through Forward Together) and near-term safety and access to transit improvements in the investment strategy. As part of expanding the high capacity vision to include rapid bus, analysis completed as part of the 2023 High Capacity Transit Strategy update indicated this corridor's readiness as a candidate for high capacity improvements, reflecting community priorities. The East Metro Connections Plan developed a community investment strategy that supports the prosperity and livability of the area. Born out of a transportation focus, it links previously separate efforts on jobs, parks, housing, equity and transportation so that different investments reinforce each other and can add up to more than the sum of their parts. More recently, Fairview, Wood Village, Troutdale and Multnomah County worked together to create a shared main street vision for the corridor through the Main Streets on Halsey Cross Section and Street Design Plan. The City of Portland also identified active transportation and crossing improvements as part of the East Portland in Motion Plan. A high capacity transit corridor investment strategy for Halsey Boulevard could build from this foundation to identify transit enhancements that will improve access, speed and reliability. This work included an economic and strategic action plan and a review of comprehensive plan land uses which are mainly commercial and low density residential along the corridor. Future corridor planning work could look at opportunities for mixed uses in station areas and town centers and nodes for transit-oriented development.
		Beaverton - Tigard - Lake Oswego - Milwaukie - Clackamas Town Center	The 2009 High Capacity Transit Plan first identified a need for a high capacity connection on this corridor following existing heavy freight rail trackage owned by BNSF Railway Company, recognizing the need for comprehensive corridor planning for this connection spanning several local jurisdictions, which could be another opportunity to serve or more directly connect Lewis and Clark college (a community need identified during outreach for the High Capacity Transit Strategy). The 2018 Regional Transit Strategy and Regional Transportation Plan carried forward the high capacity designation while recognizing the need for more comprehensive corridor planning for this connection to develop shared land use and transportation investment strategies and determine transit mode, function, general location, termini and any associated changes in road or freight rail functions and performance standards of existing and future transportation facilities, particularly along I-5 and I-205 (including the Beaverton to Oregon City connection identified below serving similar travel markets). Since much of the existing land use designations for this corridor are industrial/employment and lower density residential, future corridor planning work could look at opportunities for mixed uses in station areas and town centers and nodes for transit-oriented development. This corridor is particularly long and will likely need to be addressed in sections as part of the corridor planning process. The 2020 Oregon State Rail Plan focuses on inter-city and commuter rail where shorter corridor train services are a state and other sponsor (rather than federal) financial responsibility, recognizes that demand for passenger and commuter rail is increasing, with the Portland area projecting some of the highest anticipated future growth and identifies the substantial need to expand the system and further evaluate additional passenger rail corridors in the state. Chapter 8 of the draft 2023 Regional Transportation Plan update includes a description of future work to consider opportunities for passenger rail on existing rail corridors within the region.
		Beaverton - Tigard - Tualatin - Oregon City	The 2009 High Capacity Transit Plan first identified a need for a high capacity connection on this corridor which includes Highway 217, Interstate 5 and Interstate 205 which are reflected in mobility corridor analysis zones 3 from Tigard to Wilsonville and 10 from Tualatin to Oregon City. The 2018 Regional Transit Strategy carried forward the high capacity designation while recognizing the need for more comprehensive corridor planning for this connection, particularly along I-5 and I-205. The 2018 Regional Transportation Plan included a connection on I-205 between Clackamas Town Center and Bridgeport in the 2040 strategic investment strategy. Additionally, this corridor is within a mile of a highway proposed for tolling and part of the broader travelshed. More work is needed to define the need, mode, function, performance standards, and general location of facilities within each mobility corridor consistent with the Transportation Planning Rule to ensure land use and transportation planning and decision-making are integrated (see also Beaverton to Wilsonville in the vicinity of WES below). A corridor investment strategy to evaluate packages of multimodal improvements that will improve mobility and access along the corridor to jobs, housing and key commercial and industrial areas is needed. Since much of the existing land use designations for this corridor are industrial/employment and lower density residential, future corridor planning work could look at opportunities for mixed uses in station areas and town centers and nodes for transit-oriented development. Additionally, this corridor is particularly long and will likely need to be addressed in sections as part of the corridor planning process.

	Tier	Corridor	Background and Needs Context
3	***Developing Corridors (continued)***	Park Ave MAX Station to Oregon City in the vicinity of McLoughlin Corridor	McLoughlin is included in mobility corridor analysis zone 8 for a north/south high capacity transit connection from Gateway to Oregon City. It is also within a mile of a highway proposed for tolling and part of the broader travelshed. The 2040 Growth Concept envisioned this connection between the regional center and central city as light rail which is designated as high capacity transit in the 2018 Regional Transit Strategy and was included as a 2040 strategic investment in the Regional Transportation Plan. Though this corridor connects two regional centers, much of the land along the corridor is designated as commercial with low-density residential adjacent. Future corridor planning work could look at opportunities for mixed uses in station areas and town centers and nodes for transit-oriented development. Get Moving 2020 recognized the need for a more comprehensive corridor planning process for McLoughlin Boulevard, towards maximizing outcomes in line with regional goals that includes land use considerations and determines longer term multimodal enhancements and transit, and also started the process of conceptualizing the transit needs and complementary access improvements for people walking and bicycling on the corridor: • ***Transit:*** Enhancements to Lines 33 and 99 to improve speed and reliability, station access and amenities throughout the corridor, including electric buses, bus priority lanes and new bus stations with real-time arrival info. Originally envisioned as Better Bus, the needs below should be revisited and reconsidered with high capacity investment in mind. ○ Provide 1-2 miles or more of new bus priority (BAT) lanes on McLoughlin. Consider enhanced pavement and pavement markings in new lane areas. Consider curb-protected bikeways adjacent to BAT lanes and bus stop treatments. ○ 12 or more signals upgraded with NextGen transit signal priority along McLoughlin. ○ Fiber optic communication added for length of project along McLoughlin. ○ Approximately 16 new electric buses and associated charging infrastructure. ○ Provide enhancements to approximately 90 transit stations, such as wider station platforms, bus pads, improved shelters, real time travel information displays and lighting. • ***Safety and Access to Transit Improvements:*** Add/improve sidewalks, crossings, lighting, and other safety features to reduce severe injury and fatal crashes. Additionally, community outreach for the High Capacity Transit Strategy Update also identified the need for shade trees along the corridor south of Park Avenue, particularly at waiting areas. ○ Add 6 or more new enhanced marked pedestrian crossings with refuge islands on McLoughlin to provide more crossing frequency in the corridor (refuge island may not apply at intersections where left-turn lanes are in conflict and will comply with ORS 366.215). Strive to provide safe, marked crossings at all transit stops (15-27+ total). ○ Consider at-grade crossing improvements for the Trolley Trail (Jennings) and Kronberg Park Trail (Bluebird). Consider wayfinding for the Trolley Trail. ○ Consider medians and driveway modifications for access management. ○ Provide pedestrian scale street lighting at intersections, crosswalks, transit stops and trail crossings to enhance pedestrian safety. ○ Extend boulevard treatments along McLoughlin to implement the Willamette Falls Bike/Ped Plan, including river side multi-use path, medians, and sidewalks to improve safety for people walking and biking (9-17+ miles of improved bikeways). ○ Provide Americans with Disabilities Act (ADA) accessible sidewalks (2-5+ miles) where sidewalk infill and sidewalk widening occurs. Intent is for minimum typical sidewalk width of 8 feet which includes buffer. ○ Minimize curb radii where possible where corners are modified to provide a pedestrian-friendly design. ○ Provide separated, buffered bikeways with consideration for curb protected bikeways adjacent to bus priority (BAT) lanes and bus stop treatments. Intent is for minimum typical bikeway width of 8 feet which includes buffer. • ***Park Ave Park & Ride Expansion***: Expand the parking capacity of the existing park & ride structure at the MAX Orange Line terminus. ○ Add up to two decks to the existing Park Avenue park & ride structure at the MAX Orange Line terminus (13121 SE McLoughlin Blvd) to increase its parking capacity. • ***Anti-displacement Strategies:*** At the corridor level, displacement indicators demonstrate a mix of signals. Property values are increasing at rates comparable to the regional median and the share of renters is decreasing slightly. However, income growth along the corridor is less than the regional median. There has been no overall change in populations of color across the corridor between 2000 and 2017. Some areas, like Jennings Lodge, do show a significant loss in people of color. Beyond a future equitable development strategy as part of high capacity transit project development, applying some of the racial equity strategies identified through the Get Moving 2020 process would maximize benefits and minimize harm to marginalized communities.
4	***Vision Corridors***	Tigard to Sherwood via Hwy 99W Corridor	The 2009 High Capacity Transit Plan first identified a need for a high capacity connection on this corridor and thus Highway 99 is included in mobility corridor analysis zone 11 for an east-west high capacity transit connection from Tigard/Tualatin to Sherwood/Newberg. While the original connection was identified from Portland to Sherwood, through the Southwest Corridor Plan it was concluded that the light rail project would extend to Tualatin with the connection to Sherwood as a future consideration (something westside partners indicated is a key priority). This is also one of the most promising candidates for jurisdictional transfer and related implementation activities for safe and healthy urban arterials. The 2018 Regional Transit Strategy and Regional Transportation Plan identified the remaining segment as a high capacity transit vision corridor beyond the 2040 strategic investment strategy. Both the 2018 Regional Transportation Strategy and Get Moving 2020 recognized the need for a more comprehensive corridor planning process for Hwy 99W to develop a regional vision for the corridor through extensive public and stakeholder outreach and identify investments and policies necessary to improve multimodal safety, transportation system management, economic activity and land use potential to: ○ Assemble a list of the needs, opportunities and constraints ○ Conduct market analyses and identify potential investment strategies for road, transit and land use improvements ○ Determine how 99W and the surrounding local transportation networks should be improved and managed to balance local, regional and long-distance travel needs ○ Identify transportation infrastructure projects, service enhancements and potential funding sources ○ Develop a strategy for economic resilience, adaptation and growth ○ Identify potential land use and transportation system plan changes to build equitable multimodal, transit-supportive communities along the corridor due to most designations along the corridor being lower density commercial and residential. • ***Anti-displacement Strategies:*** Displacement indicators at the corridor level suggest mixed signals—property values are increasing on par with the region but the growth of populations of color is significantly slower, as is the increase in incomes. Some areas, like North Tigard, are experiencing a loss of people of color, suggesting displacement. Beyond a future equitable development strategy as part of high capacity transit project development, applying some of the racial equity strategies identified through the Get Moving 2020 process would maximize benefits and minimize harm to marginalized communities.

Tier	Corridor	Background and Needs Context
4 Vision Corridors (continued)	Hillsboro to Forest Grove LRT extension	The 2018 Regional Transit Strategy and Regional Transportation Plan included the light rail extension from Hillsboro to Forest Grove in the 2040 strategic investment strategy. Both the 2018 Regional Transportation Strategy and Get Moving 2020 recognized the need to analyze a possible future light rail extension as another high capacity transit connection alternative on the corridor in addition to rapid bus on Tualatin Valley Highway. Corridor planning work for transportation, transit, and land use longer-term corridor investments to improve transit speed and reliability, station access and amenities would support future investment. Activities would include: ○ Plan to identify corridor investments that will improve transit speed and reliability. ○ Alternatives analysis for the interface of all modes of transportation, including transit, as well as consideration of land use plans and proximity to and/or interface with the adjacent freight railroad. The corridor's terminus in Hillsboro is at a mixed use regional center and in Forest Grove at a mixed use town center, but in-between is mainly industrial and low to medium-density residential. ○ Alternatives analysis will address the ownership of the railroad, right-of-way limitations, consideration of an express bus and value of extending route to Hillsdale and downtown Portland. ○ Plan may consider possibility of accommodating future transitway adjacent to Council Creek Trail consistent with trail planning outcomes. • ***Anti-displacement Strategies:*** At the corridor level, displacement indicators demonstrate a mix of signals. Property values, incomes and racial diversity are increasing, though less quickly than the regional median. Beyond a future equitable development strategy as part of high capacity transit project development, applying some of the racial equity strategies identified through the Get Moving 2020 process would maximize benefits and minimize harm to marginalized communities.
	Gresham to Troutdale LRT extension	The 2018 Regional Transit Strategy and Regional Transportation Plan identified 257th/Kane Drive as a high capacity transit vision corridor beyond the 2040 strategic investment strategy which was also reflected in the readiness analysis completed for the 2023 High Capacity Transit Strategy update. The East Metro Connections Plan developed a community investment strategy that supports the prosperity and livability of the area. Born out of a transportation focus, it links previously separate efforts on jobs, parks, housing, equity and transportation so that different investments reinforce each other and can add up to more than the sum of their parts. A high capacity transit corridor investment strategy for SW 257th Drive could build from this foundation to identify transit enhancements that will improve access, speed and reliability. This work included an economic and strategic action plan and a review of comprehensive plan land uses which are mainly commercial, industrial and low to medium density residential along the corridor (though there are pockets of higher densities). Future corridor planning work could look at opportunities for mixed uses in station areas and town centers and nodes for transit-oriented development.
	Happy Valley to Columbia Corridor via Pleasant Valley	The 2018 Regional Transportation Strategy and the City of Portland's Enhanced Transit Corridors Plan both identify 181st/182nd as a key congested corridor in need of enhanced transit treatments (from better to rapid bus) to improve reliability and the Clackamas County Transit Development Plan identified the need for increased service on the corridor. The 2018 Regional Transit Strategy and Regional Transportation Plan also designated the portion of the corridor south of Powell as a high capacity transit vision corridor beyond the 2040 strategic investment strategy. As part of expanding the high capacity vision to include rapid bus, the 2023 High Capacity Transit Strategy Update identified the full corridor as a future candidate for high capacity investments. The Clackamas to Columbia (C2C) project developed a plan for improving north-south travel in the Portland Metro area east of I-205 that identified transportation improvements (including enhanced transit) to improve mobility and access, prioritizes which improvements to fund and build soonest and developed a consistent set of policies and street designs for each partner agency. Building on the East Metro Connections Plan and Clackamas to Columbia (C2C) corridor plans to conduct market analyses and identify potential land use implementation strategies would support development of equitable, high density mixed use high capacity transit-supportive communities along the corridor (currently lower density residential and commercial and industrial employment areas). Get Moving 2020 also started the process of conceptualizing the enhanced transit needs and complementary access improvements for people walking and bicycling on the corridor, which included: • ***Transit:*** Enhanced bus improvements and bus stop improvements for Line 87 on 181st/182nd Avenue such as operations, station enhancements, bus lanes, and signal priority to increase speed, reliability. Originally envisioned as Better Bus, the needs below should be revisited and reconsidered with high capacity investment in mind. ○ 10 or more major stop enhancements, including wider station platforms, bus pads and improved shelters. ○ 30 or more minor station enhancements. ○ 1 mile or more of bus priority (BAT) and queue bypass lanes added, likely at 4 major intersections. ○ 10 or more (19+) signals upgraded with NextGen transit signal priority. ○ Fiber optic communication added for length of project. • ***Safety and Access to Transit Improvements (Multnomah):*** Add/improve sidewalks, crossings, lighting to roadway to reduce severe injury and fatal crashes on 181st/182nd Avenue. 10'-11' lane widths and 1' shy are permissible to provide multimodal infrastructure. ○ 11 or more new safe, marked pedestrian crossings (14-24+ total) of 181st/182nd (beacon or signal). Strive to provide safe, marked crossings at all transit stops. ○ Continuous Americans with Disabilities Act accessible sidewalks (4-9+ miles), minimum 8-foot total width of sidewalk plus buffer from street where new or widened. ○ Continuous separated bikeways (9-16+ miles), minimum 7-foot total width including buffer. Consider protected bike intersection and bus stop treatments. ○ Pedestrian refuge islands to prevent illegal use of center turn lane at marked pedestrian crossings where possible. May not apply where in conflict with intersection turn lane. ○ Provide improved roadway lighting for safety, including consideration of pedestrian scale street lighting at intersections, crosswalks and transit stops. ○ Improve I-84 Path connections through I-84 interchange. ○ Median islands and driveway modifications for access management where feasible. • ***Anti-displacement Strategies:*** At the corridor level, displacement indicators suggest minimal displacement activity. Property values and incomes are increasing, though less quickly than the regional median. The percent of people of color along the corridor increased significantly more than the region, and the change in the percentage of renters has increased at about the same rate. Beyond a future equitable development strategy as part of high capacity transit project development, the racial equity strategies identified through the Get Moving 2020 process could still be applied to maximize benefits to marginalized communities.

	Tier	Corridor	Background and Needs Context
4	***Vision Corridors (continued)***	Clackamas Town Center to Happy Valley	The 2009 High Capacity Transit Plan which first designated Sunnyside as a vision corridor for future high capacity transit investment, recognized the need for more corridor refinement planning for Sunnyside to develop shared land use and transportation investment strategies and determine transit mode, function, general location and any associated changes in road or rail functions and performance standards of existing transportation facilities. Something the 2018 Regional Transit Strategy and Regional Transportation Plan carried forward in designating this corridor for high capacity transit beyond the RTP. The Clackamas to Columbia (C2C) project started this work and Clackamas County will continue it with the City of Happy Valley through the Sunrise Corridor Community Visioning Concept that will complete a community visioning process that encompasses economic, land use, health and recreation trends to ensure the community will grow and thrive; develop anti-displacement strategies that respond to community and stakeholder needs so that residents and businesses may remain within the community and benefit from the developments; recommend a community-supported preferred multimodal transportation and development alternative, and result in clear actionable steps to achieve implementation. Since much of the existing land use designations for this corridor are lower density residential (with some medium density notes and terminating in a mixed use town center), future corridor planning work could look at opportunities for mixed uses in future station areas and nodes for transit-oriented development.
		Clackamas Town Center to Oregon City	I-205 is included in mobility corridor analysis zone 8 for a north/south high capacity transit connection from Gateway to Oregon City. The 2018 Regional Transportation Strategy designated I-205 as a high capacity transit vision corridor beyond the 2040 strategic investment strategy, recognizing the need for more comprehensive corridor planning. This corridor already has an existing adjacent inter-city Amtrak Cascades rail line identified as one of 11 national future high speed rail corridors and Oregon City to Eugene was noted as one of the largest travel markets in the 2020 Oregon State Rail Plan (outside Portland to Salem or Eugene). Additionally, this corridor is within a mile of a highway proposed for tolling and part of the broader travelshed. More work is needed to define the need, mode, function, performance standards, and general location of facilities within each mobility corridor consistent with the Transportation Planning Rule to ensure land use and transportation planning and decision-making are integrated. A corridor investment strategy to evaluate packages of multimodal improvements that will improve mobility and access along the corridor to jobs, housing and key commercial and industrial areas is needed. This effort would identify a preferred package of transportation improvements and detail how they can be phased for implementation. Since much of the existing land use designations for this corridor are commercial and lower density residential (with mixed use town center nodes), future corridor planning work could look at opportunities for mixed uses in station areas and town centers and nodes for transit-oriented development. Such an effort would also provide recommendations on urban street design as well as recommend amendments to local TSPs to implement the preferred multimodal package.
		Beaverton to Wilsonville in the vicinity of WES	The 2040 Growth Concept envisions the connection between the Washington Square regional center and central city as light rail. While portions of the WES alignment are designated as high capacity transit as part of other corridors, the 2018 Regional Transit Strategy and Regional Transportation Plan included WES all-day service improvements in the 2040 constrained investment strategy. As part of expanding the high capacity vision to include rapid bus, the 2023 High Capacity Transit Strategy Update recognizes the need for an improved high capacity transit solution for the full WES corridor which could be light rail, elevating the 76 to rapid bus as an overlapping solution (a recent idea generating jurisdictional partner and community support), or other improvements to WES like increased frequency, all-day and/or double-tracking (supported by many jurisdictional partners). Additionally, the 2018 Regional Transportation Strategy vision went even further to identify a potential extension of commuter rail from Wilsonville to Salem in the 2040 strategic investment strategy- a connection identified as a community need from outreach for the High Capacity Transit Strategy. Both the 2018 Regional Transportation Strategy and Get Moving 2020 recognized the need for a more comprehensive corridor planning process for Highway 217 in the vicinity of WES, including community engagement to identify and prioritize safety and mobility needs, including future roadway, transit access, speed and reliability, and bike and pedestrian facilities on parallel routes. A section of SW Hall Boulevard is one of the most promising candidates for jurisdictional transfer and related implementation activities for safe and healthy urban arterials. A near-term transit study and interim opportunity for this Tier 4 corridor, particularly WES service increases, was identified as a pressing need by jurisdiction partners and business and community members. Additionally, this corridor is within a mile of a highway proposed for tolling and part of the broader travelshed. Supporting work to be done as part of corridor planning includes: • Engage the diverse communities in the corridor to identify and prioritize transportation safety and connectivity needs through an equity, safety and climate lens, and considering other Task Force values. • Provide opportunities to leverage planned transportation, affordable housing, park and trail investments by Metro, Washington County, ODOT, cities and others. • Consider future transit access, speed and reliability investments on parallel or adjacent arterials. Analyze alternatives for corridor transit investments (e.g., light rail, WES improvements, rapid bus) that will improve transit speed and reliability, while also considering land use. • Consider arterial lighting, bus shelter amenities and other investments. • Consider active transportation investments on parallel or adjacent routes, including trail and sidewalk connections, as well as improved marked pedestrian crossings including at all transit stops. • Consider opportunities for mixed uses in station areas and town centers and nodes for transit-oriented development to support the success of WES, since much of the existing land use designations for this corridor are industrial/employment and lower density residential ***Anti-displacement Strategies:*** Displacement indicators suggest displacement may be occurring, with a -3.4% drop in the percent of people of color along the corridor. While property values are increasing in step with the region, income is increasing more slowly. Beyond a future equitable development strategy as part of high capacity transit project development, applying the racial equity strategies identified through the Get Moving 2020 process is recommended to maximize benefits and minimize harm to marginalized communities.
		Gateway to Clark County in the vicinity of I-205 Corridor	I-205 is included in mobility corridor analysis zone 7 for a north/south high capacity transit connection from Gateway to Clark County. The 2008 Clark County High Capacity Transit System Study (also incorporated into C-TRAN 2030) included this corridor connection in the plan (identifying the need for study of the high capacity connection solutions longer-term and providing bus on shoulder nearer-term) and subsequently, the 2018 Regional Transportation Strategy recognized the need for more comprehensive corridor planning for Gateway into Clark County. This corridor is within a mile of a highway proposed for tolling and part of the broader travelshed with a connection spans both TriMet and C-TRAN's service areas, making collaborative partnership critical, and has the potential to either be a parallel/extension of the MAX light rail red line or a rapid bus along I-205 (similar to but upgrading existing express bus service currently provided by #65, #67 and/or #164). More work is needed to define the need, mode, function, performance standards, and general location of facilities within each mobility corridor consistent with the Transportation Planning Rule to ensure land use and transportation planning and decision-making are integrated. A corridor investment strategy to evaluate packages of multimodal improvements that will improve mobility and access along the corridor to jobs, housing and key commercial and industrial areas is needed. This effort would identify a preferred package of transportation improvements and detail how they can be phased for implementation, as well as provide recommendations on urban street design as well as recommend amendments to local TSPs and the Regional Transportation Plan to implement the preferred multimodal package. Additionally, this corridor is particularly long and will likely need to be addressed in sections as part of the corridor planning process.

Source: *Resolution No. 20-5122 Corridor Investment Package Exhibit B: Project Definition Sheets. July 13, 2020. Metro; 2009 High Capacity Transit Plan. 2010. Metro, 2018 Regional Transportation Plan. 2018. Metro; Draft High Capacity Transit Strategy. 2023. Metro; Regional Framework for Highway Jurisdictional Transfer Study. November 2020. Metro; Atlas of Mobility Corridors. October 21, 2015. Metro; Enhanced Transit Corridors Plan. June 20, 2018. City of Portland and TriMet; Portland Streetcar System Concept Plan. September 9, 2009. City of Portland; St. Johns/Lombard Plan. May 26, 2004. City of Portland; North Portland in Motion. Draft May 2023. City of Portland; East Metro Connections Plan. June 7, 2012. Fairview, Gresham, Troutdale, Wood Village, and Multnomah County; City of Troutdale Comprehensive Land Use Plan. Amended September 26, 2014.*

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