BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ADOPTING THE REGIONAL HIGH CAPACITY TRANSIT SYSTEM PLAN SCREENED CORRIDOR MAP AND EVALUATION CRITERIA	))))	RESOLUTION NO. 09-4025 Introduced by Councilor Carlotta Collette

WHEREAS, a system-wide examination of a regional high capacity transit system was completed in 1982 and resulted in nearly 90 miles of light rail transit, commuter rail and streetcar being built and/or planned for construction by 2016; and

WHEREAS, ridership of the existing regional high capacity transit system has exceeded expectations; and

WHEREAS, the regional high capacity transit system has been shown to promote sound and sustainable growth patterns; and

WHEREAS, the regional high capacity transit system has improved mobility and accessibility without increased reliance on single occupancy vehicles; and

WHEREAS, trips on transit in the Portland region replace more than 205,000 car trips daily; and

WHEREAS, high capacity transit carries approximately a quarter of afternoon rush-hour commuters traveling from downtown Portland on the Sunset Highway and Banfield Freeway corridors; and

WHEREAS, trips on transit in the Portland region eliminate more than four tons of smog-producing pollutants and more than 540 tons of greenhouse gas emissions daily; and

WHEREAS, the regional high capacity transit system has helped to leverage more than $6 billion of development in centers, corridors and station areas; and

WHEREAS, the regional high capacity transit system has been shown to create jobs through construction and long-term development, including more than 50 new businesses that opened along the most recent line, Interstate MAX, since construction; and

WHEREAS, an expanded regional high capacity transit system will extend these benefits into the future and increase transit use, walking, and biking; and

WHEREAS, a broad list of proposed high capacity transit system corridors (55) developed with the community and local jurisdictions have been screened based on criteria involving ridership, cost, environmental constraints, social equity, transit connectivity, traffic congestion and regional 2040 Growth Concept land uses; and

WHEREAS, the resulting 15 potential high capacity transit system corridors and Central City improvements would be further analyzed based on a set of evaluation criteria that has been reviewed and approved by the Joint Policy Advisory Committee on Transportation (JPACT) and recommended for approval by the Metro Policy Advisory Committee (MPAC). The evaluation criteria are derived from the

three Regional Transportation Plan (RTP) categories of community, environment and economy and also include a high capacity transit-specific category of deliverability. The evaluation criteria also reflect the six Metro Council outcomes for a successful region; and

WHEREAS, the regional high capacity transit system plan will be incorporated into the Regional Transportation Plan and long-range land use and transportation planning efforts; now therefore

BE IT RESOLVED that the Metro Council hereby adopts the regional high capacity transit screened corridor map (Exhibit A) and detailed HCT criteria for evaluation framework (Exhibit B) of those corridors.

ADOPTED by the Metro Council this 12th day of February 2009.

David Bragdon, Council President

Approved as to Form:

Daniel B. Cooper, Metro Attorney

Officially Approved — Approvato Ufficialmente — Consiglio Metropolitano — Metro Council — METRO COUNCIL

Resolution No. 09.4025 Exhibit A

Going places

REGIONAL HIGH CAPACITY TRANSIT SYSTEM PLAN

Metro

Corridors for Evaluation
02/12/2009

Bi-state HCT corridors to be considered in conjunction with RTC

Portland Central City: To be determined through Central City Plan update

L E G E N D

Transit
- High Capacity Transit* (2009)
- Planned High Capacity Transit (adopted)
- Existing Frequent Bus Route

2040 Growth Concept
- Central City
- Regional Center
- Town Center
- Urban Growth Boundary

HCT Corridors
- HCT Corridors Recommended For Advancement (Lines are representative of general HCT corridors)
- Corridors Not Recommended For HCT Advancement
- RTC HCT Corridors
- Potential Corridor Extensions (corridors extending to neighboring cities to be measured by travel demand)

- Railroad
- School
- Parks/Open Space
- County Boundary

*High Capacity Transit (HCT) can include:
-Light Rail
-Bus Rapid Transit
-Rapid Streetcar
-Commuter Rail

0 2 4 Miles

High Capacity Transit System Plan
Transit Corridors and Improvements for Evaluation
2/12/09

Not in priority order

Segment / Corridor ID*	Segment / Corridor Name
18	Improvements to Steel Bridge
19	Bridge/Rose Quarter Access Improvements
49	Eastside North/South Speed Improvement
50	Downtown East/West Speed Improvement, Downtown Tunnel - Lloyd 11th to Goose Hollow 18th
51	Downtown East/West Speed Improvement, Downtown Jefferson/Columbia via 1st Ave
52	Downtown East /West Speed Improvement, Downtown Everett/Glisan to 18th Ave
8	(CTC - OCTC) via I-205
9	(Park - OCTC) via McLoughlin
10	(Portland - Gresham) via Powell
11	(Portland to Sherwood) via Barbur Hwy 99w
12	(Hillsboro - Forest Grove)
13	(Gresham - Troutdale MHCC) via Kane Dr
16	(CTC - Damascus)
17	(STC - Hillsboro)
17D	(Red Line extension to Tanasbourne) - with revisions from WaCo and Hillsboro
28	(Oregon City - WSTC)
29	(Washington Square - Clackamas)
32	(Hillsboro - Hillsdale)
34	(Beaverton - Wilsonville)
38s	(Tualatin - Sherwood) via Sherwood Rd
43	(St. Johns - Vancouver/Union Station)
54	(Troutdale - St. Johns)
6	(Amber Glen to Tanasbourne)
48	(Murray Hill - Bethany)
56	(Orenco - Clark Hill Rd)
15	(Lents to Pleasant Valley) via Foster Road
27	(Oregon City - Clac CC) - via Hwy213/RRROW
38	(Tualatin - Sherwood) via Sherwood Rd
41	(Lake O - McLoughlin connector)
42	(Vancouver - Damascus)
46	(Cornell - St. Johns)
53	(Hillsboro - Tualatin)
55	(Sunset TC - St. Johns)
57	(Scholls Ferry - Sherwood) via Roy Rogers Rd
17C+46A+46B+43B	(Hillsboro - Vancouver)
41+32B+32C	(McLoughlin - Beaverton)

*Note: Corridors extending to neighboring cities were not considered in this analysis

LEGEND
Central City improvement - recommended for advancement
Corridor - recommended for advancement
Corridor - considered, but not recommended for advancement

memo

To	HCT Team
Cc	
From	Steer Davies Gleave & Nelson\Nygaard
Date	12 February 2009
Project	Portland HCT
Project No.	22026001

Subject Detailed HCT Evaluation Framework –DRAFT FOR DISCUSSION

Overview

In order to select and prioritize the 'best' HCT corridors for investment a robust, coherent and transparent framework for the detailed evaluation of options is required. To date a long list of corridors has been refined to a short list of corridors (~15) that will be subject to the detailed evaluation.

The objective for the detailed evaluation framework is to enable a comparative assessment of the corridors to be made. The framework therefore must:

- Assume a common baseline scenario (2035 Regional Transportation Plan Financially Constrained System) against which each corridor is compared
- Ensure a consistent level of detail across the criteria and be commensurate with the level of project information available
- Enable sufficiently disaggregate scoring, in order that the level of impact can be differentiated between corridors
- Present the information clearly, concisely and on a consistent basis so that decision makers can compare corridors against each other

It is proposed that no explicit weighting is given to the criteria. Having undertaken the initial evaluation there will be a review phase to gain agreement on the prioritization of corridors; for this it is important that decision makers can consider the implications and understand the potential effect of implicitly applying different weightings.

Associated with this approach the assessment of each criterion will be quantified (potentially, as appropriate, as a monetary value) or qualitatively scored, e.g. adverse, beneficial. The intention of this approach is to avoid the addition of scores and the creation of a 'single' number for each corridor, which would negate the whole ethos of undertaking the multiple account evaluation.

Evaluation Approach

The detailed evaluation is not a 'single step' in the process, but rather a tool that is employed on an ongoing basis to assist the shaping and refinement of the corridor prioritization. For each short listed corridor it is anticipated that the project development phase will identify the most plausible forms of mode investment for each corridor based upon the screening assessment (e.g. potential ridership, environmental, land take issues). For example light rail may be the only mode option for corridors which are extensions of the existing system, whereas for other corridors, light rail, BRT, commuter rail and streetcar[1] options may be identified and evaluated.

Therefore for each of the (~15) short listed corridors, it is likely that there will be several plausible mode investments defined. It is against these definitions that the preliminary evaluation will be undertaken.

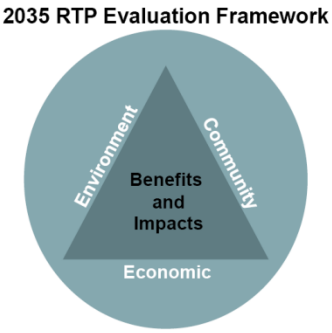
The output from this will support confirmation that the appropriate mode investments have been assumed and inform the strongest candidate, by highlighting the trade-offs that could occur and may deserve further investigation. As appropriate, the draft definition may be refined and the evaluation results revised accordingly.

Supporting this iterative process will be the consideration of the system network effects, in order to ensure the definition of individual corridors does not result in precluding valuable opportunities for integration and delivering benefits due to the 'whole being greater than the sum of the parts'.

Proposed MAE Framework

The Multiple Account Evaluation (MAE) approach is consistent with the Regional Transportation Plan (RTP) Outcomes-Based Evaluation Framework. The framework is organized in three evaluation categories:

- Community
- Environment
- Economy



[1] The 2035 RTP transit policy does not currently contain rapid streetcar as a HCT mode. This concept will be further explored in the context of the HCT system plan, and may result in policy refinements to the 2035 RTP.

Each of the categories is focused upon the effect once the investment is made, namely the transit line opens. However, for the evaluation of the corridors, it is also important to consider the implications of attempting to implement the identified transit solution. A fourth account is therefore included in the MAE to address deliverability.

The MAE framework aligns with the hierarchy of objectives.

- 2040 Growth Concept
- Metro Council adopted definition of what makes a successful region
- 2035 RTP –implementing the region's 2040 Growth Concept
- HCT – supporting the RTP Goals

The Metro Council adopted definition of what makes a successful region includes six goals to promote:

- Vibrant, walkable communities
- Sustained economic competitiveness and prosperity
- Safe and reliable transportation choices
- Minimal contributions to global warming
- Clean air, clean water, healthy ecosystems
- Benefits and burdens of growth distributed equitably

The 10 RTP Goals are:

- Foster vibrant communities and compact urban form
- Sustain economic competitiveness and prosperity
- Expand transportation choices
- Effective and efficient management of transportation system
- Enhance safety and security
- Promote environmental stewardship
- Enhance human health
- Ensure equity
- Ensure fiscal stewardship
- Deliver accountability

These goals can be grouped under the three evaluation categories used in the RTP, which provide the structure for the MAE framework (see Figure 1), alongside the consideration of deliverability and a summary of the corridor characteristics as

produced from the screening exercise. For each evaluation category, criteria addressing different aspects of the category are presented.

The evaluation will be both quantitative and qualitative, depending on the level of project development and extent of information available. As more information becomes available the assessment can be revisited.

Deriving from the framework structure will be a summary sheet designed to provide an overview for each corridor that will allow decision-makers to identify and confirm the mode investments and corridors to be prioritized. Appendix A presents an example of a summary sheet. Associated documentation will provide supporting evidence for the detailed evaluation findings.

In the summary sheet, commentary will present the most significant findings against the criteria and provide a justification of the assessment score (including any assumptions made due to the absence of full information). Where mitigation of a negative impact would be required, it will be described and the score will reflect the mitigated effect.

In the initial stage the scoring will be based upon a seven-point scale:

- Significant benefit
- Moderate benefit
- Slight benefit
- Neutral
- Slightly adverse
- Moderately adverse
- Significantly adverse

Final results will be presented in tiered categories.

Multiple Accounts

The following sections detail the specific criteria that will be used to evaluate corridors against the four accounts:

- Community
- Environment
- Economy
- Deliverability

A description of essential corridor characteristics will also be provided as part of the evaluation. This information is described in the first table of Figure 1.

System Expansion Policy

It is important to note that this level of evaluation is designed to provide a preliminary prioritization of corridors and narrow mode investment options. The assessment will be based on current and projected land use conditions. However, it is recognized that projections are never completely accurate and that conditions will change over time.

To account for these changes, a System Expansion Policy including a separate set of criteria required for project advancement is proposed.

These criteria would provide communities along a corridor an opportunity to make proactive changes to land use and access policies. Jurisdictions benefiting from a proposed alignment or project would be expected to submit Ridership Development and Financial Plans before moving to the next phase of project advancement.

The following graphic illustrates how HCT projects would be prioritized in the System Plan process and the role of proposed project advancement criteria, which would allow jurisdictions to change the priority of an adopted HCT system project.

HCT System Plan Evaluation and System Expansion Policy

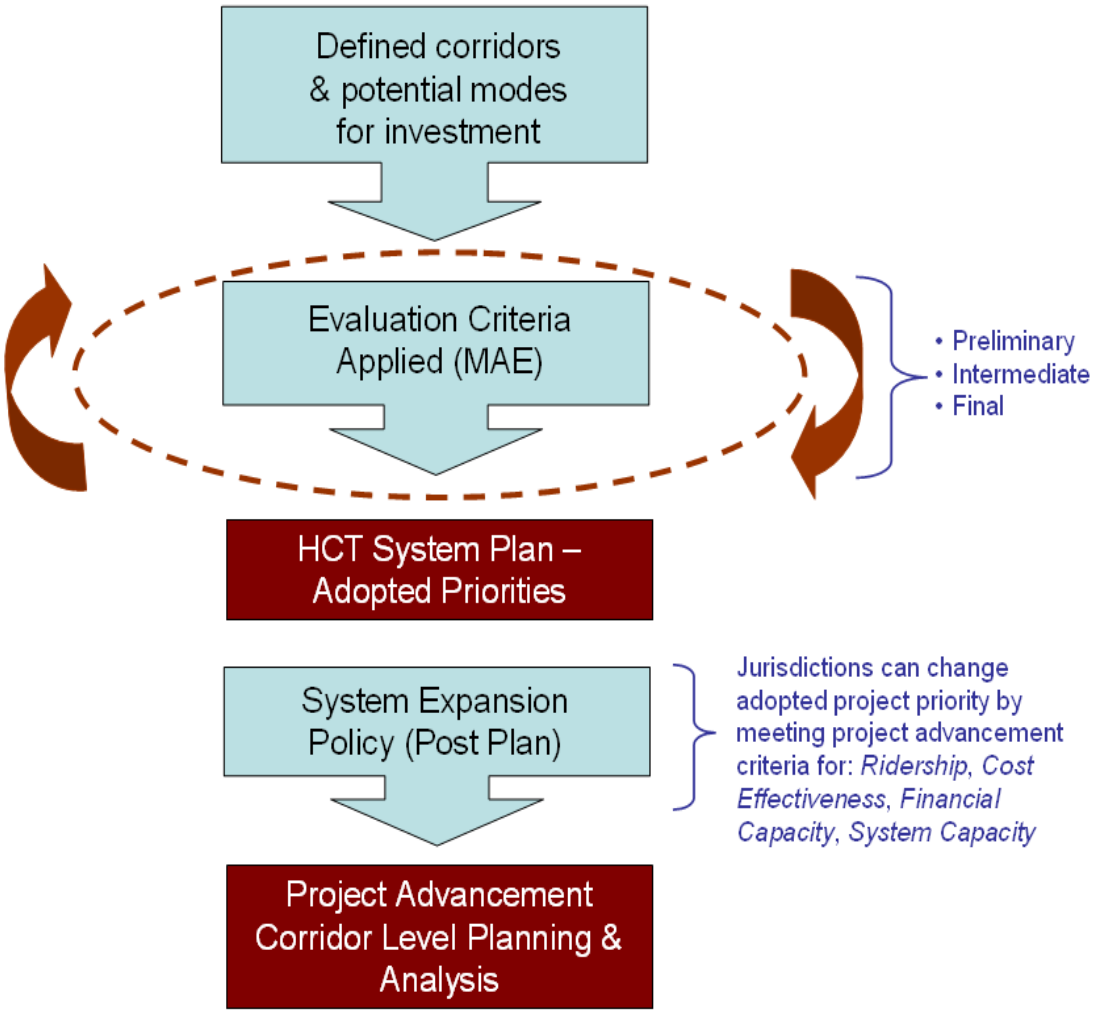


Figure 1 – MAE FRAMEWORK

COMMUNITY EVALUATION CATEGORY

Criteria	Measure	Role	Method
Supportiveness of existing local land use and adopted local transportation plans and policies	Qualitative scoring based on plan review	Identification in strategic terms of consistency or inconsistency with other proposed plans or policies	Existing LU
Aspirations of local communities	Qualitative scoring based on *Local Aspirations* process	Local populations may or may not wish to trade-off improved transit against other potential investments or may have concerns about the impact of HCT on urban form. Since a high level of local commitment is required for project development, communities that display strong commitment to project success should be acknowledged.	Rely on Metro Local Aspiration Process (reflective of regional goals/policies) Criterion to support local aspirations process with INDEX model
Ridership generators	Identification of major activity centers served, e.g. l Hospital & medical centers l Major retail sites l Major social service centers l Colleges / universities l Major Federal / State Government offices l Employers > 500 employees l Sports sites / venues	Ensuring the proposed corridor encompasses both current and future key demand attractors and generators and meets the requirements of transit to provide a service to and from where people wish to travel.	Evaluate TriMet's top 30 generators; o-d date from travel demand model. Housing not included as a major activity center, but is captured via TOI analysis

COMMUNITY EVALUATION CATEGORY

Criteria	Measure	Role	Method
Support the regional 2040 Growth Concept	1. Central City, Regional Centers, Industrial areas, Freight and Passenger Intermodal facilities 2. Employment areas, Town Centers, Station Communities, Corridors, Main Streets 3. Inner and Outer Neighborhoods	Rank based on Service to 2040 land use types, consistent with RTP for service types related to primary, secondary and other urban components.	Support Region 2040 land use designations based on RTP priority areas
Transportation network integration - Transit	Identification of full trip benefits due to integration with transit transfer centers and interchange opportunities	Consideration of the network benefits that can be achieved, including both physical integration (i.e. good interchange opportunities), system integration (i.e. timetabling connecting services, through ticketing) and redundancy	Metro and TriMet to conduct a similar exercise to the screening criterion
Transportation network integration – Roads, use of ROW	Where roadways may be used for HCT ROW planned status of ROW (i.e. are plans in place to use ROW, including whether the facility is NHS and/or freight route.	Help to clarify what is the function of the facility.	Review of jurisdictional plans.
Transportation network integration – Ability to avoid congestion	Consider HCT ability to bypass congested areas compared to comparable non-HCT transit in mixed traffic		
Equity	Catchment analysis for social groups (low income and minority census tracts) within walking access (1/4 mile) to a stop	Consideration of those who may receive greatest benefit from the transit investment due to reduction of current barriers to travel reduced cost of travel.	Census and Metro Transportation Equity Analysis for the RTP

COMMUNITY EVALUATION CATEGORY

Criteria	Measure	Role	Method
	Analysis of % of households with no vehicle available	Members of these households are likely transit consumers. Analysis includes: low and very-low income, racial minority, seniors, disabled people, low car ownership.	
Safety	Qualitative, based on adherence to good design standards	Direct safety impacts due to design and placement of HCT in ROW (i.e. physically segregated, running with general traffic, on-street stops).	Selection of corridors that have extraordinary conditions that may present a safety issue (e.g., freeway, elevated, trench, etc)
Health (Promote physical activity)	Comprehensiveness of pedestrian and cycling network Increase in average bicycle and pedestrian mode share	Assess benefits from increased physical activity caused by greater pedestrian access to transit and increased walking and cycling within the corridor.	Model and spreadsheet analysis
Housing + Transportation Affordability Index	Analysis of housing and transportation costs as percent of total household income.	Indirect measure of areas where transit demand by assessing the impact of transportation costs on housing choices.	Metro
Placemaking/Urban Form	Identification of impacts on urban composition and public space function	Potential to enhance land development; increase mix of land uses; enhance public spaces	Focus this on an assessment of vacant and underdeveloped land. Metro has done work on developable land in the region.
Transportation efficiency (Users)	Average travel time benefit per rider and distribution of benefits across the line and the system. This measure will also determine whether HCT is an effective	The average travel time benefit will demonstrate the effectiveness of the option across the system. The assessment of distribution will identify the 'winners and losers'	Model/TriMet

COMMUNITY EVALUATION CATEGORY

Criteria	Measure	Role	Method
	mode compared to non-HCT transit through congested areas.	across the system (e.g. if an extension results in new demand causing crowding on an existing section of route).	

ENVIRONMENT EVALUATION CATEGORY

Criteria	Measure	Role	Method
Emissions & disturbance	Change in VMT and resulting emission levels for CO2 and other harmful pollutants such as NOx and SOx. (Potentially for the full project life-cycle)	Impacts on local air pollution, greenhouse gases and noise. Transportation related environmental impacts tend to track closely to VMT, making it a valuable proxy for emissions and air quality related measures.	Model
Natural resources	Length of alignment impacting identified sensitive habitats and/or natural resources	Impacts on environmentally sensitive areas due to land take or proximity to major infrastructure.	RLIS
4(f) resources	Acres of 4(f) resources impacted	Impacts on the amenity value of parkland, schools and other 4(f) resources.	RLIS

ECONOMY EVALUATION CATEGORY

Criteria	Measure	Role	Method
Transportation efficiency (Operator)	Cost per rider	To identify the financial performance of the day-to-day operations.	Metro/TriMet
Transportation efficiency (System)	Annualized capital and operating cost per rider	To identify the overall cost-effectiveness of the corridor.	Metro/TriMet
Economic competitiveness	Change in employment catchment	Improved transit and land use will increase the labor market's access to employment centers and promote re-development of employment sites.	Metro
Rebuildability	Vacant and rebuildable		Metro

DELIVERABILITY EVALUATION CATEGORY

Criteria	Measure	Role	Method
Feasibility (Construction)	Capital cost	Flag for instances where negative impacts from construction of the project may be so great as to outweigh project benefits.	Sketch level engineering
Feasibility (Operations)	Operating cost	Ensure design of the project enables efficient operations; assess impact of project on existing system function/capacity.	Also focus on what impact new corridor operations would have on existing lines. TriMet should be involved in this evaluation.
Ridership	Ridership	Evaluate total ridership, ridership per revenue hour and revenue mile, system ridership impact.	Model
Funding potential	Initial assessment of local and federal funding opportunities to cover estimated capital and operating costs	Most projects will not have funding sources identified. The intent is to identify key obstacles to successful funding or reward any project that has substantial identified local funding. A more detailed funding plan will be required at the project advancement phase.	Not to focus on existing FTA program criteria but assessment of likelihood of receiving federal funds.
Cost per mile	Capital cost per mile	To act as a comparative tool to measure corridors of different length.	Sketch level engineering.

STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO. 09-4025 FOR THE PURPOSE OF ADOPTING THE REGIONAL HIGH CAPACITY TRANSIT SYSTEM PLAN SCREENED CORRIDORS AND EVALUATION CRITERIA.

Date: January 28, 2009 Prepared by: Tony Mendoza 503-797-1726

BACKGROUND

Introduction

The *Regional High Capacity Transit System Plan* is being developed as a component of the *Regional Transportation Plan (RTP)*. The *Regional HCT System Plan* will be a 30-year plan for prioritizing HCT investments in new corridors and changes to existing corridors. The results will be incorporated and further studied in the *RTP* and will be the basis for initiating future project development steps necessary to qualify for funding. Of the variety of public transit system functions (e.g., local bus, paratransit, regional bus, frequent bus and HCT), the *Regional HCT System Plan* is designed to focus on the HCT element of the public transit system. HCT modes can include light rail, commuter rail, bus rapid transit or rapid streetcar and include a significant amount of exclusive right of way.

A system wide examination of a regional high capacity transit system was completed in 1982 as part of the Regional Transportation Plan, identified as the *Regional Long-range Regional Transitway System*. This plan has resulted in nearly 90 miles of light rail transit, commuter rail and streetcar being built and/or being planned for construction by 2016.

Per tracking by TriMet, documented in its Transit Investment Plan, ridership of the existing regional high capacity transit system has exceeded expectations. The regional high capacity transit system has been shown to promote sound and sustainable growth patterns and has improved mobility and accessibility without increased reliance on single occupancy vehicles, carrying approximately one quarter of afternoon rush-hour commuters traveling from downtown Portland on the Sunset Highway and Banfield Freeway corridors. Trips on transit in the Portland metro region replace over 205,000 car trips per day, averting over four tons of smog-producing pollutants and over 540 tons of greenhouse gas emissions daily. Transportation modeling for the 2035 RTP update establishes that an expanded regional high capacity transit system shows promise for increasing transit use, walking, and biking and extending these benefits into the future.

The regional high capacity transit system has helped to leverage more than $6 billion of development in centers, corridors and station areas. The regional high capacity transit system has been shown to create jobs through construction and long-term development, such as the more than 50 new businesses that opened along Interstate MAX since construction.

The *Regional HCT System Plan* tells us where the best locations are for major rail and bus transit capital investments based on evaluation criteria derived from the *RTP*. The *RTP* tells us whether HCT is the right transportation choice relative to other potential transportation investments. *Making the Greatest Place* tells us whether HCT is the right transportation choice to support the land use in any given corridor or center based on the *2040 Growth Concept*. The function of HCT within the region is being considered as part of this plan, including weighing the benefits of providing more localized direct access compared to faster, regional access.

Non-HCT transit is planned by TriMet, SMART and other transit providers. The *Regional HCT System Plan* is not a funding plan. Future decisions will be made regarding investing in HCT projects versus other needed transportation improvements.

Public Outreach

Feedback from residents, businesses, community organizations and elected officials identified 192 potential connections in about 55 corridors around the regions. Suggestions were requested as part of the update to the *Regional High Capacity Transit System Plan*.

During July through November 2008, more than 50 stakeholders were interviewed, more than 150 people attended public workshops and more than 200 people were informed about the project and offered suggestions at farmers markets and other public events. More than 200 people participated in an interactive questionnaire on Metro's web site from Aug. 12 to Oct. 1, 2008. For more information, please see *Attachment 1: Public outreach summary*.

In addition, the HCT Think Tank serves as a forum for exploring ideas and options at project milestones. Members are asked to deliberate on issues defined by staff. Think Tank deliberations provide the staff with guidance on the appropriateness and comprehensiveness of staff work, as well as the range of issues and implications of options considered at each step of the study.

Process

The 192 potential connections in 55 corridors were assessed based on ridership, cost, environmental constraints, social equity, transit connectivity, traffic congestion and the regional *2040 Growth Concept* land uses to determine viable corridors for the next phase of public review and input.

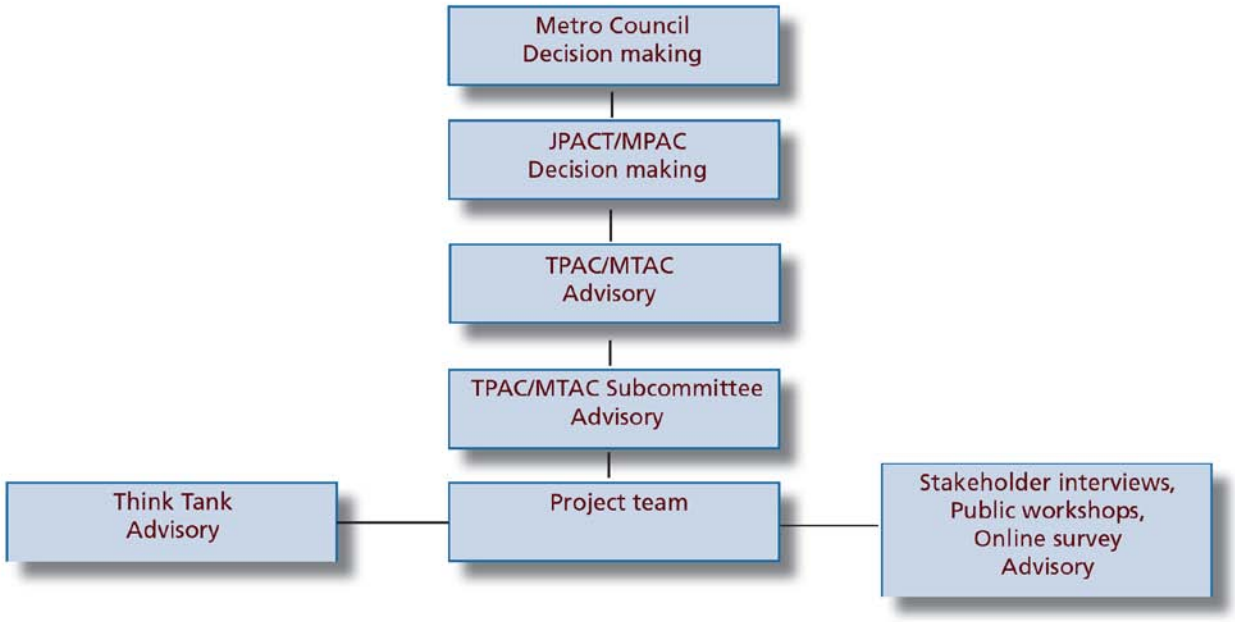
The resulting 15 high capacity transit system corridors and will be evaluated based on a set of evaluation criteria that has been reviewed and approved by MTAC, TPAC, MPAC and JPACT. The evaluation criteria are derived from the three *RTP* evaluation framework categories of community, environment and economy, and also an HCT-specific category of deliverability. The evaluation criteria also reflect the six Metro Council outcomes for a successful region.

In addition to the 15 high capacity transit system corridors, improvements to the system in the and other peak use areas along the existing alignment will be evaluated. The analysis will also examine a number of commuter lines that extend outside the region, looking at transportation demand only.

While applying the evaluation criteria, the study will explore the costs and benefits associated with placement of future high capacity transit in new right of way and placement in existing travel lanes.

The HCT project team used existing committees for advice, feedback and confirmation of key decisions thus far. *Figure 1* illustrates the decision-making and advisory hierarchy.

Figure1. The Regional High Capacity Transit System Plan decision-making structure



The HCT TPAC/MTAC Subcommittee is charged with reviewing public input and technical analysis to provide guidance and consensus-based recommendations that reflect the interests and priorities of local jurisdictions through the *Regional High Capacity Transit System Plan* process. The subcommittee includes 18 representatives from the Metro Technical Advisory Committee (MTAC) and the Transportation Policy Alternatives Committee (TPAC) or the designees of the members. The subcommittee provides ongoing guidance to the project and formal consensus-based recommendations to MTAC and TPAC at key decision points such as the identification of alternatives, development of an evaluation framework and prioritization of alternatives.
The screened corridors and the evaluation criteria have been confirmed by the HCT TPAC/MTAC Subcommittee, TPAC, MTAC, JPACT and MPAC. *Figure 2* shows the proposed and working timeline for this confirmation process.

In addition, the HCT corridors have been coordinated with the City of Portland's developing Streetcar System Plan, TriMet's Transit Investment Plan (FY 08), and the Southwest Washington Regional Transportation Council (RTC) HCT Plan. Jurisdictions have suggested changes which have been addressed through TPAC, MTAC, MPAC and JPACT.

Next Steps

Based on the evaluation, the 15 high capacity transit corridors, Central City and potential system improvements, will be grouped into tiers. Further refinement and discussion will guide future high capacity transit investment decisions, in coordination with the Regional Transportation Plan.

Tasks	Timeframe				
	October 2008	November 2008	December 2008	January 2009	February 2009
Confirm screening criteria	TPAC	MTAC			
Apply screening criteria and confirm initial set of screened corridors and projects		TPAC MTAC	TPAC MTAC MPAC JPACT	MPAC JPACT Metro Council	Metro Council
Approve/confirm evaluation criteria		TPAC MTAC	TPAC MTAC JPACT	MPAC JPACT Metro Council	Metro Council

Resolution Materials

Exhibit B illustrates work on screening the wide range of over 55 potential corridors and improvements to a reasonable set of approximately 15 corridors and Central City improvements as shown in *Exhibit A* to be advanced through a feasibility and prioritization process. The corridors are illustrative for this high level cost analysis. Specific alignments would be determined during further analysis, such as during an Alternatives Analysis or Environmental Impact Statement. The Evaluation Criteria will be applied to these screened corridors for prioritization (*Exhibit B, page 7*).

ANALYSIS/INFORMATION

Known Opposition

No known opposition.

Legal Antecedents

Ordinance No. 82-135 *For the purpose of adopting the Regional Transportation Plan*

Resolution No. 83-383 *For the purpose of endorsing the regional light rail transit (LRT) system plan scope of work and authorizing funds for related engineering services*

Resolution 07-383 1B *For the purpose of approving the federal component of the 2035 Regional Transportation Plan (RTP) Update, Pending Air Quality Conformity Analysis*

Anticipated Effects

Adoption of this resolution would enable the evaluation of high capacity transit corridors to advance. A Resolution to approve the Regional High Capacity Transit System Plan is expected to be presented to the Metro Council in July 2009 after review and recommendation by MTAC, TPAC, MPAC and JPACT.

Budget Impacts

There would be no direct impact on the Metro budget as a result of taking action on this resolution.

RECOMMENDED ACTION

Approve Resolution No. 09-4025 For the Purpose of Adopting the Regional High Capacity Transit System Plan Screened Corridors and Evaluation Criteria.

- Adopt the set of approximately 15 corridors and Central City improvements to be advanced through a detailed evaluation process.
- Adopt the evaluation criteria that will be applied to these screened corridors.

Resolution Exhibits

- Exhibit A: Map of Screened Corridors
- Exhibit B: Memo: Detailed HCT Evaluation Framework – Draft for discussion

Staff Report Attachments

- Attachment 1: Public Outreach Summary
- Attachment 2: Initial Screening Criteria
- Attachment 3: Screening Results
- Attachment 4: Long Range Regional Transitway System (1982 map)

Going places
REGIONAL HIGH CAPACITY TRANSIT SYSTEM PLAN

High Capacity Transit System Plan Public outreach summary summer/fall 2008

Project status

Feedback from residents, businesses, community organizations and elected officials identified 192 potential connections in about 55 corridors around the regions. Suggestions were requested as part of the update to the Regional High Capacity Transit System Plan. Metro is currently working to screen and evaluate viable corridors for the next phase of public review and input.

The system plan will help for prioritize high capacity transit investments in new corridors and changes to existing corridors over the next 30 years. The system plan tells Metro where the best locations are for major rail and bus transit capital investments based on evaluation criteria derived from the Regional Transportation Plan. The results will be incorporated into the Regional Transportation Plan, the Portland metropolitan area's blueprint for a multi-modal transportation system.

During July through November, more than 50 stakeholders were interviewed, more than 150 people attended public workshops and more than 200 people were informed about the project and offered suggestions at farmers markets and other public events. More than 200 people participated in an interactive questionnaire on Metro's web site from Aug. 12 to Oct. 1, 2008.

The screening process will assess potential corridors based on existing and future potential ridership, corridor availability and cost, environmental impacts, equity considerations, connectivity to the current system, congestion reduction, and support for regional 2040 land-use designations, among other measures. It is estimated that 10 to 20 viable corridors will pass the screening criteria and be evaluated at a more detailed level.

In spring 2009, Metro will share evaluation results with the public and begin discussing tradeoffs, choices and priorities. An interactive web survey and other public outreach events will happen at this time.

Overview of stakeholder interviews, public workshops, online questionnaire and community events

During July through October, more than 50 stakeholders were interviewed for the High Capacity Transit (HCT) System Plan. To capture as many viewpoints as possible and accurately represent the divergent views found across the region, stakeholders representing viewpoints related to eight of the ten goals for the Regional Transportation Plan (RTP) were identified for interviews. These included business and community leaders, transportation and transit providers, safety and

security experts, developers, economic development professionals, social service and nonprofit organizations, environmental groups and elected officials.

Between Aug. 12 and Aug. 20, Metro held four public workshops to engage participants in a discussion of HCT plan goals and to identify potential high capacity transit corridors. The workshops, held in Hillsboro, Oregon City, East Portland and Tigard, also provided an opportunity to learn about the plan's purpose and schedule and related Metro projects such as the RTP, Urban and Rural Reserves, Performance Measures. A written comment form offered individuals an opportunity to provide feedback in addition to the transit connections drawn on maps in discussion groups. A total of 104 attendees signed in at the four workshops: 26 in Hillsboro, 16 in Oregon City, eight in East Portland and 54 in Tigard.

With the first workshop on Aug. 12, an interactive questionnaire went live on Metro's web site. More than 200 people completed the online questions about which centers and corridors were important to serve with high capacity transit, barriers to using transit and goals for the system. The questionnaire was advertised at the workshops, community group meetings and events, farmers' markets and through blogs and e-newsletters. The questionnaire was removed from the web site and closed on the morning of Oct. 1, 2008.

The project team coordinated with the Drive Less/Save More community event booth to have a presence at the Willamette River Riverfest on Aug. 31 and Sept. 6, talking to more than 100 people about the project, handing out collateral and encouraging visits to the project web site. The project had its own community event booth at the Beaverton, Lents, Portland Ecotrust and Gresham farmers markets in September where staff informed more than 200 residents about the project and collected suggestions for possible connections.

A scaled-down version of the workshop presentations was also given to the Oregon City Rotary Club on Aug. 27. Close to 50 participants offered origins and destinations to be considered. The workshop format was also altered to fit a meeting of the Hillsboro Chamber of Commerce on Sept. 30, where approximately 35 participants gave feedback on the goals as well as potential corridors and other things to consider during the process.

Themes resulting from outreach efforts

Access

- Serve employment areas and major institutions (educational and health), shopping areas and activity centers (e.g. Oregon Zoo, OMSI, Rose Garden, parks and greenspaces) along with regional and town centers.
- Create links between stations and neighborhoods by integrating stations into surrounding communities, considering bike and pedestrian facilities around stations and providing good local transit service to get people to and from stations.

Service and speed

- Provide more suburban-to-suburban connections and faster service through downtown Portland
- Provide flexibility in service times and modes and improved access for transit-dependent groups (low income, elderly, etc.), especially in the suburbs

Safety and security

- Improve safety on transit vehicles and at stations
- Give special attention to crossings where transit vehicles and people or cars interact

Land use

- Connect land use to public transportation to create compact commercial, residential and mixed-use development to support transit ridership

Project timeline

Initial Screening Criteria FINAL REVISED DRAFT, 11-7-08, based on 10-22-08 Subcommittee, 10-31-08 TPAC and 11-05-08 MTAC

CRITERION	MEASUREMENT	PROPOSED SCREENING TARGET	
QUANTITATIVE CRITERIA			
Existing Potential Ridership	Transit Orientation Index	High	> 5.0 riders per acre
		Medium-High	4.0-5.0 riders per acre
		Medium	3.0-4.0 riders per acre
		Low-Medium	1.5-3.0 riders per acre
		Low	< 1.5 rider per acre
Future Potential Ridership	Transit Orientation Index	High	> 5.0 riders per acre
		Medium-High	4.0-5.0 riders per acre
		Medium	3.0-4.0 riders per acre
		Low-Medium	1.5-3.0 riders per acre
		Low	< 1.5 rider per acre
QUALITATIVE CRITERIA			
Corridor Availability and Cost	Qualitative assessment of right of way availability and associated access improvements (Includes geological hazards)	High	Minimal right of way or few structures required
		Medium	Moderate right of way or structures required
		Low	Major land acquisition, tunneling, bridge work or extensive ROW required
Environmental Constraints	Qualitative assessment of impact on natural resources	High	Minimal potential negative impacts to natural resources
		Medium	Moderate potential negative impacts to natural resources
		Low	Significant potential negative impacts to natural resources
Equity	Qualitative assessment of social equity needs	Does promote equity	Directly serves low-income and minority communities
		Slightly promotes equity	Provides indirect access to low-income and minority communities
		Does not promote equity	No access provided to low-income and minority communities
Connectivity and System	Qualitative assessment of transit system connectivity, intermodal connectivity, maintenance yard site or other transit system needs.	High	Strong connectivity and/or system benefits
		Medium	Moderate connectivity and/or system benefits
		Low	Poor connectivity, and/or system benefits

Congestion	Recognition of congestion parallel to proposed corridor	High	LOS F (2035 PM Peak 2-Hour; Mid-Day 1-Hour); Vehicle/Capacity Ratio
		Medium-High	LOS E (2035 PM Peak 2-Hour; Mid-Day 1-Hour); Vehicle/Capacity Ratio
		Medium	LOS D (2035 PM Peak 2-Hour; Mid-Day 1-Hour); Vehicle/Capacity Ratio
		Low-Medium	LOS C (2035 PM Peak 2-Hour; Mid-Day 1-Hour); Vehicle/Capacity Ratio
		Low	LOS A-B (2035 PM Peak 2-Hour; Mid-Day 1-Hour); Vehicle/Capacity Ratio
2040 Land Use	Support Region 2040 land use designations based on RTP priority areas	High	• Central city • Regional centers • Industrial areas • Freight and Passenger Intermodal facilities
		Medium	• Employment areas • Town centers • Station Communities • Corridors • Main Streets
		Low	• Inner neighborhoods • Outer neighborhoods

Screening Results by Segment/Project

		Screening Results									
		1-3	1-5	1-5	1-5	1-3	1-3	1-3	1-5	1-5	1-3
Segment / Corridor ID	Segment / Corridor Name	Connectivity and System Score	O-D	Existing Potential Ridership	Future Potential Ridership	Corridor Availability and Cost	Environmental Constraints	Equity	Congestion (Midday)	Congestion (Peak)	2040 Land Use
6	(Amber Glen to Tanasbourne)	Low	Low	Low	Low-Medium	Medium	High	Low	Low	Medium-High	Low
8	(CTC - OCTC) via I-205	High	Medium	Low	Low-Medium	Medium	Medium	Medium	Medium-High	High	Medium
9	(Park - OCTC) via McLoughlin	High	Low	Low	Low	Medium	Medium	Low	Low	High	Medium
10	(Portland Mall - Gresham) via Powell	Medium	Low-Medium	Low-Medium	Medium	Medium	Medium	High	High	High	High
10A	(Portland Mall - I-205) via Powell	High	High	Medium	High	Low	Medium	Low	High	High	High
10B	(I-205 - Gresham) via Powell	Medium	Low-Medium	Low	Low	Medium	High	High	High	High	High
11	(Portland to Sherwood) via Barbur Hwy 99w	Low	Low-Medium	Low-Medium	Medium	Medium	Medium	Low	High	High	High
11A	(Portland to Terwilliger) via Barbur Hwy 99W	Medium	Medium-High	High	High	Low	Medium	Low	Low	High	High
11B	(Terwilliger to Multnomah) via Barbur Hwy 99w	Low	Medium	Low	Low	Low	Medium	Low	Low	High	High
11C	(Multnomah to Tigard) via Barbur Hwy 99w	Low	Low	Low	Low-Medium	Medium	Medium	Low	Medium-High	High	High
11D	(Tigard -King City) via Barbur Hwy 99w	Low	Low	Low	Low	Medium	High	Low	High	High	High
11E	(King City - Sherwood) via Barbur Hwy 99w	Low	Low	Low	Low	Medium	High	Low	High	High	High
11T	(Portland to Multnomah) via TUNNEL Barbur hwy 99w	Medium	Medium-High	Medium	High	Low	Medium	Low	Low	High	High
12	(Hillsboro - Forest Grove)	Medium	Medium	Low	Low	High	Medium	High	Medium-High	High	Medium
13	(Gresham - Troutdale MHCC) via Kane Dr	Medium	Low	Low	Low-Medium	Medium	Medium	Low	Low	High	Medium
15	(Lents to Pleasant Valley) via Foster Road	Low	Low	Low	Low	Medium	Medium	Low	Medium-High	High	Low
16	(CTC - Damascus)	Medium	Low-Medium	Low	Low	High	Medium	High	High	High	Medium
16A	(CTC - Damascas) via Sunnyside	Medium	Low-Medium	Low	Low-Medium	Medium	High	Low	Medium	High	Medium
16B	(Gresham - Damascus) via 232nd/242nd Ave	Low	Low	Low	Low	High	High	Low	Medium	High	Medium
16C	(CTC - Damascas) via Hwy 212/224	Medium	Low-Medium	Low	Low	Medium	Medium	High	High	High	Medium
17	(STC - Hillsboro)	Low	Low-Medium	Low	Low-Medium	High	Medium	Low	Medium-High	High	Medium
17A	(Shute - St Vincent) via Evergreen/US26	Medium	Low-Medium	Low	Low-Medium	Medium	Medium	Low	Medium-High	High	Medium
17B	(Hillsboro -Shute) via Evergreen	Low	Medium	Low	Low	Medium	High	Low	Medium	High	Medium
17C	(Hillsboro-Shute) via Cornel/Shute	Low	Medium	Low	Low-Medium	High	Medium	Low	Medium	High	Medium
17D	(Tanasbourne - Blue Line)	Low	Medium	Low	Medium	Medium	Medium	Low	Low	Medium-High	Medium
18	Improvements to Steel Bridge	High	High	High	High	High	High	Low	Low	Medium	High
19	Bridge Improvements	High	High	High	High	Medium	Low	Medium	Low	Medium	High
27	(Oregon City - Clac CC) - via Hwy213/RRROW	Low	Low	Low	Low	Medium	Low	Low	Medium-High	High	Low
28	(Oregon City - WSTC)	Low	Low	Low	Low-Medium	High	Medium	Low	High	High	Medium
28A	(Oregon City - West Linn) via new bridge	Low	Low	Low	Low	Low	Low	Low	High	High	Medium
28B	(West Linn - Tualatin) via I-205	Low	Low-Medium	Low	Low	Medium	Medium	Low	Medium	High	Medium
28C	(Tualatin - Tigard) via WES	Medium	Low	Low-Medium	Low-Medium	High	High	Low	High	High	Medium
28D	(Tigard - WSTC) via WES	Low	Low-Medium	Low-Medium	Medium	High	High	Low	Low	High	Medium
29	(CTC - Clackamas)	Medium	Low	Low	Low-Medium	High	Medium	High	Medium-High	High	Medium
29A	(CTC - Milwaukie) via Hwy 224	Medium	Low-Medium	Low	Low-Medium	Medium	Medium	Medium	Medium	Medium-High	Medium
29B	(Milwaukie - Lake O) via RR bridge	High	Low	Low	Low-Medium	High	Medium	Medium	Medium-High	High	Medium
29C	(Lake O - Tigard TC) via RR ROW	Medium	Low	Low	Low-Medium	High	Medium	Low	Medium-High	High	Medium
29D	Tigard TC - WSTC) via WES ROW	Low	Low-Medium	Low-Medium	Medium	High	Medium	Low	Medium-High	High	Medium
29E	(Boones Ferry - Tualatin) via RR ROW	Low	Low-Medium	Low-Medium	Low-Medium	High	Medium	Low	Medium-High	High	Medium
29F	(Milwaukie - Clackamas)	High	Low-Medium	Low	Low-Medium	Medium	High	Low	Low	Low	Medium
32	(Hillsboro - Hillsdale)	Low	Low	Low	Low-Medium	High	Medium	Medium	Medium-High	High	Medium
32A	(Hillsboro - Aloha - Beaverton) via TV Hwy	Medium	Low-Medium	Low	Low-Medium	High	Medium	High	Medium-High	High	Medium
32B	(Barbur - Lake O connector)	Low	Low	Low	Low	Medium	Medium	Low	Medium-High	High	Medium
32C	(Beaverton - Raleigh Hills - Hillsdale) via Beaverton Hillsdale	Low	Low-Medium	Low	Low-Medium	Medium	Medium	Low	Medium	High	Medium
34	(Beaverton - Wilsonville)	Low	Low	Low	Low-Medium	Medium	Medium	Medium	High	High	Medium
34A	(Beaverton - Washington Sq) via Hall	Medium	Medium	Low-Medium	Medium	Medium	High	Low	Medium	High	Medium
34B	(Washington Sq - Tigard) via Hall	Low	Low-Medium	Low	Low-Medium	Medium	High	Low	Medium-High	High	Medium
34C	(Tigard - Tualatin) via 217/I5	Low	Low	Low-Medium	Medium	Medium	Medium	Low	High	High	Medium
34D	(Tualatin - Wilsonville) via I5	Low	Low	Low	Low	Medium	High	Low	High	High	Medium
38	(Tualatin - Sherwood) via Sherwood Rd	Low	Low	Low	Low	Medium	High	Low	Medium	High	Low
41	(Lake O - McLoughlin connector)	Medium	Low	Low	Low	Low	Medium	Low	High	High	Low
42	(Vancouver - Damascus)	Low	Low	Low	Low	Medium	Low	Medium	Medium-High	High	Medium

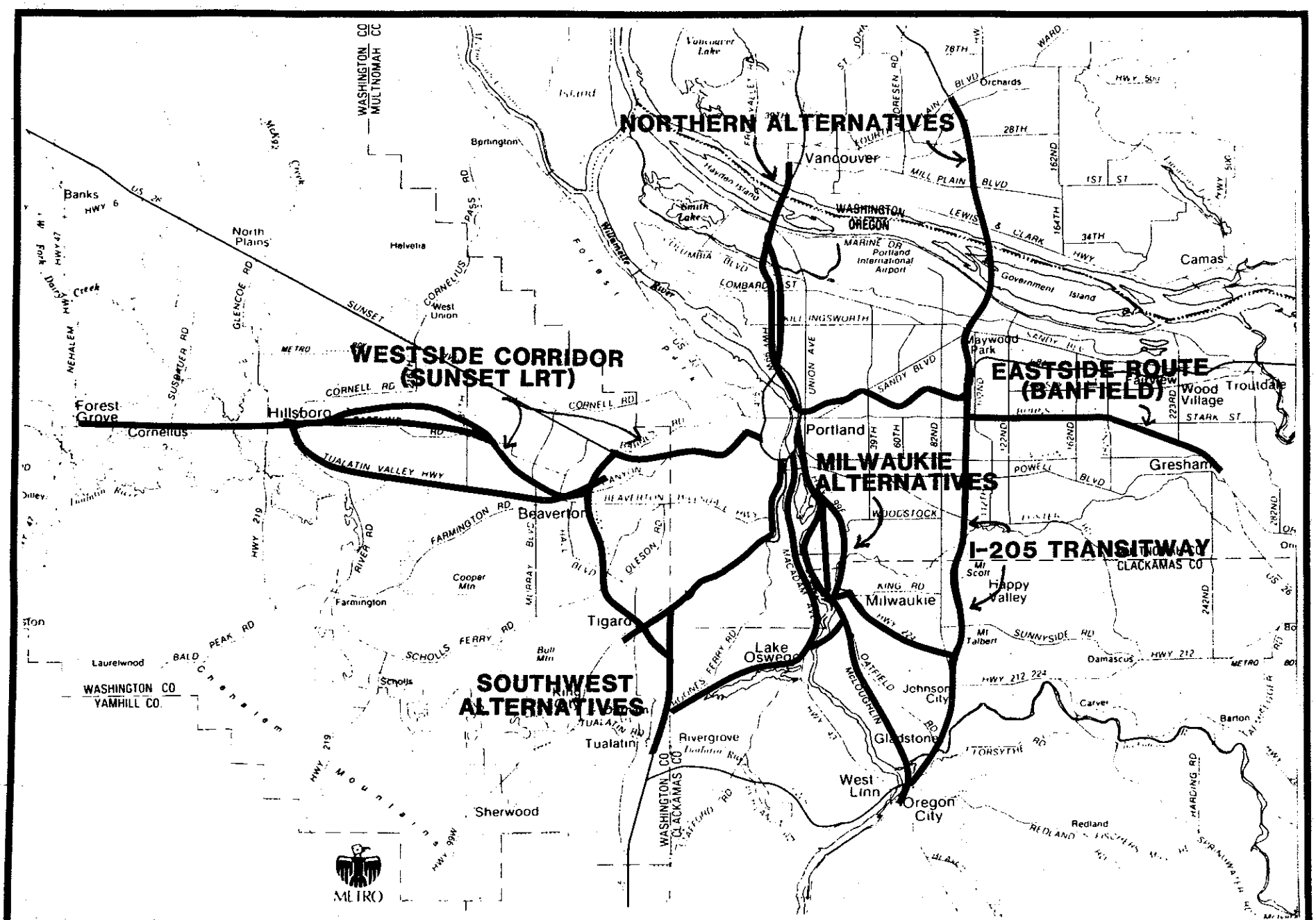
Segment / Corridor ID	Segment / Corridor Name	Screening Results									
		1-3	1-5	1-5	1-5	1-3	1-3	1-3	1-5	1-5	1-3
		Connectivity and System Score	O-D	Existing Potential Ridership	Future Potential Ridership	Corridor Availability and Cost	Environmental Constraints	Equity	Congestion (Midday)	Congestion (Peak)	2040 Land Use
42A	(Marine Drive - Vancouver) via 182nd	Low	Low	Low	Low	Low	Low	Low	Low	Medium-High	Low
42B	(Marine Drive - Rockwood) via 182nd	Low	Low-Medium	Low	Low-Medium	Medium	Medium	Low	Low	Medium-High	Medium
42C	(Rockwood - Pleasant Valley) via 182nd	Low	Low	Low	Low	Medium	Medium	Medium	Low	High	Medium
42D	(Pleasant Valley - Damascas) via Foster	Low	Low	Low	Low	High	High	Low	Medium-High	High	Low
43	(St. Johns - Vancouver/Union Station)	Low	Medium-High	Low-Medium	Medium	High	Low	High	High	High	High
43A	(St. Johns to RR)	Low	Medium	Low	Low-Medium	High	Medium	Low	Low	Low	High
43B	(RR to Vancouver) via UPRR Railroad Bridge	Low	Low	Low	Low-Medium	High	Low	Medium	Low	Medium	High
43C	(Union Station - St. Johns) via RR Bridge	Medium	High	Low-Medium	High	High	Medium	Medium	High	High	High
43D	(St. Johns - Vancouver) via Freight Corridor	Medium	Low	Low	Low	High	Low	Low	Low	High	High
46	(Cornell - St. Johns)	Low	Low	Low	Low	High	Low	Low	High	High	Medium
46A	(Cornell to UPRR) via Corn Pass Tunnel	Low	Low	Low	Low	High	Low	Low	High	High	Medium
46B	(UPRR - St. Johns) via Freight	Low	Low	Low	Low	High	Low	Medium	High	High	Medium
46C	(Corn Pass - St. Johns) via Northern Bridge	Low	Low	Low	Low	High	Low	Low	Low	Low	Medium
48	(Murray Hill - Bethany)	Low	Low	Low	Low	Low	Medium	Low	Medium	High	Low
49	Eastside Connector	High	Medium	High	High	Low	Medium	High	Low	Medium	High
50	Downtown Tunnel - Lloyd 11th to Goose Hollow 18th	High	Low-Medium	High	High	Low	Medium	High	Low	Low	High
51	Downtown Jefferson/Columbia via 1st Ave	Low	High	High	High	Low	Medium	Medium	Low	Medium	High
52	Downtown Everett/Glisan to 18th Ave	Low	High	High	High	Low	High	Medium	Medium	Medium	High
53	(Hillsboro - Tualatin)	Low	Low	Low	Low	Medium	Low	High	Low	High	Medium
54	(Troutdale - St. Johns)	Low	Low	Low	Low	High	Low	High	Low	Medium-High	Medium
55	(Sunset TC - St. Johns)	High	Low	Low	Low	Low	Low	Low	High	High	Low
56	(Orenco - Clark Hill Rd)	Low	Low	Low	Low	Medium	Low	Medium	Low	High	Low
57	(Scholls Ferry - Sherwood) via Roy Rogers Rd	Low	Low	Low	Low	Medium	Low	Low	High	High	Low
28A+28B	(Oregon City - Tualatin)	High	Low	Low	Low	Low	Medium	Low	Medium-High	High	Medium
17C+46A+46B+43B	(Hillsboro - Vancouver)	Low	Low	Low	Low	High	Low	High	Medium-High	High	High
41+32B+32C	(McLoughlin - Beaverton)	Medium	Low	Low	Low-Medium	Low	Medium	Low	Medium-High	High	Medium

Note: Methods for determining High, Medium, Low rankings are described in detail in the Screening Results Technical Memorandum
Note: All High ratings indicate positive results as related to project viability; all low ratings indicated negative results

Screening Results by Corridor

		Screening Results									
		1-3	1-5	1-5	1-5	1-3	1-3	1-3	1-5	1-5	1-3
Segment / Corridor ID	Segment / Corridor Name	Connectivity and System Score	O-D	Existing Potential Ridership	Future Potential Ridership	Corridor Availability and Cost	Environmental Constraints	Equity	Congestion (Midday)	Congestion (Peak)	2040 Land Use
6	(Amber Glen to Tanasbourne)	Low	Low	Low	Low-Medium	Medium	High	Low	Low	Medium-High	Low
8	(CTC - OCTC) via I-205	High	Medium	Low	Low-Medium	Medium	Medium	Medium	Medium-High	High	Medium
9	(Park - OCTC) via McLoughlin	High	Low	Low	Low	Medium	Medium	Low	Low	High	Medium
10	(Portland Mall - Gresham) via Powell	Medium	Low-Medium	Low-Medium	Medium	Medium	Medium	High	High	High	High
11	(Portland to Sherwood) via Barbur Hwy 99w	Low	Low-Medium	Low-Medium	Medium	Medium	Medium	Low	High	High	High
12	(Hillsboro - Forest Grove)	Medium	Medium	Low	Low	High	Medium	High	Medium-High	High	Medium
13	(Gresham - Troutdale MHCC) via Kane Dr	Medium	Low	Low	Low-Medium	Medium	Medium	Low	Low	High	Medium
15	(Lents to Pleasant Valley) via Foster Road	Low	Low	Low	Low	Medium	Medium	Low	Medium-High	High	Low
16	(CTC - Damascus)	Medium	Low-Medium	Low	Low	High	Medium	High	High	High	Medium
17	(STC - Hillsboro)	Low	Low-Medium	Low	Low-Medium	High	Medium	Low	Medium-High	High	Medium
18	Improvements to Steel Bridge	High	High	High	High	High	High	Low	Low	Medium	High
19	Bridge Improvements	High	High	High	High	Medium	Low	Medium	Low	Medium	High
27	(Oregon City - Clac CC) - via Hwy213/RRROW	Low	Low	Low	Low	Medium	Low	Low	Medium-High	High	Low
28	(Oregon City - WSTC)	Low	Low	Low	Low-Medium	High	Medium	Low	High	High	Medium
29	(CTC - Clackamas)	Medium	Low	Low	Low-Medium	High	Medium	High	Medium-High	High	Medium
32	(Hillsboro - Hillsdale)	Low	Low	Low	Low-Medium	High	Medium	Medium	Medium-High	High	Medium
34	(Beaverton - Wilsonville)	Low	Low	Low	Low-Medium	Medium	Medium	Medium	High	High	Medium
38	(Tualatin - Sherwood) via Sherwood Rd	Low	Low	Low	Low	Medium	High	Low	Medium	High	Low
41	(Lake O - McLoughlin connector)	Medium	Low	Low	Low	Low	Medium	Low	High	High	Low
42	(Vancouver - Damascus)	Low	Low	Low	Low	Medium	Low	Medium	Medium-High	High	Medium
43	(St. Johns - Vancouver/Union Station)	Low	Medium-High	Low-Medium	Medium	High	Low	High	High	High	High
46	(Cornell - St. Johns)	Low	Low	Low	Low	High	Low	Low	High	High	Medium
48	(Murray Hill - Bethany)	Low	Low	Low	Low	Low	Medium	Low	Medium	High	Low
49	Eastside Connector	High	Medium	High	High	Low	Medium	High	Low	Medium	High
50	Downtown Tunnel - Lloyd 11th to Goose Hollow 18th	High	Low-Medium	High	High	Low	Medium	High	Low	Low	High
51	Downtown Jefferson/Columbia via 1st Ave	Low	High	High	High	Low	Medium	Medium	Low	Medium	High
52	Downtown Everett/Glisan to 18th Ave	Low	High	High	High	Low	High	Medium	Medium	Medium	High
53	(Hillsboro - Tualatin)	Low	Low	Low	Low	Medium	Low	High	Low	High	Medium
54	(Troutdale - St. Johns)	Low	Low	Low	Low	High	Low	High	Low	Medium-High	Medium
55	(Sunset TC - St. Johns)	High	Low	Low	Low	Low	Low	Low	High	High	Low
56	(Orenco - Clark Hill Rd)	Low	Low	Low	Low	Medium	Low	Medium	Low	High	Low
57	(Scholls Ferry - Sherwood) via Roy Rogers Rd	Low	Low	Low	Low	Medium	Low	Low	High	High	Low
28A+28B	(Oregon City - Tualatin)	High	Low	Low	Low	Low	Medium	Low	Medium-High	High	Medium
17C+46A+46B+43B	(Hillsboro - Vancouver)	Low	Low	Low	Low	High	Low	High	Medium-High	High	High
41+32B+32C	(McLoughlin - Beaverton)	Medium	Low	Low	Low-Medium	Low	Medium	Low	Medium-High	High	Medium

Note: Methods for determining High, Medium, Low rankings are described in detail in the Screening Results Technical Memorandum
Note: All High ratings indicate positive results as related to project viability; all low ratings indicated negative results



REGIONAL LRT SYSTEM PLAN
Scope Of Work

Long Range Regional Transitway System

Figure 6