GREAT PLACES

SW Corridor Plan

Recommendations on Southwest corridor high capacity transit design options, complementary multimodal projects and potential station locations for further study

JUNE 9, 2014

STEERING COMMITTEE PROJECT PARTNERS

Cities of Beaverton, Durham, King City, Portland, Sherwood, Tigard and Tualatin, Washington County, Oregon Department of Transportation, TriMet and Metro

Overview

As people and employers seek to locate in the Southwest corridor, worsening traffic congestion will impact economic development and livability in the area. In light of this as well as local redevelopment and revitalization goals, the Southwest corridor was selected by regional leaders as the next priority area to study for a potential set of investments, including high capacity transit, to address accessibility and enhance the great places envisioned by communities in the corridor. The Southwest Corridor Plan was launched in September 2011.

Purpose and need for the Southwest Corridor Plan

The purpose of the Southwest Corridor Plan is to connect Tualatin, Tigard, Southwest Portland, and the region's central city through a high capacity transit (HCT) project with strong connections to other neighboring cities like Sherwood, Durham, King City, Lake Oswego and Beaverton, paired with appropriate community investments to improve mobility in a congested corridor and create the conditions that will allow communities to achieve their land use vision. An HCT project in the Southwest corridor is needed to address issues including: limited transit service to places where people need or want to go; limited street connectivity and gaps in pedestrian and bicycle networks that create barriers and unsafe conditions for transit access and active transportation; slow and unreliable travel on congested roadways; and unmet demand for transit service in the corridor. The complete statement of purpose and need is available in Appendix B.

Steering Committee

The Southwest Corridor Plan is guided by a Steering Committee that includes representatives from Southwest corridor cities, Washington County and agencies:
Metro Councilor Craig Dirksen, co-chair
Metro Councilor Bob Stacey, co-chair
Tigard Mayor John Cook
Beaverton Mayor Denny Doyle
TriMet general manager Neil McFarlane
Sherwood Mayor Bill Middleton
Portland Commissioner Steve Novick
Tualatin Mayor Lou Ogden
King City Commissioner Al Reu
Washington County Commissioner Roy Rogers
Durham Mayor Gery Schirado
ODOT Region 1 manager Jason Tell

Shared Investment Strategy

In July 2013 the Steering Committee directed staff to: start a local transit service enhancement plan and study both bus rapid transit (with at least fifty percent of the route in a dedicated transitway) and light rail from downtown Portland to Tualatin, via Tigard in more detail. This was part of the Steering Committee's Shared Investment Strategy for the Southwest corridor. The strategy calls for investments in both local service and HCT and related multimodal (biking, walking and roadway improvements) and green (parks, trails and nature) projects, consideration of new regulations and incentives to promote private investment consistent with community visions, and development of a collaborative funding strategy for the Southwest Corridor Plan.

Land use vision and context

The foundation of the Southwest Corridor Plan is the local land use vision that reflects each community's unique characteristics and aspirations, and identifies areas to focus new development. Land use plans include Portland's Barbur Concept Plan, Tigard's High Capacity Transit Land Use Plan, the Linking Tualatin plan and Sherwood's Town Center Plan. Building on these plans, partners selected potential HCT alternatives that could catalyze the corridor land use vision, and refined a list of multimodal projects that would support HCT and make it more effective in the corridor.

The corridor land use vision emphasizes maintaining and enhancing the many stable single-family neighborhoods, while allowing for growth in the cities' downtowns, main streets, corridors and employment areas to create more services for existing residents as well as more housing, employment and transportation choices in the future.

Creating and enhancing great places

Great places are defined by a mix of elements that come together in one location to meet a range of community needs. Public investment can play a key role in creating and enhancing great places in the Southwest corridor. Public actions can influence development in three main ways: by regulations and policies, by investments in the public realm, and by development incentives that catalyze private investment. The Southwest Corridor Plan and Shared Investment Strategy address all three of these areas.

Public investments in HCT can improve traffic congestion and enhance the attractiveness and market appeal of the corridor. Through public-private partnerships, catalytic projects can bring more people to identified locations in the corridor, which in turn attracts more amenities and private investment to the area. Locating more jobs and housing choices near transit – and attracting additional retail and services – not only spurs economic activity, but it also increases the overall market value in the corridor and preserves the character of existing single-family neighborhoods. Collaboration between Plan partners and the private and non-profit sectors will ensure that the local land use vision is supported by the implementation of prioritized projects that serve a diverse range of people in a sustainable and equitable way.

Implementation & Development in the Southwest Corridor

Collaborative efforts between public entities and the private sector are one crucial way to create and enhance great places and realize the local land use vision. The Southwest Corridor Plan identified the need to provide an opportunity for these collaborations. With this goal in mind, the Steering Committee convened a group of community leaders with a passion for the Southwest corridor who know how to get things done. This group is known as "Implementation & Development in the Southwest Corridor," or ID Southwest. Members include representatives from major employers, small businesses, environmental concerns, non-profit organizations, higher education institutions and state legislators. ID Southwest's goal is to make the most of public-private partnerships and help implement early opportunity projects in the corridor. You can find the list of ID Southwest members in Appendix H.

Refinement process

In August 2013 staff began a refinement phase that included analysis of potential transit design options consistent with the direction given by the Steering Committee, potential station areas along these options, and multimodal projects supportive of transit options and station areas. Based on the technical analysis and public input, the Steering Committee recommends a set of HCT design options for further study in a draft environmental impact statement (DEIS) under the National Environmental Policy Act (NEPA). The recommendation includes the most promising transit design options that emerged during the refinement phase and their associated potential station areas and mulitmodal projects. The Steering Committee also directed staff to answer additional questions during a focused refinement period, prior to starting the DEIS. You can see the questions identified by the Steering Committee on page 12.

Creating better options for local connections

People get to transit by car, bike, or their own feet and when they arrive at their station they will either walk or bicycle to their final destination. Multimodal (car, bike or pedestrian) improvements that are complementary to the HCT design options will maximize access to transit for people who live, work, study, shop play and visit the Southwest corridor. During the Southwest Corridor Plan refinement phase, staff studied 67 potential multimodal projects that were originally identified in the local land use plans and the Shared Investment Strategy. Some projects, known as "station-supportive multimodal projects," help people reach potential station locations. Others, known as "transit-supportive multimodal projects," are improvements to help people walk, bike or drive next to HCT in a safe and convenient way.

In addition to the technical analysis of the multimodal projects, in April 2014 the public had the opportunity to review the analysis results and give feedback. Based on public input and the analysis results, 49 station-supportive and transit-supportive multimodal projects are recommended to advance into the DEIS for further study. Some of the multimodal projects are recommended to be partially included in the DEIS if a smaller component of the project shows significant capacity to connect people to transit, compared to the entire project. The complete list of multimodal projects recommended for further study in the DEIS can be found on pages 8 and 9.

How we got here

The Southwest Corridor Plan Steering Committee assessed nearly 60 HCT design options in nine different geographic segments throughout the corridor for consideration for further study. Through preliminary design, options were analyzed based on the following categories:

- **relative (capital) cost of construction** including design elements such as tunnels, structure, length and built environment
- **impacts to natural resources** including trees, parks, watersheds, and considerations of potential opportunities for improvements
- **potential to support the Southwest corridor land use vision** through new development or redevelopment
- **effects on buildings and private property**
- **effects on roadway operations, bikeways and sidewalks**
- **assessment of ridership potential and operating costs** based on design characteristics such as distance and speed, and household and employment access

The Steering Committee considered the technical assessment, public input, and discussions with partners. The resulting recommendation proposes to study 14 design options for bus rapid transit (BRT) and 13 options for light rail (LRT) across the nine geographic segments in the DEIS. The recommendation also directs staff to answer 8 questions, including additional BRT and LRT options, prior to NEPA analysis. The table on page 5 lists the HCT design options recommended for further study in the DEIS. The additional questions to be answered in a focused refinement period are listed on page 12.

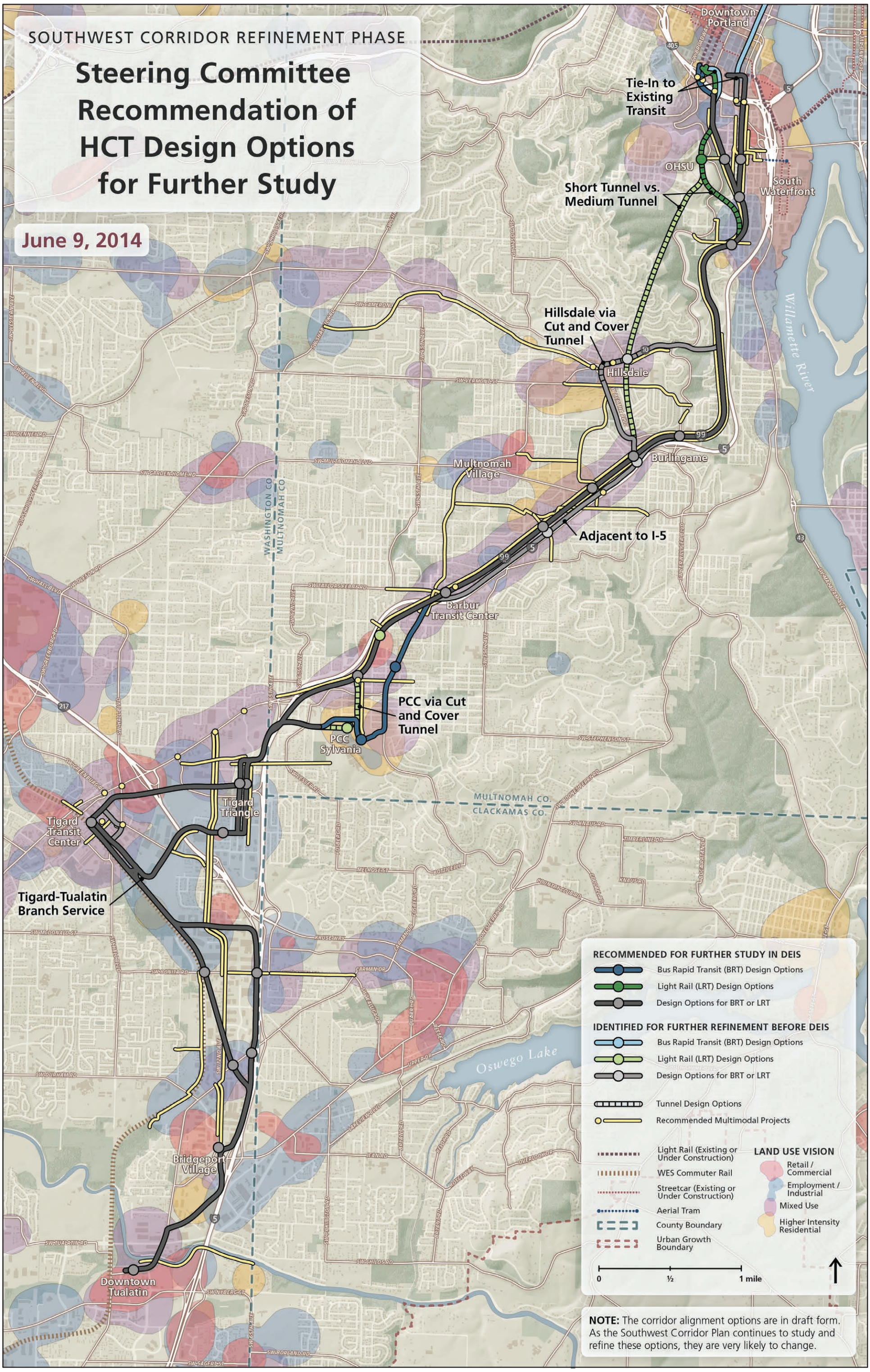
Multimodal projects included in the recommendation were selected based on how well they support the recommended HCT options. For some projects, only portions are recommended for further study.

Potential stations identified during the refinement phase design process were analyzed to establish which locations could best serve and activate the key places along the corridor. The analysis also helped to recommend policies and investments for local consideration to activate the desired local land uses in potential station areas.

The HCT options, multimodal projects, and stations recommended for further study are shown on the map on pages 6 and 7.

HCT options by geographic area recommended for DEIS or identified for further refinement before DEIS

Option	BRT		LRT	
	Recommended	Identified for further refinement	Recommended	Identified for further refinement
1. Tie-in to Existing Transit				
Barbur via Fifth/Sixth Ave couplet (with OHSU elevator)	✔			
Barbur via Fourth Ave (with OHSU elevator)		✔	✔	
Naito to Transit Mall (with OHSU elevator)	✔		✔	
Naito to Transit Mall via First Ave (with OHSU elevator)		✔		✔
Naito to First Ave – extended downtown (with OHSU elevator)		✔		
2. South Portland to Barbur Transit Center				
Barbur Boulevard	✔		✔	
Barbur-Hillsdale Loop using Capitol Hwy & Bertha		✔		✔
Short tunnel – exit at Hamilton			✔	
Medium tunnel – exit at Bertha				✔
Adjacent to I-5		✔		✔
3. PCC Area				
PCC campus via Capitol Hwy (uses either I-5 crossing)	✔			
Barbur – Crossroads to Tigard (with improved PCC walk via SW 53rd, uses new bridge I-5 crossing)	✔		✔	
Short tunnel via Barbur (uses new bridge I-5 crossing)				✔
New bridge (option for campus BRT routes)	✔			
4. Tigard Triangle				
68th/69th Couplet	✔		✔	
5. OR-217 Crossing				
Clinton to Tigard Transit Center	✔		✔	
Beveland South	✔		✔	
6. Downtown Tigard				
Commercial Street to Tigard Transit Center (no loop)	✔		✔	
Commercial Street with downtown loop via Hall		✔		✔
7. South Tigard				
WES alignment to parallel I-5 via Tech Center Drive	✔		✔	
WES alignment to parallel I-5 via PWNR Freight Rail ROW	✔		✔	
8. Bridgeport Village				
Lower Boones Ferry (from Durham Rd, 72nd or parallel to I-5)	✔		✔	
9. Tualatin				
Parallel to Boones Ferry (north side of downtown)	✔		✔	


SOUTHWEST CORRIDOR REFINEMENT PHASE
Steering Committee Recommendation of HCT Design Options for Further Study
June 9, 2014
Downtown Portland
Tie-In to Existing Transit
OHSU
Short Tunnel vs. Medium Tunnel
South Waterfront
Willamette River
Hillsdale via Cut and Cover Tunnel
Hillsdale
Multnomah Village
Burlingame
Adjacent to I-5
Barbur Transit Center
PCC via Cut and Cover Tunnel
PCC Sylvania
WASHINGTON CO.
MULTNOMAH CO.
Tigard Triangle
Tigard Transit Center
MULTNOMAH CO.
CLACKAMAS CO.
Tigard-Tualatin Branch Service
Oswego Lake
Bridgeport Village
Downtown Tualatin
RECOMMENDED FOR FURTHER STUDY IN DEIS
Bus Rapid Transit (BRT) Design Options
Light Rail (LRT) Design Options
Design Options for BRT or LRT
IDENTIFIED FOR FURTHER REFINEMENT BEFORE DEIS
Bus Rapid Transit (BRT) Design Options
Light Rail (LRT) Design Options
Design Options for BRT or LRT
Tunnel Design Options
Recommended Multimodal Projects
Light Rail (Existing or Under Construction)
WES Commuter Rail
Streetcar (Existing or Under Construction)
Aerial Tram
County Boundary
Urban Growth Boundary
LAND USE VISION
Retail / Commercial
Employment / Industrial
Mixed Use
Higher Intensity Residential
0
½
1 mile
NOTE: The corridor alignment options are in draft form. As the Southwest Corridor Plan continues to study and refine these options, they are very likely to change.

Multimodal projects complementary to HCT design options included for further study

NUMBER	PROJECT TITLE	COST	RECOMMENDATION FOR FURTHER STUDY
	1. Tie-in to existing transit		
1044	South Portland Circulation and Connectivity (Ross Island Bridge ramp connections)	$$$$	Naito design option
2999	Pedestrian connection from Barbur to Terwilliger at Gibbs	$	Barbur/Naito station near Gibbs
3038	Lower SW 1st bikeway – from SW Barbur Blvd to SW Arthur St.	¢	Barbur/Naito station near Gibbs
4002	Barbur Blvd, SW (3rd - Terwilliger): Multimodal Improvements. (Also included in segment 2. South Portland to Barbur Transit Center)	$$	Barbur design option
5013	Naito/South Portland Improvements (left turn pockets with bike/ped and remove tunnel, ramps and viaduct)	$$$$	Barbur station: signalized pedestrian crossing(s) of Naito Naito design option
6022	I-405 Bike/Ped Crossing Improvements	$	All options: opportunity to address with HCT crossing of I-405
	2. South Portland to Barbur Transit Center		
1020	Beaverton Hillsdale/Bertha/Capitol Hwy. Intersection Improvements	$	Hillsdale/Capitol surface options
1048	Traffic Calming (in the Burlingame and Hillsdale retail districts)	¢	Hillsdale station: access and safety treatments in Hillsdale Transit Center
2004	26th Ave, SW (Spring Garden – Taylors Ferry): Pedestrian Improvements	¢	Barbur/26th Ave. station
2011	Connections to Transit/Transit Improvements: Barbur & Taylors Ferry	¢	All options
2041	SW 19th Ave sidewalks: Barbur – Spring Garden	¢	Barbur/Multnomah station
3017A	Capitol Hill Rd bikeway – from SW Barbur Blvd to SW Bertha Blvd	¢	Barbur/Multnomah station
3017B	Capitol Hill Rd sidewalks– -from SW Barbur Blvd to SW Bertha Blvd.	$	Barbur/Multnomah station: Barbur to existing sidewalk at Custer Park
3028	Inner Hamilton bikeway – from SW Terwilliger Blvd to SW Corbett	¢	Barbur/Multnomah station
3033A	Inner Troy bikeway – from SW Capitol Hwy to SW Capitol Hill Rd.	¢	Barbur/Multnomah station
3044	Middle Barbur bikeway – from SW 23rd Ave to SW Capitol Hwy-Barbur Blvd Ramp.	$	I-5 option or Barbur stations within ½ mile of stations Include with Barbur option
3069A	Spring Garden, SW (Taylors Ferry – Capitol Hwy): Bikeway	$	Include low-cost elements with Barbur/26th Ave. or Barbur/Multnomah station
3069B	Spring Garden/Dolph Ct, SW (Capitol Hwy - Barbur): Sidewalks	$	Barbur/26th Ave. or Barbur/Multnomah station: 27th Ave. to intersection with 26th Way/Dolph Ct.
3093A	Terwilliger bikeway gaps	¢	Terwilliger station: lower section (near Barbur)
3101	Vermont-Chestnut bikeway – from SW Capitol Hwy to SW Terwilliger	¢	Terwilliger station
5005	Barbur Blvd, SW (Terwilliger - City Limits): Multi-modal Improvements Also included in segment 3. PCC area	$$$$	Include within ½ mile of Barbur stations (including tunnel and I-5 options) Include with Barbur option
5009	Capitol Hwy Improvements (replace roadway and add sidewalks)	$$$	All options: Taylors Ferry Rd. to Multnomah Blvd.
5010	Capitol Hwy, SW (Terwilliger – Sunset): Multi-modal Improvements	$	Surface Hillsdale/Capitol alignment
5059	SW Portland/ Crossroads Multimodal Project (roadway realignments and modifications to Barbur Blvd., Capitol Hwy., and the I-5 southbound on-ramp)	$$$$	All options: multimodal investment at the Barbur/Capitol/Huber/Taylors Ferry intersections
6003	Multnomah viaduct bicycle and pedestrian facilities	$	Barbur option
6034	Taylors Ferry, SW (Capitol Hwy – City Limits): Bicycle & Pedestrian Improvements	$	All options: Capitol to 49th Ave.
9005	Red Electric Trail: Fanno Creek Trail to Willamette Park	$$$	Hillsdale station: Hillsdale to Shattuck
	3. PCC area		
2027	Pedestrian Overpass of I-5 near Markham School	$$	Include adjacent to station area, with Barbur/53rd Ave. station, if station is on Barbur

NUMBER	PROJECT TITLE	COST	RECOMMENDATION FOR FURTHER STUDY
5057	SW 53rd and Pomona (improves safety of ped/bike users)	¢	Include with Barbur/53rd Ave. station, if station is on Barbur
6013	Barbur/PCC ped/bike connection	¢	Barbur/53rd Ave. station, if station is on Barbur
6026	Pomona St: Bicycle and Ped improvements (35th to Barbur)	$	Barbur/53rd Ave. station: 53rd to 45th
9053	Ped/Bike Connection between Tigard Triangle and PCC-Sylvania	$	All options: opportunity to add ped/bike facilities to HCT connection
	4. Tigard Triangle		
1078 2045	Atlanta Street Extension (new roadway) 72nd Avenue sidewalks: 99W to Bonita. (Also included in segment 7. South Tigard)	$$ $	North Triangle station Triangle North station: one side 99W to Dartmouth Triangle South station: one side Dartmouth to Hunziker 72nd/Tech Ctr. Dr. station: west side Tech Ctr. Dr. to Landmark Ln. WES/Bonita station: east side Bonita to Landmark Ln.
3117	72nd Avenue bikeway: 99W to city limits. (Also included in segments 7, South Tigard and 8, Bridgeport Village)	$	All options: if re-striping (conversion from 3- to 2-lane with bike lanes)
5024	68th Avenue (widen to 3 lanes)	$$$	Triangle North station: sidewalk on one side Atlanta to south of Baylor 68th Ave. option
	5. OR–217 crossing		
1107	Hwy. 217 Over-crossing – Beveland/Hampton Connection	$$$$	Beveland or Hampton options
2054	Commercial Street sidewalks: Main to Lincoln	¢	All options: one side of street
2058	Hunziker Street Sidewalks: 72nd to Hall	$	Hunziker/Beveland station: one side Beveland overcrossing to 72nd
	6. Downtown Tigard		
1077	Ash Avenue railroad crossing (new roadway)	$	All options (requires closure of another crossing by city)
2077	Tigard Transit Center crossing improvements.	$	All options: crosswalk visibility and timing elements at Greenburg, Hall Dartmouth, 72nd and 68th
2079	Tigard Transit Center pedestrian path	¢	All options
2080	Tigard Transit Center sidewalk infill	¢	All options
3129	Tigard Transit Center Bicycle Hub	¢	All options: bike-n-ride
	7. South Tigard		
3121	Bonita Road bike lanes: 72nd to Bangy	¢	WES/Bonita station: re-striping only
6001	Bonita Rd. sidewalks and bike lanes – Carman Dr. to Bangy Rd.	¢	WES/Bonita station: bike lanes only, minor widening
9014	Fanno Creek Trail – Tualatin River to Tigard St.	$	WES/Bonita station: Bonita to Ashford Durham/79th station: Bonita to Durham Park Bridgeport West station: Bonita to Ashford
	8. Bridgeport Village		
2046	72nd Avenue sidewalks: Upper Boones Ferry to Durham	$	Bridgeport Village front-door station 72nd Ave. option
	9. Tualatin		
9023	Tualatin River Pathway	$$	Tualatin TC or Upper Boones Ferry/Lower Boones Ferry stations: Boones Ferry Rd. east to existing trail

¢ = up to $500,000

$ = up to $5 million

$$ = up to 10 million

$$$ = up to $20 million

$$$$ = more than $20 million

Parks, trails and nature projects

People consistently point to the parks, trails, natural areas and urban tree canopy as essential elements of what draws them to live, work and play in the Southwest corridor. Gathering information from local plans, project partners compiled an inventory of "green" projects including parks, trails and natural areas as well as water quality improvements and natural resource enhancements like improved wildlife habitat corridors and replacing or retrofitting culverts for fish passage.

The Shared Investment Strategy approved in July 2013 identified more than 400 "green" projects in the Southwest corridor. If there is a decision to invest in HCT in the corridor, a number of these green projects will be prioritized for implementation based on their proximity to transit, station areas and multimodal projects, and also on environmental impact mitigation criteria.

Leveraging investment in potential station areas

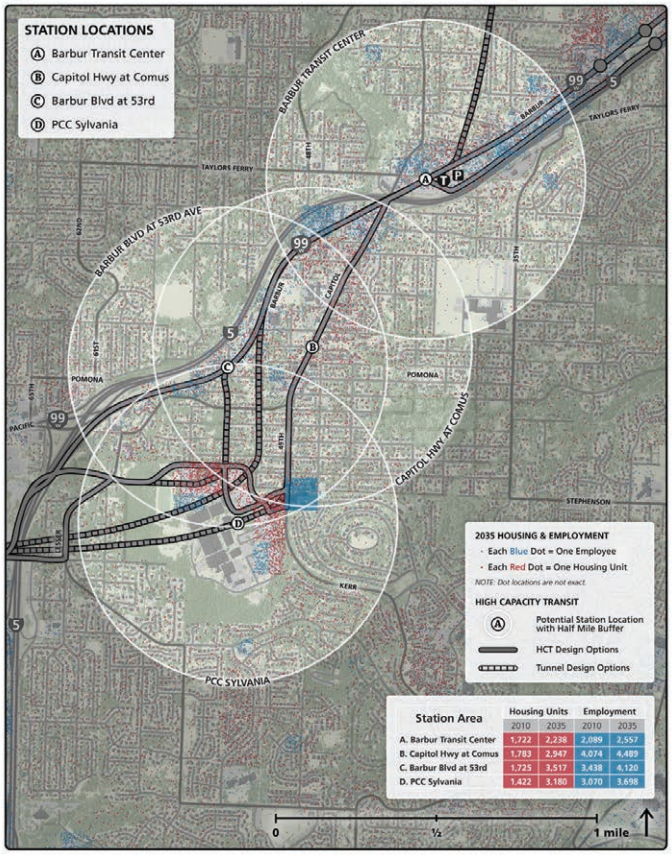
The foundation of the Southwest Corridor Plan is the land use vision as defined by each community for their downtowns, main streets and employment areas. The HCT design options were delineated in a way that best supports that land use vision while meeting transportation goals. Partner staff identified the most promising potential station locations, close to 30 due to the large number of HCT design options. As the number of transit design options is narrowed, the number of potential station locations will also be reduced.

Metro completed a preliminary potential station area analysis that provides an assessment of the opportunities and constraints of each location. The analysis included some of the most promising tools, policies and incentives to consider putting in place to leverage a major transit investment and support achieving the local land use vision. Many of the tools and policies included in the potential station area analysis would help support development consistent with the local vision regardless of a transit investment, and could be considered by each city for implementation. The potential station area analysis can be found in Appendix D.

In addition to the technical analysis of the potential station area locations, the public had the opportunity to review the analysis results and give feedback in April 2014. The public input gathered was read, analyzed and provided to the Steering Committee members to help inform their consideration of the recommendation.

In the DEIS, the potential station areas will be studied in further detail, and may result in changes to the location of the station areas or changes in multimodal projects in order to increase their potential to serve more households and employment. Metro, TriMet, and local staff will continue to work collaboratively with the public to determine the best location for station areas.

③ Crossroads to PCC: 2035 Housing & Employment



Station Area	Housing Units 2010	Housing Units 2035	Employment 2010	Employment 2035
A. Barbur Transit Center	1,722	2,238	2,089	2,557
B. Capitol Hwy at Comus	1,783	2,947	4,074	4,489
C. Barbur Blvd at 53rd	1,725	3,517	3,438	4,120
D. PCC Sylvania	1,422	3,180	3,070	3,698

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DRAFT 4/10/14

NOTE: The corridor alignment options maps and associated opportunities and constraints are in draft form. As the Southwest Corridor Plan continues to study and refine these options, they are very likely to change.

Public involvement in the refinement period

Successful plans and projects share one common element: they respond to the needs and priorities of the public. Residents of the cities in the Southwest corridor were involved in the creation of the local land use plans that form the foundation of the Southwest Corridor Plan. Broad and effective public involvement has been one of the pillars and aspirations of the Southwest Corridor Plan since its inception. Staff has utilized a variety of both tried-and-true and innovative engagement techniques to reach out to the residents and other stakeholders in the corridor and encourage them to provide input and make their voices heard. Tools utilized include Shape SW (an interactive online planning game), a Southwest corridor blog, Twitter feed and Facebook page, tabling at events where specific audiences congregate, community planning forums, corridor design workshops, and paper and online questionnaires. Public input is analyzed, summarized and presented to the Steering Committee to help them make informed decisions. The voices of the community are powerful: public input has contributed greatly to maintaining tunnel options for further study, as well as contributed to the removal from further study of unfeasible options in Durham, Tigard and elsewhere in the corridor.

During the refinement phase Metro and the Southwest Corridor Plan partners implemented public involvement activities designed to inform the public about the elements of the Plan, interact with the public in large events to answer questions and concerns, and solicit their input in person or through online questionnaires. In October and November 2013, the public was asked to comment on the Plan's statement of purpose and need. In March 2014, staff conducted three corridor design workshops to gather feedback on the HCT design options, especially on the options proposed to be removed from further study. During the same period staff conducted outreach to Spanish- and Vietnamese-speaking members of the public in Tigard. The Plan also obtained public input on the potential station area locations and related multimodal projects in April 2014. Finally, in May 2014 staff solicited public input on the draft recommendation of transit design options and multimodal projects to carry into a DEIS phase. Input collected from the public was read, analyzed, summarized and presented to the Steering Committee to inform their decisions. Public involvement reports have been published online. Appendix A contains the report on the draft recommendation input received in May 2014. A complete public involvement report for the refinement phase will be published online in June 2014.

Improving local bus service in the Southwest corridor

One of the recommendations in the Shared Investment Strategy was to improve local bus service to help people better connect with jobs, educational opportunities and other important destinations in the region. To implement this recommendation, TriMet is conducting the Southwest Service Enhancement Plan (SWSEP), which will be a shared, long-term vision for local bus service throughout the Southwest region, including locations outside the Southwest corridor. TriMet has been coordinating with Metro and the Southwest Corridor Plan partners to ensure any bus improvements connect and work in coordination with the proposed HCT investment.

TriMet has heard directly from the public in the Southwest region through neighborhood meetings, an online survey, and meetings with community groups, employers, youth, seniors, and people with limited English proficiency. The public identified connections to job centers and community resources as their most important goals for the SWSEP. The next steps for TriMet are to create a draft plan, hold a second round of public engagement in the fall of 2014, and finalize the vision for improved service in early 2015. New service improvements will be implemented as TriMet's budget allows.

Questions

Project partners will address a select set of questions during a focused refinement period from July to November 2014. Once completed, the Steering Committee will be asked to finalize the HCT options that receive full environmental review. Project partners desire a streamlined NEPA process that will begin in late 2014 and result in consideration of a locally preferred alternative in 2016.

Recommended questions to address during a focused refinement period

The Steering Committee has directed staff to address the following questions prior to initiating the project scoping phase under NEPA, in order to further narrow the HCT design options that receive full environmental analysis to the most reasonable and feasible options:

1. Assess tie-in options: Additional traffic analysis and partner discussion to determine the best approach to tie in to downtown Portland and the existing transit system.

2. HCT branch service to Tigard and Tualatin: Explore opportunities to implement branched service to downtown Tigard and south to Tualatin to achieve operational efficiencies.

3. OHSU Marquam Hill access: Explore options for pedestrian/bicycle access to Marquam Hill from a surface alignment on Barbur or Naito, including outreach to neighborhoods, stakeholder groups, OHSU, Portland Parks and Recreation and the Veterans Hospital.

4. Medium tunnel that serves Marquam Hill and Hillsdale: Explore replacing the short tunnel that serves Marquam Hill with the medium tunnel that serves Hillsdale. Outreach to communities and stakeholders will be conducted regarding refined tunnel costs, construction impacts, travel time, ridership and equity issues.

5. Hillsdale: Explore the benefits as compared to the costs and travel time of directly serving the town center that currently has eight bus lines, and look at enhanced pedestrian/bicycle connections from Barbur Boulevard.

6. Adjacent to I-5: Further explore and discuss the tradeoffs of building HCT adjacent to I-5 rather than on Barbur Boulevard.

7. Direct service to Portland Community College – Sylvania: Assess the potential of a more robust pedestrian connection from Barbur Boulevard to PCC along SW 53rd Ave. while working with PCC and the neighborhood to understand the tradeoffs of direct service for the future of the campus.

8. Funding strategy: Complete a preliminary assessment of potential funding sources and a strategy for a future HCT investment to help inform Steering Committee and public conversations on HCT alignment choices.

Robust public engagement will continue to be a priority for the project partners throughout all phases, as well as an expectation and requirement under NEPA.

Steering committee decisions: high capacity transit

October 2012	July 2013	June 2014	July – November 2014	Late 2014 – 2016
Narrowed from 10 alternatives concepts to five	• Direction on Southwest (Transit) Service Enhancement Plan • Which HCT modes to carry forward for further study • Policy direction on "level" of bus rapid transit for further study • Destination roadway improvements	Refinement • Transit design options – For BRT & LRT • Potential station locations • Multimodal projects – Bicycle, pedestrian and roadway improvements	Focused refinement • Answer questions to further narrow HCT options	Draft Environmental Impact Statement • Mode • Station locations • Transit system connections • Funding strategies

Refinement decisions and public input opportunities

November/December	January/February/March	March/April	May/June
Feedback on the purpose and need • community planning forum • questionnaire Project purpose and need statement for refinement phase approval	Guidance on narrowing of design options Which seems most promising? Which can be set aside? • corridor design workshops • questionnaire	Feedback on station area planning approach and multimodal projects • community planning forum • questionnaire	Draft recommendation on design options and related elements for further study Feedback on draft recommendation • community planning forum • business summit Final recommendation

Public input opportunities