

Steering Committee meetings

September 26, 2016 | October 3, 2016

Where we are, decisions and next steps

On June 1, 2016, the committee:

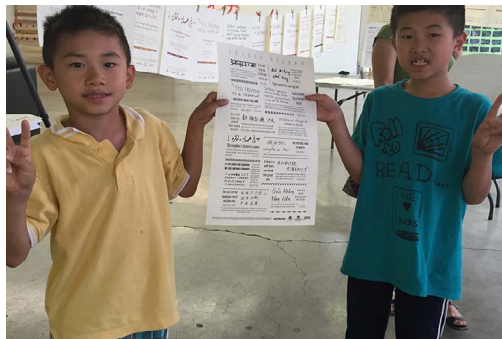
- Discussed the public outreach and technical feasibility of an inner Division alignment
- Reviewed the bus rapid transit (BRT) characteristics of this project
- Discussed information desired to reach a decision

On September 26 the committee will:

- Discuss technical findings and community input for all remaining route decisions
- Learn more detail about the Powell-Division Corridor-wide Strategy
- Discuss upcoming timelines and process for LPA decision-making

On October 3 the committee will:

- Seek consensus on LPA recommendation for routing of the BRT



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Project goals and outcomes



The Steering Committee adopted the following goals and outcomes on June 23, 2014.

Project outcomes

- 1. Create a vision and development strategy for key places that promotes community driven and supported economic development and identifies tools and strategies that mitigate the impacts of market pressures that cause involuntary displacement.
- 2. Identify a preferred near-term high capacity transit solution for the corridor that safely and efficiently serves high ridership demand, improves access to transit, is coordinated with related transportation investments, and recognizes limited capital and operational funding. The solution will include mode, alignment and station locations with supporting transportation improvements.

Project goals

- **Transportation:** People have safe and convenient transportation options – including efficient and frequent high capacity transit service that enhances current local transit service – that get them where they want to go and improves the existing system.
- **Well-being:** Future development and transit improvements create safe, healthy neighborhoods and improve access to social, educational, environmental and economic opportunities.
- **Equity:** Future development and transit improvements reduce existing disparities, benefit current residents and businesses and enhance our diverse neighborhoods. There is a commitment to prevent market-driven involuntary displacement of residents and businesses and to equitably distribute the benefits and burdens of change.
- **Efficiency:** A high capacity transit project is efficiently implemented and operated.

Why here, why now?

The Powell-Division Transit and Development Project aims to create a better experience and quicker ride for the thousands of people who ride buses to get to school, go to work or go shopping. Improved bus rapid transit service on Division Street could be operating in 2021.

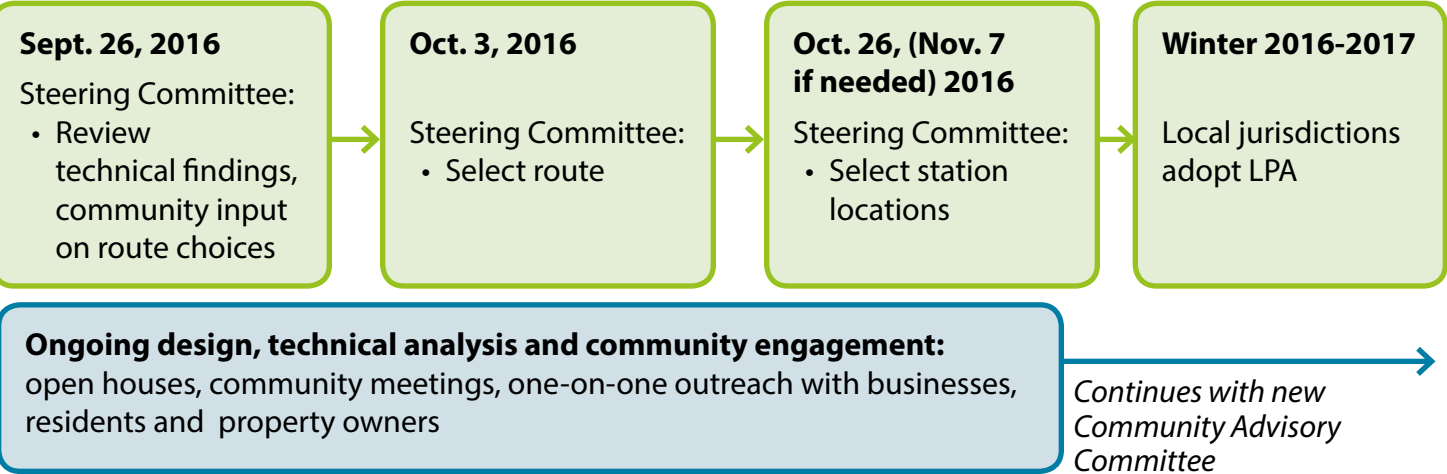
- 10,000 daily riders currently ride Line 4-Division
- Too many buses are overcrowded, too many riders passed up at bus stops
- Powell-Division is a growing and diverse corridor in our region
- Regional High Capacity Transit Plan priority



- Investing in existing, popular service
- Faster, more reliable service
- Greater ridership capacity
- Improved buses and stations
- BRT is part of a comprehensive strategy to improve transit, safety and community stabilization

Locally Preferred Alternative (LPA) decision making and timeline

The Steering Committee is charged with making a recommendation on the LPA for the transit project that determines the mode of transportation, the route and the station locations. The path forward involves the Steering Committee meeting 3-4 more times to make the remaining LPA decisions.

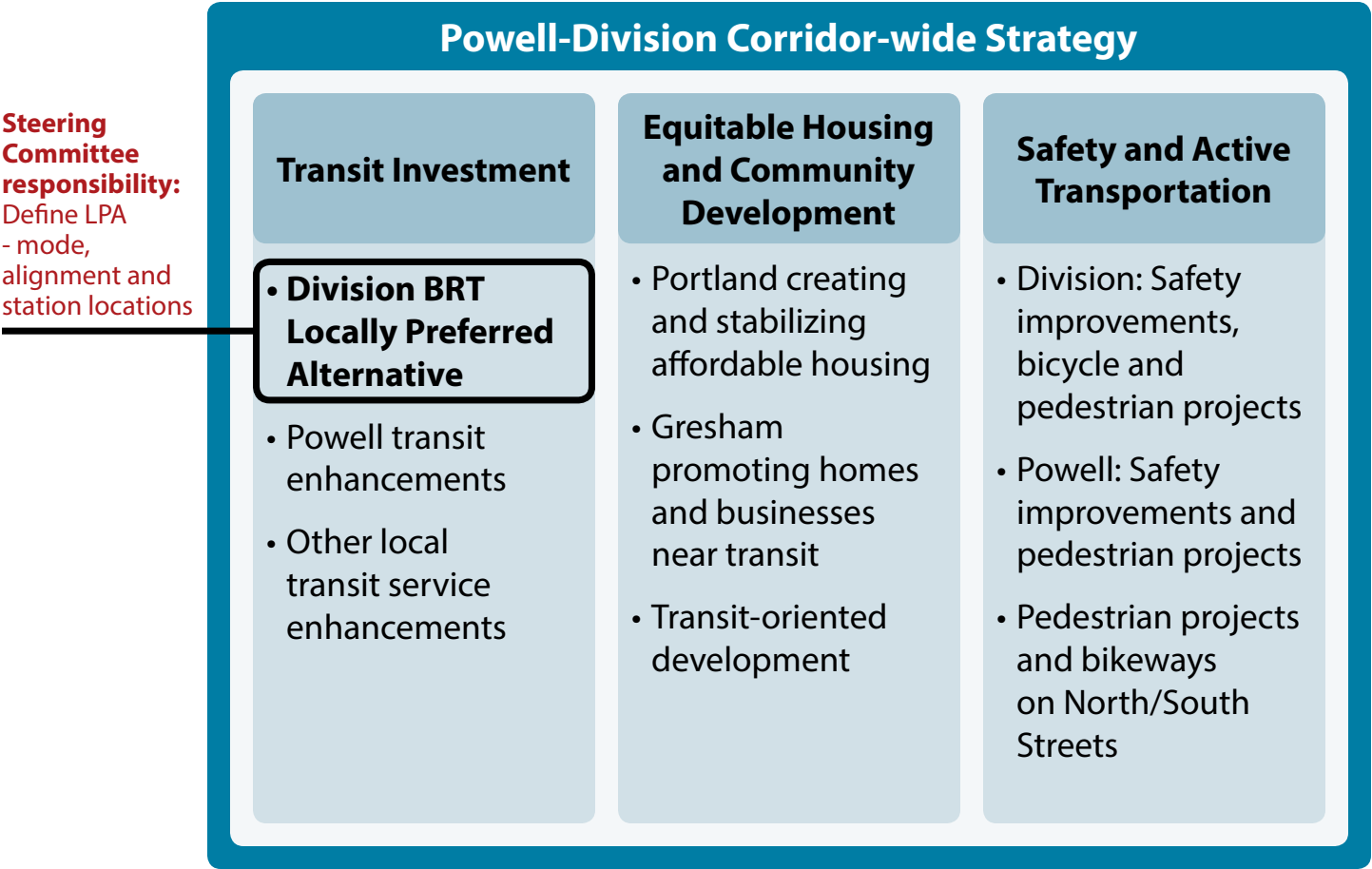


Beyond the LPA—
Highlights from the Powell-Division Corridor-wide Strategy

Developing a more reliable, rapid bus system on Division Street that carries more passengers is one key component to achieving the goals of the Powell-Division Transit and Development project. And while a major transit improvement is important, the greater Powell-Division corridor needs more than a Division BRT to meet the range of needs and priorities of communities throughout the area. While the Steering Committee is responsible for recommending the BRT Division Locally Preferred Alternative (LPA), their input has helped shape the corridor-wide strategy.

The Powell-Division Corridor-wide Strategy represents the commitments of project partners (TriMet, City of Portland, City of Gresham, ODOT, Multnomah County and Metro) to actions that improve transit service, safety, walking and biking access, community development, and housing and business stability along Division Street, Powell Boulevard, and key North/South streets.

Detailed maps that describe improvements in the corridor will be available in late September.



Highlights: Division Street

- Division BRT (Locally Preferred Alternative): More reliable service, greater capacity, station improvements. Also includes pedestrian crossings, ADA and sidewalk improvements to access transit stations
- Rapid flash beacons to make pedestrians more visible to motorists
- Bike safety improvements

Highlights: Powell Boulevard

- Advance Powell Blvd. as a priority in regional High Capacity Transit Plan
- Line 9: Improved frequency, faster limited stop service
- Pedestrian crossings, ADA, sidewalk, bus stop and safety improvements
- 25 traffic signal upgrades (Portland to Sandy)
- Outer Powell modernization

Highlights: Other Streets

Bus service improvements from Service Enhancement Plans, including reallocation of redundant service hours:

- Potential frequency improvements on lines 70, 73, 80, 81, 87
- Potential new lines on 148th, 162nd
- Potential Kane Dr bus stop enhancements
- Intersection safety along 82nd Ave.
- Construct bikeway improvements and enhanced crossings on 20s, 70s, 100s, 130s, 150s neighborhood greenways

Highlights: Corridor-wide

- Catalyze live, work development near transit stations in Gresham: Focus on 182nd/Division, Eastman/Division, Gresham Transit Center, Stark and Kane
- Affordable housing development at 82nd/Division
- Secure funding for new affordable housing units; preserve affordable housing units



Route Overview

Downtown Portland
Portland Transit Mall (more promising)

1

- Serves existing stations on Portland Transit Mall with many transit connections
- Union Station area would be the likely terminus and provide connection to Amtrak

Columbia/Jefferson (less promising)

- Fewer connections
- Numerous design constraints

Inner Portland: Division

3

- BRT would be 15-20% faster than 4-Division
- Serves existing high ridership
- Inner Division is less congested than inner Powell
- Minimal property impacts, fits within current street character
- More information on p. 12

Outer Division

✓

- The Steering Committee recommended an alignment along outer Division from 82nd Avenue to the Gresham Transit Center for further study on September 29, 2014
- Analysis and design are context sensitive and ongoing
- Investments focused where improvements are most needed

Route decisions remaining for the Locally Preferred Alternative		
	map number	more information
Downtown Portland	1	p. 15
Willamette crossing	2	p. 14
Inner Portland	3	p. 12
East Terminus	4	p. 10



Willamette River crossing
Hawthorne Bridge

2

- Faster to Pioneer Courthouse Square because it travels more directly
- Bridge lift delay during off-peak hours

Tilikum Crossing

- Serves South Waterfront, OMSI, OHSU, and PSU
- Rail and MAX crossing can cause lengthy or frequent delays anytime of day; TriMet is exploring options with Union Pacific RR

More information on p. 14

Powell Boulevard

X

- Not a feasible near-term project
- Would not provide desired travel time or reliability without major property impacts and high cost

Partners are committed to improving transit and safety on Powell as part of a corridor-wide strategy.

More information on p. 4

East Terminus

4

Gresham TC terminus could work

- Connects to MAX Blue Line and 8 bus routes
- Has park-and-ride and bike facilities

Getting from Gresham TC to MHCC is difficult

- Project costs limited to \$175 million while cost estimate is over \$200 million: may require reducing length of project
- Closed-door express BRT to MHCC would not save enough money
- Route is longer than other BRT projects

MHCC needs better transit

- Upgrading the Line 20 would provide strong connections to MHCC
- Wait for a transfer from Gresham TC would average less than 7.5 minutes
- Line 20 also connects MHCC with Rockwood, most densely populated area in MHCC district
- Line 20 serves communities of concern well

How do we fund a quality transit project for the Powell-Division corridor?

Project partners will apply for federal funding for the transit project through the FTA Capital Investment Grant Program. Through this program, the project could request up to \$100 million in federal funding as a “Small Starts” project that funds up to \$300 million based on the type of BRT.

Based on requirements and recent history of Small Starts grant awards, \$175 million is a competitive target for the total capital cost of the Division BRT transit project (see below).

Why \$175 million?

Simpler rating system with less uncertainty

Small Starts projects with high existing transit ridership can use simpler rating system below a certain cost.

High existing Line 4 ridership would make the project competitive in a simpler rating system under \$175 million.

Above \$175 million, a more complex rating system would be required. It is uncertain how competitive the project would be.

Maximize federal funding share

The maximum federal share is \$100 million, but sufficient local match is necessary to receive the full match amount.

Based on recent Small Start grant awards, \$75 million in local funding would likely be necessary to receive the full \$100 million federal share.

Costs above \$175 million would need to be covered by local funding.

\$175 million

How do we get there?

To reach \$175 million, the cost of the project will need to be reduced and additional local funding must be identified. The project will continue to seek the best ways to address community needs while looking for efficiencies in order to reduce the project cost.

Current capital cost estimates are over \$200 million. Locally, \$58 million has currently been identified for the project, including \$25 million from MTIP regional flexible funds, \$25 million from TriMet and \$8 million from the City of Portland. All local funds must be identified by spring 2018, when the project is scheduled to apply for federal funding.

Current cost estimate

Project partners have identified several strategies to reduce the cost to \$175 million while still providing a faster and more reliable transit project. (Some options for reducing costs include shortening the alignment or modifying stations.)

Target cost \$175

Project partners are working to find an additional \$17 million to reach \$175 million total, including the \$58 million in local funding already identified and the anticipated \$100 million federal match. All local funding must be identified by spring 2018.

Identified funding

What will the project bring?

New 60-foot articulated buses

- Faster boarding with multiple doors
- Carry 60% more people, fewer pass ups
- Longer, not wider than current buses
- Branded – special look and feel



Example 60-foot bus



Example station

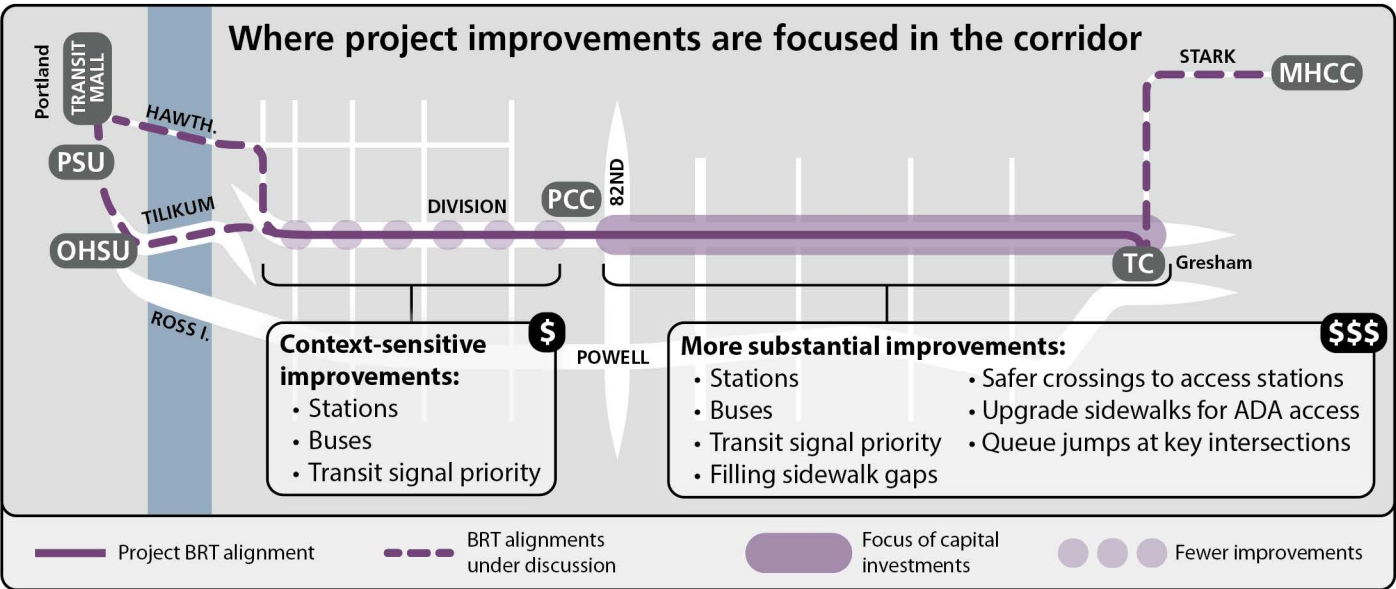
Substantial stations with wider spacing

- Weather protection and lighting
- Information on bus arrival times
- Some other amenities, such as bike parking and benches
- Branded – special look and feel

Other improvements to help the bus stay on schedule and improve access to transit

- Queue jumps at key congested intersections allow buses to move around cars
- Traffic signal priority gives longer green lights for buses to get through
- Station platform height close to the same height as the floor of the bus helps reduce time at each stop (faster boarding)
- Filling in sidewalk gaps and upgrading them for ADA access
- Improved street crossings at stations

Project improvements and investments are concentrated where there is a greater need for better infrastructure – east of 82nd Avenue



LPA Recommendation: East terminus and route

Recent analysis of costs and local budget realities have shown that the project may need to terminate at the Gresham Transit Center rather than continuing on to Mount Hood Community College (MHCC). The good news is there are options that may serve MHCC students better than the BRT. The project team is working with the Steering Committee on finding solutions.



Why could Gresham Transit Center work for the terminus?

- Connects to MAX Blue Line and eight bus routes (9, 20, 21, 80, 81, 84, 87, Sandy Area Metro)
- Existing park-and-ride, bike-and-ride facilities
- Central to downtown Gresham, near Gresham High School and development opportunities
- Short distance to potential layover site at existing Cleveland Ave Park & Ride

Why is it difficult to connect the BRT to Mount Hood Community College?

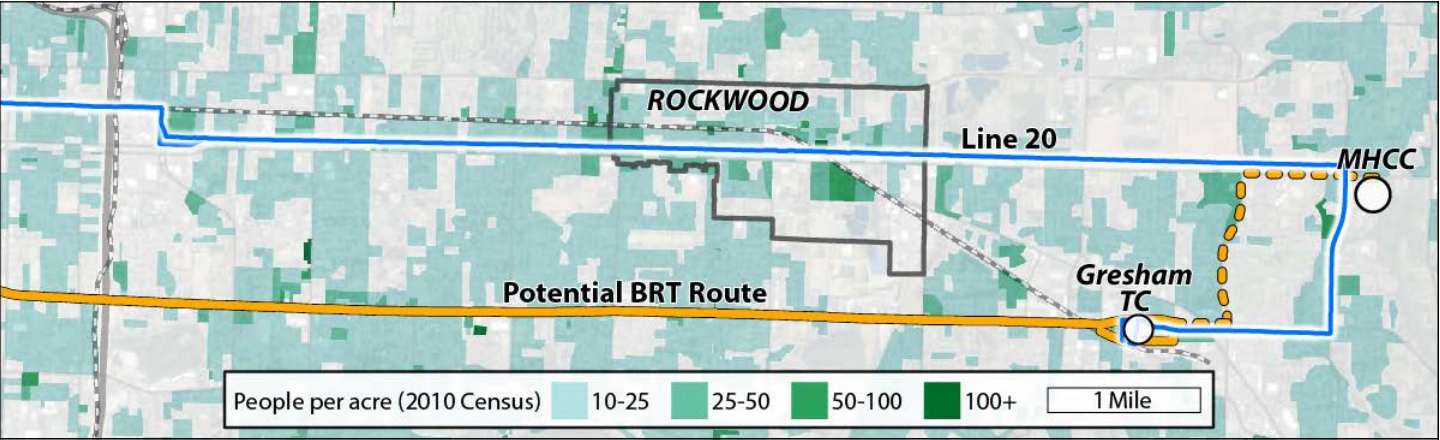
- Project costs are likely to be limited to \$175 million (see p. 8) while project cost estimate is more than \$200 million
- The BRT route is 16 miles, longer than many similar BRT projects in the U.S.
- A closed-door express BRT service between MHCC and Gresham TC would not save enough money (still needs improvements like layover facility)
- Potential ridership to MHCC is low compared to the cost of the investment

Serving MHCC with better transit

Three buses, Lines 20, 80, and 81 provide service to MHCC today accounting for around 300 riders a day to MHCC. TriMet has explored improving these lines as part of the Eastside Service Enhancement Plan.

Route	Potential improvements
Line 20-Burnside/Stark	<div>Increase to frequent service (15 minutes or better 7 days a week)</div> <ul style="list-style-type: none">• Carries 83% of current riders to MHCC• Serves Rockwood, the most densely populated area in MHCC district with high transit equity index score• Connects east Portland, Rockwood, MHCC, and Gresham Transit Center (GTC)
Line 80-Kane/Troutdale Rd Line 81- Kane 257th	<div>Double frequency to 30 minutes</div> <ul style="list-style-type: none">• Would provide service every 15 minutes between GTC and MHCC• Would not generate high ridership and had a lower equity index score

Population near Mount Hood Community College



Upgrading the Line 20 would provide strong connections to MHCC

- Easy connections to MAX, BRT, and eight bus routes at Gresham Transit Center
- Transfer times would be short. Someone getting off the BRT at Gresham Transit Center would wait, on average, less than 7.5 minutes for a transfer, with at least six buses an hour between Gresham Transit Center and MHCC (four Line 20 buses, a Line 80 bus, and a Line 81 bus).
- Line 20 serves where MHCC students live

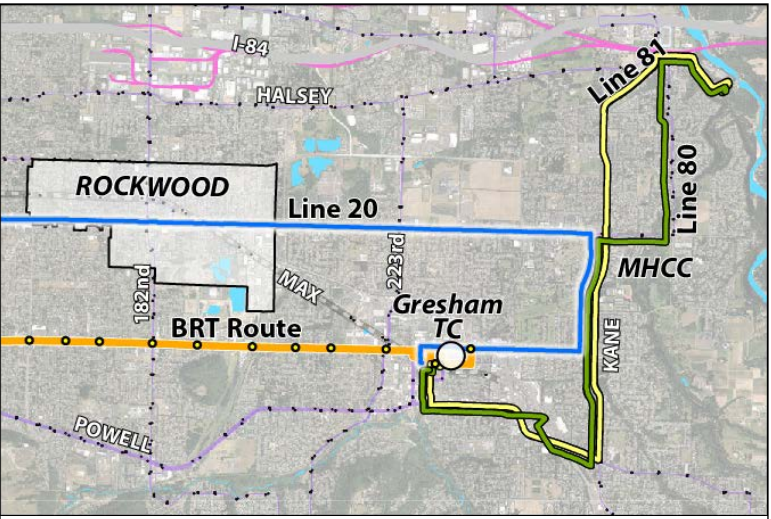


Illustration of transit options for serving Mount Hood Community College if the BRT route terminates at Gresham Transit Center

EQUITY is a Project Goal

Line 20 has a high transit equity score – it serves locations of low-income and minority households, low-and medium-wage jobs, households with youth or older adults, households with no access to a car and locations of affordable housing and social services.

Rockwood is an important equity community. Of the 38 Metro-designated town centers in the Portland area, Rockwood has: the youngest median age, the most diversity (nearly 50% non-white and 70 languages are spoken), and the lowest per-capita car ownership.

LPA Recommendation: Inner Portland

An alignment on Division in inner Portland works with three simple improvements in a walkable neighborhood: Longer buses with multiple doors, better but fewer stations, and transit signal priority at congested intersections. Information on the technical feasibility of Inner Division was presented at the June 1, 2016 Steering Committee. Since then additional information on travel time has been developed.

An alignment on Powell Boulevard is not feasible at this time because significant traffic congestion would slow down travel times, and strategies to improve travel time would cause significant property impacts. The magnitude of the improvements that would be needed could not be completed within a near-term timeframe or with the budget available to the project.

Traffic

- Division is less congested than Powell during rush hour west of 82nd Ave.
- Traffic will continue to be slow, but move more consistently with less stop and go on Division than on Powell
- With fewer stations, faster boarding and traffic signal priority, people driving will spend less time behind stopped buses

Inner Division community character

- Project can be designed within current street character on Division (sidewalks, bulb-outs, crosswalks)
- Improvements will have minimal property impacts
- Lower cost, less community disruption, fewer property impacts than a Powell alignment

Communities of concern

- While fewer minority, low income, and limited English proficiency populations live along inner Division than inner Powell, it would still serve the highest concentrations of communities of concern in the study area (outer Division neighborhoods)
- An inner Division alignment provides faster service between downtown Portland and outer Division and Gresham

Ridership

- 4-Division has high ridership, around 10,000 daily rides east of the Willamette River now
- Improved reliability, travel times, buses and amenities would attract more riders

Travel time between 82nd Avenue and Pioneer Courthouse Square

- BRT would be 15-20% faster than the 4-Division
- 4-Division takes 27-34 minutes
- BRT would take 22-29 minutes

Alignment	Travel time in minutes			
	Westbound		Eastbound	
	AM	PM	AM	PM
Line 4-Division Today	31	30	27	34
BRT via Hawthorne Bridge	26	26	22	29

Inner Division engagement findings

Public engagement efforts in June-September 2016 focused on assessing the level of support from bus riders and inner Division residents, business owners and visitors for changes that would come with bus rapid transit along inner SE Division Street, compared with current service on the Line 4. Input opportunities included an online survey, open house, intercept surveys, stakeholder interviews and multiple neighborhood and business association briefings. A more detailed description of what we heard is included in the Public Engagement Summary. Raw data from the survey is available in an online appendix.

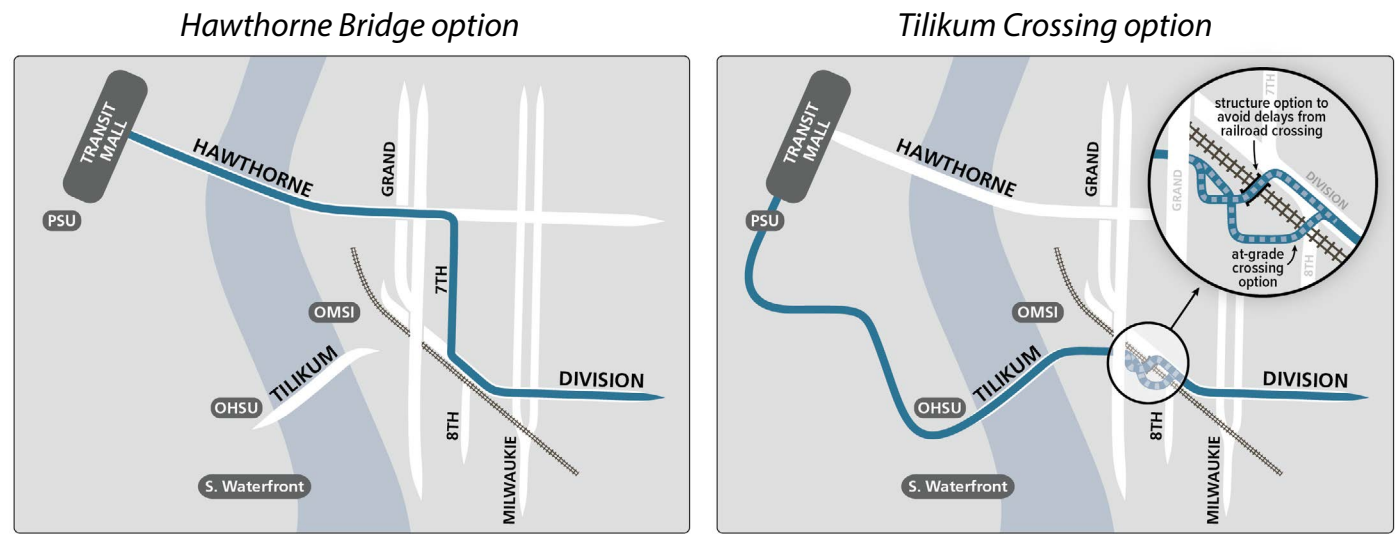
Highlights of findings from online survey

- Most say they prefer to have stops farther apart if it means a faster trip, but many also express concern that fewer stations creates a hardship for other people with mobility issues.
- Sixty-four percent of respondents say the proposed station locations work Very Well or Well; some commented that eight to ten blocks between stations seems too far.
- Some are skeptical a longer bus will fit on Division or that it may worsen traffic congestion; many are supportive that most of the existing inner Division streetscape will be maintained.
- A slight majority of people prefer the existing Line 4 routing over re-routing to South Waterfront before continuing to Downtown Portland.
- Some express frustration about the choices being offered, primarily that Powell Boulevard is no longer being considered.



LPA Recommendation: Willamette River crossing

The Hawthorne Bridge option would follow the same route as today’s Line 4 to Downtown Portland, and would require a transfer to serve OMSI, South Waterfront, OHSU and PSU. A Tilikum Crossing route would directly serve these locations before continuing to downtown.



Both river crossing options would experience disruptions that would reduce BRT reliability. The Hawthorne Bridge would be disrupted by bridge lifts. The Tilikum would be disrupted by the Union Pacific Railroad line (UPRR) and MAX Orange Line train crossings. The Tilikum Crossing route would be less reliable than the Hawthorne Bridge route unless it could avoid some of the existing delay from the track crossings. A new bridge over the tracks is too costly, but TriMet is exploring options with the UPRR that could reduce some of the longer delays.

	Train crossings or bridge lifts		
	Average per day	Average during peak periods: AM / PM	Duration: average / longest minutes:seconds
Tilikum Crossing route			
Union Pacific Railroad / Amtrak*	21	3 / 3	2:47 / 45:40
MAX Orange Line	112	18 / 19	0:33 / 3:36
Hawthorne Bridge route			
Hawthorne Bridge lifts (off-peak only)	4	None	7:47 / 15:00

**TriMet and UPRR are working to reduce delays from freight trains.*
Data sources: City of Portland Automated Rail Grade Crossing Summaries, October 2015 to January 2016, and Multnomah County Hawthorne Bridge Daily Record of Draw Openings, June 2015 to October 2015

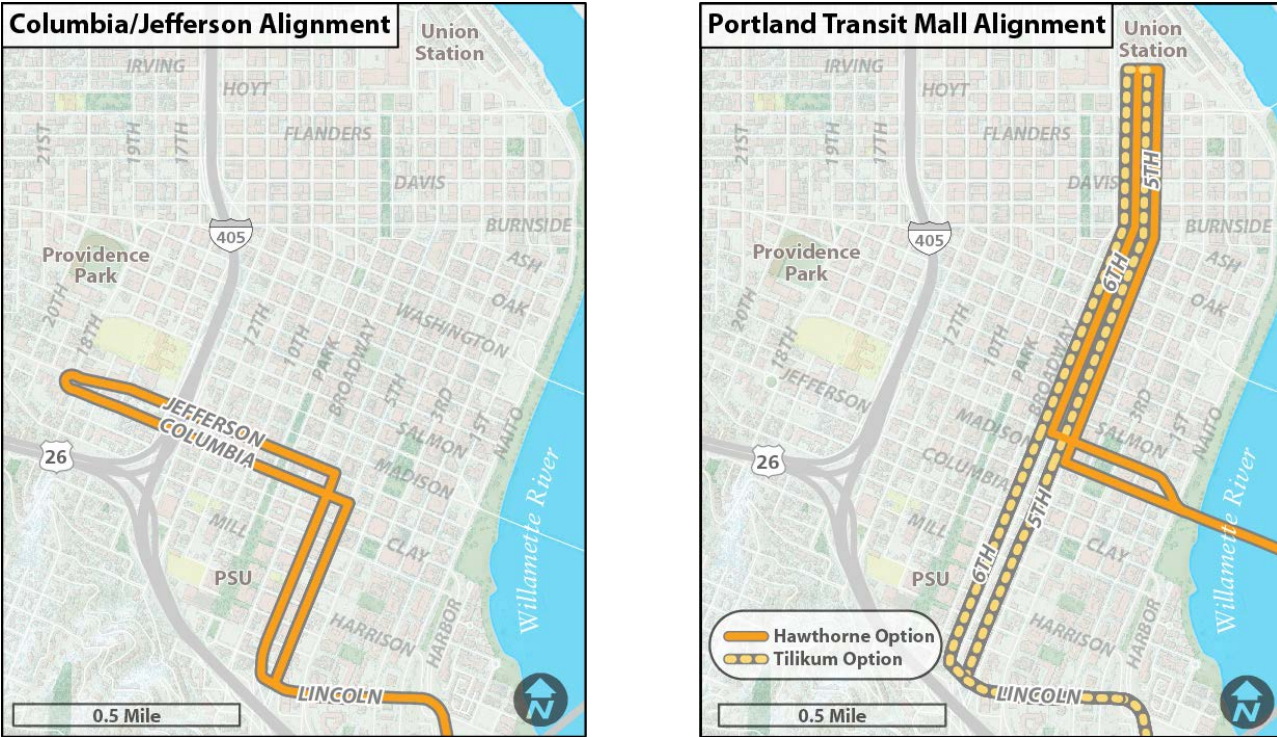
Unless resolution of the freight train conflict can be found, the Hawthorne Bridge route would be more reliable despite daily bridge lifts, with fewer disruptions throughout the day and no bridge lifts permitted during the morning and evening peak periods. A Hawthorne Bridge route would generally be 4-6 minutes faster than a Tilikum Crossing route to Pioneer Courthouse Square because of time that a Tilikum Crossing would add for travel through South Waterfront.

Public engagement: Willamette River crossing

Public outreach demonstrates support for both options for crossing the Willamette River. Throughout the project the public has shown strong support for using the **Tilikum Crossing** for the new bus rapid transit route across the Willamette River, citing speed and reliability from the dedicated transitway; leveraging investment in the new transit bridge; and direct connections to South Waterfront, OHSU, and PSU.

In a recent online survey, participants were asked to compare the current Line 4 route that crosses the Willamette River on the **Hawthorne Bridge** to a BRT route that would cross the river on the Tilikum Crossing. A majority (54%) preferred keeping the Hawthorne Bridge crossing. Twenty-eight percent supported re-routing to the Tilikum Crossing, while 18% did not have an opinion. Almost all of survey respondents (95%) currently ride the existing Line 4-Division.

LPA Recommendation: Downtown Portland



The City of Portland, TriMet and members of the business community have expressed support for the Portland transit mall alignment in downtown Portland.

Columbia/Jefferson (less promising)

- Fewer transit connections (including Amtrak and Greyhound)
- More design constraints (including Collins Circle and parking impacts)

Portland Transit Mall (more promising)

- BRT would stop at existing Line 4 stations on the Portland Transit Mall with many transit connections
- Union Station area would be the likely terminus and connect to Amtrak

Project timeline

REVISED TIMELINE	2014	2015	2016	2017	2018	2019	2020	2021
PLANNING								
Winter and spring 2014 Establish a common understanding of the needs and opportunities for transit and development in the corridor	■							
Summer through fall 2014 Look at the kinds of transit that are feasible and desirable in the corridor, hear ideas about where it should go and identify places that would make safe and active station areas	■							
Winter 2015 through fall 2016 Take the elements that are most supported and feasible, and craft a recommendation on the type of transit, route and strategies for development at station areas		■	■	■				
Fall/winter 2016 Refine the recommendation and present it to local and regional elected councils for consideration and endorsement			■	■				
DESIGN								
2015 to 2018 Create detailed design of the new transit line and station areas, and complete environmental review and permitting		■	■	■	■	■	■	■
CONSTRUCTION								
2019 to 2021 Build the transit line and station areas and start new service (2021)						■	■	■

