

Steering Committee meeting

October 24, 2016

On September 26 and October 3, the committee:

- Learned more detail and had discussion on an east terminus at Gresham Transit Center and other opportunities to improve transit service to Mount Hood Community College
- Learned more about the funding strategy and cost projections for the project
- Discussed upcoming timelines and process for LPA decision-making

On October 24 the committee will:

- Discuss technical findings and community input for all remaining route and station location decisions
- Be asked to recommend route and station locations for a Locally Preferred Alternative

A meeting on November 7 has been reserved if more time is needed for the committee to recommend a Locally Preferred Alternative.

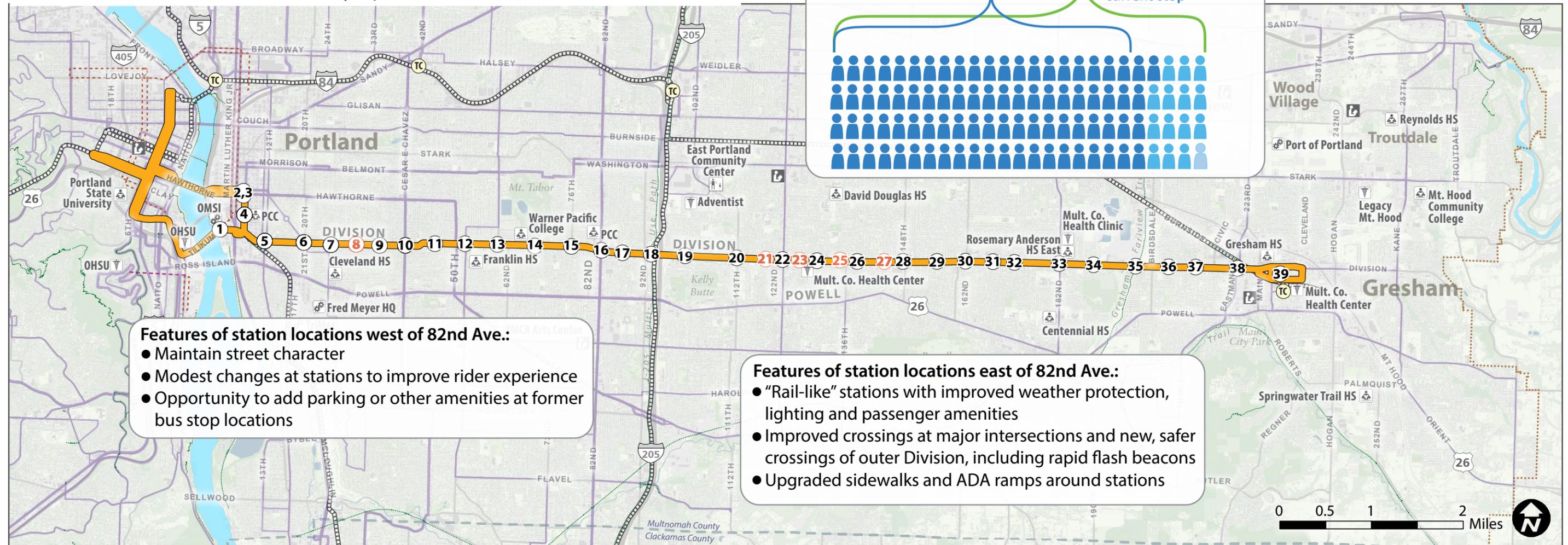


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LPA Recommendation: Station locations and alignment

The proposed route includes 39 rapid bus stations, including five new stations added based on summer 2016 community input.



Features of station locations west of 82nd Ave.:

- Maintain street character
- Modest changes at stations to improve rider experience
- Opportunity to add parking or other amenities at former bus stop locations

Features of station locations east of 82nd Ave.:

- "Rail-like" stations with improved weather protection, lighting and passenger amenities
- Improved crossings at major intersections and new, safer crossings of outer Division, including rapid flash beacons
- Upgraded sidewalks and ADA ramps around stations

Map Key	Station Location	Distance to Next Station (ft)	Map Key	Station Location	Distance to Next Station (ft)	Map Key	Station Location	Distance to Next Station (ft)
1	OMSI	2,860	17	Division & 85th	1,973	33	Division & 182nd	1,976
2	Madison & 7th	1,442	18	Division & MAX	1,953	34	Division & 190th	2,422
3	Hawthorne & 7th	1,442	19	Division & 101st	2,962	35	Division & GF Trail	1,891
4	Harrison & 7th	2,315	20	Division & 112th	1,823	36	Division & Bella Vista	1,556
5	Division & 12th	2,337	21	Division & 119th*	827	37	Division & Wallula/212th	2,409
6	Division & 20th	1,282	22	Division & 122nd	745	38	Division & Eastman	2,895
7	Division & 26th	1,270	23	Division & 125th*	1,231	39	Gresham Transit Center	2,190
8	Division & 30th*	1,302	24	Division & 130th	1,607			
9	Division & 34th	1,951	25	Division & 135th*	700			
10	Division & Chavez	1,709	26	Division & 139th	1,808			
11	Division & 45th	1,833	27	Division & 145th*	846			
12	Division & 51st	1,870	28	Division & 148th	1,947			
13	Division & 60th	3,254	29	Division & 156th	1,638			
14	Division & 68th	2,168	30	Division & 162nd	1,584			
15	Division & 76th	1,786	31	Division & 167th	1,479			
16	Division & 82nd	902	32	Division & 174th	2,328			

Options for additional study

- Potential alignments ———
- Potential station location ○
- Potential station location (recently added) ○

Average distance between stations is 1,808ft (.34 mi)

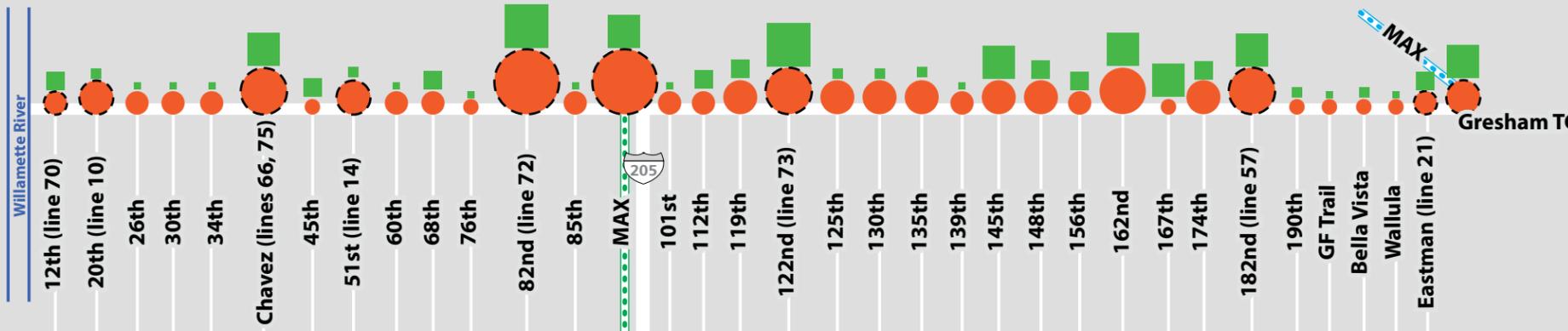
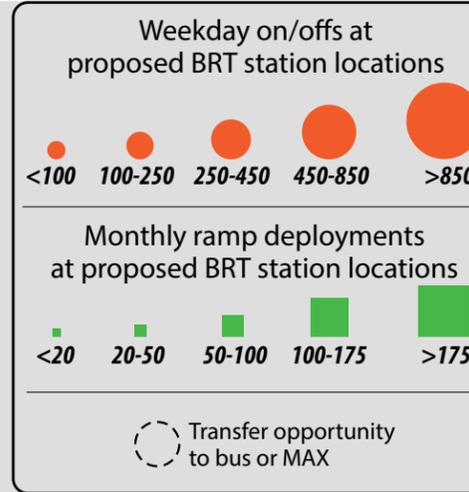
*New stations recently added

LPA Recommendation: Station Locations

Identifying station locations

In addition to community input, station locations were identified using several technical factors:

- Existing high ridership at current bus stops, including high average daily rider ons/off
- Highest number of monthly ramp deployments for mobility devices
- Major transfer points with other local bus lines and MAX
- Serves key destinations
- Safe access to stations (i.e. sidewalk infrastructure and street crossings that are signalized or marked to identify pedestrian priority)
- Maintains reasonable station spacing - on Division St., a rider would have less than 5 blocks to travel in either direction to reach a station.



Possible design of station at major intersections and transfer points.

What could stations look like?

Stations at major intersections and transfer points could be more substantial, with bike lanes that pass behind the stations (removing bus-bike conflicts), substantial weather protection and shortened crossing distances (picture at left).

Smaller “community stations” would be smaller-scale and fit more within the character of the neighborhood with a distinctive look. These would include substantial weather protection, upgraded curb ramps and new crossings of Division, including rapid flash beacons.

Community input on stations

From spring 2014 to the present, broad reaching efforts were conducted to get input on proposed stations. These include three online surveys, interacting with Line-4 and Line-9 bus riders, 11 culturally-specific focus groups, community discussion, and other in-person outreach activities. More detailed summaries of all outreach activities are included in the online project library.

Combined results from the online surveys and focus groups regarding the originally proposed stations indicate that:

Locations work well or very well or there are about the right amount of stations	50-64 %
Proposed stations do not work well	7-13%
There should be fewer stations	13-14%
There should be more stations	15-18%

In the most recent survey, most say they prefer to have fewer stops farther apart if it means a faster trip, but many also express concern that fewer stations may create a hardship for other people with mobility challenges.

In response to this input, the project team is proposing to add a new stations at 30th Ave. on inner Division, and four stations at 119th, 125th, 135th, 145th Aves. on outer Division Street. These new stations will result in 85% of riders getting on and off at their same stops, and 99% of riders having a BRT station within 3 blocks of their current stop.

In addition to stop locations and spacing, many outreach activities gathered feedback on station access and station amenities. Suggestions include:

- Weather protection, lighting and seating at stations
- Station access safety on sidewalks, at crossings and intersections and in the walking environment
- Attractive landscaping and amenities
- Clean stations with trash and recycling bins
- Security features such as cameras and station shelters that could accommodate large families
- Bathroom facilities and benches.

Underlying local transit service and reallocation of service hours

What is underlying service?

Underlying service means that another bus line would run along the corridor, in addition to the BRT, but stopping at all or most of the same stops that the Line 4-Division stops at today (approximately six stops per mile).

The project team has looked at whether underlying service can be compatible with the project goal of faster and more reliable transit service in the corridor. They analyzed various underlying service scenarios for both the entire corridor and only east of 82nd Ave.

The project team recommends not including underlying service with the BRT project.

Challenges for underlying service include safe operations for bus to bus interaction, the geometry of bus merging movements, station and stop design/layout, and conflicts between buses and people on bikes.

Some steering committee members and community continue to advocate for underlying service due to increased travel distance to transit for lowest mobility riders (elderly, people with disabilities, parents with strollers, people with groceries, etc) if local stops are removed.

Improving the network through reallocation of Line 4-Division service hours

Replacing the Line 4-Division with BRT will free up a large amount of service hours (1,400 annually) that TriMet plans to reinvest within the Powell-Division corridor. This investment will improve the transit network with dollars going to improve north/south service connections to the BRT and filling gaps with more frequency and new connections. The exact improvements will be determined with input from the communities about a year and a half before the BRT opens and local Line 4 service is discontinued.

Some potential options for reallocation of service hours could include:

- Increase frequency of Line 20-Burnside/Stark
- Increase frequency on Line 80-Kane/ Troutdale Rd and Line 81-Kane 257th
- Increase frequency of Line 87-Airport Way
- Add new service on 20th/21st, 148th, 162nd, 223rd to Troutdale



Considerations

Inner Division is not wide enough for a faster BRT to pass a slower underlying bus; a BRT would get stuck behind the bus. The project assumes that BRT is the only transit service on Division St. west of 82nd Ave.

There are multiple considerations and constraints that informed the project team recommendation to not provide underlying service on outer Division east of 82nd Ave.:

- Underlying service on outer Division would disrupt service to PCC and between outer Division and inner Division:
 - Access from the east to PCC would entail out-of-direction travel on a loop that runs on congested roadways (see image at right).
 - Transfers would be necessary between inner and outer Division.
- Underlying service would not be able to stop at key locations:
 - BRT and underlying service cannot share stations due to the neighborhood impacts and costs of longer platforms.
 - In order to accommodate bus movements for both BRT and underlying service, the underlying service stops would need to be located 150-400' apart from the BRT stations.
- BRT stations and underlying service stations close together could complicate the placement of signalized crossings.
- There would be increased numbers of bike/bus interactions where the underlying service stops are located.
- Instead of underlying service, adding four additional BRT stations in east Portland would allow **90% of current transit riders to board BRT at their current stop on outer Division and 85% on inner Division.**



BRT on Division brings changes and benefits

What does it mean to say that transit riders will have improved service? What do you get with a rapid bus system that is different than the status quo? Rapid bus service is about more reliable service, quicker trips and better access and amenities. Here’s a quick guide to rapid bus changes and benefits along the Division Street corridor.

How will rapid bus impact transit service on Division Street?		
	No change to Line 4-Division	Future rapid bus service
Buses/Capacity/ Technology	Boarding at bus front door only	Multiple door bus boarding; people can get on and off the bus quicker
	In some areas bus communicates with a traffic signal to stay green longer if bus is running late	More advanced communication with traffic signals helps the bus stay on schedule all day
	Biodiesel buses	Newer bus technology
	Riders waiting at Line-4 stops can get passed up by full buses (40' buses); most pass up complaints of any route in system	Longer 60' buses carry 60% more people; fewer pass-ups
Station Design/ Spacing/Access	72 stops between SE 8th Ave and Gresham Transit Center	35 stations between SE 8th Avenue and Gresham Transit Center
	Person travels 0-2 blocks to stop once on Division	Person travels less than five blocks to station once on Division; 85-90% of riders would use the stop they use now
	Existing TriMet buses and stops; some stops have shelters and seating	More robust stations, better station amenities, including weather protection at every station; distinct and consistent look for buses and stations
Streetscape/ Sidewalks/ Crossings	On inner Division, pedestrian friendly with streetscape enhancements	Maintains amenities and street character on inner Division, some modest changes at stations
	On outer Division, long distances between marked/signalized street crossings, inadequate ADA ramps and crossings	Improved ADA ramps and crossings including rapid flash beacons at stations not at major intersections on outer Division
	Existing sidewalk and bikelane gaps on outer Division and connecting streets	Upgraded sidewalks and bike facilities
Reliability/ Travel Times	Buses can get off schedule and travel times vary due to traffic congestion, bus bunching	15 to 20% quicker trip with improved reliability from fewer stops, quicker boarding, and coordinated traffic signals
	People driving can get stuck behind buses	People driving spend less time waiting behind buses since buses stop less often and for shorter times
	No change to Line 4-Division	Future rapid bus service