Steering Committee meeting
March 28, 2016

Where we are, decisions and next steps

This winter:

- The project team identified changes to roads and intersections needed to create a faster, more reliable bus trip, while attempting to minimize negative impacts.
- The project team learned there are significant design and congestion constraints with the currently preferred alignment.

Today, the committee will:

- Walk through and discuss constraints of the currently preferred route.
- Discuss potential concepts to deliver a near-term bus rapid transit (BRT) project.

In early summer, the committee will meet again to:

- Walk through and discuss findings of transit concepts.
- Seek consensus on most promising concepts to move forward.

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Project goals and outcomes

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

Project outcomes

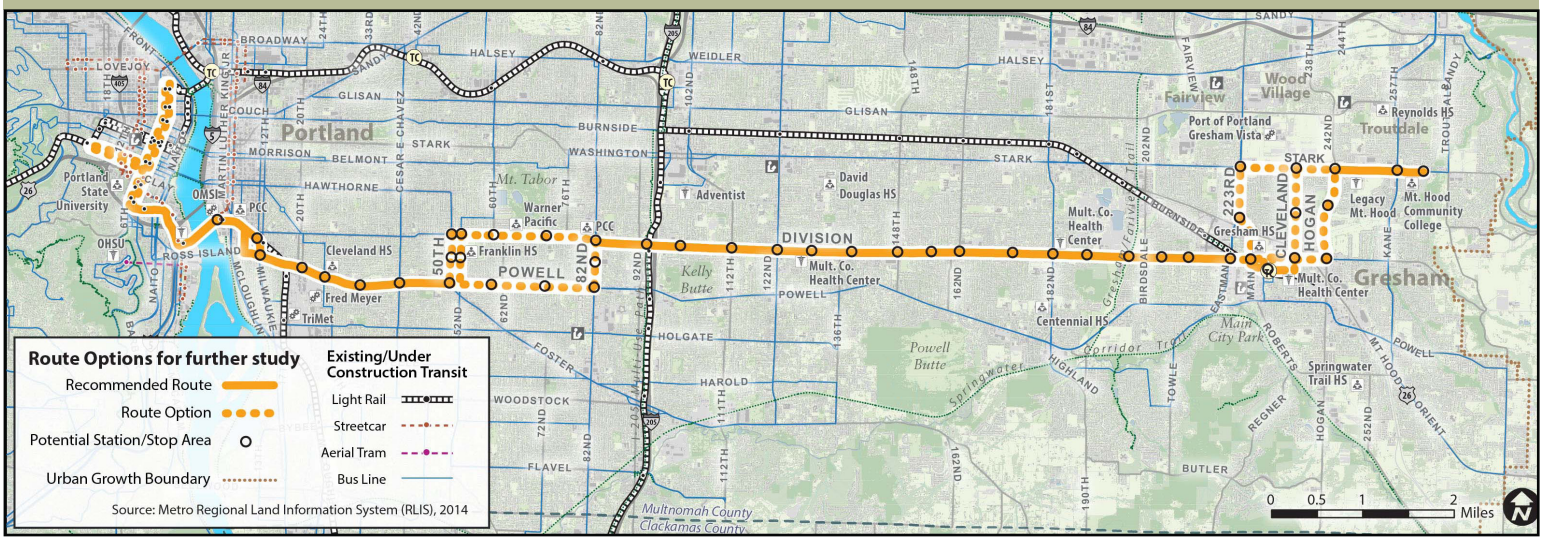
1. Create a vision and development strategy for key places that promotes community driven and supported economic development and identifies tools and strategies that mitigate the impacts of market pressures that cause involuntary displacement.
2. Identify a preferred near-term high capacity transit solution 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.

Summary of findings

- The currently preferred route -- inner Powell, 82nd Ave, outer Division -- was chosen based on connecting people to key places and activating economic development opportunities.
- Design work began this winter and identified proposed changes to roads and intersections needed to create a faster, more reliable bus trip, while attempting to minimize negative property impacts.
- **Based on design and traffic analysis, the currently preferred route does not achieve desired transit travel time savings for bus riders. The same is true for a crossing at 50th or 52nd avenues.**
- **Inner Powell Boulevard and 82nd Avenue present the most constraints (pages 4-5). Designs and roadway treatments needed to speed up the bus would negatively impact properties and other traffic (freight trucks, automobiles, bikes, and pedestrians).**
- **Potential concepts that could provide a near-term transit improvement include a smaller scale approach that improves service on TriMet lines 4-Division and 9-Powell (page 9) or a phased approach to bus rapid transit (pages 10-11). There may be other feasible concepts beyond what are shown here.**
- This spring, the project team will evaluate concepts to understand how well they meet project goals and outcomes based on a technical analysis of travel times, ridership, order of magnitude costs, potential property impacts and equity implications.
- The project team will also seek input from area residents, businesses, bus riders and the general public.
- Technical and public input findings will be shared with the Steering Committee before their next meeting, to be scheduled this summer.



Design constraints on inner Powell Boulevard

Powell underpass near 17th Ave. Congestion can last hours and back up for more than a mile.

Cleveland High School and field, a historic and 4(f) resource between 26th and 28th avenues.

Powell Park, a 4(f) resource between 22nd and 26th avenues.

Creston Park, a 4(f) resource between 43rd and 47th avenues.

Powell Boulevard in inner southeast Portland is very congested. During morning rush hour, traffic can back up from the Ross Island Bridge to 50th Avenue, causing significant travel delay.

A BRT that operates in the roadway, without treatments to help the bus get through, does not save enough time to make up for the longer trip of the currently preferred alignment (compared to a straight trip on today's line 4-Division). Traffic volumes are far above any road successfully converted to fewer lanes, so converting a lane to bus-only does not appear feasible.

Project designs that speed the bus require extra roadway width. However, Powell is constrained by limited right-of-way, abutting buildings and sensitive land uses, including parks and recreation areas, which have special protection under federal requirement *Section 4(f)*. Impacts to such properties should be avoided or minimized to the extent possible. See page 11 for a definition.

Major constraints on Powell:

- Powell underpass at 17th Avenue has narrow lanes and concrete walls.
- Powell Park and Creston Park, two city parks with recreational facilities and mature trees, are right next to the roadway.
- Cleveland High School is located right behind the sidewalk. The school's track and field is also adjacent to Powell at 30th Avenue.
- The sidewalks are narrow, as small as seven feet in some areas.
- Many buildings abut the sidewalk including new Catholic Charities offices, apartments and restaurants.
- Powell is a designated state freight route with lots of truck traffic.

Design constraints on 82nd Avenue

82nd Avenue is the Steering Committee's preference for a north/south connection between inner Powell Boulevard and Division Street.

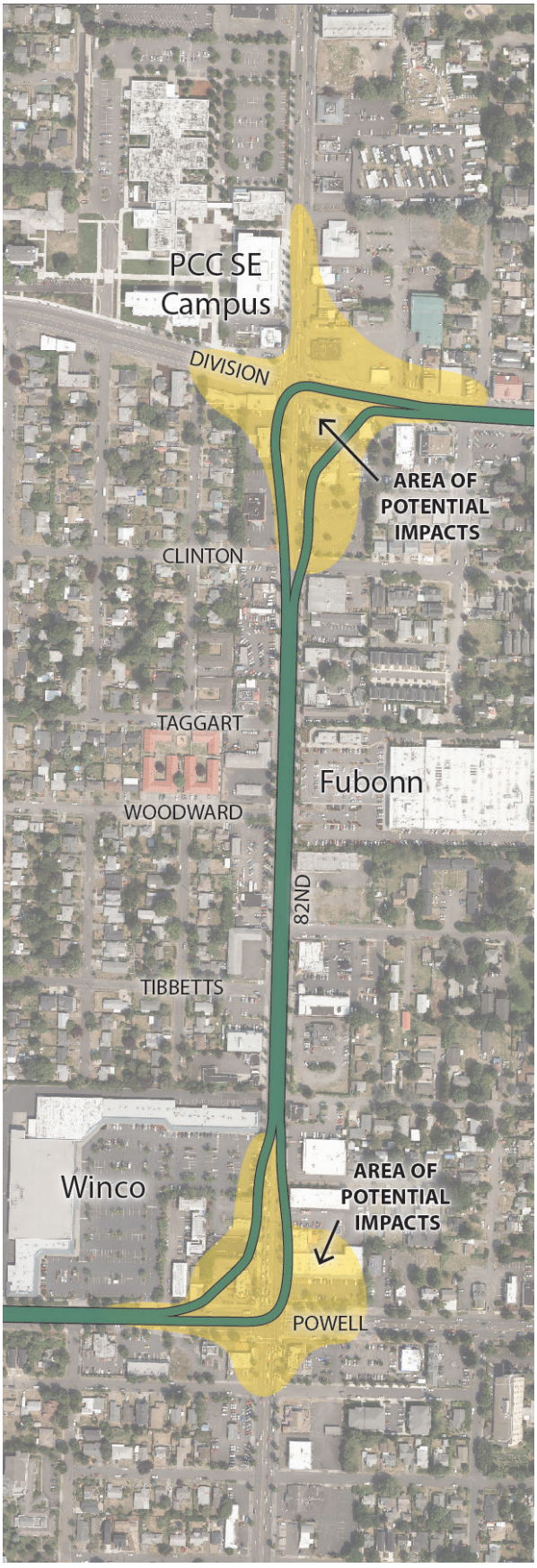
Existing congestion heavily impacts travel time and reliability for transit and traffic on 82nd, especially at the major signalized intersections the BRT would travel through (82nd/Powell and 82nd/Division). Similar to inner Powell, 82nd has many buildings that abut the roadway.

A viable BRT would need to include three major design treatments to speed up the bus on 82nd:

1. Business Access and Transit lanes (BAT) lanes would allow buses and right turning vehicles to travel in their own lanes near the major intersections.
2. An additional left turn lane for buses only from both Powell and Division onto 82nd Avenue.
3. Chamfers, or corners cut away to allow the bus to slip past traffic at the major intersections.

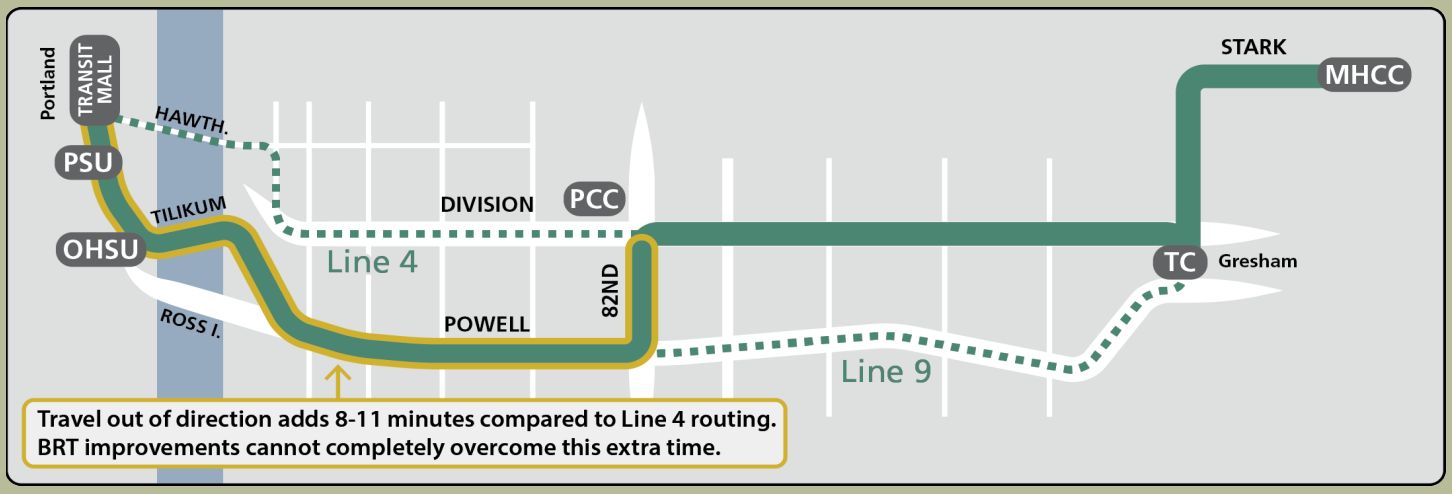
These design treatments would result in property impacts at all four corners of the major intersections (including buildings and businesses).

Public outreach in December and January shared potential property impacts, travel times and roadway designs. Since then, additional property impacts have been identified to accommodate the double left turns from both Powell and Division onto 82nd Avenue. These additional impacts are inconsistent with project goals and the Jade District vision.



An 82nd Avenue BRT alignment would have more negative property impacts than identified in January 2016.

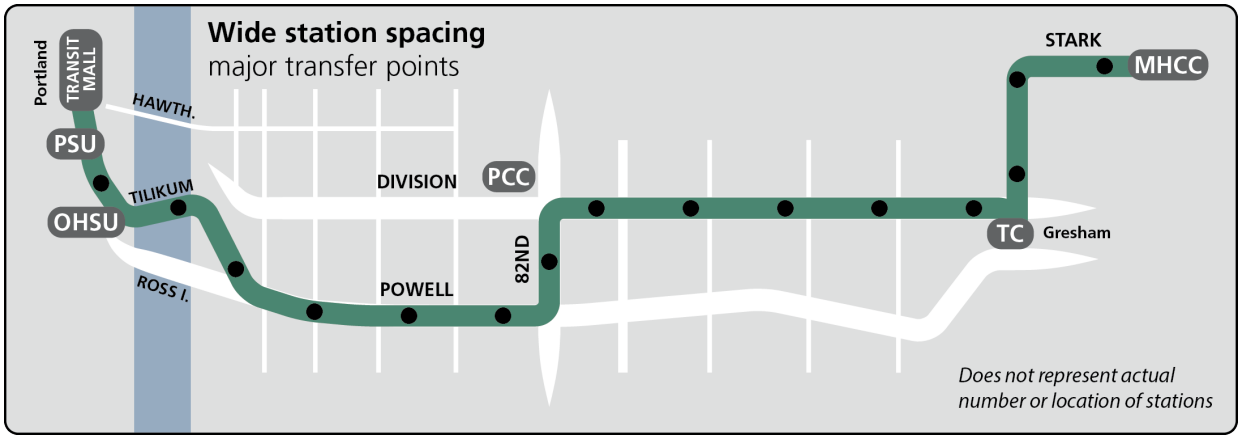
Existing transit travel patterns and estimated BRT travel times

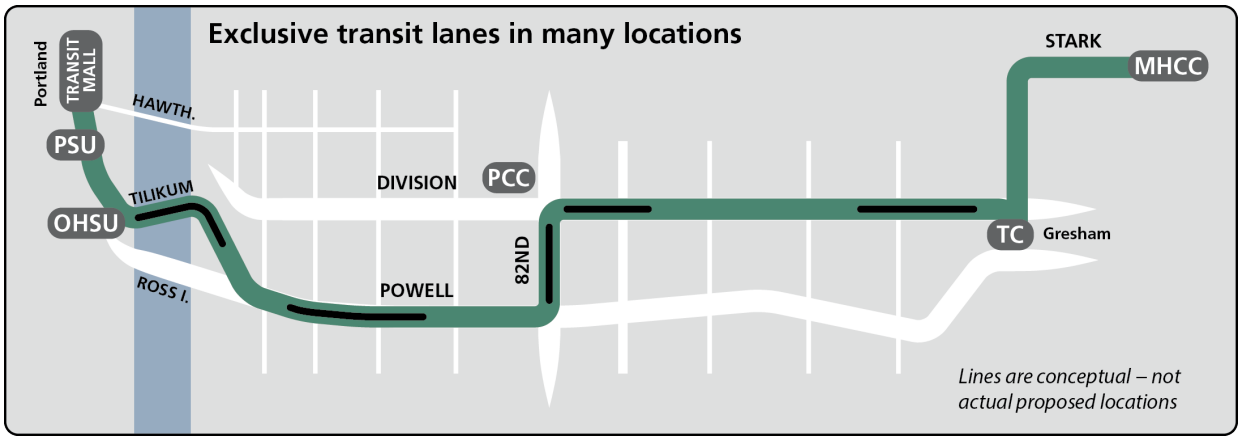


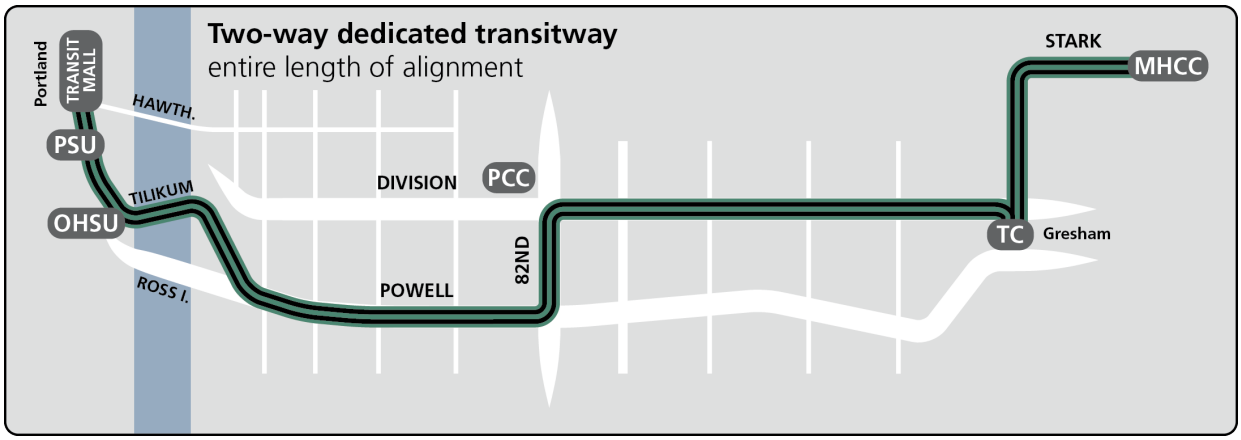
Lines 4-Division and 9-Powell have many riders today. **The project team compared estimated travel times for bus rapid transit (BRT) against current trips on lines 4-Division and 9-Powell.** BRT travel times and reliability should be better for as many trips as possible.

- The currently preferred alignment (inner Powell Boulevard and outer Division Street, via 82nd, 52nd or 50th) adds 8 to11 minutes of travel time from Gresham Transit Center to Pioneer Courthouse Square.
- The increase in travel time is primarily a result of out-of-direction travel (compared to today's trips on a straight route) and congestion on inner Powell Boulevard and 82nd Avenue.
- Proposed BRT improvements, including transit signal priority and Business Access and Transit (BAT) lanes, would reduce travel times but not by enough to provide a faster end-to-end trip compared to the line 4-Division today.
- To best compete for federal funding, the project must provide faster travel times.

Concepts using currently preferred alignment



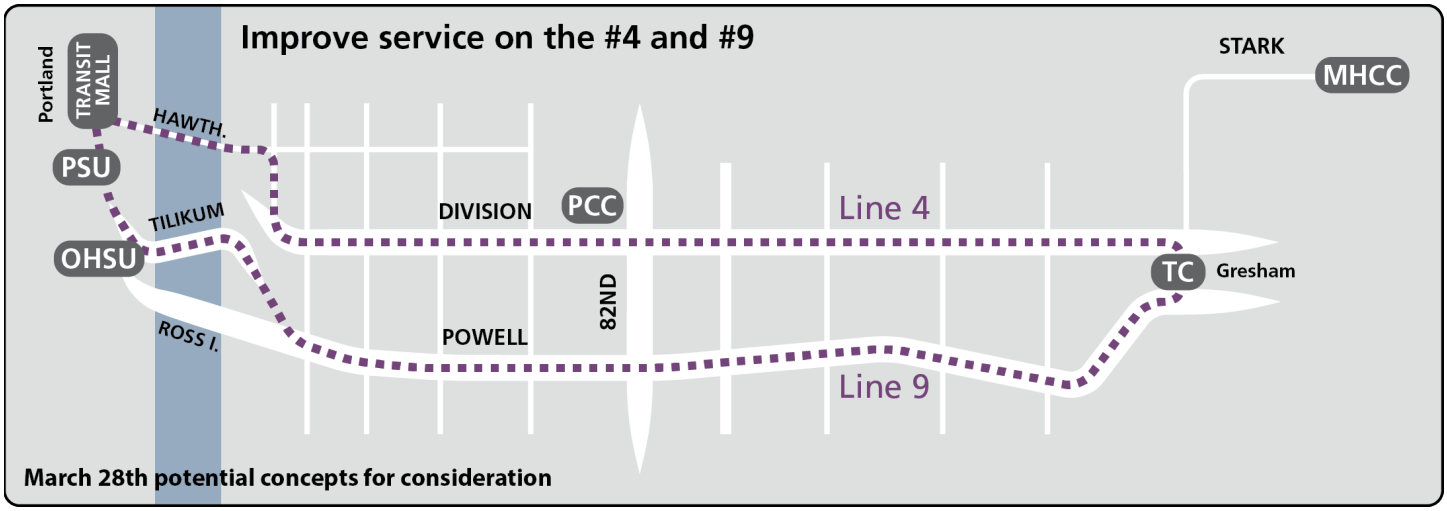




The project team analyzed ways to speed up transit travel times using the currently preferred alignment.

- **Wide station spacing**: Further consolidating the number of stations would improve travel times, but not significantly.
- **Exclusive transit lanes in many locations**: Providing limited dedicated transit lanes would improve travel times, but would likely have significant property impacts.
- **Two-way dedicated transitway**: Providing dedicated transit lanes along the entire corridor would improve travel times, but would have significant property impacts and/or significant impacts to traffic, both on the corridor and on nearby neighborhood streets. This would not be a near-term project.

Smaller scale approach



Improve service on the lines 4 and 9

- Adding limited-stop service and potentially increasing frequency on the existing transit lines 4-Division and 9-Powell. (Example: Add limited-stop service on top of regular underlying service in peak periods. Actual service details to be determined.)
- Some improved access to transit stops (sidewalks, crossings).

Project timing

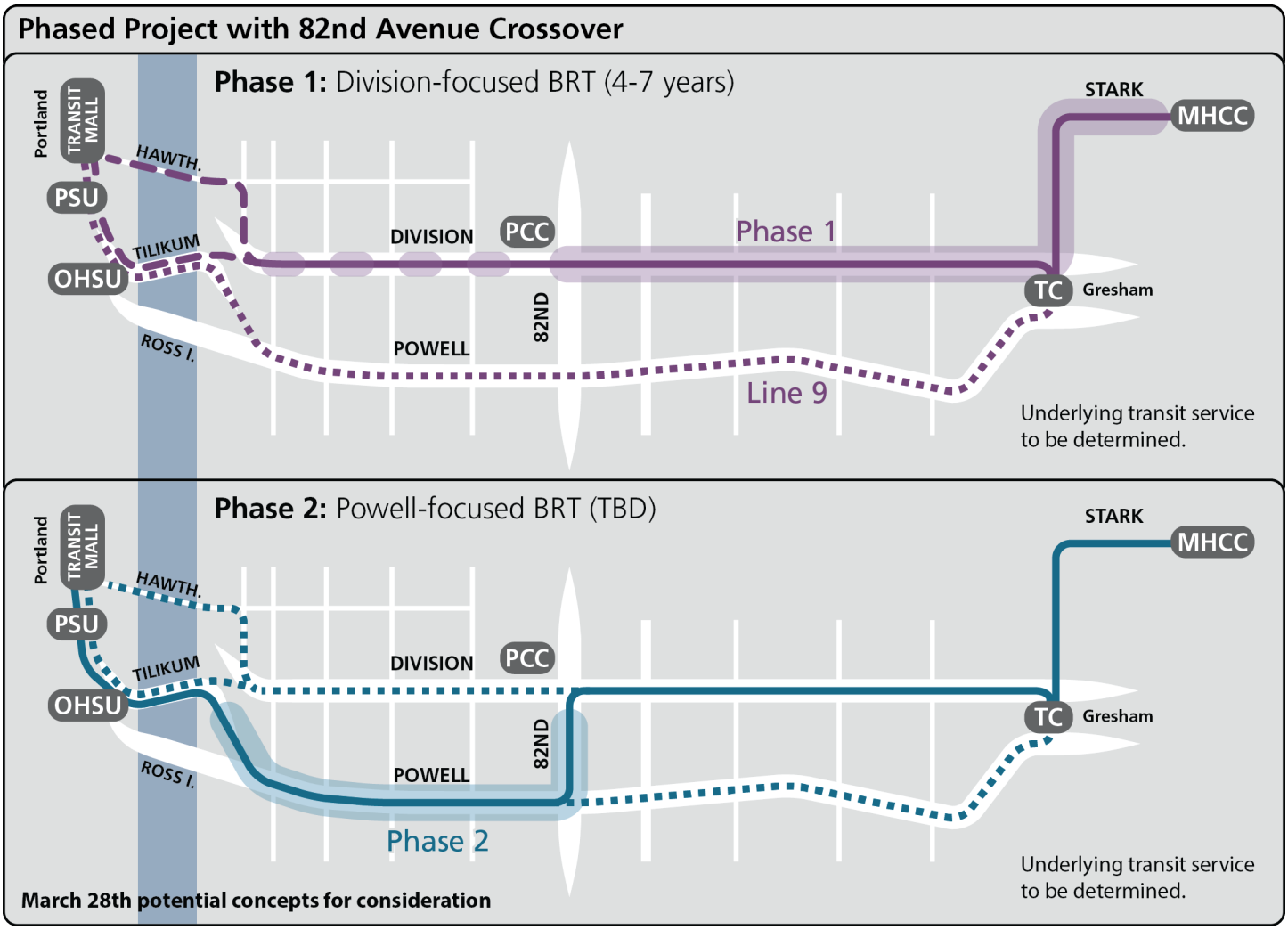
- Service improvements could be implemented within 3-5 years.

Other considerations

- Does not provide ability to seek federal funding for construction project, so limits ability to do improvements beyond bus service.

There may be feasible concepts beyond what is shown in this document. See page 11 for next steps that include analysis and public input.

Phased concepts



Phased BRT project with 82nd Ave crossover

- Phase 1 would focus on Division, and Phase 2 would focus on 82nd Ave and Powell.

Phase 1: Outer Division to Mt Hood Community College BRT

- Focus BRT capital improvements on outer Division to Mt Hood Community College.
- Branded, articulated vehicles serve inner Division to/from downtown Portland crossing either Hawthorne Bridge or Tilikum Crossing.
- Some improved service on the line 9-Powell (i.e., limited-stop service).

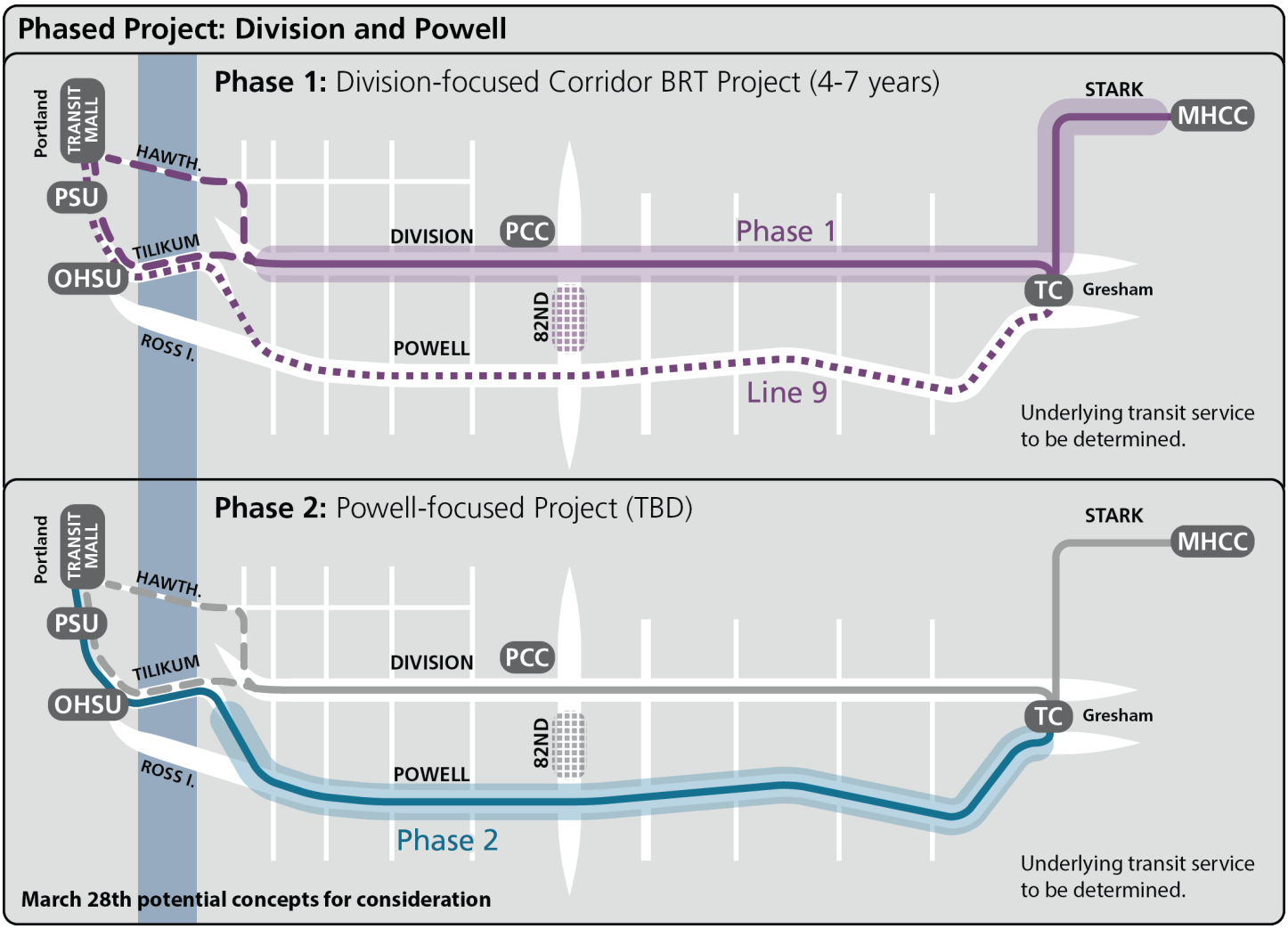
Phase 2: Inner Powell and 82nd Avenue BRT (connects to outer Division)

- BRT connection to outer Division BRT. The 82nd Ave and Powell Blvd travel and design constraints (pages 4-5) would need to be resolved. Project to be defined in second phase.

Project timing

- Phase 1 could be implemented in 4-7 years with a Locally Preferred Alternative recommendation in fall 2016.
- Phase 2 timing is to be determined based on scope of project.

Phased concepts - continued



Phased project with Division corridor BRT and Powell-focused project

Phase 1: Division-focused corridor BRT to Mt Hood Community College

- Focus BRT capital improvements on outer Division to Mt Hood Community College.
- Branded, articulated vehicles serve inner Division to/from downtown Portland crossing either Hawthorne Bridge or Tilikum Crossing with some BRT improvements.
- Some improved service on the line 9-Powell (i.e., limited-stop bus service)
- Sidewalk, crossings and lighting improvements on 82nd Ave.

Phase 2: Powell-focused project

- Project to be defined in second phase. Powell Blvd travel and design constraints would need to be resolved.

Project timing

- Phase 1 could be implemented in 4-7 years with a Locally Preferred Alternative recommendation in fall 2016.
- Phase 2 timing is to be determined based on future scope of project.

Next steps

The project team will analyze preliminary concepts for technical feasibility and engage key stakeholders about project changes between now and May. In June, findings will be shared with the Steering Committee. With committee guidance, the most promising options will be analyzed in more detail for technical issues and community preferences. This will inform a committee recommendation on route and station locations in the fall.

March-May	• Analyze alignment and river crossing concepts for technical feasibility. • Engage key stakeholders about potential concepts.
June	• Steering Committee reviews the concepts' feasibility and stakeholder input and seeks consensus on most the promising options to move forward for public input.
June-August	• Engage area residents, businesses, bus riders and the general public on options advanced by the Steering Committee. • Analyze options in more detail to determine design and transit performance.
Fall 2016	• Steering Committee reviews public input and technical analysis and seeks consensus on route and station locations (1-2 meetings).
Beyond	• TriMet designs in further detail, analyzes and works with input from a new Community Advisory Committee.

Definitions

Business Access and Transit (BAT) lane: A curb-side lane for transit use and for automobiles and bicycles that are turning right into and out of driveways.

Chamfer: A cut-through bus lane built diagonally at the corner of an intersection allowing buses their own lane to slip past congestion at an intersection.

Limited-stop bus service: Bus service that only stops at key bus stops along a route, skipping closely spaced bus stops to speed travel.

Section 4(f) of 49 U.S.C. 303: A transportation project requiring the use of a Section 4(f) resource will be approved only if there is no prudent and feasible alternative to using that land and if the project includes all possible planning to minimize harm to the resource. Section 4(f) protects public parks and recreational areas, wildlife refuges and historic sites.

Transit signal priority: A general term for technological improvements to reduce waiting time at traffic signals for transit vehicles by holding the green light longer or shortening red lights giving the transit service "priority" over competing traffic.

Revised project timeline

REVISED TIMELINE	2014	2015	2016	2017	2018	2019	2020	2021-22
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 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 summer 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 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 2021-22 Build the transit line and station areas and start new service (Year of service start not yet determined)								

The Powell-Division Transit and Development Project is a partnership of the cities of Portland and Gresham, Multnomah County, the Oregon Department of Transportation, TriMet and Metro.

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www.oregonmetro.gov/powelldivision