ROSE LANE PROJECT

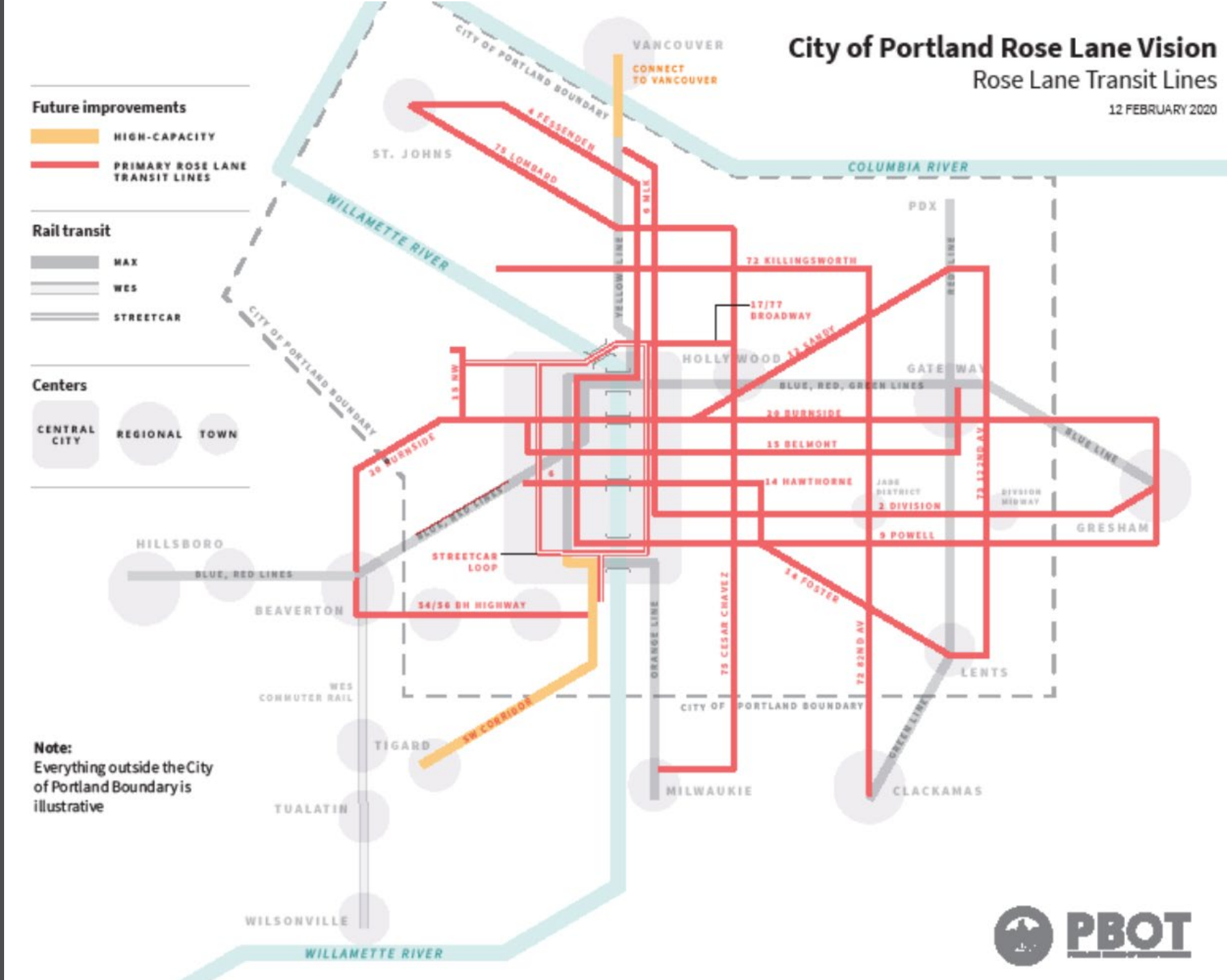
Portland Bicycle Advisory Committee

April 13, 2021

PBOT
PORTLAND BUREAU OF TRANSPORTATION

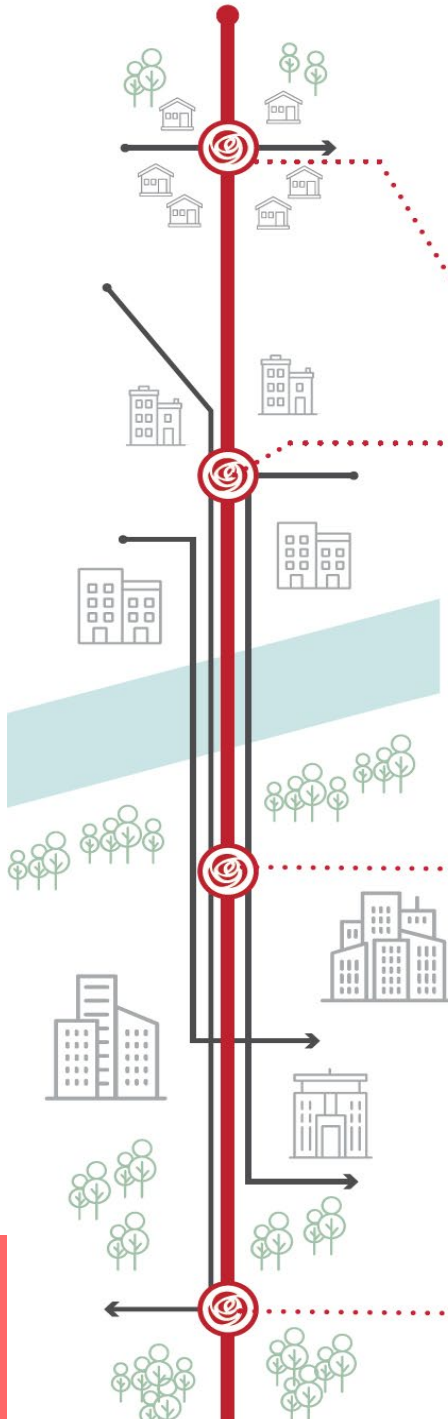
The Rose Lane Vision:

Portland's premier, city-wide bus and streetcar network that riders can count on to get where they need to go quickly and reliably.



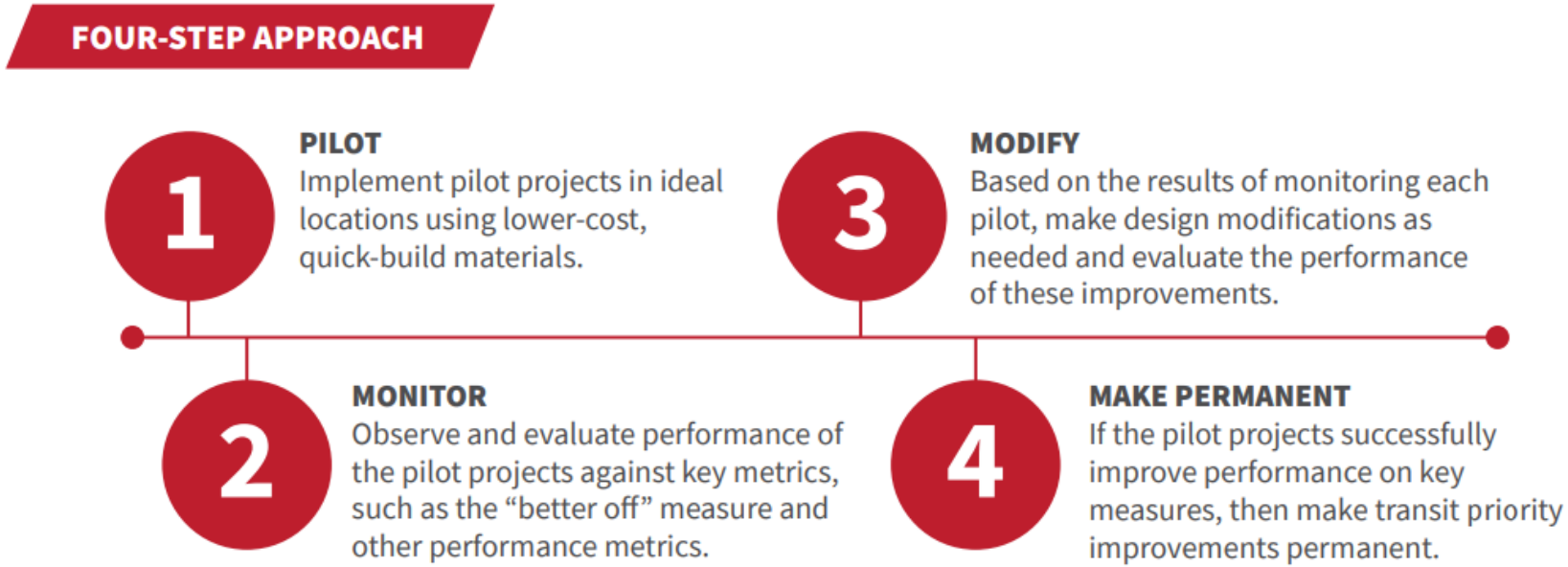
What are “Rose Lanes?”

- Rose Lanes are transit routes **where buses and streetcars get priority on the road in congested areas**.
- There are **over 20 transit priority tools** we can use to make transit faster and more reliable. **Not all Rose Lanes will be bus only lanes.**
- **Guided by project better-off measures**, we will pick the tool best suited to address the needs and context in areas where transit is most delayed.



Pilot approach across all new proposed Phase 2 projects

- Implement low-cost design and materials first (little to no red during pilot phase)
- Collect data before & during
- Provide opportunity for public to provide feedback before and during pilot
- Monitor and retain some budget for mitigation or changes
- “Harden” improvement once pilot is complete, possibly adding red where needed



Considerations for other modes

Emergency vehicles: Emergency response vehicles can use transit priority lanes to bypass motor vehicle congestion

Pedestrian facilities: Many Rose Lane projects also include benefits for pedestrians.

Bike facilities: Many Rose Lane projects also include benefits for cyclists, including creating bike network connections and reducing bike/auto conflicts.

Auto traffic travel time and diversion: Some projects will likely cause additional delay for drivers at peak times. These impacts are not expected to cause safety impacts. We may make necessary refinements based on pilot monitoring in the future.

Parking removal: Some projects will require parking space to be repurposed.

Roll out status, as of December 2020

16

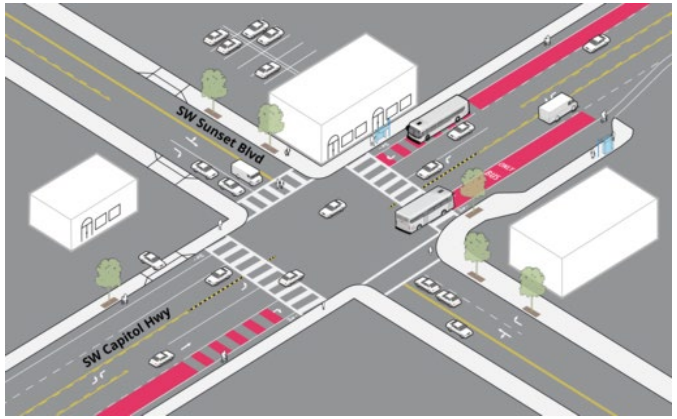
Completed Projects

(built in 2019 or after)

18

Funded/In Progress Projects

(currently funded and in design, out to bid or slated for construction)



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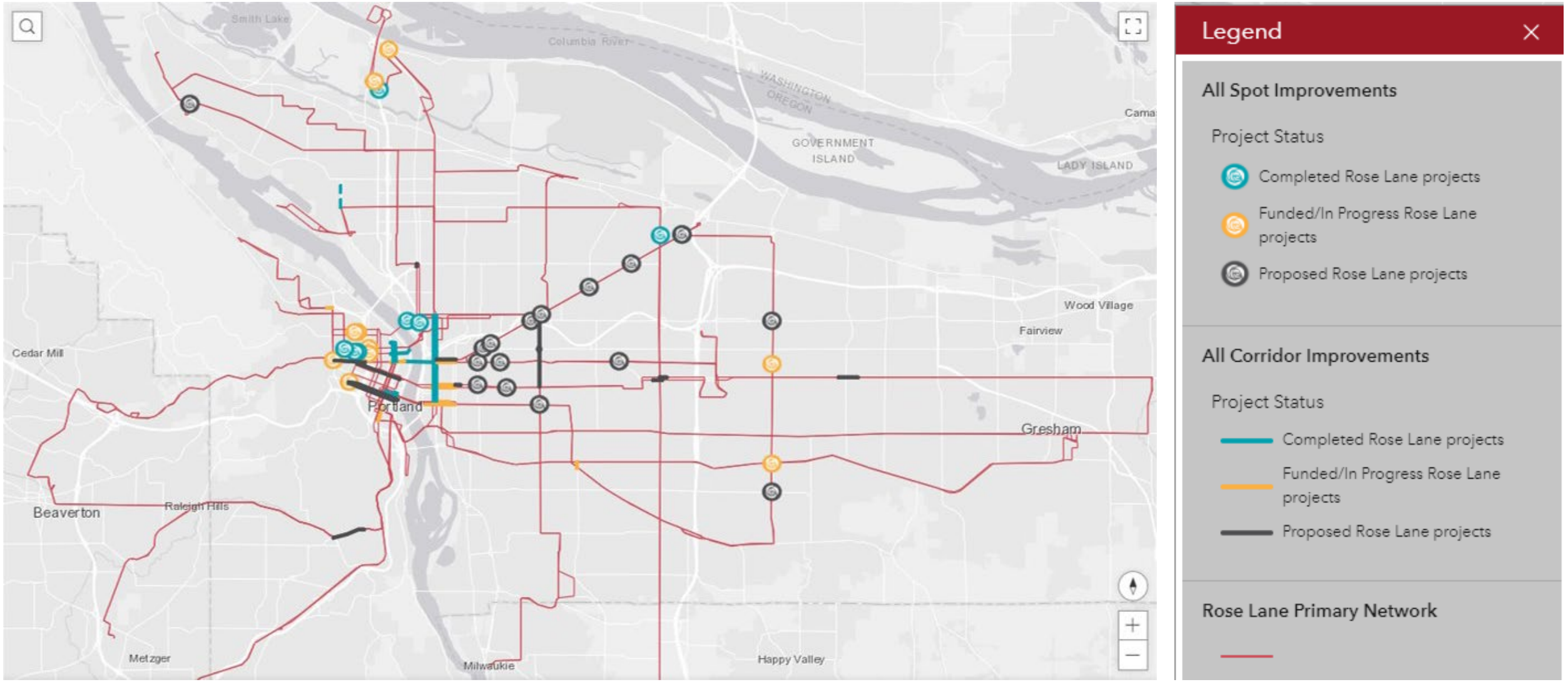
Proposed Projects

(identified for future implementation when funding is available)

Rose Lane Project online interactive map

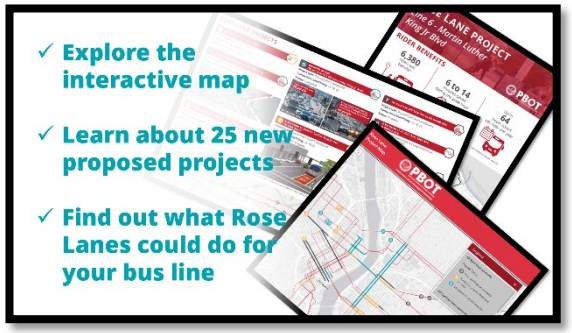


Winter outreach: Program-level engagement

- Interactive **online open house** and **map** (*Portland*.gov/*RoseLanes*)
- **Feedback survey** open December 9, 2020 – January 24, 2021
- Focused **engagement with bus riders** on key lines
  - TriMet messages
  - Sidewalk stickers at bus stops
  - Direct outreach in Spanish, Vietnamese and Chinese through Community Engagement Liaisons

Outreach numbers:

- **3,221** online open house visitors
- **15,713** interactive map views
- **1,266 English** survey responses
- **62** phone surveys conducted by community engagement liaisons
- **+13,670** GovDelivery email recipients
- **+20** CBOs notified
- **7** community groups visited



What next?

Prioritizing the next phase of Rose Lane projects

Coming Next…

- Public involvement summary report of what we heard
- Year 1 progress report:
  - Summary of work completed since Feb. 2020
  - Update on projects advancing next
- Updates to the interactive online map
- Additional public involvement in project areas, as they advance
- Visit our website to learn more and sign up for updates: *Portland*.gov/*RoseLanes*

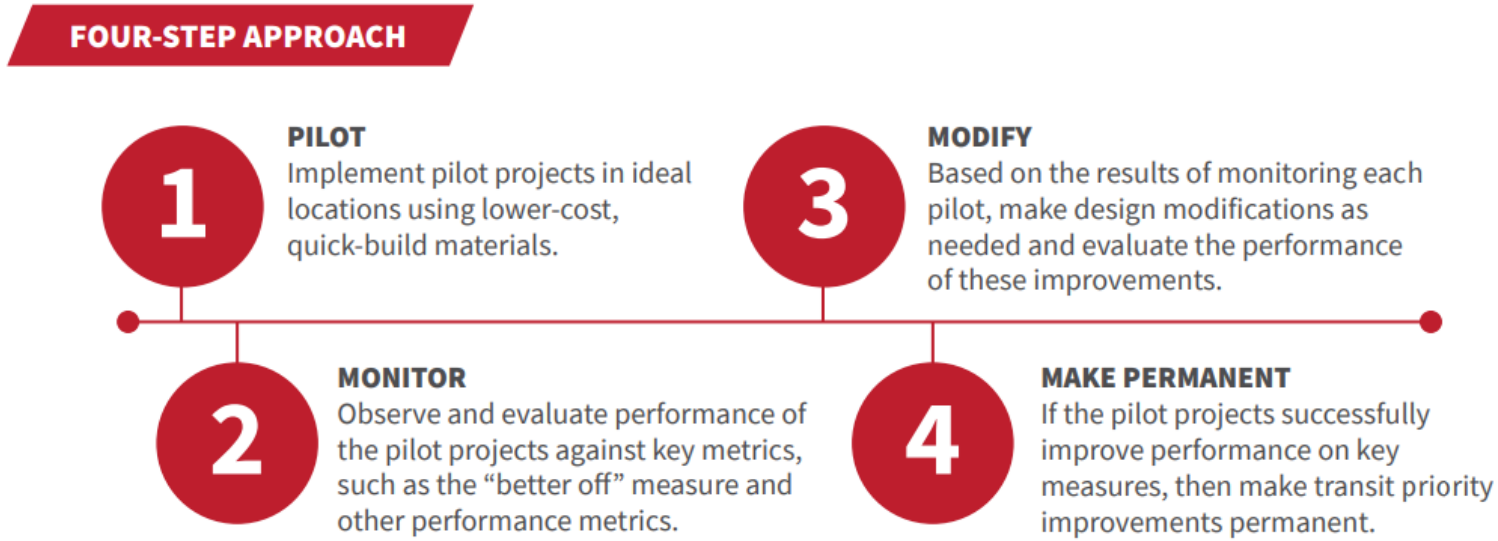
Buses and Bikes

Context and typology considerations to help inform design

Considerations for the Cycling Environment

Stages within Rose Lane Pilot Projects in which cycling is considered:

1. Design of initial pilot projects
2. Monitoring and potential modifications or mitigation during pilot
3. Making pilot projects permanent
4. Future major capital projects beyond pilot



BAC feedback, help weigh in on…

1. Context considerations that inform Bus and Bike design.
2. How and what to communicate to the cycling community.
3. Potential monitoring of the cycling environment during pilot.
4. Potential modifications or mitigation.
5. What works? What could be better?
6. Future Rose Lane pilot projects.
7. Permanent Rose Lane facilities.

Potential Monitoring of the Cycling Environment

1. Where there is potential for diversion onto Neighborhood Greenways.
2. Where Zicla modular platforms are installed.
3. Where buses and cyclists share a lane.
4. Where cyclists are permitted to use a BAT lane, or “Right Turn Except Bus and Bike” spot improvement.
5. Where a bike lane is to the right of a BAT lane.
6. Where right turns are prohibited to reduce vehicle-bike conflicts.

Proposed pilot project at Sandy/Alameda/57th Ave

Make NE Alameda from NE Sandy to NE 56th one-way westbound for auto traffic.

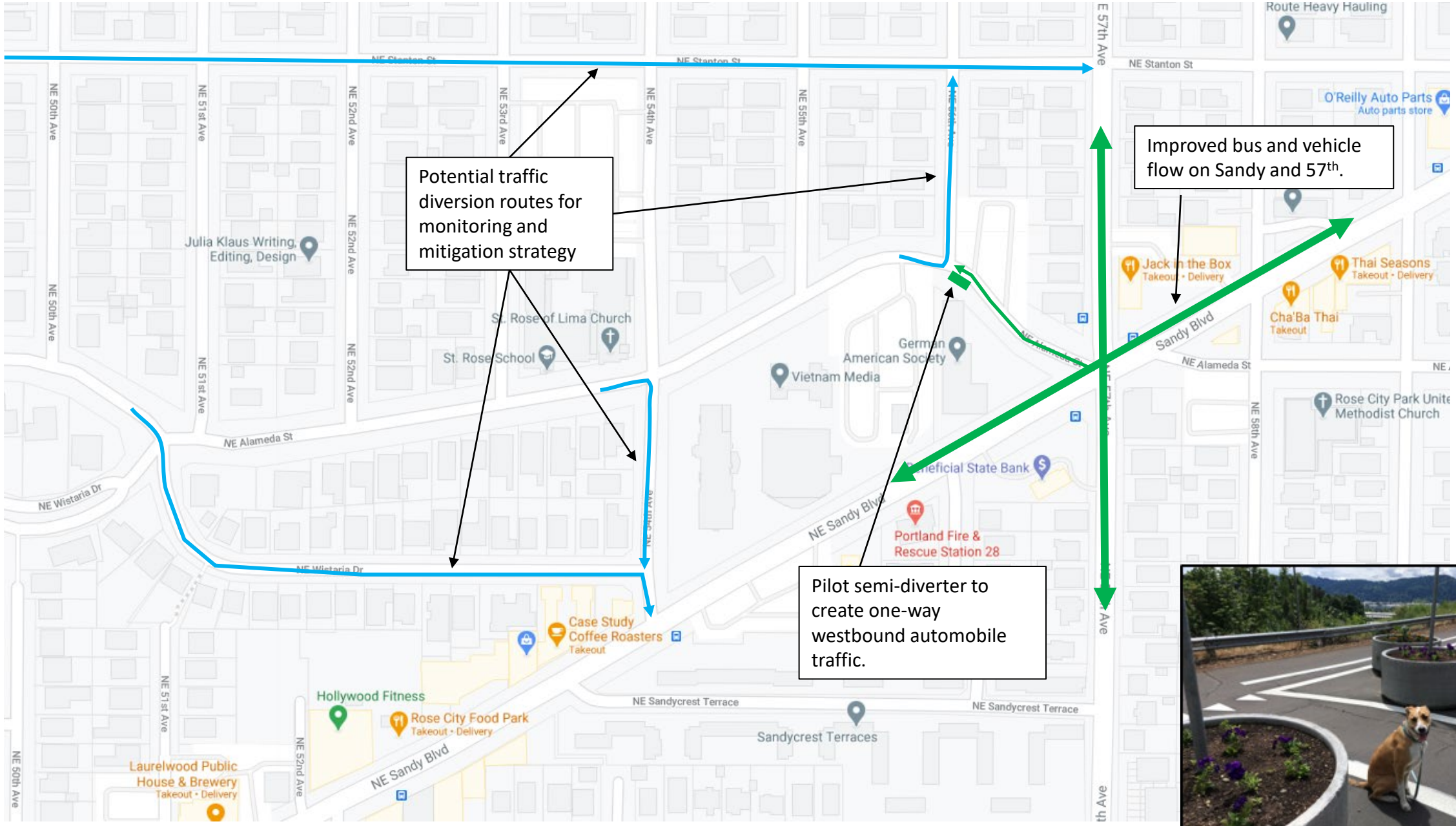
Benefits of this change:

- Remove Alameda signal phase from the complex interchange.
  - *Bike/ped signal phase remains.*
- More green time for Sandy and 57th reducing delay to transit (bus lines 12 and 71) and traffic operations.
- Reduce cut-through traffic on NE Alameda neighborhood greenway.

Monitor potential impacts of this change:

- Traffic changes on other neighborhood streets.
- Access to local destinations.

NE Alameda/57th/Sandy Neighborhood Greenway and Rose Lane Project



Context Considerations that Inform Bus and Bike Designs

- If there is an **existing bike facility or not**.
- **Constraints**, particularly roadway width between curbs, including curb extensions.
- **Speed differential** between cyclists and transit and general traffic.
- **Grade** of the street.
- **Length** of facility.
- **Parallel route** and facility type options.
- **Level of use** by buses and cyclists.
- **Policy**, particularly modal street classifications.

Types for Bus and Bike Designs

1. Bike lane to the right of bus lane
2. Bike lane to the left of bus lane
3. BAT lane conversion to the right of existing bike lane
4. Shared bus/bike lane
5. Bikes permitted use of BAT lane

SW Main (2nd - 3rd Ave)

Context Matters – laneway design considerations

- **Separate** transit and bike facilities always preferred, when reasonably feasible

Burnside Bridge (eastbound)

Context Matters: bike lane to the right of bus lane

Example on SE Morrison (12th - Grand):

Pro-time bus lane, off-peak parking right of bike lane

Right turning vehicles and buses yield to cyclists

Context Matters: bike lane to the left of bus lane

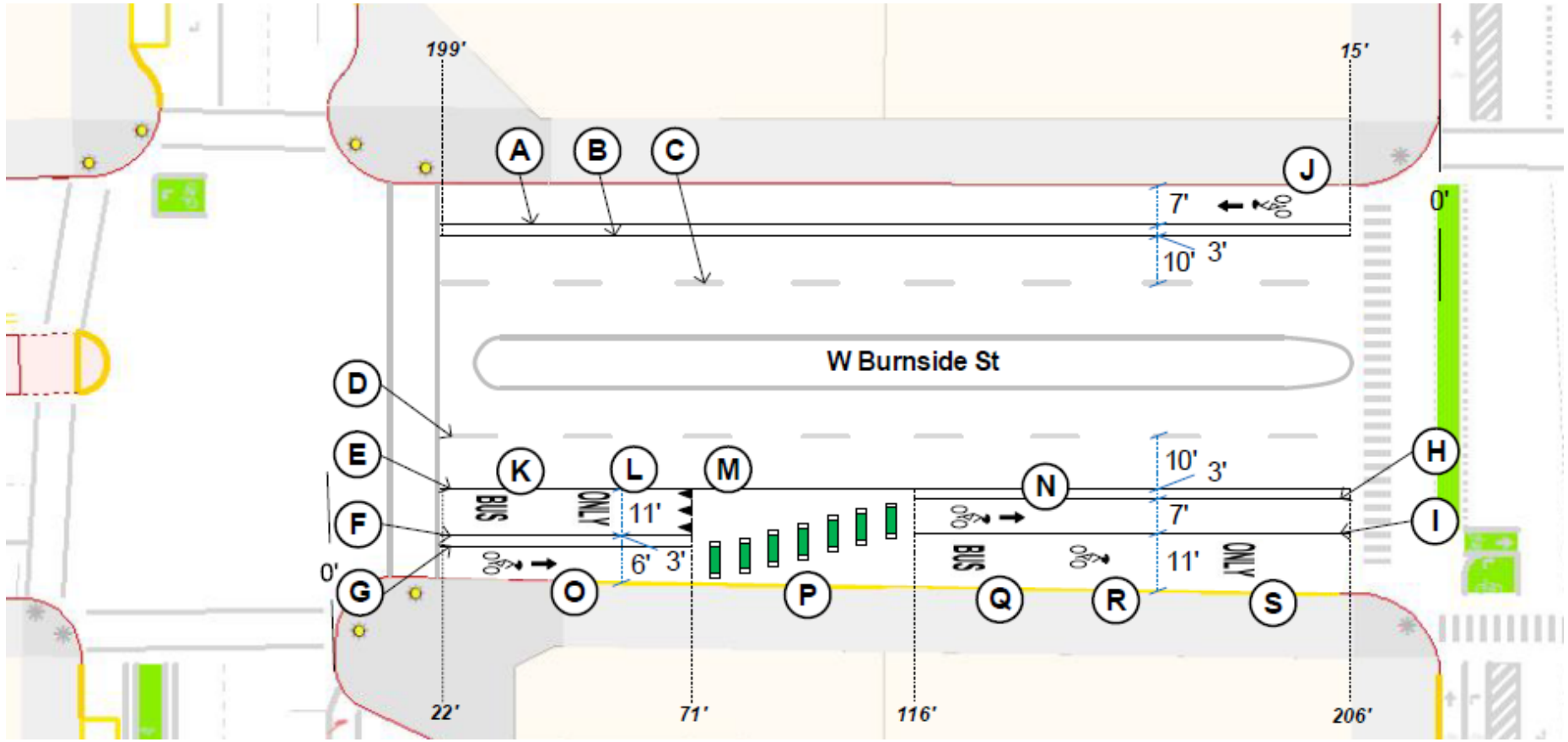
Examples on SW Madison:

Bike lane to left of BAT lane (3rd – 2nd Ave)

Bike lane to left of Bus lane (5th – 4th)

Context Matters: Separate bus and bike facilities at bus stops

Example of Bus and Bike Lane Configuration that Changes at Bus Stop



W Burnside (3rd Ave – 2nd Ave)

Context Matters: Separate bus and bike facilities at bus stops

Example: W Burnside (3rd Ave – 2nd Ave)

BEFORE (Aug 2016)

AFTER (July 2020)

Context Matters: Bikes and Bus stops

W Burnside (3rd Ave - 2nd Ave)

AFTER (July 2020)

AFTER (July 2020)

Context Matters: BAT lane conversion to the right of existing bike lane

Design Considerations:

1. Reduces the volume of vehicles in the lane adjacent to the bike lane.
2. Provide more buffer for cyclists.
3. Improves predictability: if a driver is in the BAT lane, they are likely parking or turning.
4. Try to minimize conflicts at bus stops.

BAC: What do you think about this design type and considerations?

E Burnside (MLK Blvd – 12th Ave)

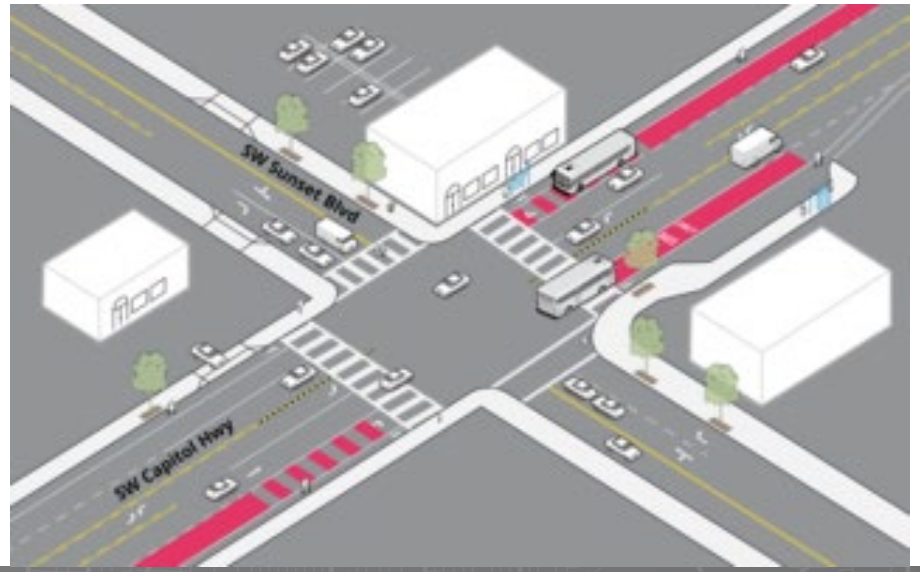
Proposed Pilot Project Concept: SW Capitol Highway

Proposed pilot treatments:
BAT lanes from SW Bertha to SW Sunset (eastbound) and from SW Terwilliger to SW Sunset (westbound) through general travel lane conversion; westbound right-turn-except-bus approaching Terwilliger.

Transit lines served: 39, 44, 45, 54, 55, 56, 61, 64, and 92

Anticipated benefits:
- Benefits 11,730 riders
- 28 buses per hour in the peak
- Between 1-2 minutes travel time savings in the PM peak

Anticipated risks:
- +1-3 minutes of average auto travel time westbound (PM peak); fewer impacts eastbound
- Minor delays in off-peak hours



Context Matters: Shared bus/bike lanes

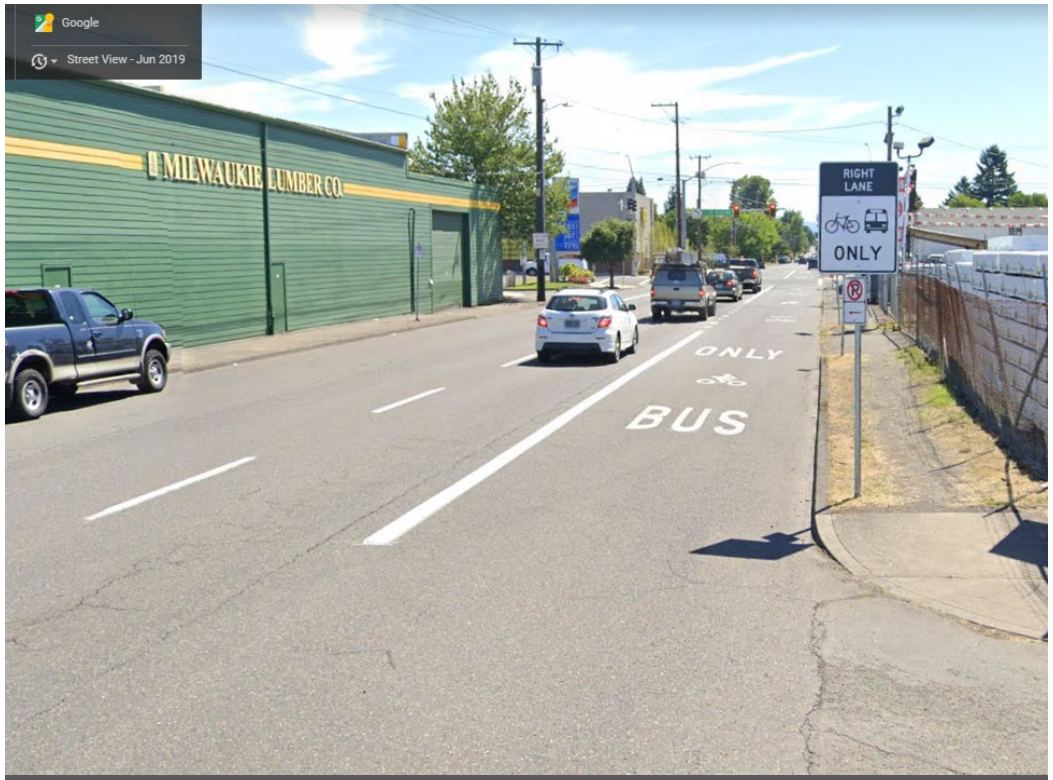
Design Considerations:

1. Width for adequate separate facilities not feasible, less than ~15 ft.
2. Low speed differential between cyclists and buses, such as urban core, signal density and timing, main streets, downhill grade or near signalized intersections.
3. Wide enough for a cyclist to pass buses at bus stops.
4. Reduce or minimize bus and bike weaving if possible.
5. Try to provide physical separation between general purpose travel lanes and shared bus/bike facility.
6. Provide a nearby route to serve 8 to 80 population.

SW Madison (4th – 2nd Ave)

Context Matters: Shared bus/bike lanes

- Other recent examples



SE Washington approaching 82nd Ave

SE Stark approaching 82nd Ave, pro-time bus lane

Funded/in progress Project:
N Whitaker Rd approaching I-5 and Delta Park

Proposed treatments:

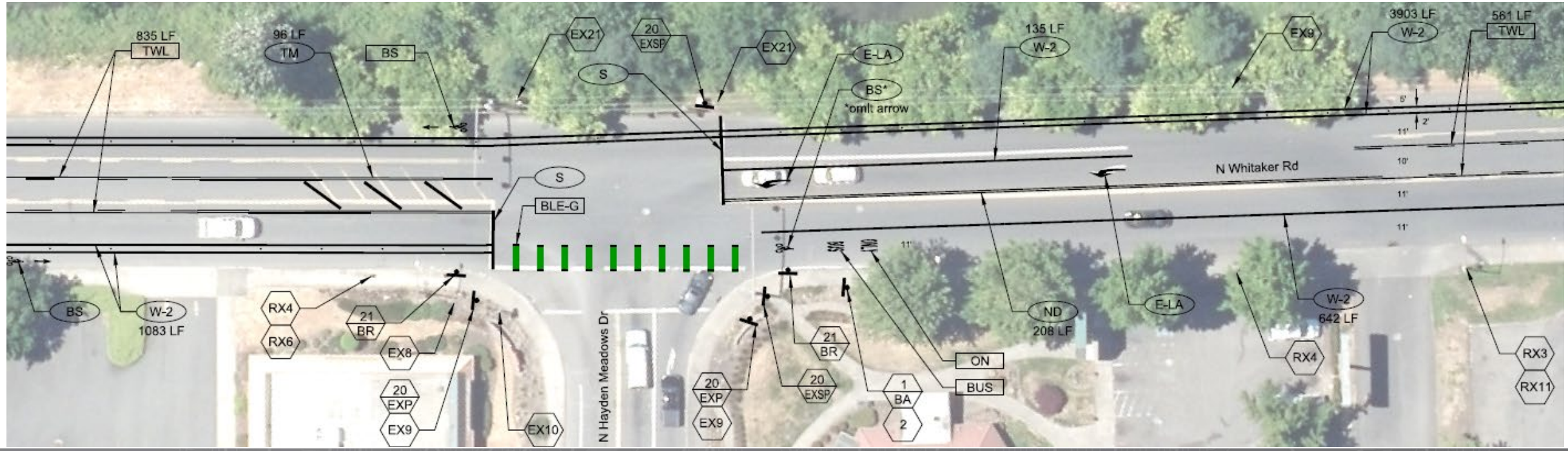
- Bus-and-turn lane, shared with cyclists northbound (Hayden Meadows Dr – N Denver Rd)
- Protected bike lanes: southbound from N Schmeer Road to I-5, and northbound from N Schmeer to Hayden Meadows Dr

Anticipated benefits:

- Less delay for buses, line 6
- New bike facilities

Anticipated impacts:

- Parking removal of spaces with low utilization, low impact



Proposed project concept: SW Alder (18th - 2nd)

Proposed treatments:

Bus-and-bike lane from 4th to 2nd (through parking conversion);

Bus stop platforms at 6th and 10th

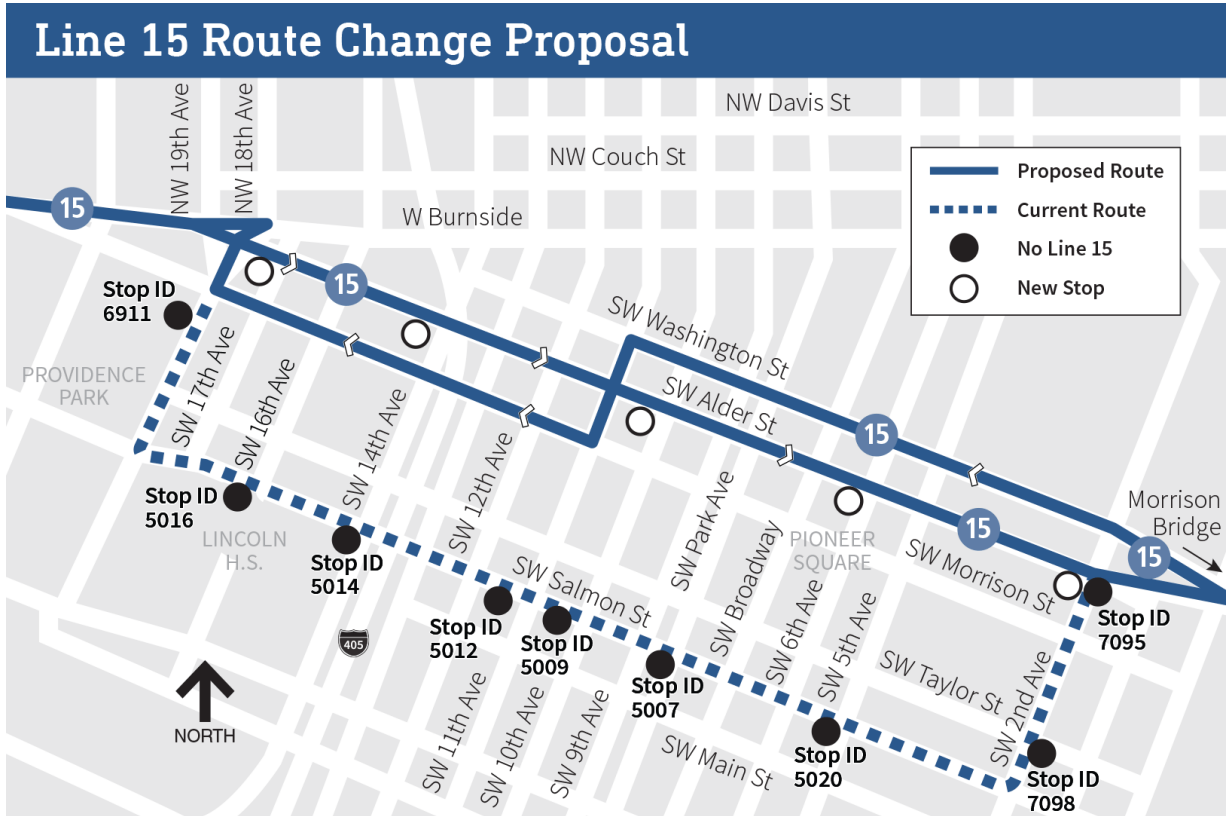
This route change proposal is still under deliberation at the TriMet Board on April 21 and April 28.

Anticipated benefits:

- Benefits 8,670 riders on Line 15
- 13 buses per hour in the peak
- 2+ minutes of transit travel time savings in the PM peak
- Reduce number of buses on SW Salmon

Anticipated impacts:

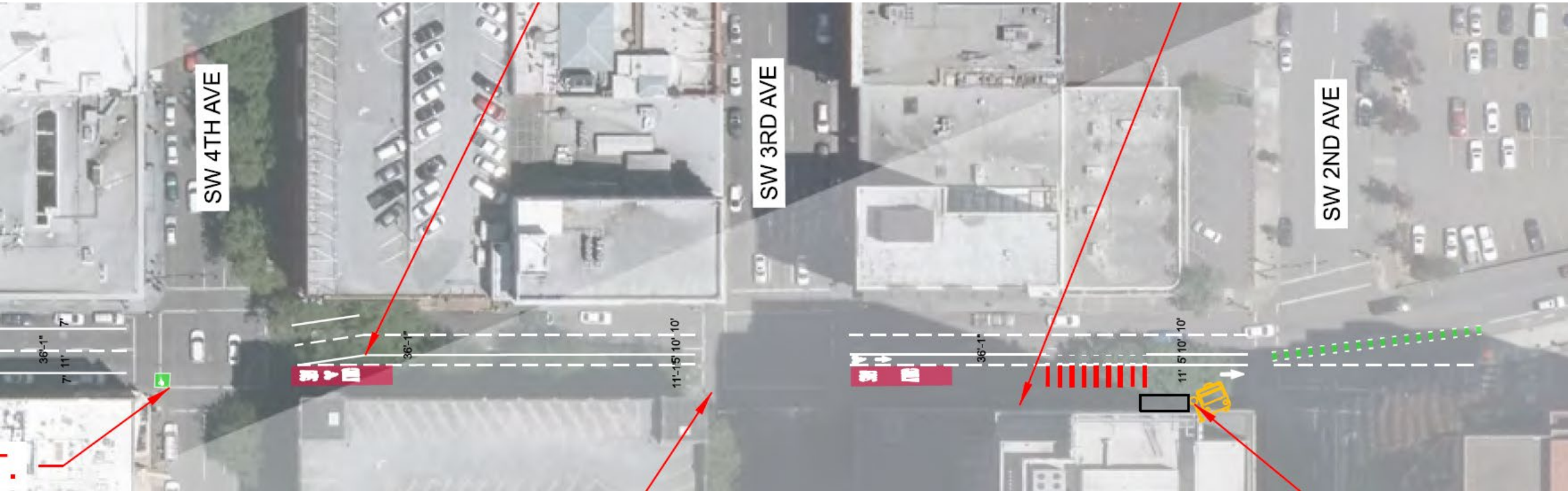
- Limited traffic impacts
- Considering restricting right turns from Alder to 3rd
- Parking removal between 2nd and 4th
- Precludes two-way bike connection from 4th to the Morrison Bridge included in CCIM Plan



Proposed project: SW Alder (4th - 2nd) Conceptual Design

Proposed treatments:

Bus-and-bike lane from 4th to 2nd (through parking conversion); Similar to Better Madison design.



Context Matters: Bikes permitted use of BAT lane

- Considerations for Bus-and-Turn (BAT) lane facilities where cyclists are permitted continuous through use:
  1. Bikes are already permitted through use.
  2. Lane is standard width. No width for separated bike lane or shared bus/bike facility.
  3. There is a travel desire line for cyclists or completes a connection.
  4. Cyclists mixing with buses would not cause a safety concern or interfere with bus operations.
  5. Low speed differential between cyclists and buses, such as urban core, main streets, downhill grade or near signalized intersections.
  6. Provide a nearby route to serve 8 to 80 population.

122nd Ave approaching Burnside

Context Matters: Bikes permitted use of BAT lane

- BAC feedback:
  1. What do you think of these considerations?
  2. How to communicate to cyclists that:
     - Buses have priority in BAT lanes and cyclists are welcome to share the lane.
     - Cyclists permitted in some BAT lanes contexts, but not all BAT lanes.
     - Buses have operational needs to maintain safety for everyone.
  3. What kinds of messages?

NW Everett BAT lane (Broadway – Steel Bridge)

BAC: What do you think of Everett today?

Proposed Pilot Project Concept: NE Couch (12th to Grand)

Proposed pilot treatments:

Bus-and-turn lane westbound from 12th to 6th through reallocation of general-purpose travel lane. Bikes could also be allowed to use BAT lane between 12th to 7th.

Transit lines served: 12, 19, 20

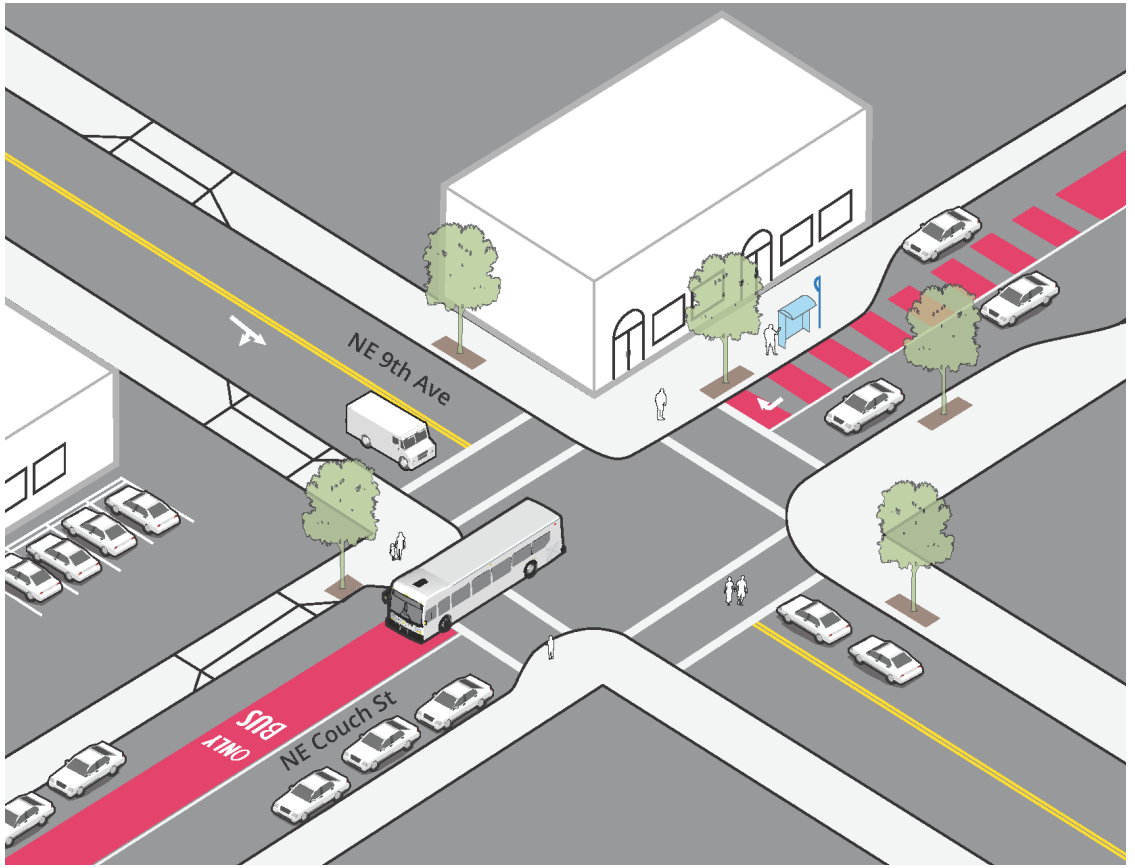
Anticipated benefits:

- Benefits 25,000 riders
- 16 buses per hour in the peak
- Between 30 seconds and 1.5 minutes of travel time savings in AM Peak
- Could improve connection to 7th Ave bikeway, new Earl Blumenauer Bridge over I-84

Anticipated impacts:

- Queuing
- No room for separate bike lane between 7th and 12th
- Some parking removal anticipated

This proposal is still at the concept level, in the planning and development stage. Timeline TBD.



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www.Portland.gov/RoseLanes