



Metro



The MAX Tunnel Study

January 16, 2020

Today's presentation

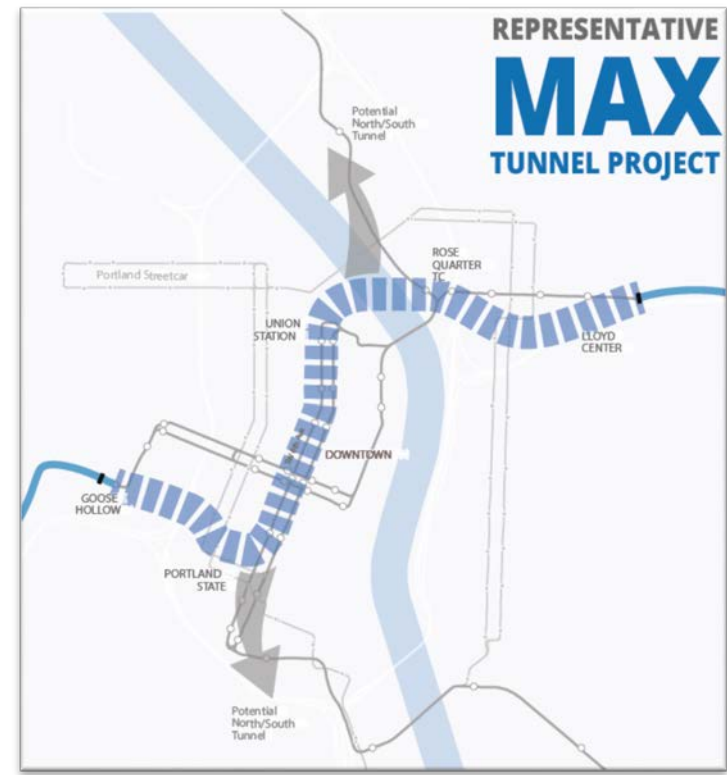
1. Purpose of the MAX Tunnel Study
2. What the MAX Tunnel Study is not
3. Why consider a tunnel?
4. Early scoping results
5. Technical findings

Partners

- Metro
- TriMet
- City of Portland
- Clackamas County
- Multnomah County
- Washington County
- ODOT
- Port of Portland
- Prosper Portland

Purpose

1. Defined representative project to address light rail capacity and reliability
2. Provided preliminary info for stakeholders and the public
3. Determined cost to advance a project through NEPA

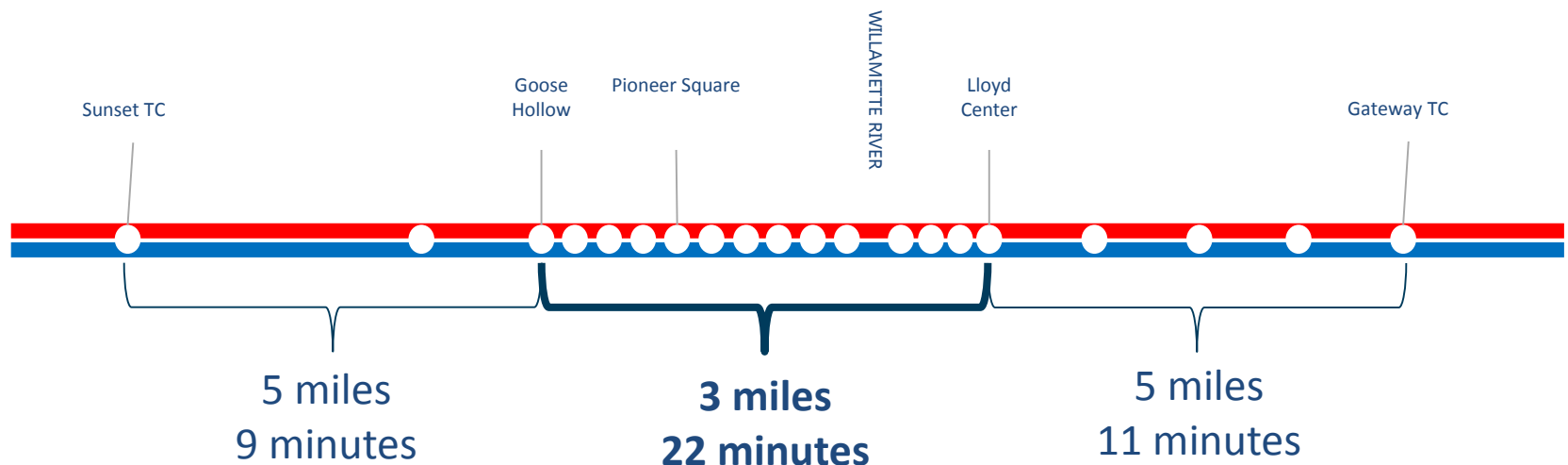


The study did NOT:

- Determine a tunnel alignment or station locations
- Include a comprehensive public engagement process

Why study a MAX tunnel?

The Portland Central City area is a bottleneck for regional light rail operations— impacting speed and reliability system wide



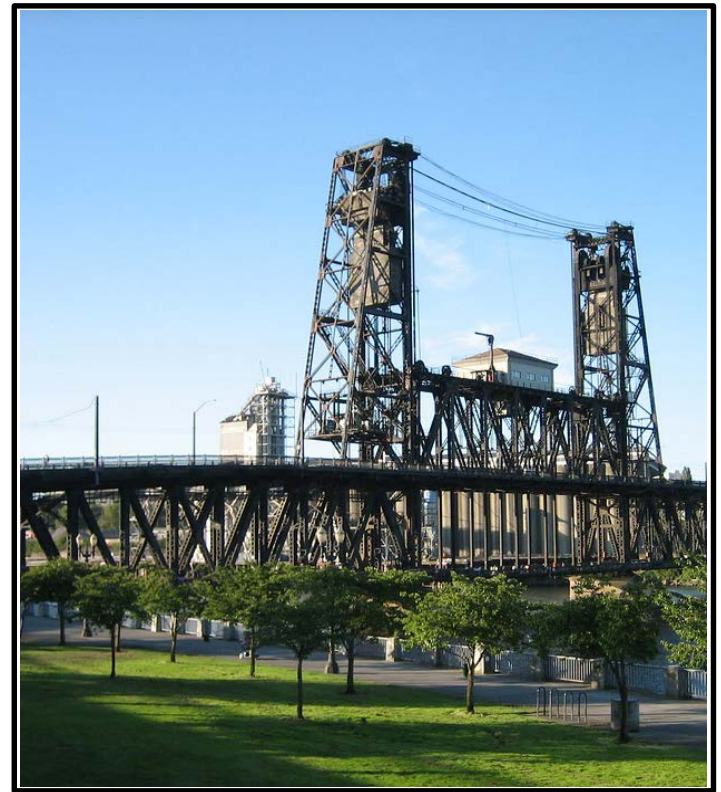
Pinch Point: Downtown Portland

- Mix of vehicles, pedestrians and bikes reduces speed
- Frequent right-of-way conflicts impact light rail reliability
- Frequent stops result in longer travel times













































Pinch Point: Steel Bridge

- Built in 1912
- Slows light rail travel
- Impacts system on-time performance
- All light rail trains cross here
- One train every 90 seconds in the peak



Pinch Point: Steel Bridge

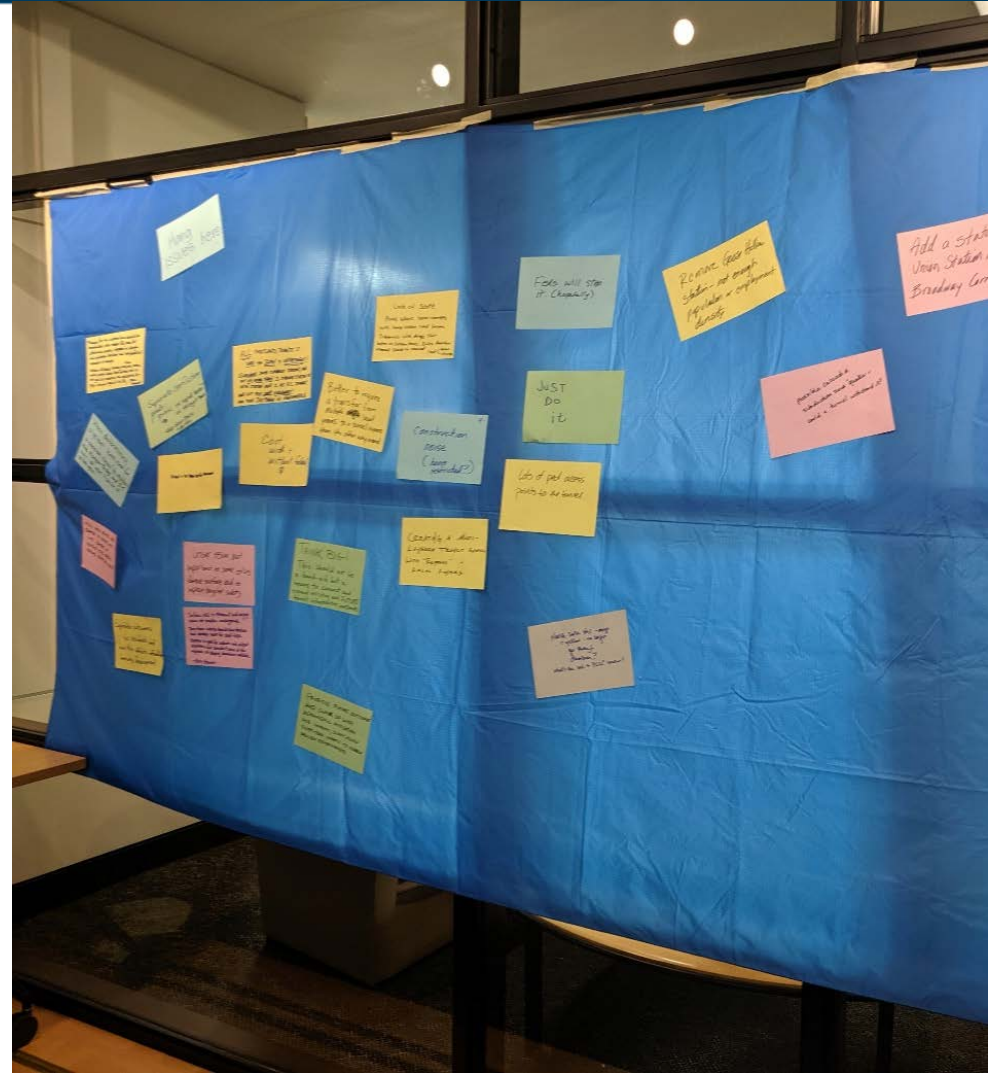
Criteria	No Build	Steel Bridge 4-Track	Replacement Bridge - Moveable	Replacement Bridge - Fixed	Supplemental Bridge	Tunnel
Travel Time						
On-Time Performance						
Service Reliability						
Frequency & Capacity						
Access						
Resiliency						
Environment Built/Natural						

Early scoping – stakeholder group meetings

- Lloyd District TMA Board
- East Metro Economic Alliance
- Washington County Coordinating Committee TAC and full committee
- Central Eastside Industrial Council L.U. Committee
- Non-profit community leaders forum
- Momentum Alliance
- TriMet Transit Equity Advisory Committee
- PBA Transportation Committee
- WEA Transportation Committee
- E. Multnomah County Transportation Committee
- Downtown Neighborhood Association

Early scoping – July 22 open house

- 56 attendees
- Comments on:
 - Draft purpose and need statement
 - What to consider
 - Downtown destinations



Early scoping – online survey

- 2,500 responses
- High degree of support



Consider the
region's
transportation
challenges
significant or
very
significant

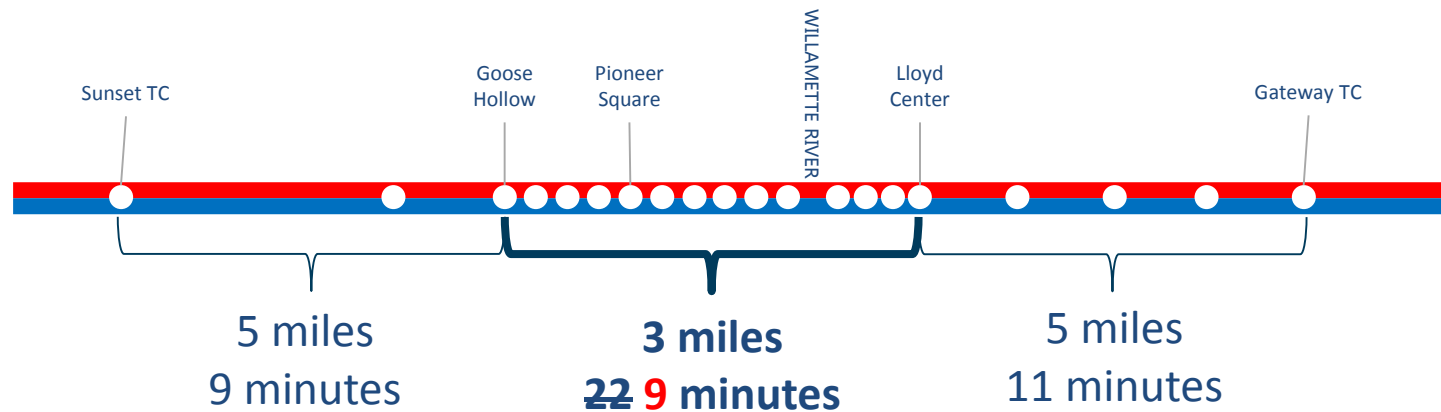


Support
studying
a MAX
tunnel



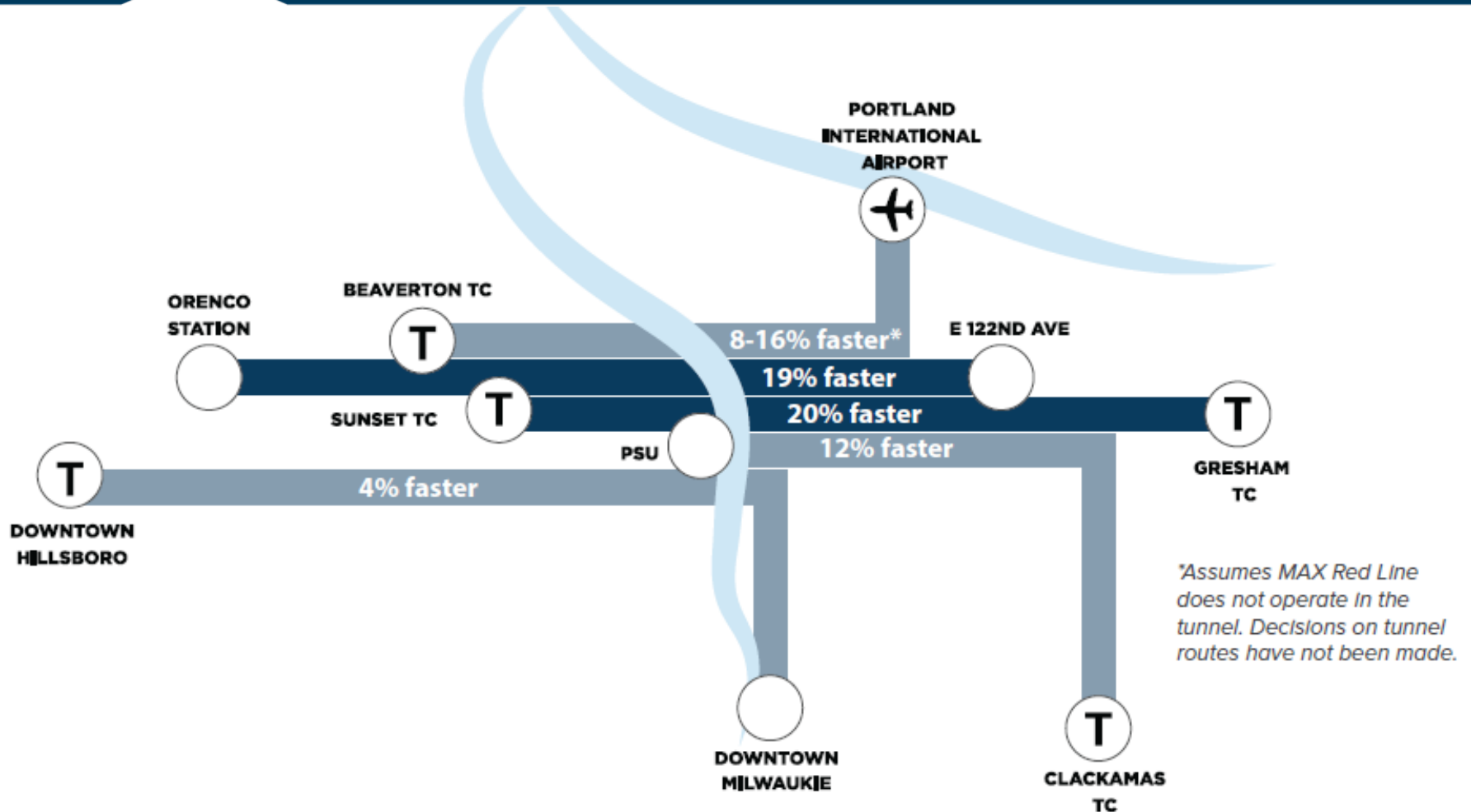
Would ride
MAX more
frequently if
it were faster

Findings – travel time



Up to 13 minutes saved over current conditions

Findings – travel time

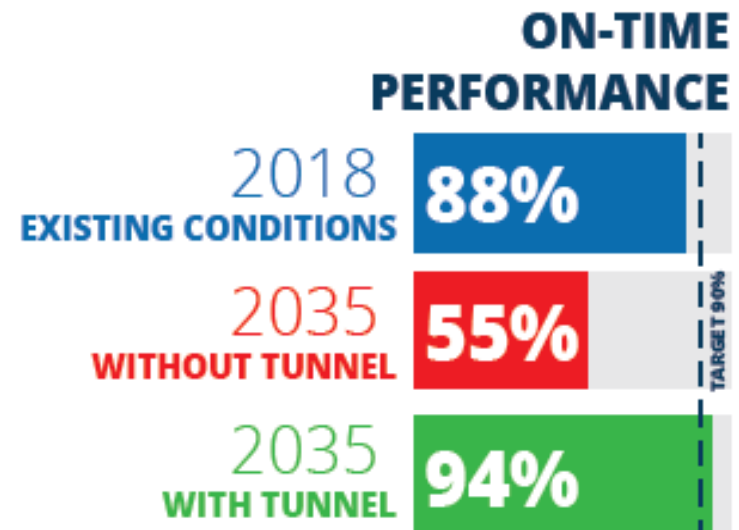


Findings – mobility

- Improves transit travel time for trips across and to downtown Portland
- Addresses projected increases in demand for cross- regional travel
- Increases labor market for employers around the region, including downtown

Findings – reliability

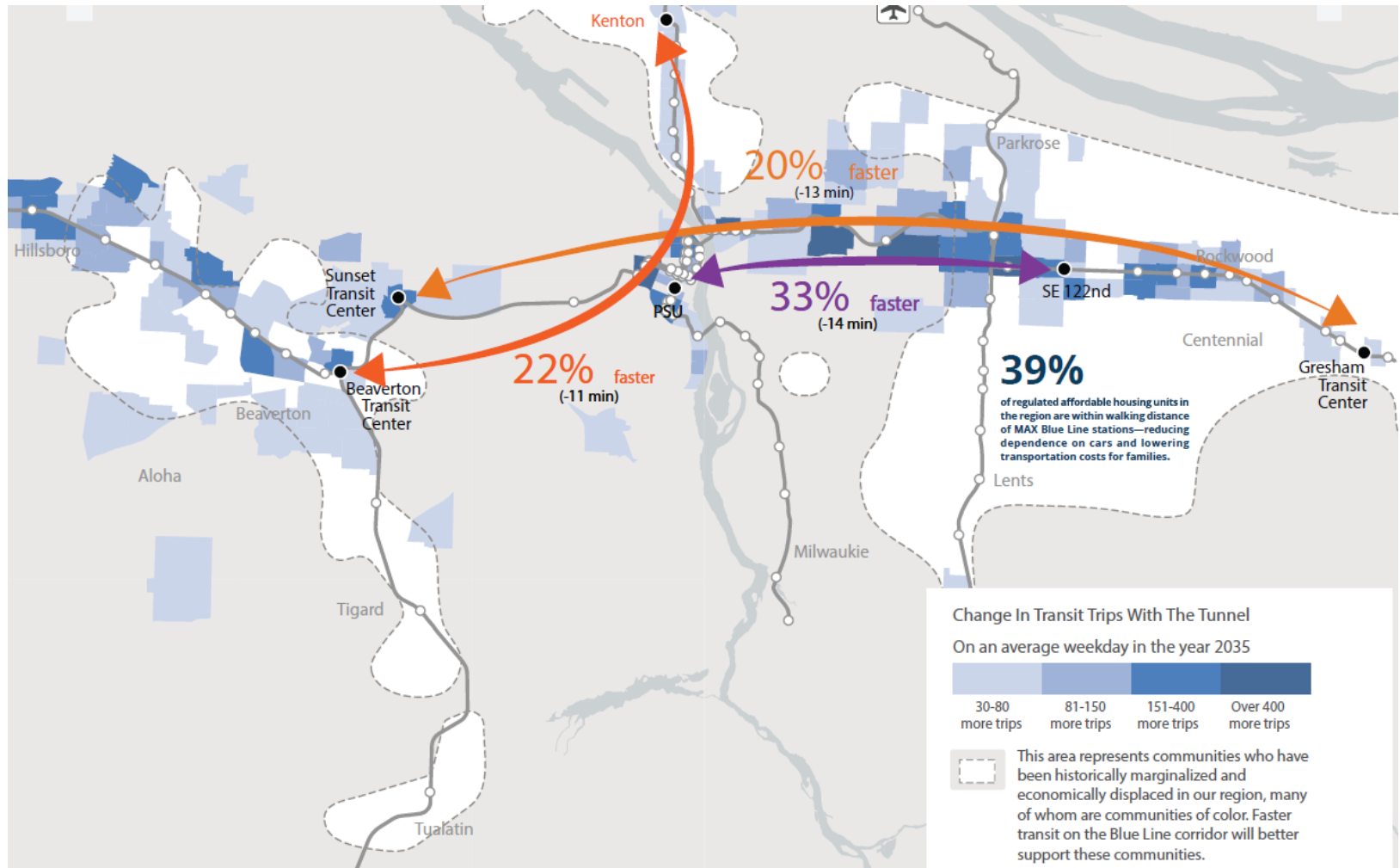
Reliability has been improving, but future ridership increases will result in eroding on-time performance if we do nothing to improve Central City light rail capacity.



Findings – equity

- 39% of the region's regulated affordable housing units are within a half mile of a Blue Line station
- 37% of current MAX Blue/Red Line riders are minority riders
- Most new transit trips created by a MAX tunnel would originate in Metro-identified equity areas

Findings – equity



Findings – climate

- 27% increase in Blue/Red Line MAX trips (2035)
- 24,000 daily new daily system trips (2035) – nearly the capacity of Providence Park



Findings – costs

- \$3 to \$4.5B in today's dollars
- 3.5 mile tunnel
- Cost per mile comparable to Seattle's Northgate Link light rail extension and to LA's Purple Line subway extension

Next steps

- Central City rail system plan
- Alternatives analysis
- Engagement
- Identify preferred route and station locations
- Preliminary risk, constructability/staging
- Capital cost estimate/finance plan
- Project development /implementation schedule
- DEIS

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