

TriMet

Red Line Extension and Operational Improvements Project

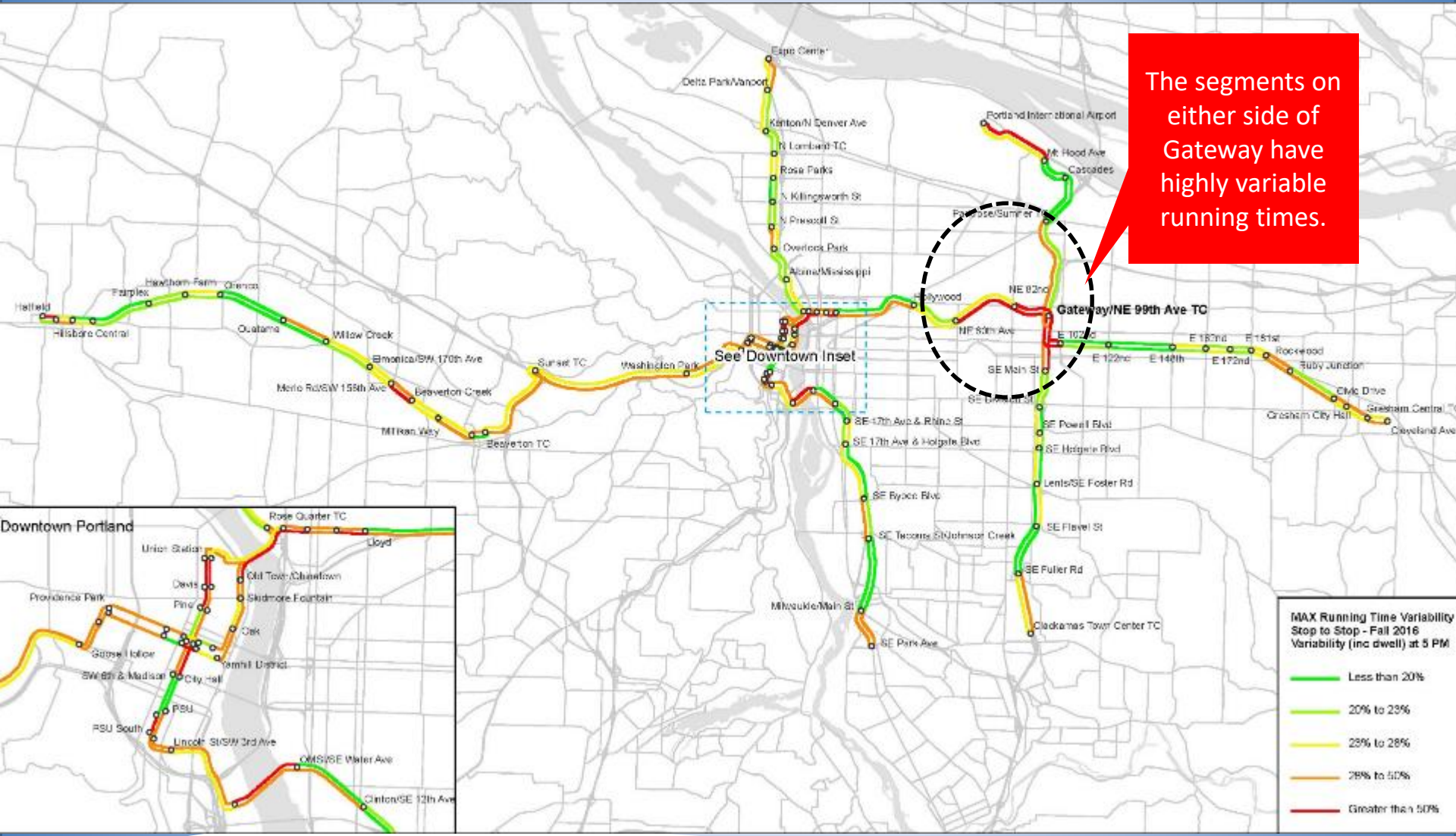
Project Briefing

October 25, 2017

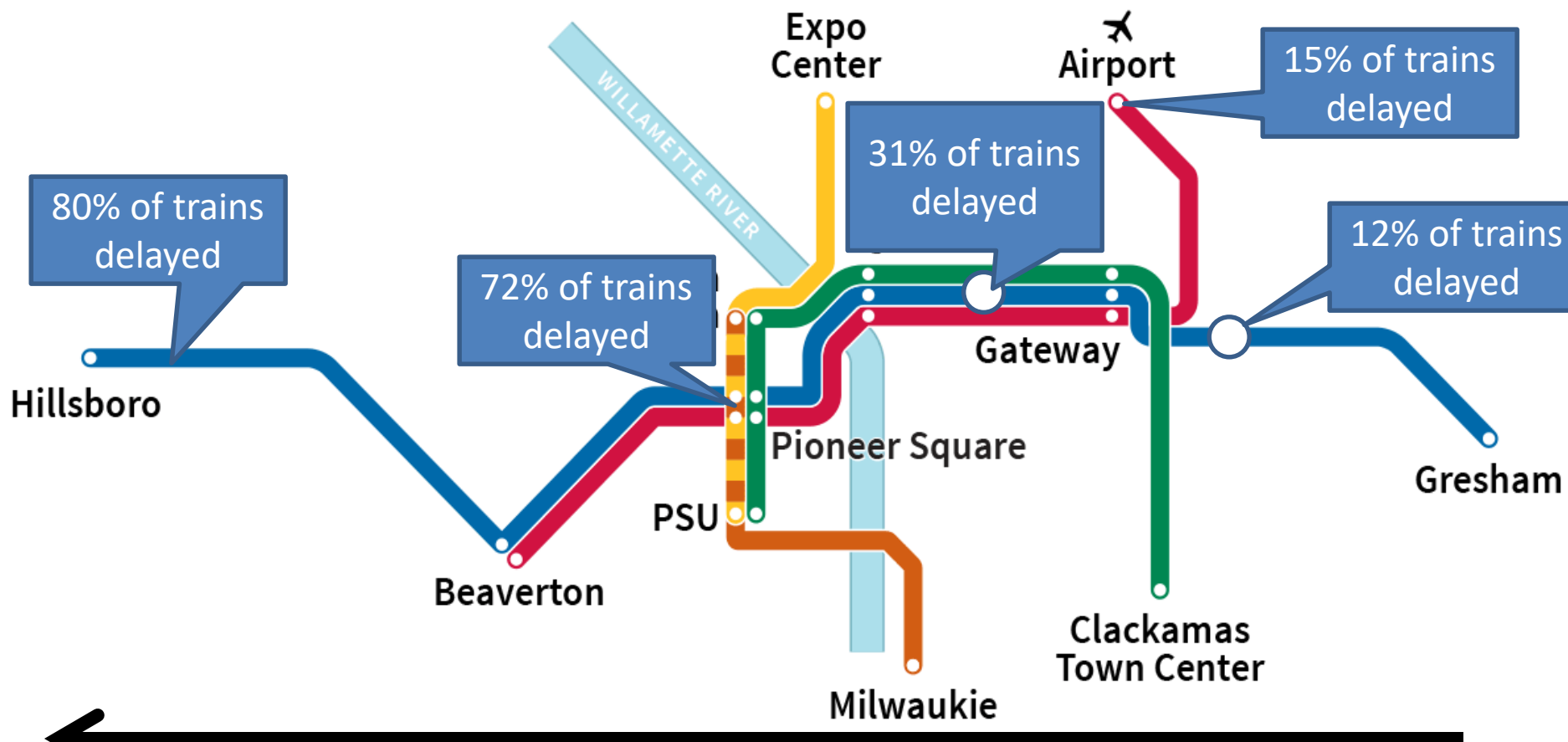
Regional Growth

- 400,000 more people and 260,000 more jobs in less than 20 years
- Concentrated in Regional Centers, Town Centers, Station Areas, and Main Streets
- \$13.1 billion worth of development in station areas since decision to build
- 5% of the area (MAX station areas) had 39% of all the housing units developed on it since the decision to build each line

Running Time Variability on MAX



Reliability Challenges Accumulate



← Delayed = more than 2 minutes late

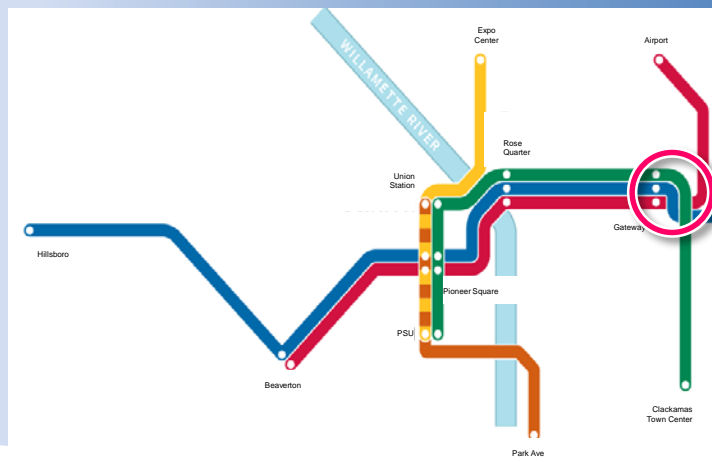
Gateway Transit Center

Departure from Ruby Junction	Departure from Clackamas Town Center	Departure from PDX	Arrival at Gateway	
				5:00 PM
4:42 PM			5:01 PM	5:01 PM
				5:02 PM
	4:46 PM		5:03 PM	5:03 PM
				5:04 PM
				5:05 PM
4:48 PM			5:06 PM	5:06 PM
				5:07 PM
				5:08 PM
				5:09 PM
				5:10 PM
				5:11 PM
		4:57 PM	5:12 PM	5:12 PM
				5:13 PM
				5:14 PM
4:57 PM			5:15 PM	5:15 PM
				5:16 PM
				5:17 PM
	5:01 PM		5:18 PM	5:18 PM
				5:19 PM
				5:20 PM
5:02 PM			5:21 PM	5:21 PM
				5:22 PM
				5:23 PM
				5:24 PM
				5:25 PM
				5:26 PM
		5:12 PM	5:27 PM	5:27 PM
				5:28 PM
				5:29 PM
5:11 PM			5:30 PM	5:30 PM

Space left for merge with Yellow Line at Steel Bridge

Space left for merge with Yellow Line at Steel Bridge

- 2+ minute buffer required between trains
- Almost no recovery time in schedule once trains are late



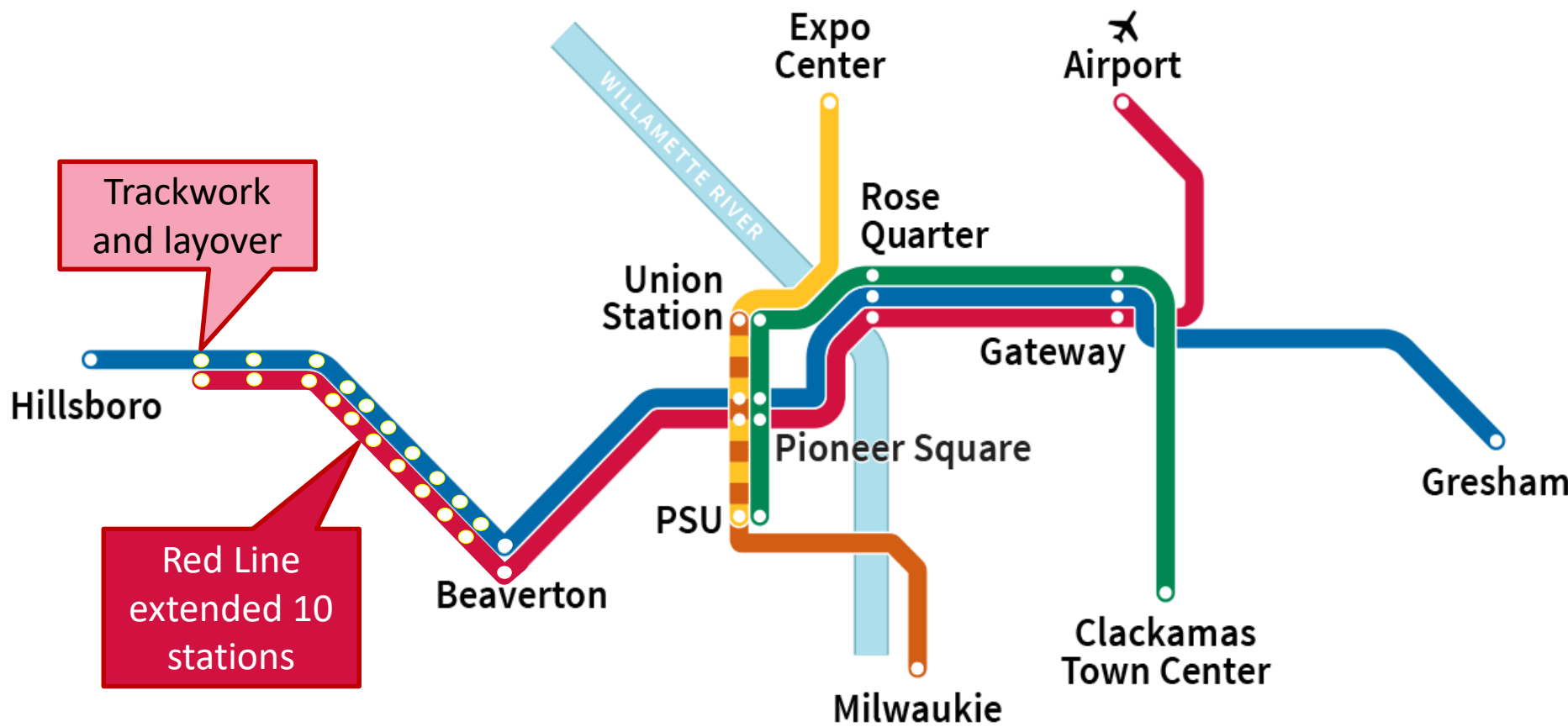
Proposed Project Elements

Element	Description
Extend to Fair Complex	<p>Address over-crowding and add service to 10 stations</p> <p>Track and switch work Signalization Construction of operator break facility</p>
Gateway	<p>Improve system operations and reliability</p> <p>Convert single-track section to double-track</p>
Portland Airport	<p>Improve system operations and reliability</p> <p>Convert single-track section to double-track</p>
New Vehicles	<p>8 more cars needed to operate extension</p> <ul style="list-style-type: none"> • 6 in service • 2 spares
Ruby Junction	<p>Extend existing storage tracks to hold 8 more cars</p>

Benefits of the Project

- More service for crowded Westside
- Fixing Gateway will have the largest impact on our on-time performance of any capital improvement we have tested via simulation
- Leverages federal funds to improve existing MAX system

Extend Red Line



Trackwork and layover

Red Line extended 10 stations

Fair Complex

Conceptual
Illustration – Not
Drawn to Scale

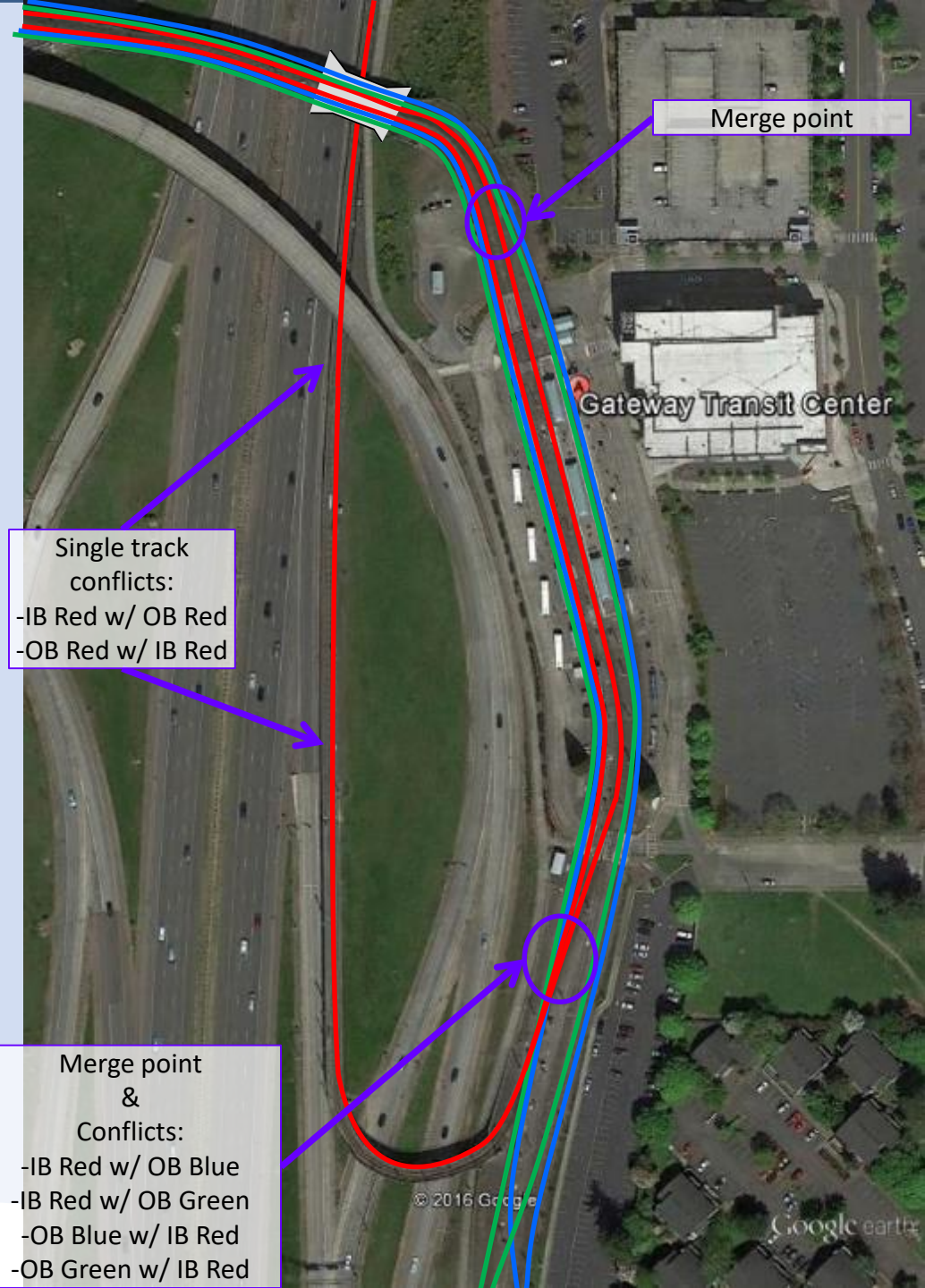
Track, switch work,
and signalization
to allow use of
existing pocket
track

New operator
break facility



Gateway – Existing Alignment and Conflict Points

- Single-track section
- 498 trains per day in all directions



Gateway



Existing alignment ———
New alignment ———

Existing single-track alignment used for outbound (to PDX) movement only

New bridge structure with track created for inbound (to Beaverton) movement

New station platform for Red Line inbound

Extend TC to new platform

Gateway Transit Center

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Google earth

Airport Double Track (Proposed)

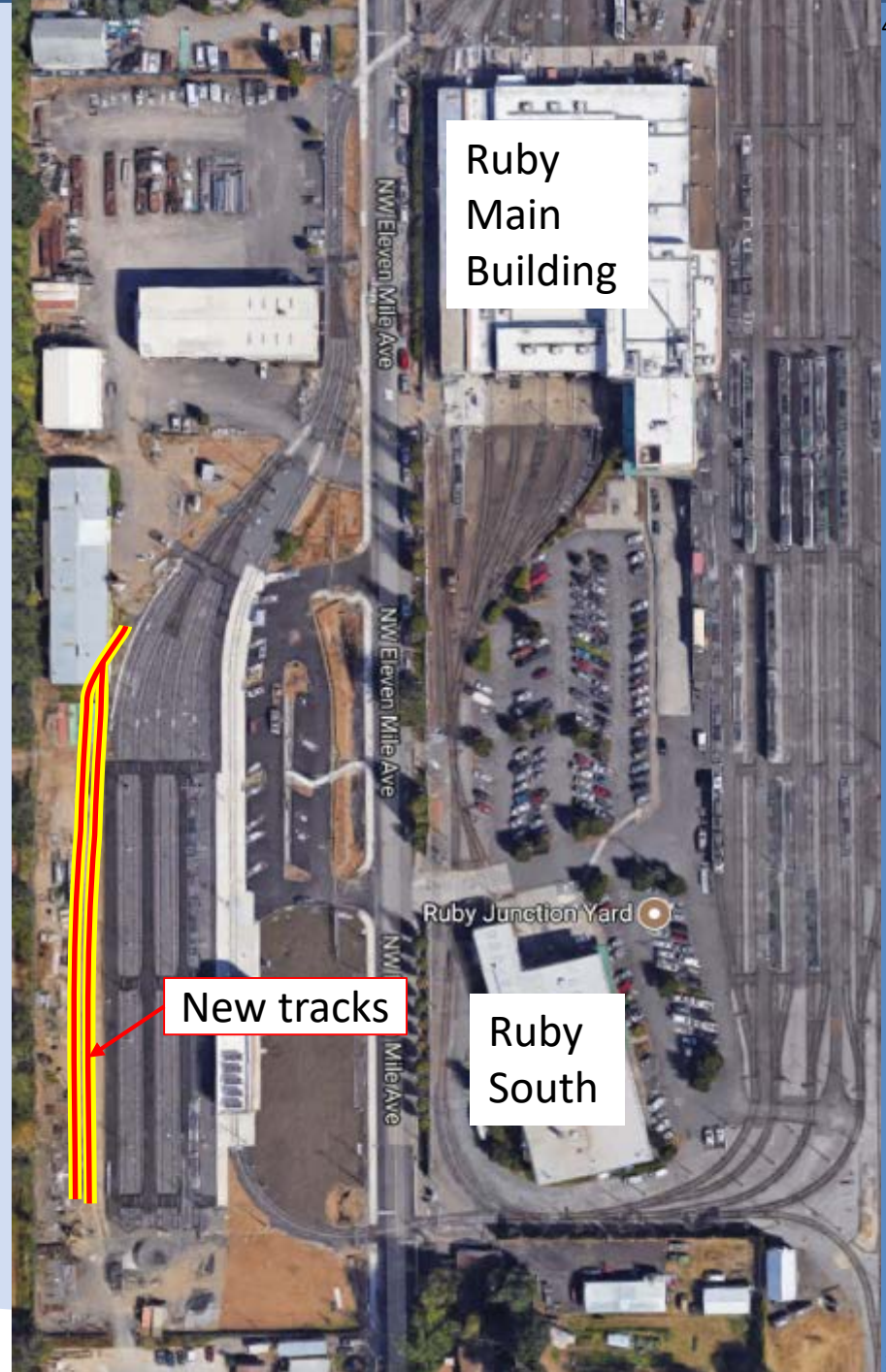


Vehicles Needed

- 6 cars to operate extension (3 2-car trains)
- 2 cars are spares
- 8 total

Ruby Junction

- This option is preferred by REM but impacts storage space
- Also provides capacity for 8 cars
- Does not require new ROW



Project Status

- Conceptual design
- Current estimate approximately \$205 million, with \$100 million projected from FTA Small Starts program
- Working with Port of Portland, City of Portland, ODOT, and others
- Broader public outreach this Fall

Future Steps

- Project Development application would occur in 2018, formally kicking off FTA process
- Further design and NEPA would involve greater detail and involvement of any public and stakeholders potentially impacted
- Local contributions to project would need to start in FY2019 to maintain currently assumed timeline