



SOUTHWEST CORRIDOR LIGHT RAIL PROJECT

**Community Advisory Committee
December 5, 2019**

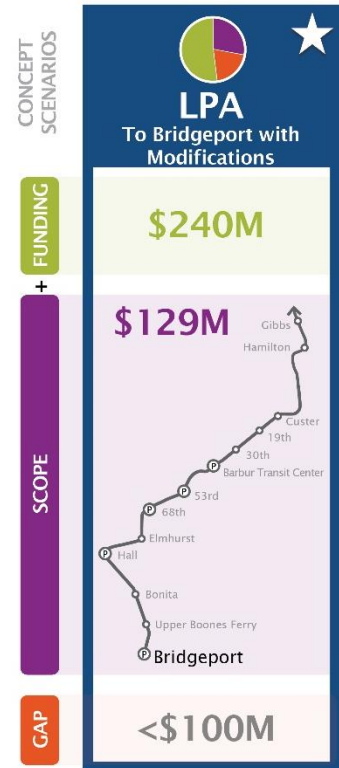
Agenda

- Public comment
- Follow up on November 7
- Review CAC role and future topics
- Ridership modeling
- Terminus & Interim Terminus

Draft Recommendation-LPA

Move forward with **LPA**:

- Incorporate **\$129m** savings from scope refinements
- Incorporate **\$240m** additional funding
- Continue to minimize impacts and costs through design
- Continue funding discussions to close **<\$100m** gap



November 7 follow up

CAC had general consensus on draft recommendation

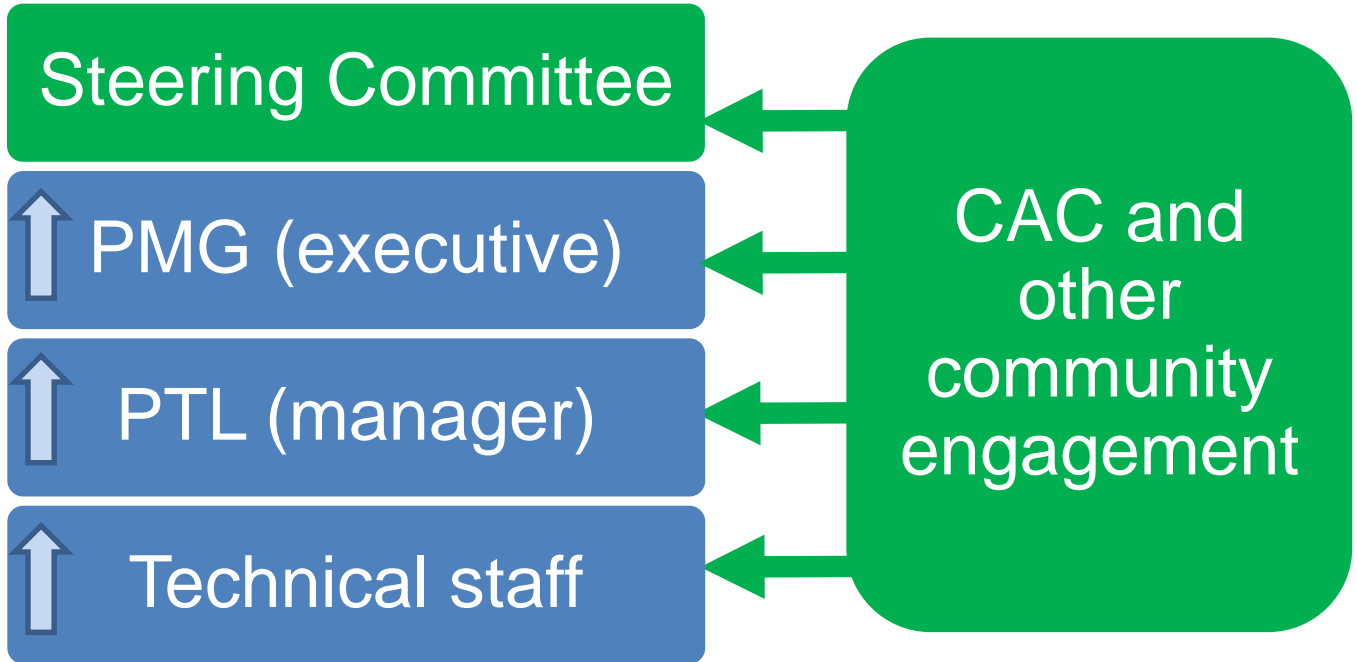
Interest in:

- Bike and walk infrastructure
- Interim Terminus
- Parking

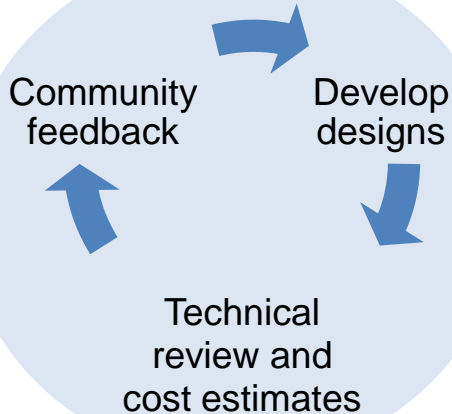
CAC Role

- Sounding board for design options
- Represent broader communities; help facilitate two-way communication
- Work together in good faith toward the best possible light rail project for the region

Decision-making



Project Development Phase



- Respond to issues in DEIS; define mitigation in FEIS
- Refine project scope, cost
- Secure 30% of local funding
- Advance design to 30%

2019-2020

2020 CAC Topics

Future Topics:

- Preliminary design – Conceptual Design Report
- SWEDS and affordable housing
- Ross Island Bridgehead, West Portland Town Center projects
- Park & Rides, mobility hubs
- Bike facilities
- Public private partnerships (P3)
- Bus network

Potential tours:

- MAX Orange Line
- Specific stations and transit oriented development
- Maintenance facilities



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Corridor

Light Rail Project

Transit Demand Modeling Overview

Matt Bihn, Metro

December 5, 2019

Metro modeling

What is it used for?

- Regional Transportation Plan (RTP)
- Local transportation plans (TSPs)
- Corridor plans (like SW Corridor)
 - ◆ Information for the public and steering committee
 - ◆ Information for an Environmental Impact Statement
 - ◆ FTA New Starts application

Metro modeling

What information is in the model?

Chief inputs:

1. Land use
2. Travel Propensities
3. Transportation supply
4. Costs

Land Use

- Land use projections developed at Metro and forecasts reviewed by local jurisdictions & adopted by Metro Council at least every 5 years
- 64 Household types
(categorized by age, number of people, income)
- 9 employment types
- SW Corridor - 2015 base year and 2035 horizon year (future) forecast

Land Use

- household and employment are distributed to 2,162 transportation analysis zones (TAZs)



Travel Propensities

- What kind of trips are people likely to make?
- 2011 Travel Behavior Study
 - ♦ Over 6,000 households surveyed
 - ♦ Questions focused on places:
 - “Where did you go next?”
 - “What did you do when you went there?”
 - ♦ Trip-making propensities matched to household profiles

Transportation supply

Roadway Network

Graphical representation of the RTP
Financially Constrained roadway
network – roadway links and nodes

- ◆ Capacities
- ◆ Number of lanes
- ◆ Speeds
- ◆ Link distances

Transportation supply

Transit network

RTP network with updates to reflect TriMet's SW Service Enhancement Plan.

- ◆ Light rail/ commuter rail/ streetcar/ bus/ tram
- ◆ Stations/ stops/ service frequencies
- ◆ Park and ride capacities

Costs

- Auto operating costs
- Transit fares
- Parking

Metro modeling

How does it forecast transit use?

4-step model:

1. **Trip generation** – how many trips and what types of trips from each TAZ?
2. **Trip distribution** – where do those trips go?
3. **Mode choice** – drive? take the bus? bike?
4. **Trip assignment** – which route to take?

Metro modeling

What information does it give us?

- 1. Ridership**
- 2. Travel times** – transit and auto travel times between specific destinations
- 3. Corridor transit service characteristics**
 - ♦ Transit vehicle hours (bus and LRT)
 - ♦ Transit vehicle miles (bus and LRT)

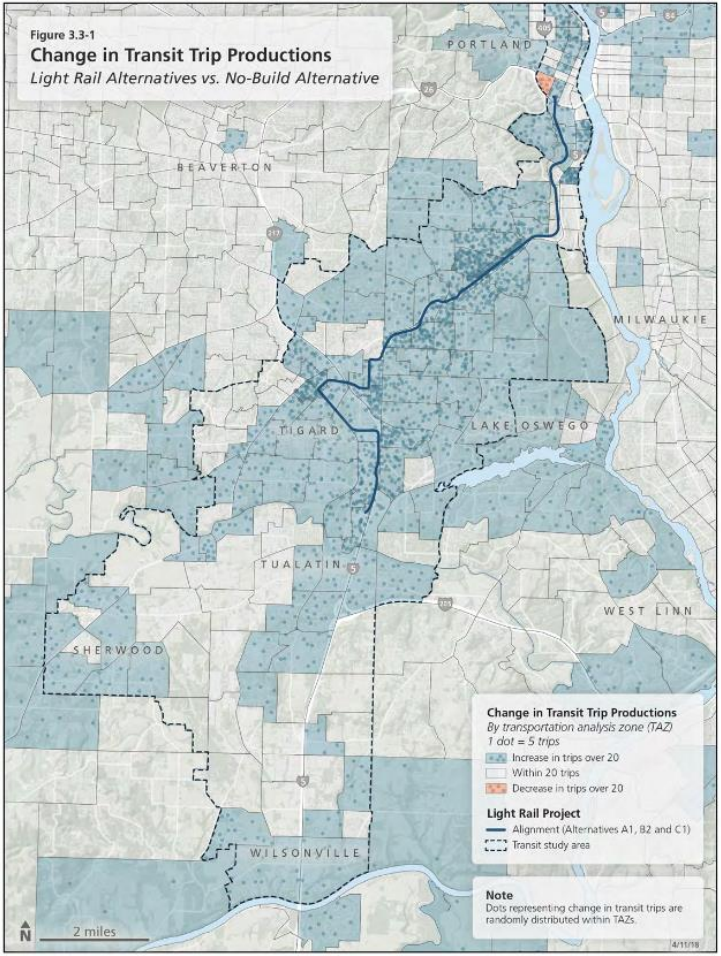
Metro modeling

What information does it give us?

Ridership information includes:

- **Daily Line riders** – how many people use the new light rail line, regardless of how far they ride
- **Daily system riders** – all transit (LRT, bus, streetcar, etc) comparing build alternatives to No-build conditions
- **Peak load point** – the busiest 1-hour location of the LRT line
- **Station usage** – walk, transfer, and park and ride
- **Corridor transit trips and mode share to Portland Central Business District** – percentage of travelers use transit

- Transit trips produced by transportation analysis zone (TAZ)

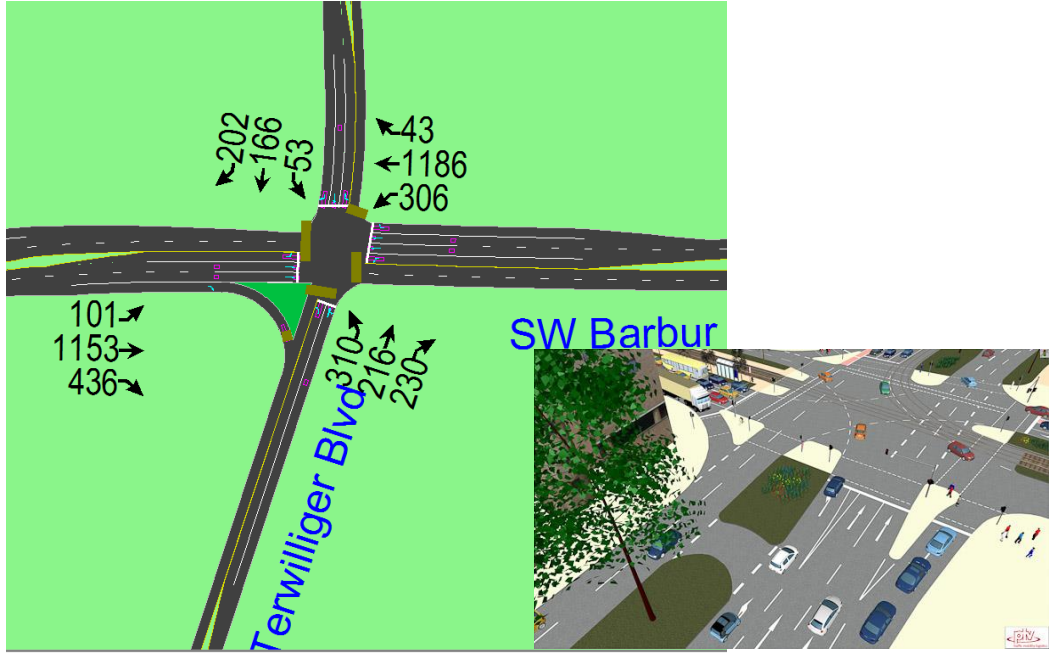


Auto performance outputs



- Auto volumes
- Vehicle miles and hours traveled
- Vehicle hours of delay

Auto performance



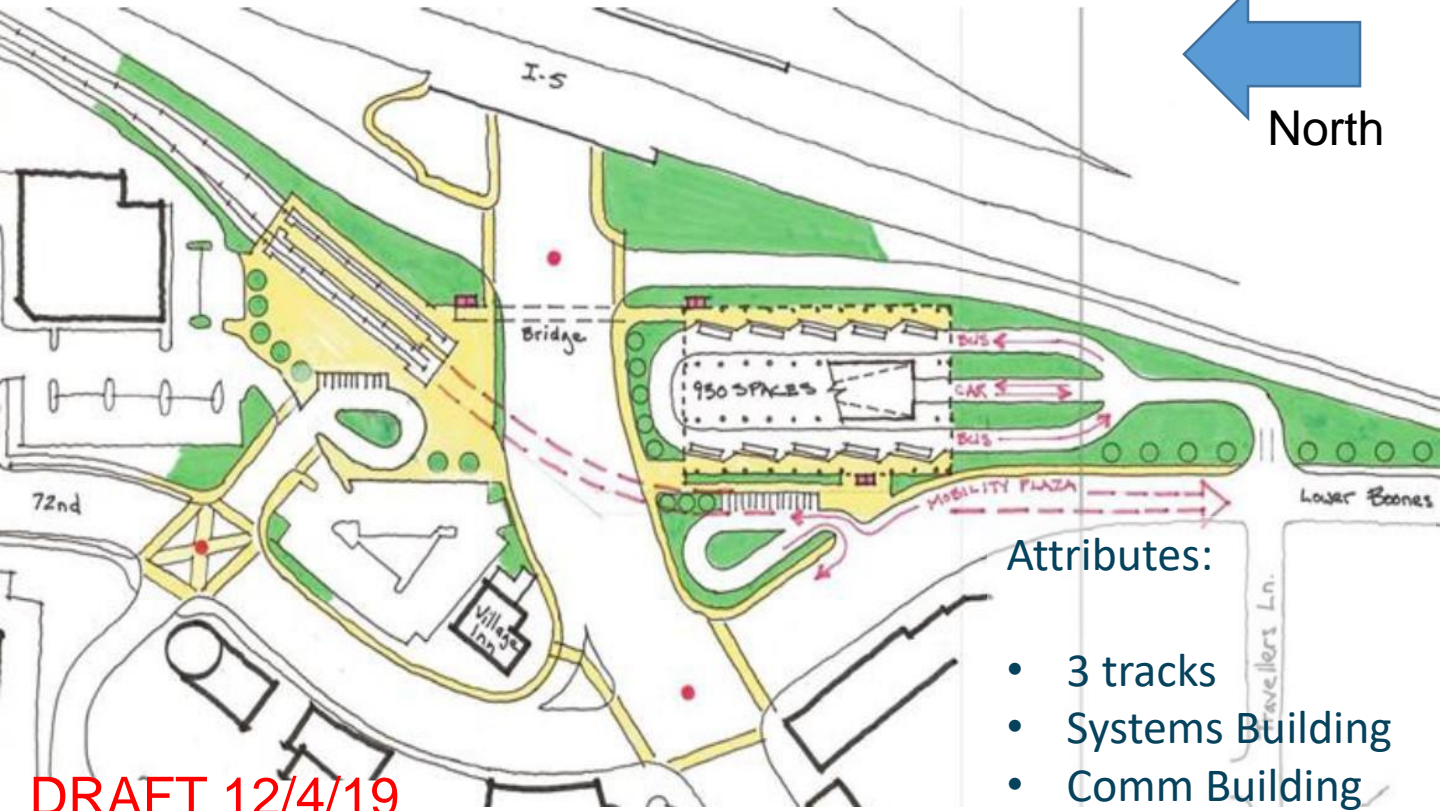
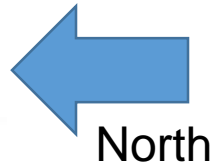
- Regional model outputs feed into traffic analysis and microsimulations



SOUTHWEST CORRIDOR LIGHT RAIL PROJECT

**Terminus and Interim Terminus
Scott Robertson, TriMet**

Bridgeport terminus concept



Attributes:

- 3 tracks
- Systems Building
- Comm Building
- Breakroom
- Pedestrian Bridge

DRAFT 12/4/19

Identifying Interim Terminus (MOS)

Recommendation:
Upper Boones Ferry

As far south as possible:

- Serves the most riders and reduces the most Vehicle Miles Traveled (VMT)
- Most competitive per FTA ratings



CONCEPT SCENARIOS



MOS
To Bonita/UBF with
Modifications

FUNDING

<\$240M

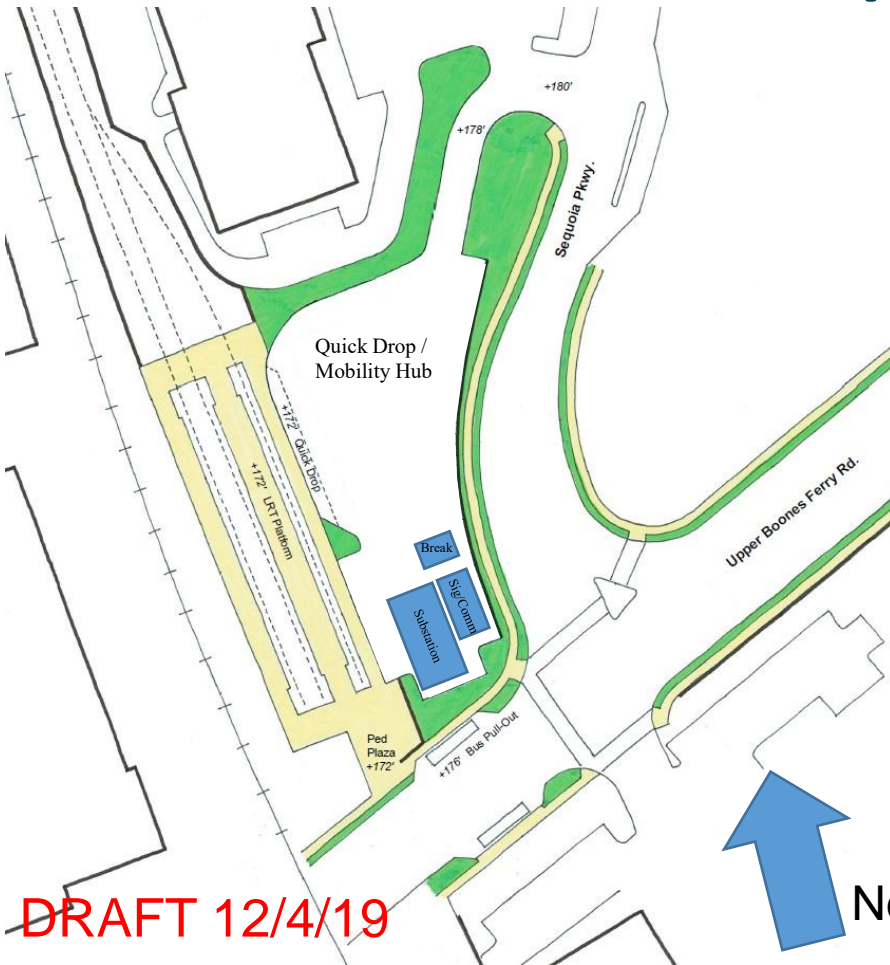
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SCOPE

\$129M



Interim terminus concept - UBF



Attributes:

- 3 tracks
- Systems Building
- Comm Building
- Breakroom
- Pick up/drop off area (likely no P&R)
- Bus pullouts on UBF

- Many refinements to explore if interim terminus actually moves forward

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North



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