

DIVISION

TRANSIT PROJECT



Portland Design Commission December 6, 2018

Teresa Boyle - PBOT

Bob Hastings, Michael Kiser & Jesse Stemmler - TriMet



Today's Agenda

- Project **Overview**
- Urban Environment
- **Station** Design
- **Shelter** Design
- Commission **Q&A/Discussion**



Transit Standards in Public ROW

- Created for Yellow Line + all prior transit - 2000
- Green Line - 2007
- Orange Line - 2017

Future Updates

- **Division Transit**
- SW Corridor



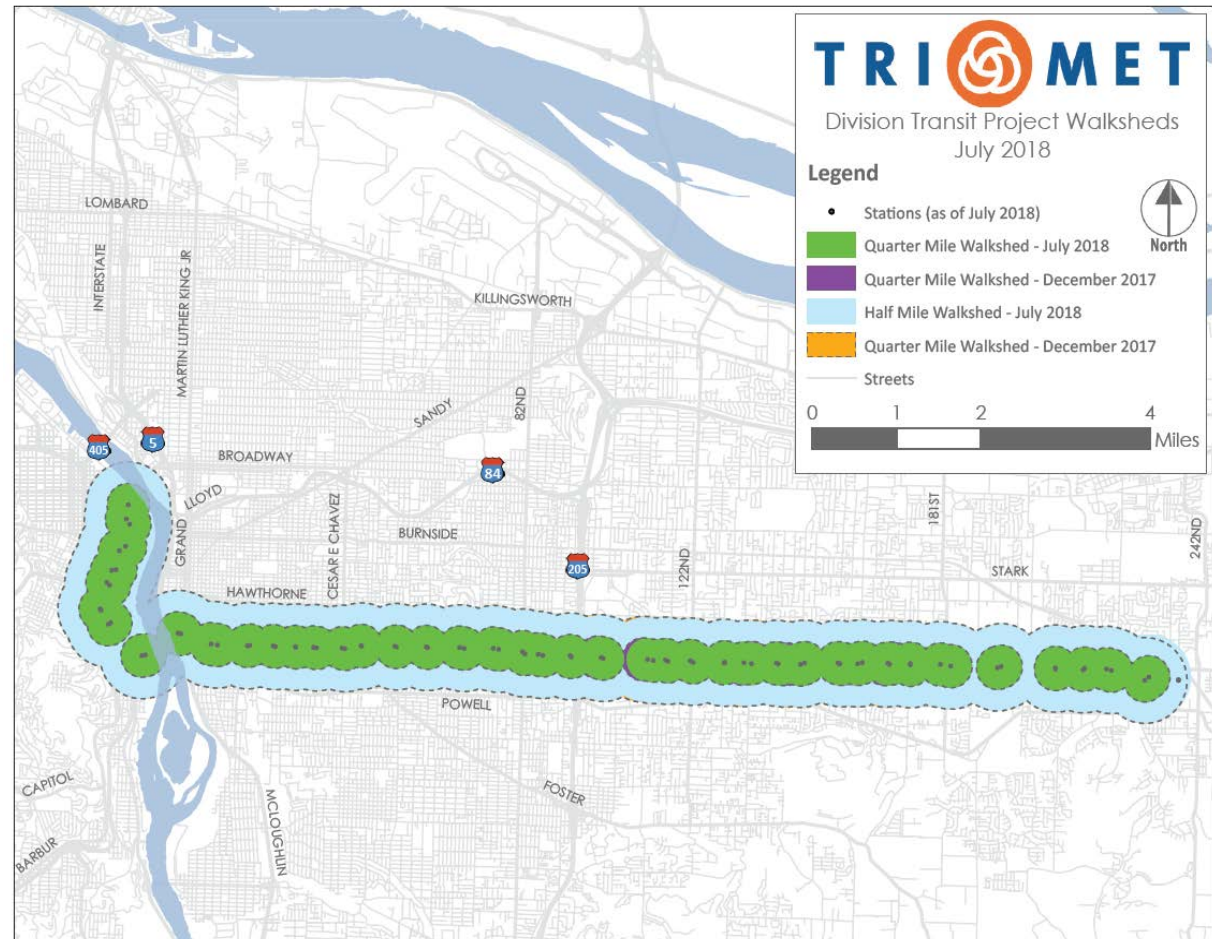
Project Approach

- **New** type of transit for Portland metro region
- Connects between downtown Portland and Gresham using Division Corridor



Stations

- 42 stations total; 35 in Portland
- > 70% of transit users will have service near current stop
- 95% of existing riders will have service within 3 blocks of current stop



Stations and Amenities

- Weather Protection
- Lighting
- Bus Marker with Real-Time Information
- Amenities (*seating, leaning rails, trash receptacles, bike racks, etc.*)



Project Overview - Schedule

- Will be at **60% design** in January
- Construction to start in late **2019**
- TriMet opens service in **2022**

Project Financing

Project Finance Revenues

Federal Transit Administration Small Starts Grant	\$87,341,000
ODOT	\$600,000
Metro	\$1,240,000
TriMet	\$33,850,000
Portland - Construction	\$16,730,000
Project Finance Revenues	\$6,242,335
Regional Funds	\$26,500,000
In Kind (Portland, Gresham, ODOT, Metro)	\$2,200,000
<u>Total Revenues</u>	<u>\$174,703,335</u>

Portland contribution	\$17,730,000
TriMet contribution	\$34,570,000



Value Received

Priority **Portland** elements:

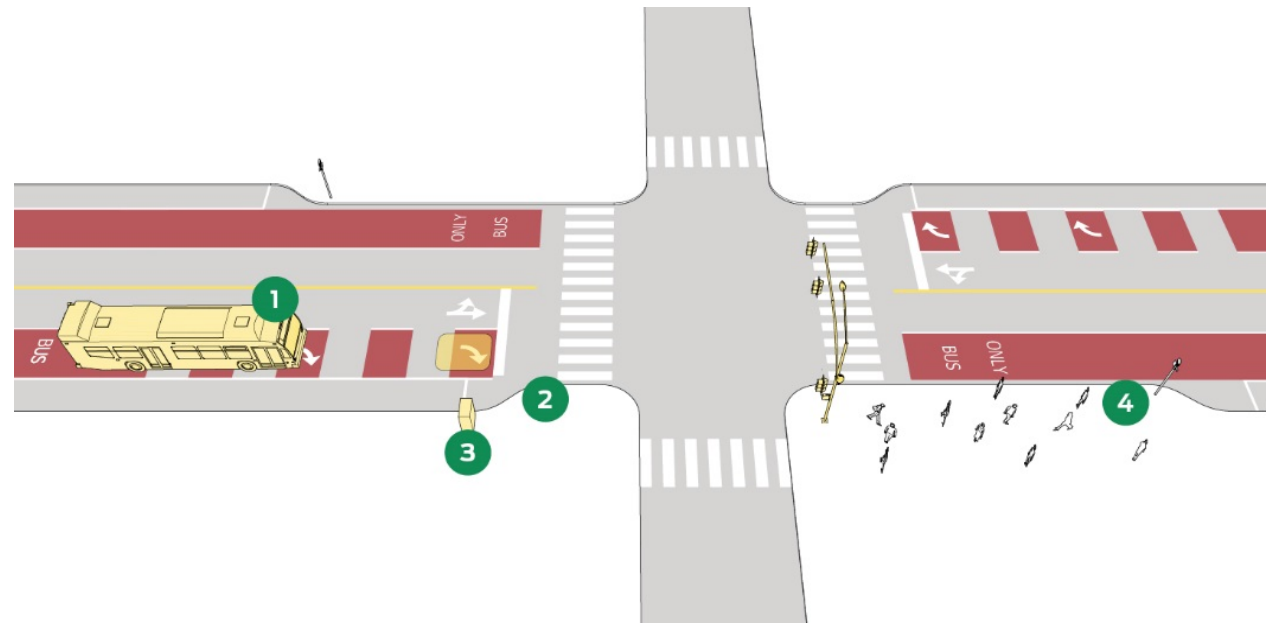
- **Protected bike lanes** east of 82nd
- **Enhanced pedestrian** crossings
- Traffic **signal upgrades**
- Fiber communications for **“smart city” transit priority**
- Concrete bus pads

Transit Signal Priority (TSP)

- Connected “smart” traffic signals

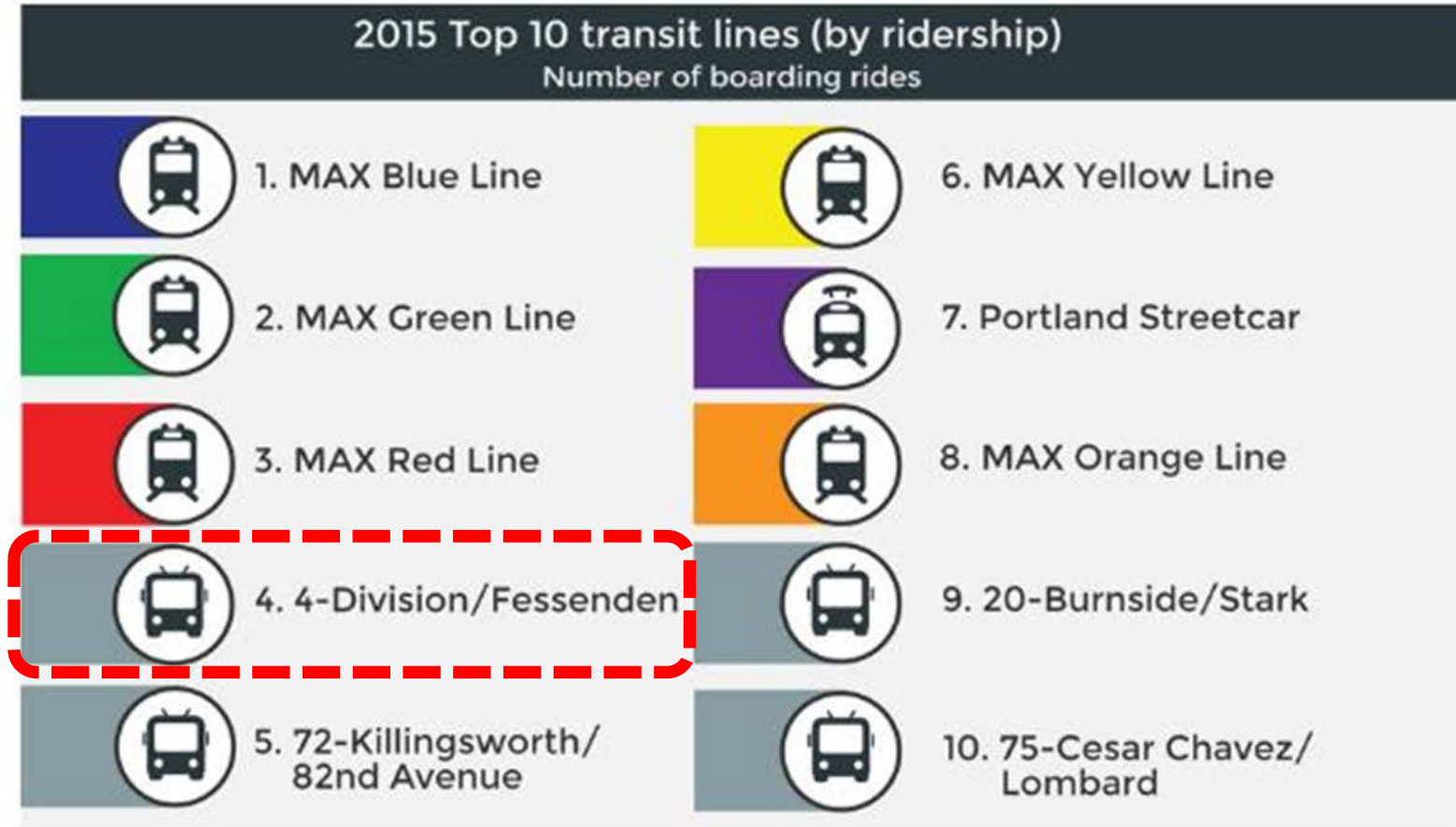
- Connected buses

= Improved performance



Project Overview

Division - A Vital, Regional Transit Corridor

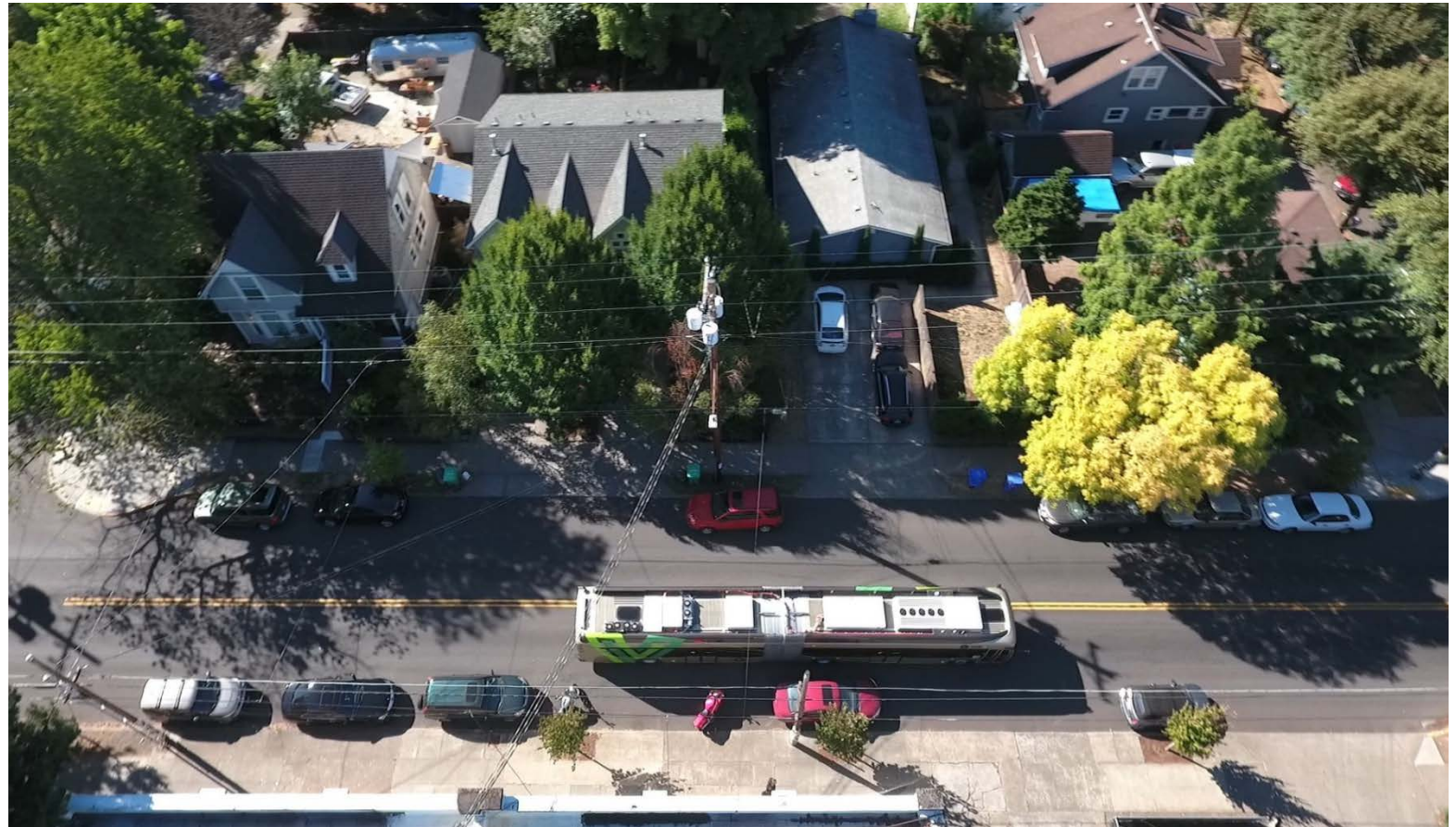


Project Goals

- Improved Transportation
- Well-being
- Equity
- Efficiency

A Faster, More Reliable Service

- 60-ft articulated buses with 60% more passenger capacity
- Three-door boarding at all platforms, and low dwell times
- Transit Signal Priority
- Bus stop consolidation





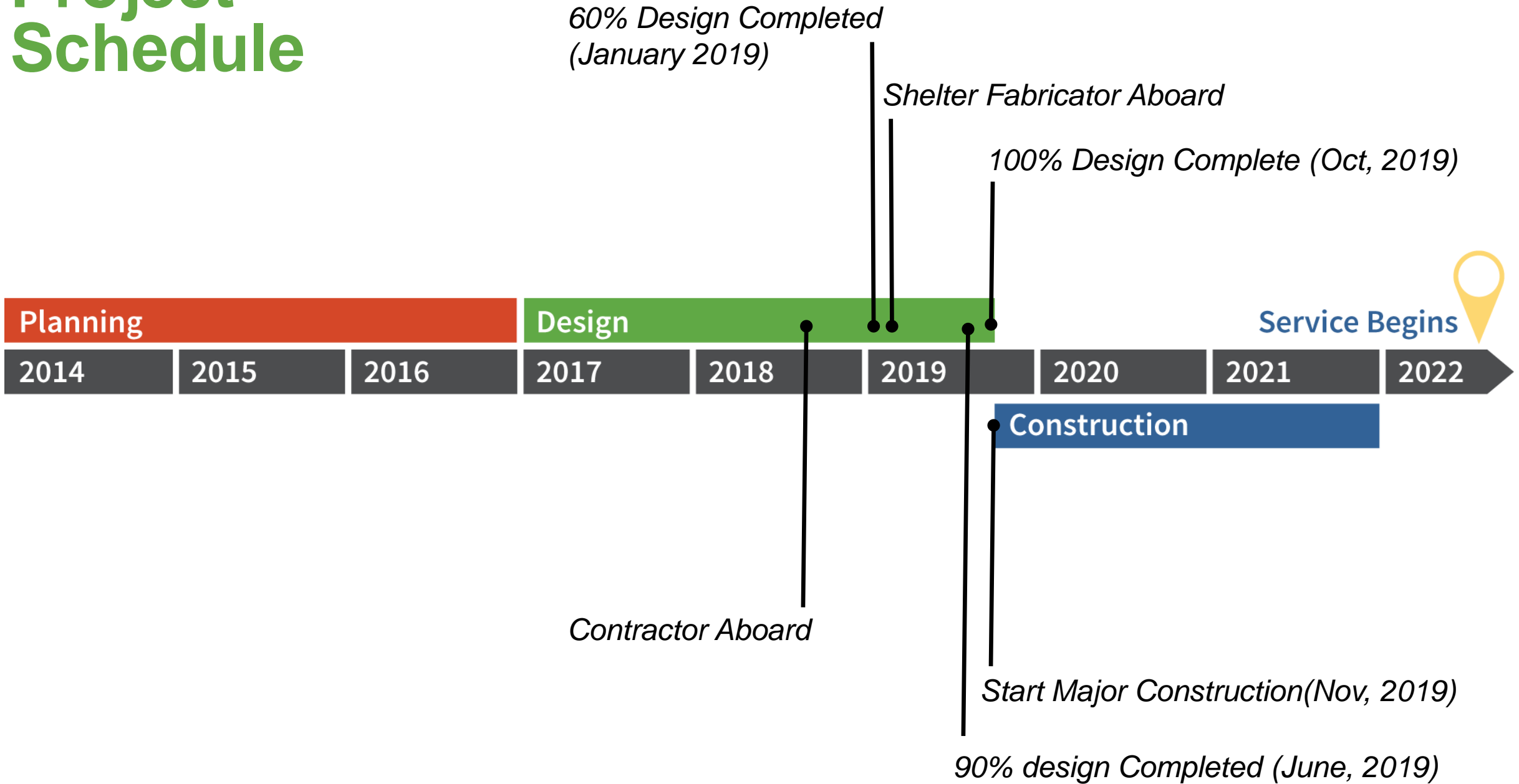
INNER DIVISION

MIDDLE DIVISION

OUTER DIVISION

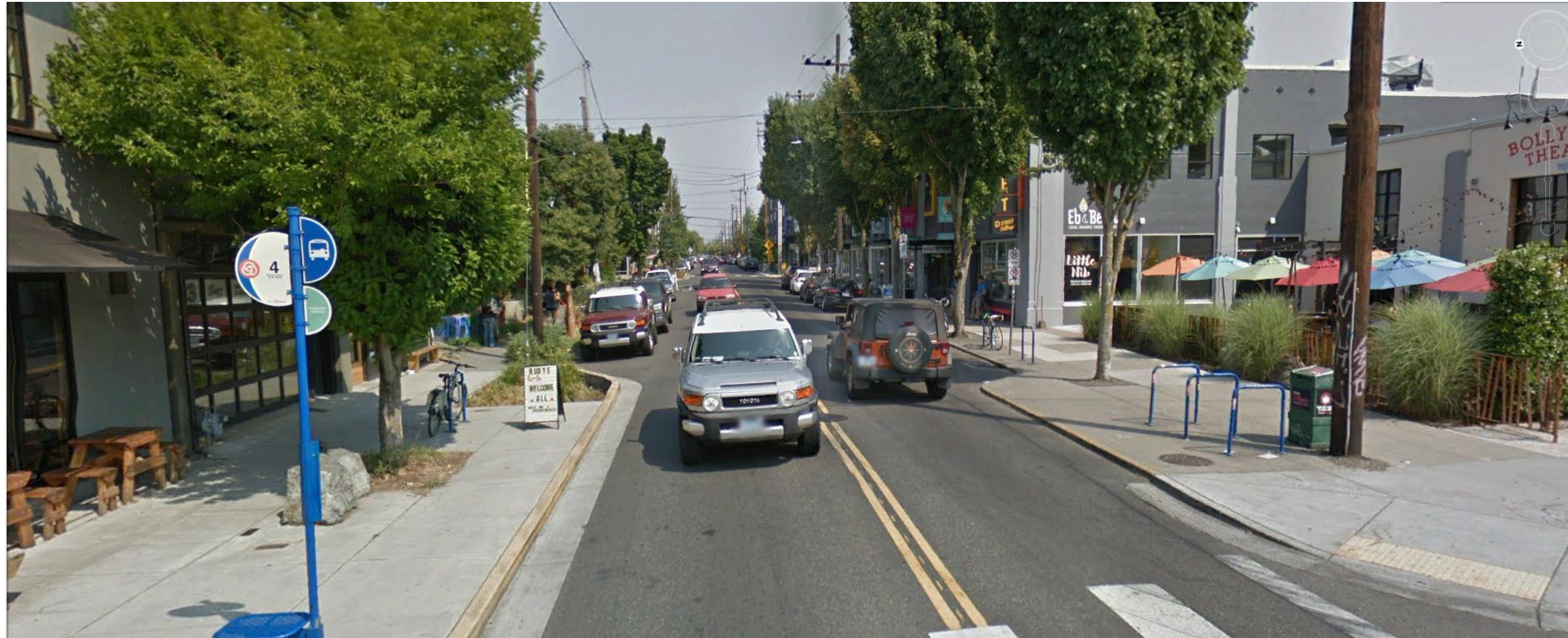
GRESHAM

Project Schedule



Urban Environment

Working In A Constrained Corridor



Division: One Corridor. Very Different Environments.



Inner Division

- Vertical mixed use with cafes, restaurants, shops at ground level
- Two lane cross section (with on street parking)
- Mix of 6-10' sidewalks
- Pedestrian scale & orientation



Middle Division

- Mix of low-rise buildings, mix-use and residential
- Two lane cross section (*middle turning lane & bike lanes east of 60th*)
- Mix of 6-10' sidewalks
- Pedestrian scale & orientation



Outer Division

- Low-rise residential & commercial buildings on larger blocks
- Five-lane cross section with on-street parking and bike lanes
- Inconsistent furnishing zone
- Auto scale & orientation
- Bike lane interface with stations
- Discontinuous street network

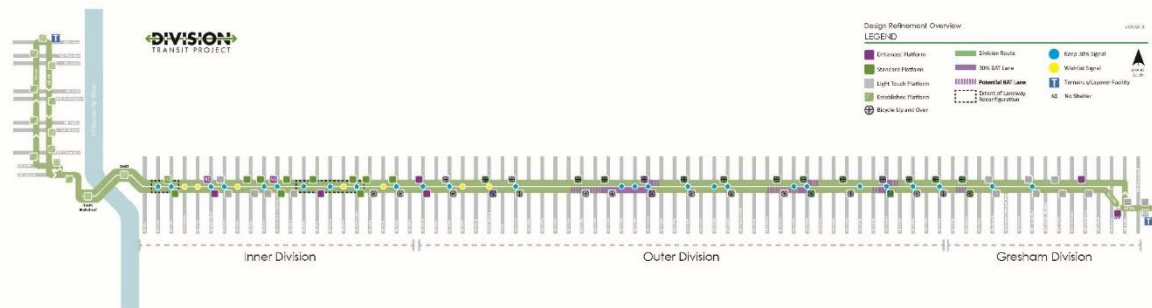


Station Design Process



Community Engagement

Division Transit Project Site Analysis of Corridor Segments August 2017



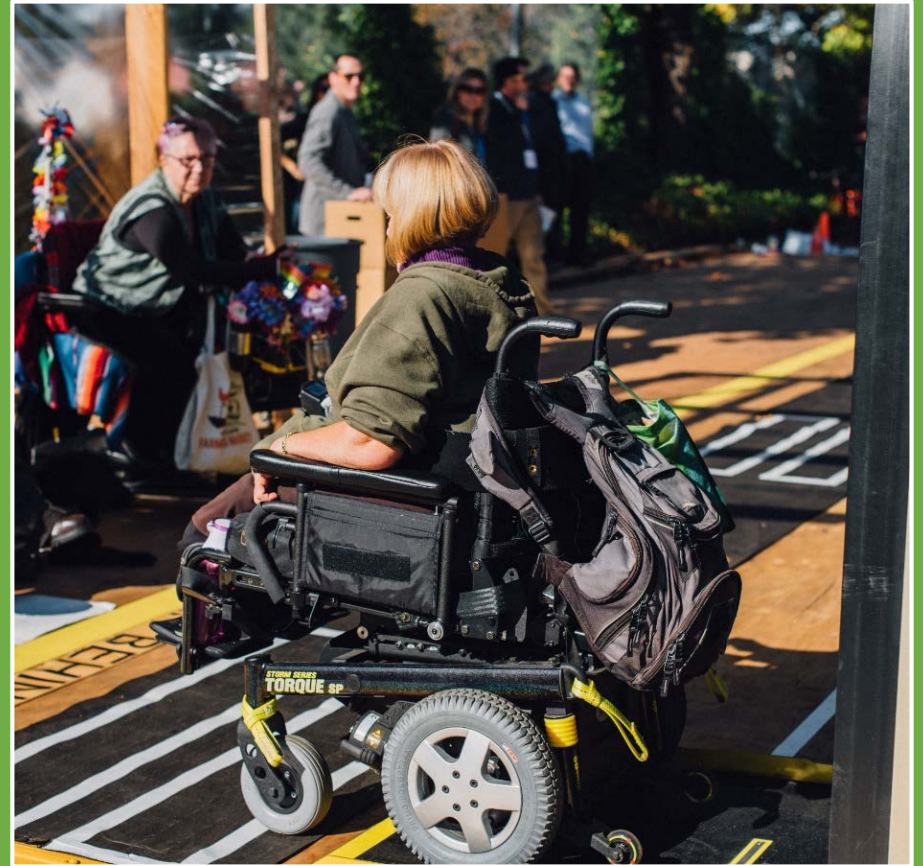
Context Analysis – Block By Block



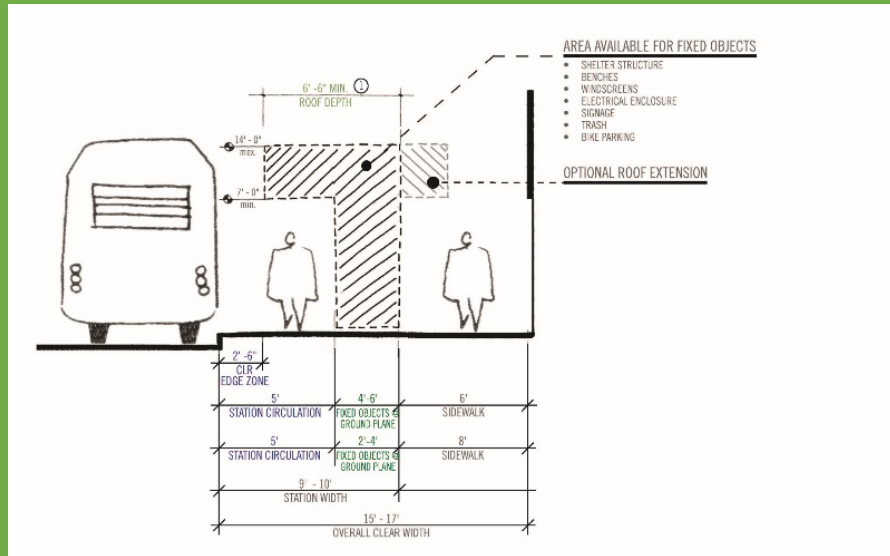
Guidelines & Resources



Precedent Studies



Prototyping & Testing



Station Design Criteria

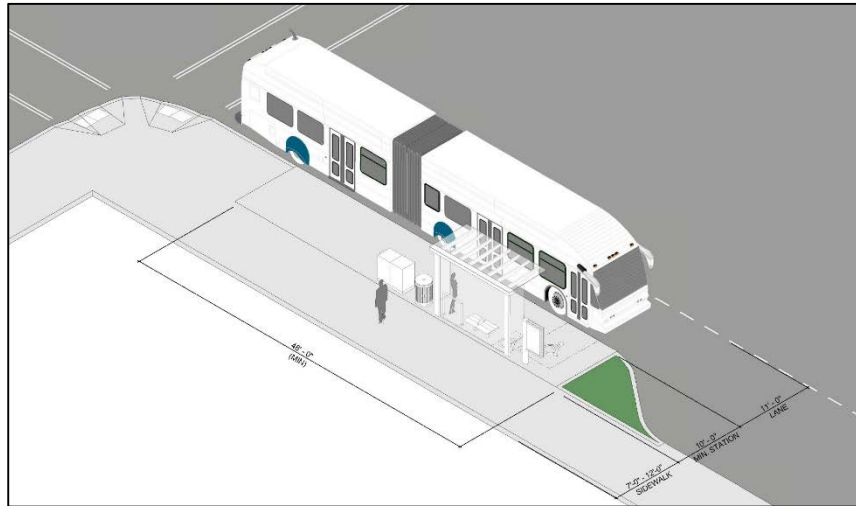
Shared Design Values

Portland Comp Plan & Community Design Guidelines

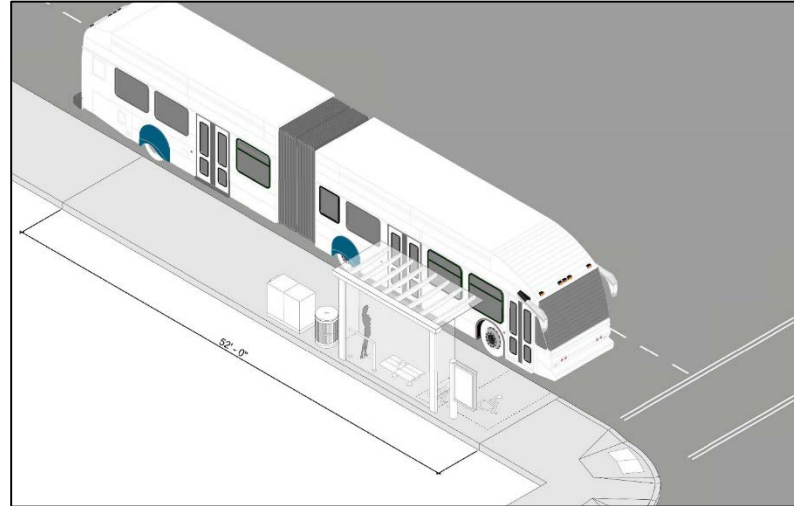
- Respond to context
- Quality and sense of purpose
- Clear design vocabulary
- Compatibility with neighborhoods
- Reinforce sense of place
- Connect with cultural & social qualities of community
- Support economic vitality

Station Design

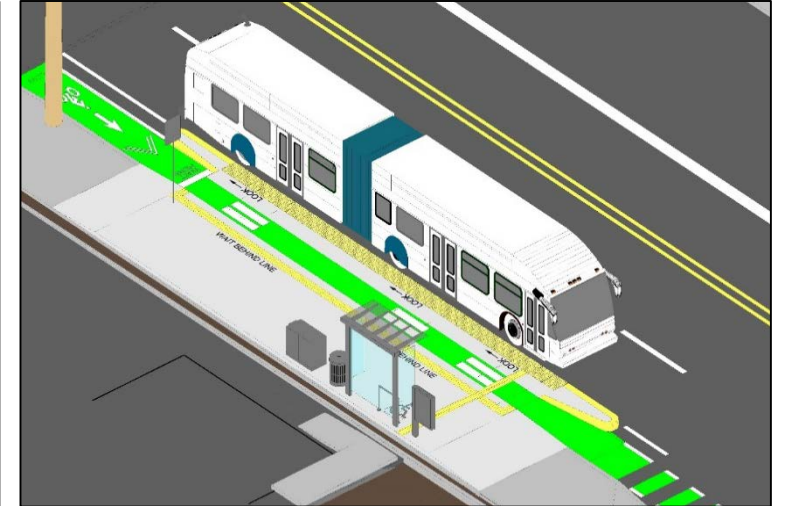
Station Designs – Three Contextual Solutions



Pedestrian By-Pass Station



Pedestrian Pass Through Station



Shared Bike/Pedestrian Station

Existing Condition



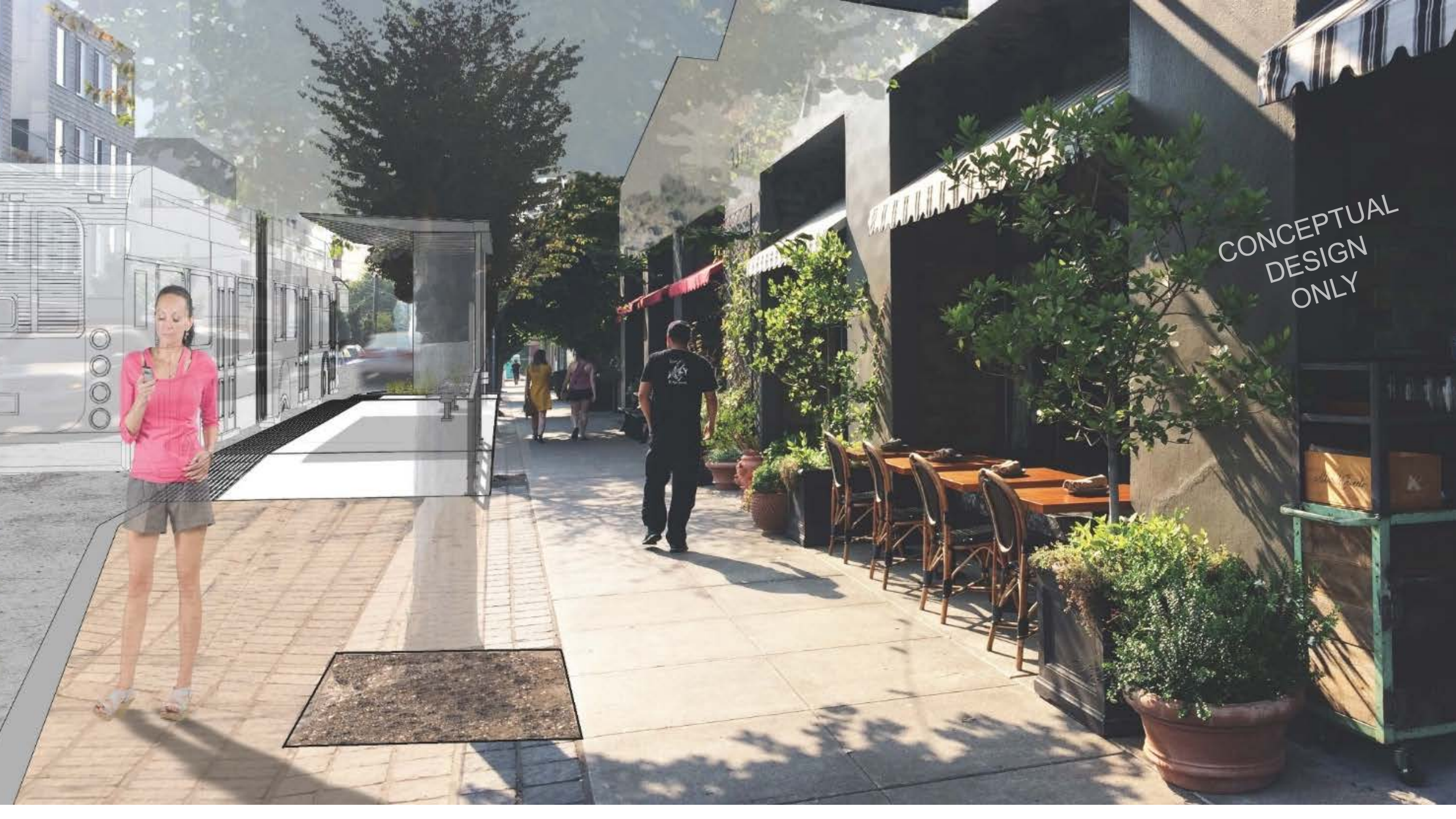
34th & Division (Westbound)



CONCEPTUAL
DESIGN
ONLY

3377

AVA
GENES



CONCEPTUAL
DESIGN
ONLY

Existing Condition



68th & Division (Eastbound)

CONCEPTUAL
DESIGN
ONLY



7'-0"
PEDESTRIAN CLEAR ZONE

8'-3"
PLATFORM WIDTH



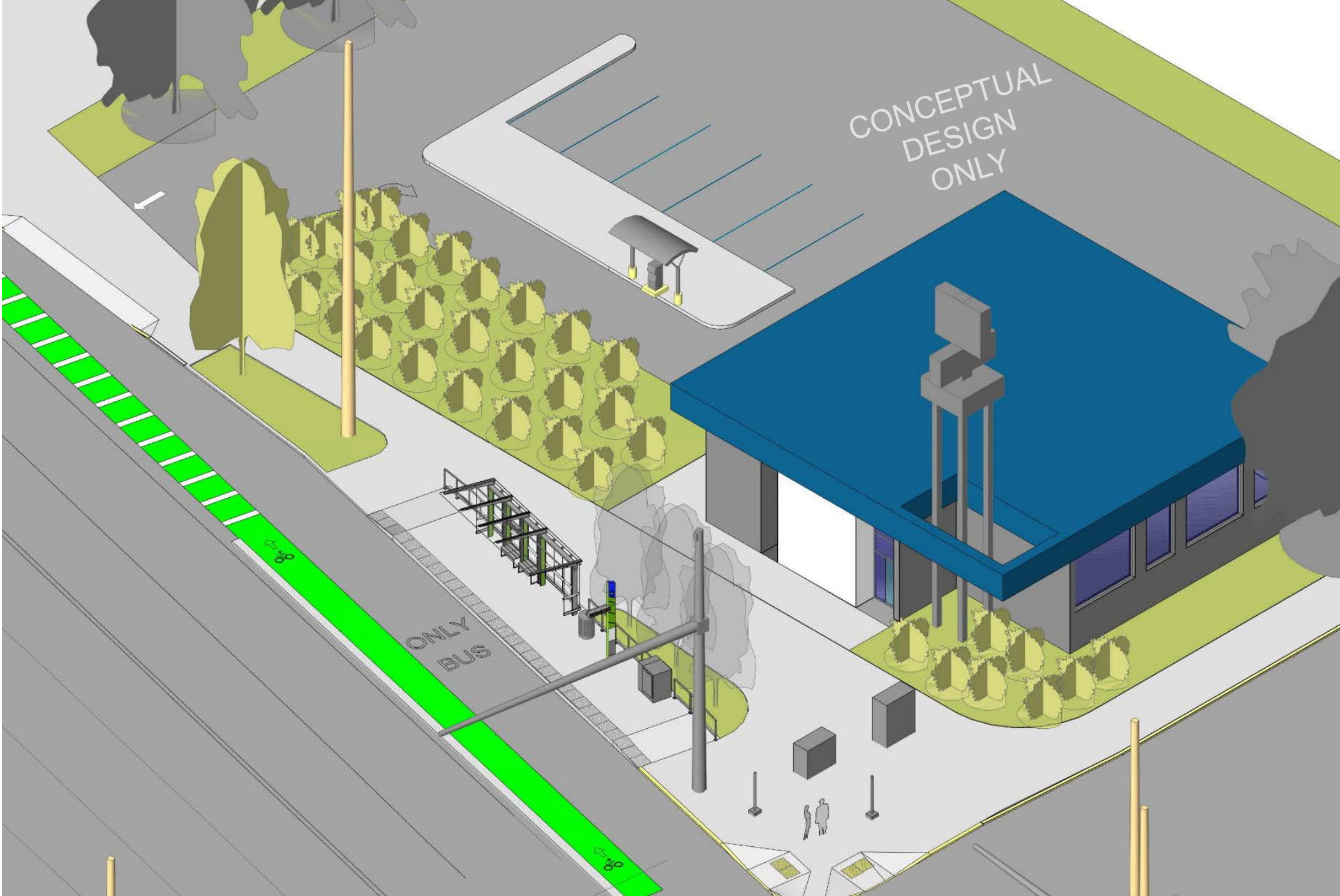
7'-11"
(E) SIDEWALK WIDTH



Existing Condition



82nd & Division (Westbound)



CONCEPTUAL
DESIGN
ONLY

ONLY
BUS

Shelter Design

Design Criteria

- Modularity, Replicability & Contextual Sensitivity
- Maintenance & Durability
- Safety & Security
- Accessibility
- Cost & Flexibility in Cost Refinement
- Ease of Fabrication & Installation
- Customer Experience

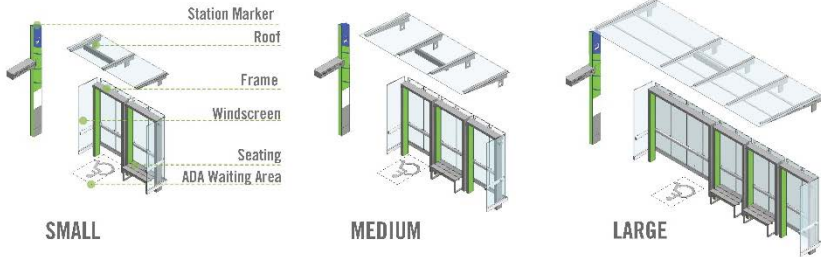
Shelter Design Schemes

CONCEPTUAL
DESIGNS
ONLY

FRAMES



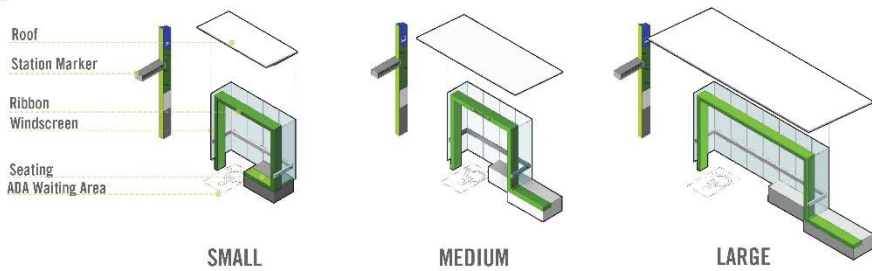
KIT OF PARTS



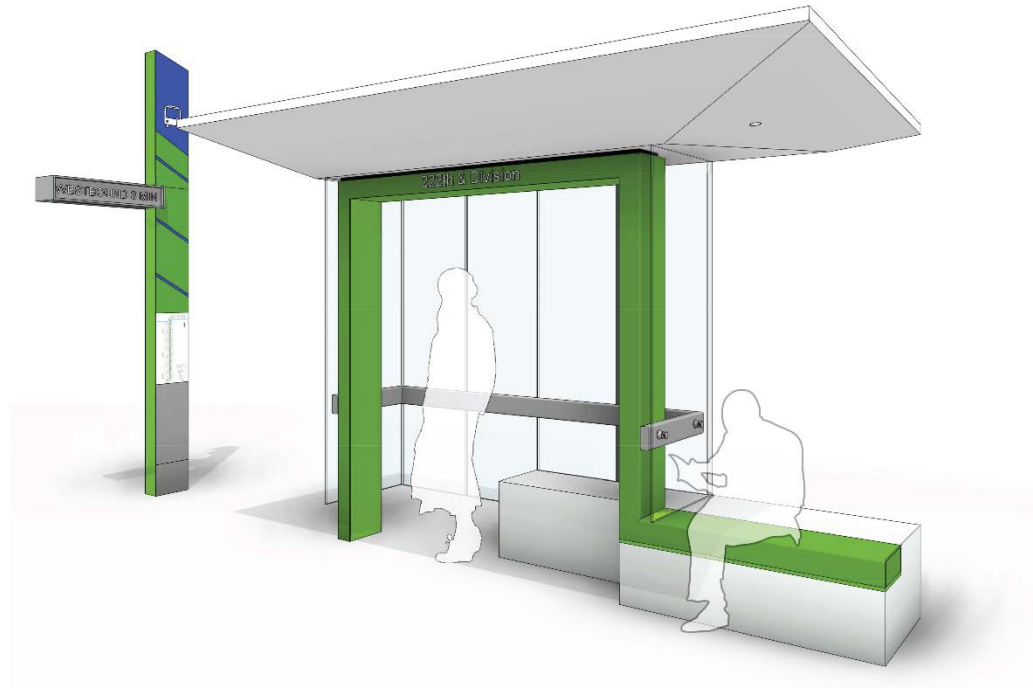
RIBBON



KIT OF PARTS



Ribbon



PROS

- ✓ Distinct Design
- ✓ Contributes to system branding/identity
- ✓ Enclosed roof (*houses lighting & other infrastructure*)
- ✓ Opportunities for place-making

CONS

- Safety and sight line concerns
- Limited capacity and weather protection
- Limited accessibility for mobility device
- Fabrication and installation more costly & complex
- Difficult to replicate or modify over time
- Difficult to maintain and replace parts
- Less flexible and responsive to site context

Frames



PROS

- ✓ Scalable, Modular & Replicable
- ✓ Sensitive to Context
- ✓ Easier To Maintain, Clean & Repair
- ✓ Safe sight lines
- ✓ More circulation space for mobility devices
- ✓ Easier to Fabricate & Install
- ✓ More cost flexibility
- ✓ Evolution of existing transit design vocabulary

CONS

- Additional weather coverage needed
- Glass panels require maintenance/cleaning
- Attachments and components may be costly and add difficulty to part replacement and repair

Feedback & Next Steps

Next Steps

- Your feedback today
- Design refinement with fabricator & design team
- Updates to project partners and stakeholders
- Updates to Design Review (design development & amenity package feedback)

THANK YOU!

