

# CENTER CITY CONNECTOR



Seattle Design Commission: Schematic Design Update

March 16, 2017

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# AGENDA

Project Status

Multi-Modal System

Schematic Design (60%)

- Urban Context
- Pedestrian & Bicycle Safety
- Design Elements
- User Experience

Operational Facilities

Questions

# FEEDBACK

## Context

1. Integration with transit modes / related downtown masterplans
2. Lessons learned from SLU / First Hill
3. Pedestrian movement of users through corridor
4. Integration with downtown arts masterplan

## Safety

5. Consideration of passenger volumes on design
6. Pedestrian safety / mid-block crossings / jaywalking
7. Bicycle safety measures – 1st/Jackson, 1<sup>st</sup>/Stewart, Westlake

## Elements

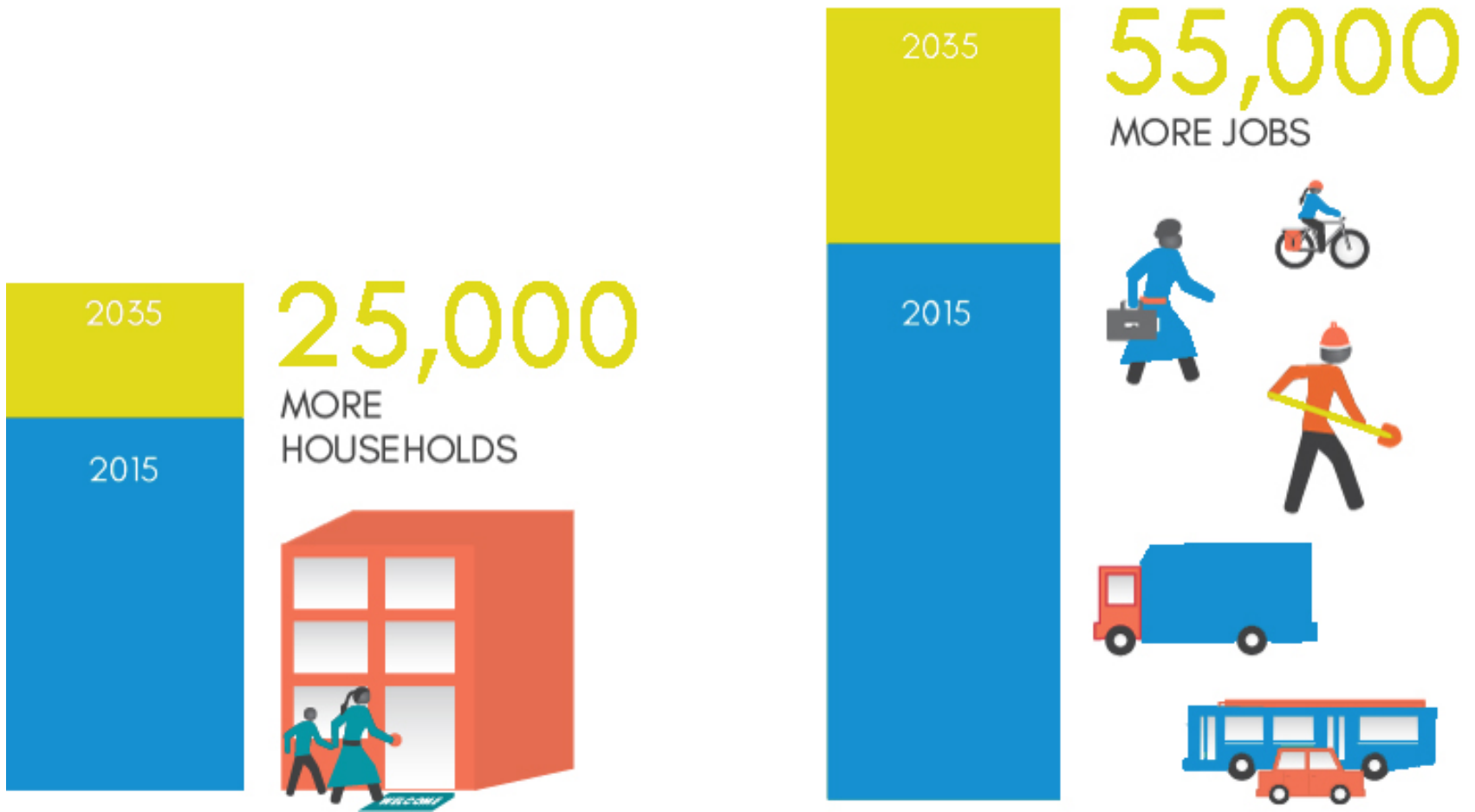
8. Evaluate need for seating and seating alternatives
9. Sustainability – material sourcing

## Experience

10. Provide visual cues to identify station locations (signage, shelter, etc.)
11. Consider operating plans for station placement and design

# PROJECT STATUS

# PURPOSE AND NEED



Schematic Design

# PROJECT OVERVIEW

Move more people...

- Connecting the system will move more people during PM peak
- Projected 20,000-24,000 average weekday riders

With more reliability...

- Exclusive transit lane on 1st Ave
- Estimated **10-minute** travel time from Westlake to Occidental
- Arrivals up to every 5 minutes between South Lake Union and Chinatown-International District



Schematic Design

Project Status

Multi-Modal

Context

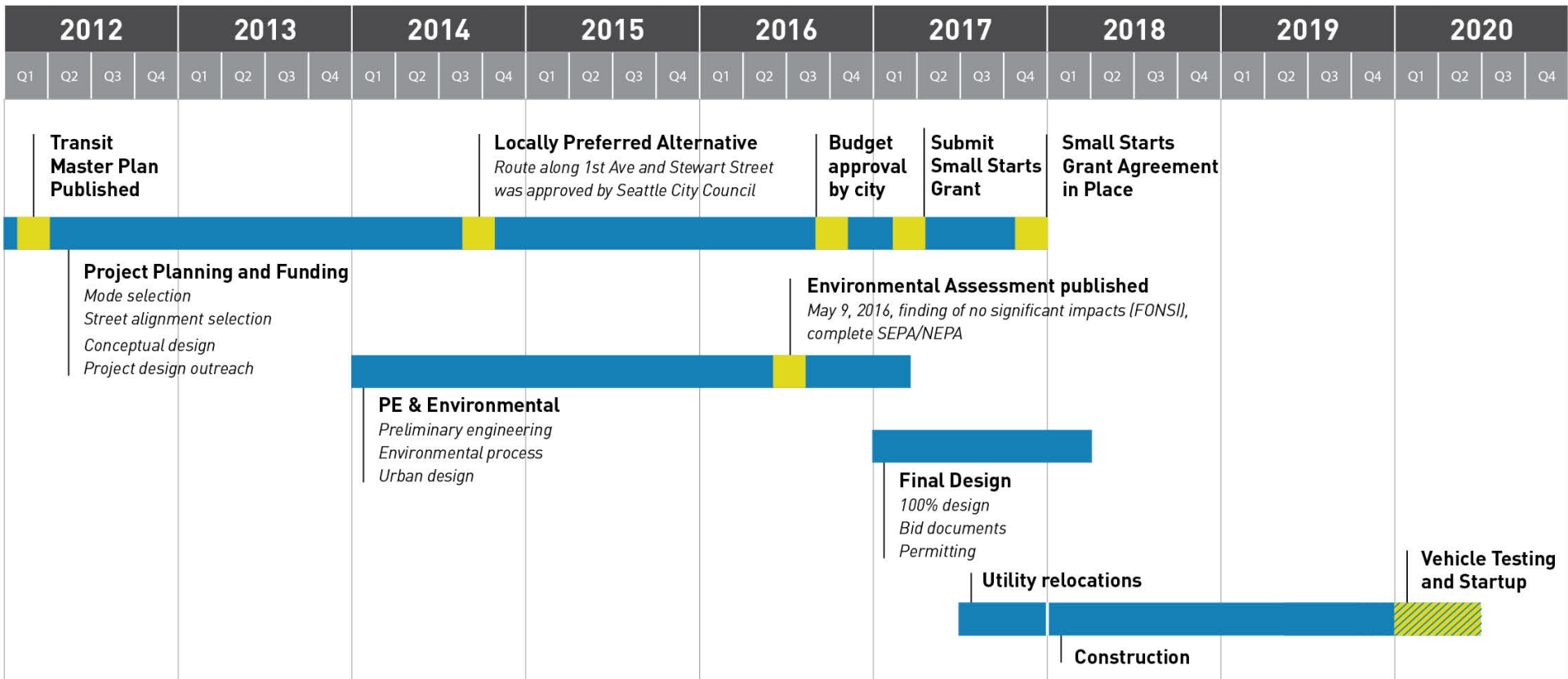
Safety

Elements

Experience

Operations

# PROJECT SCHEDULE



Schematic Design

Project Status

Multi-Modal

Context

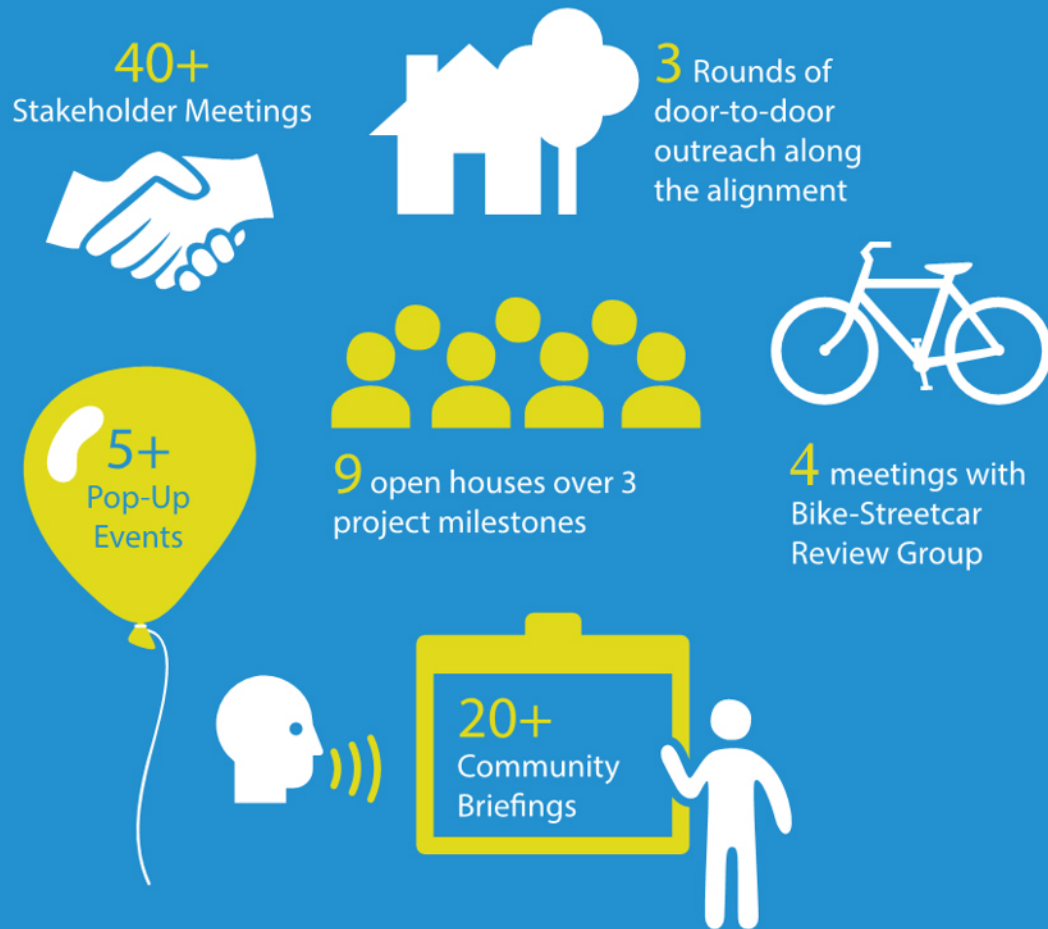
Safety

Elements

Experience

Operations

# PUBLIC OUTREACH EFFORTS



## Ongoing Outreach Activities

- Regular monthly meetings with key stakeholder groups
- Regular email updates about project status
- Stakeholder workshops
- Bike Advisory Board meetings

Schematic Design

Project Status

Multi-Modal

Context

Safety

Elements

Experience

Operations



# PUBLIC OUTREACH IMPACTS

## Groups/Individuals

- Department of Neighborhoods Historic Boards
- Community Based Organizations
- Business Owners
- Residents adjacent to, and nearby, alignment
- Advisory Boards
  - Seattle Bicycle Advisory Board, Seattle Transit Advisory Board, Seattle Pedestrian Advisory Board

## How Outreach Influenced Design

- Nord Alley Crossing Revision
- Bicycle Safety Improvements
- Modifications to On-Street Parking/Loading
- Operations and Maintenance Facility Location

Schematic Design

Project Status

Multi-Modal

Context

Safety

Elements

Experience

Operations

MULTIMODAL SYSTEM

# STREETCAR RIDERSHIP (2035)



Schematic Design

Project Status

Multi-Modal

Context

Safety

Elements

Experience

Operations

# STREETCAR + RAIL



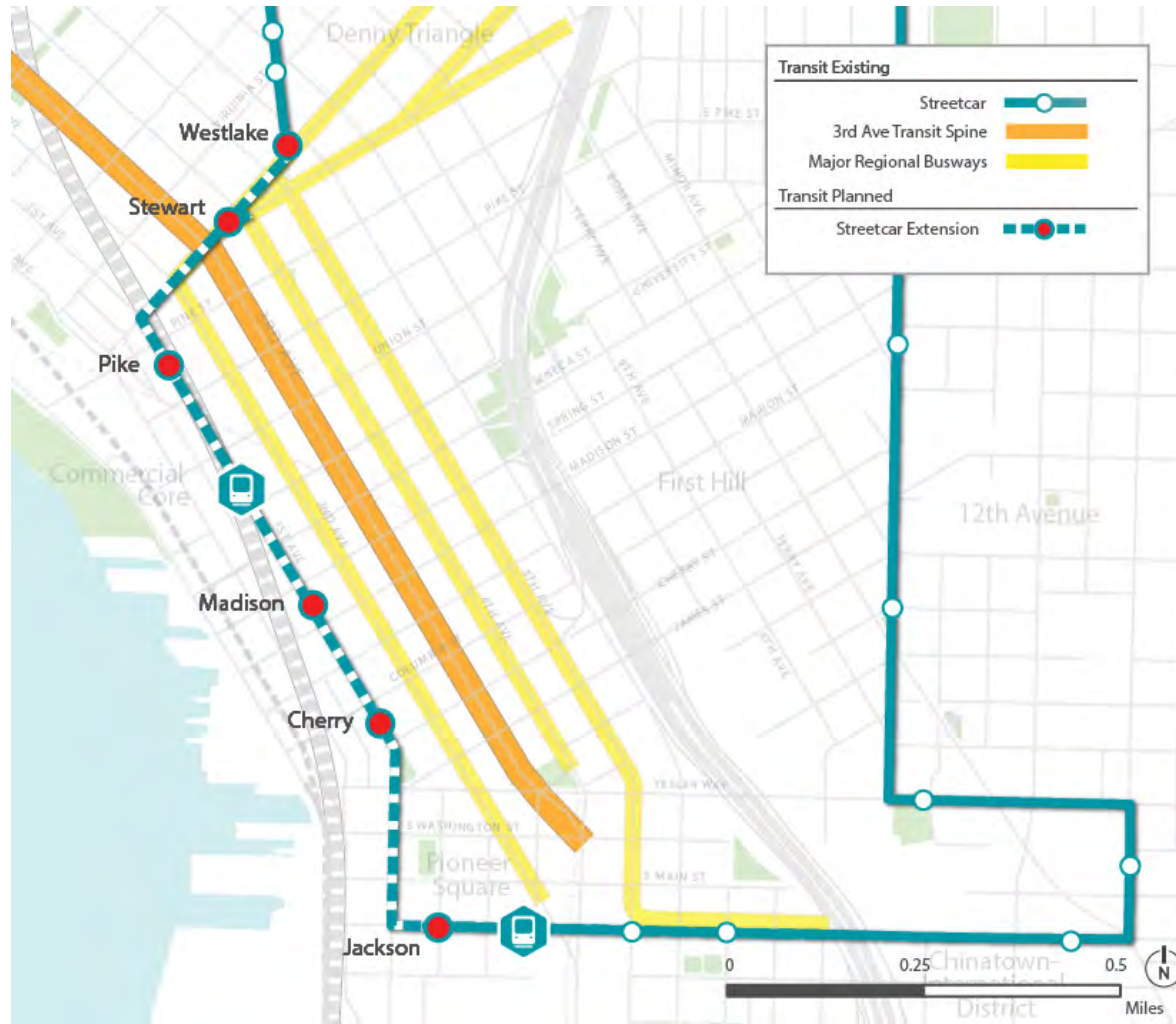
Schematic Design

# STREETCAR + RAPID RIDE



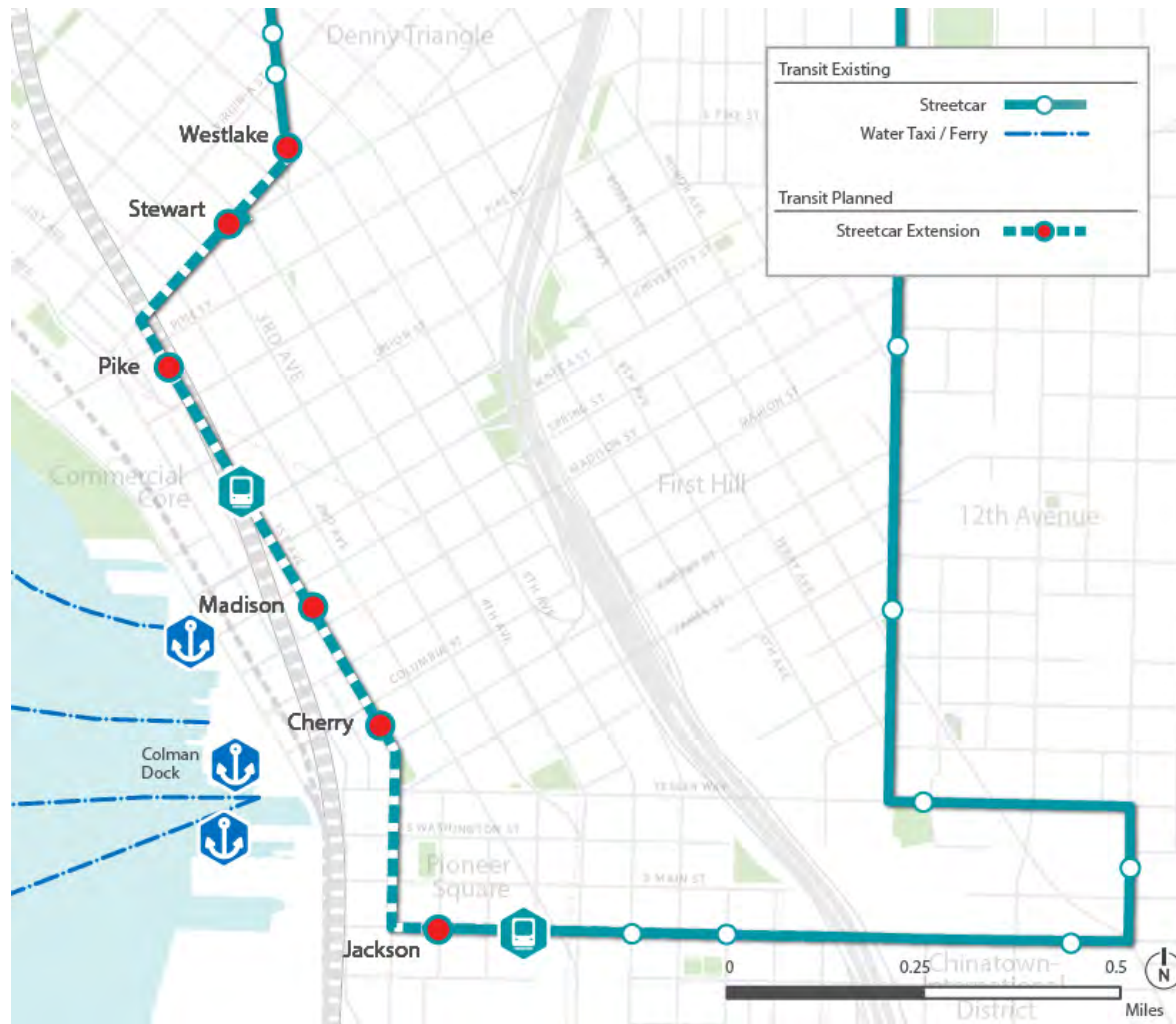
Schematic Design

# STREETCAR + REGIONAL BUS



Schematic Design

# STREETCAR + FERRY / WATER TAXI



Schematic Design

# STREETCAR + BICYCLES



Schematic Design



# PEDESTRIAN NETWORK



Schematic Design

Project Status

Multi-Modal

Context

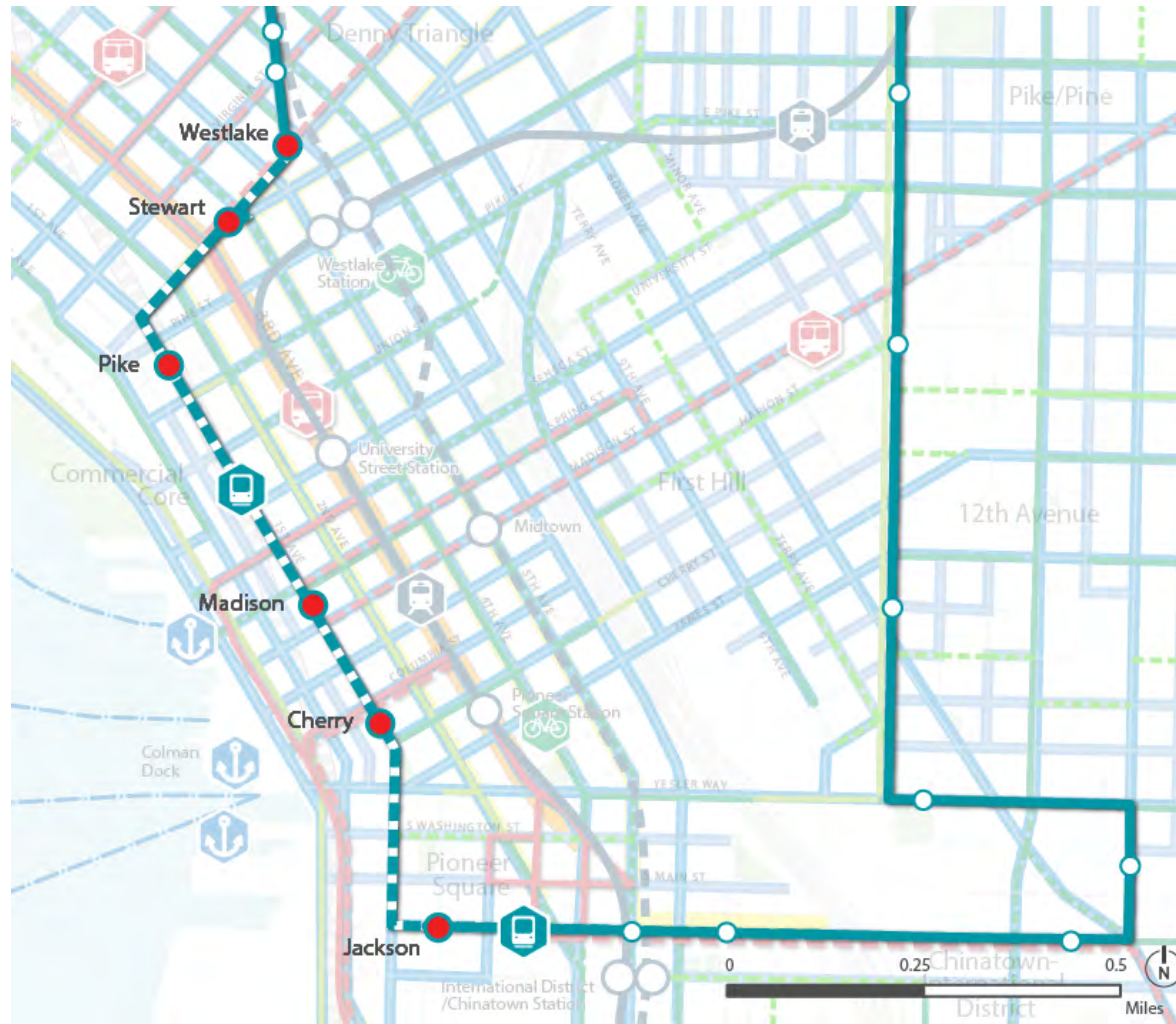
Safety

Elements

Experience

Operations

# STREETCAR + ALL MODES



Schematic Design

SCHEMATIC DESIGN (60%)

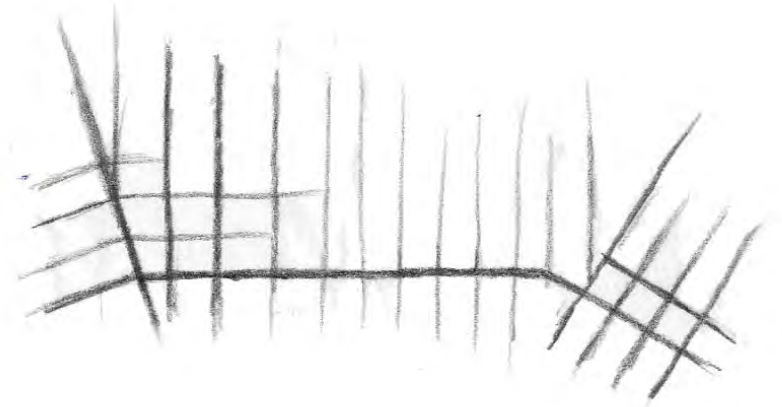
# PROJECT VISION

*"Integrate streetcar transit into downtown streets while allowing the unique, existing qualities of each street to define the physical design"*

# RETHINK "CORRIDOR"



Transit Corridor Design



Transit Integration Design

Schematic Design

Project Status

Multi-Modal

Context

Safety

Elements

Experience

Operations

# ACTIVATING & CONNECTING



Schematic Design

Project Status

Multi-Modal

Context

Safety

Elements

Experience

Operations

# QUIET INTEGRATION – UNIQUE CHARACTER



Schematic Design

Project Status

Multi-Modal

Context

Safety

Elements

Experience

Operations

# SLIM, MINIMAL, LOW, OPEN



## Schematic Design

Project Status

Multi-Modal

Context

Safety

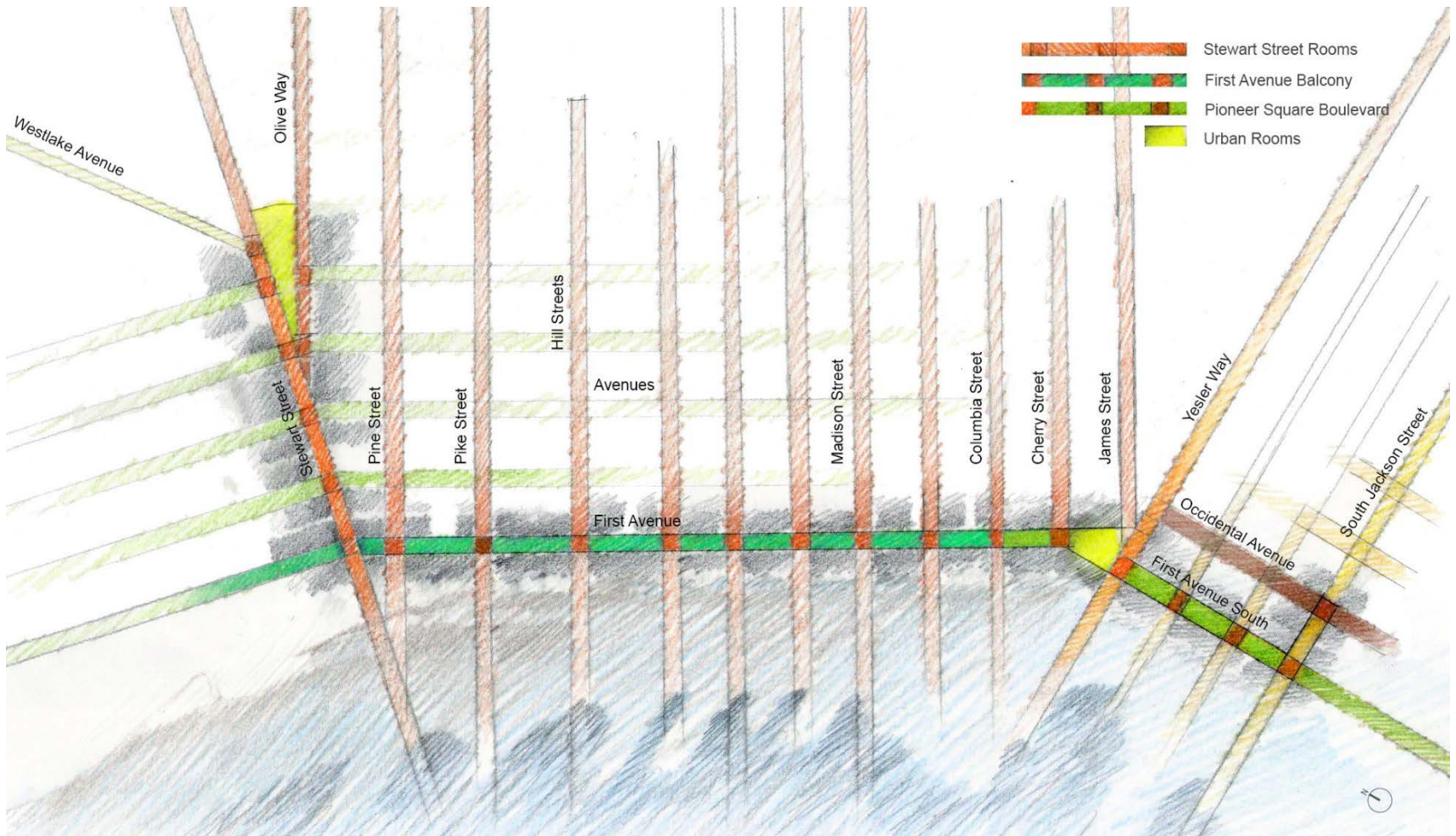
Elements

Experience

Operations



# STREET DESIGN ZONES



## Schematic Design

Project Status

Multi-Modal

Context

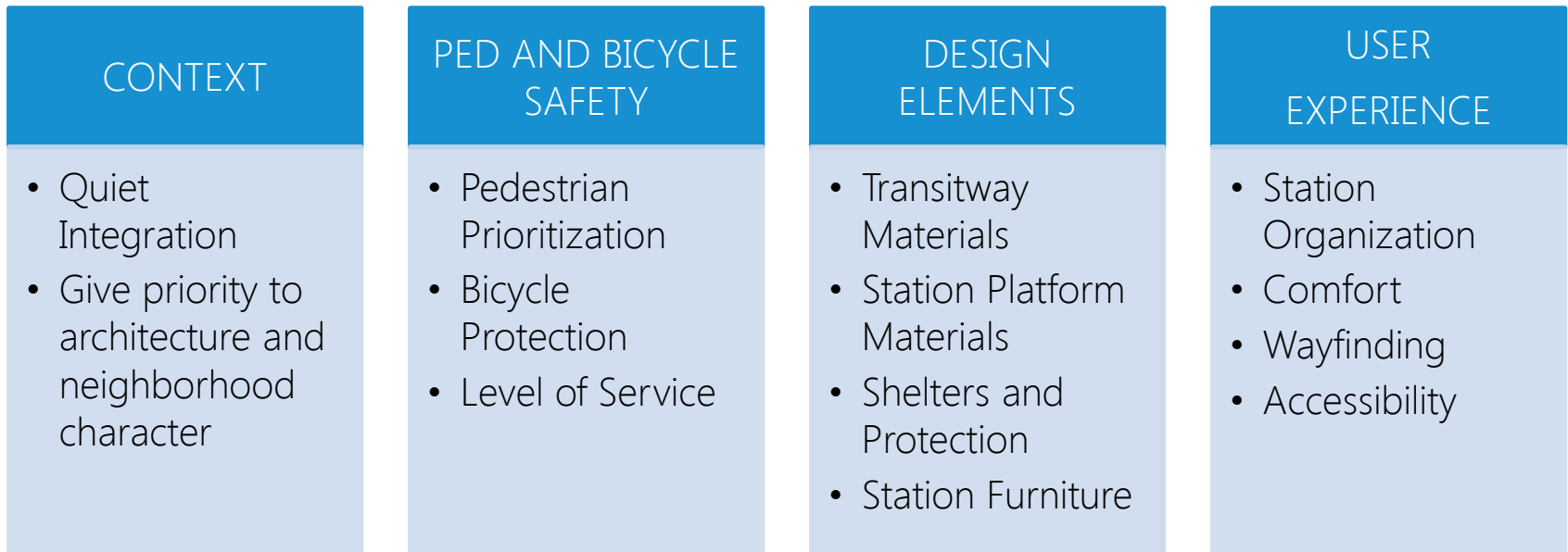
Safety

Elements

Experience

Operations

# KEY DESIGN CONSIDERATIONS



## Schematic Design

Project Status

Multi-Modal

Context

Safety

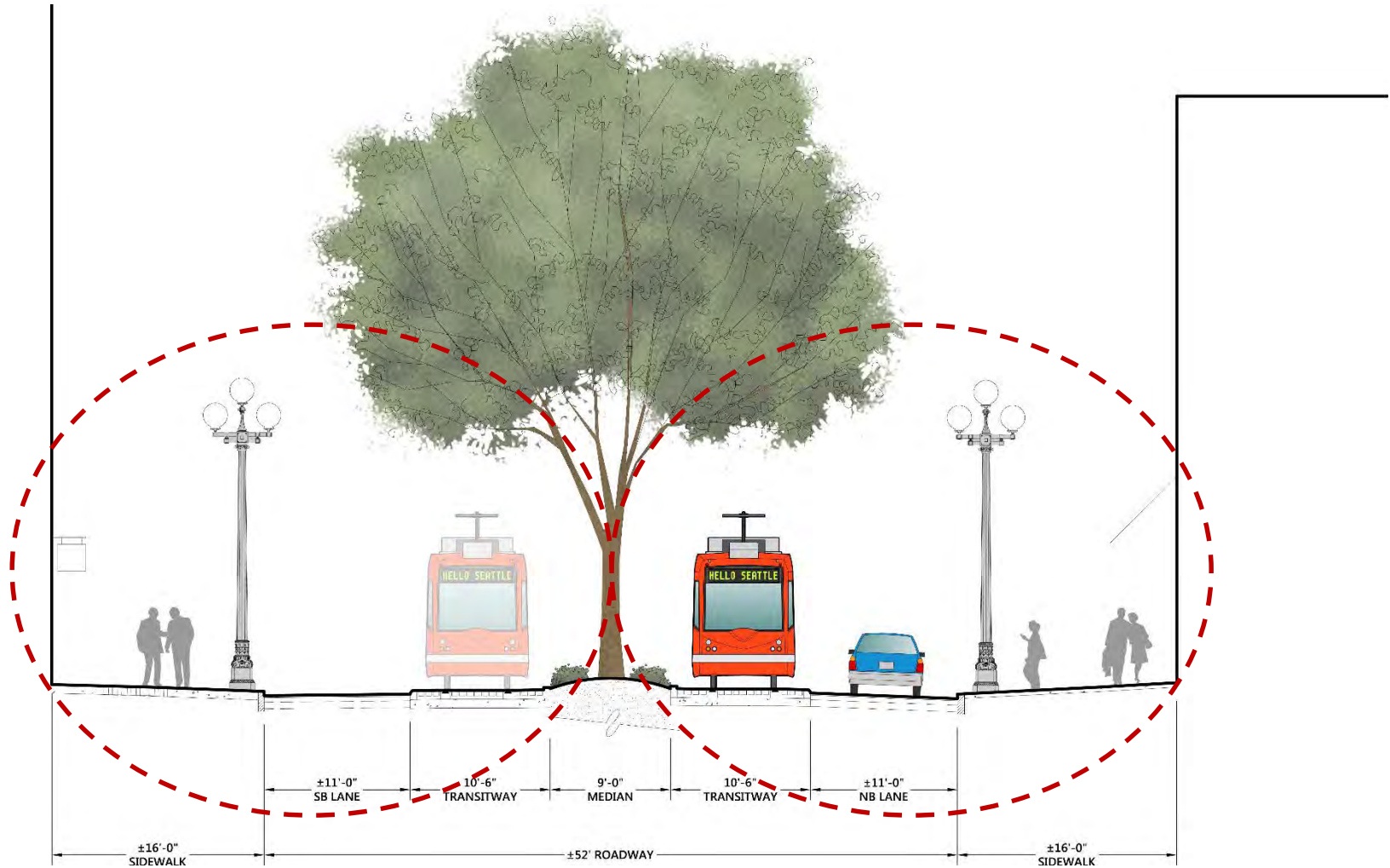
Elements

Experience

Operations

# PIONEER SQUARE BOULEVARD CONTEXT

# PIONEER SQUARE SECTION (SOUTH)



## Pioneer Square

Project Status

Multi-Modal

Context

Safety

Elements

Experience

Operations





# PIONEER SQUARE BOULEVARD SAFETY

# CARING FOR PEOPLE



## Pioneer Square

Project Status

Multi-Modal

Context

Safety

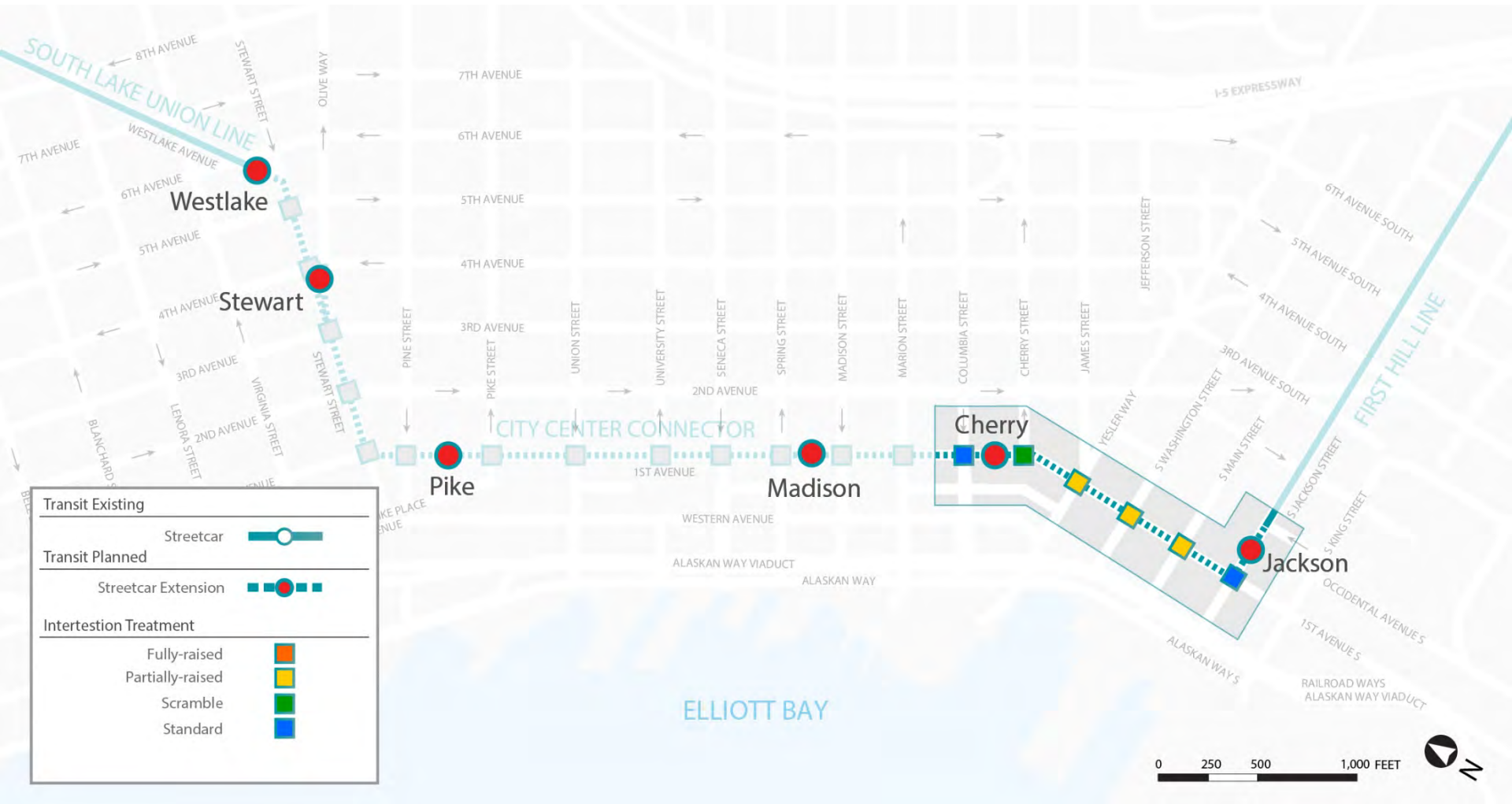
Elements

Experience

Operations



# INTERSECTION TREATMENTS



## Pioneer Square

Project Status

Multi-Modal

Context

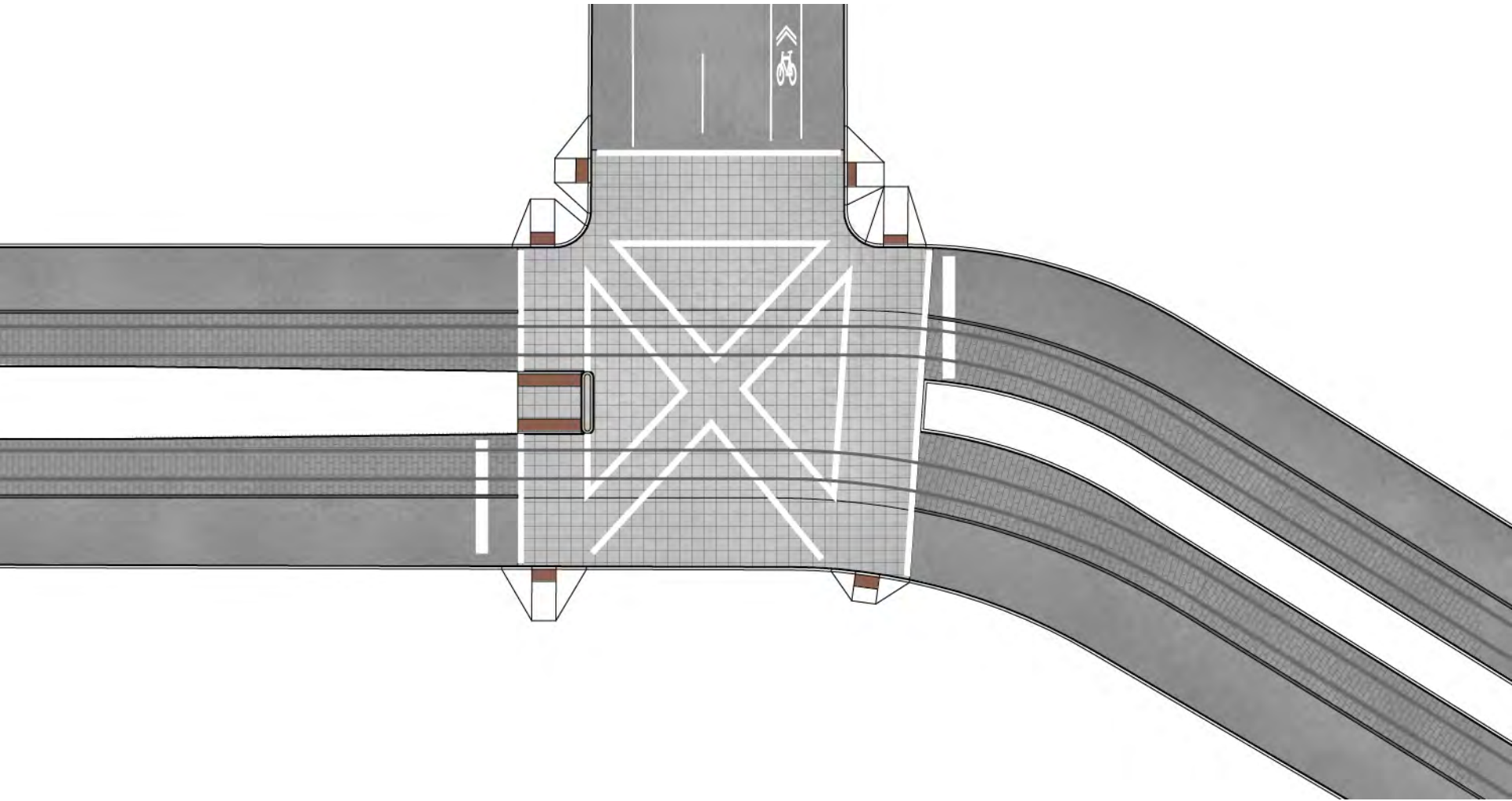
Safety

Elements

Experience

Operations

# SCRAMBLE INTERSECTIONS



Pioneer Square

Project Status

Multi-Modal

Context

Safety

Elements

Experience

Operations

# SCRAMBLE INTERSECTIONS



Pioneer Square

Project Status

Multi-Modal

Context

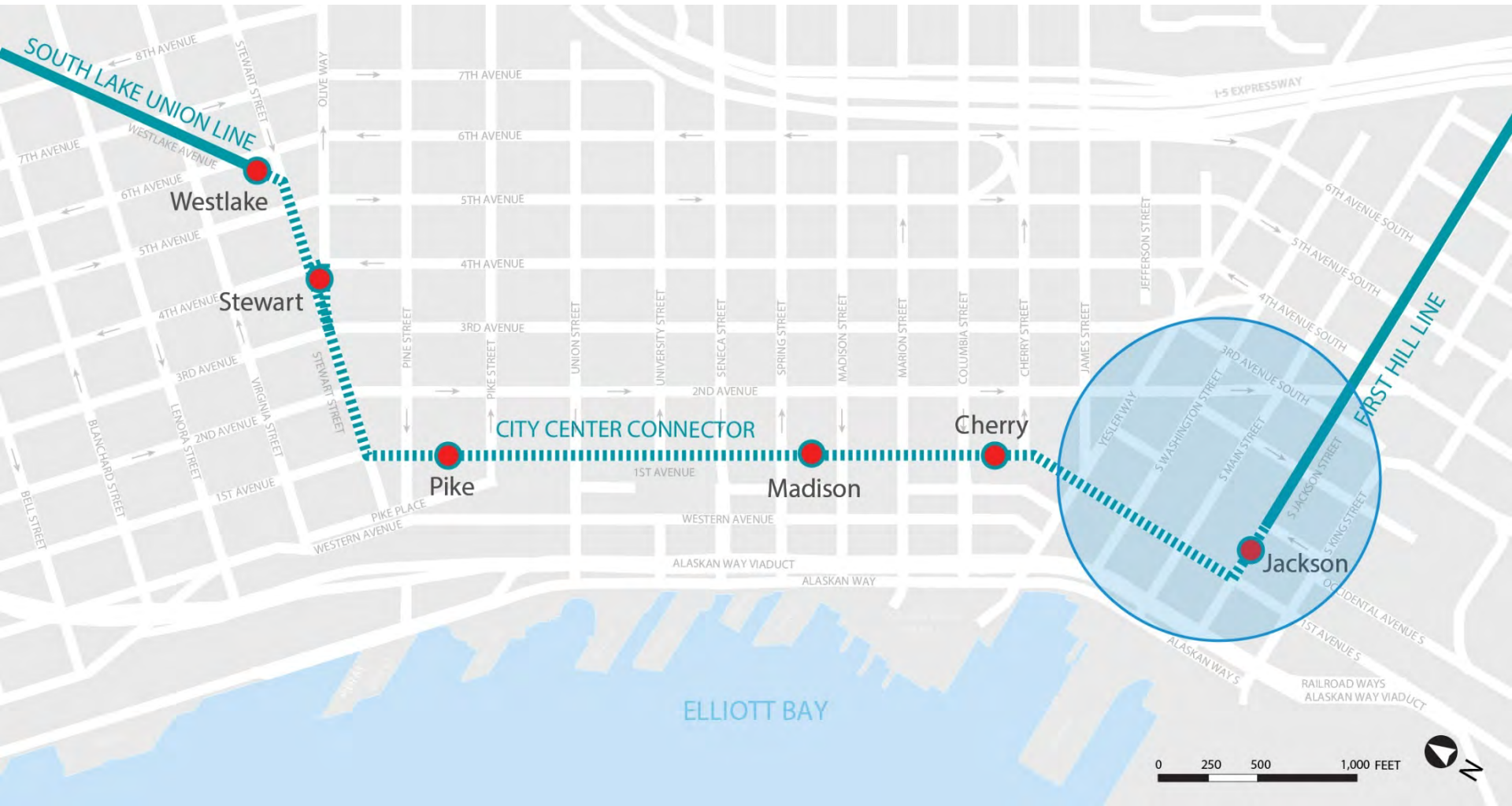
Safety

Elements

Experience

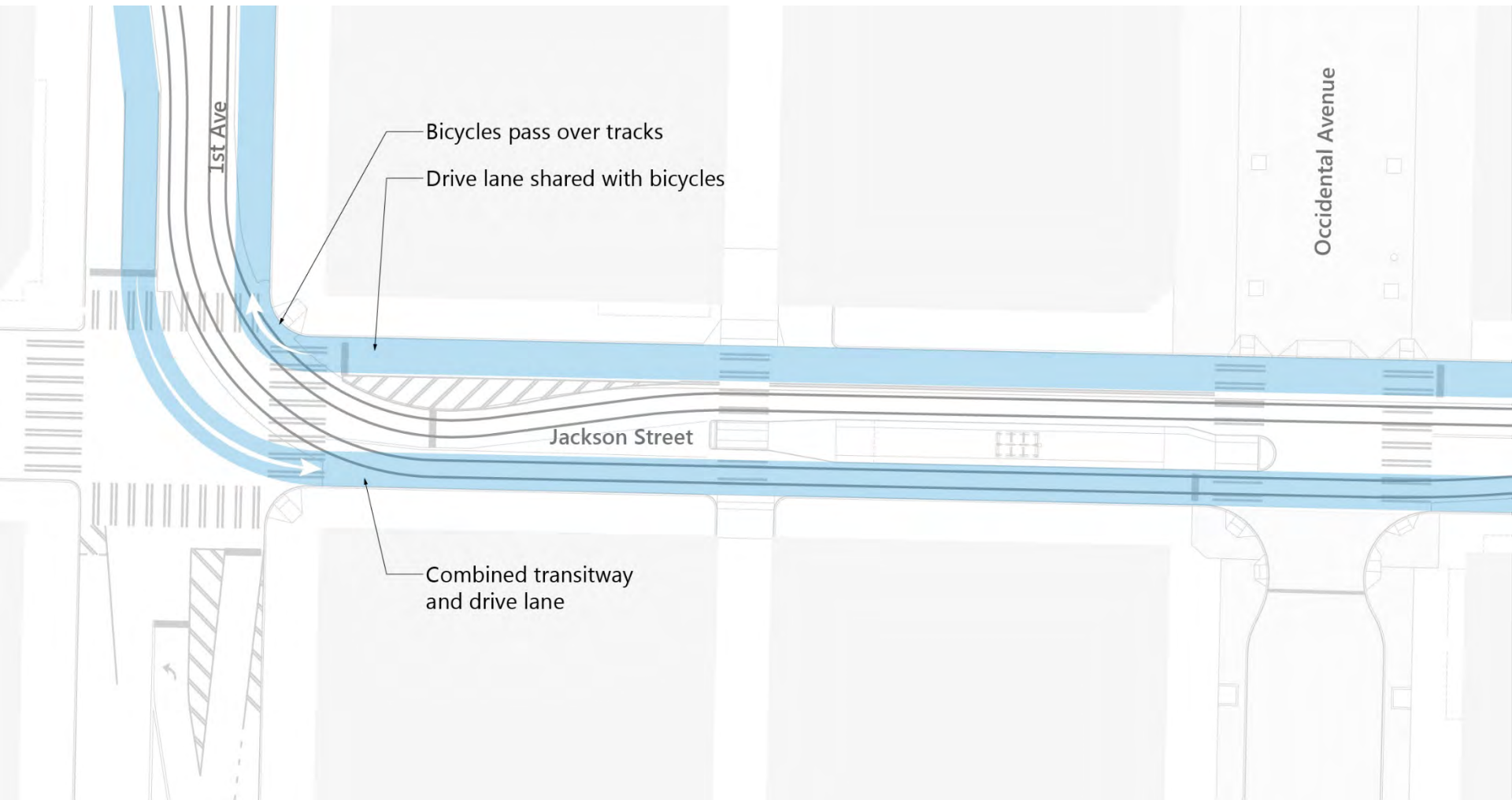
Operations

# BICYCLE SAFETY



## Pioneer Square

# BICYCLE SAFETY – CURRENT DESIGN



## Pioneer Square

Project Status

Multi-Modal

Context

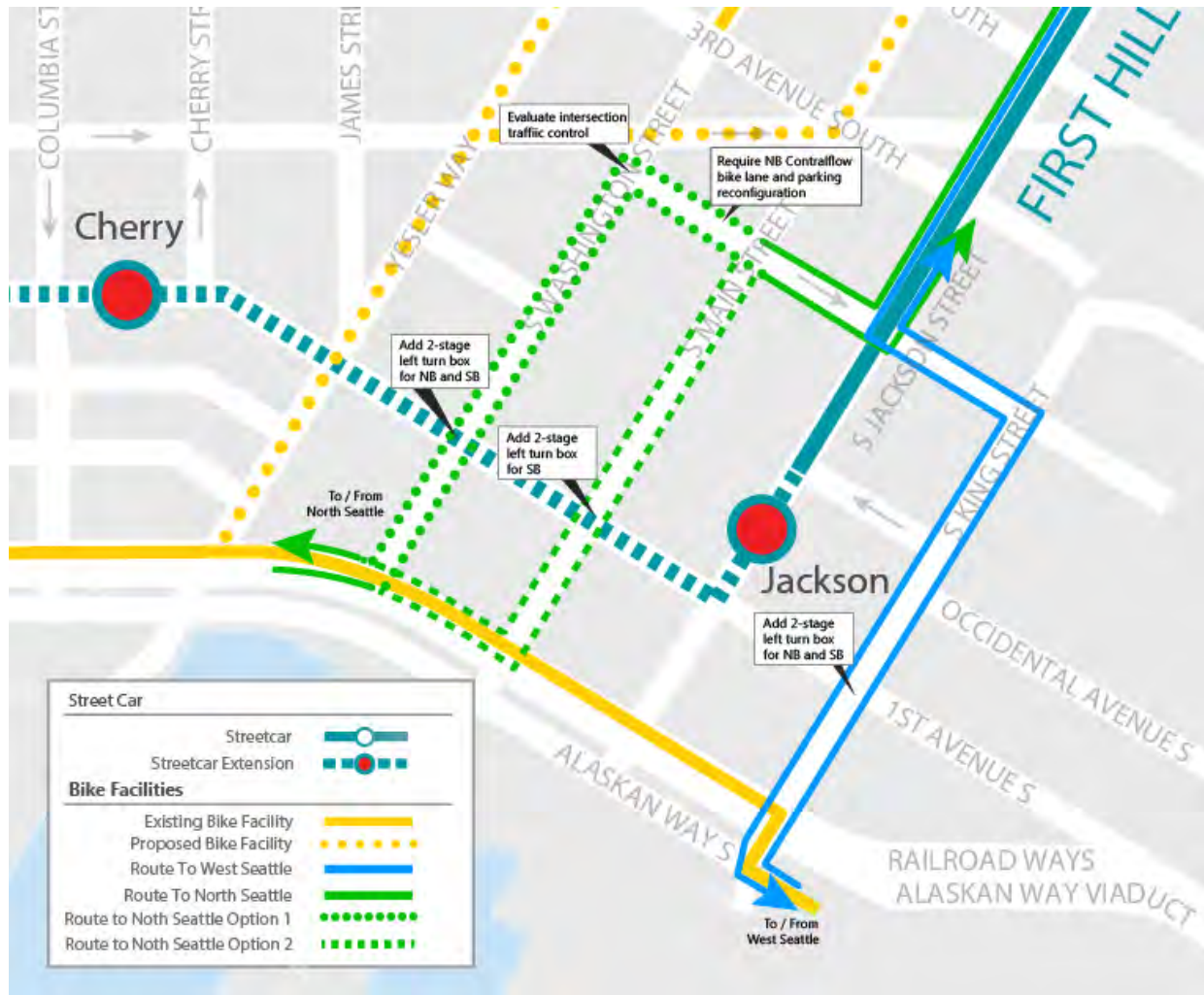
Safety

Elements

Experience

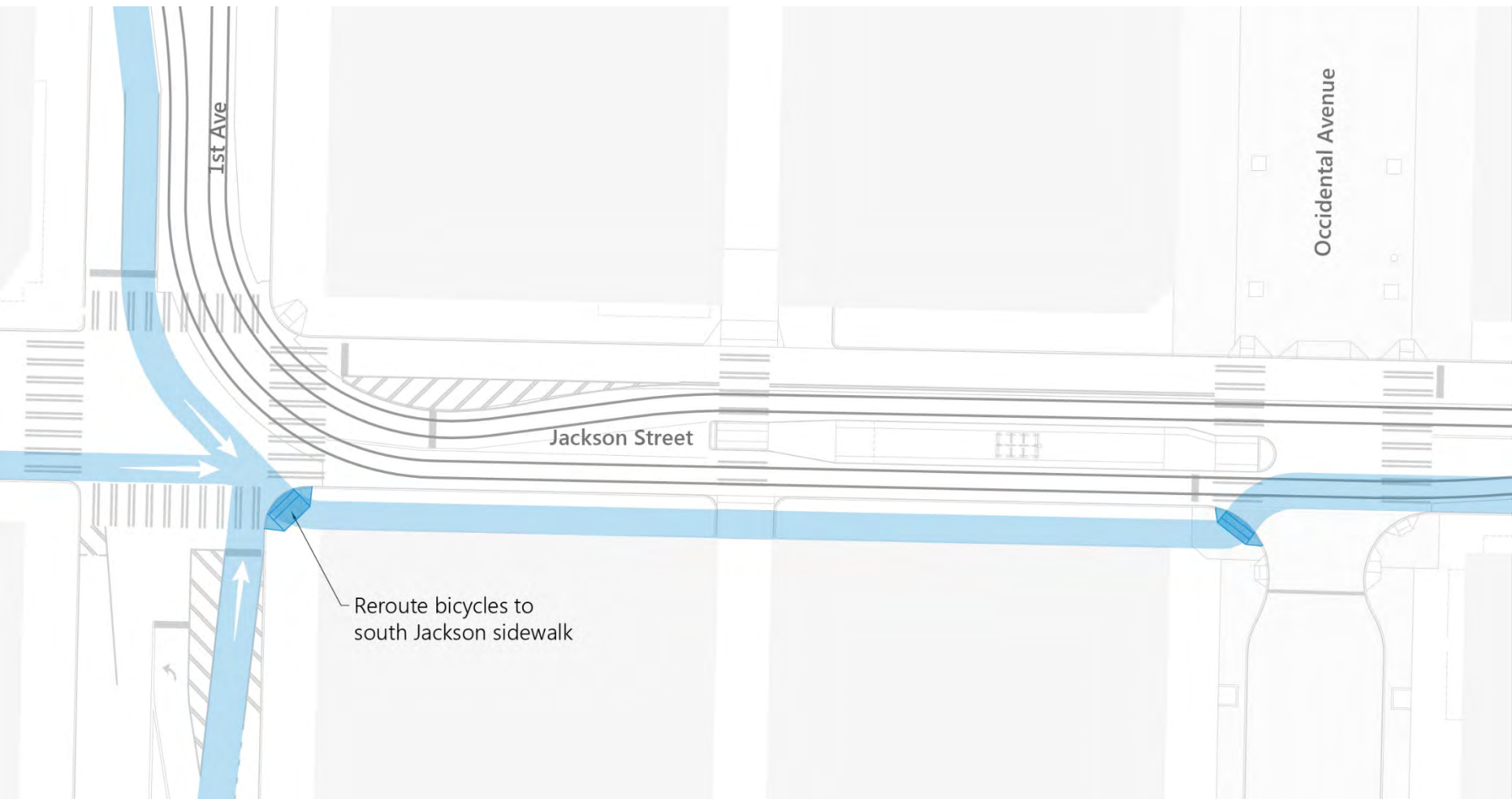
Operations

# BICYCLE SAFETY – ALTERNATE ROUTES



Pioneer Square

# BICYCLE SAFETY – ALTERNATE 1



## Pioneer Square

Project Status

Multi-Modal

Context

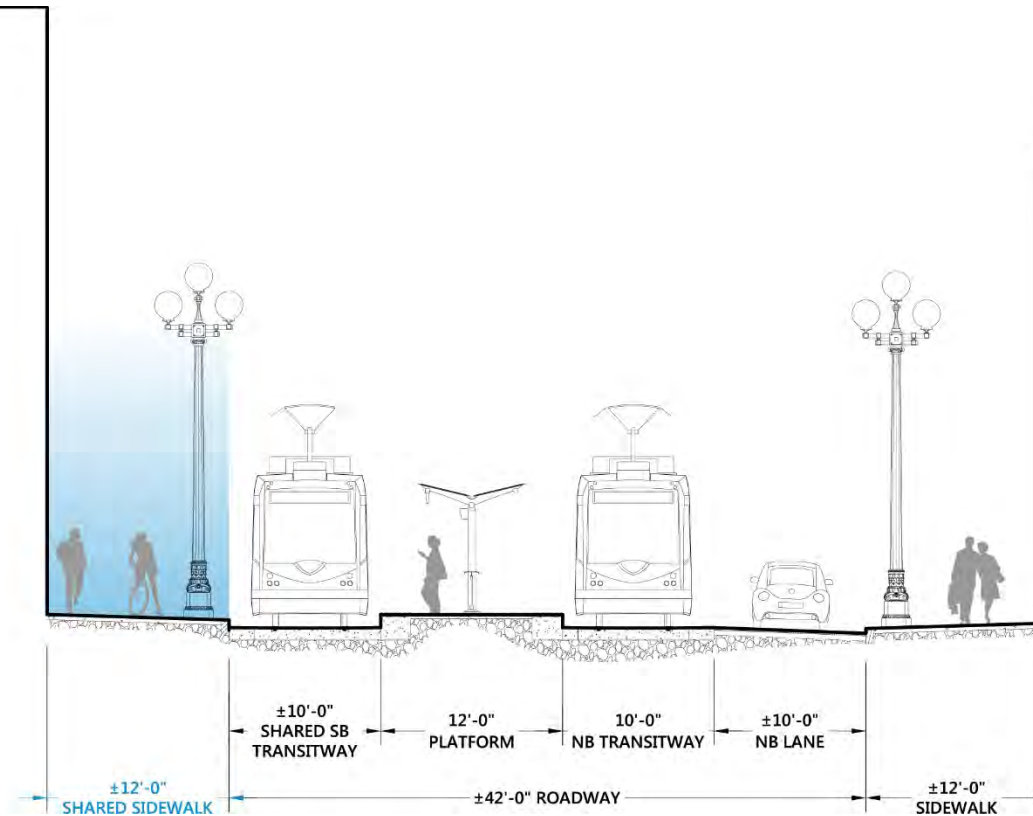
Safety

Elements

Experience

Operations

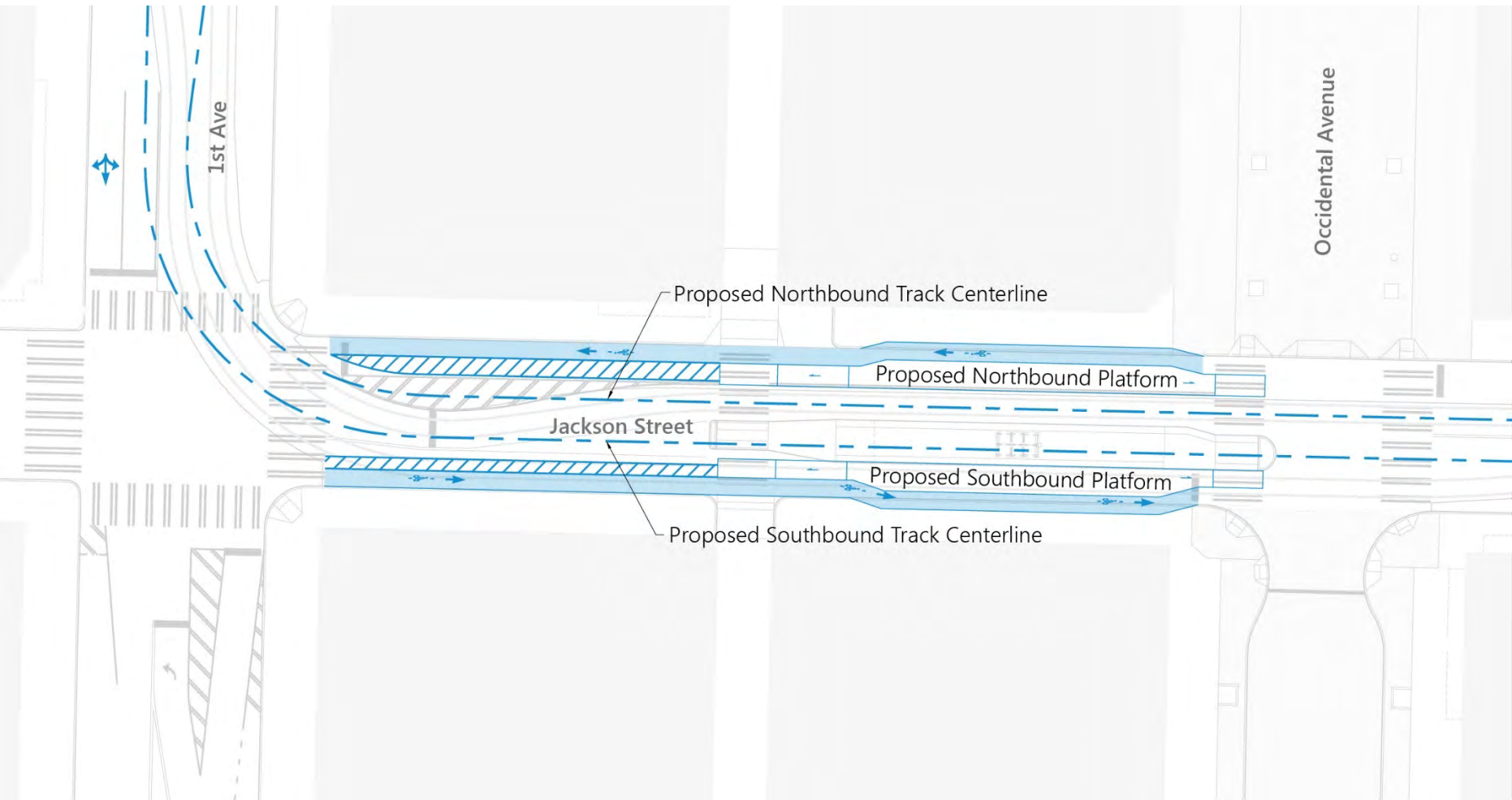
# BICYCLE SAFETY – ALTERNATE 1



## Pioneer Square



# BICYCLE SAFETY – ALTERNATE 2



Pioneer Square

Project Status

Multi-Modal

Context

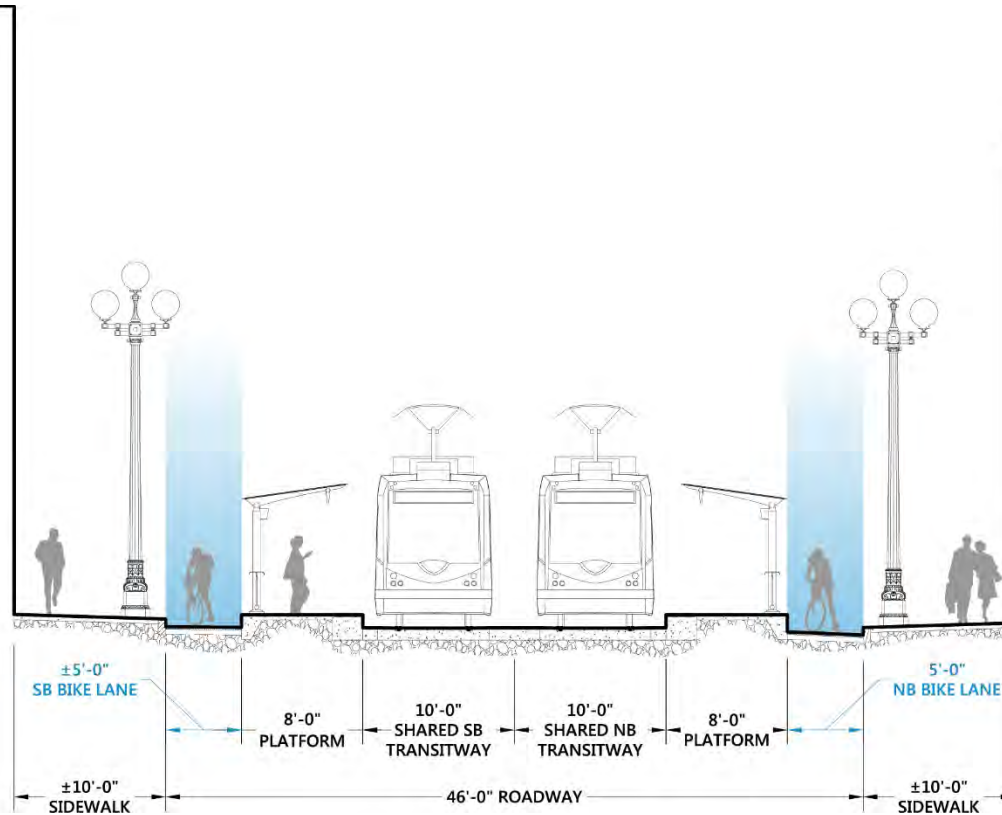
Safety

Elements

Experience

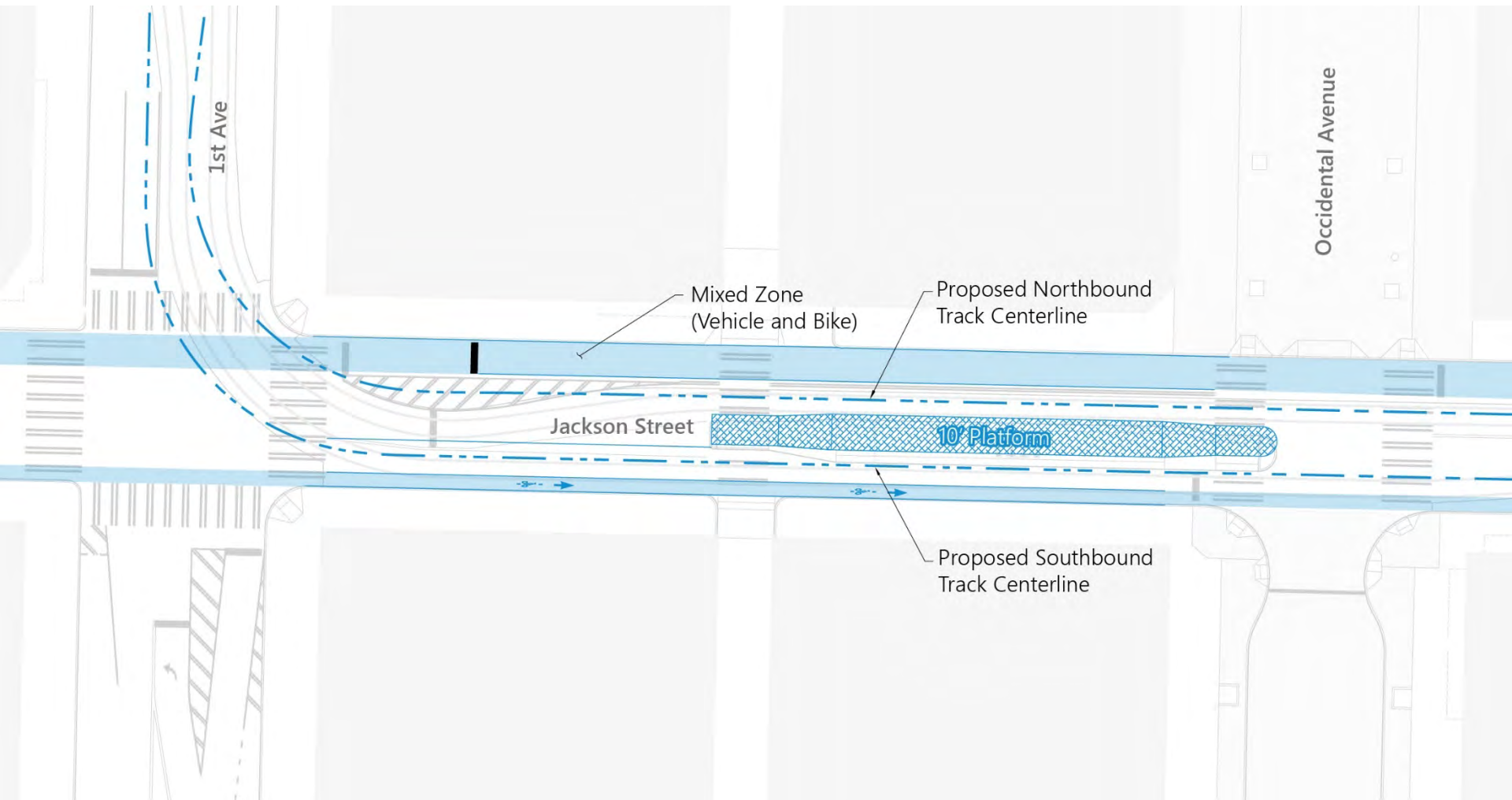
Operations

# BICYCLE SAFETY – ALTERNATE 2



Pioneer Square

# BICYCLE SAFETY – ALTERNATE 3 (PREFERRED)



Pioneer Square

Project Status

Multi-Modal

Context

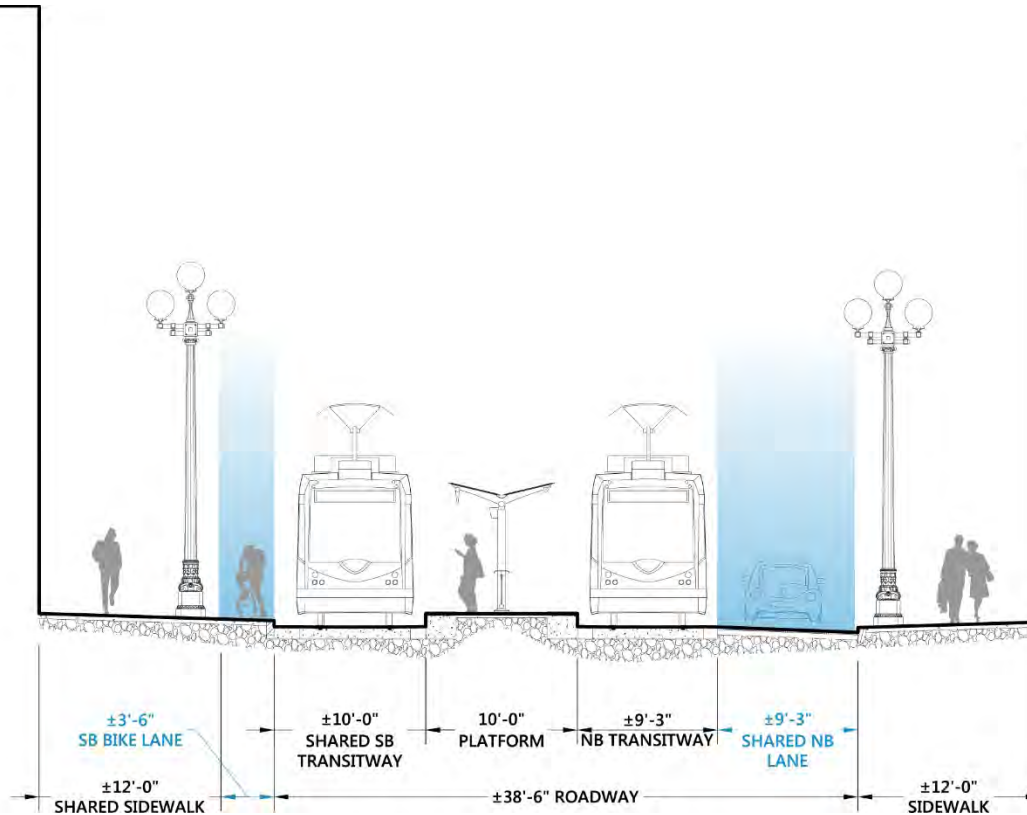
Safety

Elements

Experience

Operations

# BICYCLE SAFETY – ALTERNATE 3 (PREFERRED)



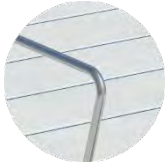
Pioneer Square

PIONEER SQUARE BOULEVARD  
DESIGN ELEMENTS

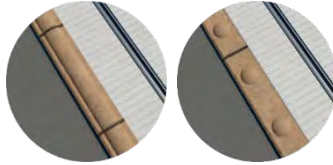
# STATION ELEMENTS



Cast-iron  
Tactile Edge



Steel Railing



Concrete Transitway  
& Cast Iron Delineator Options



Stone Transitway  
& Delineator



Shelters  
(Center and Side Options)



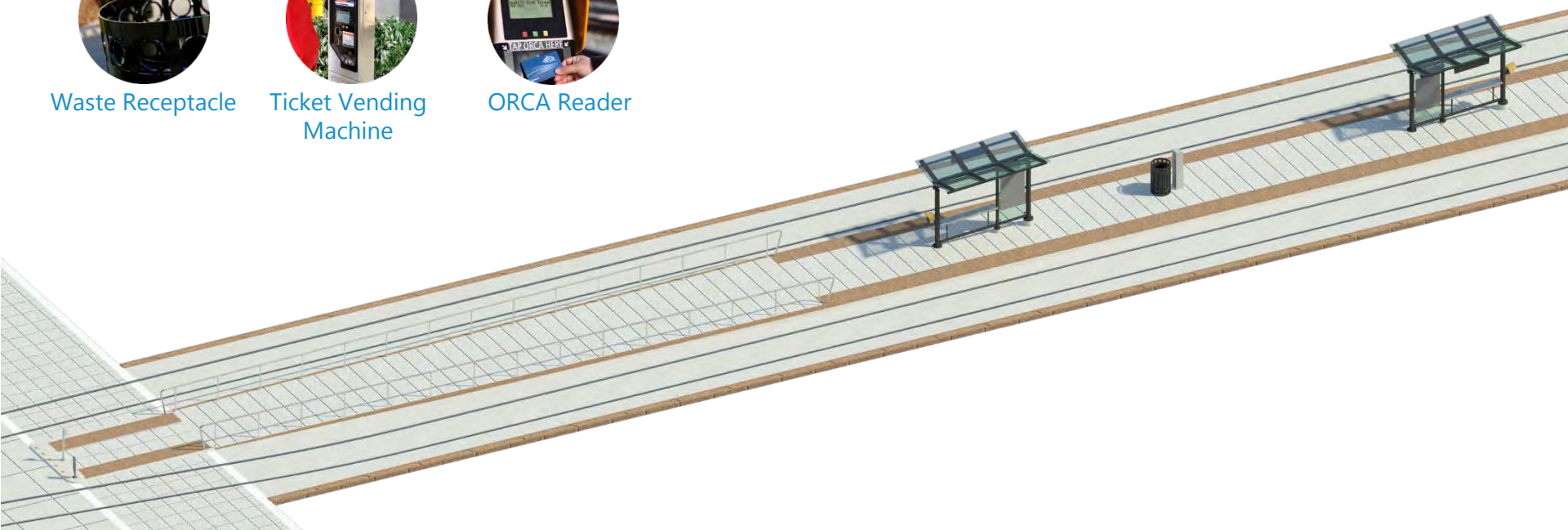
Waste Receptacle



Ticket Vending  
Machine



ORCA Reader



Schematic Design

Project Status

Multi-Modal

Context

Safety

Elements

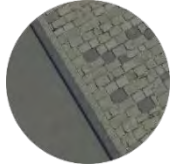
Experience

Operations

# PIONEER SQAURE STATION ELEMENTS



Stone  
Transitway



Stone  
Delineator



Red Oak  
(Quercus Rubra)



## Pioneer Square

Project Status

Multi-Modal

Context

Safety

Elements

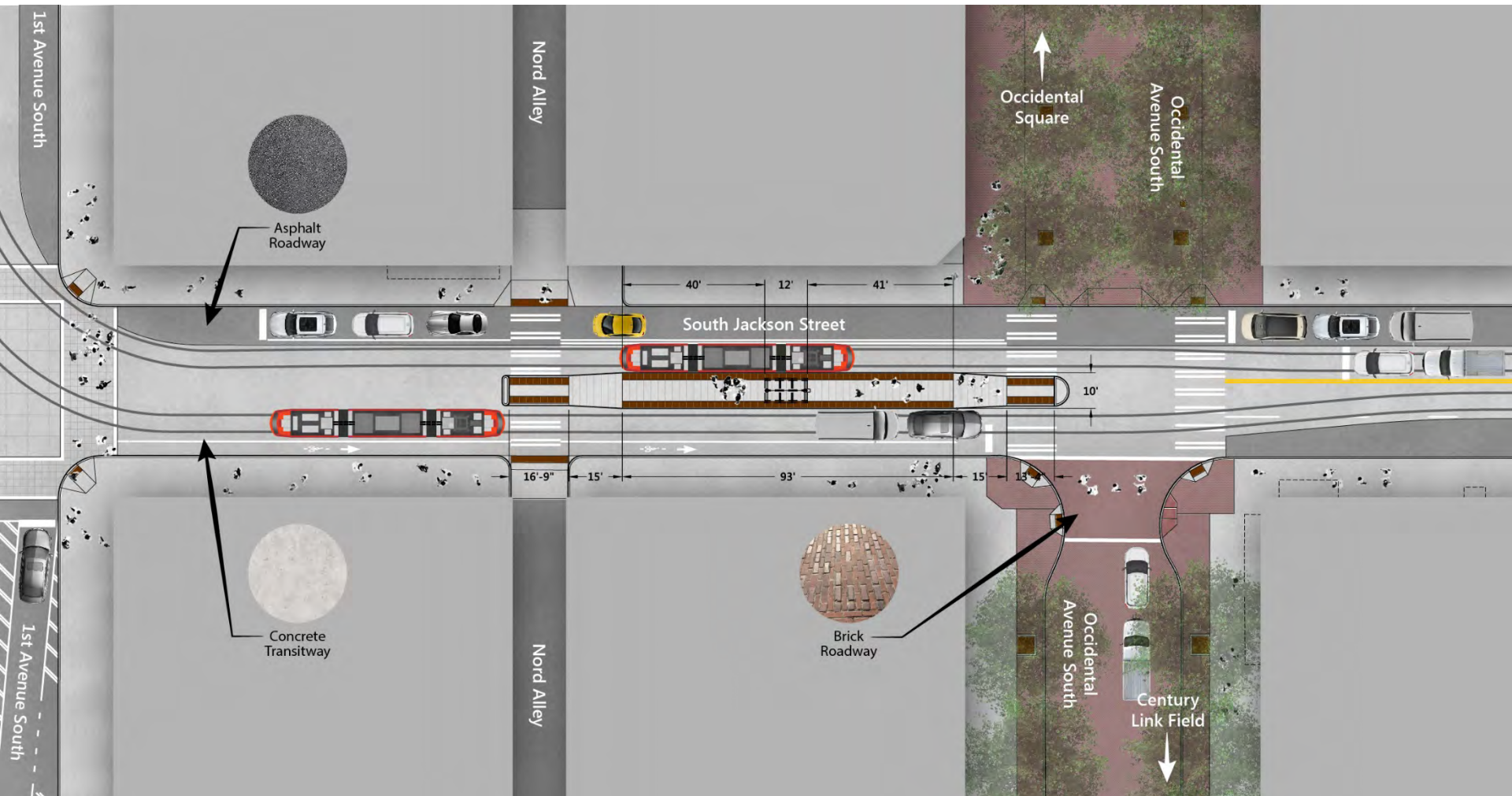
Experience

Operations

PIONEER SQUARE BOULEVARD  
USER EXPERIENCE



# JACKSON STATION - SITE PLAN



## Pioneer Square

Project Status

Multi-Modal

Context

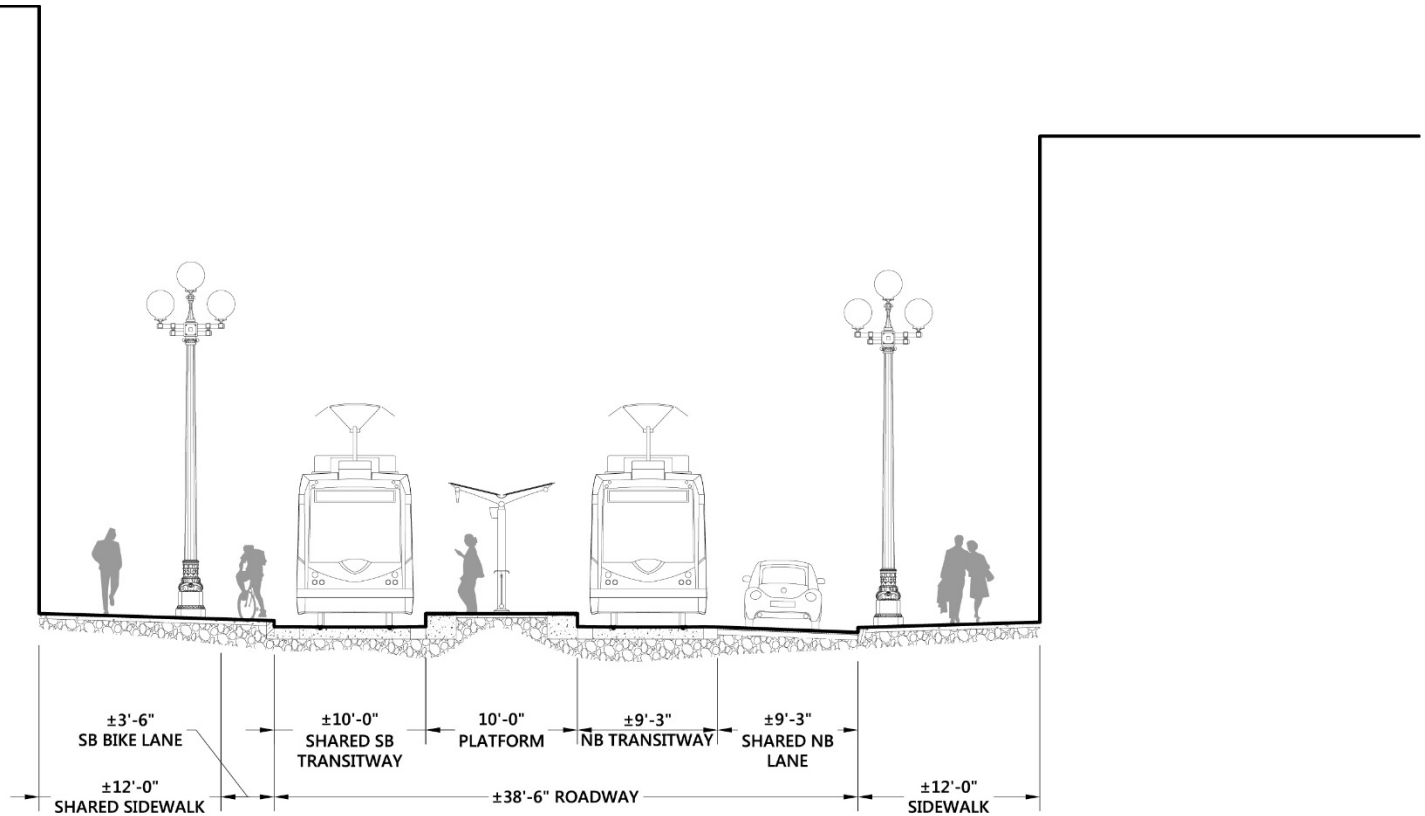
Safety

Elements

Experience

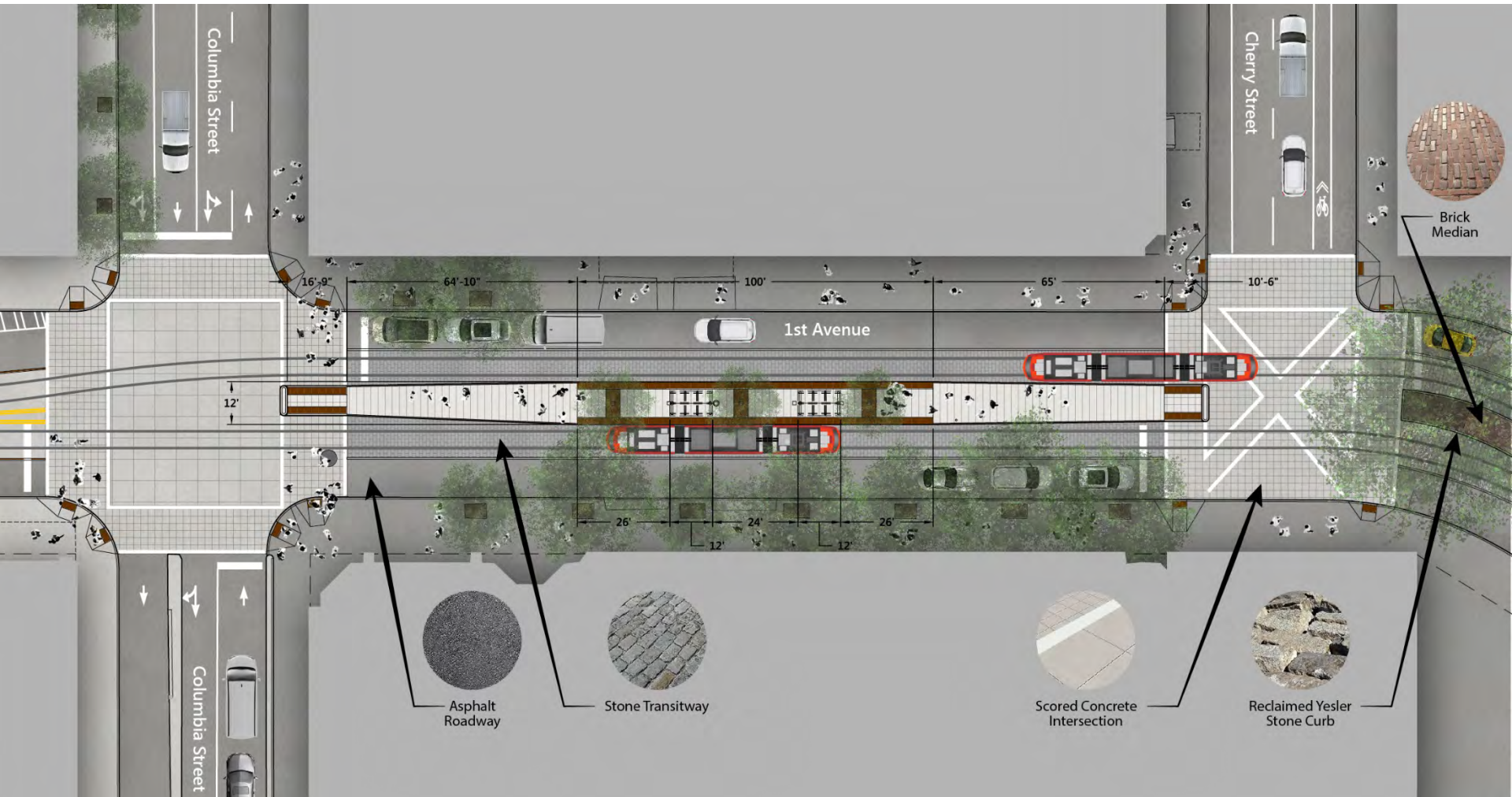
Operations

# JACKSON STATION – SECTION (WEST)



## Pioneer Square

# CHERRY STATION - SITE PLAN



## Pioneer Square

Project Status

Multi-Modal

Context

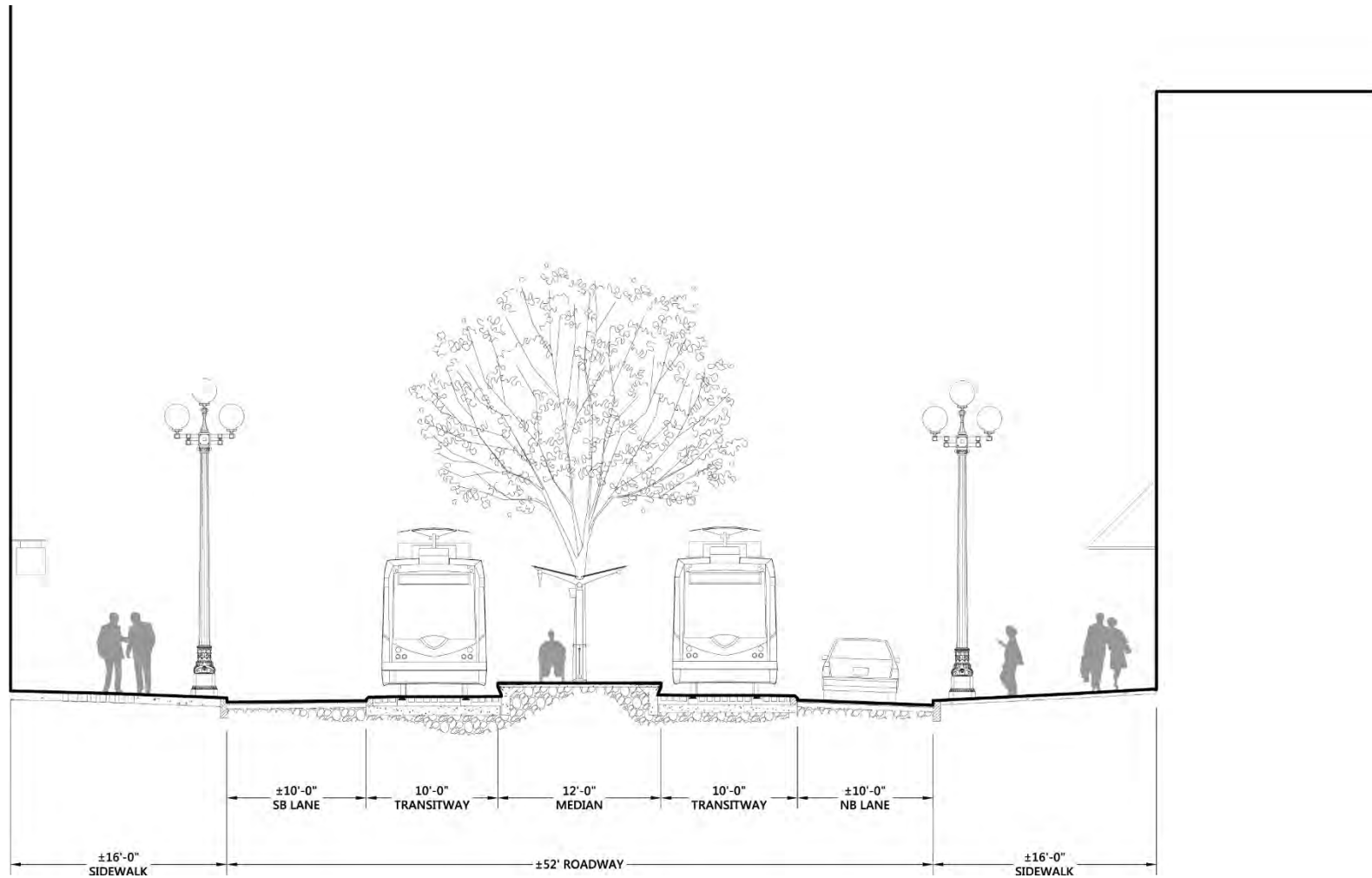
Safety

Elements

Experience

Operations

# CHERRY STATION – SECTION (NORTH)



Pioneer Square

# 1ST AVENUE BALCONY CONTEXT

# 1<sup>ST</sup> AVENUE AS SEATTLE'S BALCONY PROMENADE



## 1<sup>st</sup> Ave Balcony

Project Status

Multi-Modal

Context

Safety

Elements

Experience

Operations





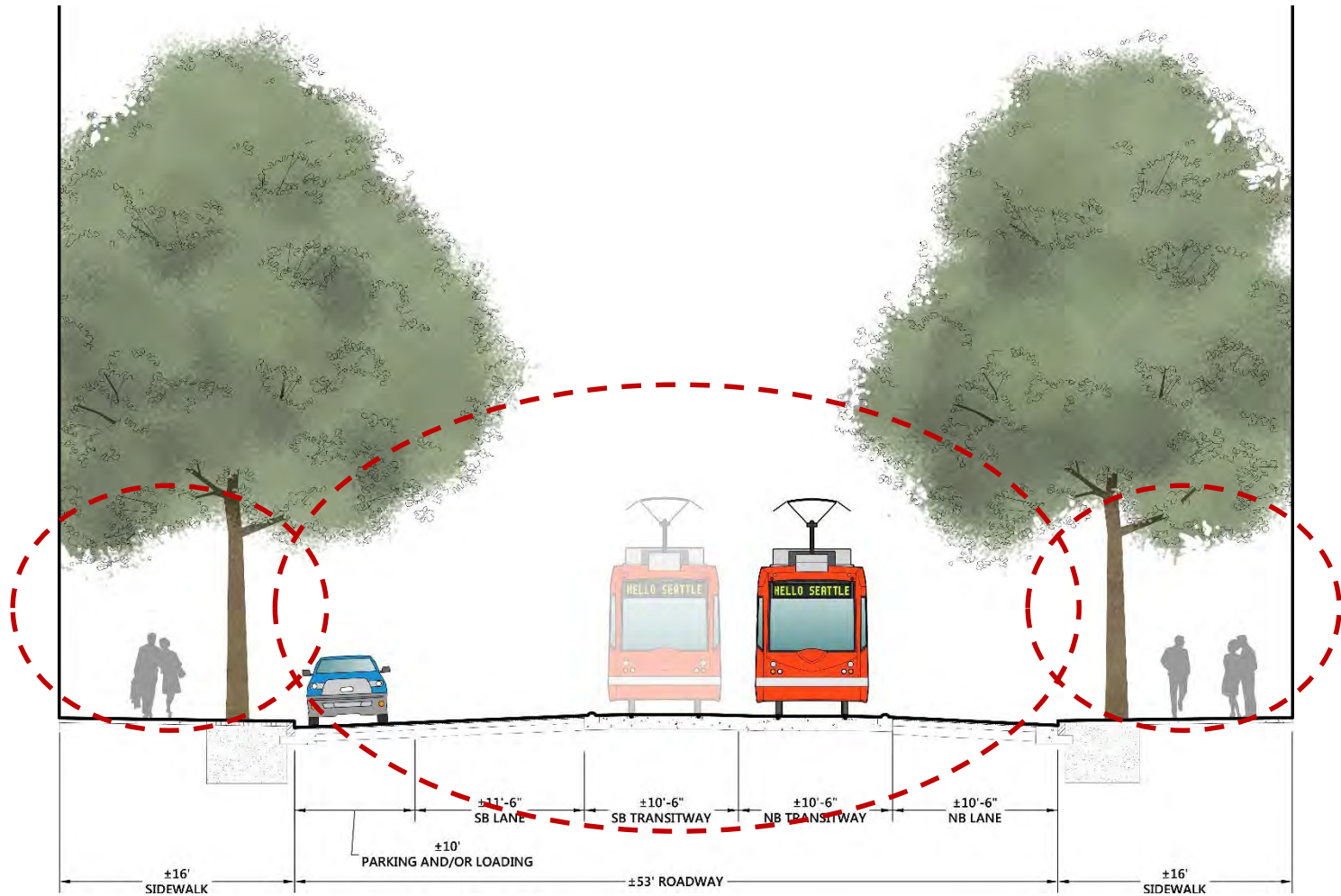




NO  
TURN  
ON RED

SIPPING  
FAIR TRADE  
COFFEE

# 1<sup>ST</sup> AVENUE STREET SECTION (NORTH)



## 1<sup>st</sup> Ave Balcony

Project Status

Multi-Modal

Context

Safety

Elements

Experience

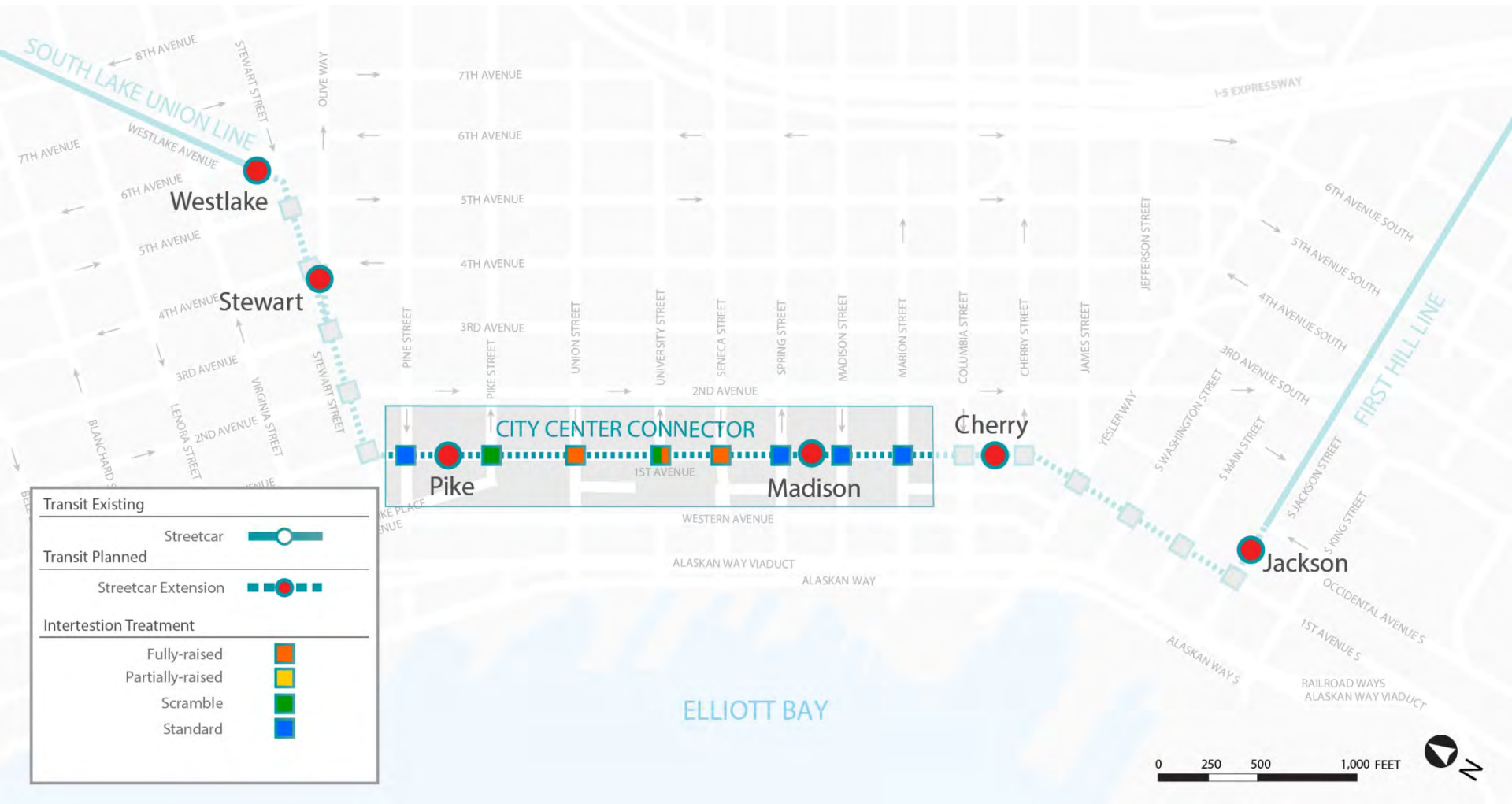
Operations





# 1ST AVENUE BALCONY SAFETY

# INTERSECTION TREATMENTS



## 1st Ave Balcony

Project Status

Multi-Modal

Context

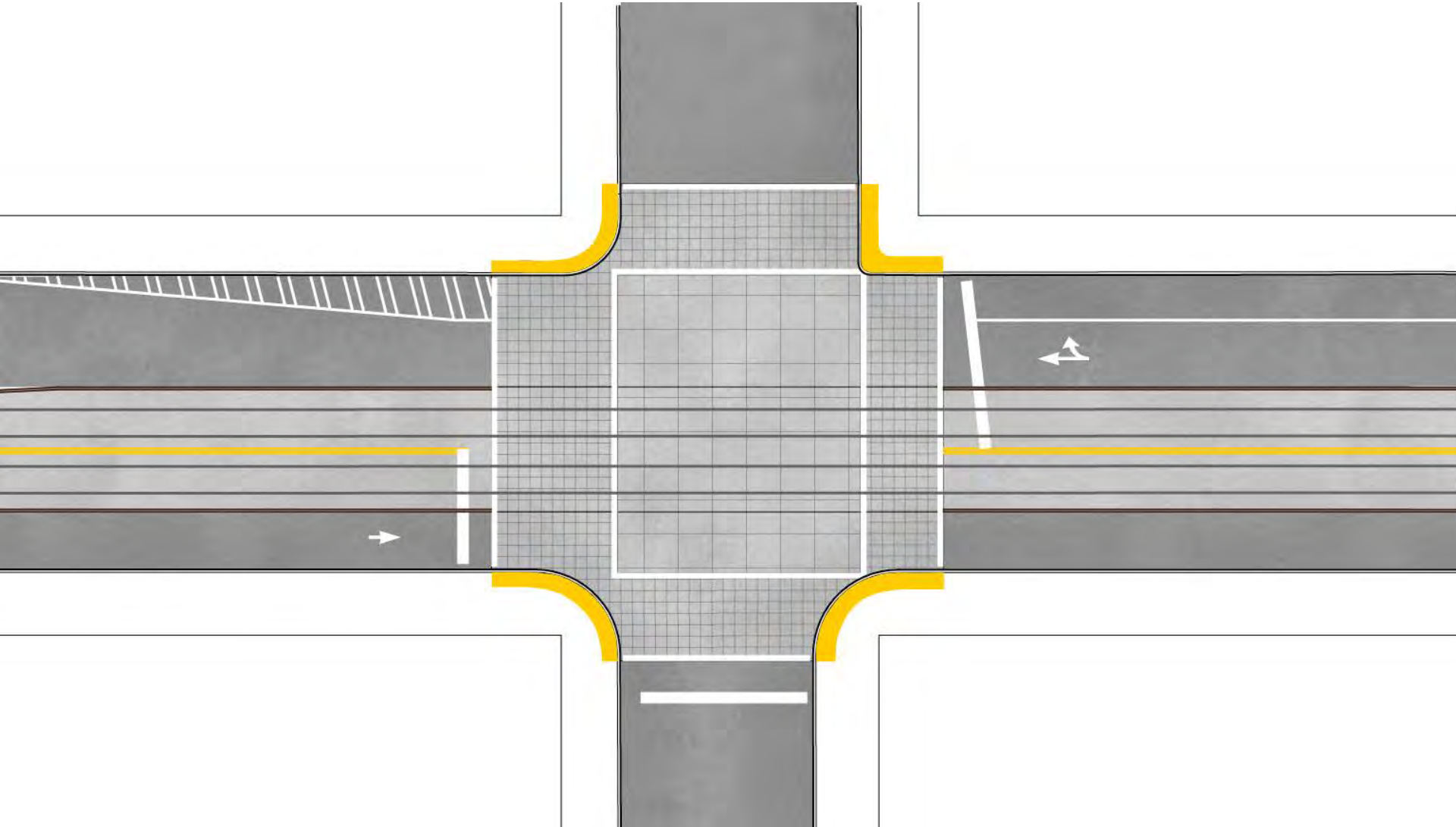
Safety

Elements

Experience

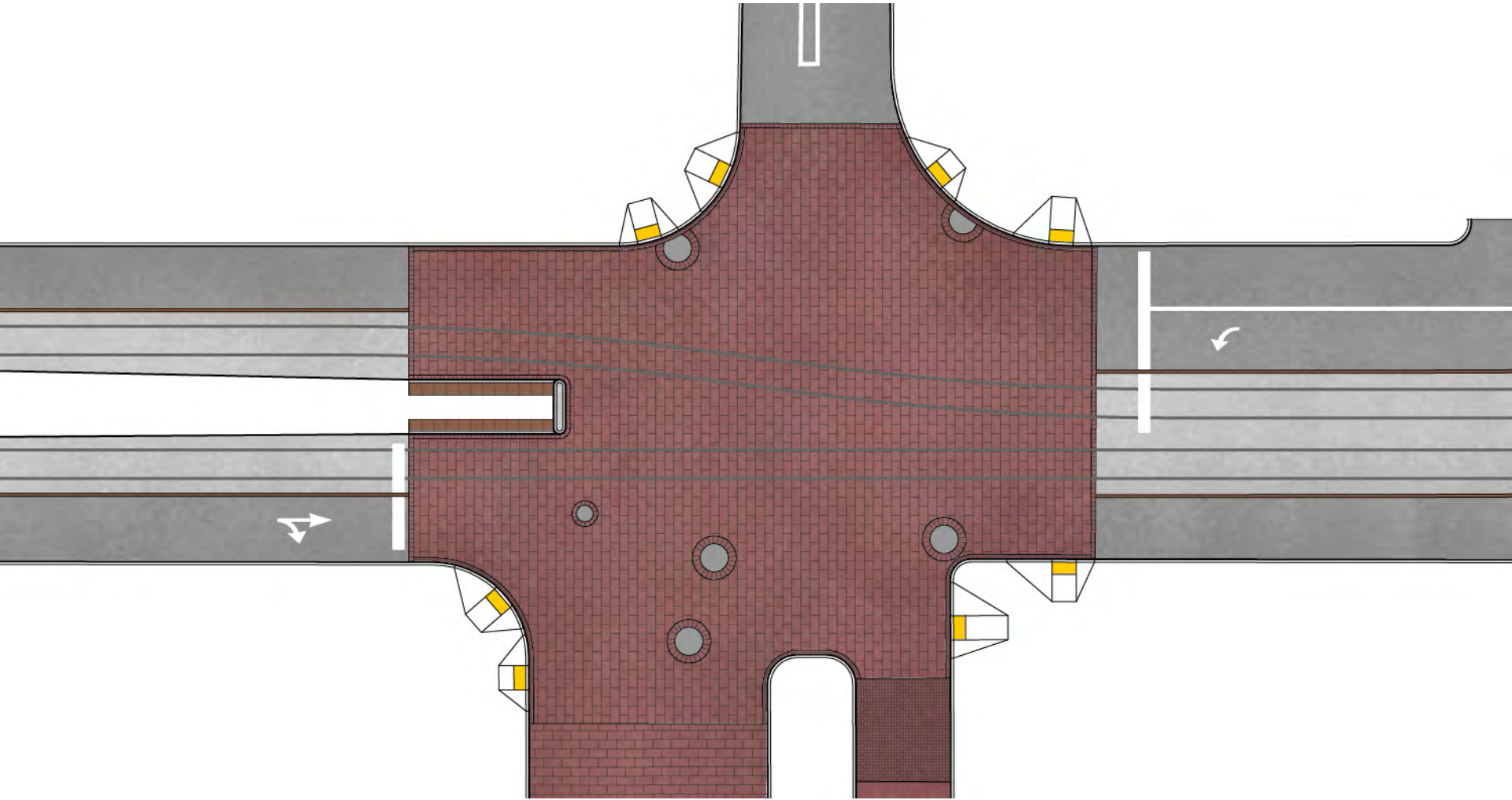
Operations

# INTERSECTION TREATMENTS



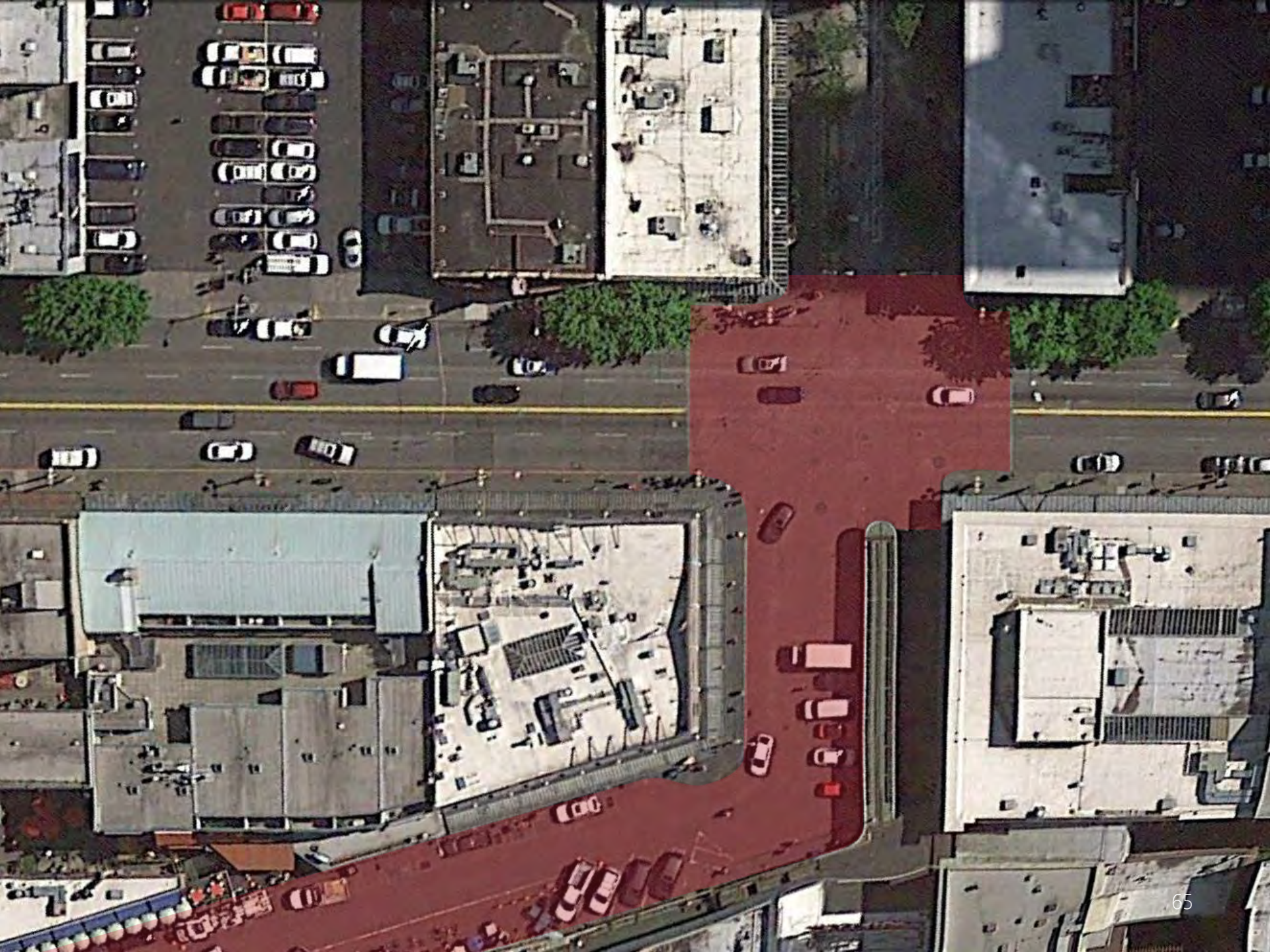
1<sup>st</sup> Ave Balcony

# INTERSECTION TREATMENTS



1<sup>st</sup> Ave Balcony





# PIKE INTERSECTION MATERIALS



1st Ave Balcony

Project Status

Multi-Modal

Context

Safety

Elements

Experience

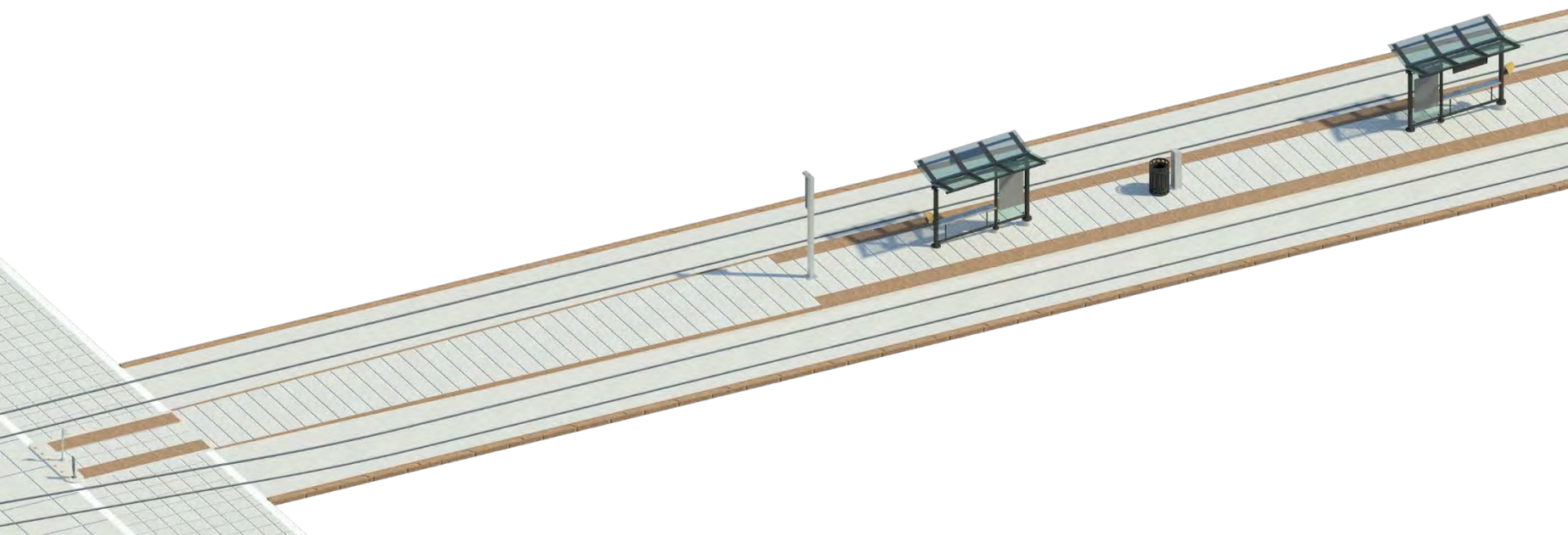
Operations

1ST AVENUE BALCONY  
DESIGN ELEMENTS

# STATION ELEMENTS



RapidRide Sign



1<sup>st</sup> Ave Balcony

Project Status

Multi-Modal

Context

Safety

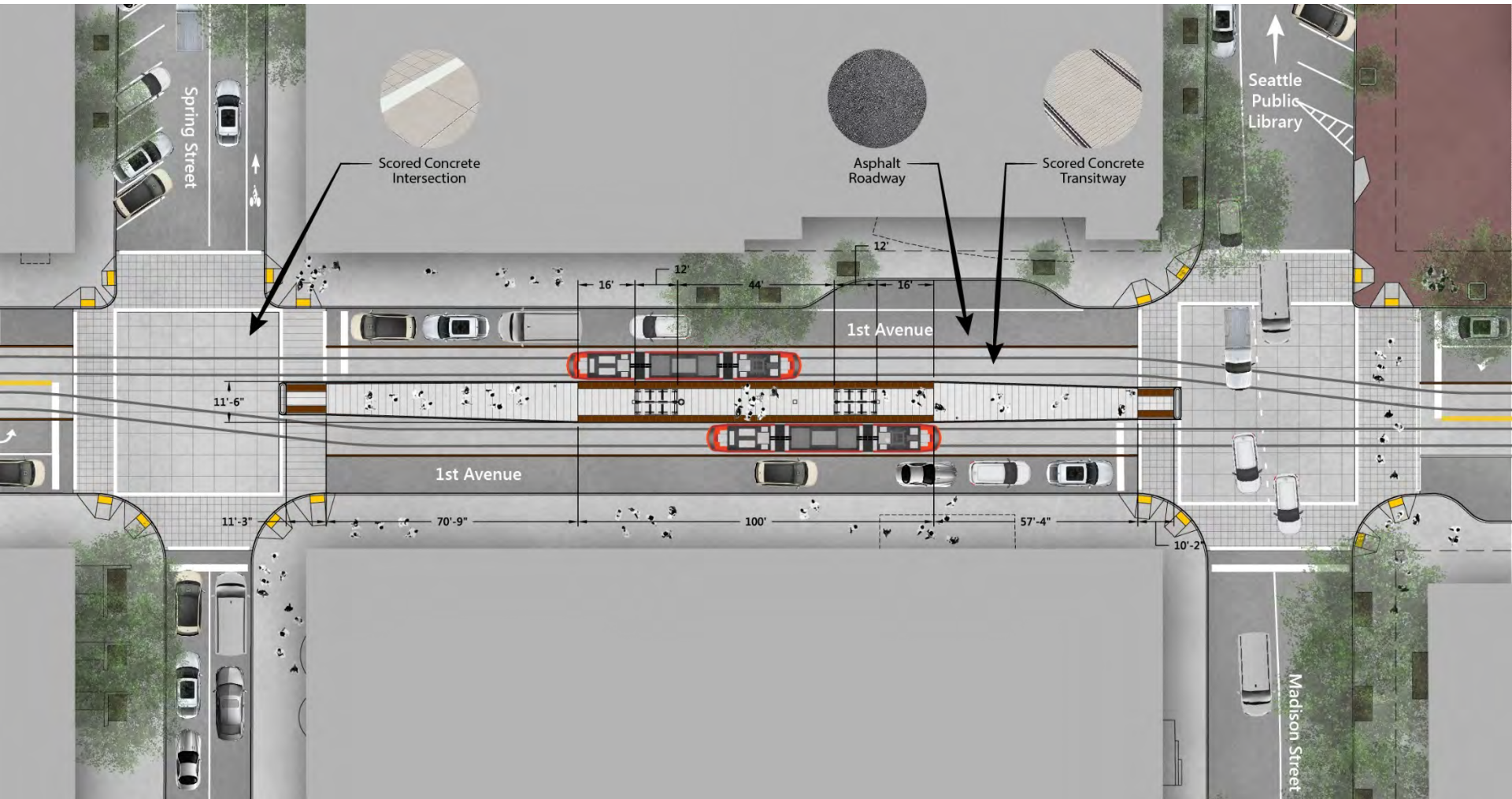
Elements

Experience

Operations

# 1ST AVENUE BALCONY USER EXPERIENCE

# MADISON STATION - SITE PLAN



## 1st Ave Balcony

Project Status

Multi-Modal

Context

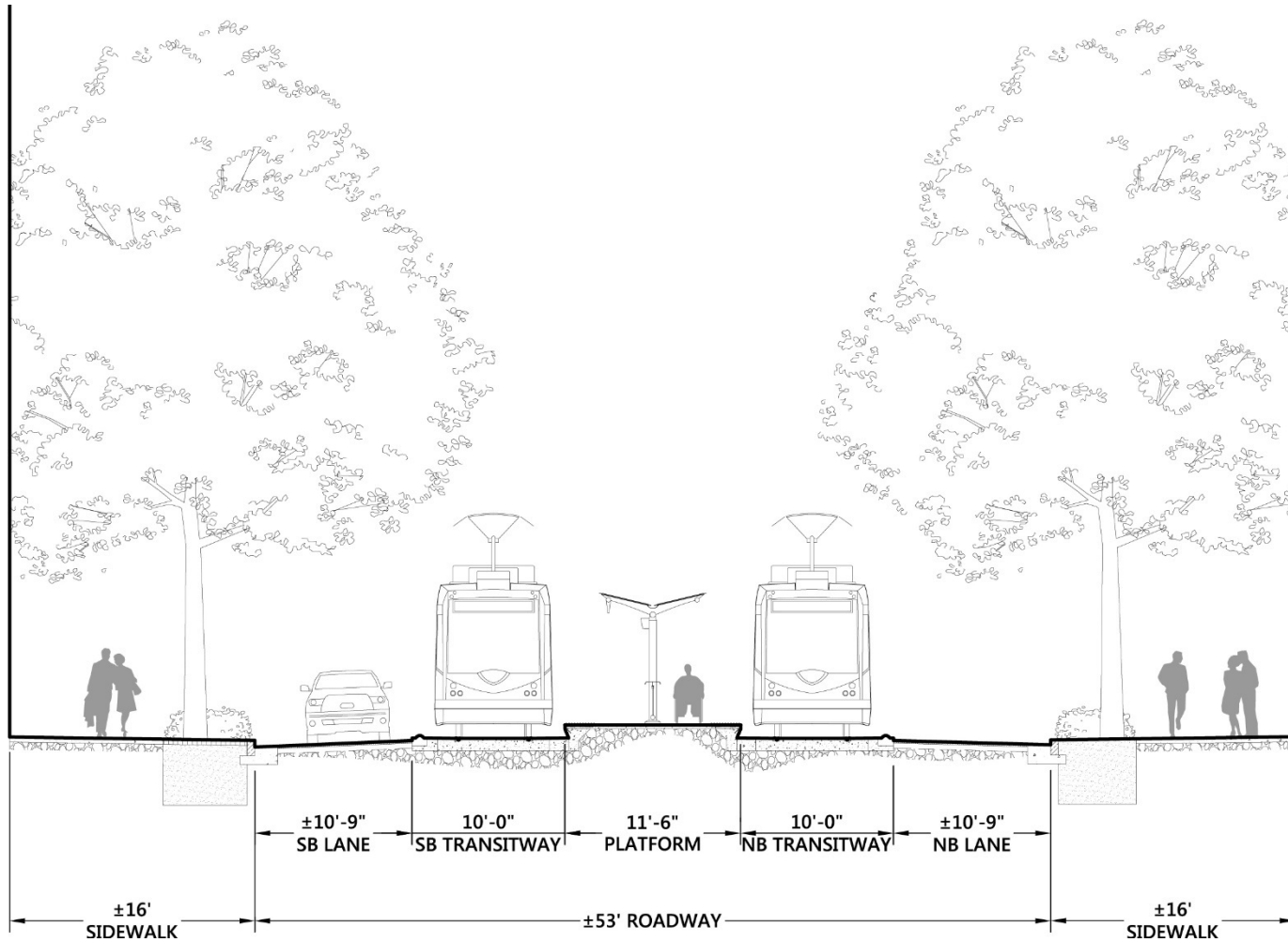
Safety

Elements

Experience

Operations

# MADISON STATION – SECTION (NORTH)

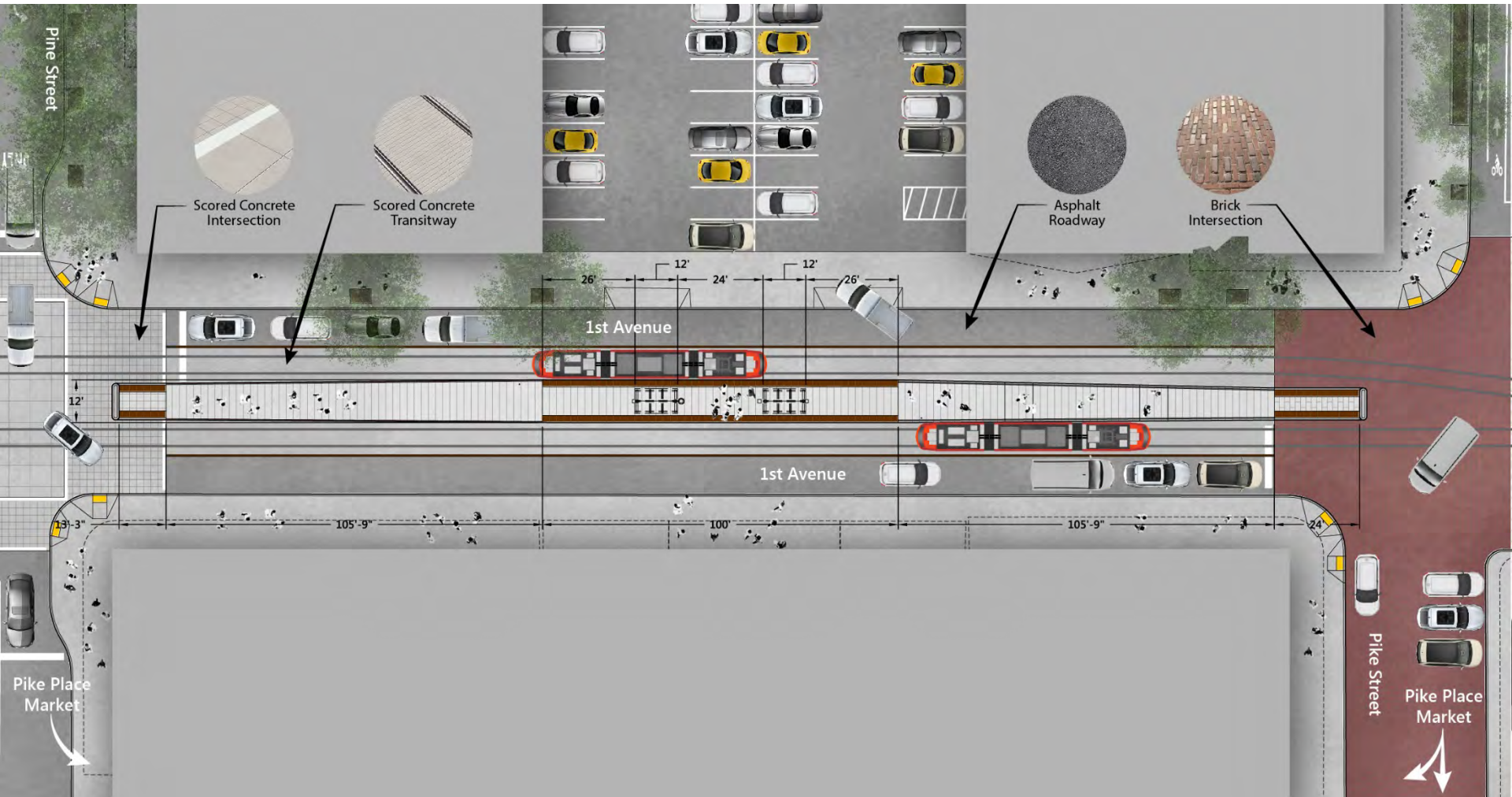


1<sup>st</sup> Ave Balcony





# PIKE STATION – SITE PLAN



## 1st Ave Balcony

Project Status

Multi-Modal

Context

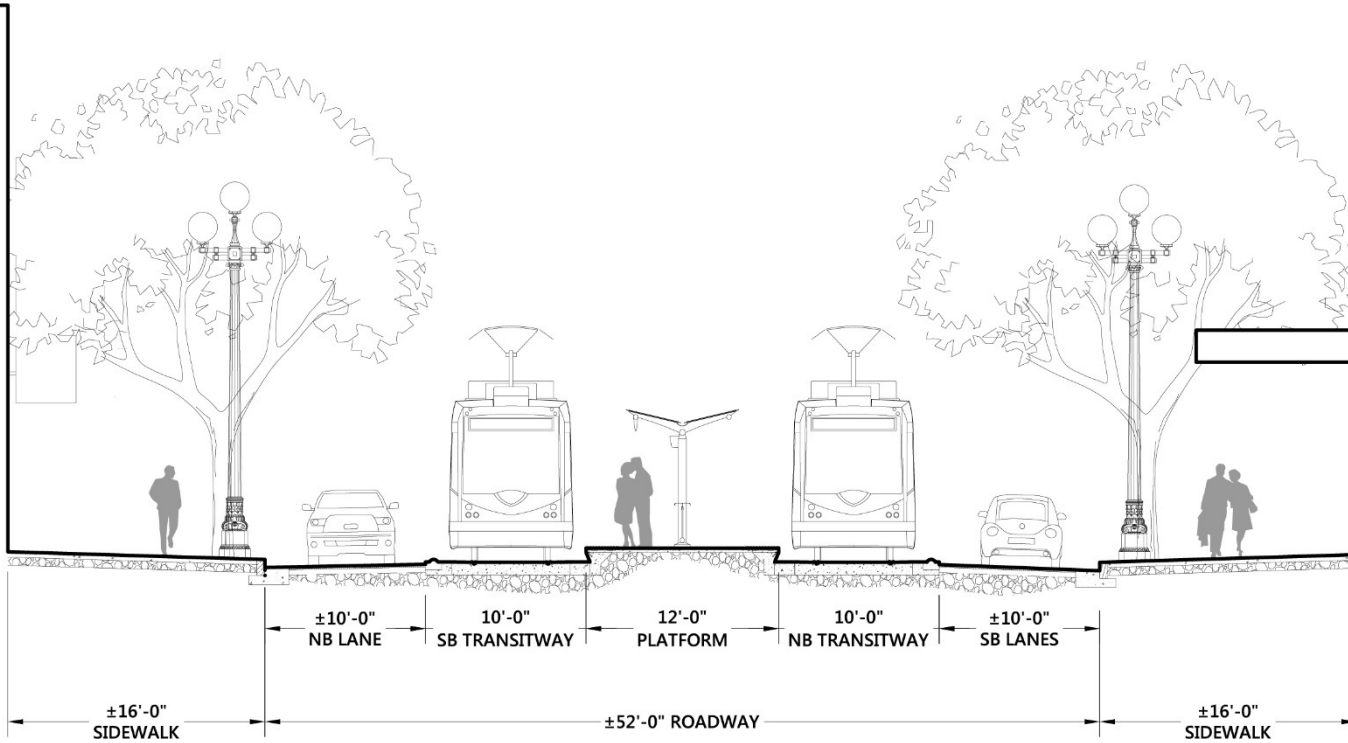
Safety

Elements

Experience

Operations

# PIKE STATION – SECTION (SOUTH)



1st Ave Balcony



# STEWART STREET ROOMS

## CONTEXT



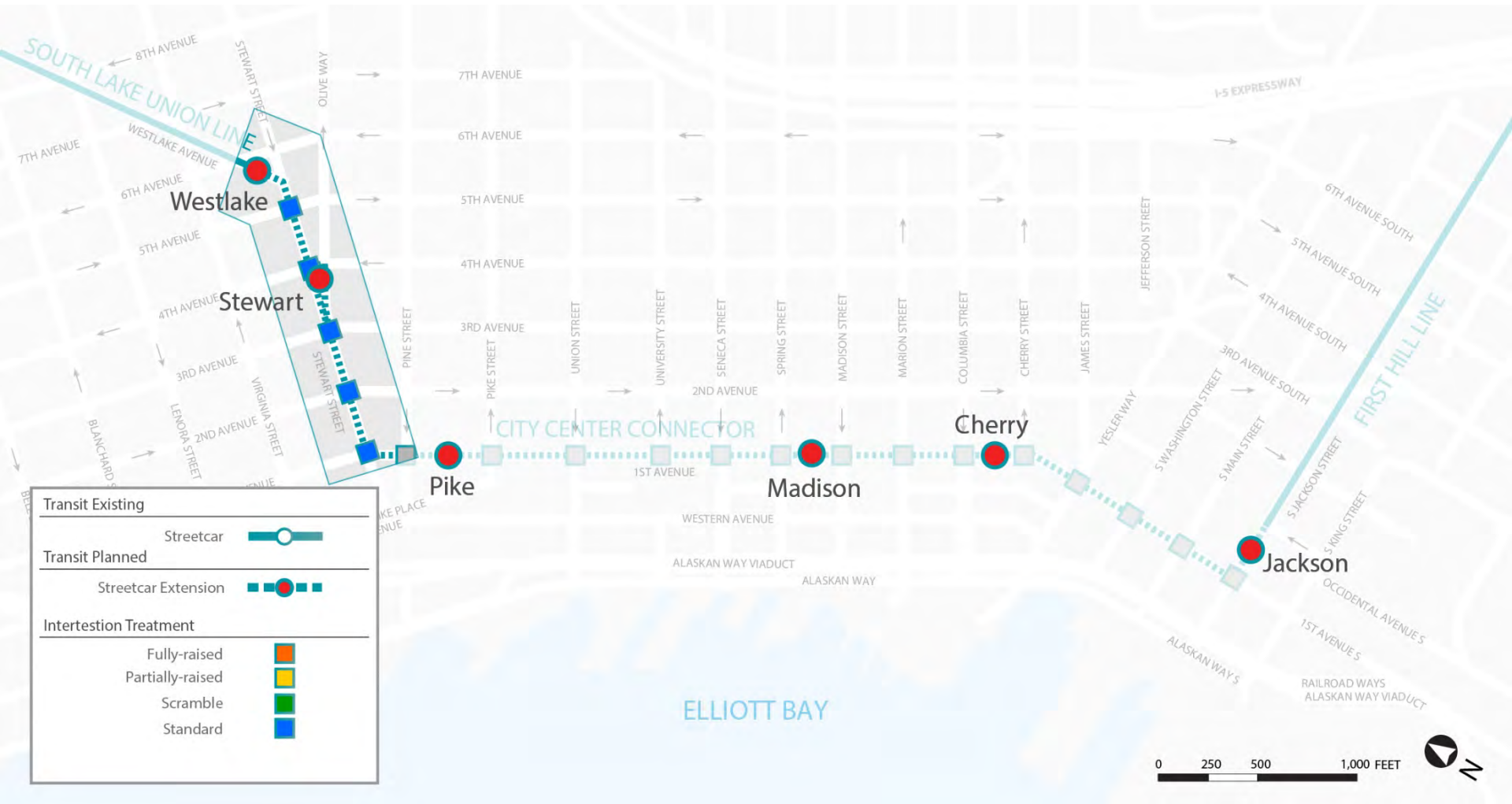




# STEWART STREET ROOMS SAFETY



# INTERSECTION TREATMENTS



## Stewart Rooms

Project Status

Multi-Modal

Context

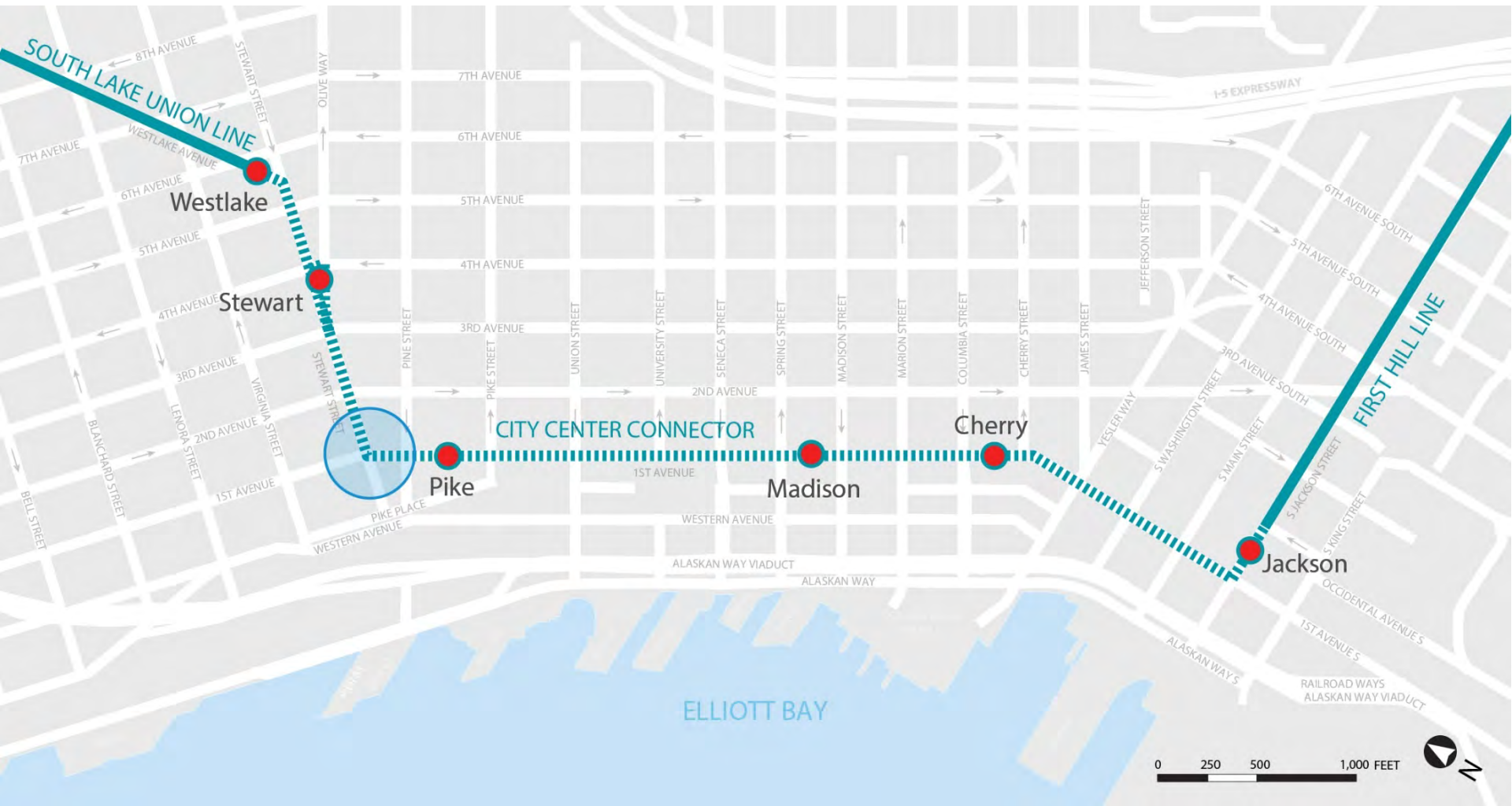
Safety

Elements

Experience

Operations

# BICYCLE SAFETY – 1<sup>ST</sup> AND STEWART



## Stewart Rooms

Project Status

Multi-Modal

Context

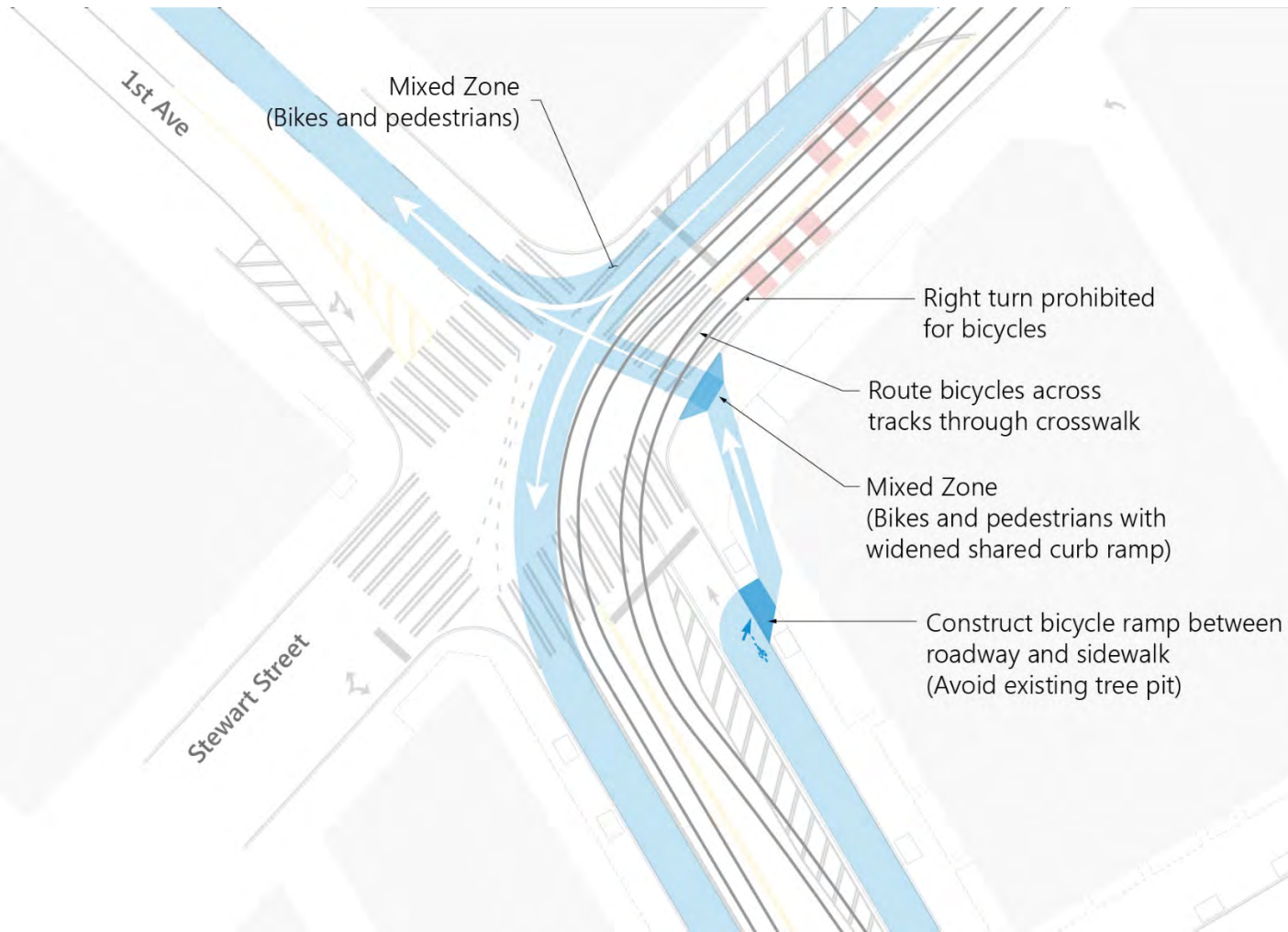
Safety

Elements

Experience

Operations

# BICYCLE SAFETY – 1<sup>ST</sup> AND STEWART



## Stewart Rooms

Project Status

Multi-Modal

Context

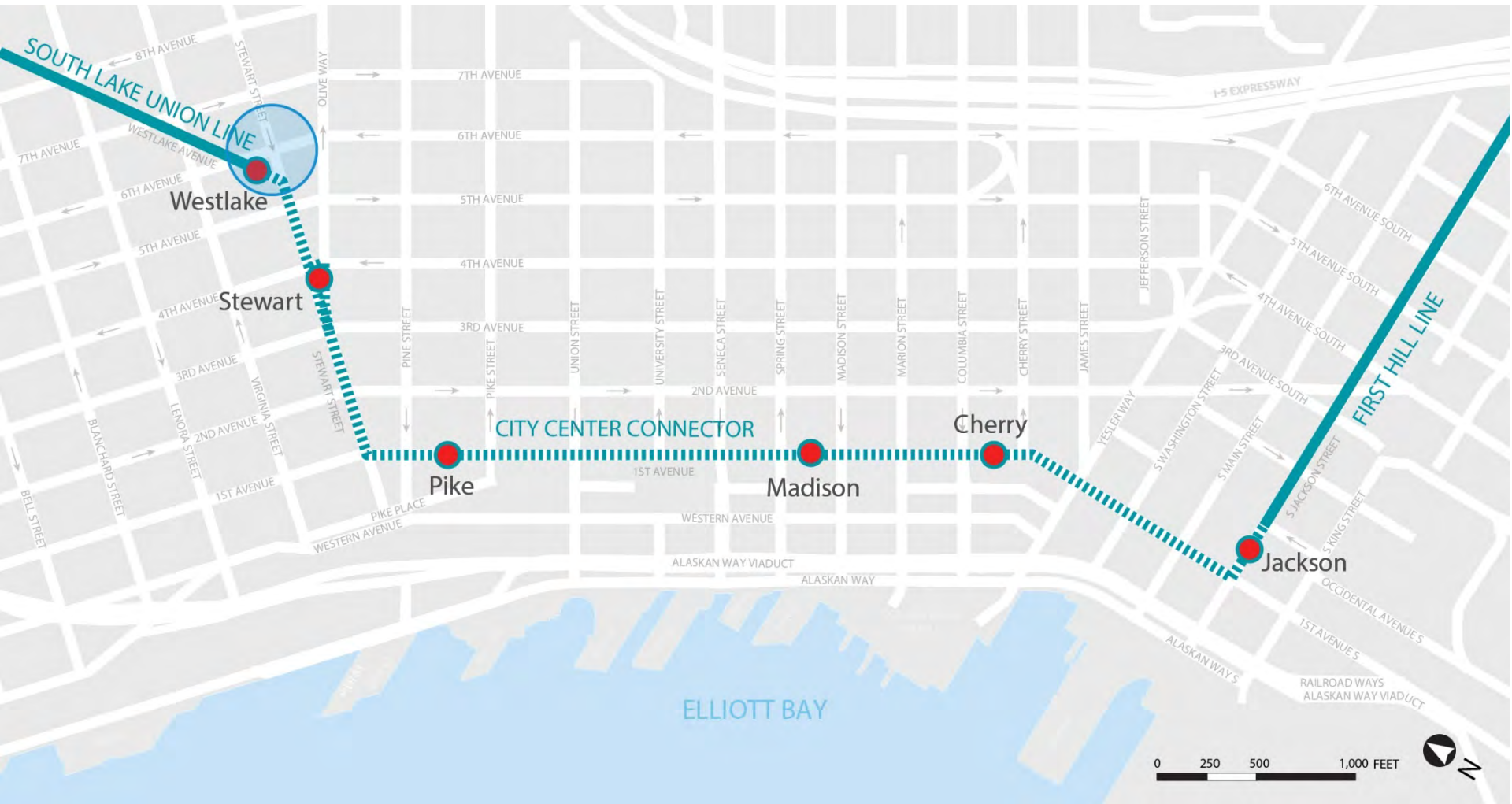
Safety

Elements

Experience

Operations

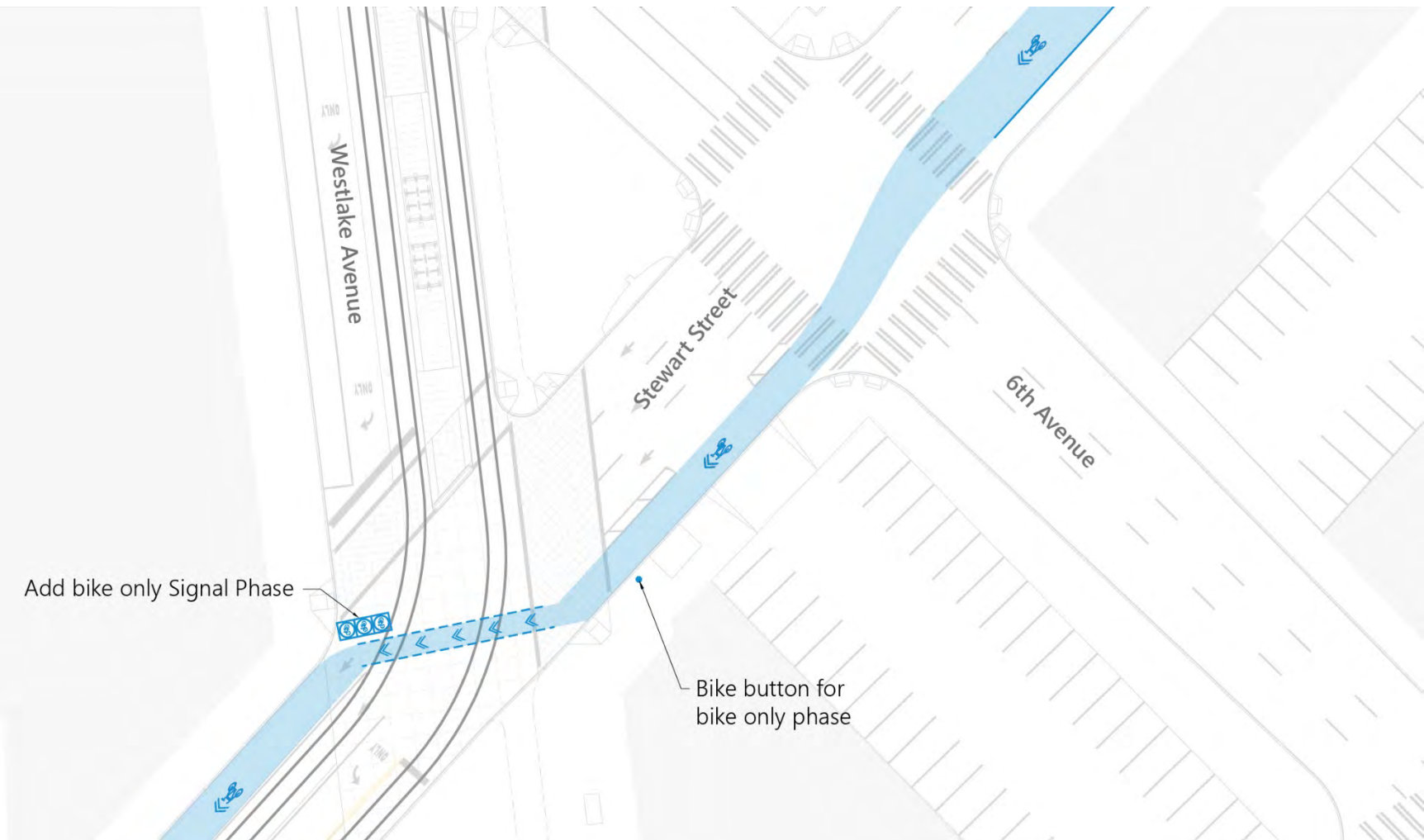
# BICYCLE SAFETY – WESTLAKE AND STEWART



## Stewart Rooms

- Project Status
- Multi-Modal
- Context
- Safety**
- Elements
- Experience
- Operations

# BICYCLE SAFETY – WESTLAKE AND STEWART



## Stewart Rooms

Project Status

Multi-Modal

Context

Safety

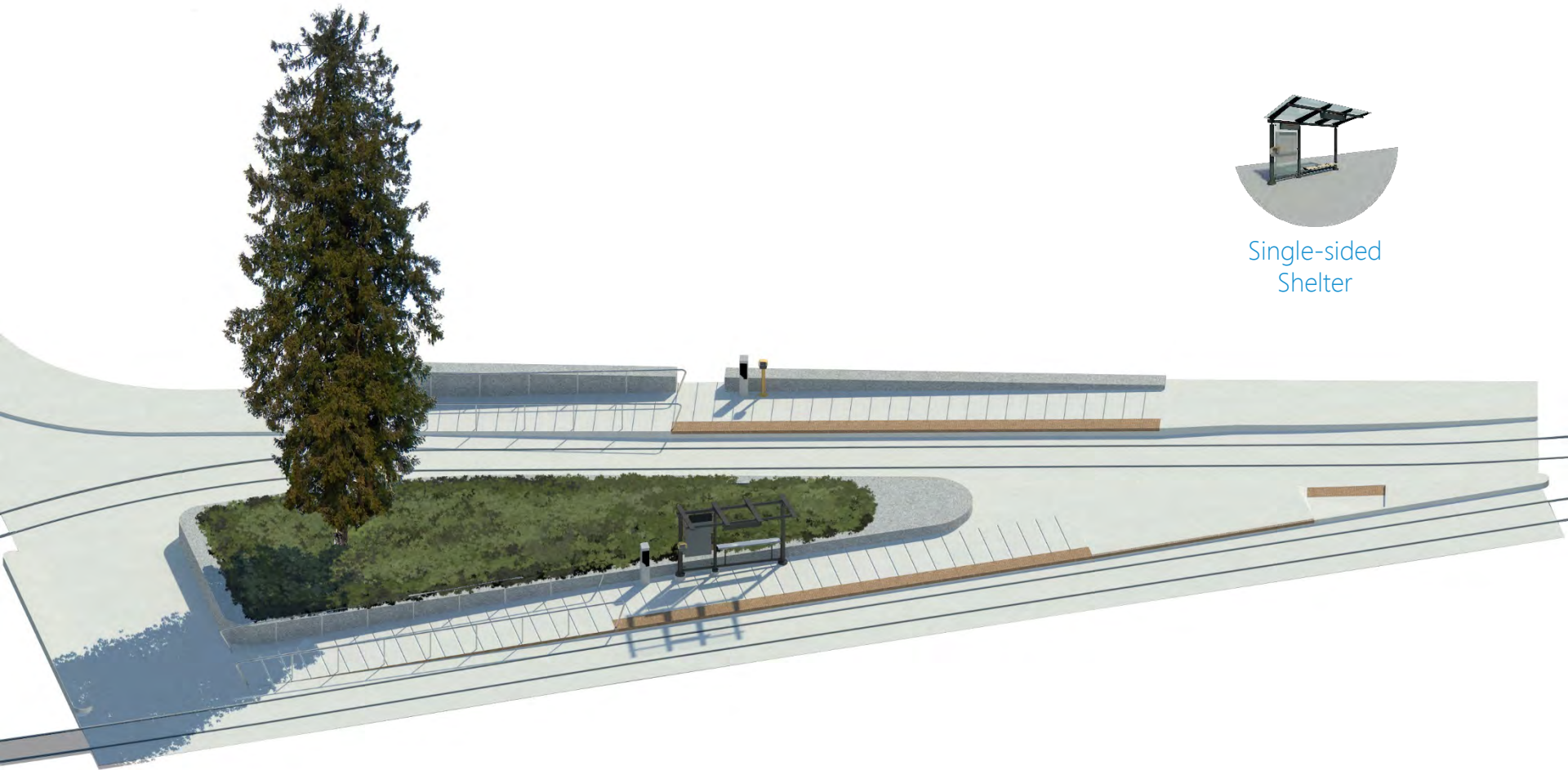
Elements

Experience

Operations

STEWART STREET ROOMS  
DESIGN ELEMENTS

# STATION ELEMENTS



Single-sided Shelter

Stewart Rooms

Project Status

Multi-Modal

Context

Safety

Elements

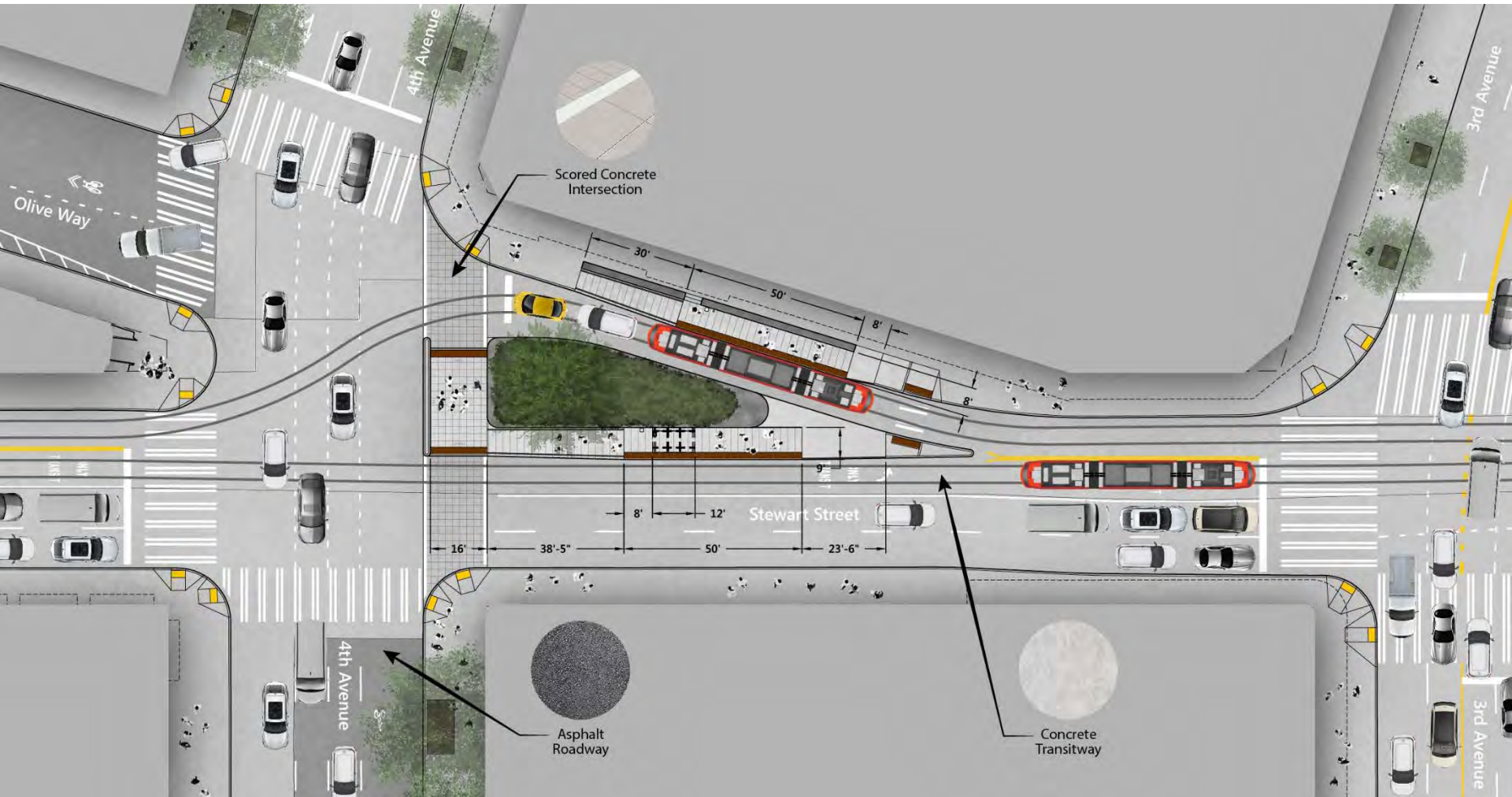
Experience

Operations

STEWART STREET ROOMS  
USER EXPERIENCE



# STEWART STATION - SITE PLAN



## Stewart Rooms

Project Status

Multi-Modal

Context

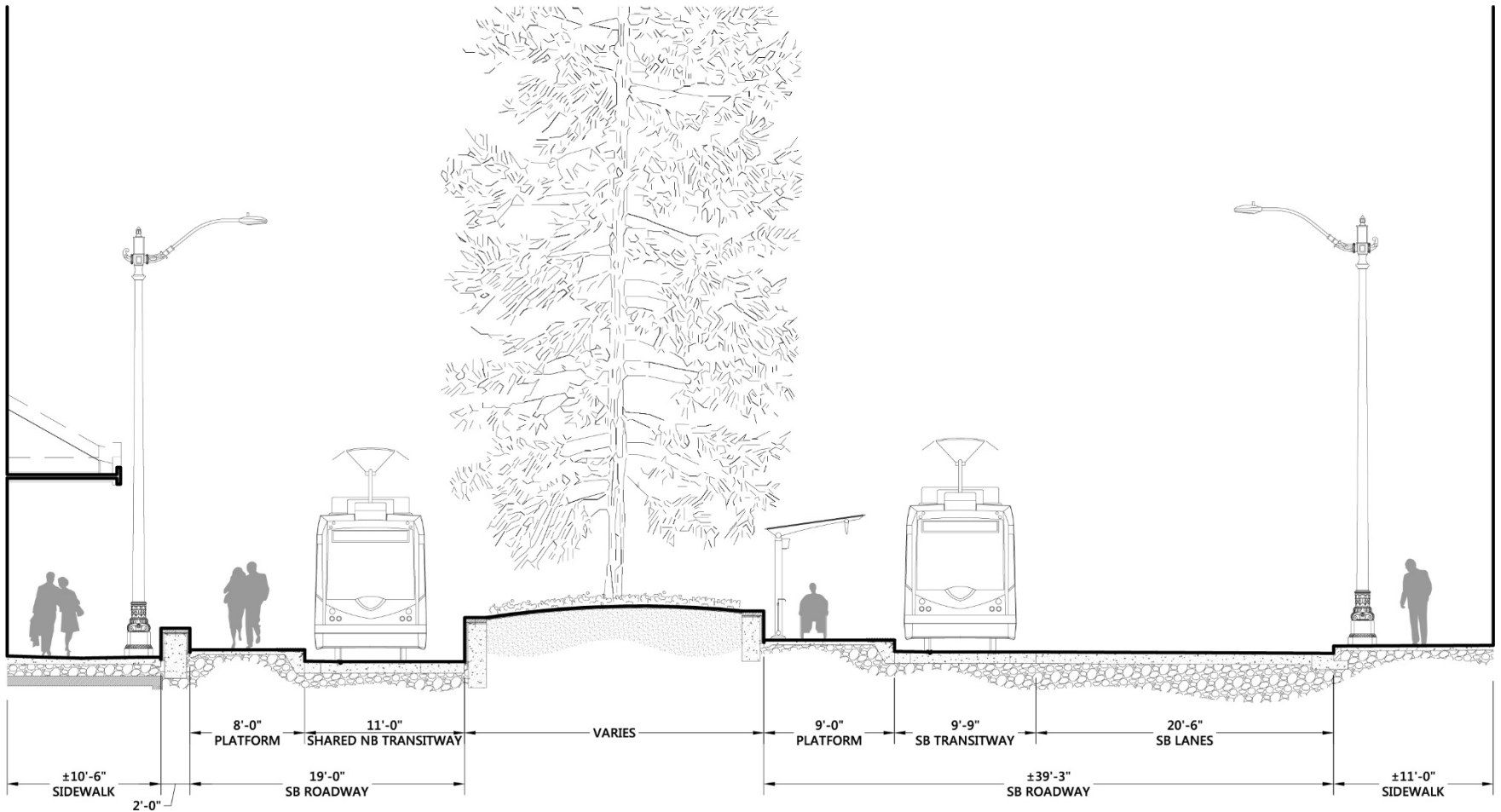
Safety

Elements

Experience

Operations

# STEWART STATION – SECTION (WEST)



## Stewart Rooms

Project Status

Multi-Modal

Context

Safety

Elements

Experience

Operations



# WESTLAKE STATION - SITE PLAN



## Stewart Rooms

Project Status

Multi-Modal

Context

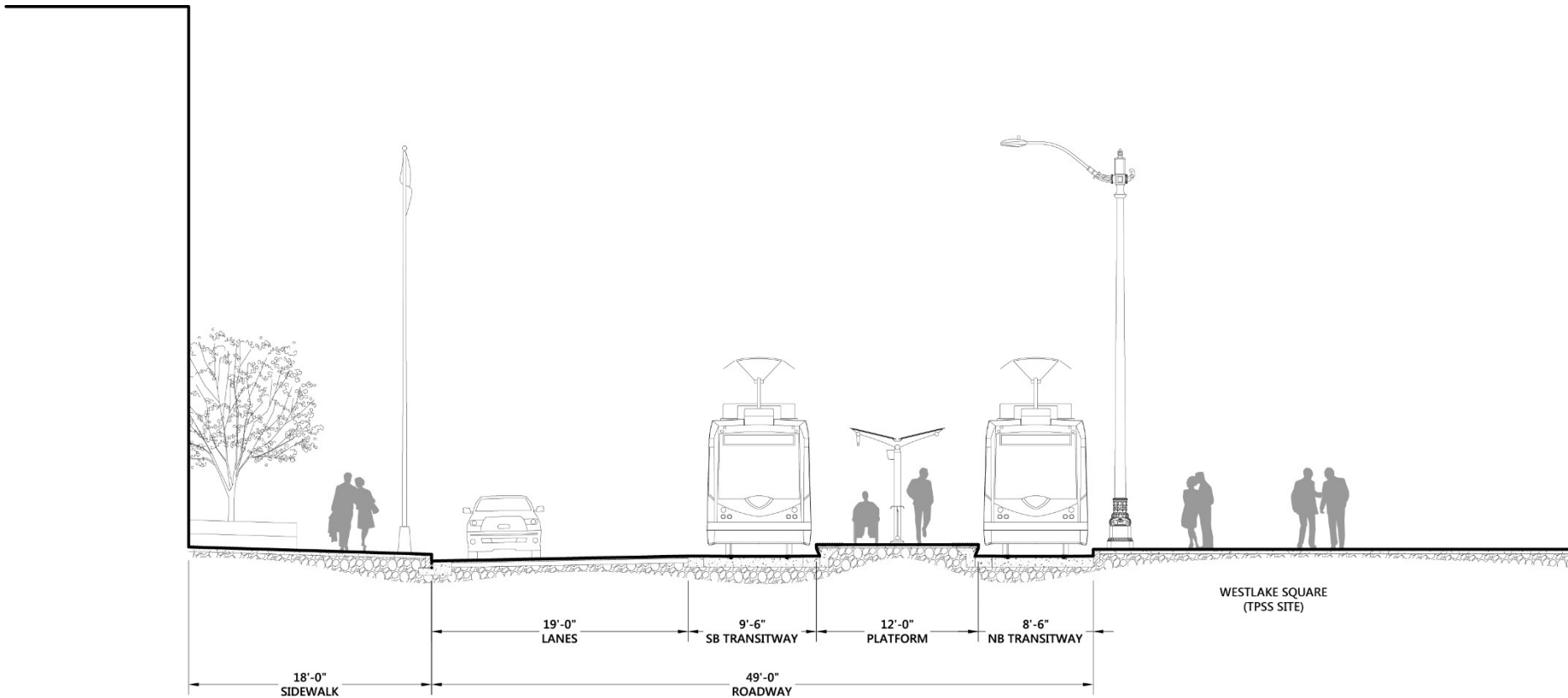
Safety

Elements

Experience

Operations

# WESTLAKE STATION – SECTION (NORTH)



## Stewart Rooms

Project Status

Multi-Modal

Context

Safety

Elements

Experience

Operations

OPERATIONAL FACILITIES

# OVERHEAD CATENARY SYSTEM

# OVERHEAD CATENARY SYSTEM (OCS)



Schematic Design



# OVERHEAD CATENARY SYSTEM (OCS)

Pole



Eyebolt



Schematic Design

Project Status

Multi-Modal

Context

Safety

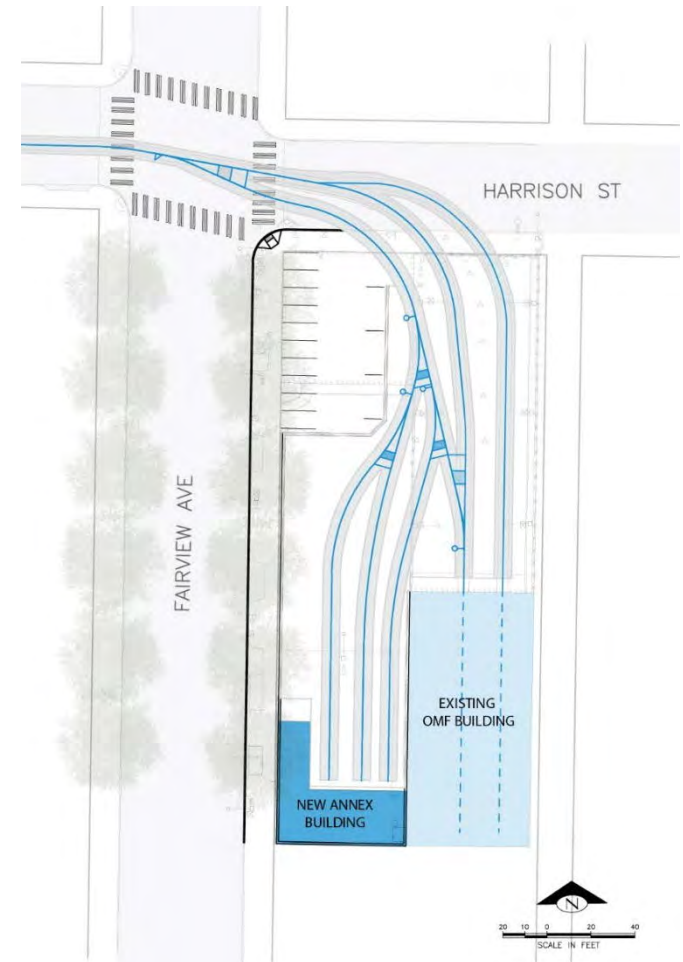
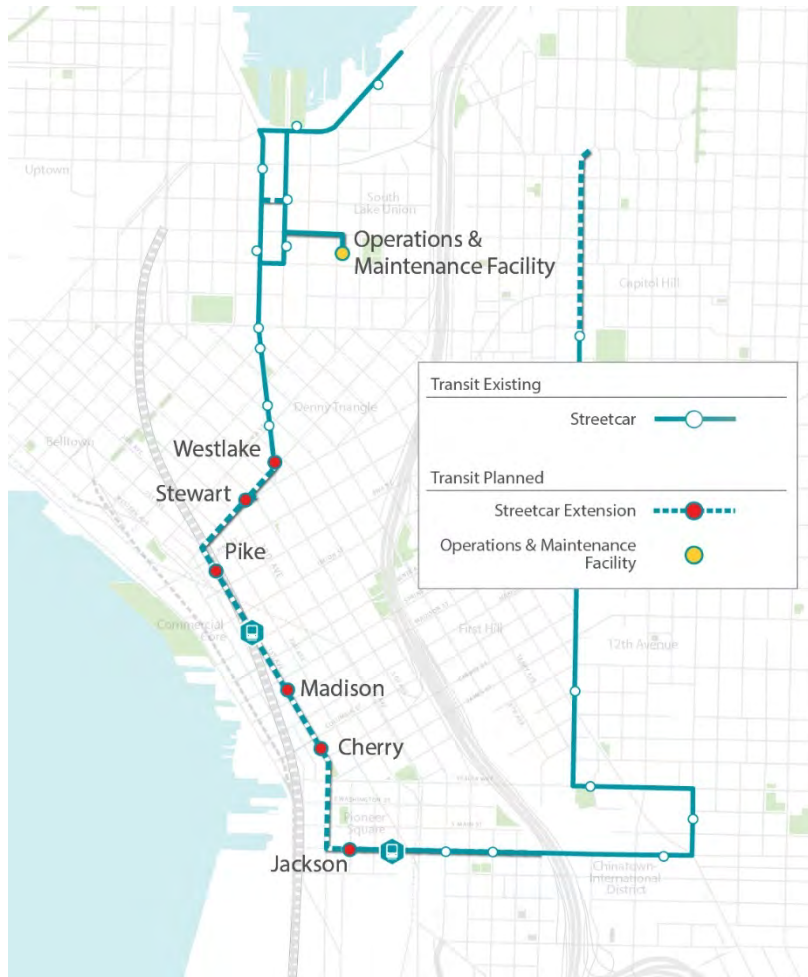
Elements

Experience

Operations

# OPERATIONS AND MAINTENANCE FACILITY – SOUTH LAKE UNION

# OPERATIONS & MAINTENANCE FACILITY



Schematic Design

# OPERATIONS & MAINTENANCE FACILITY



Schematic Design

Project Status

Multi-Modal

Context

Safety

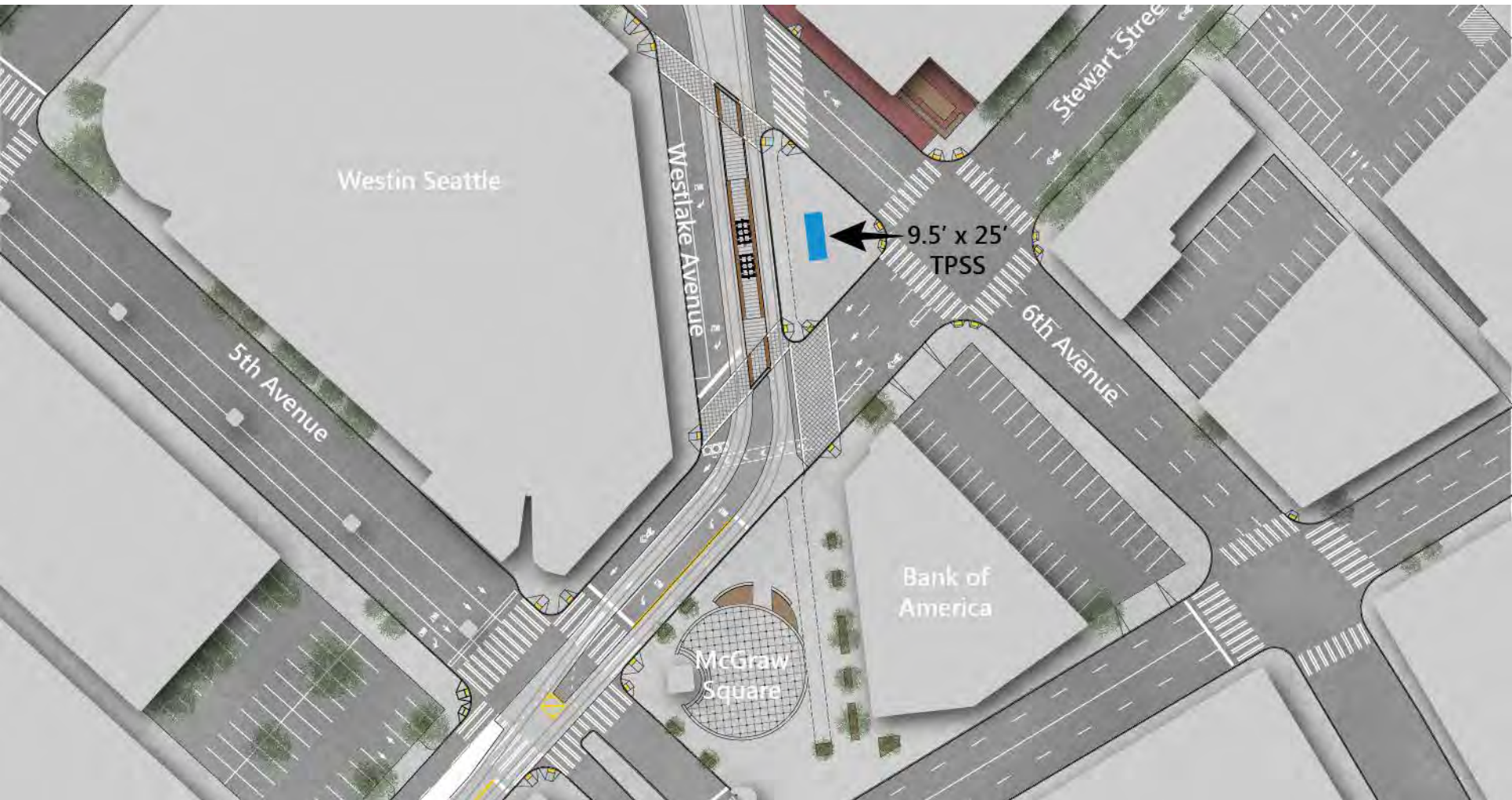
Elements

Experience

Operations

# TRACTION POWER SUBSTATION (TPSS)

# WESTLAKE SQUARE AREA PLAN



## Schematic Design

Project Status

Multi-Modal

Context

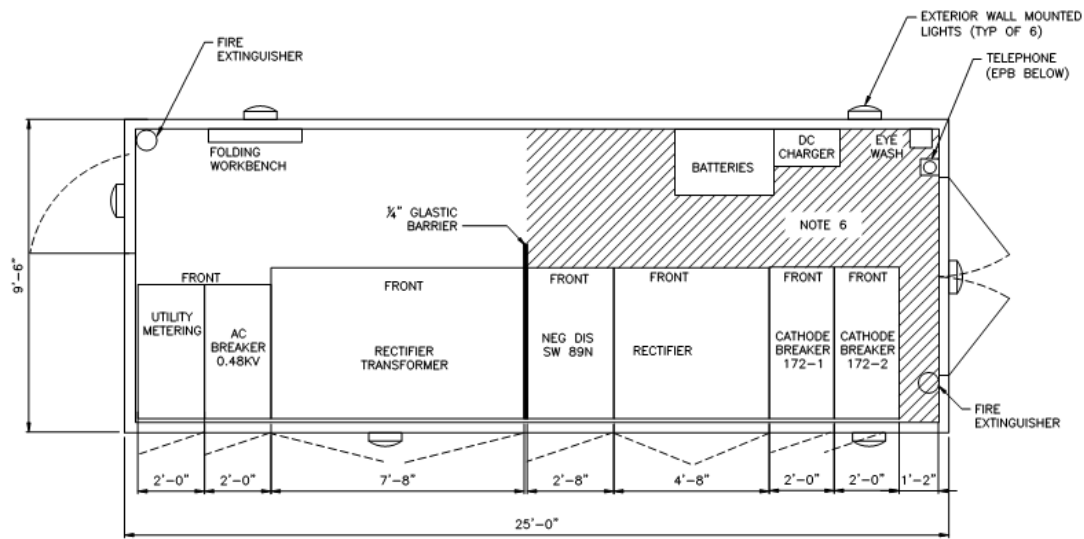
Safety

Elements

Experience

Operations

# WESTLAKE SQUARE TPSS



## Schematic Design

Project Status

Multi-Modal

Context

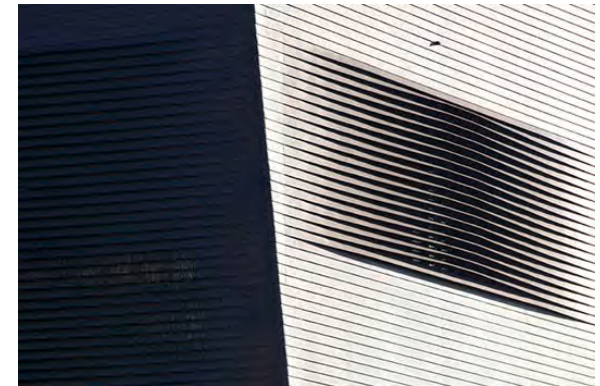
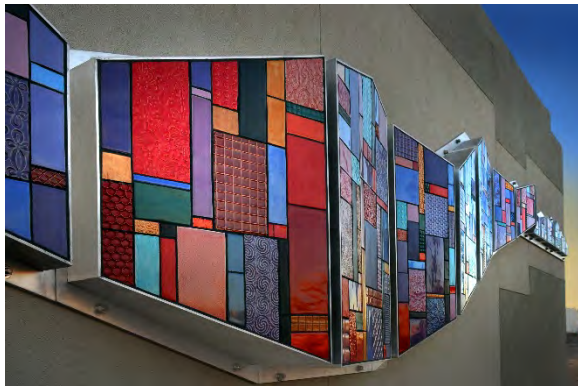
Safety

Elements

Experience

Operations

# TPSS – SCREENED WRAPPING



## Lawrence TPSS

- Mesa, AZ

## Pumstation

- Rodenkirchen, GE

## Central Signal Box

- Basel, CH

Schematic Design

Project Status

Multi-Modal

Context

Safety

Elements

Experience

Operations



# TPSS – URBAN PAVILION / FOLIES



## Cairns TPSS

- Cairns, AU

## Seaholm Substation

- Austin, TX

## Parc de la Villette

- Paris, FR

Schematic Design

Project Status

Multi-Modal

Context

Safety

Elements

Experience

Operations

# TPSS – CAMOUFLAGE



## Denny Substation

- Seattle, WA

## Folded Landscapes

- Los Angeles, CA; New York, NY

## Substations

- Rotterdam, NL

Schematic Design

Project Status

Multi-Modal

Context

Safety

Elements

Experience

Operations

# CENTER CITY CONNECTOR



Next Steps / Questions