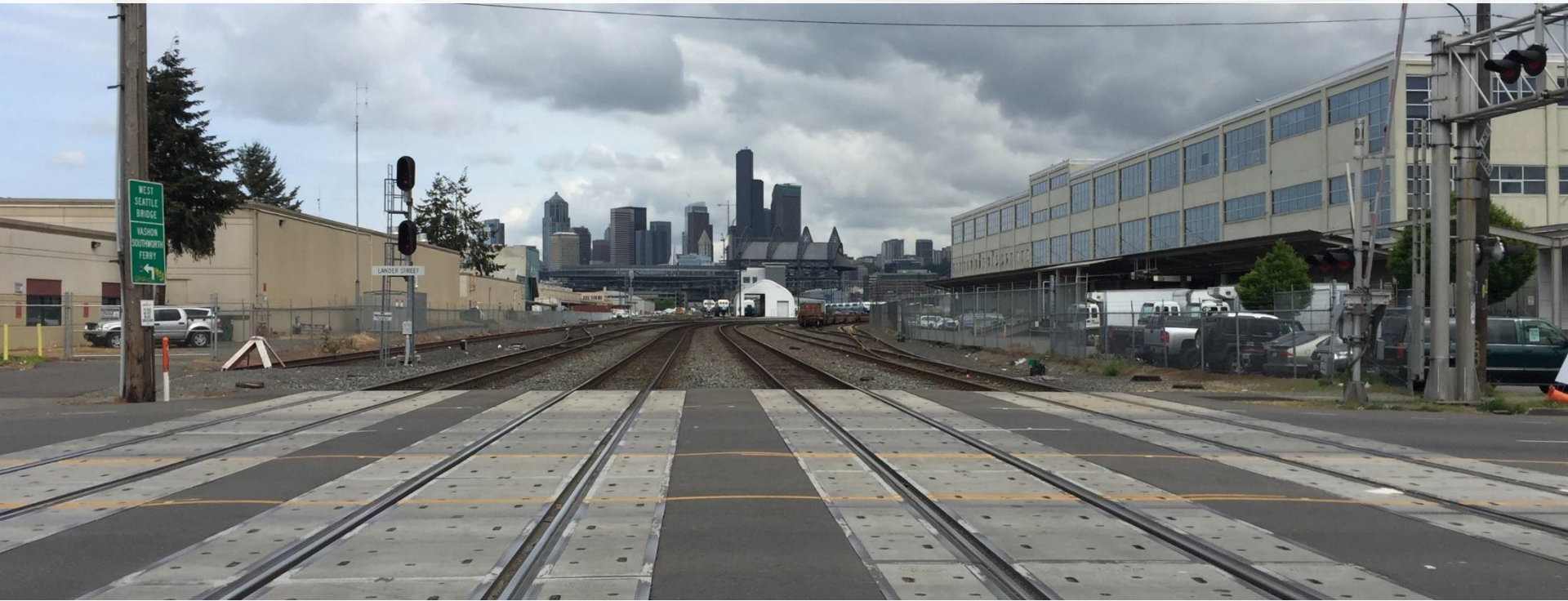


# S Lander St Bridge Project



Seattle Design Commission  
Eric Strauch, SDOT  
April 20, 2017



**Seattle**  
Department of  
Transportation



# Presentation overview

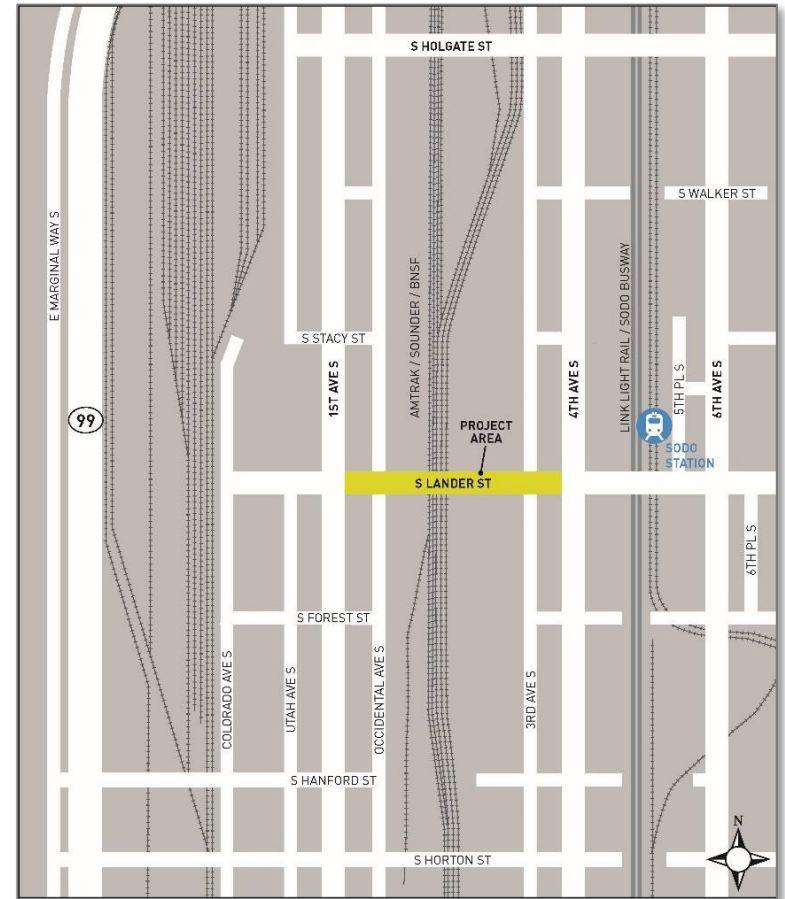
- Welcome and introductions
- Project overview
- Public involvement
- Design update
  - Review of SDC recommendations
  - Pedestrian and bicycle enhancements
  - Occidental Ave S dead end
  - Bridge lighting
  - Design inspiration/final design
- Next steps



## An important SODO corridor

# S Lander St serves:

- Local businesses and major employers
- Freight mobility
- Pedestrians and bicycles
- Commuters
- Transit
- Port of Seattle
- Freight and passenger rail



# S Lander Street by the numbers

Daily use:



**100+**  
Trains



**13,000+**  
Vehicles



**1,400**  
Pedestrians



**100**  
Bicycles



**75,000**  
Jobs supported  
(100,000 by 2040)

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Daily closures: **100+**

Average traffic delay per closure: **2 minutes, 40 seconds**

Average closure time per day: **4 hours, 50 minutes**

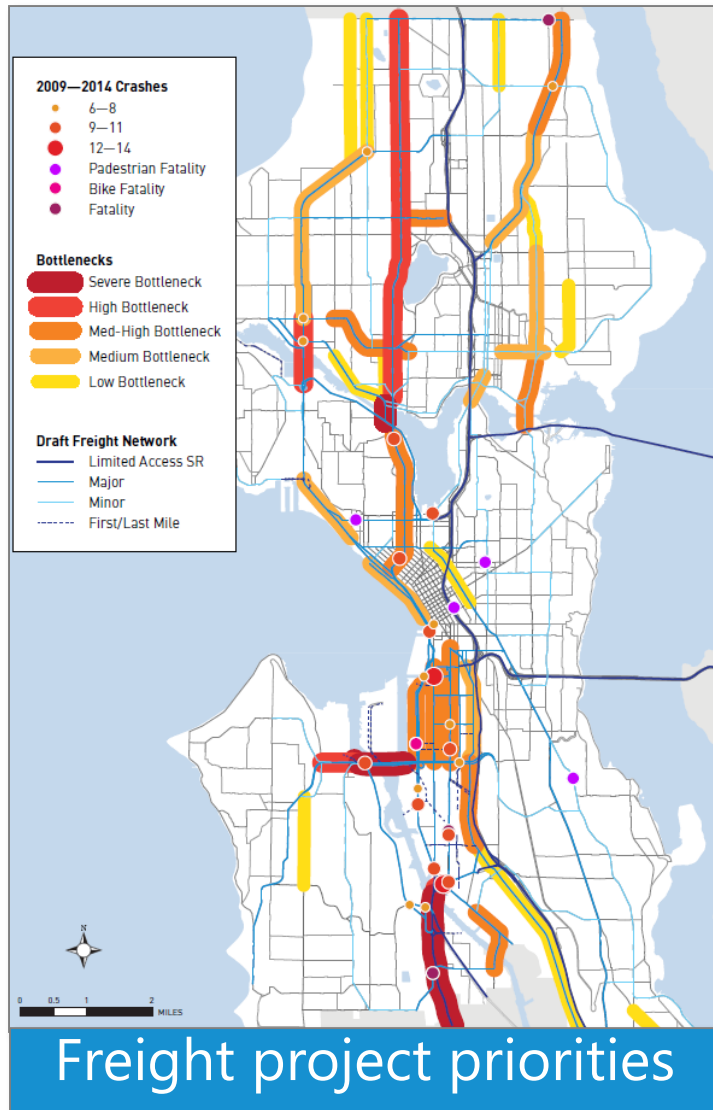
Crossing violations per day: **485**

Collisions over the past five years: **85**

Fatalities over the past five years: **3**



# Seattle freight circulation



# Project goals

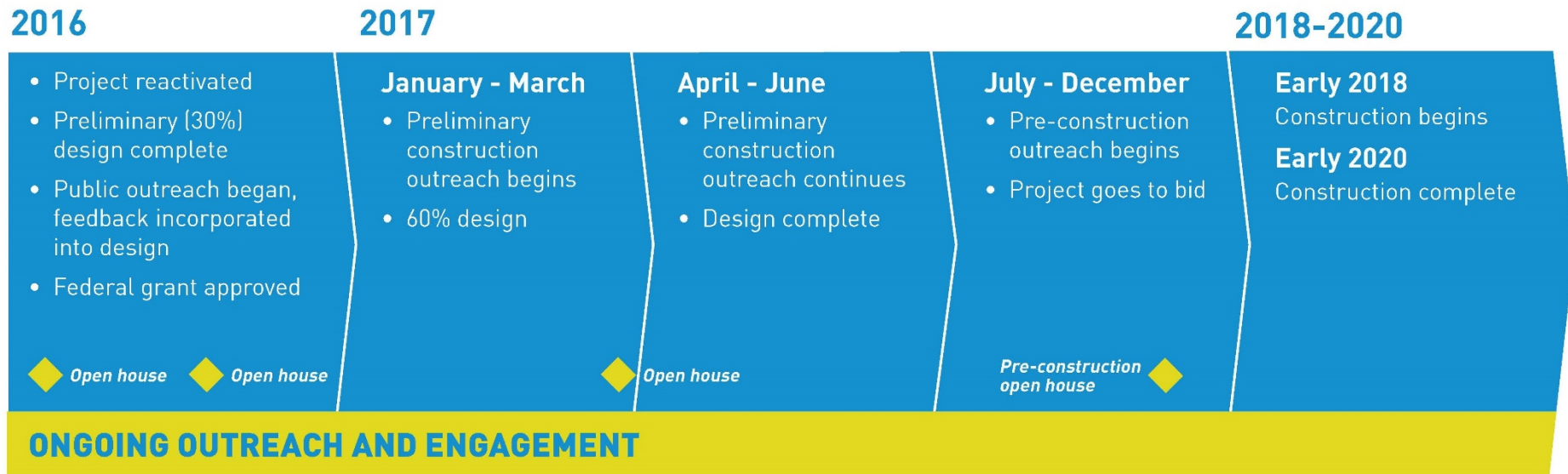
- Eliminate the at-grade crossing
- Fit the bridge in the right-of-way
- Avoid property takes
- Prioritize modal recommendations
- Reflect changes in transportation system since 2007
- Build to budget (\$140m)

Our mission:

- Safest and effective solution
- Efficient use of funding



# Timeline and communications



## Outreach methods

- Calls
- Door-to-door flyering
- Open houses (in person/online)
- Briefings
- Mailers
- Email updates
- Social media

## Frequency

- 20 briefing audiences
- 3 open houses
- 114,000 mailers
- 200 email subscribers
- Email updates

# Design process



## Seattle design Commission

### SDC recommendations

- Subcommittee review
  - Occidental Ave S
  - Bridge design details
- Freight circulation overview
- Pedestrian experience enhancements
- Street lighting for pedestrian safety
- Pursuit of CPTED design
- Artist assistance

### Public preferences

- Architectural details on railings and fencing
- Wall patterns
- Multi-use path
- Lighting
- Landscaping

### DESIGN PROCESS

#### June - September 2016

- ☒ Presented preliminary design options
- ☒ Gathered public input

#### January - March 2017

- ☒ Refined design to incorporate public feedback
- ☒ Reviewed design with Seattle Design Commission

#### March 2017

- ☒ Public open house to view updated design

#### April 2017

- ☐ Seattle Design Commission final recommendation

#### July 2017

- ☐ Final design complete

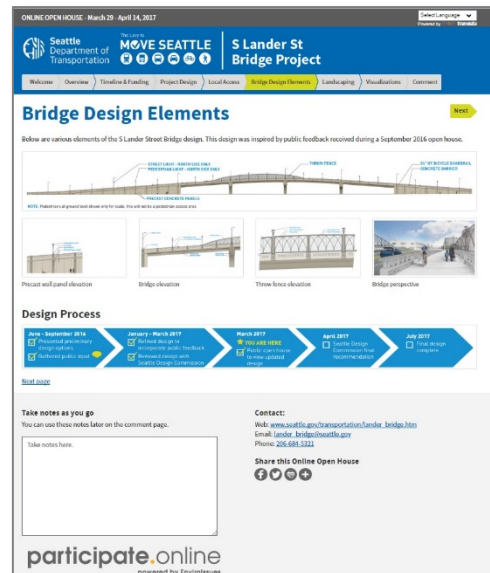


# March 2017 open house



## Public comments

- Positive feedback on bridge architecture and landscaping plans
- Concerns remain over bicycle and pedestrian connectivity
- Importance of ensuring parking and local access during construction

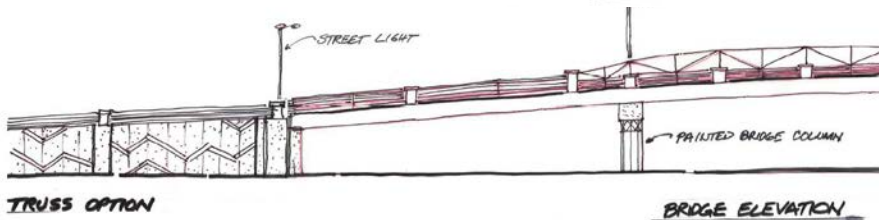
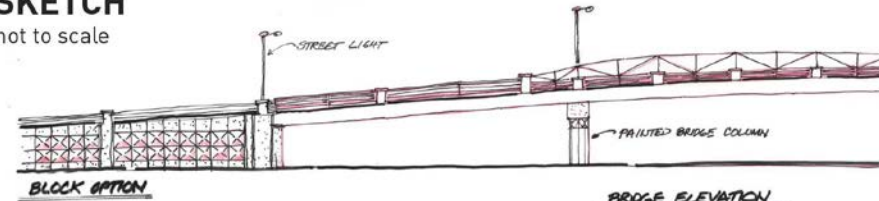


# Urban design initial concepts



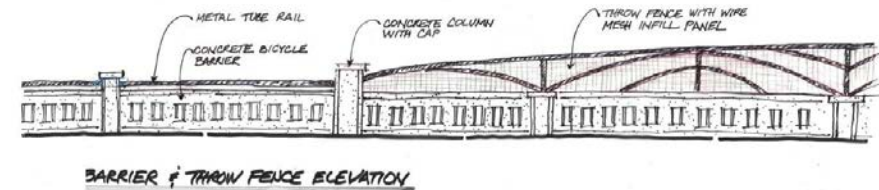
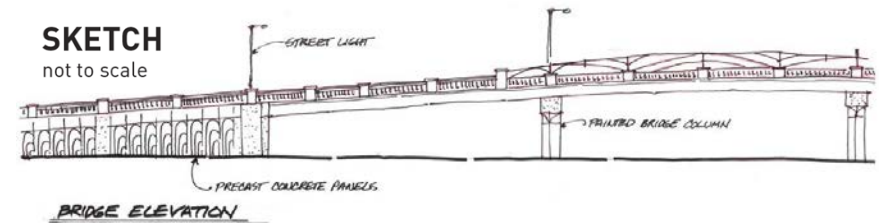
## SKETCH

not to scale



## SKETCH

not to scale





# SDC recommendations

## Artist assistance – Kristin Ramirez

- Met with artist-in-residence Kristin Ramirez throughout
- Concurrence with conclusions of first round public outreach
- Supportive of the refinements made with SDC recommendations
- Source of example of Jose Rizal concept



# SDC recommendations

## Design options

- Reflects industrial character of SODO
- Inspired by arched stadium structures and nearby railroad crossings
- Industrial concrete and metal materials, repetitive square steel tubing and welded wire mesh

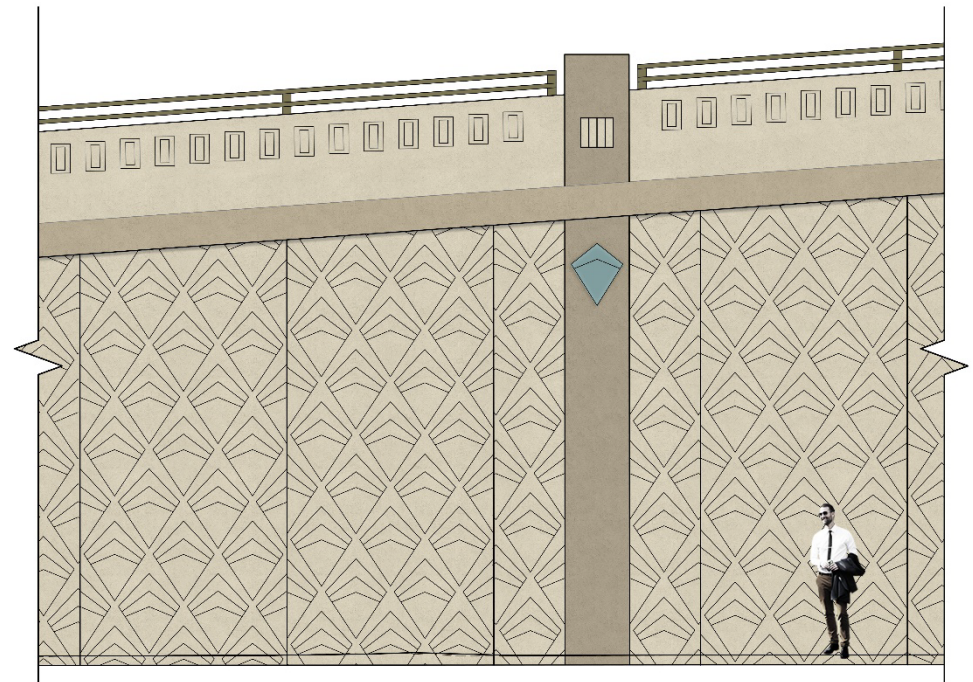




# SDC recommendations

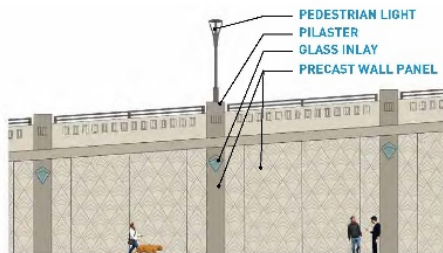
## Aesthetic relief to walls

- Wall pattern with 4-foot diamond shapes
- Glass insets for color/material accent
  - Reflective backing to increase vibrancy
  - High to prevent vandalism
- Three-dimensional layered relief to discourage graffiti

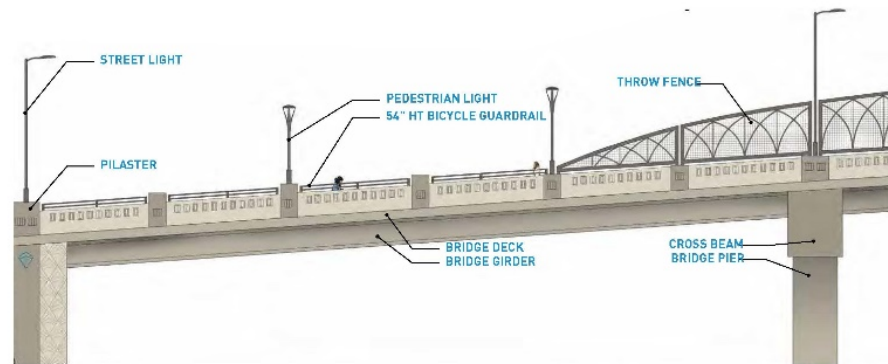


ELEVATION  
1/2" = 1'-0"

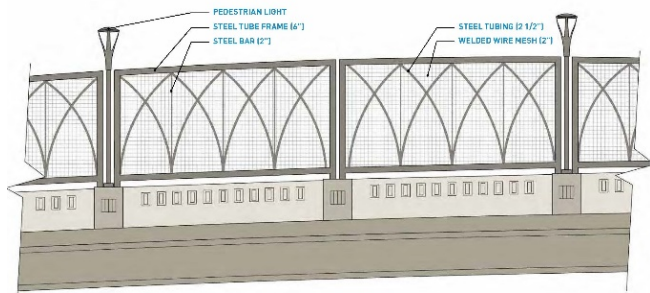
# S Lander St Bridge design



PRE-CAST WALL PANEL



BRIDGE ELEVATION DETAIL



THROW FENCE DETAIL



BRIDGE PERSPECTIVE

# SDC recommendations

## Pedestrian environment, CEPTED design, and lighting features



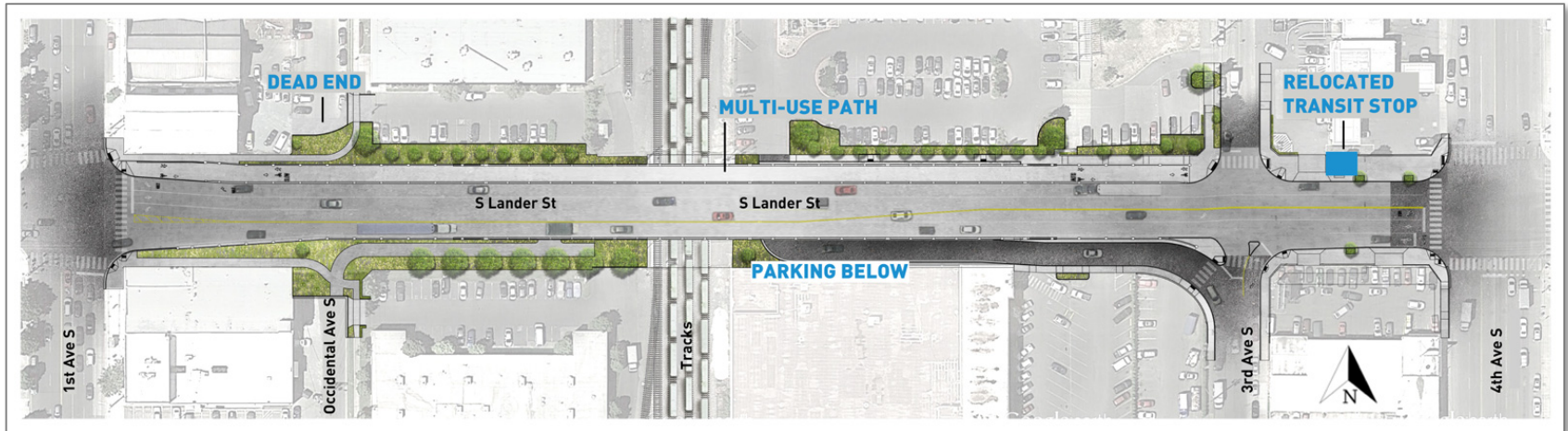
- 14 foot multi-use path
- Path lighting
- Street trees
- Low groundcover & high-branching trees
- Strengthen connection to the light rail station (with Sound Transit)



Visualization - Occidental Ave S at S Lander St

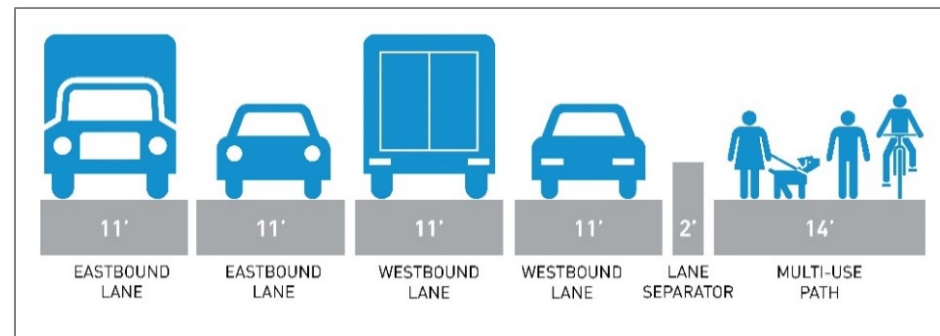


# Bicycle and pedestrian facilities



## Bicycle and pedestrian enhancements

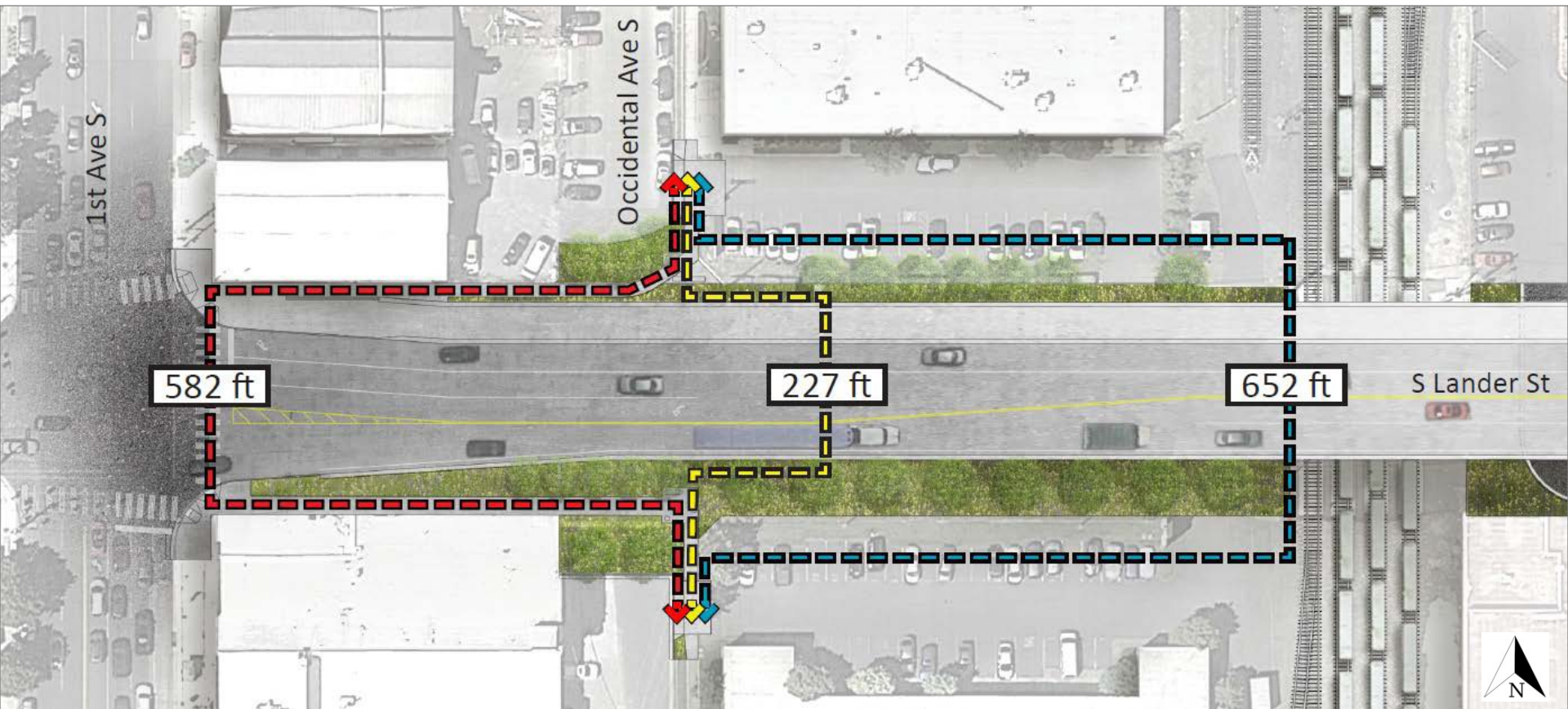
- 14-foot multi-use path
- Wide (8-foot) curb ramps
- Markings to better identify space for cyclists and pedestrians
- Forward-compatible design





# Occidental Ave S

## Non-motorized considerations



# Non-motorized tunnel Visualization

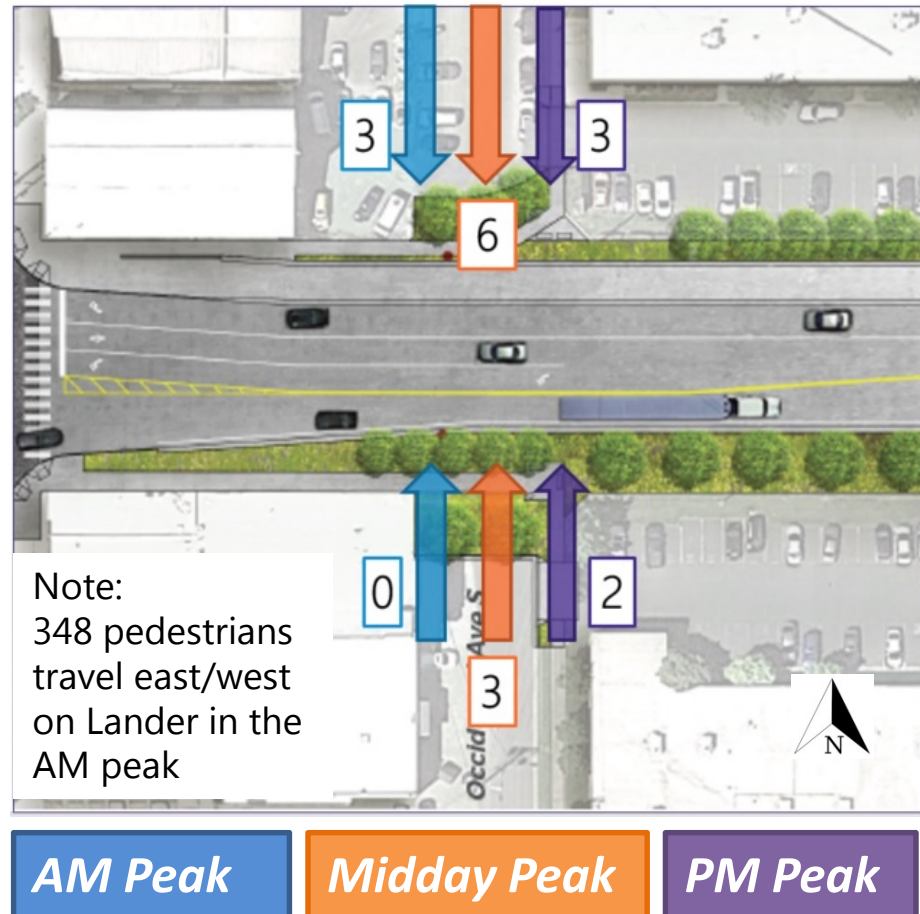




# Occidental Ave S

## User analysis

- Very few non-motorized users
  - Zoning supports future ped growth on 1st Ave
  - Bike Master Plan prioritizes Utah Ave S/SODO trail
- Pedestrian enhancements with wayfinding and lighting
  - Tunnel – maintenance and community concerns; poor sight lines not easily mitigated
  - 1st Ave route – natural light, landscaping, businesses visibility, more users



# Ped lighting (pending funding)



PEDESTRIAN OPTION 1



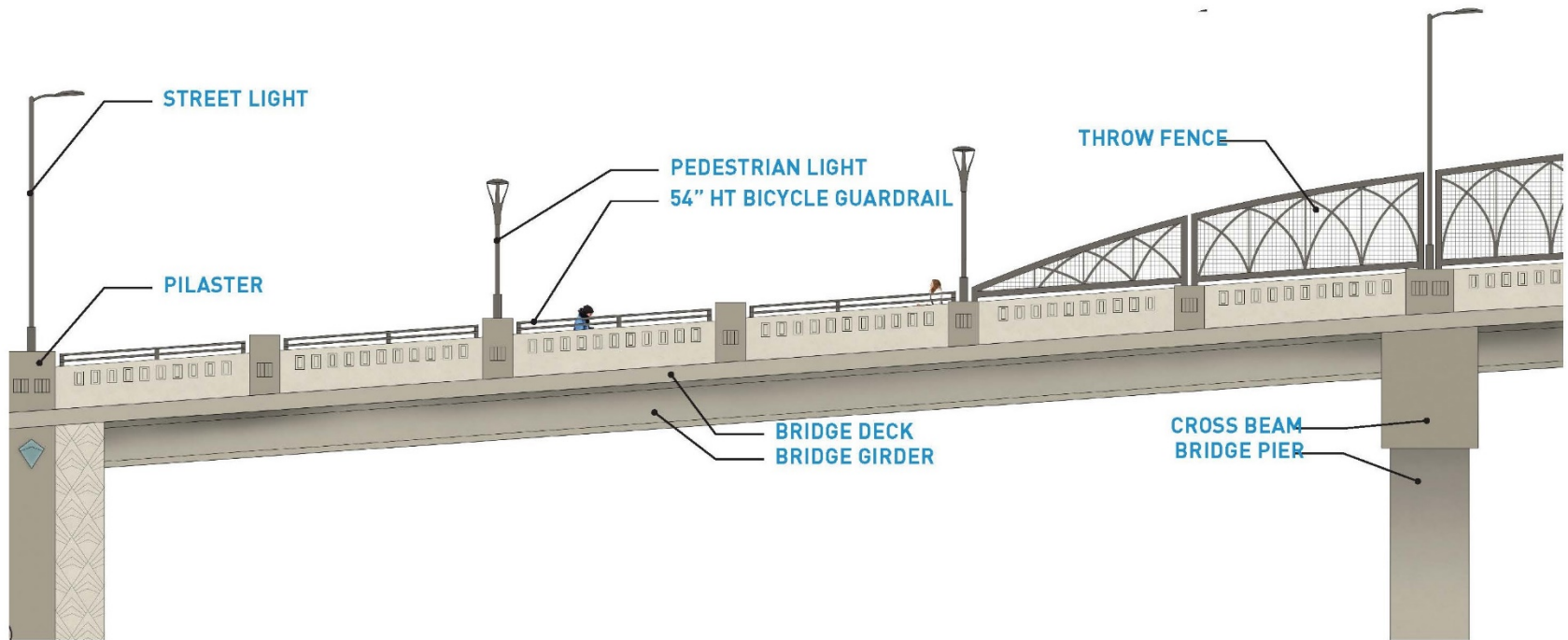
*Example of cobra heads and pedestrian lighting intermixed* 20



# Lighting plan



# Lighting



**BRIDGE ELEVATION DETAIL**

# Next steps

April 2017

- SDC final recommendation

May 2017

- Final design complete

Summer 2017

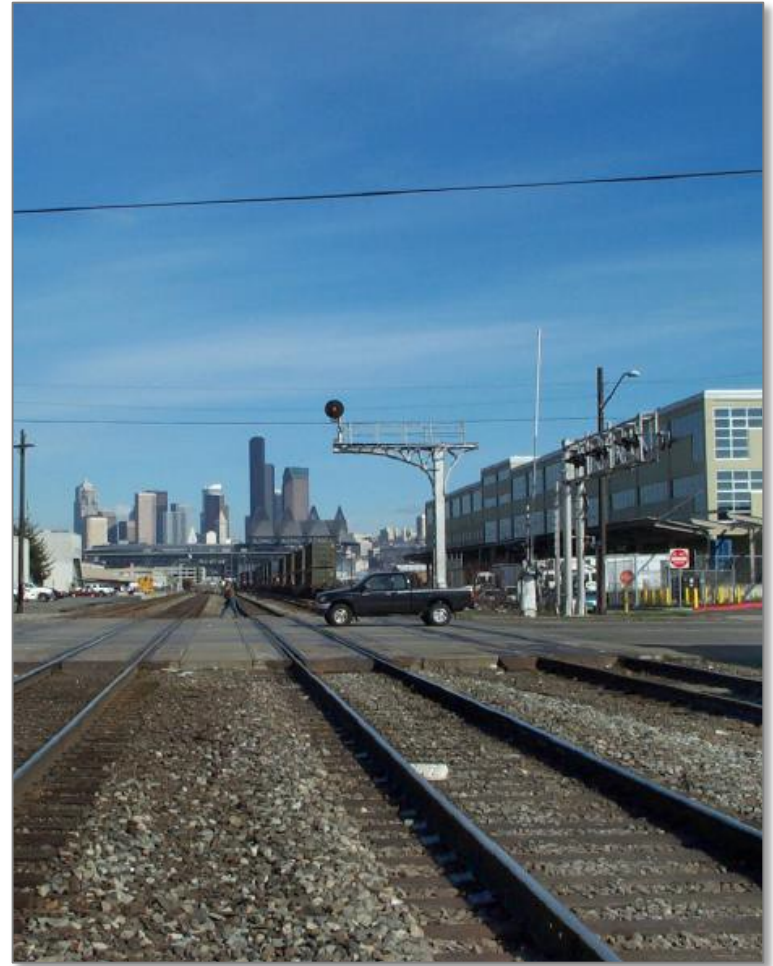
- Pre-construction outreach begins
- Solicit for construction

Late 2017

- Pre-construction open house

Early 2018

- Begin construction



# Stay connected



- Visit: [www.seattle.gov/lander\\_bridge.htm](http://www.seattle.gov/lander_bridge.htm)
- Call Eric Strauch: 206-233-7208
- Email: [lander\\_bridge@seattle.gov](mailto:lander_bridge@seattle.gov)



**Seattle**  
Department of  
Transportation



# Backpocket slides

# Project visualization

## S Lander St looking southwest



Map data: © 2016 Google  
Image Landsat



# Project visualization

## 3rd Ave S at S Lander St looking east





# Project visualization

## Occidental Ave S at S Lander St looking south





# Project visualization

1<sup>st</sup> Ave S and S Lander St looking east



# Full analysis results – Occidental

- Number of vehicles crossing is low
  - Data indicate high cut-through traffic at AM/PM peak periods (avoiding 1<sup>st</sup> Ave S), rather than local access
- Pedestrian volumes north/south are low
  - Community concerns about safety/nuisance uses of public space
- Number of bikes crossing is even lower
  - Bike Master Plan prioritizes Utah and SODO trail as north/south new facilities





[Time-lapse video](#)