S Lander St Bridge Project

Seattle Design Commission
Jessica Murphy, SDOT
January 5, 2017
Presentation overview

• Welcome and introductions
• Background
  – Timeline & funding
  – Project goals
• Public involvement
  – Roadway configuration
  – Urban design opportunities
  – Theme development
  – Before and after
  – Lighting
• Next steps
S Lander Street – 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
Neighborhood Land Use

S LANDER ST
Zoning: IG1/U85 & IG2/U85
Why Lander, why now?

• 20 years of need identified by
  – WSDOT
  – Port of Seattle
  – Duwamish Manufacturing Industrial Council
  – Local and regional stakeholders

• New funding opportunities
  – Federal FAST Act
  – Move Seattle Levy
  – WSDOT
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)**

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**
At the crossing

8 seconds after a train is out of frame:

9 pedestrians are already in the crossing

Notice the gates are still down and the lights are still flashing

Is another train coming?
Project Goals

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

Our mission:
- Safest and effective solution
- Efficient use of funding
Timeline & communications

Outreach methods

- Calls
- Door-to-door flyering
- Open houses (in person/on-line)
- Briefings
- Mailers
- Emails updates
- Social media

Frequency

- 16 briefing audiences
- 2 open houses
- 57,000 mailers
- 200 email subscribers
- Mailers
- Emails updates
Current roadway

Current road conditions

- **7’** - Sidewalk
- **14’** - Eastbound lane
- **10.5’** - Eastbound lane
- **10.5’** - Turning lane
- **11’** - Westbound lane
- **14’** - Westbound lane
- **7’** - Sidewalk
Bridge cross-sections
Preliminary options presented

**Design option 1: Multi-use path on north side**

- 11' EASTBOUND LANE
- 11' EASTBOUND LANE
- 11' WESTBOUND LANE
- 11' WESTBOUND LANE
- 2' LANE SEPARATOR
- 14' MULTI-USE PATH

**Design option 2: Sidewalks on both sides**

- 6' SIDEWALK
- 2' LANE SEPARATOR
- 11' EASTBOUND LANE
- 11' EASTBOUND LANE
- 11' WESTBOUND LANE
- 11' WESTBOUND LANE
- 2' LANE SEPARATOR
- 6' SIDEWALK
Bridge cross-sections

What we heard

Design option 1: Multi-use path on north side

- 54% preferred this option

Design option 2: Sidewalks on both sides

- 41% preferred this option
Site constraints – lots of driveways!
Roadway design – EAST of tracks
Preliminary options presented
Roadway design – EAST of tracks

What we heard

Option 1

25% preferred this option

Option 2

57% preferred this option
Proposed design – EAST of tracks

3rd Ave S:
- Two-way access drive on south side of bridge
- Based on feedback from nearby properties and stakeholders

Parking:
- New parking spaces under the bridge
- Concerns remain about utilization and management
Roadway design – WEST of tracks
Preliminary options presented
Roadway design – WEST of tracks

What we heard

**Option 1**

- 53% preferred this option

**Option 2**

- 41% preferred this option
Proposed design – WEST of tracks

Occidental Ave S:
- Proposed dead-ends
- Based on community feedback, stakeholder input, recent traffic analysis (limited use of north/south through traffic), and space management
Urban design
Preliminary options

Urban design elements include:
Railings, handrails, retaining walls, fences, columns, vertical accents, landscaping
Feedback from the June open house indicated preferences for:
• Architectural elements reflecting neighborhood’s character
• Artistic features
• Wall details with texture and patterns
• Landscaping and plantings
Urban design options
Industry theme

INSPIRATION

VISUALIZATION

SKETCH
not to scale
Urban design options
Industry theme

INSPIRATION

VISUALIZATION

32% preferred this option
Urban design options
Deco theme

**INSPIRATION**

**VISUALIZATION**

**SKETCH**

*not to scale*
Urban design options
Deco theme

68% preferred this option
Multi-use path
Deco theme
Deco theme wall patterns
Proposed visualizations
Bird’s-eye view looking northwest
Existing site
S Lander St looking southwest
Proposed visualization
S Lander St looking southwest
Existing site
3rd Ave S at S Lander St looking east
Proposed visualization
3rd Ave S at S Lander St looking east
Existing site
Occidental Ave S at S Lander St looking south
Proposed visualization
Occidental Ave S at S Lander St looking south
Existing site
1st Ave S and S Lander St looking east
Proposed visualization
1st Ave S and S Lander St looking east
Lighting
Standard cobra-head w/ LED luminaires

Seattle City Light
MATERIAL STANDARD

Standard Number: 5750.03
Superseding: November 3, 2014
Effective Date: March 25, 2015
Lighting plan
Ped lighting (pending funding)
Ped lighting (pending funding)
Under-bridge lighting
Proposed corridor rendering
Ongoing design

Several design features still under development:

• Green space, landscaping and urban design opportunities
• Lighting
• Driveways
• Parking

Proposed visualization: Bird’s-eye view
Looking northwest
Next steps

Winter 2017
• 60% design (including lighting)
• Continue development or urban design
• Public meetings

Spring 2017
• 90% and 100% design

Summer 2017
• Solicit for construction

Winter 2017/18
• Begin construction
Stay connected

• Visit: www.seattle.gov/lander_bridge.htm
• Call Jessica Murphy: 206-684-0178
• Call Eric Strauch: 206-233-7208
• Email: lander_bridge@seattle.gov
Backpocket slides
Funding

- **$121.5M Secured Funding**
  - $33M City
  - $15M State
  - $63.5M Federal
  - $10M Private (Port, BNSF)

- **$18.5M Unsecured Funding**

**TOTAL: $140M**
Project funding plan

- $45M in Federal FASTLANE grant – largest award for a municipality nationwide
- Additional $13M City contribution approved in the 2016 Budget
- Still in pursuit of other sources

TOTAL: $140M
Under-bridge lighting attachments

SUPPORT BRACKET
(DETAIL TO BE PROVIDED AT 60%)

UNDERDECK FIXTURE*

1" CONDUIT

NEMA 4X SLHH

*FIXTURE LENSE TO BE MOUNTED FLUSH WITH BOTTOM OF GIRDER OR LOWER (1" MAX)
Deco theme - elevations
Deco theme - elevations
Time-lapse video
Traffic analysis

KEY:
XX = Existing
(XX) = Future, 2040

Volumes shown are AM Peak
Traffic analysis – Occidental Ave S

KEY:
XX = Existing
(XX) = Future, 2040

Volumes shown are AM Peak
Traffic analysis – Occidental Ave S
Turning movements

KEY:
XX = Existing
(XX) = Future, 2040

Volumes shown are AM Peak
Traffic analysis – Occidental Ave S
Future movements

KEY:
XX = Existing
(XX) = Future, 2040
Traffic analysis – Occidental Ave S

KEY:
XX = Existing
(XX) = Future, 2040

Volumes shown are AM Peak
Traffic analysis results – Occidental

• Number of vehicles crossing S Lander St at Occidental Ave S is low
  – Midday peak:
    • Southbound: 10 (10)
    • Northbound: 10 (10)
  – PM peak:
    • Southbound: 60 (55)
    • Northbound: 5 (10)

• Data indicate high cut-through traffic at AM/PM peak periods (avoiding 1st Ave S), rather than local access
Funding

$100M Secured funding
- $45M: Federal FASTLANE Grant
- $20M: Levy to Move Seattle
- $10M: Puget Sound Regional Council
- $8M: Freight Mobility Strategic Investment Board
- $7M: WSDOT - Connecting Washington
- $5M: BNSF
  BNSF is committing at least 5% (approximately $5 million) pursuant to 23 CRF 666.210
- $5M: Port of Seattle

$40M Unsecured funding

TOTAL: $140M