Magnolia Bridge Planning Study

Stakeholder Meeting
Agenda

• WELCOME
• UPDATES
  • JUNE ENGAGEMENT RESULTS
  • UPDATED SCOPE & SCHEDULE
  • ALTERNATIVE ANALYSIS STATUS
• DISCUSSION OF 3 ALTERNATIVES
  • COST ESTIMATE DETAILS
  • TRAFFIC MODELING DETAILS
  • REMAINING CONCERNS/QUESTIONS
• NEXT STEPS
# Where We’ve Been

## Planning Study Process

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stakeholder Workshops: Port of Seattle, Magnolia Chamber, Magnolia Community Council, King County Metre, Seattle Parks and Recreation, Seattle Department of Transportation, Sound Transit, Queen Anne Community Council, Magnolia Interbay Queen Anne Disaster Preparedness, Seneca/Expedia, BNSF</td>
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<td>Drop-in Sessions and Online Open House &amp; Survey to describe Magnolia Bridge history, review evaluation process, present alternatives, and collect community input</td>
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</table>
|      | Emergency Closure Plan  
Technical screening of components to identify viable alternatives  
Perform alternatives analysis  
Present analysis and information  
Listening to community & agencies |

### 2017
- Q1
- Q2
- Q3
- Q4
- Jan
- Feb
- Mar
- Apr
- May
- Jun
- Jul
- Aug
- Sept
- Oct
- Nov
- Dec

### 2018
- Jan
- Feb
- Mar
- Apr
- May
- Jun
- Jul
- Aug
- Sept
- Oct
- Nov
- Dec
JUNE 2018

- 4 Drop-in sessions
- 277 Drop-in session participants
- 94 Written comments
- 1 Online open house
- 186 Online alternatives survey participants
- 200 Online open house comments
June Community Engagement
Drop-In Session Results
Drop-In Session Results

Alternatives Ranked as Most Important Across all Drop-In Sessions

- Alternative I: 19 (June 12), 27 (June 14), 18 (June 20), 10 (June 21)
- Alternative II: 2 (June 12), 4 (June 14), 3 (June 20), 1 (June 21)
- Alternative III: 2 (June 12), 5 (June 14), 3 (June 20), 4 (June 21)

Components Ranked as Most Important Across all Drop-In Sessions

- Component 1: 1 (June 12), 1 (June 14), 2 (June 20), 10 (June 21)
- Component 2A: 2 (June 12), 2 (June 14), 4 (June 20), 3 (June 21)
- Component 3: 1 (June 12), 2 (June 14), 3 (June 20), 1 (June 21)
- Component 5A: 23 (June 12), 28 (June 14), 18 (June 20), 13 (June 21)
- Component 5B: 36 (June 12), 36 (June 14), 36 (June 20), 36 (June 21)
- Component 7: 2 (June 12), 2 (June 14), 4 (June 20), 4 (June 21)
- Component 8: 2 (June 12), 2 (June 14), 4 (June 20), 4 (June 21)
- Component 10: 2 (June 12), 2 (June 14), 4 (June 20), 4 (June 21)
Online Open House Results

Alternatives Ranked as Most Important from Online Survey

Number of Rankings

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Number of Rankings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative I</td>
<td>104</td>
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<tr>
<td>Alternative II</td>
<td>18</td>
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<tr>
<td>Alternative III</td>
<td>34</td>
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Components Ranked as Most Important from the Online Survey

Number of Rankings

<table>
<thead>
<tr>
<th>Component</th>
<th>Number of Rankings</th>
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<tbody>
<tr>
<td>1</td>
<td>9</td>
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<tr>
<td>2A</td>
<td>2</td>
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<tr>
<td>3</td>
<td>16</td>
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<tr>
<td>5B</td>
<td>94</td>
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<tr>
<td>6D</td>
<td>4</td>
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<td>7</td>
<td>4</td>
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<td>8</td>
<td>2</td>
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<tr>
<td>10</td>
<td>31</td>
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</table>
What We Heard

• The majority of commenters want the in-kind replacement of the Magnolia Bridge
• Alternative I and Component 5B ranked highest
• Component 5B W Armory Way Bridge concern: would impact nearby residences on Halladay St
• Many felt W Dravus St could not be improved enough to support the additional trips
• See our website for a full community engagement summary: https://www.seattle.gov/transportation/magnoliabridgeplanning
How We’re Responding

Updated analysis of In-Kind Replacement added in response to community comments & engagement
Updated Planning Study Scope & Schedule

• Authorized Scope and Schedule addendum to update the cost and traffic analysis for the in-kind replacement option
• Extending planning study to the end of 2018
  • Present in-kind replacement and recommended alternative
  • Provide direct comparison of costs
  • Provide direct comparison of traffic impacts
ALTERNATIVE ANALYSIS STATUS

• SUMMER 2018 – Complete Alternatives Analysis
• FALL 2018 – In-Kind Replacement Analysis
# Total Cost - In-kind Replacement & Alternatives

<table>
<thead>
<tr>
<th>#</th>
<th>Summary Cost Item Description</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Quantity</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
<th>In-kind Replacement</th>
<th>Estimated Cost</th>
<th>Estimated Cost</th>
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<td>1</td>
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<tr>
<td>2A</td>
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<td>3</td>
<td>Component 3 Construction Cost</td>
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<td>8</td>
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<td>10</td>
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<td>Demo</td>
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<td>Repl</td>
<td>HMTN Replace Cost 2018$</td>
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</table>

**Construction Cost Total**

<table>
<thead>
<tr>
<th>Description</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
<th>In-kind Replacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Total</td>
<td>$91,471,000</td>
<td>$86,057,000</td>
<td>$86,852,000</td>
<td>$197,796,000</td>
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<tr>
<td>Soft Cost</td>
<td>$36,588,400</td>
<td>$34,422,800</td>
<td>$34,740,800</td>
<td>$59,338,800</td>
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<tr>
<td>Property Acq.</td>
<td>$63,704,700</td>
<td>$61,264,500</td>
<td>$62,406,800</td>
<td>$4,020,700</td>
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</table>

**Total Base Cost**

<table>
<thead>
<tr>
<th>Description</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
<th>In-kind Replacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Total</td>
<td>$131,764,100</td>
<td>$131,744,300</td>
<td>$165,999,600</td>
<td>$291,166,500</td>
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<tr>
<td>Project Cont.</td>
<td>$58,000,000</td>
<td>$55,000,000</td>
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<td>$87,000,000</td>
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<tr>
<td>Cost Total</td>
<td>$250,000,000</td>
<td>$237,000,000</td>
<td>$216,000,000</td>
<td>$378,000,000</td>
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</tbody>
</table>

**2018 Estimated Cost Range**

<table>
<thead>
<tr>
<th>Description</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
<th>In-kind Replacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Total</td>
<td>$200-$250M</td>
<td>$190-$210M</td>
<td>$170-$280M</td>
<td>$340-$420M</td>
</tr>
</tbody>
</table>

*Soft Cost and Contingency % based on SDOT standards for project's design level

**Total Cost adjusted to Estimated Cost Range based on American Association of Cost Engineering (AACE) Standards for projects in different stages of definition and design

City of Seattle
American Association of Cost Engineering (AACE) Cost Estimate Classification

<table>
<thead>
<tr>
<th>ESTIMATE CLASS</th>
<th>MATURITY LEVEL OF PROJECT DEFINITION DELIVERABLES</th>
<th>END USAGE</th>
<th>METHODOLOGY</th>
<th>EXPECTED ACCURACY RANGE</th>
</tr>
</thead>
</table>
| Class 5        | 0% to 2%                                           | Functional area, or concept screening | SF or m² factoring, parametric models, judgment, or analogy | L: -20% to -30%  
H: +30% to +50% |
| Class 4        | 1% to 15%                                          | or Schematic design or concept study | Parametric models, assembly driven models | L: -10% to -20%  
H: +20% to +30% |
| Class 3        | 10% to 40%                                         | Design development, budget authorization, feasibility | Semi-detailed unit costs with assembly level line items | L: -5% to -15%  
H: +10% to +20% |
| Class 2        | 30% to 75%                                         | Control or bid/tender, semi-detailed | Detailed unit cost with forced detailed take-off | L: -5% to -10%  
H: +5% to +15% |
| Class 1        | 65% to 100%                                        | Check estimate or pre bid/tender, change order | Detailed unit cost with detailed take-off | L: -3% to -5%  
H: +3% to +10% |

Note: [a] The state of construction complexity and availability of applicable reference cost data affect the range markedly. The +/- value represents typical percentage variation of actual cost from the cost estimate after application of contingency (typically at a 50% level of confidence) for given scope.

Table 1 – Cost Estimate Classification Matrix for Building and General Construction Industries

*Per AACE International Recommended Practice No. 56R-08*
Travel Time Routes Evaluated

Alternative 1

Alternative 2

Alternative 3

In-Kind Replacement, 2035
Travel Times by Fall 2018
2035 Travel Times - Leaving Magnolia/Interbay
AM Peak Hour

In-Kind Replacement
2035 Travel Times by Fall 2018

Travel Time (Minutes)

<table>
<thead>
<tr>
<th>Travel Route Origin and Destination</th>
<th>Alt 1</th>
<th>Alt 2</th>
<th>Alt 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. From Magnolia Village to Elliott Ave W</td>
<td>20</td>
<td>15</td>
<td>80</td>
</tr>
<tr>
<td>B. From T-91/Expedia to Elliott Ave W</td>
<td>10</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>C. From Smith Cove to Elliott Ave W</td>
<td>15</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>D. From Magnolia Village to Smith Cove</td>
<td>8</td>
<td>5</td>
<td>80</td>
</tr>
<tr>
<td>E. From Magnolia Village to Ballard</td>
<td>10</td>
<td>8</td>
<td>20</td>
</tr>
</tbody>
</table>

City of Seattle
2035 Travel Times - Leaving Magnolia/Interbay

PM Peak Hour

In-Kind Replacement
2035 Travel Times
by Fall 2018

Travel Route Origin and Destination

City of Seattle
2035 Travel Times - Along 15th/Elliott Ave Corridor

In-Kind Replacement
2035 Travel Times by Fall 2018

Direction of Travel on Elliott/15th Avenue Corridor
Preliminary Recommendations

• Access improvements beyond new components
  • Thorndyke Ave W
  • W Blaine St
  • Condon Way W

• Economic Impact
  • Intercept Survey
  • Considerations for future environmental impact study

• Emergency Response
Remaining Concerns or Questions…
# Planning Study Process

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<th>2018</th>
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<td>To review initial and technical screening and present alternatives</td>
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<td>To describe Magnolia Bridge history, review evaluation process, present alternatives, and collect community input</td>
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<td>Finalize Alternatives Analysis and Present to SDOT Directors, Mayor, and elected officials</td>
<td>To summarize community feedback, present the in-kind replacement and an alternative cost &amp; traffic trade-offs, and frame the funding package discussion</td>
</tr>
<tr>
<td>Ongoing Outreach Activities</td>
<td>To conduct an intercept survey in Magnolia Village to better understand behaviors among people visiting and working there and share results of public input and technical analysis</td>
</tr>
</tbody>
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**City of Seattle**
Questions

Wes Ducey I Wes.Ducey@Seattle.gov
Dawn Schellenberg I Dawn.Schellenberg@Seattle.gov