Doing Things!

Dunedin Causeway Bridges
Project Development & Environment (PD&E) Study – Update

June 12, 2018
Project Location and Limits

Our Vision: To Be the Standard for Public Service in America
Bridge Options

- **No-Build: $4+M = 13 Years**
  Cost includes countermeasures for both bridges

- **Major Rehabilitation: $31+M = 25 Years**
  - Additional Service Life: 25 years (to 2045)
  - Not presented to public as a viable alternative
    - Does not meet transportation/recreational needs of the community
    - Does not address the functionally obsolete bridge geometry
  Cost includes $25.1 million for main bascule bridge and $6.2 million for the tide relief bridge

- **Replacement = 75 Years**
  - Main Bridge
    - High-Level Fixed = $60+M
    - Mid-Level Movable = $81+M
    - Low-Level Movable = $77+M
  Costs include replacement of the tide relief bridge
## Alternatives Cost/Service Life

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Cost</th>
<th>Annual O&amp;M</th>
<th>Service Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>No-Build</td>
<td>$4.0 M*</td>
<td>$303 K</td>
<td>13 years</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>$31.3 M**</td>
<td>$228 K</td>
<td>25 years</td>
</tr>
<tr>
<td>Replacement (Low Level Movable)</td>
<td>$77.0 M***</td>
<td>$230 K</td>
<td>75 years</td>
</tr>
<tr>
<td>Replacement (Mid-level Movable)</td>
<td>$81.2 M***</td>
<td>$231 K</td>
<td>75 years</td>
</tr>
<tr>
<td>Replacement (Fixed)</td>
<td>$60.0 M***</td>
<td>$9.3 K</td>
<td>75 years</td>
</tr>
</tbody>
</table>

*Cost includes $4.0 million in scour countermeasures for both bridges.

** Cost includes $25.1 million for rehabilitation of Main Bascule bridge and $6.2 million for rehabilitation of the Tide Relief bridge.

***Cost includes $9.3 million for replacement of the Tide Relief bridge.
Land Use

- **Residential**: 792 Dwelling Units
- **Commercial**: 11 Businesses (Ward Island)
- **Recreational/Natural**: 1.5M Visitors Annually ($113M economic impact)
  - Attracts a variety of enthusiasts such as:
    - kayakers, bird-watchers, beachgoers, hikers, fishermen, etc.
Existing Conditions

Our Vision: To Be the Standard for Public Service in America
Land Use Impact: 1 Foot SLR

Our Vision: To Be the Standard for Public Service in America
Land Use Impact: 2 Feet SLR

Our Vision: To Be the Standard for Public Service in America
Land Use Impact: 3 Feet SLR

Percent Inundated

- Commercial
- Residential
- Recreational
- Natural

<table>
<thead>
<tr>
<th>NOAA Projection</th>
<th>Low</th>
<th>Int. Low</th>
<th>Int. High</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>After 2100</td>
<td>After 2100</td>
<td>2082</td>
<td>2061</td>
</tr>
</tbody>
</table>

Legend
- High Density Residential
- Commercial and Services
- Recreational (Urban)
- Natural Environment

Our Vision: To Be the Standard for Public Service in America
Land Use Impact: 4 Feet SLR

Our Vision: To Be the Standard for Public Service in America
Land Use Impact: 5 Feet SLR

Percent Inundated

- Commercial
- Residential
- Recreational
- Natural

NOAA Projection

<table>
<thead>
<tr>
<th>Projection</th>
<th>Low</th>
<th>Int. Low</th>
<th>Int. High</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>After 2100</td>
<td>After 2100</td>
<td>After 2100</td>
<td>2084</td>
</tr>
</tbody>
</table>

Legend

- High Density Residential
- Commercial and Services
- Recreational (Urban)
- Natural Environment

Our Vision: To Be the Standard for Public Service in America
Land Use Impact: 6 Feet SLR

Percent Inundated

- Commercial
- Residential
- Recreational
- Natural

NOAA Projection

- Low
- Int. Low
- Int. High
- High

Year

- After 2100
- After 2100
- After 2100
- 2093

Legend

- High Density Residential
- Commercial and Services
- Recreational (Urban)
- Natural Environment

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Sea Level Rise Projections Summary

SLR Scenario / Year

- Replacement (2100)
- 50% Residential and Commercial Inundation (4.8’)
- 50% Recreational Inundation (3.7’)
- 50% Natural Inundation (1.9’)

- No-Build (2033)
- Rehab (2045)

Year

2020 2030 2040 2050 2060 2070 2080 2090 2100

Sea Level Rise (feet)

0 1 2 3 4 5 6 7 8

- High
- Intermediate High
- Intermediate Low
- Low
Current Project Status

- **Construction Schedule:**
  - Anticipate construction funding in Penny IV

- **Stakeholder Preferred Alternatives**
  - **Mid-Level Movable Bridge Alternative**
    - Dunedin Causeway Ad Hoc Committee
    - Dunedin City Commission
    - General Public
  - **High-Level Fixed Bridge Alternative**
    - Pinellas MPO Bicycle/Pedestrian Action Committee

- **Pinellas BCC work session SLR Presentation & Project Update** June 12, 2018: Recommendation to finish PD&E Study with Mid-Level Movable Bridge Alternative.
Process for next steps

- **BCC (future meeting)**
- **Select Preferred Alternative**
- **Consultant**
  - **Finalize PD&E (DRAFT)**
  - **Public**
    - **Public Hearing**
    - **Consultant**
      - **Finalize and submit PD&E**

**No funding obligation to build preferred alternative**

**Inform public**

**Approved PD&E needed to seek grants**

**Our Vision: To Be the Standard for Public Service in America**

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