San Martin Boulevard over Riviera Bay
Project Development & Environment (PD&E) Study – Update
PID 001036A

June 12, 2018
Project Location & Limits

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## Overview Of Alternatives

### No Build Alternative

### Alternatives Considered but Eliminated

**Rehabilitation / Widening Alternative**
- Does not meet current design high water clearance elevations
- Existing bridge condition and unknown foundations not conducive to widening

**Alternative High-Level and Mid-Level Fixed Span Alternatives**
- Significant impacts to surrounding environment and community
- Significant impacts to adjacent street networks
- Concerns with existing channel depth, canal width and dockage space

**Movable Bridge Alternative**
- Significantly higher construction cost than fixed alternatives
- Increased long-term maintenance and operational costs

### Proposed Build Replacement Alternatives

- **Left-shifted (West) Alignment**
- **Centered Alignment**
- **Right-shifted (East) Alignment**

**Highest Feasible Profile Reconstruction Alternatives (Fixed Bridge)**
- Improves navigational clearances
- Eliminates impacts to adjacent neighborhoods
# Build Replacement Alternatives

<table>
<thead>
<tr>
<th>WEST ALIGNMENT</th>
<th>CENTER ALIGNMENT</th>
<th>EAST ALIGNMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weedon Island</td>
<td>Weedon Island</td>
<td>Weedon Island</td>
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<tr>
<td>Tallahassee Drive</td>
<td>Tallahassee Drive</td>
<td>Tallahassee Drive</td>
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</table>

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**Stakeholder Preferred Alternative**
North Bay Trail Extension Evaluation
### Alternatives Comparison Matrix

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Cost</th>
<th>Service Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>No-Build / Rehabilitation</td>
<td>NR*</td>
<td>N/A</td>
</tr>
<tr>
<td>West Alignment</td>
<td>$12.290 M</td>
<td>75 years</td>
</tr>
<tr>
<td>Center Alignment</td>
<td>$11.373 M</td>
<td>75 years</td>
</tr>
<tr>
<td>East Alignment</td>
<td>$13.753 M</td>
<td>75 years</td>
</tr>
</tbody>
</table>

* Stakeholder Preferred Alternative

* Not recommended due to unknown foundations and existing bridge condition.
Sea Level Rise
Base Conditions (0’ Inundation)
Sea Level Rise
Base Conditions (1’ Inundation)
Sea Level Rise
Base Conditions (2’ Inundation)
Sea Level Rise
Base Conditions (3’ Inundation)

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Sea Level Rise
Base Conditions (4’ Inundation)

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Sea Level Rise
Base Conditions (5’ Inundation)

Begin Project

End Project

Regional Roadway Impacts

Regional Impacts to Neighborhoods

Sea Level Rise
Base Conditions (6’ Inundation)

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Sea Level Rise Projections Summary

NOAA SEA LEVEL RISE PROJECTIONS (2012)

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

**Elevation Data from**: NOAA Office for Coastal Management Coastal Inundation Digital Elevation Model: Aggregate Record

**Publication Date**: 12062017

https://coast.noaa.gov/digitalcoast/tools/slr
Current Project Status

- **Construction Schedule**
  - Construction funding proposed in Penny IV

- **Stakeholder Preferred Alternatives:**
  - Eastern Bridge Alignment
  - Eastern Trail Alignment

- **Pinellas BCC work session SLR Presentation & Project Update**
  - June 12, 2018: Recommendation to finish PD&E Study with Stakeholder Preferred Alternative.