



Broad Causeway Bridge Replacement PD&E Study

Causeway Island to East of West Broadview Drive Hybrid Public Hearing

Financial Project ID: 452428-1-21-01
Efficient Transportation Decision Making (ETDM) Number: 14520
Town of Bay Harbor Islands Number: BC-160
Bridge Number: 875101
Miami-Dade County, FL



| Criteria/Category | | No Build Alternative | Preferred Alternative - High-Level Fixed Bridge | Alternative 2 Mid-Level Movable Bridge |
|--|--|----------------------|---|--|
| ABILITY TO MEET PURPOSE AND NEED | Address Bridge Deficiencies | | | |
| | Improve Safety | | | |
| | Improve Flow of Traffic | | | |
| | Maintain Emergency Evacuation | | | |
| BRIDGE FEATURES | Vertical Navigational Clearance Above Mean High Water | 15.7 ft. | 65 ft. | 40 ft. |
| | Horizontal Clearance (between fenders) | 79.7 ft. | 90 ft. | 90 ft. |
| | Bridge Profile Grade (West side / East side) | 3.44% / 1.55% | 5.00% / 5.85% ¹ | 2.60% / 4.15% |
| | Improved Waiting Time for Marine Traffic | No | Yes | Yes |
| | Temporary Bridge Required During Construction | N/A | No | No |
| | Bridge Closure or Detour During Construction | N/A | No | No |
| TRAFFIC OPERATIONS | Bridge Opening | Yes | No | Yes |
| | Benefit to Vehicular Traffic | No | Yes | Yes |
| | Evacuation / Emergency Response (Improved) | No | Yes | Yes |
| SOCIAL & CULTURAL RESOURCES | Potential Impacts to Archaeological Resources | N/A | None | Low |
| | Potential Impacts to Historic Resources | N/A | High | High |
| | Potential Impacts to Parks/Recreation Areas (#) Town of Bay Harbor Islands Tot Lot Florida Circumnavigational Saltwater Paddling Trail | 0 | 1 | 1 |
| | | No | Yes ² | Yes ² |
| | No | Yes ² | Yes ² | |
| | Aesthetic/Visual Changes | No | Yes | Yes |
| Pedestrian and Bicycle Facility Improvements | No | Yes | Yes | |
| NATURAL & PHYSICAL RESOURCES | Potential Total Impacts to Wetlands (acres) | 0 | 0.279 | 0.417 |
| | Potential Total Impacts to Essential Fish Habitat (acres) | 0 | 4.18 | 5.18 |
| | Threatened/Endangered Species Potential | N/A | Medium ³ | Medium ³ |
| | Potential Impacts to Sovereign Submerged Lands | No | No | Yes |
| | Potential Noise Sensitive Sites (#) ⁴ | 0 | 233 | 233 |
| | Potential Contamination Sites (#High / #Medium) | 0 | 1 / 1 | 1 / 1 |
| RIGHT-OF-WAY | Relocations (#) | 0 | 0 | 0 |
| | Right-of-Way to be acquired (acres) | 0 | 0 | 0 |
| ESTIMATED PROJECT COSTS⁵ (2023 Dollars, in millions) | Lifespan of Alternative (Estimated Years) ★ | 25 | 75 | 75 |
| | Design | N/A | \$15.9 | \$31.8 |
| | Mitigation | N/A | TBD | TBD |
| | Construction | N/A | \$226.7 | \$356.1 |
| | Bridge Tender | \$30.7 | \$0 | \$30.7 |
| | Inspection & Maintenance | \$41.7 | \$4.8 | \$22.3 |
| TOTAL | | \$72.4 | \$247.4 | \$440.9 |

★ Toll bridge to be closed with “No Build Alternative”.

¹ The bridge sidewalks will comply with ADA requirements.

² Temporary impacts during construction only.

³ Medium assigned based on mitigation and minimization measures that will be implemented based on regulatory agency coordination.

⁴ This is not a representation of impacts

⁵ Preliminary estimates are for planning purposes only. Costs shown are 2023 dollars through 2048 with 3% inflation. Utility relocation costs are not included on the cost estimate.