

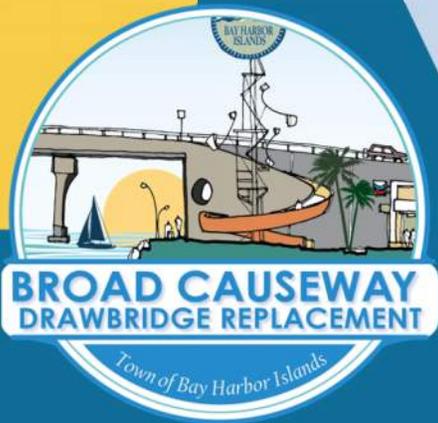
BROAD CAUSEWAY BRIDGE REPLACEMENT PD&E STUDY

Alternatives Public Workshop

In-Person Meeting: September 26, 2023
Virtual Meeting: September 28, 2023

www.bayharborislands-fl.gov





BROAD CAUSEWAY BRIDGE REPLACEMENT PD&E STUDY

Causeway Island to East of West
Broadview Drive
Miami-Dade County

Financial Project Identification Number: 452428-1-21-01

FDOT Efficient Transportation Decision Making (ETDM)
Number: 14520

Town of Bay Harbor Islands Project Number: BC-160

Bridge Number: 875101



What Are The Project Limits?



**Broad Causeway Bridge Replacement
From Causeway Island to East of West Broadview Drive
Miami-Dade County**

How Was The Public Notified?



OWNER / TENANT LETTERS



EMAILS TO CONTACT LIST



TOWN WEBSITE



FLORIDA ADMINISTRATIVE REGISTER



NEWSPAPER ADVERTISEMENTS



SOCIAL MEDIA

Bay Harbor Islands NEWSWAVES
SEPTEMBER 2023 • VOLUME 69 NUMBER 9

YOU ARE INVITED
Please join the Town of Bay Harbor Islands at an Alternatives Public Workshop regarding this project.

IN-PERSON WORKSHOP:
Morris N. Broad Community Center, 1175 95th Street, Bay Harbor Islands, Florida 33154
Tuesday, September 26, 2023 at 7 p.m.

VIRTUAL WORKSHOP:
To participate virtually from your computer, tablet, or smartphone, please register using the following link:
<https://bit.ly/3R8CB-APW>
Participants can also call in by dialing +1 (305) 224-1948; Meeting ID: 914 2234 3634
*Registration is encouraged but not required.

Thursday, September 28, 2023 at 6 p.m.

FACT SHEET
BROAD CAUSEWAY BRIDGE REPLACEMENT
Broad Causeway Bridge from Causeway Island to East of West Breakers Drive
PROJECT DEVELOPMENT AND ENVIRONMENT (PDE) STUDY
MIAMI DADE-COUNTY, FLORIDA
Project Number: 001-051028-1-01-01 / FDOT District Transportation Division Meeting #27096 10/23 (Town of Bay Harbor Islands Project Number 01-100)

OVERVIEW
The Town of Bay Harbor Islands is conducting a Project Development & Environment (PDE) Study for the Broad Causeway Bridge, also known as the Sheppard Broad Causeway Bridge, Replacement. The drawbridge is part of the Broad Causeway and connects the Town of Bay Harbor Islands with the City of North Miami. The study limits are from Causeway Island to east of West Breakers Drive. The project is located in the Town of Bay Harbor Islands in Miami-Dade County.

This is a Town of Bay Harbor Islands project. Since Federal funding may be utilized in future phases of the project, the Florida Department of Transportation (FDOT) will provide technical assistance during PDE Study. The Federal Highway Administration (FHWA) is the Lead Federal agency and FDOT Office of Environmental Management will be approving the National Environmental Policy Act (NEPA) documents on behalf of FHWA.

PROPOSED IMPROVEMENTS
The primary objective of this study is to replace the aging Broad Causeway Bridge with a new structure that meets current design standards, and is consistent with the United States Coast Guard regulatory requirements. The new bridge will include provisions for dedicated bicycle lanes and sidewalks to comply with American with Disabilities Act (ADA) requirements along with guardrails for pedestrian safety; provide safe access for multi-modal transportation and improve east-west access from the mainland of Miami-Dade County to the Town of Bay Harbor Islands, Village of Edgewater, and the Town of Surfside.

GOALS
• PROVIDE NEW STRUCTURE
• IMPROVE CONNECTIVITY
• ENSURE SAFETY
• PROVIDE TRAVEL, BICYCLE AND PEDESTRIAN IMPROVEMENTS

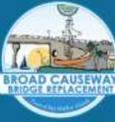
SCHEDULE
The PDE Study started in November 2022 and is expected to be completed by April 2023. The Design Phase will begin after the PDE Study is completed. Public involvement will continue throughout the PDE Study and the public is encouraged to participate in the development of this project.

GET INVOLVED
Public involvement is an extremely important part of a PDE Study to inform citizens about the project and provide interested persons an opportunity to be involved in the development of the project. The environmental review, consultation and other activities required by applicable Federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated May 26, 2022, and executed by FHWA and FDOT. The Town of Bay Harbor Islands and FDOT encourage public participation without regard to race, color, national origin, sex, age, religion, disability or family status. There will be several opportunities to participate in public meetings and individual stakeholder discussions.

TOWN OF BAY HARBOR ISLANDS CONTACT:
TOWN ENGINEER: Holly Carron-Curtain, P.E., CEM, LEED AP
Town of Bay Harbor Islands
publicworks@bayharborislands.fl.gov
MNS Bay Harbor Terrace
Bay Harbor Islands, Florida 33154
Phone (305) 964-4141

VISIT OUR WEBSITE:
<https://www.bayharborislands.fl.gov>

Title VI Non-Discrimination Compliance



TOWN OF BAY HARBOR ISLANDS

complies with various Non-Discrimination Laws and Regulations, including Title VI of the Civil Rights Act of 1964

Public participation at this Public Meeting is encouraged and solicited without regard to race, color, national origin, age, sex, religion, disability or family status.

Persons wishing to express any concerns about Title VI may do so by contacting either:

Jenice Rosado
Assistant Town Manager
Town of Bay Harbor Islands
9665 Bay Harbor Terrace
Bay Harbor Islands, Florida 33154
305-866-6241
jrosado@bayharborislands-fl.gov

Stefan Kulakowski, FCCM, CPM
State Title VI Coordinator
Florida Department of Transportation
Equal Opportunity Office
605 Suwannee St. MS65
Tallahassee, Florida 32399
850-414-4742
stefan.kulakowski@dot.state.fl.us

Meet The Presenters/Panelists

Joshua Fuller



Vice Mayor

Maria Lasday



**Town
Manager**

Rodney Carrero-Santana



**Town
Project Manager**

David Konz



**Atkins
Project Manager**

Wendy Lasher



**Atkins
PD&E Lead**

Alicia Gonzalez



**Community Outreach
Specialist**

What Will Be Discussed Tonight?



MEETING AGENDA

- Project Overview
- Proposed Alternatives
- Alternatives Evaluation
- How To Stay Informed
- How To Comment
- Question and Answer Session



Participation Options

In-Person: September 26, 2023 (7:00 p.m. – 8:30 p.m.)

Morris N. Broad Community Center
1175 95th Street
Bay Harbor Islands, Florida 33154

Virtual: September 28, 2023 (6:00 p.m. – 7:00 p.m.)

- Via a computer, tablet, or smartphone using Zoom
- Attendees will remain muted throughout the meeting except for the public comment period at the end of the presentation.

Telephone

- Dial-in Attendees for the Virtual Option are in “listen only” mode. If you are calling via a smart phone, you will be able to raise your hand to provide comments during the public comment period at the end of the presentation.



To participate virtually from computer, tablet, or smartphone, please register using the following link:
<https://bit.ly/BCB-APW>

Participants can also call in by dialing
+1 (305) 224-1968; Meeting ID: 914 7274 3634

*Registration is encouraged not required.

SCAN TO
REGISTER



A recording of the presentation and meeting materials will be available on the project website: www.bayharborislands-fl.gov



What Agencies Will The Town Coordinate With?



Lead Agencies

Cooperating Agency

Federal, State, and Local Stakeholders

NEPA ASSIGNMENT STATEMENT

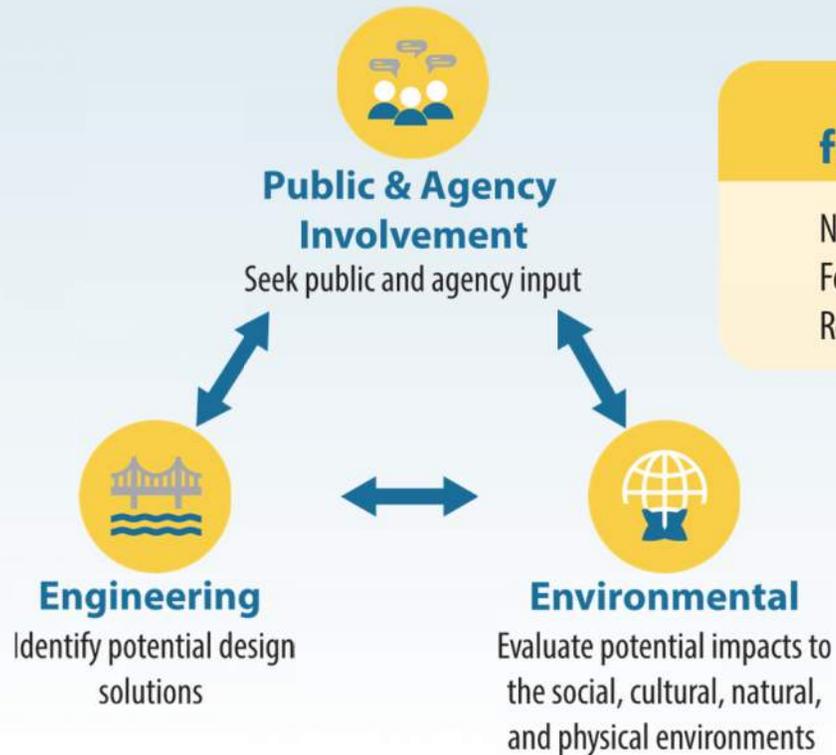
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What Is a PD&E Study?

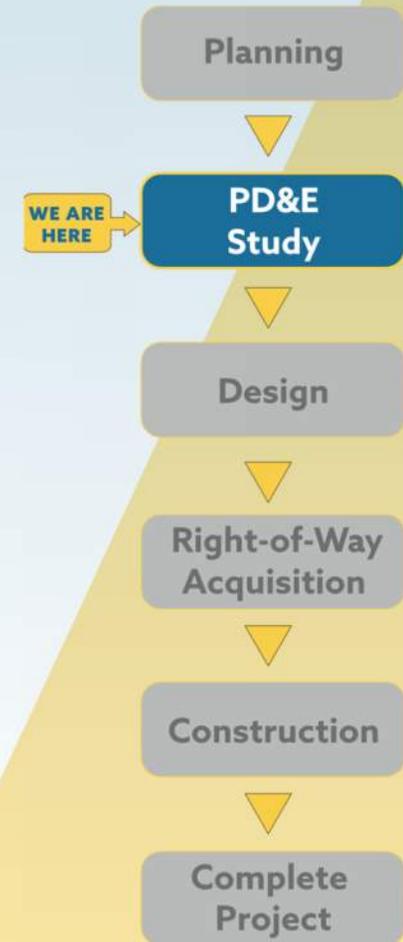
A Project Development & Environment (PD&E) Study is a process to analyze a transportation project.

It consists of 3 elements:



The PD&E Process is followed to comply with:

National Environmental Policy Act (NEPA)
Federal and State environmental laws
Requirements involving federal funding



Project Overview



BRIDGE CONSTRUCTED 1951 – 72 YEARS OLD

- Ongoing extensive and costly repair projects
- Increased cost to maintain

RECENT MAJOR BRIDGE REPAIR PROJECTS

- \$17 million completed in 2017
- \$3 million initiated in 2023 (ongoing)



BRIDGE CONDITION RATED FAIR

- 2023 FDOT Bridge Inspection
- Graded "Functionally Obsolete" by National Bridge Index
- Bridge does not meet current road design standards
- Undersized power generator



What Is The Purpose And Need For This Project?

PROJECT PURPOSE

- Identify the best solution for replacement of the existing bridge

PROJECT NEED

- Address Bridge Deficiencies
- Improve Safety
- Improve Flow of Traffic
- Maintain Emergency Evacuation



What Are The PD&E Engineering Considerations?

BRIDGE

- Profile (Height) of Bridge
- Type of Bridge
- Alignment
- Navigational Clearances
- Bicycle and Pedestrian Facilities

ROADWAY

- Width of Roadway
- Intersections
- Bicycle and Pedestrian Accommodations
- Access to Service Station
- Access to Residents
- Construction Impacts
- Traffic Flow Relief

OTHER PROJECT AREAS

- Drainage
- Utilities
- Lighting
- Bridge Aesthetics
- Geotechnical
- Constructability
- Historic Preservation
- Concurrent Project
- Estimated Cost



What Are The PD&E Environmental Considerations?

NATURAL

- Protected Species and Habitat
- Essential Fish Habitat
- Aquatic Preserve
- Outstanding Florida Waters
- Wetlands
- Water Quality



SOCIAL & CULTURAL

- Historic and Archaeological Sites
- Recreation and Section 4(f) Resources
- Mobility
- Aesthetics Effects – View to and from the bridge



PHYSICAL

- Traffic Noise
- Air Quality
- Contamination
- Navigation
- Utilities



What Are The PD&E Project Constraints?

1. TOWN OF BAY HARBOR ISLANDS TOT LOT

- Community Park
- Section 4(f) Resource



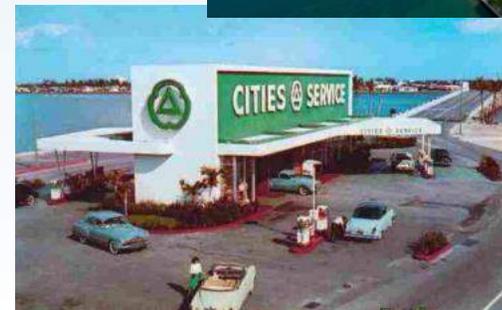
2. NAVIGATION

- Atlantic Intracoastal Waterway
- Cannot move navigational channel
- USCG requires 90 feet horizontal and 21 feet vertical clearances for bascule (movable) bridge
- USCG requires 90 feet horizontal and 65 feet vertical clearances for fixed bridge



3. SERVICE STATION

- Historic - determined NRHP eligible
- Contamination site



What Are The PD&E Project Constraints?

4. PEDESTRIAN AND BICYCLE ACCOMMODATIONS

- Improve Safety
- Provide multi-use path
- Slope meets ADA requirements



5. PROJECT COST

- Town is funding PD&E study with toll revenue
- Town has four bridges to maintain
- Funding (approximately 80%) will be pursued through Federal, state, and local grants with any remaining balance paid with toll revenue
- Toll revenue used to inspect, operation, and maintain four bridges

6. RELOCATION AND RIGHT-OF-WAY (ROW)

- Replace bridge within existing ROW
- Avoid residential and business relocations
- Utilize Town's vacant parcel



What Are The PD&E Project Constraints? - ROW



Included in the Town Charter by the 1953 Senate Bill No. 865, the State of Florida surrendered and granted to the Town of Bay Harbor Islands any claim or control over all tidewaters and other lands, and all bayous and bay bottoms, beaches, waters, waterways and water bottoms, and all riparian rights within and adjacent to the Town limits for municipal purposes only, a strip of 300 feet wide from Kane Concourse, westwardly across Biscayne Bay to approximately 123rd Street in the City of North Miami.

What Are the Proposed Alternatives?

PROPOSED ALTERNATIVES

- No Build Alternative
- Alternative 1: 65-foot High-Level Fixed Bridge
- Alternative 2: 40-foot Mid-Level Movable Bridge

ALTERNATIVES ANALYSIS

- Alignment
- Profile (height of the bridge)
- Typical Section (view of the driver)
- Pedestrian Accommodations
- Evaluation Matrix



QR Code to Video of
Proposed Build Alternatives



No Build Alternative



Alternative 1



Alternative 2

Proposed Alternatives



NO BUILD ALTERNATIVE

- Existing deficiencies will remain
- Continued deterioration
- Extensive and costly periodic repairs and maintenance
- Potential bridge closures if moveable bridge machinery breaks (unpredictable)
- Life of the bridge is expected to be 15-25 years at which time the bridge will have to be decommissioned or replaced
- No bridge eliminates toll revenue and may cause tax increases



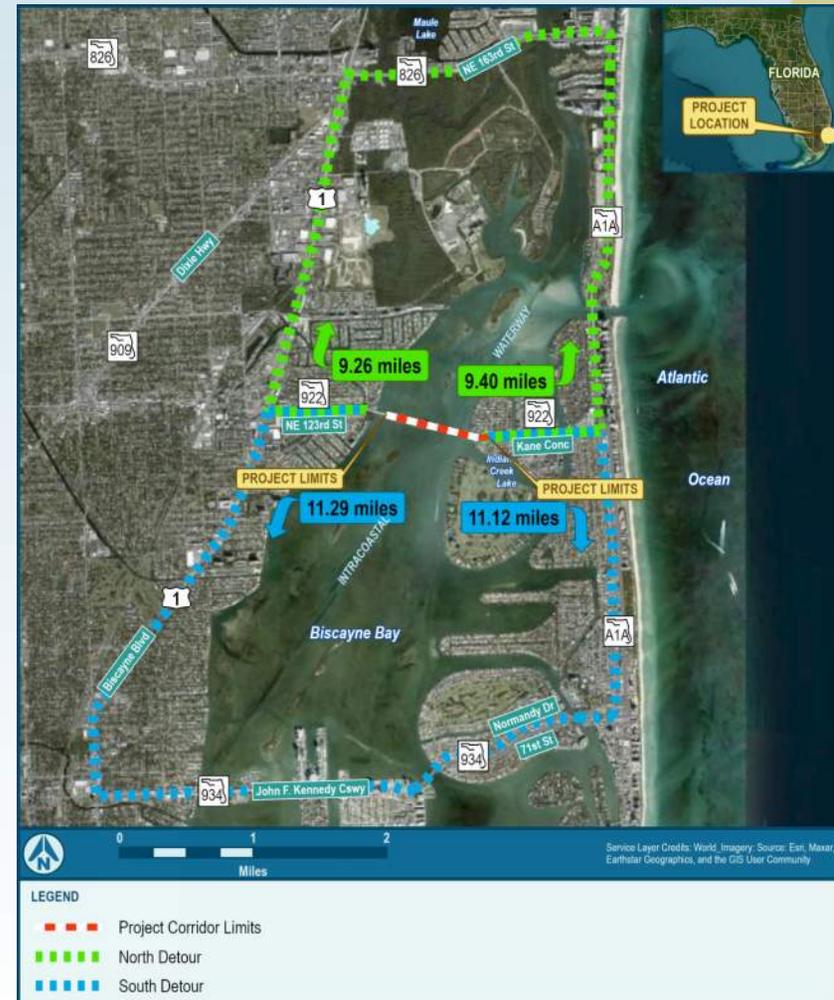
Does not meet the purpose and need for the project

Proposed Alternatives



NO BUILD ALTERNATIVE

- If the bridge is closed for repair or decommissioned, an 11-mile detour to the south or a 9-mile detour to the north would be necessary
- Emergency response and evacuation impacted



Alternatives Analysis - Alignment



SOUTHERN ALIGNMENT CHOSEN IN ORDER TO:

- Avoid Town of Bay Harbor Islands Tot Lot - Section 4(f) Resource
- Utilize Town-owned vacant parcel
- Avoid relocations and acquisition of right-of-way
- Avoid phased construction, reducing schedule by 12 – 15 months
- Avoid gas line on the north side of the existing bridge



Alternatives Analysis - Alignment



ALTERNATIVE 1: HIGH-LEVEL FIXED BRIDGE



Alternatives Analysis - Alignment



ALTERNATIVE 2: MID-LEVEL MOVABLE BRIDGE



Alternatives Analysis – Alignment



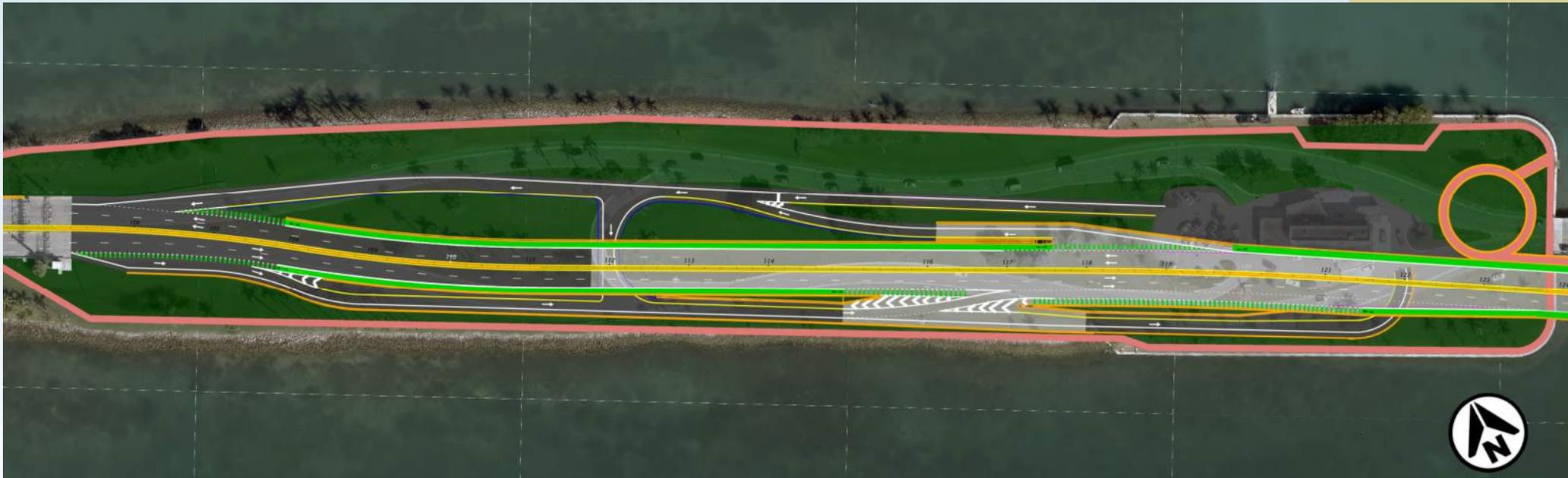
CAUSEWAY ISLAND POTENTIAL CONFIGURATION



Alternatives Analysis – Alignment



CAUSEWAY ISLAND POTENTIAL CONFIGURATION



Alternatives Analysis – Alignment

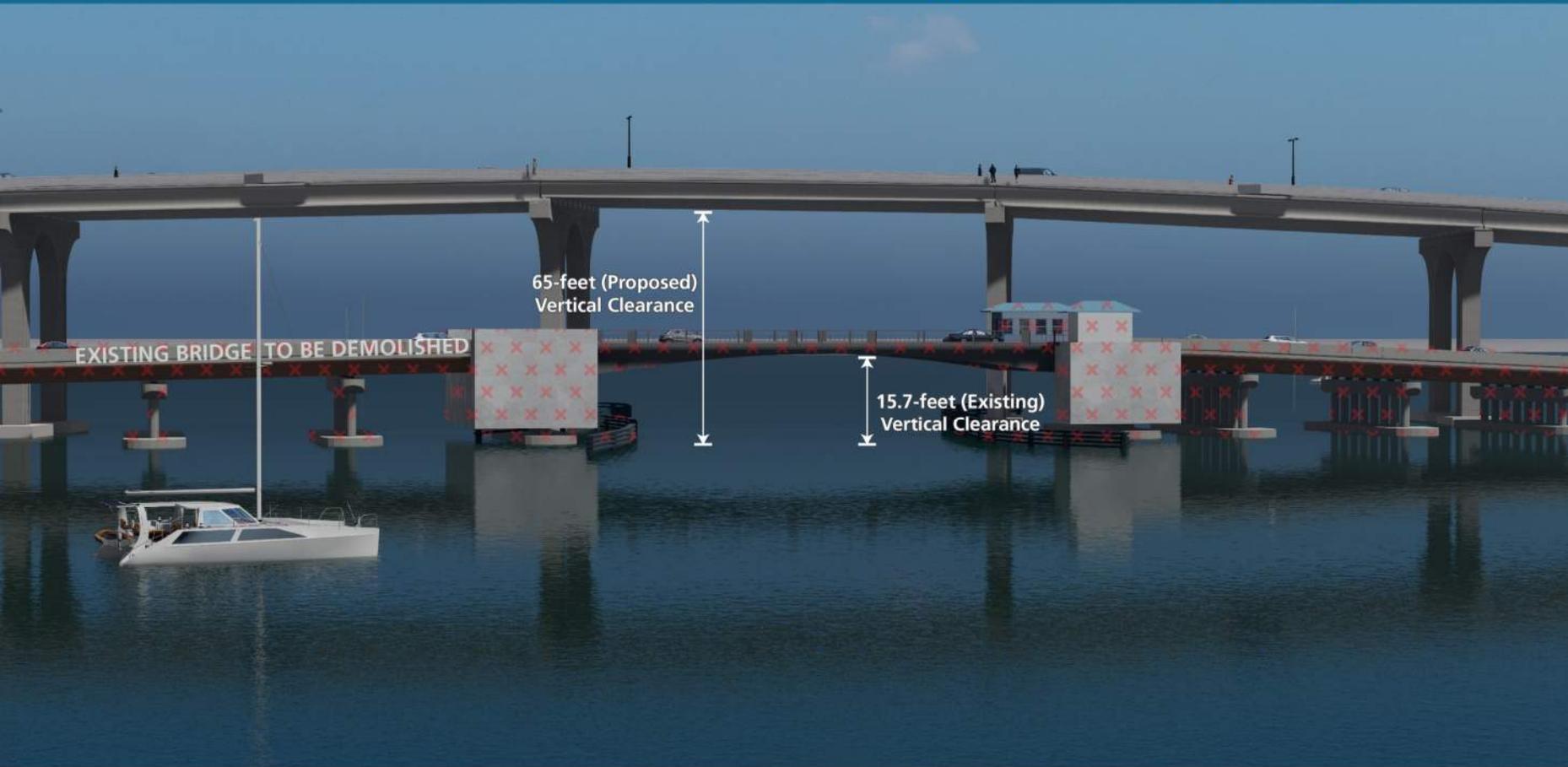


CAUSEWAY ISLAND ALTERNATIVES 1 AND 2



Alternatives Analysis – Profile (Height) Comparison

Alternative 1 - High-Level Fixed Bridge vs. Existing Bridge



View Looking South from North Side of Biscayne Bay

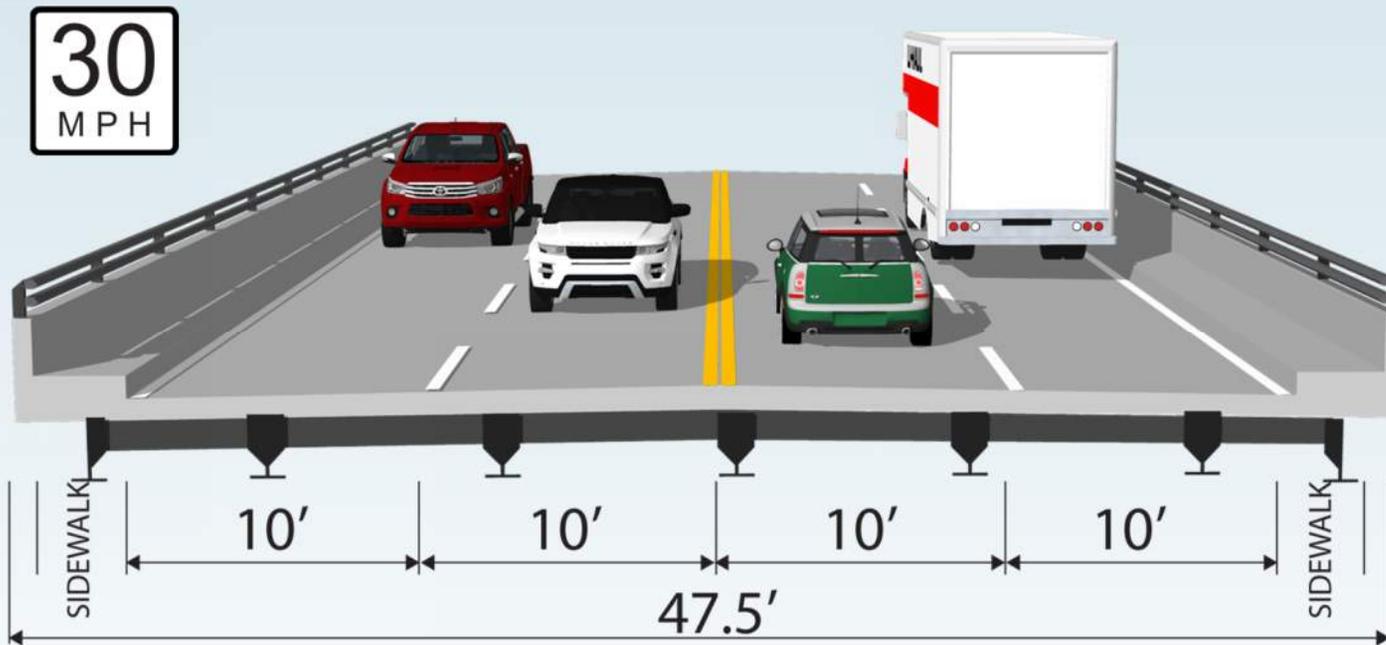
Alternatives Analysis – Profile (Height) Comparison

Alternative 2 - Mid-Level Movable Bridge vs. Existing Bridge



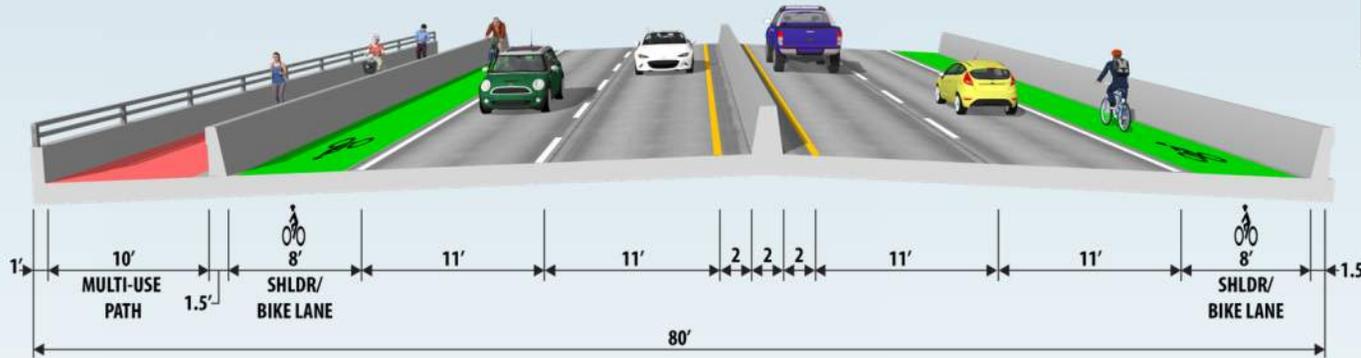
View Looking South from North Side of Biscayne Bay

Alternative Analysis - Existing Bridge Typical Section

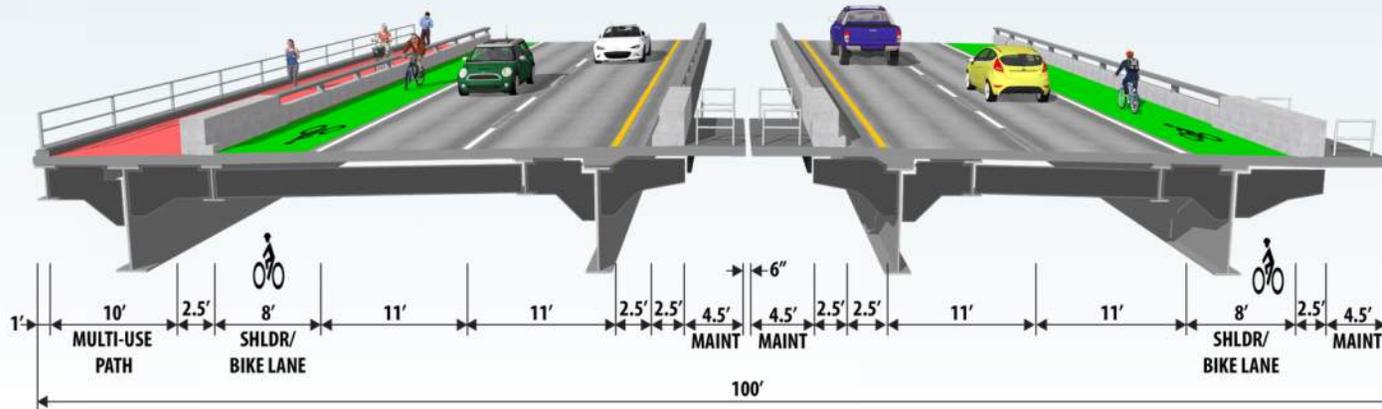


Alternatives Analysis – Proposed Bridge Typical Sections

ALTERNATIVE 1: HIGH-LEVEL FIXED BRIDGE



ALTERNATIVE 2: MID-LEVEL MOVABLE BRIDGE



Alternatives Analysis – Pedestrian Accommodations

BOTH BUILD ALTERNATIVES

- Multi-use path on north side of bridge
- Meets ADA requirements
- Bridge overlooks for the public
- Sidewalk around the causeway island

ALTERNATIVE 1 – HIGH-LEVEL FIXED BRIDGE

- Barrier separated pedestrian ramp and landings
- Variable slope with most ramps <6%

ALTERNATIVE 2 – MID-LEVEL MOVABLE BRIDGE

- Slope of < 3% on the west side and ~4% on the east side



Alternative 1



Alternative 2



Alternative 1

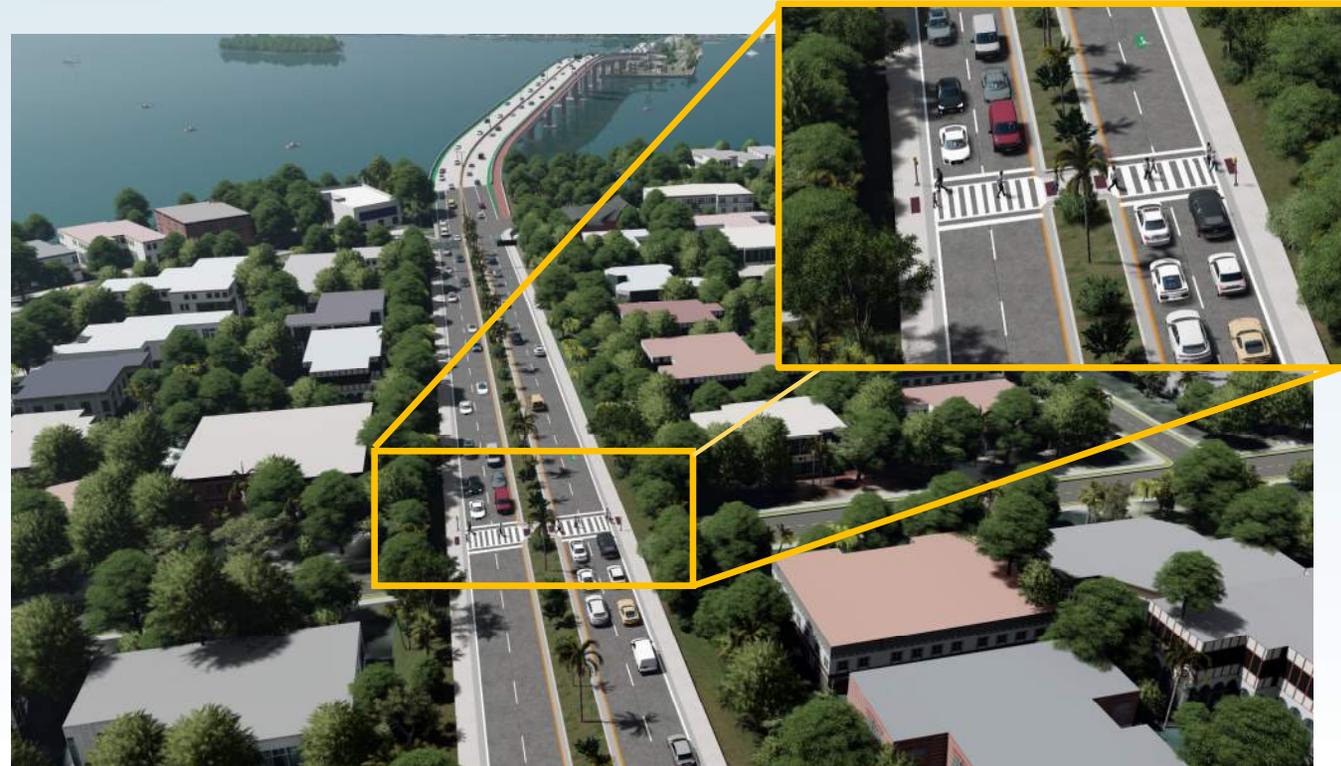


Alternative 2

Alternatives Analysis – Pedestrian Accommodations

CROSSWALK

- Pedestrian accommodations are on the north side of the bridge
- Mid-block pedestrian crosswalk to move pedestrians to north side of roadway
- Push-button crossing



Miami Beach Example

Alternatives Analysis – Eliminated Alternative



REHABILITATION

- Not a prudent nor feasible compared to build alternatives
- Widening is required to meet Design Standards
 - Northern widening is not practicable due to the Tot Lot and gas line
 - Southern widening is not practicable due to the electrical room and tender house
- The bridge has undersized bascule components
- Major rehabilitation needed to increase the remaining service life
 - Deck (driving surface) replacement
 - Mechanical/electrical upgrades
 - Corrosion mitigation measures (pile jackets, zinc metalizing)
- Significant cost with a lifespan < 40 years



Evaluation Matrix



Criteria/Category		No Build Alternative	Alternative 1 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	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.
	Slope of Road on Bridge (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	Low	Low
	Potential Impacts to Historic Resources	N/A	High	High
	Potential Impacts to Parks/Recreation Areas (#)	0	1	1
	Town of Bay Harbor Islands Tot Lot	No	No	No
	Florida Circumnavigational Saltwater Paddling Trail ²	No	Yes	Yes
	Aesthetic/Visual Changes	No	Yes	Yes
Pedestrian and Bicycle Facility Improvements	No	Yes	Yes	

¹ The bridge sidewalks will comply with ADA requirements.

² Temporary impacts during construction only.

Evaluation Matrix

Criteria/Category		No Build Alternative	Alternative 1 High-Level Fixed Bridge	Alternative 2 Mid-Level Movable Bridge
NATURAL & PHYSICAL RESOURCES	Potential Impacts to Wetlands (acres)	0	0	0
	Potential Impacts to Essential Fish Habitat (acres)	0	3.07	3.52
	Threatened/Endangered Species Potential	N/A	Medium ³	Medium ³
	Potential Impacts to Sovereign Submerged Lands	No	No	Yes
	Potential Noise Sensitive Sites (#)	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 COSTS⁴ (2023 Dollars, in millions)	Lifespan of Alternative (Estimated Years) ★	25	75	75
	Design	N/A	\$15.9	\$32.7
	Mitigation	N/A	TBD	TBD
	Construction	N/A	\$204.5	\$339.4
	Bridge Tender	\$30.7	\$0	\$30.7
	Inspection & Maintenance	\$41.7	\$4.8	\$22.3
TOTAL		\$72.4	\$225.2	\$424.2

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

⁴ Preliminary estimates are for planning purposes only. Final construction cost estimates will be prepared during the design phase.

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

No Build Alternative	Alternative 1 High-Level Fixed Bridge	Alternative 2 Mid-Level Movable Bridge
\$72.4 million	\$225.2 million	\$424.2 million

Excludes “Major Repairs” due to accelerated deterioration

Alternatives Key Differentiators

Advantages

Disadvantages

No Build Alternative



- No construction
- No impacts to environmental resources
- Maintains roadway slope
- Lowest short-term cost (\$72.4M)

- Substandard roadway lane widths and pedestrian accommodations
- Bridge will continue to deteriorate and will be decommissioned at end of estimated 25 year lifespan
- Potential for bridge closures and detours from machinery failure
- Frequent bridge openings and wait times for vehicular and marine traffic
- Bridge condition may affect emergency evacuation

Alternative 1



High-Level Fixed Bridge

- New bridge (estimated 75 year lifespan)
- No bridge openings or wait time for vehicle and marine traffic
- No impacts to Sovereign Submerged lands
- Lower impact to Essential Fish Habitat
- Lowest Build Alternative cost (\$225.2M)

- 65-foot bridge - Steeper roadway and multi-use path slopes
- 65-foot bridge - More visual impacts to businesses and residents

Alternative 2

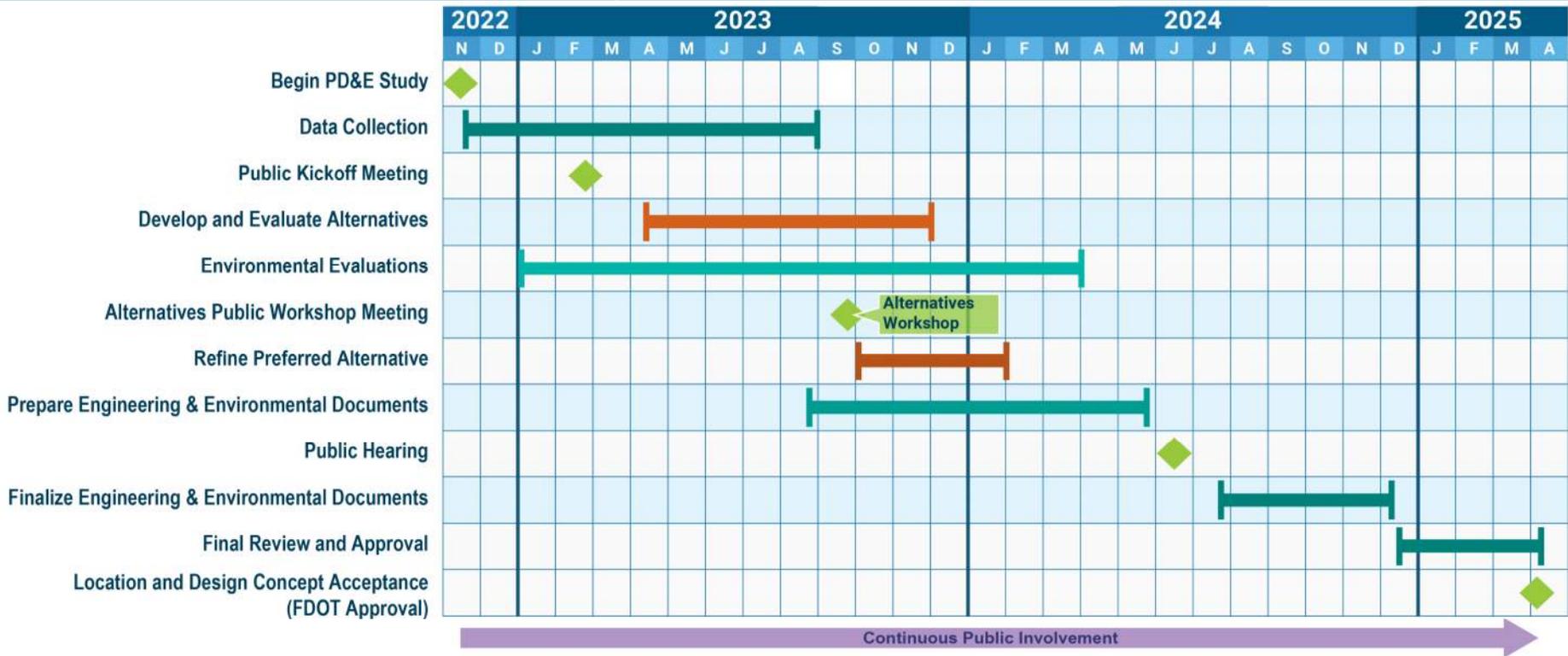


Mid-Level Movable Bridge

- New bridge (estimated 75 year lifespan)
- 40-foot bridge - Reduced roadway and multi-use path slopes
- 40-foot bridge - Less visual impacts to businesses and residents

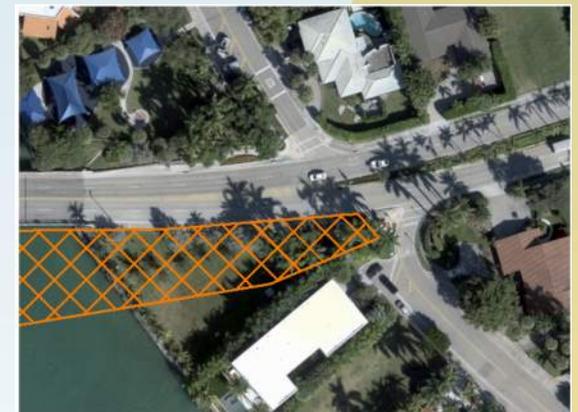
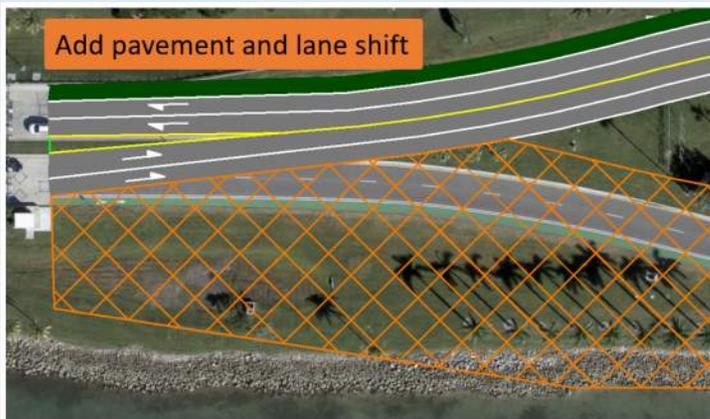
- Bridge openings and wait times for vehicular and marine traffic
- Impacts to Sovereign Submerged lands
- Higher impact to Essential Fish Habitat
- Highest Build Alternative cost (\$424.2M)

What Are the Next Steps and PD&E Schedule?



What is the Maintenance of Traffic During Construction?

- Using existing bridge.
- Shifting all traffic to the north side of the causeway island to reconnect at the toll gantry.
- Providing full corridor work zone to the south.



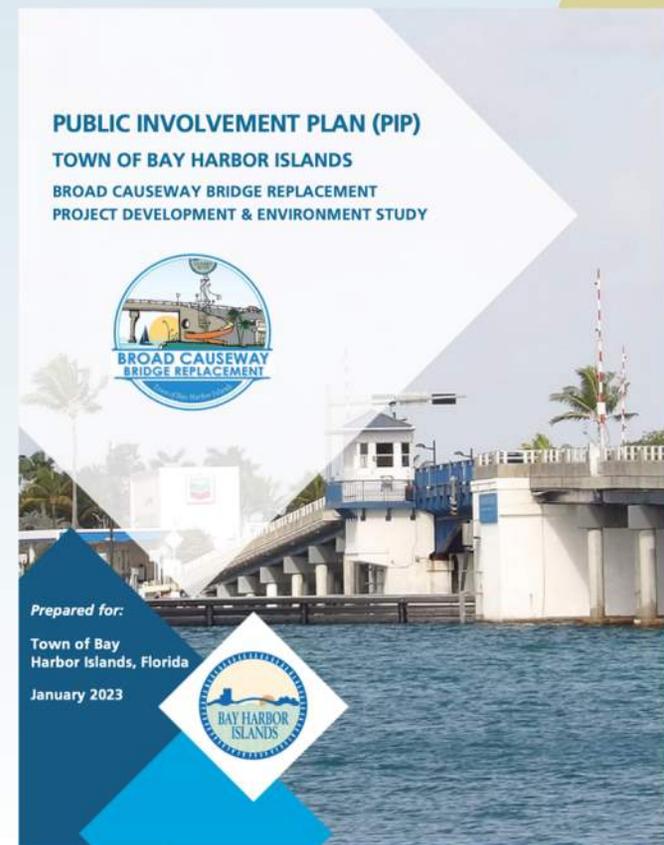
How Can I Stay Informed?



Public Engagement is Ongoing During the Entire PD&E Process

STAY ENGAGED BY:

- ✓ Attend Project Public Meetings
- ✓ Attend Public Hearing
- ✓ Participate in Surveys
- ✓ Visit the Project Website
- ✓ Provide Comments by E-mail, Mail, or Submit a Comment Card Tonight



How Can I Comment?



MAIL

Media Relations Group, LLC
Attn: **Alicia Ana Gonzalez**
14707 South Dixie Hwy, Suite
404
Miami, Florida 33176

(786) 280-6645



E-MAIL

Alicia Ana Gonzalez
agonzalez@mrgmiami.com



**COMMENT
FORM**

Submit a comment
form tonight or by mail



**PROJECT
WEBSITE**

www.bayharborislands-fl.gov



Project Question and Answer Session



IN-PERSON MEETING

- Fill out a speaker request card and provide contact information
- When your name is called, please come and speak into the microphone
- You have two (2) minutes to state your question(s) or comment(s)
- We will try to answer your question(s) or we will make note of the question and respond to you via mail or e-mail





**Thank you for
attending!**

