

PROJECTS HAPPENING NEAR VENETIAN CAUSEWAY

As the FDOT District Six continues with the PD&E Study on Venetian Causeway, there are also several planned transportation projects happening in the area.

Venetian Causeway West Bridge Design-Build Project

Agency: Miami-Dade County

Miami-Dade County is proposing a design-build project to replace the westernmost portion of the Venetian Causeway West Bridge. This project is expected to begin Spring 2015.

West Avenue Bridge Design-Build Project

Agency: City of Miami Beach

This City of Miami Beach project proposes a new bridge crossing over the Collins Canal between Lincoln Road and 18 Street. This project is currently in procurement and is anticipated to begin Spring 2015.

State Road (SR) 907/Alton Road from 5 Street to Michigan Avenue

Agency: Florida Department of Transportation, District Six

This FDOT District Six project includes roadway and drainage improvements on Alton Rd and intersecting streets. Construction began on April 1, 2013 and is expected to end in the summer of 2015.

State Road (SR) 5/Biscayne Boulevard from NE 13 Street to NE 78 Street

Agency: Florida Department of Transportation, District Six

The FDOT District Six is developing the design for the construction of a roadway project along SR 5/Biscayne Boulevard, from NE 13 Street to NW 78 Street in Miami. Design of this project is ongoing and construction is expected to begin in the summer of 2015.

UPCOMING MEETINGS

Citizens Advisory Committee (CAC)

Thursday, September 18, 2014

1000 Venetian Way

Miami, FL 33139

6:00 p.m. to 8:00 p.m.

The purpose of the CAC is to ensure that the range of stakeholder views regarding possible improvements to the Venetian Causeway is clearly understood and fully considered by the project team, and to help the project team explore how to address the issues and needs that may be identified through the study.

Cultural Resource Committee (CRC)

Wednesday, September 24, 2014

1000 Venetian Way

Miami, FL 33139

3:00 p.m. to 4:30 p.m.

The purpose of the CRC is to assist with developing ideas on how to address potential impacts to the historic aspect resulting from future road construction.

Non-Discrimination Laws and Regulations

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. Persons who require special accommodations under the Americans with Disabilities Act (ADA) or persons who require translation services (free of charge) should contact Ms. Fang Mei, P.E., at 305-470-5342 or in writing at the Florida Department of Transportation, District Six, 1000 NW 111 Avenue, Room 6111, Miami, Florida 33172 or by email at fang.mei@dot.state.fl.us.

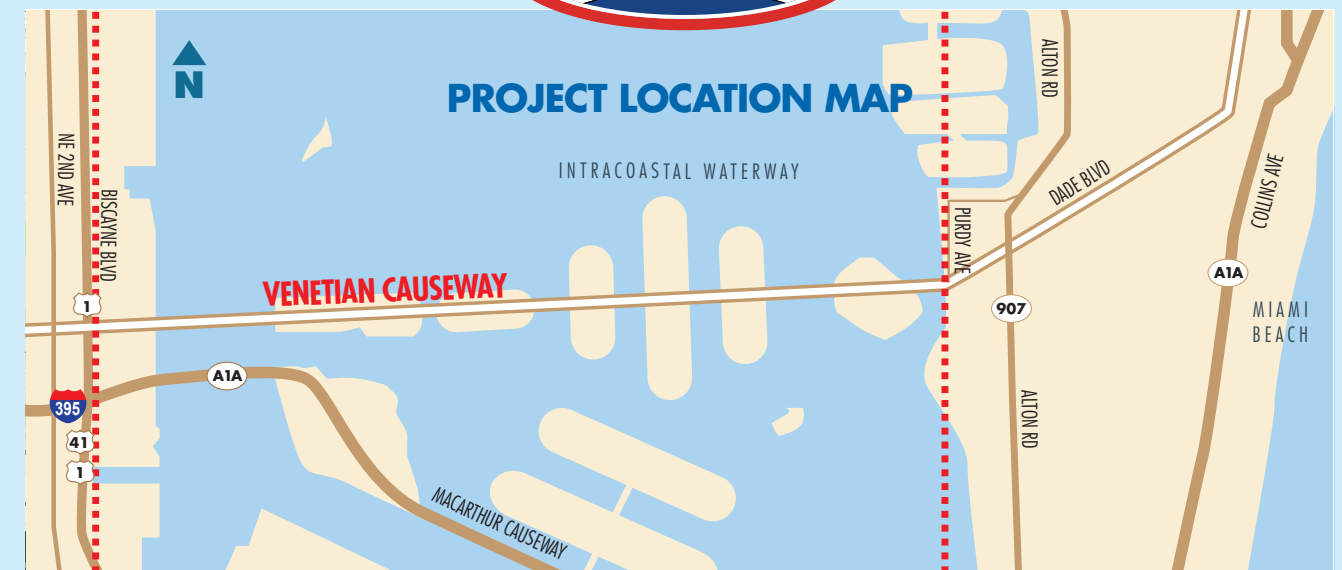


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VENETIAN CAUSEWAY PD&E STUDY

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EFFICIENT TRANSPORTATION DECISION MAKING NO. (ETDM): 12756



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www.fdotmiamidade.com/VenetianBridgeStudy

This newsletter is dedicated to the Florida Department of Transportation (FDOT) District Six's Project Development & Environment (PD&E) Study to examine the potential replacement or rehabilitation of the twelve existing bridges that comprise the Venetian Causeway.

Over 70 Residents and Business Owners Attend PD&E Public Kick-Off Meeting

On Wednesday June 25, 2014, over 70 residents and business owners attended the public kick-off meeting for the Venetian Causeway PD&E Study being developed by FDOT District Six. The meeting was held at the Miami Beach Regional Library from 6:00 p.m. to 8:00 p.m. The purpose of the meeting was to increase the public's understanding of the study and encourage participation in the process.

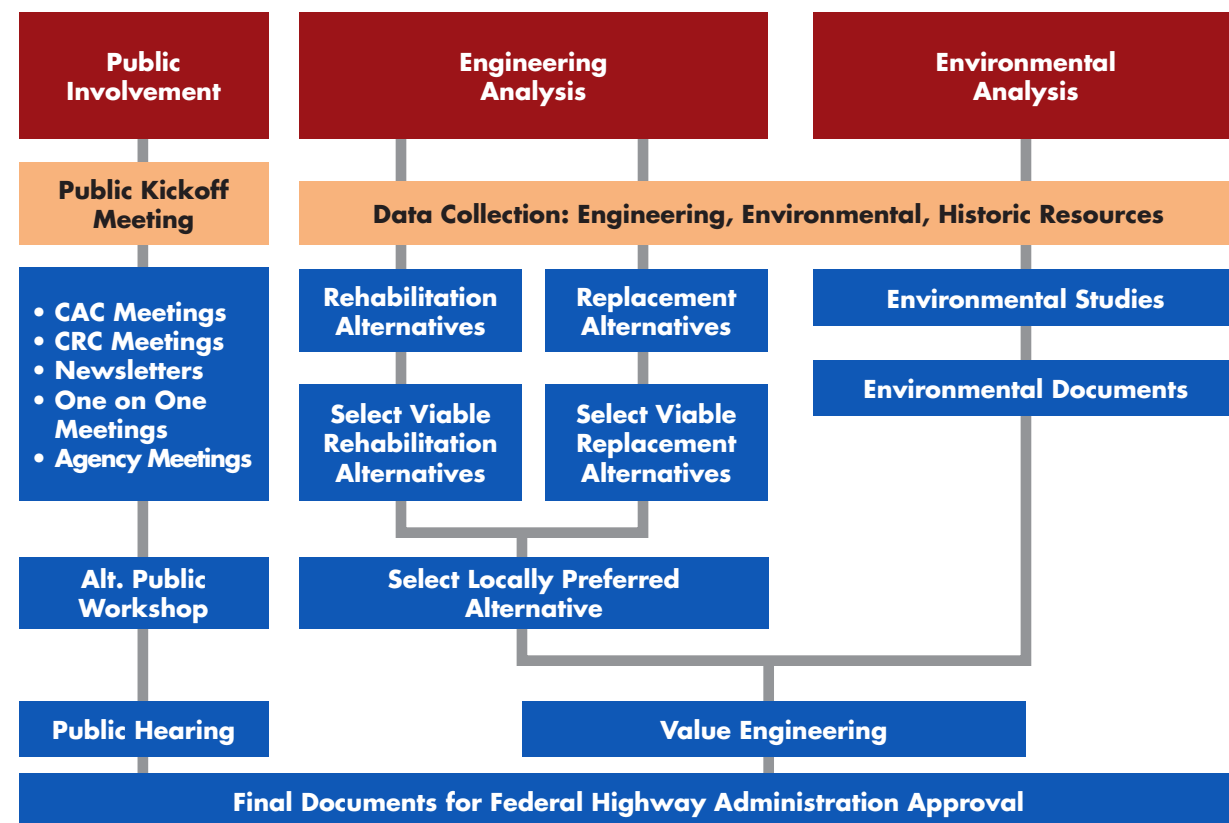


Meeting attendees watch an in-depth presentation about the project

The meeting gave the public an in-depth introduction of the project from the FDOT engineers working on the project team. The public was given information regarding the purpose of the project and an overview of existing conditions in the area. A study schedule was also discussed and distributed to the public at the meeting.

The public was given the opportunity to ask questions, express their concerns and share their thoughts with FDOT about the project. Topics of discussion during the meeting included preserving the historic design of the bridges, the construction of new bicycle lanes and environmental concerns. FDOT District Six is committed to keeping the public informed during the study. The flowchart below illustrates the anticipated elements of the PD&E Study. The Study is currently in the Data Collection phase.

PD&E Process



Historic Character of the Venetian Causeway

Constructed in 1926, the Venetian Causeway crosses the Intracoastal Waterway and links mainland Miami to Miami Beach. The Causeway consists of a series of twelve bridges containing two movable bascule spans connecting six islands via a two lane road, spanning a distance of two and one half miles. The islands, from west to east, are named Biscayne Island, San Marco, San Marino, DiLido, Rivo Alto, and Belle Island. The twelve spans are a series of viaducts built of reinforced concrete. The bridge decks are carried on shallow arched girders resting on square concrete piers anchored to the bay bottom. The planks of the original wooden bridge, the Collins Bridge (completed by John Collins in 1913), that followed the same alignment of the Venetian Causeway, are embedded under the road surface on the landfill portions of the causeway. The railings, one of the main decorative features of the bridge, were originally constructed of reinforced concrete in a pierced, ornamental geometric design that have square units with radiating diagonals forming an "x" pattern. This simple design forms a bold pattern while allowing a view of the bay from all bridges. This railing was replicated with a heavier railing that maintained the geometric pattern of the original railing as part of the 1998 rehabilitation of the bridges. The original



street light fixtures were lost at some point during the life of the bridges, but were replicated from photographs as part of the 1998 rehabilitation.

According to the 1989 National Register of Historic Places (NRHP) Nomination, the Venetian Causeway, the oldest causeway in Miami-Dade County, is significant at the local level under Criterion A under community planning and development as a bridge designed and constructed as an essential element of the planned community of Venetian Islands. The Venetian Causeway was the final phase of the development of the island communities and was the vital link to the surrounding Miami-Miami Beach areas. The Venetian Causeway was completed in 1926, shortly after the four central islands were created by the Bay Biscayne Improvement Company.

Although the NRHP Nomination specifies that the Causeway is significant in the area of community planning and development, it appears that its significance can also be attributed to significant design elements such as the arched girders, decorative railings and entrance towers. Therefore, for the purposes of this PD&E Study, the Causeway is also considered significant under NRHP Criterion C: Design/Construction.

Existing Bridge Condition

The sufficiency rating (S.R.) of a bridge is calculated per a formula defined in the Federal Highway Administration's Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges. This rating is indicative of a bridge's sufficiency to remain in service and is calculated based on 100 points with 55% attributed to the structural adequacy and safety of the bridge, 30% to the serviceability and functional obsolescence of its design, and 15% to its essentiality for public use. The ratings are used for federal funding purposes. Generally, a bridge must be considered structurally deficient or functionally obsolete and have a sufficiency rating of 80 or less to be eligible for federal repair funding, and 50 or less for federal replacement funding. A comparison of the current year 2014 sufficiency ratings of the Venetian Causeway bridges to the year 2011 sufficiency ratings are presented to the right:

Bridge No.	S.R. 2011	S.R. 2014	Rating
1	32.6	32.4	F.O.
2	52.0	47.6	F.O.
3	55.5	49.5	F.O.
4	55.5	49.5	F.O.
5	47.9	40.1	F.O.
6	57.6	48.6	F.O.
7	55.5	54.5	F.O.
8	55.5	54.5	F.O.
9	64.0	61	F.O.
10	57.5	54.5	-
11	64.0	55.7	F.O.
12	68.1	67.1	-

F.O. = Functionally Obsolete
S.R. = Sufficiency Rating

The Bridges on the Venetian Causeway have required numerous repairs since first constructed in 1926. Records dating back to the 1970s indicate the following repairs to the bridges.

- 1970s:** Bridge Rehabilitation—extensive repairs to the girders and deck, more than half of the 201 pile caps repaired.
- 1998:** Bridge Rehabilitation—40% to 90% of girders and deck repaired, one pile cap repaired, riprap placed at all foundations.
- 2011:** Bridge Repairs—50% to 75% of the girders and deck repaired

A significant amount of original bridge construction has been lost due to repairs and replacement.

- New light poles that replicated the original light poles were constructed in 1998
- New railings that replicated the original railings and satisfied current load criteria were constructed in 1998 along with the portion of the deck that overhangs the exterior beams.
- 60% of the westernmost bridge was replaced in 1998 including the drawbridge. Miami-Dade County is currently planning on replacing the rest of this bridge as part of an emergency repair project to address safety concerns with the remaining portion of the original bridge.
- The east drawbridge superstructure was replaced in 1998