

## Venetian Causeway West Bascule Bridge Fact Sheet and Frequently Asked Questions

### Venetian Bridge History

The historic Venetian Causeway connects mainland Miami with the Venetian Islands and Miami Beach. The Causeway is operated by the Miami-Dade County Public Works and Waste Management Department (PWWM) and includes a toll plaza which processes two-way traffic and collects tolls electronically through SunPass and TOLL-BY-PLATE.

The current Causeway follows the original route of the Collins Bridge, a wooden structure built in 1913. The Venetian Causeway was constructed in 1927 and consists of 12 bridges – 10 fixed and 2 bascule bridges – which span the 11 man-made Venetian Islands. In 1989, the Venetian Causeway was included on the National Register of Historic Places. Additionally, the Cities of Miami Beach and Miami have designated the Causeway as a local historic landmark.

Between 1996 and 1999, the Florida Department of Transportation (FDOT) provided funding for necessary bridge repairs. The repairs consisted of major rehabilitation of the beams and decks for all 12 bridges, the complete replacement of the bascule portion of the East Venetian Bascule Bridge, and the replacement of approximately 70% of the West Venetian Bascule Bridge, including the bascule span itself. It is important to note that at that time FDOT's plan was to fund and fully replace the bridges, instead of only rehabilitating them. However, the replacement plan was opposed by the area's residents as FDOT's proposal was not consistent with the historic nature of the existing bridges (e.g., architectural arch beams, railings, low profile elevations).

FDOT mandated that the County post load restrictions on the Causeway in 2004 and the County has maintained them until 2014 when a new directive was given by FDOT to make these restrictions more stringent.

Between 2009 and 2011, PWWM conducted a major rehabilitation project to repair the Causeway bridges' beams and decks. Construction costs for the rehabilitation project were slightly more than \$7.1 million. The rehabilitation project was funded by Causeway toll revenues and federal government grant dollars through the County Incentive Grant Program (CIGP). The scope of work for this project included major repairs to the support beam, including the removal of existing concrete and adding new, reinforcing concrete. Major repairs were also performed on the diaphragm, the deck underside and the support piers. Following the 2009- 2011 rehabilitation, PWWM Road and Bridge Maintenance crews have provided regular maintenance activities.

In 2011, FDOT, in partnership with the PWWM, initiated a Project Development and Environmental Study (PD&E) for the bridge's future replacement. The PD&E evaluates replacement alternatives, taking into consideration the bridge's historic designation, public and stakeholder concerns, environmental impacts and potential costs. The PD&E is anticipated to be completed in the next three to four years (2018-2019).

Q. When was the last inspection conducted?

A. The bridge received its last biennial inspection in November 2013 and received a rating of 32.6 on a scale of 100.

Q: What happened on the West Venetian Bascule Bridge that resulted in the need for rehabilitation?

A: On March 15, 2014, there was a localized bridge deck failure involving a Miami-Dade Transit passenger bus. The bus, which met the weight restrictions in place at the time of the incident, was traveling eastbound. There were no passenger injuries and no significant damage to the bus. However, the roadway was closed overnight to conduct emergency repairs. Three metal plates were installed on the first 730 feet of the bridge. The roadway was re-opened to vehicular traffic by 6 a.m. on March 16, 2014.

Q. What is the cause of the deterioration on the bridge?

A. Due to their location and low elevation, the bridges have and continue to be subject to the typical deterioration caused by a harsh marine environment.

Q. Have there been emergency inspections of the Venetian bridges following the incident with the County bus?

A. Immediate inspections were initiated on March 19, 2014. Working with the Florida Department of Transportation, PWWM obtained the services of an FDOT consultant to conduct inspections of all of the Venetian bridges to determine the full extent of the required repairs.

Q. What other temporary measures have been taken to make the bridge safe for travel?

A. On Wednesday April 9, 2014, the department closed the bridge to vehicular traffic from 8 p.m. to 6 a.m. to install 13 additional metal plates to distribute weight loads over the entire width of the Venetian West Bascule Bridge.

Q. Are there new weight restrictions on the Venetian Causeway?

A. On Thursday, April 10, 2014, new signage was installed on the Venetian Bridges lowering the weight limit from 15 tons to 11 tons on all of the bridges except the Venetian West Bascule Bridge, which has a 5-ton limit. The weight limits are being enforced by the FDOT. Violation of posted weight restrictions may result in a traffic citation per Florida State Statute 316.555.

Q: When will the West Venetian Bascule Bridge be repaired?

A: PWWM has secured a design/build contractor to accomplish the complete replacement of the affected segment of the bridge. Actual closure of the bridge is scheduled for June 1, 2015 and is anticipated to last up to nine months. During construction, the bridge will be closed to vehicular, pedestrian and cyclist traffic. The estimated cost for demolition and replacement of this segment of the bridge is \$12 million and is projected to extend the life expectancy of the bridge by 60 years.

Q: What will be the other roadway options during construction?

A: The MacArthur and Julia Tuttle Causeways provide access between Miami Beach and the Mainland. PWWM is working with FDOT and the City of Miami Beach to coordinate, to the extent possible, the timing of its construction work on the Venetian Causeway with other roadway improvement projects in the area.

Q: Will tolls be collected during the rehabilitation and closure of the bridge?

A: The toll plaza is located on the western end of the bridge between the Venetian Islands and mainland Miami. This portion of the bridge will be closed during rehabilitation; as a result, no tolls will be collected.