



SR 5/US 1 Long Key Bridge

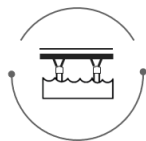
Over Long Key Channel (Bridge # 900094) Project Development and Environment (PD&E) Study
FPID 448206-1-22-01 | ETDM 14451
Monroe County, FL

Newsletter 2: Fall 2023

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) Study along SR 5/US 1/Overseas Highway over the Long Key Channel. The project location is the Long Key Bridge (No. 900094), which carries SR 5/US 1/Overseas Highway over the Long Key Channel. The Bridge is located within the Florida Keys in unincorporated Monroe County. Situated in the Middle Keys, halfway between Miami and Key West, the Bridge connects Conch Key to Long Key. The Long Key Bridge, also known as the Dante B. Fascell Bridge, is part of the 110-mile Florida Keys National Scenic Highway and All-American Road. It is the second largest bridge on SR 5/US 1/Overseas Highway after the Seven-Mile Bridge. The Long Key Bridge was constructed in 1981 parallel to the Long Key Viaduct, which carried the Overseas Railroad from 1907 – 1935. The Long Key Viaduct discontinued use after the 1935 Hurricane and was repurposed as a bike path and fishing pier as part of the Florida Keys Overseas Heritage Trail.

WHY IS THIS STUDY NEEDED?

The primary purpose and need for this project is to evaluate the replacement of the Long Key Bridge to:



Address Bridge Conditions



Assess Roadway Capacity and Safety Needs



Evaluate Movement of People and Goods



Improve Evacuation & Emergency Response

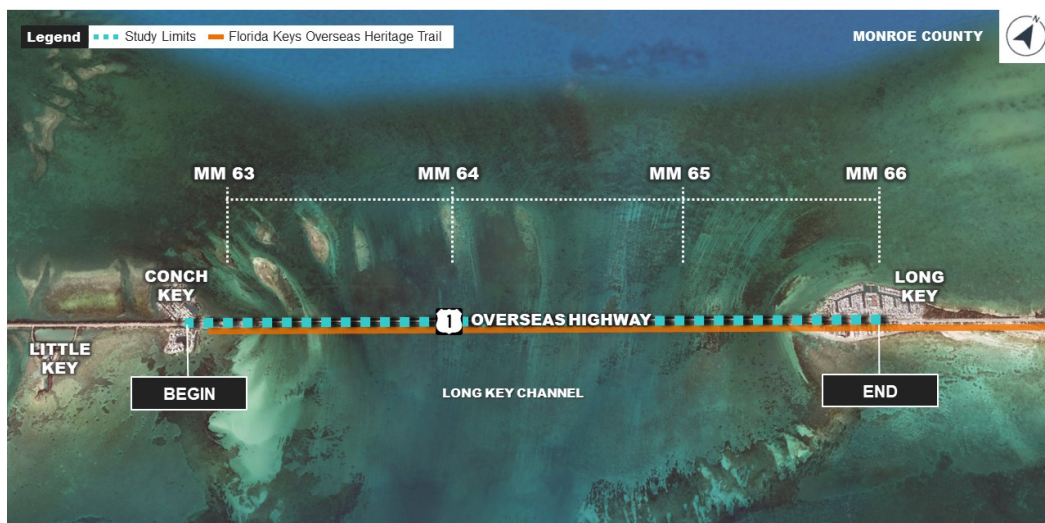


Evaluate Bicycle & Pedestrian Needs

Additionally, the project will evaluate enhancing overall mobility of the area by maintaining an important regional connection, meeting traffic demand, and enhancing multimodal connectivity.

PROJECT LIMITS

SR 5/US 1/Overseas Highway from south of N. Conch Avenue to north of Pelican Court (MM 66), a distance of approximately 3.1 miles.



The environmental review, consultation, and other actions 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 the Florida Highway Administration (FHWA) and FDOT.

<https://www.fdotmiamidade.com/LongKeyBridge.html>

Long Key Bridge Facts



Bridge Length: 12,152 feet (2.3 miles)



Travel Lanes: Two 12-foot travel lanes



Shoulders: 6-foot paved shoulders on both sides of the road also function as undesignated bicycle lanes



Sidewalks: No existing sidewalks

Long Key Bridge History

- 1981 Long Key Bridge Constructed**
The second largest bridge on SR 5/US 1/Overseas Highway after the Seven-Mile Bridge.
- 1986 Long Key Bridge Began to Corrode**
- 1994 Long Key Bridge Rehabilitation Began**
- 2015 Long Key Bridge Rehabilitated**
12 expansion joint V-piers were replaced while the bridge was in service.
- 2019 FDOT conducted a Life-Cycle Analysis to evaluate repair/rehabilitation versus replacement of the existing bridge**
Bridge replacement was the recommended course of action.
- 2020 FDOT conducted a Bridge Inspection Report**
Bridge is considered functionally but not structurally deficient
- 2022 Long Key Bridge PD&E Study Begins**
Evaluation of a range of alternatives that meet the purpose and need of the project while balancing engineering requirements, environmental impacts, and public input.
- 2023 Long Key Bridge Repairs (FM#: 441964-1-52-01)**

What is a PD&E Study?

A PD&E Study is a comprehensive study that evaluates social, economic, and environmental effects associated with proposed transportation improvements so FDOT can reach a decision on the type, location, and conceptual design to meet the project's purpose and need.

Why it's done:

- Evaluate project feasibility and potential environmental impacts (natural, physical, social, and cultural resources)
- Comply with federal and state environmental laws
- Required to secure federal regulatory approval

What it Involves:

- Conducting preliminary engineering
- Evaluating options to avoid, minimize or mitigate potential environmental impacts
- Coordinating with federal, state, and local agencies
- Engaging the public in project development

Stay Connected

Public involvement is a critical component of the PD&E Study process, and we encourage you to become and stay involved throughout the entire project. Please visit the project website often to get the most up-to-date information on the Long Key Bridge PD&E Study. Project meetings, workshops, and hearings are advertised on the webpage.

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

BAO-YING WANG, P.E.

Project Manager

Florida Department of Transportation
BaoYing.Wang@dot.state.fl.us

BETH BEAM, MS, AICP

Consultant Project Manager

Stantec
Beth.Beam@stantec.com

VERONICA PAREDES

Community Outreach Specialist

Stantec
vparedes@ardurra.com

WHERE ARE WE?

The PD&E Study started in August 2022 and is anticipated to be complete by August 2025. After completion of the PD&E phase, the preferred alternative will move to design and bridge construction is anticipated to begin in early 2027. *Schedule is subject to change.*



ALTERNATIVES EVALUATION PROCESS

Alternatives development is based on an understanding of project goals, objectives, and constraints. This information helped identify the criteria used to evaluate the alternatives. The alternatives developed meet roadway and bridge design criteria with the goal of minimizing impacts to the community and the natural and physical environments. The alternatives were developed with input obtained throughout the study process from the general public and federal, state, and local government agencies.

Data Collection and Analysis

Bridge, Navigation, Right of Way, Cost, Traffic, Roadway, Drainage, Natural, Physical, Cultural, and Social Resources

Alternatives Development

Bridge and Roadway Analysis
Typical Section Analysis
Traffic and Safety Analysis
Environmental Resource Analysis

Alternatives Screening

Screen alternatives against project criteria

- ✓ No Action (or No Build) Alternative
- ✗ Transportation systems Management and Operations (TSM&O) Alternative
- ✗ Rehabilitation /Repair Alternative
- ✓ Build Alternatives: Alternative 1 Existing, Alternative 2 East (Atlantic), Alternative 3 West (Gulf)

Alternatives Meeting

- **WE ARE HERE**
- Alternatives Presented to the Public

Refine Alternatives

- Following the Alternatives Public Meeting review of comments and input received, alternatives may be further refined

Public Hearing

- Preferred Alternative identified and presented to the Public



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