

# US 41 at the Intersection of Bonita Beach Road (CR 865) Project Development and Environment (PD&E) Study Bonita Springs, Florida

FPID: 444321-1

#### INTRODUCTION

The Florida Department of Transportation (FDOT), District One, welcomes you to the Public Workshop for the US 41 at the Intersection of Bonita Beach Road (CR 865) Project Development and Environment (PD&E) Study. The study limits are within the City of Bonita Springs, in southern Lee County.

#### WHAT IS A PD&E STUDY?

A PD&E Study is a process developed by the FDOT to determine social, economic, natural, and physical environmental effects associated with a proposed transportation improvement project. The PD&E Study adheres to the National Environmental Policy Act of 1969 and associated federal and state regulations. The PD&E Study process involves a combination of engineering evaluations, environmental analysis, and public involvement. An important component of the process is public and agency coordination. The basic activities of a PD&E Study include data collection, alternatives development and analysis, a Public Information Workshop, a Public Hearing, and final acceptance.

## **STUDY PURPOSE**

The purpose of this PD&E Study is to evaluate the need for capacity-related improvements, as well as ways to improve safety conditions and provide for multi-modal features within this area and to address congestion and projected travel demand.

## **ALTERNATIVES**

The proposed intersection improvement includes two build alternatives focused on improving intersection traffic operations and safety and a no-build alternative. The first alternative, the **Enhanced Traffic Signal**, would widen US 41 to eight lanes from Foley Road to the southern end of the Imperial River bridge and provide improvements to the existing signalized intersection. Pedestrian and bicyclist facilities include

Project Limit

BONITA BEACH RD SW

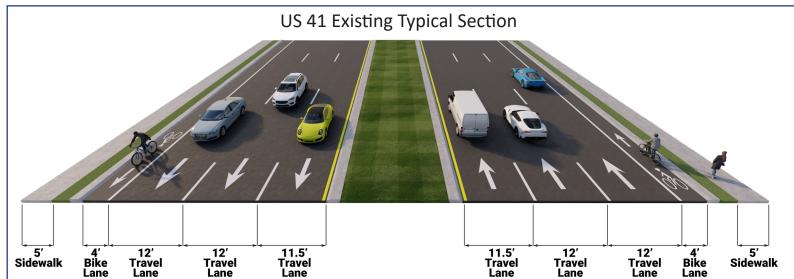
BONITA BEACH RD SE

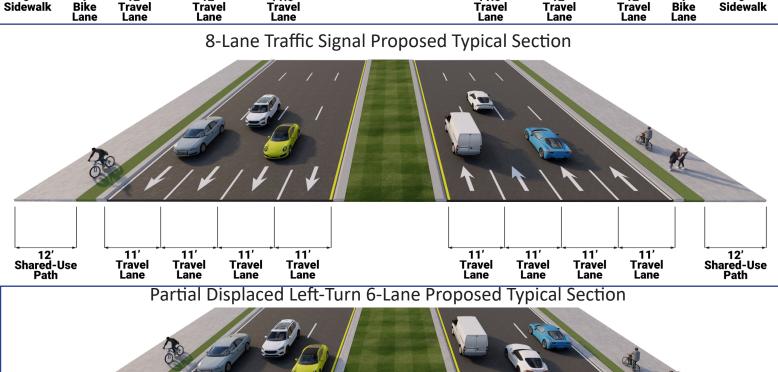
Project Limit

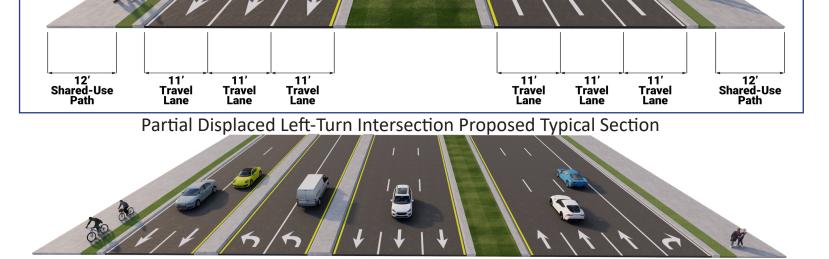
a 12 foot shared use path on both sides of the roadway. At the US 41 and Bonita Beach Road intersection, the eastbound to northbound and the southbound to eastbound left turn movements are proposed to be three lanes each. The westbound to northbound right turn movement would be two lanes and would remain under signal control.

The second alternative would reconfigure US 41 at Bonita Beach Road into a **Partial Displaced Left Turn**. The US 41 and Bonita Beach Road partial displaced left turn would have "crossover" left turn movements on US 41. The "crossover" intersection for the south approach is a two phased signalized intersection approximately 650-feet south of Bonita Beach Road. This is for the development of a two lane northbound left turn movement and also accommodates the eastbound to southbound right turn movement. The northern "crossover" signalized intersection is approximately 400-feet north of Bonita Beach Road to develop a three lane left turn movement. These "crossover" left turn movements would have the green light when the Bonita Beach Road east and west through movements have the green light to maximize signal efficiency. US 41 south of the "crossover" intersection will be a six lane divided roadway having the 12 foot shared use path on both sides. The US 41 intersection with Foley Road is proposed to be signalized. US 41 north of the "crossover" intersection widens to four lanes northbound and has a short four lane section through the signalized intersection with the quadrant roadways, terminating at the Imperial River Bridge.

For both the traffic signal and partial displaced left turn alternatives, Bonita Beach Road would be widened to six lanes between the Center of Bonita Springs to Arroyal Drive. Concepts for both alternatives are available on the project website at https://www.swflroads.com/project/444321-1.







11' Travel

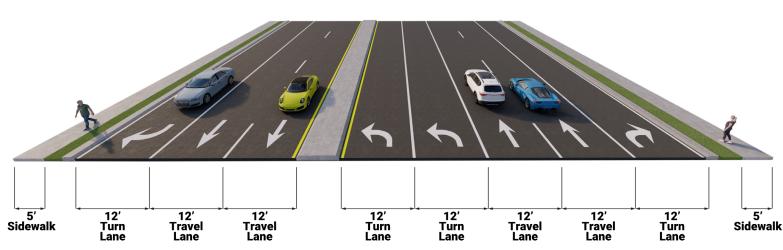
Travel

11' Turn Lane

12' Shared-Use Path

Travel

# Bonita Beach Road Existing Typical Section





### **PROJECT SCHEDULE**

The PD&E Study began in late 2019. Project staff has been performing data collection and developing and evaluating the proposed alternatives. Following today's public workshop, project staff will continue developing and evaluating the proposed alternatives and drafting study documents. A public hearing is tentatively scheduled for early 2024. The study is anticipated to conclude in late 2024. Future phases of design, right-of-way, and construction are not currently funded. This schedule is tentative and subject to change.



11' 11' 11' Travel Travel Travel Lane Lane Lane

#### **EVALUATION MATRIX**

| EVALUATION FACTORS  | Alternative | 8-Lane US 41 with Traffic<br>Signal | 6-Lane US 41 with Partial<br>Displaced Left Turn | No Build         |
|---|-------------|-------------------------------------|--|------------------|
| ABILITY TO MEET PURPOSE AND   | NEED        |                                     |  |                  |
| Improves Traffic Operations   |             | ✓                                   | ✓  | Х                |
| Improve Traffic Mobility and Transportation Network Access                                |             | ✓                                   | ✓  | X                |
| Enhances Emergency Evacuation and Response Times  |             | ✓                                   | ✓  | X                |
| Enhance Mobility Options and Multi-Modal Access   |             | X                                   | ✓  | X                |
| POTENTIAL RIGHT OF WAY IMPA   | ACTS        |                                     |  |                  |
| Relocations (#Business/#Residential/#Other)   |             | 2/0/0                               | 2/0/0  | 0                |
| Parcels (#Business/#Residential/#Other)   |             | 12/2/3                              | 14/2/3   | 0                |
| Right of Way to be Aqcuired (acres)   |             | 4.05                                | 4.73   | 0                |
| POTENTIAL ENVIRONMENTAL EFF   | ECTS        |                                     |  |                  |
| Threatened/Endangered Species and Habitat   |             | Low                                 | Low  | N/A              |
| Wetlands (acres)  |             | 0.55                                | 0.79   | 0                |
| Floodplains (acres)   |             | 4.63                                | 4.65   | 0                |
| Archaeological/Historic Resources   |             | Low-Mod/0                           | Low-Mod/0  | N/A              |
| Public Recreation Resources (#)   |             | 1                                   | 1  | 0                |
| Noise Sensitive Receptors (#)   |             | 16                                  | 16   | 0                |
| Contamination Sites (#Low/#Medium/#High Risk)   |             | 6/3/0                               | 6/3/0  | 0/0/0            |
| Utilities Impacted (#)  |             | 8                                   | 8  | 0                |
| TRAFFIC OPERATIONS  |             |                                     |  |                  |
| US 41/Bonita Beach Road Intersection 2050 Average Vehicle<br>Delay in Seconds (Midday/PM) |             | 71/93                               | 69/98  | 231/256          |
| Net Present Value <sup>1</sup> (Compared to No-Build)                                     |             | \$263,360,000                       | \$314,380,000                                    | N/A              |
| ESTIMATED PROJECT COSTS (202  | 3 \$\$)     |                                     |  |                  |
| Right of Way for Roadway  |             | \$15,000,000                        | \$16,050,000                                     | \$0              |
| Wetland Mitigation  |             | \$50,000                            | \$70,000   | \$0              |
| Final Design and Construction   |             | \$20,610,000                        | \$26,630,000                                     | \$0              |
| Construction Engineering and Inspection   |             | \$2,470,000                         | \$3,200,000                                      | \$0              |
| Preliminary Estimate of Total Project Cost <sup>2</sup>                                   |             | \$38,130,000                        | \$45,950,000                                     | \$0 <sup>3</sup> |

<sup>&</sup>lt;sup>1</sup> Net Present Value - 20 year life cycle costs for operational (reduced delay) and safety (fewer crashes) benefits as compared to the no-build alternative minus construction and right-of-way costs. The higher the number represents better return on investment.

# PROJECT CONTACT

View all materials and submit comments online at <a href="https://www.swflroads.com/project/444321-1">https://www.swflroads.com/project/444321-1</a>. For more information or to ask questions about the project contact the FDOT project manager, Patrick Bateman, P.E. at:

Florida Department of Transportation Attn: Patrick Bateman, MS 1-40 801 North Broadway Avenue Bartow, Florida 33830 Telephone: 863-519-2792

Email: Patrick.Bateman@dot.state.fl.us

Por favor contacte a Karina Della Sera para información en español por correo electrónico a <u>Karina.DellaSera@dot.state.fl.us</u> or por teléfono al 863-519-2750.

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 FHWA and FDOT.

FDOT solicits public participation without regard to race, color, national origin, age, sex, religion, disability, or family status. People who require special accommodations under the Americans with Disabilities Act or who require translation services (free of charge) should contact Cynthia Sykes, District One Title VI Coordinator, at (863) 519-2287, or e-mail at Cynthia.Sykes@dot.state.fl.us.

<sup>&</sup>lt;sup>2</sup> Source: FDOT Long-Range Estimating System. Preliminary Estimate of Total Project Cost does not include maintenance costs.

<sup>&</sup>lt;sup>3</sup> No-Build would result in higher maintenance costs.