WELCOME TO:

Sarasota County

The Blackburn Point Bridge
Project Development and Environment (PD&E) Study

Project Introduction Presentation

TONIGHT'S AGENDA

Sarasota County

- ❑ PD&E Study Process
- ❑ Project Purpose and Need
- ❑ Existing Conditions
- ❑ Alternatives to be Studied
- ❑ Project Schedule
- ❑ How to Comment

PD&E STUDY (NEPA) PROCESS

Sarasota County

Project Development & Environment (PD&E) Study following the requirements of the National Environmental Policy Act (NEPA)

- Purpose and Need
- Environmental Studies
- Alternatives Analysis
- Technical Reports
- Public Involvement
- Environmental Document Approval

PROJECT PURPOSE AND NEED

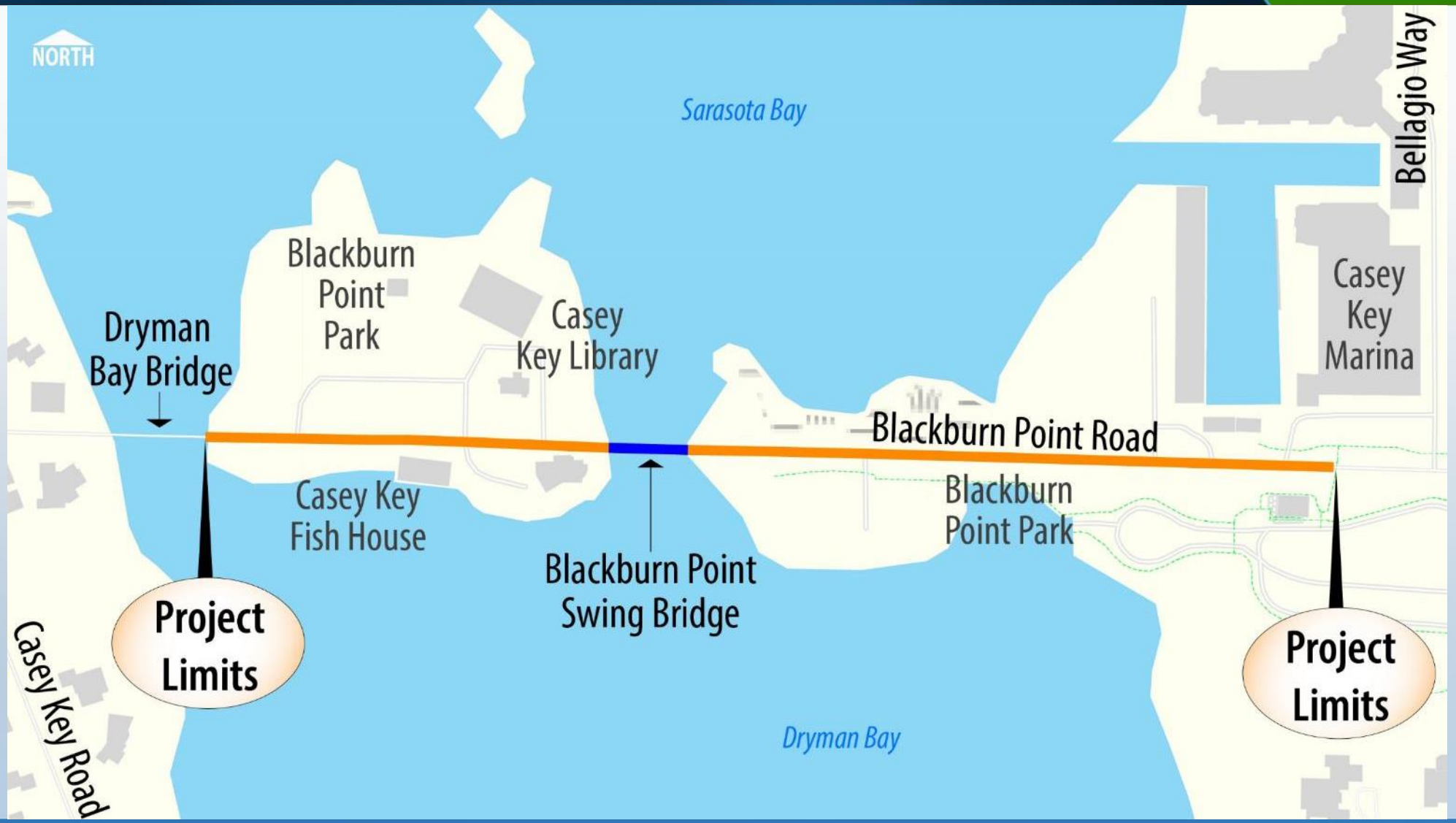
Sarasota County

The purpose of the project is to replace the Blackburn Point Bridge (Bridge No. 170064) on Blackburn Point Road (County Road (CR) 789) over the Gulf Intracoastal Waterway in Osprey, Sarasota County, Florida. The need for the project is based on the following criteria:

- Bridge Deficiencies
- Safety
- Modal Interrelationships

PROJECT LOCATON AND LIMITS

PROJECT LOCATON AND LIMITS



BRIDGE DEFICIENCIES

Blackburn Point Bridge

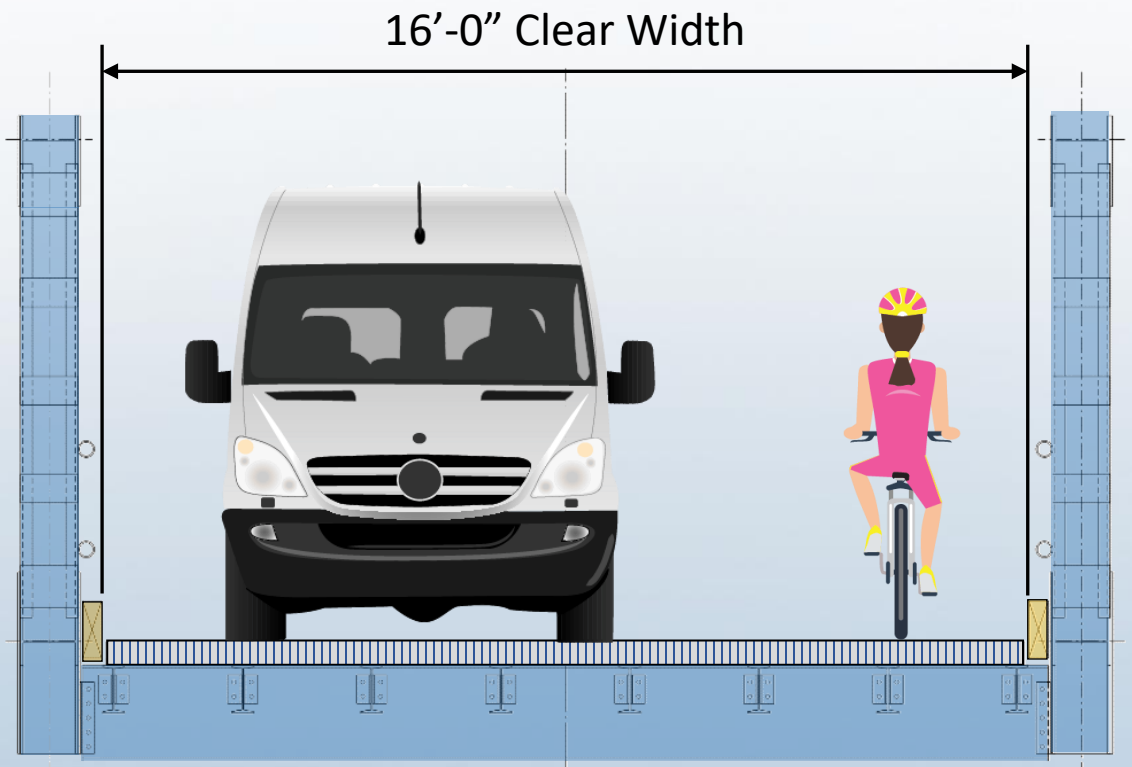
- Constructed in 1925-26
- Listed on the National Register of Historic Places and the Sarasota County Register of Historic Places
- Substandard features include:
  - Bridge is classified as functionally obsolete (insufficient width)
  - Bridge railings
  - Swing span superstructure and machinery is located in the splash zone

BRIDGE DEFICIENCIES

Sarasota County

Bridge Width Deficiencies:

- Substandard clear roadway width of only one, 16-foot-wide travel lane
- Despite frequent daily pedestrian and bicycle use, the bridge does not feature shoulders, sidewalks or bicycle lanes
- Minimum required lane and shoulder widths prescribed by the American Association of State Highway and Transportation Officials (AASHTO) are not met.



Existing Swing Span Section

BRIDGE DEFICIENCIES

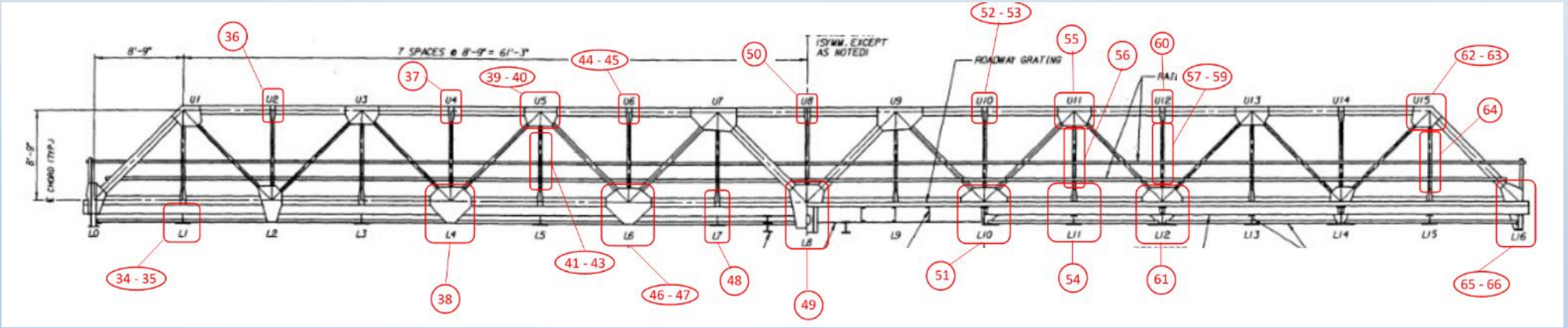
Sarasota County

Prior Major Repairs

1981 – Major Repairs

1987 – Major Repairs

1995 – Major Repairs



BRIDGE DEFICIENCIES

Sarasota County

Ongoing Repairs:

- Pinion shaft was replaced three (3) times in the past four (4) years

- Fender system repairs
- Structural repairs

HISTORY OF RECENT REPAIRS	
YEAR	**DESCRIPTION**
1997	Replaced manually-operated end toggles with electrically-operative actuator toggles
2006	Riprap and piling rehab
2009	New pivot bearing, new spider assembly, new upper and lower tracks, new rack, new pinion and shaft, new wheels, new elevator wheel assembly, new drive train assembly
2010	Placed 20 CY flowable fill behind SW timber wingwall
2011	Motor replaced
2012	Gusset plates replaced
2012	**Pinion shaft replacement emergency repair**
2014	End toggle replacements; live load shoes; pivot bearing shim
2016	Drive gear; Gusset plate and truss member retrofits
2019	Gusset plate retrofits ("cheese plates")
2019	Replace drag cables for center pivot
2019	Clean, paint and repair section loss in top chord gusset plates; replace deteriorated rivets
2019	NW quadrant slope protection
2019	**Fender repairs**
2020	Machinery stringer crack retrofitted
2020	Center bearing cover plate replaced
2020	**Fender repair due to boat impact**
2020	Stringer at rest pier 1 trimmed to avoid hitting steel nose plate on approach pavement
2021	Replace conduit system on fender
2021	Riprap at NW Wingwall
2022	Center bearing rehabilitated, new pinion shaft, floorbeam retrofits
2023	Repair grid deck welds
2024	**Pinion shaft emergency replacement (again) due to deformation. New limit switches.**
2025	**Pinion shaft emergency replacement (again) due to deformation**

BRIDGE DEFICIENCIES

Sarasota County

Substandard Navigational Clearances:

The USCG has determined that the existing navigational clearances are an unreasonable obstruction to navigation for the Gulf Intracoastal Waterway.

Existing Navigation Clearances:

- Horizontal – 51 feet
- Vertical – 9.3 feet

US Coast Guard Guide Clearances (Gulf Intracoastal Waterway):

- Horizontal – 90 feet
- Vertical – 21 feet

BRIDGE DEFICIENCIES

Sarasota County

Marine Vulnerabilities:

- Existing bridge does not meet current standards for protection from damage due to coastal storm wave action
- Existing swing bridge is not capable of sustaining a direct vessel collision
- The existing bridge low members are within the splash zone, subject to:
  - Wave impact in large coastal storms
  - Accelerated corrosion due to saltwater and salt laden air

BRIDGE DEFICIENCIES

Sarasota County

Photographs representative of existing conditions of the swing bridge's main lower truss members

BRIDGE DEFICIENCIES

Sarasota County

Photographs representative of existing conditions of the swing bridge's main upper truss members

SAFETY

Sarasota County

Crash History:

Ten (10) crashes without any fatalities were reported within the project area (bridge plus 700 feet either side) from 2019 through 2024.

Two (2) crashes involved pedestrians and bicycles, with the bicycle crash occurring on the bridge and the pedestrian crash occurring west of the bridge.

The addition of sidewalks and bicycle lanes are proposed for any replacement bridge to enhance safety and mobility for vulnerable road users.

SAFETY

Sarasota County

Bridge Railings:

Existing bridge railings do not meet current standards for pedestrians or bicycles.

Existing bridge railings do not meet current geometric and crash testing safety standards for vehicles.

Proposed improvements will provide bridge railings and traffic gates that meet current safety standards for pedestrians, bicyclists, and vehicles.

SAFETY

Sarasota County

Evacuation:

Existing bridge is important for evacuation during a storm event.

Blackburn Point Road between Casey Key and US 41 is a designated emergency evacuation route.

There is insufficient room available to pass a stalled vehicle on the bridge during an emergency evacuation.

Proposed improvements will increase bridge width to provide sufficient room for vehicles to pass a stalled vehicle on the bridge.

SAFETY

Sarasota County

Modal Interrelationships:

There are no sidewalks on the bridge to meet current accessibility requirements established by the Americans with Disabilities Act (ADA).

There are no bicycle lanes on the bridge. The bridge has an open grid metal deck which is problematic for bicyclists. An existing warning sign at each end of the bridge states "Walk Bikes Across Bridge".

Multiple pedestrians and bicyclists cross the Blackburn Point Bridge daily.

The proposed improvements for this project will provide sidewalks, bicycle lanes, and a solid bridge deck for enhanced safety.

ALTERNATIVE CONSIDERATIONS

Sarasota County

1. **Constrained Site**
   - 1 Casey Key Fish House
   - 2 Casey Key Library
   - 3 Blackburn Point Park
   - 4 Adjacent Driveways

2. **Potential Environmental Impacts**
   - 5 Historic Bridge
   - 6 Blackburn Point Park
   - 7 Natural Environment

3. **Maintaining Traffic Through Construction**

PROJECT ALTERNATIVES

- No-Build:
  - Retain the existing single-lane bridge and repair as necessary to maintain operation and structural adequacy.

- Replace with a new bridge:
  - Bridge Types:
    - Swing Span
    - Bascule Span


Swing Span


Bascule Span (single-leaf)


Bascule Span (double-leaf)

ALTERNATIVE CONSIDERATIONS

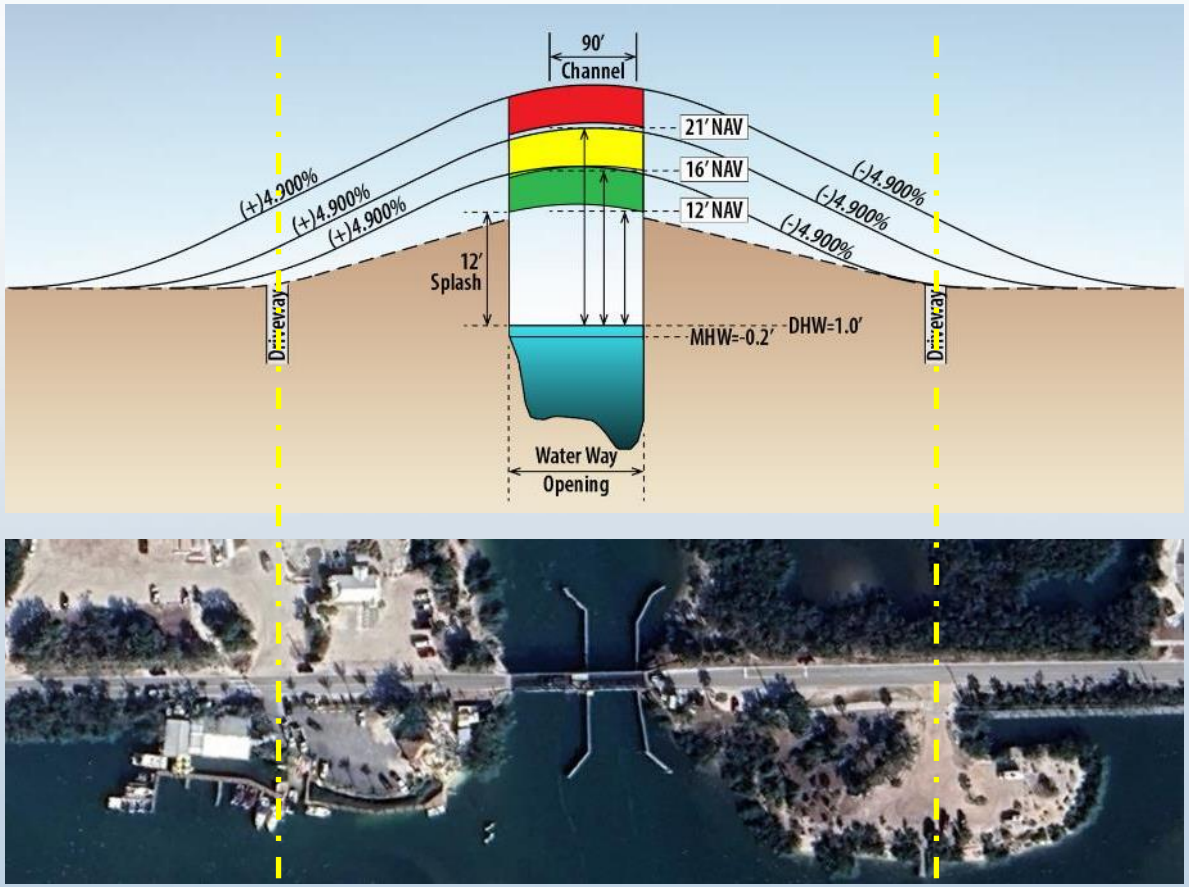
Sarasota County

Horizontal Alignment:

- Shifted to the north
- Existing alignment with temporary bridge to the north during construction

Vertical Clearance:

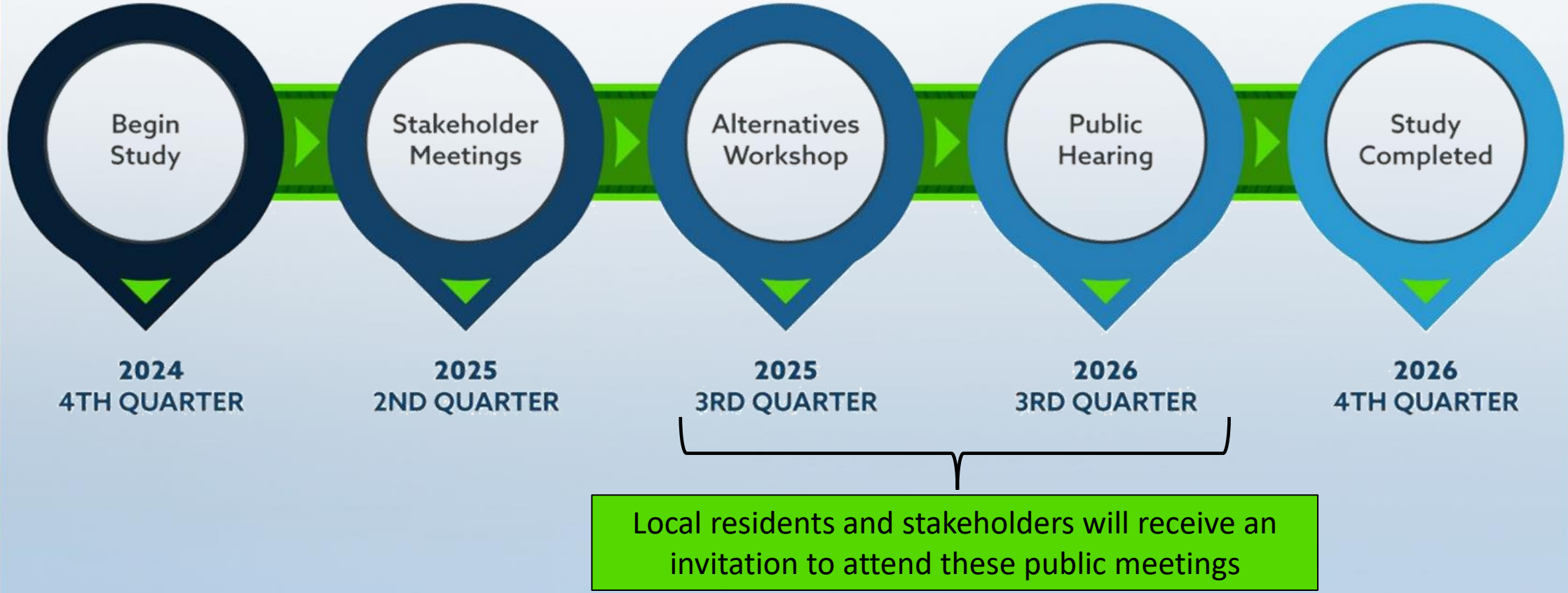
- Maintain access to existing adjacent driveways



PROJECT SCHEDULE

Sarasota County

PD&E Schedule



COMMENT & CONNECT

Sarasota County

To submit comments, sign-up for email updates or for additional information, please visit the project website at:

BlackburnBridgeProject.com

or email comments or questions to:

info@BlackburnBridgeProject.com

or call 877-496-1076

COMMENTS & QUESTIONS

Sarasota County

Open Discussion of Project, Community Comments and Questions