



### **Public Project Update**

Florida Department of Transportation, District Four

SR 5 / US 1 at Aviation Boulevard

Project Development and Environment (PD&E) Study

**Indian River County, Florida** 

**Financial Project ID: 441693-1-22-02** 





The study has identified four at-grade intersection improvement alternatives that are being carried forward. All overpass or grade separated alternatives have been discarded.

For further details on the alternative evaluation process, please visit the project website at: <a href="https://www.fdot.gov/projects/SR5AviationBlvdPDE">https://www.fdot.gov/projects/SR5AviationBlvdPDE</a>



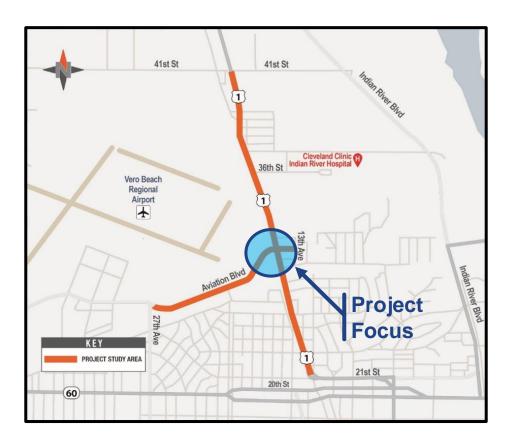
### **Project Location**

#### Project location:

Within the City of Vero Beach and Indian River County

#### Project study area:

- SR 5/US 1 from 21st Street to 41st Street
- Aviation Boulevard from 27<sup>th</sup> Avenue to 13<sup>th</sup> Avenue
- Project Focus is at SR 5/US 1 at Aviation Boulevard



**Project Location Map** 



# **Existing Conditions**





#### Federal Aviation Administration (FAA)

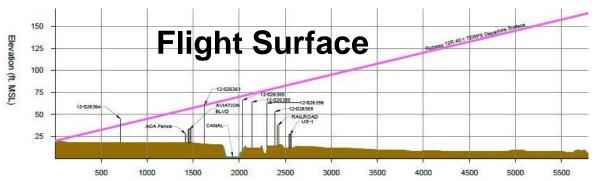
## **Runway and Aviation Regulations**

Runway 30L and the land within the airport property is controlled by the Federal Aviation Administration (FAA) and Vero Beach Airport regulations.

The Runway Protection Zone, shown as , controls the ground surface to minimize ground hazards to aircraft.

The Flight Surface controls the airspace to keep the flight space clear.







# **Purpose and Need**

The purpose of this project is to evaluate intersection improvements at SR 5/US 1 and Aviation Boulevard to:

- Improve safety;
- Address existing and projected traffic demand;
- Enhance the multi-modal features for the railroad, pedestrian, bicycle and transit users

#### The need for the project:

- Existing intersection operates at the maximum capacity
- Existing vehicle delays exceed 1.5 minutes per vehicle during peak traffic hours
- Forecasted vehicle delays will reach 3.5 minutes per vehicle by year 2045 without improvements
- The existing project area needs pedestrian and bicycle improvements
- Aviation Boulevard improvements serve regional mobility and airport needs



### **Project Update Summary**

This project update provides a brief summary of the local community and government coordination, project alternatives that were eliminated, and the alternatives that remain for further investigation.

Several coordination meetings occurred since the public kickoff meeting that obtained input from the local property owners, the City of Vero Beach, Indian River County Public Works, Indian River Metropolitan Planning Organization, the Florida East Coast Railroad, and the Federal Aviation Administration (FAA).

A total of eight (8) alternatives were developed.

- 4 alternatives with an overpass or underpass
- 4 alternatives without any overpass or underpass

The PD&E roadway alignments were developed to be compatible with the County's project to extend Aviation Boulevard to the Cleveland Clinic Hospital.

A multi-discipline planning level screening analysis was conducted to determine the best alternatives to advance into the detailed analysis phase.

Factors considered were the ability to meet the project's purpose and need, address mobility for pedestrians and bicyclists, impacts to properties, property access, and environmental impacts related to species, wetlands, noise levels, and contamination. Compatibility with the airport, railroad, and county's extension of Aviation Blvd along with cost and complexity of construction were also considered.



### **Project Update Summary – Alternatives Eliminated**

Based on the screening evaluation, public input, and coordination with the city, county, airport, and agencies, the four (4) overpass or underpass alternatives were eliminated.

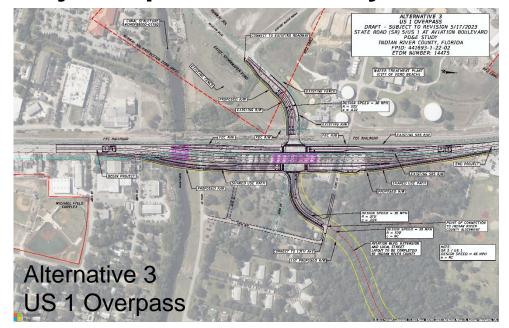
All the overpass and underpass alternatives were dropped from further investigation based on factors related to airport runway regulations, bicycle and pedestrian mobility, and property impacts and access.

#### Alternatives eliminated from the study:

- Alternative 3 US 1 Overpass
- **Alternative 4** Aviation Blvd Overpass
- **Alternative 5** Aviation Blvd Underpass
- **Alternative 6** Aviation Blvd Overpass (with railroad crossing)

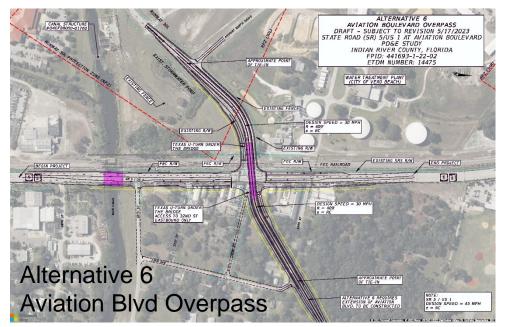


### **Project Update Summary – Alternatives Eliminated**











### **Project Update Summary - Alternatives Identified for Further Study**

Based on a screening evaluation, public input, and coordination with the city, county, airport and agencies, the four (4) alternatives without an overpass or underpass are best alternatives for further study that will benefit the community, enhance safety, enhance multi-modal features, and improve existing and future traffic congestion.

#### Alternatives identified for further study are:

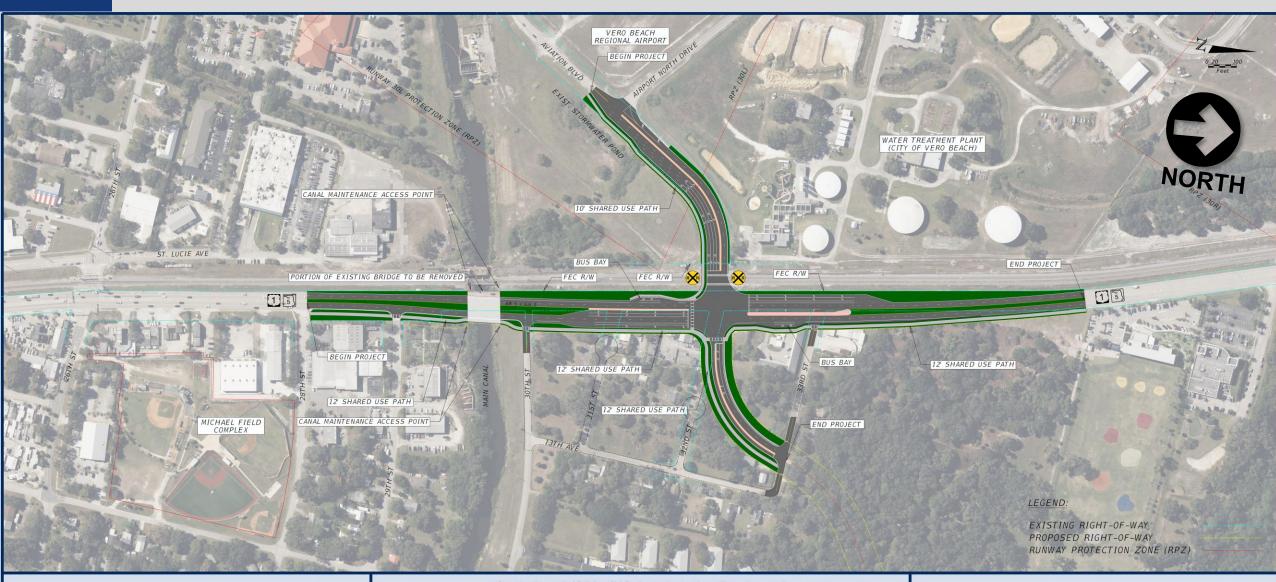
- Alternative 1 Conventional Intersection
- Alternative 2 One-Way Pair
- Alternative 7 Displaced Left Turn
- Alternative 8 Median U-turn with Roundabout

#### **Common Features**

- Reconstruction of the roadway, drainage, traffic signals and street lighting.
- Widen or replacement of the US-1 bridge over the Main Canal
- Stormwater pond
- Transit bus stops and/or bus bays
- Shared use path



### **ALTERNATIVE 1 - Conventional Intersection**



Alternative 1 - Conventional Intersection SR 5 at Aviation Boulevard

State Road (SR) 5/US 1 at Aviation Boulevard

Project Development and Environment (PD&E) Study Indian River County, Florida Financial Project ID: 441693-1-22-02 Efficient Transportation Decision Making (ETDM) Number: 14475





## **ALTERNATIVE 2 – One-Way Pair**



Alternative 2 - One-Way Pair SR 5 at Aviation Boulevard

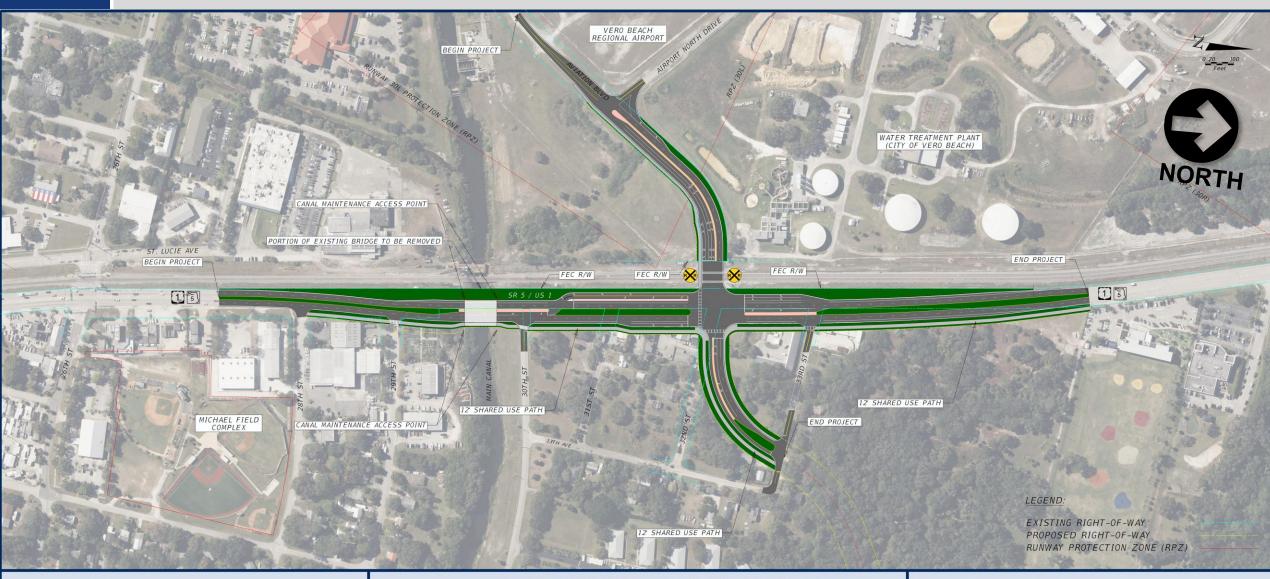
State Road (SR) 5/US 1 at Aviation Boulevard

Project Development and Environment (PD&E) Study Indian River County, Florida Financial Project ID: 441693-1-22-02 Efficient Transportation Decision Making (ETDM) Number: 14475





## **ALTERNATIVE 7 – Displaced Left Turn**



Alternative 7 - Displaced Left Turn Intersection SR 5 at Aviation Boulevard State Road (SR) 5/US 1 at Aviation Boulevard

Project Development and Environment (PD&E) Study Indian River County, Florida Financial Project ID: 441693-1-22-02 Efficient Transportation Decision Making (ETDM) Number: 14475





### **ALTERNATIVE 8 – Median U-turn with Roundabout**



Alternative 8 - Median U-Turn with Roundabout SR 5 at Aviation Boulevard State Road (SR) 5/US 1 at Aviation Boulevard

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## **Public Involvement**

## **Attend Public Meetings**

- Public Alternatives Workshop:
  - October 10, 2023 at 5:30 PM (Webinar online)
  - October 11, 2023 at 5:30 PM (In-person)
    - Vero Beach Community Center
    - 2266 14<sup>th</sup> Avenue, Vero Beach, FL 32960
- Public Hearing: May/June 2024 (tentative)
- Contact Project Manager:
  - Vandana Nagole, PE
  - Email: <u>Vandana.Nagole@dot.state.fl.us</u>
  - Project Website: <a href="https://www.fdot.gov/projects/SR5AviationBlvdPDE">https://www.fdot.gov/projects/SR5AviationBlvdPDE</a>

Public comments and questions are always welcome!

## **Stay Informed!**





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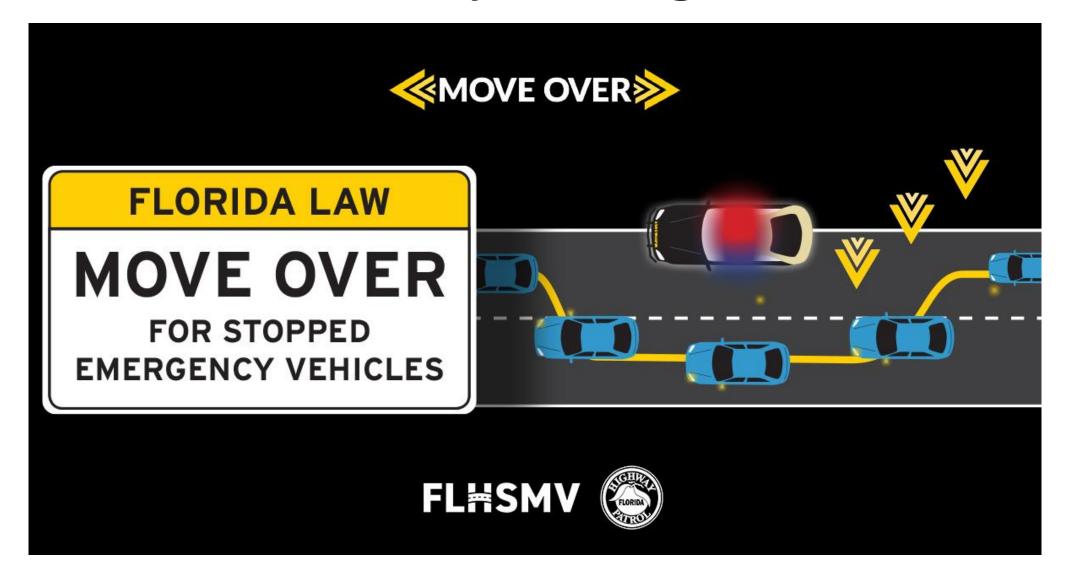
Twitter: @MyFDOT\_SEFL

Use telephone camera to scan image





# Safety Message





## Thank You

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