

# Town of Hilton Head Island

## Gateway Corridor Project

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Town Council  
March 19, 2024



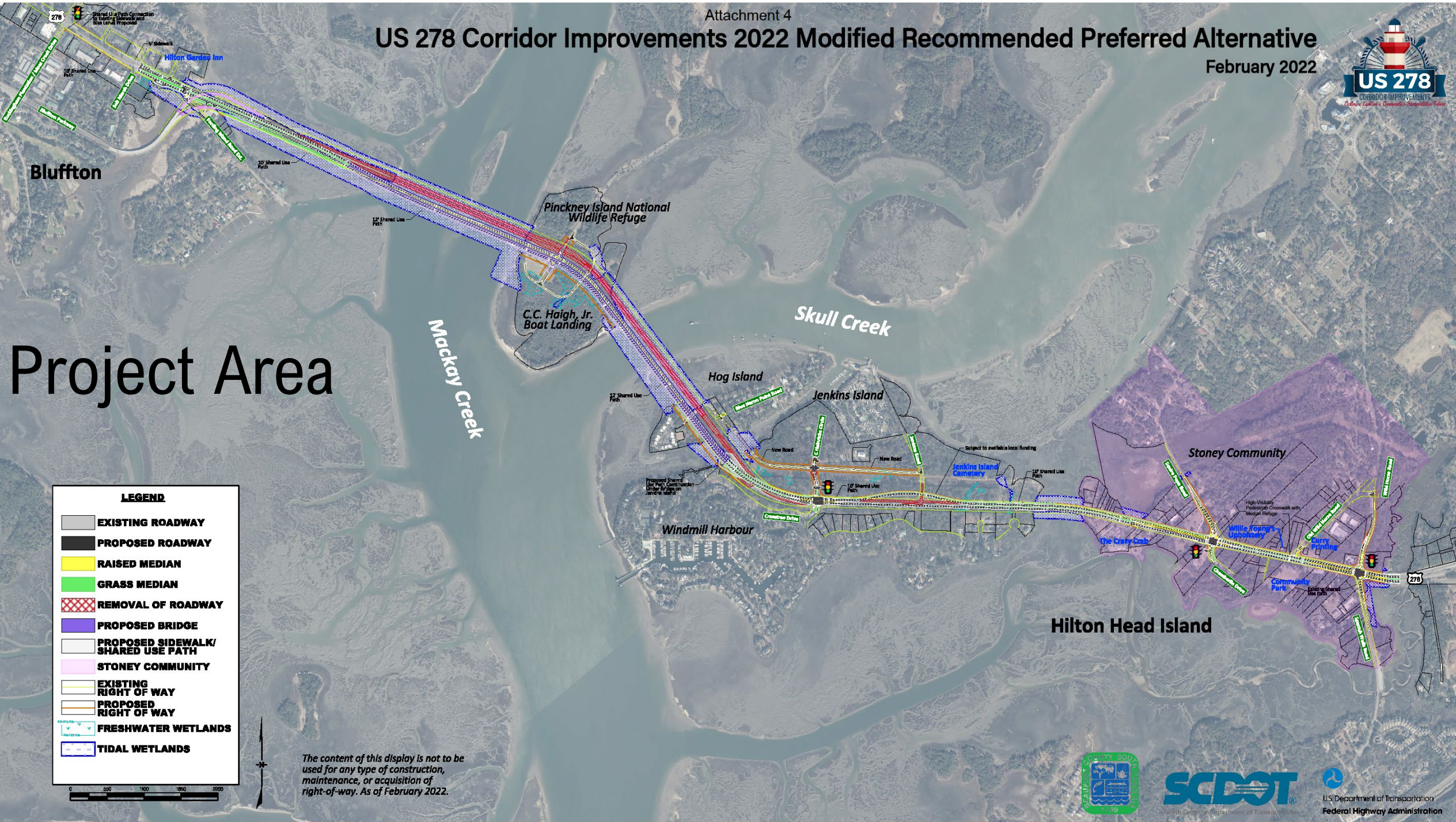
# Outline

- ❑ Project Area
- ❑ Timeline
- ❑ Town of Hilton Head Island
  - ❑ Guiding Principles
  - ❑ Resolution for Advisory Committee
  - ❑ End to End Independent Study
- ❑ No Peak Hour Left Turns Assessment
- ❑ Project Stage
- ❑ Project Impacts – Stoney Corridor
- ❑ Town of Hilton Head Island Critical Path/Next Steps



## US 278 Corridor Improvements 2022 Modified Recommended Preferred Alternative

February 2022





# Gateway Corridor Project Timeline

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Sept. 2017 - This project began in 2017 when a need was identified by the South Carolina Department of Transportation (SCDOT) to improve the westbound bridge that connects the mainland to the island (there are two bridges in each direction). The Town and County requested a more comprehensive approach to address this corridor rather than a series of projects and improvement over several years.

Nov 2018 - 2018 Sales Tax Referendum adopted

• **\$80 million would go towards U.S. 278 Corridor Traffic Improvements** including repairing and replacing the existing spans of the bridges to Hilton Head Island and other improvements between Moss Creek Drive and Squire Road.

Since that time, Beaufort County as the project sponsor and SCDOT as the project manager have involved time and funding to conduct an evaluation of alternatives and prepared a draft Preferred Recommendation following the NEPA process. There has been public involvement, with many workshops, well over 20 public meetings, and opportunities to provide comment.

Feb 2020 – Guiding Principles Adopted by Town Council

Apr. 2021 - The Town worked with technical consultants with expertise in engineering, planning, and design, starting in April 2021 to review the project and draft recommendations to improve the corridor alignment and design elements.

# Gateway Corridor Project Timeline

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Oct. 2021 - Town Council approved 26 recommendations on October 12, 2021, to be considered within the project improve the corridor alignment and design elements.

Oct. 2022 - In order to make certain that all reasonable alternatives have been evaluated before a final decision is made. Town Council approved a Memorandum of Understanding (MOU) with Beaufort County on October 4, 2022. The MOU outlined a critical path and steps to take to reach a point for municipal consent consideration.

February 2023 – Town Council created the William Hilton Parkway Gateway Corridor Independent Review Advisory Committee (committee)

March 2023 - Appointments made on March 21, 2023.

June 2023 - Town Council approved Scope of Work for Independent Study

August to October 2023 – Consultant procured to conduct Independent Study

Oct 2023 (to present) - Independent Study in progress (to date - 4 monthly meetings with committee)

\* Oct 2023 – CBB, contracted through Beaufort County, presented findings from its Independent Review of the Gateway Corridor

# Town of Hilton Head Island Gateway Corridor Project Guiding Principles

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Fix the transportation issues in the corridor in a way that improves the safety and quality of life for all residents, workers, and visitors to Hilton Head Island:

- Address transportation needs for natural disasters and resiliency of island access.
- Consider future transportation alternatives.

Improve the safety and quality of life for the residents of the neighborhoods and businesses directly impacted by the US 278 corridor:

- Stoney Community.
- Neighborhoods on Jenkins and Hog Islands (including but not limited to Windmill Harbor).

Have a gateway to and from Hilton Head Island that the region will be proud of:

- Aesthetically pleasing and reflecting the Hilton Head Island/Low Country values.
- Safe and functional pathways for pedestrians and cyclists.
- Minimizes environmental impacts and enhances the national asset of Pinckney Island.

# Town Council Resolution to Create William Hilton Parkway Gateway Corridor Advisory Committee

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1. The William Hilton Parkway Gateway Corridor Independent Review Advisory Committee is hereby created, and its membership shall consist of the following: one (1) member of Town Council, one (1) current or former licensed professional engineer, one (1) citizen member and (1) alternate citizen member from the Stoney Community, and two (2) citizen members from the Community, to be appointed by Town Council. **COMPLETE**
2. The William Hilton Parkway Gateway Corridor Independent Review Advisory Committee, in coordination with a technical review team designated by the Town Manager, shall review and assess the Town RFQ and all responses and identify a reasonable number of firms to identify as “Preferred Consultants” **COMPLETE**
3. Furthermore, any firm selected as Preferred Consultant shall be required to submit a full and detailed proposal. The William Hilton Parkway Gateway Corridor Independent Review Advisory Committee, in coordination with a technical review team designated by the Town Manager, shall review these proposals and will thereafter recommend to Town Council which “Preferred Consultant” with which to pursue a contract for work. **COMPLETE**
4. The William Hilton Parkway Gateway Corridor Independent Review Advisory Committee will work in coordination with Town staff to guide work of the selected consultant, consistent with the final Scope of Work to complete the Independent Review, to include delivery of findings and recommendations from the consultant and the Advisory Committee through staff to Town Council. **IN PROGRESS**

# Town Council Approved Scope of Work

## Independent Study

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### Task 1: Project Initiation and Coordination:

- Initial meeting with Town of Hilton Head Island and Independent Consultant. **COMPLETE**
- Conduct Bi-weekly project status meetings with Town staff and the project advisory committee. **ONGOING**
- Review meeting with representatives of Town of Hilton Head Island, SCDOT and the existing design consultants on prior work performed **ONGOING**
- Monthly update meetings with Town Manager. **PROVIDED BY STAFF**
- Review and define the study area. **COMPLETE**
- Perform a site visit/field review. **COMPLETE**
- Review and understand bridge inspection data. **IN PROCESS**
- Understand the Town of Hilton Head Island's and Community concern with the proposed concept and existing model. **COMPLETE**
- Study existing project reports including: the SCDOT Draft Environmental Assessment, Town Council recommendations supported by MKSK and HDR studies, and the Technical Working Group report dated 3/31/23 to FHWA/Council on Environmental Quality/SCDOT. **COMPLETE**



# Town Council Approved Scope of Work

## Independent Study

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### Task 2: Provide Modeling of Data and Recommended Design Concepts

- Review assumptions contained within the model – Daily, Hour, Land Use, and identify other input variables, including adaptive traffic signals and safety provisions. **COMPLETE**  
The results of each alternative evaluated should include but not be limited by the following:  
**IN PROGRESS**

#### **Throughput and Traffic Simulation**

This includes factors such as end-end delay, level of service, and average speed. We wish to see these computed via event simulation from end-to-end in each direction (for each alternative) including modeling the coupling and interactions of all proposed traffic lights, merges, splits, and other possible constrictions, as opposed to summing them as acting individually. The simulation must operate on the smallest interval possible to provide meaningful results.

#### **Costs**

Since detailed engineering for the various Corridor options is not available at this point, the Consultant shall use broad-gauge cost estimates similar to those used by SCDOT. The Consultant shall solicit assistance from SCDOT, the County, and the Town in developing cost estimates for the various options and identifying the split between covered and uncovered costs.

#### **Safety, Environmental and Community Impacts**

- Review data collection approach and study area.
- Review model outputs and subsequent recommendations for intersection operations and bridge concepts.
- Model Review and Concept Review Memo.
- Compile findings into a Summary Review Memo, identifying primary findings and recommendations for improvement.
- Review data collection from Adaptive Traffic Signals.

# Town Council Approved Scope of Work

## Independent Study

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### Task 3: Model and Operational Analysis Updates

- The model updates will be based on the version of the Lowcountry Area Transportation Study (LATS) model utilized to develop the project. Consultant to study and recommend a model alternative if warranted. **COMPLETE**
- Provide simulation and modeling of various data. **IN PROGRESS**
- Confirm that the base traffic demand model accurately takes into account trips generated by visitor traffic, workforce traffic, mass transit traffic, and traffic demand from redevelopment from existing island parcels. **COMPLETE**
- Update the model based on findings in Task 2 and coordination with the Town of Hilton Head. **COMPLETE**
- Expand the SCDOT project model and study area to include the following signalized intersections and merge points east of Spanish Wells Road: **COMPLETE**
  - William Hilton Parkway (US 278) merge with Cross Island Parkway.
  - William Hilton Parkway (US 278 Bus) at Gum Tree Road.
  - William Hilton Parkway (US 278 Bus) at Jarvis Park Road / Wilborn Road.
  - William Hilton Parkway (US 278 Bus) at Pembroke Drive/Museum Street.
  - William Hilton Parkway (US 278 Bus) at Indigo Run Drive/Whooping Crane Way.
  - Palmetto Bay Road (US 278) at Point Comfort Road/Arrow Road.
  - Palmetto Bay Road at Target Road.
  - Sea Pines Circle - William Hilton Parkway (US 278 Bus) at Palmetto Bay Road.
- Expand the model and study area to include the following signalized intersections and merge points west of Bluffton Parkway Flyover on US 278: **COMPLETE**
  - US 278 (Fording Island Road) at Buckingham Plantation Drive/Moss Creek Drive (on Mainland).
  - Bluffton Parkway at Buckingham Plantation Drive (on Mainland)

# Town Council Approved Scope of Work

## Independent Study

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### Task 4: Proposed Intersection Improvements and other important elements:

- Evaluate the safety for bicycle and pedestrians within the original Project Study Area including new signal proposed at Windmill Harbour. **IN PROGRESS**
- Evaluate vehicular safety of the Project and make cost-effective recommendations to reduce accidents and enhance safety for the motoring public including emergency response considerations. **IN PROGRESS**
- Identify potential modifications to the proposed intersection designs of the preferred alternative within the original Project Study Area from Moss Creek to Spanish Wells Road that deliver the same (or better) expected operational levels. **IN PROGRESS**
- Based on the findings of Task 3 for intersections outside of the original project study area, develop alternatives to improve operations in the future. Evaluation should include but not be limited to traffic conveyance and capacity improvements (LOS, delay, etc.) as well as anticipated project costs and known impacts or concerns with the alternatives **IN PROGRESS**
- Evaluate, quantify, and explain the Project's impacts on the Stoney Community. **IN PROGRESS**
- Develop a Summary of Findings and Recommendations for review by the Town of Hilton Head that can be utilized to secure future funding for the improvements beyond the Project Study Area. **IN PROGRESS**



# Town Council Approved Scope of Work

## Independent Study

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### Task 5: Final Report

- Compile model updates, operational analysis, and findings into a report for a review and discussion.
- Integrate safety objectives based on the results of data and analysis into findings and recommendations.
- The report shall contain a detailed quantitative, objective comparison of alternatives including pros and cons of each that assesses the conveyance and capacity efficacy, safety improvements, community and social impacts, environmental impacts, appearance/aesthetic impacts, and total costs. This comparison shall be summarized in a simple to understand, tabular format as agreed to by the Town.
- Finalize elements into draft and final reports, including executive summaries and recommendations.
- Presentation of study, with final findings and recommendations, to Town Council for endorsement/adoption.
- Submit final report electronically for endorsement/adoption by Town Council.
- All engineering work must be certified by a Professional Engineer.

# No Left Turn Assessment

## No Left Turns at Peak Hours – Stoney Corridor Signalized Intersections

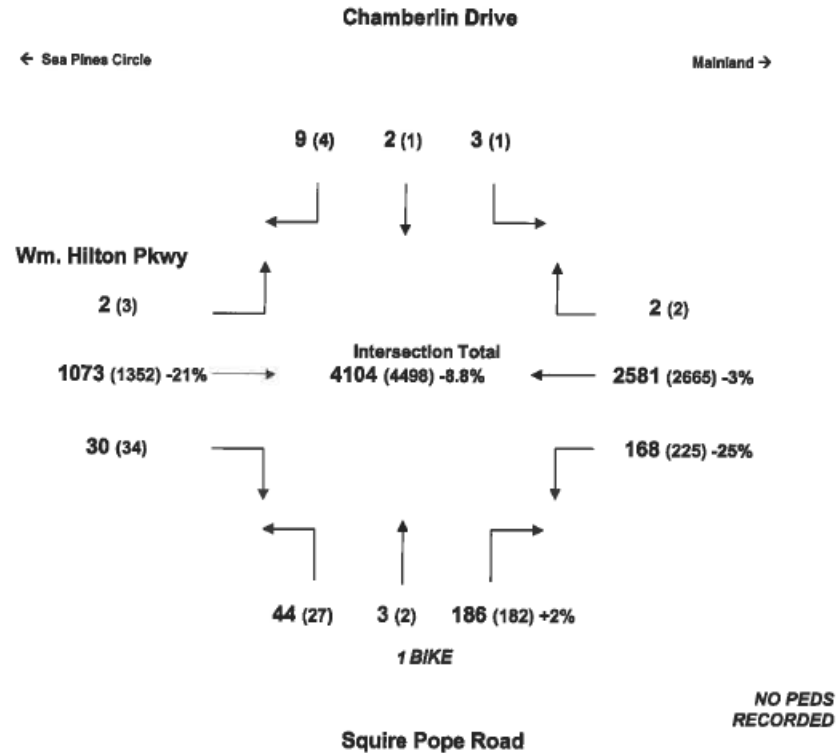
- Compared to the 2023 No-Build scenario, the VISSIM models show that the removal of the left turns would:
  - **Increase** eastbound US 278 travel times by 84 seconds during the AM peak; and,
  - **Decrease** westbound travel times by 669 seconds during the PM peak.
- The increase in eastbound travel times during the AM peak period is due to increased traffic reaching the Gumtree Road intersection, which results in queues spilling back on US 278.

Scenario	AM (Seconds)	PM (Seconds)
	EB US 278	WB US 278
2023 No-Build	1192	1760
2023 No Left-Turns	1276	1091
2023 Build	583	592

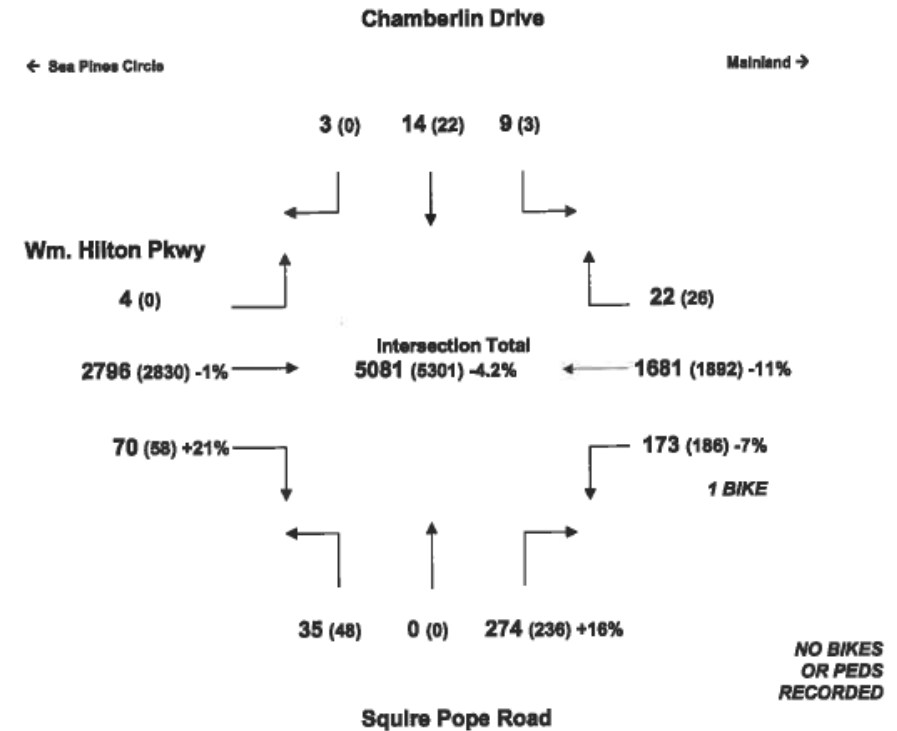
Overall, the no left-turn analysis has shown that removal of the eastbound and westbound left turn along US 278 at the signalized intersections at Squire Pope Road/Chamberlin Drive and Wild Horse Road/Spanish Wells Road would have little impact to eastbound US 278 AM peak period travel times but improve westbound US 278 PM peak period travel times. However, the CBB Independent Review Build configuration still provides a higher benefit to system travel times and long-term capacity.

# No Left Turn Assessment

**William Hilton Parkway with Squire Pope Road and Chamberlin Drive**  
A.M. PEAK HOUR (7:00 to 8:00 a.m. – Tue. 6/7/22)



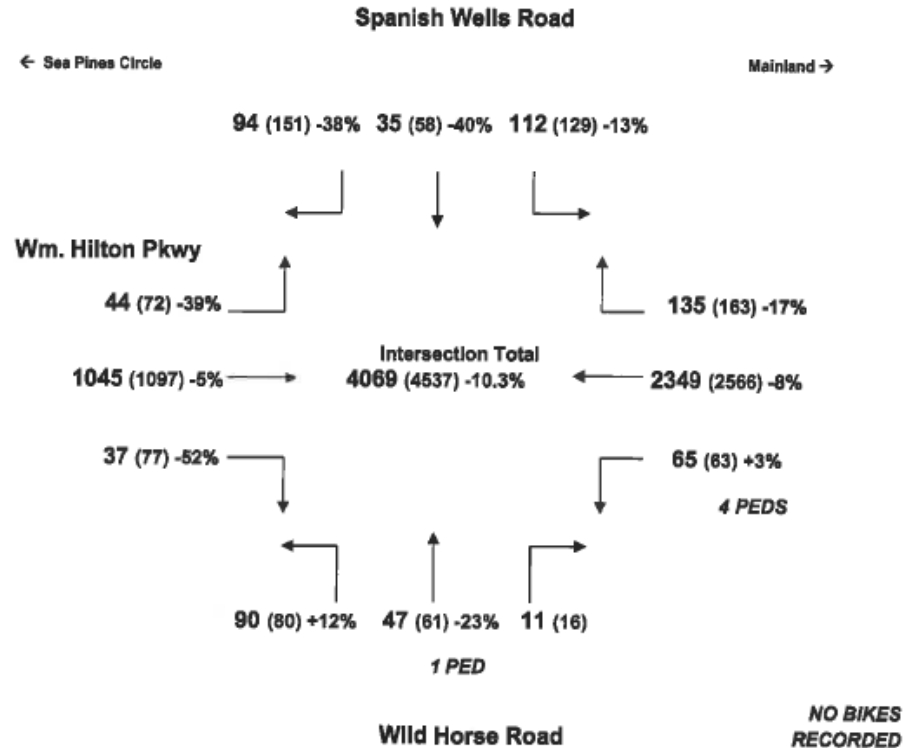
**William Hilton Parkway with Squire Pope Road and Chamberlin Drive**  
P.M. PEAK HOUR (4:15 to 5:15 p.m. – Tue. 6/7/22)



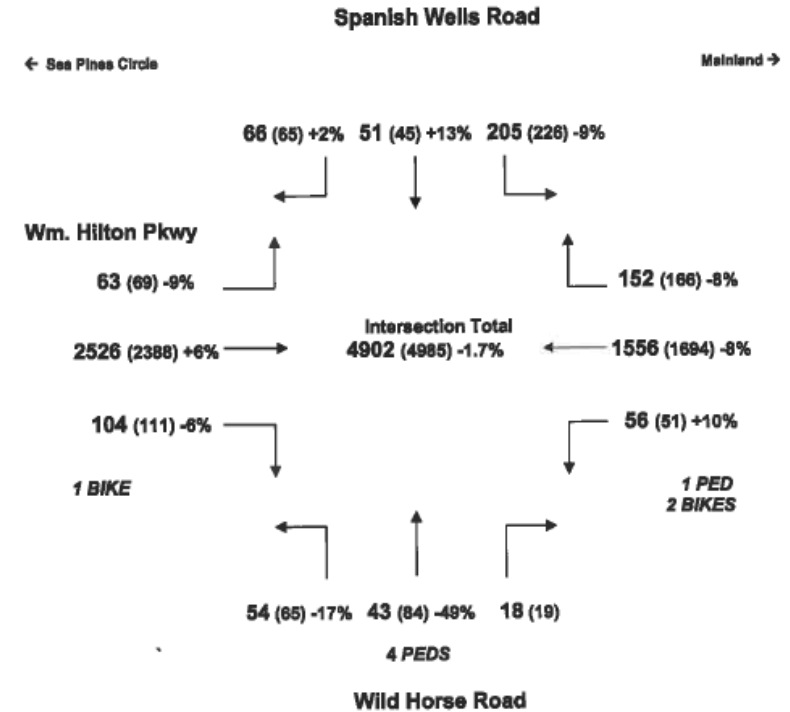


# No Left Turn Assessment

**William Hilton Parkway with Spanish Wells Road  
and Wild Horse Road**  
A.M. PEAK HOUR (7:15 to 8:15 a.m. – Tue. 6/7/22)

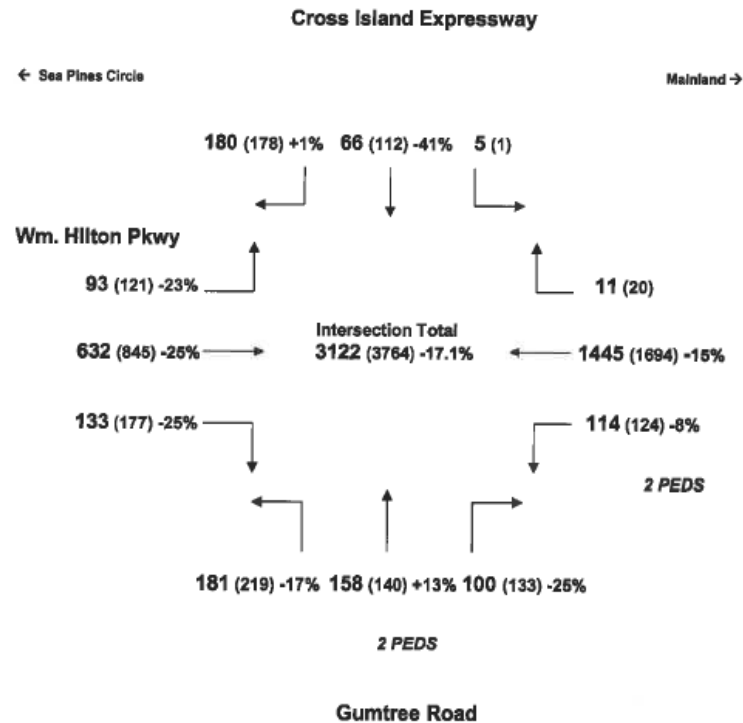


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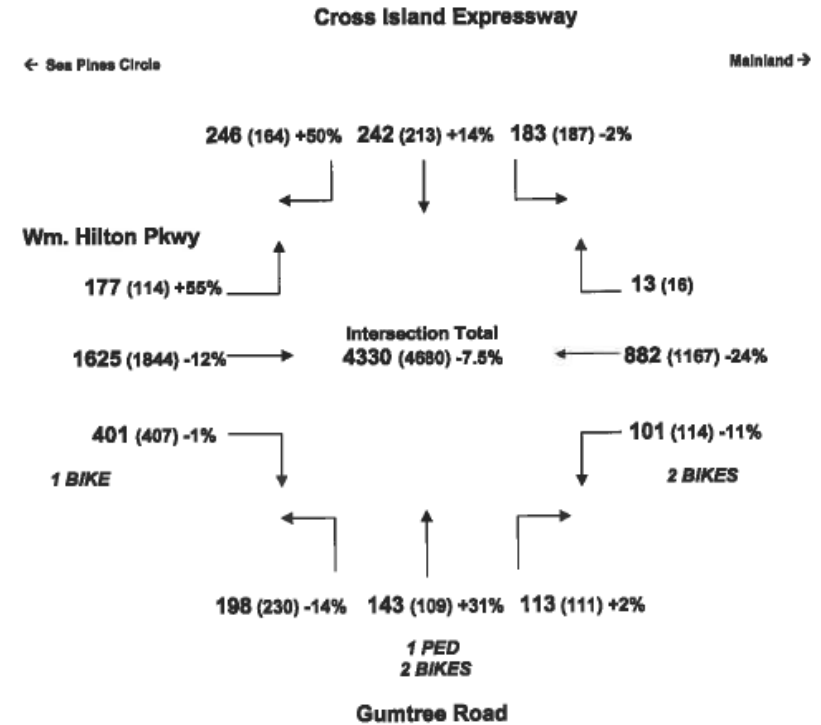


# No Left Turn Assessment

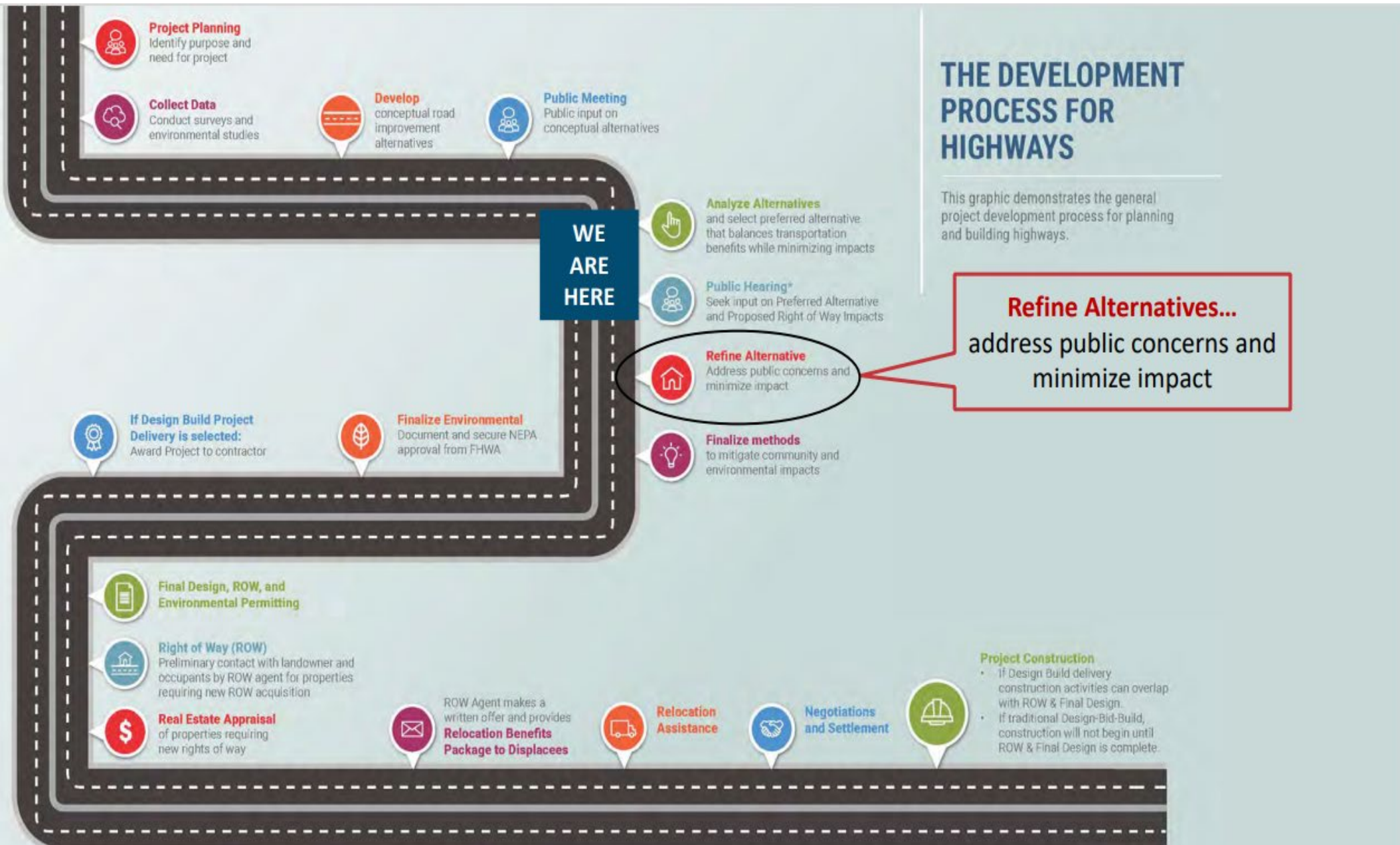
**William Hilton Parkway with Gum Tree Road and  
Cross Island Parkway**  
A.M. PEAK HOUR (7:15 to 8:15 a.m. – Tue. 6/7/22)



**William Hilton Parkway with Gum Tree Road and  
Cross Island Parkway**  
P.M. PEAK HOUR (4:45 to 5:45 p.m. – Tue. 6/7/22)



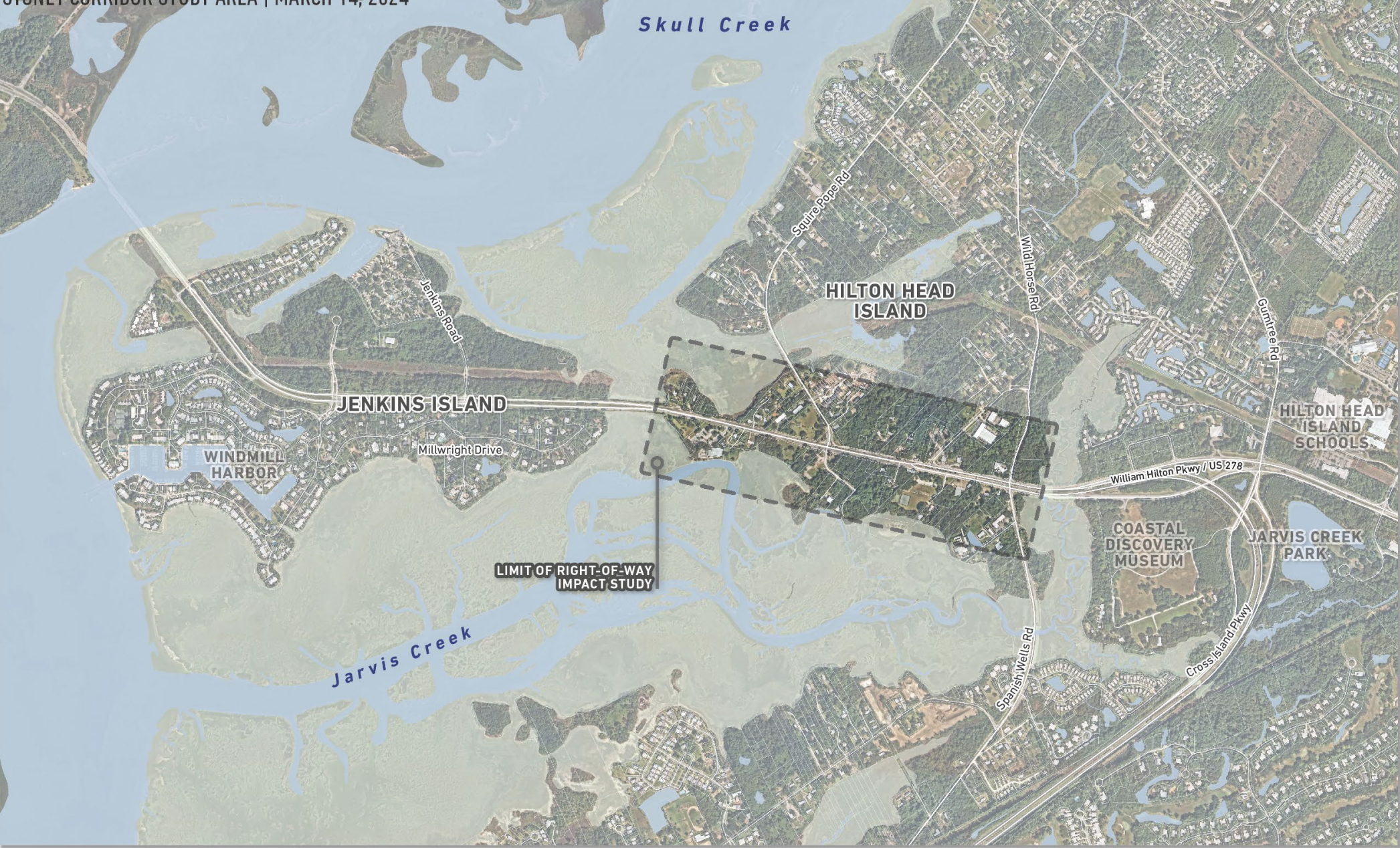
# Project Stage





# William Hilton Parkway Gateway Corridor

STONEY CORRIDOR STUDY AREA | MARCH 14, 2024





# Beaufort County Proposed Alternative

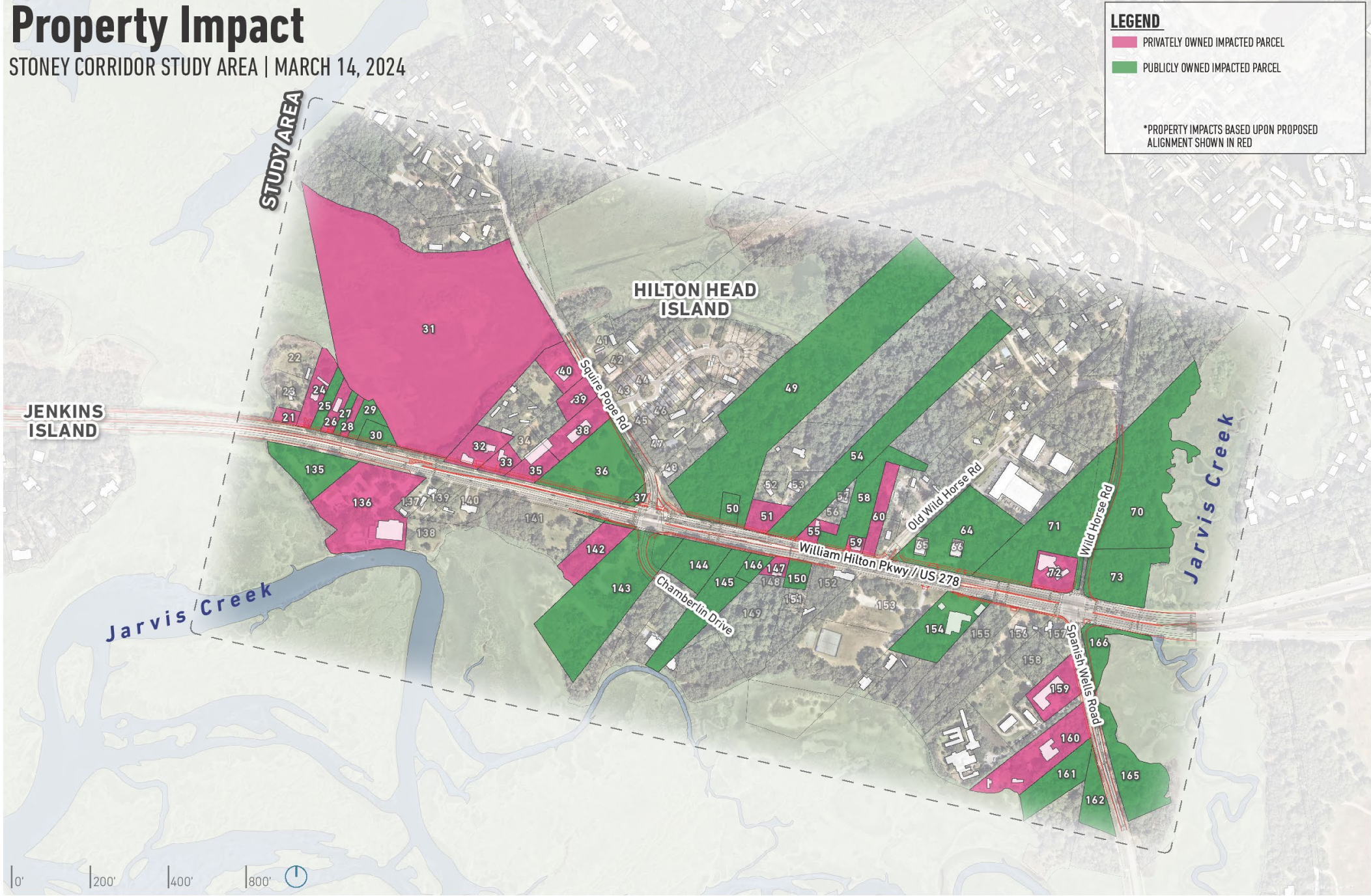
STONEY CORRIDOR STUDY AREA | MARCH 14, 2024





# Property Impact

STONEY CORRIDOR STUDY AREA | MARCH 14, 2024



# Town of Hilton Head Island

## Critical Path/Next Steps

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- Complete the Independent Study and approved Scope of Work with consultant and the Advisory Committee. Preliminary Findings expected in the first quarter of 2024 with focus on segment from Moss Creek intersection to Gum Tree Road, with final report and recommendations due in the second quarter of 2024.
- Assess recommendations for design revisions to achieve Guiding Principles.
- Coordinate meetings with impacted property owners to identify mitigation opportunities.
- Municipal Consent request and consideration (Bridge, Corridor, Impacts/Mitigation)



# Town of Hilton Head Island

## Gateway Corridor Project

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