

Ground Rules

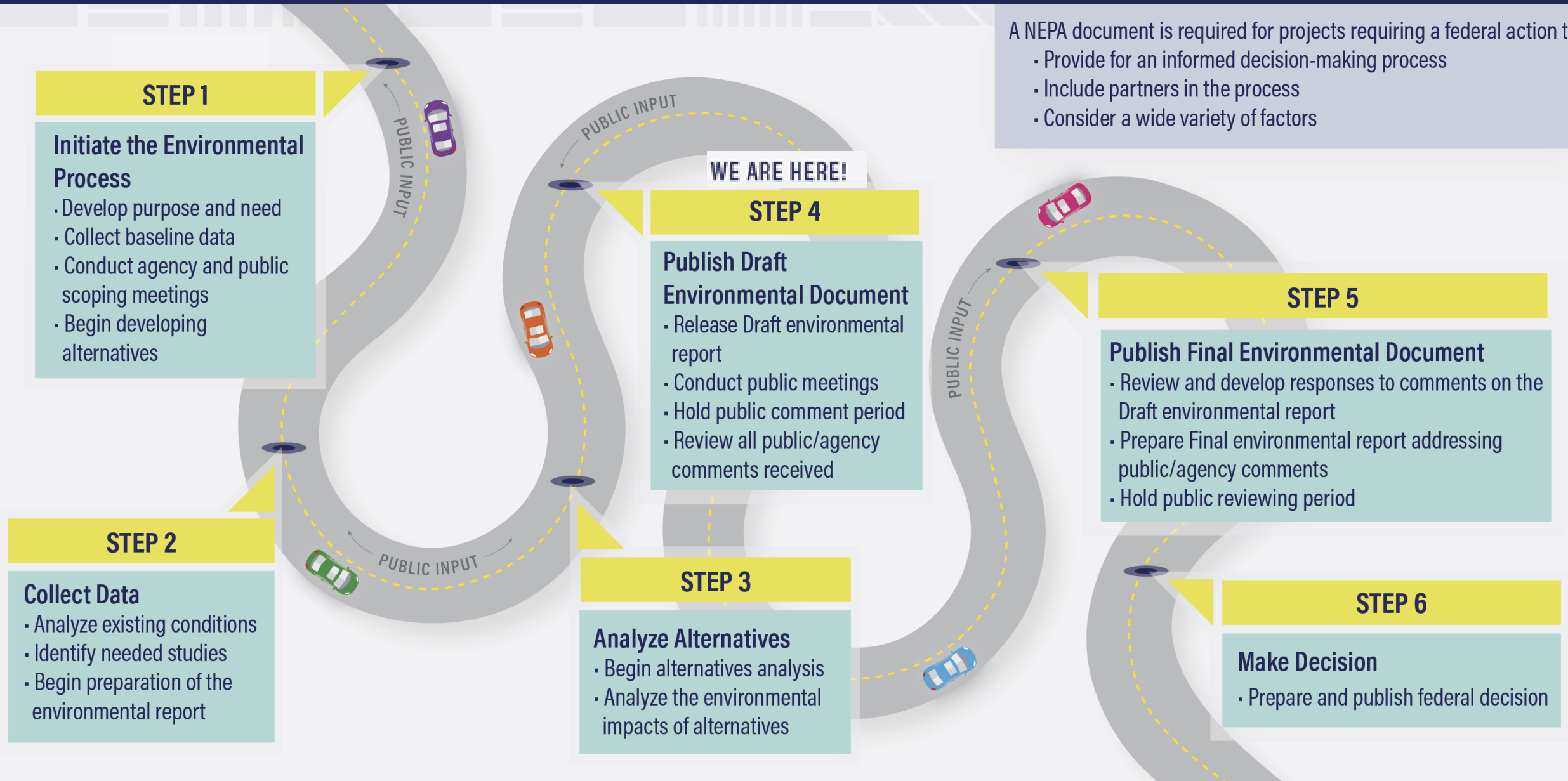
- Please be kind, courteous, and respectful to all participants.
 - Please allow our speakers to get through the presentation before asking a question.
 - During the facilitated Q&A, everyone is allowed one question.
 - We will do our best to get to all questions; please submit a comment form if you would like a written response.
 - **We will start at 6:30 p.m. and the meeting will end promptly at 8:00 p.m.**
-
- No displays, signs, banners, or noisemakers may be carried inside the meeting space.
 - Demonstrations will not be allowed in the meeting space.
 - Loud or unruly behavior will not be tolerated.
 - Please put your cell phones on vibrate.

Brickyard Plantation Meeting

August 27, 2019



National Environmental Policy Act (NEPA)



Project Purpose & Need

PRIMARY PURPOSE



Reduce congestion within the corridor



Accommodate future traffic projections

SECONDARY PURPOSE



Enhance safety throughout the corridor



Improve the transportation system and community connections

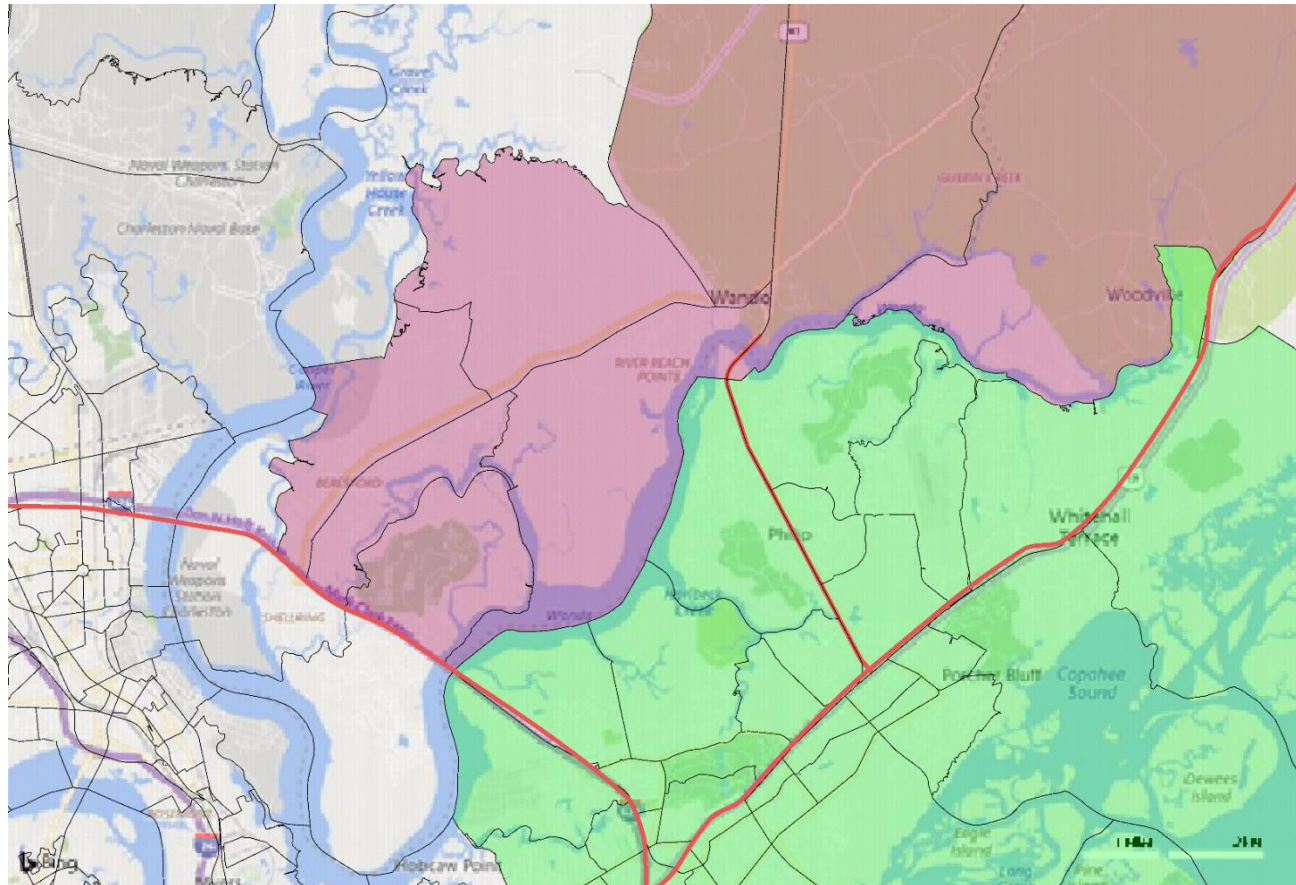


Provide bicycle and pedestrian accommodations



Minimize community and environmental impacts

Traffic Growth Forecast



■ TOMP TAZ

■ Berkeley County TAZ

Charleston Area Transportation Study Model Update

2018

- Mega-Developments in Tri-County region
 - Cainhoy Plantation in Berkeley County
 - Town of Mt. Pleasant growth

Existing traffic volumes on Highway 17: 50k vehicles/day

2045 projected volumes on Highway 17: 90k vehicles/day

ALTERNATIVES SCREENING PROCESS

DEVELOP RANGE OF ALTERNATIVES

Based on

- Preliminary traffic studies (CHATS model and planned developments)
- Regional planning documents
- Community and stakeholder working group meetings
- Agency input

ALTERNATIVE	1	ALTERNATIVE	7
ALTERNATIVE	2	ALTERNATIVE	8
ALTERNATIVE	3	ALTERNATIVE	9
ALTERNATIVE	4	ALTERNATIVE	10
ALTERNATIVE	5	ALTERNATIVE	11
ALTERNATIVE	6	ALTERNATIVE	12

SCREENING 1 ➤

IDENTIFY REASONABLE ALTERNATIVES

Eliminate and advance preliminary alternatives based on

- Ability to meet purpose and need
- Public input

ALTERNATIVE	1
ALTERNATIVE	2
ALTERNATIVE	7

SCREENING 2 ➤

REFINE THE LIST OF REASONABLE ALTERNATIVES

Eliminate and advance preliminary alternatives based on

- Ability to meet purpose and need
- Public input
- Refined traffic analysis

ALTERNATIVE	1
ALTERNATIVE	2
ALTERNATIVE	2A
INTRODUCED ALTERNATIVE	5A
ALTERNATIVE	7
INTRODUCED ALTERNATIVE	7A

SCREENING 3 ➤

FINALIZE REASONABLE ALTERNATIVES FOR ANALYSIS IN DRAFT EA

Reasonable alternatives will be refined and either eliminated or advanced based on

- Public input
- Environmental factors
- Costs
- Logistics

ALTERNATIVE	1
ALTERNATIVE	5A
ALTERNATIVE	7A

WE ARE HERE

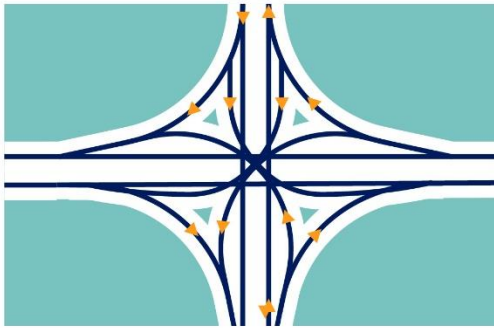
SCREENING 4

IDENTIFY RECOMMENDED PREFERRED ALTERNATIVE

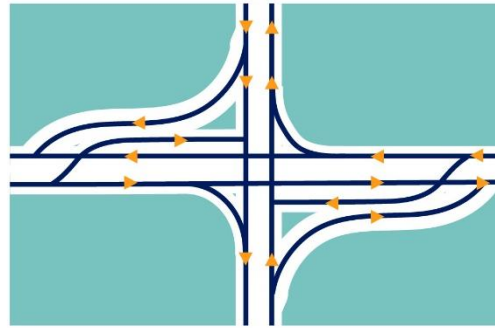
Identify a recommended preferred alternative based on

- Ability to meet the purpose and need of the project
- Public input
- Environmental factors
- Costs
- Logistics

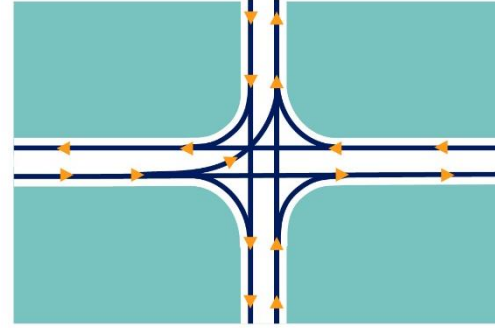
Early Concepts



Single Point Urban Interchange



Continuous Flow Intersection



Flyover Left Turn Mid



Flyover Left Turn

Alternatives Considered

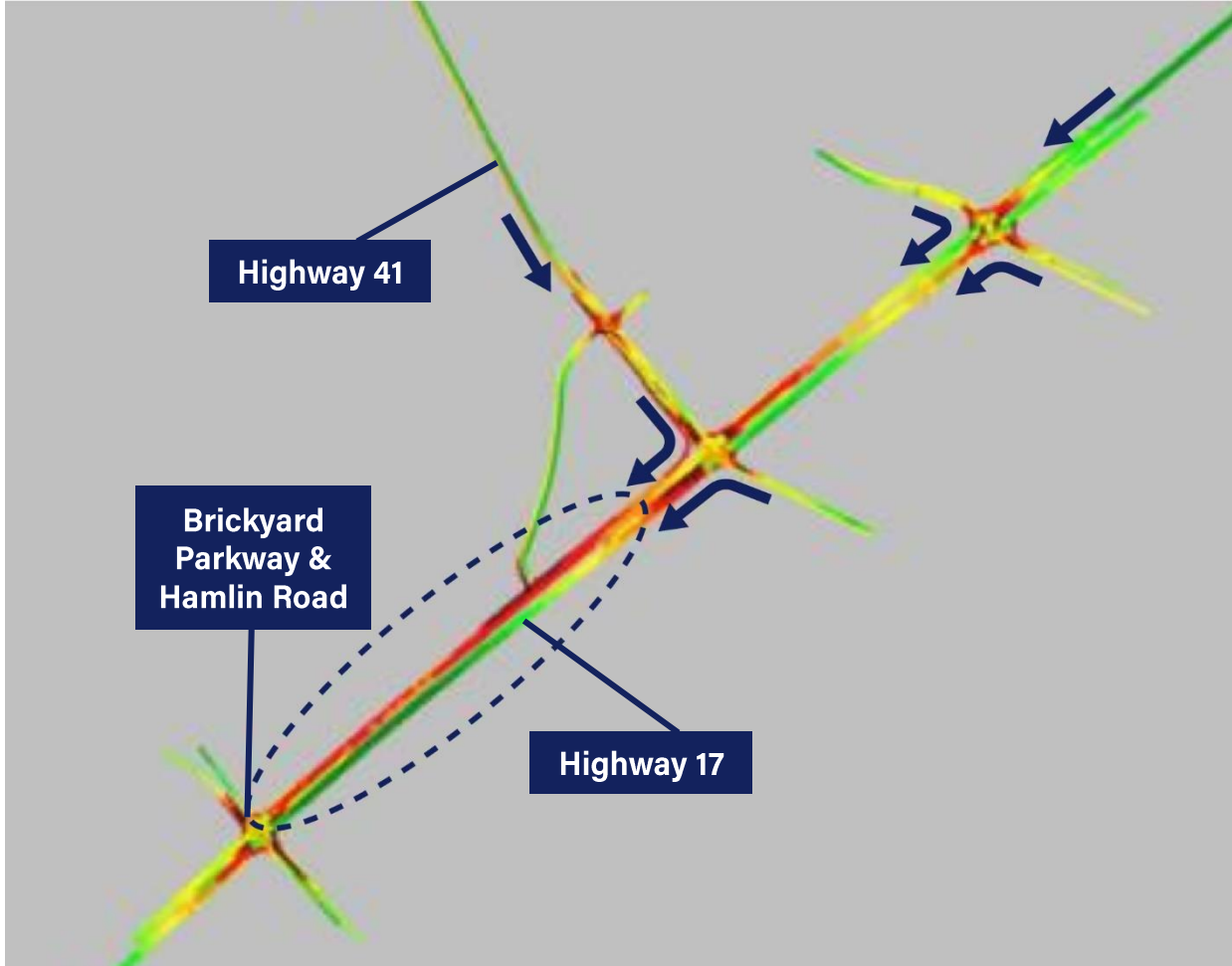
Traditional widening	Diverging diamond interchange
At Grade Restricted Crossing U-Turn (RCUT) with Quadrant roads	Grade separate four lanes of US 17 - quadrant roads
Echelon Intersection with southbound rights and eastbound lefts on a bridge	Grade separate four lanes of US 17 - two quadrant roads
Continuous flow intersection	Grade separate US 17 at SC 41 with RCUT at grade
Grade separation US 17 with options	Grade separate four lanes of US 17 from east of Hamlin to west of Porchers Bluff
Diamond interchange	Grade separation of US 17 at SC 41 / Extend SC 41 to Billy Swails / Roundabouts at Hamlin & Brickyard to eliminate lefts
Single point urban interchange	



Why didn't these alternatives work?

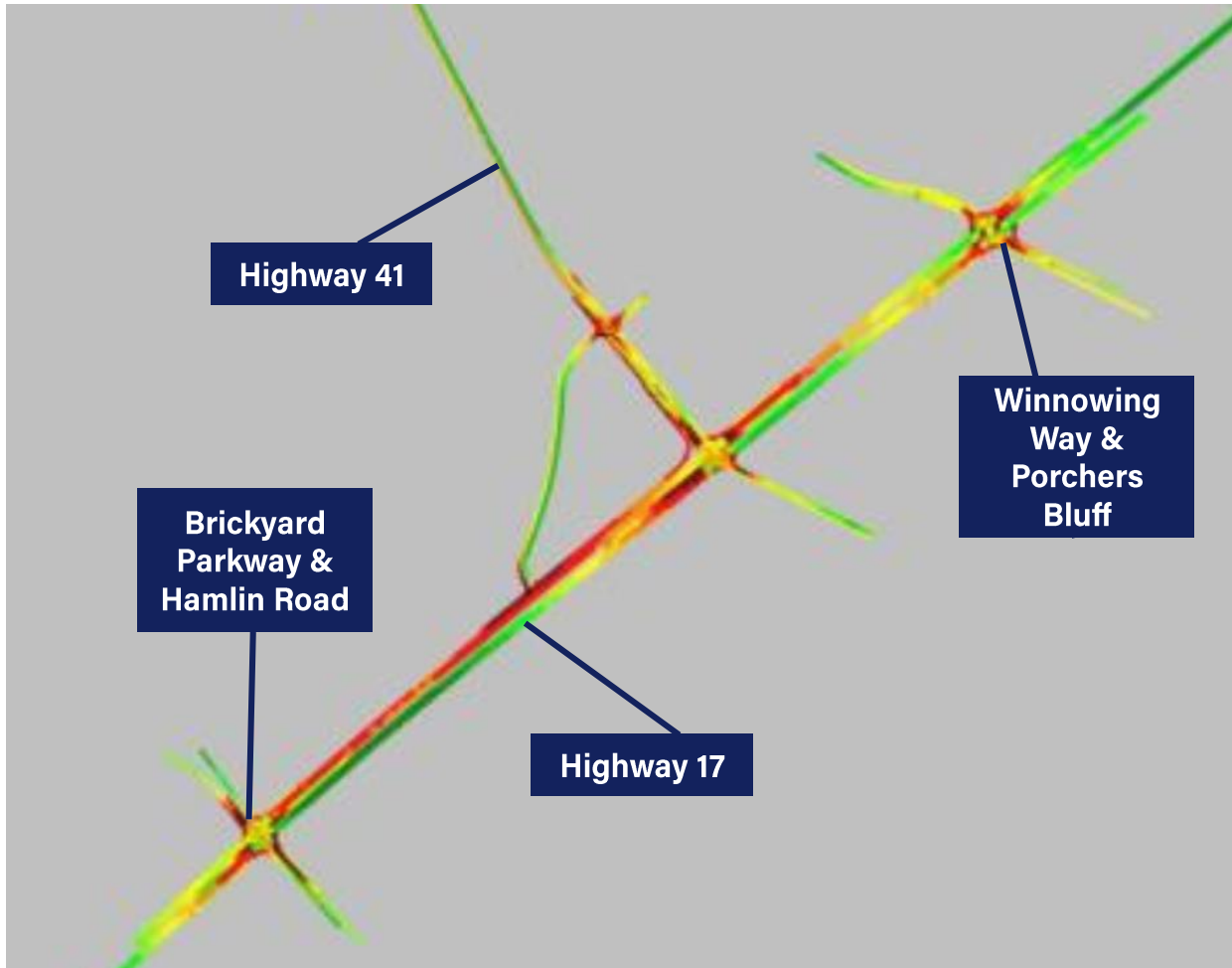
- Volume of freeway-type traffic in this corridor
- High costs and logistics of multiple bridges
- Numerous lanes and access issues throughout
- Cause of unsafe weaving movements between lanes
- Significant impacts to homes, businesses, cultural resources

The Critical Issues



- Projected 2045 traffic on Highway 17 cannot be handled without significant changes to the intersection of 17 and 41
- Hamlin at Brickyard intersection will not handle projected volumes
 - This is where all traffic in the 17 and 41 intersection comes to a head

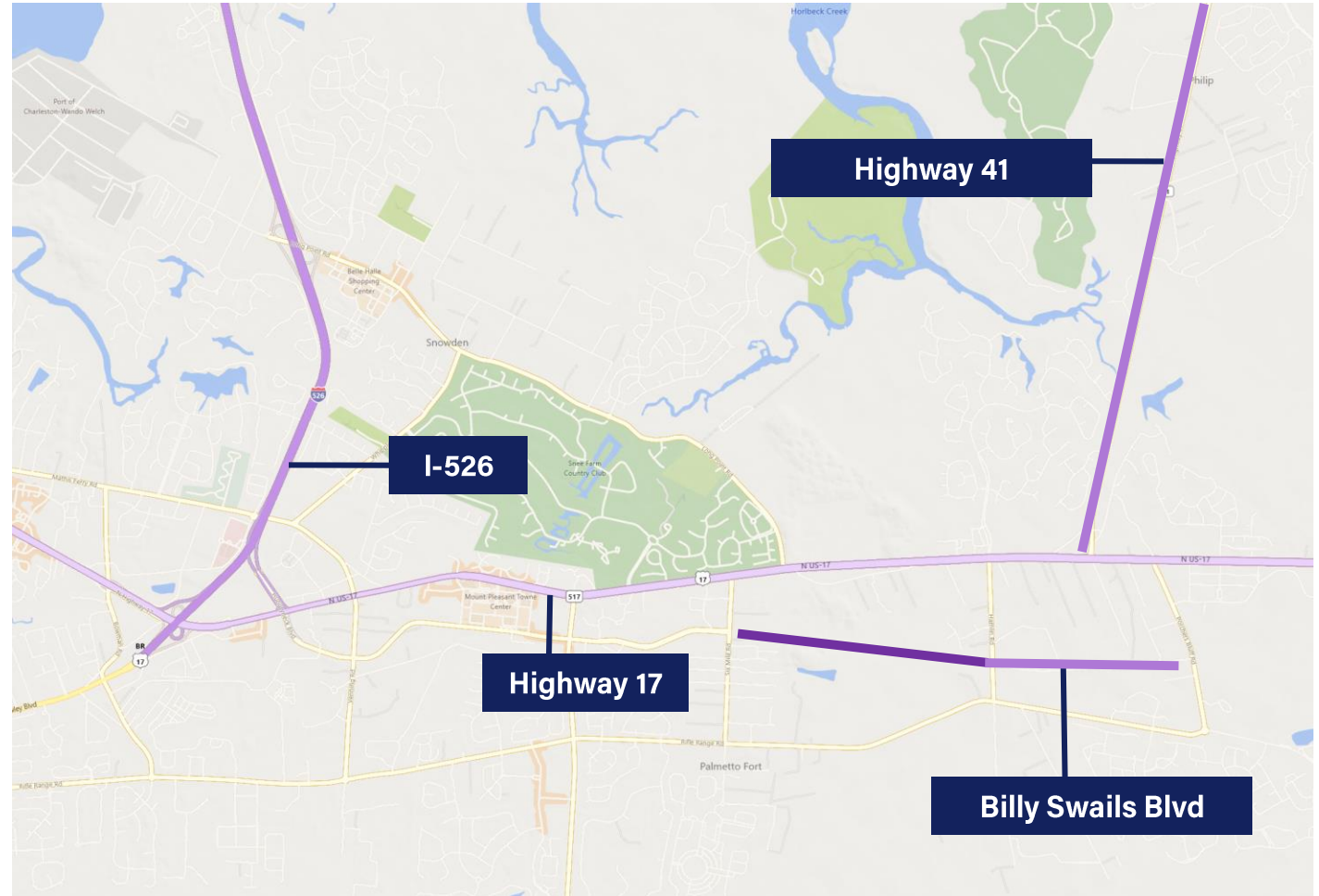
Preliminary Traffic Conclusions



- Concepts are being developed that will provide acceptable operations at the 17 and 41 intersection
- The intersection of 17 & Hamlin Road/Brickyard Parkway will fail early in the design life of the project.
- Failure of the Hamlin/Brickyard intersection in the AM peak affects operations in the 17 and 41 intersection
- Additional capacity in the 17 corridor will be needed, at least as far as Long Point Road

Regional Connectivity

- The intersection of Highway 17 and I-526 is an important factor
- Additional connections to Billy Swails Boulevard
- Planned connections have the potential to make the Highway 41 and Highway 17 intersection volumes more manageable

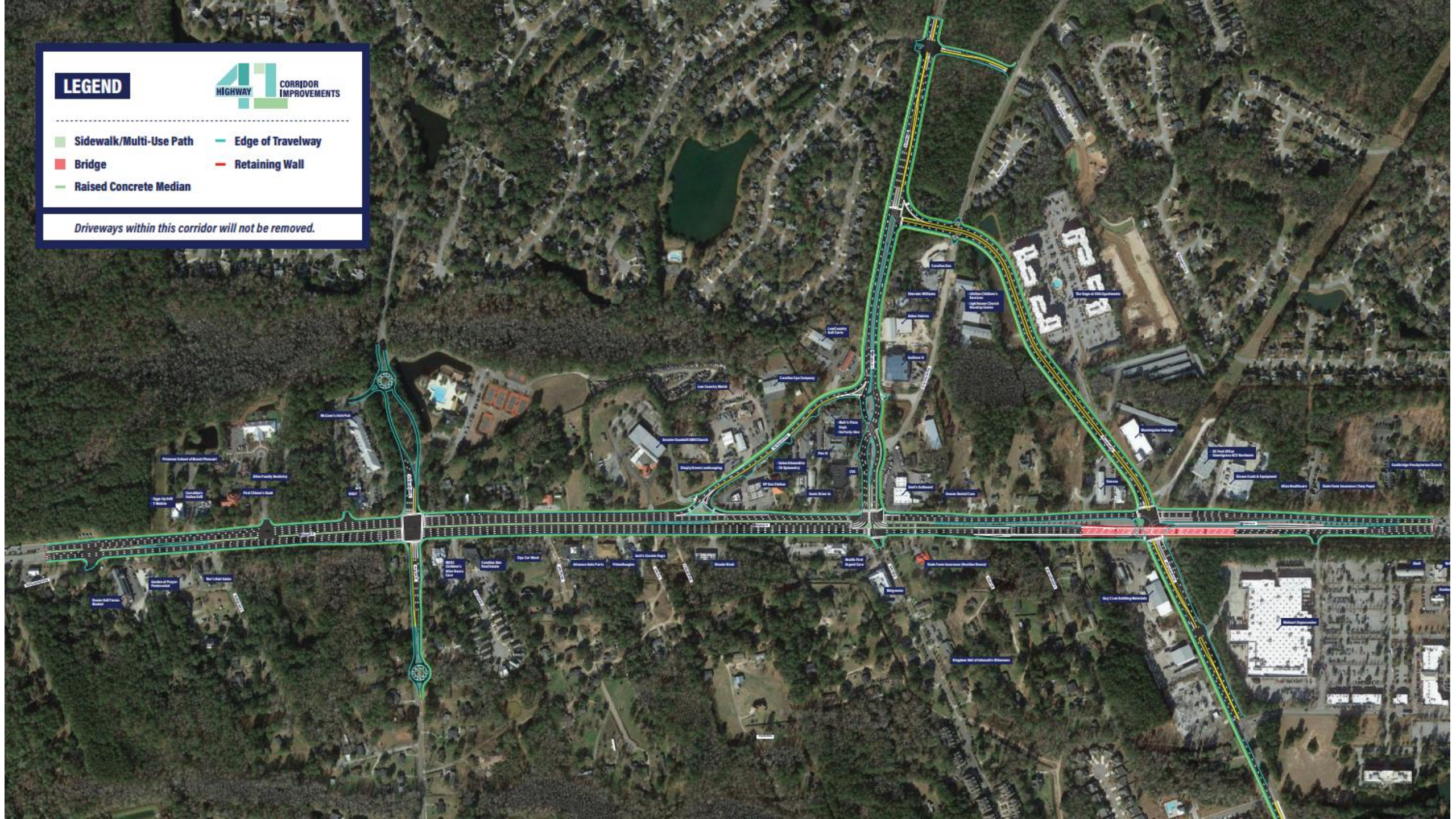


LEGEND



- Sidewalk/Multi-Use Path
- Edge of Travelway
- Bridge
- Raised Concrete Median
- Retaining Wall

Driveways within this corridor will not be removed.

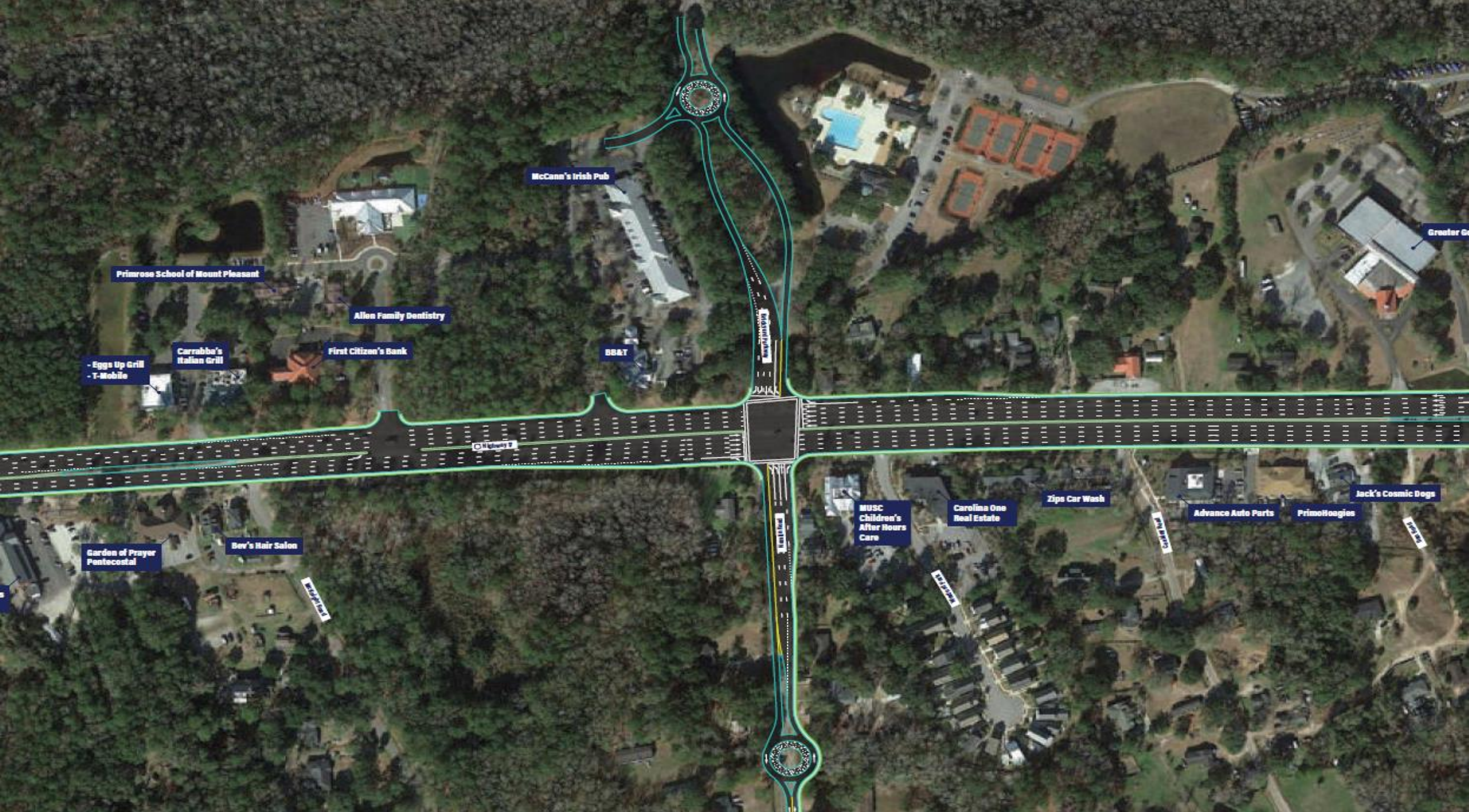




HIGHWAY

CORRIDOR IMPROVEMENTS





Brickyard Parkway Traffic

Through-traffic on Highway 17 is expected to
increase 75% by 2045.

The removal of left hand turns onto Hamlin Road and Brickyard Parkway is needed to accommodate traffic, prevent backups and minimize delays to neighborhoods.

**Winnowing Way would help to minimize right
turns into Brickyard Parkway.**

AM and PM Peak Hour

6:45-7:45 AM - peak

4:45-5:45 PM - peak

AM	PM
58	21

AM	PM
144	69

AM	PM
295	312

AM	PM
59	147

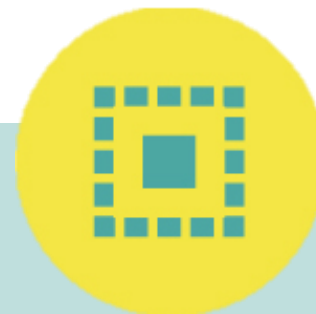
Features of the design concept – Brickyard Parkway at Hamlin Road



No total property impacts to homes or businesses in this area



Emergency services would be able to make lefts from Highway 17 into neighborhood areas



No impacts to the existing community center and amenities



Speed limit would remain 25 mph on Brickyard Parkway and speeds would reduce as traffic approaches the roundabout

Next Steps

1

Continuing to take
comments on the
design concept

2

Finalize refinements of
interchange

3

Present final design at
a public meeting in
October



Q&A



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- We will do our best to get to all questions; please submit a comment form if you would like a written response.
- The meeting will end promptly at 8:00 p.m.

Contact Us



Visit: www.Hwy41SC.com



Email us to leave comments or join the project mailing list: Hwy41SC@gmail.com



Leave a message for the project team
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