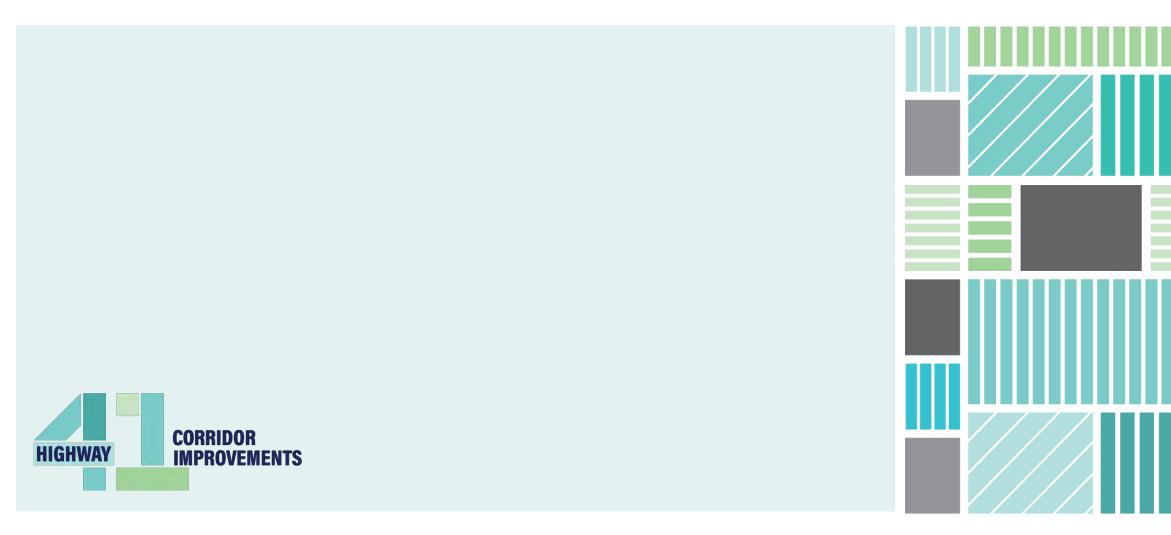
Stakeholder Working Group Meeting #2

April 26, 2018



The goals of today's meeting are to:

- Provide you with an update since our last meeting.
 - Present reasonable alternatives for the project.
- Answer questions related to the development process.
 - Gather your input and feedback.





Project Goals

- Improved capacity along the corridor.
- Improved safety for bicyclists, pedestrians and commuters.
- Improved capacity at the intersection of Highway 41 and Highway 17.
 - The completion of the Gregorie Ferry Road connector.





Preliminary Purpose & Need

- The primary purpose of the proposed SC 41 Corridor Improvements project is to reduce traffic congestion within the SC 41 corridor to accommodate future traffic projections.
- The secondary purposes of the proposed SC 41 Corridor Improvements project are to enhance safety throughout the corridor, improve transportation system and community connections, and provide bicycle and pedestrian accommodations, while minimizing community and environmental impacts.
 - The proposed project is needed to address anticipated local and regional growth, increased traffic congestion, safety and emergency response concerns, and inadequate interconnections of transportation modes, including pedestrian and bicycle facilities.





Project Phases

WE ARE HERE!

PHASE 1

- Introduction of the Project Letter of Intent
- Traffic Analysis and Field Data Collection
- Development of Conceptual Alternatives
- Determine NEPA Class of Action

PHASE 2

- Environmental
 Assessment or Impact
 Statement & Completion
 of NEPA process
- Perform preliminary alternatives development
- Conduct alternatives analysis
- Identify proposed alternative(s)

PHASE 3

- Final Design and Permitting
- Procurement

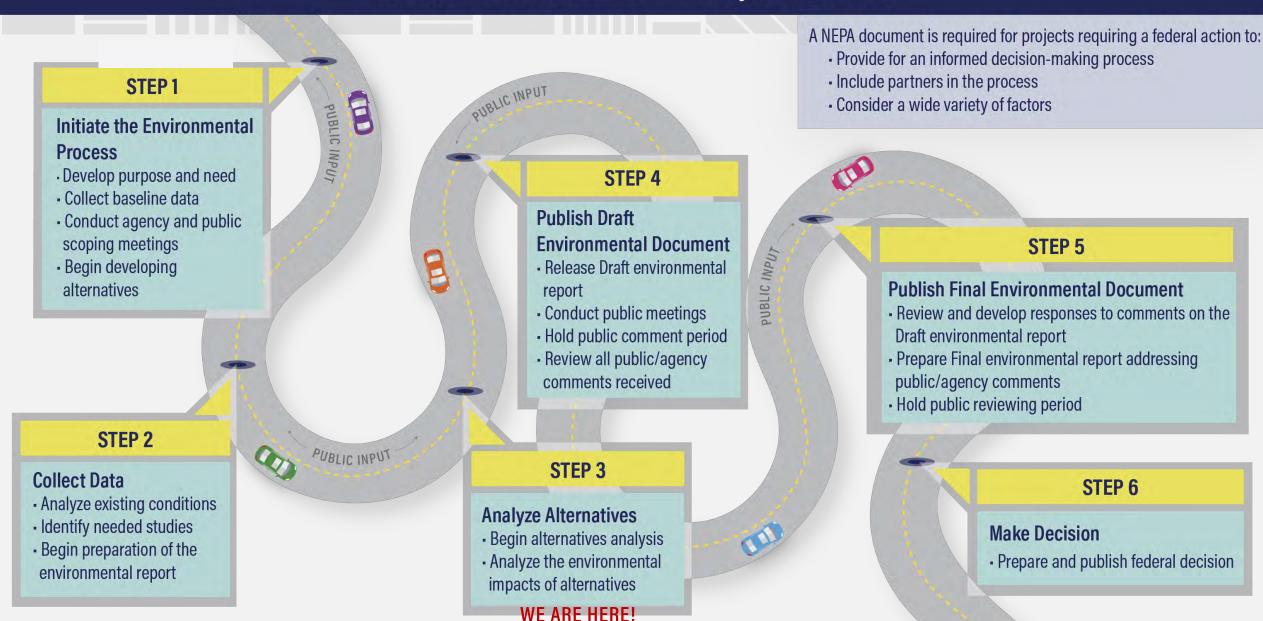
PHASE 4

Construction

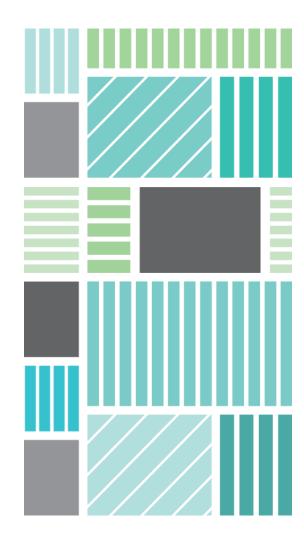




National Environmental Policy Act (NEPA)



Analyses & Data Collection



Factors examined in the environmental review:



AIR QUALITY



COSTS



HISTORIC/CULTURAL RESOURCES



ARCHITECTURAL/ ARCHAEOLOGICAL RESOURCES



ENDANGERED SPECIES



NEW/PLANNED DEVELOPMENTS



BUSINESSES



EXISTING/PLANNED UTILITIES



NOISE



CEMETERIES



FARMLANDS



RESIDENTIAL AREAS



CHURCHES, SCHOOLS, PARKS



FLOODPLAINS



STATE/FEDERAL LANDS



CONSTRUCTION FEASIBILITY



HAZARDOUS MATERIALS



WETLANDS/ WATERWAYS



Noise

- Existing noise levels have been measured within the project area.
- Sensitive receivers, such as residences, churches, and parks, have been identified.
 - Noise analysis of the reasonable alternatives will begin this summer.
 - Noise barrier analysis will be completed on the preferred alternative.

All considerations will be made based on SCDOT's Noise Abatement Policy.





Cultural Resources

A separate cultural resources study was conducted to document the Phillips Community Cultural Landscape, a National Register of Historic Placeseligible historic district.

Previously
identified
archaeological
sites

Newly identified archaeological sites

Previously
identified
architectural
resources

Newly recorded
historic
architectural
resources



Community Characterization Report

Findings from the Community Characterization and Community Impact Assessment will be used to evaluate project impacts to the human environment in the environmental document for the proposed project.



Alternatives Evaluation Considerations



Traffic (existing and future)



Environmental



Utilities

- Developments in Berkeley and Charleston Counties
 - Cainhoy Plantation
 - Clements Ferry Road
 - Planned and future developments
 - Proposed road improvements





Preliminary Traffic Analysis

Data sources

- Charleston Area
 Transportation Study
 (CHATS) model
- SCDOT and project team traffic counts/data sources

Assumptions

Alternatives were modeled by either adding capacity directly to Highway 41 or adding connecting parallel roadways, which consisted of:

- Various segments along
 Highway 41 and major crossstreets
- Bessemer Rd., Dunes West
 Blvd., Park West Blvd
- New alignments

Metrics

Purpose and need, which consisted of:

- Level of Service
- Forecasted volumes





Preliminary Traffic Results

- By adding lanes, more traffic may be drawn to that route.
- If a new corridor alignment is added, more traffic may be drawn to that route.
- By connecting two existing routes, some traffic may be drawn to that new connecting route.





Initial Screening of Alternatives

12
Alternatives

We looked at a range of 12 alternatives.



Reasonable Alternatives

Three were carried forward for further analysis of impacts on the natural environment and community based on their ability to meet the Purpose and Need.





Traffic: Level of Service

A standard measurement based on vehicle delay and speed, which reflects the relative ease of traffic flow on a scale of A to F.

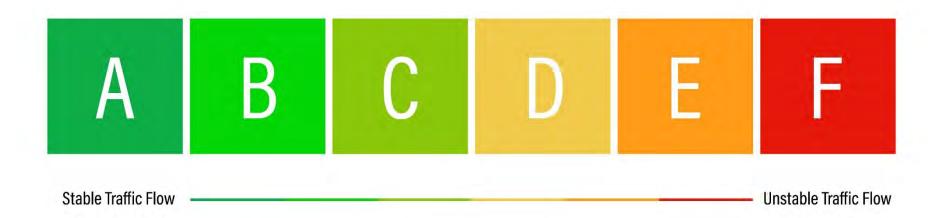






Traffic Volumes

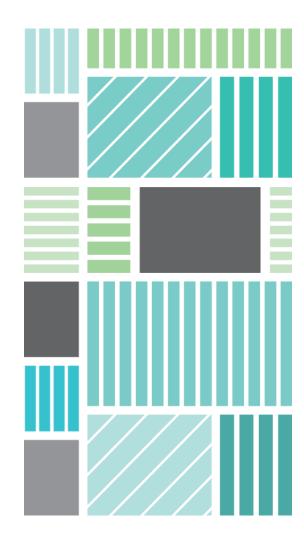
- A 3-lane road section can handle approximately 17k-18k vehicles per day and still perform at an acceptable level of service C.
- Traffic forecasts predict that the Joe Rouse Rd/Dunes West Blvd segment will have a demand of 23k to 48k vehicles per day, which will exceed capacity for a 3-lane road.







Range of Alternatives



No Build

Level of Service (LOS)



<u>G</u>

G

In the No Build Alternative, the current conditions of Highway 41 would remain unchanged. The No Build option provides a baseline of comparison for the alternatives.





Level of Service (LOS)



Alternative 1 would provide an acceptable LOS for design year 2045 and is moving forward for further evaluation.





Level of Service (LOS)

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Alternative 2 is moving forward for further evaluation as it provides an acceptable LOS for design year 2045 throughout the corridor, except for in the Phillips Community.





Level of Service (LOS)



Alternative 3 is not moving

forward because it cannot accommodate 2045 design year traffic and because of traffic flow issues involving the one-way roads.





Level of Service (LOS)



Alternative 4 is not being carried forward because the new parallel roadway would not divert enough traffic from existing Highway 41 and traffic volumes would exceed capacity along the entire new roadway.





Level of Service (LOS)



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Alternative 5 is not being carried forward because the new parallel roadway would not divert enough traffic from existing Highway 41 and traffic volumes would exceed capacity along the entire new roadway.





Level of Service (LOS)



Alternative 6 is not being carried forward because the new parallel roadway would not divert enough traffic from existing Highway 41 and traffic volumes would exceed capacity along the entire new roadway.





Level of Service (LOS)

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Alternative 7 is moving forward

Alternative 7 is moving forward for further evaluation because it provides an acceptable LOS for design year 2045.





Level of Service (LOS)



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Alternative 8 is not moving forward because a five lane section meets the design year capacity needs and it would have major impacts throughout the corridor.





Level of Service (LOS)



Alternative 9 is not moving forward because a five lane section meets the design year capacity needs and this alternative would have major impacts throughout the corridor.





Level of Service (LOS)



Alternative 10 is not being carried forward because a five lane section meets the 2045 design year capacity needs.





Level of Service (LOS)

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Alternative 11 is not being carried forward because a five lane section meets the 2045 design year capacity needs.





Level of Service (LOS)

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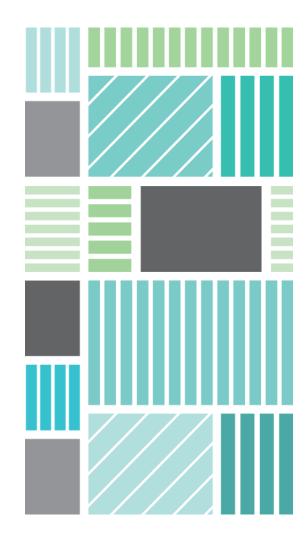
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Alternative 12 is not being carried forward because a five lane section meets the 2045 design year capacity needs.





Reasonable Alternatives



No Build

Level of Service (LOS)



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In the No Build Alternative, the current conditions of Highway 41 would remain unchanged. The No Build option provides a baseline of comparison for the alternatives.





Level of Service (LOS)



Alternative 1 would provide an acceptable LOS for design year 2045 and is moving forward for further evaluation.





Level of Service (LOS)

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Alternative 2 is moving forward for further evaluation as it provides an acceptable LOS for design year 2045 throughout the corridor, except for in the Phillips Community.





Level of Service (LOS)

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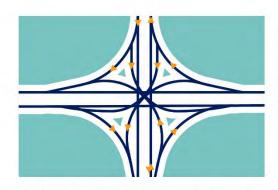
Alternative 7 is moving forward

Alternative 7 is moving forward for further evaluation because it provides an acceptable LOS for design year 2045.

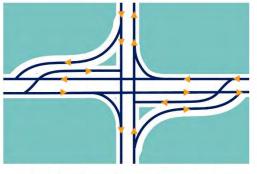




Intersection Concepts – Highway 41 at Highway 17



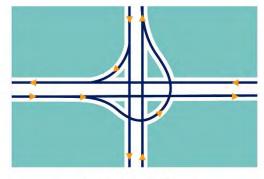
Single Point Urban Interchange



Continuous Flow Intersection



Flyover Left Turn Mid



Flyover Left Turn



Communications to Date

4,632 20,053 **Resident Project Updates Mailed Website visitors** 562 E-newsletters Sent 100 **Visitors to Online Meeting 1** Stakeholder Working Group **Total comments received Members Identified** Neighborhood Meetings Held **News articles**

134 Public Information Meeting Attendees

Top Comments To Date







New Developments

Schedule



Public Information Meeting

PUBLIC INFORMATION MEETING FOR ALTERNATIVES

15

WEDNESDAY, MAY 16

5:30 - 7:30 p.m.

Park West Gym

ONLINE MEETING

Available between MAY 16 - JUNE 16 at hwy41sc.com





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 **843-972-4403**



Follow Charleston County on Facebook ff and Twitter

CAL OYER, P.E.

Project Manager

Charleston County Transportation Development 843-202-6148

coyer@charlestoncounty.org



