



526 LOWCOUNTRY CORRIDOR

October 2021 Stakeholder Meeting
Joy Riley, PE, PMP, DBIA SCDOT



U.S. Department of Transportation
Federal Highway Administration





Project Background

Planning & Environmental Linkages Study

I-526 LCC EAST Study Area

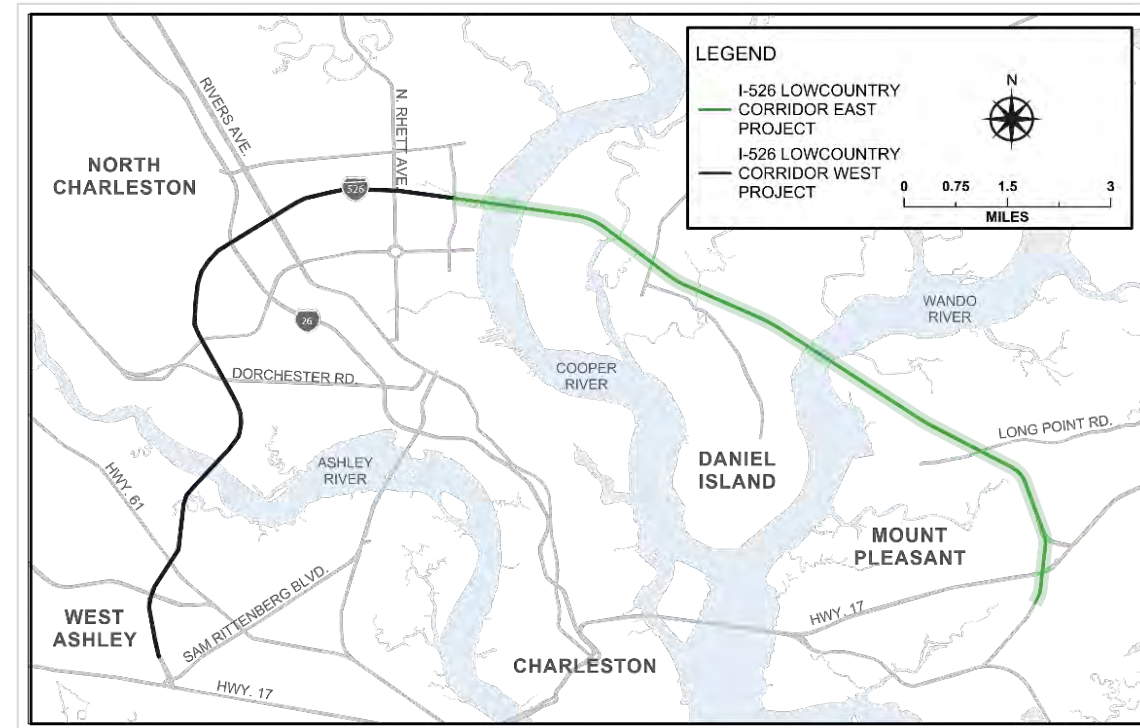
Virginia Avenue to US 17

10 
total miles

5 
interchanges

5 
miles elevated structure

2 
major bridges over
navigational channels
–Don Holt Bridge &
Wando River Bridges



What is a PEL?

1

Tool for **creating efficiency** in transportation development

2

Considers **environment, community & economy**

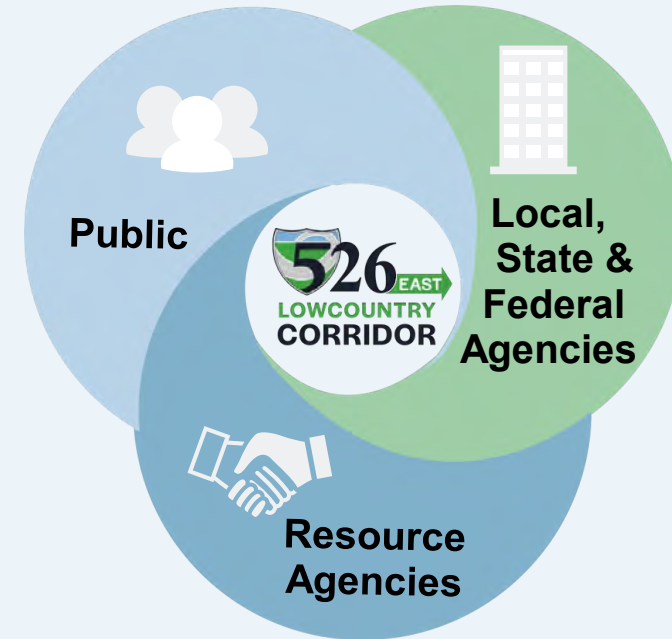
3

Collaborative & integrated approach to decision-making

What are the Benefits of including a PEL Study in the project development process?

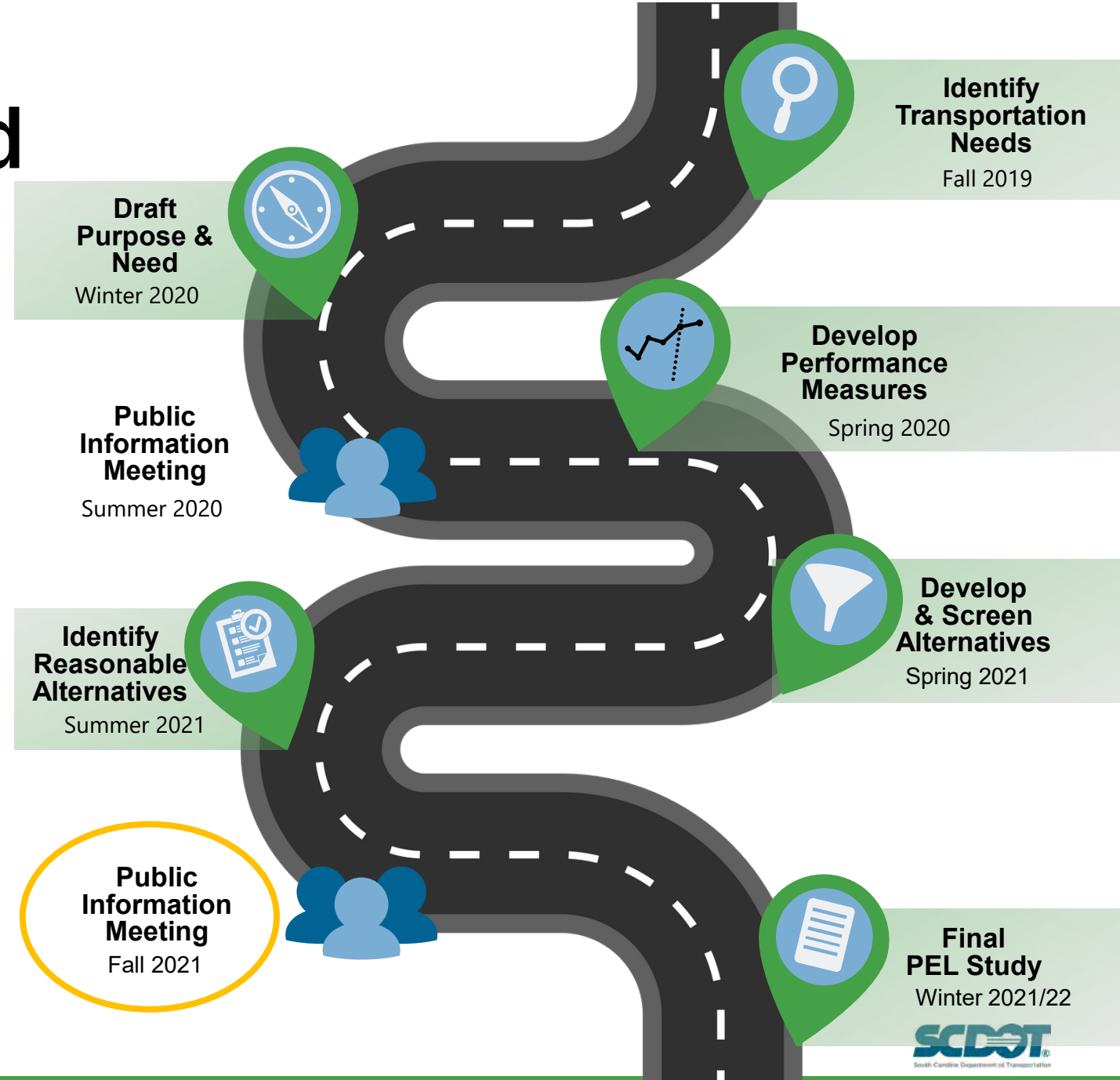


Who Participates?



PEL Study Completed Milestones

- PEL Initiation (FHWA Concurrence)
March 23, 2020
- MetroQuest Survey
May 14 - August 15, 2020
- Public Information Meeting (Online)
July 15 - August 15, 2020
- Purpose & Need (FHWA Concurrence)
February 18, 2021
- Concepts Development & Preliminary Screening
April/May 2021





Preview of Public Meeting Materials

Draft Purpose & Need

Project Purpose

The purpose for transportation improvements along this corridor is to **improve travel time reliability & reduce congestion** along I-526 from Virginia Avenue in North Charleston to US 17 in Mount Pleasant.

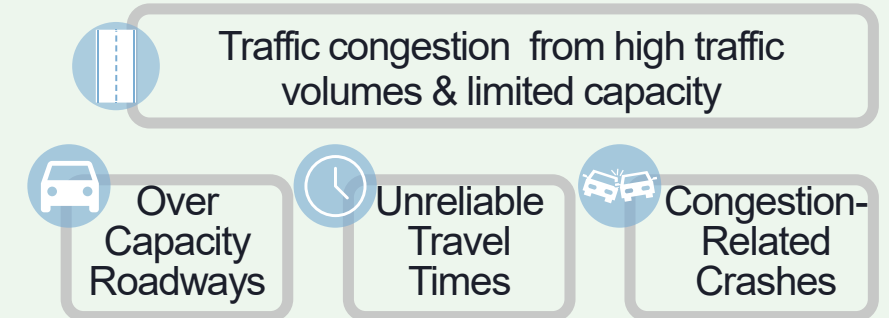
Project Goals

-  **Compatibility:** Align with local land use plans & projects
-  **Demand:** Accommodate increased numbers of vehicles
-  **Seismic:** Design any new roads or bridges with new earthquake standards
-  **Connectivity:** Improve connections with local ports, railway facilities, and transit
-  **Safety:** Reduce traffic-related crashes
-  **Multimodal:** Enhance movement through the corridor including other modes such as carpool, transit, walk, or bike
-  **Technology:** Accommodate future transportation technologies for vehicles, system monitoring, driver information, and traffic operations

Identified Needs

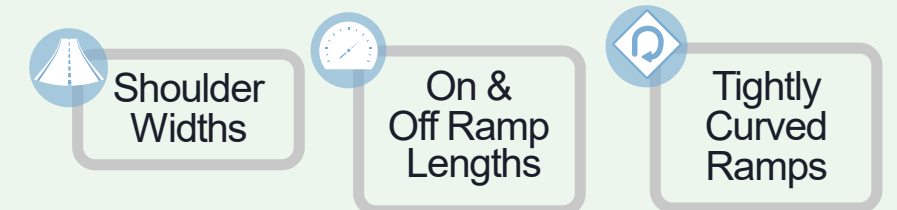
Mobility

This is a busy corridor supporting a large number of people, goods, and services. The key issues are:



Roadway Deficiencies

The current roads, bridges and interchange ramps are not designed to handle the current or future traffic demands. The key issues are:



What did we hear & how did we use YOUR input?

What We Heard: Public Information Meeting #1

Meeting Live:
July 15 -
August 15, 2020

**84
Comments**

83 Online Comments
1 Emailed Comment

Top 5 Comments & Concerns:

21%

Concerned
with Noise
Impacts

10%

Wanted Alternative
Truck/ Freight Routes

5%

Support
Widening

13%

Concerned with
Neighborhood
Impacts

6%

Wanted Trucks in
the Right Lane/
Truck-Only lanes

How was YOUR Input Used?

- To validate the purpose & need for transportation improvements in the corridor.
- To refine project goals.
- To develop alternatives concepts.



Noise was the #1 concern of the community. When will noise be studied?

More refined designs are needed to conduct a proper noise study; the current designs are high-level concepts.

This is determined during the next phase in the environmental analysis associated with the National Environmental Policy Act (NEPA). Then, multiple types of noise reduction strategies can be explored.

More information on the SCDOT noise policy can be found on the SCDOT environmental toolkit webpage

What We Heard: Public Survey

Survey Live:
May 14 -
August 15, 2020

Most Travelers
Experienced
Congestion
both
AM & PM

Top multimodal improvements
desired along the corridor:

42%
Truck-only Lanes



18%



High-Occupancy
Vehicle (HOV) Lanes or
Carpool Lanes
OR
High-Occupancy
Toll (HOT) Lanes

Most people use the
corridor daily for:

work, shopping,
entertainment &
recreation



Most people travel the corridor using their personal vehicle **85%**



Travelers are experiencing these top safety-related issues:



Congestion
25%



Truck
Merging
22%



Aggressive/
Distracted
Drivers
19%



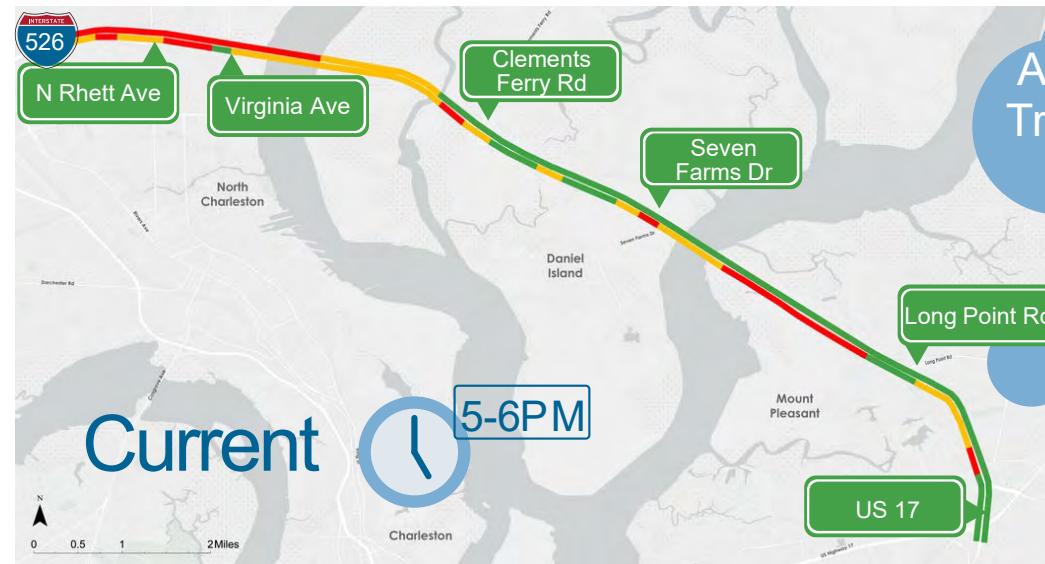
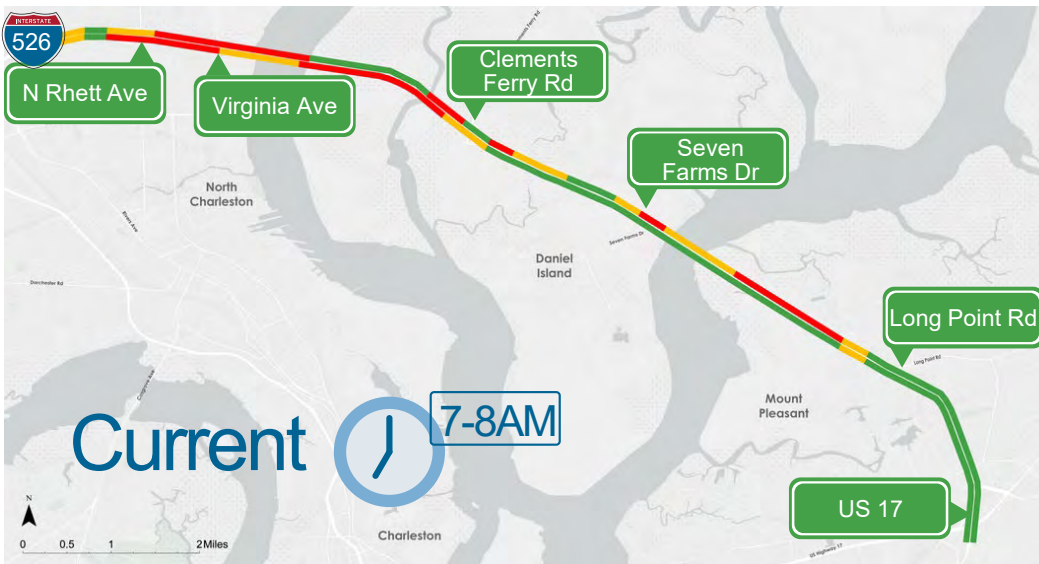
Speeding
16%

How much is traffic expected to grow by 2050?

2017 Level of Service (LOS) Conditions during Rush Hour

72% increase in Annual Average Daily Traffic & 68% increase in truck volumes expected in 2050

LOS A Free Flow	
LOS B Low Density Flow	
LOS C Medium Density Flow	
LOS D High Density Flow Stable	
LOS E Unstable Flow Approaching Capacity	
LOS F Flow Breakdown Volume Exceeds Capacity	



2050 LOS Projections with No Improvements during Rush Hour



How & why do we measure Travel Time Reliability?



Travel Time Index (TTI)

=

Time it takes to get somewhere
How long it would take to get there if you could go the speed limit

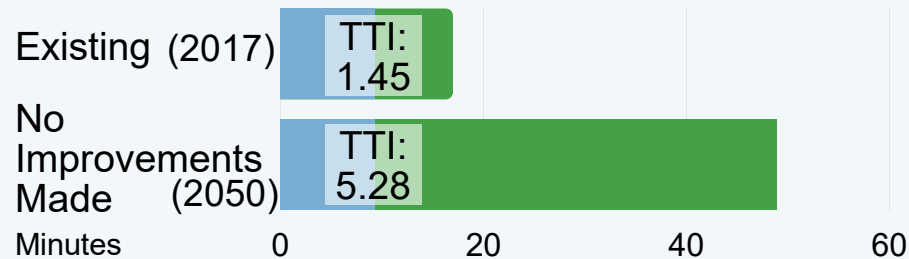


Why use this measure? If roads have a lot of traffic, even a slight disturbance can cause: Excessive Delays, have a Greater Impact, and Take longer to Recover than in a non-congested area.

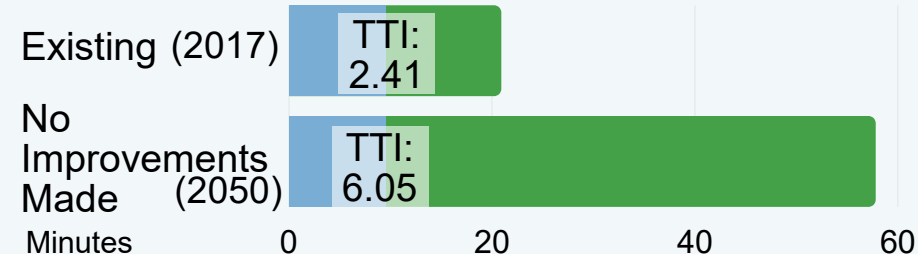
The Travel Time Index represents the additional time required to drive a certain route during rush hour (as opposed to when there is no traffic)

What would this tell me? How long would it take to go from Virginia Avenue to US 17 in Mount Pleasant in 2050 when there is no traffic (blue) vs rush hour (green)

Eastbound - Going to Mount Pleasant



Westbound - Going to North Charleston



Middle of the Night



Rush Hour

These graphs explain the Travel Time Index. Blue represents how long it would take to drive the corridor if there were no traffic, like in the middle of the night (2050). Green represents the additional time it would take to travel the corridor during rush hour. **The green bars are substantially longer under the no improvement scenario - meaning it would take that much longer to drive the corridor during rush hour in 2050 if no improvements are made.**

What does this mean?

If no improvements were made, travel times are expected to increase by 193% traveling Eastbound and 104% traveling Westbound in 2050.

What else could be done to reduce these times?

Learn more about Transportation Systems & Management Solutions in the next stations.



Stop & Pause for Questions

What types of concepts did we look at?

1 The "No Build" Alternative

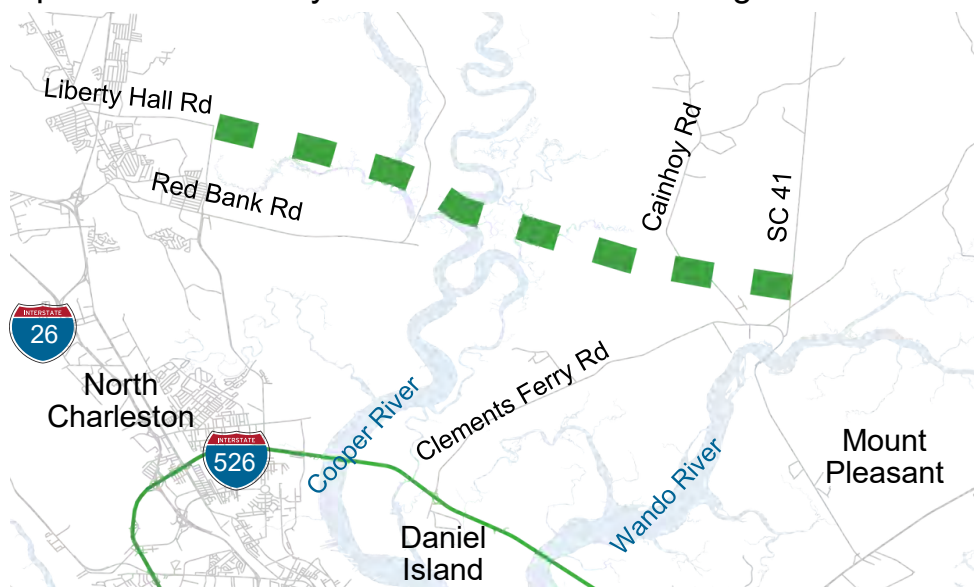
What would happen if no improvements were made?

Increased travel times and congestion. Additionally, as congestion increases, congestion-related crashes typically increase.

3 Parallel Routes

Why not build a new parallel road reduce traffic?

A new alternative route would only provide minimal improvements in congestion and travel speed. It also would not improve the roadway deficiencies of the existing I-526 corridor.



2 Transportation Systems Management & Operations (TSMO)

What other options could help extend the life of I-526 and/or prevent the need for us to build anything?

TSMO strategies are used to extend the life of a highway and avoid or delay the construction of new lanes. The existing infrastructure may not always support these options without additional construction. In this case, TSMO strategies alone would not provide the level of improvement needed. *Examples:*



Accommodation of Connected & Autonomous Vehicles



Park and Ride



Variable Speed Limit



Shoulder Lane Use

4 Adding Lanes

If we widen the existing road, how many lanes would we need in each direction? 1 lane in each direction would not improve congestion or travel time enough in 2050. Adding 2 lanes in each direction would improve both congestion and the roadway deficiencies on I-526.

+ 1



+ 2 ✓

Which transportation system management & operations options were analyzed?

Proposed to be carried forward into NEPA



Shoulder Lane Use i.e. "Bus" or "Car on Shoulder"

Shoulders are used as flexible travel lanes during rush hours

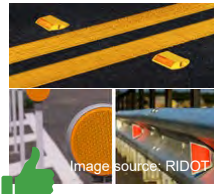


Traveler Information Incident Management Road Weather Management Work Zone Management

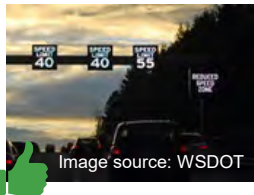


Park and Ride

Provides parking for ride sharing and bus use



Enhance Lane Markings Improves driver experience



Variable Speed Limit

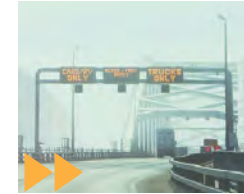
Speeds adjusted to optimize traffic flow



Accommodate Connected & Autonomous Vehicles Uses technology to improve safety and operations

Not reasonable for this project

Why not? These managed lanes options (below) do not meet the Purpose & Need of the project without regional implementation. HOWEVER, any project constructed would be done in a manner not to preclude the implementation of a regional plan.

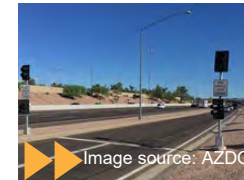


High Occupancy Vehicle Lanes i.e. Carpool Lanes

High Occupancy Toll Lanes
Adds a lane for vehicles with more than 1 passenger or those willing to pay
Dedicated Truck Lanes



Congestion Pricing
Includes a toll that increases or decreases to control the number of vehicles



Ramp Metering

Controls the number and pace of cars entering the freeway

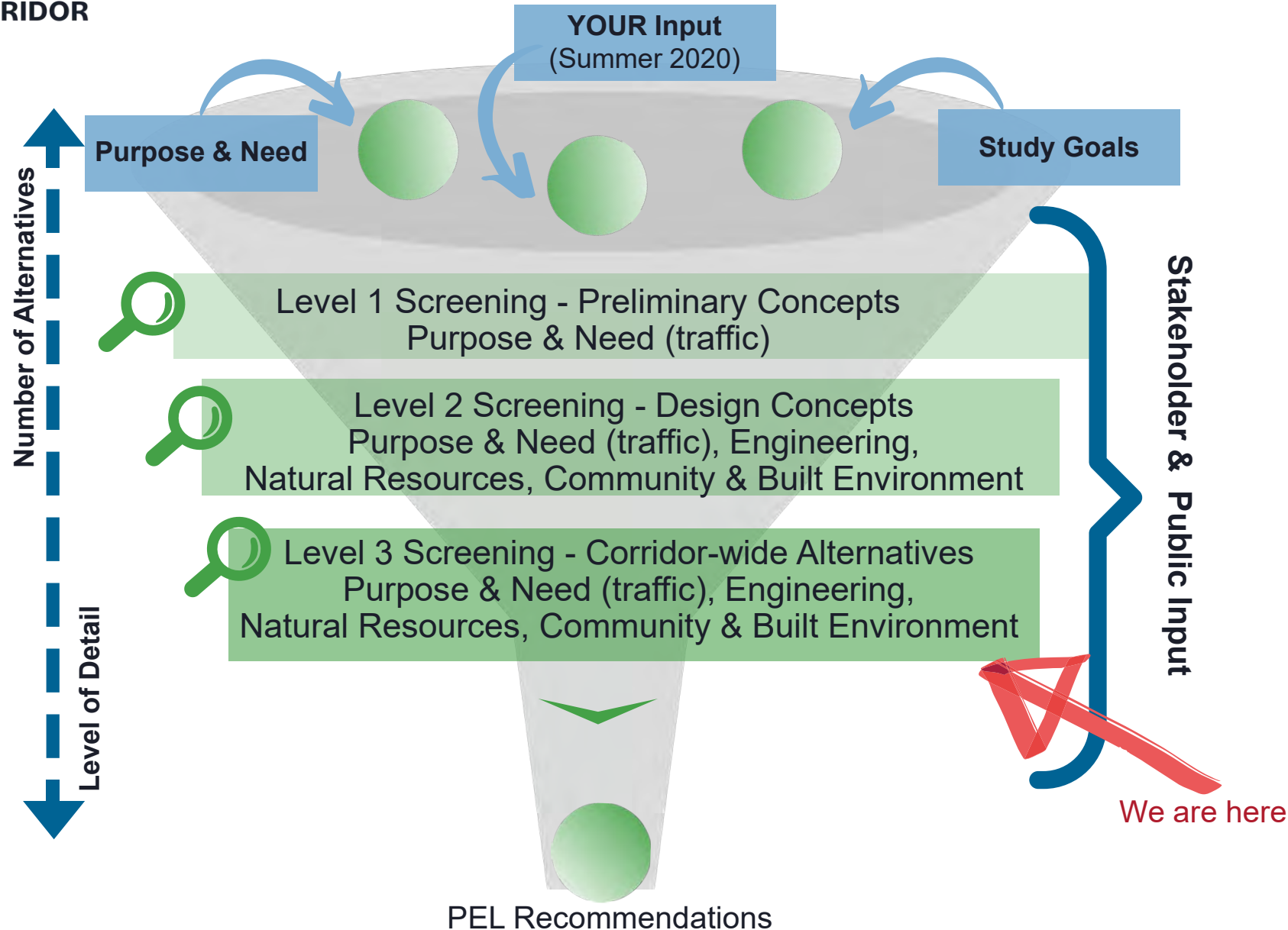
Why not? Some simulation models showed merging issues for general traffic.



Truck Platooning

Uses technology to allow multiple trucks to travel in a very tight formation

Alternatives Concepts Screening Process



How were the alternative concepts evaluated?





























The project team evaluated the alternatives through a three-step screening process to identify the reasonable alternatives that are presented today.

Each level of screening included a more detailed analysis of the alternatives. As the process progressed, poorly performing alternatives were removed from further review.

The resulting alternatives are proposed to be carried forward into the NEPA process.

Reasonable Alternatives Matrix

How do each of the reasonable alternatives compare based on the identified criteria?

	No Build	Alternative 1	Alternative 2	Alternative 4	Alternative 5	Alternative 7
 Replace Don Holt Bridge?	 Keep	 Keep	 Keep	 Replace + Raise	 Replace + Raise	 Replace + Raise
 Replace Wando Bridge?	 Keep	 Replace + Lower	 Replace + Lower	 Replace + Lower	 Replace + Lower	 Replace + Lower
 Impacts to Aquatic Resources (acres)	0 Acres	179 Acres	177 Acres	167 Acres	174 Acres	178 Acres
 Relocations	0 	73 	73 	80 	64 	72 
	0 	25 	27 	12 	15 	26 

Reasonable Alternatives Matrix - Continued

How do each of the reasonable alternatives compare based on the identified criteria?

	No Build	Alternative 1	Alternative 2	Alternative 4	Alternative 5	Alternative 7
 <p>Impacts to Parks & Recreational Facilities?</p>	0	3 Ralph M. Hendricks Park, Governors Park, Kearns Trail	3 Ralph M. Hendricks Park, Governors Park, Kearns Trail	2 Ralph M. Hendricks Park, Governors Park	3 Ralph M. Hendricks Park, Governors Park, Kearns Trail	3 Ralph M. Hendricks Park, Governors Park, Kearns Trail
 <p>Impacts to Threatened & Endangered Species?</p>	No	No	No	No	No	No



Bike & Pedestrian Access

All reasonable alternatives, except the No Build, include a 14 ft. shared-use path along the river crossings to provide access for bicycles and pedestrians. The shared-use path along these river crossings would connect with planned and existing facilities and support regional multi-modal goals.

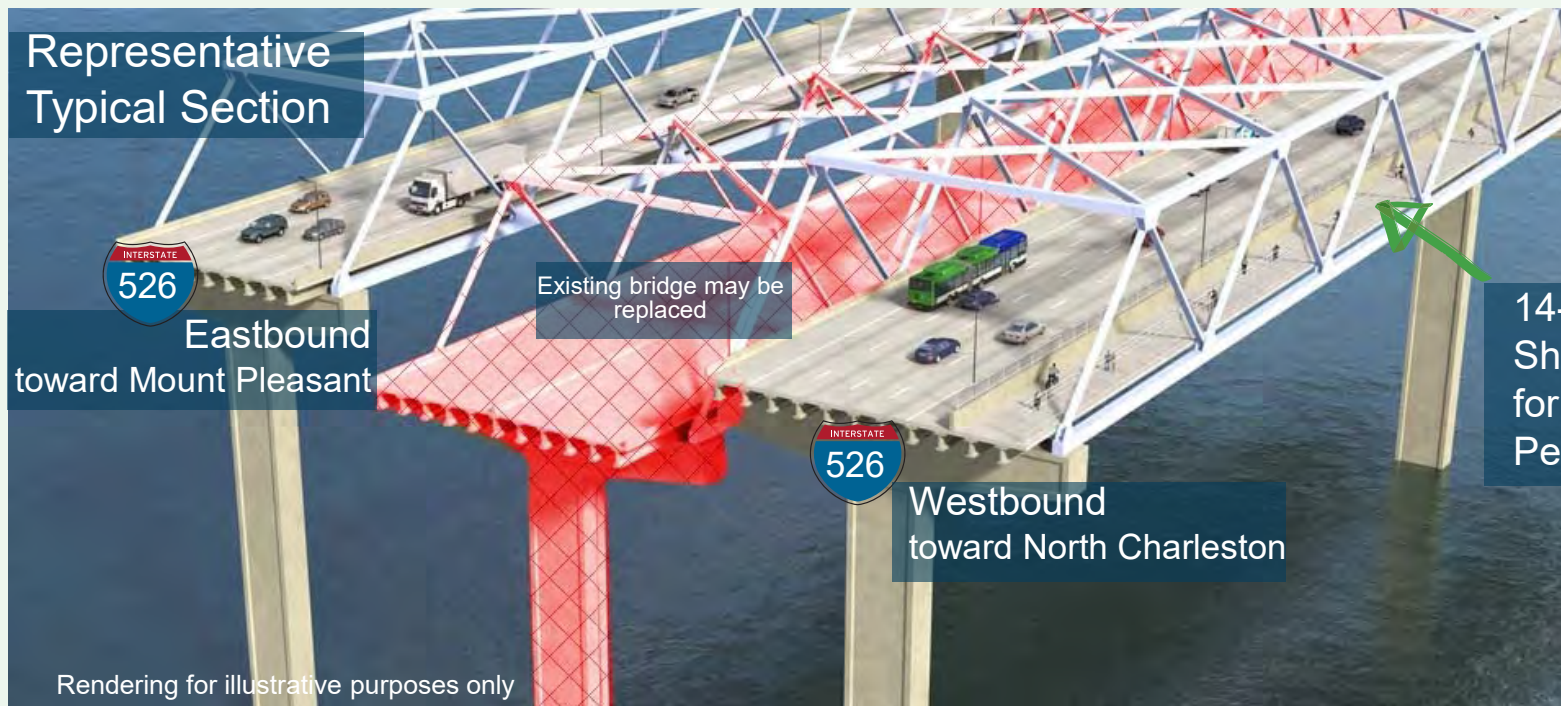


Costs

Cost is not a determining factor at this stage. However, variables influencing costs include whether or not a bridge would be replaced, the right-of-way needed, having to move any utilities, and any costs associated with mitigating impacts to the environment or communities.

Don Holt Bridge Features

How tall should the Don Holt Bridge be?

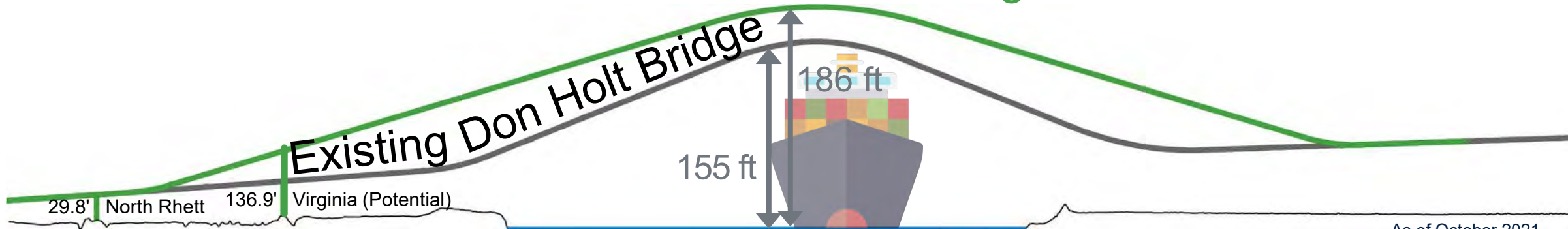


How do we determine the proposed bridge height?

Navigation studies and coordination with US Coast Guard are required to establish new bridge height



Potential Don Holt Bridges



Wando Bridge Features

How tall should the Wando Bridges be?



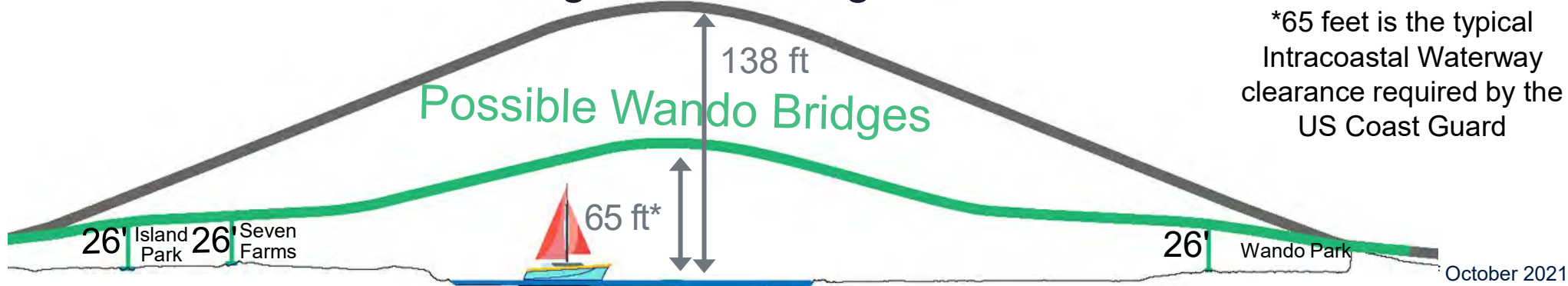
How do we determine the proposed bridge height?

Navigation studies and coordination with US Coast Guard are required to establish new bridge height

14-foot,
Shared-use Path
for Bikes &
Pedestrians



Existing Wando Bridges



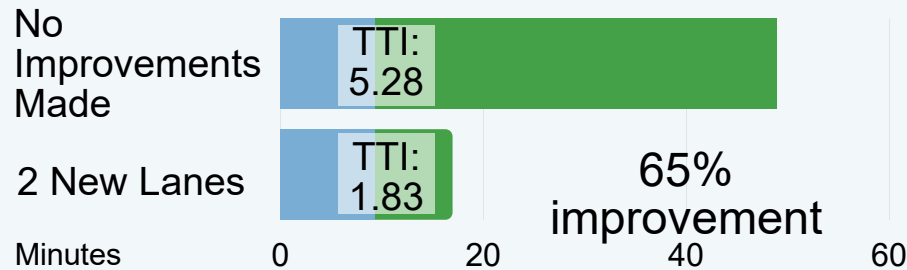
Traffic Performance of Reasonable Alternatives

How do the reasonable alternatives improve the Travel Time Reliability?

All reasonable alternatives have the same lane configurations and therefore would provide similar improvements

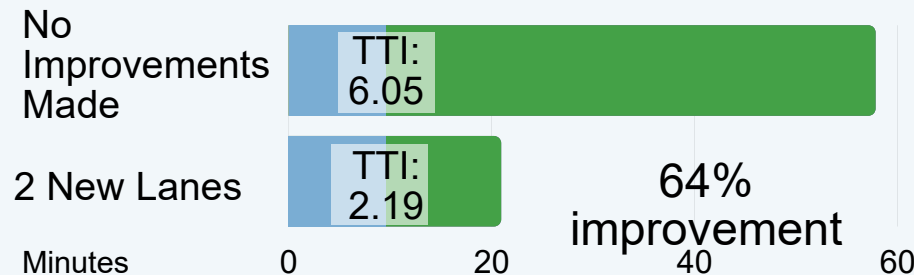
Comparing the No-Build vs. Build in 2050

Eastbound - Going to Mount Pleasant



No Traffic
(Like Middle
of the Night)

Westbound - Going to North Charleston



Rush Hour
(Such as
5-6pm)

These graphs help explain the Travel Time Index. The blue shows how long it would take to drive the corridor if there were no traffic in 2050 (AKA how long it takes to drive it going the speed limit) and the green shows the additional time it takes to travel the corridor during rush hour. Note, the green bars are substantially longer if no improvements are made - meaning it would take that much longer to drive the corridor.

What does this mean?

The Travel Time Index indicates it would take less time to drive from North Charleston to Mount Pleasant (and the reverse) if any of the reasonable alternatives were constructed



Estimated Drive Times During Rush Hour in 2050

	No Improvements Made	Reasonable Alternative Constructed
Eastbound Going to Mount Pleasant	49 Minutes	17 Minutes
Westbound Going to North Charleston	58 Minutes	21 Minutes



Stop & Pause for Questions



PEL Study Next Steps and Milestones

Next Steps

How does a PEL Study transition to NEPA and what happens after?

PUBLIC & AGENCY INVOLVEMENT

Planning & Environmental Linkages Study (PEL)

1.5 - 2.5 Years

- Planning studies
- Existing conditions analysis
- Future forecasts
- Study goals
- Purpose & need
- Range of alternatives and screened reasonable alternatives
- Cost estimates and Implementation Plan
- Level of NEPA analysis: Categorical Exclusion, Environmental Assessment, or Environmental Impact Statement

NEPA

1 - 2 Years

- Confirm/refine purpose & need
- Detailed environmental studies & noise analysis
- Refine alternatives
- Explore mitigation & commitments
- Prepare decision document

Project Implementation

- Final design
- Right-of-way acquisition
- Permitting
- Mitigation commitments
- Construction

Maintenance Operations

- Maintenance of roadway and right-of-way

- ✓ The PEL provides SCDOT leadership the estimated project costs to better plan the schedule for future improvements
- ✓ Schedules for construction will be established in the next phase based on:
 - Priorities
 - Estimated Costs
 - Available Funding
 - Design details
- ✓ Detailed noise and environmental analysis will be done in NEPA

How can I participate?

Official Comment Period
October 11 - December 1, 2021

How to Participate



Project Website

526LowcountryCorridor.com/eastvpim2021
Live, October 11, 2021

The Public Information Meeting webpage contains all the materials you would see at an in-person meeting.

A mailed public information meeting packet may be requested by calling 843.258.1135 or emailing info@526LowcountryCorridor.com.



In-person Public Meetings

Tuesday, October 26, 2021 5-7 PM

R. L. Jones Center
391 Egypt Road, Mount Pleasant, SC

Wednesday, October 27, 2021 5-7 PM

Felix C. Davis Community Center
4800 Park Circle, North Charleston, SC
CARTA Routes 13 & 104

Spanish translation services available at all meetings.

How to Comment

Meaningful input is our number one priority. Below are the ways to make your voice heard in the official project records.



Project Website

526LowcountryCorridor.com
Fill out a comment form on the project website.



Project Hotline

843.258.1135 (Call Us)

Press "2" to leave a verbal comment. Comments will be limited to 2 minutes.



Project Email

info@526LowcountryCorridor.com



Mail

Joy Riley, PE, PMP, CPM, DBIA
SC Department of Transportation
Post Office Box 191
955 Park Street, Room 401
Columbia, SC 29202-0191



Stop & Pause for Questions



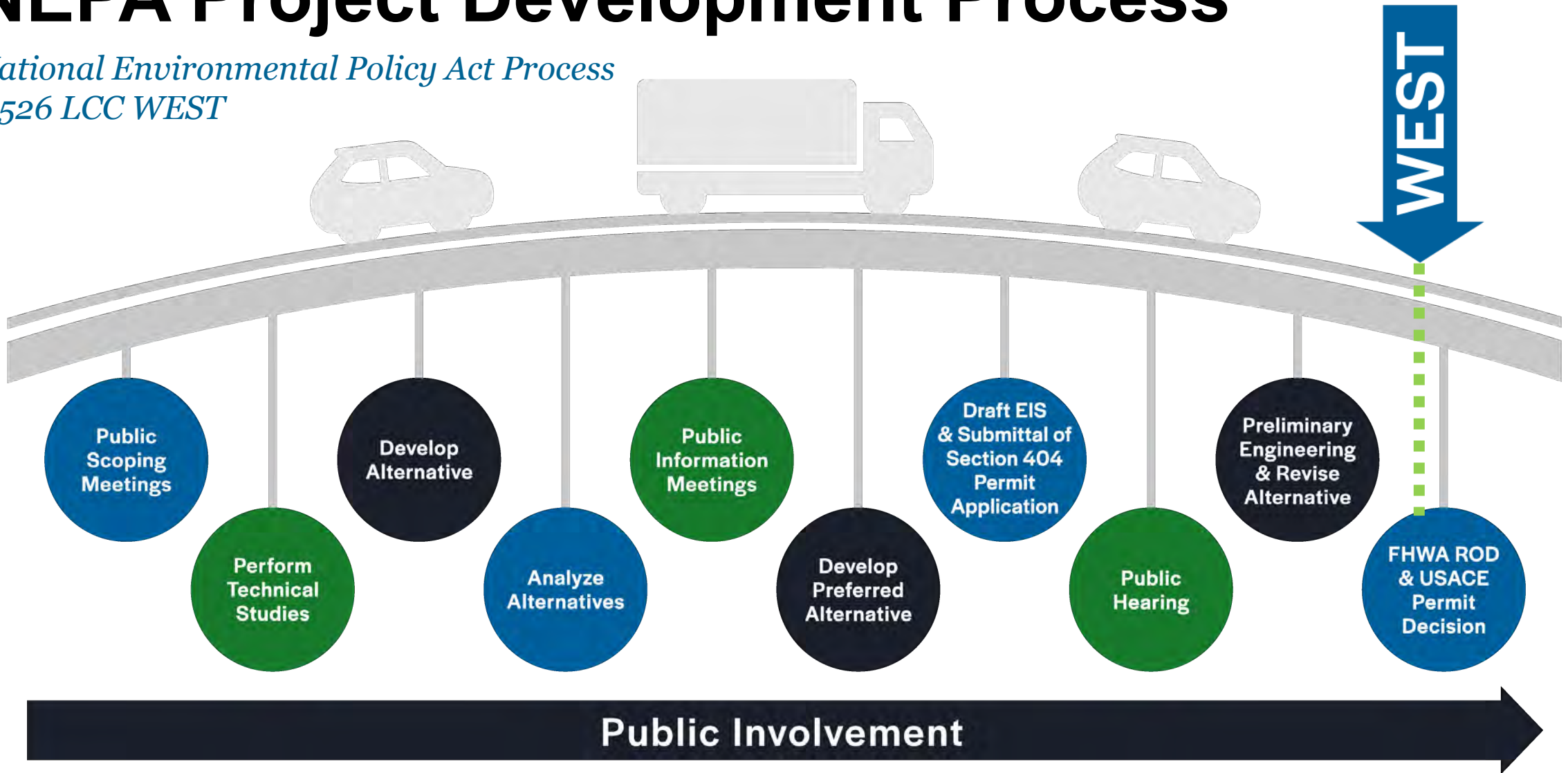
WEST Updates

An Environmental Impact Statement



NEPA Project Development Process

National Environmental Policy Act Process
I-526 LCC WEST



What is missing from this story?

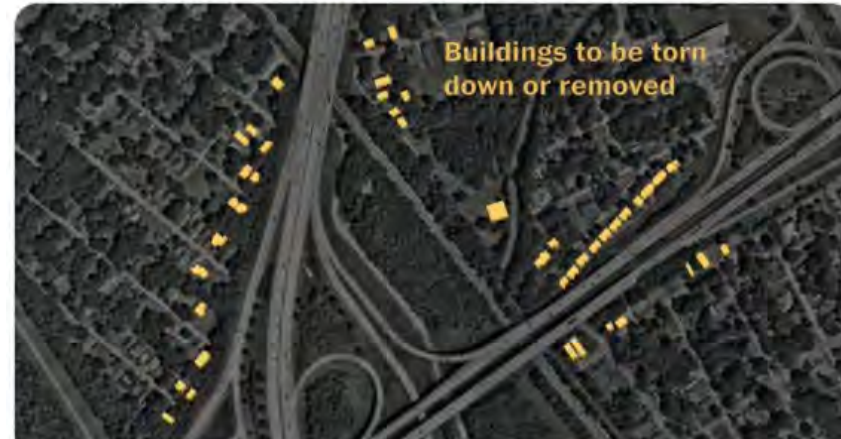


The Washington Post
@washingtonpost

...

The dismantling of Black communities for highways is not just a thing of the past.

In a planned highway widening project a few miles north of Charleston, 94 percent of displaced residents live in communities mostly consisting of Black and Brown people.



Black people are about to be swept aside for a South Carolina freeway — again South Carolina destroyed Black homes to build I-26 and I-526 without much engagement. The state vowed to engage residents for a new project, but it still ...
[washingtonpost.com](https://www.washingtonpost.com)

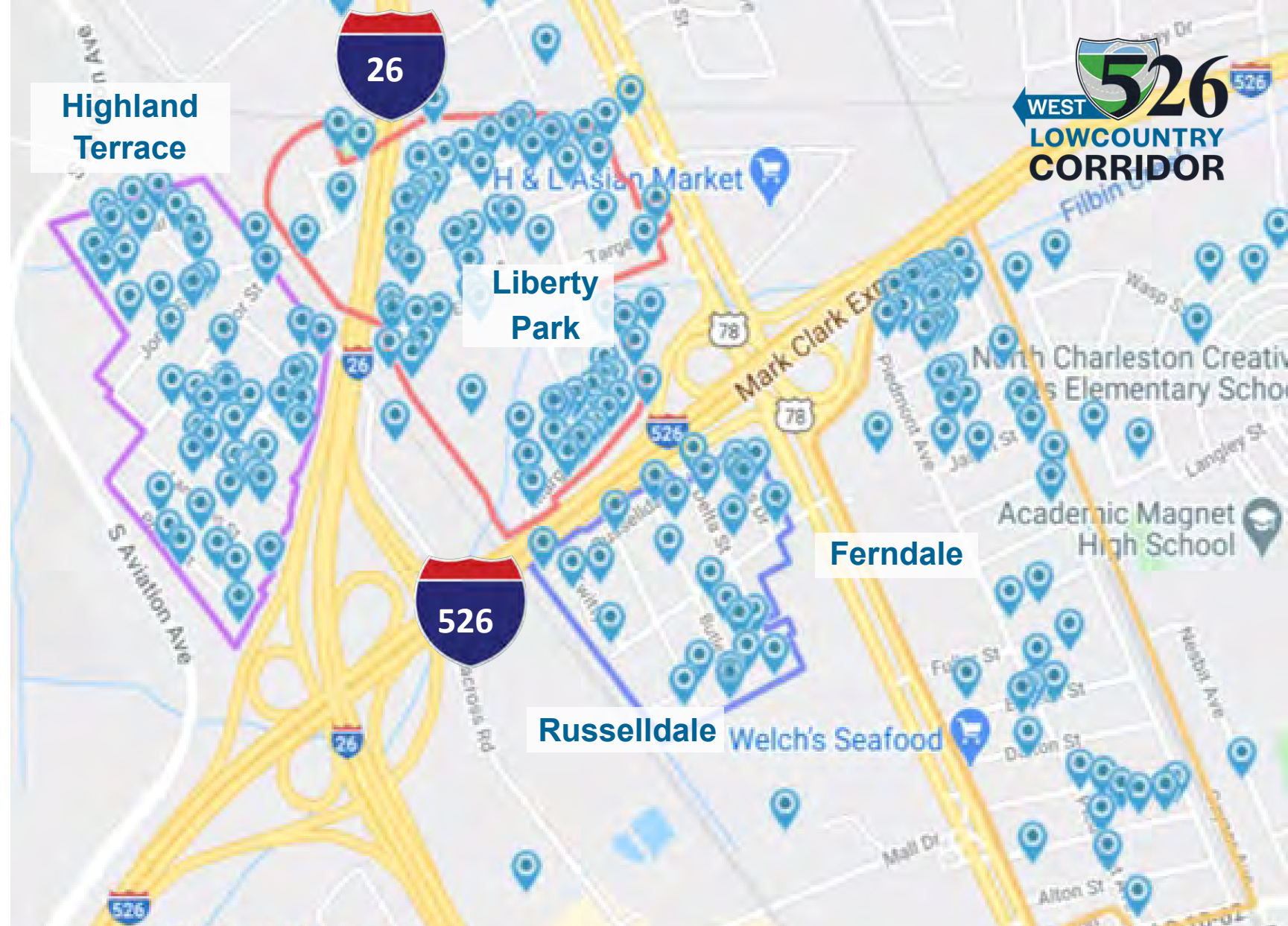
12:21 PM · Sep 19, 2021 · Twitter Web App

3,420 Retweets 545 Quote Tweets 3,833 Likes

We reached out, but how many engaged back?



By the end of the public hearing in Winter 2021, each of these addresses had "touched" us back!



IN THE COMMUNITY, FOR THE COMMUNITY



LOWCOUNTRY
CORRIDOR

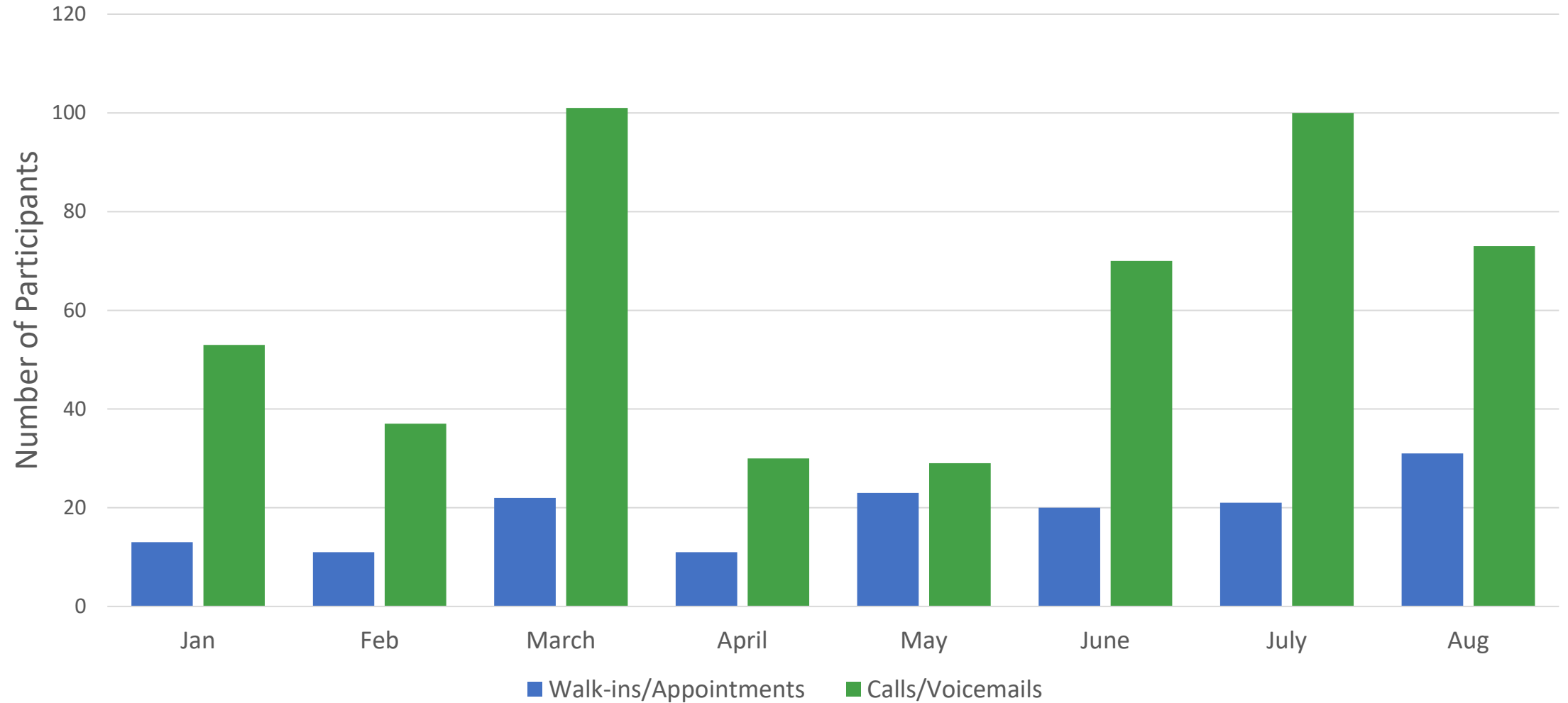
YOUR COMMUNITY OFFICE

152 VISITS THIS YEAR!

431 SINCE OPENING
NOVEMBER 2019



2021 Community Office Engagement



COMMUNITY RESOURCE INFORMATION SESSIONS

- Monthly, August - December 2021
- 2 Sessions per Topic (Lunchtime & Evening)
- In-person & Online
- Topics handpicked



Monday, September 27, 2021

Let's Put Your Financial House in Order!

Learn how to manage your finances, save for unexpected expenses, and plan to buy a home.

Monday, October 25, 2021

White Coat Fright

Are you afraid to visit a doctor? Don't be! Learn more about white coat fright and how to prioritize your healthcare.

Monday, November 8, 2021

What's the Difference in Trusts Versus Wills?

Learn the difference between a trust and a will and how you can begin planning for your family after your death.

Monday, December 6, 2021

What is PTSD (Personal Traumatic Stress Disorder)?

Learn more about PTSD and how to handle stress during difficult times.

2021 Community Advisory Council Activities

The project team has worked with the CAC to:

- Formed subcommittees to further develop mitigation commitments
- Shared project information with neighbors
- Advise the project team on adjusting and finalizing mitigation components
- Develop and improve tools to engage with residents
- Serve as a voice for the EJ neighborhoods
- Begin preparing for the Project Oversight Committee

Stay tuned - the Project Oversight Committee is coming soon.

Proposed Community Mitigation Schedule

**PUBLIC
HEARING**

**FINAL DESIGN
2021-2023**

**RIGHT-OF-WAY
ACQUISITION 2023-2027**

**CONSTRUCTION
2027-2032**

*Mitigation Schedule is
based on approval of
environmental
documentation without
legal challenge;
subject to change*



Community History Preservation Study



Community Infrastructure Enhancement Plan



**Community Centers &
Parks**



Community Programs & Activities



Affordable Housing



**Financial Literacy/First-time Home Buyer
Counseling (2022-2027)**



School-to-Work Program (2023 - 2032)



Pre-Employment Training (2023 - 2032)



College Aid Initiative (2023 - 2032)



**Organizational Training
(2022-2024)**



Summer Transportation Institute (2023 - 2032)

COMMUNITY HISTORY PRESERVATION PROGRAM



Get involved and help document the rich historic and cultural aspects of your community!



**Interviews with
past and current
residents**



**Historic
photographs of
communities**



**Information
documenting cultural
and historic elements**

526LOWCOUNTRYCORRIDOR.COM



Stop & Pause for Questions

Contact Information



www.526LowcountryCorridor.com



www.facebook.com/526Corridor



[@526Corridor](https://twitter.com/526Corridor)



info@526LowcountryCorridor.com



Community Office:
5627 Rivers Avenue | North Charleston, SC 29406



843.258.1135 (call or text)



Joy Riley, PE, PMP, DBIA
SCDOT
Project Manager

