

Appendix G

Environmental Justice Analysis





FINAL ENVIRONMENTAL JUSTICE ANALYSIS

INTERSTATE 526 (I-526)

FROM PAUL CANTRELL BOULEVARD TO VIRGINIA AVENUE
NORTH CHARLESTON AND CHARLESTON, SOUTH CAROLINA

UPDATED JULY 2022



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1.0 INTRODUCTION

This document is part of the technical reports being prepared for the proposed I-526 Lowcountry Corridor (LCC) WEST project. It contains references to supportive information in the Alternatives Development Technical Memorandum in *Final Environmental Impact Statement-Record of Decision (FEIS-ROD)* Appendix C, Community Impact Assessment (CIA) in *FEIS-ROD* Appendix D, Environmental Justice Community Mitigation Plan in *FEIS-ROD* Appendix H, Detailed Noise Analysis in *FEIS-ROD* Appendix K, and the Environmental Justice Outreach Strategy in *FEIS-ROD* Appendix X.

Environmental Justice (EJ) impacts were analyzed in accordance with Executive Order (EO) 12898 (*Federal Actions to Address Environmental Justice to Minority and Low-Income Populations*), US Department of Transportation (USDOT) Order 5610.2C (*Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*), Federal Highway Administration's (FHWA) EJ Order 6640.23A (*FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*), and FHWA's *Guidance on Environmental Justice and National Environmental Policy Act (NEPA)*.¹

2.0 IDENTIFICATION OF MINORITY AND LOW-INCOME POPULATIONS

EO 12898, *Federal Actions to Address Environmental Justice to Minority and Low-Income Populations*, USDOT Order 5610.2C, *Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, and FHWA EJ Order 6640.23A, *FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, have been set forth to:

- (1) avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations;
- (2) ensure the full and fair participation by all potentially affected communities in the transportation decision-making process, and;
- (3) prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

Title VI of the 1964 Civil Rights Act states, "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." The Act bars intentional discrimination as well as disparate impact discrimination (i.e., a neutral policy or practice that has a disparate impact on protected groups).

FHWA's 2011 *Guidance on Environmental Justice and NEPA* describes the process to address Environmental Justice during the NEPA review, including documentation requirements.

According to the USDOT and FHWA Environmental Justice orders, a "low-income" individual is defined as "a person whose household income is at or below the Department of Health and Human Services poverty

¹ https://www.environment.fhwa.dot.gov/env_topics/ej/guidance_ejustice-nepa.aspx

guidelines.² The classification of “minority” is defined by the USDOT and FHWA as individuals who list their racial status as (1) Black; (2) Hispanic or Latino; (3) Asian American; (4) American Indian and Alaskan Native; or (5) Native Hawaiian or Other Pacific Islander.³

As shown in Table 1, there are high percentages of minority and/or low-income populations within the project study area that qualify as Environmental Justice (EJ) communities, therefore further EJ analysis is required.

Table 1: Demographic Data

Neighborhood	Block Group	Minority ¹	Low-Income ²
Russelldale	450190033003	84%	34%
Highland Terrace	450190031111	91%	36%
Liberty Park	450190033001	59%	38%
Ferndale	450190033002	95%	53%
Wando Woods: West & East Ada Avenue	450190039002	69%	11%
Camps: Ozark Street & Seiberling Road	450190031111	91%	36%
Charleston Farms & Seepport Townhomes	450190034001	80%	51%
	450190034002		
	450190034003		
	450190034004		
North Westchester Drive (West Ashley)	450190027011	63%	46%

¹ Minority percentages per block group based on Census Bureau's 2013-2017 American Community Survey 5-year summary estimates.
² Low-income percentages per block group based on 2018 household income data and poverty guidelines set forth by the US Department of Health and Human Services (<https://aspe.hhs.gov/2018-poverty-guidelines>).

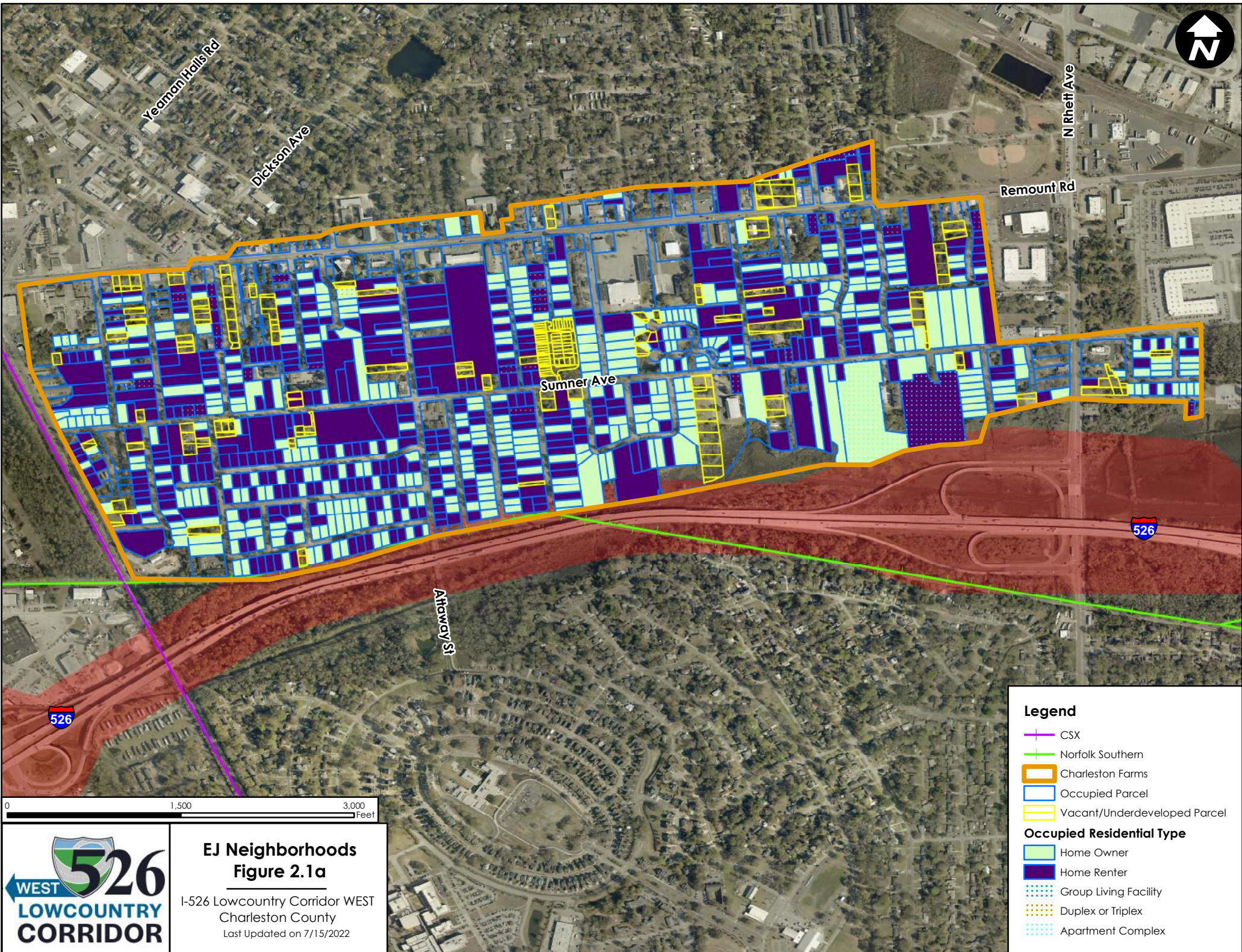
Due to their proximity to the I-526 or I-26 corridors, all EJ neighborhoods listed above are likely to be impacted by the I-526 LCC WEST project, with the exception of the North Westchester Drive area in West Ashley. This EJ population is not in the immediate vicinity of the proposed project and would not be affected by direct, indirect, or cumulative effects from the proposed project. Descriptions of the existing EJ residential areas likely to face impacts are detailed in the following sections and mapped in Figures 2.1a, b and c.

2.1 RUSSELDDALE

Located directly south of I-526 and east of active Norfolk Southern railroad tracks, the Russelldale neighborhood is comprised of single-family houses, mobile homes, duplexes/triplexes, and small apartment buildings. According to the Census Bureau's American Community Survey (ACS) 5-year 2017 summary estimates, this neighborhood is 84 percent minority and 73 percent renter occupied. 9 percent of the 883 residents are 65 years of age or older. The average home appraisal value is approximately \$30,000. In addition, the local housing authority confirmed that there are Section 8 voucher participants in rental units on Russelldale Avenue in the Russelldale neighborhood.

² <https://aspe.hhs.gov/poverty-guidelines>

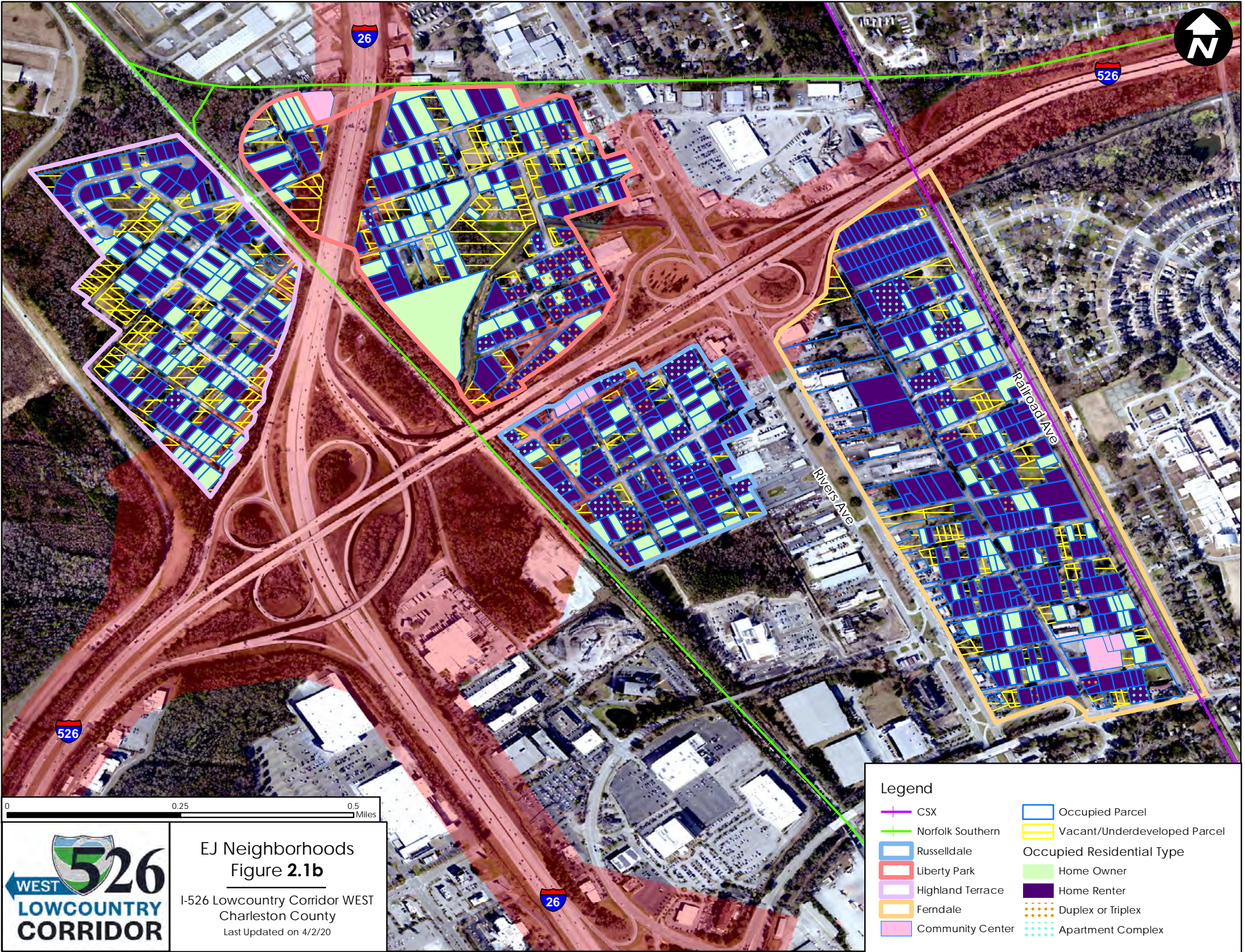
³ https://www.fhwa.dot.gov/environment/environmental_justice/faq/




**EJ Neighborhoods
Figure 2.1a**

I-526 Lowcountry Corridor WEST
Charleston County
Last Updated on 7/15/2022


Note: Home owner and renter status were determined by comparing physical addresses with mailing addresses from Charleston County parcel data








EJ Neighborhoods
Figure 2.1b


I-526 Lowcountry Corridor WEST
Charleston County
Last Updated on 4/2/20


- Legend
-  CSX


 Norfolk Southern


 Russelldale


 Liberty Park

 Highland Terrace


 Ferndale


 Community Center


 Occupied Parcel


 Vacant/Underdeveloped Parcel

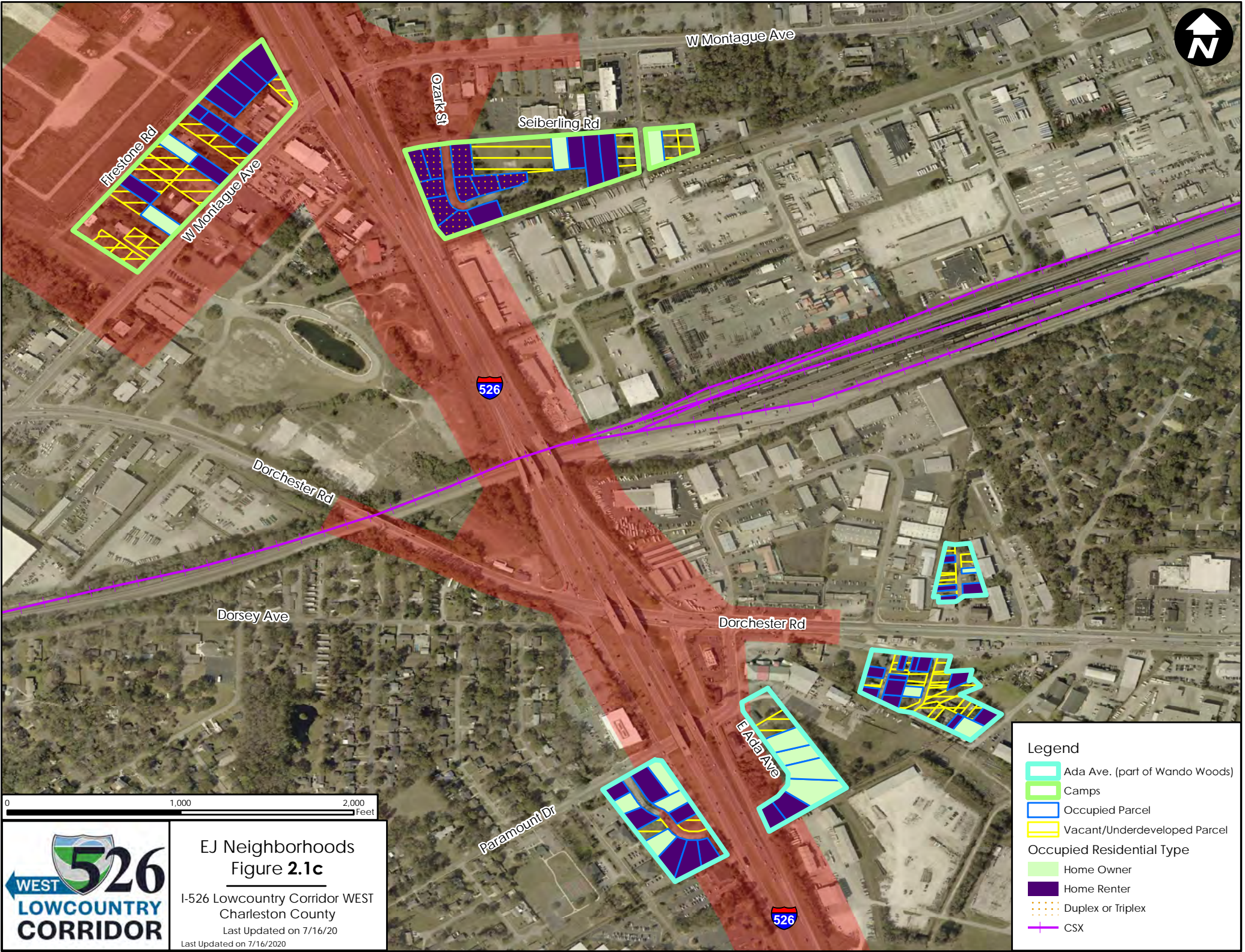
Occupied Residential Type

 Home Owner

 Home Renter

 Duplex or Triplex

 Apartment Complex
- Note: Home owner and renter status were determined by comparing physical addresses with mailing addresses from Charleston County parcel data



EJ Neighborhoods
Figure 2.1c
I-526 Lowcountry Corridor WEST
Charleston County
Last Updated on 7/16/20
Last Updated on 7/16/2020

Legend

- Ada Ave. (part of Wando Woods)
- Camps
- Occupied Parcel
- Vacant/Underdeveloped Parcel
- Occupied Residential Type
 - Home Owner
 - Home Renter
 - Duplex or Triplex
- CSX

Note: Home owner and renter status were determined by comparing physical addresses with mailing addresses from Charleston County parcel data

The high percentage of minority and low-income residents qualifies Russelldale as an EJ neighborhood; therefore, further EJ Analysis is required. The residents utilize Russelldale Community Center and the associated outdoor amenities as their primary recreational facility. This facility, which will be impacted by the I-526 LCC WEST project, was built as a part of SCDOT mitigation when the Russelldale neighborhood was originally impacted by the construction of I-526 in the 1980s. Photograph 1 depicts an average single-family home and mobile home in the Russelldale neighborhood.



Photograph 1: Example homes in the Russelldale neighborhood
SOURCE: Google Street View.

2.2 HIGHLAND TERRACE

Wedged between the Charleston International Airport, I-26, and active Norfolk Southern railroad tracks, Highland Terrace has faced direct and indirect impacts from numerous transportation projects in the past, including the original construction of the I-526/I-26 interchange in the 1980s. Additional details of previous projects and other cumulative effects can be found in FEIS-ROD Appendix F. According to the Census Bureau's ACS 2017 5-year summary estimates, this neighborhood is 91 percent minority and 83 percent renter occupied. 18 percent of the 1,338 residents are 65 years of age or older. The average home appraisal is approximately \$38,000.



Photograph 2: Proximity of a home in Highland Terrace to the I-26 interstate. "Road Ends" sign still stands, marking the original I-26 bisection of this neighborhood.
SOURCE: Google Street View.

The high percentage of minority and low-income residents qualifies Highland Terrace as an EJ neighborhood; therefore, further EJ Analysis is required. The residents use Highland Terrace-Liberty Park Community Center as their primary recreation center.

From noise and air pollution to physical displacements, the residents have witnessed an ongoing transformation of their neighborhood. The original construction of I-26 impacted 25 residences and one mobile home in Highland Terrace, while the later I-526/I-26 interchange displaced an additional seven single-family homes. The construction of the railroad and I-26 bisected the community into the two neighborhoods now known as Highland Terrace and Liberty Park. Taylor Street, a road that once directly connected these neighborhoods, was realigned almost a quarter of a mile northward for the interstate. Other roads that once connected these neighborhoods were closed off, completely disconnecting residents who were once neighbors. An example of the road closures in Highland Terrace can be seen in Photograph 2.

2.3 LIBERTY PARK

Liberty Park is bordered by I-526 to the south, I-26 to the west, Rivers Avenue to the east, and Norfolk Southern railroad tracks to the north. It is positioned directly in the flight path of air traffic landing at the Charleston International Airport, which has contributed to increased noise impacts in the area. Filbin Creek also runs through the center of this neighborhood, creating hardships associated with frequent flooding and undevelopable land. According to Census Bureau's ACS 2017 5-year summary estimates, this neighborhood is 59 percent minority and 42 percent renter occupied. 25 percent of the 354 residents are 65 years of age or older. The average home appraisal is approximately \$36,000. The high percentage of minority and low-income residents qualifies Liberty Park as an EJ neighborhood; therefore, further EJ Analysis is required. The residents use Highland Terrace-Liberty Park Community Center as their primary recreation center.

The original construction of I-526 and I-26 in the 1980s also impacted the Liberty Park neighborhood. An estimated 22 single-family homes, one church, and three businesses were displaced from the original I-26 project, in addition to the approximately 10 residences, two mobile homes, and 12 businesses that were displaced by the construction of the I-526/I-26 interchange. Photograph 3 depicts example homes and front yards in Liberty Park.



Photograph 3: Example homes in the Liberty Park neighborhood.
SOURCE: Google Street View.

2.4 FERNDALE

Ferndale is located directly south of I-526, west of the CSX railroad tracks, and east of Rivers Avenue. There are three organized mobile home communities and multiple apartment complexes/duplexes within Ferndale in addition to individual mobile homes located throughout the entirety of the neighborhood. According to Census Bureau's ACS 2017 5-year summary estimates, this neighborhood is 95 percent minority and 73 percent renter occupied. 4 percent of the 1,472 residents are 65 years of age or older. The average home appraisal is approximately \$22,000. Compared to the surrounding neighborhoods, Ferndale has a higher percentage of Hispanic residents at 30 percent of the total population. The block group that houses the Ferndale neighborhood meets the Department of Justice's "Safe Harbor" Limited English Proficiency (LEP) threshold for Spanish speaking residents who speak English "less than very well" as documented by Census Bureau survey results. LEP is further described in Section 2.8. A Spanish speaking church, Iglesia de Dios El Redil, hosts two services and shares a space with the Harvest Pointe Church at the southern end of the Ferndale neighborhood. Depicted in Photograph 4, the Ferndale Mobile Home Park will be impacted by the I-526 LCC WEST project due to its proximity to the existing I-526 corridor.



Photograph 4: Low-income communities living near the existing I-526 overpass at the north end of the Ferndale neighborhood.
SOURCE: Google Street View.

The high percentage of minority and low-income residents qualifies Ferndale as an EJ neighborhood; therefore, further EJ Analysis is required. In addition to local church facilities, the residents of Ferndale use the Ferndale Community Center as one of their primary recreation facilities and meeting places. This community center has an indoor basketball court and hosts events such as the North Charleston High School Arts Fest, the Deninufay African Drum and Dance Festival, and the Music Battery Concert.

2.5 WEST ADA AVENUE & EAST ADA AVENUE

Homes on West Ada Avenue and East Ada Avenue are located further south than the other EJ neighborhoods, directly south of Paramount Drive and bisected by I-526. Although these homes are separate from the larger Wando Woods community, they are grouped with the Wando Woods neighborhood according to City of North Charleston GIS and planning boundaries. According to the Census Bureau's ACS 2017 5-year summary estimates, this community is 69 percent minority and

13 percent renter occupied. 6 percent of the 21 total residents in this community are 65 years of age or older. The average home appraisal is approximately \$84,000, which is the highest average of the EJ communities mentioned thus far. The high percentage of minority residents qualifies the homes on Ada Avenue as an EJ population; therefore, further EJ Analysis is required. As previously mentioned, the construction of I-526 bisected this community and likely displaced any homes that were built within the 400-foot corridor where I-526 now exists. Photograph 5 depicts where Ada Avenue was divided by the original construction of I-526. Compared to the other EJ communities in the CIA study area, West/East Ada Avenue houses a small group of residents facing potential impacts from the I-526 LCC WEST project.



Photograph 5: “Road Ends” sign at the end of East Ada Avenue, signaling the bisection of Ada Avenue by I-526
SOURCE: Google Street View.

2.6 CAMPS: OZARK STREET & SEIBERLING ROAD

Directly south of Montague Drive and east of I-526 there are several multi-family housing complexes on Ozark Street and Seiberling Road. This area is within the Camps neighborhood boundary according to City of North Charleston GIS. According to Census Bureau's American Community Survey 2017 5-year summary estimates, the community is 91 percent minority and 83 percent renter occupied. 18 percent of the 11 residents in this community are over 65 years of age or older. The average home appraisal value is approximately \$17,000. The high percentage of minority and low-income residents along Ozark Street and Seiberling Road qualifies the area as an EJ neighborhood; therefore, further EJ Analysis is required. Similar to the homes on East Ada Avenue and West Ada Avenue, Seiberling Road was bisected by the original construction of I-526 which likely displaced residents within the freeway’s current footprint. Photograph 6 shows the “Road Ends” sign at the end of Seiberling Road that marks the spot of previous neighborhood disruption by I-526.



Photograph 6: “Road Ends” sign at the end of Seiberling Road, signaling the bisection of this road by I-526
SOURCE: Google Street View

2.7 CHARLESTON FARMS & SEEPORT TOWNHOMES

Charleston Farms is located directly east of I-26 and north of I-526, stopping at Remount Road. The neighborhood is a large primarily residential community but includes a small shopping center called Remount Village. According to Census Bureau's American Community Survey 2017 5-year summary estimates, the community is 80 percent minority and 70 percent renter occupied. 7 percent of the 3,900 residents in this community are over 65 years of age or older. The average home appraisal value is approximately \$56,115. Seeport Townhomes are located directly east of the larger Charleston Farms neighborhood, across North Rhett Avenue. The complex is comprised of two vinyl buildings with 5 units in each building. The high percentage of minority and low-income residents qualifies Charleston Farms and Seeport Townhomes as EJ neighborhoods; therefore, further EJ Analysis is required. Charleston Farms has single-family, brick and vinyl housing, multiple single-family mobile home parks (Photograph 7) and multi-family apartments.

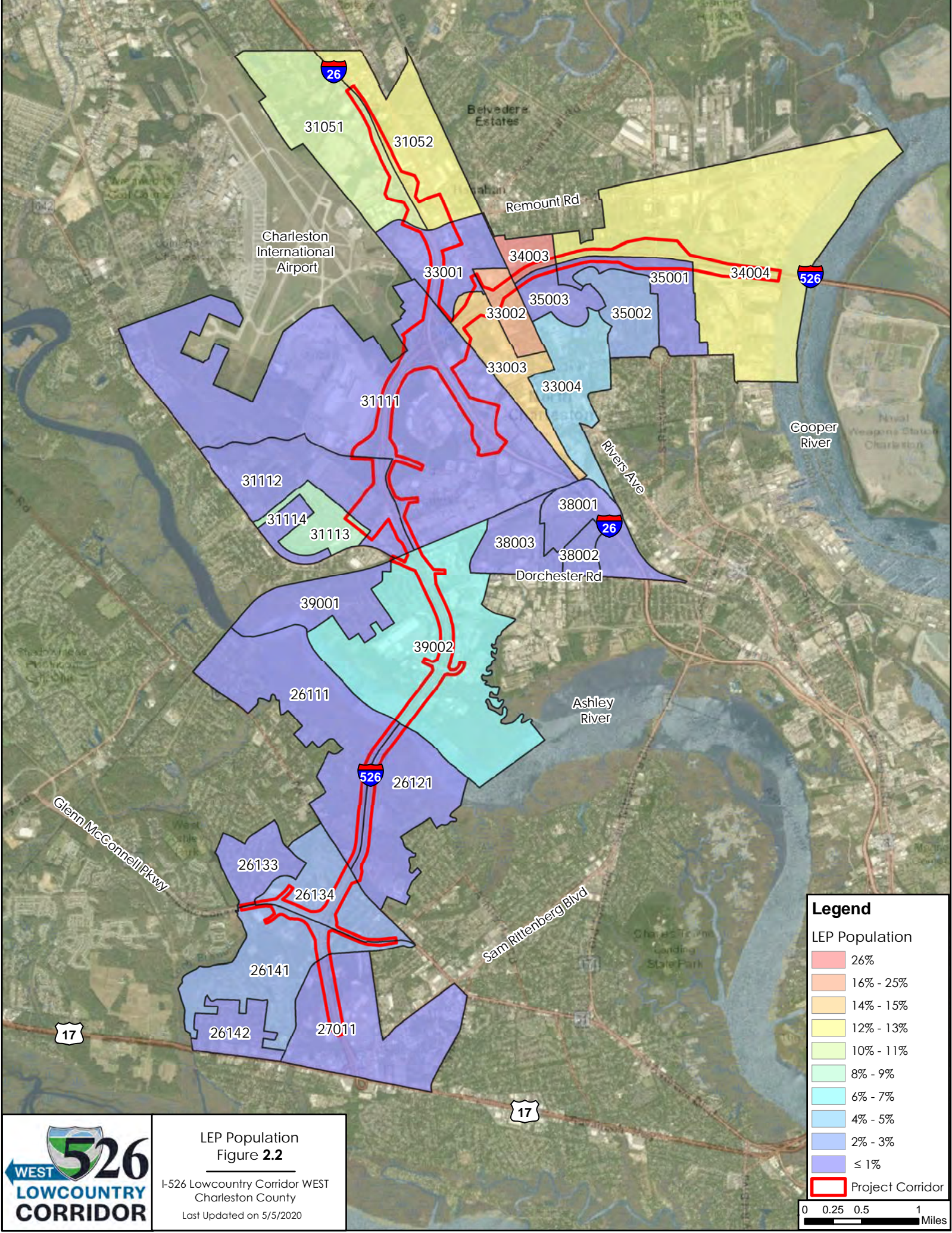


Photograph 7: Example of standard housing in the Charleston Farms neighborhood
SOURCE: Google Street View.

2.8 LIMITED ENGLISH PROFICIENCY (LEP) POPULATIONS

EO 13166 "Improving Access to Services for Persons with Limited English Proficiency" requires all recipients of federal funds to provide meaningful access to persons who are limited in their English proficiency (LEP). The US Department of Justice defines LEP individuals as those "who do not speak English as their primary language and who have a limited ability to read, write, speak, or understand English" (67 FR 41459).

The Department of Justice's "Safe Harbor" LEP threshold is met when a study area's population exceeds either 1,000 adults or 5 percent of the study area population who speak English "less than very well" as documented by Census Bureau survey results. 2013-2017 American Community Survey (ACS) data was evaluated to determine if the number of LEP individuals within the CIA study area would exceed the LEP Safe Harbor threshold. As shown in Figure 2.2, there are nine block groups with LEP populations exceeding 5 percent of the total block group population. When the number of LEP individuals are tallied in those block groups, the total is 1,886 which meets the 1,000 Safe Harbor Threshold (in this instance for Spanish-speaking populations) and necessitates additional actions to ensure that all members of the public are provided with an equitable opportunity to participate in public outreach and engagement.



Legend

LEP Population

- 26%
- 16% - 25%
- 14% - 15%
- 12% - 13%
- 10% - 11%
- 8% - 9%
- 6% - 7%
- 4% - 5%
- 2% - 3%
- ≤ 1%

Project Corridor

0 0.25 0.5 1 Miles



LEP Population
Figure 2.2

I-526 Lowcountry Corridor WEST
Charleston County

Last Updated on 5/5/2020

3.0 PUBLIC PARTICIPATION EFFORTS AND ACTIVITIES FOR MINORITY AND LOW-INCOME COMMUNITIES

As a part of the project's development, a comprehensive Public Involvement Plan (PIP), included in FEIS-ROD, Appendix U, was developed to outline how the public will be engaged during the project. Since EJ neighborhoods were identified along the project corridor and these communities are potentially impacted by the project, a separate and specific EJ Outreach Strategy was developed to incorporate efforts designed to engage those residents and business owners. The EJ Outreach Strategy is located in FEIS-ROD, Appendix X. A goal of the EJ Outreach Strategy is to facilitate project involvement opportunities that fit within the EJ community's schedule and overcome traditional barriers to public involvement that many families may face. Such barriers that can prevent effective public engagement include inadequate access to transportation and childcare services, as well as conflicting work hours when meetings or events are scheduled. To best mitigate some of the barriers to public involvement, outreach activities for the project have been held inside the impacted EJ neighborhoods to give residents a more convenient opportunity to engage with the project team. Creating public involvement opportunities within the impacted neighborhoods has helped the project team spread project awareness, promote utilization of the I-526 LCC Community Office, and encouraged participation in outreach meetings and EJ community mitigation activities.

Outreach and engagement of EJ neighborhood residents will continue to be ongoing through the planning, design, and project implementation process. Upcoming activities include, but are not limited to, Project Oversight Committee meetings to ensure adequate implementation of the final EJ Community Mitigation plan and continued utilization of the Community Office to meet with residents and answer questions from the community. A series of neighborhood meetings were held during the public review period for the Draft Environmental Impact Statement (DEIS) in 2020, and an Open House was held to gather feedback on infrastructure improvement locations in 2021. EJ outreach efforts include multiple focus areas to effectively engage the community, including those described in the following sections. A map identifying addresses within the EJ communities that were voluntarily provided to the project team as part of outreach activities such as public and community meetings, Community Office visits, and phone calls is located in Appendix A of this analysis. For additional outreach information please see the EJ Outreach Strategy, located in Appendix X of the FEIS-ROD.

Input received from EJ neighborhood residents and the CAC from 2016-2021 was used to refine and finalize the EJ Community Mitigation Plan which can be reviewed in Appendix H of the FEIS-ROD. The final EJ Community Mitigation Plan will be presented to EJ residents and other interested members of the public in August 2022.

3.1 COMMUNITY DROP-IN MEETINGS

Community drop-ins were held for EJ residents and additional stakeholders, and were primarily located, to the extent possible, within the boundaries of the neighborhoods. The overarching purpose of these meetings was to encourage discussions with participants, share information as it relates to the project,

and provide an opportunity for residents to meet SCDOT personnel and the Community Office staff who can respond to future questions, concerns, or comments regarding the project.

EJ-focused community meetings centered on engaging these groups:

- Residents of the Russelldale, Liberty Park, Highland Terrace, and Ferndale neighborhoods
- Small neighborhood businesses, which consists of “mom & pop” stores (owners and employees)
- The City of North Charleston’s Neighborhood Association Council
- Faith-based leaders (ministers, church staff, and congregants) and other community leaders

In 2016, the community meetings were arranged to resemble focus group conversations with setup including roundtable discussions. A project survey was conducted digitally (as well as orally) at each discussion table. Discussion notes were compiled and submitted to the project team.

Five community drop-ins were held in November 2019 in the weeks preceding the November 20, 2019 Public Meeting. The 2019 community drop-ins were held at the following locations:

- Biblical House of God, November 9, 2019, 2:00 – 5:00pm, 2205 Van Buren Ave, North Charleston, SC 29406
- Ferndale Community Center, November 13, 2019, 5:00 – 8:00pm, 1995 Bolton St, North Charleston, SC 29406
- Life Changers Covenant Ministries, November 14, 2019, 5:00 – 8:00pm, 2140 Eleanor Dr, North Charleston, SC 29406
- Danny Jones Community Center, November 18, 2019, 5:00 – 8:00pm, 1455 Monitor St, North Charleston, SC 29405
- Citadel Mall, November 19, 2019, 5:00 – 8:00pm, 2070 Sam Rittenberg Blvd, Charleston, SC 29407

The project team presented the same materials at each drop-in, which were identical to the materials presented at the Public Meeting. These included: an update on the alternatives development process; project schedule; update on outreach efforts; information on the project development process; mapping that showed anticipated impacts to communities; and information on next steps and how to stay involved in the process. Interactive stations included the virtual public meeting overview video, printed maps showing potential right-of-way impacts, and a property “look up” station, among others.

In addition, residents of the EJ neighborhoods that participated in Community Drop-Ins and the Public Information Meeting or visited the Community Office were asked to complete a **Social Needs Assessment (SNA)**. The purpose of this tool was to provide a snapshot of the norms, needs, and desires related to various social determinants and to rank the importance of and satisfaction with each of the 25 categories of social needs. A total of 47 EJ neighborhood residents from the four primarily impacted EJ neighborhoods participated in the survey. All services and programs were considered important, with residents generally unsatisfied with current services and programs. The survey results, detailed in the EJ Community Mitigation Plan, FEIS-ROD Appendix H, illustrate how residents prioritize the 25 social need categories included in the survey. Top social needs priorities include infrastructure improvements

related to stormwater management, bike/pedestrian facilities, and availability/quality of affordable housing followed by services for seniors and youth.

Meeting locations were chosen specifically because of their convenience and proximity to the EJ neighborhoods and I-526 LCC WEST study area. Transit routes were included in the meeting information to facilitate attendance of those relying on public transportation. Although there are no anticipated EJ impacts in the West Ashley area, a community drop-in meeting was also held in this area for the benefit of area residents but to also provide EJ neighborhood residents with an additional opportunity if the other four meeting dates were not compatible with their schedules.

The project team employed several methods to make sure there were multiple means of communication distributed to EJ neighborhoods advertising the community drop-ins. These included a postcard mailed to 1,201 EJ neighborhood addresses two-weeks prior to the meetings; door-to-door canvassing with flyers, advertising at local small businesses; meeting flyers placed at over 30 locations in the project vicinity, including transit stops; and distribution of flyers and word-of-mouth advertising by the project's CAC (discussed further in FEIS-ROD Appendix X, the EJ Outreach Strategy and Tools). A total of 188 people attended the 2019 Community Drop-ins.

Community Drop-In Activities for 2020:

The 2019 community drop-in meetings were successful in the “high-touch” goal of connecting with EJ neighborhood residents and providing accurate information about the project. In addition to gathering feedback on the proposed project, the project team was able to conduct a social needs assessment with EJ residents to help identify resident needs and priorities separate from the transportation project. Understanding residents’ needs and priorities is a vital part of the EJ Community Mitigation Plan development as it aimed to address many of the identified issues related to direct and cumulative effects associated with the project.

Three community drop-ins were held in November 2020 on the weekends bookending the Public Hearing that began on November 12, 2020. The purpose of these drop-in meetings was to give the EJ residents an opportunity to identify and understand the direct and indirect impacts from the project, speak to a Right-of-Way (ROW) agent about specific residential relocations, and provide feedback on the DRAFT EJ Community Mitigation Plan. These meetings also gave the CAC members an opportunity to solidify their knowledge of the project mitigation details and engage with their neighbors in a project specific setting with visual aids and project team support. The 2020 community drop-ins were held at the following locations:

- Biblical House of God, November 6, 2020, 3:00 – 6:00pm, 2205 Van Buren Ave, North Charleston, SC 29406
- Ferndale Community Center, November 7, 2020, 2:00 – 5:00pm, 995 Bolton St, North Charleston, SC 29406
- Enoch Chapel United Methodist Church, November 14, 2020, 2:00 – 5:00pm, 2355 James Bell Drive, North Charleston, SC 29406

At each of the community drop-in meetings, residents were given a packet that included an updated neighborhood-specific ROW impact map, a digestible copy of the individual proposed mitigation components with visual concept maps, the anticipated mitigation timeline, a project comment sheet, and a survey with a self-addressed envelope and stamp to take home and mail back to the Community Office. Given the amount of detailed information presented to the public during these drop-ins, the project team wanted to give residents time to absorb the information and fully understand each proposed mitigation component to provide specific and constructive feedback. The project team was also available to discuss impacts and mitigation items at large, socially distanced boards with information presented graphically. The boards focused on the following topics: recreation facility replacement (as seen in Photograph 8), affordable housing, community infrastructure enhancement, community history preservation, educational/employment opportunities, neighborhood direct impacts, and indirect (or community-wide) impacts.



Photograph 8: A member of the project team discussing potential community center mitigation plans with a resident at a 2020 Community Drop-In.

Meeting locations were chosen specifically based on CAC recommendations and proximity to the EJ neighborhoods and I-526 LCC WEST study area. Members of the CAC recommended that the best way to spread project information and receive feedback from the EJ residents on the draft EJ Community Mitigation plan was to host face-to-face meetings with refreshments within the EJ neighborhoods. As the proximity of meeting locations to EJ neighborhoods and the study area, many residents were able to walk to the meetings directly from their homes. Due to the on-going 2020 public health concerns, the meetings were held outdoors, under large tents that allowed residents and project team members to discuss the project and mitigation, while adhering to social distancing guidelines set forth by the Center for Disease Control (CDC). In addition, a member of the project team took the temperature of each participant and team member; face masks were required to attend the meeting (paper masks and gloves were provided if needed); and hand sanitizer was readily available at the welcome table.

The project team employed several methods to ensure there were multiple communications distributed to the potentially impacted EJ neighborhoods that advertised the community drop-ins. These included a postcard mailed to EJ neighborhood residents two weeks prior to the meetings; door-to-door canvassing with flyers; advertising at local small businesses - meeting flyers placed at approximately 20 locations in the project vicinity, including transit stops; and, distribution of flyers and word-of-mouth advertising by the project's CAC. In addition, a special focus was placed on advertising to the Hispanic and Latino population by utilizing Art Pot, a local Multicultural Group and Hispanic center, to share meeting information via social media, radio, and door-to-door interaction. Overall, the 2020 community drop-ins produced fruitful conversations with residents and participation from approximately 110 people.

3.2 POP-UP MEETINGS

To supplement the community drop-in's, EJ outreach was also conducted through "pop-up" meetings at community events. As shown in Photograph 9, a pop-up meeting is a mobile booth set up in various locations to engage area residents and create opportunities for residents to discuss the project with the project team. Pop-up meetings are also a means of creating and promoting dialogue to determine what residents see as assets, liabilities, and possible solutions to issues within their respective neighborhoods. The project team chose locations that focus on engaging residents of the affected EJ neighborhoods as well as the larger minority community in North Charleston.



Photograph 9: Pop-up meeting at the Caribbean Jerk Festival in 2019

Pop-Up Meeting Activities held in 2019

- Caribbean Jerk Festival, July 20, 2019, 6:00 – 11:00pm, 1061 Everglades Avenue
- Harvest Pointe Baptist Church Community Yard Sale, August 17, 2019, 7:00am – 12:00pm, 4870 Piedmont Avenue
- PPG Paints, September 15, 2019, 12:00 – 5:00pm, 5280 Rivers Avenue
- North Charleston High School Football Game, September 20, 2019, 6:00 – 10:00pm, 2731 Gordon Street
- Bethel Pentecostal Holiness Services, September 22, 2019, 11:00am – 2:30pm, 2331 Elder Avenue
- Biblical House of God, September 28, 2019, 11:00am – 2:00pm, 2205 Van Buren Avenue
- Russelldale Community Center, October 3, 2019, 2:30 – 5:30pm, 2248 Russelldale Avenue
- Roper St. Francis Clinic, October 12, 2019, 12:00 – 5:00pm, 5133 Rivers Avenue
- Highland Terrace Community Center, October 24, 2019, 2:30 – 5:30pm, 2401 Richardson Drive
- North Charleston Creative Arts Elementary School, October 29, 2019, 5:00 – 7:00pm, 5200 Lackawanna Boulevard
- Ferndale Community Center, October 31, 2019, 2:30 – 5:30pm, 1995 Bolton Street
- North Charleston City Hall, November 17, 2019, 11:00am – 3:30pm, 2500 City Hall Lane

The project team found pop-up meetings to be a cost-effective, convenient, and personalized way to engage EJ neighborhood residents and business owners. Informational flyers, business cards including project contact resources, and recent newsletters were passed out and email sign-up sheets were available for those that wanted to stay informed as project updates became available. Approximately 265 people participated in the 2019 pop-up outreach effort. Additional information on the pop-up meeting outreach initiative can be found in FEIS-ROD Appendix W.

Keeping residents informed and promoting project awareness were the primary goals of the pop-up meetings. This will continue to be the main objectives throughout the right of way and design phases of the project. Additional goals include encouraging participation and attendance at future community meetings and soliciting feedback about the project's impacts to individuals as well as the community.

Pop-Up Meeting Activities for 2020

Many of the planned pop-up events for 2020 were cancelled or postponed due to the ongoing 2020 public health concerns and the COVID-19 Stay-at-Home Order enacted in March 2020. With in-person interactions discouraged in order to reduce the potential spread of COVID-19 and thus cancelled, pop-up meetings in 2020 were focused on outreach opportunities that doubled as community service such as food and care package distribution and COVID testing. The project team was able to directly connect with an estimated 380 participants and provide project materials to many more. Outreach opportunities in 2020 included the following:

- I-526 LCC WEST Senior Food and Care Package Distribution throughout the year
- Back-to-School Giveaway
 - Ferndale Community Center, 1995 Bolton St., North Charleston, SC 29406, September 3, 2020, 1:00pm – 3:00pm
 - Biblical House of God, 2205 Van Buren St., North Charleston, SC 29406, September 3, 2020, 4:00pm – 6:00pm
- Palmetto Community Action Partnership (CAP) Drive-up Event, Joshua Baptist Church, 2482 Faber Rd., North Charleston, SC 29406, November 20, 2020, 10:00am – 2:00pm
- Pre-Thanksgiving Food Giveaway, Harvest Pointe Church, 4870 Piedmont Avenue, North Charleston, November 21, 2020, 11:00am – 2:00pm
- Spanish Worship Service, Enoch Chapel United Methodist Church, 2355 James Bell Drive, N. Charleston, November 22, 2020, 12:00pm – 3:00pm
- Pandemic-Relief Food Pantry Events, Harvest Pointe Church, 4870 Piedmont Avenue, North Charleston on December 3, 10 & 17, 2020, 2:00pm – 4:00pm
- SCDHEC COVID-19 Testing and Food Distribution, Ferndale Community Center (parking lot), 1995 Bolton St., North Charleston, SC 29406, December 18, 2020, 2:00pm – 5:00pm

3.3 COMMUNITY INFRASTRUCTURE ENHANCEMENT PLAN OPEN HOUSE

The project team hosted an Open House on March 6, 2021 to solicit detailed feedback from EJ residents on the Community Infrastructure Enhancement Plan (CIEP), which is a component of the EJ Community Mitigation Plan. This interactive meeting was hosted at the Ferndale Community Center, which is located within the EJ neighborhood to make attending as convenient as possible for EJ residents. The Open House was held in-person because the CAC recommended real time interaction for higher levels of



Photograph 10: CIEP Open House March 2021 set-up

participation from residents. Due to public health concerns related to the COVID-19 pandemic and the desire to keep attendees socially distanced, the CIEP Open House was held partially outdoors (see

Photograph 10) and partially in the large indoor setting of the Ferndale Community Center. The project team was also cognizant of other large and local events occurring in the spring and in an effort to increase attendance, the project team planned the Open House on a day that did not conflict with other events.



Photograph 11: Residents speaking with the project team at one of the CIEP stations

The goal of the CIEP Open House in March 2021 was to better understand residents' priorities on specific EJ infrastructure enhancement projects associated with the mitigation in the CIEP. Residents were given the opportunity to comment on and note problem locations for each of the CIEP categories including pedestrian safety and connectivity, stormwater drainage, conceptual lighting, aesthetics and landscaping, and traffic calming. As demonstrated in Photograph 11, each of these categories were represented at a different station with large maps and project team members to help residents identify areas of

infrastructure that need improvements. Residents had the opportunity to place stickers on the maps to indicate specific locations and provide additional comments on the potential improvements. These identified locations were then compared to the CAC infrastructure mapping to better understand priorities throughout the EJ communities.

The project team worked closely with the CAC and the community liaisons to canvass the EJ neighborhoods and connect with local church leaders, schools, and other institutions to advertise the CIEP Open House. Postcards and handouts with surveys were mailed to each residence in the EJ neighborhoods, flyers were distributed to local businesses and transit stations, local officials signed a letter to residents to encourage participation, and meeting information was provided to local radio stations, television stations, and newspapers. In addition, the project team utilized contact information of EJ residents who participated in the EJ Community Mitigation Survey to inform them of the follow-up opportunity to provide input at the CIEP Open House. The CAC also helped advertise the Open House by placing project branded signage in their front yards. The CIEP Open House was well attended (77 participants) and the feedback provided by residents helped inform the development of the revised EJ Community Mitigation Plan. In addition to the feedback received in person, the project team also received 85 surveys online and via mail. Almost 90 percent of these surveys were submitted by EJ residents living in the impacted neighborhoods.

3.4 FLYER BOX PROGRAM

As noted in the EJ Outreach Strategy (FEIS-ROD Appendix X), the flyer box program for the project began in mid-2019. The intent of this program is to keep citizens in and around the affected areas up to date on project information without relying on the use of technology, making it more accessible for those with limited computer/internet resources. Indoor and outdoor locations were identified throughout the EJ

communities at transit stops, local businesses, churches, community centers, and city offices. Additional locations outside of the EJ communities, such as senior centers, transit hubs, or meals on wheels routes, were also incorporated to expand reach. At initial deployment, 23 indoor locations and 10 outdoor locations were established. Standard clear plastic brochure stands were placed in high traffic/high visibility areas of each indoor location. At each outdoor location, a realtor box stand was installed within the designated right of way. From initial deployment to mid-March 2020, locations were checked weekly to determine the number of flyers taken and to replenish the supply. Information included in the boxes has ranged from project newsletters to FAQ to an outline of upcoming project-related events.

Flyer Box Program Activities conducted between 2020 and 2021:

Due to the public health concerns that caused the SC Governor to initiate the COVID Stay-at-Home Order in March 2020, the flyer box program was paused. All flyer boxes and indoor acrylic stands were removed from each location to decrease the chance of indirect contact between members of the public. Based on September 2020 guidance from the Center for Disease Control (CDC) regarding how COVID-19 spreads, the project team determined the flyer box program should be reenacted in order to get time sensitive project information out to the EJ residents who may not have access to the internet or a computer. At initial re-deployment on September 21, 2020, 10 indoor locations and nine outdoor locations were established. Standard clear plastic brochure stands were placed in high traffic/high visibility areas of each indoor location. At each outdoor location, a realtor box stand was installed within the designated right of way. In addition, three apartment complexes near the I-526 LCC WEST corridor were emailed the flyers for distribution among residents. On average from September to November 2020, approximately 70 flyers were picked up by residents or other interested members of the public per week. Information distributed via the flyer box program includes ways to engage with the project team, community drop-in dates and details, Public Hearing virtual and in-person meeting opportunities, and other project related activities and information.

3.5 COMMUNITY ADVISORY COUNCIL

As detailed in the EJ Community Mitigation Plan, FEIS-ROD Appendix H, the CAC is a group of local citizens and other stakeholders that meet during the course of the project development process to discuss project-related issues and concerns. As part of the I-526 LCC WEST Environmental Justice Outreach Strategy (found in FEIS-ROD Appendix X), a CAC was formed to facilitate meaningful engagement as intended under Executive Order (EO) 12898, *Federal Actions to Address Environmental*



Photograph 12: CAC meeting held at the Community Office

Justice to Minority and Low-Income Populations and United States Department of Transportation (USDOT) Order 5610.2C, *Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* thereby ensuring full and fair participation by all potentially affected communities in the transportation decision-making process. The CAC not only provides the project team with valuable insight into neighborhood values and goals, but has also helped to develop the EJ Community Mitigation Plan (FEIS-ROD

Appendix H), which will help to offset project impacts by addressing the social needs and priorities of neighborhood residents. EJ mitigation is further described in Section 5.0.

The overarching roles and responsibilities of the I-526 LCC WEST CAC are to:

- Share individual knowledge, experiences, and perspectives;
- Provide input on project-related impacts and proposed mitigation measures;
- Help give EJ neighborhood residents a strong voice in the process;
- And help get the word out about public meetings and other project-related information

The CAC is comprised of community members that either live or own property in the EJ neighborhoods or represent the interests of faith-based organizations that are situated within or near Russelldale, Liberty Park, Highland Terrace, and Ferndale. The first CAC meeting was held on September 30, 2019. Subsequent CAC meetings have been held monthly. CAC meeting materials and summaries can be reviewed in FEIS-ROD Appendix U.

3.6 COMMUNITY OFFICE & COMMUNITY LIAISONS

The Community Office is a local office for project or community related meetings, workshops, and other events located in Gas Lite Square, a shopping complex just north of the Liberty Park neighborhood. The Community Office is staffed with a full-time Office Manager, Community Liaisons/Outreach Specialists, and part-time Right-of-Way Specialists who provide community residents with real-time project information and assistance. During the Right-of-Way acquisition phase of the project, the Community Office will be staffed with a full-time Right-of-Way Specialist.

Informational workshops being considered include navigating heirs' property challenges; understanding citizens' rights during the right-of-way acquisition process; preparing for employment and the workplace; tax assistance workshop; and general advocacy training. The Community Office also provides a space for quarterly meetings between SCDOT and area residents where EJ neighborhood residents can meet the project team to share concerns and ask questions.

The Community Office is where area residents can gather up-to-date information on the proposed project.

The Community Office was also a location where area residents were able to review the Draft EJ Community Mitigation Plan and DEIS on their own schedule and talk with project team members as a supplement to all community meetings and outreach opportunities.

The project team will continue to collaborate with the CAC, Community Office staff and Community Liaisons to explore opportunities that will maximize the usefulness of the Community Office and add value to the quality of life for residents of their neighborhoods.

3.7 LOCAL FAITH-BASED ORGANIZATIONS

Five churches located within the EJ neighborhoods disseminated project-related information by hosting pop-up events and Community Drop-in Meetings, allowing flyer-boxes on their property, and/or

attending a CAC meeting to learn more about potential infrastructure improvements within the communities. Church leadership informed their congregations of relevant project information.

3.8 CHARLESTON COUNTY SCHOOL DISTRICT

Through the Charleston County School Districts' Division of Strategy and Communications shared information to families with students living in the EJ neighborhoods about upcoming events by distributing flyers, placing yard sign advertisements in the carpool line, and utilizing their phone messaging system to share a public service announcement.

3.9 LIMITED ENGLISH PROFICIENCY (LEP) POPULATIONS OUTREACH

The project team works to intentionally provide outreach and engagement opportunities to the LEP population, whose primary speaking language within the EJ communities is Spanish. As such, nearly all project materials are translated into Spanish. This includes the project website, quarterly project newsletters, doorhangers with project information, Community Office flyers, and Public Information Meeting materials. Furthermore, the Community Drop-Ins and Public Information Meetings were staffed with English/Spanish translators. At the Community Office, any visitors requiring Spanish translation were provided with an informational card to request a translator from SCDOT. Additionally, there is an option to hear the hotline message in Spanish and request a follow-up call in Spanish. Facebook allows for the user to translate text posts into Spanish.

The project team participated in the 2017 Latin American Festival sponsored by the Charleston County Parks and Recreation Commission, hosted a Media Day in which several local Spanish media were invited, and advertised for the Community Office Open House in the Spanish newspapers, El Informador and Universal Latin. Universal Latin also attended the Community Office Open House and interviewed the 526 LCC WEST Project Manager to publish additional information about the project for their readers. Additional details on all EJ outreach efforts can be found in Appendix X of the FEIS-ROD.

Regardless of the previously described efforts, these initial efforts to engage LEP populations were met with limited success. As a part of subsequent efforts to engage LEP populations that could be affected by the proposed project, the project team partnered with Art Pot, an art and educational multicultural group based on North Charleston. Art Pot conducted specific Hispanic outreach through the radio station 103.9 FM / 95.5 FM Charleston ¡Aquí estamos! and through online platforms such as Facebook and Facebook Live. As shown in Figure 3.1, Spanish advertisements were posted on the Facebook pages of Charleston Aquí estamos, Iglesias Hispánicas del Lowcountry, and Art Pot. Because of the reported higher concentration of Spanish-speaking residents in Ferndale, representatives of Art Pot specifically focused door-to-door outreach in this neighborhood. This outreach consisted of



Figure 3.1: Example of the LEP outreach efforts on social media

community walks that helped facilitate conversations with potentially impacted LEP families and gave the project team the opportunity to pass out information in Spanish about the I-526 LCC WEST project and coloring pages and crayons to children in the community.

For additional outreach information please see the EJ Outreach Strategy, located in Appendix X of the FEIS-ROD.

4.0 ANTICIPATED BENEFICIAL AND ADVERSE IMPACTS

4.1 BENEFICIAL IMPACTS

The purpose of the project is to increase capacity at the I-26/I-526 interchange and along the I-526 mainline, thereby relieving traffic congestion and improving operations at the I-26/I-526 interchange and along the I-526 mainline from Paul Cantrell Boulevard to Virginia Avenue. Benefits associated with these improvements would also be experienced by residents of the impacted EJ neighborhoods. These benefits are summarized below and further discussed in the Community Impact Assessment found in FEIS-ROD, Appendix D.

Mobility and Accessibility

The proposed project would reduce congestion and improve mobility along the project corridor through the construction of additional travel lanes, an improved interchange between I-26 and I-526, and wider shoulders that allow vehicles involved in crashes to be moved out of travel lanes. The proposed improvements would also improve the ease with which motorists can reach destinations along the project corridor and broader vicinity. This includes local EJ residents, commuters, and visitors alike.

Economics

Capacity improvements and improved travel times would result in the potential to expand markets for commercial businesses in the Charleston area and help improve productivity and competitiveness for production-related businesses. Reduced and more reliable travel times can also create other economic benefits such as reduced vehicle operating costs.

Construction of the proposed project would also create multi-year (short-term) employment within Charleston County. First round employment (a direct job) includes all jobs created by the hiring of construction firms that execute the projects, or by firms that provide direct inputs (e.g., paving materials, steel, lighting, etc.) to the project. Second round employment (an indirect job) includes employment in companies that provide products to the companies that provide project inputs (e.g., a company that manufactures guardrail is a first-round employer, the firm producing sheet metal for the guardrail company is a second-round employer). Third round employment (an induced job) includes all jobs generated by incremental customer expenditures due to wages paid for first and second round employees. Given the strong local work force available, it is reasonable to assume that a majority of the first and third round employment would be created in North Charleston and the immediate region. This includes residents of the impacted EJ neighborhoods. A portion of second round employment may also occur in the region, especially as some manufacturers find it economically beneficial to set up manufacturing near the project site to reduce transportation costs.

Travel Patterns & Increased Safety

Any of the build alternatives would create minor travel pattern changes around and near the EJ neighborhoods. Travelers on northbound Aviation Avenue wishing to access eastbound I-26 would move through a new reduced-conflict intersection along Rivers Avenue. The purpose of a reduced conflict intersection is to improve vehicular mobility and safety by limiting the number of points where vehicles can collide when making traffic maneuvers. This design reduces the potential for collisions by limiting the number of left-turns and moves traffic through an intersection more efficiently, ultimately translating into more signal “green time” and shorter travel times. Compared to conventional intersections, the elimination of left turns substantially reduces the number of potential conflict points and the type/severity of accidents.

In addition, all of the Proposed Reasonable Alternatives at the I-526 and I-26 interchange add collector-distributor roads along I-526 to separate movements that create congestion caused by closely spaced ramps and less than desirable weave and merge lane lengths. Separating the flow of traffic and eliminating traffic weaving and merging improves the safety of this interchange and decreases the likelihood of severe accidents.

4.2 ADVERSE IMPACTS

The FHWA EJ Order defines “adverse effects” as “the totality of significant individual or cumulative human health or environmental effects, including interrelated social and economic effects.

4.2.1 Direct Impacts

The right-of-way corridor acquired for original I-526 and I-26 construction was very narrow, leaving many North Charleston homes and businesses located near the existing interstate structures. As a result, there are several EJ communities along the corridor that would likely be directly and adversely impacted with any improvements or changes to the I-526 or I-26 corridors. As such, it is important to explore alternatives that would avoid direct impacts to EJ communities, particularly in this case where EJ neighborhoods were impacted by past transportation projects. Avoidance and minimization concepts that were studied as a part of the alternative analysis can be further explored in FEIS-ROD Chapter 3 and Section 6.0 of this analysis.

Displacements

The EJ neighborhoods that face substantial impacts with the proposed project include Ferndale, Highland Terrace, Liberty Park, and Russelldale. The availability of land and close proximity of homes to the interstate corridors in the North Charleston area are contributing factors to the high number of relocations in the area surrounding the I-526 and I-26 interchange, where these four (of the eight) impacted EJ areas are located.

The remaining four directly impacted EJ areas include Ozark Street and Seiberling Road in the Camps area, East Ada Avenue in the Wando Woods neighborhood, the Charleston Farms neighborhood, and townhomes on Seepoint Drive. As previously noted, there are homes on North Westchester Drive in the West Ashley portion of the project study area that qualify as EJ populations, but this population is not in

the immediate vicinity of the proposed project and would not be affected by direct, indirect, or cumulative effects from the proposed project.

The Proposed Reasonable Alternatives evaluated in the DEIS included a study of the direct impacts that are detailed in Table 4.1. All of the Proposed Reasonable Alternatives would displace two community centers within the Liberty Park and Russelldale neighborhoods. Impacted facilities at the Highland Terrace-Liberty Park Community Center include a 2,000 square foot community center building, one outdoor basketball court, one half-size basketball court, one multi-use court, playground equipment on a mulch play area, one picnic shelter, multiple benches and picnic tables throughout the park, and a small parking lot. Impacts to the Russelldale Community Center include the 2,000 square foot community center building, an outdoor basketball court, playground equipment on a mulch play area, a multi-use field, and multiple benches and picnic tables throughout the park. All Proposed Reasonable Alternatives would also displace Enoch Chapel Methodist Church within the Liberty Park neighborhood. This church was previously relocated by past transportation projects. As indicated in Table 4.1, the refined Recommended Preferred Alternative (Alternative 2) was selected in the DEIS in part due to the fewer community facility and service, business, and residential displacements anticipated in comparison to any of the other Proposed Reasonable Alternatives.

Table 4.1: Impact Summary for Environmental Justice Neighborhoods (DEIS, October 2020)

Russelldale					
Type of Impact	ALT 1	ALT 1A	ALT 2	ALT 2A	NO-BUILD
Community Facilities and Services	1 Comm Ctr	1 Comm Ctr 1 Church	1 Comm Ctr	1 Comm Ctr 1 Church	
Residential Acquisitions	4 apt buildings (19 units) 1 single family home	5 apt buildings (25 units) 2 single family homes 1 duplex (2 units) 1 triplex (3 units)	4 apt buildings (19 units) 1 single family home 1 mobile home	5 apt buildings (25 units) 2 single family homes 1 duplex (2 units) 1 triplex (3 units)	
Business Acquisition		1		1	
Highland Terrace					
Community Facilities and Services*	1 Comm Ctr	1 Comm Ctr	1 Comm Ctr	1 Comm Ctr	
Residential Acquisitions	11 single family homes	12 single family homes 1 mobile home	13 single family homes 1 mobile home	12 single family homes 1 mobile home	
Liberty Park					
Community Facilities and Services*	1 Comm Ctr 1 Church	1 Comm Ct 2 Churches	1 Comm Ctr 1 Church	1 Comm Ctr 2 Churches	
Residential Acquisitions	11 duplexes (22 units) 3 mobile homes 23 single family homes	11 duplexes (22 units) 3 mobile homes 26 single family homes	8 duplexes (16 units) 3 mobile homes 19 single family homes	11 duplexes (22 units) 3 mobile homes 26 single family homes	
Ferndale					
Residential Acquisitions	12 mobile homes	12 mobile homes	6 mobile homes	12 mobile homes	
Wando Woods: West Ada Avenue & East Ada Street					
Residential Acquisitions			1 single family home		
Camps: Ozark Street & Seiberling Road					
Residential Acquisitions			4 apt buildings (9 units)		
TOTAL EJ DISPLACEMENTS	94	114	92	114	
Total Business Displacements	18	19	16	19	
Non-EJ Displacements	5	5	5	5	
TOTAL PROJECT DISPLACEMENTS	117	138	113	138	

* The proposed project would relocate the Highland Terrace/Liberty Park Community Center. This relocation is shown in the table for both neighborhoods as both neighborhoods would experience adverse effects associated with the community center's relocation. This relocation is only counted once in the Total EJ Displacement number.

Once the Preferred Alternative was identified, additional right-of-way field studies were conducted to identify displacements that were not previously visible from aerial imagery, verify multi-family or single-family residence status, and consider access and drainage design impacts for a more accurate relocation count. Because two (2) hotels are likely to be displaced as a part of the project, the project team has also included an estimate of the long-term hotel tenants in the updated residential relocation count. Per SCDOT Relocation Manager guidance, this estimate is based off the percentage of long-term tenants occupying impacted hotels of previous SCDOT projects. Through this methodology, the tenant to room rate typically ranges from 10-20% of total occupancy. The high end of this range was used for this project to reflect a conservative estimate. This estimate is subject to change as contact with tenants is initiated during the Right of Way phase. Furthermore, per requests from the Community Advisory Council (CAC), cul-de-sacs have been added at the end of previously bisected roads in the Highland Terrace and Liberty Park neighborhoods which resulted in additional, yet minimal, property impacts. Commercial relocations were also re-evaluated to provide a count of actual tenants, rather than the number of commercial building displacements. These factors account for an increase of 62 residential relocations and 55 commercial unit additions since the DEIS publication.

It is noted that relocation impact numbers for all of the Proposed Reasonable Alternatives would increase to reflect the findings from the right-of-way field studies. Final relocation impacts will be based on negotiations with each property owner as a part of the appraisal process during the right of way phases. These counts will be refined as the project advances and additional measures are evaluated to minimize impacts.

Table 4.2 below shows the updated anticipated relocation impacts along the project corridor based on the Recommended Preferred Alternative described in the FEIS-ROD and the considerations noted above. This table provides a direct comparison to Table 4.1 by breaking out impacts to each EJ neighborhood.

The Recommended Preferred Alternative would displace 42 single-family homes, 11 mobile homes, 46 apartment units, seven duplexes and two triplexes consisting of 20 units, two community centers, and one church within the identified EJ neighborhoods/areas of Russelldale, Liberty Park, Highland Terrace, Ferndale, Charleston Farms, Seepoint Townhomes, Wando Woods (East Ada Avenue), and the Camps area. EJ residential relocations account for 86 percent of all residential relocations associated with the I-526 LCC WEST project. Furthermore, 63 percent of all residential relocations are within Russelldale, Liberty Park, Highland Terrace, or Ferndale.

Relocation details, including a comparison of impacts for the Proposed Reasonable Alternatives, can be found in Chapter 3 of the FEIS-ROD and in the updated Relocation Impact Study, Appendix I of the FEIS-ROD.

Table 4.2: Preferred Alternative Impact Summary for Environmental Justice Neighborhoods (FEIS-ROD, June 2022)

Type of Impact	Preferred Alternative
Russelldale	
Community Facilities and Services	1 Comm Ctr
Residential Acquisitions	5 apt buildings (27 units) 1 single family home 1 mobile home
Highland Terrace	
Community Facilities and Services	1 Comm Ctr*
Residential Acquisitions	15 single family homes
Liberty Park	
Community Facilities and Services	1 Comm Ctr* 1 Church
Residential Acquisitions	7 duplexes (14 units) 2 triplexes (6 units) 1 mobile home 24 single family homes
Ferndale	
Residential Acquisitions	9 mobile homes
Wando Woods: West Ada Avenue & East Ada Street	
Residential Acquisitions	1 single family home
Camps: Ozark Street & Seiberling Road	
Residential Acquisitions	4 apt buildings (9 units)
Charleston Farms	
Residential Acquisitions	1 single family home
EJ Neighborhood Displacements	109 residential 2 community centers*; 1 church
Other EJ Displacements**	2 apt buildings (10 units) 15 potential long-term hotel tenants
TOTAL EJ DISPLACEMENTS	137
Non-EJ Business/Institutional Displacements	72
Non-EJ Residential Displacements***	22
TOTAL NON-EJ DISPLACEMENTS	94
TOTAL PROJECT DISPLACEMENTS	231
<p>* The proposed project would relocate the Highland Terrace/Liberty Park Community Center. This relocation is shown in the table for both neighborhoods as both would experience adverse effects associated with the community center's relocation. This relocation is only counted once in the Total EJ Displacement number.</p> <p>** Includes Seepoint Drive Townhomes and potential long-term tenants at Budget Inn Charleston</p> <p>***Includes estimated relocations associated with long-term tenants at the Double Tree Hilton Hotel</p>	

Visual and Aesthetics

The proposed project would create a low level of permanent visual changes to the existing environment in the EJ neighborhoods because the existing road already sits above many of the affected communities. Long-term impacts include relocation of businesses and residences; new interchanges; increased right-of-way; and changes to the surrounding landscape through the presence of new ramps and modifications to existing overpasses, bridges, retaining walls, medians, as well as from alterations to the existing roadway grade. The EJ neighborhoods proximity to I-526 and I-26 would result in increased visual impacts as the proposed project's widening would encroach on the existing EJ neighborhoods viewshed. In comparison, I-526 was present in West Ashley before a majority of development occurred, and thus a larger buffer exists between the facility and residences. The Highland Terrace-Liberty Park Community Center in the

Liberty Park neighborhood is also in the Area of Visual Effect (AVE) and would be impacted by the proposed project, but the visual change would be minimal as existing I-26 is already visible from the area.

Noise Levels

The proposed improvements would result in an increase in traffic noise levels in 40 of the 49 Noise Study Areas (NSAs) studied for the noise study report (see Appendix K in the FEIS-ROD). Many locations in the project study area currently approach or exceed the Noise Abatement Criteria (NAC). The increase in sound levels as a result of the proposed improvements is not substantial, and in some cases result in a decrease in sound levels due to parapets on elevated sections. Traffic noise level changes in the affected EJ neighborhoods in Design Year 2050 range from -4 dB(A) to 5 dB(A), which is comparable to anticipated noise level changes in other areas along the project corridor.

Noise walls were evaluated for the affected EJ neighborhoods under feasibility and/or reasonableness standards set by the South Carolina Department of Transportation Traffic Noise Abatement Policy (2019). **Feasibility** is the combination of acoustical and engineering factors considered in the evaluation of a noise abatement measure, and **reasonableness** is the combination of social, economic, and environmental factors considered in the evaluation of a noise abatement measure. Noise walls for the affected EJ neighborhoods did not meet criteria for feasibility and/or reasonableness set forth by the SCDOT Traffic Noise Abatement Policy. More information on noise evaluations can be reviewed in the Detailed Noise Analysis, Appendix K of the FEIS-ROD.

4.2.2 Indirect Effects

Indirect impacts in EJ neighborhoods include:

- The proposed improvements would create adverse effects on community cohesion, aesthetics, and land use resulting from anticipated displacements.
- EJ neighborhood residents are anticipated to experience a high level of impacts associated with exposure to construction noise and dust as they are likely to have windows open to help ventilate homes.

4.2.3 Cumulative Effects

Past actions that have contributed to adverse cumulative impacts in EJ neighborhoods include:

- I-26 Displacements: The original construction of I-26 impacted 25 residences and 1 mobile home in Highland Terrace, and 22 residences, three stores, and one church in Liberty Park. These displacements are shown in Figure 4.1.
- I-526 Displacements: The original construction of I-526 impacted 17 residences, 12 likely residences, two apartments, two mobile homes, one motel, two restaurants, and nine stores. These displacements are shown in Figure 4.1.

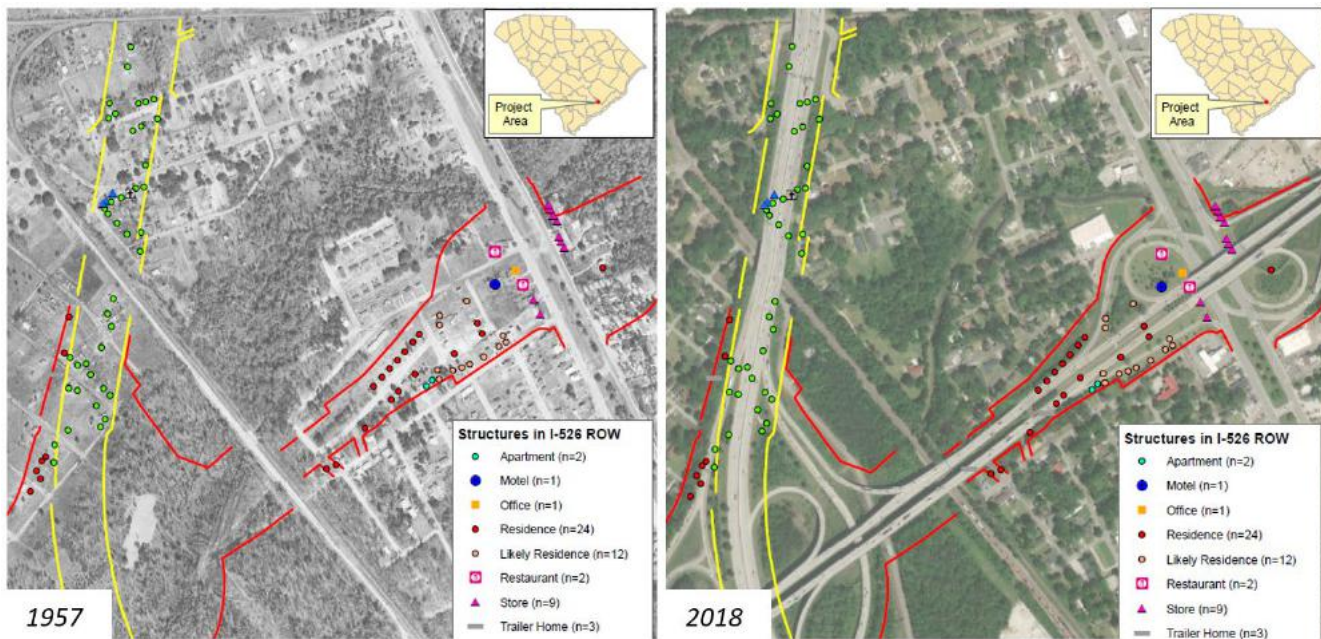


Figure 4.1: Aerial view of the EJ neighborhoods prior to the original I-526/I-26 construction (left) and post construction (right)
SOURCE: SCDOT

- **Inequitable Compensation from Previous Transportation Projects:** Feedback from the I-526 LCC WEST CAC has indicated that residents displaced or encroached upon by the previous I-526 and I-26 projects felt that they were not compensated fairly or justly and still feel the effects of these past transportation projects, including effects on community cohesion.⁴ See below for an excerpt from *the Guidebook for Assessing the Social and Economic Effects of Transportation Projects* that helps give additional context into the cumulative or indirect effects brought on by transportation projects. Past transportation projects bisected existing streets without proper design for drainage and vehicle operations which has led to deteriorating community aesthetics.

In general, **any transportation change that impedes pedestrian and local traffic in an area can create both directly and indirectly hinder community cohesion.** New or larger transportation facilities act as visual edges and boundaries: widening a facility can cut away portions of a neighborhood and isolate members of a community from their friends and neighborhoods. Conversely, transportation projects such as new pedestrian facilities or bikeways may have the opposite effect, improving connections between residents and community facilities.

Generally, **the fewer personal resources an individual has, the more harmful the loss of community.** Studies have shown that those who have lower incomes rely more on extended family as a source of social contact. Relocation of these households—or separation from their community or family by a transportation facility—may cause more social isolation than for those with higher incomes, especially when language presents a barrier to making new friends and forging a new social network.

Like economic development or changes in property value, neighborhood cohesiveness relies on an often-unpredictable amalgamation of neighborhood features and personalities. **Noise, pedestrian safety, changes in property value, and changes in visual quality are all inexorably linked to the opportunities for and the quality of social life within a neighborhood.**

Summarized/Excerpted From: Guidebook for Assessing the Social and Economic Effects of Transportation Projects (National Cooperative Highway Research Program (NCHRP Report 456. Transportation Research Board - National Research Council. Washington, D.C. 2001.

⁴ Feedback received from Community Advisory Council at January 2020 meeting.

- Future Land Use:** The EJ neighborhoods are currently zoned for single-family residential use with some multi-family residential and commercial/light industrial uses on the periphery of the neighborhoods. The City of North Charleston's future land use mapping (June 2020) shows these areas as "Mixed-Use" which provides for a mixture of land uses within in close proximity to each other. This could include mixed uses within one parcel or a single structure. The MU designation does not change a property's current zoning designation, but if a property owner were to apply to have a parcel rezoned for commercial, office, or light industrial use, the change would be compatible with the MU designation. Rezoning requests are reviewed on a case-by-case basis as there are several factors to be considered, including public sentiment, the parcel's proximity to associated infrastructure, and the areas future land use designation. As such, the MU designation opens the potential for non-residential uses within the Russelldale, Ferndale, Highland Terrace, and Liberty Park neighborhoods. In an area where affordable housing, and housing in general, is scarce and already at a premium, any properties within the EJ neighborhoods rezoned to non-residential uses would likely reduce available housing, and would thus contribute to cumulative effects on EJ neighborhoods. Any zoning changes contribute to the further breakdown of community cohesion of the EJ neighborhoods, further fragmenting residences from each other and creating a barrier to reestablishing forms of community cohesion.
- Connectivity:** Access to jobs, shopping and transit serves have been previously impacted by the original I-526 and I-26 projects because the interstate bisected neighborhoods and displaced residents and businesses. In addition, a decrease in connectivity impacted community cohesion when neighbors were displaced, and roads were cut off.
- Developer/Investor Pressure:** Many residents of the affected EJ neighborhoods that the project team encountered during public engagement activities recounted instances where investors had offered to purchase their homes. This is a common local occurrence as well as a national trend as developers purchase properties in low-income neighborhoods as an investment in future land use changes.⁵ In many cases, redevelopment can occur in response to nearby gentrification, alone or in combination with infrastructure projects, notably transit projects and subsequent Transit-Oriented Development (TOD). Although stops for the proposed Rivers Avenue Bus Rapid Transit (BRT) have not been determined, developers have expectations for redevelopment of the EJ neighborhoods.
- Housing Quality:** A large number of homes originally built in the 1920's through 1940's in Garco (short for "General Asbestos and Rubber Company", a planned city built in 1915) were moved in the 1970's and 1980's to their present locations in Highland Terrace and Liberty Park. These homes were among the first prefabricated housing in the United States, developed in response to the need to house predominantly white workers and their families who were moving to North Charleston for employment opportunities at military installations and a large number of support industrial facilities. The homes were assembled from materials shipped by rail into North Charleston and workers could assemble a single house in eight hours. By design, the houses were demountable (able to be dismantled and readily reassembled) so they could easily be taken apart and moved as needed.⁶ As such, much of the original housing stock in the affected EJ

⁵ <https://www.nytimes.com/interactive/2019/04/27/upshot/diversity-housing-maps-raleigh-gentrification.html>

⁶ North Charleston Historic Architecture Survey, 1994. <http://nationalregister.sc.gov/SurveyReports/HC10003.pdf>

neighborhoods is very old and was not “built to last” in the same way as traditional residential construction.

- Housing Composition:** Mobile homes have traditionally served as an alternative form of housing for those who cannot afford a single-family detached house. The number of mobile homes in North Charleston is steadily declining. The number of mobile homes in the tri-county area dropped by 3 percent in 2001 to 2011, but in North Charleston during that same time period, the number of mobile homes dropped by 11 percent.⁷ In 2014, roughly 7 percent⁸ of housing in North Charleston was comprised of mobile homes. Many mobile homes are more like manufactured homes that may not be able to be moved. The use/reuse of existing mobile home stock can be complicated as there are local regulations that prohibit the re-inhabiting of previously vacant mobile homes.⁷ The number of mobile home parks in the North Charleston area has rapidly declined in the last roughly 10 years. Activities such as the 2013 closure of the Trailwood Mobile Home Park and displacement of approximately 400 families (see Figure 4.2) contributes to the decrease in mobile homes.^{9, 10} City development policies and future land use plans include policies related to reducing the number of mobile homes in North Charleston.⁷ In addition to the closure of large amounts of land previously in use by mobile homes, the proposed project would displace 6 to 10 mobile homes in the Ferndale neighborhood. Historically, mobile homes comprised a notable portion of the available affordable housing stock in North Charleston. The number of mobile homes in North Charleston is on the decline.



Figure 4.2: Trailwood Mobile Home Park: 2013 (left) and 2020 (right)
SOURCE: Post & Courier and Google Maps

- Available Affordable Housing Stock:** The original construction of I-526 and I-26 reduced the amount of affordable housing in the area, notably a large number of apartment buildings located in the

⁷ https://www.postandcourier.com/archives/tough-north-charleston-rules-on-mobile-homes-reduce-their-numbers/article_3c8d7e80-0611-5c32-a161-84e1a5180053.html

⁸ COG Housing Needs Assessment, 2014

⁹ *Mobile home park families urged to prepare to move.* May 11, 2012. Post and Courier article accessed January 22, 2019.
https://www.postandcourier.com/archives/mobile-home-park-families-urged-to-prepare-to-move/article_99be2fec-6d4e-5579-8467-a4dc5021b74f.html

¹⁰ <https://www.charlestoncitypaper.com/charleston/north-charleston-evicts-trailer-park-residents/Content?oid=4795787>

current I-26 corridor. The expansion of the Charleston Airport in 2005, potential planned airport expansions, continued commercial development, and the large amount of land owned by the US Federal Government in the vicinity of the Charleston airport reduce the amount of available land for affordable housing development.¹¹ Were this land available for affordable housing, it would be very well suited for it given the area's proximity to transit and employment centers.

- **Heirs' Property Issues:** Verifying homeownership for emergency federal assistance requires documents that may not be available to residents due to various issues, namely costs associated with hiring an attorney to sort out heirs' property rights, as many of these cases are complicated.^{12,13,14, 15} Due to a lack of access to legal resources, most early black landowners did not have wills. As descendants inherited the land without a clear title, the land was designated as "heirs' property." This scenario is prevalent in low-income communities in the North Charleston area.¹⁶ Feedback from the public has indicated that obtaining building permits for renovations or re/development can also be complicated by Heirs issues. As such, the ability to re/develop in the affected EJ neighborhood affects the ability for private citizens to maintain and create affordable housing in an area where vacant and underdeveloped lots are prevalent. Photograph 7 provides an example of the vacant or underdeveloped Heirs Property parcels within the EJ neighborhoods.



Photograph 7: Many lots are vacant as residents cannot afford to maintain a house or properties are encumbered by Heirs' Property issues.
SOURCE: Google Street View

- **Effects on Economic Vitality:** The issues described above related to diminishing affordable housing stock, ability to maintain and fully utilize existing affordable housing, as well as hindrances associated with developing new affordable housing, collectively contribute to adverse effects on the economic vitality of the affected EJ neighborhoods as evidenced by depreciated home values, high numbers of vacant or underdeveloped properties, and a high number of homes in disrepair. The affected EJ neighborhoods' economic vitality is diminished by the inability of residents to be able to: afford, physically perform, or have legal authority to conduct home repairs and home construction projects.

¹¹ <https://www.counton2.com/news/charleston-international-airport-planning-to-build-new-concourse/>

¹² <https://www.fema.gov/news-release/2018/10/13/fag-verifying-home-ownership-disaster-assistance-process>

¹³ Personal communication with Dr. Jenny Stephens, Center for Heirs Property Preservation, August 2019.

¹⁴ <https://grist.org/article/these-residents-face-a-double-threat-from-hurricane-florence-and-property-rights/>

¹⁵ <https://www.nationofchange.org/2018/10/02/recent-disasters-reveal-racial-discrimination-in-fema-aid-process/>

¹⁶ <https://www.thenation.com/article/archive/african-americans-have-lost-acres/>

- **Resiliency:** NOAA's Sea Level Rise and Social Vulnerability Index Map in Figure 4.3 shows how social and economic factors can be used to determine the vulnerability of a population to future sea level rise.¹⁷ Social vulnerability is the degree to which a community can prepare for and recover after environmental hazards such as hurricanes, flooding, and sea level rise. The social and economic factors used in the analysis are influenced by the degree to which a community experiences adverse cumulative effects. The area within the vicinity of the I-526 and I-26 interchange and areas southward along I-26 toward Charleston have a high social vulnerability index, indicating that these communities are more likely to be affected by sea level rise. As noted previously, the original housing stock in the affected EJ neighborhoods was made of prefabricated materials designed so that it could be easily disassembled and moved to a different location. This fact, coupled with other factors such as the presence of a larger number of seniors that may not be able to perform their own home repairs, the challenges Heirs' Properties present for receiving federal disaster relief and perform home repairs/redevelopment, and the EJ neighborhoods' locations within the broad Filbin Creek drainage basin all contribute to a high degree of vulnerability in the face of large-scale storm events and flooding.



Figure 4.3: NOAA Sea Level Rise and Social Vulnerability Index Map (EJ Neighborhoods shown in yellow)

SOURCE: NOAA Office for Coastal Management

- **Outdoor Environmental Pollutants:** One example of a recurring effect is exposure to environmental pollutants. Impacts on air quality stemming from a combination of high traffic volumes and a larger-than-average fraction of the fleet being comprised by heavy duty vehicles are compounded by the fact that several minority and low-income communities are located in close proximity to the I-526 and I-26 corridors.

The residents of neighborhoods immediately surrounding the I-526 and I-26 interchange are likely to experience greater impacts to the quality of the air they breathe than residents living in areas further removed from high-traffic interchanges like the I-526 and I-26 interchange.¹⁸ A study that tracked the number of children treated for asthma at the Medical University of South Carolina (MUSC) over a 40-year period found a 20-fold increase of asthma instances among African-American children; four times the instances of asthma in white children over the same period.¹⁹

Other research indicates decades of residential segregation has resulted in more minority residents living in areas where there is a greater risk from hazardous air pollutants, including those pollutants

¹⁷ <https://coast.noaa.gov/slr/>

¹⁸ I-526 LCC WEST Air Quality Analysis. May 2020.

¹⁹ <https://www.charlestoncitypaper.com/charleston/is-pollution-poisoning-charlestons-african-american-and-low-income-communities/Content?oid=5790876>

that also come from traffic sources. Due to decades of residential segregation, African Americans tend to live where there is greater exposure to air pollution.”²⁰

- **Life Expectancy:** Chronic stress has known physical and mental impacts that can include clogged arteries and heart disease, obesity, diabetes, chromosome damage and premature aging. Within the project study area, health disparities are evidenced by the difference in life expectancy between neighborhoods. The average life expectancy in Russelldale, Liberty Park, and Ferndale is 71.7 and Highland Terrace 73.6, compared to 79.5 in Park Circle and 80.5 in Ashley Harbor. Life expectancy in the affected EJ neighborhoods is less than the statewide average of 77 years of age.²¹
- **Environmental Stressors:** Figure 4.4 shows a range of stressors that can have adverse effects on health. Evidence that most, if not all, of these stressors have been experienced by a larger number of residents in the affected EJ neighborhoods. Housing quality, cost and location all contribute to health in numerous ways. Unsafe housing and habitability conditions that affect health include rodent and pest infestations, exposed heating sources, excessive noise, and unprotected windows. Racially segregated neighborhoods and those with concentrated poverty typically have fewer assets and health promoting resources.

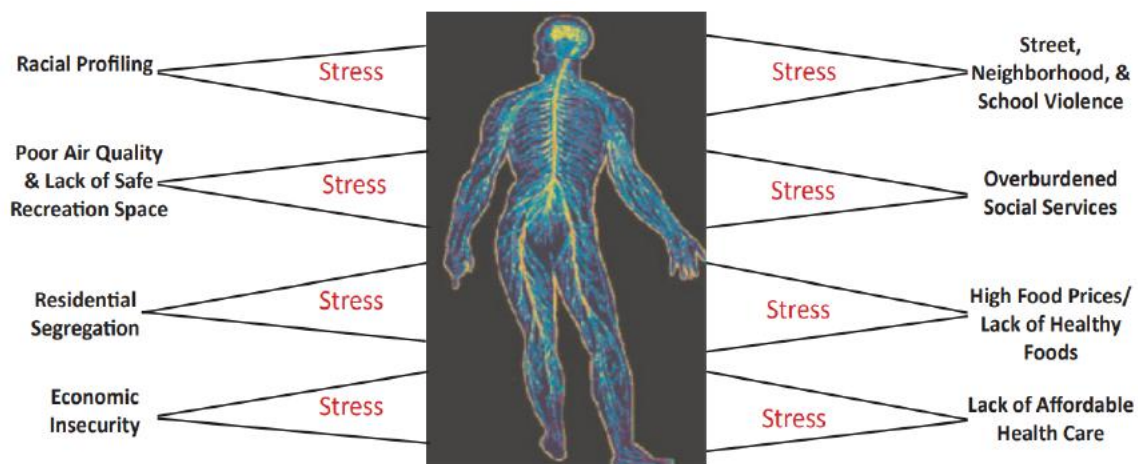


Figure 4.4: Examples of multiple stressors influencing poor health outcomes

Source: <https://www.ci.richmond.ca.us/DocumentCenter/View/28771/Attachment-2---HiAP-Strategy?bidId=>

- **Indoor Environmental Pollutants:** Given the age and state of repair of most homes in the affected EJ neighborhoods, poor indoor air quality and inadequate heating or ventilation are anticipated, which can lead to the growth of mold and flourishing of dust mites, which exacerbates asthma and respiratory allergies. Given the age of many of the homes, there is also the likelihood that many have at least some areas of lead-based paint, which can cause lead poisoning and behavioral problems. Children of color and children from low-income families are more likely to have elevated blood lead levels.²²

²⁰ <https://www.lung.org/clean-air/outdoors/who-is-at-risk/disparities>

²¹ Life Expectancy by Census Tract <https://www.cdc.gov/nchs/data-visualization/life-expectancy/#>

²² Health in All Policies <http://www.ci.richmond.ca.us/2575/Health-in-All-Policies-HiAP>

- Construction Impacts: Because residents are likely to leave windows open to help ventilate homes, small dust particles are an increased concern in the affected EJ neighborhoods. Construction noise is also expected to have a disproportionate effect on EJ neighborhood residents for the same reason.

4.3 EJ NEIGHBORHOOD IMPACT SUMMARY

4.3.1 Direct Impacts

The EJ neighborhoods of Russelldale, Liberty Park, Highland Terrace, and Ferndale would experience a high level of direct impacts associated with displacements and indirect/cumulative effects. Additional EJ locations in the Wando Woods neighborhood (East Ada Street) and in the Camps area (Seiberling Road and Ozark Street) would also experience direct impacts associated with displacements. Residential relocations within all EJ areas comprise 86 percent of total project residential relocations, 63 percent of which are located in Russelldale, Liberty Park, Highland Terrace, and Ferndale.

4.3.2 Indirect Effects

Indirect impacts in EJ neighborhoods include adverse effects on community cohesion, aesthetics, and land use resulting from anticipated displacements; disproportionate impacts associated with exposure to construction noise and dust; low level of permanent visual changes to the existing environment in the EJ neighborhoods because the existing road already sits above many of the affected communities.

4.3.3 Cumulative Effects

Past and future actions that have contributed to adverse cumulative impacts in EJ neighborhoods include:

- Displacements associated with original construction of I-26 and I-526
- Past actions, in combination with the proposed improvements and future projects, would contribute to cumulative noise levels in the affected EJ neighborhoods. The original construction of I-526 and I-26 and construction/expansion of the Charleston International Airport, generated a substantial increase in highway and air traffic noise. In addition, two railroad corridors border the affected EJ neighborhoods; both railroad corridors generate noise. As Charleston and the surrounding areas have increasingly developed, traffic levels and infill development has increased, resulting in an additional increase in noise levels in the communities.
- Adverse effects on economic vitality due to compensation from original construction of I-26
- Adverse community cohesion effects associated with potentially rezoning the EJ neighborhoods to “Mixed-Use”
- Diminished economic vitality due to depreciated home values, a high number of vacant or underdeveloped parcels, and a high number of homes in disrepair
- Diminished economic vitality increases potential for further erosion of community cohesion as homeowners may sell to developers that do not reinvest in the current community
- Many of the houses in the affected EJ neighborhoods were built in the 1940’s; these homes were prefabricated houses designed to be easily assembled and disassembled so they could be moved as needed; as such, the existing housing stock is old, and much is in disrepair

- Affordable housing stock is also affected by the reduction of mobile homes in the project area and vicinity; this trend is anticipated to continue based on local growth plans and policies related to mobile homes
- Available land for affordable housing is also being reduced by new development in the area including other transportation projects, past airport expansions, and large-scale commercial development.
- Heirs' Property issues can hinder residents from performing home repairs or building new homes
- EJ neighborhood residents experience a high degree of vulnerability related to weather hazards given the quality of housing stock, location within the Filbin Creek drainage basin, and Heirs' Property issues
- EJ neighborhood residents experience environmental stressors, notably those related to economic insecurity, outdoor, and indoor pollutants
- As a result of surrounding programmed future transportation projects, additional impacts are anticipated to the Camps area outside of the I-526 LCC WEST project, thus contributing to cumulative effects to residents living in this area.

5.0 DISPROPORTIONATELY HIGH AND ADVERSE IMPACT DETERMINATION

"Disproportionate impacts" refer to situations of concern on a project where there exists significantly higher and more adverse health and environmental effects on minority populations, low-income populations or indigenous peoples. Disproportionately high and adverse effects are effects that are predominately borne by a minority and/or low-income population or will be suffered by the minority/low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the nonminority/non-low-income population" (FHWA Order 6640.23A). The paragraphs below determine if these impacts summarized in Section 4.3 are disproportionately high and adverse for each neighborhood.

The proposed project would result in one residential relocation in Wando Woods (East Ada Avenue) and one residential relocation in Charleston Farms. Across North Rhett Avenue from Charleston Farms, two additional buildings, totaling 10 units, on Seeport Drive will potentially be relocated. There are no community impacts in the way of community center relocations in any of the above areas, and cumulative/indirect impacts are similar for these residents as those along the entirety of the project corridor. **As such, impacts in these areas are not disproportionately high and adverse.**

Four multi-family buildings totaling nine residential units will perennially need to be relocated in the Camps residential area on Seiberling Road and Ozark Street (east of I-526). Although there are no specific community impacts, additional impacts to this area are anticipated due to other future programmed projects, thus contributing to overall cumulative effects in this neighborhood. **As such, disproportionately high and adverse cumulative effects are anticipated for these residents.**

The EJ neighborhoods of Russelldale, Liberty Park, Highland Terrace, and Ferndale would experience a high level of impacts associated with direct, indirect, and cumulative effects. Relocations within these

four neighborhoods comprise approximately 63 percent of the total residential relocations and 100 percent of total recreational/community facility relocations associated with the proposed project. In addition, due to the close proximity to the existing project corridor, these neighborhoods will likely have adverse land use, visual and aesthetics, and noise impacts. Previous transportation related project impacts, perceived inequitable compensation from past projects, future land use inconsistencies, developer/investor pressure, existing affordable housing stock and quality, heirs' property challenges, social vulnerability, and environmental pollutants are among the additional cumulative effects that are impacting these EJ neighborhoods. Without mitigation, **the anticipated impacts on Russelldale, Liberty Park, Highland Terrace, and Ferndale are considered to have disproportionately high and adverse effects**, as there are no comparable burdens placed upon other neighborhoods in the broader vicinity of the proposed project.

The table below summarizes the EJ Analysis results with regard to EJ neighborhoods that face direct, indirect, and/or cumulative impacts due to the proposed project.

Table 5.1: EJ Neighborhood Demographics with Disproportionately High and Adverse Effects Anticipated Determination

Neighborhood	Block Group	Minority ¹	Low-Income ²	Disproportionately High and Adverse Effects Anticipated?
Russelldale	450190033003	84%	34%	Yes
Highland Terrace	450190031111	91%	36%	Yes
Liberty Park	450190033001	59%	38%	Yes
Ferndale	450190033002	95%	53%	Yes
Wando Woods: West & East Ada Avenue	450190039002	69%	11%	No ³
Camps: Ozark Street & Seiberling Road	450190031111	91%	36%	Yes
Charleston Farms & Seepoint	450190034001	80%	51%	No
Townhomes	450190034002			
	450190034003			
	450190034004			

¹ Minority percentages per block group based on Census Bureau's 2013-2017 American Community Survey 5-year summary estimates.

² Low-income percentages per block group based on 2018 household income data and poverty guidelines set forth by the US Department of Health and Human Services (<https://aspe.hhs.gov/2018-poverty-guidelines>).

³ Changed from "Yes" to "No" since DEIS: Although this neighborhood is considered an EJ population, relocation impacts resulting from the Preferred Alternative include one residence and zero community impacts in the way of community center relocations. Cumulative/indirect impacts are similar for these residents as those along the entirety of the project corridor. As such, impacts to the Wando Woods neighborhood are not disproportionately high and adverse.

6.0 AVOIDANCE, MINIMIZATION, AND MITIGATION FOR ADVERSE EFFECTS

Adverse effects are to be addressed in accordance with FHWA mandates to identify and avoid discrimination and disproportionately high and adverse effects on minority populations and low-income populations by actions that include:

- identifying and evaluating environmental, public health, and interrelated social and economic effects of FHWA programs, policies, and activities; and,
- proposing measures to avoid, minimize, and/or mitigate disproportionately high and adverse environmental or public health effects and interrelated social and economic effects, and providing offsetting benefits and opportunities to enhance communities, neighborhoods, and individuals affected by FHWA programs, policies, and activities, where permitted by law and consistent with EO 12898.

In accordance with FHWA guidance, projects can cause positive and negative effects (“benefits and burdens”) that can occur in the near or long term. The FHWA EJ Order notes that practitioners may take planned mitigation measures (offsetting benefits) and the relevant number of similar existing system elements in non-minority and non-low-income areas when assessing impacts on EJ populations.

6.1 AVOIDANCE

As noted in Section 6.1.1 through 6.1.7, a range of alternatives that would avoid impacting EJ communities were evaluated. These alternatives included the No-Build Alternative; Improvements to existing local facilities (i.e., East Montague Avenue and Remount Road; New location alternatives (i.e., US 78 to Virginia Avenue, Ashley Phosphate Road to Virginia Avenue, Bees Ferry Road to Dorchester Road); Managed Lanes; Transportation System Management (TSM)/Transportation Demand Management (TDM) Strategies; Mass Transit; and, Existing Corridor Improvements.

Realignment of the interstate would be restricted by the lack of open land and presence of dense existing development, regional landmarks and environmental features. Any

option for interstate realignment would cause massive impacts to the following areas:

- **Environmental Justice neighborhoods:** Interstate realignment could substantially impact additional EJ neighborhoods that are within the vicinity of the existing I-526 and I-26 corridors including Midland Park, Shady Oaks Mobile Home Park, Dale Valley Mobile Home Park, Bubis Mobile Home Park, Lakeside Mobile Home Park, Charleston Farms, Waylyn, Glen Terrace, Wando Woods, and/or Dorchester Terrace, among others.

Did the Project Team Consider Interstate Realignment?

SCDOT considered realigning the interstate with the intention of complete avoidance of the EJ communities. This concept was not carried forward because realignment of the interstate would be restricted by **the lack of open land and presence of dense existing development, regional landmarks and environmental features**. Any option for interstate realignment would cause massive impacts to areas including additional EJ neighborhoods, the Charleston International Airport, the Cooper River, and many other community features. The severity of such impacts was deemed **unfeasible and unreasonable** for improving congestion along I-526.

- Potential Section 4(f) Parks: There are 21 community centers in addition to various parks and open recreation spaces operated by the City of North Charleston throughout the North Charleston region. Those near the existing I-526 and I-26 corridors include the Charleston Farms Community Center, Ferndale Community Center, Felix Pickey Community Center, Park Circle Community Center, Miner Crosby Community Center, and Persephone Moultrie Community Center, among others.
- The Charleston International Airport: The combined airport area of the civilian facilities and Charleston Air Force Base is the busiest airport in South Carolina.²³ It extends over 2,000 acres, covering most of the land to the west of the I-26/I-526 interchange between I-26/I-526 and the Ashley River, extending north to Ashley Phosphate Road. The location and size of the airport prevent alternate route development to the west of I-26 for approximately four miles to the north. In addition, I-526 passes under the approach-departure surface of Runway 33, approximately 5,000 feet from the end of the runway. While the interstate corridor does not encroach on the approach-departure surface, it does fall within Accident Potential Zone 1 (APZ 1), where land use is restricted to protect people on the ground in the event of an aviation incident. The U.S. Air Force controls the property within the portion of APZ 1 north of I-526 and South Aviation Avenue and would oppose moving the interstate closer to the runway.
- The Cooper River Crossing: The waterway demarks the easternmost boundary of the North Charleston city limits and remains a vital commercial channel for the region. Currently, the Don Holt Bridge and the Arthur Ravenel Jr. Bridge are the only two structures that transport vehicles across the river. Any alternate route which would involve the construction of a third roadway bridge would increase the cost of the project drastically.
- Goose Creek Reservoir: Situated just east of the Rivers Avenue business district near Hanahan, the 600-acre reservoir serves as the primary water supply storage for much of the Charleston region. The area is also home to a wide variety of animal species and has become a popular destination for fishers and paddleboaters alike. The reservoir stretches from just northeast of Murray Drive to Goose Creek Road, impeding any new alternate alignment between Rivers Avenue and North Rhett Avenue.
- Francis Marion National Forest/Bonneau Ferry Wildlife Management Area: Although much of this forested expanse lies to the northeast of the project area, its presence would prevent new alternate four-lane routes north of I-526 which connect I-26 to US 17. Wildlife management is overseen by the South Carolina Department of Natural Resources.
- Natural Environment: Many areas east of North Rhett Avenue are comprised of wetlands related to the branch of the Cooper River connecting to the Goose Creek Reservoir. Alternate routes constructed in this vicinity would result in increased impacts to the surrounding natural environment.

The severity of such impacts associated with interstate realignment would be deemed unfeasible and unreasonable for improving congestion along I-526 and therefore is **not considered a prudent avoidance alternative**.

With the exception of Existing Corridor Improvements (discussed in Section 3.5.7 of the FEIS-ROD), the following alternatives would not reduce congestion along the project corridor and would not fulfill the purpose of and need for the proposed project. Alternatives to improve the existing corridor were found to meet the project's purpose and need and were evaluated further as Proposed Reasonable

²³ Charleston International Airport. About CCAA. <https://www.iflychs.com/About>.

Alternatives. Additional information on these alternatives can be found in Sections 3.5.1 through 3.5.6 of the FEIS-ROD.

6.1.1 No-Build Alternative

The no-build alternative would serve as a total avoidance alternative; however, it is not feasible or prudent due to traffic implications and localized air quality increase associated with congestion. These outcomes would not be compatible with the purpose and need of the proposed project and therefore the no-build alternative is **not considered a prudent avoidance alternative**.

6.1.2 Alternative Corridors

SCDOT initiated an evaluation of alternate routes that satisfy the purpose and need of the I-526 LCC WEST project. The study evaluated the enhancement of existing roadway facilities along with the creation of new alignment corridors, as shown in Figure 6.1. The enhancements include the development of alternate alignments which could be used to decrease interstate traffic volumes. The corridors listed do not include any options which provide an alternate route between I-26 and the Cooper River.

- **Improvements to East Montague Avenue:** This existing route runs nearly parallel to I-526 from I-26 to Virginia Avenue, and serves as a minor arterial facility connecting I-26 to the Park Circle area. Traffic modeling, including the proposed improvements to the existing East Montague Avenue, indicates a 10-24% decrease in traffic volumes along the existing I-526 mainline. Although the 24% reduction may be substantial enough to meet the purpose and need if it were along the entire corridor, this decrease in traffic volume would only be applicable to approximately 0.5 miles along I-526 from I-26 to Rivers Avenue. As a result, this reduction in congestion would not be substantial enough to meet the purpose and need of the I-526 LCC WEST project, as I-526 still operates at a LOS E/F. Additionally, the improvements along East Montague Avenue would result in large-scale impacts to development along East Montague Avenue. As such, this alternate corridor is **not a prudent avoidance alternative**.
- **Improvements to Remount Road:** This existing route serves the area just north of the I-526 corridor and connects I-26 to the North Charleston Terminal (NCT) and its associated facilities along the Cooper River. Traffic modeling including the proposed improvements to the existing Remount Road indicate a 1-12% decrease in traffic volumes along the existing I-526 mainline; this reduction in congestion would not be substantial enough to meet the purpose and need of the I-526 LCC WEST project, as I-526 still operates at a LOS E/F. Therefore, the improvements to existing Remount Road were eliminated as a potential alternative because it does not meet the purpose and need for the I-526 LCC WEST project. Additionally, the improvements along Remount Road would result in large-scale impacts to development flanking the roadway. As such, this alternate corridor is **not a prudent avoidance alternative**.

6.1.3 New Location Alternatives

- **US 78 to Virginia Avenue:** The proposed new alignment is established to connect key points along I-26 and I-526 in the vicinity of the existing Cooper River crossing at the Don Holt Bridge. The US 78 to Virginia Avenue route utilizes portions of Red Bank Road and North Rhett Avenue to create a four-lane, controlled access facility with new interchanges. A new location roadway section running north of Charleston Southern University and North Charleston Wannamaker County Park connects US 78 west of I-26 to the Red Bank Road corridor. Upgrading the existing roadway impacts commercial and

residential development along Red Bank Road and potentially impacts the North Charleston Terminal facilities.

Traffic modeling, including the proposed new alignment, indicates a 2 to 10% decrease in traffic volumes along the existing I-526 mainline; this reduction in congestion is not substantial enough to meet the purpose and need of the I-526 LCC WEST project, as I-526 still operates at a LOS E/F. Therefore, the US 78 to Virginia Avenue route is eliminated as a potential alternative because it does not meet the purpose and need for the I-526 LCC WEST project and is **not considered a prudent avoidance alternative**.

- Ashley Phosphate Road to Virginia Avenue: This proposed new alignment is a four-lane, controlled access facility which follows a short section of Ashley Phosphate Road east of I-26, then connects to Railroad Avenue and heads south before traversing on new location to run parallel to Murray Drive along the existing utility easement. A variety of features are impacted by this proposed route, including but not limited to commercial and residential development along Ashley Phosphate Road and Murray Drive, Hanahan Elementary School and Trident Technical College, and the City of Hanahan Recreation Center and its associated park areas. In addition, major utility relocations are required.

Traffic modeling, based on the proposed new alignment, indicates a 7 to 15% decrease in traffic volumes along the existing I-526 mainline; this reduction in congestion does not meet the purpose and need of the I-526 LCC WEST project, as I-526 still operates at a LOS E/F. Therefore, the Ashley Phosphate Road to Virginia Avenue route is eliminated as a potential alternative because it does not meet the purpose and need for the I-526 LCC WEST project and is **not a prudent avoidance alternative**.

- Bees Ferry Road to Dorchester Road: A third new alignment route is being evaluated to the west of I-26 which establishes a new connector across the Ashley River. The proposed roadway is four lanes with controlled access but does not include an interchange at Ashley River Road. The proposed Bees Ferry Road to Dorchester Road alignment requires a new bridge over the Ashley River that could potentially impact the existing Shadowmoss Plantation residential development. Incorporating this alignment into traffic modeling results in an estimated four percent decrease in traffic volume along I-526 near the Ashley River, while I-526 volumes to the east of I-26 have negligible reduction. Therefore, the proposed connector is also failing to meet the purpose and need of the I-526 LCC WEST project, as I-526 remains at a LOS F. Therefore, the Bees Ferry Road to Dorchester Road new alignment route is eliminated as a potential alternative because it does not meet the purpose and need for the I-526 LCC WEST project and is **not a prudent avoidance alternative**.

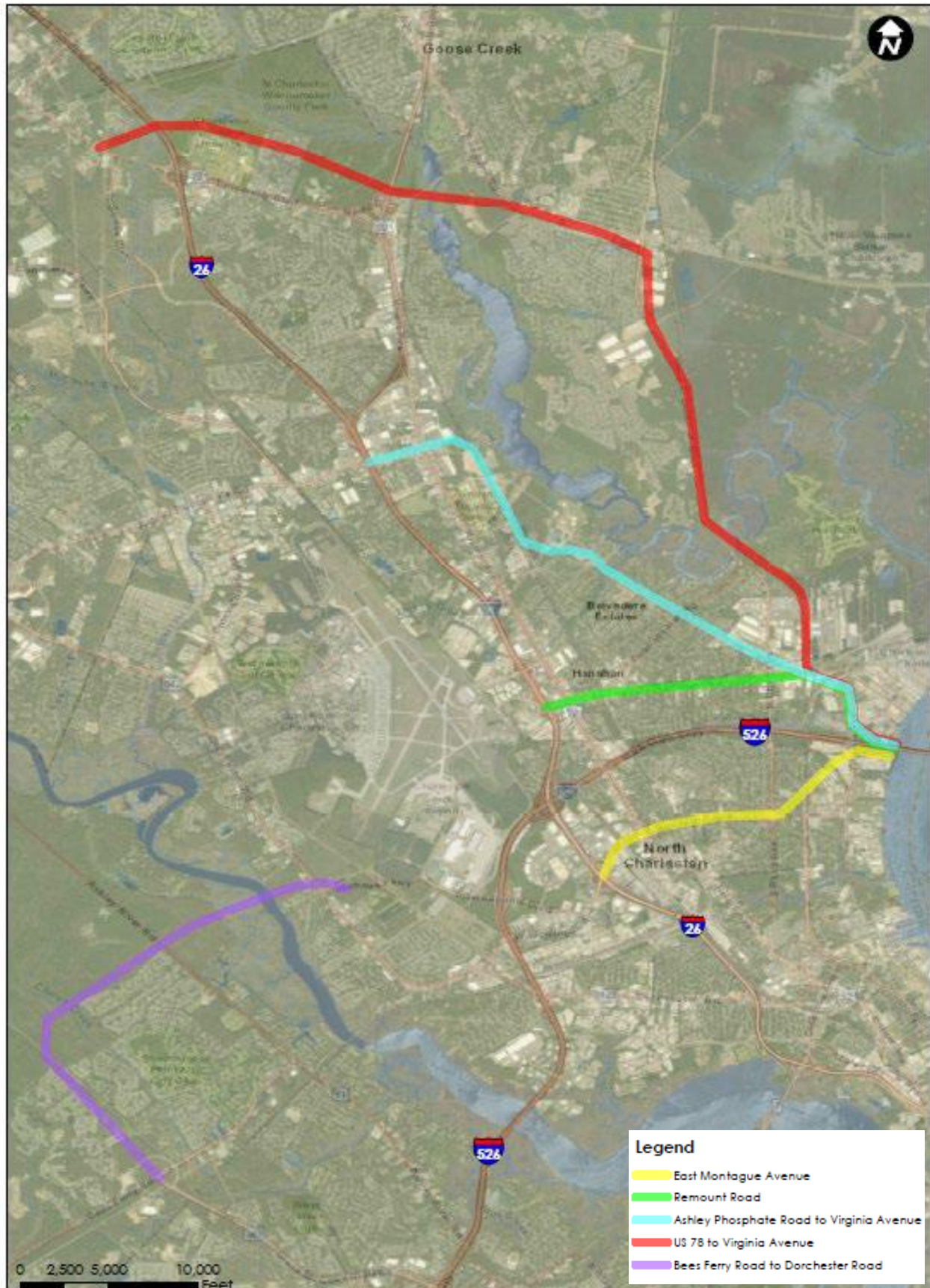


Figure 6.1: Alternate Corridors

6.1.4 Transportation System Management (TSM)/Transportation Demand Management (TDM)

- **Managed Lanes:** Managed lanes, either as a stand-alone alternative, or in combination with other avoidance alternatives, would not meet the purpose and need for the project. Managed lanes were evaluated for I-526 in the 2013 Corridor Study and found to be not feasible without implementing a more regional system of managed lanes. Managed lanes may be feasible on I-526 if they extended westward on I-26 at least as far as the US 52 Connector near Ashley Phosphate Road. This regional study suggested improvements from the plan is the implementation of HOT managed lanes from Exit 199 (US 17 Alt – Summerville) to I-26 Terminus at US 17 and along I-526 the entire section. There are currently no programmed improvements to I-26 between I-526 and the US 52 Connector; therefore, managed lanes cannot be justified based on a committed improvement ensuring their functionality upon completion of the I-526 LCC WEST Project.

In addition, existing and geometric deficiencies on I-526 would require improvements to allow for managed lanes. Existing and projected traffic demand would not allow for conversion of existing general-purpose lanes to managed lanes; therefore, managed lanes could not be implemented within the existing footprint of I-526 and would not be a viable avoidance alternative. More recent studies of managed lanes in the Charleston region include one additional general-purpose lane in each direction on I-526 in the No-Build or baseline condition. The managed lane No-Build condition in the I-526 corridor is equivalent to the 6-lane alternative that was evaluated as part of the I-526 LCC WEST traffic study. At the time that the managed lane study began, modeling had already determined that one general purpose lane in each direction would not reduce congestion to acceptable levels, so the managed lane build alternatives were evaluated in conjunction with one added general-purpose lane. The managed lane alternatives would have the same number of lanes as the I-526 LCC West Recommended Preferred Alternative. Therefore; even if funding were available, managed lanes would still require widening of existing I-526 and therefore is not considered a viable avoidance alternative by itself or in combination with other avoidance alternatives.

Whereas managed lanes alone do not meet the project's purpose and need and therefore not considered a viable stand-alone alternative, the 12-foot shoulders included in the proposed project could accommodate future managed lane options on I-26 or potential bus-on-shoulder transfers between the two interstates. As such, managed lanes are **not a prudent avoidance alternative**. Additional details on managed lanes can be found in Section 3.5.4 of the FEIS-ROD.

- **Other TSM/TDM Strategies:** Transportation System Management (TSM) strategies include lower cost improvements to improve efficiency and safety. A few examples of TSM consist of improving signal timing, adding high occupancy vehicle lanes as well as adding turn lanes. Transportation Demand Management (TDM) focuses on lessening travel demand by reducing the number of vehicle trips and vehicle miles traveled on a roadway or redistributing this demand in space or time to decrease system deficiency. TDM regional strategies may include strategies such as encouraging drivers to carpool or ride the bus, and/or encouraging employers to allow non-standard work hours or telecommuting options for employees.

The TSM/TDM strategies evaluated in the 2013 Corridor Study are listed in Table 6.1. A total reduction of 5.2% of total overall traffic can be expected with the implementation of all 10 of the TDM programs evaluated in the 2013 Corridor Study.

As a standalone alternative, TSM and TDM improvements do not adequately improve the corridor and meet the purpose and need to increase capacity and reduce congestion given the current and future level of service (LOS). TSM/TDM strategies alone do not meet the project's purpose and need and are **not a prudent avoidance alternative**.

Table 6.1: Transportation System Management/Transportation Demand Management (TSM/TDM) Strategies

STRATEGY	PERCENT REDUCTION
Carpools / Rideshare Matching / Vanpools	2.0%
Transit Pass Incentives / Financial Incentives	1.5%
Telecommuting / Compressed Work Week	0.1%
Work Flex Time / Staggered Work Hours	0.5%
Bike/Walk Enhancements	0.1%
Education, Promotion	1.0%
Total Reduction Potential	5.2%

Source: Adapted from I-526 Corridor Analysis Between North Charleston and West Ashley, Table ES3

Note: All strategies with the exception of Bike/Walk Enhancements have been funded by FHWA

6.1.5 Retaining Walls along I-26

The use of retaining walls was evaluated as an avoidance measure that would allow a more symmetrical widening of I-26 near the Highland Terrace-Liberty Park communities and could be paired with any of the reasonable alternatives. A retaining wall paralleling I-26 was considered along Taylor Street near the Highland Terrace-Liberty Park Community Center. Construction of the retaining walls would avoid displacing the Highland Terrace-Liberty Park Community Center and four residences; however, there are several issues with this avoidance measure. 11 homes along Taylor Street were displaced by the initial construction of I-26 and realignment of Taylor Street to its current location. Despite the number of relocations, a minimal amount of right-of-way was obtained for the freeway, leaving a number of remaining residents on Taylor Street within close proximity to I-26.

There is also the potential for additional lanes to be added on I-26 in the future. The proposed improvements include wide shoulders to account for this possibility; however, future improvements could necessitate additional right-of-way, incurring relocations at a future date. The current proposed right-of-way was set in consideration of both past encroachment effects and the potential for future widening and as such reduced the proposed right-of-way – although it would eliminate displacing the Highland Terrace-Liberty Park Community Center and several residences – creates the same encroachment effects by constructing new travel lanes closer to properties originally affected by construction of I-26. The community center and four residences that would be avoided by constructing the retaining wall would experience noise impacts from the proposed project, in an area where the addition of a noise wall was determined not to be feasible and the approximately 26-foot tall wall would create visual effects for adjacent residences and preclude any revegetating of the slope in the future.

Adding retaining walls on I-26 as part of any reasonable alternative was determined **not to be a prudent avoidance alternative** due to the unique problems associated with its construction, primarily the contribution of additional cumulative effects on Environmental Justice populations in the form of additional encroachment and the creation of noise and visual impacts on homes that would not be displaced through the construction of the retaining wall.

6.1.6 Mass Transit

The total potential reduction of these improvement strategies is estimated to be 7.4% with the implementation of short-term transit and freight improvements. Additionally, the addition of mass transit does not enhance safety, nor improve freight mobility. Because mass transit does not meet the purpose and need as a standalone alternative, it is not carried forward as an alternative for the I-526 LCC WEST Corridor project and is **not a prudent avoidance alternative**. Additional details on mass transit can be found in Section 3.5.6 of the FEIS-ROD.

6.1.7 Improve Existing Alternatives: International Boulevard to Rivers Avenue

Improving the existing I-526 LCC WEST mainline from Virginia Avenue to Paul Cantrell Boulevard is proposed to accommodate the current and future vehicular demands, as well as population and employment increases. While the previously discussed avoidance alternatives did not meet the purpose and need, improving the existing corridor could meet the purpose and need by increasing capacity and thereby reducing congestion. Improvements to existing I-526 (Alternatives 1, 1A, 2, and 2A) were developed based on separating movements that create congestion caused by closely spaced ramps and less than desirable weave and merge lane lengths. Alternatives 1, 1A, 2, and 2A are illustrated below and

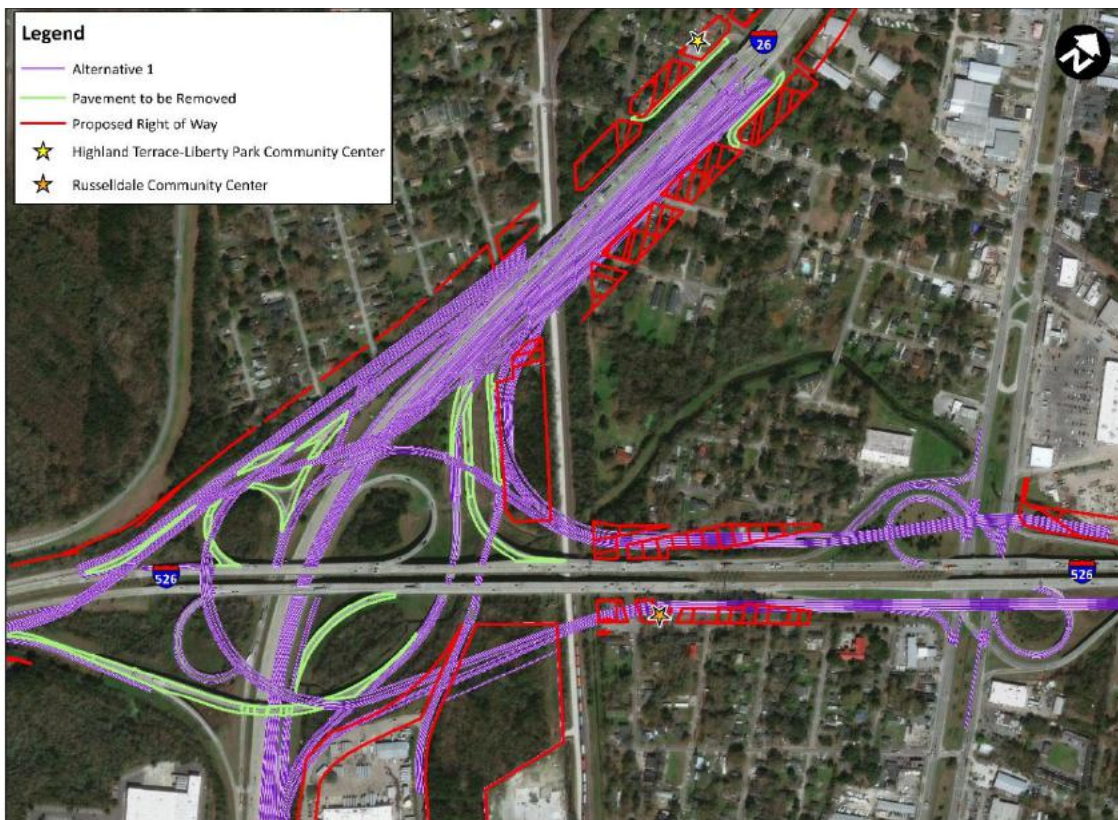


Figure 6.2: I-526 at I-26 and Rivers Ave: Alternative 1

are further described in Section 3.5.7 of the FEIS-ROD. **All four build alternatives would impact the Russelldale, Highland Terrace, Liberty Park, and Ferndale neighborhoods.**

- **Alternative 1:** As illustrated above, this alternative adds collector-distributor roads to the north and south sides of I-526 through the Rivers Avenue interchange. The eastbound I-526 to westbound I-26 directional ramp will be moved to cross over I-26 north of I-526. Access between Rivers Avenue and I-26 via I-526 is eliminated because the I-526 eastbound to I-26 westbound directional ramp prevents the slip ramp that leads to it. There is insufficient distance to grade separate all the existing movements. Figure 6.2 depicts the proposed improvements for Alternative 1.
- **Alternative 1A:** This alternative adds collector-distributor roads to the north and south sides of I-526 through the Rivers Avenue interchange. The eastbound I-526 to westbound I-26 directional ramp will be moved to cross over I-26 north of I-526. Access between Rivers Avenue and I-26 via I-526 is maintained. Figure 6.3 depicts the proposed improvements for Alternative 1A.

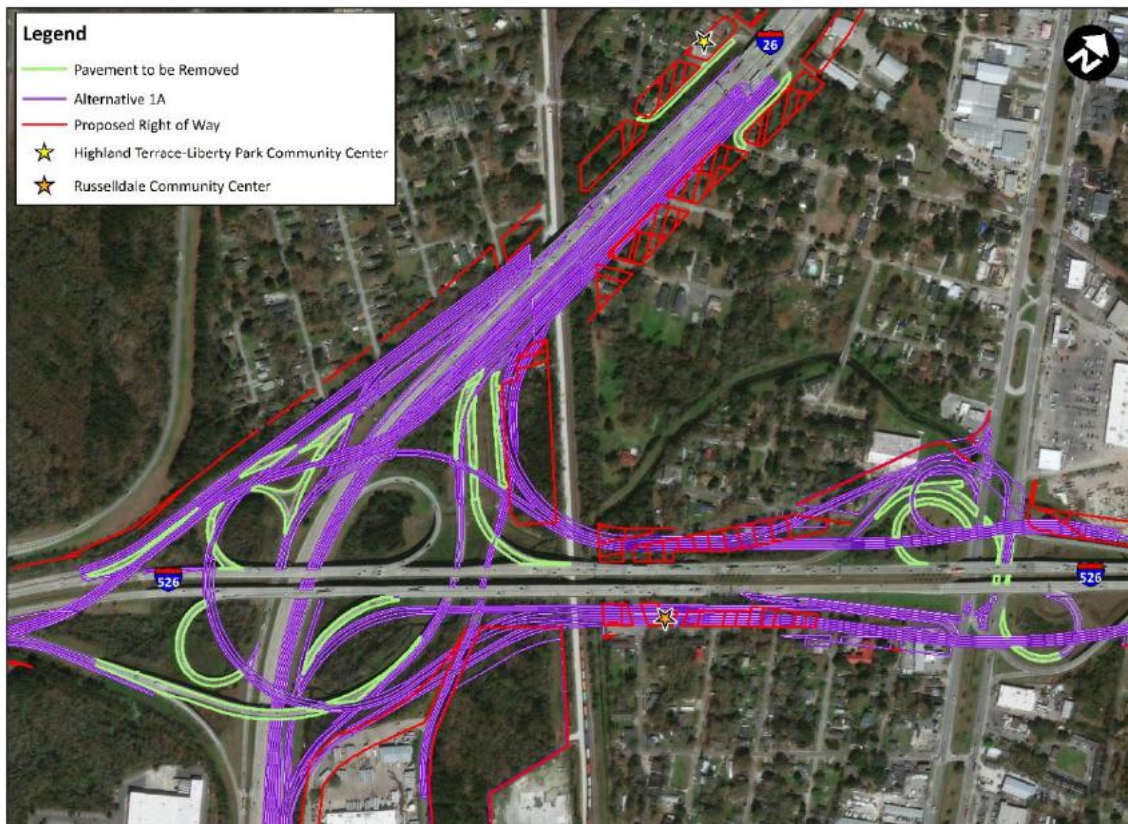


Figure 6.3: I-526 at I-26 and Rivers Ave: Alternative 1A

- **Alternative 2 (Preferred):** This alternative adds collector-distributor roads to the north and south sides of I-526 through the Rivers Avenue interchange. Access between Rivers Avenue and I-26 via I-526 is eliminated. This alternative retains the I-26 eastbound to I-526 loop ramp which provides access for traffic entering the eastbound C-D road from Aviation Avenue and Remount Road to reach I-526 eastbound. This loop also serves as a redundant path if there is an incident on the new I-26 eastbound to I-526 eastbound directional ramp and serves to lessen the traffic pressure on Rivers Ave and Remount Road. Figure 6.4 depicts the proposed improvements for Alternative 2.

- **Alternative 2A:** This alternative adds collector-distributor roads to the north and south sides of I-526 through the Rivers Avenue interchange. Eastbound I-526 to westbound I-26 will use the existing directional ramp. Access between Rivers Avenue and I-26 via I-526 is maintained. Figure 6.5 depicts the proposed improvements for Alternative 2A

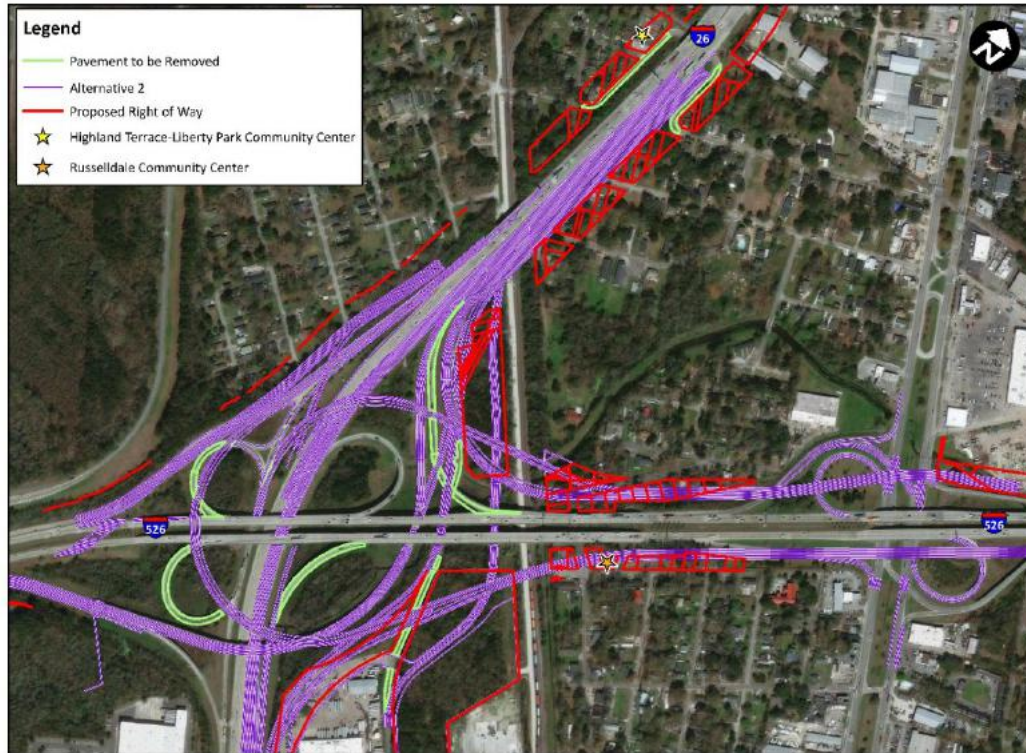


Figure 6.4: I-526 at I-26 and Rivers Ave: Alternative 2

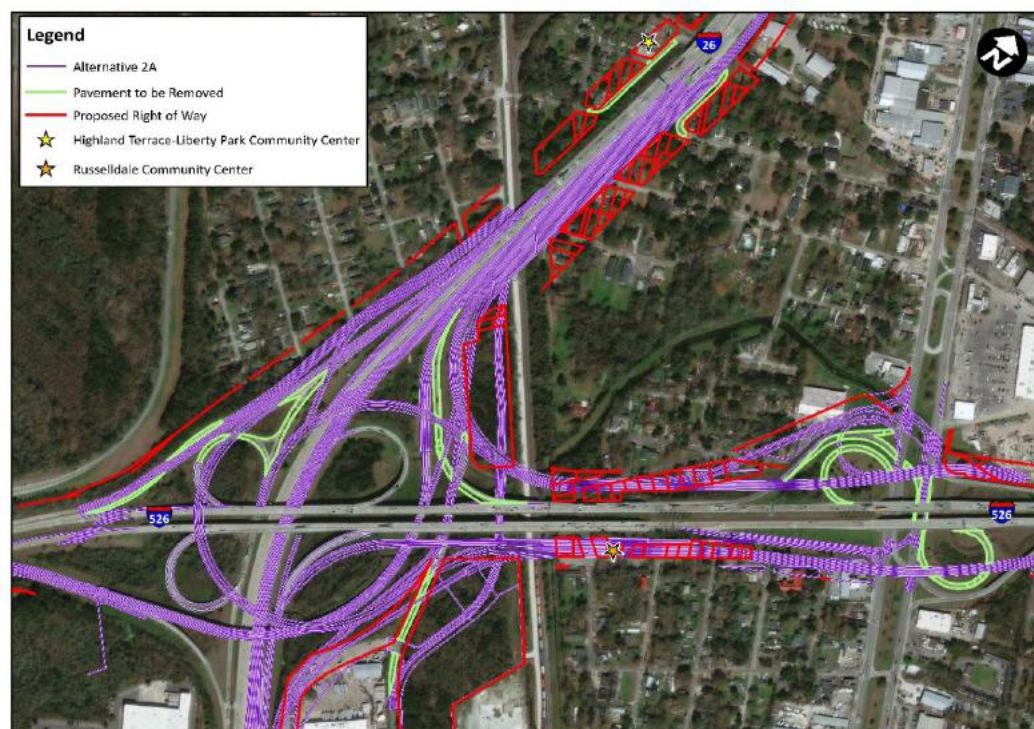


Figure 6.5: I-526 at I-26 and Rivers Ave: Alternative 2A

Alternative 2 is recommended as the preferred alternative between International Boulevard and Rivers Avenue. Although Alternative 1 and 2 would remove access from Rivers Avenue to I-26 via I-526, both alternatives would result in lower relocations and potential impacts to EJ communities than Alternative 1A or 2A. Alternative 1 would require a traffic movement or weave that may result in overcapacity and failing LOS in the segment. The over-congestion of this segment in Alternative 1 may cause upstream backups along I-526 eastbound and I-526 westbound. Alternative 2 does not require this traffic movement or weave, which reduces the number of vehicles which must weave compared to Alternative 1.

This results in traffic operations which are under capacity and with acceptable LOS C. **Alternative 2 is the Recommended Preferred Alternative between International Boulevard and Rivers Avenue.**

As noted, all reasonable alternatives including Alternative 2 would impact EJ communities.

6.2 MINIMIZATION

As noted above, four Proposed Reasonable Alternatives were developed in the vicinity of the EJ neighborhoods; which all utilize as much of the existing right-of-way as possible. See FEIS-ROD Sections 3.6 through 3.8 for additional details related to alternative development and evaluation. Among the four Proposed Reasonable Alternatives in this area, Alternative 2 is recommended as the preferred alternative between International Boulevard and Rivers Avenue. Although Alternative 1 and 2 would remove access from Rivers Avenue to I-26 via I-526, both alternatives would result in lower relocations and potential impacts to EJ communities than Alternative 1A or 2A. Alternative 1 would require a traffic movement or weave that may result in overcapacity and failing LOS in the segment. The over-congestion of this segment in Alternative 1 may cause upstream backups along I-526 eastbound and I-526 westbound. Alternative 2 does not require this traffic movement or weave, which reduces the number of vehicles which must weave compared to Alternative 1. This results in traffic operations which are under capacity and with acceptable LOS C. Alternative 2 is the Recommended Preferred Alternative as it minimizes the number of relocations, avoiding the displacement of approximately six single-family homes, five mobile homes, eight multi-family units, four businesses, and two churches (see Table 4.1).

6.3 MITIGATION

This section describes proposed mitigation developed to offset disproportionately high and adverse effects to EJ populations. The proposed EJ Community Mitigation Plan is included in Appendix H of the FEIS-ROD. Specific mitigation measures have been developed to offset community impacts within the Ferndale, Highland Terrace, Liberty Park, and Russelldale neighborhoods in North Charleston, while other mitigation programs have been developed to mitigate the broader effects of the project on EJ populations within the project study area.

The Recommended Preferred Alternative would avoid and minimize impacts to the maximum extent practicable; however, adverse impacts would still be created by the proposed project. In addition to residential and community facility displacements within EJ neighborhoods, the proposed project would further encroach upon low-income and minority EJ populations in the immediate vicinity of the I-526/I-26 interchange. The overarching goal of the I-526 LCC WEST EJ Community Mitigation Plan is to effectively mitigate disproportionately high and adverse effects to EJ communities within the I-526 LCC WEST study

area and create opportunities to offset the loss of generational wealth. Additionally, the intent of the EJ Community Mitigation Plan is to address the issues and priorities of the affected EJ communities, not only as a way to mitigate impacts, but most importantly as a way to convey ownership of the community mitigation and work toward establishing a foundation of trust. The draft EJ Community Mitigation Plan was developed by the CAC and presented to residents in affected EJ neighborhoods to gather feedback on proposed mitigation through a series of neighborhood meetings that were held in November 2020 during the public review period for the DEIS. The Community Infrastructure Enhancement Plan (CIEP), a component of the EJ Community Mitigation Plan, was presented to EJ neighborhood residents for additional feedback in March 2021.

Impacts of the Recommended Preferred Alternative to the EJ communities, comments received from the CAC, and community responses to the Social Needs Assessment (SNA) are categorized in Table 6.2 into the four pillars of community impact mitigation: Cohesion, Enhancement, Preservation, and Revitalization. The table then identifies which components of the EJ Community Mitigation Plan addresses each impact, CAC comment, and SNA response. This input from the CAC and EJ neighborhood residents, was used to refine and finalize the EJ Community Mitigation Plan which is summarized below and included as Appendix H in the FEIS-ROD.

Lastly, Table 6.2 notes feedback identified through the SNA or by the CAC but are not specifically related to direct, indirect, or cumulative impacts from the project, and thus are not addressed by the proposed SCDOT mitigation.

Summary of the EJ Community Mitigation Plan

- A **Community Project Office** was established at 5627 River Avenue, in the Gas Light Square shopping center, adjacent to Liberty Park. The primary purpose of the Community Office is to provide residents local and immediate access to project materials and knowledgeable project staff. The Community Office is staffed with a full-time Office Manager, Community Liaisons/Outreach Specialists, and part-time Right-of-Way Specialists who are available to provide community residents with real-time project information such as maps, public involvement materials, right-of-way acquisition information/assistance, and copies of the Draft and Final EJ Community Mitigation Plan. During the Right-of-Way acquisition phase of the project, the Community Office will be staffed with a full-time Right-of-Way Specialist. The community office will continue to **serve as a resource for the communities** until the completion of the project and associated mitigation components.
- To support community advocacy efforts beyond the project, SCDOT will provide **organizational training** for the CAC and interested community members.
- The project team will work with the CAC and local non-profit organizations to develop a **Community Resource Guide** which will provide residents within the EJ communities improved access to local organizations, resources, and other information related to food insecurity, health and wellness, home repair, financial assistance, minority-owned businesses, transit resources, and referral agencies.
- The project team will coordinate with local non-profit organizations and community leaders to host **free community workshops** and information sessions on relevant and beneficial topics for the EJ residents such as public safety, finances, or creating a will.
- SCDOT will fund the **construction of a large, modern, centrally located community center** with **expanded programs** and hours to replace the smaller community centers in Russelldale and Highland Terrace, which are Section 4(f) resources that will be impacted by the project. The

outdoor amenities currently located at the existing community centers will be replaced with nearby **pocket parks** located in the communities where the existing community centers are located. Construction of the new, centrally-located community center and the pocket parks will be complete prior to the I-526 LCC WEST project construction impacting the existing community centers. Additional details on the Section 4(f) and 6(f) recreational resource mitigation can be found in Appendix Q and Appendix R of the FEIS-ROD.

- SCDOT and the City of North Charleston have developed an intergovernmental agreement outlining the **programs, services, structural components, and arrangements for long-term operation and maintenance of the replacement community centers and recreational facilities**. The agreement includes language that gives residents of the communities served by the community centers priority in areas such as program enrollment/participation, reserving facility space, volunteer, and job opportunities.
- SCDOT will fund a **study to document the cultural history and character of the impacted EJ communities** through the support of a qualified historian and photographer. The study efforts will include collecting oral history, archival research, collection of historic photography, and the development of a report that will be available for viewing online and at the community center.
- SCDOT will implement the **Community Infrastructure Enhancement Plan (CIEP)**, that will address infrastructure issues to address bicycle and pedestrian safety, access to the community center/park amenities, enhanced neighborhood entrance aesthetics, stormwater improvements, lack of bus shelter amenities, and traffic calming measures that would be implemented as part of the project. The majority of the CIEP components will be completed prior to the construction of the I-526 LCC WEST improvements. However, the schedule for construction of components such as the shared use path along Margaret Drive and the pedestrian bridges will be dictated by the acquisition of right-of-way for the I-526 LCC WEST Project, construction sequencing, and access needs.
- SCDOT will develop and fund a PM 2.5 **air quality monitoring program** within the impacted EJ communities of Ferndale, Highland Terrace, Liberty Park, and Russelldale. SCDOT will provide results to their website where community members can access real time data/results through 2038 or until the end of construction activities within the EJ neighborhoods listed above.
- SCDOT will construct **mitigation barriers** along the eastbound and westbound sides of I-26 between the I-526 and Remount Road interchanges to benefit the residents of the Highland Terrace and Liberty Park communities. SCDOT will construct mitigation barriers along the westbound side of I-526 between the Rivers Avenue and I-26 interchanges to benefit the residents of the Liberty Park community. SCDOT will construct mitigation barriers along the eastbound side of I-526 from the I-26 interchange to east of the CSX railroad tracks to benefit the residents of the Russelldale and Ferndale communities. SCDOT will construct a mitigation barrier along the eastbound side of I-526 and the eastbound exit ramp at the Montague Interchange to benefit the west side of the Camps community.
- SCDOT will provide a **full time EJ Community Right of Way Liaison** to be available in the Community Office as a resource to all impacted EJ communities. The liaison will provide advisory services to the impacted residents to ensure they fully understand their rights, benefits, responsibilities, and opportunities available.
- SCDOT will implement an **affordable replacement housing program** that includes two components: (1) partnering with the South Carolina State Housing and Finance Development Authority to initiate a developer incentivized affordable housing program that will construct 100

affordable housing units within the city of North Charleston and (2) purchase 45 vacant lots within the EJ communities and part with a local non-profit that specializes in constructing affordable housing.

- SCDOT will develop partnerships with local organizations to provide **financial literacy and first-time home buyer workshops and counseling** to residents of the impacted EJ community residents.
- SCDOT will partner with a state or federal agency to provide a **grant program for first-time home buyers** within the impacted EJ communities.
- SCDOT will provide an **enhanced relocation mitigation program** for displaced business owners and employees to minimize economic harm. SCDOT will also reimburse reasonable moving costs and provide rent supplements for tenants in accordance with the Uniform Act, with an additional 18 months of supplemental rent payments based on the displacee's replacement rent and income.
- SCDOT will implement an **acquisition fairness program** that will pay for a third party appraiser to address community concerns over the fairness of property appraisals.
- SCDOT will establish and manage up to at least **\$500,000 collage aid initiative that will provide scholarships** for high school and college students from the impacted EJ communities that intend to or are currently attending institutions of higher education.
- SCDOT will develop partnerships with organizations to develop **school-to-work employment programs** with the goal of enhancing employment opportunities within the fields of construction, engineering, and transportation.
- SCDOT will provide a **transportation career awareness program** that increases the understanding of the transportation industry and builds interest in the wide range of career opportunities.
- SCDOT will initiate the **Summer Transportation Institute**, which will provide a skill building program to create awareness of and expose high school students to career opportunities in the transportation industry.
- SCDOT will identify and provide financial support for **pre-employment training opportunities** that encourage career placement in the transportation industry. Participants who successfully acquire relevant job readiness skills will be considered for the On-The-Job Training (OJT) Program implemented by the contractor selected to construct the project.
- SCDOT will partner with organizations and other disadvantaged business enterprises (DBE) in the state to develop and deliver an educational program that empowers those interested in learning more about **starting a small business enterprise (SBE)**.
- **The Community Advisory Council (CAC)** developed the proposed mitigation measures contained in the EJ Community Mitigation Plan by sharing individual knowledge, experiences, and perspectives, and providing input on project-related impacts and proposed mitigation.
- A **Project Oversight Committee (POC)** will be established after the FEIS/ROD is approved that will be tasked with overseeing the implementation of the EJ Community Mitigation Plan commitments. The POC will assume the following duties: coordinate with technical staff on issues related to implementation of the EJ mitigation, serve as a liaison between the communities and project staff during the final design and construction phases, and assist SCDOT in outreach efforts and meetings to get input from the greater community on detailed design concepts for those mitigation items that require physical construction. Prior CAC members and/or EJ neighborhood residents interested in getting involved with the project will be encouraged to participate on the POC. SCDOT will provide administrative support to the POC, consistent with the services provided to the CAC.

- SCDOT is committed to delivering the community mitigation measures outlined in this plan in a timeline that **maximizes the benefits** to the impacted EJ communities, with many components being implemented immediately upon the approval of the FEIS/ROD.
- SCDOT will develop an **implementation plan** that outlines more detailed plans for each of the mitigation items. This plan will be evaluated and adjusted each year in an effort to increase participation. The plan will be shared with the POC with the intention of continuing outreach and project communication with all EJ residents.
- SCDOT will work with the POC to conduct **community meetings** and distribute flyers to keep residents informed of project updates.

Table 6.2: Mitigation Matrix

I. COMMUNITY COHESION: ACTIONS THAT STRENGTHEN NEIGHBORHOOD CONNECTIONS	
PROJECT IMPACTS	SCDOT COMMUNITY MITIGATION MEASURES
<ul style="list-style-type: none"> Adverse effects on community cohesion from original construction of I-26 and I-526 Adverse cumulative effects on community cohesion associated with the EJ neighborhood zoning of “mixed” use. Mixed-Use (MU) zoning includes a mixture of commercial and residential land uses located in close proximity to each other. 	<ul style="list-style-type: none"> Replacement Affordable Housing Program Community Infrastructure Enhancement Plan Financial Literacy & First-Time Home Buyer Counseling First-Time Home Buyer Grant Program Community Workshops Community Office Enhanced Right of Way Advisory Services
CAC/SNA FEEDBACK	SCDOT COMMUNITY MITIGATION MEASURES
<p>CAC Feedback:</p> <ul style="list-style-type: none"> More access to community center for community children; “neighborhood” center versus “community” center Crime prevention through well-lit streets; going above code for minimum requirements for spacing of streetlights¹ Sense of community ownership through well-defined private/public areas; directional signs, landscaping, and informal common areas 	<ul style="list-style-type: none"> Recreation Facilities and Amenities Recreational Programs and Activities Community Infrastructure Enhancement Plan Community Resource Guide Community Workshops
<p>CAC Feedback:</p> <ul style="list-style-type: none"> Concern about residents and children safely crossing the railroad tracks separating Highland Terrace from Liberty Park Concerns about walkability for children to the proposed community center Crime prevention through lighting design and maintenance (CPTED principle)¹ Need to eliminate abandoned properties/overgrown lots 	<ul style="list-style-type: none"> Community Infrastructure Enhancement Plan Replacement Affordable Housing Program
<p>Social Needs Assessment:</p> <ul style="list-style-type: none"> Appearance of neighborhood homes (Ranked #9 out of 25) 	<ul style="list-style-type: none"> Organizational Training Community Resource Guide Community Workshops

I. COMMUNITY COHESION: ACTIONS THAT STRENGTHEN NEIGHBORHOOD CONNECTIONS	
CAC/SNA Feedback (Items Not Addressed by Mitigation Measures): <ul style="list-style-type: none"> • Pedestrian bridge to help children and other community center users to avoid traffic on Rivers Avenue² • Surveillance cameras as crime prevention measure³ • Convey sense of ownership of public spaces as crime deterrent by maintaining areas in public domain • Crime prevention through increased law enforcement presence³ • Community yard sale to foster community cohesion³ 	
Footnotes related to CAC/SNA Feedback on Community Cohesion: <p>¹ Item to be addressed by the City of North Charleston's City-wide LED lighting upgrade program.</p> <p>² Pedestrian safety improvements along Rivers Avenue will be implemented by the Lowcountry Rapid Transit Project starting in 2026 (https://lowcountryrapidtransit.com/)</p> <p>³ Items were identified through the SNA or by the CAC but are not specifically related to direct, indirect, or cumulative impacts and thus, are not addressed by proposed SCDOT mitigation.</p>	
II. COMMUNITY ENHANCEMENT: COMMUNITY CENTER AND RECREATIONAL FACILITY REPLACEMENT	
PROJECT IMPACTS	SCDOT COMMUNITY MITIGATION MEASURES
<ul style="list-style-type: none"> • Displacement of two community centers 	<ul style="list-style-type: none"> • Recreation Facilities, Programs, and Amenities
CAC/SNA FEEDBACK	SCDOT COMMUNITY MITIGATION MEASURES
CAC Feedback: <ul style="list-style-type: none"> • Installation of traffic calming measures • Installation of speed humps to address speeding and general safety 	<ul style="list-style-type: none"> • Community Infrastructure Enhancement Plan

I. COMMUNITY COHESION: ACTIONS THAT STRENGTHEN NEIGHBORHOOD CONNECTIONS	
<p>Social Needs Assessment:</p> <ul style="list-style-type: none"> • Services for seniors (Ranked #5 out of 25) • Services for youth (Ranked #6 out of 25) <p>CAC Feedback:</p> <ul style="list-style-type: none"> • Concerns about residents and children safely crossing the railroad tracks separating Highland Terrace from Liberty Park • Pedestrian bridge to help children and other community center users to avoid traffic • Concerns about ability of children to walk to community center • CAC agreeable to evaluate one, centrally located facility and smaller pocket parks due to limited availability of large and/or contiguous vacant/underdeveloped parcels • Residents' first choice options (amenities) should be included in the inter-governmental agreement • CAC input in the inter-governmental agreement with the City of North Charleston (Appendix C) • Facility should be broad scale in design, diverse use, forward-thinking, multi-faceted • Center staffed by neighborhood residents with scheduled activities that engage the community • Center staff need to be qualified to run the center • Design of center should facilitate delivery, storage, and distribution of emergency supplies • Incorporate visual imagery in community center • Center should integrate solar power with generator backup to ensure the facility can be used as an emergency resource. 	<ul style="list-style-type: none"> • Recreation Facilities and Amenities • Recreation Programs and Activities • Community Infrastructure Enhancement Plan • Community History Preservation Study • Project Oversight Committee • Community Mitigation Implementation Schedule
<p>CAC/SNA Feedback (Items Not Addressed by Mitigation Measures): None</p> <p>Footnotes related to CAC/SNA Feedback on Community Enhancement:</p> <p>³Items were identified through the SNA or by the CAC but are not specifically related to direct, indirect, or cumulative impacts and thus, are not addressed by proposed SCDOT mitigation.</p>	

III. COMMUNITY PRESERVATION: INFRASTRUCTURE NEEDS	
PROJECT IMPACTS	SCDOT COMMUNITY MITIGATION MEASURES
<ul style="list-style-type: none"> Adverse effects to family generational wealth created by land ownership due to cumulative acquisitions from original construction of I-26 and I-526 Diminished economic vitality due to depreciated home values, a high number of vacant or underdeveloped parcels, and a high number of homes in disrepair EJ neighborhood residents are anticipated to experience disproportionate impacts associated with exposure to construction noise and dust as they are likely to have windows open to help ventilate homes⁴ 	<ul style="list-style-type: none"> Replacement Affordable Housing Program Community Infrastructure Enhancement Plan Financial Literacy & First-Time Home Buyer Counseling First-Time Home Buyer Grant Program Enhanced Right of Way Advisory Services Acquisition Fairness Program Enhanced Relocation Mitigation Program Community Mitigation Implementation Schedule Community Air Quality Monitoring Program
<ul style="list-style-type: none"> Liberty Park and Highland Terrace residents are anticipated to experience increased exposure to traffic noise Visual changes to the existing environment in the EJ neighborhoods because the existing road already sits above many of the affected communities 	<ul style="list-style-type: none"> Mitigation Barriers
CAC/SNA FEEDBACK	SCDOT COMMUNITY MITIGATION MEASURES
<p>Social Needs Assessment:</p> <ul style="list-style-type: none"> Adequate stormwater management (Ranked #1 out of 25) Adequate sidewalks/bicycle facilities (Ranked #2 out of 25) Well-lit streets/sidewalks (Ranked #8 out of 25)¹ <p>CAC Feedback:</p> <ul style="list-style-type: none"> Installation of speed humps to address speeding/general safety Address sidewalk infrastructure needs/neighborhood connectivity Importance of safe, practical footpaths/sidewalks Safety for bicycle riders Address areas with inadequate streetlighting/standing water Bus shelters with covers and seating 	<ul style="list-style-type: none"> Community Infrastructure Enhancement Plan Community Mitigation Implementation Schedule

III. COMMUNITY PRESERVATION: INFRASTRUCTURE NEEDS	
CAC Feedback: <ul style="list-style-type: none"> Remove barriers to residents' ability to 'age in place' 	<ul style="list-style-type: none"> Replacement Affordable Housing (rentals and owner-occupied with ADA accessible units available) Community Infrastructure Enhancement Plan Community Resource Guide Financial Literacy & First-Time Home Buyer Counseling First-Time Home Buyer Grant Program Community Workshops Acquisition Fairness Program Enhanced Right of Way Advisory Services Pre-Employment Job Training Program On the Job Training Program Careers in Transportation Educational Programs School to Work Program Small Business Development Program Community Mitigation Implementation Schedule Enhanced Relocation Mitigation Program
CAC Feedback: <ul style="list-style-type: none"> Potential partnerships with local college nursing programs to develop health and wellness program for senior residents 	<ul style="list-style-type: none"> Recreation Programs and Activities Community Resource Guide Community Workshops
CAC/SNA Feedback (Items Not Addressed by Mitigation Measures): <ul style="list-style-type: none"> Pedestrian accommodations over/across Rivers Avenue; safety issues for veterans crossing at Patriots Villa across Rivers Avenue² CARTA/shuttle bus (with seats) to transport residents, AM/PM² <p>²Pedestrian improvements along Rivers Avenue will be addressed by the Lowcountry Rapid Transit Project to provide safe access to the transit service stops serving these communities. In addition, CARTA OnDemand program that serves seniors and disabled community members provides low cost, comfortable and easily accessible shuttle rides (https://www.ridecarta.com/services/ondemand/).</p> <p>⁴The contractor(s) will use fugitive dust control measures such as covering or treating disturbed areas with dust suppression techniques, sprinkling, covering loaded trucks, and other dust abatement controls, as appropriate. The contractor(s) will ensure that all construction equipment is properly tuned and maintained. Idling time will be minimized to save fuel and reduce emissions. Water will be applied to control dust impacts off site. There will be no open burning of removed vegetation. Vegetation will be chipped or delivered to waste energy facilities.</p>	

IV. COMMUNITY REVITALIZATION: REPLACEMENT HOUSING AND EMPLOYMENT/ECONOMIC OPPORTUNITIES	
PROJECT IMPACTS	SCDOT COMMUNITY MITIGATION MEASURES
<ul style="list-style-type: none"> Displacements associated with original construction of I-26 and I-526 Many of the houses in the affected EJ neighborhoods were built in the 1940's; these homes were prefabricated houses designed to be easily assembled and disassembled so they could be moved as needed; as such, the existing housing stock is old, and much is in disrepair Affordable housing stock is also affected by the reduction of mobile homes in the project area and vicinity; this trend is anticipated to continue based on local growth plans and policies related to mobile homes Available land for affordable housing is also being reduced by new development in the area including other transportation projects, past airport expansions, and large-scale commercial development⁵ Due to a lack of access to legal resources, many early black landowners did not have wills, therefore their descendants now lack clear titles. This type of property issue is called "Heirs' Property", and historically, it has hindered residents from performing home repairs or building new homes. Additional information on Heirs' Property can be found in the EJ Analysis, FEIS-ROD Appendix G EJ neighborhood residents experience environmental stressors, notably those related to economic insecurity, outdoor and indoor pollutants³ EJ neighborhood residents experience a high degree of vulnerability related to weather hazards given the quality of housing stock, location within the Filbin Creek drainage basin, and Heirs' Property issues 	<ul style="list-style-type: none"> Replacement Affordable Housing Program Community Infrastructure Enhancement Plan Community Resource Guide Financial Literacy & First-Time Home Buyer Counseling First-Time Home Buyer Grant Program Community Workshops Acquisition Fairness Program Enhanced Right of Way Advisory Services Enhanced Relocation Mitigation Program Community Air Quality Monitoring Program Community Mitigation Implementation Schedule
CAC/SNA FEEDBACK	SCDOT COMMUNITY MITIGATION MEASURES
<p>Social Needs Assessment:</p> <ul style="list-style-type: none"> Availability of quality housing (Ranked #3 out of 25) Availability of affordable housing (Ranked #4 out of 25) <p>CAC Feedback:</p> <ul style="list-style-type: none"> Prefer single-family rental units as opposed to multi-family units/mobile homes/modular 	<ul style="list-style-type: none"> Replacement Affordable Housing Program Financial Literacy & First-Time Home Buyer Counseling First-Time Home Buyer Grant Program Enhanced Relocation Mitigation Program Community Mitigation Implementation Schedule

IV. COMMUNITY REVITALIZATION: REPLACEMENT HOUSING AND EMPLOYMENT/ECONOMIC OPPORTUNITIES	
CAC Feedback: <ul style="list-style-type: none"> • Advocacy and self-advocacy – educational and financial resources • Need for advocacy training to prepare CAC members and residents to participate in the transition to Project Oversight Committee (POC) • There is a need for and added value from organizing as a community advocacy group when the purpose of the CAC has been fulfilled • Internship programs for 9th grade students • Networking opportunities • Residents feel there have been adverse effects to economic vitality due to what they consider improper compensation (for property impacts) from original construction of I-26 	<ul style="list-style-type: none"> • Organizational Training • Project Oversight Committee • Careers in Transportation Educational Program • College Aid Initiative • School-to-Work Program • Summer Transportation Institute Program • Pre-employment Training • On the Job Training Program • Small Business Development Program • Community Resource Guide • Community Office • Community Workshops
Footnotes related to CAC/SNA Feedback on Community Revitalization: <p>³Items were identified through the SNA or by the CAC but are not specifically related to direct, indirect, or cumulative impacts and thus, are not addressed by proposed SCDOT mitigation</p> <p>⁵Items were identified as a direct, indirect, or cumulative impact. However, mitigation developed for the project does not (or cannot) directly address these impacts.</p>	

7.0 CONCLUSION

The implementation of the Recommended Preferred Alternative would create disproportionately high and adverse effects to low-income and minority communities in the form of direct impacts such as residential relocations/recreation facility relocations; a decrease in overall community cohesion and economic vitality; and cumulative impacts from past transportation projects, environmental pollutants and a lack of affordable housing in the North Charleston area.

As detailed in Section 4.3, the Russelldale, Liberty Park, Ferndale, and Highland Terrace EJ neighborhoods would face the largest impacts due to their proximity to the I-526 and I-26 interchange. Approximately 98 residential units, two community centers, and one church would be displaced in these four neighborhoods as a result of the proposed project. In addition, EJ residents living in the Wando Woods neighborhood, Charleston Farms neighborhoods, Seepoint Townhomes, or Camps area anticipate impacts as up to 21 total residential units face project-related relocations in these areas. Future roadway projects that are currently programmed will also result in further cumulative impacts to the Camps residential area.

It is anticipated that the proposed mitigation measures included in the EJ Community Mitigation Plan, summarized in Table 6.1 and detailed in FEIS-ROD Appendix H, would provide community benefits within the impacted EJ communities. The draft EJ Community Mitigation Plan was developed by the CAC and

presented to residents in affected EJ neighborhoods to gather feedback on proposed mitigation through a series of neighborhood meetings that were held during the public review period for the DEIS. Feedback received from EJ neighborhood residents, and a formal response received from the CAC were used to refine and finalize the EJ Community Mitigation Plan. The final EJ Community Mitigation Plan in FEIS-ROD Appendix H catalogs all agreements and plans required to implement the mitigation commitments. Many of the final EJ Community Mitigation Plan components will be implemented prior to the construction of the I-526 LCC WEST project in order to increase the benefits to the community members who will be most impacted by the project.

In addition, as described in Section 4.1, the I-526 LCC WEST project would provide economic, mobility, and safety benefits for residents that utilize the I-26 and I-526 corridors. The purpose and primary benefit of the project is to increase capacity at the I-26/I-526 interchange and along the I-526 mainline, thereby relieving traffic congestion and improving operations at the I-26/I-526 interchange and along the I-526 mainline from Paul Cantrell Boulevard to Virginia Avenue.

Mitigation commitments within the impacted EJ communities, coupled with overall project benefits, would effectively offset adverse effects to the extent that effects on minority and low-income populations will not be appreciably more severe or greater in magnitude than the adverse effect on non-minority and non-low-income populations. Based on the above discussion and analysis, the Recommended Preferred Alternative would not cause disproportionately high adverse effects on any minority or low-income populations in accordance with the provisions of E.O. 12898 (*Federal Actions to Address Environmental Justice to Minority and Low-Income Populations*), FHWA Order 6640.23A (*FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*), and USDOT Order 5610.2C (*Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*). No further EJ analysis is required.

8.0 REFERENCES

Final I-526 LCC WEST Alternatives Development Technical Memorandum, October 2019.
Final I-526 LCC WEST Alternatives Development Traffic Analysis Report, May 2020
Final I-526 LCC WEST Community Impact Assessment (CIA). May 2021.
Final I-526 LCC WEST Environmental Justice Community Mitigation Plan, July 2022.
Final I-526 LCC WEST Environmental Justice Outreach Strategy, June 2022.
Final I-526 LCC WEST Indirect and Cumulative Assessment. April 2021. Updated July 2022.
Final I-526 LCC WEST Informational Pop-up Meeting Outreach Summary, Dec 2019. Updated July 2022
Final I-526 LCC WEST Relocation Impact Study, April 2021. Updated June 2022.
Final I-526 LCC WEST Detailed Noise Analysis, April 2021
Federal Highway Administration (FHWA) Guidance on Environmental Justice and NEPA, December 2011
U.S. Census Bureau, American Community Survey 5-year Estimates (2013-2017).
U.S. Census Bureau, Census 2010 and Census 2000, Summary File 1 100% Data.
US Environmental Protection Agency, Environmental Justice Screening and Mapping Tool, 2020



APPENDIX A

EJ COMMUNITY TOUCH-POINT MAPPING

EJ COMMUNITY TOUCH-POINT MAPPING

