

Appendix G

Environmental Justice Analysis





ENVIRONMENTAL JUSTICE ANALYSIS

INTERSTATE 526 (I-526)

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



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1.0 INTRODUCTION

This document is part of the technical reports being prepared for the proposed I-526 LCC WEST project. It contains references to supportive information in the Community Impact Assessment (CIA) in DEIS Appendix D, the Environmental Justice Outreach Strategy in DEIS Appendix X, the Alternatives Development Technical Memorandum in DEIS Appendix C, the Alternatives Development Technical Report in DEIS, and the Environmental Justice Community Mitigation Plan in DEIS Appendix H.

Environmental Justice impacts were analyzed in accordance with EO 12898 (*Federal Actions to Address Environmental Justice to Minority and Low-Income Populations*), USDOT Order 5610.2(a) (*Final Order to Address Environmental Justice in Minority Populations and Low-Income Populations*), FHWA's 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 NEPA*.¹

2.0 IDENTIFICATION OF MINORITY AND LOW-INCOME POPULATIONS

Executive Order (EO) 12898, Federal Actions to Address Environmental Justice to Minority and Low-Income Populations, the United States Department of Transportation (USDOT) Order 5610.2(a), Final Order 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 guidelines²."

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

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

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 communities, therefore further Environmental Justice analysis is required.

Table 1: Demographic Data

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%	Yes
Camps: Ozark Street & Seiberling Road	450190031111	91%	36%	Yes
Charleston Farms	450190033001	59%	38%	No
North Westchester Drive (West Ashley)	450190027011	63%	46%	No
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).				

There are four communities in North Charleston that will likely face substantial impacts with the implementation of the I-526 LCC WEST project including Russelldale, Highland Terrace, Liberty Park, and Ferndale. These neighborhoods are shown in Figure 2.1a. Several homes on West and East Ada Avenue in the Wando Woods neighborhood and on Ozark Street and Seiberling Road in the Camps neighborhood in North Charleston are EJ areas anticipated to be impacted by the project. This area is shown in Figure 2.1b.

The Charleston Farms neighborhood is located in North Charleston on the north side of I-526 and the east side of Rivers Avenue. One residential relocation is anticipated in this area and there are no community impacts in the way of community center relocations or indirect and cumulative effects. As such, the single relocation in the Charleston Farms neighborhood is not disproportionately high and adverse. There are homes on North Westchester Drive in the West Ashley portion of the project study area qualifies as an EJ population, but this population is not in the immediate vicinity of the proposed project and would not be adversely affected by direct, indirect, or cumulative effects from the proposed project.

Descriptions of impacted EJ residential areas are detailed in the following sections.

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

2.1 RUSSELDALE

Located directly south of I-526 and east of an active Norfolk Southern railway, 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 5-year 2017 summary estimates, this neighborhood is 84% minority, 73% renter occupied, and 9% of the 234 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. The high percentage of minority and low-income residents qualifies Russelldale as an Environmental Justice 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 likely also 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 an active Norfolk Southern railway, 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. According to the Census Bureau's American Community Survey 2017 5-year summary estimates, this neighborhood is 91% minority, 83% renter occupied, and 18% of the 277 residents are 65 years of age or older. The average home appraisal is approximately \$38,000. The high percentage of minority and low-income residents qualifies Highland Terrace as an Environmental Justice 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 railroad and construction of 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.



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

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 an active Norfolk Southern railway 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 American Community Survey 2017 5-year summary estimates, this neighborhood is 72% minority, 61% renter occupied, and 17% of the 335 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 Environmental Justice neighborhood, therefore further EJ Analysis is required. The residents use Highland Terrace-Liberty Park Community Center as their primary recreation center.

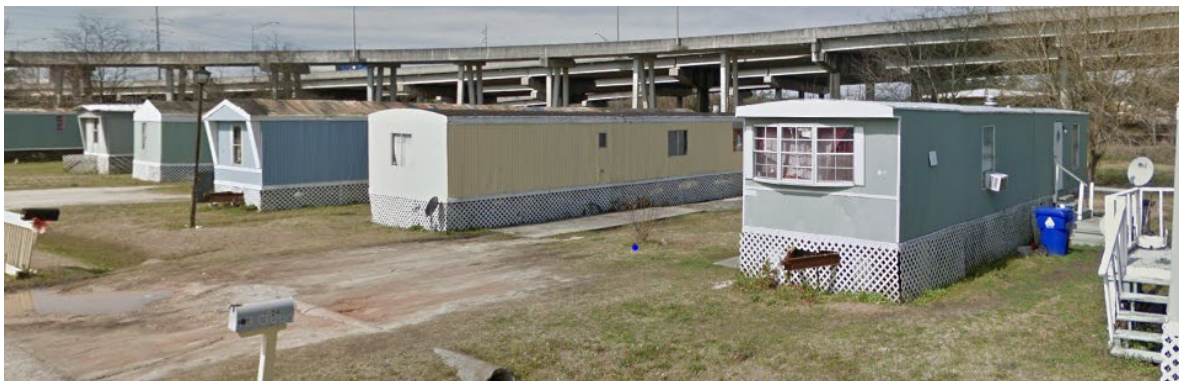
The original construction of I-526 and I-26 in the 1980s impacted the Liberty Park neighborhood. An estimated 22 single-family homes, one church, and three businesses were displaced from the original I-26 project, in addition to the approximately 10 residences, two mobile homes, and 12 businesses that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



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

2.4 FERNDALE

Ferndale is a community located directly south of I-526, west of the CSX railway and east of Rivers Avenue. There are three organized mobile home communities and multiple apartment complexes/duplexes within Ferndale, with many more individual mobile homes located throughout the entirety of the neighborhood. According to Census Bureau's American Community Survey 2017 5-year summary estimates, this neighborhood is 94% minority, 73% renter occupied, and 4% of the 1,629 residents are 65 years of age or older. Compared to the surrounding neighborhoods, Ferndale also has a higher percentage of Hispanic residents at 30% 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 2.7. 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. The average home appraisal is approximately \$22,000. Depicted in Photograph 4, a mobile home community in Ferndale is likely to face impacts from 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 Environmental Justice 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. According to the 2010 Census data, this community is 69% minority, 13% renter occupied, and 6% of the 21 total residents in this community are 65 years of age or older. Homes in this community are appraised on average at \$84,000, which is the highest average of the EJ communities mentioned above. The high percentage of minority residents qualifies the homes on Ada Avenue as an Environmental Justice 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, 83% of homes are renter occupied, 91% of residents are minority, and 18% of the 11 residents in this community are over 65 years of age or older. The high percentage of minority and low-income residents qualifies Russelldale as an Environmental Justice 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.

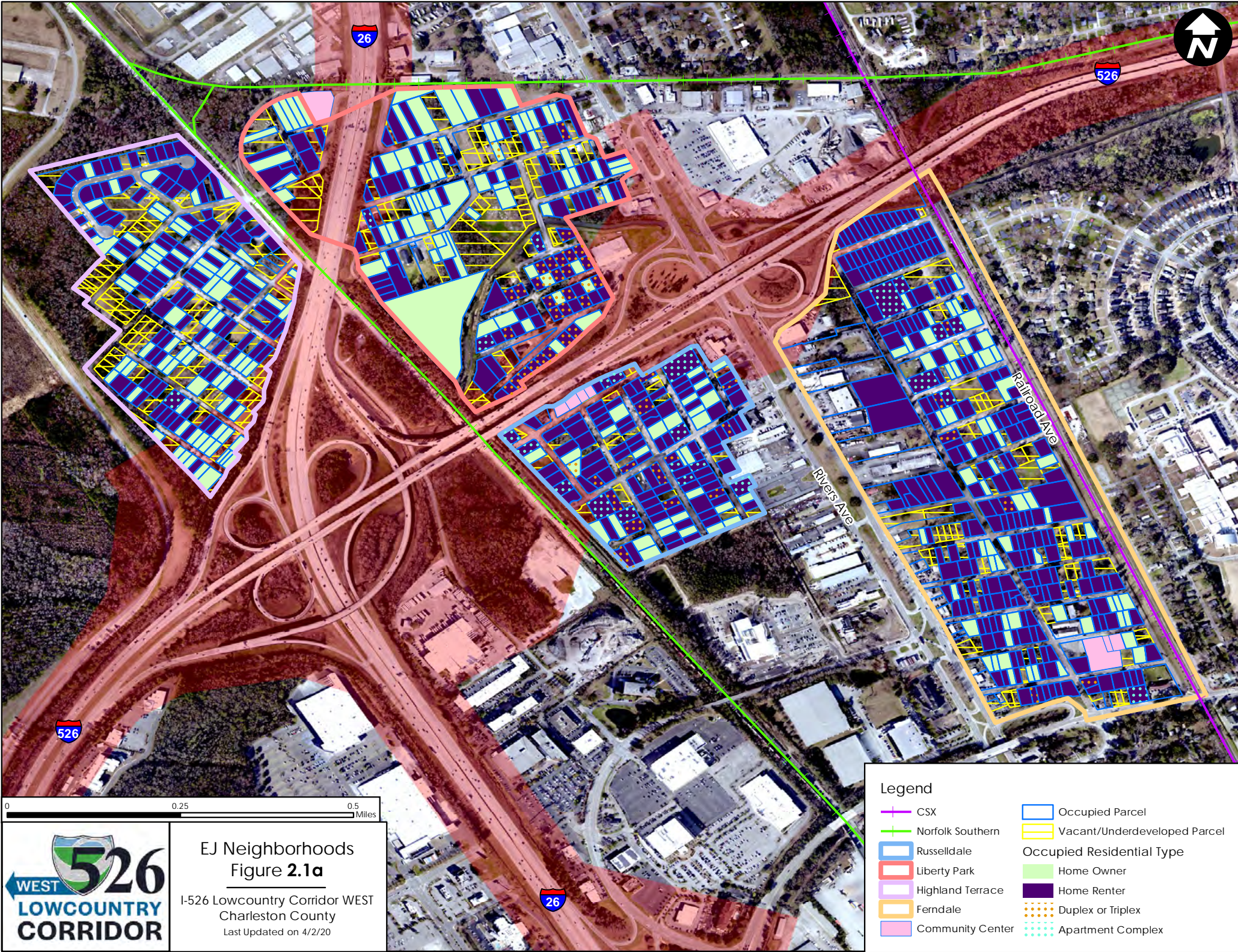


Photograph 6: “Road Ends” sign at the end of Seiberling Road, signaling the bisection of this road by I-526
SOURCE: Google Street View

2.7 LIMITED ENGLISH PROFICIENCY (LEP) POPULATIONS

Executive Order 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 exceeded either 1,000 adults or 5% of the study area population 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% 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.



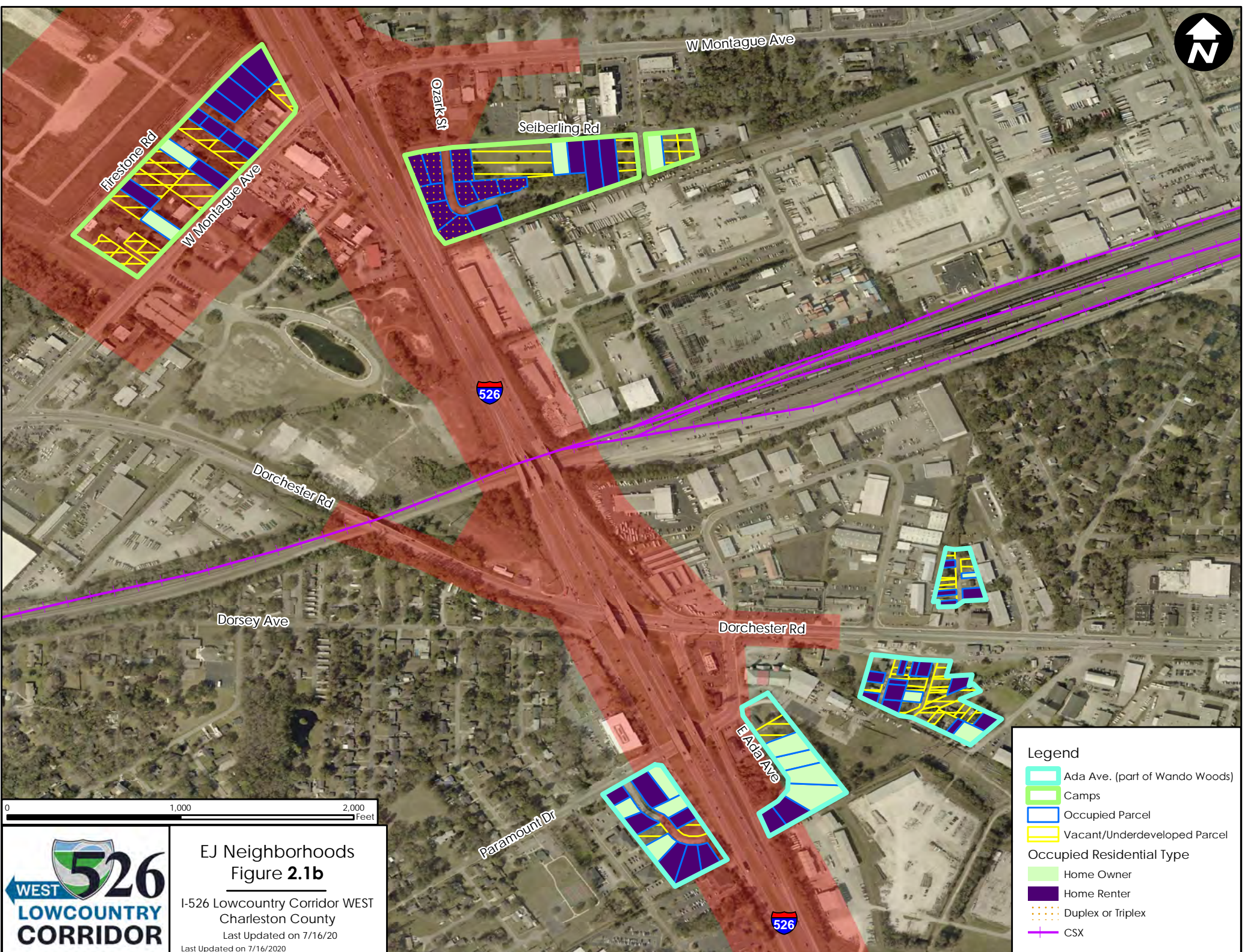
0 0.25 0.5 Miles



EJ Neighborhoods
Figure 2.1a
 I-526 Lowcountry Corridor WEST
 Charleston County
 Last Updated on 4/2/20

Legend			
	CSX		Occupied Parcel
	Norfolk Southern		Vacant/Underdeveloped Parcel
	Russelldale	Occupied Residential Type	
	Liberty Park		Home Owner
	Highland Terrace		Home Renter
	Ferndale		Duplex or Triplex
	Community Center		Apartment Complex

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



Legend

- Ada Ave. (part of Wando Woods)
- Camps
- Occupied Parcel
- Vacant/Underdeveloped Parcel

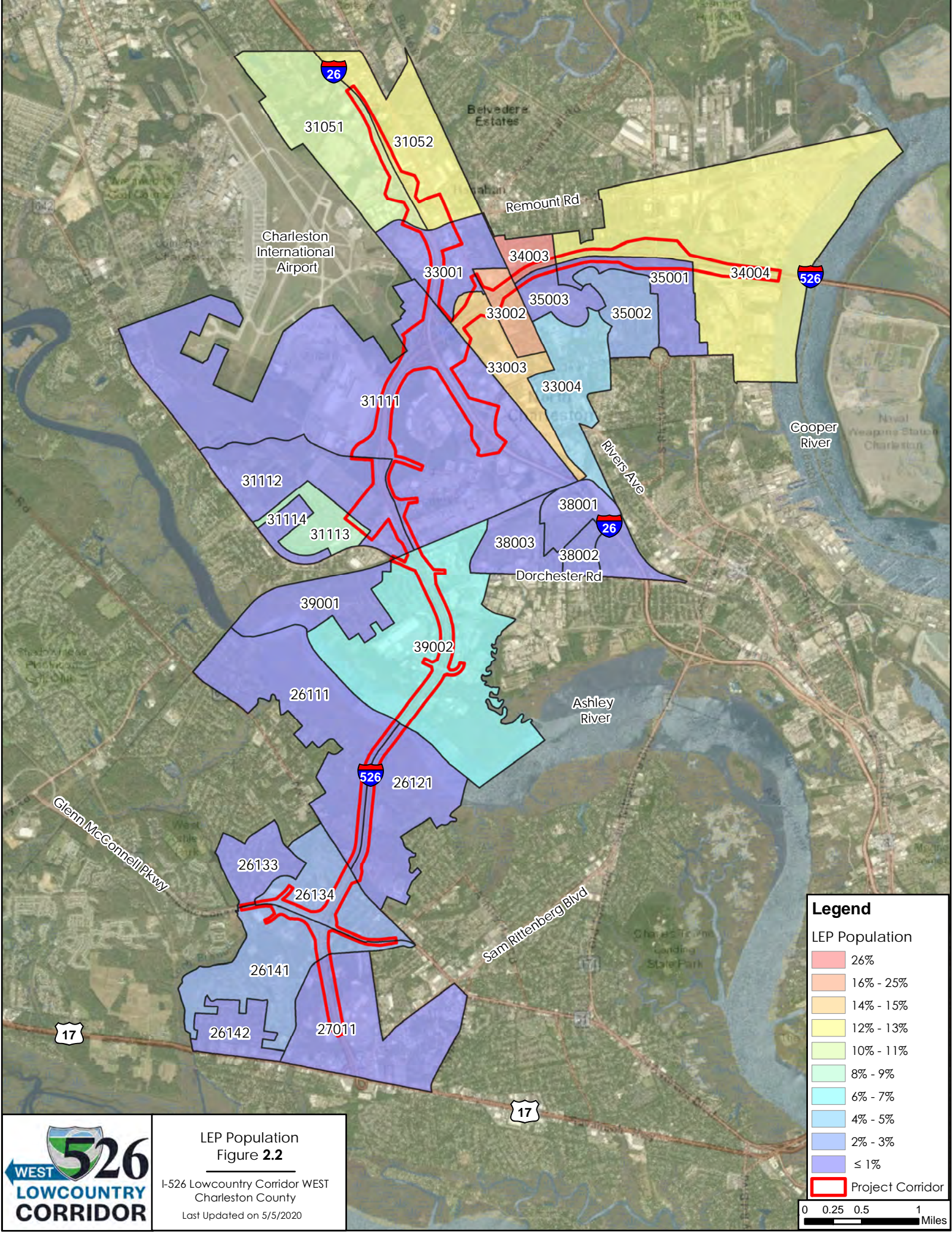
Occupied Residential Type

- Home Owner
- Home Renter
- Duplex or Triplex
- CSX



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

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



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) 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. 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 encourage attendance at the planned Informational Workshops and other outreach meetings.

Outreach and engagement of EJ neighborhood residents is ongoing through the planning and design process. Upcoming activities include but are not limited to CAC meetings and community meetings to gather feedback on proposed mitigation. A series of neighborhood meetings will be held during the public review period for the DEIS. Feedback received from EJ neighborhood residents will be used to refine and finalize the EJ Community Mitigation Plan which will be appended to the FEIS/ROD.

EJ outreach efforts include multiple focus areas to effectively engage the community, including those described in the following sections. For additional outreach information please see the EJ Outreach Strategy, located in Appendix X of the DEIS.

3.1 COMMUNITY DROP-IN MEETINGS

Community drop-ins are being held for EJ residents and additional stakeholders, and are located, to the extent possible, within the boundaries of the neighborhoods. The overarching purpose of these meetings is 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 center 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, DEIS 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 EJ neighborhood residents 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 Community Advisory Council (discussed further in DEIS Appendix X, the Environmental Justice Outreach Strategy and Tools). A total of 188 people attended the 2019 Community Drop-ins.

Community Drop-In Activities for 2020/2021:

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 aims to address many of the identified issues related to direct and cumulative effects associated with the project. Future community drop-in’s will be held in Fall 2020 to provide residents with the opportunity to review and provide comments on the EJ Community Mitigation Plan and the Draft Environmental Impact Statement (DEIS).

3.2 POP-UP MEETINGS

To supplement the community drop-in’s, EJ outreach is also being conducted through “pop-up” meetings at community events. 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.

The following pop-up meetings were 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 DEIS Appendix W.

Keeping residents informed and promoting project awareness were the primary goals of the 2019 pop-ups and will continue to be the main objectives into 2020. 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 planned for 2020/2021:

The following list of events has been developed for Summer/Fall 2020, with emphasis on minority-focused events. As the situation with the current public health concern remains fluid, the plan for pop-up meetings will be fluid as well. Each event will provide participants with updates on the I-526 LCC WEST project and connect with traditionally underrepresented populations during public events to increase awareness of updates on the project. The 2020 list of pop-up meeting opportunities includes:

- Caribbean Jerk Festival, July 2020, North Charleston
- North Charleston Farmers Market, Thursdays, May-October 2020, North Charleston
- Charleston Black Expo, June 2020, North Charleston
- 9th Annual Charleston Natural Hair Expo, June 2020, Trident Technical College
- 3rd Annual Minority Business Tradeshow, July 2020, Jerry Zucker Middle School of Science
- Charleston Career Fair, May, July and September 2020, North Charleston
- Latin American Festival, October 2020, Wannamaker County Park
- North Charleston Christmas Festival, December 2020, North Charleston

In addition to participation at local festivals, fairs and expos, the project team plans to host pop-up meetings within the EJ neighborhoods to make a focused effort on reaching impacted individuals and gather feedback on the EJ Community Mitigation Plan. Ideas for project team hosted pop-ups include:

- EJ Neighborhood Career Fair
- Hunger-Free summer collaboration
- Summer learning loss prevention collaboration
- Summer block party
- Health screenings
- Back to school event
- Care packages for seniors
- Fall Harvest Fest
- Giving Thanks event
- Neighborhood Christmas Party

The project team is also evaluating ways to continue to offer opportunities for meaningful engagement in consideration of current public health concerns. Activities being explored include telephone town halls, storyboard posters placed throughout the potentially impacted EJ neighborhoods that show project updates and other project information such as proposed site layouts for the replacement community center and recreational facilities; and, “drive-thru” meetings where residents would be provided with project information with minimal physical contact with the project team.

3.3 FLYER BOX PROGRAM

As noted in the EJ Outreach Strategy (DEIS 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, with additional locations outside of the EJ communities (such as senior centers, transit hubs, meals on wheels routes, etc.) 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 planned for 2020/2021:

A re-deployment plan is now under development and will be refined once state government orders address how and when to resume normal activities. Once refined and approved, the plan will be executed when the team is able to safely redistribute information along the route. The re-deployment plan details necessary sanitization of route assets, safely interacting with those at indoor locations, proper disposal of outdated collateral, etc. As the situation with the current public health concern remains fluid, the plan for re-deployment will be fluid as well. The ultimate goal of the flyer box program is to get information back into the hands of the public in a responsible, safe, and timely fashion. The team continues to monitor daily news related to public health concerns, state government guidance, and CDC recommendations.

3.4 COMMUNITY ADVISORY COUNCIL

As detailed in the EJ Community Mitigation Plan, DEIS Appendix H, a Community Advisory Council (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 DEIS Appendix X), a CAC was formed to facilitate meaningful engagement as intended under Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice to Minority and Low-Income Populations* and United States Department of Transportation (USDOT) Order 5610.2(a), *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 develop the EJ Community Mitigation Plan (DEIS 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 residents that live in, have elderly family living in, or own property in the impacted EJ neighborhoods of Russelldale, Liberty Park, Highland Terrace, and Ferndale. The first CAC meeting was held on September 30, 2019. Subsequent CAC meetings have been held monthly.

3.5 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.

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 is also a location where area residents can review the EJ Community Mitigation Plan and Draft Environmental Impact Statement.

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.

3.6 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. Further, the Community Drop-Ins and Public Information Meetings are staffed with English/Spanish translators. At the Community Office, any visitors requiring Spanish translation are 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 DEIS.

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 is conducting 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. Spanish advertisements have been posted on the Facebook pages of Charleston Aquí estamos, Iglesias Hispanas del Lowcountry, and Art Pot, and because of the reported higher concentration of Spanish-speaking residents in Ferndale, representatives of Art Pot have been specifically focusing door-to-door outreach in this neighborhood. This outreach has consisted of community walks that help facilitate conversations with potentially impacted LEP families and gives 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 DEIS.

4.0 ANTICIPATED DIRECT, INDIRECT, AND CUMULATIVE 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.

4.1 DIRECT IMPACTS

As shown in Table 4.1, all Proposed Reasonable Alternatives would create disproportionately high and adverse effects on EJ communities. These neighborhoods are most likely to be most affected by the project due to their proximity to the existing interstate corridor. These EJ neighborhoods were impacted in the past from interstate construction projects and it is anticipated that the impacts to these communities will be significant with any Proposed Reasonable Alternative. As such, it is important to first look at alternatives that would avoid impacts to EJ communities particularly in this case where EJ neighborhoods were impacted by past transportation projects. The range of alternatives evaluated in Sections 3.5.1 through 3.5.6 would avoid impacts to EJ neighborhoods; however, these alternatives would not reduce congestion along the project corridor and would not fulfill the purpose of and need for the proposed project. Improving the existing I-526 LCC WEST mainline from Paul Cantrell Boulevard to Virginia Avenue, as described in Section 3.5.7, would accommodate current and future vehicular

demands, as well as population and employment increases. Improving the existing highway would meet the purpose of and need for the project by increasing capacity and thereby reducing congestion. Proposed Reasonable Alternatives to improve the existing corridor were subsequently developed, including options for the I-26/I-526 System interchange (Alternatives 1, 2, 1A, and 2A). Among the four Proposed Reasonable Alternatives in this area, the Recommended Preferred Alternative (Alternative 2) would create the lowest number of EJ displacements.

Table 4.1: Impact Summary for Environmental Justice Neighborhoods

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			16		
Non-EJ Displacements			5		
TOTAL PROJECT DISPLACEMENTS			113		

** 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.*

The Recommended Preferred Alternative (Alternative 2) would displace 34 single-family homes, 11 mobile homes, 44 apartment units, two community centers, and one church within the identified EJ neighborhoods of Russelldale, Liberty Park, Highland Terrace, Ferndale, Camps and Ada Avenue. 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. The displacement of the community center would impact local community cohesion because this facility is often used to host events or gather as a group by residents living in the Highland Terrace and Liberty Park neighborhoods. 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. Similar to the Highland Terrace-Liberty Park Community Center, the displacement of the community center would impact local community cohesion because this facility is often used for social gatherings by residents living in the Russelldale neighborhood. The Recommended Preferred Alternative would displace Enoch Chapel Methodist Church within the Liberty Park neighborhood. This church was previously relocated by past transportation projects.

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 (Appendix K in the DEIS). 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 but did not meet criteria for feasibility and/or reasonableness.

4.2 INDIRECT EFFECTS

Indirect impacts in EJ neighborhoods include:

- The proposed improvements would create adverse effects on community cohesion, aesthetics, and economic vitality resulting from anticipated displacements.
- 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 homes.
- 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.

4.3 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.

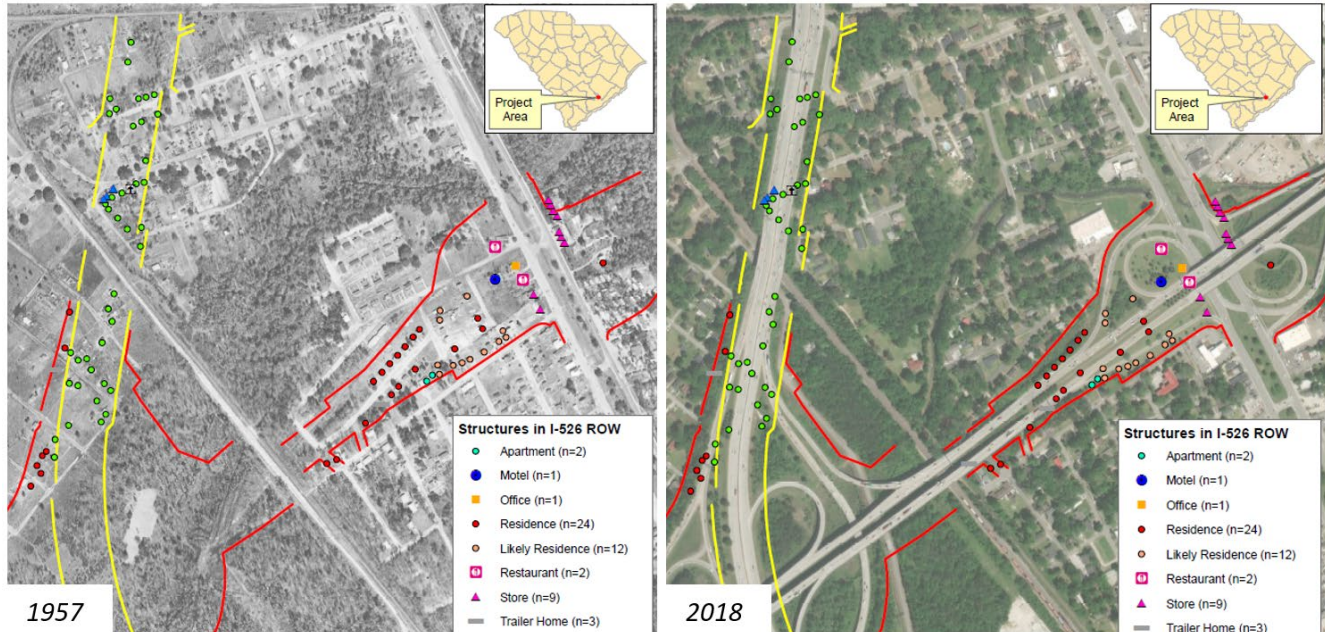


Figure 4.1: Aerial view of the EJ neighborhoods prior to the original I-526/I-26 construction (left) and post construction (right)
SOURCE: SCDOT

- Inequitable Compensation from Previous Transportation Projects:** Feedback from the I-526 West Community Advisory Council (CAC) has indicated that residents displaced or encroached upon by the previous I-526 and I-26 projects 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.
- Future Land Use:** The Russelldale neighborhood is currently zoned for single-family residential use with some multi-family residential and commercial uses on the periphery of the neighborhood. Russelldale’s future land use mapping is shown as “Light Industrial District” which is not consistent with current land uses. This zoning change would contribute to the further breakdown of community cohesion of the Russelldale neighborhood, 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.

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

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.

- **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 larger 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 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% in 2001 to 2011, but in North Charleston during that same time period, the number of mobile

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>

homes dropped by 11%.⁷ In 2014, roughly 7%⁸ 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.



¹ **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 were located in the current I-26 corridor. The expansion of the Charleston Airport in 2005, potential planned airport expansions,¹¹ continued commercial development, and the large amount of land owned by the US Federal Government in the vicinity of the Charleston airport exclude reduce the amount of available land for affordable house development. Where this land available for affordable housing, it would be very well suited for it given the area’s proximity to transit and employment centers.

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>

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

- **Heirs' Property Issues:** Verifying homeownership for emergency federal assistance ¹² 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. ^{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.
- **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.



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

- **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

¹² <https://www.fema.gov/news-release/2018/10/13/faq-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/>

¹⁷ <https://coast.noaa.gov/slr/>

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 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

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>

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

- **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.

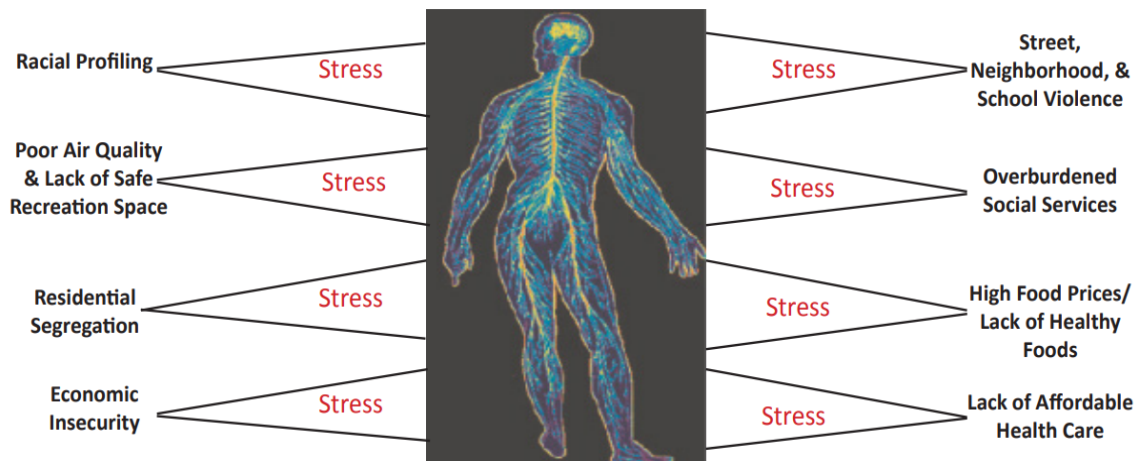


Figure 4.4: Examples of multiple stressors influencing poor health outcomes

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
- **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.

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>

4.4 IMPACT SUMMARY

4.4.1 Direct Impacts

The EJ neighborhoods of Russelldale, Liberty Park, Highland Terrace, and Ferndale, and additional EJ locations on East Ada Street, West Ada Avenue, Seiberling Road, and Ozark Street would experience a high level of direct impacts associated with displacements, and indirect/cumulative effects. Residential relocations within EJ neighborhoods comprise 95% of total residential relocations.

4.4.2 Indirect Effects

Indirect impacts in EJ neighborhoods include adverse effects on community cohesion, aesthetics, and economic vitality 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.

4.4.3 Cumulative Effects

Past 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 unjust compensation from original construction of I-26 and I-526
- Adverse community cohesion effects associated with rezoning Russelldale neighborhood to “light industrial” 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

5.0 DISPROPORTIONATE IMPACTS

“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) Without mitigation, the anticipated residential relocations and recreational facility displacements 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.

6.0 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 4.1, a range of alternatives that would avoid impacting EJ communities was 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. Additional information on these alternatives can be found in Sections 3.5.1 through 3.5.6. With the exception of Existing Corridor Improvements (discussed in Section 3.5.7), these 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 Alternatives.

6.2 MINIMIZATION

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 Sections 3.6 through 3.8 for additional details related to alternative development and evaluation. Among the four Proposed Reasonable Alternatives in this area, the Recommended Preferred Alternative (Alternative 2) would create the lowest number of displacements, avoiding the displacement of five single-family homes, five mobile homes, 11 apartment units, one business, and one church.

6.3 MITIGATION MEASURES

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, business, 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 purpose of mitigation is to lessen the burden of impacts caused by the project to an extent that, after mitigation, are no longer disproportionately high or adverse on a minority or low-income population. This section describes proposed mitigation developed to offset disproportionately high and adverse effects to EJ populations. The proposed EJ Community Mitigation Plan is included as DEIS Appendix H. The EJ Community Mitigation Plan will be presented to residents in affected EJ neighborhoods to gather feedback on proposed mitigation through a series of neighborhood meetings to be held during the public review period for the DEIS. Feedback received from EJ neighborhood residents will be used to refine and finalize the EJ Community Mitigation Plan which will be appended to the FEIS/ROD.

The Community Advisory Council (CAC) helped the project team develop 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.

As previously noted, the SNA was conducted to gather feedback on EJ residents' social needs and priorities. 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. The results of the SNA were referenced during the development of proposed mitigation.

In consideration of the SNA results, the project team coordinated with the CAC and the City of North Charleston to develop draft mitigation to address the needs and priorities of the impacted EJ neighborhoods. Proposed mitigation is categorized into four pillars: Cohesion, Enhancement, Preservation, and Revitalization as shown in Table 6.1. Table 6.1 summarizes anticipated direct, indirect, and cumulative impacts to EJ neighborhoods (as listed in Section 4.5.6), CAC feedback, SNA results, and mitigation proposed to address project impacts and community needs and priorities. The EJ Community Mitigation Plan in its entirety can be found in DEIS Appendix H.

Table 6.1 references “Recreation Facilities and Amenities” and “Recreational Programs and Activities” as part of proposed mitigation to offset impacts associated with the displacement of the Highland Terrace-Liberty Park Community Center and Russelldale Community Center. These terms refer to the construction of one large, centrally located community center complex (called the “Filbin Creek Community Center” for the purposes of this document), a pocket park in Highland Terrace-Liberty Park, and a pocket park in Russelldale. The existing community centers include cinderblock buildings of roughly 2,000 square feet each; the proposed Filbin Creek Community Center includes a roughly 17,850 square foot building.

Potential infrastructure related to the replacement recreational facilities and amenities could include, but is not limited to: classrooms designed for flexibility, which include moveable panel divider walls allowing room size to be modified to meet program needs; basketball courts; a community garden; an educational wetland; outdoor facility lighting above minimum requirements; covered picnic shelters; grills; walkways and common spaces will be user-friendly and defined by vegetation or other natural definitions (i.e., fencing would not be first choice); wayfarer/directional signs to help guide residents to new facilities; and, solar panels and emergency generators to enable the centers to be used as shelters during emergencies or inclement weather.

Programs and activities at the proposed Filbin Creek Community Center could include, but are not be limited to: senior and youth-focused programs and activities; a monthly programming/activity calendar that prioritizes programs for community seniors and youth such as meeting spaces, youth lunch programs, and tennis associations; a yearly calendar of community center events that focuses on events that foster community cohesion such as those that highlight/preserve local history, involve meeting with government representatives, and cross-cultural activities; programming that provides access to educational and financial resources for community advocacy and self-advocacy; volunteer opportunities with priority on neighborhood residents; inclusion of a community garden at the recreational facility to serve as both an educational program and effort to mitigate neighborhoods’ location in known food desert; and, nature/ecology programs that incorporate site features.

The proposed pocket parks would be developed to include playgrounds, basketball courts, 25-foot by 25-foot open air shelters, benches, and on-street parking.

Construction of the new centrally located community center and the pocket parks will be completed prior to the start of construction of the I-526 LCC-West improvements.

Table 6.1: Mitigation Matrix

I. COMMUNITY COHESION: ACTIONS THAT STRENGTHEN NEIGHBORHOOD CONNECTIONS	
<p>A cohesive community has a common vision and sense of belonging for all residents; diversity of different backgrounds and circumstances are appreciated and positively valued; those from different backgrounds have similar life opportunities; and there are strong and positive relationships between people from different backgrounds in the workplace, in schools, and within neighborhoods.</p> <p>A number of proposed mitigation measures shown here contribute to offsetting adverse effects associated with the loss of community cohesion. These include replacement affordable housing, replacement community center and recreational facilities, implementation of the Infrastructure Enhancement Plan, and organizational training.</p> <p>SCDOT will construct a centralized replacement community center and two pocket parks within the EJ communities to replace and expand upon existing services, such as recreational programs and event space, to help repair the bonds of community cohesion. The community center will host programs that are selected by community representatives within the CAC and the City of North Charleston with the intention of strengthening community cohesion within the EJ neighborhoods. SCDOT will construct community infrastructure improvements that will provide additional street lighting and safer bicycle/pedestrian facilities to help foster walking and biking in the EJ neighborhoods and provide opportunities for improved community cohesion. SCDOT will provide support for organizational training for the CAC in order to prepare the members for a transition into the Project Oversight Committee (POC) which will provide the project team with guidance while overseeing the implementation of mitigation.</p>	
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 community cohesion effects associated with rezoning Russelldale neighborhood to “light industrial” use • 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 	<ul style="list-style-type: none"> • Replacement Affordable Housing (rentals and owner-occupied) • Recreation Facilities and Amenities • Recreational Programs and Activities • Connectivity and Bicycle & Pedestrian Safety • Community Infrastructure Enhancement Plan • Community Resource Guide
CAC/SNA FEEDBACK	SCDOT COMMUNITY MITIGATION MEASURE
<p>CAC Feedback:</p> <ul style="list-style-type: none"> • More access to community center for community children; “neighborhood” center versus “community” center • Center staffed by neighborhood residents with scheduled activities that engage the community • Center staff need to be qualified to run the center • Sense of 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 • Connectivity and Bicycle & Pedestrian Safety • Community Infrastructure Enhancement Plan • Organizational Training
<p>CAC Feedback:</p> <ul style="list-style-type: none"> • Pedestrian bridge to help children and other community center users to avoid traffic • Concerns about walkability for children to the proposed community center 	<ul style="list-style-type: none"> • Connectivity/Bicycle & Pedestrian Safety • Community Infrastructure Enhancement Plan
<p>CAC Feedback:</p> <ul style="list-style-type: none"> • Crime prevention through lighting design and maintenance (CPTED principle) • Surveillance cameras as crime prevention measure • Convey sense of ownership of public spaces as crime deterrent by maintaining areas in public domain (CPTED principle) • Crime prevention through well-lit streets; going above code for minimum requirements for spacing of streetlights 	<ul style="list-style-type: none"> • Connectivity/Bicycle & Pedestrian Safety • Community Infrastructure Enhancement Plan

CAC/SNA FEEDBACK	SCDOT COMMUNITY MITIGATION MEASURE
<p>Social Needs Assessment:</p> <ul style="list-style-type: none"> • Appearance of neighborhood homes (Ranked #9 out of 25) <p>CAC Feedback:</p> <ul style="list-style-type: none"> • Need to eliminate abandoned properties/overgrown lots • Crime prevention through increased law enforcement presence • Community yard sale to foster community cohesion 	<ul style="list-style-type: none"> • Organizational Training <p>SCDOT contributions to address these needs also include development/distribution of a community resource guide, logistical support (meeting coordination, etc.), and Community Office meeting space or CAC/POC and others to organize and advocate to address these needs.</p>
<p>II. COMMUNITY ENHANCEMENT: COMMUNITY CENTER AND RECREATIONAL FACILITY REPLACEMENT</p>	
<p>Community enhancement projects improve the value, quality, desirability, and attractiveness of a neighborhood. This pillar focuses on community center and recreational facility replacement and the infrastructure enhancements that will be developed in conjunction with these replacement facilities. This includes replacing the community center facilities and pocket parks, building potential amenities such as playgrounds or walking paths, implementing potential programs such as exercise classes or computer lab training, and increasing connectivity and bike/pedestrian safety. Transit and recreation connectivity will be enhanced as a part of the EJ Community Mitigation Plan by improving sidewalk connectivity, increasing streetlight density, and installing crosswalks.</p>	
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
<p>CAC Feedback:</p> <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"> • Connectivity and Bicycle & Pedestrian Safety • Community Infrastructure Enhancement Plan
<p>CAC Feedback:</p> <ul style="list-style-type: none"> • Need for advocacy training to prepare for CAC transition to Project Oversight Committee (POC) • Networking opportunities 	<ul style="list-style-type: none"> • Organizational Training
<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"> • 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 intergovernmental agreement • CAC input in the intergovernmental agreement with the City of North Charleston • "Neighborhood" center vs. community center (no box design) • Broad scale in facility design, diverse use, forward-thinking, multi-faceted • Include history in community center 	<ul style="list-style-type: none"> • Recreation Facilities and Amenities • Recreation Programs and Activities • Connectivity and Bicycle & Pedestrian Safety • Community Infrastructure Enhancement Plan • Community History Preservation Study

III. COMMUNITY PRESERVATION: INFRASTRUCTURE NEEDS

Community preservation connects the past, present, and future of a community by maintaining and preserving neighborhood infrastructure in consideration of past effects of highway/infrastructure projects and current transportation and land use decisions; the ability to prepare for, and recover from, severe weather; and the ability of residents to be able to age in place. In addition to the previously mentioned infrastructure improvements, SCDOT will document the cultural history and character of the impacted EJ communities by utilizing a qualified historian and photographer to develop a report that will be available for viewing online and at the replacement community center.

The project team will work with the CAC and other stakeholders to develop an Infrastructure Enhancement Plan to facilitate the implementation of infrastructure-related mitigation. The Infrastructure Enhancement Plan includes technical studies on neighborhood traffic, streetlighting, and stormwater to identify infrastructure needs and a commitment by SCDOT to construct or address specified infrastructure needs prior to construction of I-526 improvements. The purpose of the Infrastructure Enhancement Plan is to identify a set of improvements to address bicycle and pedestrian safety, access to community centers, enhanced street aesthetics project-related stormwater improvements, and traffic calming measures that would be implemented as part of the project. Proposed mitigation also includes a planting plan for the project corridor within the EJ neighborhoods to offset visual impacts associated with construction of the proposed project. This vegetation will also provide some benefits related to minimizing other effects of project construction.

PROJECT IMPACTS	SCDOT COMMUNITY MITIGATION MEASURES
<ul style="list-style-type: none"> • <i>Adverse effects on economic vitality due to unjust compensation from original construction of I-26 and I-526</i> • <i>Diminished economic vitality due to depreciated home values, a high number of vacant or underdeveloped parcels, and a high number of homes in disrepair</i> 	<ul style="list-style-type: none"> • Replacement Affordable Housing (rentals and owner-occupied) • Recreation Facilities and Amenities • Recreational Programs and Activities • Connectivity and Bicycle & Pedestrian Safety • Community Infrastructure Enhancement Plan • Community Resource Guide
<ul style="list-style-type: none"> • <i>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 homes</i> • <i>Visual changes to the existing environment in the EJ neighborhoods because the existing road already sits above many of the affected communities.</i> 	<ul style="list-style-type: none"> • Planting Plan for I-526/I-26 corridors within EJ Neighborhoods
CAC/SNA FEEDBACK	SCDOT COMMUNITY MITIGATION MEASURES
<p>Social Needs Assessment:</p> <ul style="list-style-type: none"> • <i>Adequate stormwater management (Ranked #1 out of 25)</i> • <i>Adequate sidewalks/bicycle facilities (Ranked #2 out of 25)</i> • <i>Well-lit streets/sidewalks (Ranked #8 out of 25)</i> <p>CAC Feedback:</p> <ul style="list-style-type: none"> • <i>Installation of speed humps to address speeding/general safety</i> • <i>Address sidewalk infrastructure needs/neighborhood connectivity</i> • <i>Pedestrian accommodations over/across Rivers Avenue; safety issues for veterans crossing at Patriots Villa across Rivers Avenue</i> • <i>Importance of safe, practical footpaths/sidewalks</i> • <i>Safety for bicycle riders</i> • <i>Address areas with inadequate streetlighting/standing water</i> • <i>CARTA/shuttle bus (with seats) to transport residents, AM/PM</i> • <i>Bus shelters with covers and seating</i> 	<ul style="list-style-type: none"> • Connectivity and Bicycle & Pedestrian Safety • Community Infrastructure Enhancement Plan

<p>CAC Feedback:</p> <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) • Connectivity and Bicycle & Pedestrian Safety • Community Infrastructure Enhancement Plan
<p>CAC Feedback:</p> <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

**IV. COMMUNITY REVITALIZATION:
REPLACEMENT HOUSING AND EMPLOYMENT/ECONOMIC OPPORTUNITIES**

Community revitalization focuses on actions such as maintaining and providing more affordable housing stock, providing employment opportunities for neighborhood residents, and actions such as improved public safety which foster community development.

In coordination with the South Carolina State Housing Finance and Development Authority, SCDOT will finalize plans to construct replacement affordable housing rental units in the vicinity of the impacted EJ communities. Up to 68% of the potentially impacted homes in the EJ communities are renter occupied. As such, emphasis will be placed on replacing and augmenting the amount of affordable housing available within the project vicinity.

SCDOT is conducting early acquisition of vacant lots within the EJ communities and partnering with local nonprofit entities to construct affordable housing prior to right-of-way acquisition in order to ensure families displaced by the I-526 LCC West project have affordable replacement housing options available within their communities. SCDOT is also investigating provisions and partnerships that will enable the replacement housing to remain affordable in the future. Displaced residents would have to meet the qualifications for the affordable housing programs. Replacement affordable housing would be designed to maintain consistency with the character of housing (home size, style, etc.) within the affected EJ neighborhoods. The location and final number of affordable housing units will be determined prior to the approval of the FEIS/ROD.

The EJ Community Mitigation Plan focuses on the impacted neighborhoods of Russelldale, Highland Terrace, Liberty Park, and Ferndale as these neighborhoods would experience a higher level of disproportionately high and adverse community effects than the residences in the Wando Woods and Camps neighborhoods. Three residences in the Wando Woods neighborhood and six apartments in the Camps neighborhood would be displaced by the proposed project; however, these relocations are relatively removed from their respective neighborhood cores which, aside from avoiding large scale impacts to the Wando Woods and Camps neighborhoods, precludes the same level of community-wide mitigation proposed for the above-mentioned focus areas. The displacements in Wando Woods and Camps would be offset by the creation of quality affordable housing in the immediate vicinity of the impacted areas with comparable access to public transit and employment centers.

SCDOT will provide early residential relocation assistance, construct affordable housing to ensure displaced families have affordable replacement housing options within their communities, provide financial and first-time home buyer counseling. SCDOT will also implement education and employment initiatives such as a school-to-work program, a college aid initiative, and pre-employment training for residents living in the impacted communities.

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 <p><i>(continued on following page)</i></p>	<ul style="list-style-type: none"> • Replacement Affordable Housing (rentals and owner-occupied) • Recreation Facilities and Amenities • Recreational Programs and Activities • Connectivity and Bicycle & Pedestrian Safety • Community Infrastructure Enhancement Plan • Community Resource Guide

<ul style="list-style-type: none"> • 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, notability those related to economic insecurity, outdoor and indoor pollutants 	<p>(see previous page)</p>
<p>CAC/SNA FEEDBACK</p>	<p>SCDOT COMMUNITY MITIGATION MEASURES</p>
<p>Social Needs Assessment: Availability of quality housing (Ranked #3 out of 25) Availability of affordable housing (Ranked #4 out of 25)</p> <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"> • Affordable Housing (rentals and owner-occupied) • Financial and First-time Home Buyer Counseling
<p>CAC Feedback:</p> <ul style="list-style-type: none"> • Advocacy and self-advocacy – educational and financial resource 	<ul style="list-style-type: none"> • Organizational Training • College Aid Initiative • School-to-Work Program • Pre-employment Training • Community Resource Guide

7.0 CONCLUSION

The implementation of any of the Proposed Reasonable Alternatives 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 4.5.6, 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 interstate. Approximately 78 residential units, two community centers, and one church would be displaced as a result of the proposed project. In addition, EJ residents living in the Wando Woods and Camps neighborhoods anticipate impacts as nine residential units face project-related relocations.

It is anticipated that the proposed mitigation measures included in the EJ Community Mitigation Plan, summarized in Table 6.1 and detailed in DEIS Appendix H, would provide community benefits that would offset disproportionately high and adverse effects in accordance with directives contained in EO 12898 (*Federal Actions to Address Environmental Justice to Minority and Low-Income Populations*), FHWA's EJ Order 6640.23A (*FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*), and USDOT Order 5610.2(a) (*Final Order to Address Environmental Justice in Minority Populations and Low-Income Populations*). The draft EJ Community Mitigation Plan will be presented to

residents in affected EJ neighborhoods to gather feedback on proposed mitigation through a series of neighborhood meetings to be held during the public review period for the DEIS. Feedback received from EJ neighborhood residents will be used to refine and finalize the EJ Community Mitigation Plan. The refined draft EJ Community Mitigation Plan will be presented to affected EJ neighborhood residents for review and comment prior to its finalization and inclusion in the FEIS/ROD. The final EJ Community Mitigation Plan will catalog all agreements and plans required to implement the mitigation commitments.

8.0 REFERENCES

- Draft I-526 LCC WEST Alternatives Development Technical Memorandum, October 2019.
- Draft I-526 LCC WEST Alternatives Development Traffic Analysis Report, May 2020
- Draft I-526 LCC WEST Community Impact Assessment (CIA). September 2020.
- Draft I-526 LCC WEST Environmental Justice Community Mitigation Plan, September 2020.
- Draft I-526 LCC WEST Environmental Justice Outreach Strategy, May 2020.
- Draft I-526 LCC WEST Indirect and Cumulative Assessment. September 2020.
- Draft I-526 LCC WEST Informational Pop-up Meeting Outreach Summary, December 2019.
- Draft I-526 LCC WEST Relocation Impact Study, August 2020.
- 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