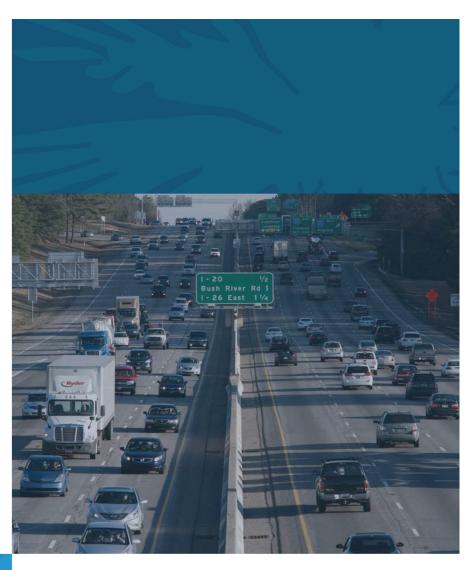


Appendix F—Community Impact Assessment





Carolina Crossroads I-20/26/126 Corridor Improvement Project Lexington and Richland Counties, South Carolina

DEIS July 23, 2018







Prepared for South Carolina Department of Transportation and the Federal Highway Administration



Carolina Crossroads

I-20/26/126 Corridor Improvement Project

Lexington and Richland Counties, South Carolina

DEIS July 23, 2018

Prepared for South Carolina Department of Transportation, and the Federal Highway Administration

Prepared by











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Appendix B – Community Characterization Report

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1 Introduction

1.1 Project Description

The proposed Carolina Crossroads I-20/26/126 Corridor Improvement Project is a transportation corridor improvement project located in Lexington and Richland counties, South Carolina. The four-mile I-20 corridor runs east-west between the Broad River and the Saluda River. The nine-mile I-26 corridor extends north-south between the Broad River Road interchange and the US-378 (Sunset Boulevard) interchange. The one-mile I-126 corridor extends from I-26 to Colonial Life Boulevard; see Figure 1, Appendix A for a project location map.

The I-20/26/126 corridor is a vital link in South Carolina, serving residents, commuters, travelers and commerce. Due to nearby residential and commercial development, proximity to downtown Columbia, increasing traffic volumes, and the overall geometric layout, including interchanges, this corridor has become one of the most congested interstate sections in South Carolina. The purpose of the proposed Carolina Crossroads Project is to improve mobility and enhance traffic operations by reducing existing traffic congestion within the corridor, and by accommodating future traffic needs (through 2040). Benefits of the project include improving freight mobility, improving safety in the corridor and improving system linkages.

1.1.1 REASONABLE ALTERNATIVES

A wide range of alternatives was identified from previous studies and local plans, scoping comments, stakeholder workgroup meetings, and from public and agency input and comments. The Project Team used a tiered screening process where seven initial alternatives, which were general in nature, were developed and screened against the Purpose and Need. Any that met the Purpose and Need were advanced as preliminary alternatives to the next screening level. Only two initial alternatives advanced as preliminary alternatives.

Since the majority of the traffic congestion and safety concerns occur at or near the interchange locations along the I-20/26/126 corridor, focus was placed on developing improvement options for each of the 12 interchanges in the corridor. These interchange design options were brought forward for more detailed analysis and were evaluated for right of way footprint, general traffic operations and public feedback. Nine alternatives were carried forward for detailed study and to compare against the No-Build alternative.

The nine representative alternatives were further screened by using more detailed traffic capacity and operation analysis, right of way acquisitions, noise impacts, impacts to community resources, natural resources and other considerations. Based on this screening Reasonable Alternative (RA) 1, RA5 Modified and the No-Build Alternative were recommended to be carried forward for evaluation in the DEIS for impacts and potential benefits.

RA1 would widen I-26 with one additional travel lane in each direction from US 176/Broad River Road to US-378, and make the following improvements:

 proposed turbine interchange at the I-26 and I-20 junction, which would eliminate all loop ramps in the interchange

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- new collector-distributor lanes
- reconfiguration of Colonial Life Boulevard interchange to provide access to Bush River Road from I-
- interchange improvements at each interchange from Harbison Boulevard to US 378 on I-26; from Bush River Road to Broad River Road on I-20; and from I-26 to Colonial Life Boulevard on I-126
- elimination of the existing interchange at I-26 and Bush River Road and new access to Bush River Road from a full-access interchange at Colonial Life Boulevard which would eliminate traffic conflict points and weaving maneuvers between Bush River Road and the I-20/I-26 interchange

RA 1 would also include construction of a new bridge over I-26, connecting Tram Road to Beatty Road.

Alternative RA5 Modified would also provide an additional travel lane in each direction on I-26, and proposes the same ramp improvements to all the interchanges as RA1; however, RA5 Modified proposes a directional interchange at the I-26 and I-20 junction, which would eliminate two loop ramps and reconfigure the other loop ramps in the interchange. A proposed directional interchange would consist of three roadway levels that cross around a central bridge; the third level would be the directional ramps from I-26 to I-20.

1.1.2 PROJECT HISTORY

Construction of I-26 began in the Columbia area in 1957, and the first section opened in 1960. One year later, I-126 opened and the first segment of I-20 followed five years later. Prior to construction of I-26, the land was primarily farmland and undeveloped. After the construction of the interstate, neighborhoods and communities gradually formed in surrounding areas as the counties saw a growth in population. For additional information on the history of the communities, refer to the 2016 Community Characterization Report.

Over the years, many improvements have been made to the I-20/26/126 corridor, including widening and adding interchanges to accommodate several decades of growth and development. Between 1966 and 1997, I-126 and I-26 were widened, interchanges were built, upgraded and redesigned, and interstate connections and flyovers were constructed. In 2009, the proposed Carolina Crossroads Project was included in the STIP as an interstate upgrade project with \$10.5 million of federal funding allocated for engineering and implementation of selected strategies.

1.2 Purpose of the Community Impact Assessment

The CIA evaluates the effects of the Reasonable Alternatives on the surrounding community or communities. The following topics are discussed at the community level, in order to evaluate the overall impacts of the Reasonable Alternatives within the study area:

- land use
- community cohesion
- visual/aesthetics
- noise
- community services

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- mobility, access and safety
- economics
- residential and business acquisitions
- construction/temporary impacts
- environmental justice (EJ)

2 Methodology

2.1 Study Area

The Federal Highway Administration (FHWA) guidance document entitled *Community Impact Assessment: A Quick Reference for Transportation* (FHWA 1996) recommends a process to evaluate the effects of a transportation project on a community and its quality of life¹. The assessment of effects helps decision-makers ensure that transportation investment addresses concerns and minimizes effects to communities.

The guidebook has various definitions of community, all of which were considered in determining the overall study area for the CIA, as well as the smaller divisions of the study area discussed in the report. The study area for the CIA is the same as that identified in the 2016 Community Characterization Report². As currently defined, the proposed Carolina Crossroads I-20/26/126 Corridor Improvement Project area encompasses I-20 from the Saluda River to the Broad River, I-26 from Broad River Road to US-378, and I-126 from I-26 to Colonial Life Boulevard. In developing the CIA study area for the project, the Project Team identified neighborhoods and communities within approximately one mile of the I-20/26/126 corridor, and for ease of data collection, used the US Census Bureau (Census Bureau) Tract/Block Group boundaries and Transportation Analysis Zone (TAZ) boundaries which encompass those neighborhoods and communities to delineate the study area. The Census Bureau and TAZ boundaries also generally follow visible natural or man-made features such as streams, rivers or major roadways.

The study area is further organized into seven smaller, Project Team-defined communities, which are based on similarities in land use and context, while still typically following Census Bureau and TAZ boundaries and visible features. These seven communities (Columbiana, Seven Oaks, Saluda, Riverbanks, Harbison, St. Andrews, and Broad) make up the study area. Data from the smaller communities were used as the foundation for the existing conditions analysis included in the 2016 Community Characterization Report, and are used in the EJ and Limited English Proficiency (LEP) discussions of the CIA. The study area and communities are shown in Figure 1.

2.2 Data Sources

Data for the CIA were obtained from a number of sources, including:

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¹ Federal Highway Administration (FHWA). 1996. Community Impact Assessment: A Quick Reference for Transportation. Office of Environment and Planning. Prepared by North Carolina DOT, California DOT, Florida DOT, Maine DOT, Columbus, GA Department of Community & Economic Development, Maryland State Highway Administration, Arkansas State Highway & Transportation Department, and Illinois DOT in consultation with Apogee Research, Inc. and Parsons Brinckerhoff Quade Douglas, Inc.

² South Carolina Department of Transportation (SCDOT). 2016. Carolina Crossroads 1-20/26/126 Corridor Improvements Community Characterization. Prepared by STV and HDR Engineering. Charlotte.



- map data from Google (Google 2017)
- ESRI World Imagery (ESRI 2015)
- historical and current USGS 7.5 minute series topographic quadrangles
- Census Bureau, American FactFinder, 2010 Decennial Census
- Census Bureau, American FactFinder, 2009-2013 American Community Survey 5-Year Estimates
- South Carolina Statewide Travel Demand Model, 2014/2015 version SC SWMV2
- published books and articles obtained from regional libraries
- local plans and websites

Information was collected and confirmed during a visit to the study area in the spring of 2015 and during discussions with local residents at a Community Kickoff Meeting on May 12, 2015; a Scoping Public Meeting on September 10, 2015; an Alternatives Public Information meeting on October 4, 2016; and a Reasonable Alternatives Public Meeting on September 19, 2017. Information was also collected via local planner input forms which were emailed to several local planners³⁴⁵.

3 Existing Conditions

The local plans and websites, community resources and services, as well as broader level EJ and LEP analyses, are identified or included in the 2016 Community Characterization Report. In this CIA, the EJ and LEP analyses will be refined to the Block Group level to better show differentiation of potential effects by alternative. Block Groups for the study area are presented in Figure 2.

EJ analyses address disproportionately high and adverse human health or environmental effects of the project's activities on minority populations and low-income populations to achieve an equitable distribution of benefits and burdens. This objective is to be achieved, in part, by actively adhering to the principles and practices of both Title VI and the National Environmental Policy Act (NEPA) during the development and implementation of transportation activities. Title VI prohibits the discrimination on the basis of race, color or national origin in programs receiving Federal assistance. SCDOT is committed to nondiscrimination in the conduct of its business. In addressing the requirements of these orders and laws, agencies identify EJ populations (minority and low-income) and evaluate potential effects resulting from transportation projects, as well as identify Limited English Proficiency populations.

The minority population includes American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino, and Native Hawaiian or Other Pacific Islander. Low-income populations were calculated by adding the below poverty population and the near poor population, which are those populations between 100 percent and 149 percent of poverty level, as prescribed by the U.S. Health and Human Services poverty guidelines.

Please refer to the 2016 Community Characterization Report for additional information on existing community conditions or socioeconomic trends through 2040.

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³ Lexington County Department of Planning, email of Local Planner Input Form to STV, February 2, 2018.

⁴ Central Midlands Council of Governments, email of Local Planner Input Form to STV, February 7, 2018.

⁵ West Columbia Planning and Zoning, email of Local Planner Input Form to STV, January 31, 2018.



3.1 Environmental Justice

EJ populations were identified through analysis of U.S. Census Bureau data at the county level (Richland and Lexington counties), the study area level and the Block Group level. Concentrations of minority and low-income populations in the study area were identified through analysis of the 2010 U.S. Census data and the 2009-2013 American Community Survey 5-year data at both the county and the Block Group level. Individual Block Group data was compared to the respective countywide data to determine whether any of the Block Groups would quality as an "EJ Block Group" within the study area. An EJ Block Group was defined to include any Block Group in which the minority or low-income population meets either of the following:

- The minority or low-income population in the Block Group exceeds 50 percent.
- The percentage of a minority or low-income population in the affected area is higher than the average for Richland or Lexington County.

The overall percentage of minorities in Richland County is 55.1 percent, and in Lexington County 23.3 percent. The low-income population in Richland County is 27.9 percent, and in Lexington County it is 23.1 percent. See Table 3.1 for EJ data; highlights show those Block Groups that meet EJ criteria.

Table 3.1 Environmental Justice Populations

Community / census tract	Block group	Total population	Minority	% Minority	Low income	% Low income
Lexington County		266,575	62,202	23.3%	60,987	23.1%
Columbiana						
103.05 (located in	1	1,111	429	38.6%	394	35.5%
Richland County)	2	1,092	395	36.2%	194	17.8%
	3	764	348	45.5%	146	19.1%
	4	1,717	567	33.0%	402	24.0%
	5	1,262	733	58.1%	672	53.2%
	6	1,192	471	39.5%	24	2.0%
211.12	1	1,675	296	17.7%	185	11.2%
	2	1,575	261	16.6%	276	17.6%
211.11	1	903	244	27.0%	69	7.6%
	2	767	236	30.8%	163	21.3%
	3	763	465	60.9%	207	27.1%

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Community /	Block	Total	Minority	% Minority	Low	% Low
census tract	group	population			income	income
Seven Oaks						
211.06	1	1,097	0	0.0%	153	13.9%
	2	734	253	34.5%	64	8.7%
	3	613	87	14.2%	41	6.7%
	4	523	50	9.6%	0	13.9% 8.7% 6.7% 0.0% 11.5% 12.7% 33.9% 14.5% 5.9% 68.1% 32.9% 50.4% 3.8% 32.9% 33.1% 51.8% 7.8% 4.0% 10.4% 13.7% 49.5% 63.6% 27.9% 14.0% 37.5% 14.4% 50.2% 2.5% 28.7% 12.9% 6.6%
205.11	1	1,323	501	37.9%	152	11.5%
	2	1,076	540	50.2%	125	12.7%
	3	980	722	73.7%	332	13.9% 8.7% 6.7% 0.0% 11.5% 12.7% 33.9% 14.5% 5.9% 68.1% 32.9% 50.4% 3.8% 32.9% 33.1% 51.8% 7.8% 4.0% 10.4% 13.7% 49.5% 63.6% 27.9% 14.0% 37.5% 14.4% 50.2% 2.5% 28.7% 12.9%
205.10	1	1,531	629	41.1%	222	14.5%
	2	1,319	492	37.3%	78	5.9%
	3	927	783	84.5%	631	13.9% 8.7% 6.7% 0.0% 11.5% 12.7% 33.9% 14.5% 5.9% 68.1% 32.9% 50.4% 3.8% 32.9% 33.1% 51.8% 7.8% 4.0% 10.4% 13.7% 49.5% 63.6% 2 27.9% 14.0% 37.5% 14.4% 50.2% 2.5% 28.7% 12.9%
	4	1,137	466	41.0%	374	
Saluda	•					
205.06	1	692	319	46.1%	298	50.4%
	2	1,857	148	8.0%	69	3.8%
	3	1,203	441	36.7%	378	32.9%
Riverbanks						
205.05	1	2,325	821	35.3%	763	33.1%
	2	1,539	1,112	72.3%	797	13.9% 8.7% 6.7% 0.0% 11.5% 12.7% 33.9% 14.5% 5.9% 68.1% 32.9% 50.4% 3.8% 32.9% 33.1% 51.8% 7.8% 4.0% 10.4% 13.7% 49.5% 63.6% 27.9% 14.0% 37.5% 14.4% 50.2% 2.5% 28.7% 12.9%
205.08	1	1,611	87	5.4%	118	7.8%
	2	744	30	4.0%	30	4.0%
205.09	1	1,058	108	10.2%	110	10.4%
	2	949	170	17.9%	128	8.7% 6.7% 0.0% 11.5% 12.7% 33.9% 14.5% 5.9% 68.1% 32.9% 50.4% 3.8% 32.9% 33.1% 51.8% 7.8% 4.0% 10.4% 13.7% 49.5% 63.6% 27.9% 14.0% 37.5% 14.4% 50.2% 2.5% 28.7% 12.9% 6.6%
	3	382	285	74.6%	189	
	4	819	669	81.7%	521	63.6%
Richland County		389,708	214,605	55.1%	101,442	27.9%
Harbison						
103.04	1	1,839	727	39.5%	258	14.0%
	2	1,241	775	62.4%	465	37.5%
	3	1,929	1,156	59.9%	271	14.4%
	4	1,210	1,044	86.3%	608	50.2%
103.09	1	4,328	1,384	32.0%	109	2.5%
	2	2,911	1,099	37.8%	834	28.7%
	3	2,054	920	44.8%	265	12.9%
103.08	1	2,475	1,044	42.2%	158	6.6%
	1					

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Community / census tract	Block group	Total population	Minority	% Minority	Low income	% Low income
St. Andrews						
104.07	1	1,518	1,251	82.4%	354	23.3%
	2	2,201	2,030	92.2%	1,312	59.6%
	3	1,160	946	81.6%	319	27.5%
104.08	1	5,683	4,095	72.1%	59	100.0%
104.09	1	1,627	1,333	81.9%	786	48.3%
104.10	1	1,718	1,401	81.5%	596	34.7%
	2	532	311	58.5%	188	40.1%
	3	1,184	1,130	95.4%	533	45.0%
104.11	1	1,693	1,494	88.2%	1,119	66.1%
	2	433	361	83.4%	161	38.1%
	3	1,181	992	84.0%	784	66.4%
Broad	·					
104.03	1	989	501	50.7%	196	20.1%
	2	489	320	65.4%	273	55.8%
	3	2,319	1,515	65.3%	675	29.1%
104.13	1	1,616	1,198	74.1%	832	52.1%
	2	392	181	46.2%	104	26.5%
104.12	1	1,667	1,304	78.2%	751	45.1%
	2	2,040	1,177	57.7%	1,010	49.5%
Study Area		86,739	43,740	50.4%	21,796	27.1%

Source: US Census Bureau, American Community Survey 5-year Estimates (2009-2013) Tract and Block Group data.

3.1.1 STUDY AREA

Based on the minority and low-income criteria, 39 of the 60 Block Groups are identified as EJ Block Groups within the study area. The population in the 39 Block Groups totals 55,145, or about 64 percent of the total study area population. Of the 39 EJ Block Groups, 27 groups exceed both the minority and low-income EJ criteria.

Table 3.1 presents the Block Groups within the study area, and highlights the EJ Block Groups. In general, there are EJ Block Groups in each of the communities, but the higher concentrations of minority populations are located in Block Groups within the Seven Oaks, St. Andrews and Broad communities (Figures 3a-3g). The higher concentrations of low-income populations are located in Block Groups within the St. Andrews and Broad communities (Figures 3a-3g).

3.1.2 COLUMBIANA

Within the Columbiana community, five out of 11 Block Groups are categorized as EJ Block Groups. Many of these EJ Block Groups are located near the proposed interchange improvements at I-26/Broad River Road, I-

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26/Harbison Boulevard and I-26/Piney Grove Road. Of the five EJ Block Groups, two groups exceed both the minority and low-income EJ criteria (Figure 3a).

3.1.3 SEVEN OAKS

Within the Seven Oaks community, eight out of 11 Block Groups are categorized as EJ Block Groups. Seven Oaks contains the highest concentration of minority and low-income populations within the Lexington County portion of the study area, at 84.5 percent and 68.1 percent respectively, in Census Tract (CT) 205.10, Block Group (BG) 3. Many of the EJ Block Groups are located around the proposed interchange improvements at I-26/Piney Grove Road, I-26/St. Andrews Road, I-20/I-26 and I-20/Bush River Road. Of the eight EJ Block Groups, three groups exceed both the minority and low-income EJ criteria (Figure 3b).

3.1.4 SALUDA

Within the Saluda community, two of the three Block Groups are categorized as EJ Block Groups. These EJ Block Groups are located in the southern portion of the Saluda community near the I-26/US-378 (Sunset Boulevard) interchange. Both of the EJ Block Groups exceed both the minority and low-income EJ criteria (Figure 3c).

3.1.5 RIVERBANKS

Within the Riverbanks community, four of the eight Block Groups are categorized as EJ Block Groups. Riverbanks contains the second highest percentages of minority and low-income populations within the Lexington County portion of the study area, in CT 205.09 BG 4, at 81.7 percent and 63.6 percent respectively. These EJ Block Groups are located in the southern portion of the community, south of the proposed RA footprints. All of the EJ Block Groups exceed both the minority and low-income EJ criteria (Figure 3d).

3.1.6 HARBISON

Within the Harbison community, four of the nine Block Groups are categorized as EJ Block Groups. These EJ Block Groups are located around the proposed interchange improvements at I-26/Harbison Boulevard and I-26/Piney Grove Road. Of the four EJ Block Groups, two exceed both the minority and low-income EJ criteria (Figure 3e).

3.1.7 ST. ANDREWS

Within the St. Andrews community, all of the 11 Block Groups are categorized as EJ Block Groups. St. Andrews contains the highest concentrations of minority populations within the study area, and it contains the highest percentage of minority populations within the study area, in CT 104.10 BG 3, at 95.4 percent and in CT 104.08 BG 2, at 92.2 percent. St. Andrews also contains the highest percentage of low-income populations within the study area in CT 104.08 BG 1 at 100 percent. Of the eleven EJ Block Groups, nine exceed both the minority and low-income EJ criteria (Figure 3f).

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3.1.8 BROAD

Within the Broad community, five of the seven Block Groups are categorized as EJ Block Groups. Nearly the entire community meets the EJ criteria for minority or low-income. Of the six EJ Block Groups, five exceed both the minority and low-income EJ criteria (Figure 3g).

4 Public Involvement

In order to encourage community involvement and to inform the public about the project, several meetings, including four in-person public information meetings, online meetings, stakeholder meetings, and neighborhood and small group meetings, have been held to date. Other outreach methods such as mailings, fliers, e-mail invitations, newspaper ads, social media announcements, and a detailed project website were also used in obtaining public input and sharing project information.

4.1 Environmental Justice/LEP Outreach Strategies

Outreach to special populations was customized to specifically target EJ and LEP communities. Outreach approaches to these communities are listed below and would continue through the duration of the project, asneeded. The project is not anticipated to contribute to any highly disproportionate or adverse effects to EJ or LEP communities; however, these outreach strategies would provide these communities opportunities for engagement and input into the project and the transportation decision-making process. Additional information on public outreach is included in Chapter 4 and in Appendix M.

- seeking out, building and maintaining a comprehensive database of mail and e-mail contact information for EJ groups and advocacy groups
- partnering with senior, disability, social service, transit, and area Hispanic liaison offices to provide information regarding the project. Offices include Hispanic Connections and the South Carolina Commission for Minority Affairs
- advertising meetings in high activity centers along the project corridor using fliers and static displays.
 Centers including Richland County Recreation facilities and City of Columbia Parks and Recreations facilities, churches, gas stations and grocery stores
- publishing newspaper ads and press releases in Spanish for Hispanic publications
- providing interpreters throughout the acquisition process
- translating other project materials to Spanish, as needed
- providing Spanish translators free of charge at public meetings
- engaging audiences through greater use of visuals, larger font and simpler language in fliers, display boards, and presentations
- translating features on the project website to Spanish
- coordinating information distribution to focused communities based on GIS mapping and socioeconomic and demographic information such as EJ insight
 - partnering with local places of worship
 - o providing project information to area grocery stores and gas stations

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4.2 Public Comments

The project used a comment tracking database to document public participation events, contact lists, and public and agency comments. Comments could be submitted at any time during the EIS process via letter, e-mail, and comment forms at public meetings, telephone call, survey, or project website. Comments received via social media were not documented in the public record since social media was informational in nature and not used for making formal comments. Upon receipt, comments (including commenter name, date received, and comment method) were entered into the database. Each comment received a distinct tracking code.

Following initial data entry, comments were categorized by NEPA topic or issue area, with the most common issues being related to alternatives, residential/community impacts, and project cost. Comments received in official comment periods during the NEPA process were reviewed by a project team member. If a comment included a specific question or a request for a response, a project team member responded by e-mail, letter, or phone. As a rule, responses were also sent to all those who submitted comments to confirm receipt of that comment.

Comments received ranged in topics and included:

- traffic (congestion, mobility, construction, signage);
- safety (better lighting, lower speeds);
- natural systems (wetlands, waterways, floodplains, biological resources, conservation, threatened and endangered species);
- communities (land use, community facilities, community services, parks and recreation, noise, aesthetics, displacements, construction);
- infrastructure (bicycle and pedestrian facilities, greenways, transit, utilities);
- project design (elevated highways, off ramp lanes, access points, alternatives);
- coordination (agency coordination, public involvement);
- schedule;
- cost/economics; and,
- cumulative impacts.

Refer to Chapter 4 of the DEIS for additional information on public comments.

4.3 Limited English Proficiency Populations

The Department of Justice's (DOJ) Safe Harbor LEP threshold is met when there is a language group that speaks English less than very well and that either consists of 1,000 adults or comprises 5 percent of the overall study area population, whichever is less. Based on the demographic analysis, the study area exceeds the DOJ's Safe Harbor thresholds for Spanish-speaking populations.

The highest concentrations of the Spanish-speaking populations are located in the Riverbanks and St. Andrews and Saluda communities. While the federal threshold for LEP is not exceeded by Asian-language and Indo-Euro-

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language speaking populations within the study area, there are larger concentrations of Indo-Euro and Asian-language speaking populations within the St. Andrews community.

As part of the DEIS public comment period outreach efforts, Spanish interpreters were available at the public information sessions and meetings, newspaper ads and press releases were translated into Spanish, and project materials were translated into Spanish when needed. Finally, the project website included translating features for project information to help ensure equal opportunity and access for LEP populations. Refer to Section 4.1.1 of this document to learn more about outreach approaches used to specifically target LEP communities.

Figure 4 presents LEP Block Groups that exceed the counties' average for LEP percentages.

5 Environmental Consequences

The following sections address potential effects of the Reasonable Alternatives on the communities within the study area. High priority has been given to avoiding and minimizing community disruption during the evaluation and selection of the Reasonable Alternatives.

5.1 Study Area

Throughout the CSA, RA1 and RA5 Modified would have similar impacts on all communities related to visual/aesthetics; community services; mobility, access and safety; economics; and construction. If specific impacts to these resources occur within a community, they are discussed in the individual community sections below.

5.1.1 VISUAL/AESTHETICS

Overall, the proposed project is not expected to introduce new visual elements, as it would be constructed in an existing transportation corridor within a predominantly developed area. Visual and aesthetic impacts may occur at individual sites within the CSA. These could include removal of trees, lighting issues, elevation changes on various bridge structures, and construction of noise walls (refer to Chapter 3.5 for details on noise walls). Public comments expressing concerns over general aesthetics, such as added greenery, improved signage and artistic materials, were received at various public meetings.

5.1.2 COMMUNITY FACILITIES AND SERVICES

In general, long-term vehicular, pedestrian and bicycle access to community services and facilities within the CSA would not be hindered, and in fact may improve as a result of the proposed project.

Input from Emergency Medical Services (EMS) highlighted concerns that changes in ramp configurations along the interstate may not allow for convenient exiting for emergency vehicles as it does now, which may cause delays for the EMS vehicles. Altering access along the project corridor could affect EMS response times. Additional coordination was conducted with area Fire Departments and the SC Highway Patrol. SCDOT is committed to continued coordination with these agencies as the project progresses in to final design, construction and operation.



No schools or libraries would be displaced as a result of RA1 or RA5 Modified. Input from Lexington County school districts 1, 2 and 5, as well as Richland County school district 1, suggested concerns about traffic on the surrounding roads. This often impacts bus drivers and arrival times, as school buses often utilize the interstate system and surrounding roads. Changes in access for school bus routes would be discussed with the school systems well in advance of when they would actually take place, so the school systems can adjust routes in a timely manner. Requests for coordination during construction were also made from local school districts.

Direct impacts to churches or cemeteries are not anticipated within any community for RA1 or RA5 Modified.

Public utility facilities have been identified within the CSA. Electricity, natural gas, communications (e.g., fiber), and water and sewer lines would be impacted throughout all communities within the CSA under either Reasonable Alternative. However, there are not expected to be any major disruptions to area services. Of particular note is

Seven Oaks

- a high pressure gas line that crosses I-26 between Piney Grove Road and St. Andrews Road
- a telephone/communications duct bank that crosses I-26 and travels along St. Andrews Road
- two power transmission lines that across I-20
- a water line located along I-20

Saluda

a water line located along I-20

Harbison

- a gas line that crosses I-26 between Piney Grove Road and Harbison Boulevard
- cellular towers east of Piney Grove Road
- a power transmission line that crosses I-26 between Piney Grove Road and Harbison Boulevard
- water lines on Harbison Boulevard and Lake Murray Boulevard

St. Andrews

- a high pressure gas line that crosses I-26 between Piney Grove Road and St. Andrews Road
- a high pressure gas line that crosses I-26 between Piney Grove Road and St. Andrews Road
- a telephone/communications duct bank that crosses I-26 and travels along St. Andrews Road
- a water line located between St. Andrews Road and I-20/26
- a sewer main along the railroad between along I-20 near the Broad River

Broad

- a power transmission line on Colonial Life Boulevard
- a water line located between St. Andrews Road and I-20/26
- a sewer main along the railroad between I-26/I-126 and Colonial Live Boulevard
- a sewer main along the railroad between along I-20 near the Broad River
- a sewer pump station located near Colonial Life Boulevard



Utility relocations are not expected to result in major disruptions to services within the communities discussed above.

5.1.3 MOBILITY, ACCESS AND SAFETY

RA1 and RA5 Modified propose the relocation of the I-26/Bush River Road interchange. Access to Bush River Road from I-26 would be relocated under both RAs; therefore, direct access to Bush River Road from I-26 would be affected.

With both Reasonable Alternatives, separating the traffic traveling to and from the mainline interchange using the collector - distributer roads and ramp systems, along with providing additional capacity along the interstate, in anticipated to reduce crashes resulting from vehicle weaving movement conflicts as well as from driver inattention in congestion conditions.

Both RA1 and RA5 Modified propose the completion of a bridge spanning I-26 between Beatty Road and Tram Road. There are three general groups of traffic that may benefit from connecting Jamil Road and Fernandina Road adjacent to Tram Road and Beatty Road. The first is the traffic with origins and destinations located along Jamil Road and Fernandina Road. The second is residential traffic located along Tram Road and Beatty Road near Jamil Road and Fernandina Road. The third is longer distance through traffic traveling between St Andrews Road and Broad River Road that would be provided with an alternative connection via Tram Road and Beatty Road.

To some extent, all three of these groups may benefit from an additional crossing over I-26 that would allow them to avoid traveling to either Piney Grove Road or St Andrews Road to cross the interstate. Currently, more traffic traveling on Jamil Road past Tram Road comes from the north in the direction of Piney Grove Road during both weekday peak hours. Along Fernandina Road at Beatty Road, more of the morning peak hour traffic comes from Piney Grove Road while more of the afternoon peak hour traffic comes from St Andrews Road. During both peak hours, more traffic turning to or from Tram Road and Beatty Road are coming from (or going to) Piney Grove Road, though in the morning peak hours the proportion of traffic is closer to being even.

For traffic with origins and destinations along both Fernandina Road and Jamil Road, the proposed bridge could be attractive by providing a shorter route and result in a reduction of local vehicle-miles traveled along those roads. The bridge could be used to cross I-26 instead of traveling from one street up to Piney Grove Road or down to St Andrews Road and then back along the other street. The distances between the intersections of Jamil Road with Tram Road and Fernandina Road with Beatty Road are approximately 2.5 miles via either Piney Grove Road or St Andrews Road. Providing a crossing over I-26 connecting Tram Road and Beatty Road will shorten these trips. These trips are anticipated to have minimal traffic impacts to Tram Road or Beatty Road, but could reduce travel along Piney Grove Road and St Andrews Road through the Exit 104 and Exit 106 interchanges.

Given the orientation towards I-26 of Tram Road in the northeast direction and Beatty Road in the northwest direction away from St Andrews Road, a bridge connecting Jamil Road and Fernandina Road will be more likely to attract traffic oriented towards Piney Grove Road than towards St Andrews Road. This is consistent with current traffic data. For the residential traffic that use Tram Road or Beatty Road to reach Jamil Road or



Fernandina Road, the proposed bridge would likely divert a portion of existing traffic to the bridge. The effect is likely to be higher on the west side of I-26, since the Whitehall neighborhood, which accesses Tram Road, is substantially larger than the residential areas accessing Beatty Road east of I-26. However, not all portions of the Whitehall neighborhood would be attracted to the proposed bridge crossing. For example, the traffic generated by the portion of Whitehall between Piney Grove Road and Townes Road are more likely to use Piney Grove Road due to closer access and would be less likely to travel through the neighborhood to reach Tram Road.

It is likely that shorter non-work and commuting trips would tend to be diverted away from traveling through Exit 104 and Exit 106 towards the proposed bridge, but longer distance trips would still access those interchanges much as they do today without the bridge. An example would be a resident of Whitehall living near Tram Road wanting to travel to the Costco located on the northeast quadrant of the intersection of Piney Grove Road and Fernandina Road. Currently, this resident is most likely to turn left from Tram Road onto Jamil Road, travel to Piney Grove Road, turn right, cross through the Exit 104 interchange, and turn left onto Fernandina Road to reach Costco. With the bridge, this resident would be more likely to take a more direct route that crosses I-26 on the proposed bridge, turns left onto Fernandina Road, and continues through Piney Grove Road to reach Costco. For a longer distance commuting trip, it may still be easier for the resident to use Jamil Road to reach Piney Grove Road or St Andrews Road than to cross the interstate on the proposed bridge and double back to access I-26 at Exit 104 or Exit 106.

The proposed bridge is not likely to increase longer distance through traffic between St Andrews Road and Broad River Road along Tram Road and Beatty Road. Traffic traveling south/east on Broad River Road are likely to continue finding Piney Grove Road a better alternative to reach St Andrews Road due to the more direct connection, higher speeds, and increased capacity. Traffic traveling south/east on St Andrews Road to Broad River Road will likely continue to use St Andrews Road through Exit 106 since it is a more direct route and less time consuming even with peak hour congestion at the interchange. Traffic traveling to the north/west on Broad River Road will continue to find quicker, more direct access along St Andrews Road than by using Beatty Road and Jamil Road. One exception to this, which could provide additional benefits, is the ability for the bridge to offer another connection point between Fernandina and Jamil during emergency conditions. The connection would allow movement between frontage roads in the case of a collision/mainline road closure on I-26. Traffic would be able to use the connection during an I-26 mainline event and could easily be rerouted onto local streets to mitigate traffic back-ups.

Impacts to travel patterns throughout the rest of the CSA are expected to be minimal. There may be slight differences in the ramp locations and movements at the reconstructed interchanges but overall, community mobility, access and safety are expected to improve from the reduced congestion in the CSA. Except where discussed below, namely the I-26/Bush River Road interchange, impacts to the existing roadway network would be minimal.

Traffic would be temporarily disrupted during construction of the proposed project (for both RA1 and RA5 Modified). A maintenance of traffic plan would be maintained during construction (refer to Chapter 3.13).



5.1.4 ECONOMICS

Providing improved mobility and reduced congestion could enhance economic opportunities for existing businesses and encourage new businesses to locate in the CSA. Unless discussed below, while business access may be reduced temporarily during construction, long-term negative economic effects are not anticipated with RA1 or RA5 Modified. For both RA1 and RA5 Modified, the most obvious benefit of the project is accident cost reduction, meaning a reduction in the cost of crashes and property damage. This benefit would be realized similarly throughout all communities. Additional information on potential economic impacts is discussed below and in Chapter 3.3.

5.1.5 CONSTRUCTION/TEMPORARY IMPACTS

Typical short-term construction impacts include dust, noise and vibration, traffic disruption, congestion and diversion as well as limited or temporary reduction in access for businesses. Motorist, pedestrians, and bicyclists would be temporarily impacted during construction as traffic detours and some temporary road closures would be required and would change frequently throughout construction. Changes in roadway conditions on the I-20/26/126 corridor, along with the arterial roadways and minor roads, could include rerouting of traffic onto other roads, temporary closure of lanes or sections of roads, and temporary lane shifts. Detours and road closures could temporarily increase vehicle commute times, fuel use, and air pollutant emissions. Construction could also temporarily increase response times for emergency service vehicles. In addition, access to residential and commercial areas could also be temporarily disrupted, resulting in longer commute times and a potential loss of revenue for some businesses.

To mitigate these impacts, the construction contractor would develop a maintenance-of-traffic plan that outlines measures to minimize construction impacts on transportation and traffic. A requirement of this plan would be that access to businesses and residences be maintained, to the extent practicable, and that existing roads be kept open to traffic unless alternate routes are provided. During construction, SCDOT will coordinate with local municipalities and/or trail groups to post information on temporary sidewalk or bicycle facility closures and detours.

Temporary construction easements may be needed for some properties to construct the build alternative. These properties are not included in the right-of-way analysis. SCDOT would temporarily use these properties during construction and would provide compensation to the landowner for the temporary use. The property would be fully returned to the owner when the use of the property is no longer required, typically when construction is complete. These properties may be temporarily affected, but no long-term impacts are expected.

The presence of large construction equipment may be perceived as visually disruptive and cause temporary effects to community character. Construction impacts to neighborhoods, businesses and the natural environment will be minimized where possible. Community outreach activities to educate the public on construction activities will occur during pre-construction and construction.



5.1.6 SPECIAL POPULATIONS

Direct impacts to elderly or disabled populations are not anticipated. A final determination will be made upon preliminary contact during the right-of-way acquisition process. Indirect impacts are anticipated on all populations within the study area and are discussed further in Chapter 3.15. LEP populations were identified within the CSA.

5.2 Columbiana

5.2.1 LAND USE

The Columbiana community is located in Richland and Lexington County, situated west of I-26 and north of Piney Grove Road. The majority of the community is residential. There are office uses along Lake Murray Boulevard and St. Andrews Road and commercial uses along Lake Murray Boulevard and Harbison Boulevard. The large, regional commercial centers of Columbiana Centre and Columbiana Station are both located near the Harbison Boulevard interchange at I-26.

Within the Columbiana community, land use impacts are mainly expected to occur at the I-26/Harbison Boulevard interchange where commercial uses would be converted to transportation uses for both RA1 and RA5 Modified. Refer to Chapter 3.1 of the DEIS for additional information on Land Use.

5.2.2 COMMUNITY COHESION

Both RAs would be located in an existing transportation corridor with right-of-way acquisition primarily at interchanges. The character of the neighborhoods is not expected to change as a result of the project, nor will the quality of life be adversely affected in the long-term.

Overall, the proposed project would not create new physical barriers or divide existing neighborhoods, and negative impacts to community cohesion are not anticipated.

5.2.3 VISUAL/AESTHETICS

Visual impacts are expected to be minimal in nearby neighborhoods, such as Country Walk Apartments. A change to the overall visual and aesthetic quality of the neighborhoods of the Columbiana community is not anticipated.

5.2.4 NOISE

With the proposed RA1 and RA5 Modified, widening along the mainlines of I-26, I-20 and I-126 would occur and move the outside travel lanes closer to receptors within neighborhoods along these roadways. Within the Columbiana community, noise receptors are expected to be impacted for both RA1 and RA5 Modified. Refer to Chapter 3.5 and the Noise Technical Report in Appendix I for additional information on potential noise impacts.

Public comments expressing concerns over noise impacts were received from residents living near Jamil Road, including the Lakewood Village Condos, as well as from residents in the Whitehall neighborhood.



5.2.5 COMMUNITY FACILITIES AND SERVICES

Impacts to community facilities and services within the Columbiana community are not expected. Community facilities are listed and shown on Figure 3.4-3.

5.2.6 MOBILITY, ACCESS AND SAFETY

According to local planners there is bicycle and pedestrian activity in the community; access to and safety of these facilities would be maintained with the proposed improvements (RA1 and RA5 Modified). Sidewalk connections are proposed for both Reasonable Alternatives at the I-26/Harbison Boulevard and I-26/Piney Grove Road interchanges. The existing community roadway network would be maintained and roads would not be permanently closed or relocated with either of the Reasonable Alternatives.

5.2.7 ECONOMICS

With both RA1 and RA5 Modified, providing improved mobility and reduced congestion could enhance economic opportunities for existing businesses and encourage new businesses to locate in Columbiana. Please refer to Chapter 3.3 of the DEIS for additional information on potential economic impacts.

5.2.8 ACQUISITIONS

Within the Columbiana community, both RA1 and RA5 Modified would result in the relocation of two residential properties, located within the Country Walk Apartments along Jamil Road, west of I-26. These residential properties consists of two apartment buildings with 10 units each and provides space for 20 families at full occupancy. Partial residential acquisitions are not anticipated. For non-residential properties, RA1 and RA5 Modified would result in the relocation of three properties (three tenants total). Refer to Appendix H of the DEIS for relocation information. Partial acquisitions of non-residential properties are anticipated for RA1 and RA 5 Modified. SCDOT is committed to continuing to work with affected communities throughout the design process.

5.2.9 CONSTRUCTION/TEMPORARY IMPACTS

Construction impacts to neighborhoods, businesses and the natural environment within Columbiana will be minimized where possible.

5.2.10 ENVIRONMENTAL JUSTICE

Within the Columbiana community, the proposed improvements for RA1 and RA5 Modified are expected to result in the relocation of two residential properties within the Country Walk Apartments along Jamil Road, west of I-26. These properties are located in a Block Group that is categorized as an EJ Block Group; however, it is not confirmed that the resident or owner is a minority or low-income person. Of the anticipated non-residential property relocations within Columbiana, all relocations for RA1 and RA5 Modified are located within EJ Block Groups. Refer to Appendix H of the DEIS for relocation information. Partial non-residential property acquisitions within Columbiana are located within EJ Block Groups for RA1 and RA5 Modified.



EJ populations would share in the potential benefits of the proposed project as there would be reduced traffic congestion and improved mobility along the interstates; refer to Section 6.2.1 of this document to learn more about the benefits of the alternatives. Recurring or cumulative effects to EJ populations are not anticipated.

5.3 Seven Oaks

5.3.1 LAND USE

The Seven Oaks community is located in Lexington County, west of I-26 and south of Piney Grove Road. Like the Columbiana community, the majority of the Seven Oaks community is residential. There are some office uses along I-20, and institutional uses are concentrated along St. Andrews Road and Bush River Road. Commercial uses are concentrated near the I-26/St. Andrews Road interchange, while industrial uses are concentrated along the Saluda River.

Within the Seven Oaks community, land use impacts are expected to occur at all interchanges within the community. Commercial, office, residential and industrial uses would be converted to transportation uses for both RA1 and RA5 Modified. Refer to Chapter 3.1 of the DEIS for additional information on Land Use.

5.3.2 COMMUNITY COHESION

Both Reasonable Alternatives would be located in an existing transportation corridor with ROW acquisition primarily at interchanges. The character of the neighborhoods is not expected to change as a result of the project, nor will the quality of life be greatly affected in the long-term. Active homeowners associations were not identified within Seven Oaks, according to Appendix N, Public Involvement Materials, of the DEIS.

Overall, the proposed project would not create new physical barriers or divide existing neighborhoods, and negative impacts to community cohesion are not anticipated.

5.3.3 VISUAL/AESTHETICS

RA5 Modified proposes the construction of a new bridge over I-26 connecting Tram Road to the west and Beatty Road to the east; access to I-26 is not provided by this proposed bridge. The Whitcott neighborhood is approximately 700 feet west of the proposed bridge; however, there is a dense stand of trees between the neighborhood and the proposed bridge that would help to shield the bridge from view.

Residents on the northern side of the St. Andrews apartments may incur minor visual impacts as a result of both Reasonable Alternatives because the interchange would be somewhat closer in proximity. Additionally, the alignments for RA1 and RA5 Modified may result in minor visual impacts for residents on the eastern sides of Stoney Creek Apartments and eastern and southern sides of Peach Tree Apartments as the interchange would be closer in proximity.

5.3.4 NOISE

With the proposed RA1 and RA5 Modified, widening along the mainlines of I-26, I-20 and I-126 would occur and move the outside travel lanes closer to receptors within neighborhoods along these roadways. In addition with



the construction of a new bridge over I-26 connecting Tram Road to the west and Beatty Road to the east, an increase in traffic through the neighborhoods is anticipated although expected to be minor. Within the Seven Oaks community, noise receptors are expected to be impacted for RA1 and RA5 Modified, respectively. The Seven Oaks community contains the highest number of noise impacts.

Public comments expressing concern over noise impacts were received from residents living in the Whitcott neighborhood.

5.3.5 COMMUNITY FACILITIES AND SERVICES

Impacts to community facilities and services within the Seven Oaks community are expected to be minimal. The proposed construction of a bridge over I-26 connecting Tram Road to Beatty Road, in RA5 Modified, may improve connectivity for EMS, police and fire responders between the Seven Oaks and St. Andrews neighborhoods.

Local police officers were asked about access impacts due to the relocation of access to Bush River Road from I-26; concerns were not expressed regarding the relocation of access at Bush River Road and I-26. The relocation of access from I-26 onto Bush River Road is not anticipated to impact EMS, police and fire response times.

The South Carolina Education Association building, located along Zimalcrest Drive is expected to be acquired with RA1 and RA5 Modified. The relocation of this building would not have a significant impact on the Seven Oaks community as the market indicates that there are numerous comparable commercial properties available to meet the needs of the potential displacees. Community facilities within Seven Oaks are listed and shown on Figure 3.4-4.

5.3.6 MOBILITY, ACCESS AND SAFETY

The proposed construction of a new bridge over I-26 to connect Tram Road and Beatty Road, for RA5 Modified, would introduce a new local roadway connection between neighborhoods west of I-26, including Whitcott and Whitehall in the Seven Oaks community, and neighborhoods east of I-26, including Westshire and Homewood Terrace in the St. Andrews community.

Due to the reconfiguration of the I-26/Bush River Road interchange, access to Bush River Road from I-26 would be relocated by both RA1 and RA5 Modified. Direct access to Bush River Road from I-26 would be affected. With the proposed improvements, individuals traveling along I-26 would access existing businesses and residences located at the existing I-26 / Bush River Road exit, by

- (if traveling I-26 west) exiting onto Colonial Life Boulevard and traveling on Colonial Life Boulevard north toward Bush River Road; turning left to go west on Bush River Road would provide access to existing businesses and residences;
- (if traveling I-26 west or I-26 east) exiting onto I-20 west toward Bush River Road; taking the Bush River Road exit and turning left to go east on Bush River road would provide access to existing businesses and residences; or



 (if traveling I-26 east) existing onto Colonial Life Boulevard and turning left onto Colonial Life Boulevard to travel north toward Bush River Road; turning left to go west on Bush River Road would provide access to existing businesses and residences.

As such, direct access to commercial businesses at this location could experience less pass by traffic than currently exists today. These businesses include gas stations, hotels, fast food restaurants, a Walmart and other highway retail. Refer to Section 5.9 in this document for information on potential economic impacts to these businesses. These businesses would still be accessible via the new full access interchange at Colonial Life Boulevard and at the interchange at I-20 and Bush River Road; however, as the project purpose is to reduce traffic congestion along the corridors, indirect effects to these businesses by reduced pass-by traffic are anticipated.

According to local planners there is bicycle and pedestrian activity in the community; access to and safety of these facilities would be maintained. Sidewalk connections are proposed for both Reasonable Alternatives at the I-26/Piney Grove Road, the I-26/St. Andrews Road and the I-20/Bush River Road interchanges. Aside from the proposed modifications of the I-20/Bush River Road, as described above, the existing community roadway network would be maintained.

5.3.7 ECONOMICS

Providing improved mobility and reduced congestion could enhance economic opportunities for existing businesses and encourage new businesses to locate in the Seven Oaks. Refer to Section 5.9 of this document for additional information on potential impacts to businesses located within the Seven Oaks community. And refer to Chapter 3.3 of the DEIS for additional information on potential economic impacts.

5.3.8 ACQUISITIONS

Residential acquisitions are anticipated within the Seven Oaks community for both Reasonable Alternatives. RA 1 is estimated to relocate 10 residential buildings (including 70 multi-family units) and RA 5 Modified is estimated to relocate 17 residential buildings (including 144 multi-family units). Partial acquisitions of residential properties are anticipated for RA 1 and RA 5 Modified. RA1 would result in the relocation of 11 non-residential properties (17 tenants total) while RA 5 Modified would result in the relocation of 13 non-residential properties (19 tenants total). Refer to Appendix H of the DEIS for relocation information. Both Reasonable Alternatives would result in the partial acquisition of non-residential properties.

5.3.9 CONSTRUCTION/TEMPORARY IMPACTS

Construction impacts to neighborhoods, businesses and the natural environment within Seven Oaks would be minimized where possible.

5.3.10 ENVIRONMENTAL JUSTICE

Within the Seven Oaks community, the proposed improvements for RA1 and RA5 Modified are expected to result in the relocation of 72 and 145 residential units, respectively, all of which are located in a Block Group



that is categorized as an EJ area; however, it is not confirmed that the residents or owners are minority or low-income. Of the anticipated 11 and 17 non-residential property relocations within Seven Oaks, for RA1 and RA5 Modified, 10 and 12 relocations are located within EJ Block Groups, respectively. Refer to Appendix H of the DEIS for relocation information. Partial non-residential property acquisitions within Seven Oaks are located within EJ Block Groups for RA1 and RA5 Modified.

Also within the Seven Oaks community, there are commercial uses concentrated near the I-26/Bush River Road interchange. Direct access to commercial businesses at this location could experience less pass by traffic than currently exists today. These businesses include gas stations, hotels, fast food restaurants, a Walmart and other highway retail all of which are located in a Block Group that is categorized as an EJ area. However, it has not confirmed that the business owners are minority or low-income. These businesses would still be accessible via the new full access interchange at Colonial Life Boulevard and at the interchange at I-20 and Bush River Road; however, as the project purpose is to reduce traffic congestion along the corridors, indirect effects to these businesses by reduced pass-by traffic are anticipated. Refer to Chapter 3.15 for additional information on indirect and cumulative impacts.

EJ populations would share in the potential benefits of the proposed project as there would be reduced traffic congestion and improved mobility along the interstates; refer to Section 6.2.1 of this document to learn more about the benefits of the alternatives. Recurring or cumulative effects to EJ populations are not anticipated.

5.4 Saluda

5.4.1 LAND USE

The Saluda community is located in Lexington County, west of the Saluda River and I-26. Much of the area north of I-20 is undeveloped. The majority of the community south of I-20 is residential. There are some office uses scattered throughout the community, and commercial uses are concentrated along US-378 (Sunset Boulevard). The community is anchored by the Lexington Medical Center at the interchange of I-26 and US-378 (Sunset Boulevard) which has plans for the construction of additional buildings on the existing medical campus.

Minimal land use impacts are anticipated within the Saluda community. Refer to Chapter 3.1 of the DEIS for additional information on Land Use.

5.4.2 COMMUNITY COHESION

Both Reasonable Alternatives would be located in an existing transportation corridor with ROW acquisition primarily at interchanges. The character of the neighborhoods is not expected to change as a result of the project, nor will the quality of life be greatly affected in the long-term. Of the neighborhoods located within the Saluda community, Quail Hollow, Quail Hollow Village, Quail Ridge and The Gates at Quail Hollow seem to be the only neighborhoods to have active homeowner associations, according to Appendix N, , of the DEIS.

The acquisition of approximately 0.4 acres of a privately owned property is expected (for both Reasonable Alternatives) from the Quail Hollow Homeowners Association. This area consists of undeveloped land that has



foot trails open to residents of the Quail Hollow neighborhood as well as a boat ramp, dock and pump station. Direct impacts to the boat ramp, dock and pump station are not anticipated.

Overall, the proposed project would not create new physical barriers or divide existing neighborhoods, and negative impacts to community cohesion are not anticipated.

5.4.3 VISUAL/AESTHETICS

Visual changes are likely to occur in the nearby neighborhoods, such as Quail Apartments. Refer to Chapter 3.5 additional information on potential noise barriers.

5.4.4 NOISE

With the proposed RA1 and RA5 Modified, widening along the mainlines of I-26, I-20 and I-126 would occur and move the outside travel lanes closer to receptors within neighborhoods along these roadways. Within the Saluda community, noise receptors are expected to be impacted for both RA1 and RA5 Modified. Refer to Chapter 3.5 and the Noise Technical Report in Appendix I for additional information on potential noise impact.

Public comments expressing concerns over noise impacts were received from residents living in Quail Hollow and Quail Hollow Village.

5.4.5 COMMUNITY FACILITIES AND SERVICES

Impacts to community facilities and services within the Saluda community are not expected; facilities are listed and shown on Figure 3.4-5.

5.4.6 MOBILITY, ACCESS AND SAFETY

Residents in the CSA expressed concerns over access being maintained within the Saluda community, specifically access to the Lexington Medical Center, during construction.

According to local planners there is bicycle and pedestrian activity in the community; access to and safety of these facilities would be maintained. The existing community roadway network would be maintained and permanent road closures or relocations are not expected within the Saluda community.

5.4.7 ECONOMICS

Providing improved mobility and reduced congestion could enhance economic opportunities for existing businesses and encourage new businesses to locate in Saluda. Please refer to Chapter 3.3 of the DEIS for additional information on potential economic impacts.

5.4.8 ACQUISITIONS

The relocation or partial acquisition of residential properties is not anticipated within the Saluda community with either of the Reasonable Alternatives. Relocations of non-residential properties are not anticipated with RA 1 or RA 5 Modified. RA1 and RA 5 would partially acquire non-residential properties within the Saluda community.



5.4.9 CONSTRUCTION/TEMPORARY IMPACTS

Construction impacts to neighborhoods, businesses and the natural environment within Saluda would be minimized where possible.

5.4.10 ENVIRONMENTAL JUSTICE

Residential relocations are not anticipated within the Saluda community with RA1 or RA5 Modified. No relocations of non-residential properties are anticipated within Saluda. Partial non-residential property acquisitions within Saluda are located within EJ Block Groups for RA1 and RA5 Modified.

EJ populations would share in the potential benefits of the proposed project as there would be reduced traffic congestion and improved mobility along the interstates; refer to Section 6.2.1 of this document to learn more about the benefits of the alternatives. Recurring or cumulative effects to EJ populations are not anticipated.

5.5 Riverbanks

5.5.1 LAND USE

The Riverbanks community is located in Lexington County, southeast of I-26 and west of I-126. The majority of this community is located within the city limits of West Columbia and is residential in nature. There are some office and institutional uses scattered throughout the community, and commercial uses are concentrated along the US-378 (Sunset Boulevard) and I-26 corridors. The Riverbanks Zoo and Botanical Garden sits on a large site along the Saluda River; the garden is located in the Riverbanks community, and the zoo is located across the river in the Broad community of Richland County.

Impacts to land use are not anticipated within the Riverbanks community. Refer to Chapter 3.1 of the DEIS for additional information on Land Use.

5.5.2 COMMUNITY COHESION

Both Reasonable Alternatives would be located in an existing transportation corridor with ROW acquisition primarily at interchanges. The character of the neighborhoods is not expected to change as a result of the project, nor will the quality of life be greatly affected in the long-term. Of the neighborhoods within the Saluda community, Colonial Park, Rivers Edge and Westover have active homeowner associations, according to Appendix M, Agency Coordination and Public Involvement, of the DEIS.

Overall, the proposed project would not create new physical barriers or divide existing neighborhoods, and negative impacts to community cohesion are not anticipated.



5.5.3 VISUAL/AESTHETICS

Both RA1 and RA5 Modified have the potential to minimally affect the Saluda Riverwalk Extension of the Three Rivers Greenway⁶ due to the proposed construction of a bridge over the trail, likely resulting in a visual impact for trail users. However, existing bridge structures are in place today within the viewshed and as a result, a change to the overall visual and aesthetic quality of the neighborhoods or community is not anticipated.

5.5.4 NOISE

With the proposed RA1 and RA5 Modified, widening along the mainlines of I-26, I-20 and I-126 would occur and move the outside travel lanes closer to receptors within neighborhoods along these roadways. Within the Riverbanks community, noise receptors are expected to be impacted for both RA1 and RA5 Modified. The Riverbanks community contains the least amount of noise impacts.

5.5.5 COMMUNITY FACILITIES AND SERVICES

Local planners expressed concern and emphasized the importance of preserving the trail access and connectivity. Additional information about impacts to the greenway can be found in Chapter 3.11. Impacts to community facilities and services within the Riverbanks community are expected to be minimal. Community facilities are listed and shown on Figure 3.4-6.

5.5.6 MOBILITY, ACCESS AND SAFETY

As mentioned in Section 5.1.3 of this document, both Reasonable Alternatives would affect the Saluda Riverwalk Extension of the Three Rivers Greenway, located along the northern side of the Saluda River between I-126 and I-26; impacts would be similar for both alternatives. The project would involve constructing a bridge over the trail; bridge pilings would not impact the trail. The long-term access and use of the trail would not be impacted by the project; however, construction would require the temporary closure of the trail for safety reasons. FHWA and SCDOT informed the City of Columbia, the local agency with jurisdiction over the Saluda Riverwalk Extension, of their intent to propose a de minimis finding for the temporary impact to the Saluda Riverwalk Extension. A copy of this letter detailing the basis for the de minimis finding and the City of Columbia's concurrence with this proposed finding is contained in Appendix B, Agency Correspondence. Refer to Chapter 3.11 for additional information.

Accessibility for the neighborhoods within the Riverbanks community and the existing community roadway network would be maintained. According to local planners there is bicycle and pedestrian activity in the community; access to and safety of these facilities would be maintained in the long-term. The existing community roadway network would be maintained and permanent road closures or relocations are not expected within the Riverbanks community.

⁶ The River Alliance. 2015. "Three Rivers Greenway." Accessed September 2, 2015. http://riveralliance.org/3rg.html.



5.5.7 ECONOMICS

Providing improved mobility and reduced congestion could enhance economic opportunities for existing businesses and encourage new businesses to locate in the Riverbanks community. Please refer to Chapter 3.3 of the DEIS for additional information on potential economic impacts.

5.5.8 ACQUISITIONS

Residential or non-residential relocations and acquisitions are not anticipated within the Riverbanks community with either of the Reasonable Alternatives.

5.5.9 CONSTRUCTION/TEMPORARY IMPACTS

Construction impacts to neighborhoods, businesses and the natural environment within Riverbanks would be minimized where possible.

5.5.10 ENVIRONMENTAL JUSTICE

Residential relocations or acquisitions are not anticipated within the Riverbanks community with RA1 or RA5 Modified. Relocations or acquisitions of non-residential properties are not anticipated within Saluda for RA1 and RA5 Modified.

EJ populations would share in the potential benefits of the proposed project as there would be reduced traffic congestion and improved mobility along the interstates; refer to Section 6.2.1 of this document to learn more about the benefits of the alternatives. Recurring or cumulative effects to EJ populations are not anticipated.

5.6 Harbison

5.6.1 LAND USE

The Harbison community is located in Richland County, between I-26 and the Broad River. This community has the greatest amount of undeveloped land in the CSA. The majority of developed portions of the community are residential. There are some office and industrial uses scattered throughout the community, while commercial uses are concentrated along Broad River Road (US-176). This community is anchored by the Harbison Environmental Education Forest (formerly Harbison State Forest), which is situated on more than 2,000 acres in the southern portion of the Harbison community.

Because the Harbison community has the most undeveloped land within the CSA, population and employment is projected to increase greatly through 2040. Improved mobility with the proposed interchange improvements for RA1 and RA5 Modified could increase the desirability for development in the vicinity of the Broad River Road, Lake Murray Road and Piney Grove Road interchanges, all located within the Harbison community. Conversion of land uses to transportation uses consist mainly of commercial around the interchanges located within the Harbison community. Refer to Chapter 3.1 of the DEIS for additional information on Land Use.



5.6.2 COMMUNITY COHESION

Both Reasonable Alternatives would be located in an existing transportation corridor with ROW acquisition primarily at interchanges. The character of the neighborhoods is not expected to change as a result of the project, nor will the quality of life be greatly affected in the long-term. Of all of the neighborhoods within the Harbison community, the Harbison neighborhood seems to have the only active homeowners association, according to Appendix N, Public Involvement Materials, of the DEIS.

Overall, the proposed project would not create new physical barriers or divide existing neighborhoods, and negative impacts to community cohesion are not anticipated.

5.6.3 VISUAL/AESTHETICS

A change to the overall visual and aesthetic quality of the neighborhoods or community is not anticipated. Visual and aesthetic impacts may occur at the Crestmont community with the proposed Fernandina Road connection using Fernandina Court; however, there are presently dense trees between the neighborhood and the proposed roadway that would help to shield the road from view.

5.6.4 NOISE

With the proposed RA1 and RA5 Modified, widening along the mainlines of I-26, I-20 and I-126 would occur and move the outside travel lanes closer to receptors within neighborhoods along these roadways. Within the Harbison community, noise receptors are expected to be impacted for both RA1 and RA5 Modified. Refer to Chapter 3.5 and the Noise Technical Report in Appendix I for additional information on potential noise impacts.

Public comments expressing concerns over noise impacts and the potential for a noise wall in the Fernandina Road area were received.

5.6.5 COMMUNITY FACILITIES AND SERVICES

Impacts to community facilities and services within the Harbison community are expected to be minimal and are listed and shown on Figure 3.4-7.

5.6.6 MOBILITY, ACCESS AND SAFETY

Fernandina Road, a service road east of I-26 and south of Harbison Boulevard, is proposed to be realigned using Fernandina Court, although access to surrounding businesses and neighborhoods would be maintained. Impacts to parking in this area is expected. According to local planners there is bicycle and pedestrian activity in the community; access to and safety of these facilities would be maintained. Sidewalk connections are proposed for both Reasonable Alternatives at the I-26/Harbison Boulevard and the I-26/Piney Grove Road interchanges. The existing community roadway network would be maintained and permanent road closures or relocations are not expected within the Harbison community.



5.6.7 ECONOMICS

Providing improved mobility and reduced congestion could enhance economic opportunities for existing businesses and encourage new businesses to locate in the Harbison community. Please refer to Chapter 3.3 of the DEIS for additional information on potential economic impacts.

5.6.8 ACQUISITIONS

Within the Harbison community, residential relocations are not anticipated for either Reasonable Alternative. For non-residential properties, RA1 and RA 5 Modified would result in the relocation of five properties (seven tenants total, each). Refer to Appendix H of the DEIS for relocation information. Partial acquisitions of residential and non-residential properties are anticipated.

5.6.9 CONSTRUCTION/TEMPORARY IMPACTS

Construction impacts to neighborhoods, businesses and the natural environment within Harbison would be minimized where possible.

5.6.10 ENVIRONMENTAL JUSTICE

The proposed improvements for RA1 and RA5 Modified are not expected to result in the relocation or partial acquisition of any residential properties within an EJ Block Group within the Harbison community. Of the anticipated non-residential property acquisitions within Harbison, acquisitions for RA1 and RA 5 are located within an EJ Block Group. Refer to Appendix H of the DEIS for relocation information. Partial non-residential property acquisitions within Harbison are located within EJ Block Groups for RA1 and RA5 Modified.

EJ populations would share in the potential benefits of the proposed project as there would be reduced traffic congestion and improved mobility along the interstates; refer to Section 6.2.1 of the document to learn more about the benefits of the alternatives. Recurring or cumulative effects to EJ populations are not anticipated.

5.7 St. Andrews

5.7.1 LAND USE

The St. Andrews community is located in Richland County, east of the Saluda River and I-26 and just northeast of the I-20/26 interchange. Several correctional institutions encompass large tracts of land in this community. The remainder of the community is predominantly residential. Commercial uses are concentrated along Broad River Road.

Conversion of land use to transportation uses consist mainly of commercial, office and residential around the interchanges located within the St. Andrews community. The interchanges within the St. Andrews community are generally already developed so any land use impacts are expected to occur as redevelopment or infill development. Refer to Chapter 3.1 of the DEIS for additional information on Land Use.



5.7.2 COMMUNITY COHESION

Both Reasonable Alternatives would be located in an existing transportation corridor with ROW acquisition primarily at interchanges. The character of the neighborhoods is not expected to change as a result of the project, nor will the quality of life be greatly affected in the long-term. Active homeowner associations were not identified in the community, according to Appendix N, Public Involvement, of the DEIS.

A portion of the Richland County Recreation Commission property, located north of I-20 and east of Broad River Road, would be affected by the proposed right-of-way expansion. Approximately 0.2 acres would be acquired as part of RA5 Modified.

Overall, the proposed project would not create new physical barriers or divide existing neighborhoods, and negative impacts to community cohesion are not anticipated.

5.7.3 VISUAL/AESTHETICS

Visual changes are likely to occur in those nearby neighborhoods, such as Raintree Apartments, Crossroads, Cherokee Gardens, Briargate and Emerald Valley. A change to the overall visual and aesthetic quality of the neighborhoods or community is not anticipated. Refer to Chapter 3.5 for additional information on potential noise barriers.

5.7.4 NOISE

With the proposed RA1 and RA5 Modified, widening along the mainlines of I-26, I-20 and I-126 would occur and move the outside travel lanes closer to receptors within neighborhoods along these roadways. Within the St. Andrews community, noise receptors are expected to be impacted for both RA1 and RA5 Modified. Several impacted receptors are located within the Willow Creek neighborhood; however, since the noise study was conducted, most of the residences within Willow Creek have been demolished. Furthermore, building permits have not been obtained for the rebuild of Willow Creek; thus, based on unavailable information, noise receptors in the Willow Creek neighborhood were not modeled in the noise analysis. Refer to Chapter 3.5 and the Noise Technical Report in Appendix I for additional information on potential noise impacts.

5.7.5 COMMUNITY FACILITIES AND SERVICES

Impacts to community facilities and services within the St. Andrews community are expected to be minimal. The proposed construction of a bridge over I-26 connecting Tram Road to Beatty Road, in RA5 Modified, may provide EMS, police and fire responders with better connectivity between the Seven Oaks and St. Andrews neighborhoods. Community facilities are listed and shown on Figure 3.4-8.

5.7.6 MOBILITY, ACCESS AND SAFETY

The proposed construction of a new bridge over I-26 to connect Tram Road and Beatty Road would introduce a new local roadway connection between neighborhoods west of I-26, including Whitcott and Whitehall in the S community, and neighborhoods east of I-26, including Westshire and Homewood Terrace in the St. Andrews community.



According to local planners there is bicycle and pedestrian activity in the community; and access to and safety of these facilities would be maintained. Sidewalk connections are proposed for both Reasonable Alternatives at the I-26/Piney Grove Road, I-26/St. Andrews Road and the I-20/Broad River Road interchanges. The existing community roadway network would be maintained and permanent road closures or relocations are not expected with either of the Reasonable Alternatives.

5.7.7 ECONOMICS

Providing improved mobility and reduced congestion could enhance economic opportunities for existing businesses and encourage new businesses to locate in the St. Andrews community. Please refer to Chapter 3.3 of the DEIS for additional information on potential economic impacts.

5.7.8 ACQUISITIONS

RA1 and RA 5 Modified are estimated to relocate four residential properties. It is anticipated that RA1 would result in the relocation of 11 non-residential properties (16 tenants total) while RA 5 Modified would result in the relocation of 12 non-residential properties (17 tenants total). Refer to Appendix H of the DEIS for relocation information. Partial acquisitions of residential and non-residential properties are anticipated with both alternatives.

5.7.9 CONSTRUCTION/TEMPORARY IMPACTS

Construction impacts to neighborhoods, businesses and the natural environment within St. Andrews would be minimized where possible.

5.7.10 ENVIRONMENTAL JUSTICE

The proposed improvements for RA1 and RA 5 Modified are expected to result in the relocation of 4 residential properties, all of which are located in Block Groups that are categorized as EJ Block Groups; however, it is not confirmed that the residents or owners are minority or low-income. RA 1 is expected to result in the relocation of 11 non-residential properties, while RA 5 Modified is expected to result in the relocation of 12 non-residential properties. Non-residential relocations are anticipated within EJ Block Groups. Refer to Appendix H of the DEIS for relocation information. Partial non-residential property acquisitions within St. Andrews are located within EJ Block Groups for RA1 and RA5 Modified.

EJ populations would share in the potential benefits of the proposed project as there would be reduced traffic congestion and improved mobility along the interstates; refer to Section 6.3.2 of this document to learn more about the benefits of the alternatives. Recurring or cumulative effects to EJ populations are not anticipated.

5.8 Broad

5.8.1 LAND USE

The Broad community is located in Richland County, situated between I-20 and I-126. The majority of the community is residential. There are some office and industrial uses scattered throughout the community, and



commercial uses are concentrated along Bush River Road and Greystone Boulevard. The community is anchored by the Dutch Square Center, a large mall on Bush River Road. The Riverbanks Zoo is located in the southern portion of the community.

Impacts to land use around the interchanges located within the Broad community consist mainly of commercial, industrial and office uses. The interchanges within the Broad community are generally already developed so any land use impacts are expected to occur as redevelopment or infill development. According to the *Richland Renaissance Plan*⁷ (approved in 2017), a "start center" is being proposed near Bush River Road and Broad River Road. The start center would house a multi-modal transit center, business incubator and other attractions and would require site acquisition and re-development. Improved mobility with the proposed interchange improvements at I-126/Colonial Life Boulevard and I-20/Broad River Road for RA1 and RA5 Modified may accelerate this development. Refer to Chapter 3.1 of the DEIS for additional information on Land Use.

5.8.2 COMMUNITY COHESION

Both Reasonable Alternatives would be located in an existing transportation corridor with ROW acquisition primarily at interchanges. Overall, the proposed project would not create new physical barriers or divide existing neighborhoods, and community cohesion is not expected to be impacted. The character of the neighborhoods is not expected to change as a result of the project, nor will the quality of life be greatly affected in the long-term. Of all of the neighborhoods located within the Broad community, Skyland Estates seems to have the only active homeowner association, according to Appendix N, Public Involvement Materials, of the DEIS.

Overall, the proposed project would not create new physical barriers or divide existing neighborhoods, and negative impacts to community cohesion are not anticipated.

5.8.3 VISUAL/AESTHETICS

Within the Broad community, both Reasonable Alternative alignments traverse through the Skyview Terrace neighborhood between the I-20/I-26 interchange and the Broad River Road interchange along I-20. Both alternative alignments would be somewhat closer to residents within the neighborhood, particularly residents on the northern side. However, the RAs are not expected to introduce new visual elements to the community as a whole, as they would be constructed in an existing transportation corridor within an urban area. Minor visual impacts are likely to occur in nearby neighborhoods, such as Three Rivers Apartments, Ashton at Longcreek, Carnaby Square and Essex Park Apartments. A change to the overall visual and aesthetic quality of the neighborhoods or community is not anticipated.

5.8.4 NOISE

With the proposed RA1 and RA5 Modified, widening along the mainlines of I-26, I-20 and I-126 would occur and move the outside travel lanes closer to receptors within neighborhoods along these roadways. Within the Broad

⁷ Richland County. 2017. "Richland Renaissance Master Plan." Accessed January 31, 2018. http://rcgov.us/Richland-Next



community, noise receptors are expected to be impacted for RA1 and RA5 Modified, respectively. Refer to Chapter 3.5 and the Noise Technical Report in Appendix I for additional information on potential noise impacts.

5.8.5 COMMUNITY FACILITIES AND SERVICES

Within the Broad community, the ITT Technical Institute and the Kenneth Shuler School of Cosmetology along Browning Road is expected to be acquired with both RA1 and RA5 Modified. Impacts to other community facilities and services within the Broad community are expected to be minimal; community facilities are listed and shown on Figure 3.4-9.

5.8.6 MOBILITY, ACCESS AND SAFETY

Due to the redesign of the I-26/Bush River Road interchange, access to Bush River Road from I-26 would be relocated by both RA1 and RA5 Modified. Direct access to Bush River Road from I-26 would be affected. With the proposed improvements, individuals traveling along I-26 would access existing businesses and residences, located at the existing I-26 / Bush River Road exit, by

- (if traveling I-26 west) exiting onto Colonial Life Boulevard and traveling on Colonial Life Boulevard north toward Bush River Road; turning left to go west on Bush River Road would provide access to existing businesses and residences;
- (if traveling I-26 west or I-26 east) exiting onto I-20 west toward Bush River Road; taking the Bush River Road exit and turning left to go east on Bush River road would provide access to existing businesses and residences; or
- (if traveling I-26 east)existing onto Colonial Life Boulevard and turning left onto Colonial Life Boulevard to travel north toward Bush River Road; turning left to go west on Bush River Road would provide access to existing businesses and residences.

As such, direct access to commercial businesses at this location would experience less pass by traffic than currently exists today. These businesses include gas stations, hotels, fast food restaurants, a Walmart and other highway retail. These businesses would still be accessible via the interchange at I-20 and Bush River Road; however, as the project purpose is to reduce traffic congestion along the corridors, indirect effects to these businesses by reduced pass-by traffic are anticipated. Refer to Chapter 3.15 for additional information on indirect and cumulative impacts.

According to local planners there is bicycle and pedestrian activity in the community; access to and safety of these facilities would be maintained. Sidewalk connections are proposed for both Reasonable Alternatives at the I-20/Broad River Road, I-26/Bush River Road and the I-126/Colonial Life Boulevard interchanges.

5.8.7 ECONOMICS

Providing improved mobility and reduced congestion could enhance economic opportunities for existing businesses and encourage new businesses to locate in the Broad community. Refer to Section 5.9 for additional information on potential impacts to businesses located within the Broad community. And refer to Chapter 3.3 of the DEIS for additional information on potential economic impacts.



5.8.8 ACQUISITIONS

The Broad community contains the highest amount of anticipated residential relocations out of all of the communities, with RA1 expected to result in the relocation of 14 residential properties and RA5 Modified is estimated to result in the relocation of 15 residential properties. For non-residential properties, RA1 would result in the relocation of six properties (nine tenants total) while RA 5 Modified would result in the relocation of seven properties (10 tenants total). Refer to Appendix H of the DEIS for relocation information. Partial acquisitions of residential and non-residential properties are anticipated.

5.8.9 CONSTRUCTION/TEMPORARY IMPACTS

Construction impacts to neighborhoods, businesses and the natural environment within the Broad community would be minimized where possible.

5.8.10 ENVIRONMENTAL JUSTICE

The proposed improvements for RA1 are expected to result in the relocation of 14 residential properties while RA5 Modified is expected to result in the relocation of 15 residential properties. Of the total residential properties to be acquired only one is located in an EJ Block Group; however, it is not confirmed that the resident or owner is minority or low-income. One anticipated relocations of non-residential properties within the Broad community is located within an EJ Block Group. Refer to Appendix H of the DEIS for relocation information. Partial non-residential property acquisitions within Broad are located within EJ Block Groups for RA1 and RA5 Modified.

Also within the Broad community, there are commercial uses concentrated near the I-26/Bush River Road interchange. Direct access to commercial businesses at this location would experience less pass by traffic than currently exists today. These businesses include limited-service restaurants, convenience stores, and gas stations all of which are located in a Block Group that is categorized as an EJ area.

EJ populations would share in the potential benefits of the proposed project as there would be reduced traffic congestion and improved mobility along the interstates; refer to Section 6.3.2to learn more about the benefits of the alternatives. Recurring or cumulative effects to EJ populations are not anticipated.

5.9 Businesses within the Study Area

It is anticipated that businesses along the project corridor would benefit from the enhanced access provided at the interchange locations of either Reasonable Alternative. At some interchange locations, this enhanced access may accelerate development of commercial or industrial uses; or would spur redevelopment, infill development, and/or revitalization with the commercial areas of the corridor. The primary location in the corridor where negative impacts to businesses could occur is within the Broad and Seven Oaks Community, near to the I-26/Bush River Road interchange. Therefore, the remainder of this section focuses specifically on that business community and the potential impacts to it.

5.9.1 I-26 / BUSH RIVER ROAD INTERCHANGE

Congestion and high crash rates on I-26 in the vicinity of the I-20/I-26 and I-26/Bush River Road interchange locations are attributed in part to abrupt driving maneuvers due to the multiple weaving movements that occur at these locations. To eliminate traffic conflict points and weaving maneuvers between these interchange locations, the I-26/Bush River Road interchange would be relocated approximately 0.7 miles to the southeast to an improved, full access interchange at Colonial Life Boulevard under both RA1 and RA5 Modified (Figure 5). During project development, some business owners voiced their concerns about the closure of the existing I-26/Bush River Road interchange and relocation to Colonial Life Boulevard. Business owners arranged a meeting that SCDOT attended on March 1, 2018. As a result of these discussions, the project team conducted further investigation on the potential impact to these businesses.

Table 5.1 Peak-hour Traffic Volumes on Bush River Road

Bush River Road	2015 Volume (Existing)			
	AM	AM		
Location	ЕВ	WB	ЕВ	WB
I-26 WB Ramps to Arrowwood Rd	1,752	950	1,239	1,727

Bush River Road	2040 Vo	2040 Volume (No-Build)					
	AM		PM				
Location	ЕВ	WB	ЕВ	WB			
I-26 WB Ramps to Arrowwood Rd	1,880	1,076	1,262	1,693			

Bush River Road	2040 Vol	2040 Volume (RA1)		
	AM		PM	
Location	EB	WB	EB	WB
Morninghill Dr to Arrowwood Rd	1.323	639	696	1,299
Change between Existing Conditions and RA1	-24%	-33%	-44%	-24%
Change between No-Build Conditions and RA1	-30%	-40%	-45%	-24%

Bush River Road	2040 Volume (RA5 Modified)			
	AM		PM	
Location	EB	WB	EB	WB
Morninghill Dr to Arrowwood Rd	1,629	550	803	1,192
Change between Existing Conditions and RA5 Modified	-7%	-42%	-35%	-31%
Change between No-Build Conditions and RA5 Modified	-13%	-49%	-37%	-30%



To further understand the travel patterns on Bush River Road the project team analyzed origin-destination (O-D) data. Origin is where a trip begins, and destination is where a trip ends. O-D data was collected in the Carolina

Crossroads project study area and was gathered from the South Carolina Statewide Travel Demand Model (SCSWM). Understanding where traffic is coming from and going to, can help to determine the possible impact on traffic of the reconfiguration of the I-26/Bush River Road interchange. As such, two destination zones along Bush River Road were identified. The first zone was located west of I-26, south of Bush River Road, opposite Zimalcrest Drive (approximately coinciding with the location of the Walmart shopping center). The second zone was located east of I-26, north of Bush River Road (coinciding with N Arrowwood Road).

As summarized in the following tables, the majority of local trips, originating inside of the study area, currently do not use the I-26 Bush River Road (Exit 108) off-ramps to access Bush River Road

To understand the travel patterns on Bush River Road, the project team analyzed origin-destination (O-D) data. Origin is where a trip begins and destination is where a trip ends. The data revealed that most traffic on Bush River Road is not coming from or going to I-26.

destinations at Zimalcrest Drive and Arrowwood Road. Instead, they are using alternate routes. With the exception of the PM WB I-26 ramp movements, alternate route access accounts for 80 percent to 90 percent of traffic with Zimalcrest and Arrowwood destinations during the morning and afternoon peak periods. In other words, the majority of the traffic on Bush River Road is local traffic that is not coming from or going to I-26 via the I-26/Bush River Road interchange. Likewise, under the No-build alternative, the majority of the traffic on Bush River Road would continue to be local traffic that is not utilizing the I-26/Bush River Road interchange.

Table 5.2 Exit 108 Destination Trips 2015 AM Peak Hour

Origins	Destination	ıs						
		Zimalo	rest Dr		N Arrowwood Rd			
	Alternate route used	I-26 EB off-ramp	I-26 WB off-ramp	Total	Alternate route used	I-26 EB off-ramp	I-26 WB off-ramp	Total
From I-26 EB	0	3	N/A	3	0	10	N/A	10
From I-26 WB	0	N/A	8	8	0	N/A	50	50
From I-20 WB	0	42	N/A	42	0	0	N/A	0
From I-20 EB	41	0	N/A	41	0	0	N/A	0
Local trips	221	11	6	238	273	4	17	294
Total	262	56	14	332	273	14	67	354

Table 5.3 Exit 108 Destination Trips 2015 PM Peak Hour

Origins	Destinations							
	Zimalcrest D	r			N Arrowwood Rd			
	Alternative route used	I-26 EB off-ramp	I-26 WB off-ramp	Total	Alternative route used	I-26 EB off-ramp	I-26 WB off-ramp	Total
From I-26 EB	0	0	N/A	0	0	12	N/A	12
From I-26 WB	0	N/A	11	11	0	N/A	148	148
From I-20 WB	0	6	N/A	6	0	0	N/A	0
From I-20 EB	29	0	N/A	29	0	0	N/A	0
Local Trips	185	0	9	194	21	49	45	115
Total	214	6	20	240	21	61	193	275

Table 5.4 Exit 108 Destination Trips 2040 AM Peak Hour

Origins	Destinations	;							
	Zimalcrest D	r			N Arrowwoo	N Arrowwood Rd			
	Alternative	Alternative I-26 EB I-26 WB Total				I-26 EB	I-26 WB	Total	
	route used	off-ramp	off-ramp		route used	off-ramp	off-ramp		
From I-26 EB	0	3	N/A	3	0	11	N/A	11	
From I-26 WB	0	N/A	10	10	0	N/A	60	60	
From I-20 WB	0	51	N/A	51	0	0	N/A	0	
From I-20 EB	49	0	N/A	49	0	0	N/A	0	
Local Trips	263	12	8	283	325	5	21	351	
Total	312	66	18	396	325	16	81	422	

Table 5.5 Exit 108 Destination Trips 2040 PM Peak Hour

Origins	Destinations	;						
	Zimalcrest D	r			N Arrowwood Rd			
	Alternative	Alternative I-26 EB I-26 WB Total				I-26 EB	I-26 WB	Total
	route used	off-ramp	off-ramp		route used	off-ramp	off-ramp	
From I-26 EB	0	1	N/A	1	0	14	N/A	14
	-				-			
From I-26 WB	0	N/A	14	14	0	N/A	173	173
From I-20 WB	0	8	N/A	8	0	0	N/A	0
From I-20 EB	34	0	N/A	34	0	0	N/A	0
Local Trips	221	0	12	233	24	59	52	135
Total	255	9	26	290	24	73	225	322



Though most of the traffic on Bush River Road is not going to or coming from I-26, the 30-40 percent decrease in pass-by traffic that would occur during peak travel hours would potentially have an impact on businesses on Bush River Road in the immediate vicinity of the existing interchange. To assess the potential economic impacts of the reconfiguration of I-26/Bush River Road, data on businesses located in the immediate vicinity of the interchange were obtained from the ReferenceUSA U.S. Businesses database. This included the business types, number of employees, and sales volumes.

The potential economic impact area was defined as follows, accounting for the presence of two major roadway nodes nearby (I-20/ Bush River Road interchange and Broad River Road/Bush River Road intersection):

- West of I-26: the area is delineated by Stoop Creek to the west, I-20 to the north, and Saluda River to the south.
- East of I-26: the area is delineated by Arrowwood Road⁹ to the east and a ½-mile buffer on either side of Bush River Road.

While businesses at the existing I-26/Bush River Road interchange would still be accessible via the I-126/Colonial Life Boulevard and I-20/Bush River Road interchanges, businesses on Bush River Road in the immediate vicinity of the existing interchange (refer to Figure 3.3.-10) would experience an approximate 30 to 40 percent decrease in pass-by traffic during the peak travel hours. ¹⁰ A signing plan would be evaluated during final design to notify commuters of the new traffic patterns. Short-term construction related impacts to businesses are discussed in Section 3.3.4.5 in Chapter 3.3.

Businesses in the vicinity of the existing I-26/Bush River Road interchange would experience an approximate 30 to 40 percent decrease in pass-by traffic as a result of either RA1 or RA5 Modified.

A map of the impact area is represented in Figure 6.

The analysis focused on businesses that would be the most affected by the reconfiguration of I-26/Bush River Road interchange, i.e. businesses that are heavily dependent on pass-by traffic because of the nature of the business. This included limited-service restaurants, convenience stores, gas stations, and retail stores, for a total of 10 businesses. Among retail stores, department stores were deemed not dependent on pass-by traffic and were removed from the sample. Likewise, hotels/motels were removed from the sample as these businesses are typically "destination" businesses. While interstate interchanges are common locations for hotels/motels for ease of access to travelers, business and leisure travelers typically reserve hotel rooms in advance, including the day of arrival.

⁸ ReferenceUSA gathers information from multiple directories and event-driven sources, including new business filings, daily utility connections, press releases, corporate websites, annual reports, user-generated feedback, and thousands of Yellow Page directories. ReferenceUSA complements and verifies this information by conducting extensive phone surveys of businesses.

⁹ Including businesses located immediately on the east side of Arrowwood Road.

¹⁰ SCDOT. 2018. Alternatives Traffic Analysis Carolina Crossroads I-20/26/126 Corridor Improvements, Lexington and Richland Counties, South Carolina. Prepared by STV.



The data collected on each of these businesses are presented in the table below.

Table 5.6 List of Affected Businesses

Company name	Address	Primary NAICS	Primary NAICS description	Industry description	Employee size	Sales volume
Captain D's Seafood	656 Bush River Rd	722513	Limited-service restaurants	Accommodation and food services	25	\$1,185,000
City Fuel Food	1301 Bush River Rd	445120	Convenience stores	Retail trade	4	\$842,000
Cook Out	600 Bush River Rd	722513	Limited-service restaurants	Accommodation and food services	7	\$332,000
Express Zone Citgo	830 Bush River Rd	447190	Other gasoline stations	Retail trade	N/A	N/A
Foodmart Sunoco	1203 Bush River Rd	447190	Other gasoline stations	Retail trade	5	\$3,556,000
Murphy USA	1330 Bush River Rd	445120	Convenience stores	Retail trade	7	\$1,473,000
Noisy Wings	1501 Bush River Rd	722513	Limited-service restaurants	Accommodation and food services	3	\$128,000
Schlotzsky's	529 Bush River Rd	722513	Limited-service restaurants	Accommodation and food services	20	\$948,000
Subway	800 Bush River Rd	722513	Limited-service restaurants	Accommodation and food services	8	\$379,000
Wing Street	1320 Bush River Rd # C4	722513	Limited-service restaurants	Accommodation and food services	20	\$850,000
All affected businesses	N/A	N/A	N/A	N/A	99	\$9,693,000
All businesses in impact area	N/A	N/A	N/A	N/A	1,264	\$256,130,000

Source: ReferenceUSA

5.9.2 CONCLUSION

Though the majority of trips on Bush River Road are local trips that are not coming from or going to I-26 via the I-26/Bush River Road interchange, the projected reduction in traffic volumes on Bush River Road in the vicinity of the I-26 interchange could result in an impact to business and revenue of the surrounding businesses with the most negative impact relating to the 10 aforementioned businesses that are dependent on pass-by traffic. Ultimately, 10 businesses were considered in the analysis, including six limited-service restaurants, and four convenience stores and gas stations, accounting for 99 jobs and \$9.7 million in annual sales volume. These businesses represent 7.8 percent of total employment and 3.8 percent of total sales volume in the impact area. It is important to note that economics are difficult to forecast, information for forecasting 20 years is unavailable and control over development of local land use is not under the control of SCDOT.

¹¹ These estimates do not account for the Express Zone Citgo gas station for which no information was available from the ReferenceUSA database.



5.10 Travel Patterns and Access at Interchanges

Due to the majority of travel pattern and access modifications occurring at the interchanges within the CSA, this section discusses changes in access, where applicable, and how any access change may impact surrounding communities and neighborhoods.

5.10.1 I-26 / BROAD RIVER ROAD

The I-26 / Broad River Road interchange is located in the Columbiana and Harbison communities and is currently a partial cloverleaf interchange with directional loop off-ramps in the eastbound and westbound direction. Changes to the existing configuration of this interchange are not proposed as part of the Reasonable Alternatives, therefore change in access is not anticipated.

5.10.2 I-26 / LAKE MURRAY BOULEVARD

The I-26 / Lake Murray Boulevard interchange is located in the Columbiana and Harbison communities and is currently a partial cloverleaf interchange with directional loop off-ramps in the eastbound and westbound direction. Changes to the existing configuration of this interchange are not proposed as part of the Reasonable Alternatives, therefore change in access is not anticipated.

5.10.3 I-26 / HARBISON BOULEVARD

The I-26 / Harbison Boulevard interchange is located in the Columbiana and Harbison communities and is currently configured as a partial cloverleaf incorporating a westbound loop ramp off-ramp. The proposed interchange for both RA1 and RA5 Modified is a diamond interchange that replaces the existing westbound loop off-ramp with a westbound off-ramp. The proposed interchange concept also shifts the westbound on-ramp to west of its existing location opposite Woodcross Drive, to opposite the proposed westbound off-ramp. Access will change slightly for traffic currently using the westbound loop off-ramp. The existing right turn movement from the loop off-ramp to the retail development located to the west on Harbison Boulevard would become a left turn movement on the proposed westbound off-ramp, and the existing left turn movement toward Broad River Road would become a right turn movement. Traffic to/from Woodcross Drive will no longer have direct access from the westbound off-ramp or to the westbound on-ramp. Access to surrounding businesses and residences at Woodcross Drive and Harbison Boulevard would be maintained.

Southeast of this interchange, a new connection for Fernandina Road is proposed to connect to Woodcross Drive via existing Fernandina Court. This would shift access to Fernandina Road, from Woodcross Drive, approximately 600 feet southeast of its current location. Access to surrounding businesses and residences in this area would be maintained.

5.10.4 I-26 / PINEY GROVE Road

The I-26 / Piney Grove Road interchange is located in the Columbiana, Harbison, Seven Oaks and St. Andrews communities and is currently configured as a diamond interchange. Changes to the existing configuration are not proposed as part of RA1 or RA5 Modified. The only change to the interchange would be the provision of a



second left turn lane on westbound Piney Grove Road to facilitate traffic movements entering the eastbound on-ramp to I-26. Change in access for surrounding businesses and residences is not anticipated.

5.10.5 TRAM ROAD – BEATTY ROAD

Though not an interchange, RA 1 and RA5 Modified proposes the construction of a bridge over I-26 to connect Tram Road to Beatty Road, between the I-26 / Piney Grove Road interchange and the I-26 / St. Andrews Boulevard interchange; this proposed bridge is located in the Seven Oaks and St. Andrews communities. This bridge would provide a new connection and access to the surrounding neighborhoods of Seven Oaks and St. Andrews communities. Access to Jamil Road from Tram Road would shift slightly south of its existing location and connect at Tram Road and Fredricksburg Way, near the entrance of the Whitehall neighborhood. Access to Beatty Road from Fernandina Road would shift slightly south of its existing location, impacting parking at an automotive dealer. Access to surrounding businesses and residences in these areas would be maintained.

5.10.6 I-26 / ST. ANDREWS ROAD

The I-26 / St. Andrews Road interchange is located in the Seven Oaks and St. Andrews communities and is currently a partial cloverleaf. The existing westbound off-ramp providing access to eastbound St. Andrews Road also has a connection to Burning Tree Drive to facilitate the movement of off-ramp traffic to that road and to Fernandina Road. The proposed interchange configuration for both RA1 and RA5 Modified is a Single Point Urban Interchange (SPUI). This SPUI maintains the connection from the westbound off-ramp to Burning Tree Drive, but eliminates the directional loop ramps. Westbound St. Andrews Road traffic that currently use the loop on-ramp to eastbound I-26 will now turn left onto an eastbound on-ramp that is joined by a ramp connection for eastbound St. Andrews Road traffic. Westbound I-26 traffic that uses the existing loop off-ramp to westbound St. Andrews Road will exit on the same off-ramp as traffic traveling to eastbound St. Andrews Road, and will turn left at the SPUI intersection.

5.10.7 I-26 / I-20

The I-26 / I-20 interchange is located in the Seven Oaks, St. Andrews and Broad communities and is currently a full cloverleaf. RA1 proposes a turbine interchange that would eliminate all loop ramps. RA5 Modified proposes a directional interchange that would eliminate two ramps and reconfigure the other loop ramps. Surrounding service roads, including Berryhill Drive, Burning Tree Drive, Browning Road and Frontage Road, would shift slightly to accommodate the new interchange configuration, but access to nearby businesses and residences in the surrounding areas would be maintained.

5.10.8 I-26 / BUSH RIVER ROAD

The I-26 / Bush River Road interchange is located in the Seven Oaks and Broad communities and is currently a partial cloverleaf with loop on-ramps to eastbound and westbound I-26. With RA1 and RA5 Modified, the existing ramps to/from Bush River Road are eliminated. This change in access would have impacts on surrounding businesses and residences along Bush River Road. Due to the redesign of the I-26/Bush River Road interchange, access to Bush River Road from I-26 would be relocated by both RA1 and RA5 Modified; direct access to Bush River Road from I-26 would be affected. As such, direct access to commercial businesses at this



location would experience less pass by traffic that currently exists today. These businesses would still be accessible via the interchange relocation; however, as the project purpose is to reduce traffic congestion along the corridors, there may be a potential indirect effect of reduced pass-by traffic to the business in general. Indirect effects to these businesses are anticipated.

5.10.9 I-20 / BUSH RIVER ROAD

The I-20 / Bush River Road interchange is located in the Seven Oaks community and is currently a partial cloverleaf. With RA1 and RA5 Modified, a diverging diamond interchange (DDI) is proposed. This DDI will require traffic turning right to use the directional loop on-ramp from eastbound Bush River Road to eastbound I-20 to turn left onto an on-ramp that also is used by right turning traffic from westbound Bush River Road. The proposed DDI places a western crossover intersection very close to the existing intersection of Berryhill Road. This will require modifying the Berryhill Road intersection from a full movement intersection to a right in/out intersection. Access to the businesses and residences surrounding the existing I-26 and Bush River Road is provided at this I-20 / Bush River Road interchange. The construction of a bridge over I-20, connecting Executive Center Drive and Rockland Road is proposed northeast of the I-20 / Bush River Road interchange; this new connection would provide additional access between the business park and businesses along Bush River Road, east of I-20.

5.10.10 I-20 / BROAD RIVER ROAD

The I-20 / Broad River Road interchange is located in the St. Andrews and Broad communities and is currently a diamond interchange. With RA1 and RA5 Modified, the interchange is modified to a SPUI. The SPUI does not change how traffic movements to and from I-20 to Broad River Road operate, but does focus them through a single signalized intersection located approximately in the middle of the bridge over I-20, rather than the current use of separate intersections for eastbound and westbound ramp traffic at the ends of the bridges. Access to nearby businesses and residences in the area would be maintained.

5.10.11 I-126 / COLONIAL LIFE BOULEVARD

The I-20 / Broad River Road interchange is located in the Broad community and is currently a partial interchange providing an on-ramp for movements from Colonial Life Boulevard toward downtown Columbia along eastbound I-126. An off-ramp is currently provided for traffic traveling from downtown Columbia on westbound I-126. The proposed interchange for RA1 and RA5 Modified is a diamond interchange providing full access between I-126 and Colonial Life Boulevard.

6 Conclusion

6.1 Summary of Impacts

The community analysis determined that there would be impacts associated with the proposed project; however, these impacts are expected to be minimal. Short-term community impacts could include temporary lane closures, temporary detours, and controlled access but appropriate public notification and traffic controls



would be used to minimize impacts to local residents. Long-term impacts could include re-configuration of property access and local roadway connections, property acquisition, and changes in viewscape. However, the project would provide a benefit to local residents through improved mobility and access to goods and services within the project area. Additionally, the project is not anticipated to cause highly disproportionate or adverse effects to EJ or LEP communities. Finally, the acquisition and relocation process would be conducted in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (P.L. 91-646, as amended by 100-17; 49 CFR 24.205 (AF)). Appendix H details the Relocation Study conducted for this project.

Overall, the proposed Carolina Crossroads I-20/26/126 Corridor Improvement Project would directly convert existing non-transportation land uses to transportation uses, and the conversion would be similar among RA1 and RA5 Modified. Anticipated land use changes, to transportation uses, would be compatible with existing uses and would be consistent with regional and local land use plans. Indirect land use effects are expected to be minimal. Refer to Chapter 3.1 of the DEIS for additional information on land use. Both RA1 and RA5 Modified could temporarily impact accessibility and mobility during construction, although these impacts are expected to be minimized during the design phase. Local planners advise consideration of special events such as the 2019 NCAA tournament, school related sporting and academic events and events at Fort Jackson when determining construction scheduling.

There would be 110 relocated residential units and 36 relocated non-residential properties (containing 52 tenants) with RA1, and 184 relocated residential units and 40 non-residential properties (containing 57 tenants) impacted with RA5 Modified. Refer to Appendix H for relocation information.

Both RA1 and RA5 Modified are expected to result in noise impacts refer to Chapter 3.5 of the DEIS for additional information. In terms of air quality, the project may result in increased exposure to MSAT emissions in certain communities, but neither alternative would have an appreciable impact on regional MSAT levels. The Reasonable Alternatives are not anticipated to put the region into nonattainment or maintenance for any of the NAAQS; refer to Chapter 3.4 of the DEIS.

Concern for visual/aesthetic impacts to neighborhoods is generally low, largely because of existing land uses (retail buildings, wooded areas, etc.) that screen residential areas from the proposed improvements. Individual visual and aesthetic impacts may occur at various sites along the proposed corridor; however, those individual impacts are not anticipated to cause an adverse effect on the overall visual and aesthetic quality of a neighborhood or community. Local planners were not aware of adopted visual or aesthetic guidelines or policies that would apply to this project.

SCDOT has made an effort to avoid and/or minimize adverse effects to scenic, natural or recreational resources. There are existing river crossings in the project study area which provide scenic views, but changes to these viewshed as a result of the project would be minimal to none. The Three Rivers Greenway is located within the project study area and SCDOT would bridge over the greenway at an adequate clearance so as not to permanently impact the trail or its users. The trail would be temporarily closed during construction. There are other open areas within the project study area, but as the proposed project is primarily within existing ROW,



adverse effects are expected to be minimal. Except for the proposed turbine interchange at I-20/I-26, changes to the vertical profile along the project corridor is expected to be minimal.

Table 6.1 presents the community impacts anticipated with the No-Build, RA1 and RA5 Modified. Impact descriptions are as follows:

- Land Use: Changes in land use could occur if the Reasonable Alternative results in growth-inducing effects or other effects such as inhibiting growth and development.
- Community Cohesion: An impact to neighborhood cohesion would occur if the community structure were disrupted, such as by a physical division of the neighborhood. Impacts to cohesion may affect the use of community services and facilities and social interaction.
- Community Facilities and Services: Impacts to community facilities and services occur if relocation, change in access, or response times are negatively effected.
- Mobility, Access and Safety: Impacts to mobility, access and safety would occur if the proposed project results in changes to neighborhood egress and ingress, loss of accessibility or decreases safety.
- Visual/Aesthetic: Visual and/or aesthetic impacts would occur if changes to existing conditions for those elements resulted from the Reasonable Alternative.
- Noise: Noise impacts would occur if noise levels rise about FHWA's noise abatement criteria.
- Acquisitions: Acquisition impacts would occur if a portion of a person's property is acquired or a person has to be displaced from their home or business as a result of the Reasonable Alternative.

Table 6.1 Community Impact Matrix - Potential Adverse Impacts*

Community	Type of impact	RA1	RA5 Modified	No-Build
Columbiana	Land use	No	No	No
	Community cohesion	No	No	No
	Community facilities and services	No	No	No
	Mobility, access and safety	No	No	Yes
	Visual/aesthetics	Yes	Yes	No
	Noise	Yes	Yes	Yes
	Residential acquisitions	Yes	Yes	No
	(full and partial)			
	Residential acquisitions	Yes	Yes	No
	within EJ block group			
	Business acquisitions	Yes	Yes	No
	(full and partial)			
	Business acquisitions	Yes	Yes	No
	within EJ block group			
Seven Oaks	Land use	Yes	Yes	No
	Community cohesion	No	No	No



Community	Type of impact	RA1	RA5 Modified	No-Build
	Community facilities and services	Yes	Yes	No
	Mobility, access and safety	Yes	Yes	Yes
	Visual/aesthetics	Yes	Yes	No
	Noise	Yes	Yes	Yes
	Residential acquisitions	Yes	Yes	No
	(full and partial)			
	Residential acquisitions	Yes	Yes	No
	within EJ block group			
	Business acquisitions	Yes	Yes	No
	(full and partial)			
	Business acquisitions	Yes	Yes	No
	within EJ block group			
Saluda	Land use	No	No	No
	Community cohesion	No	No	No
	Community facilities and services	No	No	No
	Mobility, access and safety	No	No	Yes
	Visual/aesthetics	Yes	Yes	No
	Noise	Yes	Yes	Yes
	Residential acquisitions	No	No	No
	(full and partial)			
	Residential acquisitions	No	No	No
	within EJ block group			
	Business acquisitions	Yes	Yes	No
	(full and partial)			
	Business acquisitions	Yes	Yes	No
	within EJ block group			
Riverbanks	Land use	No	No	No
	Community cohesion	No	No	No
	Community facilities and services	Yes	Yes	No
	Mobility, access and safety	No	No	Yes
	Visual/aesthetics	Yes	Yes	Yes
	Noise	Yes	Yes	No
	Residential acquisitions	No	No	No
	(full and partial)			
	Residential acquisitions	No	No	No
	within EJ Block group			
	Business acquisitions	No	No	No
	(full and partial)			



Community	Type of impact	RA1	RA5 Modified	No-Build
	Business acquisitions	No	No	No
	within EJ block group			
Harbison	Land use	Yes	Yes	No
	Community cohesion	No	No	No
	Community facilities and services	No	No	No
	Mobility, access and safety	No	No	Yes
	Visual/aesthetics	No	No	No
	Noise	Yes	Yes	Yes
	Residential acquisitions	Yes	Yes	No
	(full and partial)			
	Residential acquisitions	No	No	No
	within EJ block group			
	Business acquisitions	Yes	Yes	No
	(full and partial)			
	Business acquisitions	Yes	Yes	No
	within EJ block group			
St. Andrews	Land use	Yes	Yes	No
	Community cohesion	No	No	No
	Community facilities and services	No	No	No
	Mobility, access and safety	No	No	Yes
	Visual/aesthetics	Yes	Yes	No
	Noise	Yes	Yes	Yes
	Residential acquisitions	Yes	Yes	No
	(full and partial)			
	Residential acquisitions	Yes	Yes	No
	within EJ block group			
	Business acquisitions	Yes	Yes	No
	(full and partial)			
	Business acquisitions	Yes	Yes	No
	within EJ block group			
Broad	Land use	Yes	Yes	No
	Community cohesion	No	No	No
	Community facilities and services	Yes	Yes	No
	Mobility, access and safety	Yes	Yes	Yes
	Visual/aesthetics	Yes	Yes	No
	Noise	Yes	Yes	Yes
	Residential acquisitions	Yes	Yes	No
	(full and partial)			



Community	Type of impact	RA1	RA5 Modified	No-Build
	Residential acquisitions within EJ block group	Yes	Yes	No
	Business acquisitions (full and partial)	Yes	Yes	No
	Business acquisitions within EJ block group	Yes	Yes	No

^{*}The project would also provide many benefits to local communities which are discussed in detail in Chapter 3.3 and Appendix G.

Specific neighborhood property acquisition impacts within each community are detailed in Table 6.2.

Table 6.2 Community Property Relocation Impacts

Community	Neighborhood	Residential acquisitions		Non-residential acquisitions	
		RA1	RA5	RA1	RA5
			Modified		Modified
Columbiana	Country Walk Apartments	2	2	-	-
	Other	-	-	3	3
	Columbiana Total	2 (20)	2 (20)	3	3
	(Units/Tenants)				
Seven Oaks	Grove Park/Forest Grove	-	-	-	-
	Peach Tree Apts	2	7	-	-
	Sherwood Forest	-	-	-	-
	St. Andrews Apts	2	2	-	-
	Stoney Creek Apts	3	6	-	-
	Whitcott	-	-	-	-
	Williamsburg West	-	-	2	2
	Woodland Hills	-	-	-	-
	Other	3	2	9	11
	Seven Oaks Total	10 (72)	17 (145)	11 (17)	13 (17)
	(Units/Tenants)				
Saluda	Quail Apartments	-	-	-	-
	Riverchase	-	-	-	-
	The Gates at Quail Hollow	-	-	-	-
	Other	-	-	-	-
	Saluda Total	0	0	0	0
Riverbanks	Rivers Edge	-	-	-	-
	Saluda Hills	-	-	-	-
	Westover Acres	-	-	-	-
	Other	-	-	-	-



Community	Neighborhood	Resident	Residential acquisitions		Non-residential acquisitions	
		RA1	RA5	RA1	RA5	
			Modified		Modified	
	Riverbanks Total	0	0	0	0	
Harbison	Beacon Hill	-	-	-	-	
	Crestmont	-	-	-	-	
	Other	-	-	5	5	
	Harbison Total	0	0	5 (7)	5 (7)	
St. Andrews	Autumn Ridge	-	-	-	-	
	Briargate	-	-	-	-	
	Chartwell	-	-	-	-	
	Cherokee Gardens	4	4	-	-	
	Courtyard Apts	-	-	-	-	
	Courtyard Condos	-	-	-	-	
	Cricket Hill	-	-	-	-	
	Crossroads	-	-	-	-	
	Emerald Valley	-	-	-	-	
	Willow Creek*	-	-	-	-	
	Other	-	-	11	12	
	St. Andrews Total	4	4	11 (16)	12 (17)	
Broad	Arrowwood	3	2	1	1	
	Arrowwood Heights	-	-	-	-	
	Ashton at Longcreek	-	-	-	-	
	Belmont Estates	-	-	-	-	
	Carnaby Square	-	-	-	-	
	Essex Park Apartments	-	-	-	-	
	Lexington Green	-	-	-	-	
	Skyview Terrace	11	13	-	-	
	The Park Apartments	-	-	-	-	
	Three Rivers	-	-	-	-	
	Other	-	-	5	6	
	Broad Total	14	15	6 (9)	7 (10)	

^{*}Willow Creek Apartments have been demolished since the Noise Study was completed.

6.2 Environmental Justice Conclusion

Block groups can vary in size, and development within the block groups can be sparse or dense. Reasonable Alternatives may pass through block groups that are considered to contain EJ populations, but not actually impact these populations or communities. A community-level analysis of impacts was conducted to identify the location of potential adverse effects associated with the Reasonable Alternatives. Issues that were considered



when evaluating the potential for EJ impacts include relocations, effects on cohesion of communities and neighborhoods, visual/aesthetic impacts, noise impacts, access, mobility and safety impacts.

The No-Build Alternative is not expected to adversely affect EJ populations. However, EJ populations would not receive the benefits of the proposed interstate and interchange improvements if the project is not constructed.

Both Reasonable Alternatives would improve local mobility and reduce traffic congestion for all communities, including low-income and minority populations. Overall, the potential impacts would be minimal compared with the proposed project's benefits, which would include improvements to mobility and safety in the corridor, improved system linkages, and reduced traffic congestion.

The development of the Reasonable Alternatives focused on avoiding, minimizing and mitigating the effects on the entire population and ensuring varied input was considered in the decision-making process.

Community impacts are anticipated with the proposed improvements for both RA1 and RA5 Modified; however, the impacts are expected to affect all populations similarly, and impacts of both alternatives are similar. RA1 is expected to result in the relocation of 110 residential units total; of these 110 units, 97 are located in EJ Block Groups while 13 are located in non-EJ Block Groups. For non-residential properties, RA1 is expected to result in the relocation of 36 properties total (including 52 tenants); of these 36 properties, 27 are located in EJ Block Groups while 9 are located in non-EJ Block Groups. RA5 Modified is expected to result in the relocation of 184 residential units total; of these 184 units, 170 are located in EJ Block Groups, while 14 are located in non-EJ Block Groups. For non-residential properties, RA5 Modified is expected to result in the relocation of 40 properties total (including 57 tenants); of these properties, 31 are located in EJ Block Groups, while 9 are located in non-EJ Block Groups. Partial acquisitions are anticipated with both RA 1 and RA 5 Modified. Refer to Appendix H of the DEIS for relocation information.

The St. Andrews and Seven Oaks communities have the most residential acquisitions located in EJ Block Groups, while the Columbiana and Seven Oaks communities have the most non-residential acquisitions located in EJ Block Groups. However, impacts within EJ Block Groups are to be expected within these communities due to the high number of EJ Block Groups located in these communities. Although residential and non-residential acquisitions are higher within EJ Block Groups, it is not confirmed that the business or property owner is minority or low-income. However, due to the known EJ populations within the community study area, public outreach to special populations was customized to specifically target EJ communities. See Section 4.1.1 of this document for EJ outreach strategies.

The St. Andrews, Broad, Columbiana and Seven Oaks communities would appear to incur the greatest overall property impacts (relocations and partial acquisitions) from the proposed RAs within EJ Block Groups; and, these communities also have the higher concentrations of low-income and minority populations. The study area is majority minority (at 50.4 percent of the population) and potential project impacts and benefits appear to be distributed equitably.

The project is not anticipated to contribute to any highly disproportionate or adverse effects to EJ communities; however, these outreach strategies would provide these communities opportunities for engagement and input



into the project and the transportation decision-making process. Additional information on public outreach is included in Chapter 4 and in Appendix M. Impacts to minority and low-income populations do not appear to be disproportionately high and adverse. Benefits resulting from the proposed project are expected to be equitably distributed throughout the communities.

6.2.1 OFFSETTING BENEFITS OF THE REASONABLE ALTERNATIVES

While the impacts described above would occur in EJ areas as well as non-EJ areas, the EJ populations would share in the potential benefits of implementing a transportation solution that improves mobility and reduces traffic congestion within the project corridor. Other potential benefits of both Build Alternatives, including those mentioned by local planners, are:

- employment opportunities due to construction and the potential redevelopment/development
 opportunities in the areas surrounding the interchanges, which would result in positive economic gains
 in the form of increased wages and spending;
- improved mobility through the project vicinity in the area of the interchanges;
- improved user experiences relating to personal, emotional and mental health due to shorter travel times and ease of navigation;
- improved safety for pedestrians around interchanges;
- improved safety for motorists along the corridor and at interchanges;
- enhanced access and connectivity along the corridor; and
- reduced travel time within the corridor.

6.3 Mitigation

6.3.1 NO-BUILD ALTERNATIVE

Under the No-Build Alternative, project-related mitigation would not be warranted.

6.3.2 REASONABLE ALTERNATIVES

Environmental mitigation measures identified in the Carolina Crossroads DEIS that would address impacts from the Reasonable Alternatives upon communities are summarized as follows:

- The acquisition and relocation process would be conducted in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (P.L. 91-646, as amended by 100-17; 49 CFR 24.205 (AF)). Appendix H details the Relocation Study conducted for this project.
- Noise mitigation is addressed in the noise report.
- Because the Department of Justice's Safe Harbor threshold for LEP is exceeded for Spanish-speaking
 populations within the study area, written translations of vital documents would be provided for
 Spanish language-speaking populations, as well as other measures determined by SCDOT to ensure
 meaningful access to project information.

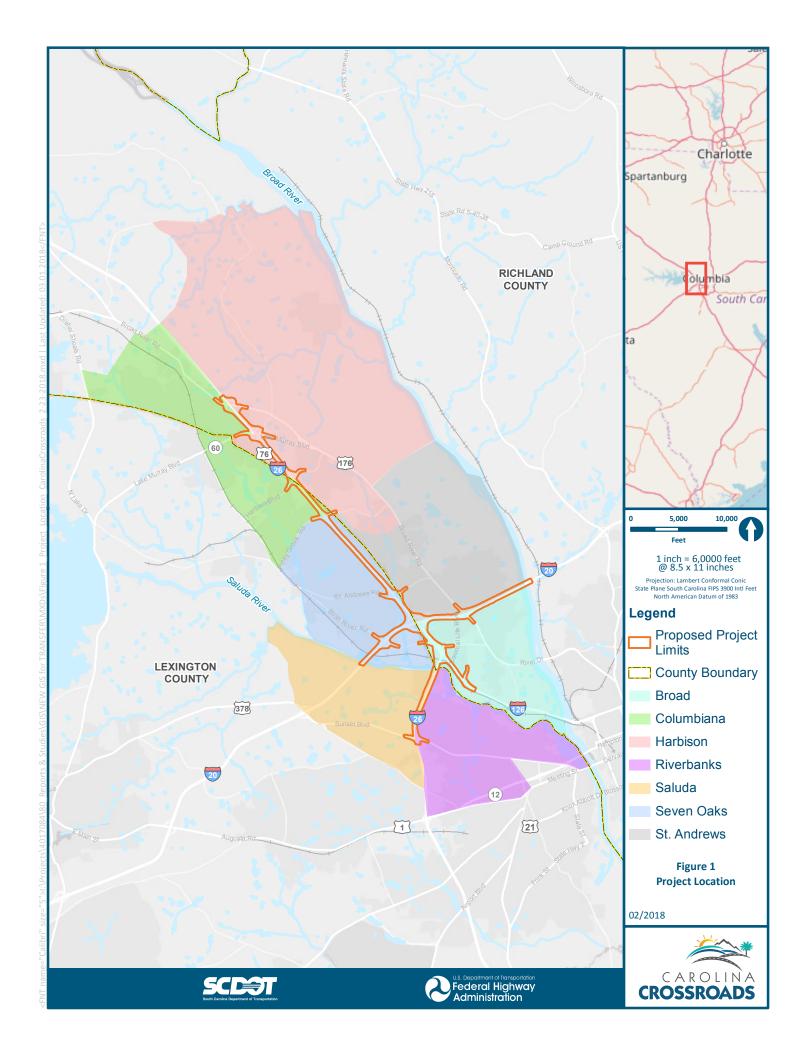


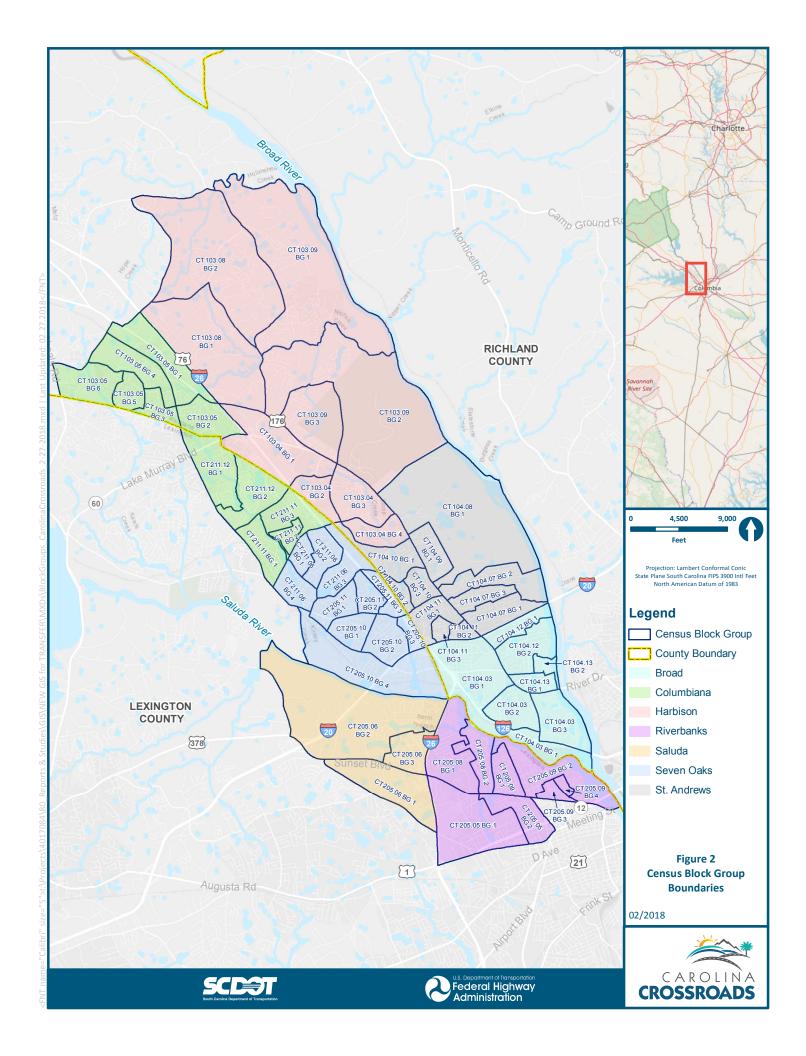
- SCDOT would coordinate with local jurisdictions to evaluate the inclusion of bicycle/pedestrian facilities in the project, and to evaluate the need for bicycle/pedestrian access accommodation during construction.
- SCDOT would continue coordinating with local EMS services, Local Fire Departments, the SC Highway Patrol, and school districts to minimize effects during and after construction.
- A signing plan will be prepared that meets the requirements and guidelines of the 2009 Manual on Uniform Traffic Control Devices (MUTCD). Each interchange will be evaluated to provide appropriate exit and advance guide signing. Typical signing layouts will include standard exit signing, exit-only signing where needed, and arrow-per-lane signs.

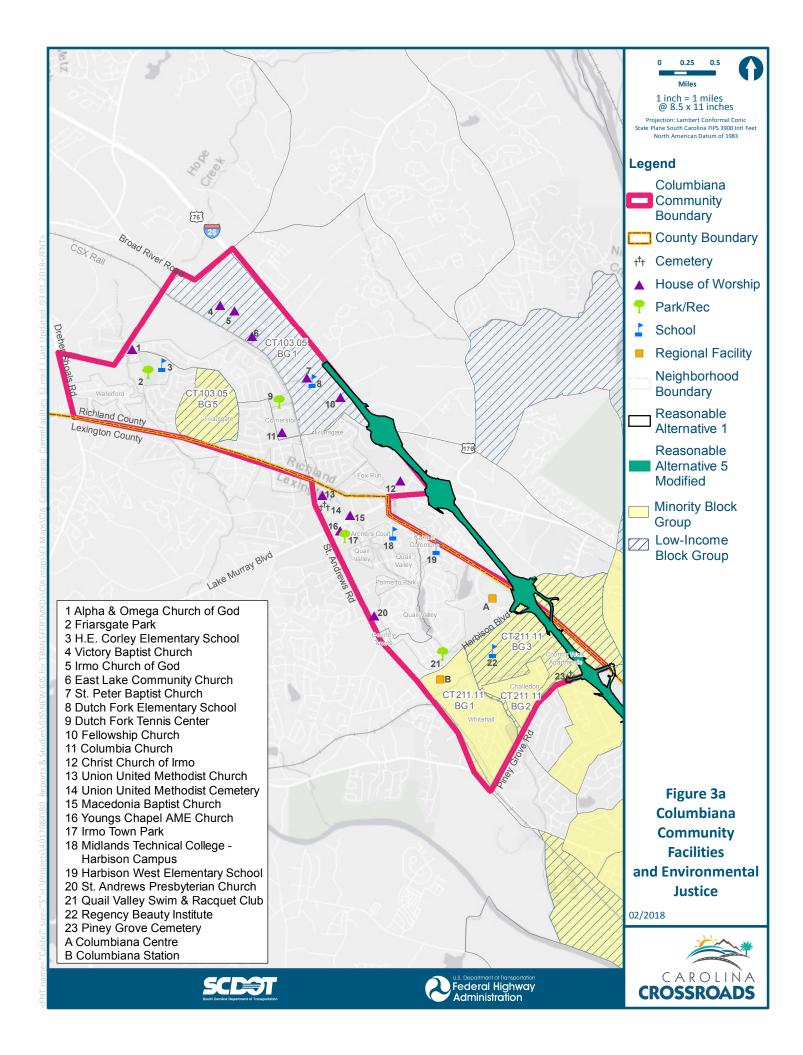
The reasonable alternatives are generally consistent with regional and local land use plans. Coordination efforts by SCDOT with local officials is ongoing during the planning process. However, the responsibility for land use planning lies with the local jurisdictions. Land developers would be responsible for obtaining the necessary approvals and permits for developments from local, state, and federal agencies, which may include, but are not limited to Section 401, Section 402, and Section 404 permits/approvals, as well as mitigation for any fill of wetlands or Waters of the U.S.

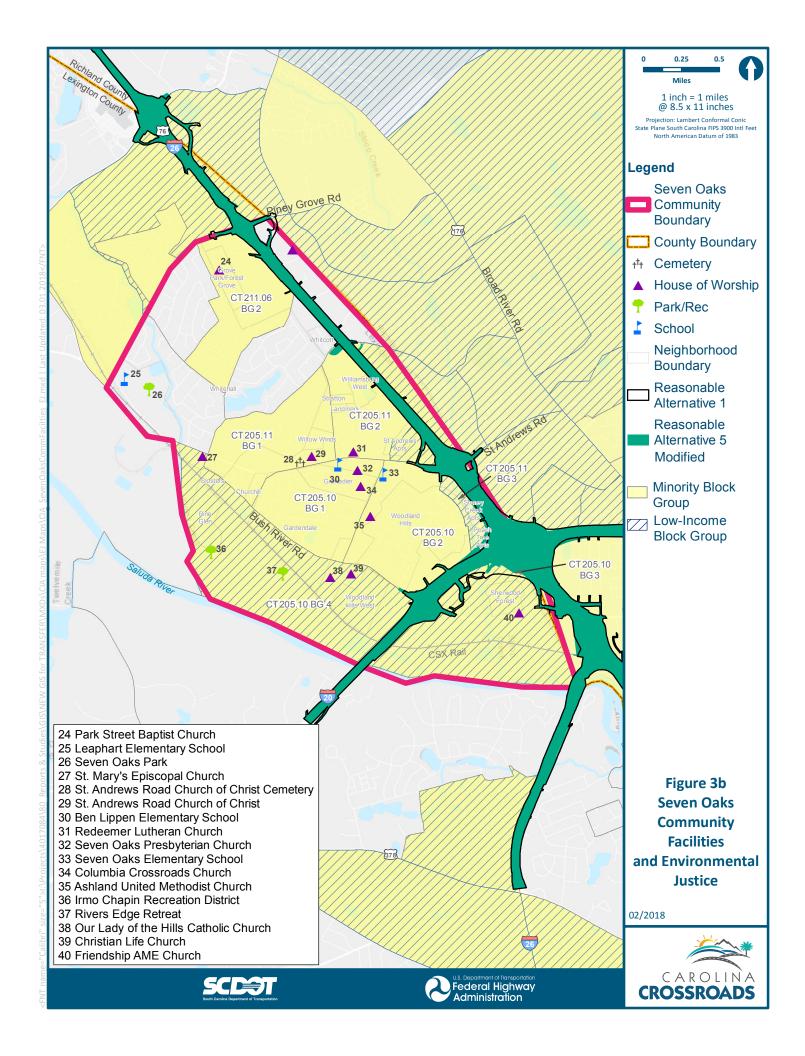


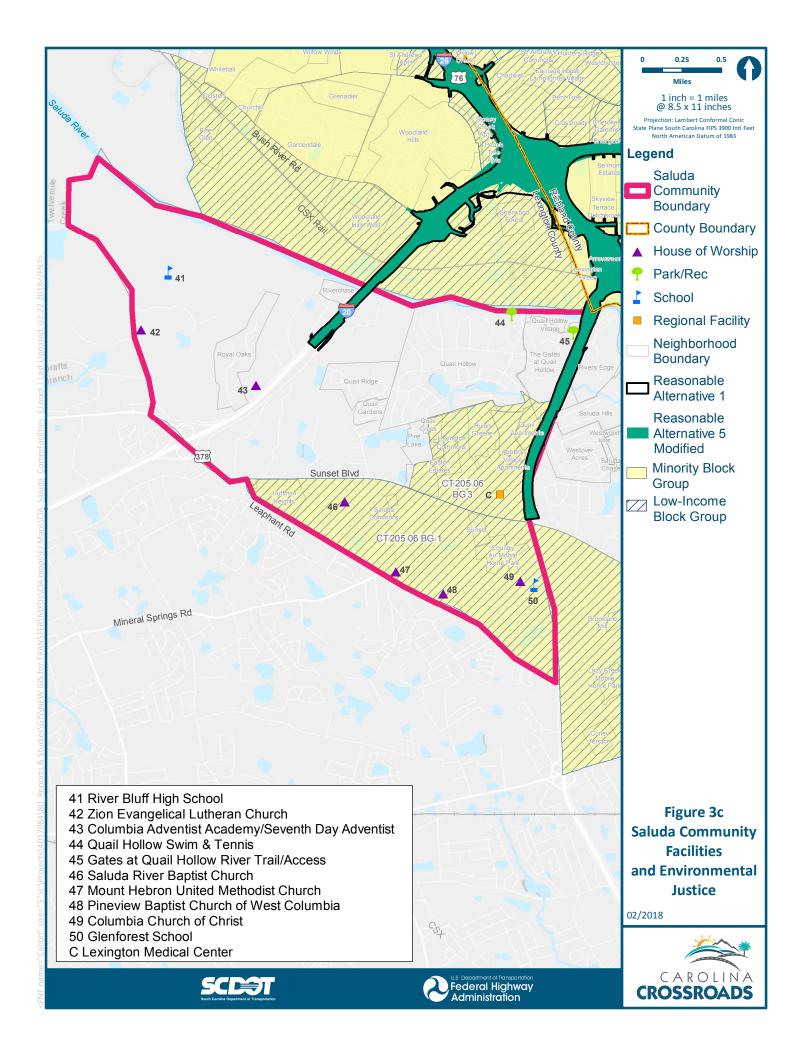
Appendix A—Figures

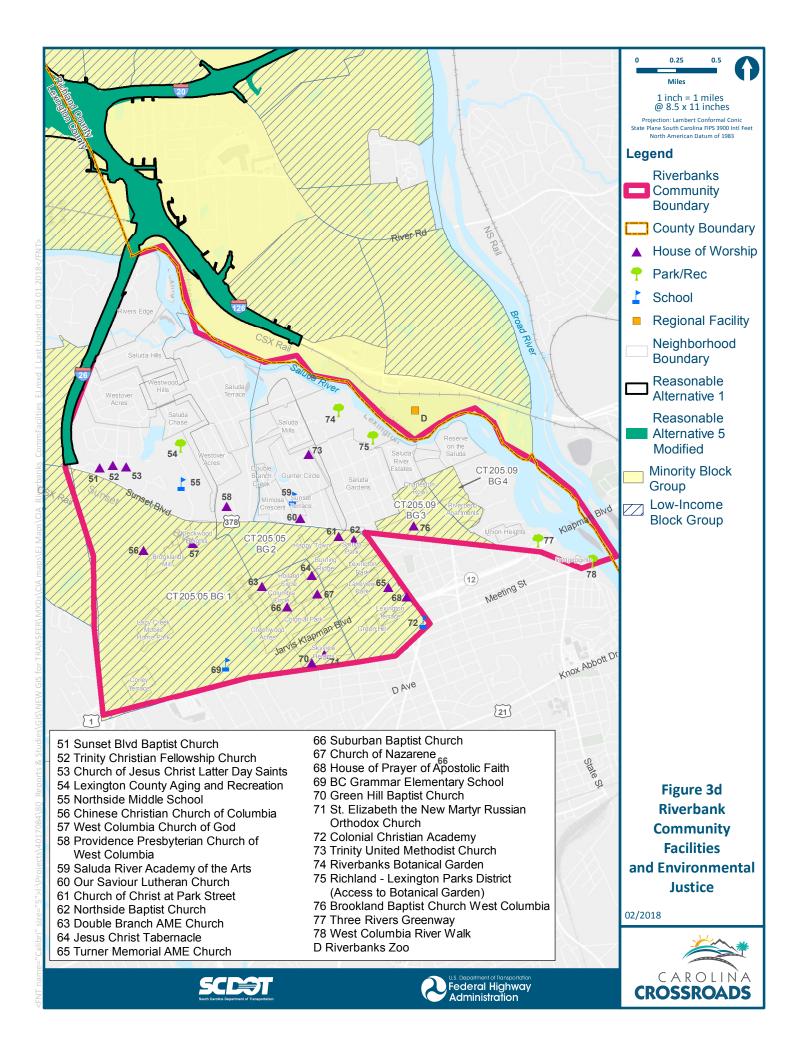


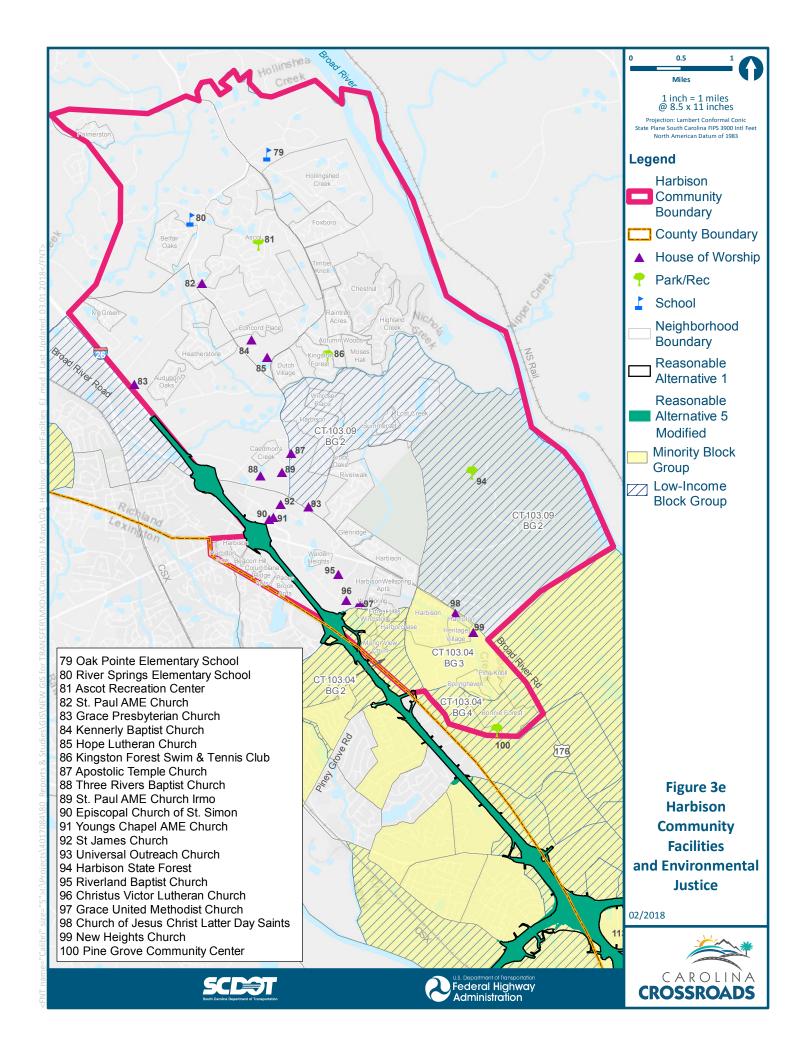


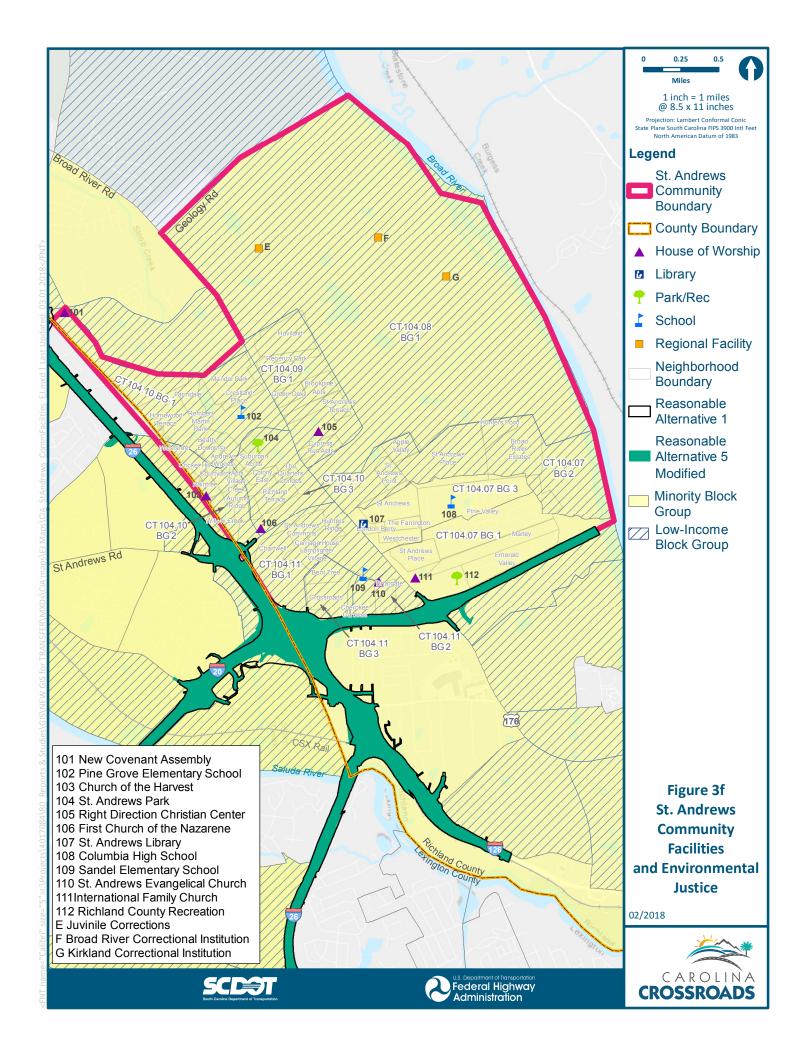


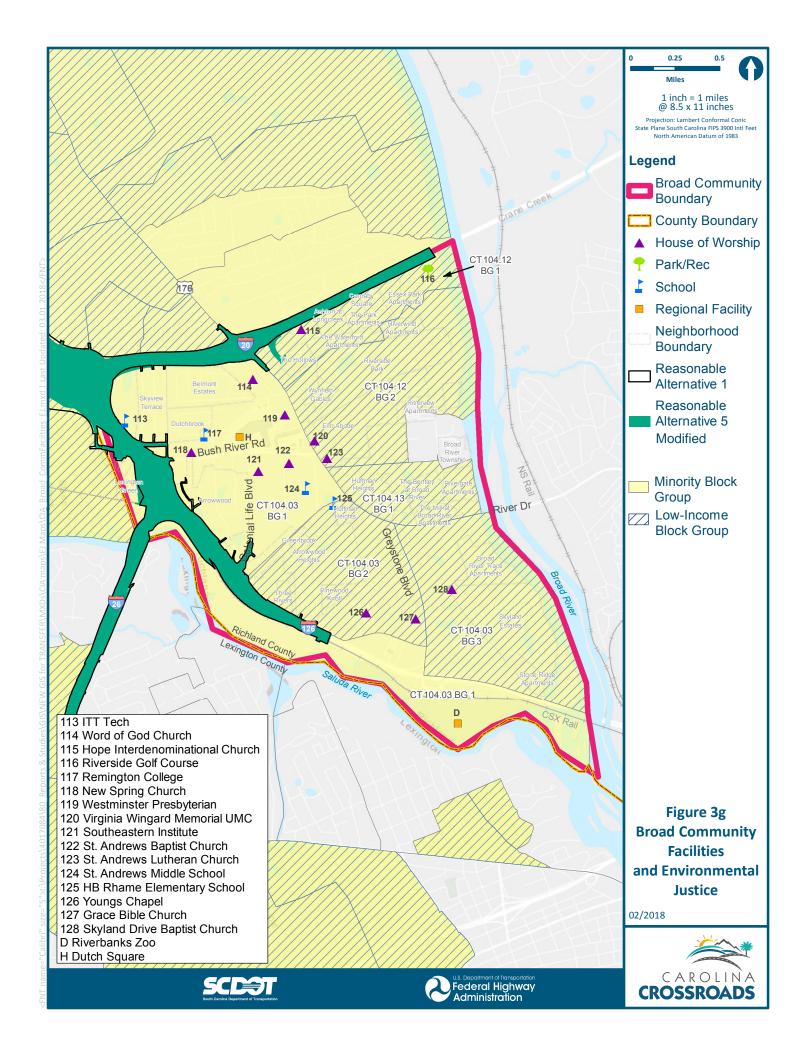


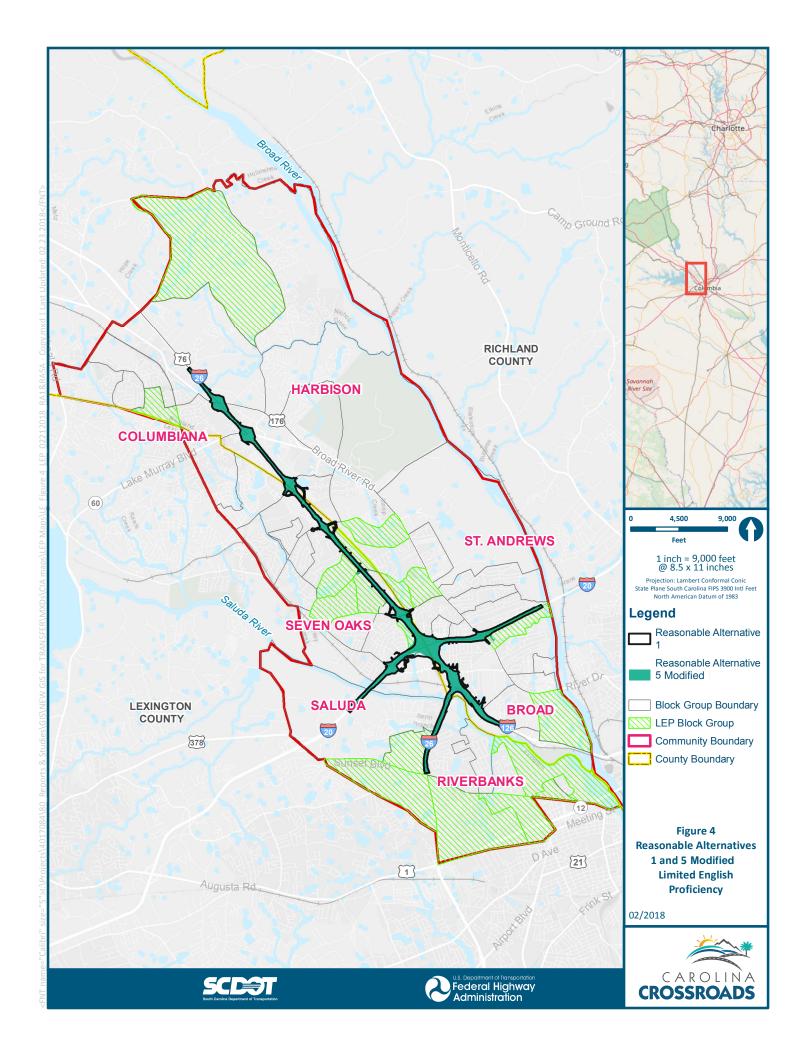


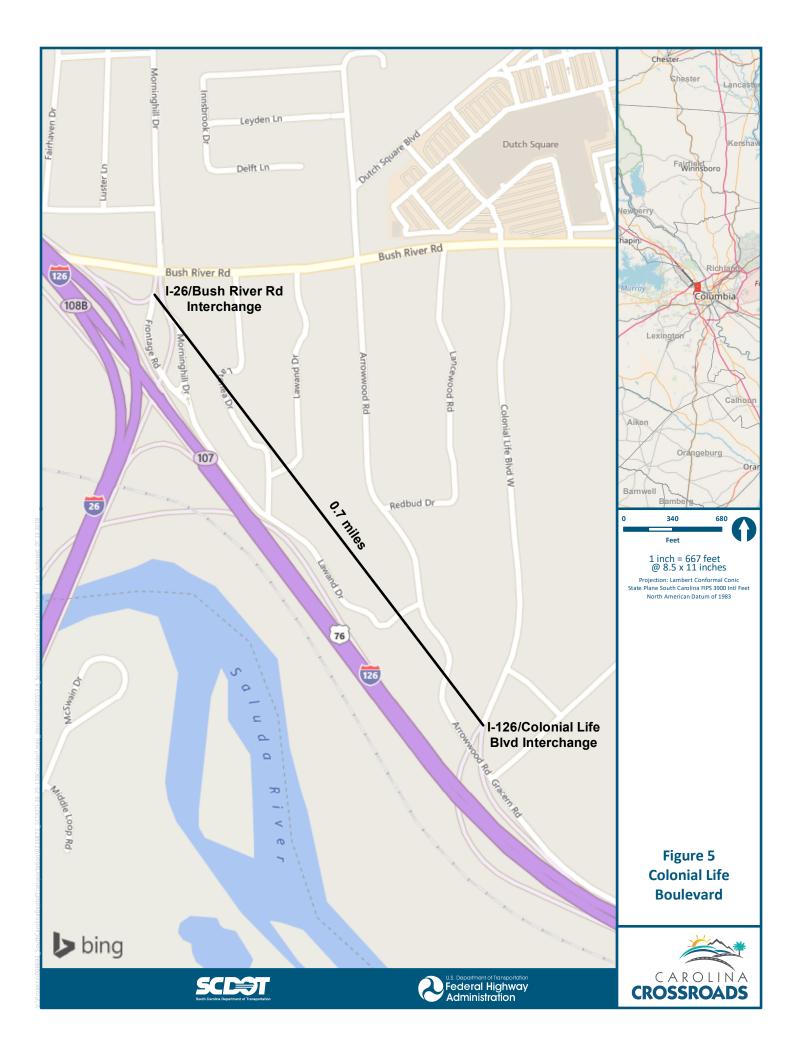


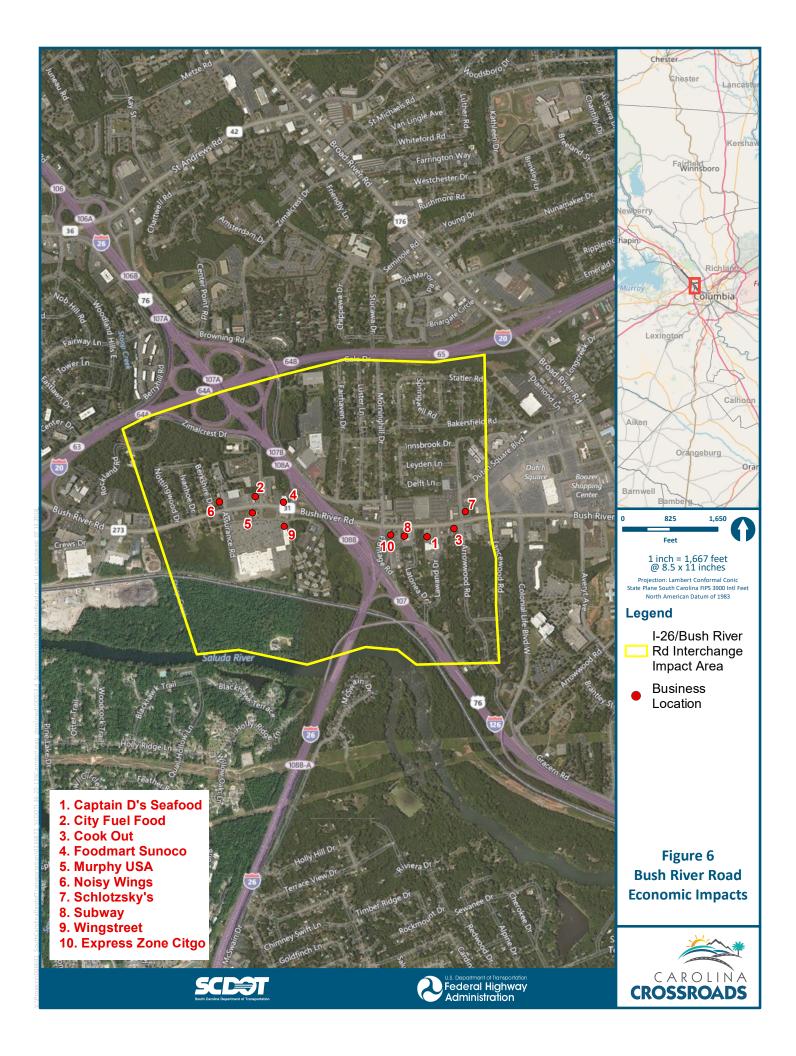






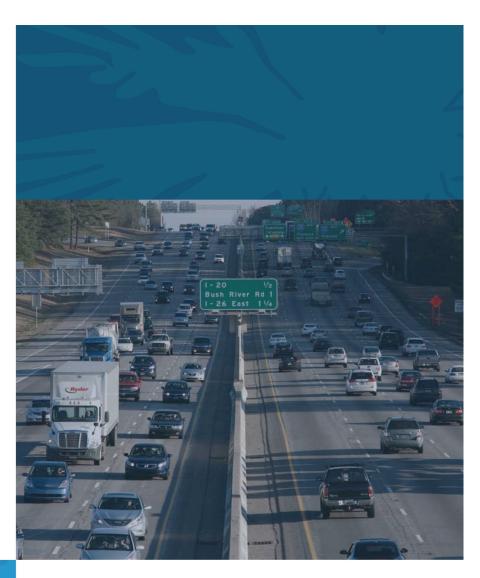








Appendix B—Community Characterization Report





Community Characterization

Carolina Crossroads I-20/26/126 Corridor Improvement Project Lexington and Richland Counties, South Carolina

DEIS July 23, 2018









Carolina Crossroads

I-20/26/126 Corridor Improvement Project

Lexington and Richland Counties, South Carolina

DEIS July 23, 2018

Prepared for South Carolina Department of Transportation, and the Federal Highway Administration

Prepared by











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Appendix B - United States Census Bureau Data



1 Introduction

1.1 Project Description

HDR, in cooperation with a team of consultants (the project team) has been contracted by the South Carolina Department of Transportation (SCDOT) to provide engineering services necessary for the preparation of an Environmental Impact Statement (EIS), right of way plans, and final construction plans for roadways and bridges for the proposed Carolina Crossroads I-20/26/126 Corridor Improvement Project (Carolina Crossroads).

The proposed project is a transportation corridor improvement project located in Lexington and Richland counties. To date, the project area has been defined as a mainline corridor including I-20 from the Saluda River to the Broad River (approximately four miles), I-26 from Broad River Road to US-378 (approximately nine miles), and I-126 from I-26 to Colonial Life Boulevard (approximately one mile); see Figure 1 in appendix A for a preliminary project location map. The I-20/26/126 corridor is a vital link in South Carolina, serving residents, commuters, travelers, and commerce. Due to nearby residential and commercial development, proximity to downtown Columbia, traffic volumes, and the overall geometric layout, including 12 interchange points, the I-20/26/126 corridor has become one of the most congested interstate sections in South Carolina. The purpose of the proposed Carolina Crossroads project is to improve mobility and enhance traffic operations by reducing existing traffic congestion within the corridor.

1.2 Purpose of Community Characterization

The Community Characterization Report summarizes the existing conditions in the study area and serves as a baseline for the National Environmental Policy Act (NEPA) process. Information from this report will also help inform the Community Impact Assessment (CIA), which is an evaluation of effects to the human environment as a result of the proposed project. The consideration and documentation of environmental and socioeconomic effects is a critical part of NEPA, and findings from the Community Characterization and Community Impact Assessment will be used to evaluate project impacts to the human environment in the EIS for the proposed project.

2 Methodology

2.1 Study Area

The Federal Highway Administration (FHWA) guidance document entitled *Community Impact Assessment: A Quick Reference for Transportation*¹ recommends a process to evaluate the effects of a transportation project on a community and its quality of life. The assessment of effects helps decision-makers ensure that transportation investment addresses concerns and minimizes effects to communities.

DEIS July 23, 2018 Introduction

¹ FHWA. 1996. Community Impact Assessment: A Quick Reference for Transportation. Office of Environment and Planning. Prepared by North Carolina DOT, California DOT, Florida DOT, Maine DOT, Columbus, GA Department of Community & Economic Development, Maryland State Highway Administration, Arkansas State Highway & Transportation Department, and Illinois DOT in consultation with Apogee Research, Inc. and Parsons Brinckerhoff Quade Douglas, Inc.



The guidebook has various definitions of community, all of which were considered in determining the overall study area for the community characterization work, as well as the smaller divisions of the study area discussed in the report. The guidebook defines community as an area where behavior patterns of individuals or groups of individuals are common and where shared perceptions or attitudes create an identifiable area. Communities may be based on a common characteristic that is not spatial in nature, such as religion, income, ethnicity, etc. Community characterization study areas typically include communities within, and immediately adjacent to, project study areas, as well as where social effects may be felt. The boundaries of study areas may be delineated based on physical barriers, land use trends, political divisions, certain demographic characteristics, and/or resident perceptions.

As currently defined, the proposed Carolina Crossroads project area encompasses I-20 from the Saluda River to the Broad River, I-26 from Broad River Road to US-378, and I-126 from I-26 to Colonial Life Boulevard. In developing the Community Characterization study area for the project, the project team identified neighborhoods and communities within approximately one mile of the I-20/26/126 corridor, and for ease of data collection, used the US Census Bureau (Census Bureau) tract/block group boundaries and Transportation Analysis Zone (TAZ) boundaries which encompass those neighborhoods and communities to delineate the study area. The Census Bureau and TAZ boundaries also generally follow visible natural or man-made features such as streams, rivers or major roadways.

The community characterization study area in this report is made up of three larger sub-areas, which are delineated similarly to the Census Bureau's county divisions. The area's history is generally discussed at the larger sub-area level. The Lexington County portion of the study area includes two large sub-areas—one is called Irmo and the other, West Columbia. The Irmo sub-area is located from St. Andrews Road/I-26 Interchange westward to Lake Murray, then northeasterly to Dutch Fork Road. The West Columbia sub-area is generally situated between the Saluda River and US-1. The Richland County portion of the study area includes one large sub-area called Dutch Fork. The Dutch Fork sub-area is positioned between I-26 and the Broad River.

The study area is further organized into seven smaller, project team-defined communities, which are based on similarities in land use and context, while still typically following Census Bureau and TAZ boundaries and visible features. These seven communities (Columbiana, Seven Oaks, Saluda, Riverbanks, Harbison, St. Andrews, and Broad) make up the study area. Data from the smaller communities are used as the foundation for the existing conditions analysis. Census Bureau Tract/Block Group and TAZ data are used in the evaluation of demographics, economics and growth trends within the overall study area and each of the seven communities. These seven communities are described in more detail in later sections of this report. The study area and communities are shown in Figure 2.

2.2 Demographic, Economic and Socioeconomic Data

Demographic and economic conditions were identified using Census Bureau data at the county level (Richland and Lexington counties) and at the tract and block group level.

DEIS July 23, 2018 Methodology



The non-white population was calculated by adding all races other than white. This includes Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; and some other race. The limited English proficiency (LEP) population was calculated by adding all populations that spoke other languages and English less than very well. Low-income populations were calculated by adding the below poverty population and the near poor population between 100 percent and 149 percent of poverty level as prescribed by the US Health and Human Services poverty guidelines.

For socioeconomic trends, 2010 base year data and 2040 horizon year estimates were used. The 2010 data and 2040 population, housing, and employment estimates were obtained from socioeconomic data prepared for the South Carolina Statewide Travel Demand Model (SC SWM), which was developed in July 2014 as part of the South Carolina Multimodal Transportation Plan (SC MTP). The socio-economic data set used originated in version SC SWMV2, build 15061 and dated June 2015. The 2010 county- and state-level population data were obtained from the Census Bureau's 2010 Demographic Profile. 3

Base year (2010) data and horizon year (2040) estimates were obtained from TAZs that fall entirely within the study area. TAZs are geographical units used for travel demand modeling. The number of people, households, and jobs were calculated within each community for the years 2010 and 2040. Population, housing, and employment data were also reviewed at county and state levels.

2.3 Data Sources

Data for the community characterization study were obtained from a number of sources, including:

- map data from Google⁴;
- ESRI World Imagery⁵;
- historical to current USGS 7.5 minute series topographic quadrangles;
- Census Bureau, American FactFinder, 2010 Decennial Census³;
- Census Bureau, American FactFinder, 2009-2013 American Community Survey 5-Year Estimates⁶;
- South Carolina Statewide Travel Demand Model, 2014/2015 version SC SWMV2²;
- published books and articles obtained from regional libraries; and
- local plans and websites.

The local plans and websites are identified in Section 5 References. In addition, information was collected and confirmed during a visit to the study area in the spring of 2015 and during interviews with local residents at a Community Kickoff Meeting held at Seven Oaks Elementary School on May 12, 2015.

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Page 3

² South Carolina Department of Transportation (SCDOT). 2014/2015. South Carolina Multimodal Transportation Plan, and socio-economic data prepared for the South Carolina Statewide Travel Demand Model (SC SWM) version SCSWMV2, build 15061. Prepared by CDM Smith.

³ U.S. Census Bureau. 2010. "Decennial Census." American FactFinder. Accessed summer 2015. http://www.census.gov/.

⁴ Google. 2015. Maps. Accessed summer 2015. http://www.google.com.

⁵ ESRI World Imagery. 2015. Accessed August 2015.

⁶ U.S. Census Bureau. 2013. "American Community Survey". American FactFinder. Accessed summer 2015. http://www.census.gov/.



3 Existing Conditions

This section summarizes the existing conditions in Lexington County, Richland County, the overall study area, and in each of the seven communities identified by the project team. Topics covered in this section include history of the area, transportation network, local plans and initiatives (including land use), demographic and economic information, and community resources such as neighborhoods and facilities (including cemeteries, houses of worship, parks and recreational amenities, schools or other regional facilities).

The study area is split between two counties. Some of the existing conditions are discussed at the county and larger sub-area level in order to give context to the smaller communities, at which level other, more specific resources are discussed.

3.1 Lexington County

Lexington County is centrally located within South Carolina in the Midlands region of the state. The county is mostly rural in character but is also composed of several urban areas, particularly along its eastern extent. Lexington is the largest municipality in the county. Other municipalities include Batesburg-Leesville, Irmo, West Columbia, and Cayce. The study area within Lexington County includes most of Irmo, portions of West Columbia, and the smaller, project team-identified communities of Columbiana, Seven Oaks, Saluda, and Riverbanks. Being near Columbia, some of the most populated areas of Lexington County are located in the study area.

3.1.1 HISTORY

In the 18th century, future Lexington County was located near the junction of Catawba and Cherokee trading routes and, as such, was a center for regional activity. In the opening decades, the area was occupied by the Congaree, a Native American tribe that was pushed westward by another tribe, the Wateree. In 1718, following a Native American uprising known as the Yemassee War, the area became the site of a British-operated Native American trading post and garrison known as Fort Congaree. The fort was abandoned by the British by 1722 but soon revitalized as a private trading venture. In 1731, the area surrounding the fort became the Saxe-Gotha township established by the colonial government to spur settlement and create a buffer between older port settlements and Cherokee territory to the west.

Apart from the Native American trade, Saxe-Gotha offered limited investment opportunities and primarily appealed to British and German American settlers interested in establishing self-sufficient family farms or small plantations. ^{12,13} The settlers' lifeways were heavily influenced by the interaction between African, Euro-, and

⁷ Moore, John Hammond. 1993. Columbia and Richland County: A South Carolina Community, 1740-1990. University of South Carolina Press, Columbia.

⁸ Groover, Mark D. 1994. Evidence of Folkways and Cultural Exchange in the 18th-Century South Carolina Backcountry. *Historical Archaeology* 28(1):41-64 ⁹ Lexington County. 2015. Lexington County Historic Tour. Accessed May 28, 2015. http://maps.lex-co.com/HistoricTour/.

¹⁰ Able, Gene. 1990. *Irmo and the Dutch Fork Legacy*. The Independent News for the Irmo Centennial Commission, Irmo, SC.

¹¹ Greater Lexington Chamber and Visitors Center. 2015. "Our History." Accessed May 29, 2015. http://www.lexingtonsc.org/community history/.

¹² Groover, Mark D. 1994. Evidence of Folkways and Cultural Exchange in the 18th-Century South Carolina Backcountry. *Historical Archaeology* 28(1):41-64.

¹³ Lewis, Kenneth E. 1999. "The Metropolis and the Backcountry: The Making of a Colonial Landspace on the South Carolina Frontier". *Historical Archaeology* 33(3):3-13.

¹⁴ Moore, John Hammond. 1993. Columbia and Richland County: A South Carolina Community, 1740-1990. University of South Carolina Press, Columbia.

¹⁵ Voigt, Gilbert P. 1952. "Cultural Contributions of German Settlers to South Carolina." The South Carolina Historical Magazine 53(4):183-189.



Native American inhabitants of the region and demonstrated traditions of each culture.¹² The settlement of Granby, near present day Cayce, arose as a trade and administrative center supporting the sparsely settled backcountry surrounding it^{10,13}. Despite this growth, Saxe-Gotha, like other townships across the interior, remained a frontier area to the end of the 18th century with few government services or controls.^{13,14}

Attesting to its continued centrality, the Cherokee trading route, or Cherokee Path as it is often called, was designated the State Road in 1820.¹⁶ Between the State Road and the west bank of the Congaree River, in 1834, one of the state's first textile mills, known as the Saluda Factory, was constructed.^{17,16}. The mill manufactured slave clothing from local cotton and was producing goods worth \$100,000 annually by 1850.^{14,16,17} In 1855, the company was under new ownership and renamed Columbia Cotton Mill. During the Civil War, the mill was used by General Sherman as a staging area during the burning of Columbia, which included setting the mill aflame.^{16,17,18} The mill was never rebuilt following a second fire in the 1880s.^{16,18}

The Saluda River was dammed in 1930 and resulted in Lake Murray.¹⁷ While creation of the dam flooded many of the characteristic farms of the area, it also resulted in additional recreative possibilities for Lexington County and other nearby residents.^{10,17} The Columbia Army Air Base, located in West Columbia, was a county airport before being commissioned as a B-25 training base in 1941 and operated as such to the end of the war, in 1945.¹⁷ Islands within nearby Lake Murray were used as bombing ranges to train B-25 crews stationed at the air base between 1942 and 1945. The base reverted back to civilian use following the war and, in 1962, was renamed the Columbia Metropolitan Airport.¹⁹The shift to a suburban focus in the latter twentieth century spurred economic and population growth in the portions of Lexington County within the study area.²⁰

The concentrated areas of the Town of Irmo, primarily consisting of the community of Columbiana, are largely within Lexington County. Not being suitable for rich plantations, in the mid eighteenth century, Irmo, Seven Oaks, and the surrounding Dutch Fork area (i.e., the southernmost land between the Saluda and Broad rivers) were settled by Germans who established family farms through British land grants. Reflecting these German roots, Bethlehem Lutheran Church, presently located within the study area along Broad River Road, was founded by German settlers around 1770. 22,23,24 St. Andrew's Lutheran Church, extant within the study area in the Broad community, was founded in 1835 in the present-day community of Seven Oaks. The concentrated settlement of Irmo did not coalesce until 1890, when the Columbia, Newberry, and Laurens Railroad initiated a rail line through the area. 22,25

¹⁶ NRHP. 1973. "Saluda Factory Historic District." Accessed June 3, 2015. http://www.nationalregister.sc.gov/lexington/S10817732003/S10817732003.pdf.

¹⁷ Lexington County. 2015. Lexington County Historic Tour. .Accessed May 28, 2015. http://maps.lex-co.com/HistoricTour/.

¹⁸ Riverbanks Zoo and Garden. 2015. "Saluda River Factory Ruins." Accessed May 28, 2015. http://www.riverbanks.org/historic-landmarks/factory-ruins/.

¹⁹ Columbia Metropolitan Airport. 2015. "History". Accessed June 4, 2015. https://www.columbiaairport.com/abouttheairport/history.aspx.

²⁰ Richland County. 2014. "A Brief History of Richland County, South Carolina." Accessed May 19, 2015.

 $[\]underline{http://www.richlandonline.com/Portals/0/Departments/PublicInformationOffice/Docs/BriefHistoryOf\%20Richland\%20County.pdf.}$

²¹ Town of Irmo. 2009. Town of Irmo Comprehensive Plan 2009. Prepared by the Town of Irmo Planning Commission and Central Midlands Council of Governments.

²² Able, Gene. 1990. Irmo and the Dutch Fork Legacy. The Independent News for the Irmo Centennial Commission, Irmo, SC.

²³ Bethlehem Lutheran Church. 2015. "About Us." Accessed June 4, 2015. http://www.bethlehemirmo.org/#labout_us/csgz.

²⁴ Martin, III, Joseph B. 1947. "A Guide to Presbyterian Ecclesiastical Names and Places in South Carolina 1685-1985." *The South Carolina Historical Magazine* 90(1 & 2):1-212.

²⁵ Lexington County. 2015. Lexington County Historic Tour. .Accessed May 28, 2015. http://maps.lex-co.com/HistoricTour/.

²⁶ St. Andrew's Lutheran Church. 2015. "History." Accessed June 4, 2015. http://www.salutheran.com/content/history.



In 1911, the Irmo area became the new location for a historically black college that played a prominent role in the history and education of local African-Americans. ^{22,27,28} Originally named Ferguson Academy, the school was founded in 1885 by Presbyterian ministers and at least partially supported by the Board of Missions for Freedmen of the United Presbyterian Church. ^{27,28} Suffering from racial tensions in its original location ninety miles to the west, in Abbeville, administrators of the school may have selected Irmo to avoid future tensions. The school sought to build an African-American Presbyterian community based on operating small, family-owned farms rather than sharecropping. Renamed Harbison Agricultural College and later Harbison Agricultural and Industrial Institute, the school operated until 1958 and, in 1978, was donated to Midlands Technical College and became a campus of the college. This historical college remains a key feature of the Irmo sub-area and, most particularly, the Columbiana community. ²⁹

Zion Lutheran Church, presently located on Corley Mill Road in the Saluda community, was founded in 1745 by German settlers of the area. ^{25,30} In the 1780s, church members formed the *Corpus Evangelicum*, an organization of fifteen congregations intended to oversee German churches in the state's interior. ^{31,32} West Columbia showed little growth until 1894, when a community intended to house workers of the Columbia Duck Mill was created. ^{33,34} Between 1894 and 1907, the worker housing development transformed a sparsely settled area known as Brookland to a town of over five thousand people. ³⁴ Residents of the community accessed the mill, first, by ferrying across the Congaree River and, later, by crossing a bridge over the river. ^{33,34} Although the community was named Aretasville after the president of the mill, the name Brookland or New Brookland persisted until the area was renamed West Columbia in 1938. ^{34,35} Private commercial interests developed the area around the community, especially on present-day Meeting and State Streets, to support the needs of Brookland residents. ^{33,34}

The Saluda and Riverbanks communities within the West Columbia sub-area were rurally settled until the mid-to late twentieth century, when suburban neighborhoods were built. This change reflects a general shift in focus from urban and rural developments to that of satellite communities with a decided suburban character. ³⁶ The establishment of the Riverbanks Park and Zoological Garden along the Saluda River in 1974 was part of this shift. Despite this change; however, local history is an important aspect of the area. In addition to providing access to

²⁷ Hoover, Valerie. 1990. "Harbison College". In *Irmo and the Dutch Fork Legacy*, edited by Gene Able, pp. 68. The Independent News for the Irmo Centennial Commission. Irmo, SC.

²⁸ University of South Carolina University Libraries. 2015. "Harbison Agricultural College Photograph Collection: Institutional History." Accessed July 9, 2015. http://library.sc.edu/digital/collections/harbisonabout.html.

²⁹ Midlands Technical College. 2015. "Campuses." Accessed September 2, 2015. http://www.midlandstech.edu/campuses#Beltline%20Campus.

³⁰ Zion Lutheran Church. 2015. "General Information." Accessed June 4, 2015. http://zionlexsc.com/sample-page/general-information/.

³¹ Lexington County. 2015. Lexington County Historic Tour. .Accessed May 28, 2015. http://maps.lex-co.com/HistoricTour/.

³² Martin, III, Joseph B. 1947. "A Guide to Presbyterian Ecclesiastical Names and Places in South Carolina 1685-1985." The South Carolina Historical Magazine 90(1 & 2):1-212.

³³ City of West Columbia. 2015. "Our History: West Columbia is a City with a History and a Future". Accessed June 3, 2015. https://westcolumbiasc.gov/history/.

³⁴ NRHP. 1978. "New Brookland Historic District.". Accessed June 3, 2015. http://www.nationalregister.sc.gov/lexington/S10817732009/S10817732009.pdf

Moore, John Hammond. 1993. Columbia and Richland County: A South Carolina Community, 1740-1990. University of South Carolina Press, Columbia.

³⁶ Richland County. 2014. "A Brief History of Richland County, South Carolina." Accessed May 19, 2015.

http://www.richlandonline.com/Portals/0/Departments/PublicInformationOffice/Docs/BriefHistoryOf%20Richland%20County.pdf



wildlife, the zoo features historic landmarks situated within its borders, including the Saluda Factory and portions of the old State Road discussed previously.³⁷

3.1.2 LOCAL PLANS AND INITIATIVES

3.1.2.1 Regional Level

The 2012-2017 Comprehensive Economic Development Strategy for the Central Midlands Region³⁸ was designed to combine the economic vision of the public and private sectors in order to diversify and strengthen the regional economy. It serves as an outline of regional goals and objectives, investment priorities, and funding sources, while also providing a regional plan of action to meet the goals. Lexington and Richland counties are both members of the Central Midlands Council of Governments (CMCOG). Planned job-creating projects in Lexington County include Nephron Pharmaceuticals (a \$300 million plant with research and development facilities on a sixty-acre parcel near Cayce) and Michelin (a \$200 million investment to its Lexington manufacturing facility). In addition, CMCOG is actively pursuing funding opportunities for a \$13 million industrial park along I-20 and a \$6 million industrial park along I-26.

The *Midlands Tomorrow: 2035 Long Range Transportation Plan*³⁹ was developed by the Columbia Area Transportation Study (COATS) and provides a long range outlook for transportation in the Columbia metropolitan area (including both Lexington and Richland counties). This plan identified freeways as critical to the state's emergency evacuation plans and emphasized that freeway infrastructure is being affected by increased tourist traffic and growth in international freight movement, particularly originating from the Port of Charleston. Additionally, the plan mentioned a proposed distribution center near I-26/95 in Orangeburg County, which would place more demands on the regional interstate system.

The COATS plan notes that sections of I-20 and I-26 within the Central Midlands region are some of the most congested roadways in South Carolina. Improvements to address this congestion would be costly, but needed to maintain acceptable levels of service. Proposed improvements in the COATS plan include interchange improvements at I-20/26 and at I-26/126, as well as widening of I-20 and I-26 within the study area.

3.1.2.2 County/Municipal Level

Several county and municipal plans are described herein. Existing land uses can be seen in Figure 3 and are discussed in general in this section as well as in each of the seven community characterization sections.

The Lexington County Comprehensive Plan⁴⁰ functions like, and has the same objectives as, the local zoning ordinance. The Lexington County portion of the study area (between Irmo and West Columbia) was originally zoned in 1980, and zoning gradually extended throughout the county over the years. The County has switched to a performance-based zoning model with more intensive uses along major arterials and less intensive (or restrictive) zoning on other smaller roads. The goals and objectives included in the plan include:

³⁷ Riverbanks Zoo and Garden. 2015. "Historic Landmarks." Accessed May 28, 2015. http://www.riverbanks.org/historic-landmarks/

³⁸ CMCOG. 2012. 2012-2017 Comprehensive Economic Development Strategy for the Central Midlands Region.

³⁹ CMCOG. 2009. Midlands Tomorrow: 2035 Long Range Transportation Plan. Columbia Area Transportation Study (COATS).

⁴⁰ Lexington County. 2015. Lexington County Comprehensive Plan: Goals and Objectives.



- ensuring the efficient and safe use of existing and proposed transportation facilities;
- promoting the compatibility of different land uses as an alternative to completely segregating residential, commercial, industrial, agricultural and other uses from one another;
- updating the land use plan for the Dutch Fork Planning Area to handle future development;
- encouraging a variety of housing types to meet demand; and,
- working with COATS to assist in reversal of sprawl pattern of development.

The Town of Irmo's Comprehensive Plan 2009, 41 which is also relevant to the Columbiana community, indicates that the Town annexed large developed areas as well as developing, residential areas in the 1980s; however, there have been fewer annexations and slower population growth more recently. The town has had an increasing proportion of elderly residents while household size has been shrinking. Trends since 1990 indicate that multi-family housing, such as along Columbiana Drive and Columbia Avenue, and manufactured homes may become more prevalent to meet the need for lower cost housing. Historically, Irmo has had a large percentage of single-family housing, and building permit data seem to confirm that this type of housing is still being constructed as well; however, the percentage of single-family housing has decreased in recent years because of the increase in multi-family housing. According to the Comprehensive Plan 2009, business development is concentrated along Lake Murray Boulevard and St. Andrews Road. The Town of Irmo lacks a formal town center, but the municipal complex includes the town hall, courthouse, police department and town park. The Town continues to search for opportunities to annex and expand business development. The future land use map included in the Town of Irmo's Comprehensive Plan 2009 shows single-family residential use throughout much of the town, with general commercial uses along major roadways like Lake Murray Boulevard and Dutch Fork Road. Limited commercial uses are shown along Woodrow Street, and farming/forestry uses are shown between Dreher Shoals Road and I-26.

The Congaree Coalition (made up of the cities of Columbia and West Columbia, the Columbia Development Corporation, the Eau Claire Development Corporation, the Columbia Housing Development Corporation and Two Notch Development Corporation) obtained a \$1 million brownfields grant from the Environmental Protection Agency (EPA) to conduct environmental assessments and redevelopment activities in the Congaree region. The City of West Columbia identified grant funded opportunities to encourage economic development for the Gateway Overlay District (GOLD). The *West Columbia GOLD Redevelopment Plan* ⁴² includes existing conditions, a needs assessment (in regards to land use, regulatory context and infrastructure), recommendations and implementation strategies. The area studied includes the Sunset Boulevard, Jarvis Klapman Boulevard, Meeting Street and State Street corridors. Limits are 9th Street and the Congaree River, which is near the southern edge of the study area. The redevelopment plan is relevant to the Riverbanks community.

In the West Columbia GOLD Redevelopment Plan, there is discussion about Columbia Mills being originally located on the eastern shore of the Congaree River and employees residing in worker housing on the western

⁴¹ Town of Irmo. 2009. Town of Irmo Comprehensive Plan 2009. Prepared by the Town of Irmo Planning Commission and Central Midlands Council of Governments.

⁴² City of West Columbia. 2012. West Columbia Gateway Overlay District Redevelopment Plan. Prepared by URS and Community Design Group.



side (see Columbia Duck Mill discussion in Section 3.1.1 of this report). The western side (the location of the GOLD) became a business district but was destroyed by fire in the early 1900s. Presently, there is a variety of land use in this district, including commercial, low- and medium-density residential, public and institutional, light industrial, and recreational. There is also vacant and undeveloped property.

The land use assessment done as part of the *West Columbia GOLD Redevelopment Plan* found scattered vacant parcels with infill opportunities for small development. One key site, a four-acre, City of West Columbia-owned site on Meeting Street between State and Alexander Road, could be a catalyst project for redevelopment. The assessment also revealed a need for additional recreational amenities, stronger connections between the GOLD and other districts, improved bus stop amenities, and increased pedestrian connectivity between stops and transit-oriented residential uses. The success of the redevelopment plan is primarily dependent on the promotion of public/private and joint capital initiatives—or catalyst projects—to work in conjunction with the City's redevelopment of the four-acre site on Meeting Street. Potential catalyst projects are the Riverwalk Park Expansion, the expansion of the Riverwalk Park and Amphitheater public space to house small-scale retail or restaurant space with added parking; the 817 Meeting Street Redevelopment, where office or retail use may occur; and the Capitol Square Redevelopment, which would entail the conversion of the existing strip center on Sunset Boulevard into mixed-use, residential, and office/retail space.

The City of West Columbia's *Comprehensive Plan*, ⁴³ which is relevant to the Saluda and Riverbanks communities, is intended to reaffirm guidelines and procedures for implementing development objectives from the City of West Columbia, and to provide guidance for planning decisions within the City. The area discussed in the plan is located between I-20 and I-126 (south of Saluda River and down to Airport Road). Since the mid to late twentieth century, West Columbia has been a bedroom community for Columbia, the state capital. Distribution of single-family permits has been mostly for infill lots or vacant lots in older subdivisions, but some new permits have been obtained near the Congaree River and along Botanical Parkway.

There are three areas identified as priority investment areas in West Columbia. One of these is the Riverfront District, where the City has sponsored improvements to complement the park, including landscaping along Meeting Street, sidewalks, street lighting and new signage. Future plans include a greenway extension to I-26 and development of City-owned property on Meeting Street. Another area, Triangle City, has had some pedestrian and façade improvements, but additional improvements may include landscaping, street furniture and a pedestrian crossing to make the area more pedestrian-friendly. The last priority area is Botanical Parkway, one of the newer residential areas, with direct access from the Botanical Gardens to Sunset Boulevard. The new corridor opened land up for development, but there is a need for sidewalk extensions and bike lanes, with a possible multi-use trail and formal landscaping.

As identified in the West Columbia *Comprehensive Plan*, existing land uses are typical, suburban-type uses with commercial uses along the major roads and residential areas beyond those. There is a mix of uses in places like Center Street, especially in the triangle area between Sunset Boulevard, Meeting Street/Augusta Road and Brown Street. The future land use map included in the West Columbia *Comprehensive Plan* shows similar land

⁴³ City of West Columbia. 2011. City of West Columbia Comprehensive Plan. Prepared by Central Midlands Council of Governments.



use patterns except with a Village District (Triangle City) at Augusta Road and Charleston Highway, the GOLD, commercial nodes concentrated along Sunset Boulevard, and future parks scattered throughout.

3.1.3 FCONOMICS

According to the *Community Profile: Lexington County*, ⁴⁴ approximately one hundred thirty thousand people are employed in Lexington County, with an unemployment rate of 5.1 percent (as compared to 6.4 percent in South Carolina). The top employers in Lexington County are Amazon.com, Babcock Center, House of Raeford Farms, Lexington County, Lexington County Health Services, Lexington County Schools (Districts 1, 2, and 5), Michelin North America, Publix Super Markets, Richland County Commission for Tech, SCANA Services, SMX, South Carolina Electric & Gas Co., Southeastern Freight Lines, Teleperformance USA, Time Warner Entertainment, United Parcel Service, Walmart Associates, and Walter P. Rawl & Sons.

The Quarterly Census of Employment and Wages indicates that the three industry sectors with the largest employment numbers are Health Care and Social Assistance (15,285), Retail Trade (14,843) and Accommodation and Food Services (10,651). Accommodation and Food Services is currently hiring in the largest numbers, while Health Care and Social Assistance has the greatest projected employment growth, by gross numbers, through 2020.⁴⁴

According to the South Carolina Department of Commerce, the total tax revenue in Lexington County for 2012 was \$184,974,977, and the total property value in 2012 was \$1,115,506,562. 45

3.2 Richland County

Richland County adjoins Lexington County to the east and is also near the central portion of South Carolina in the Midlands region of the state. The county is composed of farm lands and several urban areas. Columbia, at the center of Richland County, is both the county seat and the capital of South Carolina. Other municipalities are Blythewood, Eastover, and a small portion of Irmo. The study area within Richland County includes the smaller, project team-identified communities of Harbison, St. Andrews, and Broad. Given its proximity to Columbia, some of the most densely settled areas of the county are located in the study area.

3.2.1 HISTORY

In the early eighteenth century, future Richland County was situated between two significant Native American trading routes and was thus less strategic than areas to the west and east. ⁴⁶ However, following the establishment of the Saxe-Gotha township across the Congaree River from future Richland County in the early 1730s, Euro-Americans began to settle the floodplains of the Congaree and Wateree rivers and establish farms. ^{46,47,48} By 1747, the population of the area had reached around two hundred people, but by the 1750s,

⁴⁴ SCDEW. 2015. Business Intelligence Department. Community Profile: Lexington County. Columbia.

⁴⁵ SC Commerce. 2014. Labor Profile for Lexington and Richland Counties.

⁴⁶ Moore, John Hammond. 1993. Columbia and Richland County: A South Carolina Community, 1740-1990. University of South Carolina Press, Columbia.

⁴⁷ Lewis, Kenneth E. 1999. "The Metropolis and the Backcountry: The Making of a Colonial Landspace on the South Carolina Frontier". *Historical Archaeology* 33(3):3-1

⁴⁸ Richland County. 2014. "A Brief History of Richland County, South Carolina." Accessed May 19, 2015. http://www.richlandonline.com/Portals/0/Departments/PublicInformationOffice/Docs/BriefHistoryOf%20Richland%20County.pdf.



road systems and several ferries diverted some trade east of the Congaree River and led to an increase in population to just under one thousand people by 1760. ⁴⁹ The area suffered from a lack of government oversight and services until the latter 1760s, when unruly circumstances led to the establishment of several laws, a circuit court system, and garrisons to keep order. The Revolutionary War brought further strife and turmoil to the area, with people throughout future Richland County choosing differing sides of the conflict. After the close of the war, interior settlers began producing tobacco, a new export crop for the area and subsequently spurred adoption of the plantation system and growth of ground and water transportation systems to move the crop to market.

In 1785, the original boundaries of Richland County were shaped from the Camden District.⁴⁹ The town of Columbia was conceived by Senator John Lewis Gervais a year later and subsequently approved by the General Assembly as the new, centrally located capital of South Carolina.^{49,50,51} Relocation of the capital from Charleston largely resulted from requests to better accommodate the majority of South Carolina's population, which resided in the interior of the state. Cotton production began on large plantations and on other farms in Richland County in the 1790s, largely supplanting tobacco as the region's major cash crop and creating prosperous economic conditions for the new capital.^{49,51} The modern county boundaries were established in 1799, and Columbia was officially named the county seat.⁵¹

The antebellum cotton boom spurred the creation of canals, including the Columbia Canal on the Broad/Congaree River, to more effectively transport the crop. ⁴⁹ The Columbia Canal stimulated the local economy in the 1820s and 1830s and later became a source of power for numerous mills that were established in the area. In the 1830s, the South Carolina Railroad Company built tracks through Richland County, ⁴⁸ and in 1842, the Louisville, Cincinnati, and Charleston Railroad completed Columbia's first rail line, efficiently connecting the state capital with the coast. ⁴⁹ By the 1850s, Columbia had attracted a fairly large populace, around six thousand sixty inhabitants, and supported a growing urban complex replete with government services, an expanding transportation system, cultural institutions, and several colleges.

Following the Civil War, large plantations were separated into smaller farms, and settlements arose near train stops across the county. 48 Under the federal government's programs, the State Normal School and the Freedman's Bureau assisted freed slaves in obtaining education and land. Many rural residents moved closer to Columbia around the turn of the twentieth century. Camp Jackson, the military training camp later named Fort Jackson, was formed in 1917, during World War I, and deactivated following the war. With the rise of World War II, the camp was reestablished and expanded to occupy fifty-three thousand acres of eastern Richland County. Equalization schools were established throughout the county in the 1950s in an attempt to stop racial desegregation of public schools, which occurred at the University of South Carolina in 1963 and in the primary

 ⁴⁹ Moore, John Hammond. 1993. Columbia and Richland County: A South Carolina Community, 1740-1990. University of South Carolina Press, Columbia.
 ⁵⁰ Lockhart, Matthew A. 2003. "Under the Wings of Columbia: John Lewis Gervais as Architect of South Carolina's 1786 Capital Relocation Legislation." The

South Carolina Historical Magazine 104(3):176-197.

51 Richland County. 2014. "A Brief History of Richland County, South Carolina." Accessed May 19, 2015.



and secondary schools of Richland County by 1966.^{48,49} By the 1970s, the focus of many residents began to shift to suburban attractions, such as malls and parks in the Columbia metropolitan area.⁵²

The land between the Saluda and Broad rivers, including portions of Lexington, Richland, and Newberry counties and encompassing the Harbison, St. Andrews, and Broad communities within the Richland County portion of the study area, has long been known as the Dutch Fork. ⁵³ In the British colonial period, the area was settled by people of Germanic descent, ⁵³ both immigrants arriving in Charleston and then traveling west as well as German Americans relocating south from an initial stay in Pennsylvania. ^{54,55} Some German Americans who settled the Dutch Fork maintained traditions of their homeland by operating mills, several of which were along the Saluda and Broad rivers and tributaries in the eighteenth century. ⁵⁵ Many of the families were of Presbyterian and associated faiths and helped form German Lutheran, Presbyterian, and Reformed churches throughout the area. ^{53,54,55,56} Three such churches exist in the study area, Bethlehem Lutheran Church, St. Andrew's Lutheran Church, and Zion Lutheran Church, and are discussed in Section 3.1.1 of this report. Originally formed in 1835 in the Seven Oaks area, St. Andrew's Lutheran Church was relocated to its present site in the Broad community in 1949. ^{57,58}

Throughout the nineteenth and most of the twentieth centuries, the Dutch Fork remained characterized by rural settlements. In 1951, 2,135 acres were sold by the Board of National Missions for the Freedman of the Presbyterian Church to the South Carolina Forestry Commission for the creation of Harbison State Forest, a name honoring a benefactor of the church. ⁵⁹ It was not until the late twentieth century that suburban neighborhoods and commercial areas associated with the Columbia metropolitan area were developed in the portions of the Dutch Fork within the study area.

3.2.2 LOCAL PLANS AND INITIATIVES

3.2.2.1 Regional Level

The 2012-2017 Comprehensive Economic Development Strategy for the Central Midlands Region⁶⁰ identifies planned job creating projects in Richland County such as the planned new operations at WNS Global Services (with delivery center in Columbia). Funding opportunities will also be researched for various master plans (in areas such as Piney Grove/St. Andrews and Dutch Square/Lower Broad River) and various road improvements in the county totaling approximately \$30 million.

⁵² Richland County. 2014. "A Brief History of Richland County, South Carolina." Accessed May 19, 2015.

⁵³ Hollis, Daniel W. 1968. A History of Saint Andrews and the Dutch Fork. Home Federal Savings and Loan Association and the Saint Andrews Woman's Club, Columbia, SC.

⁵⁴ Able, Gene. 1990. Irmo and the Dutch Fork Legacy. The Independent News for the Irmo Centennial Commission, Irmo, SC.

⁵⁵ Quattlebaum, Paul. 1947. "Quattlebaum: A Palatine Family in South Carolina." The South Carolina Historical and Genealogical Magazine 48(1):1-11.

⁵⁶ Martin, III, Joseph B. 1947. "A Guide to Presbyterian Ecclesiastical Names and Places in South Carolina 1685-1985." *The South Carolina Historical Magazine* 90(1 & 2):1-212.

⁵⁷ Lexington County. 2015. Lexington County Historic Tour. .Accessed May 28, 2015. http://maps.lex-co.com/HistoricTour/.

⁵⁸ St. Andrew's Lutheran Church. 2015. "History." Accessed June 4, 2015. http://www.salutheran.com/content/history.

⁵⁹ SCFC. 2015. "Harbison State Forest." Accessed June 4, 2015. http://www.state.sc.us/forest/refharb.htm.

⁶⁰ CMCOG. 2012. 2012-2017 Comprehensive Economic Development Strategy for the Central Midlands Region.



The *Midlands Tomorrow: 2035 Long Range Transportation Plan*⁶¹ is also applicable to Richland County (see Section 3.1.2.1. of this document for discussion of this plan).

3.2.2.2 County/Municipal Level

The 2009 Richland County Comprehensive Plan⁶²) covers a portion of the study area. The planning areas in the study area include the North West and Beltway areas. The North West planning area is one of the densest of all planning areas, and growth is expected to continue. The Beltway planning area is the most populated and most dense of planning areas. This plan identifies several important features in the county, including three military installations - Fort Jackson, the McCrady Training Center, and the McEntire Joint National Guard Station. Fort Jackson is approximately fifty-two thousand acres and is the training base for approximately 50 percent of all soldiers entering the Army each year. Fifty thousand basic training and advanced soldiers come through the facility every year, with an additional twelve thousand attending courses. McCrady Training Center is on Fort Jackson and is a joint use training facility for other branches of military. McEntire Joint National Guard Station is a twenty-four hundred-acre base about twelve miles east of Columbia; it is home to twelve hundred members. Another key feature of the county is the University of South Carolina in Columbia, with over sixteen hundred full time faculty members and more than thirty thousand students. None of these features are in the study area, but residents of the study area may commute for work or study to these facilities.

The ten-year future land use map in the 2009 Richland County Comprehensive Plan. 62 shows mostly suburban land uses in the North West planning area, with rural uses in the extreme northwest portion and conservation near Harbison State Forest (now Harbison Environmental Education Forest) Priority investment areas are located near Irmo (Lake Murray Blvd/Broad River Road area and Dutch Fork Road). The amount of rural land is expected to decrease, with an increase in suburban land uses, particularly along Lake Murray and both sides of I-26 towards Chapin. Inefficient land use (i.e., sprawl) is a concern due to causing such issues as traffic congestion, crowding in schools and overextended infrastructure. The County desires to keep suburban uses in the area between the Beltway area and Dutch Fork Road area. In a portion of the Beltway planning area included in the study area, Urban Villages land uses are proposed. Richland County created a priority investment area in the southeast quadrant of the I-20/26 interchange to promote urban and suburban infill development.

The *Plan Columbia: Land Use Plan*⁶³ is an update to the future land use chapter of the City of Columbia's comprehensive plan, *The Columbia Plan 2018*. The plan is intended as a decision making tool for local officials and a guide for revisions to land development regulations. One of the guiding principles of the plan is to have a community with multimodal mobility choices. The city expects substantial growth, and there is a limited supply of large undeveloped parcels; current development patterns are low-density. Individual lot vacancy is fairly prevalent, so there is opportunity for infill development. This plan is relevant to all three of the Richland County communities of Harbison, St. Andrews, and Broad.

⁶¹ CMCOG. 2009. Midlands Tomorrow: 2035 Long Range Transportation Plan. Columbia Area Transportation Study (COATS).

⁶² Richland County. 2009. 2009 Richland County Comprehensive Plan.

⁶³ City of Columbia. 2015. Plan Columbia: Land Use Plan. Prepared by McBride Dale Clarion and Planning NEXT. Columbia.



Lake Murray Boulevard and Harbison Boulevard (both at I-26) are identified as community gateways, as are Greystone Boulevard (near the Broad River), Gervais Street, and Blossom Street (both leading to downtown Columbia). The ten-year future land use map shows a large civic/institutional district near Harbison Environmental Education Forest, and an urban edge activity center near Irmo (at the project terminus). There are park uses near the confluence of the Saluda and Broad Rivers and a community activity corridor near I-20/26. Scattered urban edge, mixed residential uses are shown along Broad River Road.

The *Broad River Road Corridor and Community Master Plan*⁶⁴ indicates that the Broad River Corridor, where the three interstates converge near Columbia, is a key commercial corridor in the St. Andrews community. Partly in unincorporated portions of Richland County and partly in Columbia, the area grew during the 1970s and 1980s with construction of Dutch Square Center and office parks. However, the loss of retail business and changing growth patterns has caused a gradual decline in the economic well-being of the area. This corridor study is one of the first comprehensive planning efforts undertaken as part of the County's Neighborhood Improvement Program.

The Broad River Road corridor study area is bounded by the Broad River to the north and east, Saluda River to the southeast, I-26/126 to the southwest, and Piney Grove/Harbison Environmental Education Forest to the northwest. The Broad River plan includes the desired future land uses for portions of the North West and Beltway planning areas— with suburban uses in the North West and urban uses in the Beltway planning area. The I-26/Broad River Road and Dutch Square/Broad River Road areas are identified as priority investment areas, which should contain a deliberate mix of residential, commercial and civic uses, with complete streets.

The Broad River plan shows the Piney Grove Village Center at Piney Grove Road and Broad River Road; the St. Andrews Neighborhood Activity Center at St. Andrews Road and Broad River Road; the Dutch Square Mixed-Use Transit Node near Bush River Road and Broad River Road; and the Greystone Boulevard Commercial District at Greystone Boulevard and Broad River Road. A Columbia High School Joint Use Sports Complex (near I-20/Broad River Road interchange) and University Extension Campus Judicial Center (near the Correctional Campus) are also proposed.

Improvements to I-26 would have a positive effect on Broad River Road (which serves as a parallel facility). The plan indicates that the I-20/26 interchange has been a problem area and explains that the interchange affects the corridor due to spillover traffic. Action strategies for economic development include establishment of a Broad River Merchants Association, Tax Increment Financing District, use of grant programs, and development incentives for rehabilitation programs.

The *Richland Renaissance Plan*⁶⁶ is a comprehensive solution to space issues faced by the government of Richland County. The plan proposes to set a series of transformative initiatives in motion that will be implemented throughout Richland County. Elements of the plan include consolidation of County operations and

⁶⁴ CMCOG and Richland County. 2010. Broad River Road Corridor and Community Master Plan. Prepared with IBI Group, McCreary Snow Architects, PA, Hall Planning & Engineering, Inc., and SPG. Atlanta.

⁶⁵ Richland County. 2009. 2009 Richland County Comprehensive Plan.

⁶⁶ Richland County. 2017. "Richland Renaissance Plan." Accessed January 31, 2018. http://rcgov.us/Richland-Next



relocation of their offices to the Columbia Place Mall; construction of a multi-purpose facility in Lower Richland County; the creation of a comprehensive historic trail and a broad community revitalization strategy. The plan also includes the development of a "start center" in the Broad River Road area. This "start center" is located within the Broad community and could be accessed by the I-126/Colonial Life Boulevard and I-20/Broad River Road interchanges. The "start center" would house a multi-modal transit center, business incubator, tourist center and more.

Published on April 30, 2018, a major component of the Richland Renaissance Plan is Revivify Richland⁶⁷, a broad strategy to boost economic development, eliminate blighted areas and enhance the overall livablility and image of Richland County. Revivify Richland asserts an overall goal of moving forward toward excellence via the remediation of Quail Atolls in the county. Quail Atolls (QAs) are areas exhibiting signs of decrepitude with the potential of adversely affecting economnic viability and/or property values in a locale, especially where posing a possible risk to future development and/or negatively impacts public perception. According to this plan, there are several QAs located throughout the project corridor; these QAs represent sites that contribute to blight in the county and also offer potential opportunity for revitalization. Higher densities of QAs within the study area appear around the I-26/Bush River Road, I-20/Broad River Road and I-26/St. Andrews interchanges. Though comprehensive in its analyses, Revivify Richland is not yet complete. Next steps include further review and comment by Richland County Council.

3.2.3 ECONOMICS

According to the *Community Profile: Richland County*, ⁶⁸, approximately one hundred eighty thousand people are employed in Richland County, with an unemployment rate of 6.0 percent (as compared to 6.4 percent in South Carolina). The top employers in Richland County are Allied Barton Security Services, Blue Cross Blue Shield of South Carolina, City of Columbia, Colonial Life & Accident Insurance, Department of Defense, Palmetto GBA, Palmetto Health, Richland County, Richland County Schools (Districts 1 and 2), SCDOT, South Carolina Department of Corrections, South Carolina Department of Mental Health, South Carolina Health & Environmental Control, Sisters of Charity Providence Hospital, South Carolina Department of Social Services, University of South Carolina, US Postal Service, Walmart Associates, and WJBD VA Medical Center.

The Quarterly Census of Employment and Wages indicates that the three industry sectors with the largest employment numbers are Health Care and Social Assistance (30,400), Public Administration (27,449) and Retail Trade (20,544). Administrative Support and Waste Management is currently hiring in the largest numbers, while Health Care and Social Assistance has the greatest projected employment growth by gross numbers through 2020.⁶⁹

⁶⁷ Richland County. 2018. "Richland Renaissance Plan. Revivify Richland." Accessed May 10, 2018. http://www.richlandcountysc.gov/Portals/0/Departments/PublicInformationOffice/RR/Revivify%20Richland_Web_04_30_2018.pdf for SCDEW. 2015. Business Intelligence Department. Community Profile: Richland County. Columbia.

⁶⁹ SCDEW. 2015. Business Intelligence Department. Community Profile: Richland County. Columbia.



According to the South Carolina Department of Commerce, the total tax revenue in Richland County for 2012 was \$223,248,622, and the total property value in 2012 was \$1,563,142,716.⁷⁰

3.3 Study Area Context and Community Characterization

3.3.1 TRANSPORTATION CONTEXT

3.3.1.1 Roadway Network

The roadway network in the study area includes three interstates (I-20, I-26, and I-126), four US routes (US-76, US-176, US-378, and US-1), two state highways (SC-60 and SC-12), and many local roadways. I-20 runs west to east through the study area, while I-26 and US-76 traverse the study area as north-south routes. I-126 veers southeastward from I-26 and accesses downtown Columbia. Local and regional commuters use these roadways.

US-176, also known as Broad River Road in the study area, travels in a north-south route through the study area toward downtown Columbia. It traverses the Columbiana community and serves as the backbone of the Harbison, St. Andrews, and Broad communities. US-378 traverses the study area from west to east and passes through downtown Columbia. This highway is known as Sunset Boulevard in the study area and serves as the backbone of both the Saluda and Riverbanks communities. US-1 is located in the southernmost portion of the Riverbanks community and traverses the study area as Meeting Street and Augusta Road (running west-east).

SC-60, also known as Lake Murray Boulevard, connects Lake Murray to US-176. It is an important commercial and office corridor in the Columbiana community. SC-12, also known as Jarvis Klapman Boulevard, runs eastwest through the Riverbanks community.

3.3.1.2 Public Transit

The Central Midlands Regional Transit Authority (CMRTA), also known as the Comet, provides bus service to the much of the study area and other portions of the central Midlands region. There are three routes that service the study area, including one through West Columbia, one along St. Andrews Road through the Irmo area, and another primarily along Bush River Road. Additionally, CMRTA/Comet operates a Dial-A-Ride Transit (DART) service for persons with disabilities that do not require the use of regular CMRTA/Comet fixed routes.⁷¹

Lexington County community facilities that can be accessed from the bus routes include the Columbiana Centre, Lexington Medical Center, the Riverbanks Zoo and Garden, and the West Columbia Riverwalk area. Richland County facilities that can be accessed from the bus routes include the St. Andrews/Richland County Public Library and the Dutch Square Center.

 $^{^{\}rm 70}$ SC Commerce. 2014. Labor Profile for Lexington and Richland Counties.

⁷¹ Central Midlands Regional Transit Authority (CMRTA). 2015. "The Comet." Accessed September 2, 2015. http://catchthecomet.org/.



3.3.1.3 Pedestrian and Bicycle Amenities

There are existing and proposed sidewalks and bicycle lanes scattered throughout the study area, particularly in the more urban, incorporated areas, such as Irmo, Columbia, and West Columbia. There are also recreational trails throughout the study area. The trails in Lexington County portion of the study area are located in the Riverbanks community. They include trails at the W. Wilson Howard Park adjacent to Northside Middle School, the Riverbanks Zoo and Garden, and the Three Rivers Greenway (existing and proposed sections). The trails in the Richland County portion of the study area include the Harbison (Harbison community) and Quail Valley (Columbiana community) neighborhood trails, and nine trails in the Harbison Environmental Education Forest (all in the Harbison community). One additional trail is located at Columbia High School (St. Andrews community).

3.3.1.4 Airports\Waterways\Rail

There are no airports (commercial or general aviation) in the study area.

There are two major waterways in the study area. The Saluda River flows from the Appalachian Mountains to Lake Murray (just northwest of the study area) and through the study area to join with the Broad River, thus forming the Congaree River. The Saluda River forms the boundary between the Seven Oaks and Saluda communities, and between the Riverbanks and Broad communities. The river also serves as the boundary between Lexington and Richland Counties in the southern portion of the study area. The Lower Saluda is designated as a State Scenic River⁷⁴ and a river trail runs through the study area. The Broad River flows from the Appalachian Mountains southward through Richland County portions of the study area to join the Saluda River to become the Congaree River. The Broad River serves as the eastern boundary of the study area. There are recreational uses along the Broad River.

A CSX railroad extends between Lake Murray (and points northward), along St. Andrews and Bush River Roads, and between the Saluda River and I-126 before heading eastward into downtown Columbia. This rail corridor is located in the Lexington County portion of the study area, in the Columbiana and Saluda communities.

3.3.2 STUDY AREA AND COMMUNITY CHARACTERIZATION

The seven communities were defined by the project team based on similarities in land use and context and by following Census Bureau and TAZ boundaries and visible features. The smaller communities are used as the foundation for the existing conditions analysis and the community characterization process. The Census Bureau tracts/block groups and TAZs are used in the evaluation of demographics, economics and growth trends within the study area and each of the communities.

Demographic and economic data presented in Tables 3.1 and 3.2 include information related to race (non-white) and ethnicity (Hispanic or Latino), age, Limited-English Proficiency (LEP), zero-vehicle households, median household income, low-income populations, median home value and unemployment. The Black/African

⁷² City of Columbia. 2014. Walk Bike Columbia: Pedestrian & Bicycle Master Plan. Prepared by Alta.

⁷³ The River Alliance. 2015. "Three Rivers Greenway." Accessed September 2, 2015. http://riveralliance.org/3rg.html.

⁷⁴ National Wild and Scenic Rivers System. "Choose a State." Accessed August 5, 2015. http://www.rivers.gov/south-carolina.php.



American population is the largest non-white population group in communities throughout the study area, and it will be discussed in the demographic profiles of each community. In general, populations under the age of eighteen and over the age of sixty-five, zero-vehicle households and low-income populations are considered more reliant on public transportation, and are therefore included in the demographic analysis in order to better evaluate the potential demand for public transportation services.

Economic data using medians (household income and home value) may be shown as a range, if the community is made up of more than one Census Bureau tract. Averaging the medians across U.S. Census Bureau tracts skews the data; therefore the range presented more accurately reflects the variations of economic characteristics within each community.

Table 3.1 Study Area Demographic Profile

Community	% Non- white	% Hispanic or Latino	% LEP	% Age: under 18 & 65 and over	% Zero vehicle households
Lexington County	18.9%	5.5%	3.2%	36.7%	4.6%
Columbiana	32.0%	3.4%	1.5%	34.7%	2.9%
Seven Oaks	38.1%	3.5%	2.4%	37.3%	2.5%
Saluda	16.6%	11.2%	5.8%	44.7%	10.2%
Riverbanks	34.1%	18.3%	10.2%	36.7%	10.2%
Richland County	50.5%	4.8%	3.0%	32.5%	6.9%
Harbison	38.5%	3.2%	1.9%	35.9%	5.4%
St. Andrews	73.8%	3.3%	2.4%	23.4%	11.6%
Broad	57.5%	3.2%	2.7%	23.4%	6.5%
Study Area	45.9%	5.3%	3.3%	32.3%	6.7%
South Carolina	32.1%	5.1%	3.0%	37.0%	7.0%

Source: US Census Bureau, 2010 Demographic Profile and American Community Survey 5-year Estimates (2009-2013) Tract and Block Group data. Population numbers have been rounded to the nearest hundred.

Table 3.2 Study Area Economic Profile

Community	Median household income	% Low - income	Median home value	% Unemployed
Lexington County	\$54,100	23.1%	\$140,100	6.2%
Columbiana	\$46,700 - \$71,000	21.2%	\$123,600 - \$191,000	1.6%
Seven Oaks	\$40,900 - \$79,600	19.4%	\$134,100 - \$166,900	1.5%
Saluda	\$46,900	20.9%	\$208,100	0.8%
Riverbanks	\$26,500 - \$78,300	28.6%	\$81,100 - \$174,700	2.6%
Richland County	\$48,400	27.9%	\$149,800	7.0%
Harbison	\$43,400 - \$65,300	16.5%	\$112,300 - \$180,000	1.5%
St. Andrews	\$19,700 - \$41,000	46.9%	\$79,000 - \$106,800	3.4%
Broad	\$29,800 - \$44,500	40.5%	\$106,600 - \$126,300	3.1%



Community	Median household income	% Low - income	Median home value	% Unemployed
Study Area	\$19,700 - \$79,600	27.1%	\$79,000 - \$208,100	2.9%
South Carolina	\$44,800	17.7%	\$137,400	6.9%

Source: US Census Bureau, 2010 Demographic Profile and American Community Survey 5-year Estimates (2009-2013) Tract and Block Group data. Median Household Income and Home Value numbers have been rounded to the nearest hundred.

Table 3.3 shows the socioeconomic trends of the state, counties, study area and communities, and each community is described in more detail in the sections following these tables.

Table 3.3 Study Area Socioeconomic Trends

	2010 Population	2040 Population	% Change	2010 Households	2040 Households	% Change	2010 Employment	2040 Employment	% Change
Lexington County	262,400	384,400	46.5%	102,700	148,600	44.7%	117,600	182,100	54.8%
Columbiana	12,200	12,000	-1.6%	4,800	4,600	-4.2%	10,900	14,300	31.2%
Seven Oaks	10,900	9,400	-13.8%	4,700	4,000	-	9,500	12,400	30.5%
						14.9%			
Saluda	3,600	4,100	13.9%	1,600	1,800	12.5%	8,400	10,700	27.4%
Riverbanks	9,800	8,300	-15.3%	4,200	3,600	-	5,400	6,800	25.9%
						14.3%			
Richland County	384,500	464,600	20.8%	145,200	178,900	23.2%	240,500	294,200	22.3%
Harbison	21,900	29,400	34.2%	8,900	11,500	29.2%	5,600	8,000	42.9%
St. Andrews	19,000	18,200	-4.2%	6,000	5,700	-5.0%	7,200	7,400	2.8%
Broad	9,000	9,500	5.6%	4,900	5,100	4.1%	17,400	24,200	39.1%
Study Area	86,500	90,900	5.1%	35,000	36,400	4.0%	64,400	83,900	30.3%
South Carolina	4,625,300	6,087,600	31.6%	1,801,10	2,401,400	33.3%	2,061,800	2,804,800	36.0%
				0					

Source: Socioeconomic data prepared for the South Carolina Statewide Travel Demand Model (2014/2015)

3.3.2.1 Columbiana

The Columbiana community is located in the Irmo sub-area of Lexington County, and situated west of I-26 and north of Piney Grove Road. The majority of the community is residential, with approximately thirteen subdivisions in the community. Table 3.4 (and all subdivision tables to follow in this report) provides a general description of the subdivision. Table 3.4 also includes a reference to the census tract that encompasses all or the majority of the subdivision; the tract number can be referenced in Appendix B to learn more detailed information about the demographic makeup of the subdivision. There are office uses along Lake Murray Boulevard and St. Andrews Road and commercial uses along Lake Murray Boulevard and Harbison Boulevard (Figure 3). The large, regional commercial centers of Columbiana Centre and Columbiana Station are both located near the Harbison Boulevard interchange at I-26, as shown in Figure 4.



Table 3.4 Columbiana Subdivisions

Subdivision	Census tract	Description
Archers Court	211.12	Suburban single-family detached homes near Columbia Avenue
Bellmont	211.12	Suburban single-family detached homes near Columbia Avenue
Carmel Commons	211.12	Suburban single-family detached homes near Columbia Avenue
Challedon	211.11	Suburban single-family detached homes near Piney Grove Road
Cornerstone	103.05	Suburban single-family detached homes near Piney Grove Road
Country Towns	211.12	Townhomes near St. Andrews Road
Country Walk Apts	211.11	Apartment complex near the I-26 interchange at Piney Grove Road
Fox Run	103.05	Suburban single-family detached homes near Lake Murray Boulevard
Friarsgate	103.05	Suburban single-family detached homes near N. Woodrow Street
Palmetto Park	211.12	Suburban single-family detached homes near St. Andrews Road
Quail Valley	211.12	Suburban single-family detached homes near Crossbow Drive
Waterford	103.05	Suburban single-family detached homes near Dreher Shoals Road
Whitehall	211.06	Suburban single-family detached homes near Piney Grove Road

Source: US Census Bureau; field review and aerial photography (including Google Maps); Lexington and Richland GIS

Town of Irmo services (police, fire, town hall) are located between Lake Murray Boulevard and Harbison Boulevard. The Midlands Technical College—Harbison Campus is located nearby on nineteen acres; it was originally the site of Harbison Junior College (see Section 3.1.1. for more discussion on the origins of this school). The campus offers courses and workshops to enhance professional development. Churches and cemeteries are scattered throughout the community and are identified along with parks and recreation facilities and schools in Table 3.5. These resources are labeled with a corresponding map ID on Figure 4.

Table 3.5 Columbiana Resources

Resource	Name	Location	Map ID
Churches & cemeteries	Alpha & Omega Church of God	1713 Chadford Road	1
	Victory Baptist Church	10245 Broad River Road	4
	Irmo Church of God	10215 Broad River Road	5
	East Lake Community Church	10057 Broad River Road	6
	St. Peter Baptist Church	7910 Broad River Road	7
	Fellowship Church	Roof Lowman Road	10
	Columbia Church	220 N Royal Tower Drive	11
	Christ Church of Irmo	25 Bluebird Trail	12
	Union United Methodist Church	7582 Woodrow Street	13
	Union United Methodist Cemetery	7582 Woodrow Street	14
	Macedonia Baptist Church	1125 Lake Murray Boulevard	15
	Youngs Chapel AME Church	7336 Carlisle Street	16
	St. Andrews Presbyterian Church	6952 St Andrews Road	20



Resource	Name	Location	Map ID
	Piney Grove Cemetery	439 Piney Grove Road	23
Parks & recreation	Friarsgate Park	1712 Chadford Road	2
	Dutch Fork Tennis Center	1141 Friarsgate Boulevard	9
	Irmo Town Park	1249 Lexington Avenue	17
	Quail Valley Swim & Racquet Club	1330 Country Squire Drive	21
Schools	H.E. Corley Elementary School	1500 Chadford Road	3
	Dutch Fork Elementary School	7900 Broad River Road	8
	Midlands Technical College - Harbison Campus	7300 College Street	18
	Harbison West Elementary School	257 Crossbow Drive	19
	Regency Beauty Institute	260 Harbison Boulevard #20	22

Source: local plans, field review and aerial photography (including Google Maps); Lexington and Richland GIS

Community Demographic Profile

The demographic characteristics within the Columbiana community, based on the U.S. Census Bureau data, are shown inTable 3.1. The non-white population of the Columbiana community makes up 32 percent of the total population, higher than that of the entirety of Lexington County, which contains 18.9 percent. The Black/African American population makes up 28.4 percent of the total population in this community, compared to the county average of 14.3 percent. The Hispanic or Latino population makes up 3.4 percent, which is less than the county average of 5.5 percent. The Limited English Proficiency (LEP) population in this community (1.5 percent) is less than the county average of 3.2 percent. The percentage of the population under the age of eighteen and over the age of sixty-five within Columbiana is 34.7 percent, compared to the county average of 36.7 percent.

Community Economic Profile

The percent unemployed for Columbiana is 1.6 percent, compared to Lexington County, which contains 6.2 percent unemployed (see Table 3.2). The median household income for this community ranges from \$46,700 to \$71,000; two of the three census tracts in the community have higher medians than that of Lexington County (\$54,100). Employment projections for 2040 show a 31.2 percent increase from 2010, the greatest increase of all the communities studied in Lexington County.

Of the total population, 21.2 percent is considered low-income, slightly less than the county average of 23.1 percent. The median value of owner-occupied homes in Columbiana ranges from \$123,600 to \$191,000. In comparison, Lexington County has a median home value of \$140,100.

Community Socioeconomic Trends

Population

As listed in Table 3.3, the 2010 total population within the Columbiana community was 12, 200, the highest population of all communities within the Lexington County portion of the study area. Population growth within the study area is expected to see a 5.1 percent increase between 2010 and 2040, while the total population in



Columbiana is expected to decrease by 1.6 percent to twelve thousand by 2040. As a whole, the county is estimated to see a 46.5 percent increase in population by 2040.

Households

As listed in Table 3.3, there were 4,800 total households in Columbiana in 2010, which is the greatest concentration of households of all communities in the Lexington County portion of the study area. The total number of households in Columbiana is expected to decrease 4.2 percent by 2040. Household growth of 4 percent is expected within the study area, while Lexington County is predicted to see a 44.7 percent increase in households by 2040.

Employment

As listed in Table 3.3, in 2010, the total number of jobs in Columbiana was 10,900, the greatest number of jobs of all communities within the Lexington County portion of the study area. The total number of jobs in 2040 in this community is expected to be 14,300, which would amount to a 31.2 percent increase. The Lexington County community with the highest concentration of jobs in 2040 is expected to be Columbiana, although job growth is anticipated throughout all communities. The study area is expected to see a 30.3 percent increase in jobs, while Lexington County is predicted to see a 54.8 percent increase in number of jobs.

3.3.2.2 Seven Oaks

The Seven Oaks community is located in the Irmo sub-area of Lexington County, positioned west of I-26 and south of Piney Grove Road. Like the Columbiana community, the majority of the Seven Oaks community is residential, with approximately seventeen subdivisions in the community (see Table 3.6). There are some office uses along I-20, and institutional uses are concentrated along St. Andrews Road and Bush River Road. Commercial uses, such as restaurants and retail stores, are concentrated near the I-26/St. Andrews Road and I-26 Bush River Road interchanges, while industrial uses are concentrated along the Saluda River. Subdivisions and community resources can be seen on Figure 5.

Table 3.6 Seven Oaks Subdivisions

Subdivision	Census tract	Description
Churchill	205.11	Apartment complex near St. Andrews Road
Closters	205.10	Apartment complex near St. Andrews Road
Gardendale	205.10	Suburban single-family detached homes near St. Andrews Road
Grenadier	205.10	Suburban single-family detached homes near St. Andrews Road
Grove Park/Forest Grove	211.06	Suburban single-family detached homes near Piney Grove Road
Landmark	205.11	Suburban single-family detached homes near Sidney Road
Peach Tree Apts	205.11	Apartment complex near I-26
Pine Glen	205.11	Suburban single-family detached homes near Bush River Road
Sherwood Forest	205.11	Suburban single-family detached homes near Bush River Road
St. Andrews Apts	205.11	Apartment complex near I-26 and St. Andrews Road
Stoney Creek Apts	205.11	Apartment complex near I-26



Subdivision	Census tract	Description
Stratton	205.11	Suburban single-family detached homes near Sidney Road
Whitcott	211.06	Apartment complex near I-26
Whitehall	205.11/211.06	Suburban single-family detached homes near St. Andrews Road and I-26
Williamsburg West	205.11	Suburban single-family detached homes near I-26
Willow Winds	205.11	Suburban single-family detached homes near St. Andrews Road
Woodland Hills	205.11	Suburban single-family detached homes near Bush River Road

Source: US Census Bureau; field review and aerial photography (including Google Maps); Lexington and Richland GIS

The Seven Oaks community is anchored by the large Whitehall subdivision and several parks on the western edge of the community. Churches and cemeteries are scattered throughout the community and are identified along with parks and recreation facilities and schools in Table 3.7. These resources are labeled with a corresponding map ID on Figure 5.

Table 3.7 Seven Oaks Resources

Resource	Name	Location	Map ID
Churches & cemeteries	Park Street Baptist Church	2204 Park Street	24
	St. Mary's Episcopal Church	170 St Andrews Road	27
	St. Andrews Road Church of Christ Cemetery	425 St Andrews Road	28
	St. Andrews Road Church of Christ	425 St Andrews Road	29
	Redeemer Lutheran Church	525 St Andrews Road	31
	Seven Oaks Presbyterian Church	530 St Andrews Road	32
	Columbia Crossroads Church	2723 Ashland Road	34
	Ashland United Methodist Church	2600 Ashland Road	35
	Our Lady of the Hills Catholic Church	120 Marydale Lane	38
	Christian Life Church	2700 Bush River Road	39
	Friendship AME Church	1449 Bush River Road	40
Parks & recreation	Irmo Chapin Recreation District	5605 Bush River Road	36
	Rivers Edge Retreat	1019 Garden Valley Lane	37
	Seven Oaks Park	200 Leisure Lane	26
Schools	Leaphart Elementary School	120 Piney Grove Road	25
	Ben Lippen Elementary School	7401 Monticello Road	30
	Seven Oaks Elementary School	2800 Ashland Road	33

Source: local plans, field review and aerial photography (including Google Maps); Lexington and Richland GIS

Community Demographic Profile

The demographic characteristics within the Seven Oaks community, based on the U.S. Census Bureau data, are shown in Table 3.1. The non-white population of the Seven Oaks community makes up 38.1 percent of the total population, higher than that of Lexington County, which, as a whole, contains 18.9 percent. The Black/African American population makes up 32.9 percent of the total population in this community, compared to the county



average of 14.3 percent, and the Hispanic or Latino population makes up 3.5 percent, which is less than the county average of 5.5 percent. The LEP population in this community (2.4 percent) is less than the county average of 3.2 percent. The percentage of the population under the age of eighteen and over the age of sixty-five within Seven Oaks is 37.3, slightly higher than the county average.

Community Economic Profile

The percent unemployed for Seven Oaks is 1.5 percent, compared to Lexington County, which contains 6.2 percent unemployed (see Table 3.2). The median household income for this community ranges from \$40,900 to \$79,600; only one census tract in the community has a higher median income than that of Lexington County (\$54,100), but that tract has the highest median income of all tracts in the study area. Employment projections for 2040 show a 30.5 percent increase from 2010, compared to the overall county-wide employment growth of 54.8 percent from 2010 to 2040.

Of the total population, 19.4 percent is considered low-income, slightly less than the Lexington County average of 23.1 percent. The median value of owner-occupied homes in Seven Oaks ranges from \$134,100 to 166,900. In comparison, Lexington County has a median home value of \$140,100.

Community Socioeconomic Trends

Population

Seven Oaks contains the second highest population within the Lexington County portion of the study area, with a 2010 total population of 10,900 (Table 3.3). The total population in Seven Oaks is expected to decrease by 13.8 percent to 9,400 by 2040. Population growth within the study area is expected to see a 5.1 percent increase between 2010 and 2040, while as a whole, the county is estimated to see a 46.5 percent increase by 2040.

Households

As listed in Table 3.3, there were 4,700 total households in Seven Oaks in 2010. The total number of households in this community is expected to decrease 14.9 percent by 2040. Household growth of 4 percent is expected within the study area, while Lexington County is predicted to see a 44.7 percent increase in households by 2040.

Employment

In 2010, the total number of jobs in Seven Oaks was 9,500 (Table 3.3), the second highest number of jobs in all communities within the Lexington County portion of the study area. The total number of jobs in 2040 in this community is expected to be 12,400, a 30.5 percent increase. The communities with the highest concentration of jobs in 2040 are expected to be Columbiana and Broad, although job growth is anticipated throughout all communities. The study area is expected to see a 30.3 percent increase in jobs, while overall, Lexington County is predicted to see a 54.8 percent increase in number of jobs.

3.3.2.3 Saluda

The Saluda community is located in the West Columbia sub-area of Lexington County, west of the Saluda River and I-26. Much of the area north of I-20 is undeveloped. The majority of the community south of I-20 is residential, with approximately eighteen subdivisions in the community (see Table 3.8). There are some office



uses scattered throughout the community, and commercial uses are concentrated along US-378 or Sunset Boulevard. This community is anchored by the Lexington Medical Center at the interchange of I-26 and US-378. This over four hundred-bed complex is part of a network with six hundred physicians, sixty practices and six medical or urgent care centers⁷⁵ (Figure 6).

Table 3.8 Saluda Subdivisions

Subdivision	Census tract	Description
Abberly Village Apartments	205.06	Apartment complex near Hulon Lane
Country Air Mobile Home Park	205.06	Mobile home community near Oakwood Road
Easton Estates	205.06	Suburban single-family detached homes near Fairlane Drive
Huffman Heights	205.06	Suburban single-family detached homes near Sunset Boulevard
Hulon Greene	205.06	Retirement community near Hulon Lane
Lexington Commons	205.06	Suburban single-family detached homes near Hulon Lane
Pine Lake	205.06	Suburban single-family detached homes near Fairlane Drive
Quail Apartments	205.06	Apartment complex near Feather Run Trail
Quail Creek	205.06	Suburban duplex homes near Pine Lake Drive
Quail Gardens	205.06	Suburban single-family detached homes near Henbet Drive
Quail Hollow	205.06	Suburban single-family detached homes near Ephrata Drive
Quail Hollow Village	205.06	Suburban single-family detached homes near Quail Hollow Lane
Quail Ridge	205.06	Suburban single-family detached homes near Henbet Drive
Riverchase	205.06	Suburban single-family detached homes near Riverchase Way
Royal Oaks	205.06	Suburban single-family detached homes near Riverchase Way
Saluda Commons	205.06	Suburban duplex homes near US-378 (Sunset Boulevard)
Sunset	205.06	Apartment complex near US-378 (Sunset Boulevard)
The Gates at Quail Hollow	205.06	Suburban single-family detached homes near Holly Ridge Lane

Source: US Census Bureau; field review and aerial photography (including Google Maps); Lexington and Richland GIS

Churches and cemeteries are scattered throughout the Saluda community and are identified along with parks and recreation facilities and schools in Table 3.9. These resources are labeled with a corresponding map ID on Figure 6.

Table 3.9 Saluda Resources

Resource	Name	Location	Map ID
Churches & cemeteries	Zion Evangelical Lutheran Church	226 Corley Mill Road	42
	Columbia Adventist Academy/Seventh Day Adventist	241 Riverchase Way	43
	Saluda River Baptist Church	3459 Sunset Boulevard	46

⁷⁵ Lexington Medical Center. 2015. Accessed September 2, 2015. http://www.lexmed.com/about/.



Resource	Name	Location	Map ID
	Mount Hebron United Methodist Church	3050 Leaphart Road	47
	Pineview Baptist Church of West Columbia	3010 Leaphart Road	48
	Columbia Church of Christ	1049 Harbor Drive	49
Parks & recreation	Quail Hollow Swim & Tennis	131 Blackhawk Trail	44
	Gates at Quail Hollow River Trail/Access	19 Willow Oaks Lane	45
Schools	River Bluff High School	320 Corley Mill Road	41
	Glenforest School	1041 Harbor Drive	50

Source: local plans, field review and aerial photography (including Google Maps); Lexington and Richland GIS

Community Demographic Profile

The demographic characteristics within the Saluda community, based on the U.S. Census Bureau data, are shown in Table 3.1. The non-white population of the Saluda community makes up 16.6 percent of the total population, lower than that of Lexington County, which contains 18.9 percent. This is the only community in Lexington County which has a lower non-white population than the county average, and it has the lowest non-white population in the study area. The Black/African American population makes up 8.9 percent of the total population in this community, compared to the county average of 14.3 percent. The Hispanic or Latino population is 11.2 percent of the total population in this community, compared to the county average of 5.5 percent. The LEP population in this community (5.8 percent) is more than the county average of 3.2 percent. The percentage of the population under the age of eighteen and over the age of sixty-five within Saluda is 44.7 percent, the highest population for these age groups of all communities of the study area.

Community Economic Profile

The percent unemployed for Saluda is 0.8 percent, substantially less than Lexington County, which contains 6.2 percent unemployed (see Table 3.2). The median household income for this community is \$46,900, which is lower than that of Lexington County (\$54,100). Employment projections for 2040 show a 27.4 percent increase from 2010, compared to the overall county-wide employment growth of 54.8 percent from 2010 to 2040.

Of the total population, 20.9 percent is considered low-income, slightly less than the Lexington County average of 23.1 percent. The median value of owner-occupied homes in Saluda is \$208,100, the highest value in all communities in the study area. Saluda's median home value is higher than the Lexington County median of \$140,100.

Community Socioeconomic Trends

Population

As listed in Table 3.3, the 2010 total population within the Saluda community was 3,600. By 2040, the total population is expected to increase by 13.9 percent to 4,100, the highest growth rate in all communities in the Lexington County portion of the study area. Population growth within the study area is expected to see a 5.1 percent increase between 2010 and 2040, while Lexington County as a whole is estimated to see a 46.5 percent



increase in population by 2040. Saluda is the only community in the Lexington County portion of the study area which is expected to have population and household growth through 2040.

Households

As listed in Table 3.3, there were 1,600 total households in Saluda in 2010, the lowest concentration of households of all communities in the Lexington County portion of the study area. The total number of households in Saluda is expected to increase 12.5 percent by 2040, which would be the highest household growth rate in all communities in the Lexington County portion of the study area. An average household growth of 4 percent is expected within the study area, while Lexington County is predicted to see a 44.7 percent increase in households by 2040.

Employment

The total number of jobs in Saluda was 8,400 in 2010 (Table 3.3). The total number of jobs in 2040 is expected to increase by 27.4 percent to 10,700. The study area is expected to see a 30.3 percent increase in jobs, while Lexington County is predicted to see a 54.8 percent increase in number of jobs.

3.3.2.4 Riverbanks

The Riverbanks community is located in the West Columbia sub-area of Lexington County, between I-26 and I-126. The majority of the community is residential, with approximately thirty-five subdivisions in the community (see Table 3.10). The majority of this community is located within the city limits of West Columbia. There are some office and institutional uses scattered throughout the community, and commercial uses are concentrated along US-378 (Sunset Boulevard) corridor and the I-26 corridor. The Riverbanks Zoo and Garden sits on a one hundred seventy-acre site along the Saluda River; the garden is located in the Riverbanks community, and the zoo is located across the river in the Broad community of Richland County. This facility is home to thousands of animals and a beautiful botanical garden (see Section 3.1.1. for more discussion on the park).

Table 3.10 Riverbanks Subdivisions

Subdivision	Census tract	Description
Bridgepointe	205.09	Condominiums on Sunset Boulevard
Brookland Mill	205.05	Suburban single-family detached homes near Hook Avenue
Burning Ridge	205.05	Suburban single-family detached homes near N Brown Road
Charleston Row	205.09	Suburban single-family detached homes on Ashley Court
Colonial Park	205.05	Suburban single-family detached homes near N Brown Street
Columbia Circle	205.05	Suburban single-family detached homes near Holland Street
Corley Terrace	205.05	Suburban single-family detached homes near Augusta Road
Double Branch Creek	205.08/205.09	Suburban single-family detached homes near Carrolton Street
Green Hill	205.05	Suburban single-family detached homes near Jarvis Klapman Boulevard
Greenwood Acres	205.05	Suburban single-family detached homes near Jarvis Klapman Boulevard
Gunter Circle	205.09	Suburban single-family detached homes near Duke Street
Happy Town	205.05	Mobile home community near Double Branch Road
Holland Circle	205.05	Suburban single-family detached homes near Holland Street



Subdivision	Census tract	Description
Kleckwood Heights	205.05	Suburban single-family detached homes near Morningside Drive
Lakeview Park	205.05	Suburban single-family detached homes near Batchelor Street
Lazy Creek Mobile Home	205.05	Mobile home community near Leaphart Road
Park		
Lexington Park	205.05	Suburban single-family detached homes near N 12 th Street
Lexington Terrace	205.05	Suburban single-family detached homes and duplexes near N 12 th Street
Mimosa Crescent	205.09	Suburban single-family detached homes near Sunset Boulevard
Reserve on the Saluda	205.09	Suburban single-family detached homes on Laurel Crest Drive
Riverbend	205.09	Apartment complex near Edgewater Lane
Riverbend Apartments	205.09	Apartment complex near N Lucas Street
Rivers Edge	205.08	Suburban single-family detached homes near McSwain Drive
Saluda Chase	205.08	Suburban single-family detached homes near Cardinal Drive
Saluda Gardens	205.09	Suburban single-family detached homes near Sunset Boulevard
Saluda Hills	205.08	Suburban single-family detached homes near Cofield Drive
Saluda Mills	205.09	Suburban single-family detached homes near Mohawk Drive
Saluda Park	205.05	Suburban single-family detached homes near Double Branch Road
Saluda River Estates	205.09	Suburban single-family detached homes near Comanchee Trail
Saluda Terrace	205.08	Suburban single-family detached homes near Saluda River Road
Skyview Heights	205.05	Suburban single-family detached homes near Jarvis Klapman Road
Sunset Terrace	205.09	Suburban single-family detached homes near Duke Street
Union Heights	205.09	Suburban single-family detached homes near N Leaphart Street
Westover Acres	205.08	Suburban single-family detached homes near McSwain Drive
Westwood Hills	205.08	Suburban single-family detached homes near Timber Ridge Drive

Source: US Census Bureau; field review and aerial photography (including Google Maps); Lexington and Richland GIS

Churches and cemeteries are scattered throughout the Riverbanks community and are identified along with other facilities in Table 3.11. These resources are labeled with a corresponding map ID on Figure 7.

Table 3.11 Riverbanks Resources

Resource	Name	Location	Map ID
Churches & cemeteries	Sunset Blvd Baptist Church	3459 Sunset Boulevard	51
	Trinity Christian Fellowship Church	1985 Old Fountain Road	52
	Church of Jesus Christ Latter Day Saints	1330 Whippoorwill Drive	53
	Chinese Christian Church of Columbia	2367 Klapman Road	56
	West Columbia Church of God	915 Kim Street	57
	Providence Presbyterian Church of West Columbia	1112 Hummingbird Drive	58
	Our Saviour Lutheran Church	1500 Sunset Boulevard	60
	Church of Christ at Park Street	1303 Sunset Boulevard	61
	Northside Baptist Church	4347 Sunset Boulevard	62
	Double Branch AME Church	Double Branch Road	63



Resource	Name	Location	Map ID
	Jesus Christ Tabernacle	635 N. Brown Street	64
	Turner Memorial AME Church	1122 Monticello Street	65
	Suburban Baptist Church	1700 Holland Street	66
	Church of Nazarene	100 S Woodside Parkway	67
	House for Prayer of Apostolic Faith	311 Lexington Street	68
	Green Hill Baptist Church	1734 Augusta Road	70
	St. Elizabeth the New Martyr Russian Orthodox Church	1703 Shull Street	71
	Trinity United Methodist Church	1201 Mohawk Drive	73
	Brookland Baptist Church West Columbia	1066 Sunset Boulevard	76
Parks & recreation	Lexington County Aging and Recreation	563 S Lake Drive	54
	Riverbanks Botanical Garden	500 Wildlife Parkway	74
	Richland - Lexington Parks District (Access to Botanical Garden)	1114 Ontario Drive	75
	Three Rivers Greenway	3436 Keenan Drive	77
	West Columbia River Walk	100 Sunset Boulevard	78
Schools	Northside Middle School	157 Cougar Drive	55
	Saluda River Academy of the Arts	1520 Duke Street	59
	BC Grammar Elementary School	114 Hook Avenue	69
	Colonial Christian Academy	1110 Meeting Street	72

Source: local plans, field review and aerial photography (including Google Maps); Lexington and Richland GIS

Community Demographic Profile

The demographic characteristics within the Riverbanks community, based on the U.S. Census Bureau data, are shown in Table 3.1. The non-white population of the Riverbanks community makes up 34.1 percent of the total population, higher than that of Lexington County, which contains 18.9 percent. The Black/African American population makes up 20.2 percent of the total population in this community, compared to the county average of 14.3 percent. Of the entire study area, the Hispanic or Latino population is the highest in the Riverbanks community, making up 18.3 percent of the total population, while the county average is 5.5 percent. The LEP population in this community is also the highest of all communities in the study area, at 10.2 percent, notably higher than the county average of 3.2 percent. The percentage of the population under the age of eighteen and over the age of sixty-five within Riverbanks is 36.7 percent, equal to that of Lexington County.

Community Economic Profile

The percent unemployed for Riverbanks is 2.6 percent, less than the 6.2 percent in Lexington County. The median household income for this community ranges from \$26,500 to \$78,300; only one of the three census tracts in this community are higher than that of Lexington County (\$54,100). Employment projections for 2040 show a 25.9 percent increase from 2010, compared to the overall county-wide employment growth of 54.8 percent from 2010 to 2040.



Of the total population, 28.6 percent is considered low-income, which is more than the Lexington County average of 23.1 percent. The median value of owner-occupied homes in Riverbanks ranges from \$81,100 to \$174,700. In comparison, the Lexington County median home value is \$140,100.

Community Socioeconomic Trends

Population

The 2010 total population within the Riverbanks community was 9,800 (Table 3.3). The total population is expected to decrease by 15.3 percent to 8,300 by 2040. Population growth within the study area is expected to see a 5.1 percent increase between 2010 and 2040, while Lexington County as a whole is estimated to see a 46.5 percent increase by 2040.

Households

As listed in Table 3.3, there were 4,200 total households in Riverbanks in 2010. The total number of households in this community is expected to decrease 14.3 percent by 2040. An average household growth of 4 percent is expected within the study area, while Lexington County is predicted to see a 44.7 percent increase in households by 2040.

Employment

In 2010, the total number of jobs in Riverbanks was 5,400 (Table 3.3), the lowest concentration of jobs in all communities within the Lexington County portion of the study area. The total number of jobs in 2040 in this community is expected to be 6,800, a 25.9 percent increase. The study area is expected to see a 30.3 percent increase in jobs, while in Lexington County, a 54.8 percent increase in number of jobs is predicted.

3.3.2.5 Harbison

The Harbison community is located in the Dutch Fork sub-area of Richland County, between I-26 and the Broad River. This community has the greatest amount of undeveloped land in the study area. The majority of developed portions of the community are residential, with approximately forty-two subdivisions in the community (see Table 3.12. There are some office and industrial uses scattered throughout the community, while commercial uses are concentrated along US-176 or Broad River Road. This community is anchored by the Harbison Environmental Education Forest (formerly Harbison State Forest), which is situated on more than two thousand acres in the southern portion of the Harbison community. No hunting or fishing is allowed in the forest, but other recreational opportunities include hiking, biking, camping, picnicking, nature study and canoe access to the Broad River (by permit). These neighborhoods and the forest can be seen, along with other community resources, in Figure 8.

Table 3.12 Harbison Subdivisions

Subdivision	Census tract	Description
Arbor Oaks	103.09	Suburban single-family duplex homes near Lykes Lane
Ascot	103.08	Suburban single-family detached homes near Hollingshed Road



Subdivision	Census tract	Description
Audubon Oaks	103.08	Suburban single-family detached homes near I-26
Autumn Woods	103.09	Suburban single-family detached homes near Peachtree Drive
Beacon Hill	103.04	Suburban single-family detached homes near Columbiana Drive
Belfair Oaks	103.08	Suburban single-family detached homes near Kennerly Road
Bonnie Forest	103.04	Suburban single-family detached homes near US-176 (Broad River
		Road)
Caedmon's Creek	103.08	Suburban single-family detached homes near I-26
Chestnut Hill	103.09	Suburban single-family detached homes near Lost Creek Drive
Columbiana Ridge Apts	103.04	Apartment complex near Columbiana Drive
Concord Place	103.08	Suburban single-family detached homes near Kennerly Road
Crestmont	103.04	Apartment complex near I-26
Dutch Village	103.09	Suburban single-family detached homes near Kennerly Road
Forest Hills	103.04	Apartment complex near Harbison Boulevard
Foxboro	103.09	Suburban single-family detached homes near Hollingshed Drive
Glenridge	103.09	Suburban single-family detached homes near Broad River Road
Hamilton Park	103.04	Suburban single-family detached homes near Columbia Avenue
Hampton	103.04	Duplex development near US-176 (Broad River Road)
Harbison	103.04/103.09	Suburban single-family detached homes near US-176 (Broad River
		Road)
Harbison Wellspring Apts	103.04	Suburban single-family detached homes w/apartments near Harbison
		Boulevard
Harborchase	103.04	Suburban single-family detached homes near I-26
Heatherstone	103.08	Suburban single-family detached homes near Kennerly Road
Heritage Village	103.04	Multi-family development near US-176 (Broad River Road)
Highland Creek	103.09	Suburban single-family detached homes near Lost Creek Drive
Hollingshed Creek	103.09	Suburban single-family detached homes near Kennerly Road
Ivy Green	103.08	Suburban single-family detached homes near Koon Road
Kingston Forest	103.09	Suburban single-family detached homes near Hollingshed Road
Lost Creek	103.09	Suburban single-family detached homes near Lost Creek Drive
Manor View Court	103.04	Multi-family development near Woodcross Drive
Moses Hall	103.09	Suburban single-family detached homes near Moses Hall Drive
Paces Brook Apts	103.04	Apartment complex off of Columbia Drive near US-76
Palmerston	103.08	Suburban single-family detached homes near Koon Road
Pine Knoll	103.04	Suburban single-family detached homes near Piney Grove Road
Raintree Acres	103.09	Suburban single-family detached homes near Hollingshed Road
Riverwalk	103.09	Suburban single-family detached homes near US-176 (Broad River
Coninghavan	102.04	Road)
Springhaven	103.04	Suburban single-family detached homes near Piney Grove Road
Summerset	103.09	Suburban single-family detached homes near Silver Fox Lane



Subdivision	Census tract	Description
Timber Knoll	103.09	Apartment complex near Harbison Boulevard
Walden Heights	103.04	Apartment complex near Lake Murray Boulevard
Wellspring	103.04	Apartment Complex near Harbison Boulevard
Windstone	103.04	Multi-family development near Harbison Boulevard
Winrose Place	103.09	Suburban single-family detached homes near Lykes Lane

Source: US Census Bureau; field review and aerial photography (including Google Maps); Lexington and Richland GIS

Churches are scattered throughout the Harbison community and are identified along with parks and recreation facilities and schools in Table 3.13. These resources are labeled with a corresponding map ID on Figure 8.

Table 3.13 Harbison Resources

Resource	Name	Location	Map ID
Churches & cemeteries	St. Paul AME Church	835 Kennerly Road	82
	Grace Presbyterian Church	225 N Brickyard Road	83
	Kennerly Baptist Church	1526 Kennerly Road	84
	Hope Lutheran Church	1400 Kennerly Road	85
	Apostolic Temple Church	928 Kennerly Road	87
	Three Rivers Baptist Church	7452 Broad River Road	88
	St. Paul AME Church Irmo	835 Kennedy Road	89
	Episcopal Church of St. Simon	1110 Kinley Road	90
	Youngs Chapel AME Church	7336 Carlisle Street	91
	St James Church	1016 Kinley Road	92
	Universal Outreach Church	7232 Broad River Road	93
	Riverland Baptist Church	201 Lake Murray Boulevard	95
	Christus Victor Lutheran Church	400 Harbison Boulevard	96
	Grace United Methodist Church	410 Harbison Boulevard	97
	Church of Jesus Christ Latter Day Saints	7449 Broad River Road	98
	New Heights Church	5501 Broad River Road	99
Parks & recreation	Ascot Recreation Center	1026 Steeple Ridge Road	81
	Kingston Forest Swim & Tennis Club	200 Delanie Woods Drive	86
	Harbison State Forest	Broad River Road	94
	Pine Grove Community Center	937 Piney Woods Road	100
Schools	Oak Pointe Elementary School	1 Riverbottom Road	79
	River Springs Elementary School	115 State Road S-40-2396	80

Source: local plans, field review and aerial photography (including Google Maps); Lexington and Richland GIS



Community Demographic Profile

The demographic characteristics within the Harbison community, based on the U.S. Census Bureau data, are shown in Table 3.1. The non-white population of the Harbison community makes up 38.5 percent of the total population, lower than that of Richland County, which contains 50.5 percent. The Black/African American population makes up 34.3 percent of the total population in this community, compared to the county average of 45.9 percent, and the Hispanic or Latino population makes up 3.2 percent, which is less than the county average of 4.8 percent. The LEP population in this community (1.9 percent) is less than the county average of 3 percent. The percentage of the population under the age of eighteen and over the age of sixty-five within Harbison is 35.9 percent, which is slightly higher than the county average of 32.5 percent.

Community Economic Profile

The percent unemployed for Harbison is 1.5 percent, less than Richland County, which contains 7.0 percent unemployed. The median household income for this community ranges from \$43,400 to \$65,300, which is generally higher than that of Richland County (\$48,400). Employment projections for 2040 show a 42.9 percent increase from 2010, compared to the overall Richland County employment growth of 22.3 percent from 2010 to 2040. This community is expected to see the greatest employment growth in the study area.

Of the total population, 16.5 percent is considered low-income, less than the Richland County average of 27.9 percent. The median value of owner-occupied homes in Harbison ranges from \$112,300 to \$180,000. In comparison, the median home value in Richland County is \$149,800.

Community Socioeconomic Trends

Population

As listed in Table 3-3, the 2010 total population within the Harbison community was 21,900, which constitutes the highest concentration of people in the study area. The total population in Harbison is expected to increase by 34.2 percent to 29,400 by 2040, the highest growth rate in all communities in the study area. Population growth within the study area is expected to see a 5.1 percent increase between 2010 and 2040, while population growth in Richland County as a whole is estimated to increase by 20.8 percent by 2040.

Households

As listed in Table 3.3, there were 8,900 total households in Harbison in 2010, the highest concentration of households of all communities in the study area. The total number of households in Harbison is expected to increase 29.2 percent by 2040, the highest household growth rate in all communities in the study area. An average household growth of 4 percent is expected within the study area, while Richland County is predicted to experience a 23.2 percent increase in households by 2040.

Employment

The total number of jobs in Harbison was 5,600 in 2010 (Table 3.3), the lowest concentration of jobs in the Richland County portion of the study area. The total number of jobs in 2040 is expected to increase by 42.9 percent to eight thousand, the highest job growth rate of all communities in the study area. The study area is



expected to see a 30.3 percent increase in jobs, while Richland County is predicted to see a 22.3 percent increase in number of jobs.

3.3.2.6 St. Andrews

The St. Andrews community is located in the West Columbia sub-area of Richland County, west of the Saluda River and I-26 and just northeast of the I-20/26 interchange. Several correctional institutions encompass large tracts of land in this community. The Broad River Correctional Institution is a high-security facility for male inmates and serves as the state's capital punishment facility. The neighboring Kirkland Correctional Institution is the site of the state's maximum security and protective custody units. A juvenile correctional facility and other law enforcement organizations have facilities in the same area, between Broad River Road and the Broad River. ⁷⁶

The remainder of the community is predominantly residential, with approximately forty-seven subdivisions in the community (see Table 3.14). This community has a large percentage of multi-family housing, particularly along the interstate corridors. Commercial uses are concentrated along Broad River Road. Subdivisions and community resources can be seen in Figure 9.

Table 3.14 St. Andrews Subdivisions

Subdivision	Census tract	Description				
Apple Valley	104.07	Suburban single-family detached homes near US-176 (Broad River Road)				
Autumn Ridge	104.10	Apartment complex near Kay Street				
Beatty Downs	104.10	Suburban attached townhomes near Beatty Road				
Bent Tree	104.11	Apartment complex near Zimalcrest Drive				
Briargate	104.11	Apartment complex near Briargate Circle				
Broad River Estates	104.07	Suburban single-family detached homes near I-26				
Brookpine Apts	104.09	Apartment complex near US-176 (Broad River Road)				
Carriage House	104.11	Apartment complex near Zimalcrest Drive				
Lamplighter Village						
Chartwell	104.11	Suburban single-family detached homes near St. Andrews Road				
Cherokee Gardens	104.11	Suburban single-family detached homes near Seminole Road				
Colony East	104.10	Apartment complex near Kay Street				
Courtyard Apts	104.10	Apartment complex near I-26				
Courtyard Condos	104.10	Apartment complex near I-26				
Crestland Place	104.10	Suburban duplex attached homes near Huffstetler Drive				
Cricket Hill	104.10	Apartment complex near Evelyn Drive				
Crossroads	104.11	Apartment complex near Seminole Road				

⁷⁶ South Carolina Department of Corrections. 2007-2015. Accessed September 2, 2015. http://www.doc.sc.gov/pubweb/institutions/brci.jsp.



Subdivision	Census tract	Description
Cypress Run Apts	104.09	Apartment complex near US-176 (Broad River Road)
Emerald Valley	104.07	Suburban single-family detached homes near Marley Drive
Farmdale	104.10	Suburban single-family detached homes near Piney Woods Road
Green Oaks	104.09	Apartment complex near US-176 (Broad River Road)
Haviland	104.09	Suburban single-family detached homes near US-176 (Broad River Road)
Homewood Terrace	104.10	Suburban single-family detached homes near US-176 (Broad River Road)
Hunters Pond	104.07	Suburban single-family detached homes near US-176 (Broad River Road)
Hunters Ridge	104.11	Apartment complex near US-176 (Broad River Road) and St. Andrews Road
Kingswood & Pine	104.07	Suburban single-family detached homes near US-176
Valley		
London Berry	104.07	Multi-family development near US-176 (Broad River Road)
Mandel Park	104.10	Suburban single-family detached homes near US-176 (Broad River Road)
Marley	104.07	Suburban single-family detached homes near Marley Drive
Raintree	104.10	Apartment complex near Evelyn Dr and US-176 (Broad River Road)
Regency Park	104.09	Apartment complex near US-176 (Broad River Road)
Rembert Martin Park	104.10	Mobile home community near Beatty Road
Richland Terrace	104.10	Suburban townhome apartments near Metze Road
St. Andrews	104.07	Suburban single-family detached homes near US-176 (Broad River Road)
St. Andrews Place	104.07	Suburban single-family detached homes near US-176 (Broad River Road)
St. Andrews Terrace	104.09	Suburban single-family detached homes near US-176 (Broad River Road)
St. Andrews Apts	104.07	Apartment complex near I-26
St. Andrews Commons	104.11	Apartment complex near St. Andrews Road
St. Andrews Point	104.07	Apartment complex near St. Andrews Road
St. Andrews Woods	104.10	Suburban attached townhomes near Beatty Road
Suburban Acres	104.11	Suburban single-family detached homes near Beatty Road
The Farrington	104.07	Apartment complex near US-176 (Broad River Road)
The Quarters Condos	104.10	Apartment complex near US-176 (Broad River Road)
Village Creek	104.10	Apartment complex near Kay Street
Westchester	104.07	Suburban single-family detached homes near US-176 (Broad River Road)
Westshire	104.10	Suburban single-family detached homes near Beatty Road
Willow Creek	104.10	Apartment complex near Fernandina Road
Windridge Duplexes	104.10	Multi-family development (duplexes) near St. Andrews Road

Source: US Census Bureau; field review and aerial photography (including Google Maps); Lexington and Richland GIS

Churches are scattered throughout the St. Andrews community and are identified along with parks and recreation facilities and schools in Table 3.15. These resources are labeled with a corresponding map ID on Figure 9.



Table 3.15 St. Andrews Resources

Resource	Name	Location	Map ID
Churches & cemeteries	New Covenant Assembly	600 Piney Woods Road	101
	Church of the Harvest	4865 Sunset Boulevard	103
	Right Direction Christian Center	1234 St Andrews Road	105
	First Church of the Nazarene	901 St Andrews Road	106
	St. Andrews Evangelical Church	2609 Seminole Road	110
	International Family Church	1311 Marley Drive	111
Parks & recreation	St. Andrews Park	920 Beatty Road	104
	St. Andrews Library	2916 Broad River Road	107
	Richland County Recreation	1320 Clemson Road	112
Schools	Pine Grove Elementary School	111 Huffstetler Drive	102
	Columbia High School	1701 Westchester Drive	108
	Sandel Elementary School	2700 Seminole Road	109

Source: local plans, field review and aerial photography (including Google Maps); Lexington and Richland GIS

Community Demographic Profile

The demographic characteristics within the St. Andrews community, based on the U.S. Census Bureau data, are shown in Table 3.1. The non-white population of the St. Andrews community makes up 73.8 percent of the total population; this is the highest concentration of a non-white population of all communities in the study area and is notably higher than that of Richland County, which contains 50.5 percent non-white. The Black/African American population makes up 70.4 percent of the total population in this community, which is the highest concentration of Black/African Americans throughout all communities in the study area. The Hispanic or Latino population makes up 3.3 percent, less than the county average of 4.8 percent. The LEP population in this community (2.4 percent) is slightly less than the county average of 3 percent. The percentage of the population under the age of eighteen and over the age of sixty-five within St. Andrews is 23.4 percent, which is lower than the county average of 32.5 percent.

Community Economic Profile

The percent unemployed for St. Andrews is 3.4 percent. The median household income for this community ranges from \$19,700 to \$41,000, with the lowest median household incomes in the study area and lower than that of Richland County (\$48,400). Employment projections for 2040 show a 2.8 percent increase from 2010, much lower than the expected overall Richland County employment growth of 22.3 percent from 2010 to 2040.

Of the total population, 46.9 percent is considered low-income, which is higher than the Richland County average of 27.9 percent and the highest poverty rate in the study area. The median value of owner-occupied homes in St. Andrews ranges from \$79,000 to \$106,800, with some of the lowest media home values in the study area. In comparison, the median home value in Richland County is \$149,800.



Community Socioeconomic Trends

Population

The 2010 total population within the St. Andrews community was nineteen thousand (Table 3.3), the second highest concentration of people in all communities of the study area. The total population in St. Andrews is expected to decrease 4.2 percent to 18,200 by 2040. Population growth within the study area is expected to see a 5.1 percent increase between 2010 and 2040, while the county as a whole is estimated to see a 20.8 percent increase by 2040.

Households

As listed in Table 3.3, there were six thousand total households in St. Andrews in 2010. The total number of households in this community is expected to decrease 5 percent by 2040. An average household growth of 4 percent is expected within the study area, while Richland County is predicted to see a 23.2 percent increase in households by 2040.

Employment

The total number of jobs in St. Andrews was 7,200 in 2010 (Table 3.3). The total number of jobs in 2040 in this community is expected to be 7,400, a 2.8 percent increase. The study area is expected to see a 30.3 percent increase in jobs, while Richland County is predicted to see a 22.3 percent increase in number of jobs.

3.3.2.7 Broad

The Broad community is located in the West Columbia sub-area of Richland County, situated between I-20 and I-126. The majority of the community is residential, with approximately twenty-nine subdivisions in the community (see Table 3.16). There are some office and industrial uses scattered throughout the community, and commercial uses are concentrated along Bush River Road and Greystone Boulevard. This community is anchored by the Dutch Square Center,⁷⁷ a large mall situated on Bush River Road. This was the first enclosed mall built in the state of South Carolina. Along Greystone Boulevard is a large car sales park. Additionally, the Riverbanks Zoo and Garden is located in the very southern portion of the Broad community along the Saluda River.

Table 3.16 Broad Subdivisions

Subdivision	Census tract	Description
Arrowwood	104.03	Suburban single-family detached homes near Arrowwood Drive
Arrowwood Heights	104.03	Suburban single-family detached homes near Arrowwood Road
Ashton at Longcreek	104.12	Apartment complex near Longcreek Drive
Belmont Estates	104.03	Suburban single-family detached homes near Bakersfield Road

⁷⁷ Columbia Visitors Bureau. 2015. "Dutch Square Center." Accessed September 2, 2015. http://www.columbiacvb.com/.



Subdivision	Census tract	Description
Broad River Township	104.13	Gated community containing patio homes, river homes, and condos
		near Bentley Road
Broad River Trace	104.03	Apartment complex near Riverhill Circle
Apartment		
Carnaby Square	104.12	Condominium complex near Longcreek Drive
Dutchbrook	104.03	Suburban single-family detached homes near N Arrowwood Road
Elm Abode	104.12	Suburban single-family detached homes near Broad River Road
Essex Park Apartments	104.12	Apartment complex near Longcreek Drive
Greenbrook	104.03	Suburban single-family detached homes near Arrowwood Road
Huffman Heights	104.13	Suburban single-family detached homes near Broad River Road
Huffman Heights	104.03	Suburban single-family detached homes near Arrowwood Road
Lexington Green	104.03	Condominium community near Bush River Road
Pinewood Knoll	104.03	Suburban single-family detached homes near Starlight Drive
Rivergate Apartments	104.13	Apartment complex near Bentley Road
Riverside Park	104.12	Suburban single-family detached homes near Broad River Road
Riverview Apartments	104.12/104.1	Apartment complex near Bentley Drive
	3	
Riverwind Apartments	104.12	Apartment complex near Longcreek Drive
Skyland Estates	104.03	Suburban single-family detached homes near Riverhill Circle
Skyview Terrace	104.03	Suburban single-family detached homes near Browning Road
Stone Ridge Apartments	104.03	Apartment complex near Skyland Drive
The Bentley at Broad River	104.13	Apartment complex near Bentley Drive
The Hollows	104.12	Apartment complex near Longcreek Drive
The Mill at Broad River	104.13	Apartment complex near Broad River Road
Trace Apartments		
The Park Apartments	104.12	Apartment complex near Longcreek Drive
The Waterford Apartments	104.12	Apartment complex near Longcreek Drive
Three Rivers	104.03	Apartment complex near Gracern Road
Wynfield Gables	104.12	Suburban single-family detached homes near Broad River Road

Source: US Census Bureau; field review and aerial photography (including Google Maps); Lexington and Richland GIS

Churches are scattered throughout the Broad community and are identified along with parks and recreation facilities and schools in Table 3.17. These resources are labeled with a corresponding map ID on Figure 10.

Table 3.17 Broad Resources

Resource	Name	Location	Map ID
Churches & cemeteries	Word of God Church	131 Diamond Lane	114
	Hope Interdenominational Church	1341 Garner Lane # 200	115
	New Spring Church	657 Bush River Road	118



Resource	Name	Location	Map ID
	Westminster Presbyterian	1715 Broad River Road	119
	Virginia Wingard Memorial UMC	1500 Broad River Road	120
	St. Andrews Baptist Church	230 Bush River Road	122
	St. Andrews Lutheran Church	1416 Broad River Road	123
	Youngs Chapel	359 Jacob Road	126
	Grace Bible Church	301 Greystone Boulevard #15	127
	Skyland Drive Baptist Church	901 Skyland Drive	128
Parks & recreation	Riverside Golf Course	1600 Garner Lane	116
Schools	ITT Tech	1628 Browning Road #180	113
	Remington College	607 Bush River Road	117
	Southeastern Institute	1420 Colonial Life Boulevard W	121
	St. Andrews Middle School	1231 Bluefield Drive	124
	HB Rhame Elementary School	1300 Arrowwood Road	125

Source: local plans, field review and aerial photography (including Google Maps); Lexington and Richland GIS

Community Demographic Profile

The demographic characteristics within the Broad community, based on the U.S. Census Bureau data, are shown in Table 3.1. The non-white population of the Broad community makes up 57.5 percent of the total population, the second highest concentration of non-white residents in all communities in the study area and slightly higher than that of Richland County, which contains 50.5 percent. The Black/African American population makes up 54.6 percent of the total population in this community, compared to the county average of 45.9 percent. The Hispanic or Latino population makes up 3.2 percent, less than the county average of 4.8 percent. The LEP population in this community (2.7 percent) is less than the county average. The percentage of the population under the age of eighteen and over the age of sixty-five within Broad is 23.4 percent, which is lower than the county average of 32.5 percent.

Community Economic Profile

The percent unemployed for Broad is 3.1 percent, less than Richland County, which contains 7.0 percent unemployed. The median household income for this community ranges from \$29,800 to \$44,500, which is lower than that of Richland County (\$48,400). Employment projections for 2040 show a 39.1 percent increase from 2010, higher than the overall Richland County employment growth of 22.3 percent from 2010 to 2040.

Of the total population, 40.5 percent is considered low-income, which is higher than the Richland County average of 27.9 percent. The median value of owner-occupied homes in Broad ranges from \$106,600 to \$126,300. Broad's median home values are lower than the Richland County median of \$149,800.



Community Socioeconomic Trends

Population

The 2010 total population within the Broad community was nine thousand (Table 3.3), the lowest concentration of people in all communities of the Richland County portion of the study area. The total population in Broad is expected to increase by 5.6 percent to 9,500 by 2040. Population growth within the study area is also expected to see a 5.1 percent increase between 2010 and 2040, while Richland County as a whole is estimated to see a 20.8 percent increase by 2040.

Households

As listed in Table 3.3, there were 4,900 total households in Broad in 2010, the lowest concentration of households in all communities of the Richland County portion of the study area. The total number of households in this community is expected to experience an increase of 4.1 percent by 2040. An average household growth of 4 percent is expected within the study area, while Richland County is predicted to see a 23.2 percent increase in households by 2040.

Employment

The total number of jobs in Broad was 17,400 in 2010 (Table 3.3), the highest concentration of jobs in all communities of the study area. The total number of jobs in 2040 in this community is expected to be 24,200; this would constitute a 39.1 percent increase and would represent the highest concentration of jobs in the study area in 2040. Job growth is anticipated throughout all communities. The study area is expected to see a 30.3 percent increase in jobs, while Richland County is predicted to see a 22.3 percent increase in number of jobs.

3.3.3 OTHER SPECIAL POPULATIONS

3.3.3.1 Disabled Individuals

Individuals with disabilities vary in their need for support services to achieve and maintain independence. Table 3.18 summarizes the estimated number of individuals with disabilities in the United States; State of South Carolina; and Lexington and Richland Counties. The estimates are for sensory, physical, mental, self-care, homebound, and employment-related disabilities. Available data for 2009-2013 indicate that the Lexington and Richland Counties disabled population percentage is below that of the state level. No residential locations dedicated specifically to serving disabled individuals have been identified in the CSA.

Table 3.18 Individuals with Disabilities

Geographic area	Total civilian non-institutionalized population with a disability	Percent of population which is disabled
United States	35,655,705	14.4%
South Carolina	600,253	16.6%

⁷⁸ Recent disability data is not available from the U.S. Census Bureau at the city, town, or census block level.



Geographic area	Total civilian non-institutionalized population with a disability	Percent of population which is disabled
Lexington County	27,579	13.2%
Richland County	39,244	13.6%

Source: U.S. Census Bureau 2009-2013 American Community Survey 5-Year Estimates

Note: The U.S. Census Bureau includes disability status of the civilian non-institutionalized population as a consideration under its five-year estimates for selected social characteristics in the United States.

Organizations and programs available to assist disabled individuals in the CSA include Disability Action Center, Able South Carolina and Bright Start. Disability Action Center, located in the Harbison community, is a part of the Able South Carolina organization. Able South Carolina is a Center for Independent Living, a consumer-controlled, community-based, cross-disability nonprofit that provides an array of independent living services to people of all ages with all types of disabilities, in 23 counties in South Carolina. Able South Carolina has a second location in the CSA in the Broad community. Bright Start, located adjacent to this location of Able South Carolina in the Broad community, is a private provider that offers early intervention services to children with disabilities and special needs.

3.3.3.2 Elderly Individuals

Elderly individuals are considered a vulnerable population; challenges and concerns for the elderly include health care, social isolation, limited mobility, and fixed incomes. As noted in Table 3.18, 12.6 percent of residents in the CSA are 65 or older. This percentage is higher than that of Richland County (10.2 percent), but slightly lower than that of Lexington County (12.8 percent). Within the CSA, the communities with the highest percentage populations of elderly individuals are Seven Oaks (38.1 percent) and Saluda (29 percent). The communities with the lowest percentage populations of elderly individuals are St. Andrews (4.3 percent) and Broad (7.1 percent).

There are no known 55 and older residential communities identified near the corridor or interchanges within the CSA. There are four known assisted living, nursing home, and rehabilitation complexes located near the corridor or interchanges within the CSA. These include Harbor Chase and Brookdale Harbison in the Harbison community, Brian Center Nursing Care in the Seven Oaks community, and The Columbia Presbyterian Community in the Saluda community. These facilities provide a range of care, from independent living to memory care. No other elderly communities were identified within the CSA.

Central Midlands Council of Governments (CMCOG) was designated as the midlands' Area Agency on Aging in 1976. The mission of the Area Agency on Aging is to plan programs and services for the growing population of older people in Lexington, Richland, Fairfield, and Newberry Counties. The agency subcontracts with local providers for delivery of services. The Regional Aging Advisory Committee, the majority of whom are older individuals or individuals who are eligible to participate in Older Americans Act programs, representatives of older persons and the general public, assists the Council of Governments in fulfilling the responsibilities of the Area Agency on Aging.⁷⁹

⁷⁹ https://centralmidlands.org/about/aging-services.html. Central Midland Council of Governments.

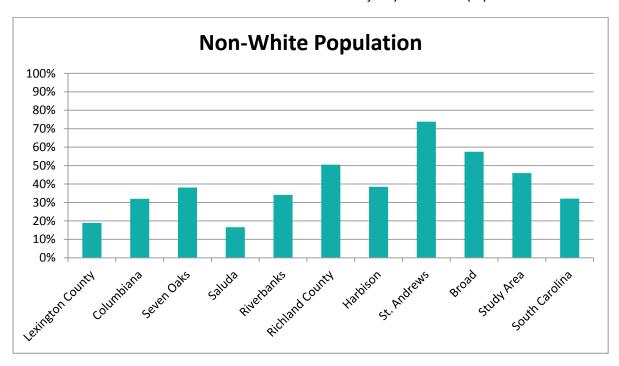


4 Conclusion

4.1 Community Characterization Summary

4.1.1 ENVIRONMENTAL JUSTICE

In evaluating demographic trends of the communities, patterns became apparent in the study area. Based on the 2010 Census Bureau data, many of the communities had higher percentages of non-white and low-income populations than the respective county averages. As seen in Graph 4.1, the St. Andrews community had the highest percentage of non-whites in the study area (at 73.8 percent). All of the Lexington County communities except Saluda had a higher percentage of non-whites when compared to Lexington County. Two of the three of the Richland County communities had a higher percentage of non-whites than in Richland County as a whole, and both the St. Andrews and Broad communities had a majority non-white population.



Graph 4.1 Non-white population

Source: United States Census Bureau, American FactFinder (2013)

The FHWA and United States Department of Transportation (USDOT) define "minority" as a person who is Black, Hispanic or Latino (regardless of race), Asian American, American Indian / Alaska Native, or Native Hawaiian / Other Pacific Islander. 80,81 In this report, race and ethnicity were examined independently, and racial minorities

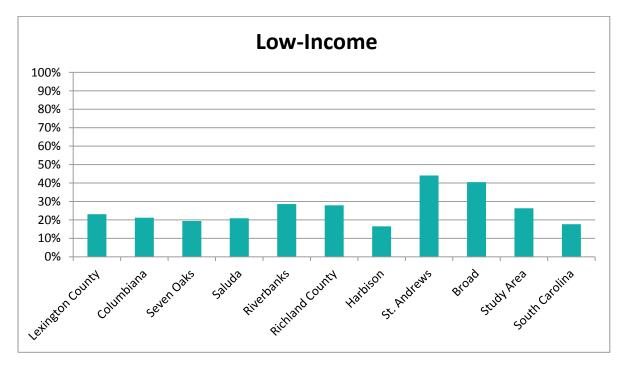
⁸⁰ Federal Highway Administration (FHWA). 1996. Community Impact Assessment: A Quick Reference for Transportation. Office of Environment and Planning. Prepared by North Carolina DOT, California DOT, Florida DOT, Maine DOT, Columbus, GA Department of Community & Economic Development, Maryland State Highway Administration, Arkansas State Highway & Transportation Department, and Illinois DOT in consultation with Apogee Research, Inc. and Parsons Brinckerhoff Quade Douglas, Inc.

⁸¹ FHWA. 2015. Environmental Justice Reference Guide. Prepared by Unitized States Department of Transportation and Federal Highway Administration



are illustrated through the "non-white" data and discussions, while ethnicity is illustrated through the "Hispanic and Latino" data and discussions. When discussing minority populations, it is sometimes helpful to look at the combined data for race and ethnicity. The trends are very similar, in that the communities with the highest percent minority are St. Andrews (81.1 percent) and Broad (65.1 percent), and the community with the lowest percent minority is still Saluda (24.2 percent). It is also interesting to note that the study area as a whole is a majority minority, at 50.4 percent minority.

As seen in Graph 4.2, the St. Andrews and Broad communities also had the highest percentage of low-income populations in the study area (at 46.9 and 40.5 percent, respectively). All of the Lexington County communities except Riverbanks had a lower percentage of low-income populations when compared to Lexington County. The Harbison community also had a lower percentage of low-income populations than in Richland County as a whole.



Graph 4.2 Low-income population

Source: United States Census Bureau, American FactFinder (2013)

4.1.2 LIMITED ENGLISH PROFICIENCY

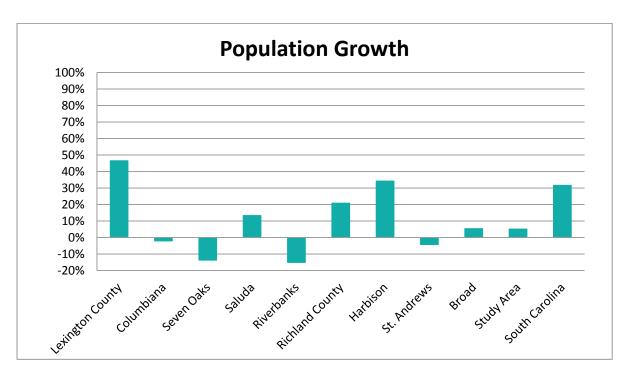
As indicated in the individual community sections, two communities (Saluda and Riverbanks) had LEP populations greater than 5 percent. Nearly 6 percent of the Saluda community is an LEP population, while just over 10 percent of the Riverbanks community is an LEP population. Based on the high level demographic screening (census tract level), there are also potential LEP populations in other communities.



4.1.3 STUDY AREA TRENDS

As mentioned previously, the I-20/26/126 corridor is a vital link in South Carolina, serving residents, commuters, travelers, and commerce. For various reasons, it has become one of the most congested interstate sections in South Carolina. The purpose of the proposed Carolina Crossroads I-20/26/126 Corridor Improvement Project is to improve mobility and enhance traffic operations by reducing existing traffic congestion within the corridor.

An evaluation of socioeconomic data reveals that population growth and employment growth are expected between 2010 and 2040. In the study area, most of the population growth is expected in the Harbison community, with an anticipated growth rate of 34.2 percent. The Saluda and Broad communities are expected to grow during the same time period but at a much slower pace. The other study area communities are expected to see a decline in population (Graph 4.3).

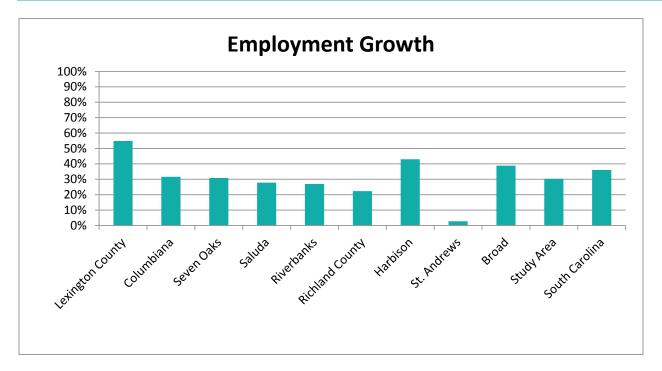


Graph 4.3 Population growth

Source: Socioeconomic data prepared for the South Carolina Statewide Travel Demand Model (2014/2015)

The socioeconomic data reveal that most of the employment growth is also expected in the Harbison community, with an anticipated growth rate of 42.9 percent. All other communities in the study area are expected to see employment growth between 2010 and 2040 but at a slightly slower pace. St. Andrews is expected to see the least amount of employment growth (Graph 4.4).





Graph 4.4 Employment Growth

Source: Socioeconomic data prepared for the South Carolina Statewide Travel Demand Model (2014/2015)

This population and/or employment growth is likely to occur in key locations, as identified in local plans. One of these locations is in the City of West Columbia. The study area for the *West Columbia GOLD Redevelopment Plan*⁸² includes the Sunset Boulevard, Jarvis Klapman Boulevard, Meeting Street and State Street corridors, which are partially within the Riverbanks community. One key site, a four-acre, City-owned site on Meeting Street between State and Alexander Road, could be a catalyst project for redevelopment and is considered a priority investment area. There are also priority investment areas in the Riverfront District and Botanical Parkway (both in the Riverbanks community).

The ten-year future land use map in the 2009 Richland County Comprehensive Plan⁸³ shows mostly suburban land uses in the North West planning area (which generally includes the Harbison community), with rural uses in the extreme northwest portion and conservation near Harbison Environmental Education Forest. Priority investment areas are located near Irmo (Lake Murray Blvd/Broad River Road area and Dutch Fork Road). In the Beltway planning area (which generally includes the Broad community), Urban Villages land uses are proposed. Richland County created a priority investment area in the southeast quadrant of the I-20/26 interchange to promote urban and suburban infill development. Because most of the study area is developed, growth is expected to occur in most areas as redevelopment or infill development. The Harbison community appears to have the most undeveloped land, which may explain why population and employment would increase the most in the study area through 2040.

⁸² City of West Columbia. 2012. West Columbia Gateway Overlay District Redevelopment Plan. Prepared by URS and Community Design Group.

⁸³ Richland County. 2009. 2009 Richland County Comprehensive Plan.

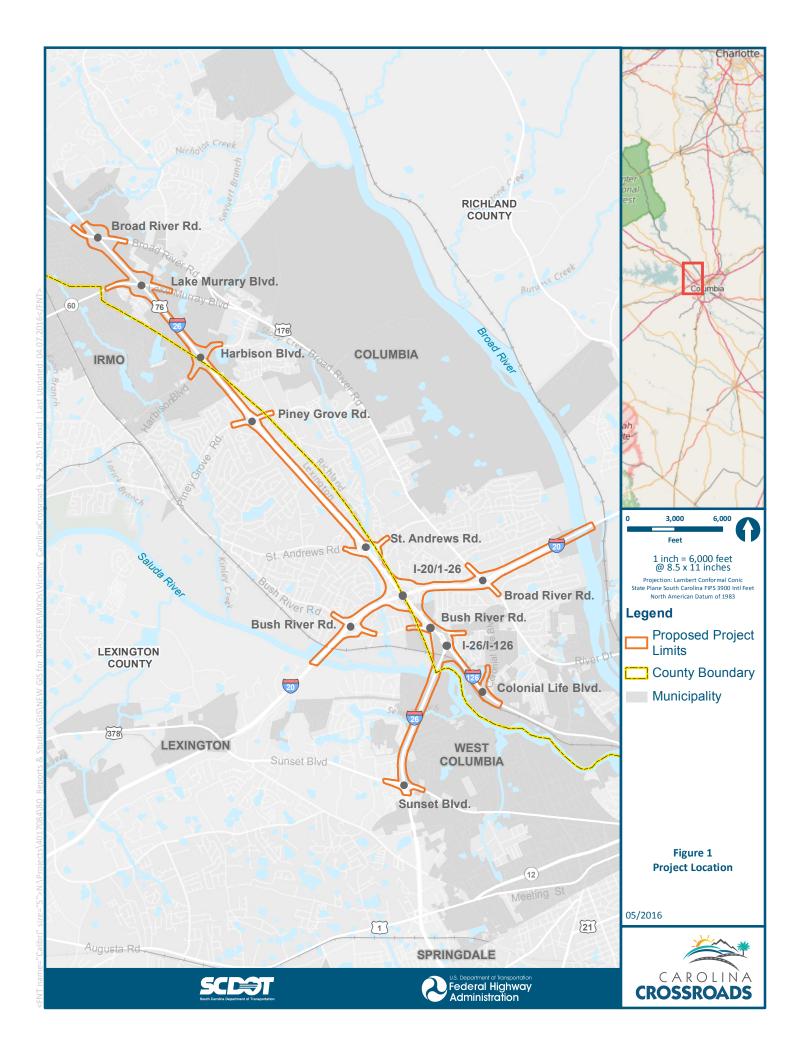


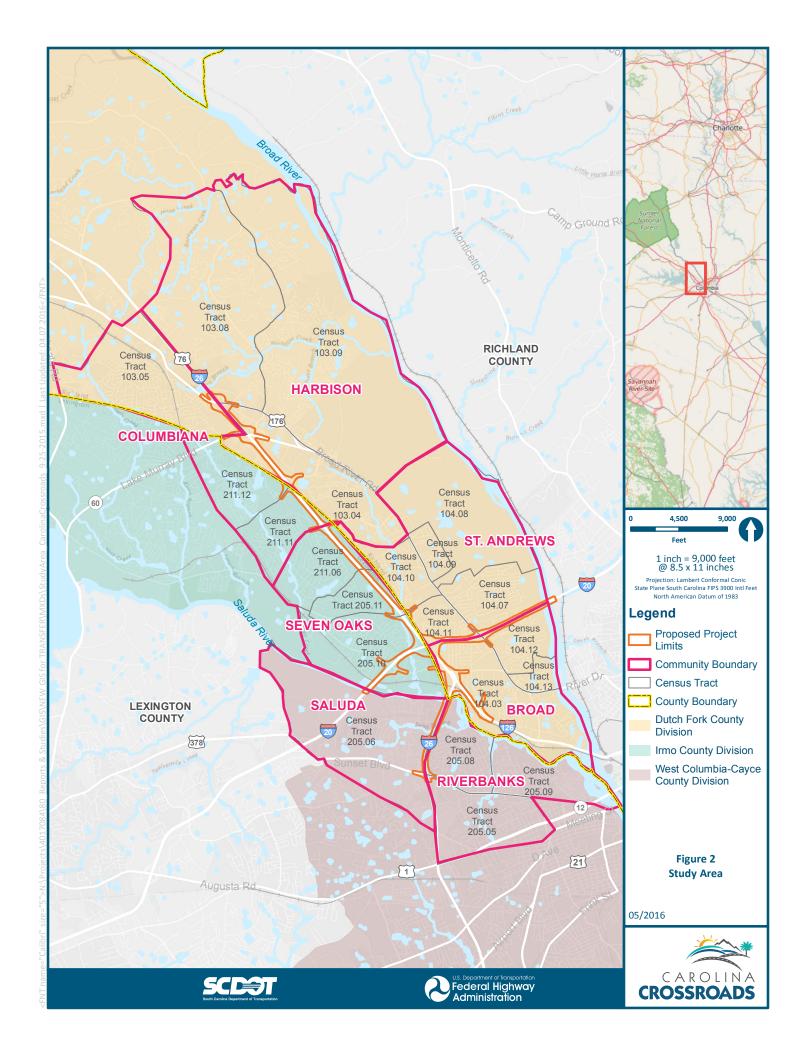
4.2 Next Steps

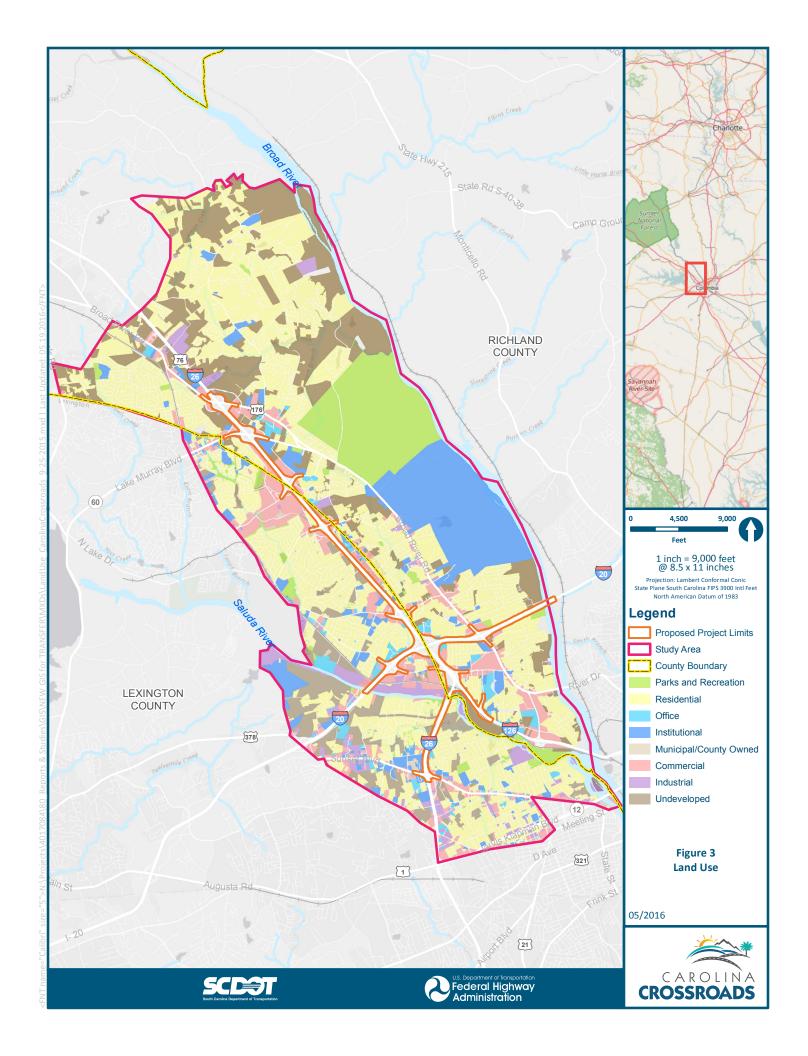
As project alternatives are developed and assessed, the project team will make appropriate re-evaluations and adjustments in the study area and findings. This report will serve as a baseline for the NEPA process and will be used to develop the Community Impact Assessment. The consideration of and documentation of environmental and socioeconomic effects is a critical part of NEPA, and findings from the Community Characterization and Community Impact Assessment will be incorporated into the EIS for the Carolina Crossroads project.

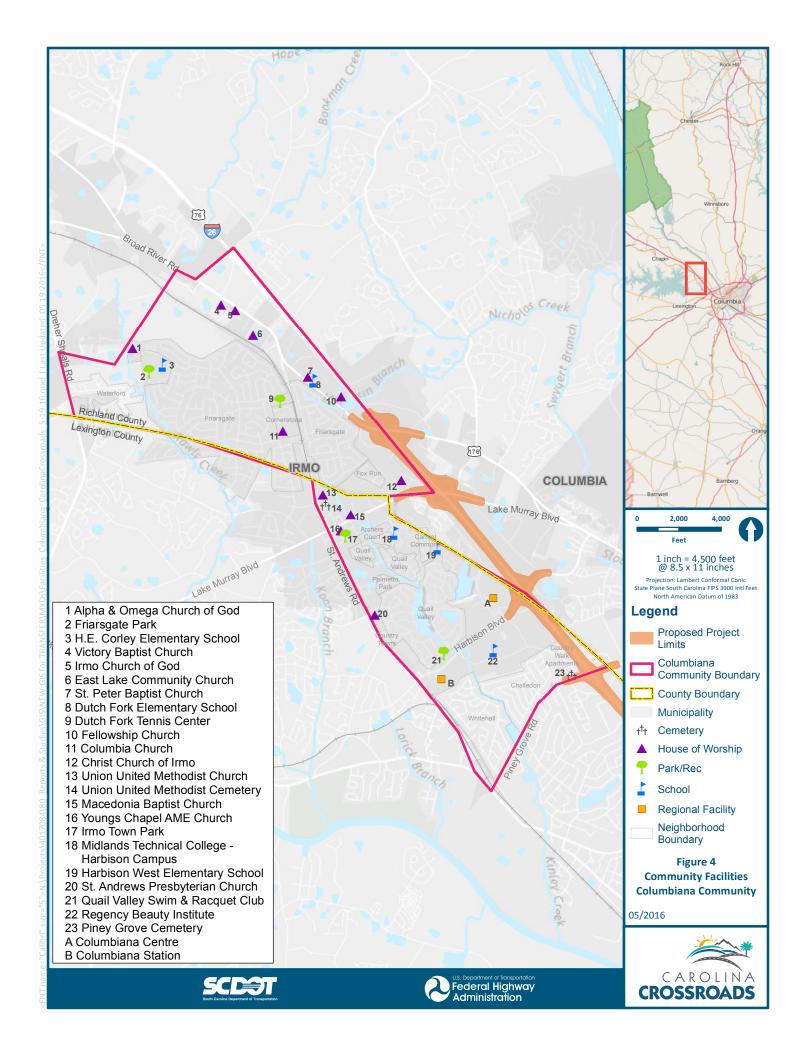


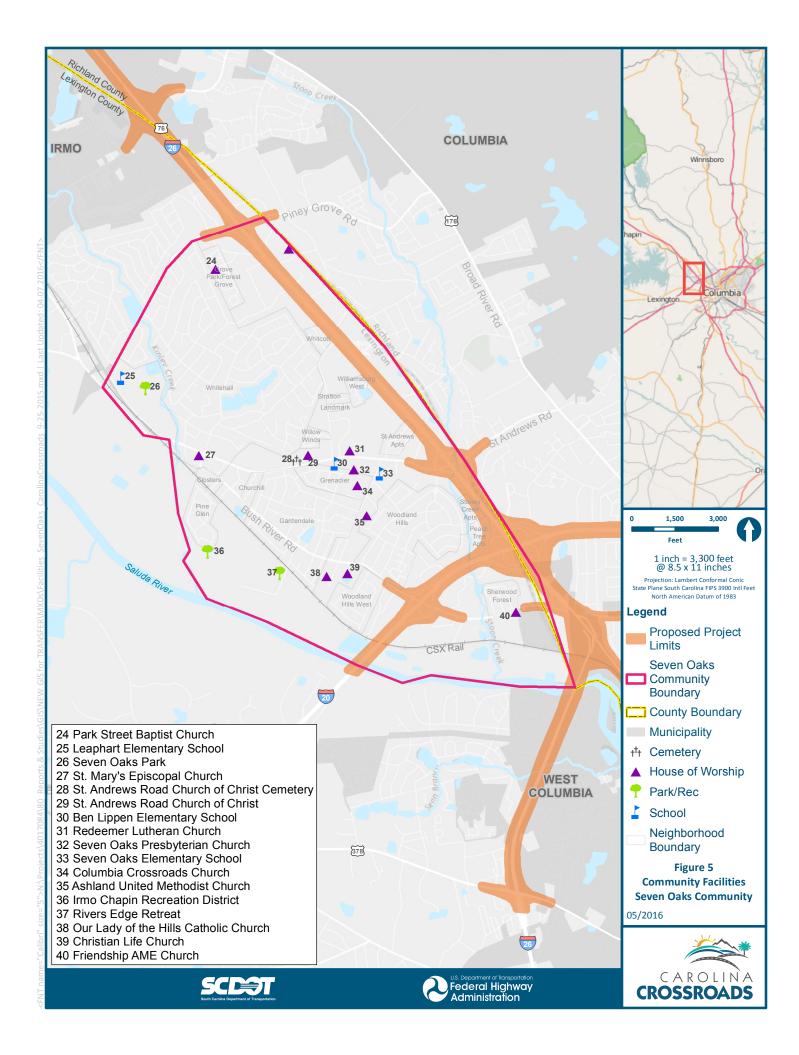
Appendix A—Figures

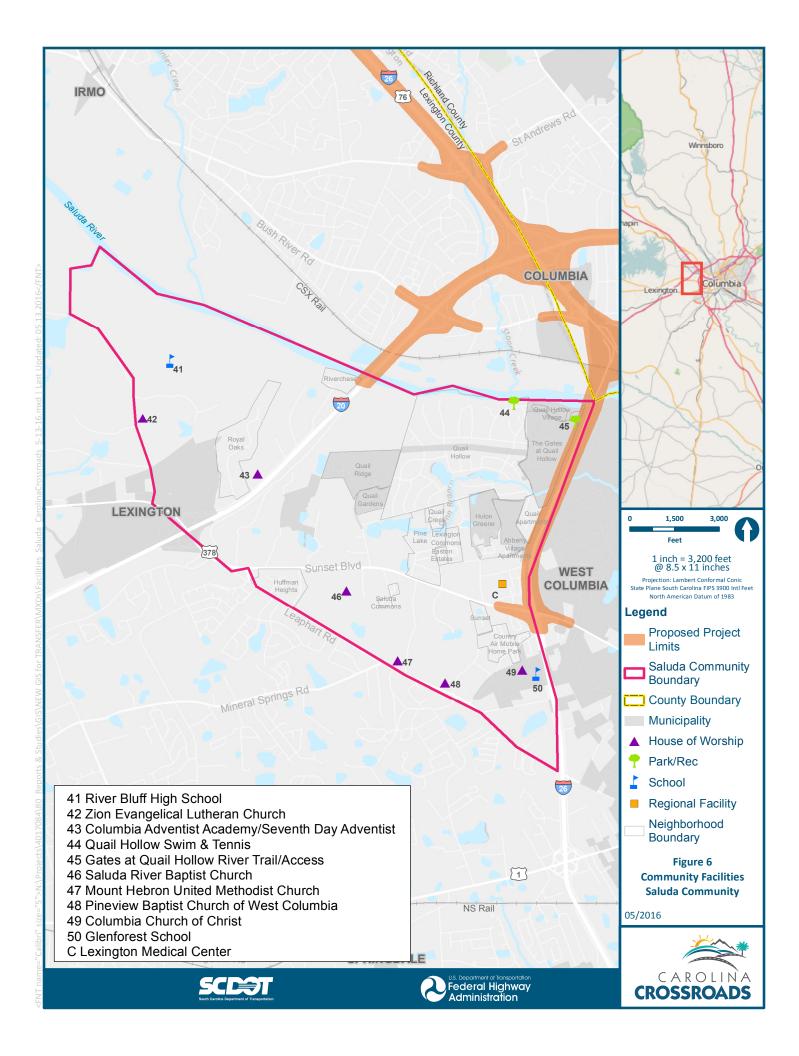


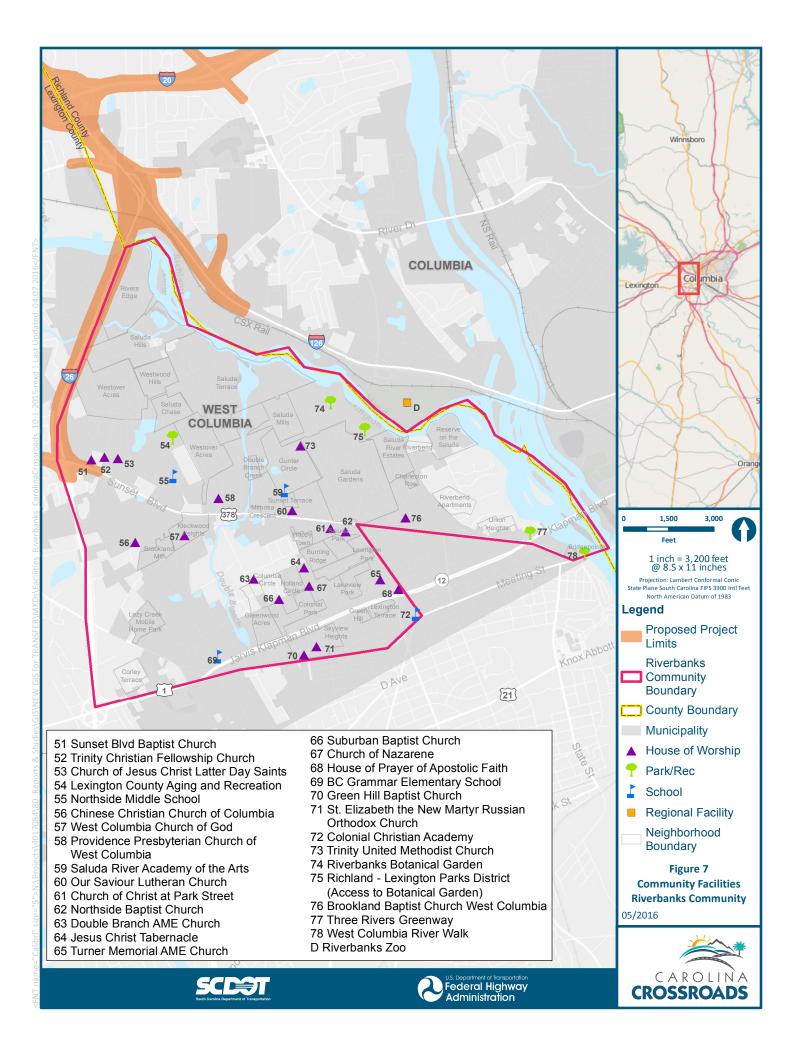


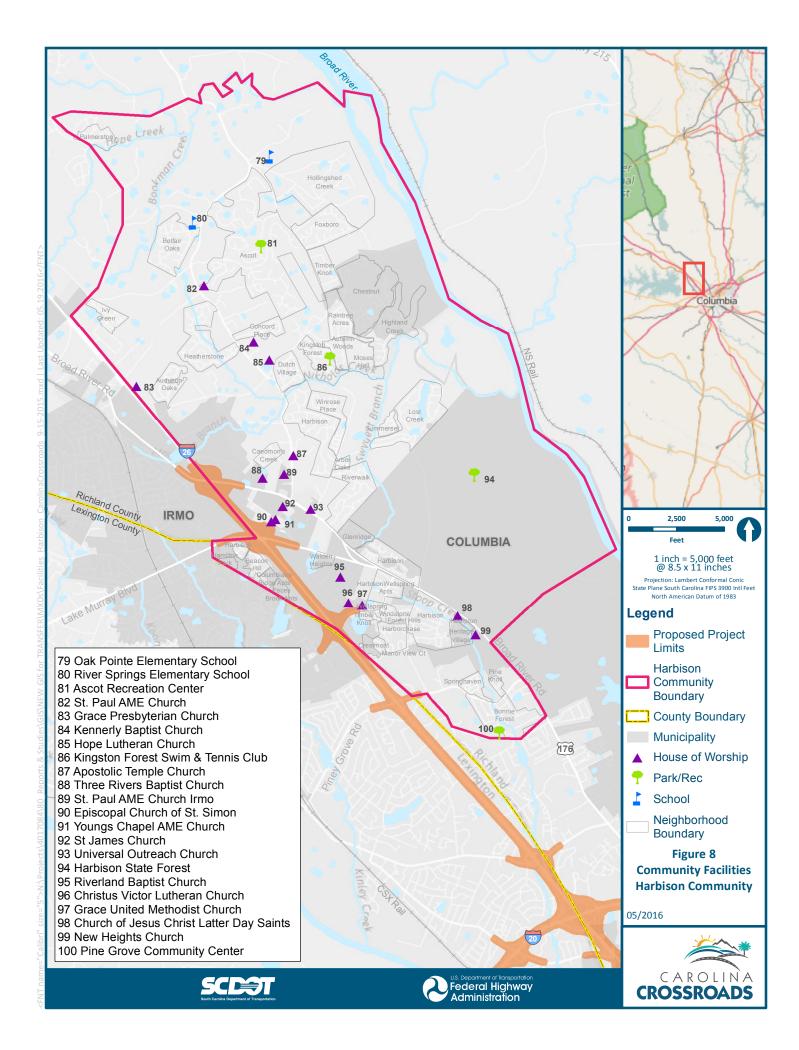


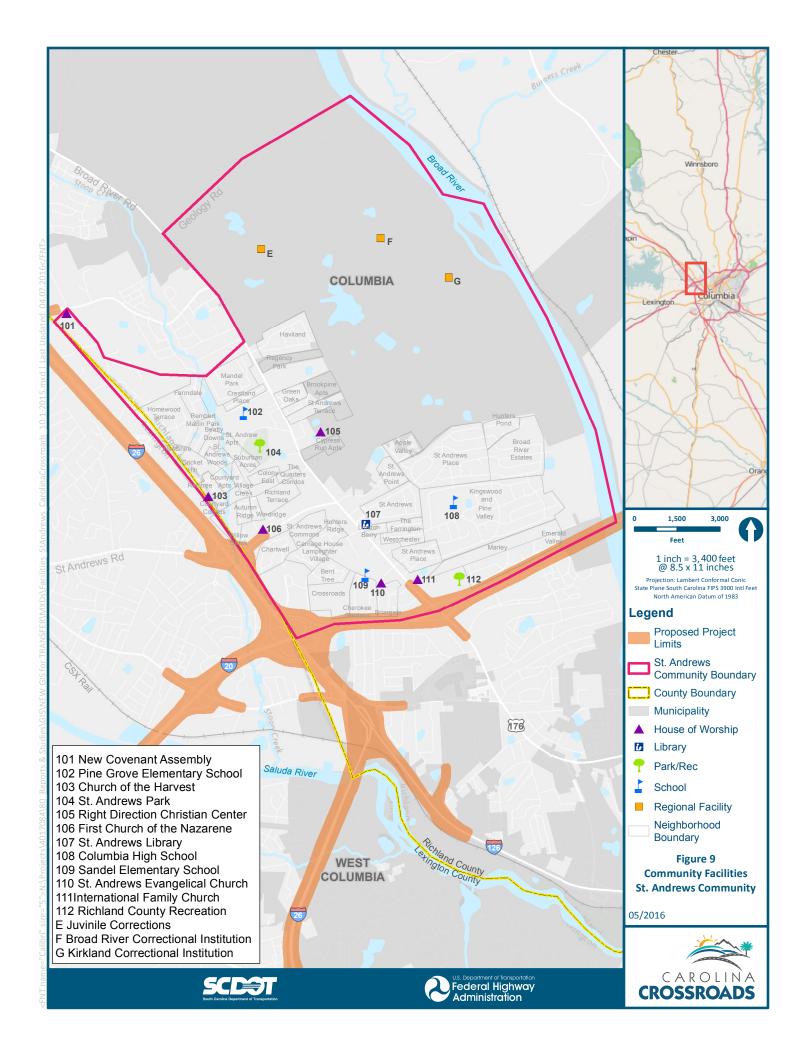


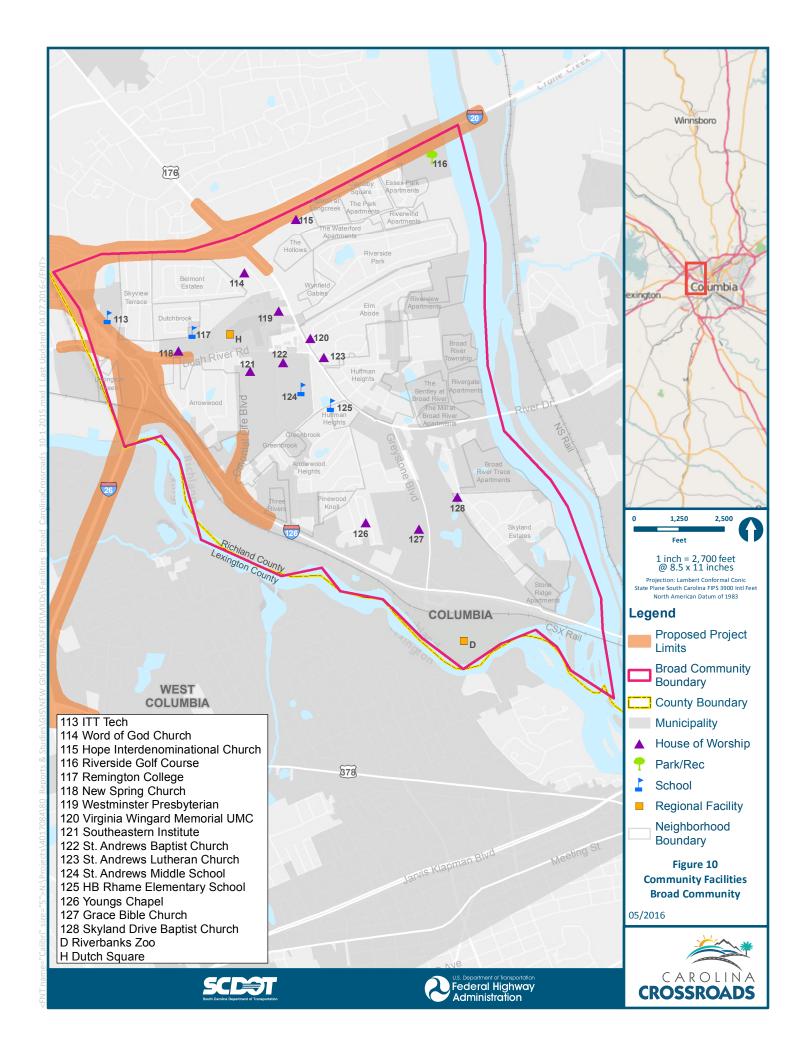














Appendix B— United States Census Bureau Data

Demographic Data Appendix Table

Community	Total Population (2010)	White alone (2010)	% White Alone (2010)	% Non- White (2010)	Black or African American alone (2010)	% Black or African American alone (2010)	American Indian and Alaska Native alone (2010)	% American Indian and Alaska Native alone (2010)	Asian alone (2010)	% Asian Alone (2010)	Native Hawaiian and Other Pacific Islander alone (2010)	% Native Hawaiian and Other Pacific Islander alone (2010)	Some Other Race alone (2010)	Two or More Races (2010)	Hispanic or Latino (2010)	% Hispanic or Latino (2010)	18 and Up Population for LEP (ACS)	% LEP (ACS)
Lexington County	262,391	208,203	79.3%	18.9%	37,522	14.3%	1,134	0.4%	3,729	1.4%	130	0.0%	6,984	4,869	14,529	5.5%	202,110	3.2%
Columbiana	12,208	7,991	65.5%	32.0%	3,471	28.4%	43	0.4%	262	2.1%	6	0.0%	130	305	415	3.4%	9,144	1.5%
Census Tract 103.05	7,004	4,329	61.8%	35.8%	2,290	32.7%	25	0.4%	113	1.6%	0	0.0%	79	168	235	3.4%	5,080	1.4%
Census Tract 211.12	2,709	2,113	78.0%	19.8%	416	15.4%	14	0.5%	89	3.3%	0	0.0%	17	60	63	2.3%	2,662	1.6%
Census Tract 211.11	2,495	1,549	62.1%	34.8%	765	30.7%	4	0.2%	60	2.4%	6	0.2%	34	77	117	4.7%	1,402	1.4%
Seven Oaks	10,973	8,625	78.6%	38.1%	3,614	32.9%	22	0.2%	338	3.1%	28	0.3%	180	302	387	3.5%	8,764	2.4%
Census Tract 211.06	2,859	2,278	79.7%	18.7%	475	16.6%	7	0.2%	26	0.9%	1	0.0%	25	47	66	2.3%	2,429	0.9%
Census Tract 205.11	3,430	1,663	48.5%	48.5%	1,407	41.0%	2	0.1%	143	4.2%	10	0.3%	103	102	183	5.3%	2,636	2.8%
Census Tract 205.10	4,684	4,684	100.0%	42.3%	1,732	37.0%	13	0.3%	169	3.6%	17	0.4%	52	153	138	2.9%	3,699	3.0%
Saluda	3,585	2,944	82.1%	16.6%	319	8.9%	8	0.2%	30	0.8%	0	0.0%	237	47	400	11.2%	3,013	5.8%
Census Tract 205.06	3,585	2,944	82.1%	16.6%	319	8.9%	8	0.2%	30	0.8%	0	0.0%	237	47	400	11.2%	3,013	5.8%
Riverbanks	9,762	6,159	63.1%	34.1%	1,973	20.2%	46	0.5%	213	2.2%	5	0.1%	1,091	275	1,790	18.3%	7,848	10.2%
Census Tract 205.05	4,143	2,113	51.0%	45.0%	1,127	27.2%	22	0.5%	36	0.9%	4	0.1%	675	166	1,162	28.0%	3,229	20.6%
Census Tract 205.08	2,151	1,977	91.9%	7.5%	111	5.2%	4	0.2%	38	1.8%	0	0.0%	8	13	34	1.6%	1,937	0.4%
Census Tract 205.09	3,468	2,069	59.7%	37.6%	735	21.2%	20	0.6%	139	4.0%	1	0.0%	408	96	594	17.1%	2,682	4.8%
Richland County	384,504	181,974	47.3%	50.5%	176,538	45.9%	1,230	0.3%	8,548	2.2%	425	0.1%	7,358	8,431	18,637	4.8%	302,086	3.0%
Harbison	21,931	12,912	58.9%	38.5%	7,520	34.3%	70	0.3%	611	2.8%	39	0.2%	198	581	703	3.2%	15,368	1.9%
Census Tract 103.04	7,126	3,277	46.0%	51.3%	3,309	46.4%	19	0.3%	235	3.3%	26	0.4%	70	190	227	3.2%	4,940	1.9%
Census Tract 103.09	8,948	5,448	60.9%	36.0%	2,904	32.5%	35	0.4%	183	2.0%	13	0.1%	89	276	342	3.8%	6,671	0.1%
Census Tract 103.08	5,857	4,187	71.5%	26.5%	1,307	22.3%	16	0.3%	193	3.3%	0	0.0%	39	115	134	2.3%	3,757	5.1%
St. Andrews	19,009	4,674	24.6%	73.8%	13,378	70.4%	55	0.3%	268	1.4%	4	0.0%	324	306	620	3.3%	14,854	2.4%
Census Tract 104.07	4,284	805	18.8%	79.3%	3,325	77.6%	7	0.2%	28	0.7%	1	0.0%	36	82	105	2.5%	3,267	0.3%
Census Tract 104.08	6,166	2,133	34.6%	65.3%	3,905	63.3%	14	0.2%	6	0.1%	1	0.0%	101	6	114	1.8%	5,349	1.0%
Census Tract 104.09	1,604	360	22.4%	75.1%	1,172	73.1%	7	0.4%	6	0.4%	0	0.0%	19	40	66	4.1%	1,236	1.1%
Census Tract 104.10	3,781	708	18.7%	77.9%	2,625	69.4%	15	0.4%	183	4.8%	2	0.1%	119	129	226	6.0%	2,603	9.3%
Census Tract 104.11	3,174	668	21.0%	77.4%	2,351	74.1%	12	0.4%	45	1.4%	0	0.0%	49	49	109	3.4%	2,399	1.9%
Broad	9,023	3,660	40.6%	57.5%	4,926	54.6%	21	0.2%	153	1.7%	5	0.1%	87	171	287	3.2%	7,796	2.7%
Census Tract 104.03	3,875	1,887	48.7%	49.4%	1,807	46.6%	8	0.2%	67	1.7%	1	0.0%	31	74	110	2.8%	3,296	2.9%
Census Tract 104.13	1,989	669	33.6%	65.0%	1,248	62.7%	1	0.1%	36	1.8%	0	0.0%	8	27	43	2.2%	1,598	1.1%
Census Tract 104.12	3,159	1,104	34.9%	62.8%	1,871	59.2%	12	0.4%	50	1.6%	4	0.1%	48	70	134	4.2%	2,902	3.4%
Study Area	86,491	46,965	54.3%	45.9%	35,201	40.7%	265	0.3%	1,875	2.2%	87	0.1%	2,247	1,987	4,602	5.3%	66,787	3.3%
South Carolina	4,625,364	3,060,000	66.2%	32.1%	1,290,684	27.9%	19,524	0.4%	59,051	1.3%	2,706	0.1%	113,464	79,935	235,682	5.1%	3,695,519	3.0%

Demographic Data Appendix Table (con't)

Community	Spanish: English less than "very well" (ACS)	% Spanish: English less than "very well" (ACS)	Other Indo- Euro: English less than "very well" (ACS)	% Other Indo-Euro: English less than "very well" (ACS)	Asian/Pacific: English less than "very well" (ACS)	% Asian/Pacific: English less than "very well" (ACS)	Other: English less than "very well" (ACS)	% Other: English less than "very well" (ACS)	Age: Under 18 & 65 and Over (2010)	% Age: under 18 & 65 and Over (2010)	Total Pop for whom poverty is determined (ACS)	Below Poverty (ACS)	% Below Poverty (ACS)	Near Poor: Between 100% and 149% of Poverty Level (ACS)
Lexington County	4,904	2.4%	633	0.3%	689	0.3%	112	0.1%	96,273	36.7%	263,687	38,194	14.5%	22,793
Columbiana	18	0.2%	82	0.9%	21	0.2%	13	0.1%	4,236	34.7%	11,826	1,452	12.3%	1,050
Census Tract 103.05	9	0.2%	51	1.0%	11	0.2%	0	0.0%	2,436	34.8%	6,169	979	15.9%	623
Census Tract 211.12	9	0.3%	11	0.4%	10	0.4%	13	0.5%	932	34.4%	3,224	242	7.5%	219
Census Tract 211.11	0	0.0%	20	1.4%	0	0.0%	0	0.0%	868	34.8%	2,433	231	9.5%	208
Seven Oaks	108	1.2%	69	0.8%	12	0.1%	18	0.2%	4,089	37.3%	11,169	1,127	10.1%	1,045
Census Tract 211.06	0	0.0%	23	0.9%	0	0.0%	0	0.0%	1,201	42.0%	2,967	223	7.5%	35
Census Tract 205.11	23	0.9%	30	1.1%	12	0.5%	8	0.3%	1,207	35.2%	3,288	296	9.0%	313
Census Tract 205.1	85	2.3%	16	0.4%	0	0.0%	10	0.3%	1,681	35.9%	4,914	608	12.4%	697
Saluda	128	4.2%	46	1.5%	0	0.0%	0	0.0%	1,603	44.7%	3,561	560	15.7%	185
Census Tract 205.06	128	4.2%	46	1.5%	0	0.0%	0	0.0%	1,603	44.7%	3,561	560	15.7%	185
Riverbanks	777	9.9%	15	0.2%	10	0.1%	0	0.0%	3,584	36.7%	9,291	1,653	17.8%	1,003
Census Tract 205.05	656	20.3%	0	0.0%	10	0.3%	0	0.0%	1,413	34.1%	3,843	929	24.2%	631
Census Tract 205.08	4	0.2%	4	0.2%	0	0.0%	0	0.0%	1,008	46.9%	2,257	95	4.2%	53
Census Tract 205.09	117	4.4%	11	0.4%	0	0.0%	0	0.0%	1,163	33.5%	3,191	629	19.7%	319
Richland County	5,178	1.7%	1,179	0.4%	2,577	0.9%	220	0.1%	125,094	32.5%	363,016	65,229	18.0%	36,213
Harbison	101	0.7%	95	0.6%	97	0.6%	0	0.0%	7,879	35.9%	20,888	1,713	8.2%	1,726
Census Tract 103.04	10	0.2%	52	1.1%	30	0.6%	0	0.0%	2,414	33.9%	6,169	979	15.9%	623
Census Tract 103.09	9	0.1%	0	0.0%	0	0.0%	0	0.0%	3,166	35.4%	9,284	441	4.8%	767
Census Tract 103.08	82	2.2%	43	1.1%	67	1.8%	0	0.0%	2,299	39.3%	5,435	293	5.4%	336
St. Andrews	125	0.8%	86	0.6%	108	0.7%	42	0.3%	4,457	23.4%	11,540	3,051	26.4%	2,041
Census Tract 104.07	10	0.3%	0	0.0%	0	0.0%	0	0.0%	1,616	37.7%	4,879	987	20.2%	998
Census Tract 104.08	51	1.0%	0	0.0%	0	0.0%	0	0.0%	504	8.2%	59	55	93.2%	4
Census Tract 104.09	3	0.2%	4	0.3%	6	0.5%	0	0.0%	410	25.6%	1,627	457	28.1%	329
Census Tract 104.1	30	1.2%	82	3.2%	102	3.9%	27	1.0%	1,144	30.3%	3,371	783	23.2%	534
Census Tract 104.11	31	1.3%	0	0.0%	0	0.0%	15	0.6%	783	24.7%	1,604	769	47.9%	176
Broad	60	0.8%	33	0.4%	119	1.5%	0	0.0%	2,108	23.4%	9,479	2,301	24.3%	1,540
Census Tract 104.03	0	0.0%	16	0.5%	79	2.4%	0	0.0%	1,015	26.2%	3,783	855	22.6%	289
Census Tract 104.13	0	0.0%	17	1.1%	0	0.0%	0	0.0%	293	14.7%	1,989	443	22.3%	493
Census Tract 104.12	60	2.1%	0	0.0%	40	1.4%	0	0.0%	800	25.3%	3,707	1,003	27.1%	758
Study Area	1,317	2.0%	426	0.6%	367	0.5%	73	0.1%	27,956	32.3%	77,754	11,857	15.2%	8,590
South Carolina	79,901	2.2%	14,519	0.4%	14,986	0.4%	2,960	0.1%	1,712,348	37.0%	4,582,871	301,042	6.6%	510,958

Demographic Data Appendix Table (con't)

Community	Total Population	White, Non- Hispanic	% White, Non- Hispanic	Minority	% Minority	Occupied Housing Units	No Vehicles Available	% No Vehicles Available
	(ACS)	(ACS)	(ACS)	(ACS)	(ACS)	(ACS)	(ACS)	(ACS)
Lexington County	266,575	204,373	76.7%	62,202	23.3%	103,742	4,814	4.6%
Columbiana	12,821	8,376	65.3%	4,445	34.7%	4,871	139	2.9%
Census Tract 103.05	7,138	4,195	58.8%	2,943	41.2%	2,488	39	1.6%
Census Tract 211.12	3,250	2,693	82.9%	557	17.1%	1,311	80	6.1%
Census Tract 211.11	2,433	1,488	61.2%	945	38.8%	1,072	20	1.9%
Seven Oaks	11,260	6,737	59.8%	4,523	40.2%	4,834	122	2.5%
Census Tract 211.06	2,967	2,577	86.9%	390	13.1%	1,183	0	0.0%
Census Tract 205.11	3,379	1,616	47.8%	1,763	52.2%	1,485	35	2.4%
Census Tract 205.10	4,914	2,544	51.8%	2,370	48.2%	2,166	87	4.0%
Saluda	3,752	2,844	75.8%	908	24.2%	1,734	177	10.2%
Census Tract 205.06	3,752	2,844	75.8%	908	24.2%	1,734	177	10.2%
Riverbanks	9,427	6,145	65.2%	3,282	34.8%	4,323	441	10.2%
Census Tract 205.05	3,864	1,931	50.0%	1,933	50.0%	1,659	259	15.6%
Census Tract 205.08	2,355	2,238	95.0%	117	5.0%	972	29	3.0%
Census Tract 205.09	3,208	1,976	61.6%	1,232	38.4%	1,692	153	9.0%
Richland County	389,708	175,103	44.9%	214,605	55.1%	143,874	9,903	6.9%
Harbison	21,037	11,995	57.0%	9,042	43.0%	8,455	455	5.4%
Census Tract 103.04	6,219	2,517	40.5%	3,702	59.5%	3,073	404	13.1%
Census Tract 103.09	9,293	5,890	63.4%	3,403	36.6%	3,425	42	1.2%
Census Tract 103.08	5,525	3,588	64.9%	1,937	35.1%	1,957	9	0.5%
St. Andrews	18,930	3,586	18.9%	15,344	81.1%	5,931	689	11.6%
Census Tract 104.07	4,879	652	13.4%	4,227	86.6%	1,698	130	7.7%
Census Tract 104.08	5,683	1,588	27.9%	4,095	72.1%	0	0	-
Census Tract 104.09	1,627	294	18.1%	1,333	81.9%	862	126	14.6%
Census Tract 104.10	3,434	592	17.2%	2,842	82.8%	1,658	203	12.2%
Census Tract 104.11	3,307	460	13.9%	2,847	86.1%	1,713	230	13.4%
Broad	9,512	3,316	34.9%	6,196	65.1%	4,570	298	6.5%
Census Tract 104.03	3,797	1,461	38.5%	2,336	61.5%	1,868	148	7.9%
Census Tract 104.13	2,008	629	31.3%	1,379	68.7%	1,013	33	3.3%
Census Tract 104.12	3,707	1,226	33.1%	2,481	66.9%	1,689	117	6.9%
Study Area	86,739	42,999	49.6%	43,740	50.4%	34,718	2,321	6.7%
South Carolina	4,679,602	2,995,377	64.0%	1,684,225	36.0%	1,780,251	123,997	7.0%



Economic Data Appendix Table

Community	Total Population (ACS)	Employment: Population 16 and over (ACS)	% Unemployed (ACS)	Median Household Income (ACS)	Median Home Value (ACS)	Low Income (ACS)	% Low Income (ACS)
Lexington County	266,575	209,378	6.2%	\$54,061	\$140,100	60,987	23.1%
Columbiana	12,821	10,258	1.6%	-	-	2,502	21.2%
103.05	7,138	5,394	0.8%	\$62,540	\$123,600	1,602	26.0%
211.12	3,250	2,763	2.6%	\$70,991	\$191,000	461	14.3%
211.11	2,433	2,101	2.4%	\$46,739	\$126,000	439	18.0%
Seven Oaks	11,260	8,992	1.5%	-	-	2,172	19.4%
211.06	2,967	2,520	0.8%	\$79,638	\$166,900	258	8.7%
205.11	3,379	2,659	1.8%	\$40,875	\$158,400	609	18.5%
205.10	4,914	3,813	1.9%	\$43,056	\$134,100	1,305	26.6%
Saluda	3,752	3,033	0.8%	-	-	745	20.9%
205.06	3,752	3,033	0.7%	\$46,916	\$208,100	745	20.9%
Riverbanks	9,427	7,995	2.6%	-	-	2,656	28.6%
205.05	3,864	3,318	3.6%	\$26,479	\$81,100	1,560	40.6%
205.08	2,355	1,983	1.8%	\$78,293	\$174,700	148	6.6%
205.09	3,208	2,694	1.8%	\$31,888	\$145,700	948	29.7%
Richland County	389,708	312,450	7.0%	\$48,359	\$149,800	101,442	27.9%
Harbison	21,037	16,141	1.5%	-	-	3,439	16.5%
103.04	6,219	5,121	1.5%	\$43,397	\$112,300	1,602	26.0%
103.09	9,293	7,046	1.5%	\$65,261	\$136,400	1,208	13.0%
103.08	5,525	3,974	1.6%	\$64,190	\$180,000	629	11.6%
St. Andrews	18,930	15,317	3.4%	-	-	5,092	46.9%
104.07	4,879	3,415	4.3%	\$40,994	\$104,800	1,985	40.7%
104.08	5,683	5,578	-	n/a	n/a	59	100.0%
104.09	1,627	1,236	16.7%	\$26,324	\$92,900	786	48.3%
104.10	3,434	2,666	3.3%	\$32,661	\$106,800	1,317	34.7%
104.11	3,307	2,422	3.4%	\$19,740	\$79,000	2,064	62.6%
Broad	9,512	7,967	3.1%	-	-	3,841	40.5%
104.03	3,797	3,368	2.0%	\$44,470	\$126,300	1,144	30.2%
104.13	2,008	1,632	3.4%	\$37,358	\$110,100	936	47.1%
104.12	3,707	2,967	5.2%	\$29,758	\$106,600	1,761	47.5%
Study Area	86,739	69,703	2.9%	-	-	20,447	26.3%
South Carolina	4,679,602	3,720,700	6.9%	\$44,779	\$137,400	812,000	17.7%

