APPENDIX I. *BISHOPVILLE TRUCK ROUTE PROJECT ECONOMIC DEVELOPMENT REPORT*

BISHOPVILLE TRUCK ROUTE PROJECT (S-69-08)

FINAL ECONOMIC DEVELOPMENT REPORT

Prepared for:

Federal Highway Administration

&

South Carolina Department of Transportation

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1. INTRODUCTION

The South Carolina Department of Transportation (SCDOT), in cooperation with the Federal Highway Administration (FHWA), are currently conducting project-development and preliminary engineering services as required by the National Environmental Policy Act (NEPA) for the proposed Bishopville Truck Route Project (project) in Bishopville.

The project was initiated in 2010 in order to encourage business revitalization along Main Street (US 15) in downtown Bishopville. SCDOT prepared an Environmental Assessment (EA) that evaluated a number of alternative routes for trucks traveling through downtown. Several comments submitted during the planning process and at the public hearing resulted in the reevaluation of the project toward the end of 2012.

In December 2014, following consultation with citizens, business owners, and public officials, Santee-Lynches Regional Council of Governments (SLRCOG) sent a letter to SCDOT proposing revisions to the project's Purpose and Need. As a result, FHWA recommended that the Purpose and Need be reassessed and an Environmental Impact Statement (EIS) be prepared if the project was to move forward. Therefore, SCDOT, in cooperation with the FHWA, are currently preparing a draft EIS as required by NEPA.

An Economic Assessment was conducted to evaluate the economic development potential of providing an alternative roadway to divert truck traffic around Bishopville as part of the Purpose and Need reassessment. This memorandum summarizes the existing economic resources for the Bishopville EIS Study Area and the potential economic impacts associated with the project's Build and No Build alternatives.

2. SUMMARY OF ECONOMIC RESOURCES IN THE STUDY AREA

2.1 EMPLOYMENT

According to the South Carolina Department of Employment and Workforce, Lee County employment totaled 6,284 in 2018. The unemployment rate was 4.6 percent, which steadily decreased over the last eight years from 16.2 percent in 2010. Employment has fluctuated since 1970, bottoming at 5,007 in 1986 before peaking at 7,368 in 2008. Lee County's share of regional employment shrunk from 6.6 percent in 1970 to 4.7 percent in 2016 and is forecast to continue shrinking to 4.1 percent by 2050. Such regional employment shares are less than population, suggesting a further relative decline in Lee County's share of the regional economy. These historical and regional composition employment trends are illustrated in **Figure 1**.

Of the workers that reside in Lee County, 21.5 percent live and work in the county, 46.6 percent commute to jobs outside the county, and 31.9 percent commute to jobs in Lee County from outside the county.

2.2 INDUSTRY CONCENTRATION

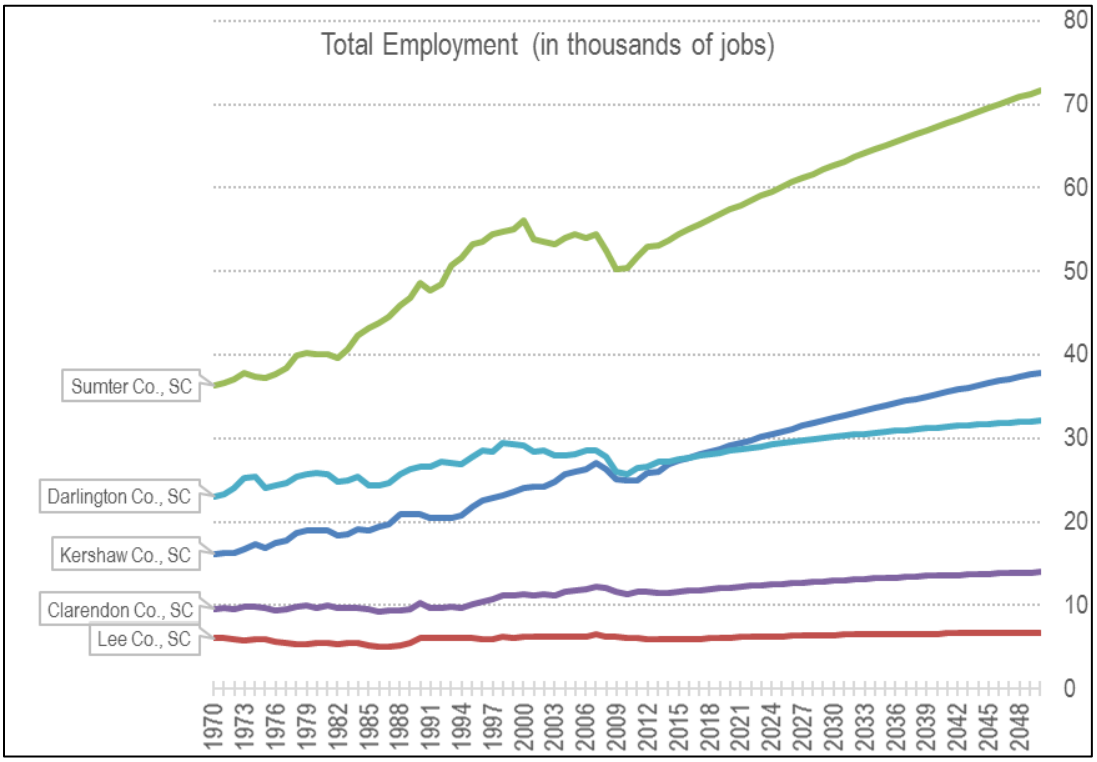
A location quotient (LQ) is the relative share of employment for basic industries compared to the statewide share and provides a means of quantifying how concentrated each industry is compared to the state. The rural nature of Lee County's economy is reflected in the extremely high LQ for the *Farm* (7.13) and *Forestry, Fishing, Related, and Others* (4.83) industries. Typically, such industries use trucks to transport low-value-to-weight commodities.

Because Darlington County generates the most truck freight movements through Lee County, its industry composition was also evaluated. The *Utilities* industry is the relatively dominant sector in Darlington County with a LQ of 6.61, which reflects supplies and operations associated with the Robinson Nuclear Plant and, to a lesser degree, the county water and sewer facilities. Darlington is also the corporate headquarters to Sonoco, a global provider of innovative packaging solutions for consumer and industrial products resulting in a notable LQ for both *Management of Companies/Enterprises* (1.78) and *Manufacturing* (1.53). The high LQ in the *Farm, Forestry, Related, and Other* and *Manufacturing* industries between the two counties generates the lumber, non-metallic minerals, and secondary traffic transported via US 15. **Figure 2** illustrates the employment LQ for Lee and Darlington Counties.

2.2.1 LEE COUNTY TRUCK FREIGHT

A majority of truck freight that moves through Lee County travels along the I-20 corridor (as shown in **Figure 3**). However, US 15 continues to provide important access to the west and south for truck freight traffic to/from Darlington County (e.g., Hartsville). The two primary highways accommodating truck freight through Bishopville, excluding I-20, are US 15 and SR 341. A notable share of SC 341 truck traffic north of Bishopville funnels onto US 15. **Figure 3** illustrates the total volumes and directional flow for Lee County.

Figure 1: Regional Employment Trends



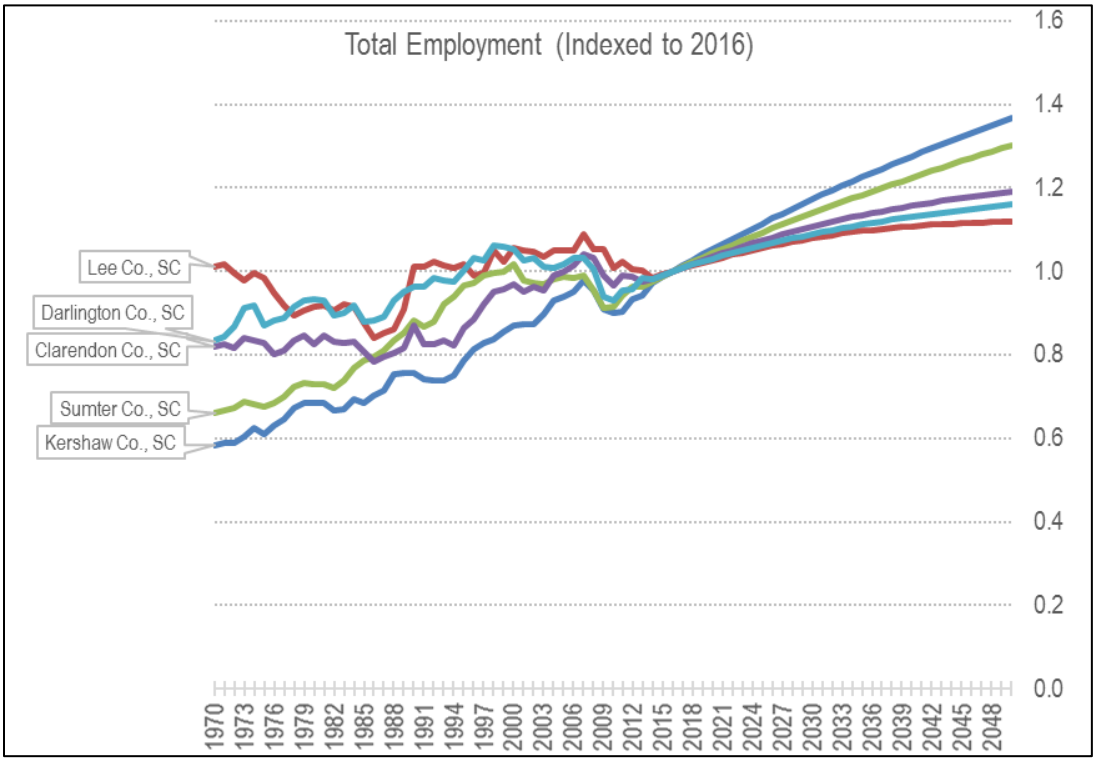
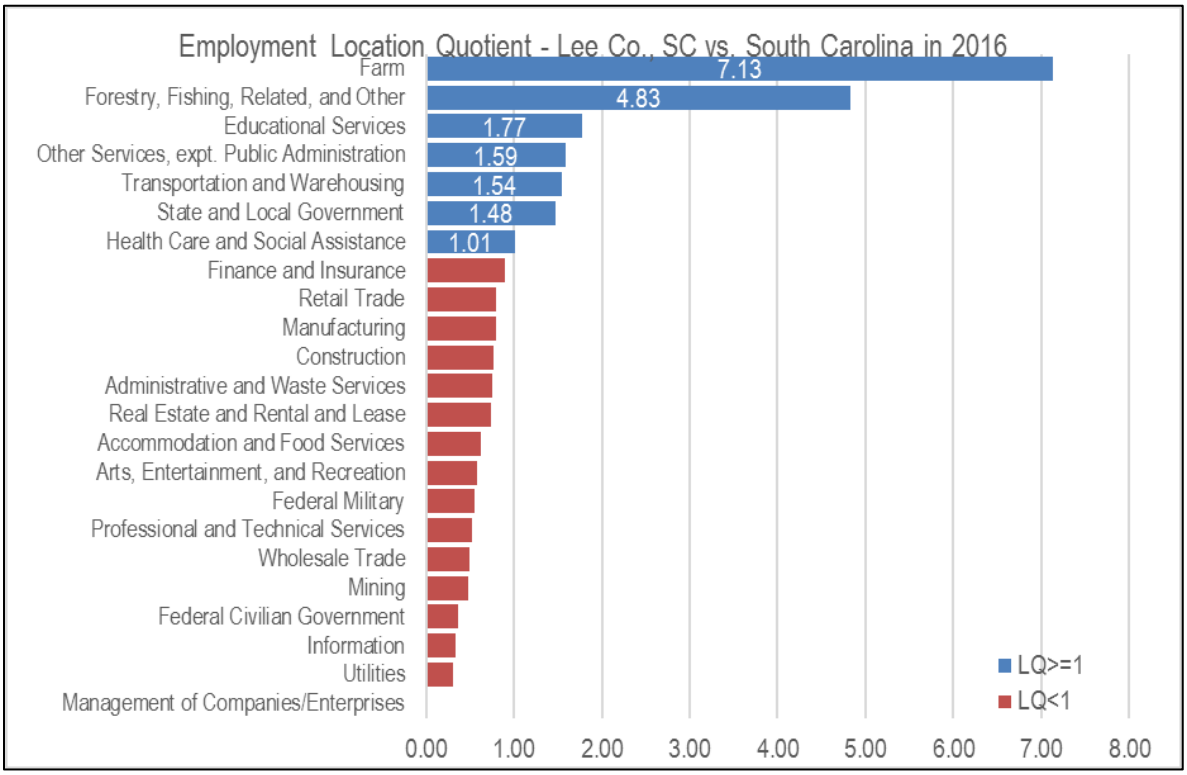


Figure 2: Employment Location Quotient – Lee and Darlington Counties



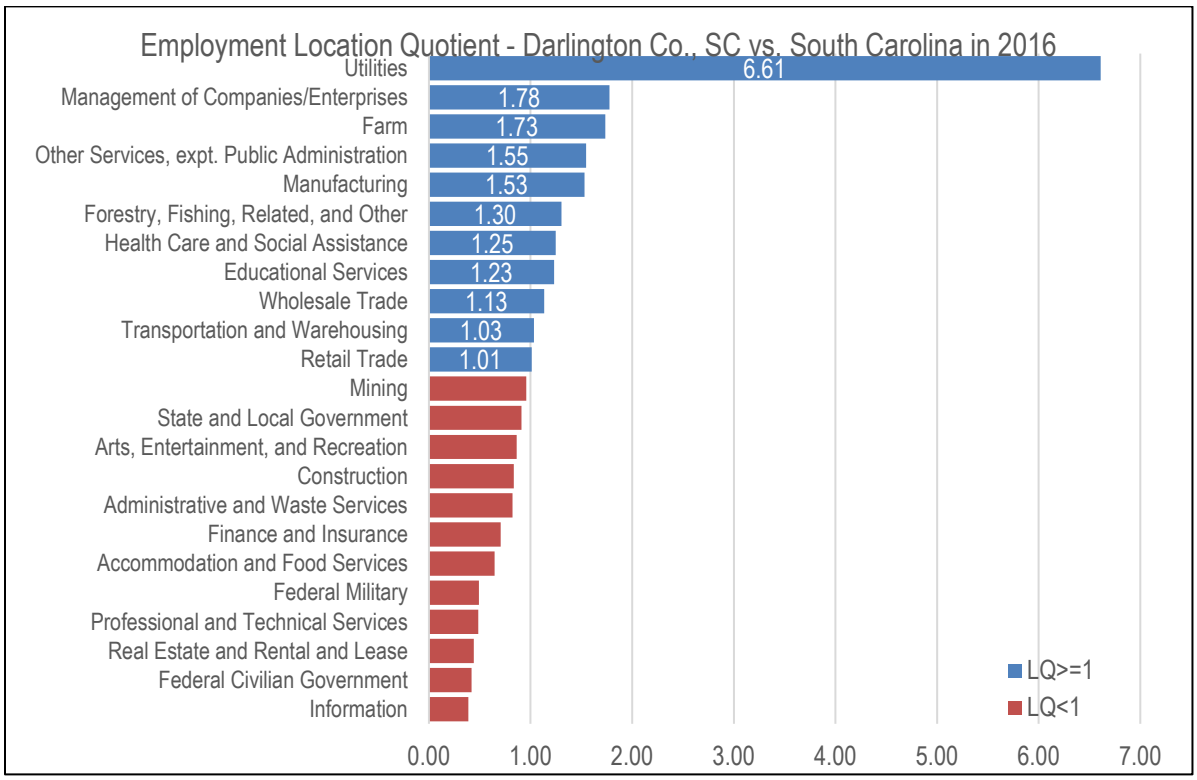
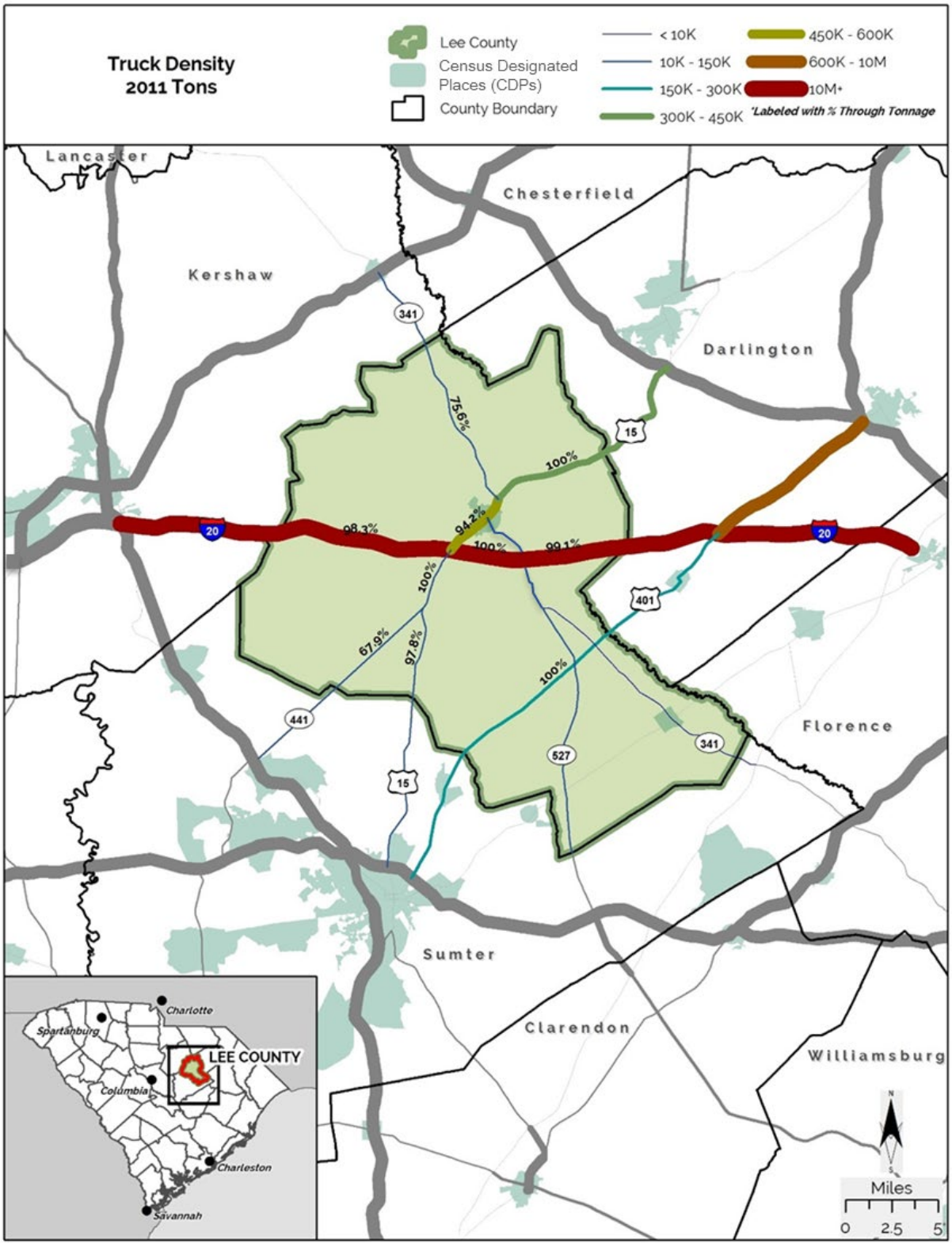


Figure 3: Truck Tonnage Density by Route (percentage through Lee County)



Source: Prepared by CDM Smith, based on TRANSEARCH data for 2011.

In 2011, Lee County truck freight tonnage totaled approximately 11.8 million tons, valued at $24.5 billion, aboard over 850,000 truck units (**Table 1**). The significant majority of Lee County tonnage (96.5 percent, 11.4 million) moves through the County, with around only 2.2 percent (0.3 million) outbound, and 1.3 percent (0.2 million) inbound, and negligible intra-county movements (78.0 tons). Most through-county movements are along I-20, with about 16.3 percent moving from one SC county to another, 22.6 percent outbound from SC, and 28.8 percent inbound to SC.

Table 1: Lee County, SC Truck Freight by Direction (2011)

Direction	Tons		Truck Units		Value (in millions)		Average Value/Ton
	Amount	*Percent*	Amount	*Percent*	Amount	*Percent*	
Outbound	259,286	*2.2*	21,967	*2.6*	$180	*0.7*	$694
Outbound to SC	116,475	*1.0*	11,730	*1.4*	$49	*0.2*	$420
Outbound to non SC	142,811	*1.2*	10,236	*1.2*	$131	*0.5*	$918
Inbound	148,307	*1.3*	22,050	*2.6*	$156	*0.6*	$1,051
Inbound from SC	52,118	*0.4*	12,021	*1.4*	$26	*0.1*	$495
Inbound from non SC	96,189	*0.8*	10,028	*1.2*	$130	*0.5*	$1,352
Intra-County	78	*0.0*	74	*0.0*	$0	*0.0*	$486
Through	11,379,659	*96.5*	806,819	*94.8*	$24,161	*98.6*	$2,123
Through SC to SC	1,921,858	*16.3*	207,717	*24.4*	$2,494	*10.2*	$1,298
Through non SC to SC	2,667,779	*22.6*	194,975	*22.9*	$5,622	*23.0*	$2,108
Through SC to non SC	3,389,218	*28.8*	211,706	*24.9*	$7,749	*31.6*	$2,286
Through non SC to non SC	3,400,804	*28.9*	192,421	*22.6*	$8,295	*33.9*	$2,439
Total	11,787,331	*100.0*	850,909	*100.0*	$24,497	*100.0*	$2,078

Source: Prepared by CDM Smith, based on TRANSEARCH data for 2011.

Tonnage volume through Lee County is forecast to more than double (approximately 109.1 percent) by year 2040, led by through traffic (approximately 110.7 percent), as shown in **Table 2**. County outbound and inbound shipments are forecast to also grow notably (63.8 and 65.6 percent, respectively). However, Lee intra-county growth is forecast at a very low 14.3 percent, reflecting little anticipated economic growth.

Table 2: Lee County, SC Truck Freight Tonnage Growth by Direction (2011-2040)

Traffic	2011	2040	Total (%)	CAGR (%)
Outbound	259,286	424,637	63.8	1.7
Inbound	148,307	245,644	65.6	1.8
Intra-County	78	90	14.3	0.5
Through	11,379,659	23,979,573	110.7	2.6
Total	11,787,331	24,649,944	109.1	2.6

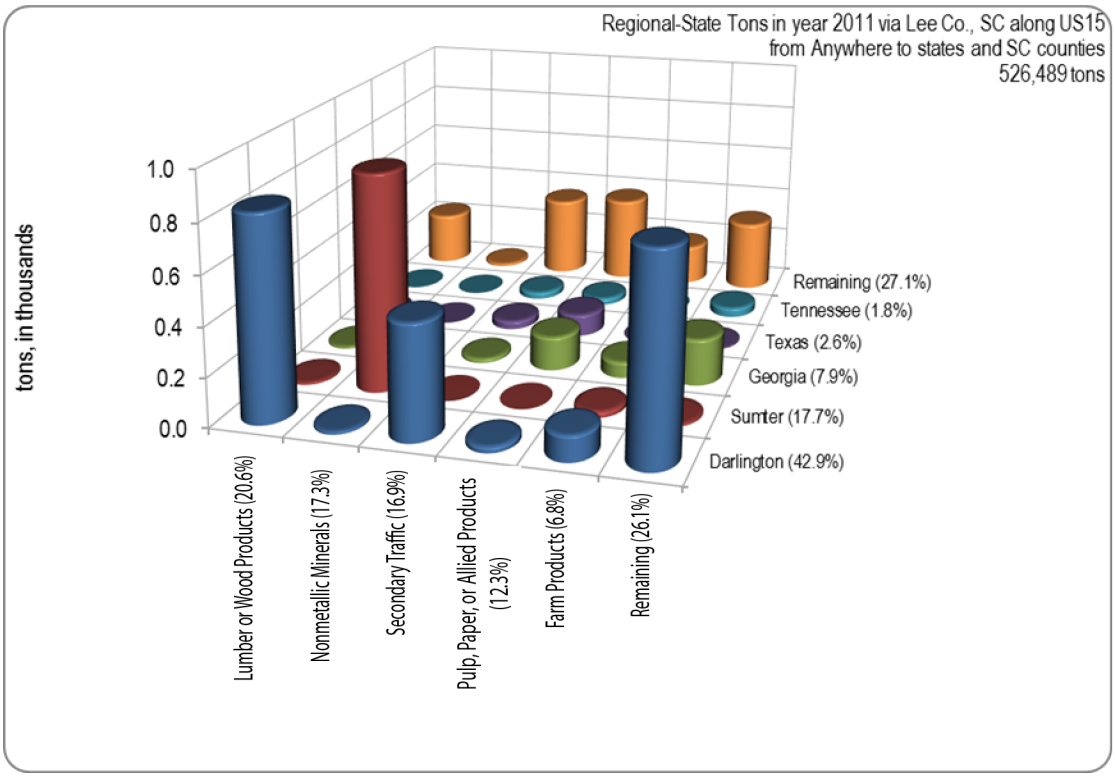
Source: Prepared by CDM Smith, based on TRANSEARCH data for 2011.

2.2.2 Bishopville Truck Freight

The truck freight assessment for Bishopville excludes the tonnage movements on I-20 through Lee County to focus attention on the commodities and origin/destination of US 15 and SC 341 truck freight through Bishopville. This assessment provides perspective on how an alternative roadway around Bishopville would affect local development and other regional traffic passing through the study area.

Approximately 0.5 million tons of truck freight annually moves through Bishopville on US 15, typically linking to/from I-20, although a small share continues south to Sumter County. Most of this tonnage originates or terminates in Darlington County (0.2 million, 42.9 percent), followed by Sumter County (0.1 million, 17.7 percent). The principle commodities include lumber or wood products moving from Darlington County and non-metallic minerals moving from Sumter County. **Figure 4** illustrates the truck freight tonnage on US 15 by commodity and origin/destination.

Figure 4: Lee County Freight Tonnage on US 15 by Commodity and Origin/Destination



Source: Prepared by CDM Smith, based on TRANSEARCH data for 2011.

2.2.3 Regional Development Initiatives

The SLRCOG assists its local governments to identify, secure, and administer resources for a variety of economic development activities, including water and sewer facilities, downtown/streetscape improvements, community facilities improvements/construction, workforce education and technology, and transportation. The SLRCOG works with the U.S. Economic Development Administration (EDA), county economic developers, economic development alliances, educational institutions, and others to develop and maintain the Comprehensive Economic Development Strategy (CEDS) for the four-

county SLRCOG Economic Development District (EDD). The CEDS, updated every five years, identifies needs and prioritizes projects across the four-county region. In addition to support from the SLRCOG, Lee County is part of a two-county Economic Development Alliance with neighboring Sumter County called "TheLINK." Regional development initiatives for the Bishopville area are briefly discussed below:

- *Water and Sewer* – Bishopville recently received a $750K Community Development Block Grant (CDBG) to complete the first phase of a three-phase $2.5 million wastewater trunk line upgrade to reduce infill and infiltration concerns.

- *Downtown Revitalization* – Many businesses along US 15 in the central business district have closed for various reasons over the past 20 years. To address through-truck traffic contribution to the business closures, the four-lane US 15 highway was narrowed to two lanes, parking spaces were provided, and curbs were constructed. While some businesses have since emerged, the net effect on local business development has not been substantial. Currently, Greater Bishopville Inc. (non-profit) was capitalized by a donation from a private benefactor to obtain and rehabilitate buildings on Main Street for new business use.

- *Workforce Education* – The SLRCOG serves as the administrative entity to implement the Workforce Innovation and Opportunity Act of 2014 (WIOA) in Clarendon, Kershaw, Lee, and Sumter counties. Staff deliver workforce investment activities through the Lee County Library to businesses and individuals who need those services,[1] as well as through individual events such as job fairs and hiring events. For example:

  - Spring 2016 Job Fair in Bishopville – attracted 440 job seekers and 28 companies (312 were Bishopville residents, with 90 percent ranging 18 to 25 in age)

  - December 2016 "Hire Me"– attracted over 400 job seekers interested in filling jobs with Crown Healthcare Laundry Services, which is in the final planning stages of opening a Lee County facility at the I-20 Industrial Park

  The SLRCOG also continues to help integrate the Lee County campus into the larger Central Carolina Technical College (CCTC), which has other campuses in Sumter, Clarendon, and Kershaw counties. CCTC offers two-year associate degrees, diplomas and certificates; utilizes both traditional and online courses; and has cooperative agreements with other four-year colleges and universities. The current Lee County campus is in downtown Bishopville on US 15.[2]

- *Transportation* – Primary objectives include the proposed alternative roadway around Bishopville, and the transit efforts of Santee-Wateree Regional Transportation Authority (RTA) in response to the Lee County Transit Task Force.

[1] Including small and large businesses, job seekers, dislocated workers, veterans, incumbent workers, new entrants to the workforce, youth, and persons with disabilities

[2] Based on discussions with the SLRCOG

- *Industry Recruitment* – In 2015 Lee and Sumter Counties formed TheLINK, a public-private economic development alliance charged with facilitating regional jobs and capital investment, with the power to incentivize industry recruitment, and customize working environments to fit investor needs. Governed by a board of directors comprised of business leaders and public officials from both counties, TheLINK is a 501(c)(6) nonprofit organization recognized by the South Carolina Secretary of State. Currently, two industrial parks certified by the South Carolina Department of Commerce are located in the greater Bishopville area — Lee County Industrial Park at I-20 and US 15 and James Industrial Park at I-20 and SC 341.

The proposed alternative roadway around Bishopville is one part of several opportunities for economic development initiatives for Bishopville, Lee County, and the larger Santee-Lynches region. Failure to address the disruptive effects of large trucks driving through the downtown inhibits the effectiveness of the other development initiatives.

3. ECONOMIC IMPACTS OF ALTERNATIVES

Various socioeconomic forecasts suggest continued economic stagnation in Lee County without coordinated regional development initiatives. In terms of population and employment, Woods & Poole Economics, Inc. does not forecast effective growth for Lee County in the foreseeable future. Nonetheless, recent development initiatives in Bishopville and Lee County include water/sewer upgrades, education/job training, downtown revitalization, and industry recruitment.

These historical trends, current initiatives, and future development potential are considered in evaluating the alternatives for the proposed roadway around Bishopville. The No Build and 12 Build Alternatives summarized below provide a framework for assessing how an alternative roadway's general location would affect potential economic development. **Figure 5** to **Figure 8** illustrates the Build Alternatives located in the southeast portion of the study area spanning a region just north of the I-20/US 15 interchange east through the "proposed development district" connecting to the SC 341/US 15 intersection.

- **No Build Alternative** – The No Build Alternative will maintain truck and passenger traffic through downtown Bishopville along US 15.

- **Alternative 1** – Alternative 1 is approximately 5.5 miles long and begins at the intersection of the Sumter Highway (US 15) and Browntown Road. From there, it heads southeast for approximately one mile and intersects Dove Lane, then heads northeast for approximately one-quarter of a mile where it intersects with the South Carolina Central Railroad (SCRF) and the St. Charles Highway (SC 154). It then heads slightly northeast for approximately six-tenths of a mile where it intersects Bradley Avenue, then heads east for approximately one-half mile where it intersects English Mill Road. From there, it heads northeast approximately one-half mile and intersects the Wisacky Highway (US 341). Alternative 1 continues northeast for approximately three-tenths of a mile where it intersects Jordan Lane. From there, it continues northeast for approximately one-mile where it follows McGuirt Road for approximately three-tenths of a mile and crosses the SCRF a second time. It then heads northwest for approximately seven-tenths of a mile and connects to the Bethune Highway (SC 341) at the existing intersection with N. Main Street (US 15).

Figure 5: Bishopville Truck Route Alternative 1, Alternative 2, and Alternative 3

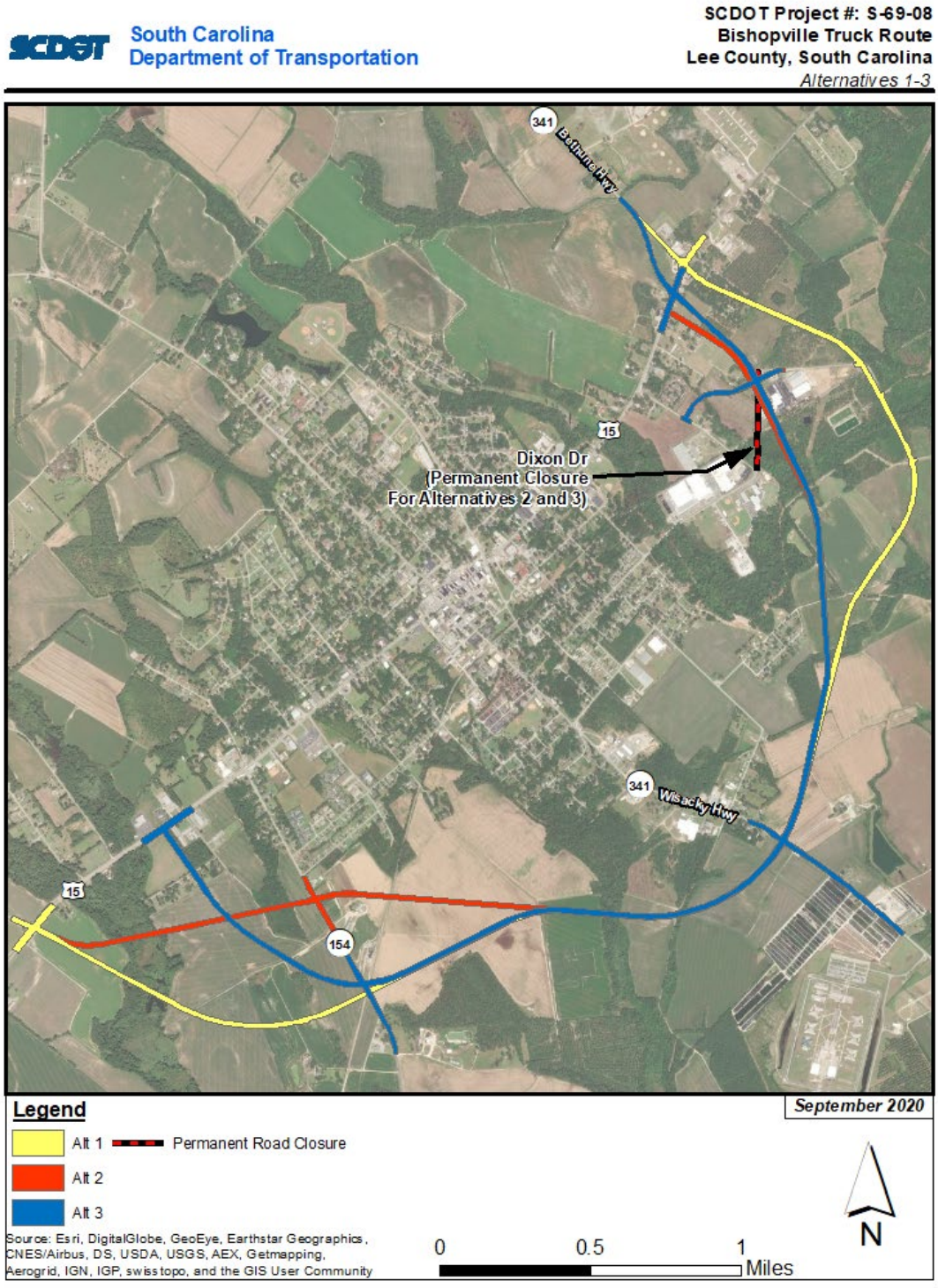


Figure 6: Bishopville Truck Route Alternative 4, Alternative 5, and Alternative 6

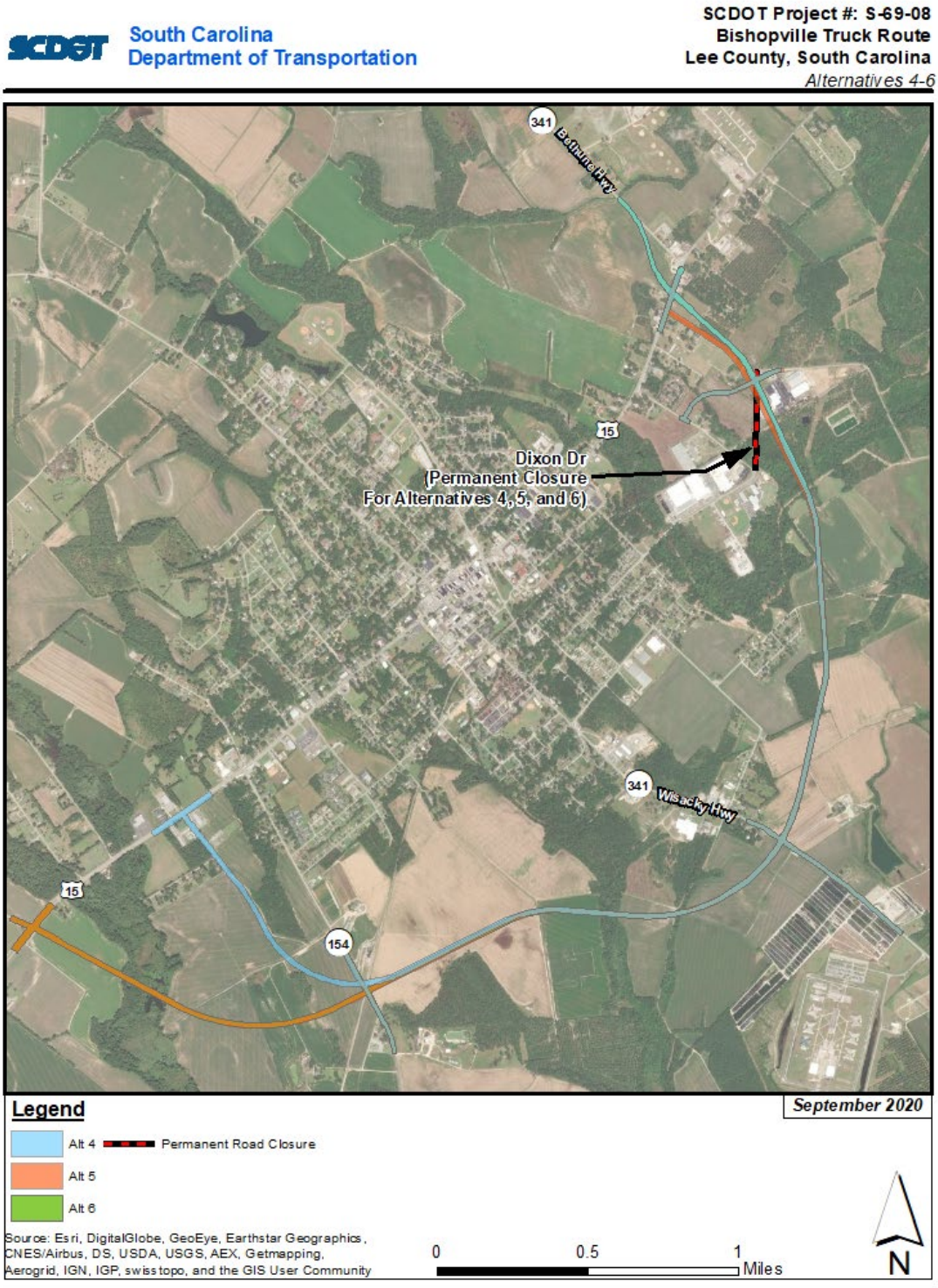


Figure 7: Bishopville Truck Route Alternative 7, Alternative 8, and Alternative 9

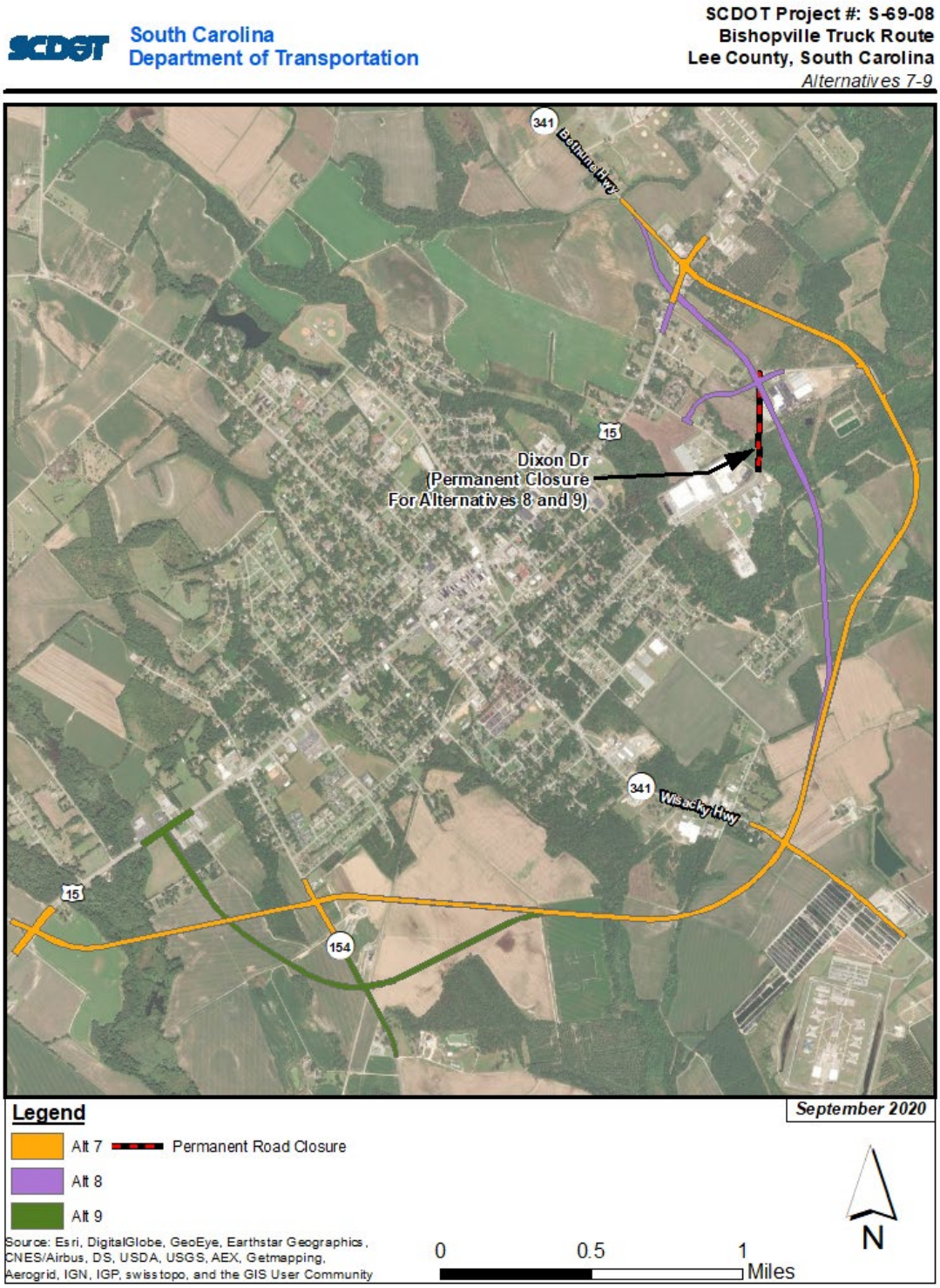
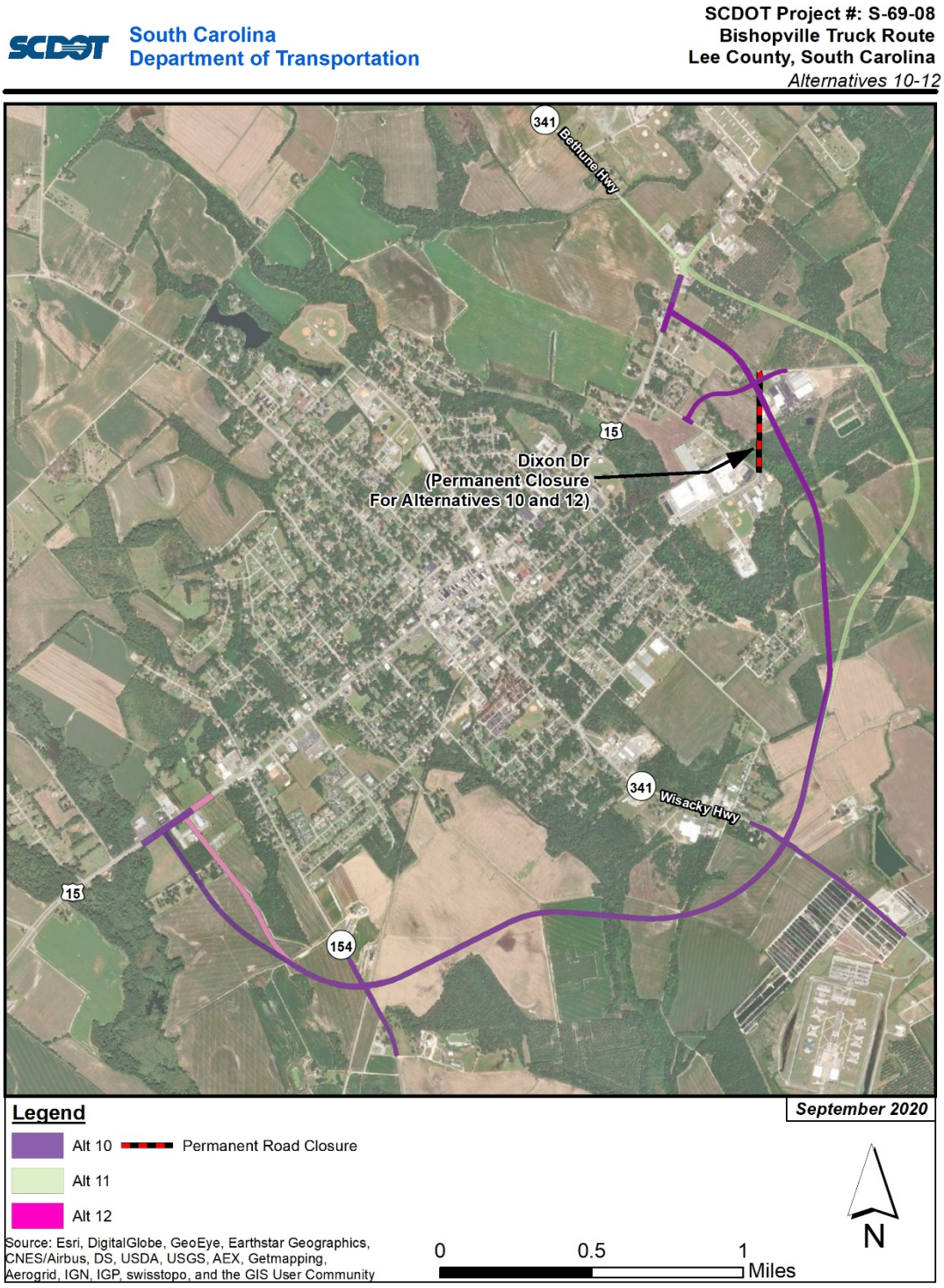


Figure 8: Bishopville Truck Route Alternative 10, Alternative 11, and Alternative 12



- **Alternative 2** – Alternative 2 is approximately 4.6 miles long and begins at the intersection of the Sumter Highway (US 15) and Browntown Road. From there, it

heads slightly northeast for approximately three-quarters of a mile and intersects Wilkinson Road. It then continues slightly northeast for approximately one-quarter of a mile before intersecting the St. Charles Highway (SC 154). From there, it heads east for approximately one-quarter of a mile where it crosses the SCRF. It then heads slightly southeast for approximately one-half of a mile where it intersects Bradley Avenue, then heads east for approximately one-half of a mile where it intersects English Mill Road. From there, it heads northeast for approximately one-half of a mile and intersects the Wisacky Highway (US 341). Alternative 2 continues northeast for approximately three-tenths of a mile where it intersects Jordan Lane. It then heads slightly northwest for approximately one and one-quarter miles, crossing the SCRF a second time, to just west of the intersection of McGuirt Road and Dixon Drive, and continues northwest along Dixon Drive for approximately four-tenths of a mile and ends at a new intersection with N. Main Street (US 15). This alternative closes Dixon Drive between Academy Road and McGuirt Road and provides a connection from the new roadway to Academy Road.

- **Alternative 3** – Alternative 3 is approximately 4.8 miles long and begins approximately one-tenth of a mile southwest of the intersection of the Sumter Highway (US 15) and Wilkinson Road (SC 364). From there, it heads southeast for approximately two-tenths of a mile and intersects Edgefield Drive, then continues southeast for approximately seven-tenths of a mile where it intersects with the SCRF and the St. Charles Highway (SC 154). It then heads northeast for approximately six-tenths of a mile where it intersects Bradley Avenue, then heads east for approximately one-half of a mile where it intersects English Mill Road. From there, it heads northeast for approximately one-half of a mile and intersects the Wisacky Highway (US 341). Alternative 3 continues northeast for approximately three-tenths of a mile where it intersects Jordan Lane. It then heads slightly northwest for approximately one and one-quarter miles, crossing the SCRF a second time, to the intersection of McGuirt Road and Dixon Drive. From there, it heads northwest just north of Dixon Drive for approximately four-tenths of a mile before intersecting N. Main Street (US 15). It then heads northeast for approximately three-tenths of a mile and connects with the Bethune Highway (SC 341). This alternative closes Dixon Drive between Academy Road and McGuirt Road, provides a connection from the new roadway to Academy Road, and replaces the intersection of N. Main Street (US 15) and the Bethune Highway (SC 341).

- **Alternative 4** – Alternative 4 is approximately 4.7 miles long and begins at the intersection of the Sumter Highway (US 15) and Wilkinson Road (SC 364). From there, it heads southeast along Wilkinson Road (SC 364) for approximately two-tenths of a mile and intersects Edgefield Drive, then continues southeast for approximately seven-tenths of a mile where it intersects with the SCRF and the St. Charles Highway (SC 154). It then heads northeast for approximately six-tenths of a mile where it intersects Bradley Avenue, then heads east for approximately one-half of a mile where it intersects English Mill Road. From there, it heads northeast for approximately one-half of a mile and intersects the Wisacky Highway (US 341). Alternative 4 continues northeast for approximately three-tenths of a mile where it intersects Jordan Lane. It then heads slightly northwest for approximately one and one-quarter miles, crossing the SCRF a second time, to the intersection of McGuirt Road and Dixon Drive. From there, it

heads northwest just north of Dixon Drive for approximately four-tenths of a mile before intersecting N. Main Street (US 15). It then heads northeast for approximately three-tenths of a mile and connects with the Bethune Highway (SC 341). This alternative closes Dixon Drive between Academy Road and McGuirt Road, provides a connection from the new roadway to Academy Road, and replaces the existing intersection of N. Main Street (US 15) and the Bethune Highway (SC 341).

- **Alternative 5** – Alternative 5 is approximately 4.8 miles long and begins at the intersection of the Sumter Highway (US 15) and Browntown Road. From there, it heads southeast for approximately one mile and intersects Dove Lane, then heads northeast for approximately one-quarter of a mile where it intersects with the SCRF and the St. Charles Highway (SC 154). It then heads slightly northeast for approximately six-tenths of a mile where it intersects Bradley Avenue, then heads east for approximately one-half mile where it intersects English Mill Road. From there, it heads northeast approximately one-half mile and intersects the Wisacky Highway (US 341). Alternative 5 continues northeast for approximately three-tenths of a mile where it intersects Jordan Lane. It then heads slightly northwest for approximately one and one- quarter miles, crossing the SCRF a second time, to just west of the intersection of McGuirt Road and Dixon Drive, and continues northwest along Dixon Drive for approximately four-tenths of a mile and ends at a new intersection with N. Main Street (US 15). This alternative closes Dixon Drive between Academy Road and McGuirt Road and provides a connection from the new roadway to Academy Road.

- **Alternative 6** – Alternative 6 is approximately 5.2 miles long and begins at the intersection of the Sumter Highway (US 15) and Browntown Road. From there, it heads southeast for approximately one mile and intersects Dove Lane, then heads northeast for approximately one-quarter of a mile where it intersects with the SCRF and the St. Charles Highway (SC 154). It then heads slightly northeast for approximately six-tenths of a mile where it intersects Bradley Avenue, then heads east for approximately one-half mile where it intersects English Mill Road. From there, it heads northeast approximately one-half mile and intersects the Wisacky Highway (US 341). Alternative 6 continues northeast for approximately three-tenths of a mile where it intersects Jordan Lane. It then heads slightly northwest for approximately one and one- quarter miles, crossing the SCRF a second time, to the intersection of McGuirt Road and Dixon Drive. From there, it heads northwest just north of Dixon Drive for approximately four-tenths of a mile before intersecting N. Main Street (US 15). It then heads northeast for approximately three-tenths of a mile and connects with the Bethune Highway (SC 341). This alternative closes Dixon Drive between Academy Road and McGuirt Road, provides a connection from the new roadway to Academy Road, and replaces the existing intersection of N. Main Street (US 15) and the Bethune Highway (SC 341).

- **Alternative 7** – Alternative 7 is approximately 5.4 miles long and begins at the intersection of the Sumter Highway (US 15) and Browntown Road. From there, it heads slightly northeast for approximately three-quarters of a mile and intersects Wilkinson Road. It then continues slightly northeast for approximately one-quarter of a mile before intersecting the St. Charles Highway (SC 154). From there, it heads east for approximately one-quarter of a mile where it crosses the

SCRF. It then heads slightly southeast for approximately one-half of a of a mile where it intersects Bradley Avenue, then heads east for approximately one-half of a mile where it intersects English Mill Road. From there, it heads northeast for approximately one-half of a mile and intersects the Wisacky Highway (US 341). Alternative 7 continues northeast for approximately three-tenths of a mile where it intersects Jordan Lane. From there, it continues northeast for approximately one-mile where it follows McGuirt Road for approximately three-tenths of a mile and crosses the SCRF a second time. It then heads northwest for approximately seven- tenths of a mile and connects to the Bethune Highway (SC 341) at the existing intersection with N. Main Street (US 15).

- **Alternative 8** – Alternative 8 is approximately 5.0 miles long and begins at the intersection of the Sumter Highway (US 15) and Browntown Road. From there, it heads slightly northeast for approximately three-quarters of a mile and intersects Wilkinson Road. It then continues slightly northeast for approximately one-quarter of a mile before intersecting the St. Charles Highway (SC 154). From there, it heads east for approximately one-quarter of a mile where it crosses the SCRF. It then heads slightly southeast for approximately one-half of a of a mile where it intersects Bradley Avenue, then heads east for approximately one-half of a mile where it intersects English Mill Road. From there, it heads northeast for approximately one-half of a mile and intersects the Wisacky Highway (US 341). Alternative 8 continues northeast for approximately three-tenths of a mile where it intersects Jordan Lane. It then heads slightly northwest for approximately one and one-quarter miles, crossing the SCRF a second time, to the intersection of McGuirt Road and Dixon Drive. From there, it heads northwest just north of Dixon Drive for approximately four-tenths of a mile before intersecting N. Main Street (US 15). It then heads northeast for approximately three-tenths of a mile and connects with the Bethune Highway (SC 341). This alternative closes Dixon Drive between Academy Road and McGuirt Road, provides a connection from the new roadway to Academy Road, and replaces the existing intersection of N. Main Street (US 15) and the Bethune Highway (SC 341).

- **Alternative 9** – Alternative 9 is approximately 5.1 miles long and begins approximately one-tenth of a mile southwest of the intersection of the Sumter Highway (US 15) and Wilkinson Road (SC 364). From there, it heads southeast for approximately two-tenths of a mile and intersects Edgefield Drive, then continues southeast for approximately seven-tenths of a mile where it intersects with the SCRF and the St. Charles Highway (SC 154). It then heads northeast for approximately six-tenths of a mile where it intersects Bradley Avenue, then heads east for approximately one-half of a mile where it intersects English Mill Road. From there, it heads northeast for approximately one-half of a mile and intersects the Wisacky Highway (US 341). Alternative 9 continues northeast for approximately three-tenths of a mile where it intersects Jordan Lane. From there, it continues northeast for approximately one-mile where it follows McGuirt Road for approximately three-tenths of a mile and crosses the SCRF a second time. It then heads northwest for approximately seven-tenths of a mile and connects to the Bethune Highway (SC 341) at the existing intersection with N. Main Street (US 15).

- **Alternative 10** – Alternative 10 is approximately 4.4 miles long and begins approximately one-tenth of a mile southwest of the intersection of the Sumter

Highway (US 15) and Wilkinson Road (SC 364). From there, it heads southeast for approximately two-tenths of a mile and intersects Edgefield Drive, then continues southeast for approximately seven-tenths of a mile where it intersects with the SCRF and the St. Charles Highway (SC 154). It then heads northeast for approximately six-tenths of a mile where it intersects Bradley Avenue, then heads east for approximately one-half of a mile where it intersects English Mill Road. From there, it heads northeast for approximately one-half of a mile and intersects the Wisacky Highway (US 341). Alternative 10 continues northeast for approximately three-tenths of a mile where it intersects Jordan Lane. It then heads slightly northwest for approximately one and one-quarter miles, crossing the SCRF a second time, to just west of the intersection of McGuirt Road and Dixon Drive, and continues northwest along Dixon Drive for approximately four-tenths of a mile and ends at a new intersection with N. Main Street (US 15). This alternative closes Dixon Drive between Academy Road and McGuirt Road and provides a connection from the new roadway to Academy Road.

- **Alternative 11** – Alternative 11 is approximately 5.1 miles long and begins at the intersection of the Sumter Highway (US 15) and Wilkinson Road (SC 364). From there, it heads southeast along Wilkinson Road (SC 364) for approximately two-tenths of a mile and intersects Edgefield Drive, then continues southeast for approximately seven-tenths of a mile where it intersects with the SCRF and the St. Charles Highway (SC 154). It then heads northeast for approximately six-tenths of a mile where it intersects Bradley Avenue, then heads east for approximately one-half of a mile where it intersects English Mill Road. From there, it heads northeast for approximately one-half of a mile and intersects the Wisacky Highway (US 341). Alternative 11 continues northeast for approximately three-tenths of a mile where it intersects Jordan Lane. From there, it continues northeast for approximately one-mile where it follows McGuirt Road for approximately three-tenths of a mile and crosses the SCRF a second time. It then heads northwest for approximately seven-tenths of a mile and connects to the Bethune Highway (SC 341) at the existing intersection with N. Main Street (US 15).

- **Alternative 12** – Alternative 12 is approximately 4.4 miles long and begins at the intersection of the Sumter Highway (US 15) and Wilkinson Road (SC 364). From there, it heads southeast along Wilkinson Road (SC 364) for approximately two-tenths of a mile and intersects Edgefield Drive, then continues southeast for approximately seven-tenths of a mile where it intersects with the SCRF and the St. Charles Highway (SC 154). It then heads northeast for approximately six-tenths of a mile where it intersects Bradley Avenue, then heads east for approximately one-half of a mile where it intersects English Mill Road. From there, it heads northeast for approximately one-half of a mile and intersects the Wisacky Highway (US 341). Alternative 12 continues northeast for approximately three-tenths of a mile where it intersects Jordan Lane. It then heads slightly northwest for approximately one and one-quarter miles, crossing the SCRF a second time, to just west of the intersection of McGuirt Road and Dixon Drive, and continues northwest along Dixon Drive for approximately four-tenths of a mile and ends at a new intersection with N. Main Street (US 15). This alternative closes Dixon Drive between Academy Road and McGuirt Road and provides a connection from the new roadway to Academy Road.

3.1 ECONOMIC QUALITATIVE EVALUATION

The 12 Build Alternatives are similar in their location with slight nuances associated with specific alignments. Because of this, the Build Alternatives were evaluated by how the general alignment affects three broad qualitative evaluation metrics:

- *Transport* – Each alternative's effect on statewide highway transport, including through traffic (especially trucks) and frontage road access.
- *Economic Development Initiatives* – Each alternative's potential to support overall downtown revitalization and access to commercial/industrial property.
- *Economic Competitiveness* – The cumulative effect of transport and economic development initiatives of each alternative on the region's overall economic demand (consumption), supply (production/employment), and distribution.

These broad areas were evaluated qualitatively, given the small analysis region and lack of sufficient data to conduct an appropriate quantitative analysis. The qualitative scoring is based on the context of the literature review, socioeconomic data, freight tonnage volumes, land use, and development initiatives discussed in *S-69-08 Bishopville Project Economic Assessment, 2017*[3] under separate cover. Scoring comprises:

- Yes – the alternative would positively affect the evaluation metric
- No – the alternative would not affect the evaluation metric
- Maybe – the alternative might positively affect the evaluation metric

The effect of each evaluation metric on the No-Build and Build Alternatives is summarized in **Table 3** and discussed below.

Table 3: Bishopville Alternative Roadway Evaluation Metrics by Alternative

Evaluation Metrics	No-Build	12 Build Alternatives
Transport		
Divert truck traffic	No	Yes
Support statewide transport	No	Yes
Economic Development Initiatives		
Open development properties	No	Yes
Support downtown revitalization	No	Yes
Economic Competitiveness		
Demand (consumption, population)	No	No
Supply (production, employment)	No	Maybe
Distribution (connectivity)	No	Yes

3.1.1 TRANSPORT

In summary, information collected suggests that the 12 Build Alternatives would adequately address the various Bishopville highway transport issues. This summary perspective considers the following:

[3] Federal Highway Administration & South Carolina Department of Transportation. (April 2017). *S-69-08 Bishopville Project Economic Assessment*, pages 32-37.

- *Divert Truck Traffic* – The ability of an alternative to divert through-truck traffic depends on trip origin/destination and routes used. The two highways affected accommodate different traffic flows US 15 and SC 341. The 12 Build Alternatives are each suited for US 15 to divert commercial traffic around Bishopville. Along SC 341, through-truck traffic is mostly from Kershaw headed south to Sumter or east to I-95; the 12 Build Alternatives provide connectivity for trucks.

- *Support Statewide Transport* – The 12 Build Alternatives are situated to support Statewide highway traffic flows, which will help facilitate local land use development patterns and statewide distribution/connectivity.

3.2 ECONOMIC DEVELOPMENT INITIATIVES

An alternative roadway would also affect and influence other economic development initiatives based on the alignment locations and the relativity to land use patterns and economic activity.

- *Open Development Properties* – A wide swath of land currently designated as "proposed development district" between the two Bishopville interchanges along Main Street would be connected by the 12 Build Alternatives. While such development around each of the 12 Build Alternatives would not be immediate, proximity to both I-20 and downtown Bishopville would make it an attractive location for future industry and/or distribution centers.

- *Support Downtown Revitalization* – Downtown revitalization requires diversion of truck traffic to the alternative roadway. The potential diversion of through town truck traffic to the 12 Build Alternatives is promising. Further, newly developed industry and/or distribution facilities along the 12 Build Alternatives could, in time, induce the development of support services (e.g., legal, accounting) in downtown and/or accommodate additional I-20 through-traffic. Lastly, small towns across the nation often close their main street to hold occasional special events to attract out-of-town visitors, strengthen the community, and encourage business activity; such events require a viable alternative route, such as the 12 Build Alternatives.

3.3 ECONOMIC COMPETITIVENESS

Demand, supply, and distribution factors typically interrelate to reflect a region's growth potential. While Bishopville's current demand (typically measured by consumption using a population proxy) and supply (measured by production using an employment proxy) are weak, the connectivity associated with its location along I-20 offers the opportunity to function as a distribution foothold from which the region can grow. The 12 Build Alternatives are all equally suited to facilitate growth as a distribution role between larger regions in the Southeast.

- *Demand* – Bishopville's current demand factor, measured by consumption using a population proxy, is weak. None of the alternatives will directly raise demand for goods and services. At best, demand (and consumption) could rise over time as an indirect effect associated with increased connectivity between external regions through Bishopville and/or from increased employment/production from development of the proposed development district.

- *Supply* – Bishopville's current supply factor, measured by production using an employment proxy, is weak. The proximity of the proposed development district to I-20 combined with assumed low-cost land values and requisite water/sewer supply; however, makes the proposed development district a potentially attractive location for manufacturing and/or processing facilities. The introduction of the proposed development district could strengthen Bishopville's supply factor.

- *Distribution* – The connectivity associated with Bishopville's location along I-20 offers the opportunity to function as a distribution foothold from which the region can grow. Bishopville's location between metro areas along I-20 and its interstate connectivity to smaller rural communities provides an opportunity for the location of niche distribution centers. This foothold can also lead to the supply of support services and/or other industries that serve external markets.

3.4 IMPACTED PARCELS

The 12 Build Alternatives were also evaluated for impacted land uses and parcels, listed in **Table 4** and **Table 5. Figure 9** to **Figure 12** illustrate the land uses within the range of alternatives. According to zoning data from the SLRCOG, a majority of the existing land within the project area of the alternatives is zoned agricultural, ranging from 55 to 74 percent of each alternative. Approximately 5 to 8 percent of the alternatives are zoned commercial. About 7 to 26 percent of the alternatives are zoned single-family residential. Alternatives 1 and 5 have the highest percent of zoned agricultural land at 74 and 70 percent, respectively. Alternatives 3, 4, 6, and 8 had the highest percent of zoned commercial land at 8 percent each. Alternatives 2 and 8 had the highest percent of single-family residential zoned land at 26 and 25 percent.

The conversion of some land uses for the construction of a roadway may have economic impacts. Impacts to agriculture land uses for example, may reduce the amount of land available for food production and therefore reduce revenue generation. Property boundaries were taken into considerations when developing build alternatives to maintain agricultural properties intact and avoid taking or disrupting agricultural land uses. To the greatest extent possible, agricultural properties were avoided to keep agricultural businesses in production. However, further avoidance and minimization of impacts to farmlands will be evaluated with advanced design for the selected build alternative. Access issues related to divided parcels and the location of pivot points will be addressed during the right-of-way acquisition process.

In addition to potential economic impacts to agricultural land uses, potential impacts to residential properties may change home values, and the potential loss of commercial properties may impact number of jobs available. However, transportation improvements may generate conversion of vacant or underutilized parcels for higher value development. If a land use classification changes, the tax assessment may change on that property impacting the amount of real estate taxes recovered.

Table 4: Land Use Impacts for Each Alternative (acres / %)

Alternative	Agricultural / Rural (acres / %)	Community Resource (acres / %)	GRM* (acres / %)	General Commercial (acres / %)	Heavy Industrial (acres / %)	Light Industrial (acres / %)	Professional, Medical, Office (acres / %)	Single-Family Residential (acres / %)	Vacant (acres / %)	Total Acreage
Alternative 1	46.7 / 74	0 / 0	0 / 0	3.9 / 6	0.2 / 0	4.8 / 8	0 / 0	4.2 / 7	3.4 / 5	63.2
Alternative 2	31.7 / 55	1.5 / 3	0.8 / 1	3.2 / 5	0.1 / 0	5.3 / 9	0 / 0	15.0 / 26	0 / 0	57.6
Alternative 3	34.9 / 58	1.5 / 2	0.8 / 1	5.1 / 8	0.1 / 0	5.7 / 9	0.1 / 0	12.1 / 20	0 / 0	60.2
Alternative 4	34.8 / 60	1.5 / 3	0.8 / 1	4.7 / 8	0.1 / 0	5.7 / 10	0 / 0	10.2 / 18	0 / 0	57.9
Alternative 5	41.8 / 70	1.5 / 2	0.8 / 1	3.2 / 5	0.2 / 0	5.9 / 9	0 / 0	6.7 / 11	0 / 0	59.5
Alternative 6	43.7 / 68	1.5 / 2	0.8 / 1	4.9 / 8	0.2 / 0	5.7 / 9	0 / 0	7.2 / 11	0 / 0	64.0
Alternative 7	36.6 / 60	0 / 0	0 / 0	3.9 / 6	0.1 / 0	4.8 / 8	0 / 0	12.5 / 20	3.4 / 6	61.3
Alternative 8	33.5 / 54	1.5 / 2	0.8 / 1	4.9 / 8	0.1 / 0	5.7 / 9	0 / 0	15.5 / 25	0 / 0	62.0
Alternative 9	37.9 / 64	0 / 0	0 / 0	4.1 / 7	0.1 / 0	4.8 / 8	0 / 0	9.1 / 15	3.4 / 6	59.5
Alternative 10	33.0 / 59	1.5 / 3	0.8 / 2	3.4 / 6	0.1 / 0	5.3 / 9	0 / 0	11.6 / 21	0 / 0	55.8
Alternative 11	37.9 / 66	0 / 0	0 / 0	3.7 / 6	0.1 / 0	4.8 / 8	0 / 0	7.2 / 13	3.4 / 6	57.2
Alternative 12	33.0 / 62	1.5 / 3	0.8 / 2	3.0 / 6	0.1 / 0	5.3 / 10	0 / 0	9.7 / 18	0 / 0	53.4

Source: Santee-Lynches Regional Council of Governments zoning data, CDM Smith Analysis
**GRM: General Residential/Manufactured Housing*

Table 5: Land Use Impacts for Each Alternative (impacted parcels / %)

Alternative	Agricultural / Rural (impacted parcels / %)	Community Resource (impacted parcels / %)	GRM* (impacted parcels / %)	General Commercial (impacted parcels / %)	Heavy Industrial (impacted parcels / %)	Light Industrial (impacted parcels / %)	Professional, Medical, Office (impacted parcels / %)	Single-Family Residential (impacted parcels / %)	Vacant (impacted parcels / %)	Total Impacted Parcels
Alternative 1	20 / 32	0 / 0	0 / 0	21 / 34	2 / 3%	5 / 8	0 / 0	11 / 18	3 / 5	62
Alternative 2	13 / 19	1 / 1	2 / 3	17 / 25	1 / 1	3 / 4	1 / 1	31 / 45	0 / 0	69
Alternative 3	17 / 27	1 / 2	2 / 3	20 / 31	1 / 2	3 / 5	1 / 2	19 / 30	0 / 0	64
Alternative 4	17 / 26	1 / 2	2 / 3	21 / 32	1 / 2	3 / 5	1 / 2	20 / 30	0 / 0	66
Alternative 5	17 / 29	1 / 2	2 / 3	17 / 29	2 / 3	3 / 5	1 / 2	15 / 26	0 / 0	58
Alternative 6	20 / 33	1 / 2	2 / 3	18 / 30	2 / 3	3 / 5	1 / 2	14 / 23	0 / 0	61
Alternative 7	16 / 27	0 / 0	0 / 0	21 / 36	1 / 2	5 / 8	0 / 0	13 / 22	3 / 5	59
Alternative 8	16 / 28	1 / 2	2 / 3	18 / 31	1 / 2	3 / 5	1 / 2	16 / 28	0 / 0	58
Alternative 9	17 / 26	0 / 0	0 / 0	23 / 35	1 / 2	5 / 8	0 / 0	16 / 25	3 / 5	65
Alternative 10	14 / 23	1 / 1	2 / 3	19 / 31	1 / 2	3 / 5	1 / 2	20 / 33	0 / 0	61
Alternative 11	17 / 25	0 / 0	0 / 0	24 / 36	1 / 1	5 / 7	0 / 0	17 / 25	3 / 4	67
Alternative 12	14 / 22	1 / 2	2 / 3	20 / 32	1 / 2	3 / 5	1 / 2	21 / 33	0 / 0	63

Source: Santee-Lynches Regional Council of Governments zoning data, CDM Smith Analysis
**GRM: General Residential/Manufactured Housing*

Figure 9: Land Uses for Alternative 1, Alternative 2, and Alternative 3

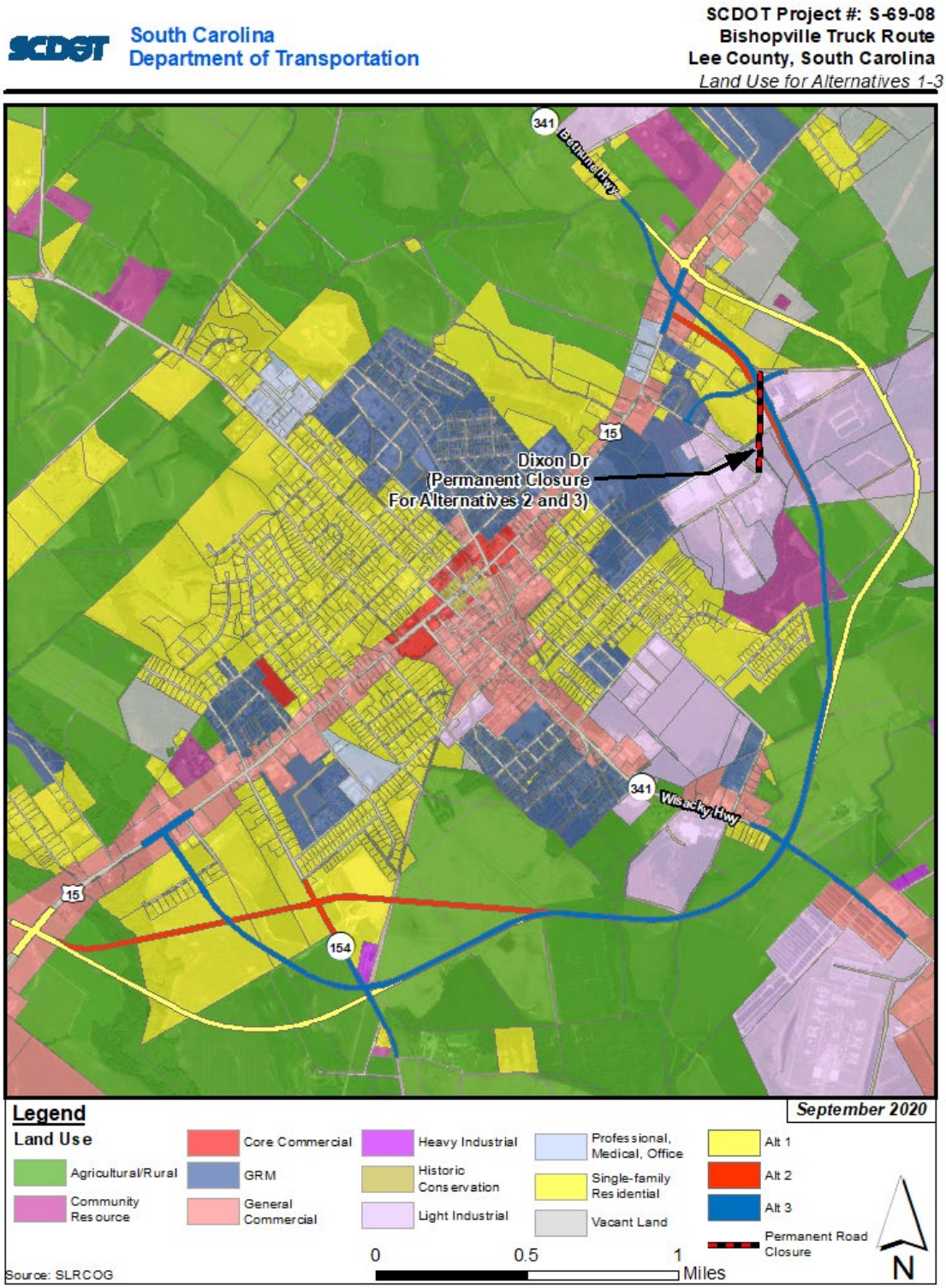


Figure 10: Land Uses for Alternative 4, Alternative 5, and Alternative 6

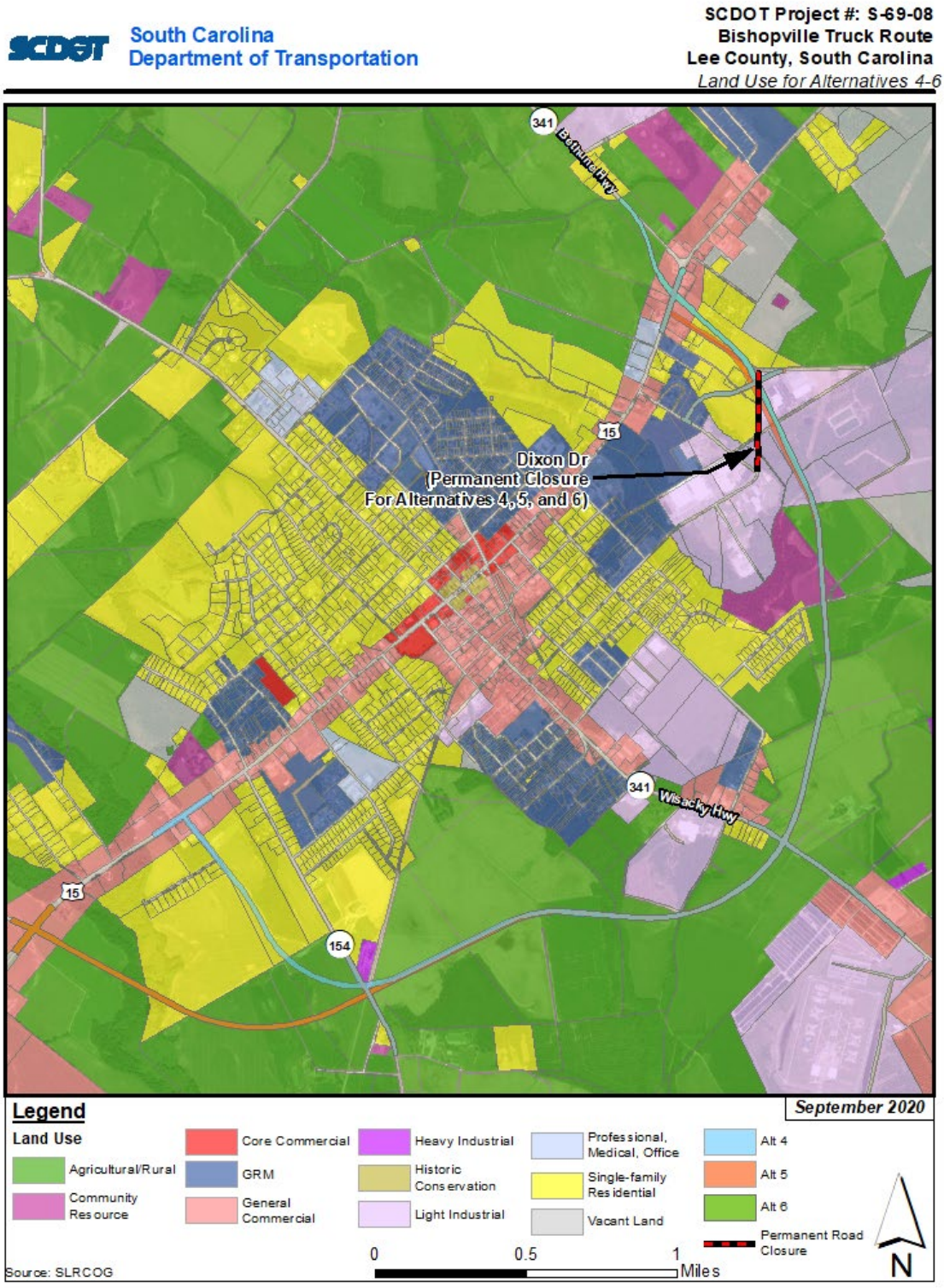


Figure 11: Land Uses for Alternative 7, Alternative 8, and Alternative 9

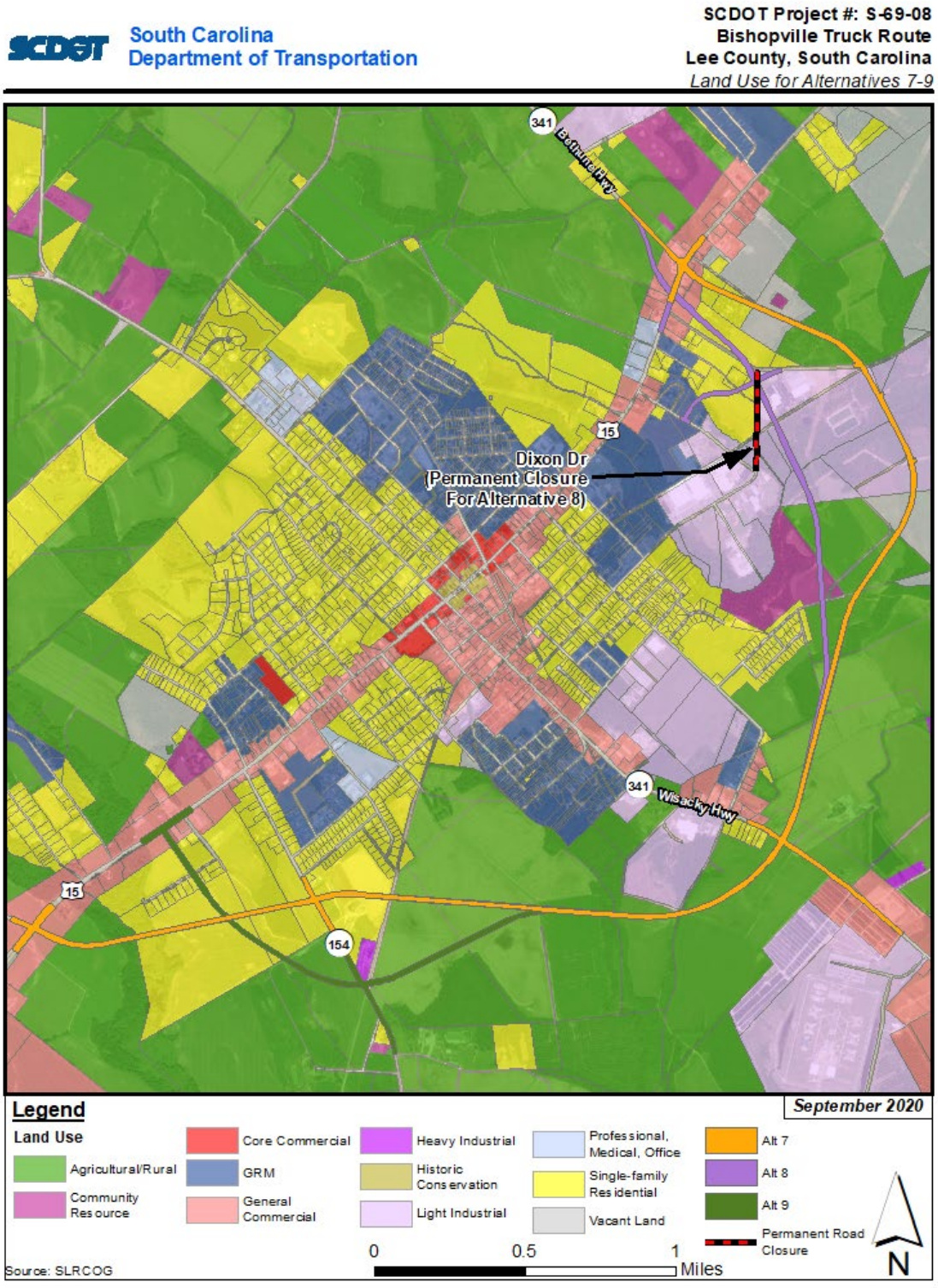
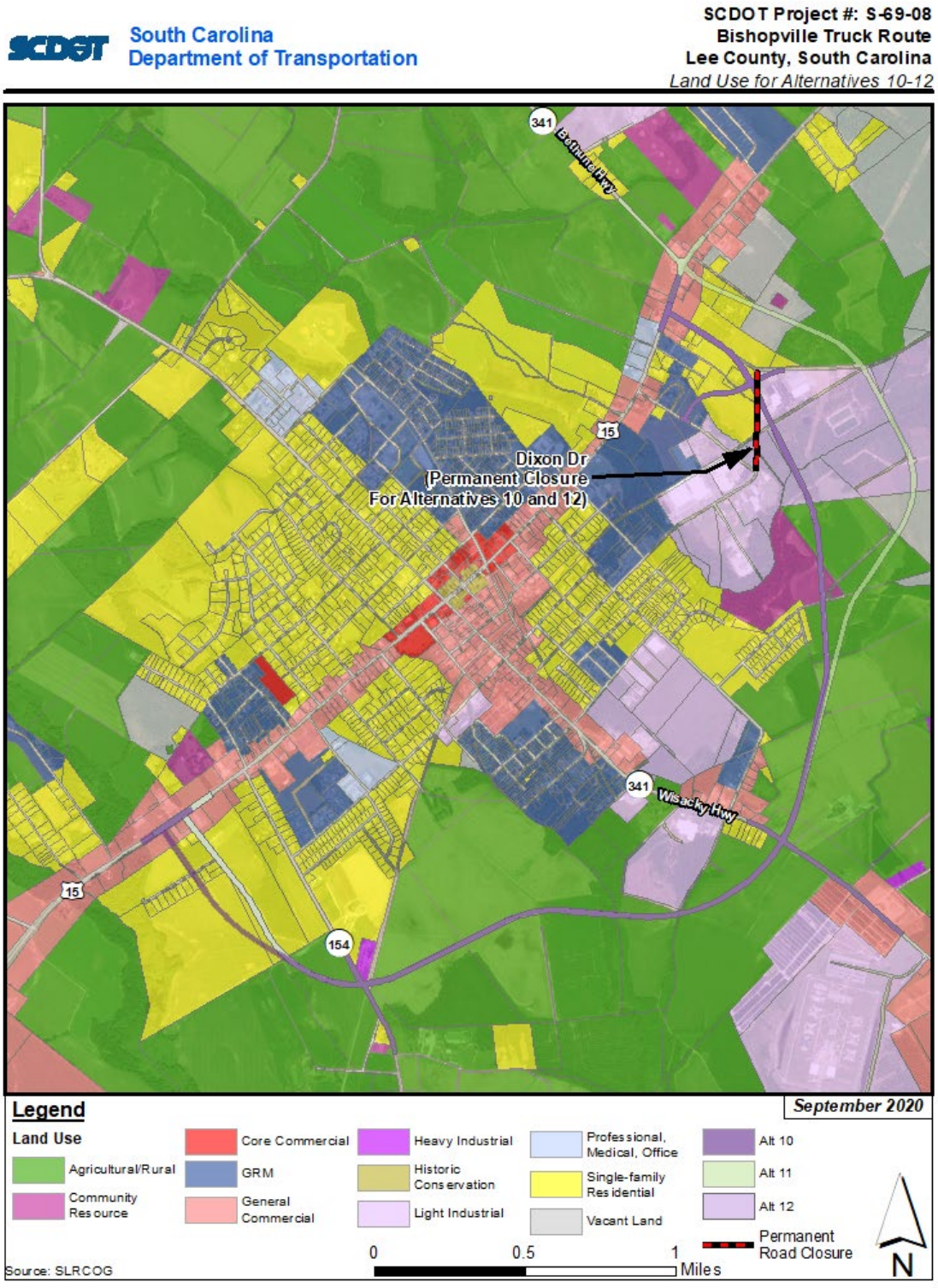


Figure 12: Land Uses for Alternative 10, Alternative 11, and Alternative 12



3.5 SUMMARY OF ECONOMIC IMPACTS

Given the historically poor socioeconomic performance of rural Lee County and the projected continuance of that trend (no population increase, low employment growth, select industry sectors, etc.), any economic development in the area would require various factors beyond an alternative roadway. Specifically, highway investment *facilitates*, but does not *create* growth.

Previous studies indicate that economic development associated with bypasses depend on many factors, including location, land use, zoning, support infrastructure, and correlation with other regional development pursuits. These observations support the overarching need for rising demand of goods and services in an area to generate economic development. While Bishopville demand is not rising, it is rising for external regions that transport goods through Bishopville and along I-20. Also, economic development initiatives are underway in Bishopville to address local demand constraints associated with a stagnant downtown economy, water/sewer needs, workforce education/training, etc.

External rising demand for goods and services drives the need for better through-traffic connectivity in Bishopville. Neighboring county population and employment levels are forecast to grow steadily through the forecast horizon (year 2050), which will increase through-traffic volumes in Bishopville, especially trucks (connecting Darlington to the west and Kershaw to the east). Failure to address such through-traffic will continue to inhibit Bishopville's downtown revitalization efforts.

Conversely, improved connectivity around Bishopville will increase the demand for Bishopville support services (e.g., interstate truck stops, restaurants) and provide a seed for other subsequent industry and/or distribution facilities. Moreover, an appropriate alternative roadway can support local demand for goods and services by coordinating with other local development initiatives—water/sewer improvements, downtown revitalization, and workforce education/training.

Roadway construction of one of the Build Alternatives may also have indirect economic impacts on the area. Roadway contractors may use local workers for short-term employment who spend earnings on food, clothing, or other services in the area. Additionally, as jobs are created employees receive additional income, spend more, and as a result tax revenue may grow.

Diversion of truck traffic may also have an indirect impact on the downtown economy from lost revenue from truck drivers stopping for food, gas, or other retail needs.

As such, each of the 12 Build Alternatives will similarly divert existing traffic patterns and support statewide transportation goals, complement existing economic development initiatives, and perhaps affect economic competitiveness.