

The 2018 South Carolina Intercity Bus Program Evaluation





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Table of Contents

I. Executive Summary	1
Statutory Requirements	1
Study Work Program	
South Carolina Intercity Busy Service	1
State's Intercity Bus Needs	2
Section 5311(f) Funding Recommendations	2
II. Project Background and Context	4
Introduction	4
III. SCDOT Intercity Bus Investment	
Inventory of South Carolina Intercity Bus Service	6
IV. Stakeholder Outreach and Input	
Intercity Bus Providers Survey	17
Public Transportation Providers Survey	17
General Stakeholders Survey	
V. Utilization of SCDOT - Section 5311(f) Funded Assets	
Greyhound	20
Southeastern Stages	21
VI. Level of Intercity Bus Coverage	
Intercity Bus Corridors and Populations Served	22
Identify Population Proximity to Intercity Bus Stations/Stops	26
VII. Demand for Intercity Bus Service	
Demographic Factors That Reflect Overall Need for Intercity Bus Service	29
Intercity bus Trip Generators	
VIII. Summary Observations	
IX. Intercity Bus Network and Schedule Analysis	41
Evaluation of Temporal Aspects of Bus Schedules	41
X. Consultation Process With Intercity Bus Providers	
Overview	43
Consultation Meeting	44
XI. FTA-Funded Public Transportation Providers	45
XII. Status Summary of South Carolina Intercity Bus Network	49
XIII. History of Rural Feeder Service Connecting to Intercity Bus Network	
FTA Section 5311(f) In-kind Match Program	58
XIV. Section 5311(f) Funding Alternatives	61
XV. Conclusions and Recommendations	

I. EXECUTIVE SUMMARY

STATUTORY REQUIREMENTS

As the designated agency responsible for the administration of the Section 5311 program (49 U.S.C. 5311 Nonurbanized Area Formula Program), the South Carolina Department of Transportation (SCDOT), Office of Public Transit (OPT), is required to spend 15 percent of its annual Federal Transit Administration (FTA) Section 5311 apportionment to carry out a program to develop and support intercity bus transportation, unless the Governor certifies that the intercity bus service needs of the State are being adequately met. The assessment of intercity bus needs may be made relative to other rural transportation needs in the State. This determination must include consultation with the State's intercity bus providers.

STUDY WORK PROGRAM

To accomplish study objectives, the consultant team utilized a detailed methodology that included the following tasks:

- Inventory South Carolina's intercity bus routes and stop locations;
- Analyze route coverage and service gaps;
- Obtain input through surveys and interviews of the State's intercity bus carriers, public transportation providers, economic development agencies, colleges and universities, and city/county executives, military representatives, County Departments of Social Services, airports, correctional facilities, and medical centers.
- Evaluate utilization of Section 5311(f) funded vehicles;
- Assess the State's current intercity bus services and performance;
- Compare current level of intercity bus service to the 2012 service level;
- Recommend investments to meet the State's intercity bus needs; and
- Provide conclusions and recommendations to improve the provision of intercity bus service in the State and for the future utilization of the SCDOT Section 5311(f) apportionment.

SOUTH CAROLINA INTERCITY BUS SERVICE

South Carolina continues to be served by only two traditional Class A intercity bus carriers, Greyhound Lines and Southeastern Stages. Megabus, a low-cost carrier serving primarily larger markets, also operates a route through the State that stops only in Columbia.

The intercity bus service in the State operates along basically the same routes that were operated at the time of the previous intercity bus study. However, over the past six years stations/stops have been terminated in Dillon, Fort Jackson and Manning, resulting in sixteen (16) stops across the State.

Greyhound operates four routes in South Carolina with stops in Anderson, Greenville, Duncan, Spartanburg, Columbia, Orangeburg, Walterboro, Beaufort, Florence and Myrtle Beach. Southeastern Stages operates seven northbound (or eastbound) routes, seven southbound (or westbound) routes, and three routes that operate in multiple directions. The carrier has South Carolina stops in Aiken, Camden, Charleston, Columbia, Florence, Georgetown, Greenville, Myrtle Beach, Orangeburg, Summerville and Sumter. Charleston, Columbia, Greenville, and Myrtle Beach are the most productive intercity bus stops in the State.

Less than 15 percent of the State's population reside greater than 25 miles from an intercity bus station/stop, the recognized reasonable proximity standard for the intercity bus industry. All major intercity bus trip generators including colleges and universities, medical facilities, commercial airports, and military bases are generally well positioned relative to their proximity to intercity bus stops. Approximately 10 percent of the trip generators are located greater than 25 miles from an intercity bus stop.

STATE'S INTERCITY BUS NEEDS

South Carolina has limited intercity bus needs. Stakeholder surveys indicated that responders are much more concerned about the lack of public transportation services as compared to intercity bus service. Over two-thirds of those stakeholders responding to the survey indicated that intercity bus needs in their area are being met.

The study identifies four areas of the State lacking intercity bus service. These areas also have the highest percentage of minority population, as determined by the U.S. Census 2016 ACS 5-Year Estimates. The Journal of Public Transportation, in a 2012 publication, reported that intercity bus riders are more likely to be of minority races, unemployed, unable to drive, and from low-income households.

The area comprising the length of the State midway between I-85 and I-20, extending to the SC/NC state line between Rock Hill and Florence, including Greenwood, is by far the highest populated area of the State that is void of intercity bus service.

The spatial and demographic analysis of intercity bus service within the State indicates, with a few exceptions, the intercity bus service needs across South Carolina are substantially met. A temporal evaluation of the State's intercity bus service found only a limited number of stops across the State between midnight and 6:00 AM.

SECTION 5311(F) FUNDING RECOMMENDATIONS

Since 2012 SCDOT-OPT has utilized its entire Section 5311(f) apportionment to purchase vehicles for the State's intercity bus carriers. It is difficult to determine the impact of these buses on South Carolina's intercity bus service due to the limited information available from the carriers. Greyhound received 17 buses during this period, while Southeastern Stages received nine (9) vehicles.

With the exception of the recommendation to install intercity bus station directional signage across the State, there are no recommendations to utilize Section 5311(f) funds for capital purchases. The study recommends that the FTA funds be utilized for operating assistance to

operate feeder services to established intercity bus stations/stops along the corridor between I-85 and I-20. A traditional intercity bus route is also a feasible alternative. A portion of the State's Section 5311(f) apportionment could be focused on intercity bus service in this corridor, allowing the Governor to issue a partial certification to FTA for the Section 5311(f) program.

INTRODUCTION

Purpose of Study

SCDOT-OPT has undertaken this as an update to the 2012 South Carolina Statewide Intercity and Regional Bus Network Plan. The information obtained through this Study will not only be used to determine how SCDOT can best utilize its annual FTA Section 5311(f) apportionment, but will also support SCDOT's next submission to FTA, whether the outcome is another certification or funding of intercity/feeder bus services. This study will incorporate the consultative process with the State's intercity bus carriers to ensure their input into the future of the statewide intercity bus program, along with a broad-based public outreach effort, to recommend how best to utilize the Section 5311(f) funds in the future.

The 2012 South Carolina Statewide Intercity and Regional Bus Network Plan evaluated the status of the intercity bus industry in South Carolina, with particular emphasis on assessing the level of demand for intercity bus service across the State and to develop a financially stable network of intercity and regional bus service to meet the needs utilizing the State's apportionment of Section 5311(f) funds. The Study ultimately determined there were unmet intercity bus service needs in the State and recommended a substantial intercity bus capital infrastructure program to maintain an efficient and effective intercity bus network.

The acquisition of new vehicles received the highest priority, resulting in the funding of 26 intercity coaches for Greyhound (17) and Southeastern Stages (9) over the past four years, utilizing the State's full apportionment of Section 5311(f) funds. During SCDOT's most recent State Triennial Review, FTA suggested that the Office of Public Transit review and update its current intercity bus study, taking into consideration the approximately \$13 million made available to Greyhound Lines and Southeastern Stages in the past four years through the FTA Section 5311(f) Program.

It is the primary purpose of this 2018 Intercity Bus Program Evaluation to determine South Carolina's intercity bus needs and gaps in service, analyze the utilization of the aforementioned 26 Section 5311(f) funded intercity coaches and provide recommendations for future use of the Section 5311(f) funds.

Study Methodology

To accomplish study objectives, the consultant team utilized a detailed methodology that included the following tasks:

- Inventory South Carolina's intercity bus routes and stop locations;
- Analyze route coverage and service gaps;
- Obtain input through surveys and interviews of the State's intercity bus carriers, public transportation providers, economic development agencies, colleges and universities, and

city/county executives, military representatives, County Departments of Social Services, airports, correctional facilities, and medical centers;

- Evaluate utilization of Section 5311(f) funded vehicles;
- Assess the State's current intercity bus services and performance;
- Compare current level of intercity bus service to the 2012 service level;
- Recommend investments to meet the State's intercity bus needs; and
- Provide conclusions and recommendations to improve the provision of intercity bus service in the State and for the future utilization of the SCDOT Section 5311(f) apportionment.

The Study provides the background information and data analysis that will be used to determine the level of intercity bus needs in the State and how SCDOT can best utilize its annual apportionment of Federal Section 5311(f) Intercity Bus Program funds. Included is documentation of the current level of intercity bus services in South Carolina and a comparison to the 2012 service level, results of the statewide stakeholder intercity bus survey, Greyhound and Southeastern Stages utilization of Section 5311(f) funded vehicles, and demographic analysis of the demand for intercity bus service in the State.

FTA Intercity Bus Program - Section 5311(f)

The FTA Section 5311(f) Intercity Bus Program, a subsection of the Section 5311 Nonurbanized Area Rural Program, is the primary Federal program for supporting intercity bus services. Section 5311 funds are apportioned to the states based on the nonurbanized population in each state. Section 5311(f) requires that 15 percent of a state's annual Section 5311 apportionment be used to support intercity bus service unless the governor certifies, following consultation with affected intercity bus providers, that all rural intercity bus needs have been adequately met. The statutory provision for the Governor's certification implies that a statewide assessment of current intercity bus service and existing needs has been conducted. The legislative history indicates that the assessment of intercity bus needs may be made "relative to other rural needs in the state." Further, a state utilizing the Governor's certification must demonstrate that the assessment of intercity bus needs was performed no more than four years prior to the date of the certification. This Intercity Bus Program Evaluation study will meet this requirement.

States are allowed to submit a partial certification if less than 15 percent is needed to provide intercity bus service. All unexpended Section 5311(f) funds revert to the Section 5311 program to support other rural transit projects. Based on FY 2018 apportionments, it is anticipated that approximately \$2,044,000 will be made available to the State of South Carolina for the Section 5311(f) Intercity Bus Program in FY 2018.

INVENTORY OF SOUTH CAROLINA INTERCITY BUS SERVICE

Greyhound and Southeastern Stages continue to be the only Class A fixed route intercity bus carriers in South Carolina. Megabus, a non-traditional "curbside" intercity bus carrier, serves only Columbia in the State.

The intercity bus route structure provided by Greyhound and Southeastern Stages today closely resembles the service provided by the carriers at the time of the 2012 Intercity Bus Study. That Study found that Greyhound and Southeastern Stages were the only licensed intercity bus carriers in the State, serving all primary interstate corridors (I-20, I-26, I-77, I-85, and I-95) as well as key US routes (US 17, US 21, US 76, and US 501). At the time Greyhound operated 15 northbound (or eastbound) routes and 12 southbound (or westbound) routes with stops in South Carolina. Southeastern Stages ran seven northbound (or eastbound) routes, seven southbound (or westbound) routes, along with three additional routes that traversed the State in no particular direction. In 2012 Greyhound and Southeastern Stages served the following 19 cities and towns in South Carolina:

Aiken	Duncan	Orangeburg
Anderson	Florence	Spartanburg
Beaufort	Fort Jackson	Summerville
Camden	Georgetown	Sumter
Charleston	Greenville	Walterboro
Columbia	Manning	
Dillon	Myrtle Beach	

The cities of Anderson, Beaufort, Duncan, Manning, Spartanburg and Walterboro were served exclusively by Greyhound in 2012, while Aiken, Camden, Charleston, Dillon, Florence, Fort Jackson, Georgetown, Summerville, and Sumter were only served by Southeastern Stages. The cities of Columbia, Greenville, Myrtle Beach, and Orangeburg were stops for both Greyhound and Southeastern Stages at that time.

Today, Greyhound has discontinued its Manning stop but added a Florence stop. Greyhound is the only carrier serving Anderson, Beaufort, Duncan, Spartanburg, and Walterboro. In June 2017 Southeastern Stages discontinued its Dillon stop due to losing its ticketing agent there. The carrier hopes to reinstate the service once an agent can be found along with a stop location. (Dillon is included in the study tables and exhibits due to its recent termination and possibility of reinstatement). Southeastern Stages has also terminated their stop at Fort Jackson due to the base no longer allowing passengers that were on the bus to enter the base. Southeastern Stages has added Aiken as a stop and is the exclusive carrier for Aiken, Camden, Charleston, Florence, Georgetown, Summerville, and Sumter. With Greyhound's added Florence stop, Columbia, Florence, Greenville, Myrtle Beach, and Orangeburg are served by both carriers. Columbia is also served by Megabus. Dillon, Manning and Fort Jackson are the communities that have lost intercity bus service since the 2012 study was prepared.

The six-year interval between the intercity bus studies has resulted in very little change in the carriers' service area. With the exception of Dillon, Manning and Fort Jackson, the same South Carolina communities have stops now as they did in 2012. No previously unserved community has been added as a stop for either carrier since the earlier study. As previously noted, Florence is now served by both carriers. The State's current intercity bus stations/stops are depicted in Table 1 below.

City	Carrier(s)	Address	
Aiken	Southeastern Stages	153 Pendleton St. NW.	
Anderson	Greyhound	4500 Hwy 81 N.	
Beaufort	Greyhound	3659 Trask Pkwy.	
Camden	Southeastern Stages	204 Wall St.	
Charleston	Southeastern Stages	3610 Dorchester Road	
Columbia	Greyhound, Southeastern Stages, Megabus	710-A Buckner Road/1780 Sumter St.	
Dillon*	Southeastern Stages	1625 Hwy 301 N.	
Duncan	Greyhound	405 E. Main St.	
Florence	Greyhound, Southeastern Stages	611 S. Irby St.	
Georgetown	Southeastern Stages	2012 Highmarket St.	
Greenville	Greyhound, Southeastern Stages	9 Hendrix Dr.	
Myrtle Beach	Greyhound, Southeastern Stages	511 7 th Avenue N.	
Orangeburg	Greyhound, Southeastern Stages	1935 Old Edisto Dr.	
Spartanburg	Greyhound	100 N. Liberty St.	
Summerville	Southeastern Stages	1950 N. Main St.	
Sumter	Southeastern Stages	129 S. Harvin St.	
Walterboro	Greyhound	11109 Augusta Hwy.	

Table 1: South Carolina Intercity Bus Stations/Stops

*Southeastern Stages discontinued Dillon as stop in June 2017 due to loss of ticketing agent; however, the carrier may reinstate the stop in the future.

Amtrak Thruway Motorcoach is Amtrak's intercity bus service for connecting Amtrak train stations to areas not served by passenger rail. Research has concluded, as was the case in 2012, that there is no Amtrak Thruway Motorcoach service in South Carolina. There is also no intercity bus service to any of the Amtrak stations in the State. It should be noted that several of the State's public transportation providers serve Amtrak stations and airports.

Below is a description by carrier of the current level of intercity bus service in the State and any service changes over the six years since the previous study (Table 2). Table 3 provides a comparison of intercity bus service in the State from 2011 to 2018. The most obvious difference is the reduced number of schedules provided by Greyhound on its Table Number 424 - Atlanta to Richmond route. Also, Table Number 427 – Knoxville to Winston-Salem route no longer stops in South Carolina since the Spartanburg stop was terminated. Exhibit 1 is a map indicating the existing South Carolina Intercity Bus Routes, while Exhibit 2 depicts the routes operated in 2012.

Columbia is the only South Carolina stop for Megabus, with the carrier having service available south to Atlanta and north to Fayetteville NC and Durham NC and on to other northern destinations including Richmond VA, Washington DC, Philadelphia PA, and New York NY. It should be noted that Megabus has an additional route that traverses South Carolina, but it has no stops in the State. At the time of the previous South Carolina intercity bus study, Megabus operated a route between Washington, DC and Charlotte, NC, but had not extended this service into South Carolina.

It should be noted that both Greyhound and Southeastern Stages have made the corporate decision to no longer publish in Russell's Guide. Their schedule tables can be found on the North America Bus Table (NABT) at the following link: <u>https://nabtguide.com/</u> and at the respective Greyhound (<u>www.greyhounds.com</u>) and Southeastern Stages (<u>http://southeasternstages.com/home.html</u>) websites.

Carrier	Route	Daily	South Carolina Stops
		RTs	
Greyhound	Atlanta, GA – Richmond, VA	5	Anderson, Greenville, Duncan, Spartanburg
Greyhound	Jacksonville, FL – Charlotte, NC	2	Beaufort, Walterboro, Orangeburg, Columbia
Greyhound	Orlando, FL – Richmond, VA	4	Florence, Walterboro
Greyhound	Myrtle Beach, SC – Raleigh, NC	3	Myrtle Beach
Southeastern	Atlanta, GA – Charleston,	9	Aiken, Camden, Charleston, Columbia,
Stages			Dillon*, Florence, Georgetown, Greenville,
			Myrtle Beach, Orangeburg, Summerville,
			Sumter
Megabus	Atlanta, GA – Durham, NC	1	Columbia

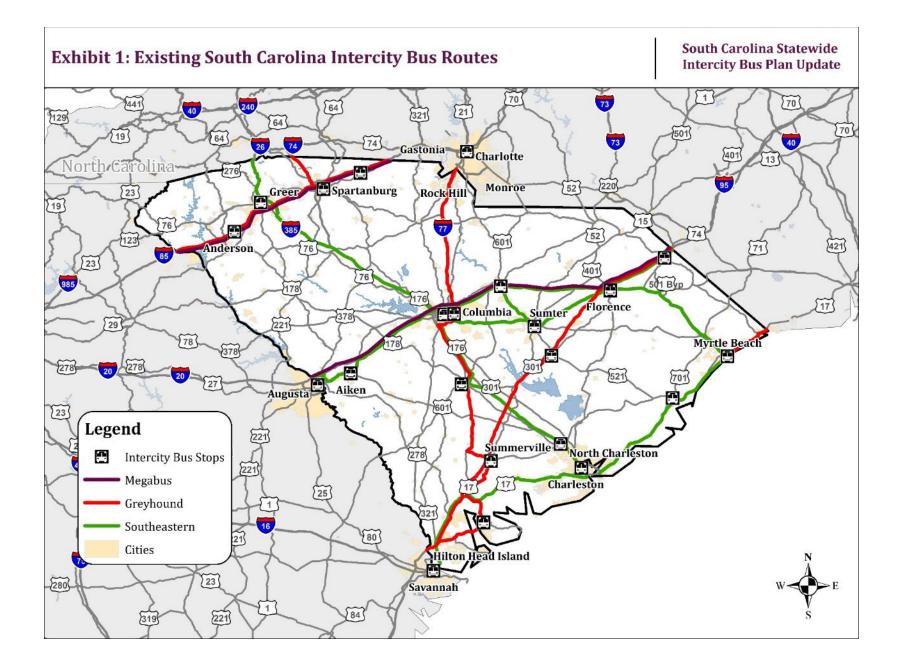
*Stop discontinued June 2017

Table 3: Comparison of Intercity Service (2011 to 2018)

Table Number/Route	Carrier	June	Number	January	Number
		2011	of Daily	2018	of Daily
		Schedules	SC Stops	Schedules	SC Stops
400/Jacksonville, FL – Richmond, VA	Greyhound	5 NB, 5 SB	4	4 NB, 4 SB	2
401/Jacksonville, FL – Charleston,	Greyhound	2 NB, 2 SB	4	2 NB, 2 SB	4
WV					
419/Myrtle Beach, SC – Raleigh, NC	Greyhound	1 NB, 1 SB	2	1 NB, 1 SB	1
424/Atlanta, GA – Richmond, VA	Greyhound	6 NB, 6 SB	4	3 NB, 3 SB	4
427*/Knoxville, TN – Winston-Salem,	Greyhound	2 NB, 2 SB	1	1 NB, 1 SB	0
NC					
2792/Atlanta, GA – Fayetteville, NC	Southeastern	9 NB, 8 SB	13	9 NB, 8 SB	13
	Stages				
M97/Atlanta, GA – Durham, NC	Megabus	NA	NA	1 NB, 1 SB	1

NB=Northbound; SB=Southbound

*Greyhound's Knoxville to Winston-Salem route no longer stops in Spartanburg.



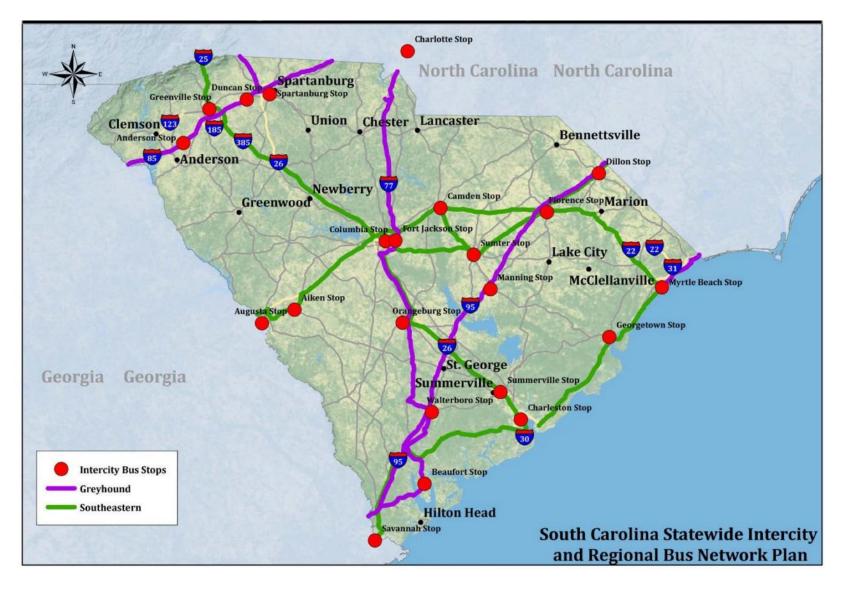


Exhibit 2: 2012 South Carolina Intercity Bus Routes

Greyhound South Carolina Operations

Today Greyhound operates 15 daily schedules on basically the same routes that the carrier operated in 2012. The only exception is that Greyhound continues to operate its Knoxville to Winston-Salem route, but has terminated its Spartanburg stop. The carrier continues to serve Spartanburg on its Atlanta to Richmond route.

Greyhound's South Carolina routes directly serve ten communities in the state, eight of which have less than 50,000 population. Table 4 is a list of Greyhound South Carolina Intercity Bus Stops with each city's population. It should be noted that connections to interline partners provide service to many additional destinations, including nine in South Carolina. The four Greyhound routes serving the state are described below. Note that the Knoxville to Winston-Salem route is not listed due to it no longer having a stop in South Carolina.

- Atlanta, GA Richmond, VA: Three daily roundtrips with stops in Anderson, Greenville, Duncan, and Spartanburg.
- Jacksonville, FL Charleston, WV: Two daily roundtrips with stops in Beaufort, Walterboro, Orangeburg, and Columbia.
- Jacksonville, FL Richmond, VA: One northbound and two southbound daily trips with stops in Florence and Walterboro.
- Myrtle Beach, SC Raleigh, NC: One daily roundtrip with Myrtle Beach the only South Carolina stop. The North Carolina portion of the route is funded through NCDOT's Section 5311(f) intercity bus program.

Table 4: Greynound South Caronna Intercity bus Stops							
Table Number/Schedules	City	Population*					
424	Anderson	27,544					
424	Greenville	67,453					
424	Duncan	3,369					
424	Spartanburg	37,876					
401	Columbia	134,309					
401	Orangeburg	13,196					
401/400	Walterboro	5,293					
401	Beaufort	13,445					
400	Florence	38,317					
419	Myrtle Beach	32,240					

 Table 4: Greyhound South Carolina Intercity Bus Stops

*U.S. Census Population Estimates, July 1, 2016

Table 5 depicts the 2016 - 2018 annual ridership on each of Greyhound's South Carolina routes by stop. Origination indicates the number of passengers that boarded a bus from the stop, while destination is the number of passengers that disembarked at a particular location. Columbia and Greenville, the largest population cities with an intercity bus station, produced the highest volume of ridership on Greyhound's routes in the State. Note that there are some stations/stops that are not currently served by Greyhound, but are included in the carrier's ridership due to the ticketing for those locations being accomplished through Greyhound.

Station/Stop	Origin			D	estinatio	n
	FY16	FY17	FY18	FY16	FY17	FY18
AIKEN	303	299	240	1,646	1,550	1,645
ANDERSON	2,500	2,384	2,398	2,450	2,349	2,307
BEAUFORT	3,044	3,278	3,085	2,149	2,544	2,225
CAMDEN (E)	153	179	38	628	610	653
CHARLESTON	764	706	634	11,594	11,871	12,140
COLUMBIA	15,480	14,832	16,827	15,595	15,666	16,978
DILLON	266	292	48	579	497	104
DUNCAN (E)	70	120	225	215	219	277
FLORENCE	3,447	4,655	5,407	5,796	5,760	6,036
FT JACKSON	60	1	4	125	142	29
FTJ FT JACKSON*	4	4	2	2	4	1
GEORGETOWN	135	106	131	763	664	655
GREENVILLE	11,507	11,001	12,004	11,916	11,918	11,693
MYRTLE BEACH	5,601	5,956	6,135	8,901	9,125	9,945
ORANGEBURG	3,057	3,226	3,268	3,174	3,224	3,068
SPARTANBURG (E)	4,771	4,526	3,020	4,135	3,858	3,869
SUMMERVILLE	292	269	287	1,867	1,699	1,704
SUMTER	492	472	461	2,414	2,322	2,431
WALTERBORO	821	666	705	663	676	651
Total	52,767	52,972	54,919	74,612	74,698	76,411

Table 5: Greyhound 2016 - 2018 Annual Ridership by Station/Stop

*FTJ schedule is a special schedule available only for the military with no general public ticket purchase.

While Greyhound has received Section 5311(f) funded vehicles through SCDOT, the carrier has implemented an extensive mechanical overhaul of many of its older coaches. These vehicles are now lift-equipped along with Wi-Fi, electrical outlets at each seat, and three-point seat belts. Not all coaches serving South Carolina have been updated, but the updated coaches, along with new Section 5311(f) supported vehicles, have improved the passenger experience for Greyhound's service in the state.

Greyhound has Passenger Call Centers around the country to provide nationwide information for the intercity bus system. Interline information is provided for Greyhound and its nearly 90 nationwide interline partners. Greyhound's TRIPS electronic ticketing and information system provides on-line fare and schedule information and interline ticketing for both Greyhound and numerous interline carriers.

Greyhound has initiated a process of modernizing its ticketing system. The web-based National Bus Ticketing System (NBTS) will provide ticket agents with the ability to view the reservationbased system for seat availability on each Greyhound schedule and print tickets and travel itineraries on regular printer paper. In September 2018 Greyhound introduced an e-ticketing feature on its online app. This enables a customer to purchase a ticket on a desktop or smartphone and have the paperless e-ticket delivered to the smartphone. This capability moves intercity bus closer to other modes of public transportation.

Greyhound is a member of the National Bus Traffic Association (NBTA) which has ticketing agreements between each member allowing each member to originate a ticket for travel on its own intercity bus network and also that of connecting NBTA members. This enhances a customer's riding experience by allowing the purchase of a single ticket for travel from point of origin to final destination. Greyhound also operates the National Baggage Clearinghouse for lost baggage which serves Greyhound and all interline carriers.

Greyhound and NBTA carriers across the country, including Southeastern Stages, serve about 3,000 locations throughout North America, resulting in about ten million unique origin and destination city-pair combinations that are possible to purchase. Mileage-based pricing is the foundation of the pricing structure. There are Mileage Tables established by State or Region with 37 defined mileage bands. Adjustments may be made to the base fare for larger volume and competitive markets, as well as for particular days of the week and peak or holiday periods. There may also be occasional adjustments to the base fare per time of day, such as a small premium for certain time windows such as late afternoon/evening travel when demand increases.

Capacity adjustments also apply to the base fare depending upon schedule loads (increased fare as bus fills up – last seats cost more than first seats). There is typically a discount of about 15 percent for tickets purchased online. Advance purchase fares may be offered at a 10 percent to 50 percent discount to the walk-up fare depending on how far in advance of travel the ticket is purchased. Greyhound uses QL2 software to provide competitive schedule and pricing data for selected markets to help better align fares with the competition.

Traditional intercity bus carriers have several competitors depending on the market. For example, Megabus offers "low bucket" fare pricing in many larger volume markets while Asian and Hispanic carriers offer low-cost competition on a regional basis. Amtrak is considered a competitor in many markets, especially in the Northeast corridor. Low-cost air carriers such as Spirit, Frontier, JetBlue etc. provide low-cost competition in many mid to longer trip distance markets. Newer Greyhound Express service was created to offer better schedule times, faster trips and lower, more competitive pricing to better compete in some of Greyhound's biggest volume and most competitive markets. Software is used to provide sales analytics to monitor metrics such as sales, tickets, yield trends etc. to aid in adjusting prices as needed. Recently Greyhound began using a Fare Optimization system from PROS, a cloud software company that helps competitive enterprises create a frictionless and personalized buying experiences for customers. PROS will provide price guidance based on algorithms utilizing demand, booking build, multi-tiered fare levels and load factor data.

Southeastern Stages' South Carolina Operations

Southeastern Stages operates 26 fully accessible coaches for its scheduled service in South Carolina, North Carolina, and Georgia. There has been relatively little change in the level of intercity bus service provided by the carrier in the past ten years. As previously noted, the Dillon stop was terminated due to the loss of the ticketing agent, while Fort Jackson has been eliminated as a stop as well. The carrier also reports that its Camden agent recently quit and they are currently stopping at a McDonalds. To this date, Southeastern Stages has been unable to find a Camden location for ticket sales.

As was the case in 2011, Southeastern Stages has seven northbound (or eastbound) routes, seven southbound (or westbound) routes, and three routes that traverse the state in such a way as to make it difficult to attribute them to one direction or the other. The carrier annually travels in excess of 1.2 million miles in South Carolina.

With the closing of the Dillon and Fort Jackson stop in June 2017, the carrier serves 12 cities/communities in South Carolina, with the primary destinations in adjacent states being Atlanta and Savannah in Georgia and Asheville and Fayetteville in North Carolina. Table 6 illustrates the carrier's South Carolina stops by table number/schedule, along with the population of each community.

Southeastern Stages transports approximately 90,600 passengers annually that originate in South Carolina, with over 104,000 passengers terminating in South Carolina per month. Table 7 depicts the volume of ridership on the carrier's South Carolina service by stop.¹ Origination indicates the number of passengers that boarded a bus from the stop, while destination is the number of passengers that disembarked at a particular location. Charleston, Columbia and Myrtle Beach by far produced the highest volumes of ridership on Southeastern Stages' South Carolina service. In an effort to maximize the ability of passengers to connect to the intercity bus network, Southeastern Stages links its service schedules to South Carolina cities to operations from origination points, typically major cities outside of the State. All tickets for the carrier are sold utilizing Greyhound's ticketing system.

Southeastern Stages places a high priority on passenger safety. Vehicles are equipped with the latest technological safety advances such as anti-lock braking systems, electronic stability control, and collision avoidance radar. Most of the fleet is equipped with fire suppression systems and passenger seatbelts. A full service, state of the art maintenance facility with experienced and trained mechanics is in place to ensure that vehicles are dependable and safe.

The carrier owns and operates full-service intercity bus stations in Florence and Charleston and contracts with several agencies in the rural communities of Aiken, Camden, Orangeburg, and Summerville to provide the public access to intercity bus travel through interline agreements with other national intercity bus operators. Southeastern Stages has recognized the need for the

¹ Note that only 2016 ridership was available from Southeastern Stages due to company's loss of data during inclement weather.

expansion of intercity bus service into the Greenwood – Anderson – Greenville – Columbia corridor. The company has conducted several feasibility studies regarding potential profitability of this service expansion. Southeastern Stages has indicated that it is positioned to move towards the execution of a prospective implementation plan for this corridor. The carrier has not indicated its willingness to serve this corridor without subsidy.

Table Number/Schedules	City	Population*
2792/4 NB-3 SB	Aiken	30,937
2792/2 NB-3 SB	Camden	7,126
2792/4 NB-4 SB	Charleston	134,385
2792/9 NB-9 SB	Columbia	134,309
2792/2 NB-2 SB	Dillon**	6,604
2792/4 NB-4 SB	Florence	38,317
2792/1 NB-1 SB	Georgetown	9,024
2792/1 NB-1 SB	Greenville	67,453
2792/1 NB-1 SB	Myrtle Beach	32,240
2792/3 NB-3 SB	Orangeburg	13,196
2792/3 NB-3 SB	Summerville	49,323
2792/2 NB-3 SB	Sumter	40,723

Table 6: Southeastern Stages South Carolina Intercity Bus Stops

*U.S. Census Population Estimates, July 1, 2016 **Stop terminated June 2017

Station/Stop	Origination	Destination
Aiken	2,568	3,058
Camden	954	1,292
Charleston	21,508	24,704
Columbia	20,946	21,692
Dillon*	370	417
Florence	10,244	10,434
Fort Jackson**	444	228
Georgetown	679	570
Greenville	5,782	8,592
Myrtle Beach	14,620	19,138
Orangeburg	4,478	5,276
Summerville	3,828	4,530
Sumter	4,182	4,194
TOTALS	90,603	104,125

Table 7: Southeastern Stages 2017 Ridership by Station/Stop

*Stop terminated June 2017

**Stop terminated 2017

Shuttle Services

In South Carolina's urban areas there are numerous private operators that provide shuttle services between cities, airports and universities. Often these operators are providing service to and from rural areas of the State. These shuttles provide a valuable transportation option in many communities, serving as a supplement to the available intercity bus service in an area. Shuttles typically use smaller vehicles than traditional intercity bus service, such as vans or minibuses, and fares tend to be higher. In many situations, such as those found at the State's colleges and universities, shuttles provide service to airports at a schedule that may be more appealing to students than that offered by the intercity bus carriers.

IV. STAKEHOLDER OUTREACH AND INPUT

It was determined that a combination of online surveys and interviews would ensure productive outreach and input from stakeholders. It is most important to gather the necessary level of input to enable the determination as to whether the current level of intercity bus coverage is adequate to meet the level of demand for intercity bus service in South Carolina. This information will be most helpful in determining how best to address gaps in intercity bus service across the State.

Online surveys were developed for three stakeholder groups: intercity bus carriers, public transportation providers, and general stakeholders. Intercity bus carriers included both Greyhound and Southeastern Stages, while public transportation providers included the State's 28 FTA-funded local public transportation providers. A total of 424 general stakeholders received the survey, including economic development agencies, colleges and universities, and city/county executives, military representatives, County Departments of Social Services, airports, correctional facilities, and medical centers.

The SCDOT Office of Public Transit reviewed and approved the survey instruments prior to distribution. *Survey Monkey*, an online survey tool, was used as the survey platform. The survey instruments are included in Appendix A.

INTERCITY BUS PROVIDERS SURVEY

A limited response to the survey was received from both Greyhound and Southeastern Stages. The carriers indicated that Greenwood and Rock Hill were the areas of the State most in need of intercity bus service. Specific routes cited by the carriers that could potentially benefit the most from the provision or improvement of intercity bus services were:

- Columbia to Rock Hill
- Columbia and Greenville to Greenwood
- Jacksonboro, Moncks Corner, St. Stephen, Kingstree, Lake City, Scranton, Dillon and Yemassee to the Greyhound/NBRA Network

Note that additional input from Greyhound and Southeastern Stages will be addressed in Section X of the study, Consultation Process With Intercity Bus Providers.

PUBLIC TRANSPORTATION PROVIDERS SURVEY

The survey was distributed via email and web link from January 31, 2018, to February 16, 2018. During this time, 14 surveys were submitted from 12 different agencies. This represents a response rate of 43 percent from the State's 28 public transportation providers.

Responses were received from:

- City of Anderson
- Charleston Area Regional Transportation Authority

- Santee Wateree Regional Transportation Authority (2)
- Waccamaw RTA
- Pee Dee RTA (2)
- McCormick County Senior Center/McCormick Area Transit
- York County Council on Aging
- Generations Unlimited
- Clemson Area Transit
- ◆ Lowcountry RTA
- Peach Blossom Express

Responses indicated that the public transportation providers are more likely to serve airports and Amtrak stations than to serve intercity bus stations/stops. A limited number of responses noted that they provide feeder service to intercity bus stations/stops, with work trips and travel to areas outside the State being the primary reasons for travel. It should be noted that some of the responses appeared to indicate that the respondent did not understand the meaning of the term "intercity bus service" or "feeder service," although both terms were defined in the survey instrument. Some were not aware of the intercity bus service available in their area.

The demand for intercity bus service to destinations that are not currently served was recognized by 73 percent of the respondents. The following routes by origin/destination pairs that could benefit most from the provision or improvement of services were recognized:

- SC Highway 81 Corridor from Anderson to Greenville
- Marion to Myrtle Beach via Conway along Highway 501/Marion to North Myrtle Beach along US Highway 76 and SC Highway 9
- McCormick to Anderson and Greenville via Greenwood along US Highways 221, 178 and 29
- Clemson area to Greenville along US Highway 123
- Feeder service Hartsville, Bennettsville, Cheraw and Chesterfield to make connections in Florence
- Lee County into Florence along I-20

GENERAL STAKEHOLDERS SURVEY

It was important as part of the overall stakeholder outreach effort to provide the opportunity for public agencies and individuals not in the business of operating public transportation services, but sensitive to the travel needs in their respective areas, to complete the intercity bus survey. This stakeholder group included economic development agencies, colleges and universities, city/county officials, military representatives, County Departments of Social Services, airports, correctional facilities, and medical centers.

While a total of 424 individuals were issued invitations to complete the survey, responses were received from only 85, a response rate of 20 percent. Over two-thirds of those responding indicated that intercity bus needs in their area were being met. This compares to the 2012 Study survey which found that 74 percent of respondents indicated intercity bus needs in their area were not being met. The primary areas of need for intercity bus service by origin/destination pairs, as provided by the general stakeholders, are cited below. Note that already served

corridors were not included. Included are pairs that are intercity or feeder service-related, while hose pairs that align more with local public transit were omitted from the list.

Some of these service needs can be addressed by adding a stop(s) to an existing intercity bus route or the initiation of feeder service by a public transportation provider.

- Walterboro Charleston
- Barnwell Columbia
- Greenwood Saluda Columbia
- Rock Hill/Fort Mill Columbia
- Bishopville Columbia
- Greenwood Saluda Augusta
- Newberry Clinton Laurens Simpsonville Greenville/Spartanburg
- Rock Hill/Fort Mill Greenville
- Sumter Bishopville Florence
- Holly Hill Orangeburg
- Orangeburg Charleston
- Edgefield/North Augusta
- Manning Sumter
- Turbeville Summerton Manning
- Florence Darlington- Hartsville

Nearly 50 percent of respondents that identified themselves with a social service agency or college/university indicated a high degree of importance and value when ranking the value of intercity bus service in their area. However, again it appears that the respondents did not understand the meaning of "intercity bus service," identifying it as local public transportation service or "intracity" service within a particular city. The general stakeholders identified the following intercity bus needs or concerns. Note that those comments which align more with local public transit services have been excluded.

- Service to Summerville by either CARTA connecting service to Charleston or direct Charleston service would enhance job opportunities for Colleton County (Walterboro) residents where people can get to jobs and schools seven days a week and cross tourism where people can come out from Summerville and Charleston for antiquing, the sanctuary, museum, and historic homes.
- Bus service to TCL and USC Beaufort for Jasper County residents.
- Reliable, convenient access for job access/commuter alternative, particularly in I-85, SC290 and SC101 corridors, to improve safety and decrease congestion.
- Feeder route along Hwy 321 into Columbia.

The consulting team conducted follow-up one-on-one interviews with intercity bus carriers and public transportation providers as applicable. It was determined that the interviews would be more productive with the consulting team first having the opportunity to evaluate the survey responses and pose questions related to those responses as needed.

V. UTILIZATION OF SCDOT - SECTION 5311(F) FUNDED ASSETS

The 2012 South Carolina Statewide Intercity and Regional Bus Network Plan recommended that SCDOT's apportionment of Section 5311(f) intercity bus program funds be prioritized for the purchase of vehicles and related equipment for the State's intercity bus carriers. As previously noted, this has resulted in the acquisition of 26 intercity coaches, at a cost of approximately \$13 million, for Greyhound and Southeastern Stages to be used to enhance the State's intercity bus network.

An important element of the current intercity bus study is to assess how and where this equipment has been utilized, and particularly to what extent the vehicles have been used to provide intercity bus service in South Carolina. The following information analyzes how both Greyhound and Southeastern Stages utilize their SCDOT – Section 5311(f) funded vehicles.

GREYHOUND

In July 2015 Greyhound placed into service nine coaches that were acquired with SCDOTadministered Section 5311(f) funds. An additional four coaches were received in October 2016, with four more coaches scheduled for delivery to Greyhound in December 2018 from the FY 2017 intercity bus program. Greyhound does not record mileage for each vehicle by state, therefore, the South Carolina mileage the carrier has accumulated on each of the Section 5311(f) supported vehicles cannot be determined. Greyhound officials indicate that the vehicles are assigned to their South Carolina routes and while the vehicles routinely travel outside the State, they are always back in South Carolina within a 36-hour period. Greyhound travels 1,602,882 miles annually in the State, with South Carolina mileage representing 1.17 percent of the carrier's annual mileage for its entire national network. Table 8 below is an inventory of the 13 intercity coaches that Greyhound has received to date from SCDOT's intercity bus program. As indicated, the buses accumulate mileage at a very fast rate.

Table 6. dreyhound Schort - Section 5511(1) venicle inventory							
VIN	Make	Model	Year	Mileage	Condition		
1M86DMBA0FP013814	MCI	D4505	2015	510,003	Good		
1M86DMBA6FP013820	MCI	D4505	2015	482,684	Good		
1M86DMBA9FP013827	MCI	D4505	2015	454,853	Good		
					Damaged due to fire. Bus on hold for legal		
1M86DMBA2FP013832	MCI	D4505	2015	289,667	review.		
1M86DMBA3FP013838	MCI	D4505	2015	433,792	Good		
1M86DMBA9FP013844	MCI	D4505	2015	481,051	Good		
1M86DMBA4FP013850	MCI	D4505	2015	472,165	Good		
1M86DMBA5FP013856	MCI	D4505	2015	487,774	Good		
1M86DMBA0FP013862	MCI	D4505	2015	508,386	Good		
1M86DMBA6HP014324	MCI	D4505	2017	285,264	Good		
1M86DMBA8HP014325	MCI	D4505	2017	259,763	Good		

Table 8: Greyhound SCDOT - Section 5311(f) Vehicle Inventory

VIN	Make	Model	Year	Mileage	Condition
1M86DMBAXHP014326	MCI	D4505	2017	261,890	Good
1M86DMBA1HP014327	MCI	D4505	2017	262,424	Good

SOUTHEASTERN STAGES

Southeastern Stages has received a total of nine Section 5311(f) funded vehicles through SCDOT beginning in 2011 when two coaches were placed into service. This was followed by two more vehicles in 2015, three in 2017, and a final two coaches in 2018. Unlike Greyhound, Southeastern Stages maintains its South Carolina mileage on these vehicles. However, this task is not as difficult for Southeastern Stages since its entire operation is in South Carolina, North Carolina, and Georgia.

For calendar year 2017, Southeastern Stages accumulated 785,667 miles on the nine Section 5311(f) funded vehicles, with 426,796 of these miles operated in South Carolina. Therefore, 54.32 percent of the mileage on the vehicles can be attributed to the carrier's South Carolina service. There is no specific route assignment for a particular vehicle on the carrier's South Carolina schedules. Table 9 below includes the inventory for the nine Section 5311(f) supported vehicles received from SCDOT.

VIN	Make	Model	Year	Mileage	Condition	
1M86DMBA7BP059764	MCI	D4505	2011	606,534	Fair	
1M86DMBA9BP059765	MCI	D4505	2011	572,178	Fair	
1M86DMBA7FP013731	MCI	D4505	2015	341,199	Good	
1M86DMBA9FP013732	MCI	D4505	2015	334,295	Good	
4RKG33498H9737320	PREVOST	X3-45	2017	179,696	Excellent	
4RKG3349XH9737321	PREVOST	X3-45	2017	157,593	Excellent	
4RKG33491H9737322	PREVOST	X3-45	2017	135,996	Excellent	
4RKG33491J9737438	PREVOST	X3-45	2018	27,837	Excellent	
4RKG33493J9737439	PREVOST	X3-45	2018	30,166	Excellent	

Table 9: Southeastern Stages SCDOT - Section 5311(f) Vehicle Inventory

It is important to note that despite receiving a total of 26 Section 5311(f) funded vehicles collectively, Greyhound and Southeastern Stages have not increased their service in South Carolina since 2012. Actually, service has declined with stops abandoned in Dillon, Manning and Fort Jackson as previously noted.

VI. LEVEL OF INTERCITY BUS COVERAGE

This chapter of the study is an analysis of demographic data related to the demand for intercity bus transportation in South Carolina. Included in this analysis are mapped visuals of areas and populations that are beyond a 25-mile radius of an intercity bus station or stop. Based on research by the Bureau of Transportation Statistics and the Office of U.S. Secretary of Transportation, a reasonable coverage radius around an intercity bus station is defined as 25 miles. This is the commonly used standard in the intercity bus industry.

INTERCITY BUS CORRIDORS AND POPULATIONS SERVED

While intercity bus service is used by a cross section of the population, studies have shown that certain populations have a greater likelihood of using intercity bus services (Yang and Cherry 2012; KFH Group 2001, 2003; Fravel et al. 2011, Al-Sahili and Sadeq 2003, Kack et al. 2011, Sperry et al. 2014). Those population characteristics of individuals more likely to use intercity bus services include:

- Youth (18-24 years old): Often these are enlisted military personnel or college students with limited budgets, no access to an automobile, and living or stationed far from home;
- Elderly (60 and above): Frequently, the elderly have a diminished ability or desire to drive and may be more likely to need to visit distant medical facilities on a regular basis;
- Persons living below the poverty level: Persons who are less likely to own a car, or if they do, the car may not be suitable for long trips;
- Persons over 16 with a disability: A group that may be reliant on accessible local transit services and, therefore, may also consider public transit options to make a long trip; and
- Autoless households: Persons who have to rely on alternative means of transportation.

Exhibit 3 is a map depicting the State's higher population areas (as defined by the U.S. Census 2016 American Community Survey (ACS) 5-Year Estimates) that are outside the 25-mile radius of an intercity bus stop. The larger concentration of higher populated areas that are greater than 25 miles from an intercity bus stop are located the length of the State midway between I-85 and I-20, extending to the SC/NC state line between Rock Hill and Florence, including Greenwood. Additional higher populated areas outside the 25-mile radius of an intercity bus stop are found in the most western portion of the State west of Anderson, along the SC/GA state line between Aiken and Hilton Head, and a final area that extends from south of Georgetown to west of Myrtle Beach.

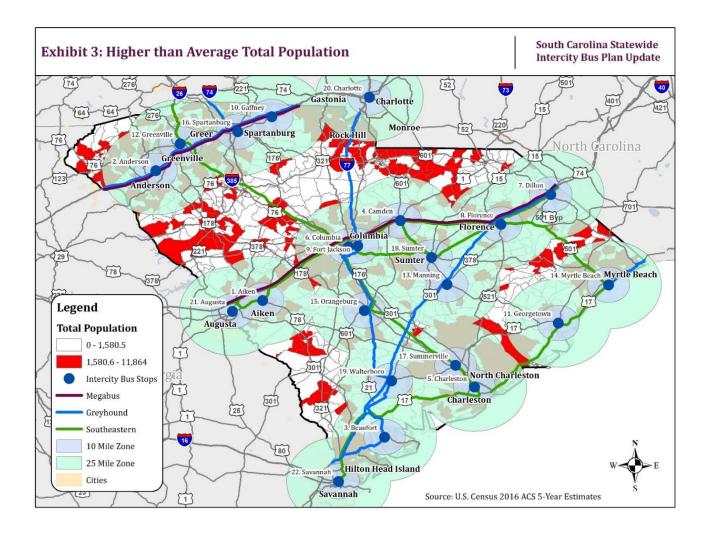


Exhibit 4 illustrates the areas of South Carolina with the highest percentage of minority population. Most of the areas not located within 25 miles of an intercity bus station/stop have higher than average minority populations. These areas include the area west of Walterboro, west of Myrtle Beach and Georgetown, and northwest of Columbia and Aiken. As previously noted, the minority population, as determined by national research, is more likely to utilize intercity bus services.

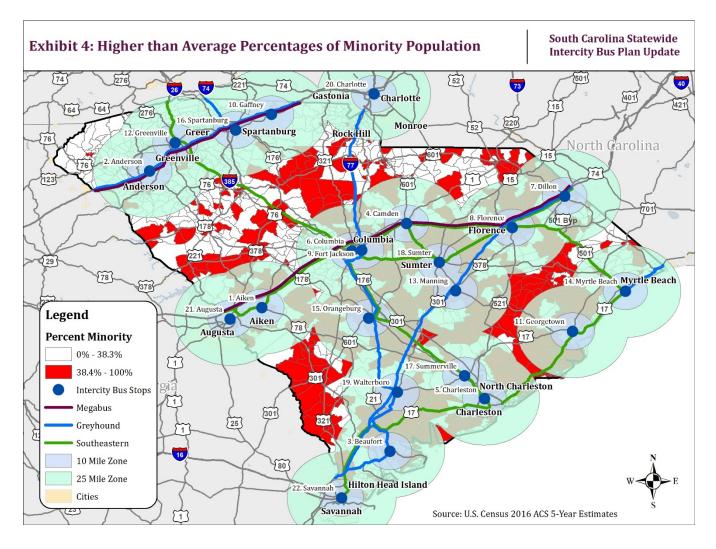


Exhibit 5 depicts the areas of the State with the higher number of individuals living below the poverty level. This is a demographic that appears to be equally concentrated across the State. While many of these individuals live within a 25-mile radius of an intercity bus stop, there are many living outside this boundary. These areas basically mirror those areas noted above of the higher populated areas that are outside the 25-mile radius of an intercity bus stop.

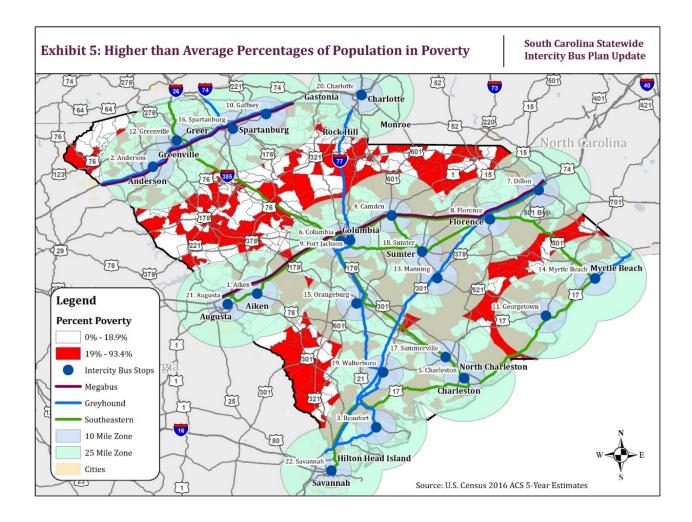
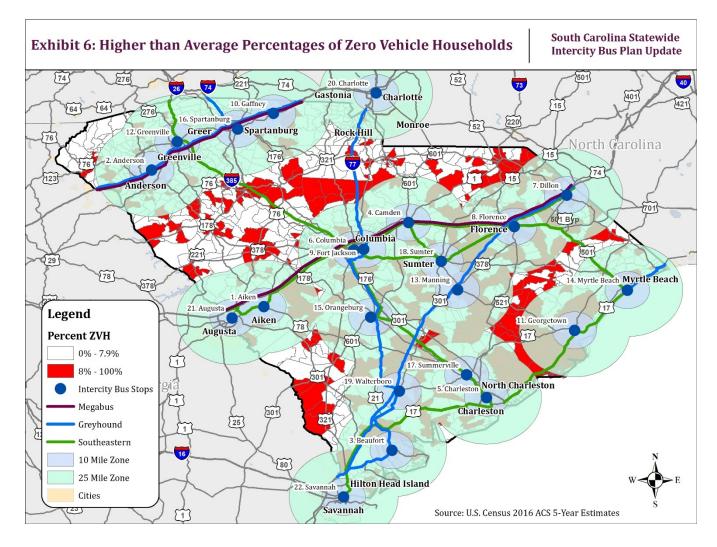


Exhibit 6 illustrates that the most significant areas of the State with households lacking a vehicle and outside the 25-mile radius of an intercity bus stop are very similar to the map depicting individuals living below the poverty level. The notable areas are those midway between I-85 and I-20, extending to the SC/NC state line between Rock Hill and Florence, along the SC/GA state line between Aiken and Hilton Head, and a final area that extends from south of Georgetown to west of Myrtle Beach.



IDENTIFY POPULATION PROXIMITY TO INTERCITY BUS STATIONS/STOPS

Spatial analysis of the South Carolina intercity bus network indicates that there is good overall coverage across the State. Nineteen of the State's 20 most populous cities are within 25 miles of an intercity bus station/stop. Fifty-one of 53 South Carolina cities with over 10,000 population have an intercity bus stop in their municipality, with only the towns of Greenwood and Newberry beyond 25 miles of an intercity bus stop. The areas of the State with the greatest population without intercity bus coverage exists east of Greenwood, Lancaster, and Catawba.

Approximately 85.3 percent of the State's population is within 25 miles of an intercity bus station/stop. It should be noted that the communities of Camden, Duncan, Georgetown and Walterboro have a population below 10,000 but have an intercity bus stop. Dillon also fell into that category until losing service in June 2017. Table 10 exhibits the South Carolina cities with a population of at least 10,000 that have no intercity bus station/stop and are greater than 25 miles from an intercity bus station/stop

		Bus	> 25 Miles from Bus	
City/Town	Population	Station/Stop	Station/Stop	
Charleston	134,385	Yes	No	
Columbia	134,309	Yes	No	
North Charleston	109,298	No	No	
Mount Pleasant	84,170	No	No	
Rock Hill	72,937	No	No	
Greenville	67,453	Yes	No	
Summerville	49,323	Yes	No	
Goose Creek	42,039	No	No	
Sumter	40,723	Yes	No	
Hilton Head Island	40,500	No	No	
Florence	38,317	Yes	No	
Spartanburg	37,876	Yes	No	
Myrtle Beach	32,240	Yes	No	
Aiken	30,937	Yes	No	
Greer	29,000	No	No	
Anderson	27,544	Yes	No	
Mauldin	25,188	No	No	
Hanahan	23,439	No	No	
Greenwood	23,320	No	Yes	
North Augusta	22,932	No	No	
Socastee	22,786	No	No	
Conway	22,761	No	No	
Taylors	22,719	No	No	
St. Andrews	22,272	No	No	
Simpsonville	21,314	No	No	
Lexington	20,988	No	No	
Easley	20,953	No	No	
Wade Hampton	20,673	No	No	
Bluffton	18,897	No	No	
Five Forks	16,929	No	No	
West Columbia	16,282	No	No	
Clemson	16,058	No	No	
N. Myrtle Beach	16,032	No	No	

Table 10: South Carolina Cities Greater Than 10,000 Population With No	
Intercity Bus Station/Stop and Greater Than 25 Miles From A Station/Stop	р

City/Town	Population	Bus	> 25 Miles from Bus	
city/10wi	ropulation	Station/Stop	Station/Stop	
Seven Oaks	15,981	No	No	
Ladson	15,776	No	No	
Fort Mill	15,029	No	No	
Fort Jackson	14,902	No	No	
Gantt	14,788	No	No	
Berea	14,497	No	No	
Red Hill	14,251	No	No	
Саусе	14,233	No	No	
Dentsville	14,192	No	No	
Beaufort	13,445	Yes	No	
Orangeburg	13,196	Yes	No	
Gaffney	12,920	No	No	
Port Royal	12,785	No	No	
Parker	12,743	No	No	
Irmo	12,177	No	No	
James Island	12,166	No	No	
Lake Wylie	11,472	No	No	
Forest Acres	10,542	No	No	
Newberry	10,372	No	Yes	
Moncks Corner	10,315	No	No	

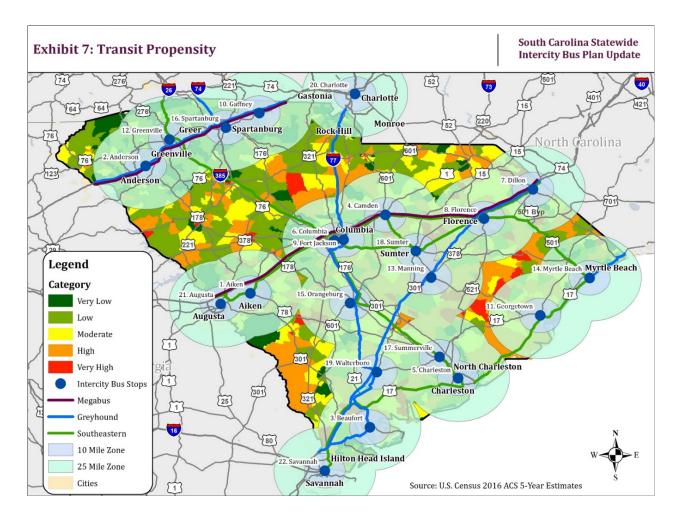
United States Census Bureau / American FactFinder. "Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2016." 2016 Population Estimates Program. Web July 2017, https://www.census.gov.

VII. DEMAND FOR INTERCITY BUS SERVICE

Chapter VII is an assessment of the extent the State's existing intercity bus network meets the demand for service across South Carolina. Included is an analysis of transit propensity using demographic factors that relate to the overall demand for public transportation. Also considered is the evaluation of intercity bus service coverage with respect to major trip generators for the intercity bus industry. According to the 2002 TCRP research study, these trip generators include colleges and universities, medical facilities, commercial airports, and military bases.

DEMOGRAPHIC FACTORS THAT REFLECT OVERALL NEED FOR INTERCITY BUS SERVICE

Exhibit 7 is a map depicting transit propensity across the State. Determination of transit propensity was accomplished by taking into consideration three demographic factors: minority population, zero vehicle households, and population below poverty. As previously noted in the report, these are population characteristics that reflect the likelihood of individuals using intercity bus services.



Each block group was assigned a score based on those three demographic factors. For example, if a census block group had a high percentage of minorities, zero vehicle households, and population below poverty, that block group received a score of 9. High percentages received a score of 3, average scored a 2, and low received a 1 for each factor. The total score for each block group was calculated to determine each block group's transit propensity score. A Very Low score received a total of 3 points, Low 4-5 points, Moderate 6 points, High 7-8 points, and Very High received a score of 9.

A calculation was made of the total South Carolina population living further than 25 miles from an intercity bus station. As a result, it is determined that approximately 712,981 persons in the State are outside the intercity bus service area. This represents approximately 14.7 percent of the State's total population of 4,834,605, indicating that from a population perspective, the State is well covered by intercity bus service. Based on work by the Bureau of Transportation Statistics and the Office of U.S. Secretary of Transportation, a reasonable coverage radius around an intercity bus stop is defined as 25 miles.

Based on this spatial analysis, the census block groups in South Carolina with the greatest demand for intercity bus service that are beyond 25 miles of an intercity bus station/stop, are primarily located in four (4) areas of the State:

- Upper Savannah COG Area
 - o Clinton
 - \circ Greenwood
 - o Calhoun Falls
 - o Newberry
 - o Saluda
- Southern Catawba COG Area
 - o Chester
 - o Lancaster
 - o Pageland
 - o Cheraw
- Southern Lower Savannah and Western Lowcountry COG Areas
 - o Allendale
 - o Blackville
 - o Barnwell
- Western Waccamaw and Southern Pee Dee COG Areas
 - Johnsonville
 - o Stuckey
 - o Russellville

INTERCITY BUS TRIP GENERATORS

As noted earlier, research has concluded that colleges and universities, medical facilities, commercial airports, and military bases represent the greatest generators of intercity bus service demand. While individual car ownership has had a major impact on the decline of intercity bus ridership, these institutions continue to generate the greatest number of intercity bus passengers. Tables 11-15 include a list of these trip generators by category, indicating their

proximity to an intercity bus station. Exhibits 8-11 map the proximity of these major trip generators to an intercity bus station/stop. Following is a summary of the possible impact these trip generators may have on intercity bus demand.

Colleges/Universities

Colleges and universities generate intercity bus trips primarily from the undergraduate student population that live on campus. These trips occur mostly during the beginning and end of school breaks and holidays. The extent to which students may use intercity bus service as a means to make trips to and from home greatly depends on the distance from the student's home to the closest bus station and the distance from the college or university to the nearest bus station. While the average distance from the home of the typical South Carolina college student to the nearest bus station cannot be determined, the spatial relationship of the State's colleges and universities to intercity bus stations/stops can.

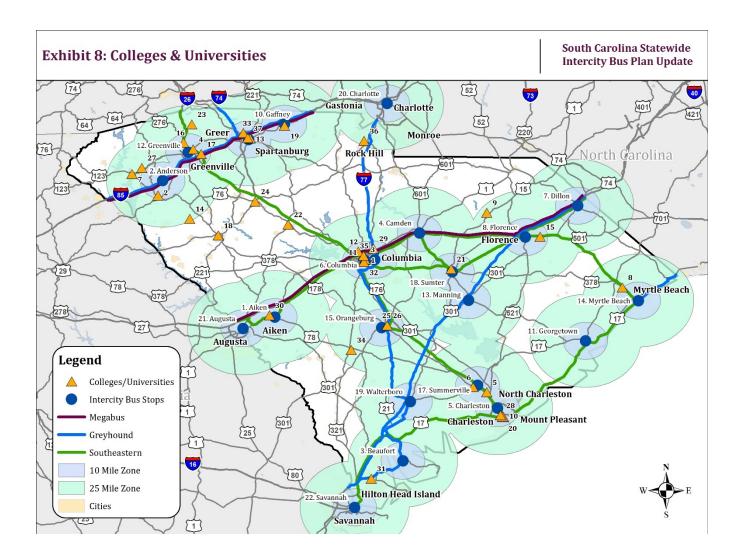
Table 11 lists the colleges and universities in South Carolina and their proximity to the nearest bus station. Exhibit 8 maps the location of the campuses. There are 37, four-year colleges located throughout the State. Of the total, nine colleges and universities are not within ten miles of an intercity bus station but only three colleges and universities noted below are located greater than 25 miles from an intercity bus stop:

- Lander University
- Newberry College
- Presbyterian College

Map Reference	College	Location	Within 10 Miles of Station/Stop	Within 25 Miles of Station/Stop	Outside 25 Mile Radius
1	Allen University	Columbia	Х		
2	Anderson University	Anderson	Х		
3	Benedict College	Columbia	Х		
4	Bob Jones University	Greenville	х		
5	Charleston Southern	Charleston	х		
6	Claflin University	Orangeburg	х		
7	Clemson University	Clemson		Х	
8	Coastal Carolina	Conway		х	
9	Coker College	Hartsville		Х	
10	College of Charleston	Charleston	х		
11	Columbia College	Columbia	х		
12	Columbia International	Columbia	х		
13	Converse College	Spartanburg	х		
14	Erskine College	Due West		Х	

Table 11: South Carolina Colleges and Universities

Map Reference	College	Location	Within 10 Miles of Station/Stop	Within 25 Miles of Station/Stop	Outside 25 Mile Radius
45	Francis Marion				
15	University	Florence	X		
16	Furman University	Greenville	X		
17	ITT Technical Institute	Greenville	Х		
18	Lander University	Greenwood			Х
19	Limestone College	Gaffney	Х		
20	Medical Univ. of South Carolina	Charleston	x		
21	Morris College	Sumter	Х		
22	Newberry College	Newberry			Х
23	North Greenville University	Tigerville		х	
24	Presbyterian College	Clinton			Х
25	South Carolina State	Orangeburg	х		
26	South University	Columbia	х		
27	Southern Wesleyan	Central		Х	
28	The Citadel	Charleston	х		
29	University of Phoenix	Columbia	х		
30	USC - Aiken	Aiken	х		
31	USC - Beaufort	Bluffton		Х	
32	USC - Columbia	Columbia	х		
33	USC - Upstate	Spartanburg	х		
34	Voorhees College	Denmark		Х	
35	W.L. Bonner Bible College	Columbia	x		
36	Winthrop University	Rock Hill		Х	
37	Wofford College	Spartanburg	х		



Military Bases

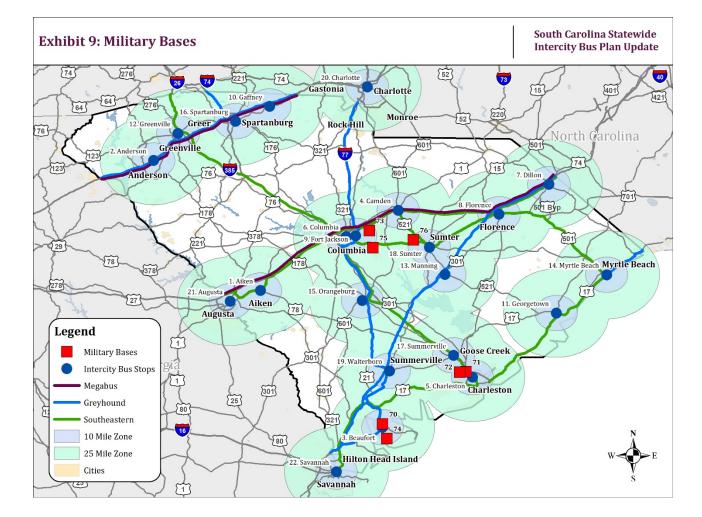
Some military bases can be significant destinations on intercity bus routes. Military bases serve as a generator of intercity bus trips primarily due to many military personnel not having access to a private vehicle while living on base. They may have to travel long distances to return home and typically funds are limited. There are seven bases identified in South Carolina.

It should be noted that an industry representative stated that despite the increase in individual car ownership by military personnel, the carrier "transports large numbers of military personnel on the major peak travel periods of the year, including Thanksgiving, Christmas and other holidays."

Table 12 lists the military bases in South Carolina. As shown, one base is located further than 10 miles from an intercity bus stop. Exhibit 9 includes a map showing the location of these military bases.

Мар			Within 10 Miles of	Within 25 Miles of	Outside 25 Miles of
Reference	Facility	Location	Station/Stop	Station/Stop	Station/Stop
	Beaufort Marine Corps Air				
70	Station, USMC	Beaufort	Х		
71	Charleston AFB, USAF	Charleston	Х		
	Charleston Naval Weapons				
72	Station, USN	Charleston	Х		
73	Fort Jackson, USA	Columbia	Х		
	Marine Corps Recruit Depot,				
74	USMC	Beaufort	Х		
75	McEntire AFB, USAF	Columbia		Х	
76	Shaw AFB, USAF	Sumter	Х		

Table 12: South Carolina Military Bases/Locations



Medical Facilities

While not considered a major generator of intercity bus trips, hospitals can attract intercity bus passengers who have extended stays or family or friends that are visiting someone with an extended stay. This normally requires that a connection be made between the intercity bus station and the hospital via local transit or taxi service. Reasonably good connections are needed to consider the hospital adequately served even if it is within ten miles of the intercity bus stop.

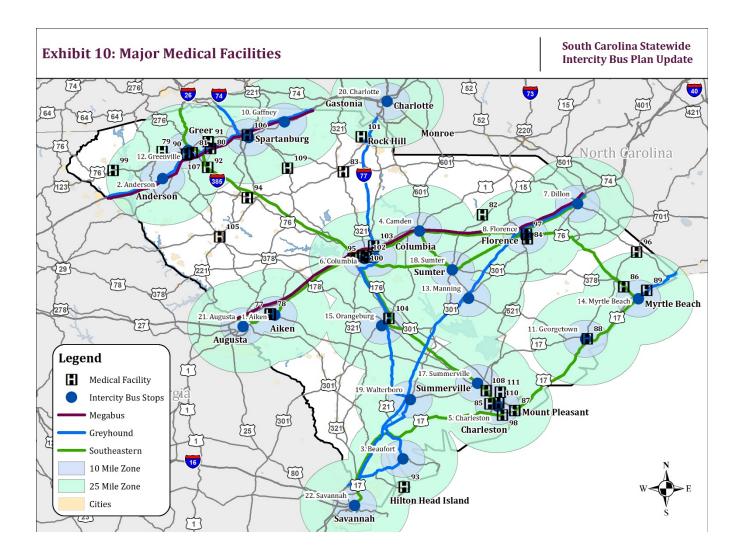
There are 35 identified major medical facilities that are located throughout the State. Of these, 24 are located within 10 miles of an intercity bus stop, with only four being located farther than 25 miles from a stop.

Table 13 lists these medical facilities and their proximity to intercity bus stations, while Exhibit 10 includes a map of these locations.

Map Reference	Facility	Location	Within 10 Miles of Station/Stop	Within 25 Miles of Station/Stop	Outside 25 Miles of Station/Stop
	Aiken Regional Medical				
77	Centers	Aiken	Х		
	Anderson Area Medical				
78	Center	Anderson	X		
79	Palmetto Baptist Medical Center Easley	Easley		х	
	Carolina Center for				
80	Behavioral Health	Greer	Х		
81	Bon Secours St. Francis Health System	Greenville	х		
82	Carolina Pines Regional Medical Center	Hartsville		х	
	Chester Regional Medical				
83	Center	Chester			х
84	Carolinas Hospital System	Florence	Х		
85	Charleston Memorial Hospital	Charleston	х		
86	Conway Medical Center	Conway	Х		
87	East Cooper Regional Medical Center	Mt. Pleasant	X		
88	Georgetown Memorial Hospital	Georgetown	X		
89	Grand Strand Regional Medical Center	Myrtle Beach	Х		
90	Greenville Memorial Hospital	Greenville	Х		
91	Greer Memorial Hospital	Greer		Х	
92	Hillcrest Memorial Hospital	Simpsonville		х	

Table 13: South Carolina Medical Facilities

Map Reference	Facility	Location	Within 10 Miles of Station/Stop	Within 25 Miles of Station/Stop	Outside 25 Miles of Station/Stop
	Hilton Head Medical Center				
93	and Clinics	Hilton Head	x		
	Laurens County Health Care				
94	System	Clinton			X
05		West			
95	Lexington Medical Center	Columbia	X		
96	Loris Healthcare System	Loris			X
97	McLeod Regional Medical Center	Florence			
97	The Medical University of	Florence	X		
	South Carolina Medical				
98	Center	Charleston	х		
99	Oconee Memorial Hospital	Seneca		x	
	Palmetto Richland Memorial				
100	Hospital	Columbia	х		
101	Piedmont Healthcare System	Rock Hill		Х	
102	Providence Hospital	Columbia	х		
	Providence Hospital				
103	Northeast	Columbia	x		
	The Regional Medical Center of Orangeburg and Calhoun				
104	Counties	Orangeburg	х		
105	Self Regional Healthcare	Greenwood			х
	Spartanburg Regional				
106	Hospital System	Spartanburg	х		
107	Shriners Hospital	Greenville	х		
108	Trident Health System	Charleston	x		
109	Wallace Thomson Hospital	Union		х	
110	Naval Hospital	Beaufort	х		
111	Naval Health Clinic	Charleston	х		



<u>Airports</u>

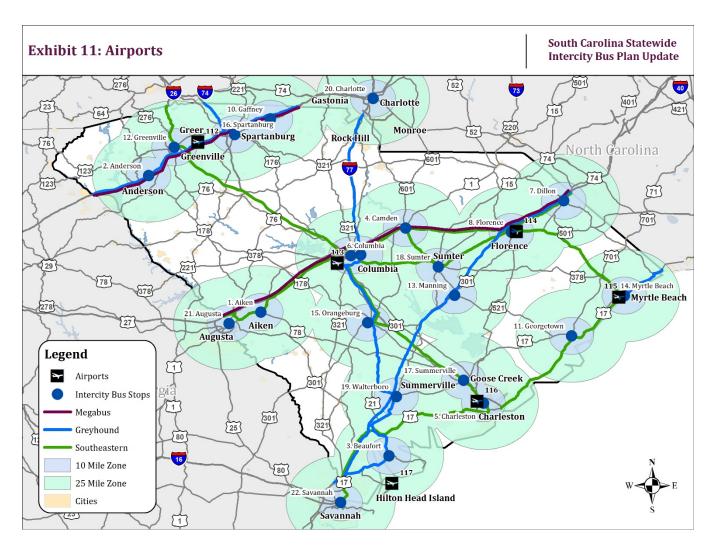
Ridership will be generated on intercity bus routes that serve airports with scheduled commercial air service. Service can be directly to the airport terminal or to a transfer center enabling passengers to reach the airport with a single transfer. There are six commercial airports in South Carolina, four of which are located within ten miles of an intercity bus stop.

A list of the airports and their locations is shown in Table 14. Exhibit 11 is a map of all commercial airports in South Carolina showing their proximity to intercity bus stops.

Map Reference	Facility	Within 10 Miles of Station/Stop	Within 25 Miles of Station/Stop	Outside 25 Miles of station/Stop
	Greenville-Spartanburg			
112	International Airport		Х	
113	Columbia Metropolitan Airport	Х		
114	Florence Regional Airport	Х		
115	Myrtle Beach International Airport	Х		
116	Charleston International Airport	Х		
117	Hilton Head Island Airport		Х	

Table 14: South Carolina Airports

All major intercity bus trip generators, are generally well positioned relative to their proximity to intercity bus stops. With a total of 117 trip generators recognized in the study, only 12, or about 10 percent, are located greater than 25 miles from an intercity bus stop.



VIII. SUMMARY OBSERVATIONS

Presented below are observations by the consulting team through this portion of the 2018 Intercity Bus Program Evaluation.

- The intercity bus route structure provided by Greyhound and Southeastern Stages today closely resembles the service provided by the carriers at the time of the 2012 Intercity Bus Study.
- Greyhound has discontinued its Manning stop, but added a Florence stop.
- Southeastern Stages terminated its Dillon stop in June 2017due to losing its ticketing agent and also terminated its Fort Jackson route in 2017.
- Dillon. Fort Jackson and Manning are the only communities that have lost intercity bus service since the 2012 study was prepared.
- Greyhound no longer operates its Knoxville to Winston-Salem route with a stop in Spartanburg, but continues to serve Spartanburg on its Atlanta to Richmond route.
- Charleston, Columbia, Greenville and Myrtle Beach are by far the most productive intercity bus stops in the State.
- Greyhound has initiated a process of modernizing its ticketing system which should have positive implications across the country's intercity bus network.
- North Central region, including Greenwood and Rock Hill, continues to be the most mentioned area of the State without intercity bus service.
- Over two-thirds of those general stakeholders responding to a survey indicated that intercity bus needs in their area are being met. (Public transportation providers and general stakeholders can still respond to the study survey.)
- Greyhound does not record mileage for each vehicle by state, therefore, the South Carolina mileage the carrier has accumulated on each of its 13 Section 5311(f) supported vehicles cannot be determined (anticipating delivery of four additional coaches in December 2018).
- Approximately 54 percent of the mileage on Southeastern Stages' nine Section 5311(f) funded vehicles can be attributed to the carrier's South Carolina service.
- The larger concentration of higher populated areas that are greater than 25 miles from an intercity bus stop are located the length of the State midway between I-85 and I-20, extending to the SC/NC state line between Rock Hill and Florence, including Greenwood. Additional higher populated areas outside the 25-mile radius of an intercity bus stop are found in the most western portion of the State west of Anderson, along the SC/GA state line between Aiken and Hilton Head, and a final area that extends from south of Georgetown to west of Myrtle Beach.

- Only 14.7 percent of the State's population resides more than 25 miles from an intercity bus station/stop, about the same percentage recognized in the 2012 study.
- Based on spatial analysis, the census block groups in South Carolina with the greatest demand for intercity bus service that are beyond 25 miles of an intercity bus stop, are primarily located in four (4) areas of the State:
 - o Upper Savannah COG Area
 - o Southern Catawba COG Area
 - Southern Lower Savannah and Western Lowcountry COG Areas
 - o Western Waccamaw and Southern Pee Dee COG Areas
- The State's major trip generators are well positioned regarding their proximity to intercity bus stations/stops.

EVALUATION OF TEMPORAL ASPECTS OF BUS SCHEDULES

The feasibility of transferring between intercity buses and other transportation modes is very much dependent on the movement of intercity buses by time of day. Anderson, with its only southbound stop at 6:30 PM, is the only station/stop in South Carolina without an arrival/departure in both directions between 7:00 AM and 5:00 PM. There are very few stops across the State between midnight and 6:00 AM. Also indicative of the quality of intercity bus service in South Carolina is the fact that there are numerous stops along the interstate routes that have inbound and outbound service during daylight hours. The level of availability and convenience in using intercity bus service is very important as travelers decide their favored service mode.

The availability of intercity bus service from early morning until late afternoon also facilitates the transferring of rural transit system passengers to the intercity bus network. While research indicates that few rural systems have scheduled stops at intercity bus stations, the fact that most of these systems operate in a demand response mode enables them to serve intercity bus stations when requested by a passenger. It should be noted that an opportunity exists for the state's rural transportation providers to expand their service hours and possibly provide weekend service to enable the local providers to better align their service with that of Greyhound and Southeastern Stages.

A further explanation of temporal service aspects by carrier can be found below.

Greyhound

Greyhound's northbound route from Jacksonville (FL) to Richmond has all South Carolina arrivals/departures between 7:05 AM and 3:05 PM, except for Walterboro where arrivals/departures are at 2:45AM/2:55 AM. The southbound Richmond to Jacksonville service has all arrivals/departures between 7:25 AM and 3:35 PM, with the exception of Florence at 10:50/10:55 PM.

All northbound arrivals/departures on the carrier's Jacksonville to Charleston route are scheduled between 7:15 AM and 10:35 PM, with the exception of Charleston which occurs at 11:35/11:55 PM. The southbound Charleston to Jacksonville service has all arrivals/departures between 8:40 AM and 9:50 PM, except for Beaufort where the bus arrives at 10:50 PM. Greyhound's Myrtle Beach to Raleigh route serves Myrtle Beach northbound at 12:15 PM and southbound at 11:30 AM.

The carrier's Atlanta to Richmond northbound service arrivals/departures occur between 12:20 PM and 10:10 PM, with the exception of Duncan which is at 3:00 AM/3:20 AM. The arrivals/departures for the southbound Richmond to Atlanta service occur from 6:20 AM to 7:15

PM with exception of arrival in Spartanburg at 10:55 PM and arrives/departs Greenville at 11:30/11:50 PM.

Southeastern Stages

All of Southeastern Stages northbound service arrivals/departures in South Carolina are between 8:30 AM and 10:45 PM, with the exception of schedule 0985 that operates during the early morning in from 12:30 AM to 3:35 AM.

The carrier's southbound service arrivals/departures are between 6:00 AM and 7:45 PM, with the exception of schedules 0982 and 0984 that operate from 10:55 PM and 1:50 AM.

X. CONSULTATION PROCESS WITH INTERCITY BUS PROVIDERS

OVERVIEW

Those states intending to submit a complete or partial governor's certification must undertake a consultation process with the state's intercity bus providers prior to issuing the certification. FTA has adopted the definition of "consultation" as "one party confers with another identified party in accordance with an established process and, before taking action(s), considers that party's views and periodically informs that party about action(s) taken." While FTA provides discretion to the states to determine the process for meeting this consultation requirement, the state's intercity consultation process must include the following elements as identified in FTA Circular 9040.1G:

- Identification of intercity bus providers in the state;
- Activities the state will perform as part of consultation with identified providers and the intercity bus industry;
- An opportunity for intercity bus providers to submit proposals for funding as part of the state's distribution of its annual Section 5311(f) apportionment; and
- A direct correlation between the results of the consultation process and a determination that the state's intercity service needs are adequately being met.

To carry out the consultation process, FTA recommends the following activities:

- Inform intercity bus carriers of the state's rural planning process and encourage their participation in that process, and where a state is considering possible certification, provide an opportunity to submit comments and/or request a public meeting to identify unmet needs and discuss proposals for meeting those needs;
- Include intercity providers' participation in scheduled meetings, such as state agency transit meetings and public transit conferences;
- Meet with individual intercity providers periodically;
- Notify providers either through direct mail or advertise in various locations around the state of availability of funds for the current year's intercity bus program;
- Inform intercity bus providers about the development of the locally developed, coordinated public transit-human services transportation plans and encourage their participation; and
- Solicit comments through direct mail and advertise in newspapers in various locations around the state of the state's intent to submit a "Governor's certification" to FTA unless intercity bus needs are identified.

FTA guidance further indicates that there should be a direct correlation between the results of the consultation process and the state's determination of intercity bus needs. In other words, a state cannot ignore the needs and service requests submitted by the intercity carriers and subsequently submit to FTA a certification that all the state's intercity bus needs are adequately met.

CONSULTATION MEETING

As previously noted, surveys were developed and made available online for three distinct stakeholder groups: intercity bus providers, public transit providers, and general stakeholders. In addition to the stakeholder survey, the intercity bus carriers were invited to a consultation meeting to discuss South Carolina's intercity bus service and service needs, and the past and future use of Section 5311(f) funds. The meeting was held on Thursday, May 31, 2018 at the following location.

South Carolina Department of Transportation (SCDOT)/Office of Public Transit (OPT) 955 Park Street – Room 201 Columbia, SC 29202

South Carolina's intercity bus carriers, Greyhound and Southeastern Stages, were invited to the consultation meeting via email. The consultation letter is included in Appendix B. Appendix C includes a completed sign-in sheet for the consultation meeting. The consultation meeting was moderated by a Senior Associate from RLS & Associates, Inc., the consulting firm under contract with SCDOT to conduct the South Carolina Intercity Bus Study.

The meeting was initiated with a discussion of the purpose and goals for the meeting and any changes in the State's intercity bus service since completion of the 2012 study. The moderator described the minimal changes to the intercity bus network over the past six years and utilization of Section 5311(f) funds over this period, including how the carriers had utilized the buses each received in South Carolina.

The results of the study's needs assessment were discussed, with particular emphasis on the few gaps in intercity bus service and alternatives to meet these intercity bus needs. The moderator provided the results of the stakeholder surveys that included public transportation providers and general stakeholders in addition to the intercity bus carriers. Preliminary observations of the study were discussed, including the great extent to which the State's intercity bus needs are being met, and the possible role of feeder connectors to meet any outstanding intercity bus needs.

XI. FTA-FUNDED PUBLIC TRANSPORTATION PROVIDERS

There are currently 28 FTA-funded local public transportation providers in South Carolina. Seven are exclusively urbanized, 17 are exclusively rural or nonurbanized, and four offer both urbanized and rural services. These agencies provide a range of public transportation service options, such as fixed-route, route deviation, ADA complementary paratransit service, commuter, and demand response.

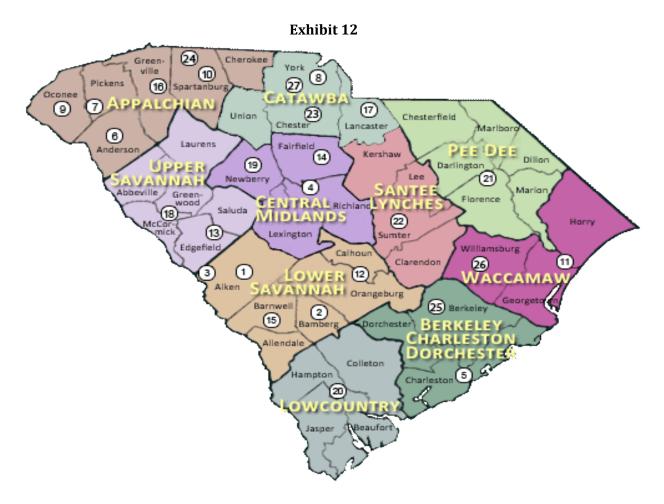
Greenville Transit Authority, Spartanburg Area Transit (SPARTA), and Santee Wateree RTA (Sumter) operate true intermodal facilities, which allow passengers to directly transfer between intercity and local services at the same location. Many other locations enable passengers to transfer to local services at a nearby bus stop (within a block or two), or to advance schedule a demand response/dial-a-ride trip. For some locations, an intercity bus arrives after local services have stopped for the day. Those passengers must arrange their own transportation, take a taxi, or stay in a hotel.

A substantial number of the State's public transportation providers operate regional transportation services. There are a number of potential benefits of regional transportation, but none is more important than the ability to impact public transportation services across a multicounty area. In many states, intercity bus service is the only general public transportation mode linking most urban and rural areas. That is not the situation in much of South Carolina. The rural transportation providers, primarily through their demand response service, provide transportation options from the State's rural areas to intercity bus stations/stops.

As noted in the 2014 SC Statewide Public Transportation & Coordination Plan, the majority of the 46 counties in the State have some level of general public transit services available. The following counties are identified as having no public transit service supported by any of the funding programs administered by SCDOT:

- Abbeville County, Upper Savannah Region
- Greenwood County, Upper Savannah Region
- Laurens County, Upper Savannah Region
- Saluda County, Upper Savannah Region
- Cherokee County, Appalachian Region
- Union County, Catawba Region

These counties happen to be located in the corridor of the State that lacks intercity bus service and is most often cited as needing this service. Therefore, to provide service in this area, such as feeder routes to intercity bus stations/stops, will require public transportation providers in surrounding counties to provide the service. For example, Central Midlands RTA could possibly operate feeder service from Columbia to Greenwood. The RTA's Executive Director has indicated that to provide this service would require two roundtrips per day to offer a return trip to Greenwood from the Columbia station and to avoid out-posting a vehicle in Greenwood. It is envisioned that most public transportation providers of feeder routes may need to operate two roundtrips to address the same issues. Exhibit 12 below identifies the public transportation agencies operating in South Carolina. The 28 public transportation agencies are numbered on the map, with the corresponding agency name noted below.



- 1. <u>Aiken Senior Life Services</u>
- 2. <u>Bamberg County Office on Aging/Handy Ride</u>
- 3. <u>Best Friend Express/Lower Savannah RTMA</u>
- 4. <u>Central Midlands RTA</u>
- 5. <u>Charleston Area Regional Transit Authority</u>
- 6. <u>City of Anderson/Electric City Transit</u>
- 7. <u>City of Clemson Transit/Clemson Area Transit</u>
- 8. <u>City of Rock Hill</u>
- 9. <u>City of Seneca Transit</u>
- 10. <u>City of Spartanburg/SPARTA</u>
- 11. <u>Coast/Waccamaw RTA</u>
- 12. Lower Savannah RTMA/Cross County Connector
- 13. Edgefield County Senior Citizens Council/ECSCC
- 14. Fairfield County Transit System
- 15. <u>Generations Unlimited/Local Motion</u>

- 16. Greenlink/GTA
- 17. Lancaster Area Ride Service
- 18. McCormick Area Transit
- 19. <u>Newberry County COA/Newberry Express</u>
- 20. Palmetto Breeze/Lowcountry RTA
- 21. <u>Pee Dee RTA</u>
- 22. Santee Wateree RTA
- 23. Santee Wateree at Lower Richland
- 24. Senior Services of Chester Co./ Chester Connector
- 25. <u>Spartanburg County Transportation Service Bureau</u>
- 26. <u>Tri-County Link/Berkeley-Charleston-Dorchester</u>
- 27. Williamsburg County Transit System
- 28. York County Access

Source: 2014 SC Statewide Public Transportation & Coordination Plan

As indicated below, the responses to the public transportation provider survey resulted in eleven (11) public providers indicating some level of service to intercity bus stations, Amtrak stations or airports within their operating area.

The Comet - Central Midlands Regional Transit Authority, Columbia

• Serves Columbia Greyhound station and Dutch Square Mall (Megabus, Bonzai Buses).

Charleston Area Regional Transportation Authority (CARTA)

• Provides local and express service to the Charleston International Airport. Local routes serve the Amtrak Station in North Charleston. CARTA is the federal recipient responsible for the construction of the new intermodal center that is replacing the existing Amtrak Station.

Tri-County Link/Berkeley-Charleston-Dorchester

• Serves the Johns Island Airport.

Santee Wateree Regional Transportation Authority

• Two routes that leave Sumter and Kershaw Counties go to Columbia and connect at the COMET Transfer Station located on Laurel Street.

Waccamaw RTA

- Serves Myrtle Beach intercity bus station;
- Regular service to Myrtle Beach International Airport; and
- Local service from the City of Georgetown to Myrtle Beach could be considered feeder service but there is not high demand. Provides three express trips daily and three local service trips daily in each direction.

Pee Dee RTA

- Serves Florence Greyhound Bus Station.
- Provides a shuttle which picks up people in Darlington, SC that wish to ride the Florence Service. The service picks up in Darlington then goes to the Technical College three times a day. Passengers then transfer to the Florence bus and are then taken to the transfer center where they have access to public transit service.

McCormick County Senior Center/McCormick Area Transit

- Occasionally drops off or picks up passengers at the Augusta, GA Airport.
- Passengers request to be transported to Greenville, Anderson, Columbia, or Augusta, GA for other transit systems, Greyhound, Amtrak, and Airports.

Generations Unlimited

• Serves Southeastern Stages Aiken station.

Clemson Area Transit

• Connects with the Amtrak at Clemson.

Low Country RTA

• Serves Beaufort Greyhound station.

Pee Dee RTA

- Serves Florence and Myrtle Beach bus stations;
- The Routes 3 and 7 Buses in Florence provide fixed route service to both the Florence Airport and Amtrak station; and
- Provides feeder service connecting passengers from Darlington, Florence and Lake City to the Intercity Line connecting passengers to Myrtle Beach/Horry County.

Santee Wateree Regional Transportation Authority

- Serve Sumter intercity bus station;
- Southeastern Stages ticket agent on site/connections possible; and
- Operates two routes from Sumter to Columbia and one from Camden to Columbia. Passengers can transfer to a Columbia city bus which may access the Columbia Airport.

XII. STATUS SUMMARY OF SOUTH CAROLINA INTERCITY BUS NETWORK

Based on the input from stakeholders, the spatial and demographic analysis of intercity bus service within the State, and the evaluation of transportation services provided by the rural transportation providers, the Consultant concludes that, with the exception of a few previously addressed service gaps, the intercity bus service needs across South Carolina are substantially met. This provides the basis for SCDOT-OPT to recommend the issuance of a partial Governor's certification to FTA. While the Study supports the use of Section 5311(f) funds to serve the areas of the State that are void of intercity bus service, it is the consultant's opinion that the entirety of South Carolina's Section 5311(f) apportionment will not be needed for this purpose and can be used to meet other rural transportation needs in the State. The following section of the study addresses the possible use of a portion of the State's annual Section 5311(f) apportionment for intercity bus service.

Potential Section 5311(f) Funded Services

Following a thorough evaluation of the State's demographic data related to the demand for intercity bus transportation, spatial coverage of South Carolina's intercity bus network, transit propensity across the State, proximity of major trip generators to an intercity bus station/stop, as well as stakeholder survey results, the consultant has determined, as also noted above, that there are limited intercity bus needs across the State. Only 14.7 percent of the State's population resides more than 25 miles from an intercity bus station/stop. As previously addressed, this Study documents four areas in the State where there are gaps in the State's intercity bus coverage, reflecting the population that resides beyond the 25-mile radius. Below is an assessment of these service gaps, including alternatives to address those service gaps that are worthy of support with Section 5311(f) funds. Exhibit 13 is a map depicting the potential feeder/intercity bus routes.

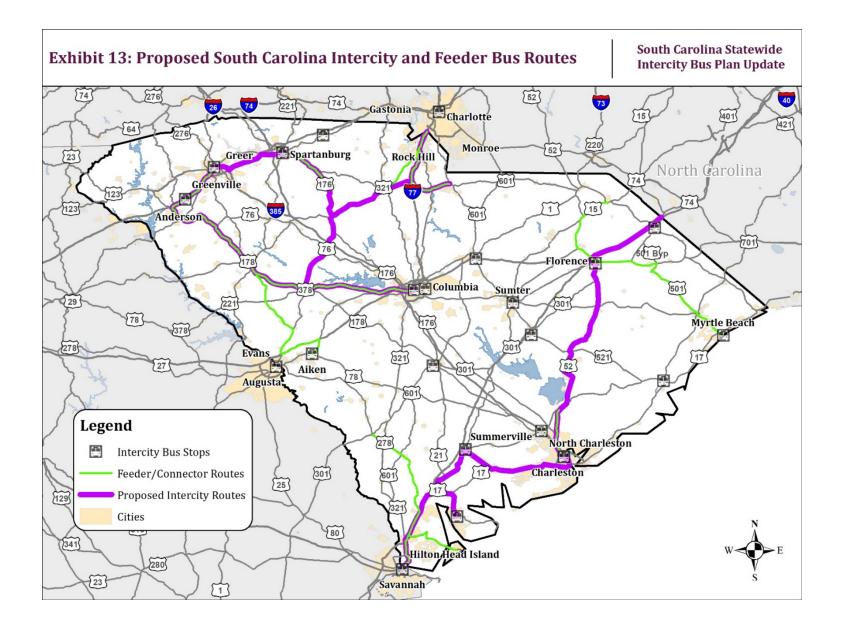
1. Between I-85 and I-20, extending to the SC/NC state line between Rock Hill and Florence, including Greenwood

There is a consensus of demographic and spatial analysis, as well as survey responses, that this is the area of the State in most need of access to intercity bus service. The propensity for utilizing intercity bus services (Exhibit 8) are by far the highest in this area of South Carolina, particularly with a high propensity area midway between Spartanburg and Columbia as well as the Greenwood area. A challenge of providing intercity bus service in this area is that this area of the State includes the six counties that offer no public transportation service.

It is recommended that SCDOT consider supporting feeder service from Anderson to Aiken via Greenwood along US Hwy 178 and US Hwy 1, enabling passengers to access Greyhound's Atlanta to Richmond route in Anderson and Southeastern Stages' service through its relatively new stop in Aiken. One alternative would be to support feeder connectors from Greenwood to Anderson/Greenville and Greenwood to Columbia. It is conceivable that McCormick Area Transit and/or Newberry County COA/Newberry Express could serve this corridor. Another option would be to provide this service as an intercity bus route from Greenville to Columbia via Anderson and Greenwood.

The area north of I-26 could be served via feeder routes from Union to Spartanburg, Chester/Lancaster via Rock Hill to Charlotte and Bennettsville to Florence. This area of the State could also be served by a single intercity bus route from Greenville/Spartanburg to Charlotte via Union, Chester, Lancaster and Rock Hill. It should be noted that regardless of the future Section 5311(f) supported service in this area, Greyhound should add Rock Hill as a stop on its Charleston, WV to Jacksonville, FL route. The rapidly growing Rock Hill/Fort Mill area is worthy of a Greyhound stop. A route from Columbia to Charlotte via Rock Hill should be considered a possibility, particularly if Greyhound does not add Rock Hill as a stop on the Charleston, WV to Jacksonville, FL route.

An alternative to the various feeder and traditional intercity bus routes noted above would be a traditional intercity bus route from Anderson to Charlotte via Greenwood, Newberry, Chester and Rock Hill.



2. SC/GA state line between Aiken and Hilton Head

While not a large population area, this area is void of intercity bus service south of Allendale. A feeder route from Allendale to Hilton Head/Savannah would meet this gap in intercity bus service.

3. South of Georgetown to west of Myrtle Beach/south of Florence

The area south of Georgetown can largely be served by a feeder route from Moncks Corner to Charleston. The service gap west of Myrtle Beach/south of Florence can more effectively be met by operating a feeder route between Myrtle Beach and the Florence bus/Amtrak station. Additional service could be provided by feeder routes to Florence from both Lake City and Marion.

4. West of Anderson

The area west of Anderson is the smallest of the areas void of intercity bus service, and there is limited population in the area. Therefore, it is not deemed reasonable at this time to offer feeder service from this area into Anderson.

Performance Estimates for Potential Intercity Bus Service

Ridership estimates for the potential feeder and traditional intercity bus routes were determined using the Transit Cooperative Research Program (TCRP) *Report 147: Toolkit for Estimating Demand for Rural Intercity Bus Services.* The Toolkit was also utilized in the 2012 Intercity Bus Study and continues to be considered the industry's state-of-the-art for estimating intercity bus ridership.

The Toolkit utilizes two different approaches or models that generate ridership estimates. The first is a regression model, a statistical equation based on the length of the route and the average population of the stops served. The second is a trip rate model using National Household Travel Survey data. It accounts for regional variation in long-distance public transportation trip rates of rural residents. Due to the differences between the regression and trip rate model results for most of the potential routes, the two ridership estimates were averaged to provide a single annual ridership number. This results in a more conservative estimate of potential routes. Table 15 below depicts the ridership estimates for the previously noted potential routes.

The Greenwood-Anderson/Greenville, Chester-Rock Hill-Charlotte, and Lancaster-Rock Hill-Charlotte feeder routes each have a projected annual ridership exceeding 11,000, with the Lancaster-Rock Hill-Charlotte route indicating the highest estimated ridership at 13,250. The highest projected ridership for a potential traditional intercity bus route is by far the Columbia-Rock Hill-Charlotte route with 53,850 riders, followed by the Greenville-Anderson-Greenwood-Columbia route with a projected ridership of 32,350.

Route Rout		Estimated	Estimated Average	
	Miles	(Annual Demand)		Annual Ridership
		Regression Model	Trip Rate Model	
Feeder Connectors				
Anderson-Greenwood - Aiken	192	8,700	12,000	10,350
Greenwood-	82/	13,600	9,000	11,300
Anderson/Greenville	110			
Greenwood-Columbia	158	10,200	8,400	9,300
Union-Spartanburg	52	0	7,200	3,600
Chester-Rock Hill-Charlotte	98	11,000	12,900	11,950
Lancaster-Rock Hill-Charlotte	96	12,200	14,300	13,250
Bennettsville-Florence	82	200	6,300	3,250
Allendale-Hilton Head/	156/	6,800	5,900	6,350
Savannah	146			
Moncks Corner-Charleston	66	4,600	0	2,300
Myrtle Beach-Florence	134	16,200	4,500	10,350
Intercity Bus Routes				
Greenville-Anderson-	298	35,800	28,900	32,350
Greenwood-Columbia				
Greenville/Spartanburg –	330/	28,400	24,900	26,650
Union – Chester – Lancaster –	266			
Rock Hill- Charlotte				
Greenville/Anderson-	370/	26,400	20,500	23,450
Greenwood-Newberry-	342			
Chester-Rock Hill-Charlotte				
Columbia – Rock Hill -	180	56,500	51,200	53,850
Charlotte				
Greyhound Proposed Route – Fayetteville, NC to Savannah, GA	341/239	23,900	23,900	23,900

Table 15: Projected Ridership for Potential Routes

Table 16 depicts the projected costs and revenue for the potential routes. The estimate of feeder route expenses was calculated by using a cost per mile of \$2.35 for one daily roundtrip. This represents a 7 percent increase from the rate used for the 2012 study. A much higher rate of \$4.60 per mile was used to project the operating cost for the potential traditional intercity bus routes. Note that depending on the service characteristics of the feeder operator, the feeder routes may need to be operated on a twice daily roundtrip basis. It should also be noted that due to the typical length of a trip on a traditional intercity bus route being at least 200 miles, the cost per trip for intercity bus routes will be much higher than that for feeder/connector routes.

Route	Round Trip Miles	Estimated Annual Ridership	Estimated Cost	Estimated Revenue	Net Deficit	Net Deficit/ Rider	Section 5311(f) Funds (50%)
Feeders/Connectors							
Anderson-Greenwood - Aiken	192	10,350	\$164,688	\$ 24,703	\$ 139,985	\$ 13.53	\$ 69,992
Greenwood-Anderson/Greenville	110	11,300	\$ 94,353	\$ 14,153	\$ 80,200	\$ 7.10	\$ 40,100
Greenwood-Columbia	158	9,300	\$ 135,525	\$ 20,329	\$ 115,196	\$ 12.39	\$ 57,598
Union-Spartanburg	52	3,600	\$ 44,603	\$ 6,690	\$ 37,913	\$ 10.53	\$ 18,956
Chester-Rock Hill-Charlotte	98	11,950	\$ 84,060	\$ 12,609	\$ 71,451	\$ 5.98	\$ 35,725
Lancaster-Rock Hill-Charlotte	96	13,250	\$ 82,344	\$ 12,352	\$ 69,992	\$ 5.28	\$ 34,996
Bennettsville-Florence	82	3,250	\$ 70,336	\$ 10,550	\$ 59,785	\$ 18.40	\$ 29,893
Allendale-Hilton Head/ Savannah	156	6,350	\$ 133,809	\$ 20,071	\$ 113,738	\$ 17.91	\$ 56,869
Moncks Corner-Charleston	66	2,300	\$ 56,612	\$ 8,492	\$ 48,120	\$ 20.92	\$ 24,060
Myrtle Beach - Florence	134	10,350	\$114,939	\$ 17,241	\$ 97,698	\$ 9.44	\$ 48,849
Intercity Bus Routes							
Greenville-Anderson-Greenwood-Columbia	298	32,350	\$ 500,342	\$100,068	\$ 400,274	\$ 12.37	\$ 200,137
Greenville/Spartanburg – Union – Chester – Lancaster – Rock Hill- Charlotte	330	26.650	\$ 554,070	\$ 110,814	\$ 443,256	\$ 16.63	\$ 221,628
Greenville/Anderson-Greenwood-Newberry-		20,000	<i><i><i><i>ϕ</i> 𝔅 𝔅 𝔅 𝔅 𝔅 𝔅 𝔅 </i></i></i>	<i><i><i>q</i> 110)011</i></i>	¢ 110) <u>200</u>	÷ 10.00	*
Chester-Rock Hill-Charlotte	370	23,450	\$621,230	\$124,246	\$ 496,984	\$ 21.19	\$ 248,492
Columbia-Rock Hill-Charlotte	180	53,850	\$ 302,220	\$ 60,444	\$ 241,776	\$ 4.49	\$ 120,888
Greyhound Proposed Route – Fayetteville,							
NC to Savannah, GA	478	23,900	\$802,562	\$160,512	\$ 642,050	\$ 26.86	\$ 321,025

Table 16: Projected Costs and Revenue for Potential Routes

Estimated revenue for each feeder and intercity bus route was calculated by using a farebox recovery rate of 15 and 20 percent respectively. As indicated in Table 16, these estimates result in a much lower net deficit per rider for those previously mentioned higher anticipated ridership routes for both route categories. The far-right column in Table 16 indicates the amount of Section 5311(f) funds that would be needed to support each route based on costs and revenue estimates. It is important to note that the amount shown in the Table represents 50 percent of the net operating deficit. Utilization of FTA's in-kind match provision would result in doubling the amount of Section 5311(f) funds needed to support the route. For example, it is estimated that the total net operating deficit amount of \$139,985 for the Anderson-Greenwood-Aiken feeder route would be needed in Section 5311(f) funds to support the route using the in-kind match provision. The in-kind match program is addressed later in the Study.

As was the case in the 2012 study, it is again recommended that feeder/connector projects be considered to provide this service due to lower costs as opposed to scheduled intercity bus carrier provided service, along with the ability to potentially impact a larger geographic area with the same amount of funds. Every effort should be made to have a same-day return on the feeder/connector routes. It is important to note from a revenue perspective that feeder routes can add other passengers beyond the intercity bus connector customer. A combination of feeder service and traditional fixed route/scheduled service could be used, particularly along the Greenville-Greenwood-Columbia corridor.

XIII. HISTORY OF RURAL FEEDER SERVICE CONNECTING TO INTERCITY BUS NETWORK

In 1987 Greyhound's "Rural Connections Program" began to work with rural transit operators to provide direct connections with Greyhound's intercity bus network. At the program's peak in the late 1980s, more than 800 communities were connecting to Greyhound's network via feeder routes served by participating rural transit operators.²In addition to serving local activity centers such as medical facilities, shopping centers and government offices, rural transit operators were encouraged by Greyhound to connect directly with the intercity bus network, and thereby to more distant destinations. Greyhound had previously performed an internal study which found that approximately one-third of Greyhound regular-route riders had at least one trip that ended in a rural area. It is likely that this general ridership pattern still holds.

While Greyhound initiated the concept of connecting intercity bus with rural transit providers, rural feeder service is not limited to Greyhound. All interlined intercity bus carriers are potential partners for the feeder connectors.

Over the years more and more rural transit operators across the country have initiated feeder service to connect with existing intercity bus routes. As previously noted, feeder routes are typically operated along state and local highways that are not served by the intercity bus industry that now operates primarily on interstate highways. In many situations rural operators can make minor adjustments to their local routes to connect with nearby intercity bus service at a relatively low cost. This cooperative effort benefits rural transit operators and their passengers, while intercity bus carriers can focus on providing express service along major corridors and between larger service points.

The importance of marketing and advertising for feeder service success cannot be understated. Such efforts are eligible expenses under the Section 5311(f) program. Marketing and advertising should be a joint effort between the rural transit operator and the intercity bus carrier. SCDOT-OPT is strongly encouraged to ensure that marketing and advertising funds are available and utilized for all Section 5311(f) supported operating projects. At a minimum, two percent of the operating budget should be designated for marketing and advertising.

Greyhound has indicated that it will not seek Section 5311(f) assistance to directly operate the feeder service routes but has agreed to support these projects through the FTA-initiated matching program allowing the use of Greyhound's unsubsidized capital expenses as local inkind match. These routes are considered interlined feeder service and must comply with federal regulations and other industry standards including: Federal Motor Carrier Safety Administration (FMCSA) operating authority; National Bus Traffic Association (NBTA) membership; insurance; driver and vehicle safety standards; and operating and terminal access agreements.

² Study of Intercity Bus Service Report of the Department of Transportation to the United States Congress Pursuant to House Report 108-671 (2004) July 2005-pg. 26

With the recommendation of utilizing feeder services to address the gaps in intercity bus coverage across the State, it was determined to be important to research intercity bus feeder programs operated by other states to take advantage of their experiences. It was found that the states utilize various methods to administer their respective programs.

Research has indicated that Washington State DOT (WSDOT) likely has the most experience in funding feeder routes under the Section 5311(f) program. Actually, WSDOT proposed the in-kind match provision to FTA in an effort to expand the scope of the Section 5311(f) program through the use of feeder connectors to the intercity bus network, while addressing the issue of insufficient local matching funds. WSDOT's intercity bus program, Travel Washington, includes Section 5311(f) supported traditional intercity bus routes, but is also comprised of four feeder routes, with one-way distances of 49 to 160 miles that provide access to intercity bus stations/stops with meaningful connections, as well as other public transportation modes such as airports.

The funded service corridors are identified through WSDOT's intercity bus planning process. Feeder bus services that are fixed route, route deviated, and/or demand response must make meaningful scheduled connections to intercity providers on the state's Intercity Public Transportation Network. Generally, the services must:

- Offer Fixed route service
- Operate on a fixed schedule
- Offer Inter-line ticketing capabilities
- Carry luggage, bicycles, and offer bus package express
- Operate at least five days per week
- Provide meaningful scheduled connections
 Source: http://www.wsdot.wa.gov/transit/intercity/

The 2012 Kansas Statewide Intercity Bus Study addressed the challenge of connecting rural communities to the national intercity bus network. The study found that Intercity bus carriers are generally not motivated to deviate from straight-line routes that maximize efficiency. Further, rural transit is typically operated in a demand-response mode that precludes formal interlining with intercity bus carriers due to ticketing systems requiring scheduled service to make connections. Convenient intermodal connections are a must if intercity bus service is to be a viable transportation option to the transportation-dependent in these rural communities.

The 2014 Minnesota Intercity Bus Study addressed potential feeder services with local and regional public transit services possibly acting as feeders to the state's intercity bus network. The study noted that services are available at almost all of the intercity bus stops in Minnesota, however, the level of service varies greatly throughout the state. In rural areas, service may be on a subscription basis, provided on certain days of the month only. The feasibility of transferring between intercity and local services in part depends on the movement of intercity buses by time of day. Unlike other states, where intercity service can occur in the middle of the night, every stop in Minnesota is served in at least one direction (inbound or outbound to/from the Twin Cities) at sometime between 7 a.m. and 5 p.m. In fact, very few stops do not have daytime service in both directions. Source: 2014 Minnesota Intercity Bus Study, KFH.

SCDOT-OPT should encourage the State's rural transportation providers to formalize agreements with the interlined intercity bus carriers to provide feeder connections to intercity bus stations/stops and to serve as ticket agents for the carriers. While there are limited feeder services being operated without Section 5311(f) assistance by the rural transportation providers, SCDOT-OPT should strongly consider utilizing a portion of its Section 5311(f) apportionment for this purpose.

FTA SECTION 5311(F) IN-KIND MATCH PROGRAM

The May 2014 AARP Public Policy Institute Spotlight addressed how the in-kind match provision was actually proposed by WSDOT due to the difficulty of states and localities meeting the traditional 50 percent Section 5311(f) operating match requirement. In the proposal, WSDOT argued that intercity bus transportation is as much about connecting rural towns to the rest of the country as it is about connecting small towns within a state to one another. It contended that long distance corridor investments made by private carriers, such as Greyhound, should offset the match requirement. In 2012, the U.S. Congress formalized the program by statute with the passage of the Moving Ahead for Progress in the 21st Century Act (MAP-21), the nation's surface transportation law. The act gave all states the certainty of the program's availability and rules over time. Today, about half the states have in place, or are planning, an intercity bus program that takes advantage of this in-kind funding arrangement, which is addressed in more detail later in the study.

FTA's in-kind match program was initiated in 2007 under SAFETEA-LU, made permanent in MAP-21, and expanded under the FAST Act by removing the 50 percent limitation imposed under previous FTA guidance. It was the result of the realization by private and public operators that intercity bus service could not be provided at a loss, as was the case with the 50 percent net cost of service Section 5311(f) participation limitation. As previously noted, Washington was the first state to use the program under its Travel Washington Program, with Greyhound as the provider of the in-kind mileage. It should be noted that while Greyhound was instrumental in the creation of the in-kind match program and has by far been the most prolific provider of the matching mileage, all intercity bus carriers are eligible participants.

An operator may use the value of the connecting unsubsidized intercity bus service as in-kind match for a Section 5311(f) funded route. The unsubsidized service must make a meaningful connection to the Section 5311(f) funded route. A meaningful connection, which provides a better travel experience for the customer along with greater ridership, has the following characteristics:

- Common transfer location;
- Connection times two hours or less; and
- Good connections for all or most of the subsidized service.

It is required that the subsidized carrier obtain written consent and supporting documentation from the operator providing the in-kind match mileage. The proposed subsidized route cannot

duplicate existing unsubsidized service. Greyhound requires the operator of the proposed connecting service to be an interline ticketing partner with the National Bus Traffic Association (NBTA) (i.e. becoming a Greyhound ticket agent), which can be a deterrent to rural public transportation operators participating in the program. Greyhound cites the following advantages to an interline ticketing agreement:

- Transit provider will have their schedules included in North America ticketing system.
- Transit provider will have their schedules, service and fare at a wider exposure at a national and industry level.
- Passengers will have "seamless" ticketing and itinerary.
- Transferring passengers will have reserved seats on Greyhound/national intercity bus carriers.
- Transit provider will receive rated compensation for each transferring passenger.

Additionally, Greyhound requires the service to be scheduled as opposed to demand response, with specific scheduled time points. Connections should be available at the origin and destinations points

on the feeder route. The carrier prefers the service to operate seven days per week, but requires at least five days of operation that must include weekends. Vehicles must be capable of carrying luggage and "Greyhound Connect" decals will be placed on the vehicles. Insurance should be provided at the \$5 million level. Greyhound has indicated that it will review each situation on a case-by-case basis.

Based on information obtained from Greyhound, it typically takes about 10-20 business days for administrative review and interline agreement to be processed. The ticketing and training process is 30-60 days from the time of the agreement to interline finalization. Greyhound notes that the service start date should incorporate a realistic timeline to accommodate implementation process and consider potential delays.

It is important to note that a traditional Section 5311(f) grant typically covers one-half of the operating deficit of the provider. However, when utilizing the in-kind match provision, the Section 5311(f) participation is all of the operating deficit, therefore, double what it would be for a traditional operating grant. SCDOT-OPT must keep this in mind when making grant decisions. Below is an illustration of a Section 5311(f) intercity bus project budget utilizing the in-kind match provision.

Total Operating Expense of Subsidized Route	\$500,000
Less Fare Box Revenue	\$150,000
Net Operating Cost (before in-kind match)	\$350,000
Cost of Unsubsidized Connecting Service* (in kind match)	\$350,000
Total Net Project Cost (including in-kind match)	\$700,000
Requested Grant Amount (50% of Net Project Cost including in-kind match)	\$350,000

*Available in-kind match from the unsubsidized miles may be calculated at a higher amount than will be used as in-kind match.

The program has benefited the traveling public, intercity bus carriers, and feeder operators. In 2016, there were 26 states participating in the in-kind match program, with 75 routes supported.³

It was noted that once a rural transit provider operates intercity feeder service, the operator must comply with FMCSA regulations. Feeder service should be operated as fixed route service, not user-side subsidy/demand response service. Connections should be available at the origin and destinations points on the feeder route and should include weekend service. The intercity bus carriers noted that there have been issues with rural operators receiving in-kind match for feeder connector service due to lack of interline ticketing and insurance issues. The intercity bus carriers also cited their frustrations in not being able to gain access to certain intermodal facilities across the State, such as the facility in Greenville.

³ Greyhound Presentation, Rural and Intercity Bus Conference, Asheville NC, October 3, 2016

XIV. SECTION 5311(F) FUNDING ALTERNATIVES

The 2012 study, *Intercity Bus Service Funding and Assessment Methodology*, explored the various alternatives currently used by states to fund intercity bus projects. The study found that there are two primary methods utilized by most states. The first, used by most states, is a grant funding process which involves intercity bus carriers applying for funding and state DOT personnel determining which applicants receive it based on prescribed project review criteria. This method is typically used when the DOT has not determined the intercity bus routes/service that it desires to support and leaves the carriers with the discretion to determine the service for which they wish to apply. This results with the carrier entering into a grant agreement with the state DOT for the provision of intercity bus service. Iowa, Colorado, Minnesota, and Pennsylvania use this funding method. North Carolina DOT also utilizes an application procedure, but has determined the routes it desires to fund prior to soliciting applications.

A different approach to intercity bus service funding is a system that more closely resembles a bid process. State DOT personnel identify a potential intercity bus route(s) that they desire to fund with Section 5311(f) funds, and then issue a Request for Proposals (RFP) to qualified bidders. The bidders propose a compensation rate for providing services on the identified routes. Typically, qualifications, experience and service details, including a marketing plan, are also submitted with the bid. In some situations, the DOT proposes the stops and schedule for the route, while this is often left to the discretion of the intercity bus carrier due to their knowledge of the intercity bus network.

WSDOT uses this RFP process for its intercity bus program. WSDOT advertises for the needed intercity bus service and contracts with a third-party provider after an open bidding process occurs. WSDOT contends that this process ensures that the most needed services are supported, while selecting the most qualified operators to provide service on a particular route. WSDOT also ensures the fair selection of a service provider through the screening of submitted applications by a committee of qualified professionals including WSDOT.

The study also found that other states, such as California and Oregon, are not limited to one funding approach. Caltrans provides intercity bus assistance with grants, RFPs, and a mixture of both approaches. In Oregon, funding is provided through a grant under a discretionary program wherein providers may apply for funding for intercity services based on local needs or provider concepts, while an RFP approach is used under a pilot project for service on particular corridors that were identified as service gaps by an Oregon DOT intercity bus needs study.

Ohio DOT (ODOT) uses a different approach, identifying local public or non-profit agencies that are interested in serving as project administrators. This approach is used due to the State of Ohio constitution precluding ODOT from directly entering into a contractual agreement with a private for-profit public transportation company such as an intercity bus carrier. Selected project administrators work with ODOT to conduct a competitive RFP process for the operation of the target interlined feeder service routes. Private intercity bus carriers, along with public and non-

public agencies are eligible to compete within the RFP process. The project administrators enter into third-party service agreements with successful private carrier applicants.⁴

⁴ Ohio DOT, Office of Transit, Ohio Rural Intercity Bus Program Guidelines, 49 U.S.C. Section 5311(f)

XV. CONCLUSIONS AND RECOMMENDATIONS

The purpose of the South Carolina Intercity Bus Study was to assess the intercity bus needs throughout South Carolina, particularly from the perspective of determining the utilization of the State's annual apportionment of FTA Section 5311(f) Intercity Bus Program funds. The Study relied on an inventory of the State's existing intercity bus service, inventory of connections to intercity bus stations/stops by the State's rural transit providers, identification of needs through geospatial analysis, demographic indicators, solicitation of input from intercity bus carriers, public transportation providers and general stakeholders, and literature review of related intercity bus documentation.

These conclusions and recommendations are based on the research and findings documented throughout the Study. SCDOT-OPT met the objectives of the 2012 Statewide Intercity and Regional Bus Network Plan and desires to continue to improve its intercity bus program through the most beneficial use of its Section 5311(f) funds.

Following are conclusions concerning the status of South Carolina's intercity bus service:

- The intercity bus route structure provided by Greyhound and Southeastern Stages today closely resembles the service provided by the carriers at the time of the 2012 Intercity Bus Study.
- Purchase of 26 intercity buses over the past four years with Section 5311(f) funds (Greyhound, 17 and Southeastern Stages, 9), has resulted in limited service impact.
- Stops in Dillon, Fort Jackson, and Manning have been terminated since the 2012 Study, with no new stops added during the period (Greyhound added a stop in already served Florence).
- The larger concentration of higher populated areas that are greater than 25 miles from an intercity bus stop are located the length of the State midway between I-85 and I-20, extending to the SC/NC state line between Rock Hill and Florence, including Greenwood.
- Charleston, Columbia, Greenville, and Myrtle Beach are by far the most productive intercity bus stops in the State.
- Only 14.7 percent of the State's population resides more than 25 miles from an intercity bus station/stop, about the same percentage recognized in the 2012 study.
- Temporal evaluation of South Carolina intercity bus service is very positive with a limited number of stops across the State between midnight and 6:00 AM.
- South Carolina has limited unmet intercity bus needs.
- Numerous private operators provide shuttle services between cities, airports, and universities primarily along the major corridors.

- There are 28 FTA-funded public transportation providers in South Carolina that are capable of providing feeder services.
- The major intercity bus trip generators—colleges and universities, medical facilities, commercial airports, and military bases—are generally well positioned relative to their proximity to intercity bus stations/stops.
- General public transportation service is available in 40 of the State's 46 counties.
- The State's rural transportation operators provide a combination of specialized intercity feeder service and demand response service that serves, or is capable of serving, intercity bus stations/stops, particularly in the areas that are void of traditional intercity bus service.
- Stakeholders indicated that local public transportation needs are a higher priority than intercity bus service.
- Feeder connector routes are the most efficient and cost-effective alternative to serve the areas of the State that need intercity bus service.

The following recommendations take into consideration the findings, observations, and conclusions noted above along with research and discussions with the SCDOT-OPT staff, intercity bus carriers and the State's rural transportation providers. In general, research concluded that, overall, South Carolina has very good intercity bus coverage, and efforts should continue to maintain and improve the State's intercity bus network.

- Provide a recommendation to the Governor to issue a partial certification for the Section 5311(f) program. At least 15 percent of the State's annual Section 5311(f) apportionment, which amounts to about \$300,000, should be used to support intercity bus related service. This is commensurate with the percentage of the South Carolina population that resides greater than 25 miles from an intercity bus station/stop.
- Continue to utilize a portion of the State's Section 5311(f) apportionment to provide intercity bus service to the areas void of service.
- Prioritize the use of Section 5311(f) funds for the operation of feeder services by the State's public transportation providers to established intercity bus stations/stops along the designated corridors.
- SCDOT-OPT should develop an education and awareness effort for the State's public transportation providers to provide information on potential feeder route services and solicit input.
- Apply performance measures to subsidized routes and services, including capital, and make service modifications as needed if measures are not being met, possibly shifting resources to more productive services if warranted.

- Require an annual report that includes ridership and revenue produced for each stop on each subsidized route.
- Increase volume of marketing of the State's intercity bus services in an effort to increase the public's awareness of available services. A minimum of two percent of each Section 5311(f) route budget should be earmarked for marketing activities.
- Increase the use of social media in an effort to reach more potential intercity bus passengers.
- Install intercity bus station/stop directional signage across the State to assist the public with locating stations/stops while also serving as marketing of intercity bus availability.
- Utilize available technology such as General Transit Feed Specification (GTFS) and make it available through such platforms as Google Transit or Google Maps to enhance the rider's intercity bus experience.
- SCDOT-OPT should carefully consider whether to solicit intercity bus projects for particular routes by utilizing a solicitation of bids for identified intercity routes or utilize an application format.



Appendix A: Survey Forms Intercity Bus Providers, Public Transportation Providers, General Stakeholders



The South Carolina Department of Transportation (SCDOT) is conducting a study to determine the level of intercity bus demand in the State of South Carolina. This information will be used to update the 2012 South Carolina Intercity and Regional Bus Network Plan, with particular focus on the State's intercity bus needs and how SCDOT can best utilize its annual apportionment of Federal Section 5311(f) Intercity Bus Program funds.

To assist in the planning process, you are requested to complete this brief survey. SCDOT is surveying intercity bus carriers, transportation planners, regional economic development professionals, city/county officials, and transportation providers and their customers throughout the State to obtain wide input on potential needs.

For more information please contact:

Charles Glover, RLS & Associates, Inc., Tel.: 919-971-5668, Email: cglover@rlsandassoc.com

1. Contact Information	
Name & Title	
Company	
Address	
City/Town	
State/Province	
ZIP/Postal Code	
Email Address	
Phone Number	

2. Please list all intercity bus schedules and stations/stops served in South Carolina to which you provide service:

3. Please attach timetables for intercity bus service provided in South Carolina

Choose File

No file chosen

4. Please list all Section 5311(f) funded vehicles (by model and VIN) your company has received through SCDOT, and the routes/schedules served by these vehicles.

5. You may also upload a PDF, Word, or picture file of your 5311 (f) funded vehicle inventory

Choose File

No file chosen

6. Please describe any other services you operate, such as connections to airports or Amtrak stations, in South Carolina.

7. Describe the sources used to inform the public of the availability of intercity bus services, such as brochures, website, posted schedules, local media, etc.

8. Describe your service connections with local public transportation providers in South Carolina?

9. Do you feel there are deficiencies in any of those connections?

(Yes
· ·	

No No

If yes, please explain

10. Describe specific areas or corridors in SC where there is a need for intercity bus service? This could include areas void of service or corridors where additional schedules are needed.

11. Is there a demand for intercity bus service to destinations that are not currently served?

🔵 Yes

🔵 No

12. If you answered yes to question 11, please identify route(s) by origin/destination pairs that could benefit most from the provision or improvement of services.

13. Is there demand for feeder services to existing intercity bus stations/stops?

🔵 Yes

) No

14. If you answered yes to question 13, please identify route(s) by origin/destination pairs that could benefit most from the provision or improvement of services.

15. In the last 4 years, please describe what type of route and stop modifications have been done within your network in South Carolina?

16. Additional comments

The South Carolina Department of Transportation - Office of Public Transit (SCDOT – OPT) is conducting a study to determine the level of intercity bus demand in the State of South Carolina. This information will be used to update the 2012 South Carolina Intercity and Regional Bus Network Plan, with particular focus on the State's intercity bus needs and how SCDOT can best utilize its annual apportionment of Federal Section 5311(f) Intercity Bus Program funds.

Intercity bus service is defined as:

"Regularly scheduled bus service for the general public which operates with limited stops over fixed routes connecting two or more urban areas not in close proximity, which has the capacity for transporting baggage carried by passengers, and which makes meaningful connections with scheduled intercity bus service to more distant points, if such service is available." Greyhound and Southeastern Stages are examples of a provider of intercity bus service.

Feeder service is defined as:

"Public transportation service that is designed to pick up passengers in a certain locality, and transport them to a transfer point where they can connect with an intercity bus to extend their trip to another stop on the connecting service."

To assist in the planning process, you are requested to complete this brief survey. SCDOT is surveying intercity bus carriers, transportation planners, regional economic development professionals, city/county officials, and transportation providers and their customers throughout the State to obtain wide input on potential needs.

For more information please contact:

Charles Glover, RLS & Associates, Inc., Tel.: 919-971-5668, Email: cglover@rlsandassoc.com

1. Contact Information

Name & Title	
Company	
Address	
City/Town	
State/Province	
ZIP/Postal Code	
Email Address	
Phone Number	

2. Please list all counties in which your public transportation services are provided.

3. Please list all intercity bus stations/stops to which you provide service:

4. Please describe any other services you operate, such as connections to airports or Amtrak stations.

Intercity bus service is defined as:

"Regularly scheduled bus service for the general public which operates with limited stops over fixed routes connecting two or more urban areas not in close proximity, which has the capacity for transporting baggage carried by passengers, and which makes meaningful connections with scheduled intercity bus service to more distant points, if such service is available." Greyhound and Southeastern Stages are examples of a provider of intercity bus service.

Feeder service is defined as:

"Public transportation service that is designed to pick up passengers in a certain locality, and transport them to a transfer point where they can connect with an intercity bus to extend their trip to another stop on the connecting service."

5. Do you currently have a route(s) that can be considered intercity feeder service (as defined above)?

(Yes

O No

If yes, please explain and identify intercity bus stops where the feeder service connects:

6. What do you view as the primary purpose of the passenger trips in your identified feeder service?

7. Describe specific areas or corridors in SC where there is a need for intercity bus service? This could include areas void of service or corridors where additional schedules are needed.

Intercity bus service is defined as:

"Regularly scheduled bus service for the general public which operates with limited stops over fixed routes connecting two or more urban areas not in close proximity, which has the capacity for transporting baggage carried by passengers, and which makes meaningful connections with scheduled intercity bus service to more distant points, if such service is available." Greyhound and Southeastern Stages are examples of a provider of intercity bus service.

Feeder service is defined as:

"Public transportation service that is designed to pick up passengers in a certain locality, and transport them to a transfer point where they can connect with an intercity bus to extend their trip to another stop on the connecting service."

8. Is there a demand for intercity bus service to destinations that are not currently served?

Yes

) No

No

If yes, please identify route(s) by origin/destination pairs that could benefit most from the provision or improvement of services.

9. Is there demand for feeder services to existing intercity bus stations/stops?

Yes

If yes, please identify route(s) by origin/destination pairs that could benefit most from the provision or improvement of services.

10. What is the average monthly ridership on your identified feeder service(s)?

11. Are there existing intercity and public transportation services in your area that may be terminated due to lack of ridership?

\bigcirc	Yes			
------------	-----	--	--	--

) No

If yes, what are these services?

Intercity bus service is defined as:

"Regularly scheduled bus service for the general public which operates with limited stops over fixed routes connecting two or more urban areas not in close proximity, which has the capacity for transporting baggage carried by passengers, and which makes meaningful connections with scheduled intercity bus service to more distant points, if such service is available." Greyhound and Southeastern Stages are examples of a provider of intercity bus service.

Feeder service is defined as:

"Public transportation service that is designed to pick up passengers in a certain locality, and transport them to a transfer point where they can connect with an intercity bus to extend their trip to another stop on the connecting service."

12. Identify any intermodal passenger facilities that are needed in your area that could allow connections between local public transportation and intercity bus?

13. Including the need for intercity bus services (as defined above), what are the greatest unmet public transportation needs in you rural/regional area? (please prioritize)

Unmet Need 1	
Unmet Need 2	
Unmet Need 3	
Unmet Need 4	

14. What county/regional entities could benefit from being included in the discussion of intercity bus services in your area?

15. Please describe any intercity bus needs that you have not addressed in an earlier question.

The South Carolina Department of Transportation - Office of Public Transit (SCDOT – OPT) is conducting a study to determine the level of intercity bus demand in the State of South Carolina. This information will be used to update the 2012 South Carolina Intercity and Regional Bus Network Plan, with particular focus on the State's intercity bus needs and how SCDOT can best utilize its annual apportionment of Federal Section 5311(f) Intercity Bus Program funds.

Intercity bus service is defined as:

"Regularly scheduled bus service for the general public which operates with limited stops over fixed routes connecting two or more urban areas not in close proximity, which has the capacity for transporting baggage carried by passengers, and which makes meaningful connections with scheduled intercity bus service to more distant points, if such service is available." Greyhound and Southeastern Stages are examples of a provider of intercity bus service.

Feeder service is defined as:

"Public transportation service that is designed to pick up passengers in a certain locality, and transport them to a transfer point where they can connect with an intercity bus to extend their trip to another stop on the connecting service."

To assist in the planning process, you are requested to complete this brief survey. SCDOT is surveying intercity bus carriers, transportation planners, regional economic development professionals, city/county officials, and transportation providers and their customers throughout the State to obtain wide input on potential needs.

For more information please contact:

Charles Glover, RLS & Associates, Inc., Tel.: 919-971-5668, Email: cglover@rlsandassoc.com

1. Do you think there are currently intercity bus needs in your area that are not being met?

-) Yes
-) No

2. If you answered yes to question 1, please identify three top areas of need by origin/destination pairs.

Area 1	
Area 2	
Area 3	

3. Including the need for intercity bus services (as defined above), what are the greatest unmet public transportation needs in your rural/regional area? (please prioritize)

4. If you are a social service agency/college estimate currently use intercity bus service?		clients/students do you
0	50	100

5. If your area **has** intercity bus service, on a scale of 1-4, with "1" representing no importance and "4" representing a high degree of importance, please rank the value of intercity bus service in your area. (indicate one)

	Not Important (1)	Somewhat Important (2)	Important (3)	Very Important (4)
Value of Intercity Bus Service	\bigcirc	\bigcirc	\bigcirc	\bigcirc

6. If your area **does not** have intercity bus service, on a scale of 1-4, with "1" representing no importance and "4" representing a high degree of importance, please rank the value of intercity bus service in your area. (indicate one)

	Not Important (1)	Somewhat Important (2)	Important (3)	Very Important (4)
Value of Intercity Bus Service	\bigcirc	\bigcirc	\bigcirc	\bigcirc

7. Please describe any intercity bus needs or concerns that you have not addressed in an earlier question.



Appendix B: Invitation Letter for Consultation Meeting



May 3, 2018

South Carolina Intercity Bus Carriers,

As the designated agency responsible for the administration of the Section 5311 program (49 U.S.C. 5311 Nonurbanized Area Formula Program), the South Carolina Department of Transportation (SCDOT), Office of Public Transit OPT), is required to spend 15 percent of its annual Section 5311 apportionment to carry out a program to develop and support intercity bus transportation, unless the Governor certifies that the intercity bus service needs of the State are being adequately met. The State has an annual intercity bus program apportionment of approximately \$1.7 million.

The assessment of intercity bus needs may be made relative to other rural transportation needs in the State. This determination must include consultation with the State's intercity bus providers. SCDOT is currently conducting an Intercity Bus Program Evaluation to determine South Carolina's intercity bus needs and gaps in service and provide recommendations for future use of the Section 5311(f) intercity bus program funds.

As part of this consultative process, SCDOT-OPT is providing the opportunity for intercity bus carriers to provide input into the development of the State's Intercity Bus Program. You are invited to attend a meeting scheduled for 10:00 AM on Thursday, May 31, 2018 to discuss South Carolina's Intercity Bus Program. Information regarding this meeting can be found below.

DATE:	Thursday, May 31, 2018
TIME:	10:00 AM - 12:00 PM
PLACE:	SCDOT/Office of Public Transit
	955 Park Street – Room 201
	Columbia, SC 29202

Please contact Mr. Bill Grooms, SCDOT-OPT Asset Manager, at (803) 737-2146 or email at groomswl@scdot.org to confirm your attendance at the meeting. If you are unable to attend but would like to participate in the meeting, teleconferencing will be available by calling (803)737-1589 at the designated meeting time.

We look forward to meeting with you on May 31st. If you have any questions, please contact Mr. Bill Grooms at (803) 737-2146 or Mr. Charles Glover, our RLS & Associates project consultant, at (919) 971-5668.

Sincerely,

Johnny Mmanu-ike Director Office of Public Transit



Appendix C: Completed Sign-In Sheet for Consultation Meeting

