UNION COUNTY TRANSIT TRANSIT FEASIBILITY STUDY

Final Report



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Prepared for: Union County, SC

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EXECUTIVE SUMMARY

Union County, South Carolina is located between Interstate 26 (I-26) and Interstate 77 (I-77) in the Upstate of South Carolina. The county is served by U.S Highway 176 from north to south. There are four municipalities within the county, the City of Union, and the Towns of Jonesville, Carlisle, and Lockhart. The rest of the areas are very rural in nature.

The county initiated a Transit Feasibility Study in November 2017. After several studies determined the need for public transportation in the county and connectivity within the region, the county decided to evaluate the feasibility of providing public transportation to the community. AECOM was retained as the consultant to conduct the transit feasibility study. The county, in partnership with the City of Union and the towns of Carlisle, Jonesville, and Lockhart, received State Mass Transit Funds from the South Carolina Department of Transportation to conduct the study. The study goals are detailed below:

- To determine the feasibility of providing transit service and support that such service will receive from the community.
- To understand the community's transportation needs.
- To understand the different transit service alternatives that could work in Union County.

The study concluded that providing public transportation service in Union County would be beneficial to address transportation barriers and increase mobility. Public input showed there is community support to implement transit service and interviews with elected officials showed that there is political will to make it happen.

Recommendations to initiate service in Union County were based on employment and demographic information, public engagement and available funding.

A demographic profile of the county was developed to understand the variables that would affect the provision of public transportation; this included an analysis of population, economic trends, employment and commuting patterns.

A robust public engagement process was followed to receive community input and understand the needs and expectations of the community. The public engagement was based on a multilayer approach to receive input from different segments of the population: pop-up events, field and online surveys, focus groups, and a traditional public meeting were some of the tools used to obtain community input. Almost 900 people participated and provided insightful and valuable information. The community identified access to jobs, medical appointments and grocery shopping as the most trip destinations. The community expressed its support for public transportation and considers it will be a valuable asset to the community and will contribute to improve their quality of life, giving them access to employment, and food and medical appointments.

The study considered State procedures required to initiate transit service in a community. South Carolina Department of Transportation will provide assistance for the implementation of new service, contributing \$80,000 per year for three years to head start the process; the County is responsible for 20% local match or \$20,000.

Three main recommendations are made for Union County:

1. Demand Response Service. This is a door to door service that operates county-wide. Initially the service is recommended to operate for limited period of time, due to constraints in funding. Once the pilot program period of three years is over, it is recommended to extend service for longer periods of time. Demand Response Service is open to the general public and will serve all trip purposes.

- 2. A vanpool program is recommended for years three and beyond and would serve employees and employers throughout Union County. The vanpool program would target employment trips specifically, and would require coordination efforts with employers and employees for the program to be successful. Work related trips were identified by the public as one of the highest priorities.
- 3. In the long term, medical and commuter trips to Spartanburg from City of Union are recommended. This service will work as an express route, providing regular commuting services for work and medical related trips. This route will connect with SPARTA Transit Center expanding the options for transit riders within the City of Spartanburg.

For those who don't, or can't, drive, public transportation will allow them to get to work, to school, to the grocery store or doctor's office, or just to visit friends, without having to engage a friend or relative to do the driving. Public transportation is a powerful tool to address inequalities and gives members of the community more opportunities to succeed in life.

1.0 OVERVIEW

Union County, South Carolina is located- between Interstate 26 (I-26) and Interstate 77 (I-77) in the Upstate of South Carolina. United States Highway 176 runs through the middle of Union County from the north to the south and several state highways traverse the County as well. There are four municipalities within the County, the City of Union, and the Towns of Jonesville, Carlisle, and Lockhart. Much of the southern and eastern portions of the County are within the boundaries of the Sumter National Forest.

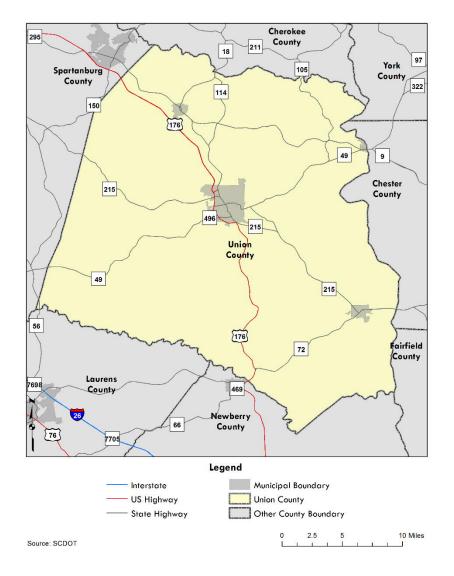


Figure 1-1 Union County Location

Union County, SC initiated the development of a transit feasibility study in November 2017. The purpose of the study was to identify the potential for public transportation services within Union County to improve local mobility, provide transportation options, and contribute to the area's economic development. Development of the study was directed by the County Manager, and managed by the Catawba Regional Council of Governments (COG), with active participation from community leaders and stakeholders. General public input was garnered through public

information meetings, and online surveys. AECOM Corporation assisted Union County in conducting the Transit Feasibility Study.

Union County, in cooperation with the City of Union and the towns of Carlisle, Jonesville, and Lockhart, received State Mass Transit Funds from the South Carolina Department of Transportation to conduct the study.

Very few motorized transportation options currently exist within the county other than private vehicles. Access to private transportation services is limited, with a handful of private taxi or special needs transportation services. Currently there is one private provider of transportation services in Union County, the Palmetto Princess Transportation & Outreach Services. The company offers work commuting, medical visits, childcare drop-offs and personal visits (counseling, recreation, shopping). The county-wide demand for transportation continues to rise while the awareness of this transit effort continues to be spread through word of mouth.

1.1 Study Scope and Schedule

The Union County Transit Feasibility Study was conducted over the course of approximately one year. An initial task for the study was to identify and document existing conditions and community needs, which were reported in the Existing Conditions Technical Memorandum. All elements of the study incorporated input from public and stakeholder involvement. Elements of the community outreach approach included meetings with the Steering Committee, stakeholder interviews, a community survey, an online survey, and public information meetings.

1.2 Study Goals

The goals that have guided the development of the Feasibility Study are summarized below:

- To determine the feasibility of providing transit service and support that such service will receive from the community.
- To understand the community's transportation needs.
- To understand the different transit service alternatives that could work in Union County.

2.0 EXISTING PLANS AND STUDIES

During the review of existing plans and studies phase, three Union County planning documents were identified as relevant to the Transit Feasibility Study. They are described below.

2.1 Comprehensive Economic Development Strategy (2012-2016)

The Comprehensive Economic Development Strategy (CEDS) has been developed every year since 2012 by the US Economic Development Administration for the Catawba multi-county district. The CEDS program performs an area-wide assessment of economic trends and needs within the region and it also reviews programs and activities of the Catawba Regional Council of Governments and provides a list of capital needs in the district. Union County is 1 of 4 counties that were assessed by the CEDS.

The CEDS document included input from the numerous stakeholders involved in economic development at the local, regional or state level. The group identified factors that impede economic development and also opportunities that continue to encourage economic development. Some of the strategies relevant to this study are:

- Expanding and upgrading to current standards the local infrastructure of the region, including water and sewer services, transportation facilities, telecommunications systems, affordable housing, recreation sites, educational facilities and other public facilities;
- Supporting local planning and economic development programs through technical assistance, and work with local Planning staff to update zoning and similar codes to reflect the latest innovative and creative design concepts such as encouraging the development of a mix of employment and residential uses (office, research, light industrial, limited commercial and high density residential) at appropriate locations or urban villages which would encourage the development of compact mixed use, small-lot, pedestrian-oriented communities;
- Assisting with increasing the quality of life in the region's communities to attract and retain the "creative class" of young workers through investments in higher and continuing education, historic preservation, entertainment/arts/culture, sports/tourism and alternative transportation options;

The CEDS provides an analysis of socio-economic trends for Union County and the region, and determines future growth potential. Union County potential growth is based on manufacturing jobs, access to the transportation network, proximity to Spartanburg, and some recreational opportunities including the tourist attractions of the City of Union and Rose Hill Plantation Historic Site.

2.2 Union County Comprehensive Plan

Union County is in the process of developing a Comprehensive Plan and the transportation element is one of the components being assessed and developed. The summary below describes public input concerning the transportation element of the plan.

The plan conducted a Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis, which indicated a "robust transportation network" as one of the strengths. No weaknesses related to transportation were identified in this exercise.

Land Use, Economic Development & Transportation Focus Group

Three meetings have been held to discuss land use, economic development and transportation components of the plan. This group identified the need for public transportation within the County and connecting to Spartanburg (the group noted trips specifically for health care purposes) and nearby cities in a period of 2 to 5 years as a way to bring prosperity into the County.

Focus group members identified the need for good public transportation and buses for transportation as a part of the Comprehensive Plan goals and outcomes. When the group was asked about transportation improvement needs, public transit service for local trips and connections to Spartanburg were noted multiple times.

2.3 Ten at the Top Program (TATT)

TATT is an initiative created to foster trust and collaboration through partnerships and cooperation that impacts economic vitality and quality of life across upstate South Carolina, according to the organization's website. The initiative focuses on five driver areas: Human Potential, Economic and Entrepreneurial Vitality, Sustainable Growth, Natural Beauty and

Resources, and Community Vibrancy. The TATT is also addressing the role of transportation in the regional economy, as well as the challenges communities in the Upstate face to provide mobility options to a growing and changing region.

The Connecting Our Future Fact Book provides a qualitative assessment of the region, opportunities such as ride shared services, identified as an effective way to reduce transportation gaps. The Fact Book also identifies gaps in vehicle ownership, limited or absence of public transportation services and dispersed population as barriers to mobility.

2.4 South Carolina 2040 Multimodal Transportation Plan Regional Transit and Coordination Plan Catawba Region (2014)

The Catawba Regional Transit and Coordination Plan Update identified existing public transportation services, needs, and strategies for the next 20 years. The plan was prepared in coordination with the development of the 2040 Multimodal Transportation Plan.

The plan identifies regional demand and opportunities for improving public transportation. Among the regional needs, the plan identifies the need to provide demand response services to Union County, as well as establishing a commuting route that connects Union County with the Spartanburg Region.

2.5 Catawba Regional 2018 Housing Assessment

The Catawba Regional Housing Assessment evaluates economic conditions and housing affordability within the region and provides an assessment of housing costs and its effects upon region's residents.

After the 2009 recession, Union County experienced high unemployment rates of up to 20.4 percent. Since then the county has experienced steadily growing employment opportunities. In 2018, the county reported a 4 percent unemployment rate, an all time low. Housing and proximity/access to jobs are a key combination to ensure economic mobility, and providing public transportation services will address some of the challenges the county faces currently in terms of housing affordability.

3.0 EXISTING TRANSPORTATION SERVICES

There are several transportation services providers in Union County generally associated with human services and non-profit agencies. These service providers are described below

- The South Carolina Vocational Rehabilitation organization has one 15-passenger van to take participants from Jonesville to Gaffney.
- The Potter's House, a non-profit agency whose primary focus is the distribution of food from the Second Harvest Food Banks, has one box truck that is used for for food pickups at the distribution sites. Volunteers collect them at Potter's House and deliver to homes in Union County using their personal vehicles with no mileage reimbursement.
- The Council on Aging (COA) is a private, non-profit agency that focuses on services for the elderly through three Senior Centers located in Buffalo, Jonesville, and City of Union. The Jonesville center provides congregate lunches and the preparation and distribution of 'Meals on Wheels'. Meals on Wheels volunteers use their personal vehicles (non-reimbursed mileage or monetary stipend) to deliver meals to citizens in the City of Union

and the Buffalo community. Supplementing the volunteers' vehicles, the COA has four mini-vans: one in Jonesville; one in Buffalo; and two in Union. It also has two 1990 Dodge vans that are used in emergencies when one of the other vans is inoperative and out of service.

- The Union County Veterans' Affairs Office provides transportation for VA patients that have VA medical appointments at the Dorn VA Medical Center or the Community Based Outpatient Care Facilities in Greenville and Rock Hill.
- The Union County Disabilities and Special Needs Board provides limited transportation to their clients. The agency has six vans they use to transport clients from their homes to the center and back. They also have nine vans that are located in agency homes; those vans provide trips to doctors' appointments, shopping and other. System users have no access to transportation to and from jobs.

3.1 Other Regional Transportation Providers

Alpha and Omega Taxi Service is one of the two known private, non-contract transportation providers in Union County. The owner of the company is also the driver. He sets his own hours and drives when it is convenient to his personal schedule.

The other provider is the Palmetto Princess Transportation & Outreach Services. The company offers work commuting, medical visits, childcare drop-offs, personal visits (counseling, recreation, shopping). The Palmetto Princess Transportation & Outreach Service transports six clients to and from work with one vehicle. The County-wide demand for transportation continues to rise while the awareness of this transit effort continues to be spread through word of mouth.

There is one contract private provider located in Carlisle, called 'MJS Transportation Service' that is under contract to LogistiCare Solutions, LLC, the South Carolina DHHS Non-Emergency Medical Transportation (NEMT) carrier for SC Region 2 (which includes Union County). MJS Transportation Service operates two Dodge Caravan minivans to meet the transportation needs for the County's Medicaid and Medicare recipients. Since services are operated weekdays from early morning until late afternoon, there is little time for private pay customers.

Two other transportation providers are often seen operating through the County. The Chester Connector, operated by Senior Services, Inc. of Chester (Chester County,) passes through Jonesville and Lockhart en route to Spartanburg. And Spartanburg County Transportation System vehicles are sometimes seen in Union County providing medical transports from and to the Spartanburg Regional Medical Center's facilities.

4.0 PUBLIC ENGAGEMENT

One of the key tasks of the study was community and agency coordination. This task involved soliciting input regarding potential transit needs from key stakeholders, area agencies, and the general public. This section includes summary reports from the community and agency coordination task elements.

4.1 Outreach Strategy

Recognizing that public and stakeholder input would be essential in developing project recommendations for the county, the project team involved the public regularly in the planning process. The project team facilitated an inclusive stakeholder outreach effort that included local elected officials, regional planning partners, faith based organizations, business and community leaders, educational institutions, neighborhood planning groups, and residents within Union County.

Outreach activities were designed to help achieve the following goals:

- Inform and educate key stakeholders about the overall project development process, opportunities for input, project schedule and objectives, and the decisions that must be made as part of the project process;
- Solicit comments from the community stakeholders on transportation-related issues of concern pertaining to mobility needs;
- Explore with the stakeholders how the transportation system within the county can be better coordinated with land use and development decisions and economic development strategies benefitting the community and region; and
- Incorporate stakeholder input, where possible and appropriate, into the feasibility study recommendations.

4.2 Opportunities for Stakeholder and Public Comment

To facilitate public and stakeholder engagement, the project team worked with Union County staff, the Catawba Regional COG, SCDOT and other planning partners to provide multiple opportunities for comment.

The public outreach activities included:

- Steering Committee Meetings
- Surveys
- Focus Groups
- Public Meetings
- Peer Workshop

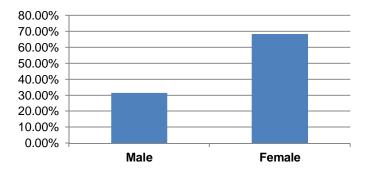
4.2.1 Steering Committee Meetings

The project team engaged the Steering Committee seeking a better understanding of the community needs and to receive guidance on where to concentrate the efforts in the alternative development. These meetings occurred in November 14, 2017 and May 2, 2018 and the meeting minutes can be found in Appendix A.

4.2.2 Public Survey Input

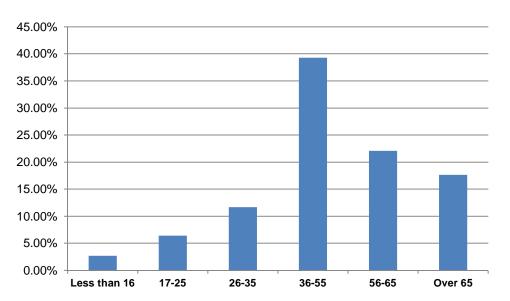
Two surveys were distributed to gather information from the public: the first one from December 1 2017 to January 3 2018 to understand the community demographics and transportation needs, and support for public transportation. The second survey was distributed from October 2nd to November 2nd 2018 to determine, from the different options to initiate public transportation service, which one the public would prefer. The online surveys were distributed by the COG to City of Union and Union County residents. Results from the almost 800 completed surveys provided insights on the public's current travel mode and ranking of the most important mobility need.

A summary of the survey results with some of the most relevant findings is presented below. All survey responders were English-speaking individuals.

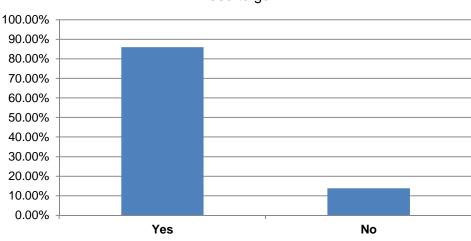


Question 1 indicates that the majority of respondents were female (70%).

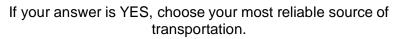
Question 2 displays the majority age group of survey responders. The largest number of survey responders had an age range between 36-55 years of age.

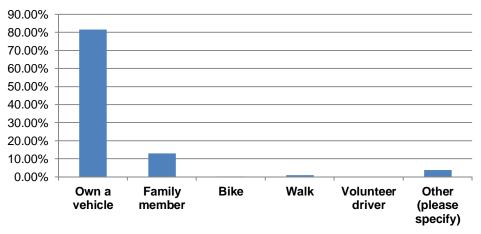


Questions 4 and 5 show that most of the survey respondents have a reliable source of transportation. However, through conversations with community members and social services agencies, the consensus is that people without transportation rely on family members and friends to move around.

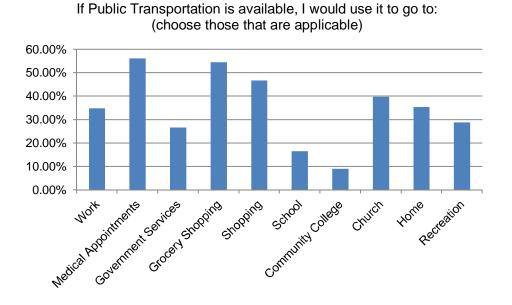


Do you have reliable transportation to get you where you need to go?

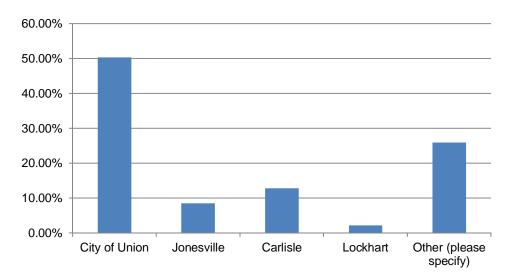




Question 6 indicated that more than 50% of the survey respondents would use transit services to go to medical appointments and grocery shopping.



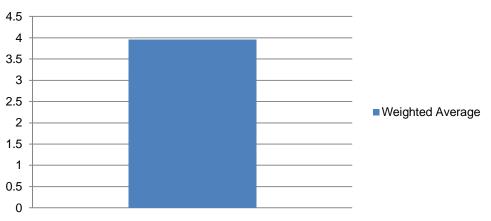
Question 7 indicates that most of survey responders reside in the City of Union (50%). Of the 25% that responded that they were living outside of municipalities, 38% said they live in Buffalo and 22% in unincorporated parts of the County.



Question 8 refines the result from question 6 above and asked the participants to select their three main destinations. Work was selected as the number one destination, followed by home and grocery store.



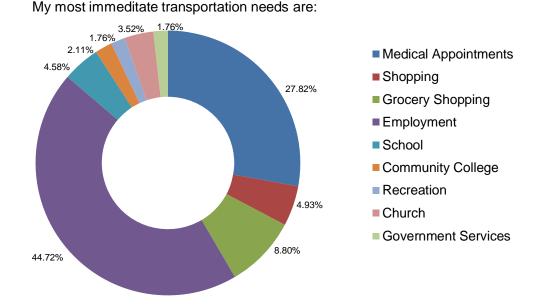
Overall, survey respondents rate the need for public transportation as high.



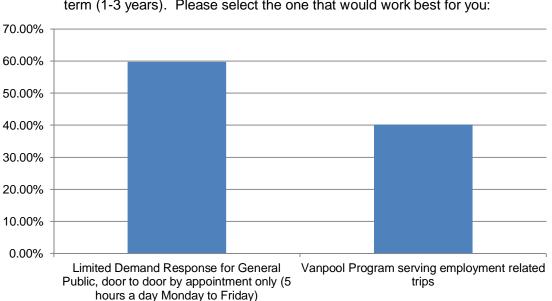
On a scale of 1 (lowest) to 5 (highest), please rate the need for a public transportation system in Union County

The second survey was distributed along with the Comprehensive Plan survey that is being developed in parallel to this study by Union County and the Catawba COG. This survey provided information about community preferences to initiate transit service.

The first question shows that the most immediate transportation needs are related to employment (45%), followed by medical appointments (28%). This response is aligned with the initial response received during the first survey when the community selected work as the most important destination if transit service was available.

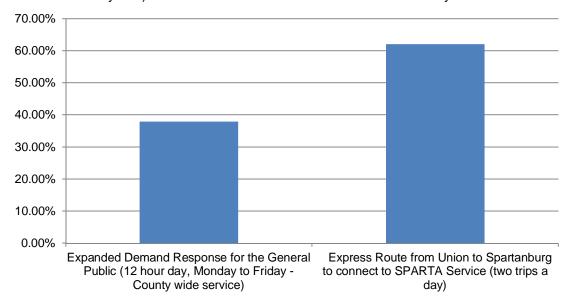


When the public was given the option to choose between limited demand response and vanpools in the short term (1-3 years), 60% preferred the demand response option.



Two public transportation options are being considered for the short term (1-3 years). Please select the one that would work best for you:

In the long term, the public chose an Express Route as the preferred alternative with 62%.



Two options are being considered in the Medium - Long Term (3+ years). Please select the one that would work best for you:

4.2.3 Focus Groups

The project team met with four focus groups to gather information related to specific segments of the community. The groups included the following: human service agencies, business and industry representatives, education and faith based groups, and government representatives. These meetings were held on December 1st, 2017 and phone interviews were also conducted with those that were unable to participate. Discussions with the focus groups informed the development of the project, specifically related to community needs and support. A summary of the discussions is presented below.

A. Human Service Agencies

With an administrative office in Jonesville and a work center in Gaffney (Cherokee County), the **South Carolina Vocational Rehabilitation** organization has one 15 passenger van to take participants from Jonesville to Gaffney. This organization's greatest challenge is arranging for participants who reside in the City of Union and other Towns to reach the Jonesville office where they can then join the vanpool. For those program participants living closer to the Gaffney work center, transportation to and from the center is an even greater challenge. Currently, there are approximately eight Union County citizens who are participating in the Vocational Rehabilitation. The agency's representative said that the number of program participants has been as many as ten in the past few years.

The Potter's House is a non-profit agency whose primary focus is the distribution of food from the Second Harvest Food Banks with facilities located in Charlotte, NC and Spartanburg, SC. The Potter's House facility in Jonesville is the County's center for receiving the large shipments from the two Food Banks; sorting and redistributing the goods; and then delivering the food for distribution at First Presbyterian Church in the City of Union and the Town Hall in Carlisle. The agency has one box truck that is used for travels to the distribution sites for food pickups. Deliveries to homes in Union County are provided by Volunteers who use their personal vehicles with no mileage reimbursement.

The **Council on Aging** (COA) is a private, non-profit agency that focuses on operations and administration of three Senior Centers located in Buffalo, Jonesville, and Union. The Jonesville center provides congregate lunches and the preparation and distribution of 'Meals on Wheels'. **Meals on Wheels** volunteers use their personal vehicles (non-reimbursed mileage or monetary stipend) to deliver meals to citizens in the City of Union and the Buffalo community. The COA has programs and recreational activities that sustain the life skills for the aging population.

Supplementing the Volunteers' vehicles, the agency has four mini-vans: one in Jonesville; one in Buffalo; and two in Union. It also has two 1990 Dodge vans that are used in emergencies when one of the other vans is inoperative and out of service. The Executive Director uses his personal vehicle for agency business because he relinquished his assigned company vehicle to sustain operations for the Senior Citizens.

The **Union County Carnegie Library** located in downtown Union has a two-seat cargo van and a used Ford Crown Victoria sedan that was 'salvaged' from the County's motor pool and used only by staff for company business. Since the loss of its Bookmobile several years ago, the only means for Union County citizens to access library materials is to come to downtown Union. Staff would like to provide transports from the communities to the central facility; however, it has no means to transport passengers.

Union County Probation and Parole has mandatory classes which program participants (parolees) must attend. Classes are currently conducted in Greer and Spartanburg. Obtaining out-of-county transportation is definitely a challenge, and representatives said that some participants are paying out-of-pocket monies to ensure reliable transportation. If reliable transportation is not available, and participation in the classes does not occur, parolees risk violating parole and going back to prison.

Union County Recreation Center has two vans that it uses for its youth programs and for Staff's daily transports for general administration tasks. These vehicles are not available for other County departments' use.

SC Works, in partnership with the State's Department of Employment and Workforce (DEW), provides job training skills and assists citizens in obtaining employment. Due to the limited number of job opportunities for unskilled labor in Union County, most program participants with reliable transportation obtain jobs in Spartanburg County. However, the unemployed with no transportation are limited to jobs within walking distance of their residences or depend on someone's good will to transport them back and forth. With the relocation of businesses to the North Duncan Bypass and away from City of Union business district, greater challenges are presented because it is difficult to walk that far. Program participants of SC Works are in need of transportation at all times of day, particularly on second shifts and weekends, because they do not have the funds to purchase their own vehicles.

B. Business / Industry

Business representatives stated that their companies are not encountering (or have very few) employment issues directly associated to the lack of a public transportation system. Tardy incidents and periodic absences occur when an employee is unable to get transportation to the worksite; however this does not adversely affect the Company's operations or production. Employees are responsible for arranging their own transportation to worksites.

Employees have informal carpool agreements, but the companies are not involved in organizing any formal rideshare programs. Nor do any of the surveyed companies provide stipends to

employees to defer transportation costs to and from the workplaces. This is because none of the companies require employees to travel to multiple locations.

One company representative stated that he thought that his corporation might entertain discussing transportation alternatives, such as having a centralized contact for ridesharing or assistance with a vanpool. Another representative noted that having a reliable taxi service in the County would be beneficial. And another representative commented that an employment vanpool might benefit all employees and employers; however some entity will have to take the lead in organizing it.

All of the representatives think that the elected officials would financially support a County-wide transportation system as long as the program is well thought out and the cost of the operations is shared by the citizens that use the service.

C. Education & Faith-Based

Education officials think that transit services could provide a powerful visible example and a renewed sense of hope to the younger generation that things are happening in the area and a positive future for them exists in the County.

Everyone in this group agreed that a public transportation system is needed in Union County, particularly in the City of Union, because it is no longer a 'walkable' community with most employment opportunities having been relocated to areas around the North Duncan Bypass.

USC-Union is experiencing strong growth, not only expanding the number of facilities but also its partnership with Spartanburg Community College. Satellite classes are offered at the latter, but students must have their own reliable transportation to move between the campuses. The perception is that this prohibits some students from participating in the program. Focus Group participants felt that the University can be an important voice and driver of a public transportation initiative.

Many churches own transportation vehicles which vary in age and seating capacity. It is not uncommon for one church to assist another, especially when there is a common good for the citizens. Churches are reliant upon volunteers, however, to operate the equipment; thus, transports during the week are more difficult to schedule than weekend activities.

D. Government / Public Officials

Citizens residing in the towns of Carlisle, Lockhart, and Jonesville are reliant upon family and friends for transportation when they are unable to drive themselves. Since Jonesville has no grocery store, residents travel frequently out of the town limits for shopping and other life-essential purposes. Residents most frequently patronize the stores in the City of Union, much like the residents in Lockhart.

The mayors of the towns recognize that public transportation would greatly benefit their communities; however, only Jonesville may have some financial means to support the operations. In-kind resources (such as office space at a Town Hall) may be a possibility for the rest of the towns. One mayor thought that a small fee (possibly \$3.00) added to the annual vehicle license tag assessment would be accepted by the County citizens.

The Mayor of Lockhart noted that the town is totally reliant upon volunteers to maintain its own operation. It is unrealistic to expect the citizens in this town to do any more for the community because the population is aging and current volunteers are already doing most of the work for others. Additional community engagement is unrealistic at this time.

Two former government officials stated that past political and financial missteps by high profile leaders shook the community's confidence and somewhat divided the County. Those officials think that public sentiment has evolved and that there is increased cooperation between the City of Union and the surrounding communities. Consequently, there is greater momentum for some type of public County-wide transportation service to happen since everyone is working together for a common goal.

4.2.4 Public Meeting

Two public meetings were held as part of the project development. The first one was designed as a pop-up event, and held during the City of Union Christmas Parade on December 1st 2017. The project team had the opportunity to talk to many members of the public about community transportation needs with nearly 90 community members responding to the community survey during the parade.





A public meeting was held on Tuesday, August 21 2018 at Main Street Junction, an event center in downtown Union. The meeting purpose was to allow the Project Team time to present its analysis and proposed alternatives, while obtaining valuable input from a diverse group of citizens. Representatives included both local and state government officials; educators and higher education administrators; health and human service agencies; non-profit organizations; and medical providers and facilities. Forty-five (45) persons were in attendance.

After an overview of the Study's activities to date, with particular emphasis on the fact that SCDOT

has allocated \$100,000.00 for transit service for a three-year pilot period, the attendees were asked to assist the Project Team in prioritizing the service standards. These include the following:

• What are the trip purpose(s) most immediately needed by County citizens' (specifically, agency's clients)?

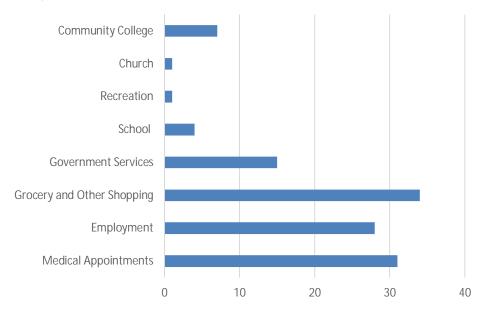
- What is the most viable short-term solution to meet the clients' needs? [Two options: limited Demand Response service or a Vanpool Program]
- What is the best long-term solution for Union County to meet citizens' transportation needs?

Each attendee was provided dot stickers to be attached to display boards that corresponded to the aforementioned service alternatives. Attendees were asked to place their stickers on their preference, recognizing that the funds for the pilot period are limited and will not cover the required costs for all the available options. The tabulation of the dot exercise follows:

Most Immediate Transportation Needs: (greatest number of votes to lowest)

- 1. Medical appointments
- 2. Grocery and Other Shopping
- 3. Employment
- 4. Government Services
- 5. Community College
- 6. School
- 7. Church and Recreation (tied votes)

The chart below graphically depicts the actual number of responses.



My agency's clients most immediate transportation needs are access to:

Short-Term Solution (1-3 years)

The following are the two preferences receiving the greatest number of 'votes' indicated by the dot labels placed on the display boards.

- 1. Limited Demand Response Service that operates on weekdays between the hours of 9:00 AM to 2:00 PM;
- 2. A Vanpool Program serving employment-related trips originating at the City of Union and traveling between Union County and Spartanburg.

These charts summarize the actual votes.

Limited Demand Response, Medical & Shopping Trips (Mon Fri.)	# of Votes
7:00 am to Noon	0
Noon to 5:00 pm	4
9:00 am to 2:00 pm	14

Vanpool Program for employment trips, originating at	# of Votes
City of Union	16
Jonesville	3
Carlisle	3
Lockhart	3
Other	0

If Vanpool service was provided, your clients would like to go:	# of Votes
Within Union County, to area Manufacturers	6
Between Union County and Spartanburg	14
Other	1

Long Term Solution (4+ years)

Attendees had two options to consider for a long-term transportation solution for their clients. The most popular option was to expand demand response service. The options and respective votes are shown below.

Options	# of Votes
Expanded Demand Response for the General Public - 7:00 am to 7:00 pm, weekdays	23
Express Route from Union County to Spartanburg to connect to SPARTA Service originating from:	12
City of Union	5
Jonesville	2
Carlisle	0
Lockhart	2
Other - Multiple stops to Spartanburg	3





4.2.5 Peer Workshop

A meeting was held with four counties in South Carolina that are similar in nature to Union County to discuss how they are addressing public transportation and what they have experienced in providing it. The meeting was held on August 18, 2018 and was conducted in a teleconference format. Meeting minutes can be found in Appendix A.

The most important lessons learned from the discussion are reflected below:

- a. Finding additional funding for start-up is very beneficial and allows the provider to begin service with a much stronger structure. For instance, Lancaster County began transit operations in 2009; the system was initially funded through private funding because the agency wanted to know how the service would be utilized before applying for State funds. The funding included vehicle acquisition. After the initial three year period they were able to access funds pass through the South Carolina Department of Transportation and became a recipient. Prior to this service some agencies were providing sporadic transportation services but not to the general public.
- b. Developing accurate tracking systems to track operational statistics is paramount to secure funding with SCDOT.
- c. Trip purpose varies depending on the community, some are oriented to medical and general purpose trips, while others are more work related trips across county lines.
- d. Interagency cooperation is very important to ensure the community at large is reached with the service.
- e. Hours of operation are determined by the type of service provided. For instance work related trips begin earlier in the morning and end later in the evening, while medical trips begin later and end earlier during the day.
- f. Service providers stated that if service begins as medical service, transitioning to the general public is very difficult.

- g. It will be advisable to develop a communications plan to provide effective information County-wide.
- h. Developing a marketing plan that includes branding, logos, name tags and supplemental materials, press release templates, color schemes, is important to create ownership in the community.

5.0 FUTURE UNION COUNTY TRANSIT SERVICE OPTIONS

5.1 New Service Evaluation Methodology

The new services proposed in this document were developed based on input from a variety of sources which are summarized in the *Union County Transit Feasibility Study Existing Conditions Report.* The initial sources included a review of recently completed and/or ongoing plans, studies, and initiatives affecting land use and transportation decision making in Union County. A peer review was conducted to indicate how other similarly sized counties in South Carolina utilize transit and how they perform. Data was collected to analyze the existing conditions in the County and to propose potential transit service applications. Additionally, the data was also used for the purpose of identifying areas most likely to support some form of transit. The data includes population and employment densities; socioeconomic and land use data; and a transit target market analysis. A public survey was conducted during this time period to solicit input and public opinion on aspects of potential transit service. The summaries of these efforts are presented in the *Existing and Future Conditions Report*. Union County staff was closely involved in the study process and contributed their service recommendations.

5.2 Compilation of Information from Prior Planning Tasks

In this section, the findings from the *Existing Conditions Report* were combined with an evaluation of Union County considering the propensity of the study area for transit service.

The population and employment densities in the study area were compared to industry standard density thresholds for various transit service options. Several studies in the past thirty years have attempted to identify relationships between transit ridership and land use development patterns.

5.3 Transit Service Alternatives and Recommendations

As Union County currently does not provide public transportation, the range of choices is broad on what level of investment may be appropriate. Developing suitable transit service alternatives involved examining community demographic characteristics, listening to community and stakeholder input about local needs and travel patterns, and determining which types of transit services would best meet the local needs. The following section provides a description of possible transit service alternatives, discusses what types of transit communities similar to Union County offer, provides a summary of community findings, and presents a suite of potential transit alternatives.

5.3.1 Transit Options

Transit can take many forms. Intensity of development, population and employment distribution, and community demographics help to define what types of transit may be feasible within an area. In general, greater investment in transit is needed in areas with higher population and employment densities. Lower densities do not mean that transit service is not needed, rather the types of modes change based on the intensity of development. The range of transit options includes different technologies with varying operational characteristics. Table 3-1 provides an overview of common transit services types found in the United States and South Carolina.

Transit Service Type	Primarily Serves	Where it Operates	Operational Characteristics	Technology
Commuter Rail	Long distance commuter trips	Between outlying areas and major activity centers	Regularly scheduled service operating during commuter peak periods, with some mid-day service; Stops are infrequent at major intercept points	At-grade rail
Heavy Rail	Short to moderate distance trips	Highly urbanized areas with intense residential or employment development	Regularly scheduled frequent service operating daily during defined service period; Stops are at major intercept points spaced one-mile or more apart	Separated- grade rail
Light Rail	Short to moderate distance trips	Highly urbanized areas with intense residential or employment development	Regularly scheduled frequent service operating daily during defined service period; Stops are at major intercept points spaced one-mile or more apart	Both at-grade and separated grade rail
Commuter Express Bus	Long distance commuter trips	Between outlying areas and major activity centers	Regularly schedule service operating during commuter peak periods, with some mid-day service; Stops are few and located at beginning and end of route	Coach bus
Fixed-Route Bus	Local trips	Moderate to high density areas	Regularly scheduled service operating during defined service period; Stops are located at regular intervals along route	Large, medium or small buses; Vans or cut- away buses in smaller markets
Fixed-Route Bus with Route Deviation	Local trips	Moderate to low density areas	Regularly scheduled service operating during defined service period; Stops are located at regular intervals; Service deviates from route within defined service area for scheduled on-request stops	Medium or small buses; Vans or cut- away buses
Demand Response	Local trips	Moderate to low density areas	Service period is defined and schedule is based; Stops are based on service requests	Small buses; Vans or cut- away buses
Subscription Service	Commuter trips	Moderate to low density areas	Regularly scheduled service for identified market at defined stops	Small buses; Vans or cut- away buses

Table 5-1 Transit Service Options

Transit Service Type	Primarily Serves	Where it Operates	Operational Characteristics	Technology
Jitney	Local trips	Moderate density areas	Service operates on a fixed route without a fixed schedule or fixed stops	Small buses; Vans or cut- away buses
Vanpool	Long distance commuter trips	Moderate to low density areas	User defined schedule and stops	Full-size or mini-vans

All of the transit options listed in Table 5-1 except vanpools are operated by either a public or private operator. Vanpools are unique in that generally users operate the vehicles. The level of administration varies greatly for vanpool programs, from only providing assistance in forming vanpools, to also purchasing vehicles, providing an insurance pool, maintaining vehicles, and driver training. Additional transit options not listed in Table 5-1 are voucher programs and Transportation Demand Management (TDM) programs. Voucher programs provide subsidized trips for eligible users in which vouchers are used to pay for trips from private transportation providers, such as taxis. A TDM program focuses on reducing single occupant vehicle (SOV) trips and encouraging travelers to shift to other modes to reduce congestion and environmental impacts of SOV trips. A vanpool program can be part of a TDM program, but TDM programs also include promoting carpools, taking transit, walking, bicycling, changing work hours, or telecommuting to reduce SOV trips.

The population and employment densities in the study area were compared to industry standard density thresholds for various transit bus service levels. Several studies in the past thirty years have attempted to identify relationships between transit ridership and land use development patterns. Transit Cooperative Research Program (TCRP) Report 16 provides scales for residential and employment densities that have been developed to identify the general type of transit service that can be supported by different local conditions. These are shown in **Tables 5-2** and **5-3**.

Table 5-2 Relationship between Residential Densities and Transit Services

Resident <u>ial Density</u>	Transit Thresholds
Type of Service	Residential Density Threshold
Ridesharing, van pools, employer shuttles, circulators and rural transit services (Demand Resonse)	Less than two dwelling units/residential acre
Flex Routes	Two to four dwelling units/residential acre
Local Bus (1 bus every hour)	Four to six dwelling units/residential acre
Intermediate Bus (1 bus every 30 minutes)	7 to 14 dwelling units/residential acre
Frequent Bus (1 bus every 10 minutes)	15+ dwelling units/residential acre

Table 5-3 Relationship between Employment Densities and Transit Services

Employment Density Transit Thresholds			
Type of Service	Employment Density Threshold		
Ridesharing, van pools, employer shuttles, circulators and rural transit services (Demand Resonse)	Areas with two or less jobs/acre and 1,000 or less contiguous jobs		
Flex Routes	Areas with two to nine jobs/acre and 2,000 or more contiguous jobs		
Small to large bus fixed route service complemented by paratransit service with 30 to 60 minute frequency	Areas with 10 to 25 jobs/acre and 3,000 or more contiguous jobs		
Large bus fixed route service complemented by paratransit service with 15 to 30 minute frequency	Areas with 26 to 49 jobs/acre and 5,000 or more contiguous jobs		
Large bus fixed route service complemented by paratransit service with 5 to 15 minute frequency. Connections to circulators possible.	Areas with 50+ jobs/acre and 10,000 or more contiguous jobs		

The thresholds listed in **Tables 5-2** and **5-3** are generalizations that provide an overall estimate of the need and level of potential transit service. Corridor-specific factors, such as the mix of land uses, pedestrian accessibility, local travel patterns, roadway congestion, urban design elements, and transit service characteristics (existing or proposed) also have an effect on transit ridership. Nonetheless, this general information on residential and employment thresholds can be used at a planning level to identify areas or regions where scheduled transit service may be successful.

Figures 5-1 and **5-2** indicate the residential and employment densities in Union County in 2010. The figures indicate that the City of Union and Union County are low-density areas. There are no census tracts with more than two households per acre and no census tracts with more than two jobs per acre. Therefore services such as demand response, ridesharing, vanpools and employer-provided shuttles are most appropriate, although that does not preclude other types of services if they can be provided in a cost-effective manner.

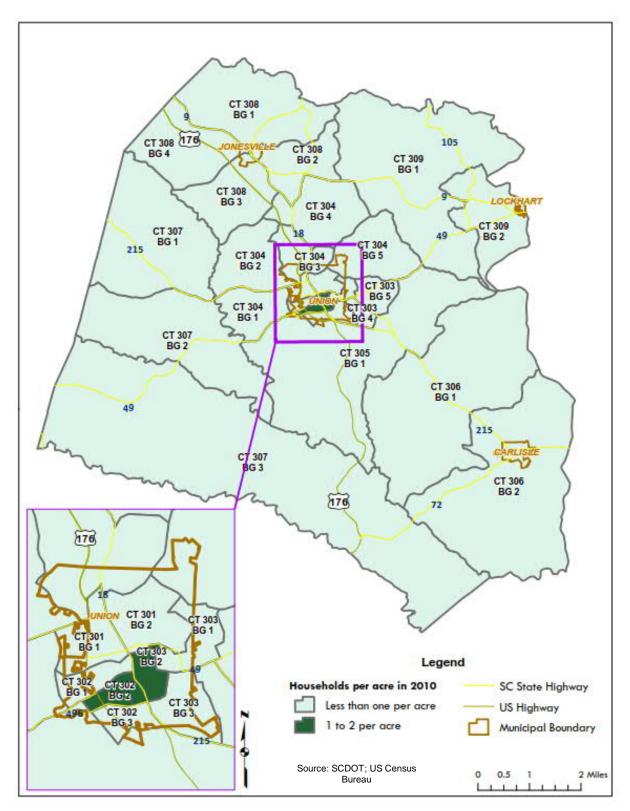


Figure 5-1 Relationship between Residential Densities and Transit Services

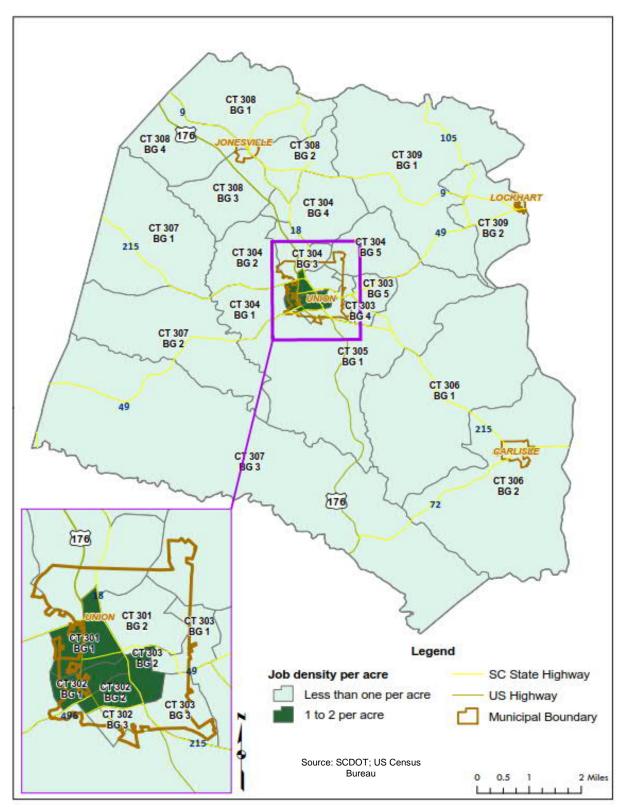


Figure 5-2 Relationship between Residential Densities and Transit Services

The following **Figures 5-3** to **5-4** show commuting patterns between Spartanburg County and Union County, including concentrations of commuter residents and places of employment. As described in the Existing Conditions Report, there were over 1,000 Spartanburg County residents commuting into Union County for work in 2015. These commuters live all over Spartanburg County, but the highest concentrations of these commuters reside in the City of Spartanburg and Pacolet, near the Union County line. Spartanburg County residents commuting into Union County are employed mostly in the City of Union or in Jonesville.

There were also approximately 2,600 Union County residents commuting to Spartanburg County in 2015. Most live in the central area of the County, primarily the City of Union, or are otherwise spread throughout northern Union County. These commuters are employed primarily in or near the City of Spartanburg.

The largest employment areas in Union County are downtown Union and Jonesville. Employees of Union City, Union County, Union County Schools, Union Medical Center, and University of South Carolina Regional Campus are all located in or near the central downtown areas of Union. Belk, Inc., the Family Dollar distribution center, and other large employers are located in Jonesville.

Additional demographic analysis can be found in Appendix B.

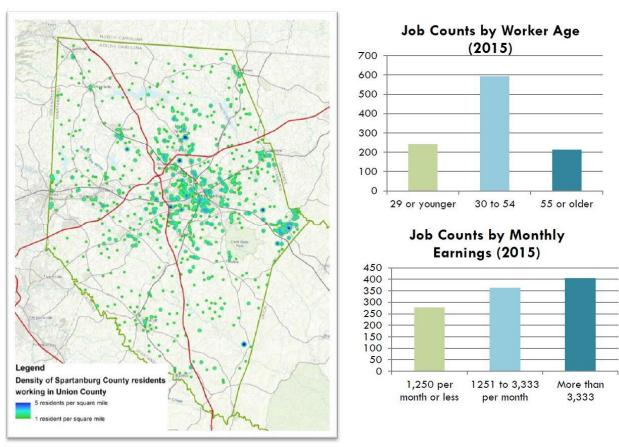


Figure 5-3 Spartanburg County Residents Working in Union County

Source: ESRI; SCDOT; US Census Bureau – LEHD on The Map

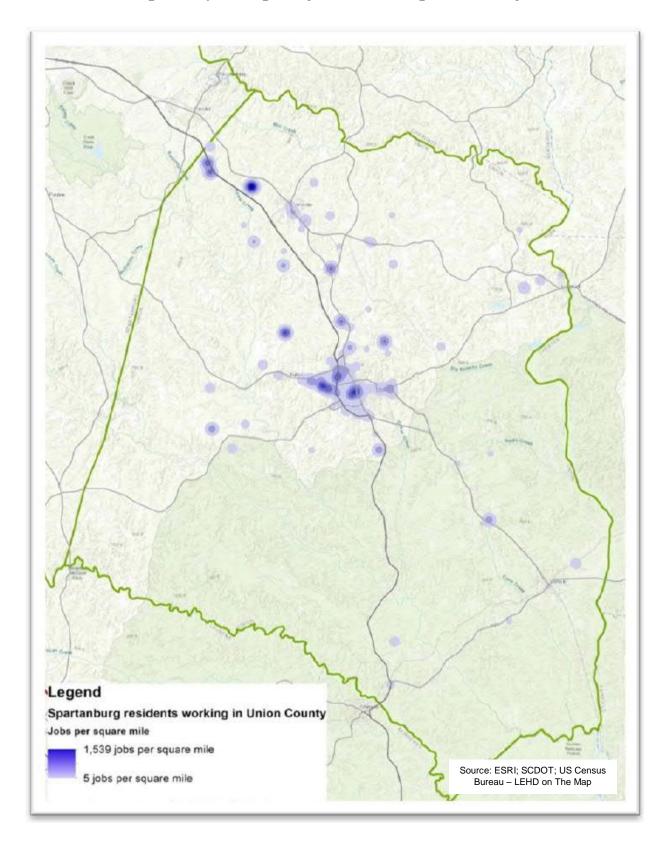


Figure 5-4 Spartanburg County Residents working in Union County (Jobs per sq. mile)

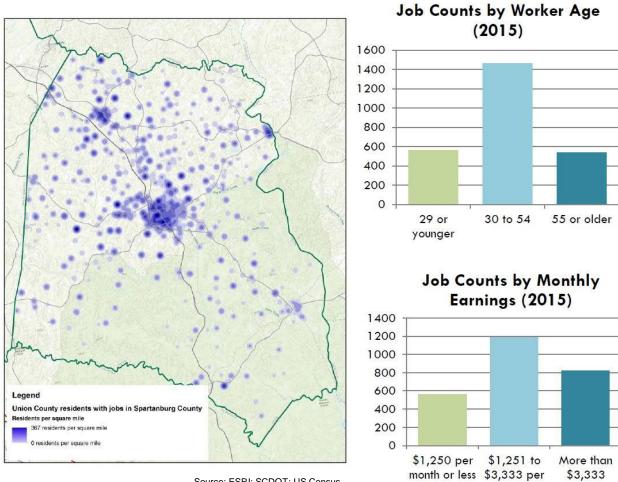


Figure 5-5 Union County Residents with Employment in Spartanburg County

Source: ESRI; SCDOT; US Census Bureau – LEHD on The Map

month

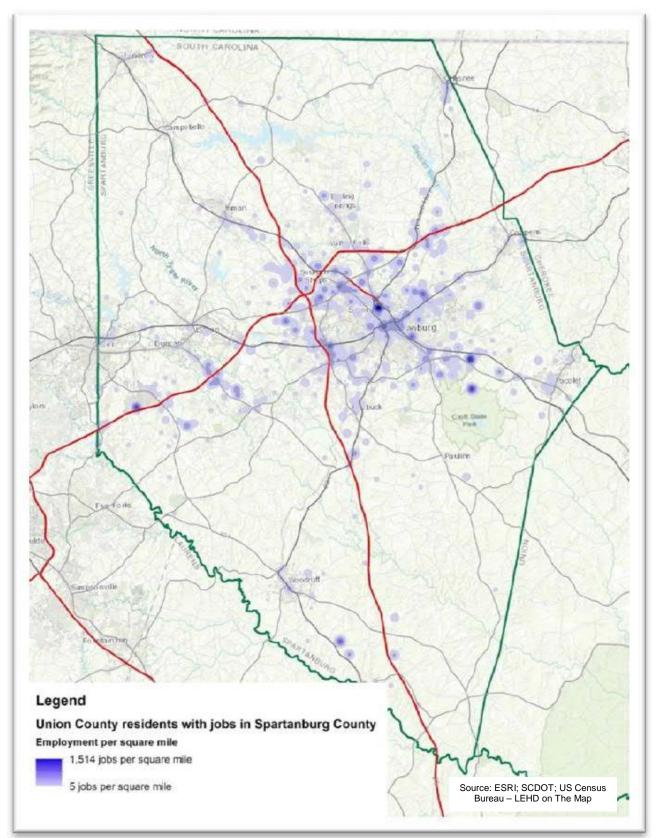


Figure 5-6 Union County Residents Working in Spartanburg County

5.4 Peer Review

Determination of appropriate transit service recommendations for Union County is derived both from the demographic considerations (i.e., population and employment densities), as well as a peer review of similar sized counties and their transit services. Counties in South Carolina with similar size and characteristics to Union County that provide transit services were identified using Decennial Census population data from 1990-2010. Union County had a population of 28,961 in 2010, and is estimated to have declined slightly to 27,537 according to the U.S. Census 2017 population estimate. **Figure 5-7** shows other South Carolina counties that provide local services. Union County only exceeds one other county in population that provides local transit services (Edgefield).

The most appropriate peer counties in South Carolina based on population were Chester, Edgefield, and Williamsburg Counties, which, similarly to Union County, have populations under 50,000. Greenwood County's population is between 50,000 and 75,000 but was also chosen as a peer county for review to consider eventual transit services.

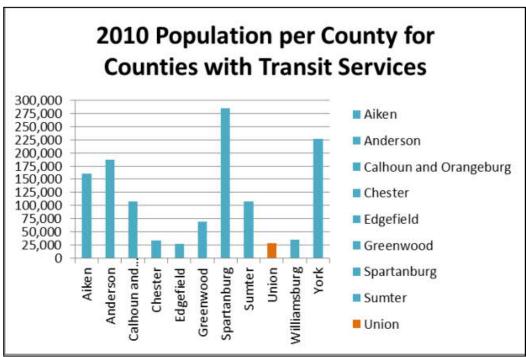


Figure 5-7 Peer Counties

Among the peer agencies, Edgefield and Chester County have more modest fleets and budgets, whereas Williamsburg and especially Greenwood County have more robust service. Chester and Edgefield, and in some respects Williamsburg, provide services more in line with the services that would be feasible in Union County, at least in the short-term; whereas growth into the future may incorporate some of the services provided in the larger counties in this group.

Excluding Greenwood, demand-response services operated in the peer agencies ranged in annual budget from \$625,089 to \$931,385 with fleets of 11 to 32 vehicles and primarily small transit vehicles.

Additionally, given the very low density of employment and population in the county, small-scale demand-response would be more appropriate than fixed bus route service. Similar to Union County's connection to Spartanburg, Chester County feeds into the Greater Charlotte, NC and Rock Hill areas for much of its employment and medical needs, and Chester County's demand-response services is targeted towards connecting its residents to medical facilities and into the Charlotte Area Transportation System (CATS). A summary I provided in **Table 5-4**

County	Description of Services	Budget	Annual Vehicle Revenue Hours	Annual Vehicle Revenue Miles	Ridership	Type of Vehicle	Number of Vehicles
Chester	Demand Response Service Chester Connector provides public and Medicaid transportation within Chester County and surrounding counties (York and Lancaster Counties) and offers transportation to Charlotte Area Transit (CATS) Park and Ride located in downtown Rock Hill (off Main Street) that transports to 3rd and McDowell in Charlotte.	\$ 883,876	18,575	363,554	26,824	16ft minivan (x4) 24ft cutaway (x10) (manufacturer and vehicle type unavailable via NTD)	14
Edgefield	Demand Response Service The Edgefield County Senior Citizens Council (ECSCC) provides transportation services for seniors to and from the meal/activity centers and for anyone throughout Edgefield County through its public transportation program, the Peach Blossom Express. The service may be used for work, shopping, medical appointments, recreation, or just to get out and away for a while. The ECSCC operates weekday, round trip transportation between Edgefield, Trenton, Johnston, and Greenwood.	\$ 625,089	13,735	469,129	27,441	23 ft cutway (x11) 2017 Ford Transit Vans	11
Greenwood*	Piedmont Agency on Aging (PAOA) offers services for seniors aged 60+ and not eligible for Medicaid Transportation in Greenwood, Abbeville, and Laurens Counties. PAOA provides transportation to in-town and out-of-town locations including congregate nutrition sites, medical appointments, grocery stores, banks, and the post office. A four day notice is required for this service.						20
	The Burton Center is a non-profit, governmental agency that provides service for people with disabilities and special needs and their families in Abbeville, Edgefield, Greenwood, Lexington, McCormick, and Saluda Counties. Each person is picked up every day, transported to the Center located on SC 72/US 221, and returned home in the afternoon.						65
Williamsburg	Demand Response Service Williamsburg County Transit System (WCTS) provides service within the county and out of the county, requiring passengers to book rides at least one day in advance. The service focuses on, but is not limited to, non-emergency medical transportation and provides service to specific areas on designated days of the week. Out-of-county destinations served include Charleston, Columbia, Georgetown, Florence, Lake City, Manning, Myrtle Beach, and Sumter.	\$ 931,385	42,949	704,998	91,646	24 ft cutaway (x28); 27ft van (x4) (manufacturer and vehicle type unavailable via NTD)	32
	Bus Service WCTS provides employment commuter service along 11 routes within the county, and to Myrtle Beach.	\$ 718,575	22,139	305,390	83,039	45 ft bus (x4); 40 ft bus (x6) (manufacturer and vehicle type unavailable via NTD)	10
	Total (Williamsburg Demand Response + Bus)	\$1,649,960	65,088	1,010,388	174,685		42

Table 5-4 Peer Transit Systems

SOURCES:

CHESTER COUNTY 2016 National Transit Database Annual Agency Profile; http://chesterconnector.com/; https://scaccess.communityos.org/zf/profile/service/id/9266; National Transit Database 2016 Vehicles Database EDGEFIELD COUNTY 2016 National Transit Database Annual Agency Profile; http://www.edgefieldcountyseniorcenter.com/; https://scaccess.communityos.org/zf/profile/agency/id/57667; National Transit Database 2016 Vehicles Database GREENWOOD COUNTY Greenwood City/County Comprehensive Plan 2035 (https://www.greenwoodsc.gov/countywebsite/modules/showdocument.aspx?documentid=595);

http://www.piedmontaoa.com/history.html#

WILLIAMSBURG COUNTY 2016 National Transit Database Annual Agency Profile; www.wctransit.com National Transit Database 2016 Vehicles Database

NOTES:

*No National Transit Database information available for Greenwood County. The project team reached out to PAOA and the Burton Center via phone, but have been unable to collect the information in the shaded boxes.

An analysis of key service statistics is presented in Table 5-5.

County	Cost per Rev. Hr.	Passengers per Revenue Hour
Chester	\$47.53	1.4
Edgefield	\$45.49	2.0
	\$21.69	2.1
Williamsburg	\$32.46	3.8
	\$25.35	2.7
Group Average	\$34.50	2.4
Chester / Edgefield Average	\$46.51	1.72
Statistics Used for Union County	\$46.51	2.0

Table 5-5 Peer Transit System Service Statistics

Chester County and Edgefield County transit services were the most similar to the potential Union County service and the average cost per revenue hour for these systems was used to estimate the operating costs for Union County in Section 6.

5.5 Peer Workshop

The peer workshop was held on August 16th 2018. The intent of the workshop was to provide Union County officials and staff with a better understanding of transit operations and the challenges the agencies face when providing transit service. A summary of the Peer Workshop findings is provided in Section 4.2.5.

5.6 Proposed New Services

The proposed services were developed from public comment, staff input and the consultant team analysis. Three options have been considered in the short, medium and long term:

- 1. Short-term (1-3 years): Limited Demand Response Service County-wide. This service will be the foundation to bring transit to the county, according with SCDOT funding guidelines.
- 2. Medium term (4 to 8 years): Vanpool service. Once limited demand response service is implemented, the County will be in a position to begin the ground work to implement a work related program that would serve County residents. The vanpool service will provide alternative transportation to the main employers in the area.
- 3. Long term (9 10 years): the County will build upon the successes of the vanpool program and provide connections between Union County and Spartanburg with an express bus service.

5.6.1 Section 5311 Rural Transit Service

The following types of Rural Transit Services are recommended for Union County in order to provide cost effective services while meeting the needs of county residents and employees.

Demand Response Service:

A local demand-response service would be appropriate to provide work and medical related trips locally within Union County, particularly in the central area of the county in and around the City of Union, as well as to the northwest to Jonesville. This service area would provide trips to the majority of health and employment locations in the county. For demand-response services, trips are generally requested a day in advance by a specified time and within a designated service area. Fares are distance-based. Actual trip costs and fare structures are determined by demand and the operating budget of the transit agency.

When initiating a transit service, it is important to demonstrate initial success and acceptance by the community. Focusing the service on the densest and most transit supportive areas of the county, at least in the short-term, will provide the best potential for ridership and utility. As indicated in Figures 5-1 and 5-2, most of the residential and employment density lies within the City of Union. Additionally, the area northwest of Jonesville that includes the Belk, Inc. and Dollar General Distribution Centers also has a strong concentration of employment destinations. These areas should be targeted as the initial service area for the Union County transit services and expanded as demand and resources allow.

Cutaway type vehicles are recommended for this service, as they fit the expected capacity needed for this type of service. Cutaways are also equipped to handle wheelchair boarding, accommodating handicap patrons and reducing the need for providing specific paratransit services.

5.6.2 Transportation Demand Management Service

Transportation demand management (TDM) programs and strategies encourage greater use of sustainable modes of transportation, shared vehicles, and trip decision making that reduces, combines, or shortens vehicle trips. TDM strategies are implemented to increase the efficiency of existing transportation infrastructure and resources by reducing the demand for private motor vehicle travel, particularly people driving alone. TDM programs and strategies provide important

benefits to communities at a relatively low cost. Below are some of the benefits found with robust TDM programs:

- TDM reduces traffic congestion and related air pollution;
- TDM increases the demand for public transit, improving farebox recovery and the ability to improve the quality and quantity of service;
- TDM supports workforce development by educating workers on commuting options other than driving alone;
- TDM improves public health by motivating people to walk and bike more;
- TDM makes communities more attractive to companies looking to relocate that want their employees to have multiple commute options;
- TDM reduces the total amount of land used for parking and make it available for other public or private uses; and
- TDM encourages private investment in transportation infrastructure improvements and services such as employee and transit station shuttles.
- TDM start-up costs could be lower than regular demand response service.

Because capacity needs are highest during peak periods, TDM frequently, but not exclusively, focuses on reducing peak-period, single occupant vehicle travel by shifting commuters to modes other than driving. Frequently this is done by shifting trips times to outside of the peak periods, increasing the number of passengers per vehicle, or eliminating trips altogether. Strategies typically fall into the following categories:

- Low cost infrastructure that facilitates the use of modes other than driving. Examples include secure bike racks, and preferential parking for carpools/vanpools.
- Education programs and materials that inform people of their travel options. Examples include travel planning assistance and general marketing efforts.
- Providing services to reduce the use of automobiles or facilitate the use of modes other than driving. Examples include ride-matching software, bike shares, area or employer shuttle services, and vanpools.
- Parking management that affects how parking is allocated and priced. Examples include paid parking, parking cash out, free or discounted carpool/vanpool parking, and unbundled parking costs from a building's lease rates.
- Subsidies that reduce the cost of using non-auto travel modes. Examples include free or discounted transit passes, bike share enrollment, and car share memberships, as well as access to a guaranteed ride home program.

 Employer-based programs that provide benefits to employees that make it easier for employees to commute using non-auto modes. Examples include telework programs, flexible work hours, and the ability to purchase transit passes with pre-tax dollars.

These practices are most successful when aligned with government TDM policies that support alternative commutes. Local governments frequently set TDM compatible requirements in zoning regulations including requiring developers to consider TDM infrastructure when requesting to build a new development. Examples of TDM compatible features in developments include requiring wide sidewalks and well-marked cross-walks, requiring bike racks in convenient locations, setting limits for the maximum number of parking spaces allowed at site, and requiring employers to participate in a Transportation Management Association.

The TDM program can be hosted either by the local agency, or by the COG. Generally, one person is enough to initiate the program, which can grow as demand for services grow.

Vanpool Program

Vanpools are a component of the TDM strategies. For years three and beyond, a vanpool program is recommended to serve employees and employers throughout Union County. The county can take the lead role in promoting and implementing a vanpool program that would target employment trips specifically, and strive to achieve the initiatives of energy conservation, reducing congestion, improving air quality, reducing vehicle miles, and provide an enhanced regional connectivity.

A vanpool is a group of commuters who share a ride to and from work in a shared 7-15 passenger vehicle. The van originates from an area near the commuters' homes, often a parkand-ride lot or local meeting place, and travels to one or more work sites in close proximity. A member of the vanpool volunteers to drive the group with support from designated back-up drivers. The vanpool group typically splits the cost of the vanpool including insurance, fuel, maintenance and parking. Some commuters may also receive subsidies from their employer, and if their employer participates in the vanpool benefit program, employees may elect to pay a monthly vanpool fare using pre-tax dollars.

When a van receives financial support through federal funds, such as Section 5311 formula funds or when the van is reporting National Transit Database (NTD) passenger miles, there are additional elements to the definition of a *qualifying* vanpool. These include the requirement that the vehicle accommodate seven to 15 passengers and fulfill federally established Buy America requirements. Further, at least 80% of the vehicle's miles must be dedicated to trips connecting a common workplace with a convenient residential location. Additionally, the van cannot have a paid driver.

The intent of this program would be to increase the use of alternative transportation in the region and connect individuals and employers with building a sustainable solution for work-related commuter trips. Employers would benefit through improved worker productivity, expanded the labor market, increased worker retention, and reduced need to expand parking facilities. All commuters would be targeted, but there would be a focus on commuters who commute over 15 miles each way to work.

Medical and Commuter Trips to Spartanburg from City of Union:

Demand-response services provide appropriate services for occasional trips, but may not serve day to day needs, particularly for commuters into Spartanburg County for work or medical trips. A limited daily service between Union County and Spartanburg is recommended during weekdays to provide regular commuting services that support cross-county commutes.

Spartanburg is a primary destination for work and medical related trips for Union County residents. A vanpool or similar service would target these trips and provide a regular or ondemand service between Union and Spartanburg with a limited number of stops during weekdays.

An express service with few stops is recommended between City of Union, Jonesville, Spartanburg Medical Center and the SPARTA Passenger Center in downtown Spartanburg. Providing service to the SPARTA Passenger Center would provide access to the hub of Spartanburg's transit with transfer access to all SPARTA transit routes. Providing service to the Medical Center directly would reduce the need for medical commuters to take an additional transfer. The City of Union and the area northwest of Jonesville that includes the Belk, Inc. and Dollar General Distribution Centers appear to have the highest concentrations of employment for these commuters. This service is recommended for weekdays, but could eventually be extended to weekend service with proven demand. Cutaway type vehicles are recommended for this service.

Although this service is recommended primarily for Union County residents commuting to Jonesville or Spartanburg, providing round-trip service would accommodate some of the Spartanburg County commuters that work in Jonesville and City of Union. However this may not prove cost-effective compared to commutes from the City of Union to Spartanburg. **Figure 5-8** displays the proposed route between Union County and Spartanburg.

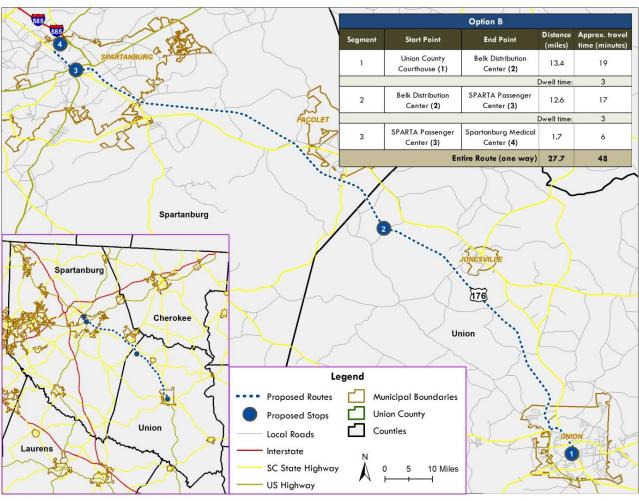


Figure 5-8 Proposed Commuter/Medical Service Route from Union County to Spartanburg

Source: ESRI; SCDOT;

6.0 RECOMMENDATIONS AND FINANCIAL PLAN

Based on the study area analysis, staff knowledge and public surveys, the following recommendations have been prepared. The recommendations regarding the proposed service options are grouped in three categories: Demand Response Service, Transportation Demand Management Services and Express Bus Service to Spartanburg. Operating and capital cost estimates for the demand response (short-term) and TDM (medium-term) proposed services were prepared using the SC DOT New Start Program and Section 5311 as the primary funding source.

6.1 Recommended Service Options and Cost Estimates

The services recommended for implementation and the estimated annual operating cost of implementing the recommendations for the three years of the pilot program are presented in **Table 6-1**. The operating statistics and ridership estimates for the services in the table are presented in **Appendix C**.

In Table 6-1, the following recommendations were considered:

- Administration this administrative cost will be added to help oversee the new services at an initial cost of \$9,000. This would allow for additional staff hours to oversee service delivery. It is expected that as the staff gains experience with the transit service, less supervisory hours will be required resulting in reduced annual cost.
- A fare of \$1.00 for local route service is assumed. As this is a County policy decision. This fare estimate is subject to change.
- SCDOT administered State Mass Transit funding is recommended to be utilized.

Ridership estimates were based on peer ridership figures presented in **Table 3-4**. The average peer ridership was two passengers per revenue hour. As the peer systems were also demand response systems, the peer group average ridership per revenue hour was used to estimate ridership for the initial year of service. A growth rate of two percent per year was also assumed.

Year	- Program Elements	Est. Annual Ridership ¹	Operating Cost ²	Average Fare (Est.)	Fare Revenue	Total Subsidy	State Share	Total Local Share
	Administration	-	-	-	-	\$9,000		
1	Local Route Service	4,080	\$94,880	\$1.00	\$4,080	\$90,800		
	Total	4,080	\$94,880	-	\$4,080	\$99,800	\$80,000	\$20,000
	Administration	-	-	-	-	\$6,000		
2	Local Route Service	4,162	\$97,727	\$1.00	\$4,162	\$93,565		
	Total	4,162	\$97,727	-	\$4,162	\$99,565	\$80,000	\$20,000
	Administration	-	-	-	_	\$3,000		
3	Local Route Service	4,245	\$100,659	\$1.00	\$4,245	\$96,414		
	Total	4,245	\$100,659	-	\$4,245	\$99,414	\$80,000	\$20,000
	Administration	-	-	-	-	\$5,000		
4	Local Route Service	4,330	\$146,590	\$1.00	\$4,330	\$142,260		
	Total	4,330	\$146,590	-	\$4,330	\$147,260	\$106,000	\$42,000
	Administration	-	-		-	\$5,000		
5	Local Route Service	4,416	\$150,988	\$1.00	\$4,416	\$146,572		
	Total	4,416	\$150,988	-	\$4,416	\$151,572	\$106,000	\$46,000

Table 6-1 Estimated Annual Operating Costs of Demand Response Service

Notes:

1. Ridership estimate for Demand Response assumes 2 passengers per hour and annual increase of 5%

2. Operating Cost assumes \$46.51 per revenue hour and includes estimated 2% CPI annual increase

3. State Share in years 4 and 5 is based on a conservative estimate of projected federal funding

4. Any cost and/or quantity opinions, estimates or forecasts provided by AECOM was on a basis of experience and judgment, but since AECOM has no control over market conditions or bidding procedures, AECOM cannot and does not warrant that bids, ultimate construction cost, or project economics will not vary from such opinions, estimates or forecasts.

Vanpool Sample Funding Overview

For year four, it is recommended to begin the implementation of a vanpool program to target the work related trips that are not captured under general public demand response service. The following estimate assumes use of seven-passenger vehicles, with five riders and one driver. In this scenario, the driver of the vehicle would pay less on a monthly basis than the other riders. The estimated cost of this size van is \$900 per month, based on the current cost structure of Enterprise which is a well known provider of vanpool services. Any local vendors may have slightly different costs.

Table 6-2 Estimated Annual Operating Cost of Vanpool

Description:	Cost	Notes
Monthly Contract Cost of Seven Passenger Van:	\$900	Estimated cost
Contribution of each rider:	\$100 per rider, driver \$50	Assumes 5 passengers + 1 driver
Total rider(s) monetary contributions:	\$550	
Subsidy provided by Union County:	\$350	Subsidy for each operating vanpool
Total:	\$900	

This simplified financial model displays a \$900 total vanpool cost for each operating vanpool. That monthly vanpool cost would be accounted for with the contribution of each rider and a monthly subsidy to be provided by Union County. This monthly subsidy from Union County can be varied based on funding availability. If that funding structure is changed, the contribution of each rider can be adjusted accordingly.

Vanpool Subsidies

Vanpooling is largely dependent on the use of subsidies to reduce the monthly cost for participants. In general, the greater the subsidy amounts available to commuters, the greater the vanpool participation in an area.

Federally Funded Subsidies: Federal funds are frequently used by federal grant recipients to encourage greater use of non-SOV travel modes by funding user fare or fee subsidies. These subsidies are used to reduce an individual commuter's cost when participating in a vanpool operated by an outside contractor.

Subsidies are usually calculated or distributed in one of two ways:

- A vehicle fixed, flat-rate subsidy that is distributed evenly among all riders in the van. This amount is typically removed from the cost of the van before riders pay their monthly fare. With this type of subsidy, each rider's subsidy depends on how many people are registered in van.
- A rider flat-rate subsidy that reduces the cost for each vanpool rider equally. This subsidy ensures that regardless of the number of riders, each participant receives the same subsidy.

In addition, agencies sometimes choose to further subsidize the primary vanpool driver's fare. It is common practice across vanpools regardless of operator, to allow the driver to participate at a free or reduced cost. This is typically done to the added responsibility that the driver takes on to coordinate the group, serve as a point of contact with the provider, take and/or schedule the van for necessary service and fueling, and possibly complete reporting requirements on behalf of the group. Vanpool programs may also feature subsidies that help during the formation process and/or help to support a van if

there is a drop in ridership. An empty seat subsidy is typically a short-term offering that allows the group financial support while encouraging them to recruit additional participants to maintain a lower cost per rider.

Employer Subsidies: To reduce the cost of commuting and encourage employees to take an alternative commute, some employers offer an additional financial subsidy to employees that take a vanpool to and from work. It is common to see greater participation in a region among employer sites that offer additional subsidies to employees.

Pre-tax Benefits: Just like other fringe benefits that employers offer, vanpool fares (along with transit and parking costs) are eligible to be purchased using pre-tax dollars. For 2018, the IRS has announced that up to \$260 of monthly transit fares can now be deducted in the same way. This method is growing in popularity with many companies throughout the country because it allows employees to save a significant amount on their monthly commute without the company directly subsidizing the cost. As an added bonus, the company's bottom line also improved as vanpool fares would be paid out of an employee's gross income; resulting in the company avoiding payroll taxes on the monthly vanpool fare. This can result in significant savings for both the employee and employer.

6.2 Capital Costs

The capital costs for the proposed initial service should be nominal as existing vehicles will be utilized and the nature of demand response service does not require bus stops, shelters or transfer centers. Additional county or other funds could be dedicated to marketing, branding and service monitoring efforts if they become available. These subjects are discussed under Section 7- Implementation. **Table 6-3** displays the estimated capital costs:

Capital Cost Estimates					
Туре	Units	Estimated Unit Cost	Local Share (100%)		
Transit Vehicle	1	\$45,000	\$45,000		
Spare Transit Vehicle	1	\$45,000	\$45,000		
Software/hardware	-	\$10,000	\$10,000		
Office equipment	-	\$5,000	\$5,000		
Totals			\$105,000		

Table 6-3 Estimated Capital Expenses

Another option is to lease one or two small cutaway transit vehicle(s) for approximately \$4,800 annually for the three-year pilot program.

6.3 Potential Funding Sources

This section evaluates the financial plan for the proposed transit service in Union County and includes a discussion of several key implementation issues and the financial capacity and possible phasing of the transit system creation. In order to fund this proposed system, Union County will contribute local revenues in order to provide the necessary local match needed to acquire federal and state funding. The South Carolina Department of Transportation (SCDOT) administers various Federal and State Aid Grant Programs to assist localities with funding for public transportation systems. SCDOT is the designated recipient for Federal Transit Administration (FTA) Section 5311 funding and distributes this funding to small urbanized localities based on an application process.

Union County would operate as a Rural Area system and would apply for FTA Section 5311 grant program funding through SCDOT. Funding from the FTA is typically used to fund up to 50% of operating expenses and 80% of capital investments in the transit system.

In order for Union County to qualify for continued federal funding from FTA, Union County must have completed a feasibility study which includes an estimation of transit costs (capital and operating) and a listing of potential funding sources. If approved by SCDOT, State Mass Transit funding will be used to fund a three year pilot implementation period for the proposed transit system in Union County. SCDOT will contribute 80% of the total funding and will require 20% matching local funds from Union County. This local matching ratio will be the same for the entirety of the three year pilot implementation period. To begin the three year pilot period, Union County will be required to submit a resolution to SCDOT requesting the annual funding allocation. During the pilot period, SCDOT will conduct at least one on-site technical assistance visit.

At the completion of the third year of the pilot, a review will be conducted to determine if Union County has met the managerial, technical, and financial capacities needed to continue receiving SCDOT-administered federal funding. SCDOT will issue a report informing Union County if they will be eligible to apply for federal and state funding. A positive report will result in removal of the pilot designation and Union County will then be responsible for meeting all federal and state requirements for receiving and expending SCDOT-administered transportation funding.

Union County will be required to continue providing matching funds using appropriate percentages for federal operating and capital dollars (e.g. 50% matching for operating expenses and 80% for capital expenses). The next section describes the potential Federal funding sources available should Union County successfully complete the SCDOT Pilot Transit Program.

6.3.1 Federal Sources of Transit Funding

Table 6-4 is a summary of the Federal grants for which Union County is potentially eligible for the financing of a public transportation system.

Federal Aid Grant Program	Program Description	Eligible Recipients	Matching Ratios
FTA Section 5303, 5304 and 5305 – Metropolitan and Statewide Planning formula funding	Support transit planning expenses.	 Metropolitan Planning Organizations (MPOs) State DOTs 	Up to 80% of eligible expenses
FTA Section 5311 – Rural Area formula funding	Supports operating and capital costs of transit operators in non-urbanized areas.	 State DOTs Federally recognized Indian Tribes Sub-recipients include state or local government authorities, nonprofit organizations, and operators of public transportation or intercity bus service. 	Up to 50% of eligible operating expenses. Up to 80% of eligible capital expenses.
FTA Section 5339(b) – Bus and Bus Facilities discretionary grant	Provides capital funding to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities.	 Designated Recipients of urbanized areas. State DOTs that operate or allocate funding to fixed- route bus operators. Sub-recipients include public agencies or private non-profits engaged in public transit. 	Up to 80% of eligible capital expenses.

Federal Aid Grant Program	Program Description	Eligible Recipients	Matching Ratios
Flexible Funding Program – Surface Transportation Program (STP) Funds	Provides funding for a wide variety of projects that support operating and capital costs of transit operators. Used by the State DOT to fund small urban transit systems.	• Funding is made available to designated recipients, which must be public bodies. Typically the State DOT is the designated recipient for urbanized areas between 50,000 and 200,000.	Up to 88.5% of eligible capital expenses.

Most transit systems in the United States receive substantial federal funding. Below is a summary of the transit funding options available for Union County. All funding programs include limiting factors related to the eligible recipients and eligible costs, either planning, capital and/or operating costs.

Federal funding is established through legislative program structures and programs maintained in the Fixing America's Surface Transportation (FAST) Act. The FAST Act preserved much of the Moving Ahead for Progress in the 21st Century (MAP-21) legislative programs and funding shares. Because the horizon of the FAST Act is much longer than MAP-21, the FAST Act provides longer term funding provisions for transportation agencies. Federal funding categories that can be leveraged for transit improvement projects by Union County are detailed below.

- A. Metropolitan and Statewide Planning and Non-Metropolitan Transportation Planning – Sections 5303, 5304 and 5305 Programs These funds are available for planning activities that:
 - Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
 - Increase the safety of the transportation system for motorized and non-motorized users;
 - Increase the security of the transportation system for motorized and non-motorized users;
 - Increase the accessibility and mobility of people and for freight;
 - Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
 - Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
 - Promote efficient system management and operation; and
 - Emphasize the preservation of the existing transportation system.

B. Rural Formula Program – Section 5311 Program

The Formula Grants for Rural Areas program provides capital, planning, and operating assistance to state DOTs to support public transportation in rural areas with populations of less than 50,000, where many residents often rely on public transit to reach their destinations.

The Section 5311 program supports both the maintenance of existing public transportation services and the expansion of those services through these program goals of:

- Enhancing access in rural areas to health care, shopping, education, employment, public services, and recreation;
- Assisting in the maintenance, development, improvement, and use of public transportation systems in rural areas;
- Encouraging and facilitating the most efficient use of all transportation funds used to provide passenger transportation in rural areas through the coordination of programs and services;
- Providing financial assistance to help carry out national goals related to mobility for all, including seniors, individuals with disabilities, and low-income individuals;
- Increasing availability of transportation options through investments in intercity bus services;
- Assisting in the development and support of intercity bus transportation;
- Encouraging mobility management, employment-related transportation alternatives, joint development practices, and transit-oriented development; and,
- Providing for the participation of private transportation providers in rural public transportation.

The program also provides funding for state and national training and technical assistance through the Rural Transportation Assistance Program. Funds may be used for capital, operating, and administrative assistance to state agencies, local public bodies, Indian tribes, and nonprofit organizations, and operators of public transportation services. The maximum FTA share for operating assistance is 50 percent of the operating costs.

Established under MAP-21 and upheld by FAST Act legislation, the Section 5311 grant program also includes eligible activities from the Job Access and Reverse Commute (JARC) Program (formerly known as Section 5316), which focuses on providing services to low-income individuals to access jobs. These activities include operating assistance with a 50 percent local match for JARC activities. There is no minimum or maximum amount of funding that can be spent on JARC activities.

Funds in the Section 5311 program have a very wide compass of eligibility. Eligible capital expenses include the acquisition, construction, and improvement of public transit facilities and equipment needed for a safe, efficient, and coordinated public transportation system as well as certain other expenses classified as capital in Section 5302(3). Operating expenses are those costs directly related to system operations. At a minimum, states must consider the following items as operating expenses: fuel, oil, drivers' salaries and fringe benefits, dispatcher salaries and fringe benefits, and licenses.

The governor designates a state agency that will have principal authority and responsibility for administering the Section 5311 program. For South Carolina, the agency given charge over the Section 5311 program is SCDOT. Specifically, the role of the state agency is to:

- 1) Document the state's procedures in a state management plan (SMP);
- 2) Notify eligible local entities of the availability of the program;
- 3) Plan for future transportation needs, and ensure integration and coordination among diverse transportation modes and providers;
- 4) Solicit applications from transit providers;
- 5) Develop project selection criteria;
- 6) Review and select projects for approval;
- 7) Forward an annual program of projects and grant application to FTA;
- 8) Certify eligibility of applicants and project activities;
- 9) Ensure compliance with federal requirements by all sub-recipients;
- 10) Monitor local project activity;
- 11) Oversee project audit and closeout; and
- 12) File an NTD report each year for itself and each sub-recipient.

C. Flexible Funding Program – Surface Transportation Program (STP) Funds

The STP program provides a national annual appropriation to the Federal Highway Administration (FHWA). This funding has a broad project eligibility and funding may be used for projects to preserve or improve conditions and performance on any Federal-aid highway, bridge project on any public road, facilities for non-motorized transportation, transit capital projects and public bus terminals and facilities. This program funding can also be "flexed" to FTA for use by transit agencies.

7.0 IMPLEMENTATION

The first three years the recommendation is to implement a Demand Response service. Union County representatives have expressed interest in providing the initial service with existing county resources. This is advisable as initially service will be provided on a limited schedule. It has been assumed that during the first three years, service will be provided with those resources.

For the longer term, it is recommended that the county considers one of these three operational models:

• In-house operations: under this model, the agency manages administrative and operational activities, including maintenance. The agency owns the capital, and it is responsible for recruitment and hiring of personnel, scheduling and reservations, reporting and compliance with all federal and state regulations.

The major benefit of this type of model is control. Service changes could be implemented quicker should they be required and the agency has total control over reservations and scheduling, which can reflect on the quality of service provided.

The major challenge under this model is cost. The agency needs to bear the cost of running the system and doesn't get the benefits of the economies of scale that can be achieved when contracting out with an existing provider that operates transit in other communities. Most of the cost is allocated to personnel, as the agency is responsible for wages and fringe benefits of the administrative personnel and drivers.

• **Turnkey contract:** under this model, all administrative and operational tasks are performed by a contractor. This includes scheduling, reservations, and dispatching, as well as maintenance. The contractor is responsible for state and federal reporting and the county is only responsible for oversight.

The advantages of contracting out the service, either with a public transit agency or a private service provider or management company, is that the county would only need to provide oversight, while capital infrastructure, administration and operations could be provided by the contractor. The county, in this case, will need to negotiate the rate for service provided.

Another benefit is that the cost of providing service could be lower than the in-house model because, as mentioned above, contractors may be able to achieve economies of scale. The contractor's experience with federal and state reporting and processes will make it easier to comply with federal and state regulations.

The downside of the turnkey contract is that the agency loses direct control over the scheduling and reservation system, which could affect the quality of service. The agency needs to set expectations based on performance (service standards, response times, etc.) and monitor the contractor's performance. Though the contractor performs reporting and compliance activities regulations, the agency is the ultimate responsible to comply with federal and state regulations.

• **Hybrid administration and operations:** generally under this model, administrative activities, such as scheduling and reservations are performed by the agency while operational activities are performed by the contractor.

The benefits under this model is that the agency has control over reservations and scheduling, and over the cost of providing service, as trips are assigned to the contractor and they just deliver trips.

The main disadvantage of this model is that the agency is responsible for the cost of personnel to staff the scheduling, and reservations units and performs all administrative tasks. The agency is also responsible for reporting and compliance with federal and state regulations.

Contracting out, either on the turnkey or hybrid model will require the County to follow a competitive bidding process, as required by SCDOT, to ensure that there is fair competition.

The turnkey contract option could represent a better financial option for the county, as a contractor will provide administration and operation services, including capital, and the county will be able to provide more service in return.

Vanpool Service Models

Vanpooling is a common element of trip reduction and ridesharing programs, which seek to reduce the number of single occupant vehicle (SOV) trips for the purpose of reducing congestion and vehicle emission while also providing residents with lower cost commuting options. In addition, vanpools offer regions an added mobility-service, often providing transportation where transit may not be viable, including suburb to suburb connectivity and in rural areas, while also supporting the reverse commute pattern and employers in outlying areas. Vanpools also typically appeal to groups with long-distance commutes – the generally accepted distance within the industry is a commute in excess of 15-20 miles one-way. However, the threshold can vary greatly with local conditions including traffic congestion that impacts travel times, high parking costs and other factors.

Vanpool programs typically follow one of three operational models:

- In-house operations: Vanpool services offered internally and exclusively by a transit agency. Under this approach, the transit agency owns, maintains and insures the vanpool vehicles; has agency staff members performing all passenger recruitment, formation and marketing; fulfills NTD reporting; determines driver eligibility, recruits drivers and provides driver training; provides support programming such as subsidies, ride-matching and Guaranteed Ride Home (if offered); and fulfills all administrative and customer service tasks.
- Turnkey contract: Vanpool services contracted through a private provider of public transportation by vanpool. With this approach, agencies typically use a competitive bid process to select a vendor(s) to provide inclusive vanpool services. The vendor fully supports the operation program while the agency oversees the contract. The transit agency may still elect to provide subsidies under this model.
- Hybrid, administration and operational model: Under this approach, the agency operates some tasks in-house and selects other individual program components to be provided by a third party vendor(s). The individual components are secured through a competitive bid process from one or multiple vendors and could include any combination of: marketing, maintenance, insurance, capital expenditures, fuel, etc. The hybrid model features the transit agency and third-party operator(s) splitting the responsibilities for developing and maintaining the vanpool program.

Vanpool Turnkey Service Model

A turnkey operation would be optimal for Union County to prevent the County from acquiring the vehicles needed for the operation. In this model, Union County would contract with a vendor to provide the vanpooling administration and capital needs. In the United States, most contracting entities, like Union County, provide a monthly subsidy to make the vanpooling service more attractive to users. Currently, Enterprise is the only national provider of turnkey vanpool services. Some markets do have small local operators, but the project team is not aware of any small local operators in Union County.

Next Steps:

This study recommends a comprehensive assessment of potential vanpool operations for Union County to include program funding sources, a complete set of operational scenarios, performance measures and program recommendations. This study would be instrumental in the creation of a Union County vanpool business plan to help guide the implementation of any vanpool program, whether that program would be in-house, turnkey or a hybrid model.

7.1 Other implementation activities

If additional funds are available from Union County or other sources, the following implementation activities are recommended:

7.1.1 Marketing

A comprehensive marketing plan for the recommended system should be developed to assist in implementing the system. A strong marketing plan is crucial for establishing the foundation for future marketing strategies once the implementation is completed. Items to be addressed could include:

- Overall system image
- Graphics
- Community outreach
- Advertising
- Coordination techniques with other organizations

It is essential that a distinctive system logo, vehicle paint scheme, signage, and theme for the new services be developed to generate a unique and positive image for the transit program. A key recommendation is that the image (logo/graphics) created be unique to the service area and avoid the more conventional or institutional look often utilized by new transit systems.

Customer Service is closely linked with marketing as this function typically:

- Provides transit service information through various methods including internet, printed media, and telephone
- Coordinates the sale of fare media
- Handles customer complaints, commendations, inquiries, requests, and suggestions
- Responsible for "Lost and Found"

Immediate priorities should be the development of attractive English and Spanish versions of informational materials such as posters and flyers. These cost effective marketing tools should be widely distributed and will assist Union County in increasing the visibility of the system while providing the public with much needed information about the services offered.

Also, a high priority should also be given to updating the Union County web site to include a home page for the transit service. There should be information on how to ride the system, including consideration for people with disabilities and Limited English Proficiency (LEP).

Though not a priority, branding the new service will bring community ownership and recognition of the new transit service. The brand can be reflected in logos, vehicle colors, brochures and flyers, etc.

7.1.2 Service Monitoring

Transit systems have recurrent needs and requirements to collect and report a wide range of information about operations and ridership. The continual compilation of data is essential for the effective planning and management of transit services. Without detailed operations information, the ability to effectively monitor and report system performance and subsequently revise services would be severely impacted. Resource limitations frequently limit comprehensive service monitoring programs. However, the information resulting from service monitoring is very important because fundamental transit functions such as scheduling, service planning, maintenance, finance, and marketing require this data for decision making and reporting. Key considerations for establishing a service monitoring program include:

- Identification of the data categories to be collected
- Methods and sources to be used in data collection
- Procedures to be used to process and store the data
- Evaluating and reporting the data in a meaningful and ongoing format
- Determining where and ensuring required reports are properly transmitted

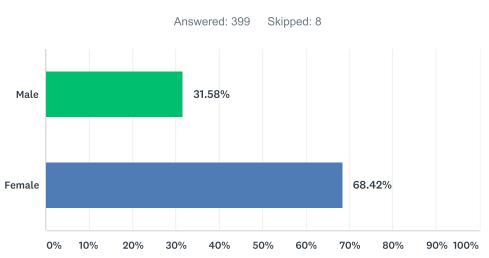
Program elements must be identified prior to the initiation of service as certain data must be recorded on a daily basis. While the majority of information may, in the case of a contract service provider, be collected and processed by the contractor, the agency must ensure the data is collected, evaluated, and reported in an accurate and timely manner. In addition to compilation of statistical data, periodic field observations of system operations and contract monitoring must also be regularly undertaken.

7.1.3 Conclusion

The study concluded that providing public transportation service in Union County would be beneficial to address transportation barriers and increase mobility. Public input shoed there is community support to implement transit service and interviews with elected officials showed that there is political will to make it happen.

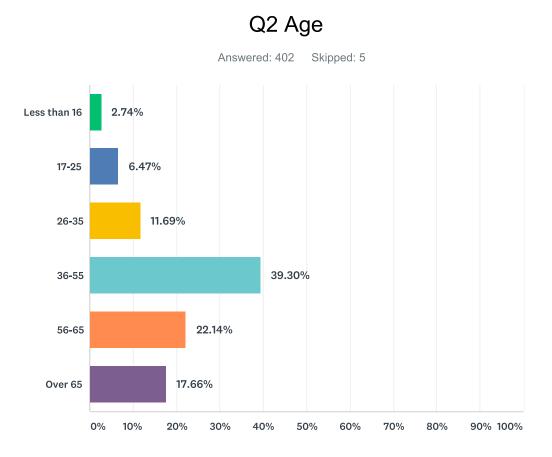
For those who don't, or can't, drive, public transportation will allow them to get to work, to school, to the grocery store or doctor's office, or just to visit friends, without having to engage a friend or relative to do the driving. Public transportation is a powerful tool to address inequalities and gives members of the community more opportunities to succeed in life.





ANSWER CHOICES	RESPONSES	
Male	31.58%	126
Female	68.42%	273
TOTAL		399

Public Survey Questions

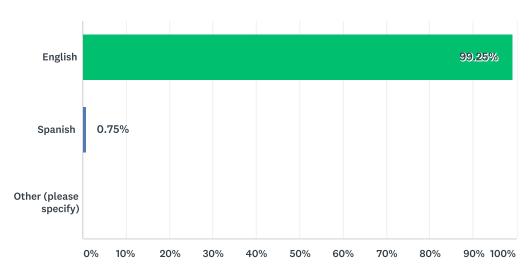


ANSWER CHOICES	RESPONSES	
Less than 16	2.74%	11
17-25	6.47%	26
26-35	11.69%	47
36-55	39.30% 1	58
56-65	22.14%	89
Over 65	17.66%	71
TOTAL	4	02

Public Survey Questions

Q3 Language

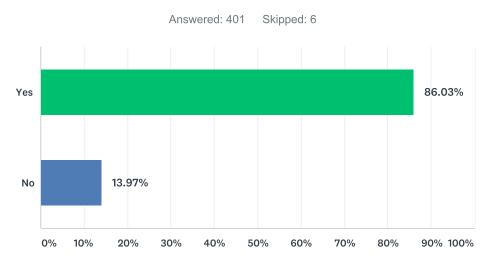
Answered: 398 Skipped: 9



ANSWER CHC	DICES	RESPONSES	
English		99.25%	395
Spanish		0.75%	3
Other (please specify)		0.00%	0
TOTAL			398
#	OTHER (PLEASE SPECIFY)		DATE

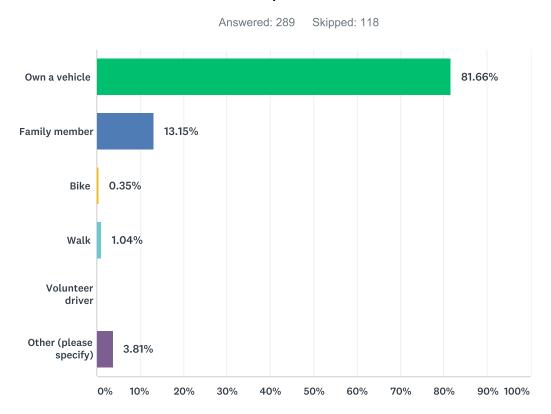
There are no responses.

Q4 Do you have reliable transportation to get you where you need to go? If your answer is NO, please skip Question 5.



ANSWER CHOICES	RESPONSES	
Yes	86.03%	345
No	13.97%	56
TOTAL		401

Q5 If your answer is YES, choose your most reliable source of transportation.



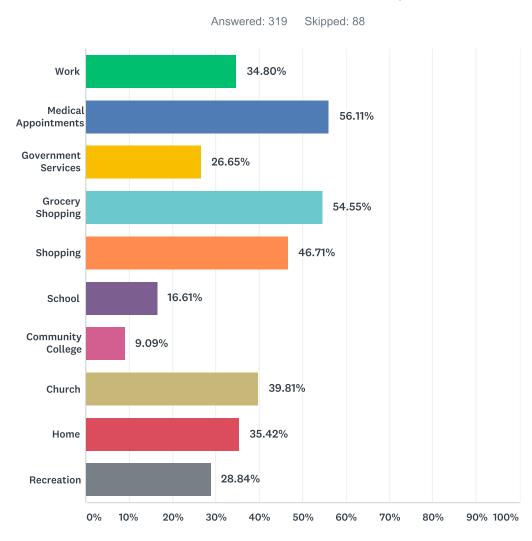
ANSWER CHOICES	RESPONSES	
Own a vehicle	81.66%	236
Family member	13.15%	38
Bike	0.35%	1
Walk	1.04%	3
Volunteer driver	0.00%	0
Other (please specify)	3.81%	11
TOTAL		289

#	OTHER (PLEASE SPECIFY)	DATE
1	sometimes/ own vehicle	1/7/2018 2:38 PM
2	do not drive at night	1/7/2018 2:27 PM
3	own two feet	1/7/2018 2:05 PM
4	cant drive due to illness	1/7/2018 1:55 PM
5	car	1/5/2018 2:59 PM
6	car	1/5/2018 2:37 PM
7	sister	1/5/2018 2:28 PM
8	sometimes	1/5/2018 2:14 PM

Public Survey Questions

9	car in bad condtion	1/5/2018 1:49 PM
10	car, in bad conditon	1/5/2018 1:47 PM
11	Not Working	1/5/2018 1:40 PM

Q6 If Public Transportation is available, I would use it to go to: (choose those that are applicable)



ANSWER CHOICES	RESPONSES	
Work	34.80%	111
Medical Appointments	56.11%	179
Government Services	26.65%	85
Grocery Shopping	54.55%	174
Shopping	46.71%	149
School	16.61%	53
Community College	9.09%	29
Church	39.81%	127
Home	35.42%	113
Recreation	28.84%	92

Public Survey Questions

Q7 I live in:

Answered: 397 Skipped: 10 City of Union 50.38% 8.56% Jonesville Carlisle 12.85% 2.27% Lockhart Other (please specify) **25.94**% 60% 0% 10% 20% 30% 40% **50**% 70% 80% 90% 100%

ANSWER CHOICES	RESPONSES	
City of Union	50.38%	200
Jonesville	8.56%	34
Carlisle	12.85%	51
Lockhart	2.27%	9
Other (please specify)	25.94%	103
TOTAL		397

#	OTHER (PLEASE SPECIFY)	DATE
1	Buffalo	1/7/2018 2:49 PM
2	Buffalo	1/7/2018 2:48 PM
3	Goshen Hill	1/7/2018 2:48 PM
4	Buffalo	1/7/2018 2:47 PM
5	union county	1/7/2018 2:41 PM
6	Paclote	1/7/2018 2:36 PM
7	Paclote	1/7/2018 2:36 PM
8	Paclote	1/7/2018 2:34 PM
9	union county	1/7/2018 2:32 PM
10	Buffalo	1/7/2018 2:31 PM
11	Buffalo	1/7/2018 2:31 PM
12	Buffalo	1/7/2018 2:30 PM
13	Buffalo	1/7/2018 2:29 PM

14	Buffalo	1/7/2018 2:28 PM
15	Buffalo	1/7/2018 2:27 PM
16	Buffalo	1/7/2018 2:27 PM
17	whitmore	1/7/2018 2:25 PM
18	Monarch	1/7/2018 2:19 PM
19	Cross Keys	1/7/2018 2:13 PM
20	union SC	1/7/2018 2:08 PM
21	Buffalo	1/7/2018 2:07 PM
22	union county	1/7/2018 2:01 PM
23	union county	1/7/2018 1:57 PM
24	union county	1/5/2018 3:55 PM
25	Buffalo	1/5/2018 3:29 PM
26	Uion county	1/5/2018 3:28 PM
27	Monarch	1/5/2018 3:16 PM
28	outside Jonesville	1/5/2018 3:12 PM
29	union county	1/5/2018 3:11 PM
30	County	1/5/2018 3:09 PM
31	Buffalo	1/5/2018 3:08 PM
32	Whitmore	1/5/2018 3:06 PM
33	Adousburg	1/5/2018 3:05 PM
34	Union County	1/5/2018 3:03 PM
35	Buffalo	1/5/2018 3:02 PM
36	Buffalo	1/5/2018 2:58 PM
37	union county	1/5/2018 2:57 PM
38	Town of Whitmore	1/5/2018 2:53 PM
39	Buffalo	1/5/2018 2:50 PM
40	Buffalo	1/5/2018 2:48 PM
41	union co	1/5/2018 2:38 PM
42	Buffalo	1/5/2018 2:37 PM
43	NA	1/5/2018 2:27 PM
44	Santue	1/5/2018 2:26 PM
45	Buffalo	1/5/2018 2:13 PM
46	Union county	1/5/2018 2:11 PM
47	Union County	12/28/2017 6:43 AM
48	Buffalo	12/18/2017 9:27 AM
49	County	12/11/2017 3:53 PM
50	Gaffney, SC	12/11/2017 9:23 AM
51	Just outside the city of Union	12/11/2017 9:06 AM
52	Adamsburg	12/10/2017 8:30 PM
53	Buffalo	12/10/2017 7:40 PM
54	Buffalo	12/10/2017 5:58 PM

55	Union county	12/10/2017 4:56 PM
56	Buffalo	12/10/2017 4:25 PM
57	Buffalo	12/10/2017 3:52 PM
58	Buffalo	12/10/2017 3:42 PM
59	Sardis Community	12/10/2017 3:28 PM
60	Spartanburg	12/10/2017 2:20 PM
61	Buffalo	12/10/2017 2:05 PM
62	Buffalo	12/10/2017 2:04 PM
63	Buffalo	12/10/2017 11:08 AM
64	Outside city limirs	12/10/2017 10:04 AM
65	Buffalo	12/10/2017 9:28 AM
66	Union	12/10/2017 7:48 AM
67	Union County towards Whitmire	12/10/2017 7:36 AM
68	County	12/10/2017 7:25 AM
69	County	12/10/2017 7:14 AM
70	Santuc	12/10/2017 5:50 AM
71	Newberry	12/10/2017 4:47 AM
72	Buffalo	12/10/2017 2:20 AM
73	Sardis Rd	12/10/2017 1:42 AM
74	Santuc	12/10/2017 12:41 AM
75	County	12/10/2017 12:26 AM
76	Sardis	12/10/2017 12:17 AM
77	Mt. Lebanon	12/10/2017 12:01 AM
78	Monarch	12/9/2017 11:59 PM
79	Buffalo	12/9/2017 10:12 AM
80	Whitmire, Union County	12/6/2017 2:49 PM
81	Santuc area	12/6/2017 12:43 PM
82	Monarch	12/5/2017 10:47 PM
83	Neal Shoals	12/5/2017 10:35 PM
84	Union County	12/5/2017 3:41 PM
85	county	12/5/2017 10:45 AM
86	kelton	12/5/2017 9:34 AM
87	Union County	12/5/2017 9:27 AM
88	Buffalo	12/5/2017 9:16 AM
89	greenville county	12/5/2017 8:21 AM
90	country in union	12/5/2017 3:32 AM
91	Spartanburg county	12/4/2017 2:42 PM
92	Laurens	12/4/2017 2:14 PM
93	Rural Union County	12/4/2017 2:10 PM
94	Union County Limits	12/4/2017 1:38 PM
95	County	12/4/2017 1:26 PM

Public Survey Questions

96	Adamsburg Area	12/4/2017 11:30 AM
97	Santuc Area of the County	12/4/2017 11:22 AM
98	Pacolet	12/4/2017 11:09 AM
99	Spartanburg	12/4/2017 10:25 AM
100	Spartanburg	12/4/2017 10:17 AM
101	Union County	12/4/2017 10:14 AM
102	County of Union	12/4/2017 9:54 AM
103	County	12/1/2017 11:14 AM

Q8 My primary destinations are: (list THREE (3) destinations with 1 being the most important) [provide exact name of the destinations]

Answered: 356 Skipped: 51

ANSWER CHOICES	RESPONSES	
Destination 1	100.00%	356
Destination 2	94.38%	336
Destination 3	85.39%	304

#	DESTINATION 1	DATE
1	Belk	1/7/2018 4:35 PM
2	medical appointment	1/7/2018 2:49 PM
3	union medial center	1/7/2018 2:48 PM
4	work	1/7/2018 2:48 PM
5	church	1/7/2018 2:47 PM
6	Dr. Appts	1/7/2018 2:47 PM
7	grocery store	1/7/2018 2:46 PM
8	Doctor	1/7/2018 2:46 PM
9	chruch	1/7/2018 2:45 PM
10	church	1/7/2018 2:45 PM
11	save a lot	1/7/2018 2:44 PM
12	walmart	1/7/2018 2:44 PM
13	bi low	1/7/2018 2:43 PM
14	north grove, spartnburg	1/7/2018 2:42 PM
15	Dr. Appts	1/7/2018 2:41 PM
16	church	1/7/2018 2:40 PM
17	bingo	1/7/2018 2:40 PM
18	Dr. Appts	1/7/2018 2:39 PM
19	church	1/7/2018 2:37 PM
20	grocery store	1/7/2018 2:37 PM
21	work	1/7/2018 2:36 PM
22	work	1/7/2018 2:36 PM
23	work	1/7/2018 2:35 PM
24	medical	1/7/2018 2:35 PM
25	work	1/7/2018 2:34 PM
26	work	1/7/2018 2:33 PM
27	work	1/7/2018 2:33 PM
28	car	1/7/2018 2:32 PM
29	church	1/7/2018 2:32 PM

30	church	1/7/2018 2:31 PM
31	chruch	1/7/2018 2:30 PM
32	Church	1/7/2018 2:29 PM
33	Buffalo	1/7/2018 2:29 PM
34	buffalo senior center	1/7/2018 2:28 PM
35	buffalo senior center	1/7/2018 2:27 PM
36	walmart	1/7/2018 2:27 PM
37	shopping	1/7/2018 2:26 PM
38	work	1/7/2018 2:26 PM
39	newburry	1/7/2018 2:25 PM
40	work	1/7/2018 2:24 PM
41	greenvile	1/7/2018 2:24 PM
42	work	1/7/2018 2:23 PM
43	work	1/7/2018 2:22 PM
44	work	1/7/2018 2:22 PM
45	school	1/7/2018 2:21 PM
46	work	1/7/2018 2:21 PM
47	union	1/7/2018 2:20 PM
48	walmart	1/7/2018 2:20 PM
49	union	1/7/2018 2:19 PM
50	work	1/7/2018 2:18 PM
51	work	1/7/2018 2:17 PM
52	medical appointment	1/7/2018 2:17 PM
53	grocery store	1/7/2018 2:17 PM
54	belk distribution	1/7/2018 2:16 PM
55	work	1/7/2018 2:14 PM
56	work	1/7/2018 2:14 PM
57	home	1/7/2018 2:13 PM
58	bank	1/7/2018 2:12 PM
59	home	1/7/2018 2:11 PM
60	unemployment office	1/7/2018 2:10 PM
61	chruch	1/7/2018 2:09 PM
62	work	1/7/2018 2:08 PM
63	Work	1/7/2018 2:07 PM
64	grocery store	1/7/2018 2:07 PM
65	work	1/7/2018 2:06 PM
66	spartanburg(various)	1/7/2018 2:05 PM
67	Dr. Appts	1/7/2018 2:04 PM
68	work	1/7/2018 2:04 PM
69	Work	1/7/2018 2:02 PM
70	Dr. Appts	1/7/2018 2:01 PM

71	medical appointment	1/7/2018 2:00 PM
72	medical appointment	1/7/2018 1:59 PM
73	Church	1/7/2018 1:59 PM
74	medical appointment	1/7/2018 1:57 PM
75	med appts	1/7/2018 1:56 PM
76	Doctor	1/7/2018 1:55 PM
77	Doctor	1/7/2018 1:53 PM
78	medical appointment	1/7/2018 1:51 PM
79	medical appointment	1/7/2018 1:51 PM
80	church	1/7/2018 1:50 PM
81	Mental health	1/7/2018 1:49 PM
82	Work	1/7/2018 1:48 PM
83	church	1/7/2018 1:47 PM
84	medical appointment	1/7/2018 1:46 PM
85	church	1/7/2018 1:44 PM
86	walmart	1/7/2018 1:44 PM
87	walmart	1/7/2018 1:42 PM
88	Dr. Office	1/7/2018 1:40 PM
89	Dr. Office	1/7/2018 1:39 PM
90	Church	1/7/2018 1:38 PM
91	Doctor	1/7/2018 1:37 PM
92	work	1/5/2018 3:58 PM
93	doctor	1/5/2018 3:57 PM
94	walmart	1/5/2018 3:55 PM
95	medical appt	1/5/2018 3:55 PM
96	home	1/5/2018 3:54 PM
97	shopping	1/5/2018 3:53 PM
98	medical appt	1/5/2018 3:53 PM
99	doctor appt	1/5/2018 3:52 PM
100	work	1/5/2018 3:51 PM
101	medical	1/5/2018 3:50 PM
102	Grocery	1/5/2018 3:50 PM
103	work	1/5/2018 3:32 PM
104	school	1/5/2018 3:31 PM
105	walmart	1/5/2018 3:30 PM
106	school- highschool	1/5/2018 3:29 PM
107	work	1/5/2018 3:29 PM
108	home	1/5/2018 3:28 PM
109	home	1/5/2018 3:27 PM
110	home	1/5/2018 3:27 PM
111	work- o'reilly auto	1/5/2018 3:26 PM

112	UCS union	1/5/2018 3:25 PM
113	school- union lovnig high	1/5/2018 3:25 PM
114	Buffalo Elem	1/5/2018 3:24 PM
115	work	1/5/2018 3:23 PM
116	church	1/5/2018 3:23 PM
117	work	1/5/2018 3:22 PM
118	work	1/5/2018 3:21 PM
119	Vapor Apparel	1/5/2018 3:19 PM
120	Wal-mart	1/5/2018 3:19 PM
121	home	1/5/2018 3:18 PM
122	Bilo	1/5/2018 3:17 PM
123	USC Union	1/5/2018 3:16 PM
124	walmart	1/5/2018 3:15 PM
125	work	1/5/2018 3:14 PM
126	work	1/5/2018 3:14 PM
127	church	1/5/2018 3:13 PM
128	grocery store	1/5/2018 3:13 PM
129	school	1/5/2018 3:11 PM
130	work	1/5/2018 3:11 PM
131	work	1/5/2018 3:10 PM
132	Home- Sardis Rd	1/5/2018 3:09 PM
133	work	1/5/2018 3:08 PM
134	work	1/5/2018 3:07 PM
135	Texas	1/5/2018 3:06 PM
136	Wal-mart	1/5/2018 3:06 PM
137	Doctor Unions	1/5/2018 3:05 PM
138	Mc Donalds	1/5/2018 3:04 PM
139	church	1/5/2018 3:03 PM
140	work- Author State Bank	1/5/2018 3:02 PM
141	Ellen Sagar Nursing Center	1/5/2018 3:01 PM
142	work	1/5/2018 3:00 PM
143	Union county high school	1/5/2018 2:59 PM
144	School(high School)	1/5/2018 2:58 PM
145	gestamp	1/5/2018 2:57 PM
146	home	1/5/2018 2:56 PM
147	Bells	1/5/2018 2:55 PM
148	work	1/5/2018 2:54 PM
149		1/5/2018 2:54 PM
	work	1/5/2010 2.341 1
150	work	1/5/2018 2:53 PM

153	School, Union SC	1/5/2018 2:50 PM
154	Church	1/5/2018 2:48 PM
155	School	1/5/2018 2:37 PM
156	school	1/5/2018 2:36 PM
157	work	1/5/2018 2:34 PM
158	work	1/5/2018 2:33 PM
159	spartanburg	1/5/2018 2:28 PM
160	work	1/5/2018 2:27 PM
161	work	1/5/2018 2:27 PM
162	work(school)	1/5/2018 2:26 PM
163	work	1/5/2018 2:25 PM
164	monarch elem school	1/5/2018 2:24 PM
165	walmart	1/5/2018 2:23 PM
166	work-wal-mart	1/5/2018 2:22 PM
167	Doctor	1/5/2018 2:21 PM
168	work	1/5/2018 2:19 PM
169	work	1/5/2018 2:18 PM
170	Doctor	1/5/2018 2:18 PM
171	shopping	1/5/2018 2:17 PM
172	work	1/5/2018 2:14 PM
173	work	1/5/2018 2:14 PM
174	g-daughter to school	1/5/2018 2:13 PM
175	work	1/5/2018 2:12 PM
176	work	1/5/2018 2:11 PM
177	DCI Dialysis Clinic	1/5/2018 2:10 PM
178	work	1/5/2018 2:09 PM
179	Doctor	1/5/2018 2:04 PM
180	medical	1/5/2018 2:04 PM
181	Church	1/5/2018 2:01 PM
182	Doctor	1/5/2018 2:01 PM
183	Medical	1/5/2018 2:00 PM
184	Church	1/5/2018 1:59 PM
185	Doctor	1/5/2018 1:59 PM
186	Doctor	1/5/2018 1:58 PM
187	Doctor	1/5/2018 1:57 PM
188	Doctor	1/5/2018 1:56 PM
189	Doctors	1/5/2018 1:56 PM
190	Doctor	1/5/2018 1:55 PM
191	Medical App	1/5/2018 1:54 PM
192	Doctor	1/5/2018 1:54 PM
193	Doctor	1/5/2018 1:53 PM

194	medical appointments	1/5/2018 1:52 PM
195	medical appointments	1/5/2018 1:51 PM
196	Church	1/5/2018 1:51 PM
197	Dr.	1/5/2018 1:49 PM
198	home	1/5/2018 1:48 PM
199	Dr	1/5/2018 1:47 PM
200	grocery	1/5/2018 1:45 PM
201	Dr	1/5/2018 1:44 PM
202	shopping	1/5/2018 1:40 PM
203	shopping	1/5/2018 1:39 PM
204	Dr	1/5/2018 1:38 PM
205	Dr	1/5/2018 1:38 PM
206	DR	1/5/2018 1:36 PM
207	Dr	1/5/2018 1:35 PM
208	gr	1/5/2018 1:34 PM
209	Church	1/5/2018 1:33 PM
210	Dr. Visit	1/5/2018 1:32 PM
211	Carlisle	1/5/2018 1:25 PM
212	Union	1/5/2018 1:04 PM
213	WORK	12/28/2017 4:43 PM
214	Bilo	12/28/2017 6:43 AM
215	work	12/27/2017 3:12 PM
216	School	12/19/2017 10:29 PM
217	Work	12/18/2017 9:27 AM
218	Union Carnegie library	12/17/2017 10:13 AM
219	Doctors. Apointments	12/16/2017 2:34 PM
220	home	12/15/2017 9:07 PM
221	Work	12/14/2017 8:13 AM
222	Work	12/13/2017 10:16 PM
223	north duncan bypass	12/13/2017 11:41 AM
224	Main Street	12/12/2017 11:40 PM
225	Work	12/11/2017 10:13 PM
226	School	12/11/2017 3:53 PM
227	Walmart	12/11/2017 3:28 PM
228	work	12/11/2017 2:00 PM
229	work	12/11/2017 1:01 PM
230	work-umc	12/11/2017 12:16 PM
231	Work	12/11/2017 9:06 AM
232	Schools	12/11/2017 8:40 AM
233	CVS Rice Avenue Extension	12/11/2017 8:06 AM
234	doctor	12/11/2017 6:43 AM

235	Monarch elementary school	12/10/2017 11:16 PM
236	Self Employed	12/10/2017 10:06 PM
237	BiLo	12/10/2017 8:30 PM
238	School district office	12/10/2017 8:26 PM
239	Home	12/10/2017 8:02 PM
240	Union medical center	12/10/2017 7:40 PM
241	WOrk	12/10/2017 7:36 PM
242	Union County Court House	12/10/2017 6:39 PM
243	Soartanburg	12/10/2017 6:18 PM
244	Work	12/10/2017 6:03 PM
245	Work	12/10/2017 5:58 PM
246	Bi lo	12/10/2017 4:50 PM
247	Sherwin Williams Greer, SC	12/10/2017 4:20 PM
248	Work	12/10/2017 4:12 PM
249	Bi lo	12/10/2017 3:52 PM
250	Buffalo elm school	12/10/2017 3:42 PM
251	Home	12/10/2017 3:38 PM
252	Work	12/10/2017 3:29 PM
253	Sonoco Plastics	12/10/2017 3:28 PM
254	Walmart	12/10/2017 3:20 PM
255	Walmart	12/10/2017 2:39 PM
256	Work	12/10/2017 2:20 PM
257	Work	12/10/2017 2:05 PM
258	Grocery	12/10/2017 11:59 AM
259	Union library	12/10/2017 11:54 AM
260	Home	12/10/2017 11:03 AM
261	Walmart	12/10/2017 11:01 AM
262	Farm Bureau	12/10/2017 10:04 AM
263	Doctors office	12/10/2017 9:56 AM
264	Walmart	12/10/2017 9:43 AM
265	Work	12/10/2017 9:28 AM
266	Work	12/10/2017 9:20 AM
267	Home	12/10/2017 8:55 AM
268	Work	12/10/2017 8:48 AM
269	Work	12/10/2017 8:38 AM
270	Wal-Mart	12/10/2017 8:36 AM
271	Spartanburg District 7	12/10/2017 8:27 AM
272	Work	12/10/2017 8:09 AM
273	Work	12/10/2017 8:04 AM
274	Walmart	12/10/2017 7:54 AM
275	Work	12/10/2017 7:52 AM

276	City of Union municipal building	12/10/2017 7:48 AM
277	Spartanburg	12/10/2017 7:43 AM
278	Wal-Mart	12/10/2017 7:41 AM
279	Walmart	12/10/2017 7:36 AM
280	Wal Mart	12/10/2017 7:25 AM
281	Buffalo Elementary	12/10/2017 7:24 AM
282	Work	12/10/2017 7:14 AM
283	County building	12/10/2017 5:50 AM
284	Work	12/10/2017 5:18 AM
285	Work	12/10/2017 2:45 AM
286	Walmart	12/10/2017 2:28 AM
287	Work - Spectra Colorants	12/10/2017 2:20 AM
288	Job at ESAB	12/10/2017 1:42 AM
289	Home	12/10/2017 12:43 AM
290	Bilo	12/10/2017 12:41 AM
291	Mon-Aetna CEC	12/10/2017 12:33 AM
292	Sims Middle School	12/10/2017 12:26 AM
293	Sims	12/10/2017 12:17 AM
294	Home	12/10/2017 12:15 AM
295	Walmart	12/10/2017 12:10 AM
296	Charlotte	12/10/2017 12:09 AM
297	Shadys	12/10/2017 12:03 AM
298	Work	12/10/2017 12:01 AM
299	Dollar General	12/9/2017 11:59 PM
300	228 Industrial Park Road, Union, SC	12/9/2017 11:50 PM
301	to mall on Duncan Bypass	12/9/2017 4:15 PM
302	work	12/9/2017 10:12 AM
303	Doctors office in hospital	12/9/2017 2:32 AM
304	Work	12/8/2017 11:58 AM
305	Spartanburg Medical Center	12/7/2017 6:31 PM
306	work	12/6/2017 10:19 PM
307	doctor, greenville	12/6/2017 5:21 PM
308	work	12/6/2017 2:49 PM
309		12/6/2017 12:43 PM
310	Union Medical Center	12/6/2017 12:02 PM
311	Home	12/6/2017 4:40 AM
312	work	12/5/2017 10:47 PM
313	Work	12/5/2017 10:35 PM
314	work	12/5/2017 9:01 PM
315	Dr Appointments	12/5/2017 4:19 PM
316	Children's school	12/5/2017 3:41 PM

317	Spartanburg	12/5/2017 2:22 PM
318	Work	12/5/2017 2:08 PM
319	work	12/5/2017 10:45 AM
320	UMC -work	12/5/2017 9:34 AM
321	Home	12/5/2017 9:27 AM
322	Home	12/5/2017 9:16 AM
323	home	12/5/2017 8:21 AM
324	Work	12/5/2017 8:09 AM
325	Home	12/5/2017 6:18 AM
326	Union Medical	12/5/2017 3:32 AM
327	Work	12/4/2017 9:15 PM
328	Work	12/4/2017 4:50 PM
329	Home	12/4/2017 4:31 PM
330	Work- Union Medical Center	12/4/2017 4:20 PM
331	Doctor	12/4/2017 3:41 PM
332	WORK	12/4/2017 3:09 PM
333	Work	12/4/2017 2:57 PM
334	medical appointments	12/4/2017 2:42 PM
335	USC-Union	12/4/2017 2:14 PM
336	Grocery Store	12/4/2017 2:10 PM
337	work	12/4/2017 2:00 PM
338	Walmart	12/4/2017 1:46 PM
339	work	12/4/2017 1:46 PM
340	Union Medical Center	12/4/2017 1:41 PM
341	Union Medical Center/Hospital	12/4/2017 1:38 PM
342	work	12/4/2017 1:38 PM
343	USC Union	12/4/2017 1:32 PM
344	Union Medical Center	12/4/2017 1:27 PM
345	Work	12/4/2017 1:26 PM
346	Spartanburg Regional Hospital	12/4/2017 12:33 PM
347	Work	12/4/2017 11:30 AM
348	Work	12/4/2017 11:22 AM
349	USC Union (work)	12/4/2017 11:09 AM
350	University of South Carolina Union	12/4/2017 11:04 AM
351	Hospital/Drs appointments	12/4/2017 10:35 AM
352	Home	12/4/2017 10:25 AM
353	Home	12/4/2017 10:19 AM
354	HOME	12/4/2017 10:17 AM
355	Work	12/4/2017 10:14 AM
356	Work	12/1/2017 11:14 AM
#	DESTINATION 2	DATE

1	Dr	1/7/2018 4:35 PM
2	grocery store	1/7/2018 2:49 PM
3	walmart	1/7/2018 2:48 PM
4	grocery store	1/7/2018 2:48 PM
5	dr appts	1/7/2018 2:47 PM
6	church	1/7/2018 2:47 PM
7	dr appts	1/7/2018 2:46 PM
8	church	1/7/2018 2:46 PM
9	shopping	1/7/2018 2:45 PM
10	shopping	1/7/2018 2:45 PM
11	walmart	1/7/2018 2:44 PM
12	bi low	1/7/2018 2:44 PM
13	doller tree	1/7/2018 2:43 PM
14	walmart	1/7/2018 2:42 PM
15	medical appts	1/7/2018 2:40 PM
16	shopping	1/7/2018 2:39 PM
17	grocery store	1/7/2018 2:37 PM
18	church	1/7/2018 2:37 PM
19	home	1/7/2018 2:36 PM
20	school	1/7/2018 2:36 PM
21	shopping	1/7/2018 2:35 PM
22	grocery store	1/7/2018 2:35 PM
23	home	1/7/2018 2:34 PM
24	home	1/7/2018 2:33 PM
25	mma gym	1/7/2018 2:33 PM
26	van	1/7/2018 2:32 PM
27	walmart	1/7/2018 2:32 PM
28	dr appts	1/7/2018 2:31 PM
29	senior center	1/7/2018 2:30 PM
30	shopping	1/7/2018 2:29 PM
31	dr appt	1/7/2018 2:29 PM
32	shopping	1/7/2018 2:28 PM
33	dr appts	1/7/2018 2:27 PM
34	bi low	1/7/2018 2:27 PM
35	church	1/7/2018 2:26 PM
36	school	1/7/2018 2:26 PM
37	jonesville	1/7/2018 2:25 PM
38	school	1/7/2018 2:24 PM
39	dentist	1/7/2018 2:24 PM
40	grocery store	1/7/2018 2:23 PM
41	shopping	1/7/2018 2:22 PM

42	home	1/7/2018 2:22 PM
43	work	1/7/2018 2:21 PM
44	downtown	1/7/2018 2:21 PM
45	chester	1/7/2018 2:20 PM
46	V C works	1/7/2018 2:20 PM
47	chester	1/7/2018 2:19 PM
48	grocery store	1/7/2018 2:18 PM
49	Government services	1/7/2018 2:17 PM
50	grocery store	1/7/2018 2:17 PM
51	Government services	1/7/2018 2:17 PM
52	mothers help (west springs highway)	1/7/2018 2:16 PM
53	medical appts	1/7/2018 2:14 PM
54	medical appts	1/7/2018 2:14 PM
55	work	1/7/2018 2:13 PM
56	store	1/7/2018 2:12 PM
57	church	1/7/2018 2:11 PM
58	apply for jobs	1/7/2018 2:10 PM
59	work	1/7/2018 2:09 PM
60	medical	1/7/2018 2:08 PM
61	church	1/7/2018 2:07 PM
62	Dr. Office	1/7/2018 2:07 PM
63	jonesville (work)	1/7/2018 2:05 PM
64	church	1/7/2018 2:04 PM
65	home	1/7/2018 2:04 PM
66	shopping	1/7/2018 2:02 PM
67	grocery store	1/7/2018 2:01 PM
68	Government services	1/7/2018 2:00 PM
69	recreation	1/7/2018 1:59 PM
70	grocery store	1/7/2018 1:57 PM
71	gov appts	1/7/2018 1:56 PM
72	store	1/7/2018 1:55 PM
73	Store	1/7/2018 1:53 PM
74	grocery store	1/7/2018 1:51 PM
75	grocery store	1/7/2018 1:51 PM
76	dr. appt	1/7/2018 1:50 PM
77	union medical center	1/7/2018 1:49 PM
78	Church	1/7/2018 1:48 PM
79	work	1/7/2018 1:47 PM
80	grocery store	1/7/2018 1:46 PM
81	store	1/7/2018 1:44 PM
82	church	1/7/2018 1:44 PM

83	CVS	1/7/2018 1:42 PM
84	Government Office	1/7/2018 1:40 PM
85	grocery store	1/7/2018 1:38 PM
86	Work	1/7/2018 1:37 PM
87	grocery	1/5/2018 3:58 PM
88	dorctor appt	1/5/2018 3:55 PM
89	groery	1/5/2018 3:55 PM
90	work	1/5/2018 3:54 PM
91	doctor appt	1/5/2018 3:53 PM
92	church	1/5/2018 3:53 PM
93	church	1/5/2018 3:52 PM
94	grocery	1/5/2018 3:50 PM
95	Medical appt	1/5/2018 3:50 PM
96	home	1/5/2018 3:32 PM
97	church	1/5/2018 3:31 PM
98	new life baptist	1/5/2018 3:30 PM
99	home-carlise	1/5/2018 3:29 PM
100	home	1/5/2018 3:29 PM
101	work	1/5/2018 3:28 PM
102	school	1/5/2018 3:27 PM
103	work	1/5/2018 3:27 PM
104	crossway church main st	1/5/2018 3:26 PM
105	home	1/5/2018 3:25 PM
106	doctor- spartenburg	1/5/2018 3:25 PM
107	Wal-mart	1/5/2018 3:24 PM
108	church	1/5/2018 3:23 PM
109	shopping	1/5/2018 3:23 PM
110	shopping	1/5/2018 3:22 PM
111	church	1/5/2018 3:21 PM
112	L.L Cricket	1/5/2018 3:19 PM
113	work	1/5/2018 3:18 PM
114	Walmart	1/5/2018 3:17 PM
115	Work	1/5/2018 3:16 PM
116	family dollar	1/5/2018 3:15 PM
117	school	1/5/2018 3:14 PM
118	grocery	1/5/2018 3:14 PM
119	doctor	1/5/2018 3:13 PM
120	school	1/5/2018 3:13 PM
121	home	1/5/2018 3:11 PM
122	church	1/5/2018 3:11 PM
123	school	1/5/2018 3:10 PM

124	TBA Consturction- Union SC	1/5/2018 3:09 PM
125	grocery	1/5/2018 3:08 PM
126	wal-mart	1/5/2018 3:07 PM
127	Columbia	1/5/2018 3:06 PM
128	Doctor	1/5/2018 3:06 PM
129	Church	1/5/2018 3:05 PM
130	Tex Resturant	1/5/2018 3:04 PM
131	YMCA	1/5/2018 3:03 PM
132	Church- Tabernade	1/5/2018 3:02 PM
133	Union Medical Center	1/5/2018 3:01 PM
134	church	1/5/2018 3:00 PM
135	usc union	1/5/2018 2:59 PM
136	college	1/5/2018 2:58 PM
137	sailors MHP	1/5/2018 2:57 PM
138	save-a lot, Union NC	1/5/2018 2:56 PM
139	Bi Lo	1/5/2018 2:55 PM
140	church	1/5/2018 2:54 PM
141	groceries	1/5/2018 2:54 PM
142	home	1/5/2018 2:53 PM
143	work	1/5/2018 2:51 PM
144	work (save a lot)	1/5/2018 2:51 PM
145	home, Buffalo NC	1/5/2018 2:50 PM
146	Sptg & Grayburg	1/5/2018 2:48 PM
147	unique steps	1/5/2018 2:37 PM
148	grandmas house (Willow lane)	1/5/2018 2:36 PM
149	union	1/5/2018 2:28 PM
150	hospital	1/5/2018 2:27 PM
151	home	1/5/2018 2:27 PM
152	church	1/5/2018 2:26 PM
153	church	1/5/2018 2:25 PM
154	welcome baptist church	1/5/2018 2:24 PM
155	wells fargo	1/5/2018 2:23 PM
156	home	1/5/2018 2:22 PM
157	paybills	1/5/2018 2:21 PM
158	home	1/5/2018 2:19 PM
159	grocery	1/5/2018 2:18 PM
160	Groceries	1/5/2018 2:18 PM
161	church	1/5/2018 2:17 PM
162	grand childrens home	1/5/2018 2:14 PM
163	grocery	1/5/2018 2:14 PM
164	work	1/5/2018 2:13 PM

165	home	1/5/2018 2:12 PM
166	church	1/5/2018 2:11 PM
167	Union Medical Center	1/5/2018 2:10 PM
168	church	1/5/2018 2:09 PM
169	Union	1/5/2018 2:04 PM
170	grocery	1/5/2018 2:04 PM
171	Shopping	1/5/2018 2:01 PM
172	Government	1/5/2018 2:00 PM
173	Doctor	1/5/2018 1:59 PM
174	Church	1/5/2018 1:59 PM
175	Grocery	1/5/2018 1:58 PM
176	Shopping	1/5/2018 1:57 PM
177	Shopping	1/5/2018 1:56 PM
178	Shopping	1/5/2018 1:54 PM
179	grocery	1/5/2018 1:54 PM
180	government services	1/5/2018 1:52 PM
181	church	1/5/2018 1:51 PM
182	Dr	1/5/2018 1:51 PM
183	Shopping	1/5/2018 1:49 PM
184	work	1/5/2018 1:48 PM
185	grocery	1/5/2018 1:47 PM
186	medical appt	1/5/2018 1:45 PM
187	Grocery	1/5/2018 1:44 PM
188	grocery	1/5/2018 1:40 PM
189	grocery	1/5/2018 1:39 PM
190	Grocery	1/5/2018 1:38 PM
191	Church	1/5/2018 1:38 PM
192	Church	1/5/2018 1:36 PM
193	Grocery	1/5/2018 1:35 PM
194	church	1/5/2018 1:34 PM
195	Grocery	1/5/2018 1:33 PM
196	Work	1/5/2018 1:32 PM
197	Union	1/5/2018 1:25 PM
198	Carlisle	1/5/2018 1:04 PM
199	CHURCH	12/28/2017 4:43 PM
200	Courthouse	12/28/2017 6:43 AM
201	Work	12/19/2017 10:29 PM
202	Home	12/18/2017 9:27 AM
203	Union county high school	12/17/2017 10:13 AM
204	Bilo	12/16/2017 2:34 PM
205	work	12/15/2017 9:07 PM

206	Bi-lo	12/14/2017 8:13 AM
207	Stores	12/13/2017 10:16 PM
208	Walmart	12/13/2017 11:41 AM
209	Walmart	12/12/2017 11:40 PM
210	Church	12/11/2017 10:13 PM
211	Work	12/11/2017 3:53 PM
212	shopping for food, visiting food banks	12/11/2017 2:00 PM
213	home	12/11/2017 1:01 PM
214	wal-mart	12/11/2017 12:16 PM
215	Shopping	12/11/2017 9:06 AM
216	Work	12/11/2017 8:40 AM
217	Walmart	12/11/2017 8:06 AM
218	grocery store	12/11/2017 6:43 AM
219	Welcome Baptist church	12/10/2017 11:16 PM
220	lake Murray	12/10/2017 10:06 PM
221	WalMart	12/10/2017 8:30 PM
222	Grocery store	12/10/2017 8:26 PM
223	Work	12/10/2017 8:02 PM
224	Walmart	12/10/2017 7:40 PM
225	Walmart	12/10/2017 7:36 PM
226	Walmart	12/10/2017 6:39 PM
227	Walmart	12/10/2017 6:03 PM
228	Walmart	12/10/2017 5:58 PM
229	Wal-Mart	12/10/2017 4:50 PM
230	Putman Baptist Church	12/10/2017 4:20 PM
231	Church	12/10/2017 4:12 PM
232	Wal Mart	12/10/2017 3:52 PM
233	Wallace Thomson hospital area	12/10/2017 3:42 PM
234	Work/school	12/10/2017 3:38 PM
235	Bank	12/10/2017 3:29 PM
236	Buffalo Baptist	12/10/2017 3:28 PM
237	Bilo	12/10/2017 3:20 PM
238	Bilo	12/10/2017 2:39 PM
239	Church	12/10/2017 2:20 PM
240	Church	12/10/2017 2:05 PM
241	Drug store	12/10/2017 11:59 AM
242	Bilo Grocery store	12/10/2017 11:54 AM
243	Gro shopping	12/10/2017 11:03 AM
244	YMCA	12/10/2017 11:01 AM
245	Cvs	12/10/2017 10:04 AM
246	Grocery store	12/10/2017 9:56 AM

247	Bilo	12/10/2017 9:43 AM
248	Church	12/10/2017 9:28 AM
249	Medical appointments	12/10/2017 9:20 AM
250	Work	12/10/2017 8:55 AM
251	Grocery store	12/10/2017 8:48 AM
252	Home	12/10/2017 8:38 AM
253	Foster Park area	12/10/2017 8:36 AM
254	Boiling Springs Church of Christ	12/10/2017 8:27 AM
255	Walmart	12/10/2017 8:09 AM
256	Shopping	12/10/2017 8:04 AM
257	Church	12/10/2017 7:54 AM
258	Church	12/10/2017 7:52 AM
259	Jonesville Elementary Middle School	12/10/2017 7:48 AM
260	Gaffney	12/10/2017 7:43 AM
261	Grace Church	12/10/2017 7:41 AM
262	Bilo	12/10/2017 7:36 AM
263	Bilo	12/10/2017 7:25 AM
264	BiLo	12/10/2017 7:24 AM
265	Shopping wal mart	12/10/2017 7:14 AM
266	City Hall	12/10/2017 5:50 AM
267	Church	12/10/2017 5:18 AM
268	School	12/10/2017 2:45 AM
269	Court House	12/10/2017 2:28 AM
270	WalMart	12/10/2017 2:20 AM
271	Work	12/10/2017 12:43 AM
272	Ace Hdwr	12/10/2017 12:41 AM
273	Wal Mart	12/10/2017 12:33 AM
274	Walmart	12/10/2017 12:26 AM
275	Bi-lo	12/10/2017 12:17 AM
276	Grace United Methodist church	12/10/2017 12:15 AM
277	Bi-Lo	12/10/2017 12:10 AM
278	Spartanburg	12/10/2017 12:09 AM
279	Wal mart	12/10/2017 12:03 AM
280	Church	12/10/2017 12:01 AM
281	Walmart	12/9/2017 11:59 PM
282	432 N Duncan Bypass, Union, SC	12/9/2017 11:50 PM
283	Downtown Union	12/9/2017 4:15 PM
284	grocery	12/9/2017 10:12 AM
285	Walmart	12/9/2017 2:32 AM
286	Home	12/8/2017 11:58 AM
287	Boiling Springs church of Christ	12/7/2017 6:31 PM

288	doctor	12/6/2017 10:19 PM
289	shopping, spartanburg	12/6/2017 5:21 PM
290	church	12/6/2017 2:49 PM
291		12/6/2017 12:43 PM
292	Walmart	12/6/2017 12:02 PM
293	Union Medical Center	12/6/2017 4:40 AM
294	home	12/5/2017 10:47 PM
295	Grocery Shopping: Bi-Lo or Wal-Mart	12/5/2017 10:35 PM
296	doctor	12/5/2017 9:01 PM
297	grocery shopping	12/5/2017 4:19 PM
298	work	12/5/2017 3:41 PM
299	Greenville	12/5/2017 2:22 PM
300	Church	12/5/2017 2:08 PM
301	school	12/5/2017 10:45 AM
302	Spartanburg-shopping	12/5/2017 9:34 AM
303	Work	12/5/2017 9:27 AM
304	Work	12/5/2017 9:16 AM
305	work	12/5/2017 8:21 AM
306	Church	12/5/2017 8:09 AM
307	work	12/5/2017 6:18 AM
308	Shopping	12/4/2017 9:15 PM
309	Doctor	12/4/2017 4:50 PM
310	Hospital	12/4/2017 4:31 PM
311	Wal-Mart	12/4/2017 4:20 PM
312	Pay Bills	12/4/2017 3:41 PM
313	GROCERY STORE	12/4/2017 3:09 PM
314	Home	12/4/2017 2:57 PM
315	grocery shopping	12/4/2017 2:42 PM
316	Events or meetings in Union	12/4/2017 2:14 PM
317	Gas Station	12/4/2017 2:10 PM
318	grocery store	12/4/2017 2:00 PM
319	Church- Kelly Rd	12/4/2017 1:46 PM
320	home	12/4/2017 1:46 PM
321	Government office re DSS	12/4/2017 1:41 PM
322	Main Street	12/4/2017 1:38 PM
323	dr appt	12/4/2017 1:38 PM
324	Timken Sports Complex	12/4/2017 1:32 PM
325	Walmart	12/4/2017 1:27 PM
326	Church	12/4/2017 1:26 PM
327	Jonesville	12/4/2017 12:33 PM
328	Home	12/4/2017 11:30 AM

329	WalMart	12/4/2017 11:09 AM
330	Lockhart First Baptist Church	12/4/2017 11:04 AM
331	Grocery shopping	12/4/2017 10:35 AM
332	Work	12/4/2017 10:25 AM
333	Work	12/4/2017 10:19 AM
334	WORK	12/4/2017 10:17 AM
335	Home	12/4/2017 10:14 AM
336	Home	12/1/2017 11:14 AM
#	DESTINATION 3	DATE
1	Shopping	1/7/2018 4:35 PM
2	church	1/7/2018 2:49 PM
}	senior center	1/7/2018 2:48 PM
ŀ	church	1/7/2018 2:48 PM
5	Recreation	1/7/2018 2:47 PM
6	church	1/7/2018 2:46 PM
7	home	1/7/2018 2:46 PM
3	Recreation	1/7/2018 2:45 PM
)	Recreation	1/7/2018 2:45 PM
0	family dollar	1/7/2018 2:44 PM
1	doller general	1/7/2018 2:44 PM
2	walkmart	1/7/2018 2:43 PM
3	church	1/7/2018 2:42 PM
4	shopping	1/7/2018 2:40 PM
5	home	1/7/2018 2:39 PM
16	Dr	1/7/2018 2:37 PM
7	grocery	1/7/2018 2:36 PM
8	Dr. Appt	1/7/2018 2:36 PM
9	park	1/7/2018 2:35 PM
20	chruch	1/7/2018 2:35 PM
:1	dr office	1/7/2018 2:34 PM
22	dr	1/7/2018 2:33 PM
23	dr office	1/7/2018 2:33 PM
24	friend	1/7/2018 2:32 PM
25	spartanburg health center	1/7/2018 2:32 PM
26	shopping	1/7/2018 2:31 PM
?7	shopping	1/7/2018 2:30 PM
28	Dr	1/7/2018 2:29 PM
29	walmart	1/7/2018 2:29 PM
30	church	1/7/2018 2:28 PM
31	church	1/7/2018 2:27 PM
32	church	1/7/2018 2:27 PM

33via triansi17/2012 2.0 P.M34home17/2012 2.2 F.M35uppls17/2012 2.2 F.M36appls17/2012 2.2 F.M37drivial17/2012 2.2 F.M38medical appl17/2012 2.2 F.M40groery17/2012 2.2 F.M41shopping17/2012 2.2 F.M42walmart17/2012 2.2 F.M43blow17/2012 2.2 F.M44spatianburg17/2012 2.2 F.M45walmart17/2012 2.2 F.M46spatianburg17/2012 2.2 F.M47blow17/2012 2.2 F.M48home17/2012 2.2 F.M49spatianburg17/2012 2.2 F.M41spatianburg17/2012 2.2 F.M42home17/2012 2.1 F.M43blow17/2012 2.1 F.M44poreny17/2012 2.1 F.M45groery17/2012 2.1 F.M46mom17/2012 2.1 F.M47bome17/2012 2.1 F.M48home17/2012 2.1 F.M49bome17/2012 2.1 F.M51groery17/2012 2.1 F.M52groery17/2012 2.1 F.M53groery17/2012 2.1 F.M54groery17/2012 2.1 F.M55groery17/2012 2.1 F.M56groery17/2012 2.1 F.M57groery17/2012 2.1 F.M58groery17/2012 2.1 F.M59groery17/2012 2.1 F.M59			
35union17/2018 2.24 PM36opps17/2018 2.24 PM37odical appt17/2018 2.24 PM38molical appt17/2018 2.24 PM39home17/2018 2.24 PM40grosery17/2018 2.22 PM41shopping17/2018 2.21 PM42walmat17/2018 2.21 PM43bilow17/2018 2.21 PM44sparlanburg17/2018 2.21 PM45bilow17/2018 2.12 PM46grocery17/2018 2.12 PM47bilow17/2018 2.12 PM48home17/2018 2.12 PM49bilow17/2018 2.12 PM41sparlanburg17/2018 2.12 PM42grocery17/2018 2.12 PM43home17/2018 2.12 PM44sparlanburg17/2018 2.12 PM45home17/2018 2.12 PM46grocery17/2018 2.12 PM47home17/2018 2.12 PM48home17/2018 2.12 PM49home17/2018 2.12 PM50grocery17/2018 2.12 PM51grocery17/2018 2.12 PM52grocery17/2018 2.12 PM53grocery17/2018 2.12 PM54home17/2018 2.12 PM55grocery17/2018 2.12 PM56grocery17/2018 2.12 PM57grocery17/2018 2.12 PM58grocery17/2018 2.12 PM59grocery17/2018 2.02 PM50 <td>33</td> <td>visit friends</td> <td>1/7/2018 2:26 PM</td>	33	visit friends	1/7/2018 2:26 PM
38appts17/2018 2.24 PM37drvisit17/2018 2.24 PM38medical appt17/2018 2.24 PM38bome17/2018 2.22 PM40grocery17/2018 2.22 PM41shoping17/2018 2.21 PM42walmart17/2018 2.21 PM43blow17/2018 2.21 PM44spatianburg17/2018 2.21 PM45blow17/2018 2.11 PM46grocery17/2018 2.11 PM47home17/2018 2.11 PM48bome17/2018 2.11 PM49home17/2018 2.12 PM40home17/2018 2.12 PM41grocery17/2018 2.12 PM42home17/2018 2.12 PM43grocery17/2018 2.12 PM44home17/2018 2.12 PM54home17/2018 2.12 PM54grocery17/2018 2.02 PM54grocery17/2018 2.02 PM54grocery17/2018 2.02 PM54grocery17/2018 2.02 PM55grocery17/2018 2.02 PM56grocery17/2018 2.02 PM57grocery17/2018 2.02 PM58grocery17/2018 2.02 PM59grocery17/2	34	home	1/7/2018 2:26 PM
Arrival 17/2018 2.24 PM 38 medical appl 17/2018 2.22 PM 39 home 17/2018 2.22 PM 40 grocery 17/2018 2.22 PM 41 shopping 17/2018 2.22 PM 42 shopping 17/2018 2.21 PM 42 shopping 17/2018 2.21 PM 43 blow 17/2018 2.21 PM 44 spataburg 17/2018 2.21 PM 45 blow 17/2018 2.12 PM 46 grocery 17/2018 2.12 PM 47 home 17/2018 2.12 PM 48 more 17/2018 2.14 PM 49 grocery 17/2018 2.14 PM 41 grocery 17/2018 2.14 PM 42 home 17/2018 2.14 PM 51 grocery 17/2018 2.14 PM 52 home 17/2018 2.14 PM 53 grocery 17/2018 2.14 PM 54 home 17/2018 2.14 PM 55 grocery 17/2018 2.01 PM 56	35	union	1/7/2018 2:25 PM
38medical appl17/2018 2.23 PM39home17/2018 2.22 PM40grocery17/2018 2.22 PM41shopping17/2018 2.21 PM42walmart17/2018 2.21 PM43bi low17/2018 2.21 PM44spartanburg17/2018 2.21 PM45bi low17/2018 2.21 PM46grocery17/2018 2.17 PM47home17/2018 2.17 PM48home17/2018 2.17 PM49home17/2018 2.17 PM41home17/2018 2.17 PM42home17/2018 2.17 PM43home17/2018 2.17 PM44home17/2018 2.17 PM45home17/2018 2.17 PM46grocery17/2018 2.13 PM47home17/2018 2.12 PM58grocery17/2018 2.12 PM54home17/2018 2.12 PM55grocery17/2018 2.12 PM56grocery17/2018 2.02 PM57grocery17/2018 2.02 PM58grocery17/2018 2.02 PM59grocery17/2018 2.02 PM59grocery17/2018 2.02 PM50grocery17/2018 2.02 PM51grocery17/2018 2.02 PM52grocery17/2018 2.02 PM53grocery17/2018 2.02 PM54grocery17/2018 2.02 PM55grocery17/2018 2.02 PM56grocery17/2018 1.02 PM57groc	36	appts	1/7/2018 2:24 PM
39home17/2018 2.22 PM40groery17/2018 2.22 PM41shoping17/2018 2.21 PM42walnart17/2018 2.21 PM42bilow17/2018 2.20 PM44bilow17/2018 2.20 PM44groery17/2018 2.20 PM45home17/2018 2.10 PM46groery17/2018 2.17 PM47home17/2018 2.17 PM48groery17/2018 2.17 PM49home17/2018 2.17 PM41home17/2018 2.17 PM42home17/2018 2.17 PM43home17/2018 2.17 PM44home17/2018 2.17 PM45home17/2018 2.17 PM46home17/2018 2.17 PM47home17/2018 2.17 PM48opery17/2018 2.17 PM49home17/2018 2.17 PM51groery17/2018 2.17 PM52groery17/2018 2.07 PM54home17/2018 2.07 PM55groery17/2018 2.07 PM56groery17/2018 2.07 PM57groery17/2018 2.07 PM58groery17/2018 2.07 PM59groery17/2018 2.07 PM50groery17/2018 2.07 PM51groery17/2018 2.07 PM52groery17/2018 2.07 PM53groery17/2018 2.07 PM54groery17/2018 2.02 PM55groery17/2018 2.02 PM	37	dr visit	1/7/2018 2:24 PM
41groory177/2018 2:22 PM41shoping177/2018 2:21 PM42walmart177/2018 2:21 PM43bi low177/2018 2:21 PM44spatrahourg177/2018 2:19 PM45home177/2018 2:19 PM46grocery177/2018 2:19 PM47home177/2018 2:19 PM48mone177/2018 2:19 PM49home (Bobby Faucette Rd)177/2018 2:16 PM49home (Bobby Faucette Rd)177/2018 2:14 PM51grocery177/2018 2:14 PM52chuch177/2018 2:14 PM53grocery177/2018 2:14 PM54home177/2018 2:14 PM55grocery177/2018 2:14 PM54home177/2018 2:14 PM55grocery177/2018 2:14 PM54shopin177/2018 2:14 PM55grocery177/2018 2:17 PM56shopin177/2018 2:09 PM57grocery177/2018 2:01 PM58shopin177/2018 2:02 PM59grocery177/2018 2:02 PM59grocery177/2018 2:02 PM59grocery177/2018 2:02 PM51grocery177/2018 2:02 PM51grocery177/2018 2:02 PM52grocery177/2018 2:02 PM54grocery177/2018 2:02 PM55grocery177/2018 2:02 PM56grocery177/2018 2:02 PM57grocery177/2018 1:02 PM5	38	medical appt	1/7/2018 2:23 PM
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76	Church	1/7/2018 1:37 PM
77	church	1/5/2018 3:58 PM
78	church	1/5/2018 3:55 PM
79	shopping	1/5/2018 3:55 PM
80	church	1/5/2018 3:54 PM
81	church	1/5/2018 3:53 PM
82	grocery	1/5/2018 3:53 PM
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86	walmart	1/5/2018 3:32 PM
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107	church	1/5/2018 3:14 PM
108	store	1/5/2018 3:13 PM
109	church	1/5/2018 3:13 PM
110	Sand House- Columbia SC	1/5/2018 3:09 PM
111	doctor	1/5/2018 3:08 PM
112	church	1/5/2018 3:07 PM
113	Newberry	1/5/2018 3:06 PM
114	stores	1/5/2018 3:03 PM

115	Union YMCA	1/5/2018 3:02 PM
116	Wal-Mart	1/5/2018 3:01 PM
117	store	1/5/2018 3:00 PM
118	unique steps	1/5/2018 2:59 PM
119	home	1/5/2018 2:58 PM
120	walmart	1/5/2018 2:57 PM
121	Wal-mart	1/5/2018 2:56 PM
122	Sonesville\ tead short	1/5/2018 2:55 PM
123	shopping	1/5/2018 2:54 PM
124	church	1/5/2018 2:54 PM
125	church	1/5/2018 2:53 PM
126	church	1/5/2018 2:51 PM
127	wal-mart	1/5/2018 2:51 PM
128	dad's house, Marion SC	1/5/2018 2:50 PM
129	Store	1/5/2018 2:48 PM
130	university of union	1/5/2018 2:37 PM
131	home (William E Free Pathway)	1/5/2018 2:36 PM
132	doctor	1/5/2018 2:27 PM
133	town	1/5/2018 2:27 PM
134	relatives	1/5/2018 2:26 PM
135	outing	1/5/2018 2:25 PM
136	walmart	1/5/2018 2:24 PM
137	babysitter	1/5/2018 2:22 PM
138	grocery	1/5/2018 2:21 PM
139	family	1/5/2018 2:19 PM
140	doctor	1/5/2018 2:18 PM
141	banking	1/5/2018 2:18 PM
142	grocery	1/5/2018 2:17 PM
143	home	1/5/2018 2:14 PM
144	shopping	1/5/2018 2:14 PM
145	pay bills	1/5/2018 2:13 PM
146	work	1/5/2018 2:12 PM
147	grocery	1/5/2018 2:11 PM
148	Upstate Nephrology	1/5/2018 2:10 PM
149	store	1/5/2018 2:09 PM
150	Gym	1/5/2018 2:04 PM
151	church	1/5/2018 2:04 PM
152	Medical	1/5/2018 2:01 PM
153	Shopping	1/5/2018 2:00 PM
154	Grocery	1/5/2018 1:59 PM
155	Grocery	1/5/2018 1:59 PM

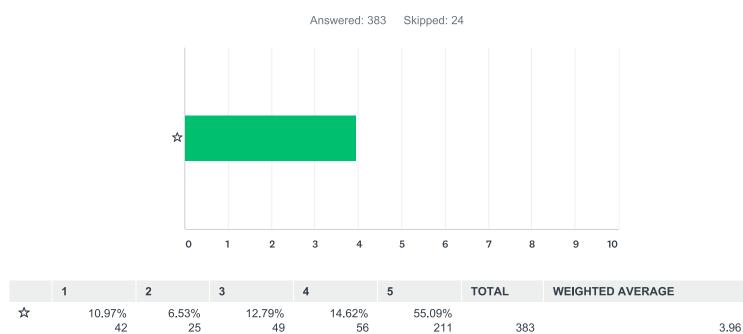
156	School	1/5/2018 1:58 PM
157	Government	1/5/2018 1:57 PM
158	Church	1/5/2018 1:56 PM
159	Grocery	1/5/2018 1:54 PM
160	grocery	1/5/2018 1:52 PM
161	grocery	1/5/2018 1:51 PM
162	Grocery	1/5/2018 1:51 PM
163	grocery	1/5/2018 1:49 PM
164	grocery store	1/5/2018 1:48 PM
165	church	1/5/2018 1:47 PM
166	shopping	1/5/2018 1:45 PM
167	church	1/5/2018 1:44 PM
168	church	1/5/2018 1:39 PM
169	Shopping	1/5/2018 1:38 PM
170	Grocery	1/5/2018 1:38 PM
171	Grocery	1/5/2018 1:36 PM
172	Shopping	1/5/2018 1:35 PM
173	work	1/5/2018 1:34 PM
174	Doctor	1/5/2018 1:33 PM
175	Grocery	1/5/2018 1:32 PM
176	Spartanburg	1/5/2018 1:04 PM
177	SHOPPING	12/28/2017 4:43 PM
178	Walmart	12/28/2017 6:43 AM
179	Store	12/19/2017 10:29 PM
180	Shopping/out to eat	12/18/2017 9:27 AM
181	Walmart	12/16/2017 2:34 PM
182	errands	12/15/2017 9:07 PM
183	Eating	12/14/2017 8:13 AM
184	Activities for my children, ball field for ex.	12/13/2017 10:16 PM
185	Bilo	12/13/2017 11:41 AM
186	Foster Park	12/12/2017 11:40 PM
187	Grocery shopping	12/11/2017 10:13 PM
188	Grocery store	12/11/2017 3:53 PM
189	church	12/11/2017 2:00 PM
190	store	12/11/2017 1:01 PM
191	grocery store	12/11/2017 12:16 PM
192	Restaurants	12/11/2017 9:06 AM
193	Town	12/11/2017 8:40 AM
194	wal-mart	12/11/2017 6:43 AM
195	Walmart	12/10/2017 11:16 PM
196	Dollar General	12/10/2017 8:30 PM

197	Cvs	12/10/2017 8:26 PM
198	Church	12/10/2017 8:02 PM
199	Dollar General	12/10/2017 7:40 PM
200	Church	12/10/2017 7:36 PM
201	Phillipi Church	12/10/2017 6:39 PM
202	El poblano	12/10/2017 6:03 PM
203	Dr	12/10/2017 5:58 PM
204	Dr Keiths	12/10/2017 4:50 PM
205	WalMart	12/10/2017 4:20 PM
206	Home	12/10/2017 4:12 PM
207	Church	12/10/2017 3:52 PM
208	Grocery store (bilo or walmart)	12/10/2017 3:42 PM
209	Grocery store	12/10/2017 3:38 PM
210	Walmart	12/10/2017 3:29 PM
211	Walmart	12/10/2017 3:28 PM
212	Family Dollar Store's	12/10/2017 3:20 PM
213	Hospital	12/10/2017 2:39 PM
214	Store	12/10/2017 2:20 PM
215	Home	12/10/2017 2:05 PM
216	Church	12/10/2017 11:59 AM
217	USC Union	12/10/2017 11:54 AM
218	Family	12/10/2017 11:03 AM
219	Fresh Air Galaxy	12/10/2017 11:01 AM
220	DairiO	12/10/2017 10:04 AM
221	Work	12/10/2017 9:56 AM
222	YMCA	12/10/2017 9:43 AM
223	My son school	12/10/2017 9:28 AM
224	Grocery store	12/10/2017 9:20 AM
225	Grocery	12/10/2017 8:55 AM
226	Family	12/10/2017 8:48 AM
227	Wal Mart	12/10/2017 8:38 AM
228	Sims Middle School	12/10/2017 8:36 AM
229	Dr. Appointments, Spartanburg, Gaffney, Asheville	12/10/2017 8:27 AM
230	Church	12/10/2017 8:09 AM
231	Downtown	12/10/2017 7:54 AM
232	Store	12/10/2017 7:52 AM
233	Union County High School	12/10/2017 7:48 AM
234	Greenville	12/10/2017 7:43 AM
235	Hospital	12/10/2017 7:41 AM
236	Hospital	12/10/2017 7:36 AM
237	CVS	12/10/2017 7:25 AM

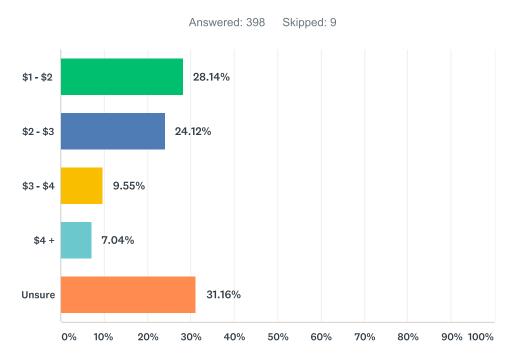
238	Walmart	12/10/2017 7:24 AM
239	Home	12/10/2017 5:18 AM
240	Home	12/10/2017 2:45 AM
241	Foster Park	12/10/2017 2:28 AM
242	CVS	12/10/2017 2:20 AM
243	Wal-Mart	12/10/2017 12:43 AM
244	La Fogota	12/10/2017 12:41 AM
245	Miss Elaine's Dance Studio	12/10/2017 12:33 AM
246	Timken Sports Complex	12/10/2017 12:26 AM
247	La fogata	12/10/2017 12:17 AM
248	Wal mart	12/10/2017 12:15 AM
249	Save a lot	12/10/2017 12:10 AM
250	Greenville	12/10/2017 12:09 AM
251	155 Mitchell road	12/10/2017 12:03 AM
252	Grocery Store	12/10/2017 12:01 AM
253	Bilo	12/9/2017 11:59 PM
254	489 Buffalo-West Springs Hwy. Union, SC	12/9/2017 11:50 PM
255	Monarch	12/9/2017 4:15 PM
256	appointments	12/9/2017 10:12 AM
257	Save-A-Lot	12/9/2017 2:32 AM
258	Union Medical Center	12/7/2017 6:31 PM
259	grocery store	12/6/2017 10:19 PM
260	visiting relatives, charlotte nc	12/6/2017 5:21 PM
261	dr appointments	12/6/2017 2:49 PM
262		12/6/2017 12:43 PM
263	Court House	12/6/2017 12:02 PM
264	Jonesville Lockhart Hwy	12/6/2017 4:40 AM
265	store	12/5/2017 10:47 PM
266	Church	12/5/2017 10:35 PM
267	grocery	12/5/2017 9:01 PM
268	store	12/5/2017 3:41 PM
269	Gaffney	12/5/2017 2:22 PM
270	shopping	12/5/2017 2:08 PM
271	shop	12/5/2017 10:45 AM
272	Gaffney-shopping	12/5/2017 9:34 AM
273	Shopping	12/5/2017 9:27 AM
274	school	12/5/2017 8:21 AM
275	Grocery Store	12/5/2017 8:09 AM
276	GRocery Store	12/5/2017 6:18 AM
277	Church	12/4/2017 9:15 PM
278	Shopping	12/4/2017 4:50 PM

279	Wal-Mart	12/4/2017 4:31 PM
280	Church- Jonesville, SC	12/4/2017 4:20 PM
281	Shopping	12/4/2017 3:41 PM
282	DRUG STORE	12/4/2017 3:09 PM
283	Recreation	12/4/2017 2:57 PM
284	social visits	12/4/2017 2:42 PM
285	Recreational in Union	12/4/2017 2:14 PM
286	Church	12/4/2017 2:10 PM
287	church	12/4/2017 2:00 PM
288	Main Street	12/4/2017 1:46 PM
289	shopping	12/4/2017 1:46 PM
290	Housing	12/4/2017 1:41 PM
291	Walmart	12/4/2017 1:38 PM
292	grocey shopping	12/4/2017 1:38 PM
293	Union County Stadium	12/4/2017 1:32 PM
294	Grocery Store	12/4/2017 1:26 PM
295	Columbia	12/4/2017 12:33 PM
296	Store	12/4/2017 11:30 AM
297	Restaurants	12/4/2017 11:09 AM
298	Walmart	12/4/2017 11:04 AM
299	Govt agencies	12/4/2017 10:35 AM
300	Walmart	12/4/2017 10:25 AM
301	Stores	12/4/2017 10:19 AM
302	Grandmothers	12/4/2017 10:17 AM
303	Shopping	12/4/2017 10:14 AM
304	Church	12/1/2017 11:14 AM

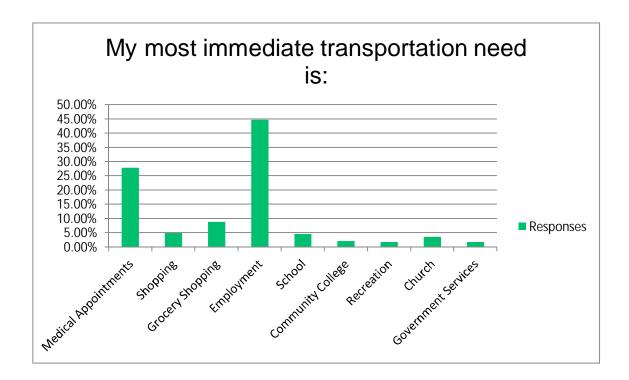
Q9 On a scale of 1 (lowest) to 5 (highest), please rate the need for a public transportation system in Union County.

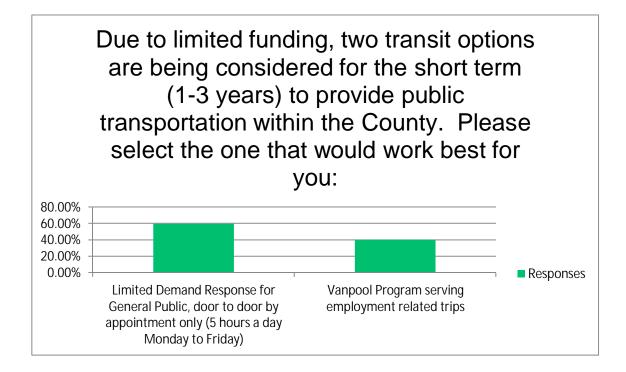


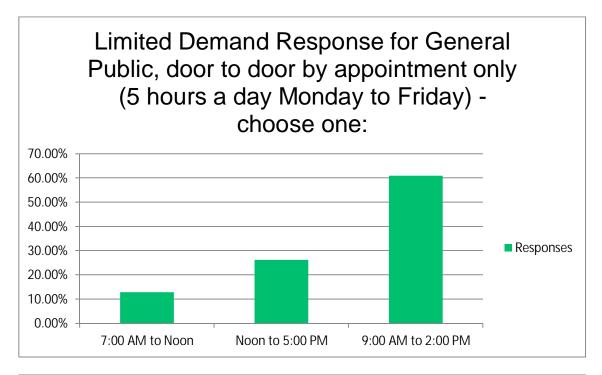
Q10 How much would you be willing to pay for a one-way trip on a transit vehicle?

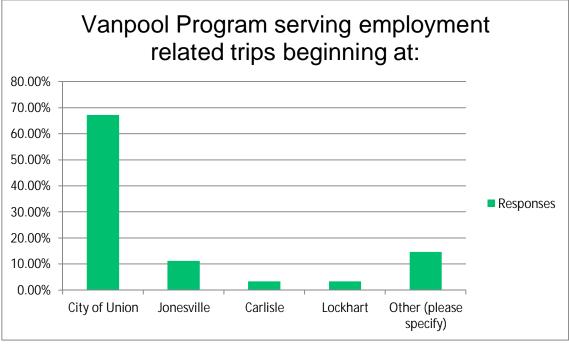


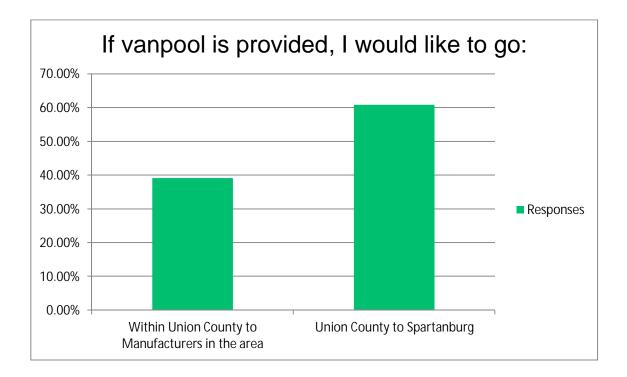
ANSWER CHOICES	RESPONSES	
\$1 - \$2	28.14%	112
\$2 - \$3	24.12%	96
\$3 - \$4	9.55%	38
\$4 +	7.04%	28
Unsure	31.16%	124
TOTAL		398











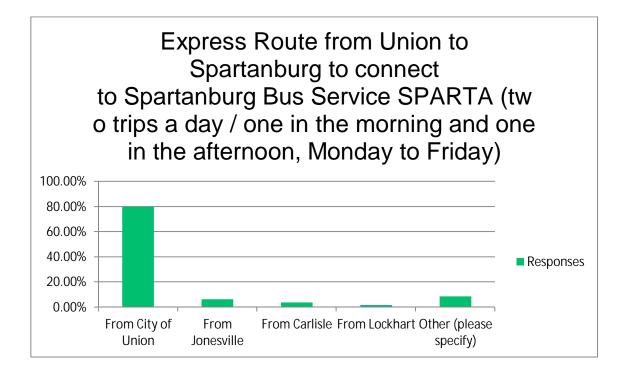
Two options are being considered in the Medium - Long Term (3+ years). Please select the one that would work best for you: 70.00% 60.00% 50.00% 40.00% 30.00% 20.00% 10.00% Responses 0.00% Expanded Demand Response for the Express Route from Union to General Public, door to door by Spartanburg to connect to SPARTA appointment only (12 hour day, Service (two trips a day / one in the

morning and one in the afternoon,

Monday to Friday)

Monday to Friday - County wide

service)



ΑΞϹΟΜ

Minutes

Meeting name Monthly meeting

Meeting Date May 2, 2018

Prepared by Mariate Echeverry Subject Meeting notes

Project name Union County Transit Feasibility Study

Attendees

Kara Drane – Catawba Regional COG David Burgess, South Carolina DOT Frank Hart – Union County Katherine Pendergrass – Union County AECOM: Mariate Echeverry Chip Burger Jennifer Hibbert

Steering Committee attendees in Appendix A.

AECOM provided an agenda for the meeting and provided a project status update.

Mariate Echeverry and Chip Burger provided an overview of the public outreach process and the evaluation of transit alternatives (Power Point presentation in Appendix B). Then the group discussed the materials presented and asked questions. A summary of the discussion is presented below:

- Since many agencies and organizations have a pool of vehicles, it would be ideal if those vehicles could be coordinated to provide service. During the discussion it was established that those vehicles are acquired most of the time through grant programs that limit the scope of what can be done.
- Some coordination between agencies can be done with the use of vanpools.
- Even when it is proposed to bring transit from Union to areas of Spartanburg, it is usually responsibility of the transit service originator to fund the service. Partnerships could be achieved with other municipalities to help offset some costs.
- AECOM is proposing a commuting route that operates continuously, beginning in the morning and ending at night. Once the costs are estimated it will be determined if this is feasible or if it makes more sense to operate only during peak hours.
- There is need for serving the area around the bypass, and the group agreed that probably Wal-Mart would be the best place to do transfers.
- The group also expressed the need to serve Union at the Court House, or other central location easily reachable by the community.
- There are concerns about how to serve 2nd and 3rd shifts, as those usually have harder times finding transportation.
- The group agrees senior and low income population should be the priority, including veterans without transportation.
- There were concerns about restricting access to people with disabilities, and the AECOM team explained that people
 with disabilities are protected by federal law.
- In general the group agrees that the alternatives presented are a good start and encouraged the AECOM team to continue with project development.

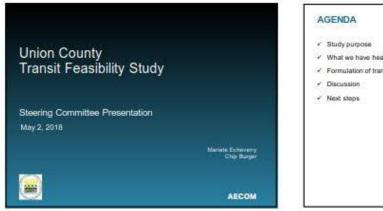
APPENDIX A

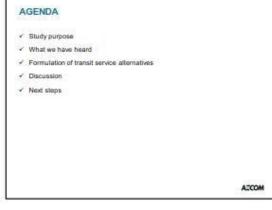
STEERING COMMITTEE May 2nd 2018

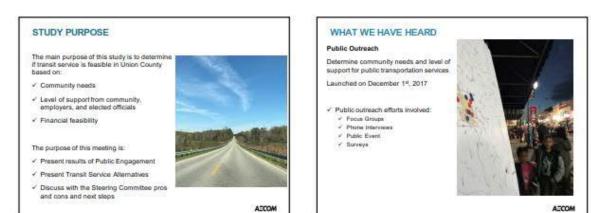
Sign-in Sheet

X	_John Catalano, USC Union
X	Carolyn Rutherford
	_Debbie Shumpert, Gestamp
	_Patrick Wentz, Vocational Rehab
	_Shawn Johnson, Dollar General Distribution Center and HR Manager also
X	David Burgess, SCDOT
	_Andrena Powell-Baker, Lockhart Power
X	Isaac McKissick, Spartanburg Community College
	_John Robbins, Timken
	_Jami Trammell, Union County Chamber of Commerce
X	Leroy Worthy, Resident
X	Cindy Fore, Veterans Affairs Union County
	Elizabeth Tisdale, Union County Dept. of Social Services
X	Tim Black, Union County Council on Aging
X	_Rena (Latisha) Goode, Union Medical Center
X	_Jerry Brannon, P.E. Union County Engineer
	_Kathy Jo Lancaster, Union County Development Board
X	_Katherine Pendergrass, Union County
	_Amy Smith, Union County Disabilities & Special Needs
X	Lewis Jeter, Union County Planning Commission
	_Evans Crocker Union County Planning Commission
X	Frank Hart, Union County Council Chair
X	Kara Drane, Catawba Regional Council of Governments
X	Harold Thompson, Mayor City of Union
X	Dalton Williams, Union County Development Board
X	Melodi Gault, Department of Social Services

APPENDIX B











WHAT WE HAVE HEARD

HUMAN SERVICES AGENCIES

- Agencies regularly provide transportation services to participantis in their programs, but are unable to reach the community out of their boundaries.
- Some agencies use volunteers to distribute food to femilies participating in their food pentry programs.
- These valuativers usually don'traceive reinbursement for their services (Poter's House, Council on Aging Maels on Wheels). ż
- V Union County Probation and Pantis has mandatory classes in Generating Sparticipants (parsiversity) must altern Charling out-of-county transportation is definitely a chelorge and participants append a bit of money in transportation.
- Residents without reliable transportation are limited in their job opportunities. Due to tack of unskilled jobs in Union County, citizens with transportation find jobs in Spanlarburg.
- This also applies for businesses relocating in the Union SC bypass area instead of the business district because the walking distance from residential areas is very long.



ACOM

WHAT WE HAVE HEARD

EDUCATION / FAITH GROUPS

- Transportation could provide a renewed sense of hope to the younger generation that things are happening in the area and a positive future for them eatsts in the County.
- Public transportation systemia needed in Union County, particularly in the City of Union, because it is no langer a welvable: community with employment opportunities all relocated to the Bypere.
- Solelite classes are offered at Sportanturg Community College, but students must have their own militable transportation to move balanses the campases. This prove the provides some students from periodeting in the program.
- Participants that that the University can be an important uoice and driver of a public transportation initiative.
- Many churches own transportation whickes, varying in age and sealing capacity. Churches are related upon volumieses, however, to operate the apaptment, thus, humporte during the week are more difficultie schedule than seehend achrides.



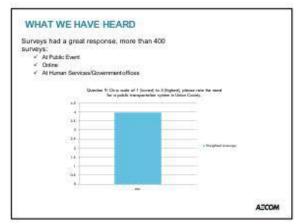
ACCOM

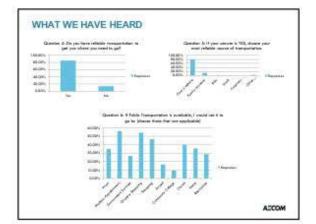
WHAT WE HAVE HEARD

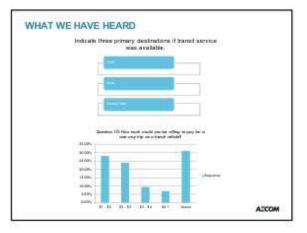
- **GOVERNMENT AND PUBLIC OFFICIALS** Clizens residing in the lowre of Carlele, Lockhet, and Jonesville are reliant upon territy and hends for transport when they are unable to drive themselves.
- Since Jonesville has no grocerystore, neidents travel frequently out of the town imits for shopping and other inte-staential purposes.
- The Mayers of the towns necognize that public transportation would greatly benefit their communities, however, only one of the towns may have some financial means to support the operations.
- One Mayor thought that a small fee (possibly \$3.00) active to the annual which license big assessment would be accepted by the County officients.
- be accepted by the clumy clumm. Official shorts that public extinent has evolved after pair, political and francial missilips. There is increased comparation with Union and the surrounding commutation. Comparation () have a gradeer momentation for access type of public County-web transportation num/out to happen since reservation is working together from a commence and the surrounding of the surrou



ATCOM







Residential Density	Transit Thresholds			
Type of Service	Reaidential Density Threshold			
Ridesharing, isan pools, employer shuttles, circulators and runal transit services (Demend Resonan)	Loss then two detelling units/residential acre			
Flex Routes	Two to four dwelling units/nesidential acre			
Local Bus (1 bus every hour)	Four to six deefling units/vasidential acre			
niermediate Bus (1 bus every 30 minutes)	7 to 14 dwelling unturresidential acre			
Frequent Bus (1 bus every 10 minutes)	15+ dwelling units/residential acre			

Employment Density Transit Thresholds				
Type of Senice	Employment Density Threshold			
Risesharing, van polis, employer dhuttes, circulators, and ruist transit services (Demand Resonae)	Areas with two or less jobstacre and 1.000 or less configuras jobs			
File: Routes	Areas with two to nine jobaliscre and 2,000 or more contiguous jobe			
Small to large bus field route service complemented by parameterial service with 30 to 60 minute frequency.	Areas with 10 to 25 jobatacce and 3,000 or more contiguous jobs			
Large but fixed route service conglemented by paramanal service with 15 to 30 minute trequency	Areas with 26 to 49 jobs/scre and 5.000 or more contiguous jobs			
Large bus fixed route service complemented by paratransit service with 5 to 15 minute frequency. Connections to circulators possible.	Areas with 50+ jobstacre and 10.000 or more contiguous jobs			



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FORMULATION OF TRANSIT SERVICE ALTERNATIVES

There were approximately 2,600 Union County residents commuting to Spartanburg County in 2015. Most live in the central area of the County, primarily City of Union, or are otherwise spread throughout northern Union County. These commuters are employed primarily in or near the City of Spartanburg.



PROPOSED NEW SERVICE ALTERNATIVES

- Peer Review Findings
 - Chester County:
 - Service: Provides Demand Response service for public and Medicaid trips. Also provides trips to surrounding counties and Charlotte Area Transit (CATS) Park and Ride
 - ✓ Budget: \$900,000
 - Annual Ridership: 27,000
 - Y Type of Vehicles: Minivans and Cutaways
 - Number of Vehicles: 14 total

PROPOSED NEW SERVICE ALTERNATIVES

- ✓ Peer Review Findings
 - Edgefield County:
 - Service: Provides Demand Response service for seniors to meal and activity centers and for the general public for work, medical and shopping trips, and Medicaid trips. Also provides trips to nearby towns
 - ✓ Budget \$625,000
 - Annual Ridership: ~ 27,000
 - Type of Vehicles: Ford Transit vans and Cutaways
 - Number of Vehicles: 11 total

ACCOM

PROPOSED NEW SERVICE ALTERNATIVES PROPOSED NEW SERVICE ALTERNATIVES Peer Review Findings Peer Review Findings Williamsburg County. Williamsburg County: Service: Provides Demand Response service within the county and outside the county to Charleston, Florence, Myrtle Baach and other towns to specific areas on designated days of the week. Also provides service within the county primarily for non-emergency Service: Provides Commuter Bus service along 11 routes within the county and to Myrtle Beach, primarily for hospitality workers. Budget - \$720,000 medical trips. Annual Ridership: - 83,000 Budget: - \$930,000 Type of Vehicles: 42 and 45 foot buses Annual Ridership: - 92,000 Number of Vehicles: 10 total Type of Vehicles: Vans and Cutaways Number of Vehicles: 32 total ACOM ACCOM



PROPOSED NEW SERVICE ALTERNATIVES

Transportation Demand Management Service (TDM):

- TDM programs and strategies encourage:
 - Greater use of sustainable modes of transportation, shared vehicles, and trip decision making that reduces, combines, or shortens vehicle trips.
 - Providing services to reduce the use of automobiles or facilitate the use of modes other than driving. Examples include ride-matching software, bite shares, area or employer shuttle services, and vanpools.
 - Education programs and materials that inform people of their travel options. Examples include travel planning assistance and general marketing efforts.

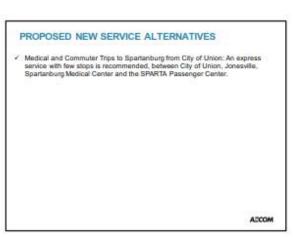
AECOM

PROPOSED NEW SERVICE ALTERNATIVES

✓ 5311 Rural Transit Service (Demand Response Service):

- A local demand-response service would be appropriate to provide work and medical related trips locally within Union County, particularly in the central area of the county in and around the City of Union, as well as to the northwest to Jonesville. This service area would provide trips to the majority of health and employment locations in the county.
- For demand-response services, trips are generally requested a day in advance by a specified time and within a designated service area. Fares are distance-based. Actual trip costs and fare structures are determined by demand and the operating budget of the transit agency.
- Cutaway type vehicles are recommended for this service, as they fit the expected capacity needed for this type of service. Cutaways are also equipped to handle wheelchair boarding, accommodating handicap patrons and reducing the need for providing specific paratransit services.

ACCOM





ΑΞϹΟΜ

Peer Workshop

Meeting name Peer Workshop

Meeting Date August 16, 2018

Prepared by Mariate Echeverry Subject Meeting notes

Project name Union County Transit Feasibility Study Kara Drane – Catawba Regional COG Frank Hart, County Council Chair Jerry Brannon, PE, County Engineer Katherine Pendergrass, SC Works / Union County Leroy Worthy, Citizen David Burgess, SCDOT Office of Public Transit Sally Sherrin, Lancaster Council on Aging

Attendees

Diane White, Williamsburg County Transit Gail Dorn, Edgefield County Senior Citizens Council Jennifer Davis, Chester Connector

AECOM: Mariate Echeverry Chip Burger Jennifer Hibbert

AECOM provided an agenda for the meeting and prepared questions to guide the conversation, in attachment.

The main topics of discussion were:

- o Type of service users usually request.
- o Utilization Rate.
- o Cost per trip.
- o Funding.
- o Community support.
- Hours and days of service.

Below is a summary of the discussion.

- Frank initiated the discussion by asking if people usually called for demand response when they requested service; Diane, from Williamsburg County Transit (WCT) responded yes.
- Regarding the utilization rate, Sally, from Lancaster Council on Aging (COA) said she didn't have specific numbers, but it is always a challenge because the county has very low density.
- Diane said their utilization rate is very good, 15 passengers/bus. They offer trips to medical appointments and charge for the trips. Roundtrip to Charleston is \$20. There ridership is mixed, as they also serve work related trips.
- WCT is using 8 to 10 buses to transport workers to their jobs on the beach town.
- The group continued the discussion talking about startup funding. Sally explained that they received funding from a private foundation to get started, and this allowed them to launch the program in the County. They provided medical trips for the first three years and at the end of that period opened to the general public.
- Lancaster COA receives \$30K from the County as matching funds; they operate 20 vehicles and provide coordinated service, Medicaid, public transportation and seniors.
- WCT receives \$230K from the County; they operate 38 vehicles. Diane said they started service with 5/6 vehicles. They record Medicaid separately in their books.
- All the agencies said they cooperate with other agencies to reach more people.
- In general, the agencies have a mix of full-time and part-time employees.



- Sally said they receive \$206K from SCDOT; they have a very small fleet and ADA vehicles. They are constantly tracking vehicles' useful life.
- Gail said they have 16 vehicles (service began in 1976), and provide Medicaid, and Senior Services.
- The group discussed the obstacles they face providing service.
- Lancaster is a very large county, it is divided in five zones, and service is based on where people live. They used many communication channels when they began service, created a logo, brochures, and published press releases in the newspaper and ads in the TV.
- Gail said their main service is public transportation and then Medicaid. They began exclusively serving medical trips and had to make a big effort to change the mindset when they began serving the general public. They created a new brand and image and emphasized that it was transportation for the community in general.
- In terms of fares, the service providers said that it depends on the length of the trip.
- All the service providers said they currently don't have partnerships with private entities.
- The providers talked about their days and hours of operation:
 - Williamsburg operates seven days a week from 5:00am to 8:00pm. This schedule is necessary to fulfill the work related trips.
 - ECSCC operates five days a week from 7:30am to 4:00pm and sometimes during the weekends to transport dialysis patients.
 - Lancaster operates six days a week from 9:00am to 3:00pm. They also cover dialysis patients on Saturdays and sometimes at 5:00am.
- Lancaster began operations in 2009; the system was funded initially through private funding because the Council of Aging wanted to know how the service was utilized, the funding included vehicle acquisition. After the initial three year period they were able to access funds pass through the South Carolina Department of Transportation and became a recipient. Prior to this service some agencies were providing sporadic transportation but not to the general public.
- They received \$100,000 for operations and \$75,000 for capital. They began operations with part time employees.
- The service providers said that if service begins as medical service, transitioning to the general public is very difficult.

APPENDIX B

Demographic Profile

1. Demographic Profile

Demographic data for Union County and comparative South Carolina demographic data were obtained from the 2015 American Community Survey conducted by the US Census Bureau. Discussion of the demographic makeup of the County is at the Census block group level, and tables showing the breakdown of data by block groups are included in Appendix A.

1.1 Population Characteristics

The majority of Union County is rural in nature with population concentrations mainly at the municipalities.

Figure 2 shows the population density per square mile of the County by block group.

The denser block groups are located in and around the City of Union, with the remainder of the County at density rates of less than 100 people per square mile. Population densities are lowest in the three block groups at the southern end of the County (census tract (CT) 306 block groups (BG) 1 and 2, and census tract 307, block group 3). The majority of these block groups are within the boundaries of the Sumter National Forest.

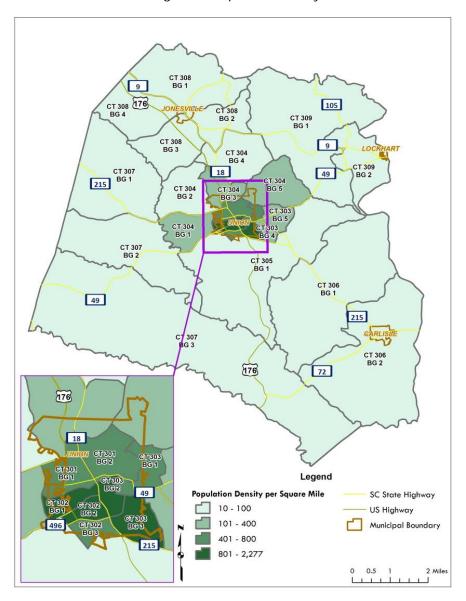


Figure 2: Population Density

The median age of Union County is 43.6 years of age compared to 38.8 years of age for the overall State of South Carolina.

Figure 3 shows the breakdown of age cohorts in the County.

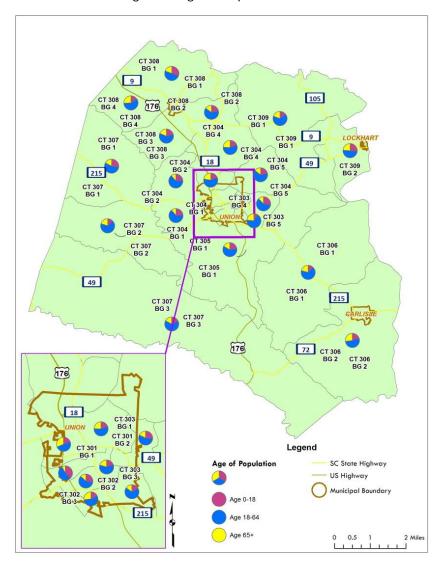


Figure 3: Age of Population

Within the County, 21.8 percent of the population is under the age of 18 and 18.2 percent of the population is over 65 years of age. At the State level, 22.9 percent of the population is under the age of 18, while 15.7 percent is over the age of 65 years of age.

Figure 4 shows the minority population rates within Union County.

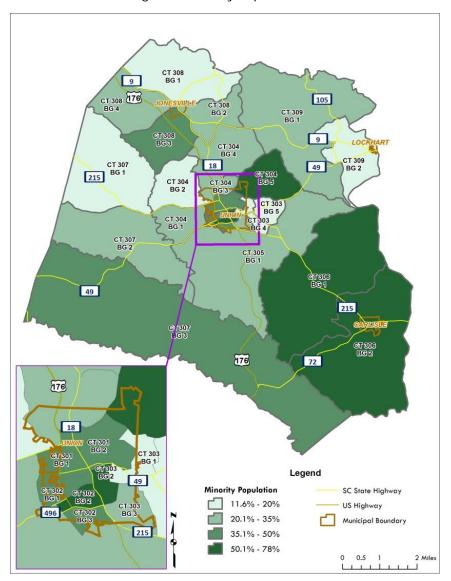
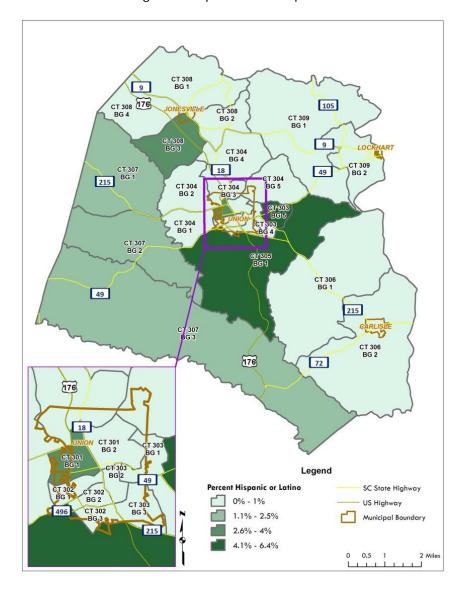


Figure 4: Minority Population

The predominant racial groups in the County are white (66.5 percent) and African American (31.3 percent). Minorities make up 33.5 percent of the population, with some concentrations in the southeastern portion of the County, and in the block group to the north east of the City of Union. Overall, the racial composition of the County is similar to the State levels, however the percentage of African Americans is slightly higher at the County level, 31.3 percent compared to 27.4 percent at the state level.

The Hispanic and Latino population makes up for a smaller percentage of Union County's population than the overall state comparison. Within the County, only about 1.2 percent of the

population is Hispanic or Latino, while the overall population of the state has a rate of 5.3 percent Hispanic or Latino. Only two block groups in Union County have rates of Hispanic or Latino population higher than the state rate, census tract 303, block group 5 (6.4 percent) and census tract 305, block group 1 (5.3 percent). Both of these block groups are to the southeast of the City of Union (see Figure 5).





1.2 Economic Characteristics

Poverty rates in Union County are slightly higher than comparative South Carolina rates. In Union County, 20.3 percent of the population is below the poverty level, compared to 18 percent in South Carolina as a whole. The highest rates of poverty are found in census tract 302, block

groups 1, 2 and 3, just south of downtown Union; and census tract 308, block group 3, just to the south of Jonesville, along US 176. See Figure 6 for the locations of these block groups.

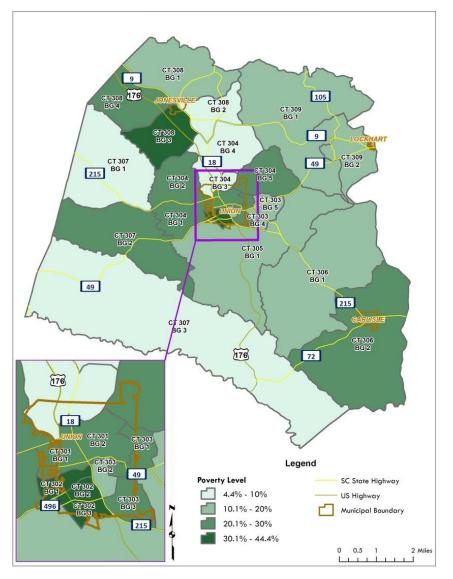


Figure 6: Poverty Levels

These four block groups have poverty rates in excess of 30 percent.

Union County also has a higher rate of vehicleless households than the State. Overall, 11.2 percent of the total households in the County do not own a vehicle compared to 6.5 percent of all the households in the State. The highest rates of vehicles households are in block groups to the south of downtown Union, most notably census tract 302, block group 2 which has a vehicleless household rate of 42.5 percent. Census tract 308, block group 4 in the northwestern part of the County along US 176 also has a notably high rate of vehicleless households at 29.9 percent.

Several other block groups in the City of Union have vehicleless rates of over 20 percent. See Figure 7 for the locations of these block groups.

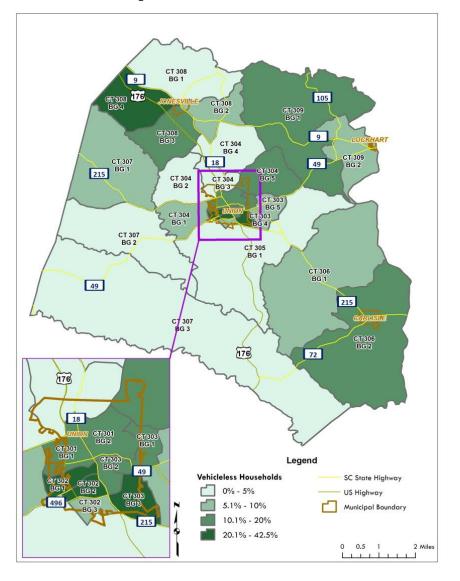


Figure 7: Vehicleless Households

The County also had a higher unemployment rate according to 2015 ACS data than the State as a whole. Approximately 12.2 percent of the labor force in the County was unemployed compared to 8.4 percent of the statewide labor force. The block groups with the highest rate of unemployment was census tract 302, block group 1 in Union City with 25.6 percent and census tract 308, block group 3 south of Jonesville with 23.7 percent unemployment. See Figure 8 for the locations of these block groups.

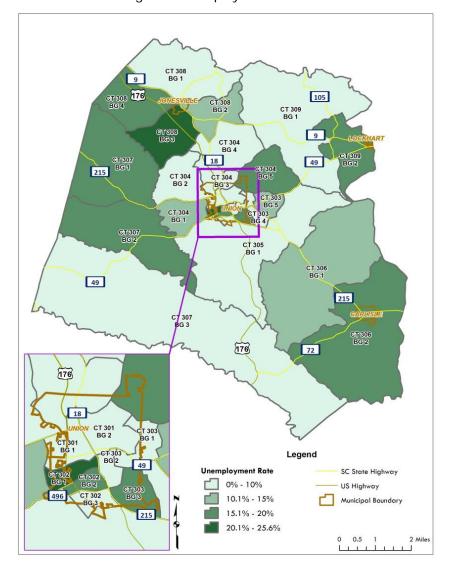


Figure 8: Unemployment Rate

1.3 Employment Characteristics

The largest employers in Union County are concentrated in the City of Union and along US 176 in the northwestern part of the County.

See Table 1 for the list and location of the largest employers in Union County.

Label	Name	Location	Employees
1	Belk Inc	3805 Furman L Fendley Highway, Jonesville, SC	575
2	Carlisle Finishing, LLC	3863 Carlisle Chester Hwy, Carlisle, SC	140
3	City of Union	101 Sharpe Avenue Union, SC	121
4	County of Union	210 W Main Street, Union, SC	162
5	Dolgencorp	1451 Spartanburg Hwy, UNION, Jonesville, SC	610
6	Gestamp	1 LSP Rd, Union, SC	416
7	Haemonetics	155 Medical Sciences Dr, Union, SC	234
8	Heartland Health Care Center-Union	709 Rice Ave, Union, SC	N/A
9	Milliken & Co	153 Lower Fairforest Church Rd, Union, SC	90
10	Milliken & Co, Cedar Hill Div.	225 Bob Little Rd, Jonesville, SC	183
11	Roper Personel Services	309 B Hunter Street, Union SC	N/A
12	Sonoco Plastics	242 State Rd S-44-290, Union, SC	100
13	Staffmark Investments	3805 Furman L Fendley Highway, Jonesville, SC	N/A
14	Standard Textile	100 Highpoint Dr, Union, SC	118
	State Department of Youth Services/SC		
15	State Government	1585 Jonesville Highway, Union SC	230
16	Timken Company	7 LSP Rd, Union, SC	269
17	Union County Disabilities Board	226 S Gadberry St, Union, SC	N/A
18	Union County Schools	130 W Main Street, Union SC	675
19	Walmart Associates	513 N Duncan Bypass Union SC	N/A
20	Wallace Thompson Hospital	322 W South Street Union SC	404

Table 1: Top Employers

Source: Community Profile, Union County, SC Department of Employment and Workforce, Updated January, 2018; Union County Development Board (<u>https://uniondevelopmentboard.com/industry/</u>) accessed February, 2018

And, although jobs are dispersed throughout the County, Figure 9 which shows total employment by census block group, reveals that jobs are mainly located along US 176 between the City of Union and Spartanburg County.

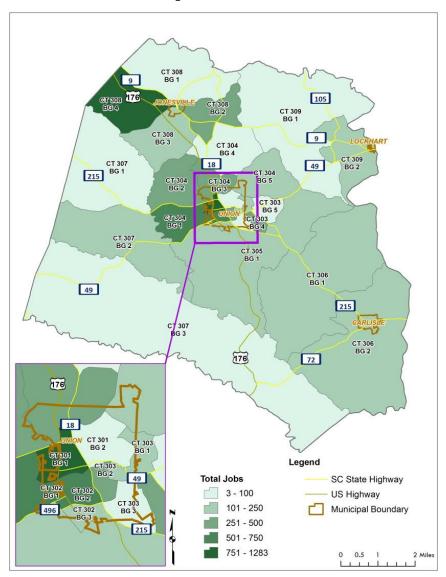


Figure 9: Total Jobs

Many of these large employers are manufacturing industries, including Belk Inc., Carlisle Finishing, Milliken and Company, and Sonoco Plastics.

1.4 Commuting Profile

According to the latest U.S. Census Bureau numbers, there were over 1,000 employees traveling from Spartanburg County to Union County in 2015.

See Figure 10 for the concentrations of these employees. Nearly a quarter of these employees (23.1%) were aged 29 and younger. Furthermore, 277 employees (26.5%) earned \$1,250 or less per month, (\$15,000 or less per year).

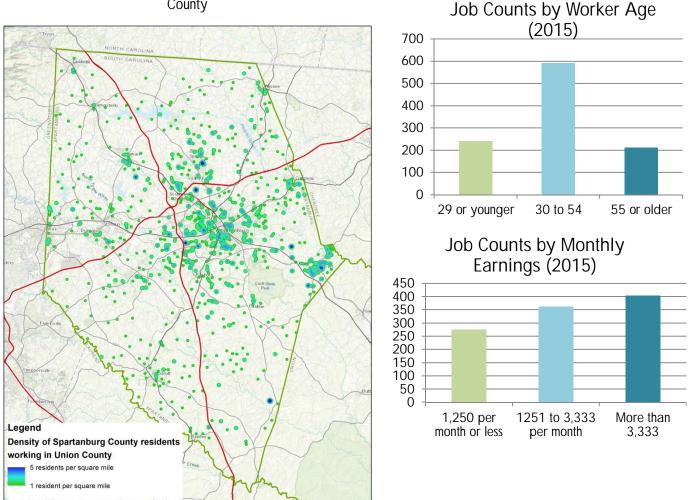


Figure 10: Spartanburg County Residents working in Union County

The analysis indicates a concentration of Spartanburg residents working in and around the City of Union, as well as at some of the large employers along US 176 near Jonesville. Figure 11 shows the place of work concentration of these employees.

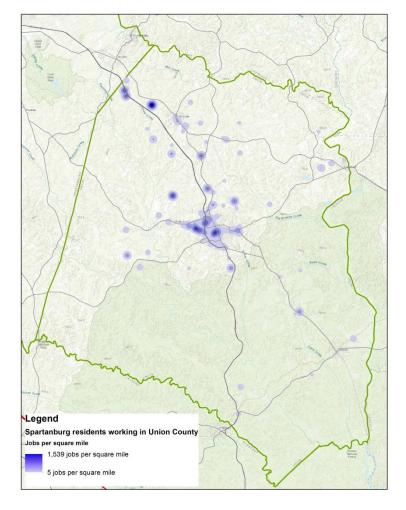
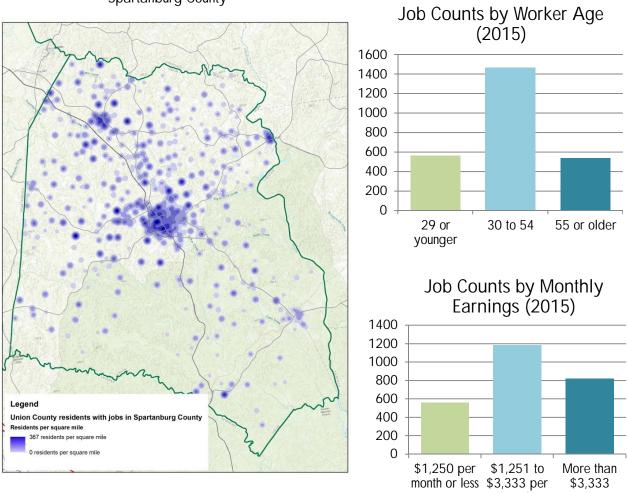


Figure 11: Spartanburg County Residents working in Union County (Jobs per sq. mile)

There are also nearly 2,600 Union County residents who work in Spartanburg County. See Figure 12 for the concentrations of these employees. Approximately 22% of these residents were 29 and younger, and approximately 22% earned less than \$1,250 per month. Many of these residents live in concentrated areas around the City of Union and Jonesville, and commute to jobs in downtown Spartanburg and to large employers to the east of the City of Spartanburg.



month

Figure 12: Union County Residents with Employment in Spartanburg County

Additionally, the analysis indicates a concentration of Union residents working in and around the City of Spartanburg. Figure 13 shows the place of work concentration of these employees.

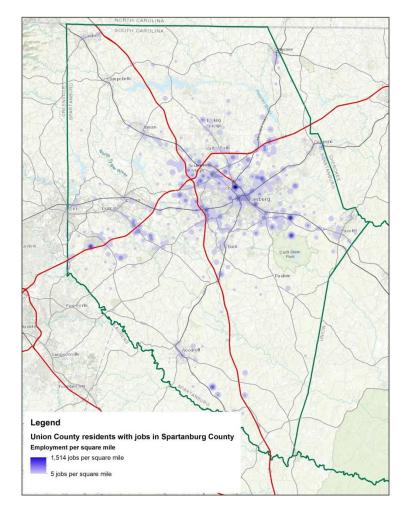


Figure 13: Union County Residents with Employment in Spartanburg County (jobs per sq. mile)

2. Land Use

The City of Union is the largest demographic destination for the residents throughout Union County. This destination has shared uses that include social services, medical, education and governmental purposes. Below is a list that is associated with shared land use destinations that were described:

Major Social Service Facilities Union County Home Health Service Total Care of Union County Union County Department of Social Services Union County Commission of Alcohol & Drug Abuse Spartanburg Mental Health Center-Union Mental Health Center (Located within Union County lines)

Major Medical Facilities Wallace Thomson Hospital (Union Medical Center)

Major educational facilities, including public and private schools, colleges, and branches of universities

Major Educational Facilities		
Union County Advanced Technology Center		
Spartanburg Community College		
University of South Carolina-Union		

The Downtown district of Union County includes most of the governmental facilities describe below. According the Union County website, this district is used as commercial, public, residential, industrial, and transportation-related buildings.

Government Facilities			
Union County Court House			
Carnegie Library			
Union County Depot			
Downtown Union District			

Finally, survey responders were unsure to how much they were willing to pay for a one-way trip on a transit vehicle; this is followed by \$1 - \$2 (more than 25%).

APPENDIX C

Operating Statistics and Ridership Estimates

Service Statistics	Units
Peak Vehicles	1
Fleet Vehicles	1
Annual Vehicle Revenue Hours	2,040
Annual Vehicle Revenue Miles	20,400
Estimated Ridership	4,080
Annual O&M Cost ²	\$94,880
Estimated Cost per Revenue Hour	\$46.51