Section 4 – Public Transit Needs Assessment

The URS team used 2 methods to identify and quantify the need for public transit in the City of Easley. While each method came to the same conclusion, that transit is needed in the City of Easley, each method reveals important information that should be considered by the City Council when deciding on the fate of transit for the residents of the city.

The first method for identifying the need for transit in the City of Easley is based on the existing and future land use and development patterns identified by the team. The study area characteristics discussed in Section 3 identified an increasing transit dependent population in the City of Easley. **Figures 4, 5 and 6** illustrate the concentrations of minority, poverty population and no-vehicle households on the west side of the City. Comparing these concentrations with the major commercial developments in the City, shown in **Figure 1**, reveals an increasing divide between the economically-challenged residents of the west side of the City and access to their basic needs (food, pharmacy, etc.). The closing of the BI-LO grocery store along SC Highway 8 earlier this year added to this problem.

This combination of transportation challenges, coupled with the physical separation from businesses supplying the residents' basic needs, creates an increasing dilemma for the City leaders. In addition to the current situation, the potential relocation of several major shopping opportunities to the Saco Lowell site, which is even further away from the neediest residents, could intensify the situation for the west side residents. While the introduction of the proposed transit is not the only solution to this issue, it is a viable solution that has additional advantages.

The second method for identifying the City's need for transit is much more quantitative than the first method. This method utilizes transit demand research completed by the Transit Cooperative Research Program (TCRP) and provides a detailed analysis of the demographic data for the City of Easley. One of the most important sources of information used for this method is the TCRP Project A-3: Rural Transit Demand Estimation Techniques. This study, completed by SG Associates, Inc. and LSC, was the first substantial research into transit service demand for small communities and rural areas in nearly 30 years. The study provided information and formulas related to actual demand for public transit for specific population groups. The formulas were based on actual transit demand at nearly 200 transit agencies across the country. Sample forms used in this process can be seen in **Appendix B**.

The first step in this method is to identify the input data for the study area. This data is similar to the data discussed in Section 3 of this study. Due to the nature of the TCRP Model, the data for the study area was aggregated into several subcategories. The following table shows the data used to determine the potential transit demand in the Easley area.

Table 4.1 Input Data for TCRP Model

Data Type	Easley		Seneca	
	Total	% of Total Pop	Total	% of Total Pop
Size of Service Area (sq miles)	10.6		7.06	
Total Population	17,754		7,652	
Persons Aged 60 and Over	3,408	19%	1,606	21%
Persons Aged 16-64 with a Mobility Limitation	249	1%	194	3%
Persons Age 64 or less Residing in Households with Incomes Below Poverty Level	1,638	9%	1,021	13%
Persons Age 16 and Over	14,233	80%	6,075	79%
Total Persons with a Mobility Limitation	733	4%	419	5%
Families in Poverty	432	2%	286	4%
Persons Age 3 and 4	1,205	7%	527	7%
Persons Age 16 to 59	10,825	61%	4,469	58%
Persons Age 16 to 64	11,627	65%	4,852	63%
Persons Age 65 and Over	2,606	15%	1,223	16%
Persons Age 75 and Over	1,235	7%	539	7%

Source: US Census Bureau

Table 4.1 shows the comparison between the City of Easley and Seneca demographic data in each of the data sets. Seneca was chosen for this comparison due to its size, proximity to an urban area (Clemson) and the recent introduction of transit service to the city. The comparison between Easley and Seneca also is strengthened by the nearly identical subcategory ratios within the demographic data. In 9 of the 11 subcategories, the 2 cities are within 2% of each other.

Using the aggregated demographic data and the worksheets provided by the TCRP model, the following table outlines the estimation for transit demand for 3 major transit dependent groups – Persons age 60 and over, Persons with mobility limitations and Persons residing in families with incomes below the poverty level. This estimation method compares the actual number of persons within each category to the vehicle miles available per square mile of service area and national averages for annual transit usage per category.

Table 4.2 Estimation of Transit Demand

Data Type	Easley	Seneca
Persons Age 60 and Over		
Number of Persons Age 60 and Over	3,408	1,606
Annual Vehicle Miles Available	121,759	83,433
Annual Vehicle Miles Available per Square Mile	11,487	11,818
Estimated Annual Transit Demand	*217,550*	*112,818*
Persons With Mobility Limitations		
Number of Persons With Mobility Limitations Age 16-64	249	194
Annual Vehicle Miles Available	121,759	83,433
Annual Vehicle Miles Available per Square Mile	11,487	11,818
Estimated Annual Transit Demand	*6,026*	*5,164*
Persons Residing in Families with Incomes Below the Poverty Level		
Number of Persons, age 64 or less, Residing in Households with Income Below the Poverty Level	1,638	1,021
Annual Vehicle Miles Available	121,759	83,433
Annual Vehicle Miles Available per Square Mile	11,487	11,818
Estimated Annual Transit Demand	*90,335*	*62,074*
Total Estimated Annual Transit Demand	***313,912***	***180,056***

Sources: US Census Bureau and TCRP

The purpose of transit demand estimation is to predict the potential ridership, based on the area's need, under conditions that are close to optimal. In other words, the need is equal to the number of trips provided by the City at convenient hours and at frequent intervals to all locations within the study area. It also assumes that the trips are provided on comfortable, easy-access vehicles. Since not all of these conditions can be met at all times by the public transit provider, this estimation is considered to be on the high end of estimations. For example, the estimation for the City of Seneca indicates a monthly average of just over 15,000 riders per month (180,056 estimated annual ridership). The most current data for that service is closer to 11,000 riders per month. Eventually, the actual ridership may approach the estimate, but there is no guarantee of that. For the purposes of this feasibility study, the estimates produced, using the TCRP method, will be used to calculate potential revenues for the transit service.