

2016 Technical Assistance Program Case Study: PDRTA Commuter Feasibility Study

Abstract:

In 2015-2016, National RTAP worked with five rural transit agencies as part of a new direct technical assistance (TA) program. Pee Dee Regional Transportation Authority of Florence, SC, a system offering fixed route, demand response, and commuter services that receives 5311 and 5307 funds, was selected as part of this program.

The PDRTA project was to conduct a feasibility study for a commuter route from Lake City to Florence, SC, the small city in a mostly rural area with high levels of poverty. National RTAP hired Main Street Connections to conduct the study, provide analysis, and make recommendations for next steps for PDRTA, in collaboration with National RTAP staff.

Since the completion of the project in May 2016, which produced a Recommendations Report and Executive Summary, local support has been growing. PDRTA added more service, including a service on Mondays/Wednesdays between Lake City and Florence for the local technical college. They hope to build on that partnership and establish a daily service. The information and analysis from this project have been helpful for starting these new services and building the support needed for partnerships and local funding.

The Executive Summary on the following pages provides a case study for other transit systems on the process of doing a feasibility study, the data needed, the factors and barriers to consider, and potential outcomes and recommendations.

For additional information about this project email info@nationalrtap.org.



Pee Dee Regional Transportation Authority Commuter Feasibility Study - Executive Summary

Main Street Connections May 2016

INTRODUCTION

The Pee Dee Regional Transportation Authority (PDRTA), in association with National RTAP, set out to identify service plan alternatives that will assist in bringing cost effective and efficient mobility options to the service area provided by PDRTA. The goal was to assess mobility interests and investigate the feasibility of providing commuter service along the Route 52 Corridor from Lake City to Florence.

With the recommendations of the transit development plan (TDP) as one resource, National RTAP hired the transportation consulting firm of Main Street Connections on behalf of PDRTA

to assist in the discovery process to help

identify mobility alternatives.

The objective, if feasible, is the creation of new or enhanced service that can rely on coordination of existing services, cost sharing arrangements and unified collaboration between service providers and peripheral stakeholders who have a vested interest in its success.



In early November 2015, Main Street Connections began the project by assessing the existing conditions of PDRTA's current transportation services provided throughout the Pee Dee region. The team also prepared a survey to assess the feasibility of a commuter service along the Route 52 corridor from Lake City to Florence. The significance of the Route 52 corridor is due to the location of large manufacturing firms located on this route.

The major focus of the study was to assess the level of interest and need for PDRTA service along this route, and to identify the funding sources necessary to operate this service.

The survey was distributed between January 14, 2016 and February 12, 2016 to passengers on board PDRTA buses and to area employment and social service agencies, and online on PDRTA's website. A total of 375 responses were submitted. The survey results indicated that respondents are likely to use public transportation along the Route 52 corridor for work-related transportation and to access shopping destinations like malls or Wal-Mart.

The likelihood of the new service succeeding, from a community service standpoint, seems positive with 70% of those surveyed indicating they would use transit.

Further supporting potential success are results showing thirty percent (30%) of respondents currently riding with others, and thirty percent (30%) of commuters currently traveling 30 minutes or longer. Because the survey results indicated strong support for a commuter service along the Route 52 corridor, the project team focused their efforts on the design and budgeting aspects of the potential new service. The brief summary that follows offers an abbreviated version of the project activities and recommendations.

PROJECT PHASES

There were four (4) phases initiated during the project to help determine the feasibility of initiating new commuter service along the Route 52 corridor. Those phases included 1) a review of existing conditions, 2) a commuter survey, to gauge interest, 3) the design of the proposed commuter route, and 4) the recommendations and methodologies for implementation based on findings of phases one, two and three above. Below is a brief summary of each phase.

PHASE 1 - EXISTING CONDITIONS

During the review of the PDRTA's current transportation services it was found that the PDRTA is a federally designated urban and rural public transit provider currently serving the geographically widespread counties of Florence, Darlington, and Marion.

The PDRTA employs a total of 33 employees primarily out of the transit



administrative and maintenance facility located at 313 South Stadium Road, Florence, South Carolina.

PDRTA's operates fourteen (14) routes comprised of fixed route, complementary paratransit, deviated fixed route, or commuter service. Urban services are provided utilizing twenty (20) vehicles via fixed-route service, with ADA complementary paratransit service provided for qualifying individuals. PDRTA's rural services are provided utilizing nine (9) vehicles via deviated fixed route service and commuter service.

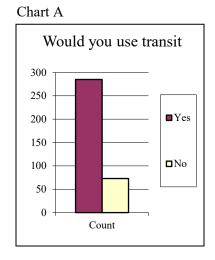
The key findings during the existing conditions phase included:

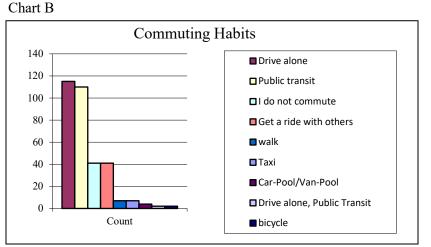
- 1. The PDRTA Board of Directors is the main governing body. This makes implementing any new service an internal decision.
- 2. Taking riders from one municipality to go to another, as the proposed new commuter service would, will raise territorial concerns and challenge political support.
- 3. The PDRTA financial position is still recovering from the loss of a major Medicaid contract in 2013 and further compounded by a proposed state reduction in allocated federal funding.
- 4. Rural services require a peak fleet of five (5) vehicles with a current fleet of nine (9). This eases the implementation process of new service by alleviating additional infrastructure concerns.
- 5. Low income neighborhoods are generally earnest users of public transportation, and are prevalent in both Lake City and Florence. Manufacturing jobs along the Route 52 have potential for employing more than 1,000 individuals. These jobs are traditionally lower paying, also favorable to the success of public transportation. The current demographics appear to support the proposed commuter service expansion.
- 6. The PDRTA large geographic service area offers relevance to regional expansion to offer greater interconnectivity, enhanced mobility options, support jobs, enable economic growth, and support public policies regarding energy use, air quality and carbon emissions.

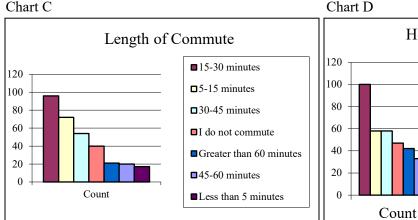
PHASE 2 - COMMUTER SURVEY

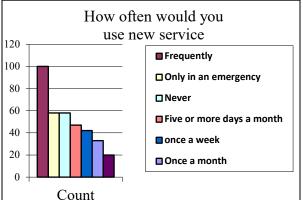
The survey distributed between January 14 and February 12, 2016 was intended to gauge interest in the proposed commuter service. The results proved promising for demand of a new commuter run. A brief detail of four (4) key results are outlined below.

- 1. 70% of respondents indicated they would use transit (Chart A),
- 2. 30% of respondents currently ride with others (Chart B),
- 3. 30% of respondents currently travel 30 minutes or longer (Chart C), and
- 4. 25% of respondents said they would use the new service "frequently" (Chart D).









The survey results provide support for commuter service along the Route 52 corridor with a strong showing for frequency in which riders would use the new service, commuting habits that lend themselves to a willingness to ride with others, and long commutes that have costly ramifications at the gas pump for single occupancy vehicles.

Since the survey results and current commuting habits provide justifiable support for new service, it was determined that the initial planning activities should commence, including route design and budgeting of service as outlined on the following page.

PHASE 3 - PROPOSED COMMUTER ROUTE

The proposed PDRTA commuter route design consists of three round trips daily, originating in Lake City. The service would begin operating with a 6am morning commute, then a 11am midday commute, and end with a 4pm evening commute. The service would have 16 stops, covering approximately 42,120 miles, over 1,850 hours during a 5 day per week, 260-day annual service schedule. The projected total annual cost of the new commuter service is \$165,460, approximately \$99,000 of which could be obtained through federal grants, leaving a local

funding need of approximately \$66,000. For five local funding partners, a cost of approximately \$13,200 each could support this service for an entire year.

Table 1 below depicts the route characteristics including operational and budget data. The anticipated budget was derived using the PDRTA current cost per hour of \$27.19, and current cost per mile of \$1.46.

<u>Table 1 – Route</u> Characteristics

CHARACTERISTIC	DATA
Number of stops	16
Distance (one-way)	27 miles
Run time (one-way)	70 minutes
Number of runs daily	6 (3 roundtrip)
Annual miles	42,120
Annual hours	1,850
Projected expenses	\$165,460
Projected federal subsidies	\$82,730
Projected farebox	\$15,000
Projected local	\$67,730
contribution	

Figure 1 – Route Design

As shown in Figure 1 located to the right, the proposed route originates out of Lake City and operates in reverse from the City of Florence.

Greater detail on the proposed route structure, including stop locations and times, can be found in the PDRTA's Commuter Feasibility Study Final Report.

PHASE 4 - RECOMMENDATIONS

Based upon the full review and analysis of the PDRTA

Transit system, discussions with staff, and the proposed route design and budget, the team has developed the three (3) following recommendations for service implementation.

Recommendation 1 – Intercity Service under the "In-Kind Match for Intercity Bus Program"

The project team recommends that in order to achieve service expansion from Lake City to Florence the PDRTA should reach out to the South Carolina Department of Transportation (SCDOT), Intercity Bus Program Section, to inquire about the potential availability of the "In-Kind Match for Intercity Bus" program, Section 5311(f).

Figure 1 – Route Design



Depending upon availability of resources, this program may offer further opportunity to establish connectivity between Lake City and Florence by reducing local resources necessary to satisfy match requirements. This is performed by supplanting local resources with the intercity operators unsubsidized capital expenses as local in-kind match. Under this recommendation, service would be classified as intercity, not commuter. For further details see "Exhibit A - In-Kind Match for Intercity Bus Program" within the PDRTA's Commuter Feasibility Study Final Report, "Recommendation 1 – Lake City to Florence Intercity Bus Service."

Recommendation 2 - Shared Cost Commuter Service

The PDRTA has demonstrated an understanding that sharing the cost of new services with stakeholders who will benefit the most is a prudent approach to long term sustainability. PDRTA has further recognized the benefits of mobility coordination, and has initiated a request for mobility management funds to broaden shared services in the region.

With this in mind, the project team makes their second recommendation of establishing a cost sharing methodology for implementing new commuter service between Lake City and the City of Florence. Cost sharing is a process of fairly and logically determining, and then distributing among two or more benefactors, the costs of a coordinated and managed transportation system. A strong potential cost sharing partner identified during the study was McCall Farms, a canning and distribution center located in the Town of Effingham.

The project team offers in this recommendation a holistic approach to coordination that takes into account not only inclusion of providers and agencies who have clients with mobility needs along the corridor, but also a cost sharing methodology that offers fair and equitable distribution of services.

Recommendation 3 - PDRTA Underwritten Commuter Service

This third recommendation assumes that PDRTA will not seek financial assistance from partners or businesses that may benefit from the creation of a new service, and will completely underwrite the proposed route after all farebox revenues and federal subsidies have been exhausted.

RECOMMENDATIONS SUMMARY

The recommendations above are similar in design, but vary in complexity of negotiation, levels of funding, and implementation. All can achieve regional connectivity along the Route 52 corridor to link Lake City to the City of Florence.

Main Street Connections has identified the most favorable recommendation based upon the perceived strong demand for service, coupled with anticipated funding constraints. The recommendations in order from most favorable to least favorable are as follows:

Recommendation 1 - Providing Intercity Service that connects Lake City to the City of Florence we consider *most favorable* with the potential ability to leverage the funding associated with the

"In-Kind Match for Intercity Bus Program." This funding is not a guarantee, however, as SCDOT may not have remaining resources or may not consider the project a priority for this funding. If this funding is available, the project could offer regional connectivity at minimal cost.

Recommendation 2 - Establishing a Shared Cost Commuter Service is considered as the <u>second</u> <u>most favorable</u> recommendation. At a minimum, this should be implemented if Recommendation 1 is not an option. This recommendation offers the potential for cost effective regional connectivity through collaboration and partnering.

Recommendation 3 - PDRTA Underwritten Commuter Service is of course the <u>least favorable</u>, due to the underwriting cost being fully absorbed by PDRTA. This should be the recommendation only after all other possibilities have been exhausted and if it is determined that a commuter service is necessary regardless.

Last Reviewed 2/16/22