

# PIEDMONT TRIAD SEAMLESS MOBILITY STUDY

## FINAL REPORT

Executive Summary



PREPARED BY

**URS**

*in association with*



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## 1.0 Piedmont Triad Seamless Mobility Study

The Triad has reached a point where leaders must make decisions to determine the role of transit in supporting mobility for the region. Rising fuel prices and congestion on the roadways are two primary forces increasing public consciousness and concern toward conserving energy, protecting the environment and considering the use of alternative modes of travel. The public’s “consideration” of alternative modes is one thing; but actually having them make the shift requires that the transit system is a viable and logical choice. The nine transit agencies that serve the Triad are poised to take the steps necessary to bring their systems to a point where they form a regional network that is accessible, convenient and ultimately, a viable option for travel. The first step in that process is to conduct the Piedmont Triad Seamless Mobility Study (PTSMS).

Public transportation providers in the Piedmont Triad include Greensboro Transit Authority (GTA), High Point Transit (HiTran), Winston-Salem Transit Authority (WSTA), Piedmont Authority for Regional Transportation (PART), Alamance County Transportation Authority (ACTA), Davidson County Transportation System (DCTS), Forsyth County, Guilford County Transportation and Mobility Services (TAMS), Regional Coordinated Area Transportation System (RCATS) of Randolph County, and the Yadkin Valley Economic Development District, Incorporated (YVEDDI). These transit systems have varying focal points, a wide range of service levels and differing funding sources. Common among these systems, however, is that they are all constrained by their resources and unable to expand or meet certain needs at this time. An infusion of funding will be necessary to facilitate the improvements in their systems to continue serving their existing clientele and creating the services needed to support regional mobility.



The PTSMS marks the first time that staff from the nine transit agencies has convened as a group to discuss their systems and how their services relate to each other. The scope for the project was developed to ensure and exhibit that the participating agencies are good stewards of public dollars and includes exploring opportunities for maximizing resources, coordinating functions and services to the maximum extent possible, and providing seamless transit services. The PTSMS constitutes an important process for the transit systems to undergo prior to asking elected officials for more funding to support transit expansion in the Triad.

The primary purpose of the PTSMS is to provide a systematic review of all services and functions provided by the participating transit systems, and to identify possible opportunities for consolidation, coordination and communication among the systems. The project also includes two other key elements: the development of a long range (5-10 years) transit concept plan and an

evaluation of potential regional funding scenarios as they relate to the expansion goals for each of the systems.

The PTSMS does not include an analysis of unmet demand for transit within the region and is not intended to define where and when transit expansion is to occur. Most of the recommendations relate to how the systems are operated today and represent improvements that can be implemented in the nearer term. These are changes that will improve the efficiency of the service, enhance customer relations, reduce costs of operations and/or establish a framework for how these agencies will work together as they grow.

## **2.0 Existing Conditions**

As part of the PTSMS, the consultant was charged with collecting information about each transit system’s services, functions, positions, and personnel and the existing condition section documents the data collection effort. More information about the current services provided is also available in the System Profiles (on CD included with this report).

Transit systems reported that a total of 695 employees work in the nine agencies that provide urban, regional and community transportation in the Triad region within 42 different functional classifications. A profile of current services appears in Table ES-1. The table summarizes the service spans and the types of services operated by each public transportation provider.

**Table ES-1: Fixed Route and Demand Response Service Providers**

<b>System</b>	<b>Service Span</b>	<b>Service Type</b>	<b>Annual Riders</b>
Alamance County - ACTA	6:00a-6:00p, weekdays	Community Transportation	96,728
Randolph County – RCATS	6:00a-6:00p, weekdays	Community Transportation	72,844
Davidson County - DCTS	6:30a-5:00p, weekdays	Community Transportation	75,117
Guilford County - TAMS	24 hours/day, Mon-Sun	Community Transportation	182,195
Forsyth County - WSTA, TransAid	5:30a-12:30a, weekdays 5:55a-7:00p, Saturdays	Fixed Route, ADA, Community Transportation	2,899,678
City of Greensboro - GTA	6:00a-11:55p, weekdays 6:00a-11:55p, Saturdays 6:00a-6:55p, Sundays	Fixed Route, ADA Transportation	4,007,198
City of High point - Hi Tran	5:45a-6:30p, weekdays 8:45a-5:15p, Saturdays	Fixed Route, ADA Transportation, Seniors/Non- ADA Disabled	752,497
Davie, Stokes, Surry & Yadkin Counties - YVEDDI	6:00a-6:00p, weekdays weekends by appointment	Community Transportation	256,269
Regional - PART	6:00a-9:30p, weekdays	Fixed Route, Ridesharing	1,142,404

### **3.0 Long Range Transit Concept Plan**

Each of the systems has expansion goals and unmet needs, but it became apparent during the study process that the region needed to take the long range vision for transit in the Triad a step further and define in greater detail what shape transit will take over the next 5-10 years. A Long Range Transit Concept Plan was developed as an effort to bring these plans and goals together.

The Long Range Concept Plan guides the development of short term recommendations described in the various study elements and represents a significant departure from the way transit services are currently being provided in the Piedmont Triad region. The catalyst for this change is the introduction of significant new source(s) of regional funding that should be administered by PART. New systems and policies for the distribution of this funding will need to be created that will change organizational structures and functions performed by the current transportation providers in the region. The Long Range Concept Plan includes the following four elements:

- ◆ **Consolidation of Functions** – Most of the recommendations included in the PTSMS relate to this element of the Long Range Concept Plan. As mentioned, these are shorter term efforts to ensure that transit is being provided efficiently and effectively without duplication among systems and to provide a framework for these systems to accommodate future growth. Consolidation, coordination and increased communication recommendations are outlined in more detail in Section 4 of the Final Report.
- ◆ **Regional Branding** – The transit service provided throughout the Piedmont Triad region would be advertised and branded as one system, regardless of local operators. This does not advocate changing logos at each system but rather adding information in prominent locations, such as shared bus stops and an identifier on transit vehicles that would include a common symbol of the overarching regional service. The intent is to begin promoting all the services as part of the larger transit network, so that the riding public begins to understand the breadth and range of transit services in the region.

A branding program will also be instrumental in generating public support for transit as new funding mechanisms are considered. Developing marketing strategies that relay the efforts of the transit agencies toward coordination and cost effectiveness will help to encourage higher ridership and enhance the reputation of public transportation as a good investment.

- ◆ **New Regional Funding** – This is the essential element and catalyst for bringing the Concept Plan to fruition. While the final funding source or combination of sources will be determined through a local process, the adoption of a new and significantly increased source of dedicated transit funding will trigger a need to revamp current organizational responsibilities. The financial evaluation included in Section 7 of the Final Report analyzes the level of funding needed to meet regional and local service expansion goals.
- ◆ **Increased Transit Services** – With the new source of local funding, more transit services can be provided. This includes expanding existing services and providing services that address unmet needs. The goal of all public transit services in the Piedmont Triad region should be to improve the travel market share and capture five (5) percent of all trips by

catering to commuter based trips and shorter local trips. This is a lofty goal since it entails quadrupling ridership. Public transit currently captures less than one (1) percent of the travel market in the region. Most of the expansion ideas included in this analysis were drawn directly from the participating systems themselves as they develop services to accommodate unmet needs. Described in detail in Section 5 of the Final Report, there are also increased service recommendations designed to improve regional mobility and to enhance the regional transit network.

## 4.0 Recommendations of the Plan

The systematic review all of the services and functions provided by the nine participating transit systems yielded a number of possible opportunities for consolidation, coordination and communication among the systems. The recommendations formulated from this review range from low cost short range efforts involving the development of regional clearinghouses for information to full-scale consolidation of major functions currently occurring at each of the transit agencies. Highlights of the recommendations are included in this section.

### 4.1 Consolidation of Functions/Services

The development of a **Regional Call Center** (Section 4.4) represents an opportunity to consolidate functions in two primary areas: Customer information and the paratransit support functions. The PTSMS recommends a staged approach for consolidating these functions since there are a number of policy and procedural changes that should take place prior to adding certain functions to the center. At build out the Regional Call Center should include these functions:

- Demand Response Service – Reservations, Customer Service, ADA Eligibility Determination and Scheduling and Dispatching.
- System Customer Service and Trip Itinerary Planning
- Regional Transit Website

Phasing of the regional call center facility begins with customer information and trip itinerary planning which should begin by incorporating these functions from the GTA, PART and Hi-Tran systems into the existing WSTA call center. Then, as the paratransit support functions are centralized, the entire center should be housed at the PART administration facility currently in development, since the WSTA facility will not have enough space.

The process is expected to take a number of years because the effectiveness and efficiency of the regional call center is heavily dependent upon the standardization of ADA eligibility requirements and service policies, which at present vary widely from system to system. It is also recommended that the regional call center begin with the consolidation of these functions at the urban and regional fixed systems first and then incorporate the community-based and rural systems over the course of several years.

The PTSMS recommendations also include the consolidation of the **Multiple Paratransit Systems in Guilford County** (Section 4.5). Currently, there are three separate transit systems in Guilford County that could realize some economies of scale by consolidating their operations. Guilford County (TAMS) and GTA have experimented with consolidation in the past with limited success but the idea should be brought back for consideration. Each of these systems has expressed concern about operations especially for their paratransit programs at Hi-Tran and GTA and the entire TAMS systems. The regional call center recommendation includes the potential for consolidating the reservation and scheduling for the demand response portions of their respective services.

Economies of scale will result from a consolidation of these three transit agencies' paratransit services. This results from more efficient use of personnel and capital equipment. The average cost per trip for demand response services in Forsyth County (City/County Consolidated) is \$12.53 (FY 2006) while the average cost per trip among the three providers in Guilford County is \$19.24, according to the National Transit Database. There are a number of variables that can explain the difference in unit cost including service area statistics and drivers' wages and benefit, but it is likely that consolidation of these services will result in a significant reduction in unit cost per paratransit trip.

Consolidation of the **Drug and Alcohol Testing** (Section 4.9.3) program will create a transit specific testing consortium for purposes of compliance with Federal Transit Administration (FTA) rules on this subject and any forthcoming rulemaking regarding over-the-counter medications. If the program is regionalized then all of the testing can be procured together which should create a volume of tests that would allow the contractor to provide cost reductions in the range of \$8.00 to \$12.00 per test. The contract, however, should provide testing sites that are conveniently located for each of the systems participating. This action would reduce the duplication of the human resource function associated with management of a drug and alcohol testing program.

Future **Shared Use of Facilities** (Section 4.10.2) Construction of any new facility in the Triad should be subject to a joint use analysis in the feasibility and design phases. For example:

- Establishment of a regional call center should be considered in the design of the proposed new PART facility;
- The new GTA operations and maintenance facility currently in development should incorporate PART and TAMS operations.
- PART and WSTA should jointly develop a similar operations and maintenance facility in Winston-Salem.
- There are several existing and future PART park and ride facilities which should be designed to accommodate joint uses with community-based and rural systems' services. Asheboro, Burlington and the YVEDDI locations present the greatest potential.

## 4.2 Coordination

A **Regional Pass Program** (Section 4.6) will make it easier for passengers to make regional trips using more than one public transportation system. This will encourage people to use public transportation for these types of trips and will likely result in some increases in ridership. Also, an unlimited ride pass will provide economic value for passengers who frequently use public transportation. From a system standpoint, encouraging passengers to travel between systems allows each system to benefit from increased boardings which positively affect federal and state funding allocations. An equitable method also needs to be developed for sharing the regional fare revenue among the transit agencies participating in a fare integration program. This can be based on a number of factors, including an actual count of boardings or a passenger survey.

The implementation of the regional pass can be accomplished in the very near term (1-2 years), however, in the long term the establishment of a **Regional Fare Structure** will be necessary. The development of a regional funding mechanism will mean that the nine systems will need more integration of all of their revenue streams including fares. If the systems are to enhance the ability for passengers to make regional trips while creating an equitable regional funding program, a regional fare structure should be implemented. Further analysis should be undertaken to determine the optimum method(s) and the participating systems at the various phases of implementation. This can also address other issues related to fare policies such as the desired cost recovery ratio for each system and developing the revenue allocation policy among systems.

The development of **Locally Based Programs** (Section 5.4) is an effort to streamline the process for the implementation of new service around the region. Several proposals exist to expand the current fixed route service area within the Piedmont Triad region including new local service in Burlington and Asheboro. These and other future service expansion should be designed to complement the current and planned regional system, both in terms of the route system and the overall management structure. In this approach, functional responsibilities would be shared among PART, the municipality, and the entity responsible for operating the service. The municipality, with assistance from PART, would primarily determine the type and level of service to be provided. This would assure that the service met local needs. Grants administration and oversight functions would be primarily PART's responsibility. Financial responsibilities would be shared by PART and the municipality, although PART would be able to use its authority to implement a vehicle registration fee to assist in the funding of the program. The selection of the service operator would be done jointly by PART and the municipality. Most management and operations functions would be the responsibility of the operator.

The primary purpose of **Regional Training Program** (Section 4.7.1) based at PART would be to take lead responsibility for operations related training for the four suburban transit systems, including YVEDDI, ACTA, DCTS and RCATS. This program would not necessarily replace the program now in place at YVEDDI; rather this program would

be assumed by PART and expanded to the other three systems. North Carolina Department of Transportation funding should be used to support this program. Implementation of this strategy would increase the effectiveness and frequency of bus/van operator training in the suburban/fringe counties. In addition, all of the driver training programs (**System Information** - Section 4.7.2) around the region should be updated to include a module on the regional transit network. Drivers should be familiarized with the services provided in other jurisdictions as well as PART services so that they can relay this type of information to the riding public.

### **4.3 Increased Communications**

Recommendations for increased communications are highlighted by the continuation of the Technical Advisory Committee that convened as a part of the PTSMS. This group, which includes staff representatives from the participating transit agencies, will be the primary people involved in the implementation of the recommendations included in this report. They will be instrumental in continuing the communication among the systems, engaging the proper stakeholders and maintaining the momentum of the process as the region moves toward the Long Range Concept Plan.

The urban systems (GTA, WSTA, PART, Hi-Tran and TAMS) are presently engaged in the Regional Technology Project which is an effort to coordinate the software and technology these systems use to support the customer service, scheduling and information collection aspects of their services. The use of intelligent transportation systems (ITS) such as automated vehicle locating (AVL) systems will help facilitate the exchange of information among these systems and their customers. The PTSMS calls for the expansion of the Regional Technology Project to other systems within the region and to use these advances in technology to increase the effectiveness of other coordination efforts such as the regional call center.

## **5.0 Governance and Funding**

The Long Range Transit Concept, is contingent on substantial new local funding developed as part of this project recommends creation of a regional funding mechanism across the nine participating counties, administered by PART, for both regional and local transit. The financial evaluation analyzes the funding levels for a long range funding scenarios that included the implementation of a ½ penny sales tax in Guilford and Forsyth Counties and a ¼ penny in the remaining counties. The evaluation showed that the level of funding would be sufficient to double existing bus and paratransit services (from \$37M to \$74 M annually) and the associated capital improvement with enough revenue to initiate high capacity transit investments throughout the region.

Since a sales tax would require legislative and/or local referendums, an interim scenario was tested (Section 7) and showed the levels of funding utilizing property taxes and vehicle registration fees, since these mechanism could be implemented without state legislation or

referendum. This scenario is intended to show what amount of funding will be necessary to meet a portion of local needs and continue regional expansion over the next 3-4 years while more robust funding mechanisms are considered. Disparities in existing local funding levels from property taxes and other sources should be factored in to ensure equity for communities that have invested more in system growth and enhancement.

The financial evaluation also examined regional funding opportunities such as a regionally coordinated multi-year capital improvement program for fleet and facility improvements, potential changes to the urbanized area formula fund calculation and provides more details on the expansion plans for each system. The Federal Transit Administration Section 5309 Program favorably considers regionally-coordinated applications for transit system improvements and a regionally sponsored application from the Triad would provide the stop-gap in funding created by the aggressive transit expansion pursuits encouraged by the PTSMS. Success with these measures will require significant local and regional funding sources and careful structuring.

It was determined that the existing governance structure would support the Long Range Concept Plan as long as PART's role as a conduit for the regional funding mechanism is defined to redistribute funds equitably. The PTSMS recommends small changes in the committee structure at PART to address the interaction among participating systems for the regional call center and long range planning. PART should also develop planning capacity to assist or conduct long-range local transit planning as needed. There are several systems that either report to the local governing body (Hi-Tran and DCTS) or a non-profit agency board (YVEDDI, RCATS). The Plan suggests that as these systems grow that transportation focused authorities or advisory boards are established so that there is an entity that can devote the time and energy required to govern a public transportation system.

## **6.0 Implementation**

Most of the recommendations generated as part of the PTSMS were designed to increase the efficiency of the provision of transit across the region. They vary in complexity, both in terms of the number of functions/services they entail but also in the number of systems that may or may not participate. Implementation schedules which are explained in greater detail in Section 8 of the Final Report were based on full participation and will take 1-6 years depending on the recommendation. Generally, the communications based recommendations can be implemented in the shortest amount of time. Concepts like the regional clearinghouses, continuation of the PTSMS Technical Advisory Committee and improvements of the Regional Vanpool Program can be implemented within the next year. Coordination efforts, such as the Regional Fare Structure, Locally Based Programs (depending of funding) will range from 2-3 years for implementation. The consolidation recommendations, most notably the Regional Call Center, may have some functions consolidated early in the process, but the procedural and policy based changes required for implementation will take a number of years to accomplish.

The first step toward implementation will be the presentation of this report to various boards, councils and commissions around the region and to discuss the merits of consolidation,

coordination and communication from the standpoint of each system. Each participating agency, in conjunction with their municipal government, will need to address their role and level of participation on a case by case basis.

Regardless of whether a particular system serves an urban or rural area, public transportation will continue to move toward the forefront of providing mobility and viable options for the travelling public. Providing public transportation as effectively and efficiently as possible, which is the primary goal of the PTSMS, will be necessary for the public and locally elected officials to embrace it as a good public investment.

The Final Report is available online at [www.partnc.gov](http://www.partnc.gov).

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