

Executive Summary

Introduction

The Triangle Transit Short-Range Transit Plan (SRTP) is a five-year transit operating plan and capital program for public transportation and ridesharing services. It provides an overview of the status of regional services in the three-county (Wake/Durham/Orange) service area and provides a guide for improvements in current services and expansion of services to new locations from Fiscal Year 2009 through 2013. The service recommendations and policies presented in the SRTP are intended to be supportive of the region's goals for reducing vehicle miles of travel (VMT) in the region, while absorbing rapid growth in population and economic activity, moving the region forward in providing a sustainable transportation system.

Triangle Transit History and Service Trends

The State Legislature created the Research Triangle Regional Public Transportation Authority (operating as "Triangle Transit") in 1989 to plan, finance, organize, and operate a public transportation system for the three-county Research Triangle area. Governed by a thirteen-member Board of Trustees, our primary program areas are: regional transportation demand management marketing and outreach; regional transit planning; and regional bus, paratransit, vanpool, and ridematching services. Refer to the inset at right for a summary of these services.

A number of external factors affect customer usage of Triangle Transit services, including regional population and employment growth in the service area, congestion levels, gas prices, parking prices and availability, and environmental awareness. In recent years, all of these factors have trended in favor of greater use of Triangle Transit services. A burgeoning pass program with large employers has also led to increased bus ridership. In 2002, Triangle Transit entered into its first pass agreement with North Carolina State University. In ensuing years, similar "GoPass" programs have been established with several other entities with great success: during Fiscal Year 2007, there were 254,091 boardings with GoPasses, accounting for 29.4% of all Triangle Transit boardings.

Planning Context

A variety of transit planning activities occurring in recent years form the foundation on which the SRTP is built. These include the Seamless Transit Memorandum of Agreement between

Triangle Transit's Services

- Triangle Transit began directly operating regional bus service in April 1993. Today, Triangle Transit operates 49 peak vehicles on 21 routes during weekdays, and offers Saturday service on 4 routes. Weekday service includes 11 regional routes, 6 shuttle routes, and 4 regional express routes. We operate approximately 251 weekdays each year and 52 Saturdays. During FY2007, we had an average of approximately 3,300 passenger boardings on weekdays, and a total of 865,911 annual boardings. The agency owns a fleet of 63 buses.
- Triangle Transit began offering complementary paratransit service in May 2002 for individuals who are not able to use the fixed-route services for reasons of a disability. Today, Triangle Transit has six paratransit vehicles providing service between Raleigh, Durham, Chapel Hill, and RDU Airport 6 days per week.
- Triangle Transit has been operating regional vanpool and ridematching services since its inception in 1991. Today, Triangle Transit has a fleet of 86 vans, with 70 vanpools on the road on a daily basis. In Fiscal Year 2007, the vanpool service provided an estimated 397,000 passenger trips, and the ridematch system processed 10,369 match requests.

Guiding Principles of the Short-Range Transit Plan

- Triangle Transit should meet or exceed our customers' expectations for high quality services.
- Triangle Transit should align investments to meet existing and projected demands for services in the region.
- Triangle Transit should be equitable in our provision of services according to demand, need, and revenue generation.
- Triangle Transit should be a leader in providing sustainable transportation services and promoting a sustainable transportation system.
- Triangle Transit should be a leader in developing a seamless transportation network across the region.
- Triangle Transit should continue to pursue transportation demand management (TDM) strategies to build markets for public transportation and ridesharing services.

Triangle Transit, Raleigh, Durham, Chapel Hill, Cary, and North Carolina State University; the Raleigh, Durham, Chapel Hill, and Cary Mayors' Bus Expansion Plan; the Special Transit Advisory Commission (STAC) report; Triangle Transit's Strategic Investment Plan for Bus, Vanpool, and Paratransit; and the Triangle Regional 7-Year Travel Demand Management Plan.

Evaluation Methodology

In order to make recommendations for improvements to Triangle Transit services, staff conducted several analyses of current service provision and performance and travel demand analysis for corridors that are not currently served by transit.

Staff used the agency's Regional Bus Service Standards to evaluate route-level ridership and financial data from September through December 2007. Staff then prioritized the recommendations for improvements to several low-performing routes based on the amount of resources dedicated to each route. Analyses of on-time performance and coordination opportunities also yielded several priority projects to improve these aspects of our services.

The list of corridors staff evaluated for new service provision comprised corridors from the Triangle Mayor's Bus Expansion Plan, Special Transit Advisory Commission near-term recommendations, and corridors suggested by internal and external advisory groups. Staff estimated travel demand in each corridor using the Triangle Regional Model travel demand estimates for 2005. Staff then adjusted travel demand figures based on several factors that influence transit ridership (low-income household travel demand, destination walkability, parking constraints, and existing employer incentives) to rank and group the corridors into high, medium, and low priority projects.

Triangle Transit staff engaged the assistance of two advisory groups, met individually with several of our transit planning partners, and solicited public feedback to guide the Short-Range Transit Plan process and recommendations. Public response to the SRTP recommendations highlighted the importance of improving on-time performance, the success of express routes, and the need to better coordinate the regional routes with local routes.

Summary of Recommendations

- *Transform and Expand the Regional Bus System* - To address customer preferences for faster, more reliable services, Triangle Transit will transform the regional bus system to focus on long-distance, limited stop routes serving major employment centers with transit-supportive conditions in place. Access to the regional routes will be provided through better coordinated local bus routes and park-and-ride lots. Improved schedule reliability will be built into our routing and schedule changes. Where feasible, we will route regional services along future fixed guideway corridors identified in the Regional Transit Vision Plan adopted by the Special Transit Advisory Commission.

Triangle Transit Short-Range Transit Plan

- *Keep Up with Growing Paratransit Demand* - As the region grows and transit access is improved, demand for ADA paratransit will increase. We plan for expansion of the fleet of paratransit vehicles from six today to eight by Fiscal Year 2013.
- *Grow to 100 Vanpools on the Road* - As demand for vanpool services continues to grow, staff recommends an expansion of thirty new vanpools and replacement of an aging fleet over the upcoming five years.

Policy Changes and Implementation

In order supplement the SRTP recommendations, staff recommends Board consideration of policies that would:

- Require partnerships with local governments or employment institutions in the provision of regional public transportation bus services,
- Redefine Triangle Transit service jurisdiction in the agency's Regional Bus Service Standards to include up to ten miles beyond the boundaries of Wake, Durham, and Orange Counties, as permitted by the agency's enabling legislation, and
- Add new regional bus service quality standards for on-time performance, service interruptions, timed transfers, bus stop amenities, and average fleet age to improve the quality of regional bus service.

Service Improvement Plan

The service improvement plan outlines the specific projects recommended for implementation in each year of the Short-Range Transit Plan (FY2009-2013). The recommended service improvements are intended to transform the regional public transportation network and expand its reach in a manner consistent with the guiding principles for this plan laid out by the Board of Trustees.

FY2009 Service Improvements

Capacity enhancements - Add passenger capacity on our most popular routes as dictated by demand and within the constraints of our budgeted resources for FY2009

Night service revision - Return to weekday night service on Routes 412, 413, 105, and Shuttle 747 and eliminate routes 470, 570, and 670.

Route 102 (Raleigh-Garner) reroute and reschedule - Revise routing and schedule to provide more predictable headways.

RTP shuttles evaluation and identification of demonstration projects - Work with RTP partners to generate ideas for and plan demonstration projects for transit connections to employers in RTP.

On-time performance - Evaluate all routes and implement service changes that will help the agency move toward the goal for each route to achieve on-time status for 90% of its trips.

Route 420 (Hillsborough - Chapel Hill) schedule improvements - Work with Orange Public Transportation to revise schedule to provide more consistent, predictable, and improved headways.

Passenger amenities - Install bus stop amenities at eight of our highest use bus stops and two new park-and-ride locations.

Advanced technology - Implement wi-fi demonstration project on twenty vehicles in the fleet; work with the City of Raleigh and Capital Area MPO on US 1 corridor transit signal priority feasibility study.

Wake Forest - Raleigh Express - Implement weekday hourly peak-period express service between Wake Forest, Triangle Town Center, and downtown Raleigh, and hourly mid-day service between Wake Forest and Triangle Town Center.

Wake Forest Loop (local service) - Provide local circulator service that feeds into the Triangle Transit express service on behalf of the Town of Wake Forest.

Participate in opening of Wake Tech - Raleigh route to general public - Maintain Triangle Transit interest in the establishment of a park-and-ride lot on US 401 in the vicinity of Wake Tech, and in the eventual extension of service to Fuquay-Varina.

Triangle Transit Short-Range Transit Plan

FY2010 Service Improvements

Increase frequency of Route 600 (Raleigh - Durham Express) - Provide 30-minute headways in order to meet increasing demand for this service.

Route 301 eastern half (Cary - Raleigh) coordination - Work with Cary and Raleigh to coordinate the distribution of transit resources along Routes 301 and 303 for improved regional and local access.

Implement RTP demonstration projects - Implement RTP demonstration projects and evaluate their effectiveness at improving transit access to employer sites within RTP.

RDU service study - Employ external resources to evaluate and make recommendations for improved regional transit access to RDU International Airport.

Passenger amenities - Install bus stop amenities at 15 of our highest use bus stops, focusing on improved customer information at bus stops, and at three new park-and-ride locations.

Advanced technology - Deploy a real-time arrival passenger information system and coordinate it with existing systems in the region through the GoTriangle Regional Customer Information Center and Web interfaces.

On-time performance - Continue to evaluate and improve on-time performance so that all routes work toward the goal of 90% of trips achieving on-time status.

Eastern Wake Express - Implement weekday hourly peak-period service from Zebulon, Wendell, and Knightdale to downtown Raleigh.

FY2011 Service Improvements

Route 301 western half reroute and coordination - Revise the section of Route 301 between RTP and downtown Cary to travel via NC 54 with service to Perimeter Park.

Sunday/Holiday service - Implement Saturday level of service on Sundays, Good Friday, and the Friday following Thanksgiving; consider service on Martin Luther King, Jr. Day.

Hillsborough Street coordination - Work with Raleigh and NC State University to coordinate the distribution of transit resources along the Hillsborough Street corridor.

15-501 corridor coordination - Work with Durham, Chapel Hill Transit, and Duke Transit to coordinate the distribution of transit resources along the US-15/US-501 corridor.

Passenger amenities - Improve bus stop amenities at two highest use bus stops and six new park-and-ride locations.

Clayton - Garner - Raleigh Express - Extend Route 102 (Raleigh-Garner) to provide weekday hourly peak period service from Clayton and Garner to downtown Raleigh, with a potential extension to NC State University.

Pittsboro - UNC Express - Implement hourly peak period service from Pittsboro to Chapel Hill.

North Raleigh - RTP Express - Divide current Route 201 (North Raleigh - RTP) into two routes, with one serving the western portion of the North Raleigh service area and the second serving the eastern portion of North Raleigh service area, traveling on I-540 with limited stops.

Increase frequency of Wake Forest Express - Given adequate demand, increase frequency during weekday peak periods from hourly to 30-minute headways.

FY2012 Service Improvements

Route 420 (Hillsborough-Chapel Hill) increased frequency - Given adequate demand, increase frequency during weekday peak periods to 30-minute

Passenger amenities - Implement bus stop amenities improvements to two of our highest use bus stops and four new park-and-ride locations.

Burlington - Duke/Durham Express - Implement weekday hourly peak period service from Burlington, Mebane, and Hillsborough to Duke and downtown Durham.

Person County - Duke/Durham Express - Implement weekday hourly peak period service from the Durham/Person County line and north Durham to Durham Regional Hospital, Duke, and downtown Durham.

Increase frequency of Eastern Wake Express - Given adequate demand, increase frequency during weekday peak periods to from hourly to 30-minute headways.

Triangle Transit Short-Range Transit Plan

FY2013 Service Improvements

Passenger amenities - Implement bus stop amenities improvements to two of our highest use bus stops and five new park-and-ride locations.

Holly Springs - NCSU/Raleigh Express - Extend Route 305 (Apex-Raleigh) to Holly Springs, providing hourly peak period service from Holly Springs, Apex, and southern Cary to NC State University and downtown Raleigh.

Raleigh - RDU Direct Service - Implement service between downtown Raleigh and RDU Airport, serving an existing or future park-and-ride facility in Wake County.

Increase frequency of Clayton - Garner - Raleigh Express - Given adequate demand, increase frequency during weekday peak periods from hourly to 30-minute headways.

Southern Wake Express - Extend service between downtown Raleigh and Wake Tech to Fuquay-Varina, providing hourly peak period service between Fuquay-Varina and downtown Raleigh.

Implementation Plan

The SRTP will guide investment decisions to be made by the Board over the upcoming five-year period. The successful implementation of the SRTP recommendations will require the Board and staff to make key strategic decisions and to coordinate activities throughout the organization. The agency will need to consider contracting for the provision of expansion services; the preferred approach to acquiring vehicles for fleet expansion (purchase, lease, or contract); the timing of vehicle purchase with respect to grant versus local funds; and the effect that forming partnerships and coordination will have on the timing of service introduction. Staff also recommends that the agency contract for outside planning resources to support the current planning staff during the early years of the plan. Finally, effective marketing of the service improvements and new routes will be critical to their success. Staff recommends combining individualized marketing strategies at the residential end of new routes with employer-based transportation demand management (TDM) strategies.

Financial Plan

The Five-Year Financial Plan for the SRTP shows the ability to expand service by approximately 50% above the FY2008 levels. Over the five-year period, total operational expenses associated with the plan would grow from \$11.4 million in FY2009 to \$18.3 million in FY2013. Given the spending and revenue assumptions for operations and maintenance of the services in the plan, the amount of revenue that would need to be drawn from Triangle Transit's two local revenue sources would increase from \$5.7 million in FY2009 to \$9.0 million in FY2013.

The most significant capital expenses in the plan are associated with the acquisition of vehicles for the bus, vanpool, and paratransit programs. Additionally, the plan calls for continued investments in stop amenities and investments in a real-time arrival information system and other technology upgrades. Using the assumption that Triangle Transit will purchase buses with delivery taken (and expenses shown) in the fiscal year of planned start of service, the capital costs over the five-year period are \$31.5 million. Given the spending and revenue assumptions for capital procurements necessary to implement the plan, \$10.2 million would need to be drawn from Triangle Transit's two local revenue sources for these purposes over five years. This level of spending would enable the purchase of 30 over-the-road (OTR) coaches by FY2013, and an increase in total bus fleet from the current 63 to 86 vehicles by FY2013. The paratransit fleet will increase from five to eight vehicles, while the vanpool fleet will increase from 86 vehicles today to 117 vehicles by FY2013.

By adopting this plan, the Triangle Transit Board of Trustees is not committing to funding all the recommendations over the five-year period. Each year, a refined funding request for the upcoming fiscal year's recommendations will be included in the budget planning process and recommendations will be considered along with other agency priorities.

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