



Cape Fear Public Transportation Authority



Farebox Revenue Analysis and Options

August 2012

INTRODUCTION

Continued reductions in federal , state and local subsidies for transit have forced many public transportation providers to develop creative ways to increase revenue in an effort to provide an acceptable level of service. Wave Transit has been an active participant in these innovative revenue options over the last few years. Greyhound, vehicle advertising and contract revenue increases have assisted the Authority in raising revenue while and keeping service levels consistent.

Unfortunately, expenses continue to increase and additional sources of revenue are scarce. Recent discussions with elected officials in Raleigh indicate additional reductions in state subsidies are inevitable. There is some indication that support from the North Carolina general Assembly may be eliminated entirely. State legislators believe that current legislative options exist for counties to raise adequate transit subsidies at the local level if communities desire a public transportation system.

The purpose of this analysis is to address the options available to the Authority to reduce expenses, increase revenue and provide a blueprint for remaining fiscally healthy over the next five years. It will also address the adopted policies of the Authority in order to ensure compliance and recommend any changes necessary to meet the mission and goals of the Authority.

ADOPTED MISSION & GOALS

The mission of the Cape Fear Public Transportation Authority (Wave Transit) is to develop and maintain an effective, efficient, and safe system of public transportation services within Southeastern North Carolina which is responsive to the mobility needs of the community. Transportation services provided shall be designed to maintain and encourage the use of public transportation and shall contribute to the economic vitality of the community, the conservation of natural resources and the protection of the environment.

The goals of Wave Transit are as follows:

1. Provide cost effective transportation services which optimize the utilization of personnel, vehicles, and other resources and which are operated with a minimum of public subsidy.
2. Provide transportation services which meet the mobility needs of the community, within available financial resources.
3. Develop funding options which assure the continued stable operation of transportation services at a public subsidy level acceptable to the community.
4. Develop policies which assure, as much as possible, that transit services are designed and operated to encourage maximum utilization by the community. Service should be provided first in areas where the greatest potential for use exists.
5. Promote the use of public transportation services within the community. This includes both providing adequate and up-to-date information on services available and aggressively marketing the transit system.
6. Expand public transportation to new areas of the community as demand estimates and population densities indicate that service will be sufficiently utilized within established service standards.

The Goals of the Cape Fear Public Transportation Authority will be reviewed and revised, as needed, during the budget development process. These goals and objectives will guide the development of capital and operating budgets, service planning, and operation of transit services.

Adopted: June 09, 2005

REDUCTION OF EXPENSES

Budget management is an ongoing effort and one of the highest priorities of the Authority's Finance & Budget Committee as well as staff. Efforts to manage labor costs including overtime, fuel, benefits and liability costs can go a long way in ensuring budget compliance. Under the watchful eye of the Authority, staff is confident that the Authority is run in the most efficient and economical manner possible. A significant reduction in expenses is not viable because staff is confident that the system is operating as efficiently and economical as possible.

In 2010 the Authority contracted with Nelson Nygaard to prepare a short range transit plan. The plan recommends minor route modification based on passenger surveys and current travel patterns. Although the plan was developed to be revenue neutral, two proposed routes which offer thirty minute headways could be increased to sixty minute headways saving approximately \$100,00.00 per route annually. Ridership would most likely decrease.

Expenses could be further reduced by eliminating weekend service. Elimination of Sunday service was proposed by staff and was estimated to save the Authority approximately \$200,000 annually. The proposal was based on many factors but an \$11.61 subsidy per passenger on Sunday compared to a \$3.87 subsidy per passenger on weekdays was the most prominent statistic for the proposal. Following the public comment period for the service reduction, Authority staff was directed to present other alternatives to make up the \$200,000.

INCREASE IN REVENUE

Absent significant reduction in expenses, the Authority is forced to turn its efforts to balance the annual budget through increased revenues. Since the Authority does not possess a dedicated source of funding (sales tax, vehicle revenue fee, etc...) it is forced to look at increased subsidies, or increasing fees for service through contract revenue and/or fares.

With the exception of UNCW, current contract revenues are based on the fully allocated cost for the service. UNCW is allowed a portion of the Authority's FTA and NCDOT subsidy since the service it supports is also available for use by the general public. The subsidy was capped at a fixed dollar amount in FY 2013. Medicaid transportation is billed to New Hanover County DSS at the fully allocated cost.

Although fares are controlled by the Authority, farebox revenue is based on ridership which is sensitive to many external factors such as the economy, fuel prices and the like. Rising fuel prices are a double edged sword. Although they increase revenue through additional passengers and increased fares, the additional revenue is offset by the increased cost of fuel paid by the Authority.

When evaluating fares, the Authority takes the following into consideration:

- Analysis of peer fare structures
- Cost of competing transportation providers
- Authority policies regarding passenger fares
- Federal requirements regarding fare increases

An analysis of fare structures for transit systems throughout North Carolina was undertaken as a part of this study (table 1). While it seems helpful to understand the fare structure of peer agencies, an unbiased analysis would debate the value of such comparison. Is comparing the fare structure of Wave Transit to the system in High Point a fair comparison? Without an in depth analysis of mitigating factors like the cost of living, trip length, wages and the like, many may argue that the analysis is failing to compare apples to apples. Even with an understanding of mitigating factors, is a twenty-five cent difference in the cost of a one-way trip measurable?

INCREASE IN REVENUE (CONT).

One question that must be addressed when developing a fare structure is the purpose of fares. Are fares intended to be a major source of acquiring revenue? Is the fare structure designed to rely heavily on taxpayer subsidies and keep the cost to the user artificially low? Does a deflated fare structure provide citizens and passengers a false sense of the cost of public transportation service? These questions must be addressed in order to develop a responsible fare structure.

System	FR	PT	31 day
Charlotte	\$ 2.00	\$ 3.20	\$ 80.00
Raleigh	\$ 1.00	\$ 2.00	\$ 36.00
Durham	\$ 1.00	\$ 2.00	\$ 36.00
Cary	\$ 1.00	\$ 2.00	\$ 36.00
Chapel Hill	free	free	n/a
Triangle Transit	\$ 2.00	\$ 4.00	\$ 85.00
High Point	\$ 1.00	\$ 2.00	\$ 40.00
Winston Salem	\$ 1.00	\$ 0.50	\$ 30.00
Greensboro	\$ 1.50	\$ 1.50	\$ 58.00
PART	\$ 2.40	\$ 4.40	\$ 90.00
Asheville	\$ 1.00	\$ 2.00	\$ 20.00
Fayetteville	\$ 1.00	\$ 1.35	\$ 30.00
Greenville	\$ 1.00	\$ 2.00	n/a
Concord	\$ 1.00	\$ 2.00	n/a
Gastonia	\$ 1.00	\$ 2.00	n/a
WPRTA Hickory	\$ 1.25	\$ 2.50	\$ 45.00

Table 1

This extensive study is costly and time consuming. Consultation with FTA Region IV Civil Rights staff indicate that the new FTA C 4702.1B will provide relief for TMA's who operate less than fifty revenue vehicles. C4702.1B is expected to be released in October 2012. FTA Region IV has advised the Authority that it could proceed with a proposed fare increase without a fare equity analysis.

If the Authority operated as a private enterprise, a reasonable fare analysis would rely heavily on costs of competing providers when determining rates. Traditionally, this is not the approach of transit providers. The Authority's primary competition would be taxi cabs. The current drop rate, or the fare for a passenger getting in a cab is \$3.00. Additional fees for mileage, night trips, wait time, etc... are also assessed by Wilmington City Code.¹ The current adult fare for Wave Transit is \$1.50 or 100% less than the cost to hail a cab.

To ensure that the public has an adequate opportunity to speak to proposed fare increases, the Authority currently requires a ninety day notification process before increasing fares. Notification in revenue vehicles and at prominent bus stop locations is also required. This policy has proven to be an adequate method for gauging public input.

FTA Title VI Circular 4702.1A requires systems in Transportation Management Areas (TMA) over 200,000 in population to undertake a fare equity analysis to ensure that any proposed fare increases meet current federal civil rights law.

RECOMMENDATION

This analysis was prepared to demonstrate that difficult choices need to be made in order for the Authority to continue to meet its financial obligations in a manner that is consistent with FTA and NCDOT rules, regulations and laws. As evidenced by the Authority's recent attempt to eliminate Sunday service, there is no easy solution. A reduction in service, a fare increase or a combination of both will ensure that the Authority has the necessary funds available to function economically and efficiently. In addition to eliminating Sunday service, the Authority has calculated revenues from different scenarios of fare increases (table 2).



Cape Fear Public Transportation Authority

Fare Increase Analysis
Across the Board

Basic Assumptions

Annual Ridership 1,250,000 (less UNCW rides of 250,000)
Average Fare/Ride \$0.62

For every \$.25 increases in 1 Ride Adult Fare we will see a \$.125 Increase in the Average Fare/Ride
Of the \$6,475,000 Fixed Route Budget, Fares cover approximately 12% of the cost.

Fare Increase	Projected Annual Revenue									
	0%	1%	3%	5%	8%	10%	15%	20%		
	1,250,000	1,237,500	1,212,500	1,187,500	1,150,000	1,125,000	1,062,500	1,000,000		
Estimated Ridership Drop % ---->										
Annual Ridership ----->	775,000	767,250	751,750	736,250	713,000	697,500	658,750	620,000		
1 Ride Adult	\$1.50	\$0.610	\$0.610	\$0.610	\$0.610	\$0.610	\$0.610	\$0.610		
Avg Fare	\$1.75	\$0.735	\$0.735	\$0.735	\$0.735	\$0.735	\$0.735	\$0.735		
	\$2.00	\$0.860	\$0.860	\$0.860	\$0.860	\$0.860	\$0.860	\$0.860		
	\$2.25	\$0.985	\$0.985	\$0.985	\$0.985	\$0.985	\$0.985	\$0.985		
	\$2.50	\$1.110	\$1.110	\$1.110	\$1.110	\$1.110	\$1.110	\$1.110		
	1,400,000	1,386,000	1,358,000	1,330,000	1,288,000	1,260,000	1,190,000	1,120,000		

Fare Increase	Projected Annual Revenue Increase/(Decrease)									
	0%	1%	3%	5%	8%	10%	15%	20%		
	1,250,000	1,237,500	1,212,500	1,187,500	1,150,000	1,125,000	1,062,500	1,000,000		
Ridership Drop % ---->										
Annual Ridership ----->	156,250	146,938	128,313	109,688	81,750	63,125	16,563	(30,000)		
1 Ride Adult	\$1.75	\$0.735	\$0.735	\$0.735	\$0.735	\$0.735	\$0.735	\$0.735		
Avg Fare	\$2.00	\$0.860	\$0.860	\$0.860	\$0.860	\$0.860	\$0.860	\$0.860		
	\$2.25	\$0.985	\$0.985	\$0.985	\$0.985	\$0.985	\$0.985	\$0.985		
	\$2.50	\$1.110	\$1.110	\$1.110	\$1.110	\$1.110	\$1.110	\$1.110		
	625,000	611,000	583,000	555,000	513,000	485,000	415,000	345,000		

Estimating that ridership elasticity to equal 5% per every \$.25 increase in fares.

For a 2 ride per day, 5 day a week rider:

Average rider would see an annual increase in cost ranging from \$62.50 for a \$.25 increase to \$250 for a \$1.00 increase in fares.
For an adult paying full fare the annual increase in cost ranging from \$125 for a \$.25 increase to \$500 for a \$1.00 increase in fares.

Table 2

For additional information about this publication or any of the services provided by Wave Transit, please contact:

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