



# ***Buncombe County***

---

## ***Community Transportation Service Plan***



**PARSONS  
BRINCKERHOFF**



# TABLE OF CONTENTS

- Executive Summary..... 1
- 1 Introduction ..... 5
  - 1.1 Study Purpose ..... 5
  - 1.2 Study Process ..... 5
  - 1.3 Study Area..... 6
  - 1.4 System Overview..... 7
- 2 System Inventory ..... 12
  - 2.1 Study Area Characteristics ..... 12
    - 2.1.1 Demographics ..... 12
    - 2.1.2 Employment Market ..... 15
    - 2.1.3 Medical Market ..... 19
    - 2.1.4 Trip Origins and Destinations..... 21
    - 2.1.5 Summary of Study Area Evaluation ..... 22
  - 2.2 Financial Management..... 22
    - 2.2.1 Key Funding / Revenue Sources..... 22
    - 2.2.2 Fare Structure and Billing Rate for Agencies and General Public Services ..... 24
    - 2.2.3 Other Local Funding Opportunities..... 25
    - 2.2.4 Third Party Contracts with Service Providers ..... 25
  - 2.3 Capacity Analysis..... 26
    - 2.3.1 Vehicle Inventory and Utilization..... 26
    - 2.3.2 Condition of Facility ..... 28
    - 2.3.3 Organization..... 30
    - 2.3.4 Observations of Scheduling and Dispatching Performance..... 31
  - 2.4 Public Satisfaction ..... 32
    - 2.4.1 Human Service Agency Passengers’ Input ..... 32
    - 2.4.2 General Public Riders’ Interview Comments ..... 32
    - 2.4.3 Human Service Agency Directors ..... 32
    - 2.4.4 Stakeholder Interviews ..... 34
    - 2.4.5 Non-Participating Agencies..... 35
    - 2.4.6 Input from Limited English Proficiency (LEP), Minority and Low-Income Populations ..... 35
- 3 Presentation of Technical Memorandum #1 ..... 36
- 4 Develop Management and Service Alternatives and Recommendations ..... 36
  - 4.1 Develop Management and Service Alternatives and Recommendations ..... 36
    - 4.1.1 Mission and Goals of the Organization ..... 36
    - 4.1.2 Existing Policies ..... 39
    - 4.1.3 Annual Budgeting..... 42
    - 4.1.4 Fully Allocated Cost Model ..... 43
    - 4.1.5 Financial Reserves ..... 44
    - 4.1.6 Financial Assistance ..... 44
    - 4.1.7 Local Constraints and Barriers ..... 45
    - 4.1.8 Marketing and Education..... 46
    - 4.1.9 Public Involvement Strategies..... 47
    - 4.1.10 Local Coordinated Plan ..... 48
  - 4.2 Service Analysis..... 49
    - 4.2.1 Leveraging Federal Programs..... 49
    - 4.2.2 Alternative Service Delivery Strategies ..... 52

4.2.3 Service to the Commute Market..... 54  
4.2.4 Service to Underserved Areas..... 55  
4.2.5 Expanding General Public Service ..... 56  
4.2.6 Advanced Technology ..... 56  
4.3 Coordination Opportunities..... 58  
4.3.1 Other Providers and Volunteer Groups ..... 58  
4.3.2 Input from Surrounding Counties ..... 60  
4.3.3 Existing and New Connector Service Opportunities ..... 63  
4.3.4 Coordination Opportunities with Urban System ..... 63  
4.3.5 Regional Medical Centers ..... 64  
4.3.6 Park and Ride Locations ..... 64  
5 Presentation of Technical Memorandum #2 ..... 66  
6 Five-Year Plan..... 67  
6.1 Implementation Plan ..... 67  
6.2 Implementation Schedule..... 67  
6.3 Financial Plan ..... 71  
6.4 Performance Measures..... 71  
7 Public Outreach..... 72  
Appendix A: Transit Dependence Index (TDI)..... 73  
Appendix B: Public Satisfaction Survey..... 75  
Appendix C: Interlocal Agreements ..... 79  
Appendix D: Dynamic Financial Model Summary ..... 80

## EXECUTIVE SUMMARY

### What is a CTSP?

This Community Transportation Services Plan (CTSP) is a five-year vision for transportation in Buncombe County. The North Carolina Department of Transportation (NCDOT) Public Transportation Division (PTD) recognizes the value of the CTSP and requires the County have this plan to receive federal and state funding for transit.

The focus of this plan is to evaluate the transportation services that already exist; to identify ways to maximize operating efficiencies; and to enhance the mobility options for Buncombe County citizens. Transit service is critical to many local residents; and the CTSP is a guide, a 'road map' to maximizing the effectiveness of services in a cost-efficient manner.

### What is the study's process?

During the last ten months, the study process has consisted of a series of tasks that built on one another for the final report. The first milestone evaluated the County's existing conditions and focused primarily on service characteristics and public satisfaction to understand the current challenges in both scheduling and facilitating transportation services, in addition to the opportunities available to both citizens and user agencies and organizations. Service alternatives and coordination opportunities were then explored to provide a strategically planned response to the projected mobility needs. Finally, proposed alternatives and recommendations were developed, with potential funding opportunities and realistic executable timelines for each one. Throughout the study process, feedback has been solicited from the general public; private and non-profit agencies that contract transportation to their clients and providers; government entities and officials; human service providers; and other targeted populations that are reliant upon public transit. For oversight and to provide a broad perspective, a Steering Committee was established, providing valuable and insightful input at the study's milestones.

### What are Mountain Mobility's strengths?

Overall the entire community is very supportive of Mountain Mobility. Buncombe County Commissioners, interviewed early in this CTSP study, recognize that transportation is critical to life sustaining activities, and continue to financially support Mountain Mobility.

Passenger and local human service agencies' transportation needs are being met by Mountain Mobility. The system's service is based upon 'ridesharing', a term that means the co-mingling of passengers from different agencies and the general public on the vehicles at the same time, thereby reducing the shared costs per mile and increasing the efficiency of operations. Mountain Mobility has a policy that no one who is eligible or entitled to transportation assistance and who is enrolled in a funded program is denied service (e.g., for capacity constraints, etc.). When surveyed, passengers identified many positive attributes of the system including clean vehicles and courteous, safe bus operators.

The talented and caring staff that administers and operates transportation in the County is a strong point and an asset. Mountain Mobility has two contractors: Land-of-Sky Regional Council (LOSRC) which fulfills the administrative role; and McDonald Transit Associates, Inc. handles operations. It was observed that staff is highly qualified and proficient in utilizing advanced technology, including RouteMatch (the dispatch and scheduling software for operations) and the fleet camera surveillance system (monitors safety and security matters). Both of these transit technologies support continued operating efficiencies. Additionally, County staff has historically been proactive and aggressive at

pursuing federal and state grant monies which ultimately reduces the amount of local funds needed to sustain the existing operations.

### **What are the observed transportation needs in Buncombe County?**

There is a clear need for transit service throughout Buncombe County. Mountain Mobility currently transports a significant number of passengers (roughly 600 trips per day), and the demand for public transportation is continually increasing with population growth and aging, long-term residents. Continued growth in transit demand can be expected. Based on projections from North Carolina Office of State Budget and Management (NCOSBM), in Buncombe County over a 20-year period there is an anticipated 20% increase in overall population and 40% increase in elderly population (a target market for Mountain Mobility).

Customers are very appreciative and satisfied with Mountain Mobility's service and performance; however, comments indicating areas of improvement focused on the timeliness of pick-ups to their intended destinations and lengthy trip travel times, both of which are indicators that current resources are 'stretched' (i.e. exceeding capacity).

Demographic and socioeconomic information was evaluated to better locate areas with concentrations of transit dependent populations (i.e. segments of the population that are most likely to need and be reliant on public transit service). The evaluation indicated that the greatest opportunities for potential transit customers are located within and just beyond the Asheville city limits, along I-40 to the east and west, along I-26 to the north, and along US-25 to the south.

There are also many requests for transportation service in the rural areas of the County. The limited roadway network and elevation changes are some of the contributing factors to the lengthy trips and time requirements, which often tie up resources (i.e. vehicles).

### **Is the County well positioned to meet the needs?**

Based on an evaluation of the study area characteristics, transit service appears to be well-placed to meet the majority of people's travel needs within Buncombe County. The Trailblazer routes currently travel along three of the four axes where demand is placed (north, east, and west). The south axis is served by the City's ART transit system. In addition to the deviated-fixed route Trailblazer routes, residents have the opportunity to schedule a demand response trip to and from any geographic area within Buncombe County.

A number of counties in the region travel to Buncombe County for medical trips. In some cases, specialty medical facilities (i.e. dialysis centers and pain clinics) are not available in surrounding or neighboring counties, and the nearest facility is in Buncombe County. Another major destination is, of course, the Charles George Veterans Affairs Medical Center (VA Hospital) for veterans' and their families' services. Therefore, short- and long-term recommendations have been made and will be explained in the pages that follow.

### **What alternatives / recommendations emerged from the CTSP?**

As previously stated, Buncombe County can anticipate growth, particularly in the elderly population, over the next 20 years. Thus, Mountain Mobility must take steps now to prepare for the future. In order to keep up with this demand, Mountain Mobility should increase its fleet size by 20% (twelve vehicles) over the next five years, and also evaluate the need to retain vehicles that are targeted for disposed at the end of the vehicles' useful life (dependent on mileage and/or time in active service).

Besides the above-mentioned increase in Mountain Mobility's fleet, the recommendations presented as part of this Plan were developed as the framework for building upon the successful efforts that have already been made by Buncombe County. The following aim to increase the mobility options for residents:

1. Increase education and marketing efforts.
2. Analyze the rates charged to agencies.
3. Modify the RIDE Voucher Program.
4. Perform a comprehensive route analysis to determine if route restructuring and/or a small expansion would improve level of service during peak times.
5. Upgrade / replace the camera surveillance system.
6. Initiate a feasibility study to evaluate the need for a new facility and screen potential sites.
7. Enhanced coordination with surrounding counties.

### Has there been early success?

Buncombe County has already taken proactive measures to institute modifications to the RIDE Voucher Program (Recommendation #3). Achieving multiple objectives (reducing over capacity on vehicles; expedited use of grant monies; and enhanced customer satisfaction), up to five transportation vouchers (total value of \$50) rather than only one will be allowed starting July 1, 2015. This change in policy and practice meets a transportation need that was voiced, particularly expressed by workers at the Industry of the Blind, during the April public outreach meeting.

The County has always been proactive, even aggressive, at pursuing federal and state grant monies. Such is the case with its recent award of a \$45,000 APTAP Grant, with monies targeted to conduct a Comprehensive Route Analysis Study (Recommendation #4). The objective is to analyze and evaluate how Mountain Mobility can implement structured routes in the most efficient manner in terms of the public's existing travel patterns. Another ADTAP Grant will support the purchase of Interactive Voice Response (IVR) technology that will enhance customer services by providing night-before trip reminders, confirmation or cancellation of trip requests, service alerts, etc. The technology should decrease no-shows and cancellations, while also improving on-time performance and utilize staff and vehicles more efficiently.

### Why is continued public outreach essential?

Mountain Mobility aims to address concerns and complaints from the riding public and agency representatives; however, continued educational and on-going dialog is recommended as part of the public outreach process (Recommendation #1).

It was observed that some passengers have unrealistic expectations regarding Mountain Mobility's operations, and continued education is needed to explain that transportation service is provided using the 'shared ride' model (the vehicles are not their personal taxis). Passengers and human service agency staff who are well educated about the policies and procedures of the transit system can contribute significantly to a fully effective and functioning system. The number of passenger complaints / inquiries is also decreased.

Educating passengers should not be seen as a one-time effort. It must be something that is sustained and repeated on a periodic basis, both to reinforce the information to long-time passengers and to make it available to new and potential riders. This recommendation strives to serve as both a public relations and an education effort to improve the functioning of Mountain Mobility and its performance.

### How can enhanced coordination be achieved?

As previously stated, Recommendation #7 focuses on opportunities to enhance coordination with surrounding counties based upon seating capacity and scheduling, including transit systems in Region B and counties farther west and north. This coordination of rides could take many forms:

- Transportation providers in other counties could coordinate with Mountain Mobility to pick up passengers residing in the outlying areas of Buncombe County, and transporting those riders (along with their riders);
- Transportation providers in other counties could coordinate with Mountain Mobility to meet a Mountain Mobility vehicle to transfer Buncombe County riders vehicles operated by other agencies, and that provider would transport all riders to their destinations; and
- Other providers could use their vehicles to assist Mountain Mobility rather than sitting idle or going off-duty while awaiting the completion of their residents' business and the return trips.

### How will funding change in the next five years?

Funding from several federal transit programs is allocated based on whether an area is classified as urban or rural, and each program includes specific requirements and restrictions on the use of funds. Furthermore, additional restrictions are implemented when an urban area has a population of greater than 200,000. A portion of Buncombe County is now defined as an urbanized area and having a population of 200,000 or more based on the 2010 Census. The NCDOT-PTD has taken steps to move systems operating in urban areas into the funding arena created by the growth in population and "flipping the pyramid" to make new rules for all funding programs, including state funding for ROAP and state match funds for Section 5311 and other programs. These changes affect transit systems across North Carolina.

The Community Transportation system in Buncombe County has been primarily funded with Section 5311 federal funds and state funds because the system is providing human service and general public transportation to individuals living both inside the urbanized area and in rural areas of Buncombe County. In April, NCDOT advised certain systems, including Buncombe County, that beginning in FY2016, the state would no longer offer the same level of state funding to Community Transportation systems that are recognized by FTA as an urban transit service provider. The NCDOT urged systems to begin conversing with the MPO about Section 5307 funding for services provided in the urbanized area. As per Recommendation #2, Buncombe County should continue to analyze the rates charged to contracting agencies to ensure that the charges are in line with operating costs.

### What are the next steps?

Following adoption of the CTSP by the Buncombe County Board of Commissioners, Buncombe County and Mountain Mobility staff should immediately begin planning initiatives for implementing activities outlined in the Implementation Schedule (Section 6.3). This may include a more detailed outline of specific activities involved and the timeframe for work to be conducted, assignment of responsibilities, etc. Adjustments to the process and timeline will need to be made over time due to regulatory changes and funding mechanisms available. Progress reports should be discussed at regular staff meetings and with the Community Transportation Advisory Board. Every success should be recognized throughout the implementation of the plan. Buncombe County's vision is for a "caring community in harmony with its environment where citizens succeed, thrive, and realize their potential." Mountain Mobility will continue to play an important role in providing transit connections that people need to help make this vision a reality.

# 1 INTRODUCTION

## 1.1 Study Purpose

A Community Transportation Services Plan (CTSP) has been conducted to take an in-depth look at public transit conditions and options in the County and decide where to allocate transit resources over the next five years. The North Carolina Department of Transportation (NCDOT) Public Transportation Division (PTD) recognizes the value of the CTSP and requires the County have this plan to receive state funding for transit. This five-year plan is a strategically planned response to the projected mobility needs of the general public and targeted populations in the service area, and will aim to improve service delivery and management.

The focus of the plan was to evaluate the transportation services that already exist and to identify ways to maximize the efficiency of transit while enhancing the mobility options for residents. Transit service is critical to many local residents, and the CTSP is a guide to the transit provider for maximizing the effectiveness of its services in a cost-efficient manner.

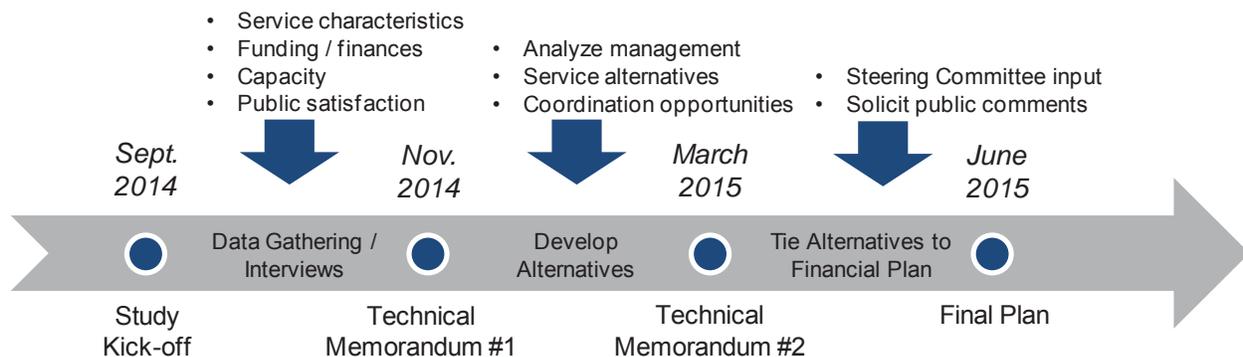
The CTSP is a “living document” and it is recognized that funding amounts at the federal, state, and local levels may change from year to year. Therefore, the recommendations that have been developed as part of this planning process will be measureable and dynamic to provide guidance based on a changing stream of revenue.

## 1.2 Study Process

The study process consisted of a series of tasks, including reviewing existing information, developing potential service enhancements, and assessing funding availability.

Receiving feedback from key stakeholders was an important element of the study process. This plan was developed through a public outreach process that included the general public, private and non-profit transportation providers, human service providers and targeted populations that include individuals with disabilities, low incomes and limited English proficiency (LEP). The Steering Committee provided input at study milestones. The result of this planning effort will produce overall growth and expansion goals that the community can support.

The components of each step in the study process are shown as follows:



### 1.3 Study Area

Mountain Mobility prioritizes services outside of ART service area while also providing services inside the Asheville City limits to qualified passengers (elderly, disabled and Medicaid clients). The CTSP considers the projected mobility needs of the general public and targeted populations in Buncombe County both inside and outside the urbanized area. The study area is shown in Figure 1.

Figure 1: Study Area



## 1.4 System Overview

Mountain Mobility was established by Buncombe County in 1989. The mission of Mountain Mobility is to serve the transportation needs of Buncombe County's residents.

Mountain Mobility currently provides transportation services to clients of human service agencies, departments of local governments, and general public transportation services. Note that the general public transportation services provided by Mountain Mobility are for persons residing outside of Asheville city limits.

Mountain Mobility is administered and operated through two contractors with Buncombe County:

- Land-of-Sky Regional Council (hereafter referred to as LOSRC) fulfills the administrative role; and
- McDonald Transit Associates, Inc. (doing business as Buncombe County Transit Management, Inc.) handles operations.

The Buncombe County Community Transportation Advisory Board (CTAB) serves as an advisory board to Buncombe County staff and the Board of Commissioners and is actively involved in the planning and oversight of operation of the system.

### Fleet Overview

Mountain Mobility has a fleet of 43 vehicles available to provide transit service. There are 36 vehicles in the fleet equipped with wheelchair lifts. More than half of the fleet (22 vehicles) operates using bi-fuels, which means that the vehicles can operate on gasoline or alternative fuel sources. The alternative fuel sources used by the fleet include liquid propane gas (LPG) and compressed natural gas (CNG). The remaining vehicles use gasoline or diesel. Figure 2 shows one of the lift-equipped vehicles that uses CNG.

### Hours of Operation

Transportation services are provided Monday through Saturday from 5:30am to 7:30pm. Reservations can be made Monday through Friday 8:00am to 3:00pm.

ADA comparable paratransit services are available to eligible passengers the same days and hours as the ART bus system operates, which includes evenings, Sundays and some holidays. Reservations for ADA comparable paratransit services can be made Monday through Friday 8:00am to 5:00pm, and on Saturday and Sunday via voicemail.

Figure 2: Transit Vehicle



## Modes of Service

Transportation modes include demand response service, subscription service, and deviated fixed-route service. Demand response and subscription services are shared rides, so passengers may travel with other riders and may not go directly from their homes to their destinations. Coordinating trips allows the system to operate more efficiently and provides more transportation service at a lower cost. In addition to these services, Mountain Mobility provides complementary paratransit service for ART (Asheville Redefines Transit). The Senior Bus Pass Program is another program offered by the County. The modes of service are summarized as follows:

### Demand Response Service

- Trips that are provided from a passenger's home to specific destinations on an as-needed basis, such as medical appointments, etc.
- Reservations must be made by 3 p.m. the day before service is needed, but are accepted up to 30 days in advance of a trip.
- Mountain Mobility does not provide emergency transportation services.

### Subscription Service

- Trips that are scheduled from a passenger's home to the same destination and the same day of week for two or more times within the same week and are needed on a continuing basis.
- Advance reservations are required for subscription services.
- Passengers requesting subscription service for non-medical appointments may be placed on a waiting list if an existing route is not available in the area and/or at the times service is requested.

### Deviated Fixed Route Service

- "Trailblazer" is a deviated fixed route service, meaning the bus will be at preset locations according to a schedule but can deviate off the route by one-quarter mile.
- Provide transportation around local communities, as well as connections where passengers can transfer to Asheville Transit (ART) buses or Haywood Public Transit buses.
- Service provided by light transit vehicles that seat 14 to 18 passengers and equipped with lifts to serve persons using mobility aids.
- This service is open to anyone who wants to ride.

### ADA Service

- Shared ride, advanced reservation, origin-to-destination service for persons with disabilities who are unable to use the regular ART fixed route public transit service because of their disability.
- Service is available during hours that ART operates.
- LOSRC performs ADA eligibility determination.

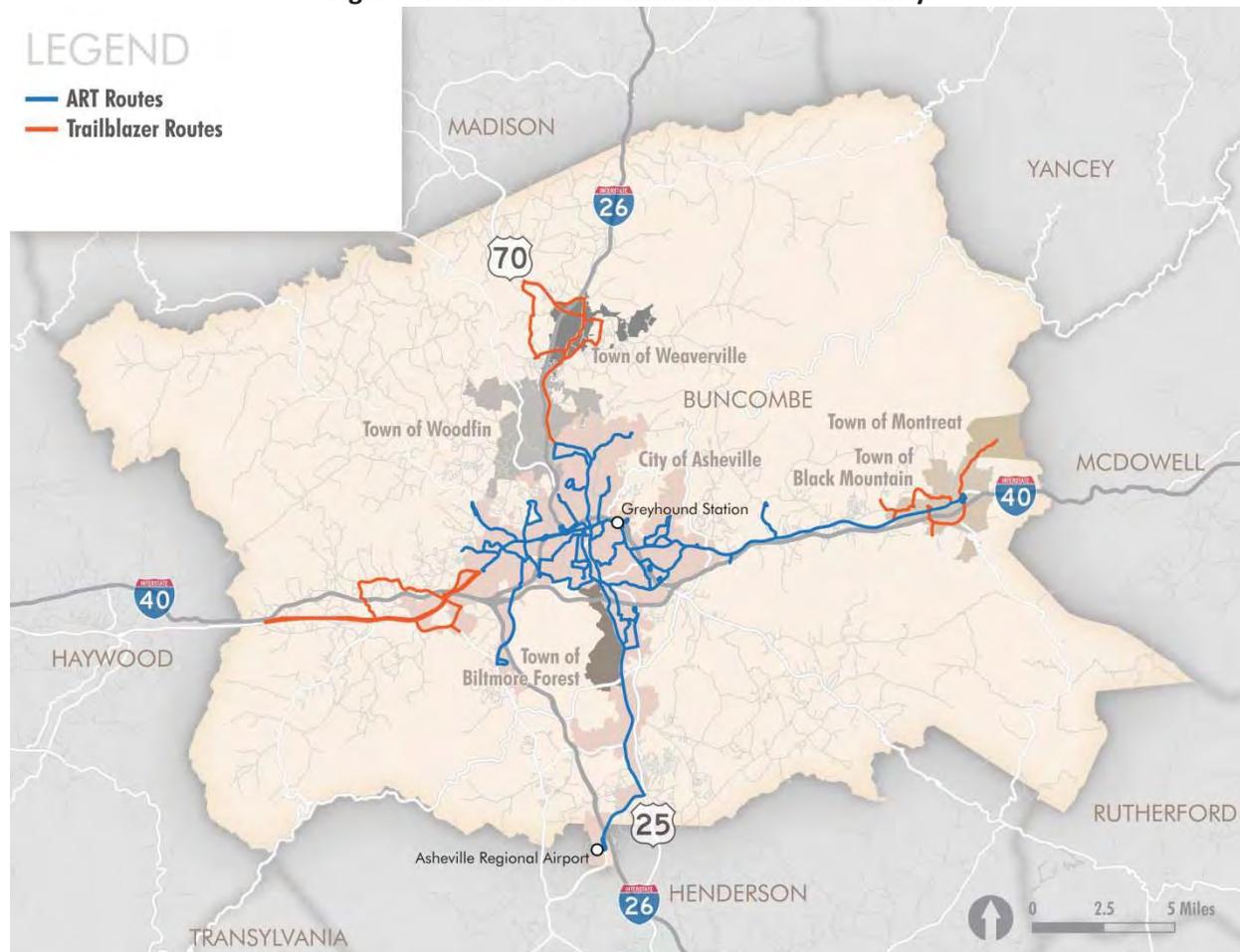
### Senior Bus Pass Program

- Mountain Mobility administrative office certifies seniors over 65 years of age to qualify for a free monthly ART bus pass.
- Utilized by seniors who are able to ride the fixed route system, accessible to bus routes, and do not require the ADA paratransit service.

Three Trailblazer Routes are currently in operation within Buncombe County, and are illustrated in Figure 3.

North Buncombe Trailblazer Route	Black Mountain Trailblazer Route	Enka-Candler Trailblazer Routes
<ul style="list-style-type: none"> <li>• Serves parts of north Buncombe County, including Woodfin and Weaverville.</li> <li>• The route connects with ART Route N1 at several times throughout the day.</li> <li>• The North Buncombe Trailblazer operates Monday through Friday, 6:30am - 6:30pm.</li> <li>• Started in February 2009.</li> </ul>	<ul style="list-style-type: none"> <li>• Serves parts of east Buncombe County, including Black Mountain, Swannanoa, and Montreat College.</li> <li>• Connects with ART route at the Sutton Avenue Park-and-Ride lot in Black Mountain for service to downtown Asheville.</li> <li>• Operates Monday through Saturday, 5:50am - 7:45pm.</li> <li>• Started in December 2002.</li> </ul>	<ul style="list-style-type: none"> <li>• Serves parts of West Buncombe County, including the A-B Tech Enka Campus.</li> <li>• Connects with ART at the Goodwill Industries' Park-and-Ride lot on Smokey Park Highway.</li> <li>• Provides service along Hwy 19-23 and connects four times a day to Haywood Public Transit.</li> <li>• Operates Monday through Friday, 6:15am - 6:10pm.</li> <li>• Started in March 2007.</li> </ul>

Figure 3: Transit Service within Buncombe County



**Contracting Agencies**

More than 30 agencies purchase transportation service from Mountain Mobility. Table 1 summarizes those contracting agencies.

**Table 1: Agencies that Contract Services**

	Agency/Organization	Department (If Applicable)
1	A-B Tech. Community College	Compensatory Education
2	Aston Park Health Care	
3	Blue Ridge Homes	Asheville Day Program
4	Buncombe County	Child Care Services
5	Buncombe County	DSS
6	Buncombe County	DSS Work First
7	Buncombe County	Health Center
8	Buncombe County	Planning Department
9	C&B Support Services	
10	Chunns Cove Asst. Living	
11	City of Asheville	Parks, Recreation & Cultural Arts
12	City of Asheville	Transportation
13	Community CarePartners	Adult Day Services
14	Council on Aging	
15	Evergreen Living Family Care Home	
16	Family Preservation Services of NC	
17	Goodwill Industries	
18	Highland Farms	
19	Irene Wortham Center	
20	Jewish Family Services	
21	Liberty Corner Enterprises	
22	Madison County	DSS
23	Magnolia Health Care	
24	Marci's Adult Day Health Services	
25	N.C. Division of Services for the Blind	
26	N.C. Division of Vocational Rehab.	
27	Open Hearts Art Center	
28	RHA Health Services	
29	Rosa L. Thomas Homes, LLC	
30	Serenity Heart Family Care Home	
31	The ARC of Buncombe County	

**Operating Statistics and Performance Measures**

Over recent years, overall ridership for services provided by Mountain Mobility has been steadily increasing on both weekdays and Saturdays. Between FY 2009 and FY 2013, the ridership for the Trailblazer deviate fixed routes more than doubled. The cost per trip has been stable. The services provided by Mountain Mobility over the recent years are summarized in Table 2.

**Table 2: Overview of Operating Statistics by Year**

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
<b>Total Passenger Trips</b>	142,802	148,578	162,985	166,680	159,974	162,100
<b>Average Weekday Trips</b>	535	542	579	633	597	602
<b>Average Saturday Trips</b>	96	103	110	123	148	131
<b>Total Trailblazer Trips</b>	12,013	16,947	21,891	25,042	32,405	28,246
<b>Average Trip Distance</b>	9.94	9.47	9.32	9.44	9.12	9.34
<b>Accidents per 100,000 Miles</b>	0.98	0.76	0.77	1.00	0.50	0.69

Source: Buncombe County's Community Transportation System; ITRE's Performance Plan Review Spreadsheet

In FY 2014, Mountain Mobility provided service to an average of 602 riders per day. Table 3 summarizes the operating statistics for FY 2014, obtained from Institute for Transportation Research and Education's (ITRE) Performance Plan.

**Table 3: Operating Statistics for FY 2014**

	Numbers	Percent
<b>Average Daily Passengers</b>	602	
<b>Average Daily No-Shows</b>	12	2%
<b>Average Daily Wheelchair Passengers</b>	53	9%
<b>Total Vehicles</b>	43	
<b>Lift Vehicles</b>	36	84%
<b>Average Daily Service Hours</b>	296	
<b>Average Daily Revenue Hours</b>	238	80%
<b>Average Daily Deadhead Hours</b>	57	19%
<b>Average Daily Service Miles</b>	5,433	
<b>Average Daily Revenue Miles</b>	4,346	80%
<b>Average Daily Deadhead Miles</b>	1,087	20%
<b>Passengers Per Service Hour</b>	2.04	
<b>Passengers Per Revenue Hour</b>	2.53	
<b>Passengers Per Service Mile</b>	0.111	
<b>Passengers Per Revenue Mile</b>	0.138	

Source: ITRE's Performance Plan Review Spreadsheet

## 2 SYSTEM INVENTORY

### 2.1 Study Area Characteristics

Mountain Mobility serves eligible residents of Buncombe County, including older adults, individuals with disabilities, clients of human service agencies and departments of local governments, and also provides general public transportation services for residents outside of Asheville city limits. Demographic data was used to identify areas currently underserved by Mountain Mobility and determine underlying causes for service gaps. Many of the trips provided enable workers to access employment or job training, and increase access to healthcare facilities; therefore, in-depth evaluation of the employment and medical markets was also performed.

#### 2.1.1 Demographics

##### Transit Dependency Index Methodology

To better locate potential areas with high concentrations of transit dependent populations (i.e. segments of the population that are most likely to need transit service), demographic information was used in the form of the Transit Dependency Index (TDI), which is an aggregate measure of several socioeconomic characteristics, including:

- Population Density
- Amount of Vulnerability based on the presence of:
  - No vehicle households
  - Older adult population
  - Youth population
  - Disabled population
  - Below poverty population

This data is reported at the block group level based on American Community Survey five-year estimates for all but the disability population, which is based on tract-level 2008-2012 data. The disability population data was reported in four age groups (18-34, 35-64, 65-74, and 75 and older) by sex. Using the distribution of the general population by age (summed to match the disability population ranges) and sex, the proportion of block-group-level data that makes up each tract was calculated. This proportion was then applied to the tract-level disability population data to arrive at a disability population figure for each block group.

The TDI scoring is based on a range of 0 to 100, with higher scores representing larger numbers of transit dependent persons in an area with high population density. For additional information about the TDI methodology, please see Appendix A at the conclusion of this report.

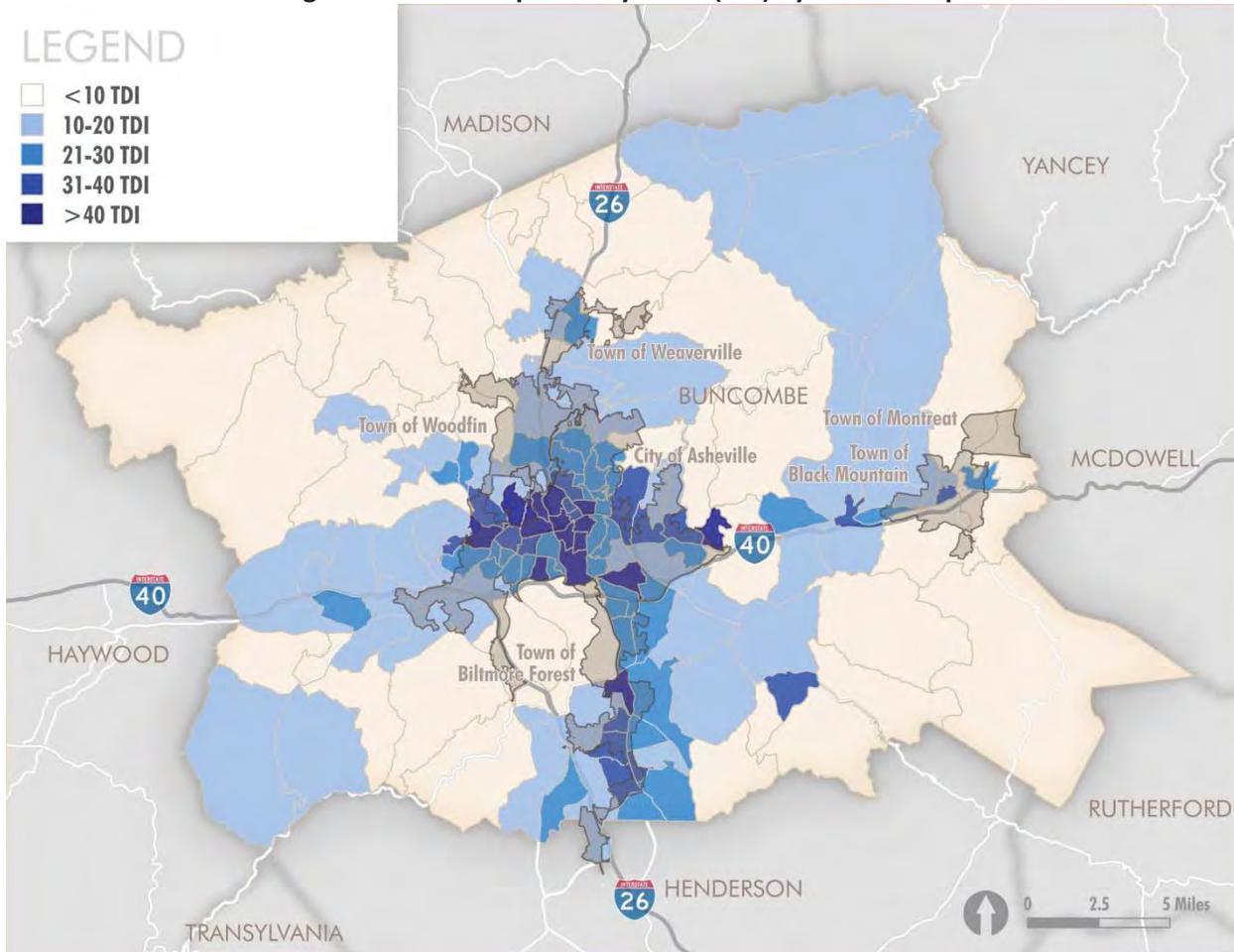
##### Transit Dependency Index for Buncombe County

As illustrated in Figure 4, the locations with the highest transit dependency index are found primarily in the following areas:

- Within and immediately surrounding the Asheville city limits.
- Generally along US-25 from the Henderson County border to just north of the I-240 loop.
- Generally along the combined US-23/Patton Avenue/US-70 corridor roughly from the western limits of the City of Asheville east to the Town of Black Mountain.

Many of these areas also exhibit some of the highest population and employment densities in the county.

**Figure 4: Transit Dependency Index (TDI) by Block Group**



**Amount of Vulnerable Elderly for Buncombe County**

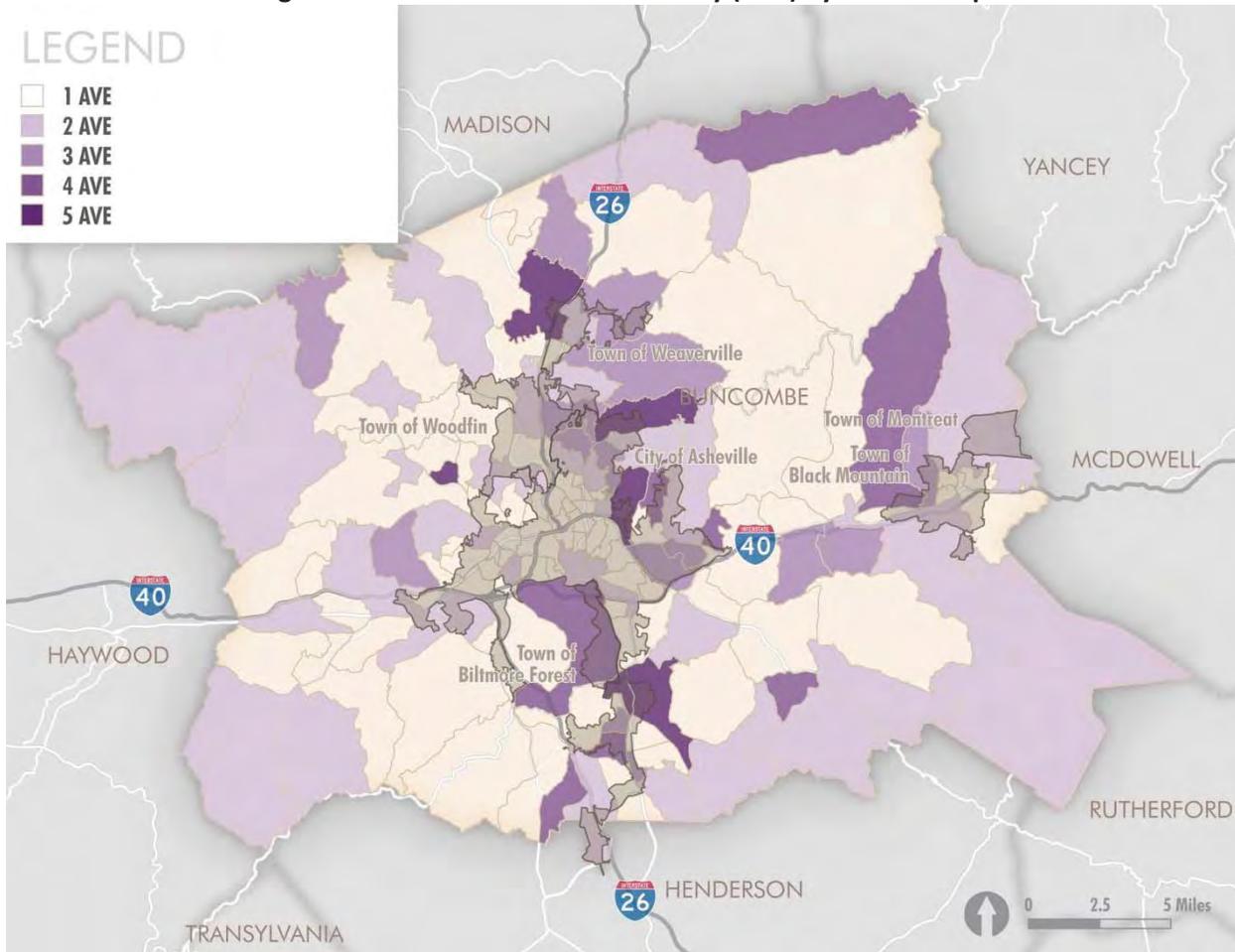
In addition to analyzing the TDI in the aggregate, one category in particular – the Amount of Vulnerable Elderly (AVE) – was analyzed and mapped independently to gain a deeper understanding of the elderly population (65 years and older), which is a particularly sensitive population in Buncombe County in the context of transit dependency. Figure 5 below shows the concentrations of AVE across the county, with scores of 1 being the lowest and scores of 5 being the highest. These scores were calculated by comparing the AVE population of each block group to the AVE population of the county as a whole. Block groups that are below the average for the entire county received a scoring of 1, while those above the average received increasingly higher values (with a score of 5 representing an AVE greater than two times the county average).

As shown below, the block groups with the highest AVE score are scattered across the county, with some of the highest scores generally along:

- The eastern and southern fringes of the City of Asheville;
- Partially within and just northwest of the Town of Weaverville;
- The northern-most edge of the county; and
- The west of the towns of Black Mountain and Montreat.

Several of the areas with high concentrations of elderly population appear to be located beyond the reaches of the ART and Trailblazer routes. Areas with high concentrations of elderly population are much more geographically dispersed than the other populations that were evaluated, which may present challenges to any efforts aimed at better serving the transit needs of this population, particularly at the edges of the county.

**Figure 5: Amount of Vulnerable Elderly (AVE) by Block Group**



Keep in mind that the TDI and AVE scores could be high and the number of residents living in those areas could be low, because a considerable factor in the TDI and AVE is population density. For example the northern-most edge of the county has high AVE score, but the population in Barnardsville is less

than 1,700 people. Therefore, employment locations and population densities should be considered to understand Buncombe County’s demographics.

**2.1.2 Employment Market**

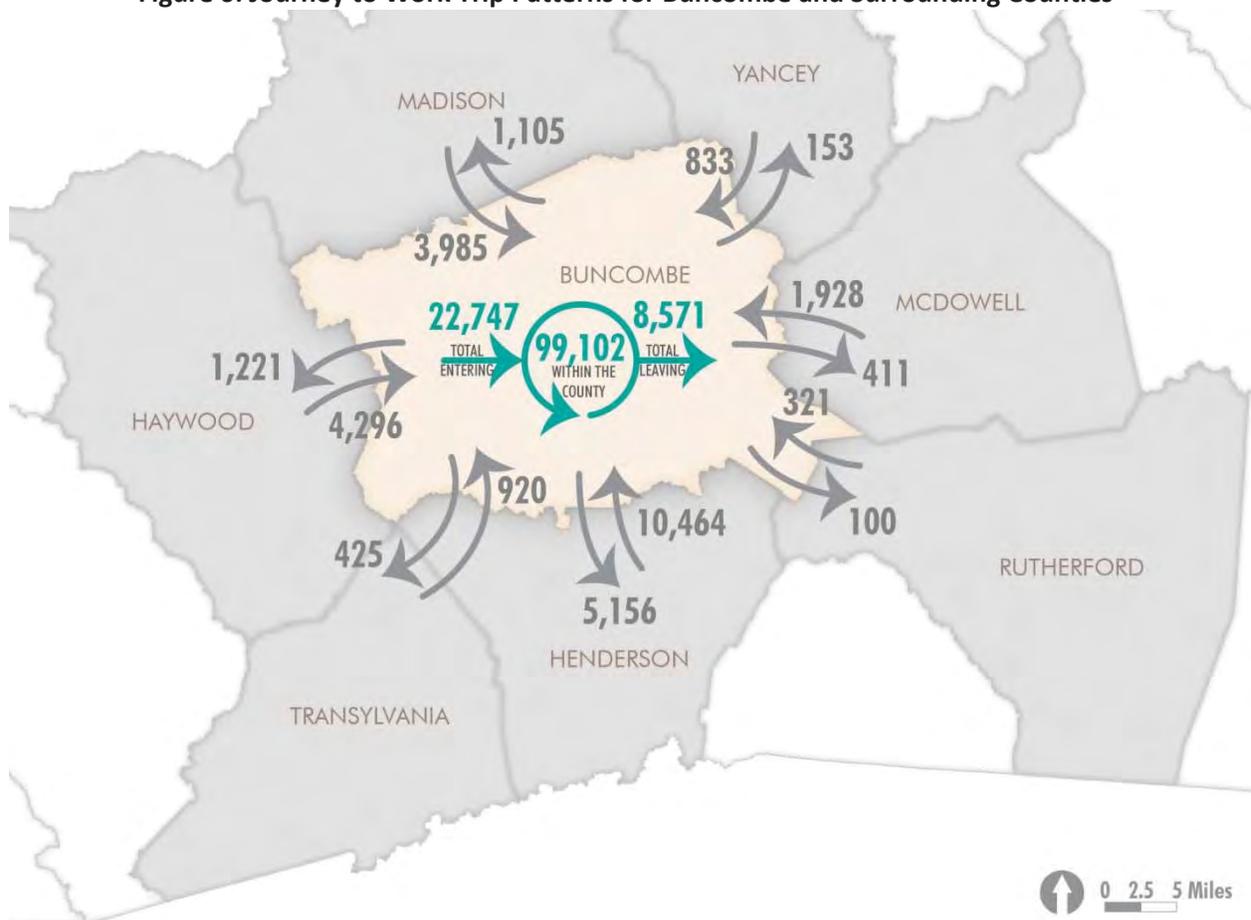
**Employment Travel Patterns**

Figure 6 illustrates travel movements from places of residence to places of work for Buncombe County and the immediate surrounding counties from the latest American Community Survey data (2006-2010). As illustrated by the teal text in Figure 6:

- 99,102 people live and work within Buncombe County;
- 22,747 residents of surrounding counties travel to Buncombe County to work; and
- 8,571 residents of Buncombe County travel to surrounding counties to work.

By far the largest share of work trips are completed without ever leaving Buncombe County itself. The next largest share of work trips *from* Buncombe County is to Henderson County (4.8%), followed by Haywood County (1.1%) and Madison County (1.0%). The next largest share of works trips *to* Buncombe County are from Henderson County (8.6%), followed by Madison County (3.5%), Haywood County (3.3%) and McDowell County (1.6%).

**Figure 6: Journey to Work Trip Patterns for Buncombe and Surrounding Counties**



**Major Employment Centers**

Figure 7 shows the major employment centers and their relative size in terms of number of employees (provided by InfoUSA data from 2010) overlaid on population densities in Buncombe County. This offers a more detailed look at where the majority of people live and work within the county, which is roughly concentrated within and just beyond the Asheville City limits, along I-40 to the east and west, along I-26 to the north, and along US-25 to the south.

**Figure 7: Employment Locations and Population Densities by Block Group**

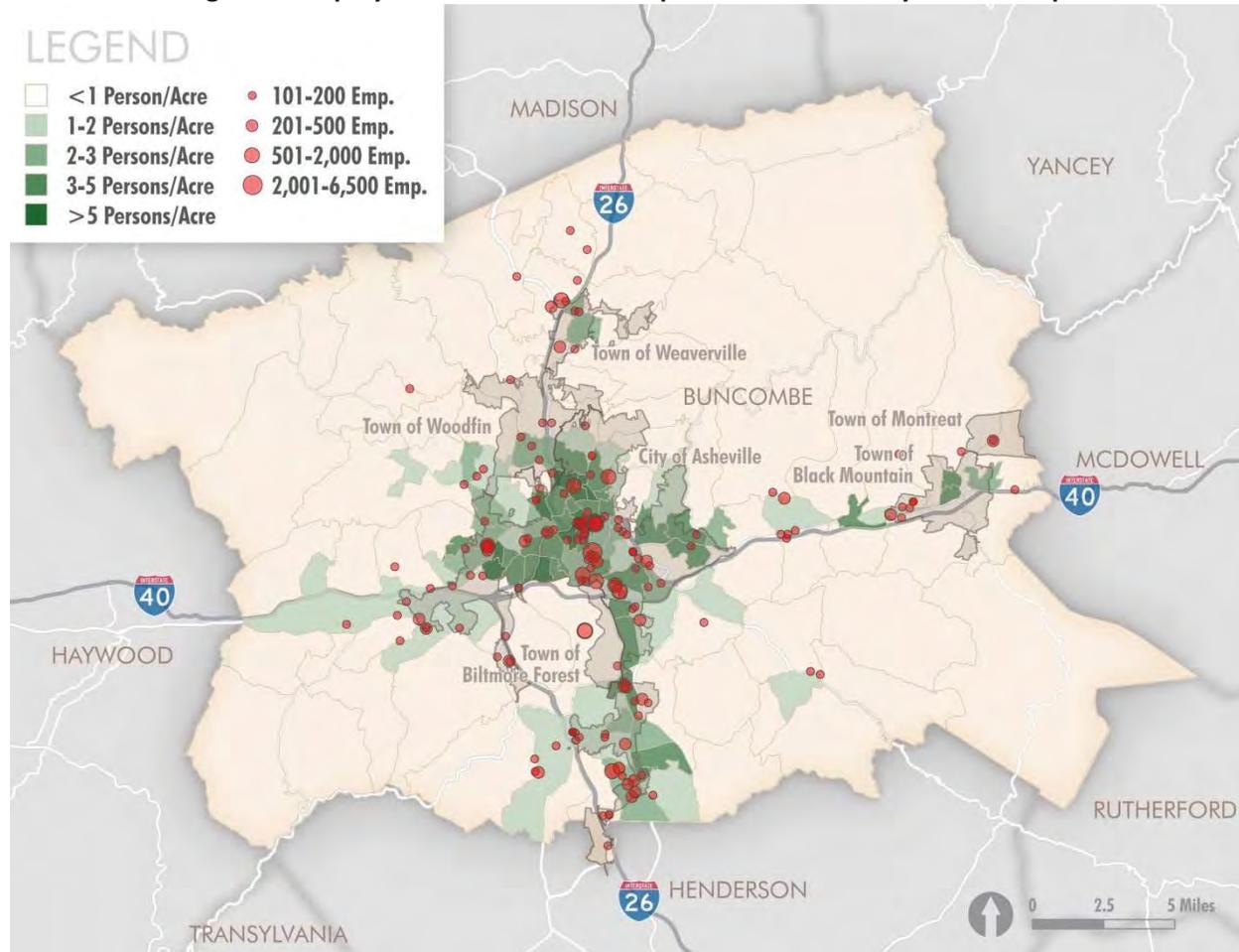


Figure 8 shows the largest employers and their relative size based on number of employees overlaid on employment densities. While the locations and densities roughly mirror each other in the central portion of the county, roughly within and just beyond the Asheville City limits, one notable exception is the area along US-25 near the Henderson County border. This area is home to several relatively large employers but is not located in a high employment density area. This highlights the importance of showing both data together, which provides a more complete picture of the employment landscape in Buncombe County.

**Figure 8: Employment Locations and Employment Densities by Block Group**

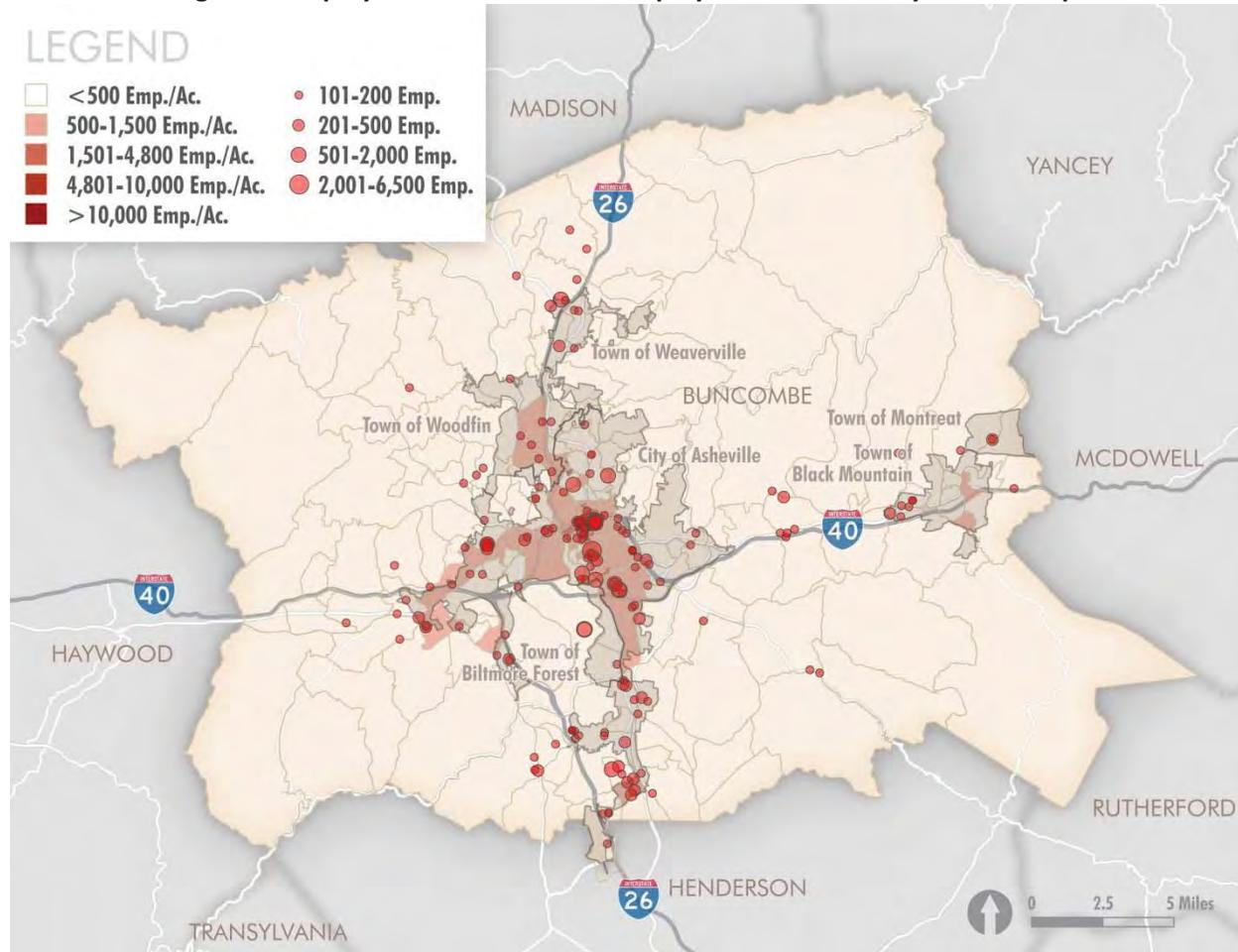


Table 3 below shows the top 25 employers based on number of employees reported by the Asheville Chamber of Commerce. It is worth noting that while Figure 8 shows the number of employees for each major employer at a specific location, Table 4 shows the combined number of employees for each major employer, which typically include more than one location.

**Table 4: Largest Employers by Number of Employees in Buncombe County**

Rank	Company	Industry	Employees
1	Memorial Mission Hospital Inc.	Education & Health Services	1000+
2	Buncombe County Board of Education	Education & Health Services	1000+
3	Ingles Markets Inc.	Trade, Transportation & Utilities	1000+
4	Veterans Administration	Public Administration	1000+
5	County of Buncombe	Public Administration	1000+
6	Wal-Mart Associates Inc.	Trade, Transportation & Utilities	1000+
7	City of Asheville	Public Administration	1000+
8	Eaton Corporation	Manufacturing	1000+
9	AB Tech Community College	Education & Health Services	1000+
10	Community CarePartners Inc.	Education & Health Services	1000+
11	The Biltmore Co (A Corp)	Leisure & Hospitality	500-999
12	Omni Hotels Management Corp	Leisure & Hospitality	500-999
13	Asheville City Schools	Education & Health Services	500-999
14	UNC Asheville	Education & Health Services	500-999
15	State of NC Dept. of Health & Human Services	Public Administration	500-999
16	Kendro Laboratory Products LP	Manufacturing	500-999
17	Mission Medical Associates Inc.	Education & Health Services	500-999
18	Borgwarner Turbo Systems	Manufacturing	500-999
19	Lowes Home Centers Inc.	Trade, Transportation & Utilities	500-999
20	Site Operating Corporation	Professional & Business Services	500-999
21	Dept. of Public Safety	Public Administration	500-999
22	General Mills Restaurants Inc.	Leisure & Hospitality	250-499
23	U.S. Postal Service	Trade, Transportation & Utilities	250-499
24	U.S. Airways Express	Trade, Transportation & Utilities	250-499
25	Young Mens Christian Association	Other Services	250-499

2.1.3 Medical Market

Medical centers are destinations for both employees and those seeking medical treatment. There are four major hospitals in Buncombe County. Mission Hospital and the Asheville Specialty Hospital are both part of the Mission Health Care System, which is the largest employer in the county. Other hospitals in the county include CarePartners Rehabilitation Hospital and the Asheville Veterans Affairs Medical Center. All of these medical centers are among the top ten employers in the county according to the Asheville Chamber of Commerce. The four major hospitals, as well as the three dialysis centers and forty-one nursing homes located within Buncombe County, are shown below in Figure 9 and Tables 5 through 7.

Figure 9: Medical Facilities in Buncombe County

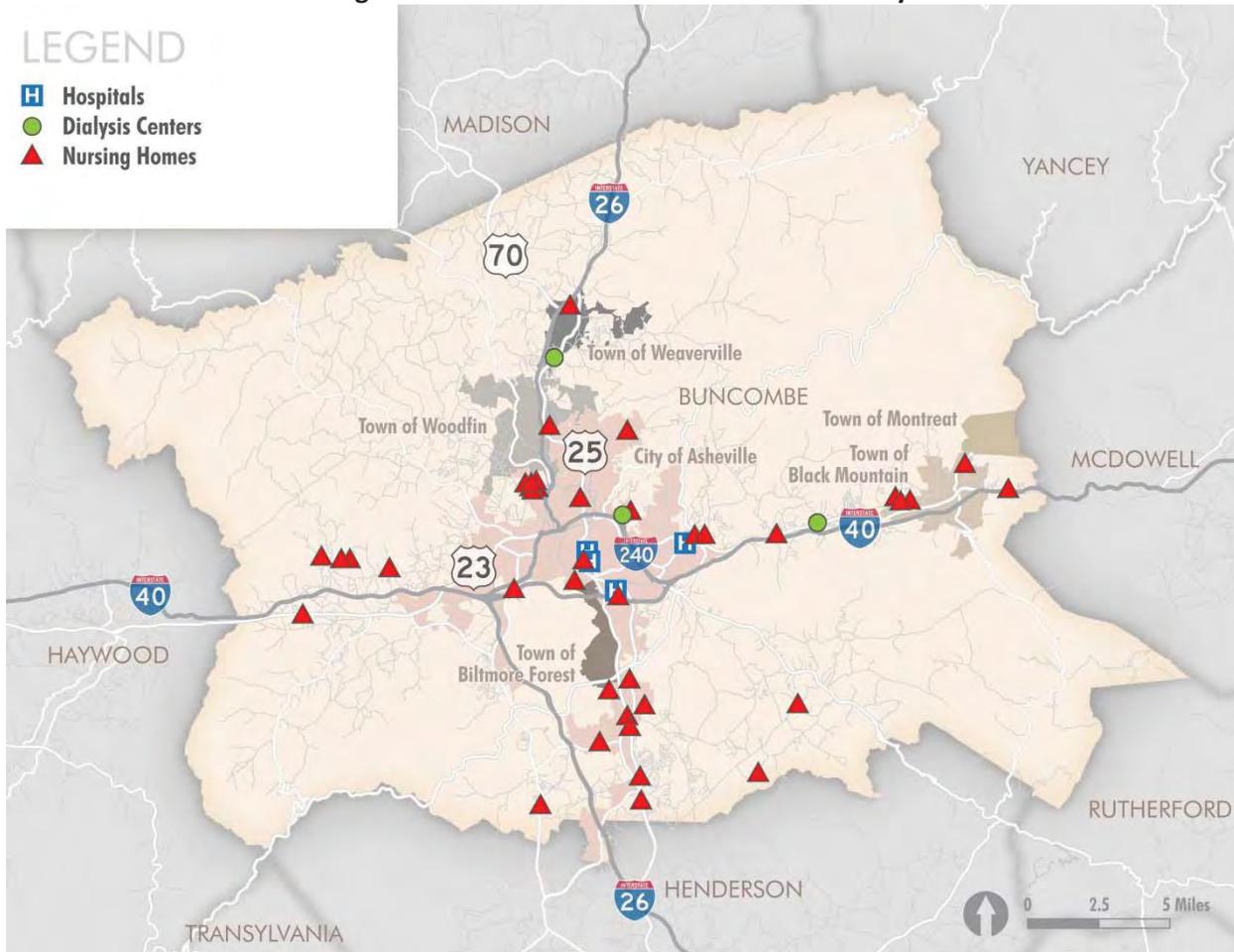


Table 5: Major Hospitals in Buncombe County

Hospitals	Address
1 Asheville VA Medical Center	1100 Tunnel Road, Asheville, North Carolina
2 CarePartners Rehabilitation Hospital	68 Sweeten Creek Rd, Asheville, North Carolina
3 Mission Health - Asheville Specialty Hospital	428 Biltmore Avenue, Asheville, North Carolina
4 Mission Health - Mission Hospital	509 Biltmore Ave, Asheville, North Carolina

**Table 6: Dialysis Centers in Buncombe County**

	Dialysis Center	Address
1	DaVita Asheville Dialysis Center	1600 Centre Park Drive, Asheville, North Carolina
2	DaVita Swannanoa Dialysis Center	2305 US-70 Highway, Swannanoa, North Carolina
3	DaVita Weaverville Dialysis Center	329 Merrimon Avenue, Weaverville, North Carolina

**Table 7: Nursing Homes in Buncombe County**

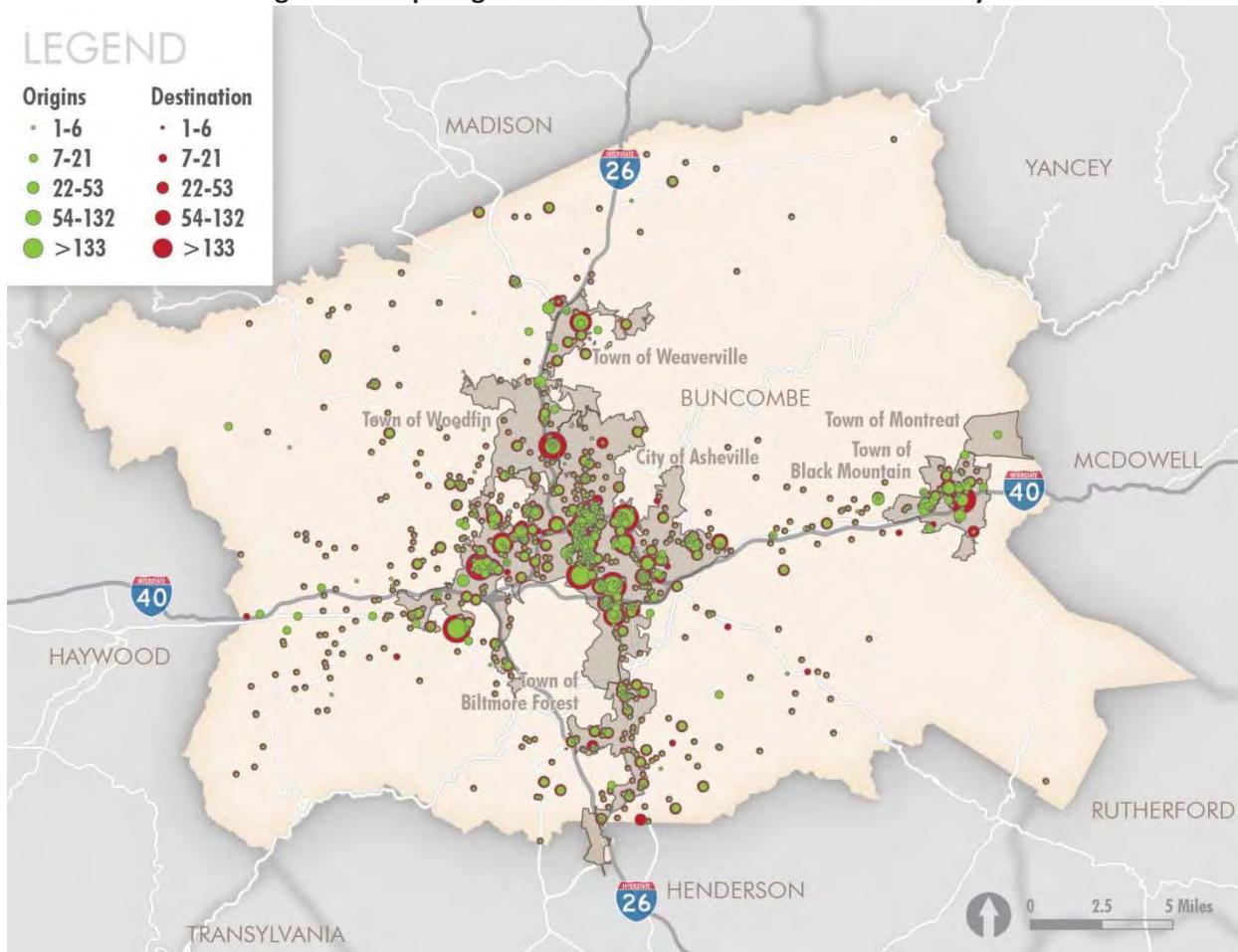
	Nursing Home	Address
1	Heather Glen at Ardenwoods	103 Appalachian Blvd., Arden, NC
2	Crescent View	2533 Hendersonville Road, Arden, NC
3	The Oaks at Sweeten Creek	3864 Sweeten Creek Road, Arden, NC
4	Richard A Wood Jr Assisted Living Center	2360 Sweeten Creek Road, Asheville, NC
5	Clare Bridge of Asheville	4 Walden Ridge Drive, Asheville, NC
6	Asheville Manor	308 Overlook Road, Asheville, NC
7	Arbor Terrace of Asheville	3199 Sweeten Creek Road, Asheville, NC
8	Brooks-Howell Home	266 Merrimon Avenue, Asheville, NC
9	The Laurels of Greentree Ridge	70 Sweeten Creek Road, Asheville, NC
10	Courtyard Rehabilitation And Nursing Center	455 Victoria Road, Asheville, NC
11	Grace Healthcare of Asheville	91 Victoria Road, Asheville, NC
12	Rickman Nursing Care Center	213 Richmond Hill Drive, Asheville, NC
13	Emerald Ridge Rehabilitation And Care Center	25 Reynolds Mountain Boulevard, Asheville, NC
14	Givens Estates Health Center	600 Barrett Lane, Asheville, NC
15	Aston Park Health Care Center Incorporated	380 Brevard Road, Asheville, NC
16	The Laurels of Summit Ridge	100 Riceville Road, Asheville, NC
17	Deerfield Episcopal Retirement Community Incorporated	1 Highbridge Crossing, Asheville, NC
18	Chase Samaritan Assisted Living	30 Dalea Drive, Asheville, NC
19	Chunns Cove Assisted Living	67 Mountainbrook Road, Asheville, NC
20	Richmond Hill Rest Home	95 Richmond Hill Road, Asheville, NC
21	Golden Livingcenter – Asheville	500 Beaverdam Road, Asheville, NC
22	Marjorie Mccune Memorial Center	101 Lions Way, Black Mountain, NC
23	Shadybrook Living Center	1114 Montreat Road, Black Mountain, NC
24	Mountain Ridge Wellness Center Limited Liability Company	315 Old United States Highway 70 East, Black Mountain, NC
25	Highland Farms Retirement Community	200 Tabernacle Road, Black Mountain, NC
26	Black Mountain Neuro-Medical Treatment Center	932 Old United States Highway 70, Black Mountain, NC
27	Pisgah Valley Retirement Community	95 Holcombe Cove Road, Candler, NC
28	Candler Living Center	136 Robinson Cove Road, Candler, NC
29	Canterbury Hills Adult Care Home	18 Horse Barn Road, Candler, NC
30	Windwood Rest Home	6 Windwood Drive, Candler, NC
31	Hominy Valley Retirement Center	2189 Smokey Park Highway, Candler, NC
32	Flesher's Fairview Health Care Center Incorporated	3016 Cane Creek Road, Fairview, NC
33	Flesher's Fairview Health And Retirement Center	3016 Cane Creek Road, Fairview, NC
34	Becky's Rest Home 1	316 Lower Brush Creek Road, Fletcher, NC
35	Asheville Health Care Center	1984 United States Highway 70, Swannanoa, NC
36	Brian Center Health And Rehabilitation – Weaverville	78 Weaver Boulevard, Weaverville, NC

2.1.4 Trip Origins and Destinations

Origin and destination data provides a snapshot of the service that was provided during a particular time period. The service provided during one day, week or month may differ from the next depending on the request for service that Mountain Mobility receives. However, given this context, this data provides a glimpse into the locations in the study area where trips begin and end.

Figure 10 below shows the number and location of origins and destinations by transportation analysis zones (TAZ) for paratransit service in Buncombe County between July 28, 2014 and August 9, 2014. Areas with the largest number of origins and destinations are generally within and just beyond the Asheville City limits, and along I-40 to the east and west, I-26 to the north and US-25 to the south. Large areas in the four “corners” of the county, particularly to the northeast and southeast, have the fewest number of paratransit service requests. As shown in Figure 14, these areas also exhibit some of the lowest population and employment densities in the county, suggesting that the fewer paratransit requests in these areas may reflect lower demand than exhibited in other areas of the county.

Figure 10: Trip Origins and Destinations in Buncombe County



### 2.1.5 Summary of Study Area Evaluation

This evaluation of the study area was performed to identify areas currently not served or underserved by the transit system and determine underlying causes for service gaps and identify transit service growth opportunities. There are no geographical areas in Buncombe County not served by Mountain Mobility, and service is provided to locations based on received requests.

Based on an evaluation of the study area characteristics, transit service appears to be well-placed to meet the majority of people’s travel needs within Buncombe County. Generally, the highest concentrations of the populations represented by these data are located within and just beyond the Asheville city limits, I-40 to the east and west, I-26 to the north, and US-25 to the south. Trailblazer routes currently travel along three of the four axes where demand is placed, while an ART route serves the southern axis.

Transit considerations should also continue to be given to regional travel, particularly for trips to and from Henderson County, which represent the largest share of work trips to and from any of the counties surrounding Buncombe County.

## 2.2 Financial Management

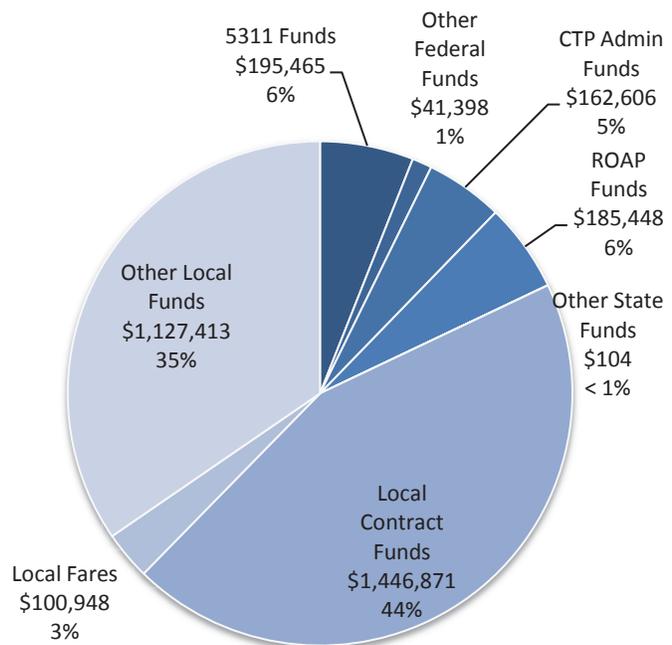
### 2.2.1 Key Funding / Revenue Sources

Funding of Mountain Mobility comes from Federal and State grants, local contributions, and user fees. Buncombe County government supports Mountain Mobility, which has been designated as the ‘lead agency’ for transportation in the County, thereby allowing the County to receive community transportation grant monies to support Mountain Mobility. The Board of Commissioners has provided all of the required NCDOT-PTD matching funds, though Mountain Mobility attempts to minimize funding requests to the County. Revenues come from the following sources:

- Federal / State funds through NCDOT’s Community Transportation Program and NCDOT’s Rural Operating Assistance Program;
- Local matching funds for operating cost; and
- Fares and contract revenue (user fees).

Figure 11 shows the actual (rather than budgeted) revenue breakdown in FY2013. A total of 18% of system revenues come from federal and state sources; 38% are local monies; and 44% are contract revenue.

**Figure 11: Mountain Mobility FY2013 Revenue**



Source: FY2013 NCDOT Public Transportation Division, Community Transportation Operating and Financial Statistics

Buncombe County's transportation budget for FY 2015 is \$4,196,335. The planned revenue and expenditures is summarized in Table 8.

**Table 8: FY 2015 Buncombe County Transportation Budget**

REVENUES		EXPENDITURES	
ACCOUNT DESCRIPTION	BUDGET	ACCOUNT DESCRIPTION	BUDGET
NCDOT/FTA ADMINISTRATION	\$365,314	PROFESSIONAL SERVICES	\$213,037
NCDOT/FTA CAPITAL-OTHER	\$764	MOTOR FUELS	\$438,000
NCDOT/FTA CAPITAL VEHICL	\$267,948	OFFICE SUPPLIES / DP PROJECT	\$30,929
FTA/CITY OF ASHEVILLE JA	\$58,145	TELEPHONE	\$15,000
NCDOT/ROAP - EDTAP	\$131,883	UTILITIES	\$10,000
NCDOT/ROAP - RGP	\$123,771	MAINT & REPAIR--BLDG & G	\$700
NCDOT/ROAP - EMP	\$43,903	MAINT & REPAIR--AUTO	\$14,115
MEDICAID TRANSPORTATION	\$903,878	DATA PROCESSING SERVICES	\$60,178
HCCBG/COUNTY SUPP - GENERAL	\$197,081	CONTRACTED SERVICES	\$3,007,469
HCCBG/COUNTY SUPP - MEDICAL	\$270,942	RENTAL--OFFICE SPACE	\$46,970
PASSENGER FARES-ATS CASH	\$54,000	RENTAL--EQUIPMENT	\$3,294
PASSENGER FARES	\$38,459	DUES & SUBSCRIPTIONS	\$1,300
LOCAL MATCH/CONTRIBUTION	\$53,799	<b>TOTAL OPERATING EXPEN</b>	<b>\$3,840,992</b>
<b>TOTAL RESTRICTED INTE</b>	<b>\$2,509,887</b>	CAPITAL--DP PROJECT	\$32,250
AUCTION PROCEEDS - HUMAN	\$48,000	CAPITAL--VEHICLES	\$307,545
CONTRIB/DONAT HCCBG MEDI	\$9,000	CAPITAL--OTHER	\$7,048
<b>TOTAL MISCELLANEOUS I</b>	<b>\$57,000</b>	<b>TOTAL CAPITAL OUTLAY</b>	<b>\$346,843</b>
RESTRICTED CONTRIBUTION	\$3,000	<b>TOTAL EXPENDITURES</b>	<b>\$4,187,835</b>
<b>TOTAL APPROPRIATED FUNDING</b>	<b>\$3,000</b>		
INTERFUND TRANSFER	\$1,626,448		
INTERFUND TRANSFER-SECTION 5317	-\$8,500		
<b>TOTAL OTHER FIN SOURC</b>	<b>\$1,617,948</b>		
<b>TOTAL REVENUES</b>	<b>\$4,187,835</b>		

Source: Buncombe County General Ledger report for FY 2015

Mountain Mobility has a 5317 New Freedom grant under another fund for multi-year grants. Through the Metropolitan Planning Organization (MPO), Mountain Mobility applied for Urban 5317 funds for the RIDE Voucher Program and to support other program components of the grant.

Buncombe County also has been receiving a recurring JARC grant for Black Mountain Trailblazer operations. Those funds are allocated through the FBRMPO. While FTA 5316 JARC program has sunset at the start of MAP-21, FBRMPO Board has voted in April 2014 to set aside 10% of 5307 funding allocated to Asheville Urbanized Area for JARC-type projects going forward.

Buncombe County is also currently in the process of participating in a study that will look at 5307 allocation between various transit systems in Asheville Urbanized Area. The study (funded with STP-DA funds allocated through the French Broad River MPO) is expected to start in July of 2016, and to serve as the basis for allocating FY 2016 5307 funds in the Asheville region. While the City of Asheville is the Direct Recipient for 5307 funds, it is likely that Buncombe County could become a 5307 sub-recipient in the future, pending the study and applicable contractual agreements with the City of Asheville.

The following cost and revenue data for Mountain Mobility was illustrated in *NCDOT Community Transportation System Operating and Financial Statistics Report* for FY2013.

**Figure 12: Average Cost per Trip by Year**



Source: FY2013 NCDOT Public Transportation Division, *Community Transportation Operating and Financial Statistics Report*

**2.2.2 Fare Structure and Billing Rate for Agencies and General Public Services**

Trips are billed on a shared service mile. Trip charges are based upon the fully allocated rate setting model that was developed by the NCDOT. Contracting agencies per mile rates range from \$1.30 to \$1.82. Over the years, rate increases, if any, have been nominal. It should be noted that the Board of County Commissioners might consider a rate increase to all contracting agencies for FY2016 due to funding reductions in administrative grants and ROAP funds. The receipt of Section 5307 grant funds, however, could offset any increase.

Some ROAP passengers and those trips provided by federal funding (JARC) do pay fares that have been established to meet local match requirements. One such service is the Black Mountain Trailblazer that is funded with JARC funds. Local match is met by a passenger fare of \$0.50 per boarding, a local match contribution from the Town of Black Mountain, and County monies. Since December 2002 when the route began, many of the riders utilize the Trailblazer to transfer to an ART vehicle, paying the additional ART fare of \$1.00. Decision makers have not increased the Trailblazer fare because they want to encourage transfers to ART. A fare increase might make the total cost of the trip too expensive.

Another example of a multi-funded transportation alternative for disabled residents of Buncombe County who are unable to access ART or a Mountain Mobility Trailblazer route is the RIDE Program (Ridership Independence for the Disabled). It is funded through the Federal Transit Administration’s (FTA) Section 5317 New Freedom Program, supported by local funds and revenues from the sale of vouchers. Riders that are pre-approved purchase vouchers that may be used with any of the RIDE

contracted transportation providers (as of November 2014, there are six participating taxi companies). Voucher coupons are sold for \$2.50 each in books of ten coupons. As of this writing, there is a balance of \$170,000 remaining to fund citizens' needs.

Trips for a general public passenger utilizing the demand response service require the passenger to pay a fare of \$3.00 per one-way trip. The fare for an ART ADA Complementary Paratransit trip is \$2.00 per one-way trip, based upon ART's current fare of \$1.00. The aforementioned fares went into effect on November 6, 2006. General public passengers using the Trailblazer pay a \$0.50 fare each time they board a transit vehicle.

Fares are paid in either cash or fare tickets, the latter being purchased in quantity using cash or a check. The ticket sales occur at the Mountain Mobility office on Riverside Drive.

Mountain Mobility's administrative office mails letters quarterly to certified Home and Community Care Block Grant (HCCBG) riders to request consumer contributions to help fund their transportation. The FY2015 first quarter (from July 1<sup>st</sup>, 2014 to September 30, 2014) report showed that \$3,967.90 was received in consumer contributions. Informing clients of the cost of service provided and offering an opportunity to participate in the cost of service is required by NCDAAAS guidelines for the State's HCCBG program.

### 2.2.3 Other Local Funding Opportunities

At the state level, SL 2009-527 (presented as House Bill 148) enables counties to establish (via referendum) dedicated funding sources for transit. For Buncombe County, these opportunities include the ability to enact a ¼ cent sales tax or a \$7.00 vehicle license fee with the proceeds dedicated to support transit. Again, these options would require approval from the electorate. One County Commissioner who was interviewed did not think that the current Board would support this funding alternative.

As a system that borders seven other counties, there is the potential to become a regional transit provider. If the organization were restructured as an autonomous authority, then regional operations would create the ability to seek additional funding from various sources other than the County. This issue has been evaluated through previous studies.

### 2.2.4 Third Party Contracts with Service Providers

McDonald Transit has been the contractual service operator of Mountain Mobility since July 1, 2011. The first three-year term with McDonald Transit ended on June 30, 2014. Buncombe County exercised Option 1 under the agreement for another three-year term from July 1, 2014 to June 30, 2017.

Since 2011, LOSRC has provided administrative support to Mountain Mobility under a cooperative agreement with Buncombe County. Three positions (one Transit Program Manager, one Transit Program Specialist, and a Transit Administrative Assistant) are responsible for the following:

- Certification of Seniors eligible under Home and Community Care Block Grant funds awarded through the LOSRC's Area Agency on Aging and Buncombe County Aging Coordinating Consortium (ACC);

- Data entry and maintenance of eligibility records for certified riders (elderly and disabled Buncombe County residents, ADA paratransit-certified riders and Medicaid transportation clients) in the RouteMatch software system;
- Ridership data analysis that include RGP Trailblazer numbers, demand response services and Medicaid);
- Ongoing update of customer home addresses and destination addresses in RouteMatch software system;
- Verification of DSS ride data with Medicaid Form 5118 submittals;
- Mountain Mobility financial and report preparation for the County’s Planning and Development Department;
- Preparation of required operating statistics for NCDOT-PTD required reports; and
- Grant application preparation for Planning and Development Department’s execution.

Vehicle services and repairs are performed by the operations contractor through external maintenance vendors. Mountain Mobility utilizes two local vendors with certified CNG Technicians to service the alternative fuel vehicles, and a local Ford dealership is used for the remaining fleet. A local tire vendor is also used.

## **2.3 Capacity Analysis**

### **2.3.1 Vehicle Inventory and Utilization**

Vehicles operated by Mountain Mobility are purchased with federal and state grant funding and are owned by Buncombe County. NCDOT holds the lien until vehicles reach the end of their useful life and are replaced. As of September 2014, Mountain Mobility has a fleet of 43 vehicles as shown in Table 9.

There are 36 vehicles in the fleet equipped with wheelchair lifts. Table 9 shows the pertinent information for the Mountain Mobility fleet.

**Table 9: Vehicle Summary**

	<b>Vehicles</b>
<b>Number of Vehicles</b>	43
<b>Lift-Equipped Vehicles</b>	36
<b>Vehicles that use Alternative Fuels</b>	22
<b>% of Fleet using Alternative Fuels</b>	51%

More than half of the fleet operates using alternative fuel sources, including liquid propane gas (LPG) or compressed natural gas (CNG). The remaining vehicles use gasoline or diesel. However, Mountain Mobility would like to replace the vehicles that use diesel with vehicles that use CNG at some point in the future. Due to this commitment to using alternative fuels, Mountain Mobility was the recipient of WNC Regional Air Quality Agency’s 2012 Clean Air Excellence Award.

The fleet is equipped with AVL (automatic vehicle locator) and cameras. Video recordings are downloaded daily via an antenna that is mounted to the facility.

The physical condition in the table is categorized using the following key:

- N – new;
- G - like new, with almost no signs of wear;
- F - general appearance is still satisfactory, but it is beginning to show signs of wear and aging;
- P - poor appearance, upholstery is coming apart; body has dings and scratches, needs painting and/or has other damages due to wear and aging.

The mechanical condition in the table is categorized using the following key:

- B - continued use presents potential problems;
- P - requires frequent repairs;
- F - requires frequent minor repairs;
- G - good working order requiring only nominal minor repairs;
- E - only routine preventative maintenance required.

Table 10 shows the fleet inventory from Mountain Mobility from September 2014.

**Table 10: Fleet Inventory**

MM ID	Model Year	Model	Vehicle Type	Seating	Wheel-chair Stations	Physical Condition	Mech Condition	Odometer Reading 9/30/14	Projected Year of Replacement Request
00464	2010	E-450	23' LTV	13	2	F	F	113,227	2018
00465	2010	E-450	23' LTV	13	2	F	F	107,965	2018
00466	2010	E-450	23' LTV	13	2	F	F	114,534	2018
00467	2010	E-450	23' LTV	13	2	F	F	116,113	2017
00468	2010	E-450	23' LTV	13	2	F	F	121,958	2017
00469	2010	E-450	23' LTV	13	2	F	F	121,460	2017
00470	2010	E-450	23' LTV	13	2	F	F	112,185	2017
00471	2010	E-450	23' LTV	13	2	F	F	120,851	2017
00472	2010	E-450	23' LTV	13	2	F	F	107,780	2018
00473	2010	E-450	23' LTV	13	2	F	F	110,887	2017
00474	2010	E-450	23' LTV	13	2	F	F	111,657	2017
00475	2010	E-450	23' LTV	14	2	F	F	169,125	2016
11704	2011	E-350V	CONVAN	12	0	F	F	117,371	2016
11705	2010	E-350V	LFTVAN	9	2	F	F	110,392	2017
11706	2011	E-350V	LFTVAN	9	2	F	F	120,371	2016
11707	2011	E-350V	LFTVAN	9	2	F	F	106,666	2017
11708	2011	E-350V	LFTVAN	9	2	F	F	109,603	2017
13100	2013	E-350V	LFTVAN	9	2	G	G	33,081	2019
13101	2013	E-350V	LFTVAN	9	2	G	G	23,069	2021
13102	2013	E-350V	LFTVAN	9	2	G	G	20,663	2021
13840	2013	E-350V	LFTVAN	9	2	G	G	29,112	2019
13841	2013	E-350V	LFTVAN	9	2	G	G	21,883	2021
13842	2013	E-350V	LFTVAN	9	2	G	G	25,853	2019
13844	2013	E-350V	LFTVAN	9	2	G	G	21,408	2021
13845	2013	E-350V	LFTVAN	9	2	G	G	26,610	2020
13846	2013	E-350V	CONVAN	12	0	G	G	29,862	2019
13847	2013	E-350V	CONVAN	12	0	G	G	27,260	2020

MM ID	Model Year	Model	Vehicle Type	Seating	Wheel-chair Stations	Physical Condition	Mech Condition	Odometer Reading 9/30/14	Projected Year of Replacement Request
13884	2013	E-350V	LFTVAN	9	2	G	G	22,930	2021
14641	2014	E-350V	CONVAN	12	0	G	G	12,980	2020
14642	2014	E-350V	CONVAN	12	0	Casualty Loss 3/2015	-	9,927	2021
14643	2014	E-350V	LFTVAN	9	2	G	G	16,074	2020
14644	2014	E-350V	LFTVAN	9	2	G	G	19,527	2020
14645	2014	E-350V	LFTVAN	9	2	G	G	13,533	2020
19457	2009	E-450	25 LTV	20	2	F	P	169,047	2015
20408	2011	JOURNEY	MV NON	7	0	G	G	37,768	2022
32604	2007	E450L	25 LTV	20	2	F	P	197,386	2015
33296	2008	Truck	SVRVEH	2	0	F	F	126,736	Local
51224	2008	CHAMPION	25 LTV	20	2	F	P	158,230	2015
51230	2008	CHAMPION	25 LTV	20	2	F	P	156,198	2016
72054	2011	E-350V	LFTVAN	9	2	F	F	113,276	2017
72055	2011	E-350V	LFTVAN	9	2	F	F	123,521	2016
72056	2011	E-350V	LFTVAN	9	2	F	F	135,282	2016
82543	2011	E-350V	LFTVAN	9	2	F	F	120,764	2016
82544	2011	E-350V	CONVAN	12	0	F	F	94,733	2017
94339	2001	MVAN	SVRVEH	7	0	P	P	173,250	N/A (Retained)

Provided by Buncombe County on June 11, 2015

**2.3.2 Condition of Facility**

Under the terms of the contract between Buncombe County and McDonald Transit (transit management contractor), the County provides an operational office and parking lot for the fleet. Buncombe County leases space in an industrial complex located at 2000 Riverside Drive, as shown in Figures 13 and 14. Mountain Mobility’s office is identified as Suite 17, and has two floors.

**Figure 13: Mountain Mobility Facility and Parking**



**Figure 14: Mountain Mobility Parking Lot**



There appears to be an adequate number of administrative offices, even one on the second floor that is currently vacant and identified as the 'Staff Work Room'. There is also a large room on the first floor called the 'Training Room'. It is mainly used by the Training Manager for newly hired Bus Operators, but also used for all other training and quarterly safety meetings. The Training Room is not large enough to hold all employees, so training and safety meetings are split into two or more sessions. While the leased office space has enough square footage, the layout does not consider the working relationship between staff. It is recommended that a facility feasibility study be performed to evaluate the need for new space and screen potential sites.

There seems to be enough parking for all transit vehicles; however, the units are not secured in a fence, thus subject to risk (potential break-ins, vandalism, or body damage caused by other privately owned vehicles and work trucks that park in the same lot). The lot has some lighting around the premises, but it is not adequate to perform thorough early morning, pre-sunrise vehicle inspections (therefore, all operators are issued headlamps as personal equipment to help with activities performed in low light). Another concern is the LPG fueling station located at the end of the large parking area, as shown in Figures 15 and 16. The pump has no fencing and is accessible to the environment; thus, it is also not secure or free of risk.

**Figure 15: LPG Fueling Station**



**Figure 16: Vehicle Preparing to Fuel Up**



Office space for the three (3) LOSRC employees who support Mountain Mobility administration is provided at the Land-of-Sky's offices on New Leicester Highway and is adequate for current needs.

While the Riverside Drive site is currently adequate to the needs of Mountain Mobility Operations, it is utilizing a building dated from 1906 which could use some updating to continue to provide a comfortable work environment, and the site does not provide secure vehicle parking. The current site leaves very little to no room for expansion. Additionally, leasing space means that there is a potential future fluctuation in lease costs which might be hard to predict or control. Mountain Mobility operations would benefit from a dedicated facility in the long run. Starting a feasibility study in the next five years could be a step in a longer process of identifying an appropriate site and assembling funding for a new facility.

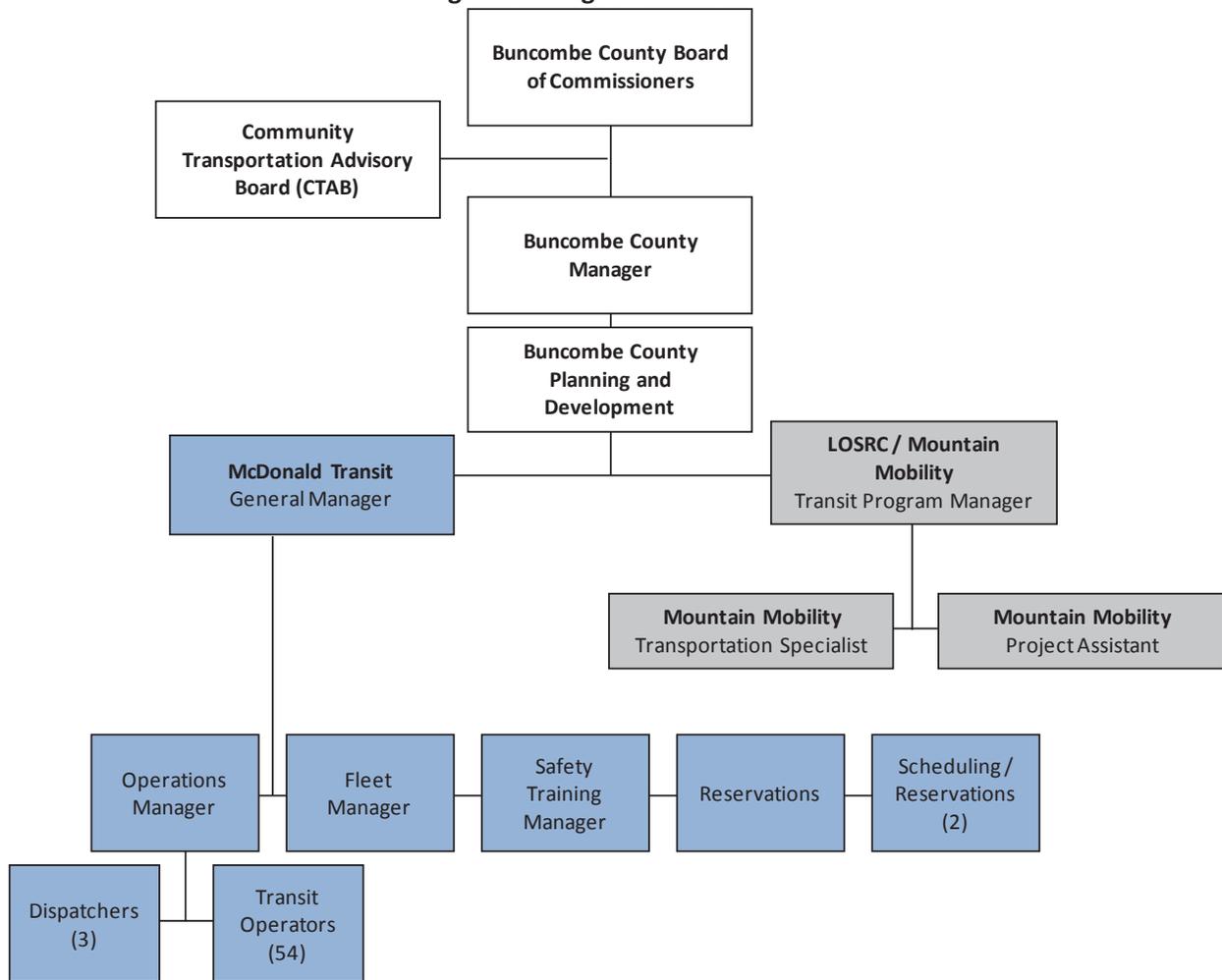
**2.3.3 Organization**

County operations are overseen by the County Manager, who reports to the County’s Board of Commissioners. Buncombe County also utilizes advisory council called the Community Transportation Advisory Board, as required by the NCDOT. The Assistant County Manager / Planning and Development Director, who reports to the County Manager, has public transportation within his Department; and Planning Department staff are directly responsible for the overall transportation program, as well as planning activities, contracts, compliance, and related functions.

Included in the McDonald Transit contract is a General Manager who supervises approximately 61 budgeted positions, all of which are McDonald Transit employees. The following are the job positions: 54 Bus Operators; one Operations Manager; one Fleet Manager; one Safety Training Manager; three Dispatchers; two Schedulers; one Reservation Clerk; and one Administration Support Staff. The organizational chart that follows shows the staffing arrangement as of October 2014.

As stated in Section 2.2.4, LOSRC employs three (3) staff members to assist in performing Mountain Mobility’s administrative tasks.

**Figure 17: Organizational Chart**



### 2.3.4 Observations of Scheduling and Dispatching Performance

Mountain Mobility currently uses several forms of advanced technologies. Automatic Vehicle Location (AVL) systems are a fleet management tool that integrates several technologies to allow an operations manager or dispatcher to determine at any given time the exact locations of the vehicles. A GPS receiver, a data modem, and a Mobile Data Terminal (MDT) are three types of technologies used to indicate the status of each vehicle (i.e., time, odometer reading/mileage, and passenger trips). Mountain Mobility has installed AVL/MDT equipment across its fleet.

RouteMatch (version 5.5) is a software application that provides computer-assisted data management, scheduling, routing, dispatching, verification, billing and reporting features. Persons requesting Mountain Mobility's service telephone the agency and speak with the Reservation Clerk who manually inputs the passengers' origin and destination information. Medicaid transportation recipients are scheduled by the Land of Sky Transportation Research Center through a contract with the Department of Social Services, and a listing of all future requested transports are compiled in a report that is forwarded electronically to the Reservation Clerk. The trip requests are then entered into RouteMatch when there are lulls in phone call requests.

The software develops routing lists, called 'manifests', based on geographic data. While this software is extremely sophisticated, it does have limitations. To ensure that arrivals and departures operate in a timely fashion and that all requests for transport occur, the transit provider has a designated Scheduler who reviews the manifests that are generated by the RouteMatch software and then evaluates where modifications should be made (e.g., adding passengers that are not included in the initial route optimization or re-assigning passengers to other, more suitable trip manifests). After the Scheduler completes the assignment of requested pre-scheduled rides, which occurs at 3:00pm each workday, a second Scheduler determines the manpower and equipment requirements to provide the transports. This is done by evaluating the database that contains each and every requested passenger trip, and optimizing the master work schedule (equipment assignments, trip lengths, passengers' travel times on the equipment, etc.). Late in the day the manifests for the following day's work assignments are finalized, with documentation prepared for the Dispatcher and Bus Operators.

The Dispatch Office was observed on two separate days and at different times (early morning and late afternoon) when the greatest number of activities occur, i.e. peak hours. Commonalities that were observed on both days include the following: trip cancellations; phone calls to riders requesting that they come out of the buildings; Bus Operators trying to ascertain the exact location (correct exit door within a complex of buildings) where passenger will board the vehicle; and phone calls to request future transports. Cancellations sometimes benefit the agency because the time dedicated to the transport is used to reduce the amount of wait-time incurred by other passengers. Also, due to absences of two Operators on one of the days of observation, other vehicles were assigned to pick up the passengers assigned to the two routes assigned to the absent Operators.

With some minor modifications to the operating procedures and processes (such as changing the phone system's recording to have the Reservation Clerk as the first option rather than the Dispatch Office; have one designated drop-off and pick-up location at RHA Health Services; verify and update more frequently the passengers' means of contact in the RouteMatch database), operating efficiencies can be recognized. It is important to note that amidst some difficult and stressful conditions during both observations, the Mountain Mobility employees performed admirably. Operators did not hesitate to respond when the Dispatchers made requests for additional pick-ups; and staff left their normal job

assignments to assist in performing functions when assistance was needed in the Dispatch Office. The aforementioned are signs of a collaborative and well-trained workforce.

Mountain Mobility staff are highly qualified and proficient in utilizing advanced technology, including RouteMatch and cameras.

## 2.4 Public Satisfaction

Public input was solicited on the existing services, the changes that have occurred over the past few years, and the future direction for Mountain Mobility. This section describes the findings of these efforts.

### 2.4.1 Human Service Agency Passengers' Input

The Study Team surveyed 27 passengers of human service agencies contracting with Mountain Mobility while riding vehicles enroute to their intended destinations. The aforementioned included DaVita Asheville Kidney Center; a Senior Center; and Care Partners Adult Day Center.

The survey instrument focused on riders' satisfaction with Mountain Mobility's services - its strengths and targeted areas of improvement. This survey is included in the Appendix. The following is a summary of riders' comments:

#### Strengths

- Operators are professional and courteous.
- Passengers feel safe while onboard the vehicles.
- Van/buses are clean.
- Operators assist the passengers, when needed but most commonly when handling bags of groceries.

#### Areas of Improvement

- The wait time for return trips definitely needs to be improved, especially following dialysis treatments and life-essential medical appointments.

### 2.4.2 General Public Riders' Interview Comments

To obtain insight on current riders' perspective of the service, the Study Team conducted surveys onboard the vehicles assigned to the three Trailblazer routes. Twenty (20) general public riders completed the passenger survey, most indicating that they ride daily. A significant number of general public riders were traveling to or from their work sites (such as hotels and retailers), grocery stores, and medical appointments. Consistently, vehicle conditions, i.e. cleanliness, morning vehicle arrival times, and courteous Operators received high marks. Passengers stated that Mountain Mobility meets their current needs and is affordable; however, riders stated that they would like to have weekend transports, to have the service hours extended, and have increased frequency of the existing service.

### 2.4.3 Human Service Agency Directors

The Study Team interviewed representatives of several primary agencies contracting with Buncombe County for Mountain Mobility's services. Representatives providing a comprehensive perspective included Blue Ridge Group Homes; Goodwill Industries; Community Care Partners; Buncombe County's

Council on Aging (COA); the NC Division of Vocational Rehabilitation; and the Buncombe County Department of Social Services.

The majority of the representatives stated that the success of their programs is entirely dependent upon Mountain Mobility meeting their clients' transportation needs. The representatives are sensitive to the fact that Mountain Mobility is constrained by having sufficient funds to expand the hours of operation; trying to balance the needs of City of Asheville residents and citizens who reside in the more rural communities (like Barnardsville); and scheduling passengers to maximize vehicle capacity, resulting in sometimes lengthy wait and travel times. Two of the agencies (Goodwill Industries and Community Care Partners) that currently contract Mountain Mobility have already purchased their own vehicles with intentions of receiving others by March 2015 because the agencies require more flexibility in meeting their clients' specific needs.

Representatives commented on the cost of Mountain Mobility's services. One agency said that it's the most affordable, much more than private providers; however, the current hours of operation is sometimes a limitation, and either private providers or agency staff are the only alternatives. DSS tries to use ART whenever possible, purchasing passes for the clients. The fixed route system is not always feasible, though, for the elderly and disabled populations and those not qualifying for the ADA complementary service.

Representatives said that they think public officials are supportive, especially pertaining to funding of public transit, and the officials understand how much citizens depend on the system. Connectivity with ART's routes is of paramount importance in controlling costs to the agencies. Council on Aging representatives stated their satisfaction in having the ability to process paperwork to internally certify program participants' use of Mountain Mobility rather than having to direct participants to the transit provider for certification.

When asked direct questions regarding specific areas of improvement, responses varied. The three Department of Social Services (DSS) representatives said that cost savings could be achieved by relaxing the current scheduling notification timeframes [three-day advance for an in-county appointment and a five day for out-of-county transports]. With increasing demands for Medicaid-funded transportation services, particularly for in-county transports within 24- to 48-hours, the agency would like to 'relax' the established scheduling timeframes. To meet DSS clients' needs, a total of nine (9) private providers are used, incurring higher costs to the County but offering more flexibility in scheduling. When a client requires a vehicle with a lift, Mountain Mobility is the primary provider with lift-equipped vehicles; thus, clients have no option but to wait three-days for transports. Essentially, an area of improvement is more flexibility in scheduling rides.

COA representatives stated that the transit system could do a better job of communicating its operating rules and regulations and scheduling procedures to the senior population. The time that passengers have to wait for return trips from medical appointments was mentioned by not only COA representatives but other stakeholders that were interviewed. Mountain Mobility schedules transports based upon a two-hour window of time between the time of a drop-off and then the pick-up. This amount of time reduces the likelihood of pre-trip 'no shows', i.e. vehicles arriving for pick-up transports and the passengers are not ready as well as 'not ready' for the riders' return trips to their homes and/or initial pick-up locations. Passenger training and enhanced communication by Mountain Mobility to both riders and agency representatives on scheduling methods would be appreciated. In cases where agency representatives know that Mountain Mobility's services cannot meet their clients' needs, volunteers

(currently totaling 24) are paid \$0.55 per mile to provide individual transports in their personal vehicles. Trips are predominately to medical appointments and other life sustaining locales that do not require lift-equipped vehicles. Buncombe County provides EDTAP, 5317, and local funding to support this alternative transportation option to older adults. During the last fiscal year, mileage reimbursements totaled \$19,661.

#### 2.4.4 Stakeholder Interviews

A sign of the government officials' interest and support to the planning process was their resounding response to the Consulting Team's requests to be interviewed. Two County Commissioners (one who is the current Chair) and the Town Managers of Black Mountain and Weaverville shared their ideas and perspectives on the current transportation needs of their constituents. All of the government officials commended the services currently provided by Mountain Mobility and recognize that services are probably strained by the ever-increasing needs of the aging and low-income populations of the community. In priority order, the Commissioners see a direct correlation between employment and transportation. Having a workforce that can access job sites and educational institutions is critical to the County's economic development and an enticement for luring new businesses and industry to the area. Several of the officials knew little about the actual operations of the service having only heard from the Planning staff about financial matters, such as budget proposals and authorization for grant requests. The majority of the officials thought that additional marketing and promotion of Mountain Mobility's services might raise the public awareness of the agency, and thus better position it for possible future funding. However, none of those interviewed think it realistic to expect a commitment for additional funds in the next few years as all human service agencies and County departments are challenged to maximize their funding allocations.

It is worth noting that during the discussions with representatives of the Towns that marketing or possible enhancement in public relations of Mountain Mobility's current services might be beneficial because the Representatives aren't sure that the general public is totally informed about the transportation options and availability. Promoting the existing services is definitely one means of additional ridership and the generation of increased fare revenues.

Interviews were also conducted with four staff members of LOSRC. Even though the Council has a Cooperative Agreement with Buncombe County, its Staff members could provide perspectives and knowledge of the three other counties (Madison, Henderson, and Transylvania) that comprise the Council and border Mountain Mobility's service area. LOSRC's staff works with transit administrators for each of the aforementioned counties and has a working knowledge of not only planning efforts but also operations, thereby potentially presenting opportunities for multi-county coordinated rides. It was also learned from the discussion that Haywood County is included for transportation planning purposes in the Metropolitan Planning Organization (MPO) and in the Rural Planning Organization (RPO) based at LOSRC, and already has connecting service with Mountain Mobility's Enka-Candler Trailblazer route.

LOSRC's Executive Director who was hired within the past year has focused great attention to economic and community development on a regional level; workforce development; and connectivity with strategic locations around the region. Locations include the Long Shoals and Airport Road area where General Electric has plans to expand its operations. Sierra Nevada, located in Henderson County, could also offer additional employment opportunities to Buncombe County residents. LOSRC continues to assist Buncombe County with grant applications (recently submitted Appalachian Regional Commission grant), as well as helping other systems in the region.

### 2.4.5 Non-Participating Agencies

The following programs that do not currently contract with Mountain Mobility for transportation services offered their time for formal interviews with the study team members:

- Division of Services for the Deaf and Hard of Hearing;
- Veterans Administration Hospital;
- Asheville Buncombe Community Christian Ministries; and
- Marjorie McCune Memorial Center.

The general consensus from these agencies is that Mountain Mobility's services would not be contracted in the near future for the following reasons:

- Lead times for scheduling transports is unrealistic, i.e. the transit system does not offer same-day service and trips must be scheduled by 3:00 PM the day before the ride;
- Excessive wait times for return trips from the agency; and
- Limited capacity on the vehicles for escorts, i.e. clients require assistants to accompany them and space is limited on the vehicle.

The Division of Services for the Deaf and Hard of Hearing conducts face-to-face interviews weekly for persons applying for free hearing aids. Persons have short notices as to whether they have been selected as a recipient; thus, Mountain Mobility's trip scheduling requirements are not doable for this agency. The Regional Manager was receptive to distributing a written survey (called the 'Non-Rider Survey') to her agency's Program Participants. Data collected from this information-gathering tool is incorporated into the 'Alternatives / Recommendations' section of this study.

Positive experiences in using Mountain Mobility were cited by the administrator of another agency. A relative of this representative needed to utilize the services after incurring a temporary disability. For almost a year, the rider rode Mountain Mobility and had nothing but praise for the service standards and personnel. However, a Program Participant at this same non-contracting agency regularly uses a private provider (called 'Out and About').

If modifications to the transit system's existing procedures could be implemented, it seems that the aforementioned agencies might be responsive to contractual agreements.

### 2.4.6 Input from Limited English Proficiency (LEP), Minority and Low-Income Populations

The State and County QuickFacts (updated in July 2014) provided by the US Census Bureau shows that 6.3% of Buncombe County residents are persons of Hispanic or Latino origin and 5.6% are foreign born.

While final conclusions have not been reached and we continue to engage in conversation with representatives of the Hispanic population, contact was made with multiple agencies to determine their needs and challenges. Agencies include: Catholic Social Services; Asheville Buncombe County Christian Ministries; Eblen Charities; Foster Memorial Seventh Day Adventist Church; Nuestro Centro; and United Way. The representatives of Nuestro Centro shared that the clients with whom they work have said that Mountain Mobility cannot meet their needs, specifically second and third-shift work hours do not coincide with the transportation providers' hours of operation and the rides are too lengthy such that

arrival times at destinations are not always met. For doctors' appointments, the Nuestro Centro uses volunteers for individual transports.

In multiple conversations regarding the foreign born population, interviewees said that these residents seem to be quite self-sufficient and, mainly due to the language barrier, rely on each other to meet their transportation needs.

During an interview with representatives of multiple Department of Social Services programs, it was learned that there are currently 2,777 clients who are provided some form of Medicaid-funded transportation. Ten (10%) percent of the aforementioned clients receive direct reimbursement at \$0.28 per mile; the remaining are solely reliant upon either Mountain Mobility or the seven other private providers that contract with DSS. Representatives said that Mountain Mobility transports almost 100% of their clients that use wheelchairs or other assistance apparatus.

### 3 PRESENTATION OF TECHNICAL MEMORANDUM #1

Per the scope of work, the consultant met with the Steering Committee on December 16, 2014 to summarize and discuss Technical Memorandum #1. The Steering Committee provided input on the existing conditions.

## 4 DEVELOP MANAGEMENT AND SERVICE ALTERNATIVES AND RECOMMENDATIONS

### 4.1 Develop Management and Service Alternatives and Recommendations

#### 4.1.1 Mission and Goals of the Organization

North Carolina Department of Transportation (NCDOT) Public Transportation Division (PTD) has requested that Mountain Mobility's mission statement, goals, objectives, and performance measures be analyzed and summarized.

#### Mission

Buncombe County adopted a mission statement for Mountain Mobility as part of the *Buncombe County Transportation Development Plan* (adopted May 22, 1997, Resolution 97-5-12). The mission statement is as follows:

*To provide transportation services responsive to the needs of Buncombe County residents.*

While this mission statement is included in Mountain Mobility's Policies and Procedures, it is recommended that the mission statement be publicized on the system's website.

#### Goals

Goals have been established for Buncombe County. The following are a subset of the countywide goals that pertain to transportation (i.e. goals that are relevant to Mountain Mobility's operations and performance measures):

*General Government (GG)*

1. *Improve communications with citizens through public meetings, media, and integrated technology.*
2. *Provide high quality, cost-effective, fair and equitable service through process improvement, efficient use of resources, contracted services, materials, and equipment.*
3. *Ensure high quality service by attracting and retaining a qualified work force through competitive compensation, employment benefits, employee training, and employee recognition.*
4. *Continuously improve internal and external customer satisfaction through ongoing analysis and response to customer feedback.*
5. *Assure fiscal and programmatic accountability to citizens through internal and external reporting and well-documented, clearly communicated procedures.*

*Human Services (HS)*

1. *Encourage client independence and self-sufficiency by providing basic care and protection while promoting self-reliance.*
2. *Address the current and changing needs of individuals by making efficient use of available resources.*
3. *Respond effectively to the needs of individuals and families by providing flexibility in service delivery.*
4. *Maximize the effectiveness of county services by establishing collaborative planning, developing, and evaluation of human service programs among county departments.*
5. *Enhance human service programs by encouraging collaboration through community partnerships.*
6. *Meet the changing needs of our diverse community by developing, supporting, and encouraging access to appropriate technological, educational, and recreational programs.*

*Public Safety (PS)*

1. *Improve service by reducing response time while maintaining or increasing the quality of service.*
2. *Address the current and changing community needs by enhancing facilities and services and by applying available technology effectively.*
3. *Assure high quality service by improving employee retention, education, and training.*

*Economic and Physical Development (EDP)*

1. *Promote economic development within the region by fostering cooperative partnerships with local, regional, and state entities.*
2. *Facilitate economic growth by eliminating impediments to small business and entrepreneurial expansions.*

*Education (ED)*

1. *Meet the region's complex education needs by establishing programs that make education more accessible, expand graduate programs, and promote high-quality research, technology transfer, and economic development.*

**Performance Measures**

Buncombe County's Planning Department selected three of the countywide goals and developed correlating objectives and measures for Mountain Mobility. The Planning Department assesses the actual performance for these and other measures monthly. The table below shows Mountain Mobility's annual performance measure targets and actual performance.

**Table 11: Performance Measures from Buncombe County**

		FY2012		FY2013		FY2014		FY2015
		Target	Actual	Target	Actual	Target	Actual	Target
<b>County Goal (GG #2)</b>	Provide high quality, cost-effective, fair and equitable service through process improvement, efficient use of resources, contracted services, materials and equipment.							
<b>Objective</b>	Enhance quality of service and customer satisfaction by providing a minimum of 95% of passenger trips on time.							
<b>Measure</b>	Percent of passengers dropped off and picked up within +/- 15 minutes of their scheduled time.	95.00%	93.30%	95.00%	93.27%	95.00%	91.04%	95.00%
<b>County Goal (HS #2)</b>	Address the current and changing needs of individuals by making efficient use of available resources.							
<b>Objective</b>	Improve productivity and lower costs associated with providing transportation services by improving route efficiency and increasing the coordination of paratransit trips, achieving a system-wide average of at least 2.34 revenue trips per revenue hour.							
<b>Measure</b>	Number of revenue trips per hour of revenue service.	2.35	2.33	2.35	2.42	2.35	2.42	2.35
<b>County Goal (GG #3)</b>	Assure high quality service by improving employee retention, education, and training.							
<b>Objective</b>	Ensure the safety of passengers, staff and the public by reducing driver turn-over and maintaining a high level of staff training, observation and re-certifications.							
<b>Measure</b>	Percentage of drivers meeting or exceeding requirements for evaluations, initial training, retraining, and re-certifications.	100%	100%	100%	100%	100%	99%	100%

Mountain Mobility’s RouteMatch software collects the operating data, which is provided to NCDOT-PTD’s research group called ‘ITRE’ (Institute for Transportation Research and Education). The *Performance Plan and Analysis* developed by ITRE in October 2014 analyzed the data and provided recommendations for improving operating performance measures. The recommendations follow:

**Table 12: Performance Measures from ITRE**

Performance Measure	Current Level	Growth %	6 months	12 months	18 months
<b>Weekday Average Daily Passengers</b>	602	1%	608	614	620
<b>Weekday Passengers per Service Mile</b>	0.111	7%	0.119	0.127	0.136
<b>Weekday Passengers per Revenue Mile</b>	0.138	7%	0.147	0.158	0.168
<b>Weekday Passengers per Service Hour</b>	2.04	7%	2.18	2.34	2.50
<b>Weekday Passengers per Revenue Hour</b>	2.53	7%	2.71	2.90	3.10

Mountain Mobility’s on-time performance has historically fallen below the established targets. There may be multiple reasons, including overbooking of trips, traffic congestion, vehicle maintenance issues, etc. Based upon service standards (e.g. policy of denying a trip), the targets may be unrealistic. It is recommended that a comprehensive route analysis be performed. It should be noted that Buncombe County has applied for an ADTAP grant to conduct a study to analyze demand response ridership patterns, trip origins, trips destinations, peak times of service throughout the day, population density, employment, medical and other service centers (shopping, nutrition sites, etc.), Trailblazer Routes, and connectivity to the urban fixed route system, as well as connectivity to other rural counties contiguous to Buncombe, including Madison, Haywood, Henderson and McDowell counties.

As for the service productivity, the system has exceeded its targets, which may contribute to the service delays referenced above. If and/or when a route analysis study is conducted, internal performance targets should be reevaluated.

**CTAB Goals**

The Buncombe County Community Transportation Advisory Board (CTAB) serves as an advisory board to Buncombe County staff and the Board of Commissioners. Actively involved in the planning and oversight of the system, the CTAB objectives are:

- To assist in the coordination and development of transportation services that will increase mobility options and choices for citizens and to promote the development of Buncombe County’s Community Transportation Program, otherwise known as "Mountain Mobility";*
- To assist in the development, update, and implementation of the Buncombe County Community Transportation Services Plan, as amended.*
- To work with agencies, organizations, and units of local government to maintain a coordinated and cost-effective approach to the delivery of transportation services in Buncombe County;*
- To make funding and policy recommendations related to the delivery of transportation services;*
- To provide the public with information regarding transportation services and resources available to address transportation needs in Buncombe County;*
- Perform other functions and responsibilities as may be requested or prescribed by the Buncombe County Board of Commissioners.*

**4.1.2 Existing Policies**

Mountain Mobility has policies and is compliant with them. The current policies are as follows (obtained from the ITRE Questionnaire, completed in August 2014, and “Mountain Mobility Policy and Procedures Manual”, dated 2013):

*Scheduling Policy*

- *Reservations are accepted up to 30 days in advance of the trip date.*
- *The cutoff time for registrations is 3 pm for all agencies/passengers except those reserving ADA comparable paratransit services. ADA reservations are taken during normal business hours. Voice mail is available after hours and on weekends.*
- *Requests for “standing” subscription trips (two or more trips to the same destination each week and continuing on a regular basis) may be placed on a waiting list if a route is not available in the area service is needed, or at the requested time or on the requested days that service is needed. Typically there are fewer than 10 people on the waiting list at a time. The types of subscription trips that are typically placed on a waiting list are for employment transportation and for transportation to day programs and services (e.g., adult day centers).*
- *No one who is eligible and signed up is denied service (e.g., for capacity constraints, etc.).*
- *The van will arrive to pick the passenger up from their home up to one hour and fifteen minutes before the requested drop-off time. For ADA paratransit passengers, the pick-up time may be up to one hour before the requested drop-off time.*
- *Return trips for Medicaid passengers are required to be scheduled two hours after the appointment time unless the passenger receives a “waiver” from DSS for a shorter return time. This procedure minimizes “not-ready” trips.*
- *For return trips the van will arrive within 15 minutes after the requested pick-up time.*

*Cancellation Policy*

- *If a passenger cannot take a scheduled trip, the passenger must call to cancel their trip at least two hours before their appointment time. Passengers are encouraged to cancel their reservation as soon as they know a trip will not be taken. An answering machine is available after hours, on weekends and on holidays.*
- *Mountain Mobility does not accept late cancellations. If a passenger cancels a scheduled trip prior to the trip time but without the required two-hour notice, the trip is recorded as a no-show.*

*No Show Policy*

- *When a passenger elects not to take a trip and fails to cancel a scheduled trip at least two hours before their appointment time, a no-show trip is recorded. The system will not reschedule a no-show trip on the same day as when a passenger fails to take or cancel a trip.*
- *If a passenger is not ready to go at the scheduled pick up time for their return trip home, the trip is recorded as a not-ready/no-show trip. The system will reschedule a later pick-up time for the passenger if needed.*
- *Passengers and Contracting Agencies are billed for no-shows. If the original trip is recorded as a no-show, the return trip is cancelled. Only one no-show trip is billed. Monthly invoices include a detailed no-show and cancellation report.*
- *The contract for Medicaid Transportation services does not include charges for no-show trips; however, no-show trips are reported to HHS (Health and Human Services). HHS is responsible for communicating and handling no-show trips for Medicaid recipients in accordance with the Medicaid policy.*
- *Medicaid no-show trips are billed to a different account than other Medicaid trips and are offset with County funds allocated to the County’s Transportation/Mountain Mobility budget.*

Note: Buncombe County Department of Social Services (DSS) adopted the transportation scheduling guidelines established by the NC Department of Health and Human Services, Division of Medical Assistance. The guidelines, established on April 1, 2012, states, “Uniform no show policy must be followed”. (Source: [www.ncdhhs.gov/dma/dcdss/2012/031512\\_adjust\\_NEMT\\_policy.pdf](http://www.ncdhhs.gov/dma/dcdss/2012/031512_adjust_NEMT_policy.pdf)). DSS staff handles its own scheduling (faxing a trip list to Mountain Mobility). Mountain Mobility staff maintains a list of riders who incur no shows and forwards names to the Medicaid

transportation unit of DSS. It is DSS case managers who invoke temporary suspensions of services.

#### *Suspension Policy*

- *Passengers may be suspended or terminated from receiving Mountain Mobility services for violating Mountain Mobility policies and guidelines related to disruptive behavior; behavior or actions that compromise the safety or wellbeing of other passengers or the driver; and/or a demonstrated pattern of refusal to follow rules and guidelines.*
- *Passengers will be automatically suspended and terminated from Mountain Mobility whenever a passenger demonstrates violent behavior or engages in illegal activity while on board the bus.*

#### *Fare Policy*

- *Presently the fare for a RGP trip is \$3.00 per one-way trip (\$6.00 round trip). The fare for an ADA trip is \$2.00 per one-way trip (\$4.00 round trip)\*. Fare amounts are subject to change. (\*Effective 11/06/2006.)*
- *Fares must be paid when a passenger boards the vehicle. Fares can only be paid by cash or fare ticket. Round trip payment of fares can only be made during the initial trip. If the return trip is cancelled, no money/ticket(s) can be refunded after it has been paid. Passengers cannot pay for round trip fares on the return trip home.*
- *Fare tickets are available to be purchased in quantity and may be purchased with cash or a check. Passengers should request fare tickets by calling 828-250-6750 x6 and/or mailing cash or check to: Mountain Mobility, 2000 Riverside Drive, Suite 17, Asheville, NC 28804. Receipts for the purchase of tickets may be provided upon request.*
- *A service fee of \$25.00 will be charged on all returned checks. Any passenger that has a check returned will not be permitted to pay by check in the future.*
- *All passengers are responsible for having correct change that will be collected by the driver. Drivers do not carry change. If a passenger pays more than the required fare, no change will be refunded to the passenger.*
- *Passengers may have one personal care attendant (as defined under the ADA) ride with them. Personal care attendants are not charged a fare. Passengers may travel with an escort. Escorts shall pay the full fare (which is allowed under ADA).*
- *Children age 8 and under may ride as a general public passenger only if accompanied by an adult (age 18 or older). Children age 8 and under are not charged a fare. Proof of age may be required. Other information may be required of any rider under age 18.*

Note: The City of Asheville sets fare amounts for ADA trips; Buncombe County sets fare amounts for rural general public services and Trailblazer routes.

It is recommended that policies be made known on Mountain Mobility's website to help communicate the operations and, thus, improve customer relations with not only passengers but also the program administrators of both current contracting and non-contracting agencies.

#### **Same-Day or Next-Day Reservations**

Mountain Mobility's scheduling policy is outlined in Section 4.1.2 above. Mountain Mobility does not provide same-day transportation, but does accept next-day reservations.

In Section 2.4.3, a conversation with Department of Social Services (DSS) representatives revealed that cost savings for DSS could be achieved by relaxing the current scheduling notification timeframes [three-day advance for an in-county appointment and five-day for out-of-county transports]. After a follow-up discussion with a DSS representative, it was learned that the DSS follows the transportation scheduling

guidelines established by the NC Department of Health and Human Services, Division of Medical Assistance. The guidelines, established on April 1, 2012, state, “No more than 3 business days can be required for (reservations for) in-county trips and 5 business days for (reservations for) out-of-county trips. Urgent requests are exempt”. (Source: [www.ncdhhs.gov/dma/dcdss/2012/031512\\_adjust\\_NEMT\\_policy.pdf](http://www.ncdhhs.gov/dma/dcdss/2012/031512_adjust_NEMT_policy.pdf)). The DSS representative added that Mountain Mobility has always been willing to assist DSS in scheduling next-day reservations, normally for trips to medical providers, even when the request is made after the 3PM established time, when DSS sends its fax for scheduled transports.

Introducing a policy that allows for same-day reservations was evaluated as part of this study. The study team reached out to Inter-County Public Transportation Authority (ICPTA), Mecklenburg Transportation System, Wake County Human Services Transportation Services, and Yadkin Valley Economic Development District, Inc. (YVEDDI). The following is what we were told:

- ICPTA will provide same day service, if the schedule permits.
- Mecklenburg Transportation System does not normally provide same day reservations; however, depending on the need, it will consider a reservation based on a case-by-case basis (seating capacity and vendor availability must exist).
- Wake County Human Services Transportation Services does not accommodate same day requests.
- YVEDDI wants 24 hour notices; however, if equipment is available, YVEDDI will accommodate the request.

The practices that are in place for Mountain Mobility are comparable to those of other transportation providers in North Carolina, so no changes to current practices is recommended at this time. It is wise, however, to periodically evaluate whether or not policy changes should occur.

#### 4.1.3 Annual Budgeting

Buncombe County provided general ledger summaries for FY 2012, FY 2013 and FY 2014 that include the budgets and actual expenditures. The County categorizes the revenue and expenses of Mountain Mobility under “Transportation” with various line items assigned specific account numbers. To balance the account at the end of each fiscal year, the County transfers funds from the “General Fund” to the “Transportation” fund. During the three years evaluated, the actual amount transferred was less than the budgeted amount (likely due to savings on fuel costs and professional services).

The system’s financial records for FY 2012, FY 2013 and FY 2014 were analyzed to determine any possible trends. The most obvious finding is a surplus of budgeted County funds for each of the three years. Even though the amount was less than one half of a percent of the overall budget, no deficits occurred.

The table below summarizes the comparison between the budgeted and actual dollars.

**Table 13: Comparison of Budget to Expenditures**

	FY 2012	FY 2013	FY 2014
Revenue collected from grants, contracts and fares	Actual > Budget	Actual < Budget	Actual > Budget
Revenue collected from miscellaneous items (i.e. advertising and auction proceeds)	Actual < Budget	Actual < Budget	Actual > Budget
Transferred from general fund	Actual < Budget	Actual < Budget	Actual < Budget
<b>Total revenues</b>	Actual < Budget	Actual < Budget	Actual < Budget
<b>Operating expenses</b>	Actual < Budget	Actual < Budget	Actual < Budget
<b>Capital expenditures</b>	Actual < Budget	Zero dollars spent	Actual < Budget
<b>Total expenditures</b>	Actual < Budget	Actual < Budget	Actual < Budget
<b>Surplus / Deficit</b>	Surplus < 0.2% of total budget	Surplus < 0.4% of total budget	Surplus < 0.3% of total budget

**4.1.4 Fully Allocated Cost Model**

A fully allocated cost model is typically used to calculate the rate that a transit system should charge for its services in an effort to not only forecast expenses, but also to build capital reserve funds. Actual expenses, vehicle hours and miles are components of the model. The end result is normally a shared mile cost figure by agency based upon the amount of service provided. It is not uncommon to find that there are varying rates for different contracting agencies (i.e. not all the same).

Contracting agencies are charged based on a shared service mile basis. From FY 2006 until FY 2008, the rate charged to human service agencies was \$1.20 per shared service mile, increasing to \$1.25 per shared service mile from FY 2009 until FY2011. As of January 2015, human service agencies contracting with Mountain Mobility are charged a cost of \$1.30 per shared service mile, with the exception of DSS and ART / City of Asheville. DSS is charged \$1.82 per shared service mile, and ART / City of Asheville is charged \$4.00 for ADA service that occurs outside normal service hours, i.e. after hours, holidays and Sundays (no other services/trips can be coordinated with ADA paratransit trips, so a rate factoring in overtime is charged). The current rates charged, as of January 2015, are summarized in the table below.

**Table 14: Current Rates Charged**

	Billing Method	Rate
City of Asheville ADA Services	Shared Service Mile plus 10% Admin Surcharge	\$1.30
City of Asheville ADA Services (After-Hours, Holidays)	Shared Service Mile plus 10% Admin Surcharge	\$4.00
HHS/Medicaid	Shared Service Mile	\$1.82
Black Mtn. Trailblazer*	Shared Service Mile	\$2.08
All Other Funding Sources and Agencies	Shared Service Mile	\$1.30

*\*Note: The \$2.08 was the FAC rate for the BMTB when applying for the second JARC grant to support funding for the route. Since only federal and local funds are used, the fully allocated cost is charged in order to draw down the full cost of service.*

The fully allocated cost model considers the breakdown of variable costs (costs associated with vehicle hours and vehicle miles) and fixed costs. Referencing the NCDOT Operating Statistics for FY 2014, a significant portion of the expenses incurred falls under the heading of “management and operations services” given that Buncombe County does not operate the service in-house. Therefore, a breakdown of the variable and fixed costs was requested from Buncombe County Planning Department for purposes of this evaluation (the overview rather than the breakdown is included in the table below).

Mountain Mobility had the following operating statistics for FY 2014:

- Incurred \$3,454,633 in total annual administrative and operating expenses based on the NTD Operating Expenses Summary.
- Operated for a total of 79,694 vehicle service hours over total of 1,456,782 vehicle service miles based on excerpts from the Mountain Mobility Service Report.
- Based on excerpts from the Mountain Mobility Service Report, the approximate breakdown for the annual vehicle service miles was: 70% for demand response and subscription service miles; 19% for ADA service miles; and 11% for Trailblazer service miles.

The fully-allocated cost for Mountain Mobility was calculated based on FY 2014 revenue, expense, and operating data. Based on the calculated costs, unit costs and a fixed cost factor were determined, as shown in the table below. On an allocated basis, this amounts to \$0.12 per hour, plus \$1.98 per mile multiplied by \$1.19 for overhead expenses.

**Table 15: Fully Allocated Cost Model for FY 2014**

Buncombe County - FY 2014	Total Cost	Variable Costs		Fixed Costs
		Vehicle Hours	Vehicle Miles	
<b>TOTAL COSTS</b>	<b>\$3,454,633</b>	<b>\$9,771</b>	<b>\$2,891,674</b>	<b>\$553,188</b>
Annual Operating Statistics		79,694	1,456,782	
Unit Cost		\$0.12 <i>per hour</i>	\$1.98 <i>per mile</i>	
Fixed Cost Factor				1.19

$$\text{Cost of Service} = \text{Fixed Cost Factor} \times [(\text{Hours Op. Stat.} \times \text{Hours Unit Cost}) + (\text{Miles Op. Stat} \times \text{Miles Unit Cost})]$$

NCDOT’s fully allocated cost model is ideal for determining what to charge for new services. However, Mountain Mobility charges contracting agencies on a shared service mile basis, making it difficult to use the fully allocated cost model to assess current rate (different units). Buncombe County provides great financial support to Mountain Mobility to ensure transportation service remains at an extremely affordable rate to agencies. Mountain Mobility should continue to annually analyze the rates charged to agencies; and if warranted, an incremental annual increase is recommended to offset any variances, rather than maintaining rates for multiple years as has been done in the past.

**4.1.5 Financial Reserves**

Buncombe County has set aside a small reserve fund (approximately \$200,000) from when it operated the system in-house. The reserves are maintained for use at the discretion of the County.

**4.1.6 Financial Assistance**

Buncombe County recognizes the value and support of Mountain Mobility. The County has transferred more than a million dollars annually from its general fund to Mountain Mobility, amounting to one third of the system’s total revenue, based on the general ledgers for FY 2012, FY 2013 and FY 2014.

The County is not the only entity that provides support. As an example, the Town of Black Mountain provides financial contributions that, along with monies from County and passenger fares, serve as the local match for the Black Mountain Trailblazer, which is funded with JARC funds. Based on the general

ledgers for the last three years, Mountain Mobility has nearly met or exceeded the local match contributions that were budgeted.

#### 4.1.7 Local Constraints and Barriers

Overall the local community is very supportive of Mountain Mobility. Buncombe County Commissioners, interviewed earlier in this CTSP study process, recognize that transportation is critical to life sustaining activities, and thus continue to financially support Mountain Mobility.

#### Consolidation

In August 2010, the *Asheville/Buncombe/Henderson Regional Feasibility Study* was prepared to consider how transit coordination and consolidation could occur between City of Asheville (ART), Buncombe County (Mountain Mobility), and Henderson County (Apple Country Transit). The study recommended that Asheville and Mountain Mobility merge into a new “municipal public transportation authority” under Article 25 of Chapter 160A of the North Carolina General Statutes through an Interlocal Agreement between the City of Asheville and Buncombe County, with Henderson County eligible to join at the outset or at a later time. Based on earlier interviews with stakeholders, this recommendation was identified as highly unlikely based upon the political climate at the time. Opportunities for collaboration and coordination are discussed in Section 4.3.

#### New Taxes

Additionally, the *Asheville/Buncombe/Henderson Regional Feasibility Study* recommended Buncombe County or Henderson County acting individually (or together), could implement a vehicle registration tax of up to \$7.00 annually by action of the Board of Commissioners. The North Carolina legislature passed House Bill 148, now known as Session Law 2009-527, that introduced three new funding sources dedicated to transit service, one being the “county vehicle registration tax” highlighted in this recommendation. The Commissioners, interviewed earlier in the CTSP study process, were not receptive to any short-term implementation of a tax increase and expressed that any increase in the long-term would require strong justification. It is apparent that there is local financial support from the County and the Town of Black Mountain through contributions from their general funds. Based upon other County Departments’ demands for additional resources, it is unlikely that Mountain Mobility will receive additional funds above what it already receives. Commissioners added that the system would have to make a case to receive additional funds and that they would look to the Planning Department to reallocate monies from existing stipends.

#### RIDE Voucher Program

The RIDE Program (Ridership Independence for the Disabled) is a user-side subsidy transportation alternative for disabled residents of Buncombe County (residing outside the city limits of Asheville) who are unable to access ART or a Mountain Mobility Trailblazer route. The program is funded through the Federal Transit Administration’s (FTA) Section 5317 New Freedom Program, supported by local funds and revenues from the sale of vouchers. While this program provides a valuable service, a large balance of funds remains, and there are a number of unredeemed vouchers that have been issued.

When written in 2008, the grant was for a three year program. However, the grant is currently structured to end in 2019, ten years after being awarded. As of December 31, 2014, \$81,514 had been spent and \$334,486 remained. In FY 2015, \$208,000 is approved to be spent.

The value of each voucher is \$10, and a person can use one voucher per trip. Persons using these vouchers pay the remaining cost of each taxi trip, but these trips can be much more than the cost of the voucher (e.g. five mile trip is roughly \$25 one-way). This may be one reason why so few vouchers have been redeemed.

It is recommended that a modification be made to the RIDE Voucher Program Guidelines, allowing more than one voucher per ride. Based upon what seem to be standard taxi rates (as of February 2015), base fee is \$2.50 and additional per mile cost (e.g. four (4) mile trip costs \$2.50 plus an additional \$13.37). Published rates for areas outside of Asheville city limits but within the County (for example, Weaverville and Black Mountain) cost no less than \$55.00. Increasing riders' abilities to redeem \$20 in vouchers (versus \$10) may provide much needed transportation service to the residents who qualify for the Program. It would provide more feasible options for residents who live further from downtown Asheville. This increase would also help spend the remaining funds at a faster rate.

#### 4.1.8 Marketing and Education

##### Marketing Activities

As the well-recognized transportation provider in Buncombe County, the County has not, as of late, had to market Mountain Mobility's existence or its services. Funds are made available in the budget to support marketing activities. The LOSRC contract includes marketing and development of promotional materials. The system currently does not have a marketing plan. Mountain Mobility does not actively market its services because the majority of the transports have been provided to 'captive audiences', specifically human service agencies whose programs' successes are reliant upon having Mountain Mobility transport clients. Without extensive marketing, Mountain Mobility still receives a high volume of requests for service.

Vehicles are readily seen throughout the County, and the telephone number to obtain information is prominently displayed on the vehicles.

Brochures are available for the Trailblazer route brochures. These brochures are multi-color, double-sided publications that include maps and timing of routes. A good description of route deviation is included. Potential and/or first-time users of the Trailblazers can easily understand these brochures. Brochures can be downloaded from the system's website in both English and Spanish. Compliant to FTA guidelines, written on the front in capital letters, is narrative stating, "This printed material will be provided in an alternative form upon request." Mountain Mobility's website is listed once and the system's phone number is listed five times, which is commendable.

Mountain Mobility's website is [www.buncombecounty.org/transportation](http://www.buncombecounty.org/transportation). The website provides a great deal of valuable information. A video providing an overview of Mountain Mobility is prominently placed on the main webpage. While the website is extremely comprehensive, it is recommended that the following be added to better inform and train passengers and contracting agencies:

- ADA information (rather than a link to ART);
- Information about shopping days; and
- Policies for agencies that contract service.

Buncombe County started to make these additions to the website during the study process (in May 2015). It is recommended that Buncombe County continue to perform an in-depth review of the website to update, as necessary, information that has changed during the previous 12 months.

### **Educate Riders**

Systems often neglect training for their riders and the agencies that they serve. Riders who are well educated about the policies and procedures of the transit system can contribute significantly to a fully effective and functioning system. Passenger complaints / inquiries are also lowered.

While Mountain Mobility's Riders Guide outlines general passenger information, it does not include specific information targeted to specific groups of riders. Education programs can be targeted to all riders or to specific groups of riders (e.g. subscription riders, or riders traveling for certain trip purposes such as dialysis) as well as to the various human service and other agencies whose clients use the system.

Educating riders should not be seen as a one-time effort. It must be something that is sustained and repeated on a periodic basis, both to reinforce the information to long-time riders and to make it available to new riders. It is recommended that such education efforts will improve the functioning of Mountain Mobility and its performance.

#### **4.1.9 Public Involvement Strategies**

Purposeful involvement in the community can lead to partnerships or agreements between local governments and business that result in financial support for the transit system.

When any new service is implemented, such as the RIDE program, public notification is advertised on the County's government-operated television station and through a written press release; in written materials (brochures, flyers, etc.); and through face-to-face communications at venues where the target population is present. For example, when the RIDE program commenced in late 2012, Mountain Mobility's Administrative Staff attended countywide health fairs and agency-sponsored public events for Senior Adults. One recent example where communication, if any, occurred of added service is ART's ADA Complementary service on Sunday. Additional riders possibly could be obtained if the County advertises its services to the public. Communication could occur via updates to the website or a press release.

Mountain Mobility has held public hearings every year associated with grant applications and proposed uses of funds. Also, there have been several public meetings and surveys through the MPO/RPO related to the Locally Coordinated Plan for the region that have included these opportunities. However, Mountain Mobility has not conducted a customer satisfaction survey in several years.

While open communication between the County and representatives of the local human service agencies and TAB representatives occurs, the County should recognize that personnel changes occur in agencies. Mountain Mobility should have ongoing communications with agency representatives and key community stakeholders, particularly representatives serving the diverse, limited English proficiency (LEP) populations. During stakeholder interviews it was learned that persons of non-American descent are not prone to readily seek assistance from persons who do not speak their own language; thus, as previously stated, Mountain Mobility is challenged to hire non-English-speaking staff who can effectively

interact with customers making phone inquiries; enhance its outreach with agencies that serve the LEP populations; and engage in activities or attend venues where diversity is the focus.

It is worthy to note that Buncombe County's Title VI Plan is fully compliant. Implementing programs and actions to evidence the Plan, however, is a suggested goal in coming years, especially as the population in the County changes.

#### 4.1.10 Local Coordinated Plan

The local coordinated plan, *French Broad River Metropolitan Planning Organization Coordinated Public Transportation and Human Services Transportation Plan* (adopted in 2012), was reviewed to determine what recommendations could appropriately be included in this five-year CTSP. These findings are not only identified "service gaps", but also enhancements to existing services and/or challenges faced by Mountain Mobility in its coordination activities with other transit systems in the region. These recommendations will be further discussed in the following sections of this CTSP.

Identified gaps in service and barriers to regional coordination that were listed are as follows:

- *Lack of a Regional Call Center and one-stop information point for transit riders, especially needed when traveling across county boundaries;*
- *Shortage of park-and-ride lots and transfer points, especially for travel between Haywood County and Buncombe County, and travel between Henderson County and Buncombe County;*
- *No uniform transfer fares agreements between agencies;*
- *Limited coordination and information exchange between transit agencies with regards to passengers traveling across county boundaries; and*
- *Lack of convenient, fast, commuter-oriented express bus service across county boundaries (for example, from Hendersonville to Asheville and from Waynesville to Asheville).*

The identified findings and prioritization of needs that were listed are as follows:

- *Expand Transit Service Scope-New Routes, Additional Hours of Operation and Vouchers for more Flexible Service*
  - *Purchase buses, other appropriate transit vehicles and technology upgrades including alternative fuels upgrades and vehicle location and route matching software, to support expansion and improvement of transit services*
  - *Set up voucher programs to alleviate service gaps and allow more flexible transportation options--vouchers for use with taxi service, for gas for volunteer drivers*
- *Maintain Existing Level of Transit Service and Diversify Funding Sources*
  - *Continued funding for the three Mountain Mobility Trailblazer routes*
- *Target Improved Services for Specific Population Groups*
  - *Target transportation needs of population with mental health and development disability issues; particular need for trips from North Buncombe to reach services in Asheville*
- *Promote Better Cooperation, Transfer and Information Exchange between Transit Agencies*
  - *Better travel options between counties, such as from Henderson County to Buncombe County especially for medical trips, from Haywood to Buncombe; and from Madison County to Buncombe County for medical trips;*
  - *Regional transfer stations with benches, information kiosks, shelters needed (for example, at the planned Park & Ride south of the Airport)*
  - *Coordination between transit agencies, for example Haywood County Transit and Mountain Mobility/Asheville Transit to provide trips from Waynesville to Asheville and back*

- *Better Outreach and Information Sharing with the General Public*
  - *Improve ease of information access including measures such as better websites and transit signs to inform riders of schedules and procedures; posting transit route and schedule information in additional locations; for example, Trailblazer routes info could be posted at Asheville Transit Center; make route information easier to understand*
- *Build Partnerships with Non-Traditional Providers for Additional Transportation Services*

## 4.2 Service Analysis

### 4.2.1 Leveraging Federal Programs

Funding of Mountain Mobility comes from Federal and State grants, local contributions, and user fees. Mountain Mobility has been designated as the 'lead agency' for transportation in the Buncombe County, thereby allowing the County to receive community transportation grant monies to support Mountain Mobility.

In the past, Mountain Mobility has proactively pursued federal grants to support various programs. For example, Mountain Mobility was awarded two 5316 Job Access and Reverse Commute (JARC) grants through French Broad River Metropolitan Planning Organization (MPO) / City of Asheville to support the Black Mountain Trailblazer. Mountain Mobility also has a 5317 New Freedom grant through the MPO / City of Asheville for the RIDE Voucher Program and to support other program components of the grant.

The table below shows the grants that have been awarded, timeframes and remaining balances.

**Table 16: Mountain Mobility Grant Balances (as of 12/31/14)**

Grant ID	Description	Period of Performance	State / Fed (Net)	Local	Total	Total Expenditures Through 12/31/14	Balance
NC-37-X030-00	5316 JARC Grant #2 - Blk. Mtn. Trailblazer	1/1/13 - 3/31/15	\$118,065	\$118,065	\$236,130	\$217,941	\$18,189
NC-37-X035-00	5316 JARC Grant #3 - Blk. Mtn. Trailblazer	1/1/13 - 12/31/16	\$115,381	\$115,383	\$230,764	\$0	\$230,764
NC-57-X002-00	5317 New Freedom (RIDE Voucher)	3/1/09 - 12/31/19	\$208,000	\$208,000	\$416,000	\$81,514	\$334,486
15-CT-002	5311 Administration	7/1/14 - 6/30/15	\$365,314	\$64,469	\$429,783	\$253,140	\$176,643
15-CT-002	5311 Capital	7/1/14 - 6/30/15	\$268,712	\$29,858	\$298,570	\$0	\$298,570
13-ED-002	5310 Elderly and Disabled	7/1/12 - 6/30/15	\$45,700	\$45,700	\$91,400	\$23,025	\$68,375
ROAP	EDTAP, RGP, EMP	7/1/14 - 6/30/15	\$299,557	\$13,752	\$313,309	\$151,112	\$162,197
Appalachian Dev*	Planning Study / IVR System	7/1/15 - 6/30/16	\$93,840	\$23,460	\$117,300	\$0	\$117,300
16-CT-002*	5311 Administration	7/1/15 - 6/30/16	\$298,827	\$52,735	\$351,562	\$0	\$98,422
16-CT-002*	5311 Capital	7/1/15 - 6/30/16	\$432,879	\$48,099	\$480,978	\$0	\$480,978

\*Note: The FY 2016 grants included in the last three rows have not been officially awarded. The expenditures are \$0 because no funds will be expended until after award and after July 1, 2015.

MAP-21, the Moving Ahead for Progress in the 21st Century Act (P.L. 112-141), was signed into law by President Obama on July 6, 2012. Some of the SAFETEA-LU Formula Grants, such as JARC and New Freedom, ended when MAP-21 was established. Since FTA 5317 New Freedom grant category no longer exists on its own, Mountain Mobility will not be able to pursue this grant type as funding options. However, JARC funding continues to be available in Asheville Urbanized Area as a set-aside of 5307 funds. Section 5310 Program, Enhanced Mobility of Seniors and Individuals with Disabilities, is now available to cover both traditional 5310-type projects and New Freedom-type projects. Federal Transit Administration (FTA) has fact sheets on all the current FTA formula and discretionary programs on its website: [www.fta.dot.gov/about/15035.html](http://www.fta.dot.gov/about/15035.html).

### New Urbanized Area Classification

Funding from several federal transit programs is allocated based on whether an area is classified as urban or rural, and each program includes specific requirements and restrictions on the use of funds. Furthermore, additional restrictions are implemented when an urban area has a population of greater than 200,000. A portion of Buncombe County is now defined as an urbanized area and having a population of 200,000 or more based on the 2010 Census. The NCDOT-PTD has taken steps to move systems operating in urban areas into the funding arena created by the growth in population and “flipping the pyramid” to make new rules for all funding programs, including state funding for ROAP and state match funds for Section 5311 and other programs. These changes affect transit systems across North Carolina.

The Community Transportation system in Buncombe County has been funded partly with state funds because the system is providing human service and general public transportation to individuals living inside the UZA which is prohibited by the Section 5311 Program. In April, NCDOT advised certain systems, including Buncombe County that beginning in FY2016, the state would no longer offer the same level of state funding to Community Transportation systems that are recognized by FTA’s National Transit Database as an urban transit service provider. The NCDOT urged systems to begin conversing with the MPO about 5307 funding for the services provided in the urbanized area.

The NCDOT began this transition in FY 2016 by reducing ROAP-Rural General Public funds and the state’s participation in the urban portion of administrative/operating costs. As a result, the composition of federal funding streams used in the future by Mountain Mobility will change with this new urbanized area classification.

Buncombe County currently receives FTA Section 5311 (rural program) funding for operating assistance, but a portion of those funds will no longer be available since less of Buncombe County will be classified as “rural”. The reduction in funding will be based on the percent of trips that originate from the newly-designated urbanized area. The magnitude of the reduction in Section 5311 funds for operating assistance is unclear at this time; additional guidance from the NCDOT FTA will be forthcoming at a later date.

The following table illustrates the historical and FY 2016 administrative/operating funding levels and federal/state participation levels applicable to Buncombe County:

**Table 17: Mountain Mobility Funding Levels**

FY	Administrative Costs				Capital Costs			ROAP-RGP
	Admin. Max. Cost Cap	Federal	State	Local Match	Federal	State	Local Match	State Formula Allocation
2011	\$454,125	46.4%	38.6%	15%	0%	90%	10%	\$164,003
2012	\$429,783	46.4%	38.6%	15%	46.4%	43.6%	10%	\$118,519
2013	\$429,783	46.4%	38.6%	15%	46.4%	43.6%	10%	\$136,578
2014	\$429,783	46.4%	38.6%	15%	46.4%	43.6%	10%	\$161,967
2015	\$429,783	38.4%	46.6%	15%	38.4%	51.6%	10%	\$123,771
2016-RURAL	\$206,296	80%	5%	15%	--	--	--	--
2016-URBAN	\$145,267	0%	85%	15%	--	--	--	--
2016-TOTAL	\$351,562	47%	38%	15%	38.4%	51.6%	10%	TBD-Likely Reduction to FY 15 Level

FTA Section 5307 funding will be available for capital and operating assistance in the urbanized areas. Funding is made available to a designated recipient in each urban area (in this case the City of Asheville ART), and then sub-allocated to other eligible transit providers in the urbanized area based on a locally-developed plan for the sharing of funds. Local planning agencies and transit providers will be evaluating how the Section 5307 funds will be shared; however, the specific distribution plan for these funds remains to be defined. The French Broad River Metropolitan Planning Organization set aside STP-DA funds for a planning consultant to develop an Urban Transit Funding Formula Study. The project covers Buncombe, Haywood, Henderson, and Madison counties, and includes the City of Asheville. The project will focus on the suballocation of FTA Section 5307 funds and how potential recipients can use those

funds. The goal of the project is to provide the transit providers in the region with a methodology and framework to effectively use the 5307 funds made available.

Because of the uncertainty surrounding future allocations of Section 5311 and Section 5307 funds to Mountain Mobility, it is not possible to provide a specific projection for the amount of revenue to be received from these sources over the next five years. However, the dynamic financial model developed for this CTSP includes a row for future Section 5307 funding. A conservative estimate of \$100,000 in revenue from Section 5307 in FY2017, but can be edited in the future as details emerge regarding the likely amount of future funding from this source. Likewise, the row for Section 5311 funding can also be modified as more information is gained regarding future funding from that program.

#### **Veterans Transit Livability Grant**

Mountain Mobility may want to pursue Veteran Transit Living Initiative (VTLI) Grants, which currently are not available but may be in the future. The VTLI Grants will be discussed further in Section 4.2.2.

Wake County used a VTLI Grant, totaling more than \$500,000 to develop its TRACS Program ([www.Waketracs.com](http://www.Waketracs.com)). Wake County Transportation, partnering with RouteMatch and the City of Raleigh as subsidiary sponsors, acquired funds to not only solicit providers, train them, but to also provide an operating facility from which to train and work. Additional information on development and implementation of this program is available through the Wake County MPO or the Transit Administrator of Wake County Transportation System.

Utilizing the same funding source, a VTLI grant totaling \$459,873, multiple rural transit providers west of Buncombe County (Macon, Clay, Cherokee, Jackson, and Swain) created a One-Call/One-Click Travel Management Coordination Center that enables more than 20,000 veterans and their families who live in the areas to better understand and coordinate transportation options. The Coordination Center provided upgrades to the transit systems' technology such that calls can be routed to the appropriate transit system based upon where the caller resides. Information on this program can also be obtained from any of the Transit Administrators of the affected systems. It should be noted that no VTLI grants are currently available (first round was in 2011; second was in 2012); however, due to the current President's focus on transportation for Veterans, funding sources may become available during the five years covered by this study.

It has been learned that private enterprises (i.e. Lowes Home Improvement and Starbucks) in other States have partnered with rural transit systems to provide funding to cover the cost of fares for Veterans and their family members (*TCRP Report 164: Community Tools to Improve Transportation for Veterans, Military Service Members, and Their Families*; available at [http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp\\_rpt\\_164.pdf](http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_164.pdf)).

It is recommended that Mountain Mobility remain abreast of funding sources such as this to improve Veterans' and their family members' access to jobs, education, health care and other services.

#### **4.2.2 Alternative Service Delivery Strategies**

As an established and respected transit system by not only County residents but also peers throughout the State, Mountain Mobility has already instituted several alternative service delivery strategies. These include:

- Three (3) deviated fixed routes (The Trailblazers) serving the western, northern, and eastern parts of the County;
- Structured scheduling on specific days and times of the week of general public trips to shop (grocery and retail sales) and conduct personal business / matters, i.e. non-medical multi-purpose trips. These trips serve specific communities (Arden, Candler, Fairview, Leicester, Swannanoa, and Weaverville) and the areas surrounding them (funded by ROAP);
- ART bus pass program for seniors over 65 who are able to ride ART (funded through ROAP funds); and
- RIDE Voucher Program for older adults and disabled citizens who are unable to travel on ART or Mountain Mobility Trailblazer buses (funded by 5317).

Volunteer programs providing alternative transportation include the following:

- Council on Aging of Buncombe County, Inc. oversees a volunteer driver program (funded through 5310 and local contributions from Buncombe County) with mileage reimbursement paid from Federal 5317 grant monies; and
- Area Agency on Aging that’s overseen by LOSRC has a senior companion program (funded through a Block Grant and currently applying for 5310 funds) that offers one-on-one transportation for senior citizens.

Since Mountain Mobility is the recognized transit provider for the County, the demands for its service are great. As shown in Section 4.1.1, the performance measures indicate how service standards have been affected by the service demands as well as the number of persons moving into the County. Essentially, Mountain Mobility’s on-time service has declined over the past few years, and it is unrealistic to expect a change unless the current service changes. Alternative transportation delivery strategies most definitely should be evaluated to determine, not only when, but if other options are more appropriate to meet the riders’ needs. Concepts are under consideration to provide additional transportation options to Buncombe County residents and assist Mountain Mobility with meeting its ever increasing service demands in the urban area (as indicated in the demographic analysis, the highest concentrations of potential transit customers are located within and just beyond the Asheville city limits, along I-40 to the east and west, along I-26 to the north, and along US-25 to the south).



**Private Providers**

Private transportation providers' services are utilized by DSS for non-emergency medical transports and its other Health and Human Services programs (such as foster care). Mileage reimbursement is paid to eligible Medicaid transportation recipients' family members for long distance, one-on-one trips (such as to Duke Hospital) when overnight stays are expected, family members' have reliable transportation, and cost savings are recognized by not having to use a private provider.

There is already a presence of private providers participating through the RIDE Voucher Program and several contracting agencies with Mountain Mobility. With the presence of a great number of military veterans residing in the region, it would be beneficial to formalize a vendor/private transportation provider certification program (such as the TRACS Program in Wake County) to entice service for disabled veterans and small business enterprises into the transportation industry. As part of the 5317 funding grant received in FY 2009, the Travel Training Program has already been designated as one of the uses for the funds. Thus, coupling the rider training and the vendor training would benefit Mountain Mobility with its growing service demand, particularly in rural parts of the County and outside the urbanized area.

The establishment of this program presents an opportunity to promote economic development for small business owners should the County decide to contract with a private provider to operate the service rather than utilizing Mountain Mobility or coordinating with a bordering county. The concept of utilizing private providers is discussed in Section 4.3.1.

**Enhanced Coordination**

A number of counties in the region travel into Buncombe County for medical trips. In some cases, specialty medical facilities (i.e. dialysis centers and pain clinics) are not available and the nearest facility is in Buncombe County. In other cases, Veterans' services are provided at Charles George Veterans Affairs Medical Center in Asheville (VA Hospital). Based upon seating capacity and scheduling, enhanced coordination could take many forms:

- Transportation provider in other counties could coordinate with Mountain Mobility to pick up passengers residing in the outlying areas of Buncombe County, and transporting those riders (along with their riders);
- Transportation provider in other counties could coordinate with Mountain Mobility to meet a Mountain Mobility vehicle to transfer Buncombe County riders vehicles operated by other agencies, and that provider would transport all riders to their destinations; and
- Other providers could use their vehicles to assist Mountain Mobility rather than sitting idle or going off-duty while awaiting the completion of their residents' business and the return trips.

Short- and long-term recommendations were developed to enhance coordination activities with surrounding counties. These concepts for coordination are discussed further in Section 4.3.2.

**4.2.3 Service to the Commute Market**

A vanpool program is a common transportation alternative used to provide employment trips to persons who are coming from outlying areas to a centralized location. The vanpool program is not intended to replace the demand-response transportation service. Rather, a vanpool is optimal when there are a small number of commuters that have comparable travel times with comparable trip origins and destinations, such as employment centers with regular work shifts. Persons residing in a section of a

rural community that all work at the same location are a target group for vanpooling to and from centrally, pre-designated pick-up locations en route to the work location. Potential vanpool destinations include downtown Asheville or other regional employment centers.

The consulting team's research indicated that no formalized vanpool program exists in the western part of the State and definitely not in Buncombe County. This is not to say that informal agreements do not exist; but, if they do, they are not advertised to the public. An interview was conducted with a representative of Sierra Nevada and it was learned that the management in the corporate office in California advocates the use of public transportation and other alternative mass transit modes to its employees. When questioned about whether or not the North Carolina employees might be receptive to ridesharing or vanpooling, the representatives responded affirmatively. One representative said that many employees commute daily from Asheville to the Mills River location. She added that it is her understanding that the Company assists employees in transportation in California. Besides Sierra Nevada, General Electric has a planned expansion of its plant in this same area. There are opportunities to develop public-private partnerships with these major employers, and possibly even some of the subcontracting agencies to the larger employers (particularly during the construction of GE's plant addition and/or Asheville Airport runway expansions), providing information on "Share the Ride NC" Program, and potential use of the LOSRC Call Center when it becomes fully operative.

The establishment of a vanpool program achieves these objectives:

- It is a means to attract new ridership (one of the recommendations made by the Institute for Transportation Research and Education (ITRE) in its October 2014 *Performance Plan and Analysis*; and
- Generates a funding source of additional revenue from general public riders and potentially the employers, if they deem the service viable to attracting and retaining workers and thereby willing to assist in funding.

It is recommended that Buncombe County be a partner in a formalized regional vanpool program that focuses on the commute market.

#### 4.2.4 Service to Underserved Areas

There are no geographical areas in Buncombe County not served by Mountain Mobility, and service is provided to locations based on received requests. As previously mentioned in Section 2.1.5, the highest concentrations of the populations represented by these data are located within and just beyond the Asheville city limits, I-40 to the east and west, I-26 to the north, and US-25 to the south. Mountain Mobility has introduced transportation services where demand is placed, i.e. the Trailblazer routes that currently travel along three of the four axes (ART route serves the southern axis).

Recommendation for a new deviated fixed route has not been included in this five-year CTSP, because there was no outcry for this type of service in the public surveys; and there is not compelling data in the demographic analysis to suggest this type of service is needed. As Buncombe County continues to grow, a new deviated fixed route may be considered as a long-range option.

Mountain Mobility structures its scheduling on specific days and times of the week for general public trips to shop (grocery and retail sales) and conduct personal business / matters, i.e. non-medical multi-purpose trips. These trips serve specific communities (Arden, Candler, Fairview, Leicester, Swannanoa,

and Weaverville) and the areas surrounding them. From the customers' perspective, this practice may leave them feeling underserved, given the flexibility restrictions; however, the practice is an efficient use of Mountain Mobility's limited resources.

As the demand for transportation services increases, especially in the rural areas, Mountain Mobility should continue to look for creative ways to provide additional transportation options.

#### 4.2.5 Expanding General Public Service

A key issue surrounding the potential for additional general public service is that the level of service provided to existing passengers and contracting agencies should not decrease from current levels. Current passengers should maintain their mobility options. As shown in Section 4.1.1, the performance measures show that Mountain Mobility's on-time service has declined over the past few years indicating the system is at or exceeding capacity. Section 4.2.2 includes concepts for improving current on-time performance service and expanding transportation options for general public riders (i.e. vanpooling); or increasing Mountain Mobility's existing capacity (i.e. use of private providers and enhanced coordination with surrounding counties) so that it could accommodate increased requests from general public riders.

Additional improvements in services provided to the general public are possible through restructuring the routes. Buncombe County has received an ADTAP grant to conduct a study and consider how community routes serving the general public (for grocery, retail and multi-purpose trips) can be improved to make them more efficient. For example, setting up zone routes and times across the county and requiring passengers to schedule their trips during certain times to fit those routes except for life-supporting medical trips could increase in improved efficiency of service.

Section 5307 funding, when it becomes available to Buncombe County, could help support future increase in service, especially if coupled with increased efficiency due to zone routes or another form of service delivery other than demand response service provided across the entire county.

#### 4.2.6 Advanced Technology

##### Technology and Software

As already discussed in Item 2.3D, Mountain Mobility has been progressive in its utilization of advanced technologies to make the system operate efficiently and effectively. However, since some of the current technological equipment is now more than six years old, there have been developments specifically designed for the public transit industry that would once again establish Mountain Mobility as a pacesetter within the State. More important than the recognition of being a leader is the fact that the institution of these technological advances enables the system to enhance its operating efficiencies and overall effectiveness.

As a RouteMatch software user, with mobile data collection (MDCs) hardware devices that are compatible with RouteMatch, the County executed a contract in early December 2014 to replace its current Mentor Ranger devices for Android-based tablets. The contract, valued at a little under \$65,000, includes the required software users' license; hardware for 43 units, implementation of the new technology; the required data plan; and system support and maintenance services from RouteMatch. The funding source for this technology upgrade is County funds. Conversion to tablets occurred in mid-January 2015.

In conjunction with this new equipment, there is the ability for adding a software enhancement called the 'RouteMatch Notification (IVR) Module'. Its features include the following capabilities:

- Night-before trip reminders to reduce 'no shows' and late cancellations;
- Automated confirmation and cancellation of trip requests to either confirm reservations or reduce the number of canceled trips;
- Automated real-time trip arrival and delay notifications to Mountain Mobility administrators;
- Creation of either general or customized message to riders, including system alerts (such as weather delays or cancellations), service changes (ex: detours), and targeted group messages (ex: messages to persons attending a specific site, such as the Senior Center or Dialysis Center); and
- Emergency messages (to both bus operators and riders).

The period of performance for this advanced technology project will be 12-months, starting July 1, 2015 and concluding on or before January 2016. Eighty (80%)-percent of the initial year IVR module cost, totaling \$72,300, will be received from Federal funds with the remainder covered by local dollars. This same system has already undergone the required testing and has been installed at other large NC transit providers. The administrators with whom the Consulting Team communicated had nothing but praise and excitement when they described the enhancement's capabilities, specifically how much smoother their systems operate on a daily basis and the reduction of labor hours in administrative, labor intensive tasks. Customers also reap the benefits because they receive real-time service information, are reminded of their scheduled trips, and have a sense of knowing when their transports will occur.

Mountain Mobility's fleet camera surveillance has now been installed for more than three years. This technology has also been improved in the recent past. Even though the transit system has done a good job of properly servicing and maintaining the equipment, during the period of this study it will be necessary for Mountain Mobility to budget additional capital funds to replace aging camera hardware and mounting apparatus. It is recommended that the research begin in the next fiscal year to determine what costs will be incurred for upgrading the camera surveillance system and software used to effectively view and manage the database. An upgrade to the computer which stores the Commander software data files and/or the antennae may also need to be replaced, all costs that have increased since obtaining the initial equipment.

The most common advanced technology in the transit industry is Smartphone applications for both purchasing transit passes and using the technology to pay transit fares (normally with credit cards or bank drafts). This advancement may not currently be something that Mountain Mobility needs or wants to undertake; however, if more coordination of rides involving other transit providers occurs, it may be worth researching.

### **Alternative Fuels**

An overview of Mountain Mobility's use of alternative fuel program is as follows:

- More than half of the fleet (22 out of 43 vehicles) is outfitted with bi-fuel systems that operate on alternative fuel sources, including liquid propane (LP) or compressed natural gas (CNG).
- LP fueling station located at the transit facility.
- City-owned CNG fueling station approximately 5 miles from the transit facility.

Currently, Buncombe County / Mountain Mobility have no preference to the type of fuel used. The following are some key points when considering which fuel modification kits to select:

- **Vehicle Type:**

The fuel types are dictated by vehicle type. CNG is more compressed than LP, resulting in large, heavy tanks to operate the transit vehicle for a full day. The vehicle must have a larger chassis to support the CNG tanks (installing small CNG tanks do not get the range needed to operate all day). Therefore, CNG is preferable for Mountain Mobility's cutaway vehicles. However, service is provided in more rural areas of the County, which are difficult for LTVs (also referred to as cutaways) to access. Thus, the paratransit vans are more often used and they are equipped with LP tanks.

When a fuel modification kit is installed on a new vehicle, the vehicle must have an engine/body that will carry the fueling system. An EPA certification must also be acquired to operate the vehicles with LP fuel.

- **Safety:**

Most people are fairly knowledgeable about hazards and the safety precautions that need to be taken with the use of gasoline and diesel. The average person is not as familiar with the necessary precautions for LP or CNG. It is recommended that not only agency staff attend training, but also local emergency responders familiarize themselves with the location of fueling sites and Mountain Mobility equipment.

- **Costs:**

Gas products (CNG and LP) are currently at some of the lowest rates based upon drilling activities and increased production. These prices can easily increase due to decreased availability. Due to the cost outlay and useful life of modifying FTA funded equipment, it is in the County's best interest to secure long-term fuel contracts, thereby avoiding what can be possible and unexpected fuel increases in future years.

CNG fueling station is not available at the current facility. There is some minimal expense associated with vehicles incurring deadhead miles to/from the City-owned CNG fueling station.

## 4.3 Coordination Opportunities

### 4.3.1 Other Providers and Volunteer Groups

#### Other Providers

An internet search reveals that there are more than 20 private transportation companies in the area. Many, but not all, are listed as taxi cabs in Buncombe County. The majority has corporate headquarters, i.e. physical addresses in Asheville but there were others listing Candler, Weaverville, and even one in Marion, NC. Geographic areas serviced are throughout the County (Weaverville, Barnardsville, and Black Mountain) and areas outside the County as far as Atlanta (GA), Charlotte and Durham (NC), Greenville (SC), and Johnson City (TN). Phone calls were made to five providers and each call was well received, pleasant, and informative. Information regarding the local market, mileage rates, as well as the owners' interest in learning more about opportunities to partner with the County was obtained. The consultant provided details on the public outreach sessions scheduled for April 7, 2015, and the

providers were encouraged to attend to learn more about this study and potential contracting opportunities.

Besides information on the actual carriers, the Internet research also provided a chart showing estimated costs for both per mileage rates and trip destination fixed rates. At any given time one can find a taxi cab or car service at the Asheville Airport or in the heart of downtown Asheville, specifically catering to visitors and tourists. Uber has found its niche in the County, focusing on UNC-Asheville and other college students' late night and weekend transportation demands.

UNC-A has contracted with local providers for two University-sponsored student transportation programs – the 'Emergency Ride' and 'MedCab' programs. The UNC-A website indicates that there are specific conditions that students must meet for the University to approve and ultimately compensate the taxi cab companies. A process is in place for the University to pre-approve the services.

As previously stated, Buncombe County's Department of Social Services also contracts with six private providers to support its Medicaid Transportation and Work First programs. The carriers are used for after-work hour and weekend trips when either Mountain Mobility is not operating or transports are needed for out-of-county, more distant medical trips to places such as Chapel Hill and Durham. DSS utilizes providers that are not only taxis but also one or two carriers with lift apparatus, even though the aforementioned are more expensive per ride than Mountain Mobility.

The County also has five (5) participating providers for the RIDE voucher program. The carriers used for the aforementioned program primarily make transports in the Asheville area for eligible Seniors Citizens. All current providers are small businesses. The County should continue to seek and add any new providers to the initial, approved provider list.

While the RIDE voucher is valued at \$10 per ride, utilization of the program seems minimal because the costs for transports in outlying parts of the county are too expensive for the residents to fund the variance cost of the trip, i.e. full cost less \$10 voucher.

It is recommended that the County 'revisit' the RIDE program by taking the following actions:

- Consider allowing riders to utilize more than one voucher per ride (as was recommended in Section 4.1.7). Based upon what seem to be standard taxi rates, \$10 allows a rider to travel no more than four (4) miles. The County needs to revisit and revamp its stipends to reflect current private transportation market rates. Published rates for areas outside of Asheville city limits but within the County (for example, Weaverville and Black Mountain) cost no less than \$55.00.
- If the County wants to foster private-public partnerships, Mountain Mobility should consider establishing a vendor certification program for small transportation businesses such as the program created and instituted by Wake County. The Wake TRACS website is: <https://waketracs.com/become-a-vendor/>.

### **Volunteer Driver Programs**

Volunteer driver programs vary in structure, depending on community needs and program resources. Approaches differ by service span, rider payment, vehicles used, whether the volunteer driver is provided by the sponsoring program or identified by the person needing the ride, and driver reimbursement, among other program design characteristics. The most common volunteer driver

program model is what's called a 'full service model' where coordination of all aspects of the program (driver recruitment and screening, ride scheduling, driver reimbursement, etc.) is handled by an organization or entity. Such is the case with LOSRC's Aging and Volunteer Services unit. As previously stated, this unit oversees the 'Senior Companion Program' which provides a transportation stipend to Volunteers who utilize their personal vehicles for transporting seniors. A second example is The Council on Aging of Buncombe County which has its team of approximately 24 volunteer drivers. They, too, receive some reimbursement. The Veterans Transportation Service office at the Charles George VA Medical Center has a formal Volunteer Driver program in place to transport veterans and their family members. The Volunteer Transportation Network (VTN) has established rules and regulations established by the Department of Veterans Affairs and the Disabled American Veterans (DAV) National Headquarters on who can and is selected to drive; the training that a Volunteer must complete prior to any assigned transport; and the procedures for scheduling a Volunteer for a driving assignment.

A much less formal and truly a 'volunteer' driving program (another example of a 'full service model' but with a differing program design) are those transportation services that exist as congregational care and outreach at local churches. Two examples of effective programs in Buncombe County are spearheaded by Central United Methodist Church and First Baptist Church of Asheville.

#### 4.3.2 Input from Surrounding Counties

As previously stated in Section 2.4.4, not only Haywood but other bordering counties' transit administrators were surveyed as part of the initial stakeholder interview task to discuss the existence of coordinated trips for transports, especially to medical facilities located in Asheville. Haywood County Transit's administrator said that the weekday coordinated trips coming from his County to link with the Enka/Candler Trailblazer route have been quite beneficial to residents in his community. There are potential additional opportunities for coordinated medical trips, but he's of the understanding that Mountain Mobility has capacity limitations.

Henderson County's provider, WCCA, operates both fixed route and demand response service. There are opportunities for coordinating trips for County residents residing in the Arden and Skyland areas that may need to go to Park Ridge Hospital and surrounding medical facilities in Hendersonville.

Transylvania County's transit administrator said that only recently has his system begun to travel out of county, and most of the destinations are to Asheville's VA Hospital. It is conceivable, based upon seating capacity and scheduling, that Transylvania County vehicles could coordinate with Mountain Mobility to pick up passengers residing in the eastern most part of the County or those residing just off the I-26 corridor (such as Biltmore Forest), transporting to not only the VA Hospital but other destinations in east Asheville.

Those counties that do not border Buncombe County, such as Clay, Graham and Yancey Counties, were contacted to learn of their travel patterns and willingness to coordinate. Yancey County's system travels to Buncombe County twice each weekday. These trips could realistically transport residents residing in rural areas (e.g. Barnardsville traveling the 19/23 Corridor).

Graham County's transit system has scheduled trips to Buncombe on Tuesday and Thursday. Due to the trip lengths, it is reasonable that, if agreements could be reached, this provider and possibly others can use their vehicles to assist Mountain Mobility rather than sitting idle or going off-duty while awaiting the completion of their residents' business and the return trips.

Clay County’s transit system currently travels to Buncombe County once each weekday, but has plans to increase to twice each weekday. Clay County is very receptive to coordination with other counties. In fact, it was learned that en route to Buncombe County, the system picks up riders in Swain and Macon Counties at a flat rate of \$100 and \$135, respectively.

The table below summarizes what was learned during the most recent outreach effort to surrounding counties.

**Table 18: Coordinate Trips with Surrounding Counties**

	Clay	Graham	Haywood	Yancey
<b>Travels to Buncombe County on specific scheduled days</b>	Once every weekday (to increase soon)	Yes	Once every weekday	Twice every weekday
<b>Days travel to Buncombe County</b>	Monday through Friday 3 – 4 people/day	Tuesday and Thursday	Monday through Friday	Monday through Friday
<b>“Usual” and frequent destinations</b>	VA Hospital; Bone & Joint Orthopedic; pain clinic in Arden	Oteen Federal Credit Union; Vanderbilt Medical Park	Medical offices	Dialysis center in Weaverville
<b>Vehicle sits idle while in Buncombe County</b>	Sometimes	Sometimes	Will stay in Buncombe County if appointments last more than one hour	Sometimes
<b>Willing to pick up Buncombe County residents on way to destinations</b>	Varies based vehicle capacity (picks up passengers in Swain and Macon Counties on way)	Yes	Yes	Yes
<b>Interest in providing transports during “down time” / wait time in Buncombe County</b>	Possibly interested	Yes, if none interfere with pick-up schedule	Possibly interested	Possibly interested
<b>Type of vehicle normally assigned to Buncombe County trips</b>	25-pax LTV w/ lift or mini-van (dependent on the number of riders)	20-pax LTV w/ lift or mini-van (dependent on the number of riders)	Depends on the need; never take a bus	Mini-van

In an effort to fully address this Task, a meeting was held on February 2, 2015 at the LOSRC with the following representatives participating:

- Two Buncombe County Department of Planning representatives;
- Mountain Mobility’s contractors (McDonald Transit and LOSRC –Transit Division);
- Henderson County Transportation Planner;
- WCCA’s Transit Administrator (contractor to Henderson County); and
- NCDOT-PTD Mobility Development Specialist.

While not unexpected, the challenges of instituting a formal coordinated ride program consumed the majority of the meeting time. Highlights of the more substantive points of discussion and recommended actions follow, listed in short-term and long-term objectives:

### Short Term Recommendation

- It would be beneficial to Mountain Mobility if counties' systems had established or scheduled days when they traveled into Buncombe, thus allowing Mountain Mobility to pre-schedule certain rides on other systems' vehicles. Recommended action is for follow up conversations with transit administrators to obtain more details on how and when coordination can occur.
- Time constraints on transit Schedulers / Reservation Clerks to make multiple phone calls to determine the days, times, and intended destinations that other providers are going to be traveling to the County. Most effective means to coordinate trips is to have a website where a system can post 'open trips' to see if another provider would be willing and/or available to pick up the slack from another system. Recommended action includes:
  - a) The Asheville urbanized area has a 5310 grant that supports regionalized efforts. Calls for projects are released by the MPO and the funds must be obligated by September 2015. Contact needs to be made to determine whether or not funds will be designated for development of a website.
  - b) Contact NCDOT-PTD and the FTA to ensure that a website development service is an allowed expense under the terms of the grant.
  - c) Obtain a contractor (either person or company previously used or via RFQ process) to develop a website.
  - d) Train administrators and staff to use website.
- Legal agreements (such as Interlocal Agreements; three examples included in the Appendix) for multi-County transports should be drafted to provide details (performance expectations, service standards, responsible parties and shared costs) and then executed by the Counties' officials. Buncombe County will need assurances that the non-County owned equipment, Vehicle Operators, and standard operating practices, procedures, and DOT-mandated regulations are in keeping and compliant with its own. Recommended action includes:
  - a) Working with the County's legal staff, Buncombe County Planners should compile the stipulations that it would require for another provider to transport Buncombe County residents. This list should include, of course, the fully allocated cost that would be reimbursed to other transit systems.
  - b) Discussions need to occur with surrounding counties' transit administrators to determine if the rates are acceptable.
  - c) Buncombe County's concerns regarding equipment, DOT compliance matters, and Operators' performance can be resolved by conducting its own internal audit at the facilities of bordering counties.
  - d) Formal Interlocal Agreements are executed when 'partnering' agencies have resolved any pending matters or issues.

### Long Term Recommendation

A regional call center such as the one established by Macon, Clay, et al in the southwestern part of the State is the 'ideal' method for coordinating trips. This endeavor would require not only time but a major source of funds. Land of Sky Regional Council would be the likely agency to take a lead on establishing a regional call center in 2019 - 2021 timeframe. Buncombe County as well as other counties in the region should support Land of Sky Regional Council in pursuing state and federal funding sources such as 5310 and VTPI to set up a regional call center. This would likely result in savings from coordinated trips to the local transit providers, which could be part of the answer to diminished ROAP funds to all transit systems. For years NCDOT-PTD and the Board of Transportation has espoused coordination, and yet very little movement has occurred. The passengers' needs have far outreached the available resources in any one County and only through collaborative efforts can the demands be met.

#### 4.3.3 Existing and New Connector Service Opportunities

Intercity connectors provide service over long distances. An example of this type of service is the Mountaineer North-South, which makes stops in Boone, Lenoir, Newton-Conover, Lincolnton, Gastonia and Charlotte. Another example is the Queen City-Coastal Connector that connects Wilmington, Fayetteville, Rockingham, Wadesboro and Charlotte. Greyhound intercity bus service is available to/from Asheville to Charlotte, but it currently takes 6 hours and 15 minutes with a transfer in Winston-Salem. A recommendation for a new connector to/from Asheville has not been included in this five-year CTSP, because there was no assertion for this type of service in the public surveys.

#### 4.3.4 Coordination Opportunities with Urban System

The three Trailblazer routes provide connectivity between the more rural parts of the County to the urban areas serviced by ART.

Henderson County's fixed route also offers connectivity to ART vehicles near the airport; thus, it is conceivable that a Buncombe County resident can travel throughout Hendersonville if two transfers are made (i.e. Mountain Mobility to ART and then a boarding an Apple Country Transit fixed route service).

ART and Apple Country realize that the most logical point of connection is the Asheville Airport; thus, both routes service this destination offering riders a safe, comfortable location with transit amenities to await transfers. However, traffic congestion around the airport and the presence of the Park and Ride lot on Highway 280 adjacent to the WNC Fairgrounds warrant its use, as shown in Figure 18. Effective May 4, 2015, transfers will occur at the Park and Ride lot.

**Figure 18: Park and Ride Lot near the Asheville Regional Airport**



#### 4.3.5 Regional Medical Centers

As previously covered in Section 2.1.3, there are four major hospitals in Buncombe County:

- Charles George Veterans Affairs Medical Center located at 1100 Tunnel Rd, Asheville, NC;
- CarePartners Rehabilitation Hospital located at 68 Sweeten Creek Road, Asheville, NC;
- Mission Health – Asheville Specialty Hospital located at 428 Biltmore Avenue, Asheville, NC; and
- Mission Health – Mission Hospital located at 509 Biltmore Avenue, Asheville, NC.

Concepts for coordination with transportation providers from surrounding counties offering service to medical destinations are previously discussed in Sections 4.2.2 and 4.3.2. Section 4.3.1 details the Veterans Transportation Service Program (VTS), which was established to facilitate transports of Veterans and their immediate family members to VA medical centers and clinics.

#### 4.3.6 Park and Ride Locations

In the *FBRMPO Comprehensive Transportation Plan* (dated January 2008), a park and ride lot is defined as, “a strategically located parking lot that is free of charge to anyone who parks a vehicle and commutes by transit or in a carpool.” The concept of sharing a ride from a pick-up point became quite popular in the 1980s, thereby reducing the number of vehicles on the roads and reducing the cost of conveyance to affected parties. Through the years Park and Ride lots have become more ‘glitzy’ from the original concept of meeting in a parking lot at a centrally located grocery store, although these designated points still exist today in more rural areas. Enhancements to the lots have resulted to address safety and security of not only persons but vehicles (adequate lighting and fencing, for example); amenities such as restrooms, car service vendors, coffee dispensers, food trucks); and passenger protection from inclement weather, ranging from bus shelters to elaborate buildings.

The *FBRMPO Comprehensive Transportation Plan* identified the Weaverville and WNC Fairgrounds locations as potential Park and Ride lots, and these lots have been constructed with ARRA funding. Fourteen additional locations for potential Park and Ride lots were recommended by the Plan throughout Buncombe County with most adjacent to existing or proposed ART fixed routes (illustrated in *FBRMPO Comprehensive Transportation Plan* Figure 2-2).

To promote ride sharing and connectivity between the public transit providers at a nominal cost, certain locations have been designated as transfer points that can also be used for parking personal vehicles. One such informal park and ride lot / transfer location is the Goodwill Store on Patton Avenue in west Asheville. Persons driving to the locale normally park close to the road near the bus shelter which does not take parking spaces away from the users of the building. Persons can connect to either the Enka-Candler Trailblazer route or ART’s West Asheville route.

In total there are four Park and Ride lots in Buncombe County, which are summarized in Table 18 and illustrated in Figure 19.

**Table 19: Buncombe County Park and Ride Lots**

Lot	Location	Function	Approximate Parking Spaces
<b>Patton Avenue Goodwill</b>	US-23 in western Asheville	Serves as the transfer point for the Enka-Candler Trailblazer and ART Route W3	15 Signed for park-and-ride is the front row of parking
<b>Black Mountain (owned by Town)</b>	Broadway Avenue at Sutton Avenue	Near transfer point between the Black Mountain Trailblazer and ART Route 170	25 – 30 unmarked pavement
<b>Weaverville</b>	Griffee Road near I-26 Exit 17	Currently unserved by local transit is used as a carpool lot	29 with one handicap
<b>WNC Fairgrounds</b>	Highway 280 near the Asheville Regional Airport	Effective May 4, 2015 will be used as a transfer point between ART and Apple Country	27 with two handicap

**Figure 19: Park and Ride Facilities in Buncombe County**



It is recommended that as part of the route evaluation study that is to occur in FY 2016, analysis of whether or not the North Buncombe Trailblazer should be extended to provide service to the Weaverville Park and Ride Lot should occur.

As a general rule, Park and Rides attract riders that have access to vehicles (i.e. “choice riders”). Fixed routes are more attractive to choice riders due to the type of schedules. This is not to say that a deviated fixed route could not serve a Park and Ride lot, but much depends upon the trip length, reliability of service, trip frequency and number of transfers.

Park and Rides offer value even if Mountain Mobility does not provide service to these locations.

The most common transportation alternatives are carpool and vanpool, which directly benefit from Park and Rides. These alternatives are small informal groups of persons that have comparable travel patterns (i.e. nearby destinations and similar schedules). In speaking to residents, it was learned that Big Ivy Community Center in Barnardsville, NC is used for carpooling purposes. This is a good example of an informal arrangement to ride share. Additionally, a potential future Park and Ride lot at Future I-26, Exit 15, NC 197 Barnardsville Highway, should be evaluated. An unpaved site at this location, just off the exit, used to serve as an informal park and ride, until a guard rail was put up along the road which inadvertently has put a stop to this informal park and ride arrangement.

Mountain Mobility currently promotes carpooling. A link to the “Share the Ride NC” Program ([www.sharetheridenc.org](http://www.sharetheridenc.org)) is included on Mountain Mobility’s webpage under Related Links. This Statewide program assists residents to quickly find carpool partners. Ongoing marketing of this alternative is highly recommended, particularly to residents in the outlying areas of the County.

As a means to attract new ridership (one of the recommendations made in ITRE’s *Performance Plan and Analysis FY 2014*) and possible avenue to generate additional funds, a formal vanpool program is recommended. If and/or when one is created, consideration should be given to participants’ origins before new Park and Rides are constructed.

## 5 PRESENTATION OF TECHNICAL MEMORANDUM #2

Per the scope of work, the consultant met with the Steering Committee on April 7, 2015 to present the findings of Technical Memorandum #2. Two public outreach sessions were also held on April 7, 2015 to solicit feedback from residents of Buncombe County. Input from the Steering Committee and public were considered in the development of the five-year draft plan.

## 6 FIVE-YEAR PLAN

### 6.1 Implementation Plan

There is a clear need for transit service throughout Buncombe County. Mountain Mobility currently transports a significant number of passengers (roughly 600 trips per day), and the demand for public transportation is continually increasing with population growth and aging, long-term residents. Continued growth in transit demand can be expected. Based on projections from North Carolina Office of State Budget and Management (NCOSBM), in Buncombe County over a 20 year period there is an anticipated 20% increase in overall population and 40% increase in elderly population (a target market for Mountain Mobility). Thus, Mountain Mobility must take steps now to prepare for the future. In order to keep up with this demand, Mountain Mobility should increase its fleet size by 20% over the next five years, and also evaluate the need to retain vehicles that are targeted for disposal at the end of the vehicles' useful life (dependent on mileage and/or time in active service).

Besides the abovementioned increase in Mountain Mobility's fleet, the recommendations presented as part of this Plan were developed as the framework for building upon the successful efforts that have already been made by Buncombe County. The proposed recommendations are intended to increase the mobility options for passengers and to support existing and future services. Emphasis is placed on the identification of service enhancements requiring additional funding through NCDOT's Community Transportation Program, as well as other federal, state, and local sources. The CTSP process is not intended to be a 'service audit' (i.e. compliance review), but rather it is a 'road map' (i.e. planning document).

The following are key focus areas for the next five years:

1. Increase education and marketing efforts.
2. Analyze the rates charged to agencies.
3. Modify the RIDE Voucher Program.
4. Perform a comprehensive route analysis to determine if route restructuring and/or a small expansion would improve level of service during peak times.
5. Upgrade / replace the camera surveillance system.
6. Initiate a feasibility study to evaluate the need for a new facility and screen potential sites.
7. Enhanced coordination with surrounding counties.

### 6.2 Implementation Schedule

An implementation schedule for the aforementioned recommendations is provided in the table below. The 'Status' column is designed for the Buncombe County / Mountain Mobility staff's use as a checklist for additional comments as implementation progresses. Activities for the first year are based on a target range of months, while activities for Years 2 – 4 are described in more general terms.

ID	Rec	Action Items	Time Frame	Cost	Potential Funding Stream	Status
1	Increase education and marketing efforts. (Section 4.1.8)	<ul style="list-style-type: none"> <li>Publicizing the following information on Mountain Mobility’s website to better inform and train passengers and contracting agencies: mission statement; policies; ADA information (rather than a link to ART); information about shopping days; and policies for agencies that contract service.</li> <li>Continue to perform in-depth reviews of the website to update, as necessary, information that has changed during the previous 12 months.</li> <li>Facilitate outreach opportunities to educate riders on a periodic basis, both to reinforce the information to long-time riders and to make it available to new riders.</li> <li>Focus marketing efforts on any deviated-fixed route that has lower ridership, thereby increasing revenue and transportation opportunities for new riders.</li> <li>Join “Nextdoor” social network to allow Mountain Mobility to better connect (at no cost) with its neighbors and provide information about transportation services.</li> </ul>	Ongoing	Can be accommodated with existing Mountain Mobility administrative staff resources	N/A	
2	Analyze the rates charged to agencies. (Section 4.1.4)	<ul style="list-style-type: none"> <li>Continue to annually analyze the rates charged to agencies.</li> <li>Increase annually to offset any shortfalls, rather than maintaining rates for multiple years, and to become less reliant on County dollars.</li> </ul>	Ongoing	Can be accommodated with existing Buncombe County Planning staff resources	N/A	

ID	Rec	Action Items	Time Frame	Cost	Potential Funding Stream	Status
3	Modify the RIDE Voucher Program (Section 4.1.7)	<ul style="list-style-type: none"> <li>Consider allowing riders to utilize more than one voucher per ride (based upon prevailing rates charged by private providers in the area).</li> <li>Encourage Buncombe County to revisit and revamp its stipends to reflect current private transportation market rates.</li> <li>Publish rates for areas outside of Asheville city limits but within the County (for example, Weaverville and Black Mountain).</li> </ul>	Begin coordination immediately but no later than second quarter FY2016	\$13,000 for half-time position	Section 5317	
		<ul style="list-style-type: none"> <li>Consider establishing a vendor certification program for small transportation businesses such as the program created and instituted by Wake County. The Wake TRACS website is: <a href="https://waketracs.com/become-a-vendor/">https://waketracs.com/become-a-vendor/</a>.</li> </ul>	FY2017			
4	Perform a comprehensive route analysis (Section 4.1.1)	<ul style="list-style-type: none"> <li>Conduct a study to analyze demand response ridership patterns, trip origins, trips destinations, peak times of service throughout the day, population density, employment, medical and other service centers (shopping, nutrition sites, etc.), Trailblazer Routes.</li> <li>Analyze connectivity to the urban fixed route system and other rural counties.</li> <li>Consider zone routes or an alternative route structure to more effectively serve the general public ridership.</li> <li>Evaluate whether the North Buncombe Trailblazer should be extended to provide service to the Weaverville Park and Ride Lot.</li> </ul>	FY2016	\$45,000 (\$36,000 federal funds and \$9,000 local match)	ADTAP Grant	
5	Upgrade / replace the camera surveillance system	<ul style="list-style-type: none"> <li>Procure the camera surveillance system and software to replace current equipment at the end of useful life.</li> </ul>	FY2018	\$175,000 - \$200,000	Section 5311, Section 5339 (Bus and Bus Facilities), and ADTAP Grant	
6	Initiate a facility feasibility study (Section 2.3.2)	<ul style="list-style-type: none"> <li>Coordinate with NCDOT PTD to begin study to evaluate the need for a new facility and screen potential sites.</li> <li>Set aside local match.</li> </ul>	FY2018	\$100,000 (\$10,000 local match)	Local sources including donations	

ID	Rec	Action Items	Time Frame	Cost	Potential Funding Stream	Status
7	Enhance coordination with surrounding counties (Section 4.2.2 and Section 4.3.2)	<ul style="list-style-type: none"> <li>Have follow up conversations with surrounding counties' systems, confirming established / scheduled trips to Buncombe County.</li> <li>Determine Mountain Mobility's ability to pre-schedule rides on other systems' vehicles.</li> </ul>	Coordination can begin immediately	Can be accommodated by existing Mountain Mobility administrative staff	N/A	
		<ul style="list-style-type: none"> <li>Draft legal agreements for multi-County transports, providing performance expectations, service standards, responsible parties and shared costs. Set assurances that non-County owned equipment, Vehicle Operators, and SOPs, and DOT-mandated regulations are acceptable to Buncombe County.                             <ul style="list-style-type: none"> <li>Compile stipulations requiring another provider to transport County residents, including the fully allocated cost.</li> <li>Determine if the rates are acceptable to surrounding counties.</li> <li>Conduct internal audit at the facilities of bordering counties to resolve concerns regarding equipment, DOT compliance matters, and Operators' performance.</li> </ul> </li> <li>Execute legal agreements by the Counties' officials.</li> </ul>	FY2017	Can be accommodated by Buncombe County Planning and Legal staff	N/A	
		<ul style="list-style-type: none"> <li>Explore a web based system (web portal) where Mountain Mobility can post 'open trips' and another provider would be able to see the post and determine willingness and/or availability to accommodate the trip.                             <ul style="list-style-type: none"> <li>The Asheville urbanized area has a 5310 grant that supports regionalized efforts. Calls for projects are released by the MPO and the funds must be obligated by September 2015. Contact needs to be made to determine whether or not funds can be designated for development of a website.</li> <li>Contact NCDOT-PTD and the FTA to ensure that a website development service is an allowed expense under the terms of the grant.</li> <li>Obtain a contractor (either person or company previously used or via RFQ process) to develop a website.</li> <li>Train administrators and staff to use website.</li> </ul> </li> </ul>	Begin efforts in FY2017 and complete by FY2018	\$150,000 - \$180,000	Section 5310, State and/or Federal Grants	
		<ul style="list-style-type: none"> <li>Support Land of Sky Regional Council application for federal and grant funding sources to establish a regional call center in FY 2019. Contract with the regional call center when appropriate and cost-effective, when established (FY 2020 or later).</li> </ul>	Begin efforts in FY2018 and complete by FY2019	\$150,000 initial capital; \$150,000 - \$175,000 shared annual operating	Section 5310, State and/or Federal Grants	

### 6.3 Financial Plan

A five-year administrative, operations, and capital financial plan has been developed for Mountain Mobility, in the form of a dynamic budgeting model. The model is intended to be a tool for Buncombe County staff to use when anticipating potential expenses and revenues for FY 2015 through FY 2020. The model was developed based on the following:

- Category delineation is based on the Buncombe County accounting codes.
- Data from NCDOT's Operating Statistics was referenced to designate sources as federal, state and local.
- Inflation factors provided by NCDOT were applied.
- FY 2014 Budgeted and Actual are based on Buncombe County's General Ledger Summary (annual period ended 06/30/14).
- FY 2016 Budget is based on the budget that the County Manager is recommending for approval by the BOC and FY 2016 Adjusted is based on recommended budget adjusted as needed based on grant award information not available at budget time.
- Vehicle replacement is based on vehicle inventory data from April 2015.

Expenses are separated by anticipated administrative and operating (A & O) costs, and capital costs. The revenue summary identifies likely funding sources, separated by federal, state and local (i.e. passenger fares, local subsidies, and other revenues) assistance, that may be available to Mountain Mobility.

The model includes the costs to continue providing existing service, in addition to the costs to implement the recommendations and fleet expansion. Recommended improvements have been programmed into the financial plan based on the year presented in the Implementation Schedule (see Section 6.2). Note that expansion vehicles would subject to the STI process.

A summary of the model is shown in Appendix D.

### 6.4 Performance Measures

Mountain Mobility aspires to grow their business and increase effectiveness in providing transportation services. Performance measures are the indicators of progress toward growth and improvement. Recommended performance measures have been incorporated into dynamic budgeting model, and can be used by Mountain Mobility administrative staff as a tool to evaluate metrics.

## 7 PUBLIC OUTREACH

As previously mentioned in Section 2.4, public input is an important aspect of the study process. The following individuals or groups have been contacted for input during the course of this study:

- Passengers:
  - DaVita / Asheville Kidney Center
  - Community Care Partners Adult Day Center
  - Senior Center
  - General public riders
- Participating Agency Staff:
  - Blue Ridge Group Homes
  - Goodwill Industries
  - Community Care Partners Adult Day Center
  - Buncombe County's Council on Aging (COA)
  - NC Division of Vocational Rehabilitation
  - Buncombe County Department of Social Services
- Non-participating Agency Staff:
  - Division of Services for the Deaf and Hard of Hearing
  - Charles George Veterans Administration Medical Center
  - Asheville Buncombe Community Christian Ministries
  - Marjorie McCune Memorial Center
- Limited English Proficiency (LEP), Minority and Low-Income Populations:
  - Catholic Social Services
  - Asheville Buncombe County Christian Ministries
  - Eblen Charities
  - Foster Memorial Seventh Day Adventist Church
  - Nuestro Centro
  - United Way
- Governmental:
  - County Commissioners (two commissioners)
  - LOSRC
  - City of Asheville

To determine how coordination efforts could be enhanced, the following surrounding counties were contacted for feedback: Henderson County; Transylvania County; Graham County; Haywood County; Clay County; Macon County; Yancey County; and Madison County.

Two public outreach sessions were held on April 7, 2015. The morning session was held at the Senior Center (Nutrition Site) in Weaverville, NC. An evening session was held in Downtown Asheville at 100 Court Plaza, Asheville, NC.

The Steering Committee provided input at study milestones. The study team met with the Steering Committee on December 16, 2014 to summarize and discuss Technical Memorandum #1, and on April 7, 2015 to present the findings of Technical Memorandum #2. The study team will meet with the Steering Committee on June 17, 2015 to discuss the recommendations included in this report.