



French Broad River Metropolitan Planning Organization

August 2021









AECOM

Imagine it. Delivered.

CONTENTS

1	Bac	kgro	ound	VII
	1.1	Stud	dy Goals	VIII
2	Exi	sting	Transit Conditions	9
	2.1	Ser	vice Provider Overview	9
	2.1.	.1	Asheville Rides Transit	9
	2.1.	.2	Mountain Mobility – Buncombe County	9
	2.1.	.3	Apple Country Public Transit – Henderson County	10
	2.1.	.4	Haywood Public Transit – Mountain Projects	10
	2.1.	.5	Madison County Transportation Authority	10
	2.2	Ser	vice Provider Comparison	12
	2.2.	.1	Service Hours	12
	2.2.	.2	Fare Structure	12
	2.2.	.3	Ridership	13
	2.2.	.4	Operating Funding	14
	2.2.	.5	Federal and State Funding Administration	15
	2.2.	.6	Capital Funding	16
	2.2.	.7	Governance	16
	2.2.	.8	Regional Coordination	18
3	Der	nogr	aphics and Socioeconomics	19
	3.1	Pop	ulation	19
	3.1.	.1	Projected Population Growth	21
	3.2	Trai	nsit Dependent Populations	21
	3.2.	.1	Minority	21
	3.2.	.2	Poverty	24
	3.2.	.3	Zero Car Households (Vehicle Availability)	26
	3.2.	.4	Disability	28
	3.3	Lim	ted English Proficiency in the FBRMPO	30
	3.4	Emp	oloyment and Commuting Patterns	32
	3.4.	.1	Employment Density	32
	3.5	Lar	gest Employers	34
	3.6	Reg	ional/County Level Commuting Patterns of FBRMPO Residents and Workers	36
	3.6.	.1	Inflow Commutes	36
	3.6.	.2	Outflow Commutes	38
	3.6.	.3	Local Commutes to FBRMPO	40
	3.7	Exis	ting Plans Review	42
1	On	norti	inities and Constraints	45

4.1	Service	45
4.2	Coordination	46
4.3	Fares	47
4.4	Governance	47
4.5	Funding	48
4.6	Partnerships	48
4.7	Benefits of Regional Transit	49
4.7	.1 Social Justice	49
4.7	.2 Traffic Alleviation	50
4.7	.3 Effective Use of Resources	50
4.7	.4 Economies of Scale	50
4.7	.5 Regional Solution for Regional Problem	50
4.7	.6 Formal Coordination Efforts	51
4.7	7.7 Branding	51
4.8	Maximize and Leverage Participation for Grants and Additional Funding	52
4.9	Partnerships	52
4.10	Stakeholder and Public Involvement	52
4.1	0.1 Focus Groups	53
4.1	0.2 Community Ambassadors	53
4.1	0.3 Public Input	53
4.11	Transit Service Options	55
4.1	1.1 Transit Modes	57
4.12	Integration Options Assessment	60
4.1	2.1 Description of Service Integration Options	60
5 Fu	nding Sources	62
5.1	Traditional Funding Sources	62
5.1	.1 Urbanized Area Formula Grant – FTA Section 5307 Program	62
5.1	.2 Rural Formula Program – FTA Section 5311 Program	63
5.1	.3 Bus and Bus Facilities Grant – FTA Section 5339	65
5.1	.4 Capital Investment Grants – FTA Section 5309	65
5.1	.5 Flexible Funding Program – Surface Transportation Program (STP) Funds	65
5.1	.6 Metropolitan Transportation Planning Program – FTA Section 5303 Program	65
5.1	.7 State Maintenance Assistance Program	66
5.2	Other Traditional Sources for Consideration	66
5.2	.1 Enhanced Mobility of Seniors and Individuals with Disabilities Program – FTA Section 5310	66
5.2	.2 Urban Advanced Technology Grant Program	66
5.2	.3 NCDOT PTD Mobility Management Program	67
5.2	.4 NCDOT Urban State Match Program	67

	5.3	Alte	ernative Funding Sources	67
	5.3.	.1	Sales Taxes	67
	5.3.	.2	Vehicle Registration Tax for Transit	68
	5.3.	.3	Vehicle Rental (U-Drive-It Vehicle) Tax	68
	5.3.	.4	Property Tax Levied Through Municipal Service Districts (MSDs)	68
	5.3.	.5	Bond Proceeds	68
	5.4	Re	gional Transit Plan Vision	69
6	Gov	vern	ance and Funding Introduction	70
	6.1	Pe	er Study	70
	6.2	Pe	er Selection	70
	6.3	Sui	nmary of Key Findings and Lessons Learned	72
7	Gov	vern	ance Structures	75
	7.1	Sta	keholder Input: Steering Committee Workshop	75
	7.2	Ор	portunities for Integration: Operating and Administrative Functions	78
	7.3	Re	commended Regional Governance Model	79
8	Ser	vice	Recommendations	80
	8.1	Pro	posed Regional Services	80
	8.2	Cro	ss Jurisdictional Regional Express Routes	80
	8.3	Cro	ss-Jurisdictional Regional Connectivity Options	91
	8.3.	.1	Microtransit	91
	8.3.	.2	Vanpool	91
	8.4	Imp	plement Regional Express Routes	92
	8.4.	.1	Implementation of Regional Express Route Service	93
	8.4.	.2	Implementation of Microtransit Services	93
9	Nev	w Tr	ansit Agency Funding Alternatives	96
	9.1	Tra	ditional Funding Sources	96
	9.2	Re	venue Projection	99
	9.2.	.1	Sales Tax	99
	9.2.	.2	Vehicle Registration Fee.	99
	9.2.	.3	Vehicle Rental Fee	100
1	0 Fur	ndin	g Strategies	101
	10.1	F	unding Package 1	101
	10.2	F	unding Package 2	101
	10.3	F	unding Package 3	102
1	1 Opt	tion	s for Establish a New Regional Transit Operating Entity	104
	11.1	(Option 1: Article 25 Regional Public Transportation Authority	104
	11.2	(Option 2: New Enabling Legislation	105
	11.3	(Option 3: Providing Regional Transit through Intergovernmental Agreements (IGAs)	106

	11.3.1	Comparison of Three Options	106
1	1.4	Recommended Implementation Plan	107
12	Conclu	ısions	111
Аp	pendix /	A – Service Provider Organizational Charts	1
Аp	pendix l	3 – Existing Plans Review	6
	FBRM	PO Coordinated Public Transportation & Human Services Transportation Plan – 2018	8
	Ashevi	le In Motion: City of Asheville Mobility Plan – 2016	10
	FBRM	PO 2045 Metropolitan Transportation Plan – 2020	12
	Ashevi	le Transit Master Plan – 2018	14
	Buncor	nbe County Community Transportation Service Plan – 2015	16
	Hende	rson County, NC 2020 Comprehensive Plan – 2004, Amended 2009	18
	FBRM	PO Comprehensive Transportation Plan – 2008	20
	2030 H	endersonville Comprehensive Plan – 2009	22
	FBRM	PO Congestion Management Process – 2018	23
	NCDO	Г 2040 Statewide Transportation Plan – 2011	25
	NCDO	T Complete Streets Policy and Guidance – 2019	27
	North (Carolina Vision Zero Initiative – 2015	28
	NCDO	T Statewide Regionalization Study – 2012	29
	NCDO	T – Public Transportation Division Strategic Plan – 2018	31
	City of	Asheville Comprehensive Plan: 'Living Asheville' – 2018	33
Аp	pendix (C – Additional Resources and Considerations	35
Αp	pendix I	O – Implementation of Vanpool Service	37

FIGURES

Figure 2-1. Existing Transit Services in the FBRMPO Region	1′
Figure 2-2. Change in Ridership by Provider (2015-2019)	13
Figure 2-3. National Long-Term Ridership Trend	
Figure 2-4. Transit Provider Funding Sources	
Figure 2-5. Regional Transit Transfer Points	
Figure 3-1. Population Density	
Figure 3-2. Minority Density	
Figure 3-3. Poverty	
Figure 3-4. Households with No Vehicles Available	
Figure 3-5. Disabled Population	
Figure 3-6. LEP Populations.	
Figure 3-7. FBRMPO Employment Density	
Figure 3-8. Major Employers	
Figure 3-9. Commuter Flow into FBRMPO by County	
Figure 3-10. Commuter Flow Out of FBRMPO by County	
Figure 3-11. Commuter Flow	
Figure 3-12. Top 15 Commuting Patterns	
Figure 4-1. Public Transportation Options	
Figure 4-2. Service Integration Continuum	
Figure 9-1. Regional Express Route Alignments	
Figure 9-2. Potential North Route Midpoint	
Figure 9-3. Potential North Route Endpoint	
Figure 9-4. Potential East Route Midpoint	
Figure 9-5. Potential East Route Endpoint	
Figure 9-6. Potential South Route Midpoint	
Figure 9-7. Potential South Route Endpoint	
Figure 9-8. Potential West Route Midpoint	
Figure 9-9. Potential West Route Endpoint	
TABLES	
Table 2-1. Service Hours by Provider	11
Table 2-1. Service Hours by Provider	
Table 2-3. Annual Ridership by Provider	
Table 2-4. Service Provider Revenue	
Table 2-5. 5307 Apportionment Formula Allocations After 10% JARC Set Aside	
Table 2-6. Capital Funding Available to the Agencies in the Region	
Table 2-7. Service Provider Organization	
Table 3-1. Population and Population Growth	
Table 3-2. Projected Population Growth	
Table 3-3. Minority Population	
Table 3-4. Poverty Population	
Table 3-5. Zero Car Households	
Table 3-6. Disabled Population	
Table 3-7. Limited English Proficiency	
Table 3-8. FBRMPO Top Employers	
Table 3-9. Other Top Employers	
Table 3-10. Where Employees in Businesses within the FBRMPO Footprint Live, by County	
Table 3-11. Where FBRMPO Residents Work, by County	
Table 3-12. Existing Plans Review	
Table 4-1. Opportunities and Constraints	

Table 4-2. Transit Service Options	55
Table 4-3. Potential Express Routes	58
Table 6-1. Comparison of Governance Models	71
Table 6-2. Peer Agency Characteristics	71
Table 6-3. Peer Agency Research	72
Table 7-1. Integration Opportunities for Each Function	79
Table 9-1. Description of Regional Routes	81
Table 9-2. Operations and Maintenance Costs for Express Route Services - Phase I	93
Table 9-3. Operations and Maintenance Costs for Express Route Services - Phase II	93
Table 9-4. Operations and Maintenance Costs for Microtransit Services	93
Table 9-5. Capital Costs for Regional Services	94
Table 8-1. Potential Traditional Funding Sources	96
Table 8-2. Sales Tax Revenue Potential	99
Table 8-3. Vehicle Registration Fee Revenue Potential	99
Table 8-4. Vehicle Rental Fee Revenue Potential	100
Table 10-1. Vehicle Registration Fee Revenue Potential	101
Table 10-2. Vehicle Rental Fee Revenue Potential	102
Table 10-3. Sales Tax Revenue Potential	103

BACKGROUND

1 Background

The French Broad River Metropolitan Planning Organization (FBRMPO) engaged AECOM to determine the feasibility of establishing regional connectivity in the MPO area. The study includes Buncombe, Haywood, Henderson, and Madison Counties, and the City of Asheville. The need for regional service has been identified by the MPO and its partners as a critical element to respond to regional growth pressures, to provide mobility options to underserved communities that have no access to reliable transportation, to alleviate increasing congestion, and to improve the quality of life across the region.

Currently there are five transit providers serving the urbanized area: Asheville Rides Transit (ART), Mountain Mobility, Apple Country Public Transit, Haywood County Transit, and Madison County Transportation Authority. These agencies primarily provide local service, and several of them facilitate transfers to other systems in a limited way.

This study was initiated with an extensive analysis of existing conditions, including demographic and socio-economic analysis, current transit services governance and operational models, and commuting patterns that were reviewed to identify opportunities and constraints.

This analysis was followed by a comprehensive governance and funding analysis that included a peer review to five regional agencies. Three peer agencies were located in North Carolina and two were non regional. The analysis included a series of workshops with the project stakeholders to determine the most adequate model for the region.

Public involvement was an integral part of the process; agencies, advocacy organizations, stakeholders and the public provided input and feedback during key stages during the development of the study.

The project was guided by the Steering Committee, which was composed of the Land of Sky Regional Agency, the MPO, transit agencies, counties, and city representatives. Recommendations were tailored through frequent meetings and feedback throughout the project's development.

Recommendations were developed in three specific areas, as follows:

Service: the study identified four express routes and five microtransit areas to increase public transportation coverage in the region. Vanpool was also identified as a suitable way to connect people to jobs.

Funding: three funding strategies were developed to offer options to fund the creation and operation of a regional agency.

Governance: a preferred governance model was identified to address the region's specific goals which provides flexibility to grow over time.

Finally, the study provides a high-level implementation plan that the MPO and its partners could follow to consolidate the creation of a Regional Authority.

1.1 Study Goals

The study was guided by the following goals:

- ✓ Evaluate the provision of regional services with a focus on equity
- ✓ Facilitate cross-jurisdictional public transit
- ✓ Enhancement of cross-jurisdictional public transit and connectivity options
- ✓ Improvement of regional coordination
- ✓ Identify additional sources of funding and funding strategies
- ✓ Identify a governance model adequate for the region

EXISTING CONDITIONS

2 Existing Transit Conditions

There are five individual transit providers in the footprint of the FBRMPO offering a combination of fixed route and on-demand transit services to their individual service areas. These providers have different service models and fare structures, as well as different budget requirements and organizational structures. For example, the largest of the individual providers, Asheville Rides Transit, provides fixed route services to nearly two million riders (as of 2019), and has an annual operation budget of \$5.4 million. On the other end of the spectrum, the Madison County Transportation Authority provides on-demand services for just over 20,000 riders and has an annual operating budget of just over \$500,000. The five individual providers are discussed below, and service areas are shown in Figure 2-1.

2.1 Service Provider Overview

This section provides an overview of the following five service providers in the urbanized area: Asheville Rides Transit, Mountain Mobility, Apple Country Public Transit, Haywood Public Transit, and Madison County Transportation Authority.

2.1.1 Asheville Rides Transit

Asheville Rides Transit (ART) provides fixed route bus service within the City of Asheville through 18 local bus routes all operating out of a central station located on Asheland Avenue in downtown Asheville (ART Station). Additionally, one of the routes, Route 170, provides regional service east to the Town of Black Mountain. ART has a total fleet size of 28 vehicles, a service area of 47 square miles, and a service area population of 89,121. ART contracts with RATP Dev USA, to provide transit services.

2.1.2 Mountain Mobility – Buncombe County

Mountain Mobility provides demand response and deviated fixed route service to Buncombe County both outside and inside of the City of Asheville. The service is managed by Buncombe County. Mountain Mobility offers three deviated fixed routes referred to as Trailblazer Routes: Black Mountain, Enka Candler, and North Buncombe. Transit vehicles can deviate off the route by 1/4 mile to pick a customer up from an address. Mountain Mobility also provides ADA Complementary Paratransit Services for the City of Asheville's ART system. Mountain Mobility has a total of 43 vehicles in its fleet and has a service area of 657 square miles (as a result of the demand response area), and a service area population of 238,818. Eligibility is determined by several factors, including where a person lives, age, trip needs (medical, shopping, etc.), Medicaid eligibility, and access to fixed-route bus service, among others. Mountain Mobility contracts with RATP Dev USA to provide transit services.

AECOM 19

2.1.3 Apple Country Public Transit – Henderson County

Henderson County offers transit services through Apple Country Public Transit (ACPT) which provides bus service throughout the City of Hendersonville, Town of Fletcher, and Laurel Park. ACPT has three fixed routes that originate from the Transfer Site, located at the corner of 4th and Grove Street in downtown Hendersonville. ACPT also provides on-demand paratransit services for areas within 3/4 of a mile of one of the fixed routes. There are five vehicles in the ACPT fleet, which includes vehicles for both services. The total service area for ACPT is 39 square miles and the service area population is 71,227. Henderson County contracts with Western Carolina Community Action (WCCA) to provide fixed route and paratransit services. WCCA also provides demand response service for rural areas in Henderson County.

2.1.4 Haywood Public Transit – Mountain Projects

Haywood Public Transit is the transit service provider in Haywood County. As of July 1, 2021, Haywood County became the direct subrecipient of 5307 funds and contracts with Mountain Projects, Inc. to provide services. Haywood Public Transit is an on-demand service with two fixed routes and provides service to the entire county. The east and west routes utilize the Havwood County Department of Social Services building as the transfer area. The east route heads toward Canton, followed by Old Clyde Road to Champion Drive and through downtown. The west route utilizes Old Asheville Highway. Banner Avenue, and travels to Walmart.

There are 20 vehicles in the Haywood Public Transit fleet, which serve a total service area of 555 square miles and a service area population of 62,317. Haywood Public Transit is a division of Mountain Projects, Inc., a community based non-profit organization, founded in 1965 as a Community Action Agency, that provides vital services to the elderly, disadvantaged, and general public in Western North Carolina.

2.1.5 Madison County Transportation Authority

The Madison County Transportation Authority provides transit services in Madison County through on-demand service. Residents in the County can access destinations in Madison County and Buncombe County. Madison County Transportation Authority has 11 vehicles in its fleet, a total service area of 451 square miles, and serves 21,755 residents. Madison County is the direct operator of Madison County Transportation Authority.

Mitchell County Yancey County Madison County Haywood County McDowell County Swain County Buncombe County Rutherford County Henderson County Jackson County Polk County Transylvania County 2.5 5 10 SOUTH CAROLINA Miles **Regional Transit Service Transit System** Demand Response Service Area — Interstate ART **FBRMPO** Boundary - Major Road Apple Country Public Transit **County Boundary** Haywood Public Transit Municipal Boundary Mountain Mobility Data Source: Service Providers

Figure 2-1. Existing Transit Services in the FBRMPO Region

2.2 Service Provider Comparison

The service providers hours, fares structures, and fiscal details are compared below. The data was gathered from the National Transit Database, as well as the providers themselves.

2.2.1 Service Hours

Table 2-1 shows the service hours for each of the service providers by type of service offered. Mountain Mobility, which offers both deviated fixed route and on-demand services, has service hours six days a week including on-demand services on Saturday. ART offers service seven days a week. The three other providers do not offer weekend or evening service.

Table 2-1. Service Hours by Provider

Service Provider	Weekday Fixed Route Service	Weekend Fixed Route Service	Weekday On- demand Service	Weekend On- demand Service
Asheville Rides Transit	5:30 AM - 10:30 PM	6:30 AM - 1:00 AM (Sa) 7:30 AM - 6:30 PM (Su)	N/A	N/A
*Mountain Mobility - Buncombe County	5:50 AM - 7:45 PM	5:50 AM - 7:45 PM (Saturday only)	5:30 AM - 7:30 PM	5:30 AM - 7:30 PM (Saturday only)
Apple Country Public Transit - Henderson County	6:30 AM - 6:30 PM	N/A	6:30 AM - 6:30 PM	N/A
Haywood Public Transit - Mountain Projects	N/A	N/A	6:00 AM - 5:30 PM	N/A
Madison County Transportation Authority	N/A	N/A	8:00 AM - 4:30 PM	N/A

^{*}Mountain Mobility provides a deviated fixed route

2.2.2 Fare Structure

Fares for the various service providers are shown in **Table 2-2**. All of the providers, except for ART, require cash payments to drivers (no credit accepted). ART also requires cash payments to drivers on the bus, but also sells monthly passes, annual passes, and discounted passes inperson at the ART Station by cash or credit card.

Table 2-2. Fare Structure by Provider

Service Provider	Fare (One-way)	Discount Fare	Monthly pass	Annual Pass
Asheville Rides Transit	\$1.00	\$0.50	\$20.00	\$220.00
Mountain Mobility - Buncombe County	Fare Free and Determined by Eligibility Specialist			
Apple Country Public Transit - Henderson County	\$0.75	\$0.35	\$ 15.00	N/A
Haywood Public Transit - Mountain Projects	\$3.00	N/A	N/A	N/A
Madison County Transportation Authority	\$2.50 - \$6.00 depending on destination	N/A	N/A	N/A

ART discount fare eligibility: Age 65+, disabled individuals, Medicare recipients, students (age 6-19) ACPT discount fare eligibility: Age 65+, disabled individuals

Mountain Mobility fares are fare free for deviated fixed route service and fare free to \$3 depended on eligibility specialist. They do not offer a discount fare, monthly pass, or annual passes. They do allow the purchase of fare media (tickets) in addition to cash payments to drivers.

2.2.3 Ridership

Table 2-3 shows the ridership data for all five of the transit service providers in the FBRMPO footprint. Annual ridership across the five individual service providers, with the exception of ART, has generally fallen over the past five years of available data, although even ART is down from its ridership high in 2016. The region's combined ridership on all services increased 24.9 percent between 2015 and 2019. However, as shown in **Figure 2-2**, all of the increase can be attributed to growth in ART ridership, with the other four providers having lost riders during the same time period.

ART ridership growth of 32 percent was mostly due to a change in the system to process ridership, using the Automated Passenger Counters (APC) instead of the fare box system. This change was approved by the National Transit Database (NTD) and the Federal Transit Administration (FTA). Since ridership was captured by automated systems, the accuracy increased significantly from 2015 and subsequent years.

Service Provider	2015	2016	2017	2018	2019
Asheville Rides Transit	1,458,306	2,135,879	2,125,214	1,964,651	1,978,720
Mountain Mobility - Buncombe County	165,382	158,940	146,079	131,689	145,386
Apple Country Public Transit - Henderson County	110,611	100,963	90,829	76,541	74,895
Haywood Public Transit - Mountain Projects	39,992	39,649	38,132	31,925	26,926
Madison County Transportation Authority	23,892	15,949	18,332	18,569	20,780
TOTAL	1,798,183	2,451,380	2,418,586	2,223,375	2,246,707
Source: National Transit Databas	se, Mountain Mob	oility, and Madiso	n County		

Figure 2-2. Change in Ridership by Provider (2015-2019)



Source: National Transit Database, Mountain Mobility, and Madison County

The change in ridership mirrors the national trend of stagnant or declining ridership in recent years (see **Figure 2-3**). This trend has accelerated in the past few years, with most systems – and bus

transit in particular – experiencing steady declines in ridership, despite a historically good economy. In the absence of the COVID 19 pandemic, there is no reason to believe that this attenuation of ridership would have stopped. With the introduction of the COVID 19 pandemic, however, ridership trends are being substantially disrupted. There are several causes for ridership declines including a decrease in fuel costs and increased availability of auto loans (which has made personal vehicle ownership more accessible), and increased competition from transportation network companies (TNC) such as Uber and Lyft which can be more convenient for users. However, according to a 2017 report by the American Public Transit Association (APTA) (Public Transportation's Impact on Rural and Small Towns) ridership decreases in rural areas is, in part, a result of declining population in rural areas.

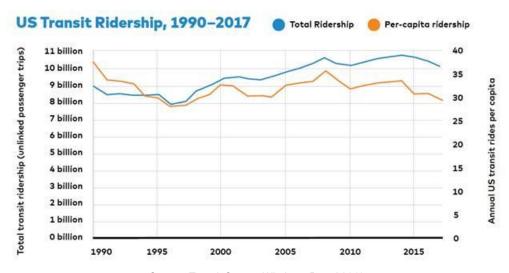


Figure 2-3. National Long-Term Ridership Trend

Source: Transit Center, Who's on Board 2019

2.2.4 Operating Funding

For all the service providers, the majority of the revenues for service comes from local sources, with a smaller amount coming from farebox, Federal, and State sources. **Table 2-4** shows the breakdown in revenue for the service providers by source, including farebox, federal, state, and local sources.

Table 2-4	Sarvica	Provider	Ravanua

Funding Source	Asheville Rides Transit	Mountain Mobility - Buncombe County	Apple Country Public Transit - Henderson County	Haywood Public Transit - Mountain Projects	Madison County Transportation Authority
Farebox	\$583,455	\$91,446	\$51,031	\$10,293	*
Federal	\$1,552,642	\$373,364	\$368,373	\$141,135	\$93,840
State	\$1,122,920	\$430,313	\$187,722	\$190,264	\$120,994
Local**	\$3,942,085	\$2,729,723	\$693,789	\$309,436	\$209,986
TOTAL	\$7,201,102	\$3,624,846	\$1,300,915	\$651,128	\$424,820

^{* -} Not reported in NCDOT Opstats

Source: 2019 NCDOT OpStats

^{** -} Local funds are comprised of other non-DOT funds as well

Figure 2-4 shows an alternative way of looking at the same information. The graph shows the breakdown of revenue for the service providers by percentage of total revenue (note that percentages of less than 5 percent are not labeled). The graphic shows the importance of a diverse pool of local, state, and federal funds required to operate the transit systems. All five of the service providers rely on these funds for most of their revenue. It also reveals that the farebox revenue as a percentage of total revenue is only notable for ART (8 percent). The other providers receive less than five percent of their revenues from the farebox.

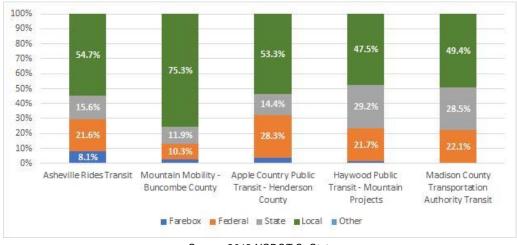


Figure 2-4. Transit Provider Funding Sources

Source: 2019 NCDOT OpStats

2.2.5 Federal and State Funding Administration

The FTA provides federal funds to urbanized areas for transit capital and operating assistance and for transportation-related planning through the distribution of 5307 funds. An urbanized area is an incorporated area with a population of 50,000 or more that is designated as such by the U.S. Department of Commerce, Bureau of the Census. The City of Asheville is the designated recipient of regional 5307 funds. The FBRMPO and its partners decided to allocate ten percent of the 5307 funds for Job Access and Reverse Commute (JARC) activities, which are sub-allocated among the City of Asheville, Buncombe County, Haywood County, and Henderson County based on an adopted formula within a competitive process. **Table 2-5** shows the distribution of 5307 funds.

Table 2-5. 5307 Apportionment Formula Allocations After 10% JARC Set Aside

Year	City of Asheville	Buncombe County	Haywood County	Henderson County
1st year (State FY 2018)	66.6%	9.8%	5.4%	18.2%
2nd year (State FY 2019)	54.6%	19.2%	6.9%	19.3%
3rd year (State FY 2020)	42.6%	28.6%	8.3%	20.4%

 $Source: {\it https://www.buncombecounty.org/common/Commissioners/20200721/CARES\%20Act\%20Funds\%20more\%20info.pdf}$

Asheville is also the designated recipient of FTA Section 5310 funds and is responsible for the overall administration of the 5310 program, which is intended to meet the transportation needs of older adults and people with disabilities when the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs. The FBRMPO is responsible for the planning process and grantee selection and coordinates the application process. Federal funds are also available through FTA Section 5311 funds which are provided for rural areas with populations of

less than 50,000. These funds are provided to states, which in turn, distribute the funds by county. Systems that provide demand response also have access to FTA Section 5310 funds to support transportation for older adults and people with disabilities.

The City of Asheville originally received assistance from the state through the State Maintenance Assistance Program, designed to help funding service operations in urban areas. This funding source ended in 2020. Buncombe County, Henderson County, Haywood County, Madison County, WCCA and, Mountain Projects all received NCDOT grants of various kinds (including Section 5311, ADTAP, and/or 5310 funds to support costs).

2.2.6 Capital Funding

The capital expenses for fixed route agencies in the region are typically funded through FTA Sections 5307 and 5339. Under these sections, the federal government contributes 80 percent and the local agency 20 percent; this 20 percent could be reduced by participation of the state by 10 percent, as has been the case in the past with vehicle acquisition. Technology and infrastructure acquisition usually are 80 percent federal and 20 percent local, though there have been exceptions when the state has contributed 80 percent and the local agency contributes 20 percent.

The agencies that operate demand response systems outside of the urban area have several funding sources available, such as FTA Sections 5310, 5311, and 5339, administered by the state for capital expenditures. Under FTA Section 5339, the federal government contributes 80 percent, the state contributes 10 percent, and the remaining 10 percent comes from local funds (see **Table 2-6**).

Table 2-6. Capital Funding Available to the Agencies in the Region

Provider	FTA 5307 Funds	FTA 5339 Funds	FTA 5311 Funds	FTA 5310 Funds	FTA 5339 Administered by the State
Asheville Rides Transit	Х	Х			
Mountain Mobility - Buncombe County	Χ	Х	Х	Х	
*Apple Country Public Transit - Henderson County	Х	Х	Х	Х	Х
Haywood Public Transit - Mountain Projects	Х	X	X	Х	Х
Madison County Transportation Authority Transit			X	Х	X

^{*5311} funds will not be available for Apple Country Public Transit after FY2023

Source: AECOM, Transit agencies financial information

2.2.7 Governance

Understanding the organizational structure of the individual service providers can help provide insight into what resources might be available. Organizational structures of the various providers are included in Appendix A. All providers separate their functions in planning and operations. The planning functions are departments or divisions within their respective governments, with Mountain Mobility, Apple Country Public Transit, Haywood Public Transit, and Madison County Transportation Authority being a part of their county government structure, and ART planning being a division in the City of Asheville. Madison County is the only provider that directly operates transit, all other providers contract service out either to management companies or non-profits.

ART is the only provider that is unionized. **Table 2-7** outlines the structure of the five transit service providers.

Table 2-7. Service Provider Organization

	Plar	nning	Admi	nistration	Ор	eration	Mair	itenance	Lal	bor
Provider	In House	Contracted Out	In House	Contracted Out	In House	Contracted Out	In House	Contracted Out	Union	Non- Union
Asheville Rides Transit	Х			X		X		Х	Х	
Mountain Mobility - Buncombe County	X			Х		Х		Х		Х
Apple Country Public Transit - Henderson County	Х			X		X		Х		Х
Haywood Public Transit - Mountain Projects	Х			Х		X		Х		Х
Madison County Transportation Authority Transit	Х		Х		Х		Х			Х

Source: Transit agencies

2.2.8 Regional Coordination

While the various service providers operate independent from one another, there is still some regional coordination among the agencies. This includes cross-boundary service and inter-agency transfers, which allows riders some regional mobility. The regional connections, as well as the mechanisms used for regional coordination are outlined below and are displayed in **Figure 2-5**.

Cross-boundary Services:

<u>ART</u>: Route 170, provides regional service east to the Town of Black Mountain.

<u>Haywood Public Transit</u> provides transportation services to residents who travel to the City of Asheville for dialysis.

Madison County Transportation Authority provide on-demand service to destinations in Madison County and in the surrounding counties of Buncombe, Mitchell, Avery, and Yancey Counties. Madison County also provides medical trips to Asheville for dialysis.

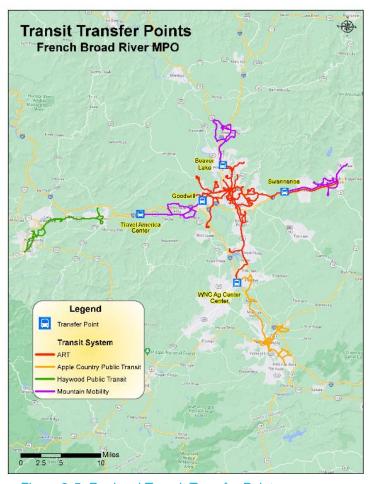


Figure 2-5. Regional Transit Transfer Points

Inter-agency Transfers:

Transportation Services for Haywood County residents are available through coordination between Haywood Public Transit and Mountain Mobility. Haywood Public Transit provides connections to and from the Enka-Candler Trailblazer Route operated by Mountain Mobility.

Transfers are available between ART fixed routes and Mountain Mobility deviated fixed-route services and between ART and Apple Country, near the airport.

Existing Regional Coordination Mechanisms:

The FBRMPO Technical Coordinating Committee and the Regional Transit Operators group meet regularly to facilitate bilateral coordination between operators or local governments.

Currently, coordination is limited to operations and to funding allocation discussions. There is no coordination related to other essential functions such as procurement, fare structures, or equipment acquisition.

3 Demographics and Socioeconomics

Current demographic and socioeconomic characteristics of the population, employment, and travel patterns in and around the FBRMPO region are discussed in this section. Sources of data for the analysis included the US Census Bureau American Community Survey (ACS) 5-year estimates for 2014-2018, the 2010 Decennial Census, and the US Census Bureau Longitudinal-Employer Household Dynamics (LEHD) dataset for 2017. The LEHD dataset, produced through the Local Employment Dynamics Partnership, provides more detailed information on workers and work locations based on employer administrative records.

3.1 Population

Table 3-1 shows current populations and population growth for the four counties within the FBRMPO footprint, and the state of North Carolina in 2010 and 2018, which represents the most recent decennial census (2010), and most recent population estimates (2018) provided by the Census Bureau. According to these datasets, both Buncombe and Henderson Counties have met or exceeded the state's growth rate both in terms of percentage growth and the annualized growth rate for the period. Haywood County grew at a slower rate than Buncombe and Henderson, but still added 5 percent to its population. Finally, Madison County, which is the most rural in nature of all four of the counties, added 3.1 percent to its total population.

Table 3-1. Population and Population Growth

Geography	Census 2010 Population	2018 Population Estimate	Difference	Percent Change	Annualized Growth Rate
Buncombe County	238,318	254,474	16,156	6.8%	0.7%
Madison County	20,764	21,405	641	3.1%	0.3%
Henderson County	106,740	113,625	6,885	6.5%	0.6%
Haywood County	59,036	61,971	2,935	5.0%	0.5%
North Carolina	9,535,483	10,155,624	620,141	6.5%	0.6%

Source: US Census Bureau, American Community Survey 5-year Estimates (2013-2017), Decennial Census (2010)

Figure 3-1 shows the population density within the four-county region by census block group. Population density is low throughout most of the region due to the rural nature of the area. Population within the region is generally concentrated in and around Asheville and Hendersonville, and in the municipalities and communities along I-40 and I-26. The densest areas of the region are in Asheville, to the north and west of downtown, and just south of I-40. Other areas of relative density are in and around downtown Hendersonville and Waynesville. All the areas with densities above 250 people per square mile in the four-county region are within the boundaries of the FBRMPO.

Mitchell County County Madison County **Buncombe** County County McDowell Swain County Rutherford County Henderson County County Polk County Transylvania County 2.5 5 PS: JABRE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community Miles **Population Density By Block Group** Population per Square Mi 1,000 - 1,999 FBRMPO Boundary = Interstate 0 - 250 2,000 - 3,999 **County Boundary** – Major Road 251 - 999 4,000 - 5,259 Municipal Boundary Data Source: US Census American Community Survey 2014-2018 5-year estimates

Figure 3-1. Population Density

3.1.1 Projected Population Growth

Table 3-2 shows the projected population growth in the four-county region within the FBRMPO footprint and the state through 2039. According to the data from the North Carolina Office of State Budget and Management, Buncombe County is expected to grow by 35.9 percent between 2010 and 2039, slightly exceeding the growth rate of the state (35.5 percent). Madison and Henderson counties are expected to grow slightly less than the state but will still grow by over 30 percent during the time period. Haywood County is projected to grow by 23.8 percent.

Table 3-2. Projected Population Growth

Geography	Census 2000	Census 2010	2020 Projection	2030 Projection	2039 Projection	2010 to 2039 Growth	2010 to 2039 Growth
Buncombe County	206,315	238,318	267,046	296,961	323,879	85,561	35.9%
Madison County	19,636	20,764	22,843	25,251	27,420	6,656	32.1%
Henderson County	89,182	106,740	119,730	132,035	140,668	33,928	31.8%
Haywood County	54,033	59,036	63,813	68,680	73,061	14,025	23.8%
North Carolina	8,049,313	9,535,483	10,630,691	11,836,070	12,919,921	3,384,438	35.5%

Source: North Carolina Office of State Budget and Management

3.2 Transit Dependent Populations

Demographic and socioeconomic statistics are important in transit planning to understand the potential transit markets that exist in an area. Transit dependency is frequently related to demographic factors, such as minority populations, poverty rates, vehicle availability, and disability.

3.2.1 Minority

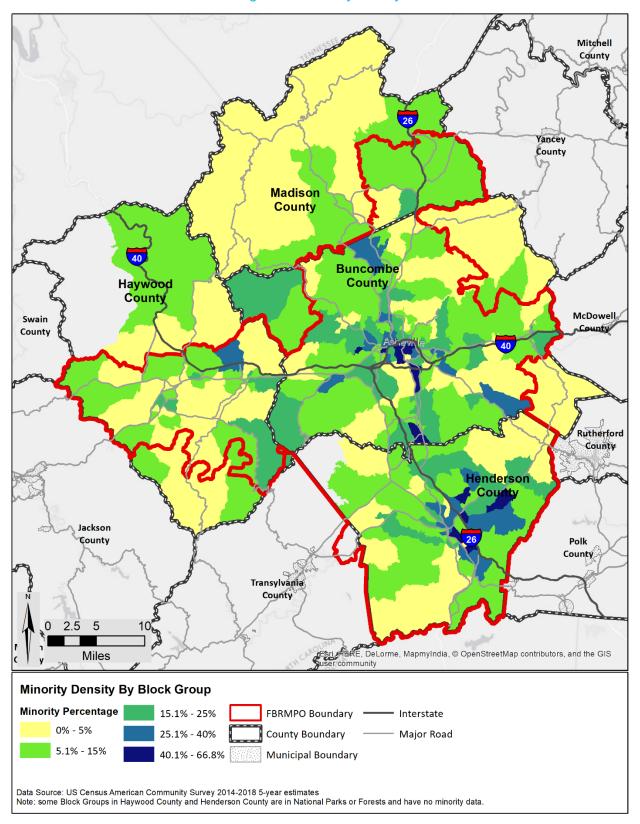
According to the Census, minority populations include all races that are non-white or Hispanic. Minority population for the FBRMPO and the four-county region, as well as for the entire state is shown in **Table 3-3**. Overall, the minority population in the region is much lower than the state, with Henderson County having the highest rate of minorities at 16.8 percent, which is nearly 20 percent lower than North Carolina. Buncombe County had the second highest percentage of minorities (16.4 percent) followed by Haywood (7.1 percent) and Madison (5.9 percent) counties. Within the FBRMPO footprint, the minority population is 15.7 percent of the total population. **Figure 3-2** shows the percent of minority populations by block group for the region and the FBRMPO. Most minority concentrations are centered around the cities of Asheville and Hendersonville.

Table 3-3. Minority Population

Geography	Total Population	White, Non-Hispanic		Minority Po	pulation*		
		#	%	#	%		
FBRMPO	318,980	268,857	84.3%	50,123	15.7%		
Buncombe County	254,474	212,773	83.6%	41,701	16.4%		
Madison County	21,405	20,140	94.1%	1,265	5.9%		
Henderson County	113,625	94,557	83.2%	19,068	16.8%		
Haywood County	60,433	56,133	92.9%	4,300	7.1%		
North Carolina	10,155,624	6,433,039	63.3%	3,722,585	36.7%		
* Minority population includes all races that are non-white or Hispanic.							

Source: US Census Bureau, American Community Survey 5-year Estimates (2014-2018), Table B03002, "Hispanic or Latino Origin by Race."

Figure 3-2. Minority Density



3.2.2 Poverty

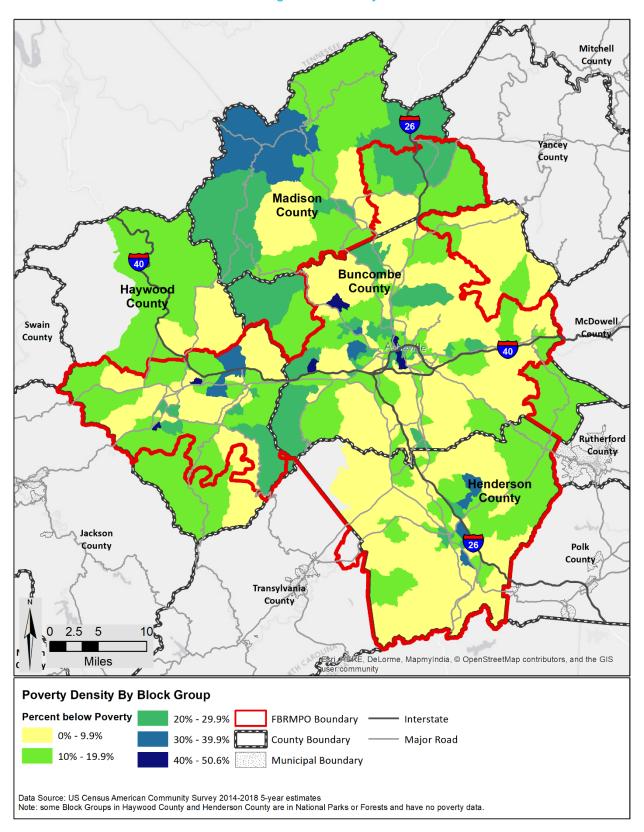
Income level plays a large role in the modes of transportation available to an individual or a household. According to the ACS, in 2018 the poverty threshold for an individual, which is the dollar amount the Census Bureau uses to determine a person's poverty status, was \$12,784. Poverty thresholds are also determined for households based on household size. Poverty rates in the region and FBRMPO are shown in **Table 3-4**. Apart from Madison County, all the counties within the region, as well as the FBRMPO footprint have lower rates of poverty than the state. Henderson County has the lowest rate of poverty in the region at 10.6 percent. Madison County, on the other hand, has the highest poverty rate at 17.6 percent, which is over two percentage points higher than the state. **Figure 3-3** shows the poverty rates by block groups in the region, including within the FBRMPO footprint. Generally, pockets of low-income populations are dispersed throughout the region. Block groups with the highest rates of poverty are in and around downtown Asheville and in northwest and west Buncombe County, as well as north of the town of Clyde.

Table 3-4. Poverty Population

Geography	Population for whom Poverty Status is Determined	Below Poverty Level		
		#	%	
FBRMPO	311,919	39,310	12.6%	
Buncombe County	248,033	30,609	12.3%	
Madison County	20,337	3,586	17.6%	
Henderson County	112,230	11,926	10.6%	
Haywood County	59,656	8,304	13.9%	
North Carolina	9,881,292	1,523,949	15.4%	

Source: US Census Bureau, American Community Survey 5-year Estimates (2014-2018), Table C17002, "Ratio of Income to Poverty Level in the Past 12 Months."

Figure 3-3. Poverty



3.2.3 Zero Car Households (Vehicle Availability)

Vehicle availability is also a key factor to determining those who may rely on public transportation services. Although income can play a key factor in vehicle ownership, there are other various reasons for not having access to a vehicle, including age, physical or mental limitations, or choice. The ACS gathers data on households with no vehicle available. According to the ACS, vehicles refer to passenger cars, vans, and pickup trucks kept at home and available for use by members of the household. **Table 3-5** shows the percentage of households with no vehicles available by block group within the region and the FBRMPO footprint. According to the ACS data, Buncombe County has the highest rate of households with no vehicles available at 5.1 percent. This is lower than the state rate of 5.9 percent. The remaining counties, as well as the FBRMPO, had rates of households with no vehicles of less than 5 percent. Many of the block groups with the highest rates of households with no vehicles are in downtown Asheville and to the east of downtown Asheville. There are other concentrations in and around Hendersonville and in southern Buncombe County, near the Asheville Regional Airport. Households with no vehicles available by block group are shown in **Figure 3-4**.

Table 3-5. Zero Car Households

Geography	Occupied Housing Units	No Vehicle Available		
		#	%	
FBRMPO	134,787	6,616	4.9%	
Buncombe County	107,093	5,428	5.1%	
Madison County	8,452	398	4.7%	
Henderson County	48,281	2,267	4.7%	
Haywood County	26,336	1,176	4.5%	
North Carolina	3,918,597	231,826	5.9%	

Source: US Census Bureau, American Community Survey 5-year Estimates (2014-2018), Table B25044, "Tenure by Vehicles Available."

Mitchell County Yancey County **Madison** County Buncombe County **Haywood** County McDowell Swain County Rutherford County Henderson County County Polk County Transylvania County 2.5 हिंद्रा महिल्ल, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community Miles Zero Car Households by Block Group No Vehicles Available 5.1% - 10% FBRMPO Boundary Interstate 0% - 2.5% 10.1% - 25% County Boundary Major Road 2.6% - 5% 25.1% - 53.9% Municipal Boundary Data Source: US Census American Community Survey 2014-2018 5-year estimates
Note: some Block Groups in Haywood County and Henderson County are in National Parks or Forests and have no vehicle ownership data.

Figure 3-4. Households with No Vehicles Available

3.2.4 Disability

The percent of the population that is classified as having a disability can also be a key factor in determining those who may rely on public transportation services. The Census Bureau collects data on disability primarily through the ACS, the Survey of Income and Program Participation (SIPP), and the Current Population Survey (CPS). Questions related to disability cover six disability types:

- Hearing difficulty Deaf or having serious difficulty hearing.
- Vision difficulty Blind or having serious difficulty seeing, even when wearing glasses.
- Cognitive difficulty Due to a physical, mental, or emotional problem, having difficulty remembering, concentrating, or making decisions.
- Ambulatory difficulty Having serious difficulty walking or climbing stairs.
- Self-care difficulty Having difficulty bathing or dressing.
- Independent living difficulty Due to a physical, mental, or emotional problem, having difficulty doing errands alone such as visiting a doctor's office or shopping.

Respondents who report any one of the six disability types are considered to have a disability.

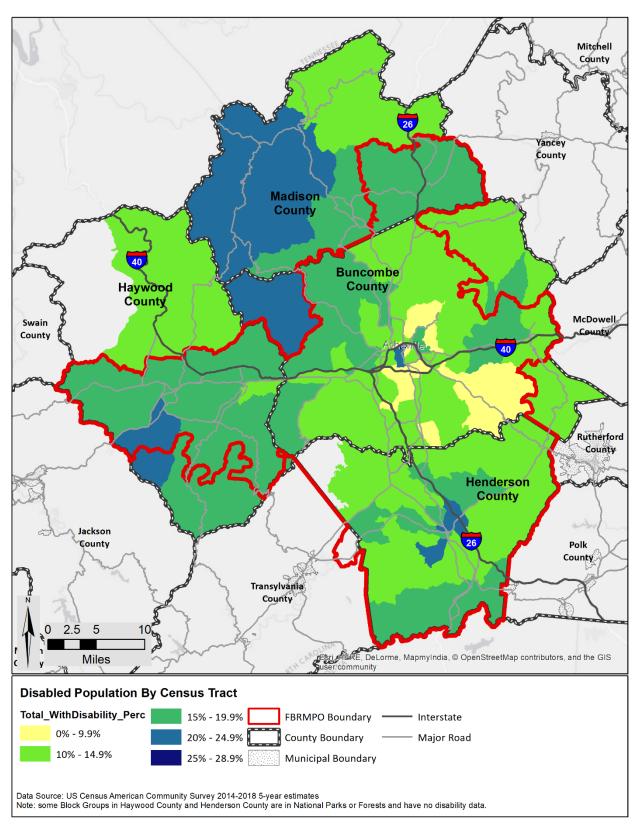
Disability is reported at the census tract level, and Table 3-6 shows the percentages of disabled persons by census tract for the region and the FBRMPO footprint. The highest rate of disabled population is within Haywood County (17.6 percent), which has a disabled rate 4 percentage points higher than the statewide rate (13.6 percent). Madison (16.8 percent) and Henderson (14.9 percent) counties also had higher disability rates than the state, while Buncombe County had the same rate as the state at 13.6 percent. Overall, the FBRMPO rate of disabled population was slightly higher than the statewide rate at 14.6 percent. Figure 3-5 shows the location of disabled populations by census tract in the region and in the FBRMPO footprint. Disabled populations are concentrated around downtown Asheville and Hendersonville, as well as in the vicinity of Waynesville. Concentrations in Madison County and northwestern Buncombe County are located outside of the FBRMPO footprint.

Table 3-6. Disabled Population

Geography	Civilian Noninstitutionalized Population	Persons with Disability	
		#	%
FBRMPO	418,043	60,887	14.6%
Buncombe County	250,737	34,184	13.6%
Madison County	21,170	3,566	16.8%
Henderson County	112,521	16,810	14.9%
Haywood County	59,959	10,530	17.6%
North Carolina	9,952,031	1,350,533	13.6%

Source: US Census Bureau, American Community Survey 5-year Estimates (2014-2018), Table B18101, "Sex by Age by Disability Status."

Figure 3-5. Disabled Population



3.3 Limited English Proficiency in the FBRMPO

Limited English Populations (LEP), or populations above the age of 18 who identify as speaking English "Less than Very Well" in the American Community Survey, are shown in **Table 3-7**. In general, there are fewer LEP populations in the FBRMPO footprint and in the four-county region than in the state. One notable exception is the higher rate of "Other Indo-Euro" language speakers who live in Buncombe County (0.6 percent) compared to the state rate (0.5 percent).

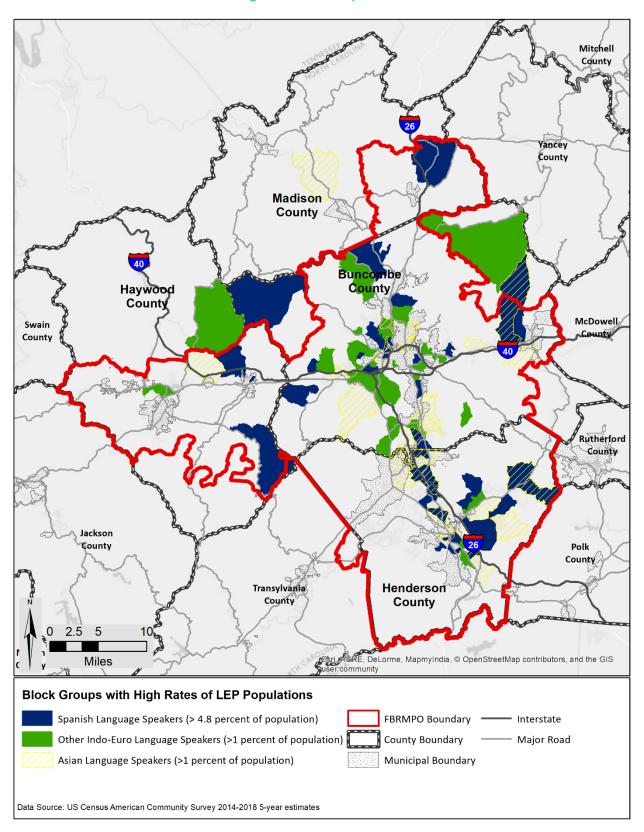
Table 3-7. Limited English Proficiency

	Total Adult	Primary l	_anguag	je Group d	of Perso Very		peak En	glish Less	than
Geography	Population, 18 years	Spani	sh	Other I Eur		Asian/P	acific	Oth	er
	and older	#	%	#	%	#	%	#	%
FBRMPO	257,691	6,092	2.4%	1,290	0.5%	1,230	0.5%	169	0.1%
Buncombe County	206,161	4,780	2.3%	1,272	0.6%	1,044	0.5%	95	0.0%
Madison County	17,523	91	0.5%	7	0.0%	28	0.2%	5	0.0%
Henderson County	91,623	2,931	3.2%	209	0.2%	605	0.7%	62	0.1%
Haywood County	49,364	572	1.2%	43	0.1%	38	0.1%	74	0.1%
North Carolina	7,863,008	269,811	3.4%	42,001	0.5%	59,555	0.8%	15,278	0.2%

Source: US Census Bureau, American Community Survey 5-year Estimates (2014-2018), Table B16004, "Age by Language Spoken at Home by Ability to Speak English for the Population 5 Years and Over."

Figure 3-6 shows the location of block groups with a high rate of LEP populations. A high rate of LEP populations were determined to be block groups with twice the rate of those populations than that of the FBRMPO (for example block groups with 4.8 percent of Spanish language speaking residents who speak English less than very well).

Figure 3-6. LEP Populations



3.4 Employment and Commuting Patterns

The trip to work is often the most frequent trip taken by many people; therefore, employment characteristics are important factors in the transportation and transit discussion. Large employment centers are common destinations for significant numbers of work-related trips, which make these locations important to accessing transit service.

3.4.1 Employment Density

As shown in **Figure 3-7**, employment density within the FBRMPO region is concentrated around the City of Asheville, with smaller concentrations around the cities of Hendersonville and Waynesville. Employment is also concentrated around highway corridors such as along the I-40 and I-26 corridors, and along US 25 (Hendersonville Road) in Buncombe County.

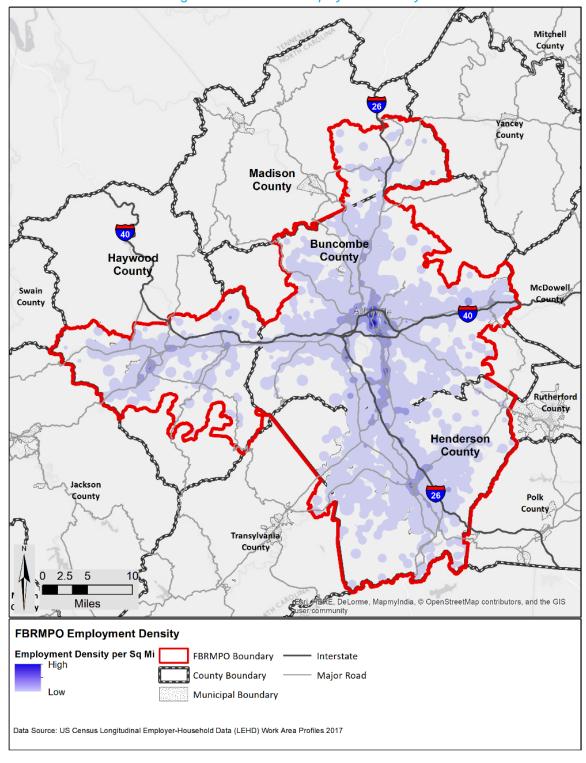


Figure 3-7. FBRMPO Employment Density

3.5 Largest Employers

Data for the largest employers within the FBRMPO footprint was obtained from the FBRMPO and supplemented with data from the North Carolina Department of Commerce. The FBRMPO provided a shapefile of top employers with the specific location of employers in the footprint. **Table 3-8** shows the ten largest employers and **Figure 3-8** shows the location of all top employers within the FBRMPO. Large employers are generally located in Asheville and other municipalities, and along the I-40 and I-26 corridors. The largest employers include hospitals and other care facilities, the Biltmore Estate, as well as Asheville Buncombe Technical College, and Ever Green Packaging in Canton. The Department of Commerce data includes a summary of employment data by employers and helps round out who the major employers are in the area. For example, while an individual school may have 100 employees, the overall school system may have over a thousand employees in all the schools in the county. These employers are also identified in **Table 3-9**.

Table 3-8. FBRMPO Top Employers

Company Name/Employer	City	Total Employees	Class
Mission Hospitals	Asheville	7,000	Private Sector
VA Medical Ctr-Asheville	Asheville	2,300	Public Sector
Biltmore Estates	Asheville	2,000	Private Sector
Ingles Markets Inc	Asheville	1,449	Private Sector
Asheville-Buncombe Technical	Asheville	1,400	Public Sector
Margaret Pardee Memorial Hospital	Hendersonville	1,400	Private Sector
Park Ridge Health	Fletcher	1,250	Private Sector
Community Carepartners, Inc	Asheville	1,200	Private Sector
Park Ridge Health	Fletcher	1,190	Private Sector
Ever Green Packaging	Canton	1,186	Private Sector

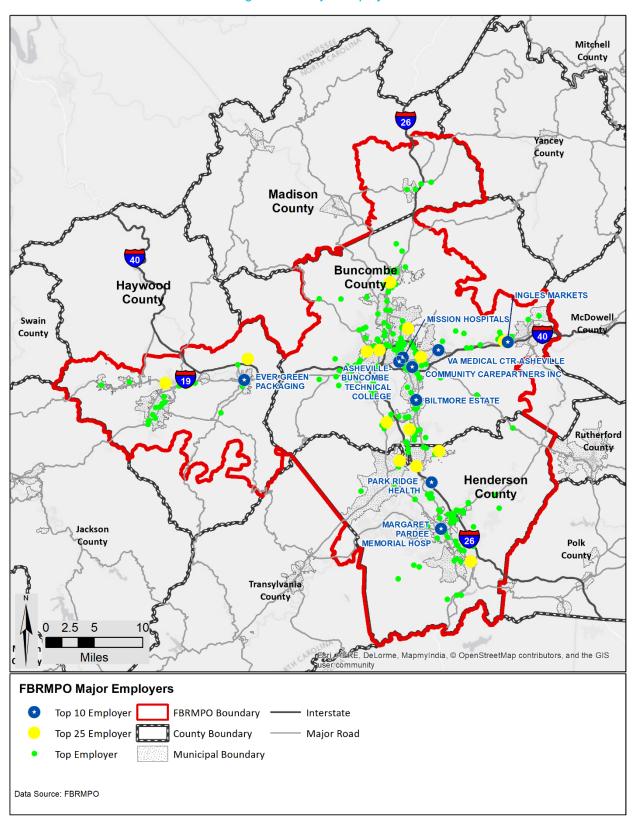
Source: FBRMPO

Table 3-9. Other Top Employers

Employer	County	Total Employees
Buncombe County Board of Education	Buncombe	1000+
County of Buncombe	Buncombe	1000+
City of Asheville	Buncombe	1000+
Haywood County Consolidated Schools	Haywood	1000+
Henderson County Board of Public Education	Henderson	1000+

Source: NC Department of Commerce

Figure 3-8. Major Employers



3.6 Regional/County Level Commuting Patterns of FBRMPO Residents and Workers

Commuting characteristics can help in understanding regional travel patterns and travel choices. This section provides information about local commutes at a county level into and out of the FBRMPO, and the subsequent section describes commutes within the FBRMPO.

3.6.1 Inflow Commutes

Commuting characteristics influence regional travel patterns and can help providers better understand travel choices. **Table 3-10** below and the following figure (**Figure 3-9**) show where workers in the FBRMPO footprint live. Most of the workers within the FBRMPO footprint come from Buncombe County with the remaining three counties within the region rounding out the top four, and accounting for a total of 73.5 percent of the total workers. The remaining 26.5 percent of the total workers commute to jobs within the FBRMPO footprint from counties outside the FBRMPO region.

Table 3-10. Where Employees in Businesses within the FBRMPO Footprint Live, by County

County	#	%
Total Primary Jobs	151,398	100.0%
Buncombe County, NC	67,994	44.9%
Henderson County, NC	26,065	17.2%
Haywood County, NC	13,565	9.0%
Madison County, NC	3,676	2.4%
Mecklenburg County, NC	2,769	1.8%
Transylvania County, NC	2,625	1.7%
McDowell County, NC	2,559	1.7%
Rutherford County, NC	1,777	1.2%
Jackson County, NC	1,665	1.1%
Cleveland County, NC	1,493	1.0%
All Other Locations	27,210	18.0%

Source: US Census Bureau, on the Map Application, LEHD Origin-Destination

Alleghany Ashe County Surry County County Watauga Wilkes County County Yadkin County Avery County County Caldwell County Alexander Madi County County Buncomb Iredell County, NC County McDowell Burke Haywood County, NC County Catawba County, NC County 2,559 13,565 County Haywood Lincoln County Cleveland derson Rutherford County, NC **Henderson** County County, NC Cleveland Jackson 2,769 vania County County, NC County, NG County, NC 1,777 County enburg 1,493 County Transylvania County, NC 2,625 Union County 12.5 25 50 Esri, HERE, DeLorme, MapmyIndia, @ OpenStreetMap contributors, and the GIS Miles Commuter flow into FBRMPO Top 10 Counties Where FBRMPO FBRMPO Boundary -Workers Live County Boundary ---Data Source: US Census Longitudinal Employer-Household Data (LEHD) Work Area Profiles 2017

Figure 3-9. Commuter Flow into FBRMPO by County

3.6.2 Outflow Commutes

Table 3-11 below and **Figure 3-10** show which county FBRMPO residents commute to for work, regionally. Most commuters (a total of 74.2 percent) are commuting to jobs in either Buncombe, Henderson, or Haywood county. A much smaller portion of commuters are commuting to jobs in Madison County (only 0.8 percent).

Table 3-11. Where FBRMPO Residents Work, by County

County	#	%
Total Primary Jobs	142,883	100.0%
Buncombe County, NC	75,280	52.7%
Henderson County, NC	21,519	15.1%
Haywood County, NC	9,199	6.4%
Mecklenburg County, NC	6,387	4.5%
Transylvania County, NC	1,830	1.3%
Wake County, NC	1,826	1.3%
Guilford County, NC	1,640	1.1%
Jackson County, NC	1,638	1.1%
Madison County, NC	1,167	0.8%
Catawba County, NC	1,113	0.8%
All Other Locations	21,284	14.9%

Source: US Census Bureau, on the Map Application, LEHD Origin-Destination

Alleghany Ashe County Surry County County Watauga Wilkes County County Yadkin County Mitchel Madison County, NC 1,167 County County Caldwell ounty, NC Yancey County Alexander 1,640 County Madiso County Iredell Buncombe Haywood⁵ Catawba County County, NC County, NC County, NC County McDowell 75,280 9,199 1,113 Wake County, NC Lincoln County derson County unty County Henderson County County, NC Mecklenburg **Jackson** County unty County, NC **21**,519 Transylvania Mecklenburg County, NG County, NC 31,830 Union County 12.5 25 50 Esri, HERE, DeLorme, MapmyIndia, @ OpenStreetMap contributors, and the GIS Miles user community **Commuter flow out of FBRMPO** Top 10 Counties Where FBRMPO FBRMPO Boundary Residents Work County Boundary -— Major Data Source: US Census Longitudinal Employer-Household Data (LEHD) Work Area Profiles 2017

Figure 3-10. Commuter Flow Out of FBRMPO by County

3.6.3 Local Commutes to FBRMPO

Within the boundary of the FBRMPO, many commuters are traveling from their homes to jobs in Asheville, Hendersonville, or Fletcher. **Figure 3-11** shows the commuter flows for residents within and between municipalities within a 10-mile buffer of the FBRMPO footprint. The width of the shape is indicative of the number of residents in the municipality who are commuting to work, and the width of the connection indicates the proportion of commuters going to other municipalities to work. Most residents in Asheville commute to jobs in Asheville, with a smaller number commuting to Woodfin, Fletcher, and Hendersonville for work. Hendersonville also has a larger percentage of the residents who commute to jobs within Hendersonville. Only one community, Biltmore Forest, has more Asheville residents commuting to it than residents commuting to Asheville.

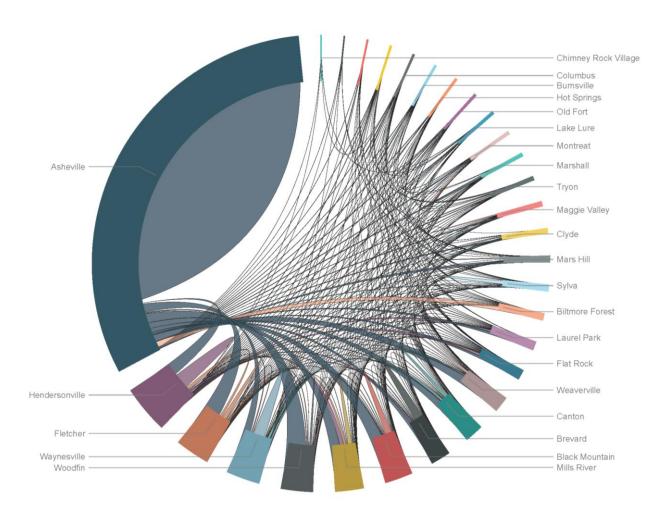


Figure 3-11. Commuter Flow

Figure 3-12 shows commuting patterns among the top fifteen municipalities in the region, as well as unincorporated areas (Swannanoa and East Flat Rock) and Census Designated Places that have many residents. Asheville has also been segmented into downtown Asheville, south Asheville and the rest of Asheville. This graphic clearly shows the commuter flows between parts of Asheville, as well as where regional commuters are traveling to. More commuters are traveling to areas in Asheville other than either downtown or South Asheville (both of which are employment

centers). Also, of note, more commuters are traveling from homes in other parts of Asheville to surrounding municipalities such as Hendersonville, Woodfin, and Waynesville.

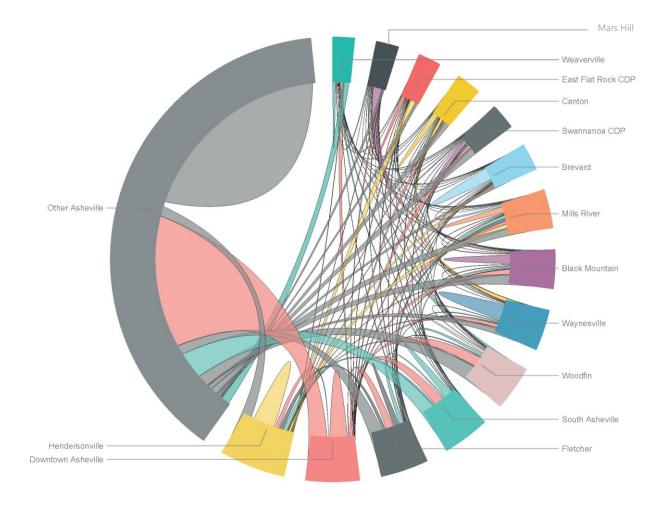


Figure 3-12. Top 15 Commuting Patterns

3.7 Existing Plans Review

Existing plans in the region are summarized below. Additional information, including key findings and recommendations, are provided in Appendix B.

Table 3-12. Existing Plans Review

Plan Title	Introduction
NCDOT Commuter Bus Study (2020)	This study was conducted to identify, vet, and prioritize commuter transit markets and potential for commuter transit service enhancements in the five largest urban regions (Asheville Region included) in North Carolina. The study included an analysis of existing and potential future travel markets that supports commuter transit, a feasibility assessment of specific routes, and prioritization of potential investments within and across the regions.
FBRMPO Coordinated Public Transportation & Human Services Transportation Plan (2018)	This Coordinated Public Transit-Human Services Transportation Plan ('CPT-HSTP', also known as Locally Coordinated Plan) was developed to serve both the French Broad River Metropolitan Planning Organization planning area as well as the Land of Sky Rural Planning Organization planning area, covering the counties of Buncombe, Haywood, Henderson, Madison, and Transylvania in Western North Carolina. This plan is required by the FTA for the programming of various Federal monies (Sections 5307, 5310, 5317, SAFETEA-LU, FAST Act, etc.) for the region. The LCP's purpose is to document the needs of the counties for potential funding as transit operators, local government, and other transportation providers, striving to improve the regional transportation system.
Asheville In Motion: City of Asheville Mobility Plan (2016)	This study intended to consolidate a variety of modal plans into a cohesive strategy and to express a method for prioritizing transportation investments in a manner consistent with desired outcomes. This study was to consolidate the information from previous, singularly focused studies of various transportation modes and to provide integrated transportation strategies in a long-term mobility plan.
FBRMPO 2045 Metropolitan Transportation Plan (2020)	This plan serves as a comprehensive, long-range plan for transportation investments within the French Broad River MPO region through the planning horizon year of 2045. The plan identifies transportation needs and projects for the five-counties in the region served by the MPO. The recommendations are focused on a set of projects primarily funded through a combination of Federal, State (North Carolina Transportation Improvement Program), and local funding.
Asheville Transit Master Plan (2018)	This study updated the Plans from previous years, aiming to serve as a guide on topics like how and where ART will provide service while ensuring safety, convenience, and accessibility for all residents, workers, and visitors. The Plan provides a vision for long term service expansion and infrastructure needs.
Buncombe County Community Transportation Service Plan (2015)	This study is a five-year vision for transportation and a requirement of the NCDOT-Public Transit Division (PTD) to receive Federal and State funding for transit. The focus is to evaluate existing services; identify ways to maximize efficiencies; and to enhance mobility options for Buncombe County citizens.

Plan Title	Introduction
Henderson County, NC 2020 Comprehensive Plan (2004, Amended 2009)	This Plan is intended to serve as a guide for the County's government and its appointed bodies in the development and management of growth and related public services and infrastructure. Recognizing the change that is taking place in the County, this Plan is to assist in guiding and influencing the future by setting growth and development objectives through the formulation of realistic policies and decisions.
FBRMPO Comprehensive Transportation Plan (2018)	This Plan identifies recommendations to multimodal transportation systems in Buncombe, Haywood, and Henderson Counties. This Plan is intended to ensure that the region's transportation system is developed in a coordinated and efficient manner that anticipates future needs and minimizes negative impacts on communities, cultural resources, and the natural environment.
2030 Hendersonville Comprehensive Plan (2009)	This Plan articulates a vision of what Hendersonville wants to become over the next 20 years and describes how to achieve that vision. The Plan includes both short-term actions that the City can commence within the next five years, in furtherance of the long-term visions.
FBRMPO Congestion Management Process (2018)	This Federally mandated process for the region incorporates methods for addressing congestion amidst the environmental constraints in the region and presenting unique opportunities to promote alternative transportation systems for managing the congestion.
NCDOT 2040 Statewide Transportation Plan (2011)	The 2040 Plan is a broad investment strategy that lays out the policies and programs needed to enhance safety, improve mobility, and reduce traffic congestion for North Carolinians over the next 30 years. It is a policy-based document that identifies transportation needs, estimated revenue to fund the needs, and investment strategies and policies supporting them.
NCDOT Complete Streets Policy and Guidance (2019)	This document defines North Carolina's approach to interdependent, multi-modal transportation networks that safely accommodates access and travel for all users. The Policy requires NCDOT to consider and incorporate multimodal facilities in the design and improvement of all appropriate transportation projects in North Carolina.
North Carolina Vision Zero Initiative (2015)	A statewide program which aims to eliminate roadway deaths and injuries using data- driven prevention strategies. United in the effort and Vision Zero strategy are both State agencies and private non-profit agencies.
NCDOT Statewide Regionalization Study (2012)	NCDOT-PTD was required by law to study the feasibility and appropriateness of developing regional transit systems. Examinations for consolidating systems based on regional travel patterns as well as the consolidation of single-county transit systems occurred.
NCDOT-Public Transportation Division Strategic Plan (2018)	This Plan establishes a collective transit vision of connecting North Carolinians to opportunities, and three strategies: Building Thriving Healthy Communities, Improving Access to Jobs and Economic Development, and Connecting Communities to Opportunities. The purpose is to establish a shared vision and a coordinated, updated approach for providing transit and mobility services to NC residents.

Plan Title	Introduction
City of Asheville Comprehensive Plan: 'Living Asheville' (2018)	The Plan is intended to be used as a policy-guiding document, outlining a vision and suggesting strategies that the City should undertake in order to implement the objectives of the Plan. It will be used by the Planning and Zoning Commission and the City Council when reviewing zoning amendments.

OPPORTUNITIES & CONSTRAINTS

4 Opportunities and Constraints

In order to identify opportunities and constraints for potential regional transit solutions in the FBRMPO region the analysis of the existing transportation services, market conditions, and travel patterns as well as the results of public and stakeholder input, were consulted. This section analyses the different possibilities available to the region and the potential issues the region would face in its efforts to create regional transportation connections and a regional transit system. This section also identifies the benefits of regional transit, transit service modes that would be appropriate for the region, integration options, and available funding.

The following elements were considered in the opportunities and constraints analysis and are introduced by first describing the current context and then identifying opportunities to make changes and constraints to making those changes:

- Service
- Coordination
- Fares
- Governance
- Funding
- Partnerships

These elements are described below in this section and discussed in more detail in the following sections and summarized in **Table 4-1**.

4.1 Service

There are currently three types of services in the urbanized area: fixed route, deviated fixed route, and demand response. Three of the county systems provide deviated fixed route and demand response: Buncombe, Henderson, and Haywood counties. The City of Asheville provides fixed route service and Madison County serves the community only with demand response service.

Fixed route or deviated fixed route services are designed to serve more densely populated areas and are frequently associated with urban areas. Demand response service is generally associated with less dense suburban and rural areas. Generally, the operational requirements for these services are different, particularly in terms of resources and technology:

 Demand response service is based on scheduling service only when there is demand, and this changes daily; some systems use a special software that helps with this task, but many schedule trips manually. In the FBRMPO region, each system has its own scheduling system. Potentially merging scheduling systems would require coordination and agreement on the type of software, especially when talking about specialized software. The County systems use of technology and scheduling software is supported by NCDOT grants, and NCDOT useful life, as well as NCDOT funding support would also be necessary to facilitate a single platform.

- Fixed route service is provided on specific corridors at scheduled times of the day and is more predictable than demand response. Run-cutting, the process of detailing route-byroute schedules for the actual provision of transit service, can be done manually or using specific software. Run-cutting is only needed periodically. From the riders' perspective, fixed route service is easier to understand, and it could be considered more convenient because it occurs more frequently at pre-established times and follows standard routing/paths.
- There are some variations to fixed route service, such as deviated fixed route services that provide similar service to the fixed route but also provide some trips on demand, generally close to the main corridor where service is running, as it is the case of Buncombe County's Mountain Mobility.

In general, the systems do not provide service outside of their boundaries due to funding restrictions, and when service is provided to other counties and cities, it is generally to access medical services. This is the case for Madison County, Henderson County, and Haywood County, all of which regularly transport people to Asheville. WCCA also transports individuals to Asheville, principally the VA hospital.

Some of these systems provide service outside of their service area, such as the Black Mountain route operated by Asheville Redefines Transit (ART). This route is funded with Job Access and Reverse Commute Program funds, from the FTA Section 5307 regional allocation. This shows that the region has been able to overcome existing barriers to crossing municipal boundaries to provide service to needed areas and has found and an appropriate funding mechanism. Buncombe County also provides deviated fixed route and demand response services within the City of Asheville, facilitating transfers and other trip purposes.

In terms of regional connectivity, providing service to transit dependent populations in the suburban and rural areas will require looking at different service models because these places lack the density to run frequent fixed route types of service. These communities need to access jobs, medical and educational services, and the current options are very limited.

Weekend service is only available from ART (Saturday and Sunday) and Mountain Mobility (Saturday only). This may preclude people from finding jobs across boundaries because of lack of transportation.

4.2 Coordination

Four systems currently coordinate transfers. Though these transfers provide an opportunity to travel across boundaries and expand mobility, they are very limited because few trips are offered during the day. This, in addition to the travel time, could discourage people to use transit. In some cases, people may need to transfer two or three times to reach their destination, which makes the trip unfeasible due to the time it takes to move through the region.

Coordination is generally ad-hoc; the transit agencies work together to resolve any issues that may arise from operations, and to coordinate trips. This trend shows opportunity for more coordination in the future.

Currently coordination is limited to operations and discussions about funding allocation; there are opportunities to coordinate further, in terms of operational improvements, policies, procurement, and even operational processes.

4.3 Fares

Currently, each system has individual fare policies, equipment, and fare collection systems. This affects riders that transfer frequently between systems, as their trips could be more expensive if they use two or more systems. They must also carry currency, most times exact change, or multiple passes and tickets, when available, to be able to travel across the area.

Understanding the fare collection system for each system imposes a burden on the rider and can potentially discourage people from riding transit.

4.4 Governance

Three transit agencies have contracts with management companies or community organizations to run the transit services operations. This model responds to the need to achieve savings in operations. The systems typically pay a preestablished fee for operation of the systems, while the outside companies operate with the expenses of hiring personnel, performing maintenance functions and managing maintenance processes.

In the case of ART, the City is prohibited from engaging in collective bargaining, which forces the City to contract the service to a management company. ART is the only system that is represented by a union, the Amalgamated Transit Union (ATU). Since the union can not be disenfranchised, the City must contract service with a management company.

Planning is a function of the government agency in all the agencies in the region. New route planning, community liaisons, FTA compliance functions, procurement, and special projects are all hosted by the agencies. Madison County is the only agency that performs all transit activities in-house.

Introducing new governance models could be challenging, in part because existing structures need to share or give away control of activities and resources, which could be destabilizing and require adaptation. New governance models could offer more opportunities to the involved agencies. The agencies are already familiar with third party operations and with ongoing coordination. As the region evaluates the benefits of regionalism, coordination of planning tasks, compliance, and resources could be beneficial to improve service and customer experience.

New governance models could also open the region to other or new funding sources. For instance, assistance from the MPO for planning of consolidated activities under FTA Section 5303, or at a local level, could provide justification for a county tax or fee to support regional transit.

New governance models could also be established in addition to the existing ones; they could coexist and complement each other.

4.5 Funding

The analysis of current funding sources indicates that the transit agencies are maximizing the use of federal and state funding. All systems are currently using the funding that is available based on type of service. Using the current funding sources to fund a regional system or even some functions under a more coordinated approach would be a stretch and would put additional pressure on system performance.

The agencies are currently using the federal and state funding available. Deviating resources to a regional model would potentially affect service provided at a local level. It would also require a more robust contribution from each agency in local funds. In general, transit agencies local funds are allocated from their general fund to match the federal and state contributions.

A regional approach with a different governance model would require a dedicated funding source to ensure that it is sustainable over time; the region would need to consider other funding mechanisms available, such as sales tax, vehicle registration fee, rental car fee, etc. Funding options are discussed in Section 5.

4.6 Partnerships

There are no known partnerships between transit agencies and employers in the area, except for the passport program by the City of Asheville. Under this partnership, employees or students ride for free and the employer or university pays for the fares. Though this is a very limited contribution, it creates a sense of community and awareness of public transportation.

There are opportunities to expand partnerships, if service to job sites is guaranteed, for instance with a vanpool program.

Table 4-1. Opportunities and Constraints

Area of Analysis	Opportunities	Constraints
Service	 Existing fixed route service is provided in denser areas and corridors with high employment Demand response serves a big swath in rural areas and extends service beyond fixed route coverage Dependent riders are already familiar with fixed route and demand response services Some of the transit systems already have processes in place to provide service across their boundaries Deviated routes already in place may serve both fixed route trips and more suburban/rural trips 	 Each agency has individual systems to create schedules and provide service In general, transit agencies currently only provide service within jurisdictional boundaries, except for medical trips and the Black Mountain route operated by ART Different hours of operation and lack of service during weekends may affect some communities accessing jobs that have different shifts Currently transfers result in long travel times
Coordination	 The agencies have demonstrated they work well together when they seek to improve transportation conditions for the community Formal coordination and/or consolidation of functions, policies and processes could produce efficiencies for the agencies 	Informal coordination may result in fewer benefits to the region, as the agencies focus more on local issues

Area of Analysis	Opportunities	Constraints
	Better coordination could improve travel times	
Fares	 Systems could use integrated fare collection systems, or establish policies across agencies to reduce financial burden on the riders and to improve the customer experience 	 Each agency has different fare policies, and establishing fare collection systems and policies across the region will require intense collaboration among the agencies
Governance	 Four of five agencies already contract service out to third parties There are common activities that could be housed under one organization to achieve efficiencies and make a better use of resources. Agencies would be able to focus on improving local service planning if a regional agency is responsible for select common tasks New governance models could use different funding mechanisms currently not available to the agencies in the region 	 Establishing a regional agency will require a local champion to spearhead the efforts Agencies may need to give some control away if common activities are performed by a regional entity
Funding	 There are funding mechanisms that are untapped: Vehicle registration fee Rental car fee Municipal Business Districts (MSD) Sales taxes Property taxes If a regional entity is considered, reallocation of resources and a dedicated funding source will be needed to make regional service sustainable over time 	 The use of federal and state funding sources is maximized The region lacks dedicated funding sources to fund transit at local or regional level If an umbrella agency is created, the need for funding could affect local service
Partnerships	 There are opportunities to develop partnerships with employers, social service agencies, health and educational institutions and other organizations 	Partnerships require a dedicated effort to bring stakeholders to participate in the process and extensive ongoing coordination

Source: AECOM

4.7 Benefits of Regional Transit

The benefits of regional transit can be significant but are not always easy to quantify. In general terms, greater coordination of operational functions, fare structures, and schedules greatly benefit the community and the riders because the processes, customer service, and communications can be streamlined and present a more unified, seamless system to the riders.

4.7.1 Social Justice

Providing accessible transit throughout the region may support equitable transportation opportunities for everyone. In addition, FTA requires transit agencies to meet its Title VI program requirements which help ensure public transportation services are provided in a non-discriminatory manner and promote full participation in decision-making without regard to race, color, or national origin, and ensure meaningful access by persons with limited proficiency.

4.7.2 Traffic Alleviation

Traditionally, car-centric communities typically result in roadway congestion, thereby leading to roadway expansions. Increasing capacity on a transit system, combined with other strategies, can help alleviate congestion. Transit as an alternative transportation mode for car users may help decrease travel times for all commuters in the surrounding area.

4.7.3 Effective Use of Resources

One of the benefits of adopting a more regional approach is the more effective use of resources. The transit agencies in the region have scarce resources; planning and administrative functions are generally a shared function in a position, along with many other activities that are unrelated to transit. The City of Asheville's ART has a dedicated Transit Manager position with dedicated transit administrative and planning staff and Buncombe County has dedicated transit staff as well.

4.7.4 Economies of Scale

In general terms, regionalization is not synonymous with cost savings; when agencies consolidate functions or merge under a regional umbrella, the costs associated with the function remain the same, as well as the resources needed to perform the functions. At first this does not generally produce any savings, but over time it can produce economies if certain redundancies are eliminated.

The discussion should shift towards a better use of the funding available in the region. Currently there are many functions that are common to several of the providers that could benefit from cost sharing, for instance:

- Procurement
- Grant administration and compliance, including federal and state funds
- Scheduling, call centers, and customer service for demand response service.

Consolidation of these functions will require extensive coordination among the providers. In North Carolina, bus procurement through the NCDOT has been beneficial for many transit providers, saving time and resources preparing vehicles' specifications.

4.7.5 Regional Solution for Regional Problem

One of the major benefits of regionalization is the customer experience. When systems take a more regional approach, the customer experience improves because the riders are not restricted by political boundaries that are often inconvenient and, in many cases, result in more expensive and longer trips.

- Routes: consolidated service or more direct routes are the most convenient way to travel in public transportation across jurisdictional boundaries and result in better customer experience.
- Transfers: reducing or eliminating transfers among existing riders is one of the most important factors to improve customer service. Transfers add unnecessary time to the trips and usually affect people that have less flexibility (minimum wage workers, for instance), as the dependent riders. For example, a transit trip from Downtown Weaverville to Downtown Asheville will involve transfer from Mountain Mobility to ART. It would take three times the time that takes to drive this same distance. For transit to be effective, travel times must be shorter to provide a seamless service for the rider.

- Amenities: a regional effort could aim to provide amenities across the area for passengers to wait comfortably and safely for transit service.
- Fares: implementing the same fare structure across the region would potentially reduce costs for the rider and improve the customer experience. Currently, every system has a different price structure, and they use different processes and or equipment, which can become a barrier for someone who wants to ride transit.

GoTriangle is an example in North Carolina of a system that offers streamlined services. GoTriangle provides regional trips in the Raleigh region, transporting people to important destinations across geographic boundaries. The regional service connects to the local service, if needed.

In addition, the Seattle region has adopted the ORCA payment system across all transit providers, as part of their vision to build a regional transit service and to make it faster and easy to travel around the region. This effort included a comprehensive educational and marketing campaign to facilitate the transition to this new system.

4.7.6 Formal Coordination Efforts

A regional approach would facilitate coordination efforts among transit providers and remove barriers for riders. It would allow agencies to respond in a timely manner to ridership changes and other changing circumstances.

Some systems like the Charlotte Area Transit System (CATS) have used their Metropolitan Transportation Commission as the formal coordination mechanism to provide transit service to the region. This body meets monthly to discuss projects, budgets, and other items that are pertinent to all its members.

4.7.7 Branding

Branding is often overlooked. Creating a consistent brand in the region would help bring awareness about the role of public transportation in the community. This, along with some of the other elements involved in regionalization, would help smooth how riders navigate the systems across the region.

Dallas Area Transit (DART) is one of many examples in the nation where the region has adopted a consistent brand across their services that is easily identifiable.







Source: DART website.

4.8 Maximize and Leverage Participation for Grants and Additional Funding

A regional approach to grant applications could benefit the transit systems in the area by leveraging more power to match grants and to demonstrate regional needs. This is an approach NCDOT uses for RAISE Discretionary Grants (formerly known as TIGER and BUILD grants) that has resulted in millions of dollars awarded to the state.

4.9 Partnerships

A regional approach could attract partners and secure additional funding sources. This is particularly important for vanpool programs where employer participation is necessary to ensure the success of the program.

The Passport Program, by the City of Asheville, is an example of a successful partnership in this region. The passport program provides free rides to passport passholders and the employers paid for the rides. Three agencies, in addition to the City of Asheville, provide free rides to passport passholders and the employers or agencies pay for the rides. This type of program helps promote transit use because people are not required to acquire passes or similar to ride the bus.

4.10 Stakeholder and Public Involvement

The public involvement process to-date has involved a multipronged approach to capture the region's sentiment regarding regional connections and to understand some of the challenges the community currently faces when trying to travel across the region. The MPO hosted the following activities:

- Focus groups
- Community Ambassadors
- Virtual Public meeting

4.10.1 Focus Groups

The first focus group included business leaders and nine attendees in the discussion. The discussion was focused around challenges employers and employees face regarding public transportation. The three most important issues raised were the following:

- Employees live outside public transportation area (39%)
- Public transportation is available, but has limited service (30%)
- Public transportation is not provided to work sites (22%)

Employers across the region (Buncombe, Madison, and Haywood Counties and city of Asheville) and regional agencies also stated that there is a limited pool of qualified applicants, though this is not specifically related to transportation issues, in their opinion.

Employers expressed interest in having other transportation options such as carpools, vanpools and shuttles, and would consider partnering with a local transit provider; some of them would consider financial support of an employer transportation benefits program.

The second focus group was comprised of social service agencies, community organizations, and ambassadors (total of eight participants). This focus group identified limited transit service hours as one of the biggest challenges (30%), followed by lack of public transportation to key destinations (20%) and people located outside public transportation areas (20%).

Participants were interested in carpool, vanpool, and shuttle options. Overwhelmingly, participants expressed the importance of strengthening public transportation at local and regional level to provide more opportunities for the entire community.

4.10.2 Community Ambassadors

The Community Ambassador Program was created to extend the reach of the public input process and obtain input from hard-to-reach communities. Ambassadors attended a training session; materials were distributed, and instructions given to bring information to their communities and encourage them to participate in the planning process. Almost 30 percent of the community members that filled out the survey were engaged through the Community Ambassador Program.

4.10.3 Public Input

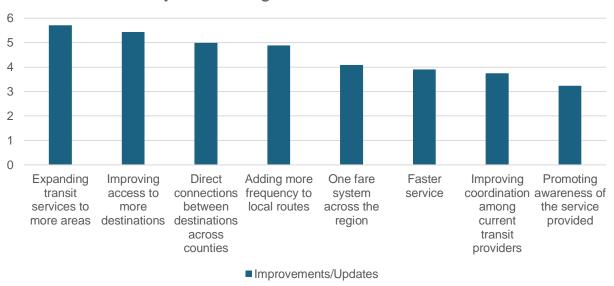
Ninety-six members of the community participated in an online public survey that was hosted from December 7, 2020 to January 1, 2021. Seven members of the public participated in the online public meeting held on December 15, 2020. Findings from these public events are described below.

In general, the results showed strong support for regional transit, even when more than 60 percent of the participants were not currently transit riders.

- Twelve percent of the existing rider respondents said that they transfer between Mountain Mobility and ART.
- Forty percent of the respondents said they would travel to work if public transportation were available.
- The top four priorities in the next ten years were identified as:
 - Expanding transit service to more areas
 - Improving access to more destinations

- Direct connections between destinations across counties
- Adding more frequency to local routes

What Transit Improvements or Updates Should Be Highest Priority for the Region Over the Next 10 Years?



These priorities were confirmed when participants were asked trade-off questions on preferences.

TRADE-OFF #1: WHICH WOULD YOU PREFER?



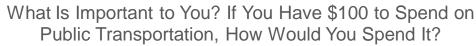
TRADE-OFF #2: WHICH WOULD YOU PREFER?

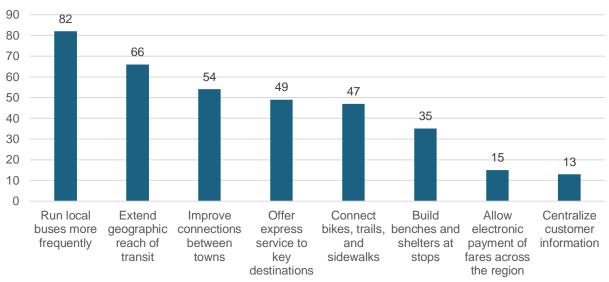


TRADE-OFF #3: WHICH WOULD YOU PREFER?



All the groups were asked to prioritize public transportation improvements. The results show that most respondents wanted "local buses to run more frequently", followed by "extend the geographic reach of transit" and to "improve connections between towns". This indicates that the community values local service and it is a priority to strengthen it; while at the same time they want regional public transportation, and to create regional connectivity.





■ Public Transportation Features

4.11 Transit Service Options

Transit can take many forms. Intensity of development, population and employment distribution, and community demographics help to define which types of transit service may be feasible within an area. In general, greater investment in transit is needed in areas with higher population and employment densities. This does not mean that areas of lower densities do not also need transit service; rather the types of modes change based on the intensity. The range of transit options includes different technologies with varying operational characteristics. **Table 4-2** provides an overview of common transit services types found in the United States and North Carolina.

Table 4-2. Transit Service Options

Transit Service Type	Primarily Serves	Where it Operates	Operational Characteristics	Infrastructure/Vehicles
Commuter Rail	Long distance commuter trips	Between outlying areas and major activity centers	Regularly scheduled service operating during commuter peak periods, with some midday service; stops are infrequent except at major intercept points	At-grade rail
Heavy Rail	Short to moderate distance trips	Highly urbanized areas with intense residential or	Regularly scheduled frequent service operating daily during defined service period; stops are at major intercept points spaced one mile or more apart	Separated-grade rail

Transit Service Type	Primarily Serves	Where it Operates	Operational Characteristics	Infrastructure/Vehicles
		employment development		
Light Rail	Short to moderate distance trips	Highly urbanized areas with intense residential or employment development	Regularly scheduled frequent service operating daily during defined service period; stops are at major intercept points spaced one mile or more apart	Both at-grade and separated grade rail
Commuter Express Bus	Long distance commuter trips	Between outlying areas and major activity centers	Regularly schedule service operating during commuter peak periods, with some midday service; stops are few and located at beginning and end of route	Coach bus
Fixed-Route Bus	Local trips	Moderate to high density areas	Regularly scheduled service operating during defined service period; stops are located at regular intervals along route	Large, medium or small buses; Vans or cut- away buses in smaller markets
Fixed-Route Bus with Route Deviation	Local trips	Moderate to low density areas	Regularly scheduled service operating during defined service period; stops are located at regular intervals; service deviates from route within defined service area for scheduled on-request stops	Medium or small buses; Vans or cut-away buses
Demand Response/Microtransit	Local trips	Moderate to low density areas	Service period is defined, and schedule is based on requested trips; stops are based on service requests	Small buses; Vans or cut-away buses
Subscription Service	Commuter trips	Moderate to low density areas	Pre-requested regular service for identified market at defined stops	Small buses; Vans or cut-away buses
Jitney	Local trips	Moderate density areas	Service operates on a fixed route without a fixed schedule or fixed stops	Small buses; Vans or cut-away buses
Vanpool	Long distance commuter trips	Moderate to low density areas	User-defined schedule and stops	Full-size or mini-vans

Source: AECOM

All of the transit options listed in **Table 4-2**, except for vanpools, are operated by either a public or private operator. Vanpools are unique in that generally users operate the vehicles. The level of administration varies greatly for vanpool programs, from only providing assistance in forming vanpools, to also purchasing vehicles, providing an insurance pool, maintaining vehicles, and driver training. Some agencies do, however, subsidize vanpool programs.

Additional transit options not listed in **Table 4-2** are voucher programs and Transportation Demand Management (TDM) programs. Voucher programs provide subsidized trips for eligible users and vouchers are used to pay for trips from private transportation providers, such as taxis. A TDM program focuses on reducing single occupant vehicle (SOV) trips and encouraging travelers to shift to other modes to reduce congestion and environmental impacts of SOV trips. A vanpool program can be part of a TDM program, but TDM programs also include promoting carpools, taking transit, walking, bicycling, changing work hours, or telecommuting to reduce SOV trips.

In the FBRMPO region, there is a variety of densities, ranging from higher densities in urban areas, to suburban and rural areas with low density. **Figure 4-1** shows the different types of service available according to location and operating environment. The communities in the FBRMPO region fall into one of three categories: mid-size city, small city, and suburban/rural. Several of these modes already operate in the region: fixed route, demand response, carpool, TNCs, and Intercity Services.

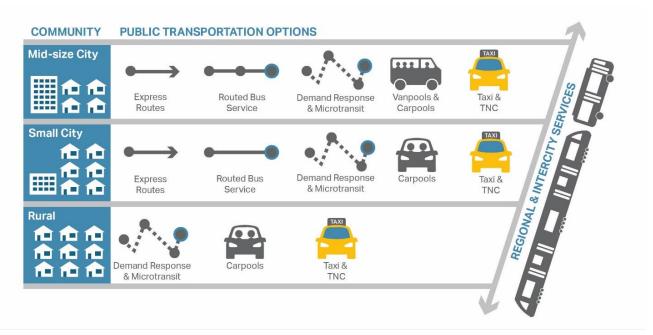


Figure 4-1. Public Transportation Options

Source: Adapted from Transit Development Plan Guidebook, Oregon Department of Transportation 2018

4.11.1 Transit Modes

To best serve the transit markets identified as part of this study, there are a few types of transit service that could be adopted. The various types of transit service that could be considered for regional service are described in the overview below.



Express Routes / Commuter Service

Fixed route service operated only during peak commuting times in the morning and evening connecting major residential areas with major employment areas. Commuter service is generally an 'express' service in that it makes limited stops along its route to keep the trip time as close as possible to automobile trip times. Commuter service does not require the operation of complementary ADA paratransit service.

The top 15 commuter flows identified in the Existing Conditions report show that there are four natural routes that are candidates for express service:

Table 4-3. Potential Express Routes

Local Service Commuter Service Access Point		Stop	Destination	
Apple Country Transit	Hendersonville	Fletcher/Arden	Asheville Downtown Transit Center	
Mountain Mobility Service/ART	Black Mountain	Swannanoa	Asheville Downtown Transit Center	
Madison County Transportation Authority/Mountain Mobility Service	Mars Hill	Weaverville	Asheville Downtown Transit Center	
Haywood County Transit Waynesville		Canton	Asheville Downtown Transit Center	



Microtransit / Demand Response Feeder Zones

According to FTA, microtransit is IT-enabled private multi-passenger transportation services that serve passengers using dynamically generated routes and may expect passengers to make their way to and from common pick-up or drop-off points. Vehicles can range from large SUVs to vans to shuttle buses. Because they provide transit-like service but on a smaller, more flexible scale, these new services have been referred to as microtransit (TCRP Research Report 188).

Since the region is also comprised of large suburban and rural areas, the microtransit concept could feed into the express route system, as well as the local service. Microtransit is more flexible than regular demand response service and could be used to address some of the first and last miles issues found in the less dense suburban and rural areas in the region.





Vanpools

Vanpools can be operated by a paid driver or can be driven by vanpool participants. Vanpools are typically for larger groups of people going to a common destination or a small number of somewhat adjacent destinations. The pick-up location also needs to be convenient to vanpool participants and convenient to the highway. A park-and-ride lot is a common starting point for vanpools. The cost of the vanpool is split between riders and generally a successful vanpool participant would usually have a 15+ mile work commute.

This service could address some of the mobility issues found when trying to cross service boundaries, because service is provided from centralized locations to job sites, and some funding could be leveraged through partnerships with employers. Discussion with the Focus Groups during the public input period showed that there is appetite for vanpools and some employers would support this initiative if proven convenient for their employees.

Park-and-Ride

A park-and-ride lot is a parking area where people meet to share rides or to utilize transit service. The parking location is generally well lit and has a place to wait for ridesharing partners. Retail locations are common locations for park-and-ride participants to meet. A sheltered location is advantageous for participants to consider. Generally, there is no cost to park in the park-and-ride area and this helps to encourage ridesharing and transit usage.

Park-and-ride locations could also be served by express routes, microtransit and vanpools.

4.12 Integration Options Assessment

The purpose of this section is to identify potential transit integration options for consideration in the FBRMPO region that may be most suitable for possible implementation.

4.12.1 Description of Service Integration Options

Interagency coordinative arrangements and activities among government agencies are quite common and occur in a wide range of forms. Agencies involved in efforts to strengthen organizational working relationships alter the interests of their institutional and governance structure to consider the interests of the other agencies involved and the public they serve. To do so, agencies need a way to guide the integration continuum so that it continues to reflect the common interests of the participants. The governance structure selected for an organization depends on the location along the continuum of the participating agencies in their relationship-building efforts.

The following are a list of possible service integration types ranging from the lowest level of commitment to the highest:

 Connection is a relationship based on common interests but with no significant resource sharing other than information. For example, staff members of transit agencies operating in the same geographic area speak with each other informally regarding shared areas of expertise.

Transitioning to **Cooperation** is contingent upon the following:

- Implementing informal to less-formal agreements
- Information and limited resource sharing
- Limited integration of services and goals
- Cooperation involves low-level linkages, informal to less-formal agreements, some resource sharing, and limited integration of organizational services and goals. For example, transit agencies that operate shared park-and-ride facilities agree to facilitate passenger transfers between systems, provide unified passenger information/amenities, and meet periodically to discuss relevant operational issues.

Transitioning to **Coordination** is contingent upon the following:

- Implementing more formal agreements
- Resource-sharing
- More formal integration of services and goals
- Coordination consists of more robust linkages that involve participants sharing resources beyond information to pursue shared goals. For example, transit agencies that operate paratransit and rural transit services meet regularly to coordinate trip planning, passenger transportation, and related activities.

Transitioning to **Collaboration** is contingent upon the following:

- Implementing formal agreements
- Integrating resources including staff, facilities, and vehicles
- Researching legal implications

Collaboration is marked by strong linkages, formal agreements, and complex goals
usually pursued over a long period of time. It has a stable membership with strict
processes and structure. Resource commitment is significant. For example, transit
agencies would operate as one entity, but retain individual identities.

Transitioning to Integration is contingent upon the following:

- Determination of the elements that will merge into one entity (partial and total functions)
- Determining tax and funding implications and sources
- Integration involves one agency subsuming the service of another agency, which then stops providing it. For example, formation of a regional transit authority that would combine existing agencies or functions and operate services under the new authority's name.

These various forms of service integration differ based on complexity of purpose, intensity of linkages, and formality of agreements, as shown in **Figure 4-2**.

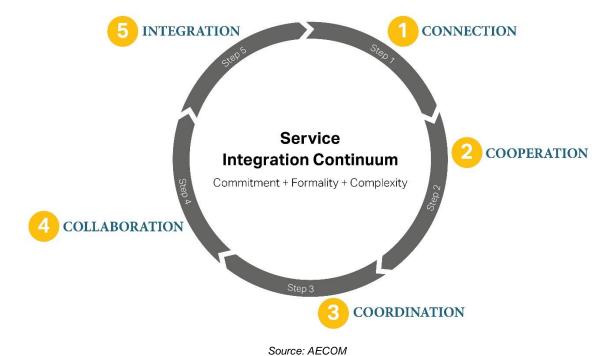


Figure 4-2. Service Integration Continuum

These integration options will be explored in depth in Section 7.

FUNDING SOURCES

5 Funding Sources

This chapter explores transit funding sources available to the FBRMPO region. Funding typically comes from federal, state, and local sources, but there are other non-traditional alternatives that can be used to fund transit service, such as vehicle registration or sales taxes. Traditional funding sources are very limited, and growth over time generally cannot support system expansion. Transit systems that are looking to expand transit service must find alternative ways to increase funding and those that have in the past have mostly relied on local sources. Finding a dedicated funding source that funds service improvements sustainably over time is one of the biggest challenges transit agencies face and is also the key to long-term success. The information below describes traditional and non-traditional funding sources. A more detailed look at the pros and cons of these funding sources and feasibility of use in the French Broad River region will be explored as recommendations and implementation strategies are developed.

5.1 Traditional Funding Sources

Traditional funding sources are those related to federal, state and local sources. The federal and state programs provide annual allocations to transit agencies that qualify for funding and are formula-based. These funding sources require local match.

5.1.1 Urbanized Area Formula Grant – FTA Section 5307 Program

The Section 5307 formula grant provides transit capital, operating and planning assistance to urbanized areas with populations of more than 50,000. This program has the most encompassing eligibility of any federal program providing funding to transit systems. Grant funds are utilized to support the development, maintenance, and improvement of public transportation in urbanized areas. Eligible projects fall into three primary categories: Planning Projects, Capital Projects, and Operating Projects.

Planning eligible activities include, but are not limited to: studies relating to management, operations, capital requirements, and economic feasibility; work elements and related activities preliminary to and in preparation for constructing, acquiring, or improving the operation of facilities and equipment; plans and specifications; evaluation of previously funded projects; job access and reverse commute projects; and other similar or related activities before and in preparation for the construction, acquisition, or improved operation of public transportation systems, facilities, and equipment.

Capital projects eligible under the Urbanized Area Formula Program include all projects under 49 U.S.C. 5302(3). In general, capital project expenses involve purchasing, leasing, constructing, maintaining, or repairing facilities, rolling stock, and equipment for use in a public transportation system. Capital project costs may include all direct costs and indirect costs associated with the project (provided that the grantee has an approved cost allocation plan or indirect cost proposal). It is noted that a listing of eligible projects is not shown here because of the breadth of projects. All eligibility of projects is generally determined by the FTA regional offices. Example eligible

projects include engineering design and evaluation of transit projects, capital investments in bus and bus-related activities such as replacement and overhaul of buses, rebuilding of buses, crime prevention and security equipment, construction of maintenance and passenger facilities, and capital investments in new and existing fixed guideway systems. All preventive maintenance and some ADA complementary paratransit service costs are considered eligible.

FTA provides funding to eligible recipients for costs incurred in the operation of public transportation service. In general, operating expenses are those costs necessary to operate, maintain, and manage a public transportation system. Operating expenses usually include such costs as driver salaries, fuel, and items having a useful life of less than one year (i.e., office supplies). Recipients in small Urbanized Areas (UZA), such as ART, may use Section 5307 funds for operating assistance. There is no limitation on the amount of the apportionment that recipients in these UZAs may use for operating assistance.

Established under MAP-21 and upheld by FAST Act legislation, the FTA Section 5307 grant program also includes eligible activities from the Job Access and Reverse Commute (JARC) Program (formerly known as FTA Section 5316), which focuses on providing services to low-income individuals to access jobs. These activities include operating assistance with a 50 percent local match for JARC activities. In addition, the urbanized area formula for distributing funds now includes the number of low-income individuals as a factor. There is no minimum or maximum amount of funding that can be spent on JARC activities. JARC can also be used to fund capital projects that are aligned with eligibility guidelines.

The local match required for the FTA Section 5307 funding can vary from 10 percent to 50 percent depending on the type of project. The federal share for *planning and capital projects* that receive funding under the FTA Section 5307 Program may not exceed 80 percent of the project cost. There are several notable exceptions in which the federal share may exceed 80 percent for certain projects related to ADA, the Clean Air Act, and certain bicycle projects as follows:

- i. <u>Vehicles.</u> The federal share is 83 percent for the acquisition of vehicles for purposes of complying with or maintaining compliance with the Americans with Disabilities Act of 1990 (ADA; 42 U.S.C. 12101 et seq.) or the Clean Air Act (CAA; 42 U.S.C. 7401 et seq.).
- ii. <u>Vehicle-Related Equipment and Facilities.</u> The federal share for project costs for acquiring vehicle-related equipment or facilities (including clean fuel or alternative fuel vehicle-related equipment or facilities) for purposes of complying or maintaining compliance with the CAA, or required by the ADA, is 90 percent.

The federal share for *operating expenses* may not exceed 50 percent of the net operating cost.

5.1.2 Rural Formula Program – FTA Section 5311 Program

The Formula Grants for Rural Areas program provides capital, planning, and operating assistance to state departments of transportation (DOT) to support public transportation in rural areas with populations of less than 50,000, where many residents often rely on public transit.

The FTA Section 5311 program supports both the maintenance of existing public transportation services and the expansion of those services through the program goals of:

• Enhancing access in rural areas to health care, shopping, education, employment, public services, and recreation.

- Assisting in the maintenance, development, improvement, and use of public transportation systems in rural areas.
- Encouraging and facilitating the most efficient use of all transportation funds used to provide passenger transportation in rural areas through the coordination of programs and services.
- Providing financial assistance to help carry out national goals related to mobility for all, including seniors, individuals with disabilities, and low-income individuals.
- Increasing availability of transportation options through investments in intercity bus services.
- Assisting in the development and support of intercity bus transportation.
- Encouraging mobility management, employment-related transportation alternatives, joint development practices, and transit-oriented development.
- Providing for the participation of private transportation providers in rural public transportation.

The program also provides funding for state and national training and technical assistance through the Rural Transportation Assistance Program (RTAP). Funds may be used for capital, operating, and administrative assistance to state agencies, local public bodies, Indian tribes, and non-profit organizations, and operators of public transportation services. The maximum FTA share for operating assistance is 50 percent of the operating costs.

Similar to FTA Section 5307 funds, this funding is upheld by FAST Act legislation, the FTA Section 5311 grant program also includes eligible activities from the Job Access and Reverse Commute (JARC) Program (formerly known as FTA Section 5316), which focuses on providing services to low-income individuals to access jobs. These activities include operating assistance with a 50 percent local match for JARC activities. There is no minimum or maximum amount of funding that can be spent on JARC activities.

Funds in the FTA Section 5311 program have a very wide compass of eligibility. Eligible capital expenses include the acquisition, construction, and improvement of public transit facilities and equipment needed for a safe, efficient, and coordinated public transportation system, as well as certain other expenses classified as capital in Section 5302(3). Operating expenses are those costs directly related to system operations. At a minimum, states must consider the following items as operating expenses: fuel, oil, drivers' salaries and fringe benefits, dispatcher salaries and fringe benefits, and licenses.

The governor designates a state agency that will have principal authority and responsibility for administering the FTA Section 5311 program. For North Carolina, the agency given charge over the FTA Section 5311 program is NCDOT Public Transportation Division. Specifically, the role of the state agency is to do the following:

- Document the state's procedures in a state management plan.
- Notify eligible local entities of the availability of the program.
- Plan for future transportation needs and ensure integration and coordination among diverse transportation modes and providers.
- Solicit applications from transit providers.
- Develop project selection criteria.

- Review and select projects for approval.
- Forward an annual program of projects and grant application to FTA.
- Certify eligibility of applicants and project activities.
- Ensure compliance with federal requirements by all sub-recipients.
- Monitor local project activity.
- Oversee project audit and closeout.
- File a NTD report each year for itself and each sub-recipient.

5.1.3 Bus and Bus Facilities Grant – FTA Section 5339

The Bus and Bus Facilities is a formula grant program created by MAP-21 legislation which replaced the previous FTA Section 5309 discretionary Bus and Bus Facilities program. This capital program provides funding to replace, rehabilitate, and purchase buses and related equipment, and to construct bus-related facilities. Distribution of this grant is formula-based and requires a 20 percent local match. A portion of the total FTA Section 5339 program has been also set aside as a discretionary pot of funding through the FAST Act. These competitive grants also provide additional federal resources to state DOTs and designated and direct recipients to replace, rehabilitate and purchase buses and related equipment and to construct facilities including technological changes or innovations to modify low or no emission vehicles or facilities. A subprogram, the Low- or No-Emission Vehicle Program, provides competitive grants for projects that support the purchase or rehab of those specified vehicles.

5.1.4 Capital Investment Grants – FTA Section 5309

This FTA discretionary grant program funds transit capital investments, including heavy rail, commuter rail, light rail, streetcars, and bus rapid transit. Federal transit law requires transit agencies seeking Capital Investment Grant funding to complete a series of steps over several years. For New Starts and Core Capacity projects, the law requires completion of two phases in advance of receipt of a construction grant agreement – Project Development and Engineering. For Small Starts projects, the law requires completion of one phase in advance of receipt of a construction grant agreement – Project Development. The law also requires projects to be rated by FTA at various points in the process according to statutory criteria evaluating project justification and local financial commitment. Though these programs will not apply to the FBRMPO region, because of the type of projects being developed, it is good to have them in mind as the region grows.

5.1.5 Flexible Funding Program – Surface Transportation Program (STP) Funds

The STP program provides a national annual appropriation to the Federal Highway Administration (FHWA). This funding has a broad project eligibility and funding may be used for projects to preserve or improve conditions and performance on any federal-aid highway, bridge project on any public road, facilities for non-motorized transportation, transit capital projects and public bus terminals and facilities. This program funding can also be "flexed" to FTA for use by transit agencies.

5.1.6 Metropolitan Transportation Planning Program – FTA Section 5303 Program

FTA Section 5303 provides funding and procedural requirements for multimodal transportation planning in metropolitan areas and states. Planning needs to be cooperative, continuous, and

comprehensive, resulting in long-range plans and short-range programs reflecting transportation investment priorities. In North Carolina, each urbanized area receives a Section 5303 allocation from NCDOT for MPO transit planning activities based on a funding formula. NCDOT Public Transportation Division (PTD) provides one half the local match (10 percent) for FTA Section 5303-funded transit planning tasks.

5.1.7 State Maintenance Assistance Program

The State Maintenance Assistance Program (SMAP) funds are a state funding source administered by the NCDOT PTD to provide operating assistance to urban, small-urban, and urban regional fixed route and commuter bus systems with low overhead and paperwork. Eligible uses of SMAP funds are limited to a system's operating costs as defined by the FTA C 9030.1E circular for the FTA Section 5307 program. Projects such as preventative maintenance and ADA that are defined as capital-eligible expenses in federal grants are still eligible as operating expenses for SMAP.

SMAP has played a significant role in public transportation budgets throughout North Carolina. However, the state's budget bill for FY 19 (House Bill 99) included a recurring reduction in SMAP of approximately 26 percent between FY 2018 and FY 2019. This was further reduced in FY2020 with the allocation of CARES Act funds. There is no certainty that these funds are going to grow and that could really impact the provision of service in the FBRMPO region.

5.2 Other Traditional Sources for Consideration

In addition to federal and state funding sources outlined above the FBRMPO and transit agencies should consider applying for the following available competitive programs to supplement transit activities.

5.2.1 Enhanced Mobility of Seniors and Individuals with Disabilities Program – FTA Section 5310

The FTA Section 5310 program provides formula funding to states for assisting private non-profit groups in meeting the transportation needs of older adults and people with disabilities when/where the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs. The program aims to improve mobility for seniors and individuals with disabilities by removing barriers to transportation service and expanding mobility options.

FTA Section 5310 funding is managed by the City of Asheville and administered by FBRMPO. In accordance with federal rulemaking, PTD makes FTA Section 5310 funding available to rural areas and small urban areas for operating projects through a specific FTA Section 5310 Operating Program with its own application. Operating funds are available through this program only after FTA Section 5310 capital funding has been allocated and are funded with a 50 percent local match requirement when available. Applications for this competitive program must demonstrate project value towards enhanced mobility for seniors and individuals with disabilities to include filling a gap in service to these populations or otherwise expanding their access through the service.

5.2.2 Urban Advanced Technology Grant Program

NCDOT PTD encourages North Carolina's transit systems to employ advanced technologies fostering increased efficiencies throughout the state using a competitive Urban Advanced Technology grant program. Urban Advanced Technology funding is used to benefit transit systems in North Carolina utilizing the wide selection of technologies available today, enhancing both the passenger experience and enabling transit systems to improve safety and operational efficiency.

These competitive grants are available to urban and regional transit systems in North Carolina where projects are included in the Regional Intelligent Transportation System (ITS) Strategic Deployment Plan.

5.2.3 NCDOT PTD Mobility Management Program

NCDOT PTD considers applications for a competitive and limited Mobility Management grant program for regional systems. Applicants must complete a mobility management worksheet and budget sheet to submit with application documents for consideration of funding. PTD only considers applications from multi-county or regional systems and will not fund a mobility management program that it determines duplicates efforts within the same geographic and/or service area.

5.2.4 NCDOT Urban State Match Program

NCDOT PTD provides an Urban State Match funding program to be used as a match for both federally (FTA and FHWA) funded and locally funded urban transit projects. Federal funds matched through this program include 5307 Urbanized Area Formula Grants, 5339 Bus and Bus Facilities, 5310 Elderly and Disabled, and Discretionary grants from the FTA. Applicants can submit an unlimited number of requests for a ten percent state match for projects funded with federal funds or local funds for facility and vehicle replacement projects. Funding is allocated based on transit system operating performance factors, vehicle fleet characteristics, past receipt of state matching funds, and availability of state funds.

5.3 Alternative Funding Sources

Alternative sources of funding were investigated to provide options to implement and fund transit services in the FBRMPO region. In total, five sources could be feasibly implemented into the regional structure to supplement current federal, state, and local funding and operating revenues.

Counties have the authority to levy sales tax, vehicle registration tax, and vehicle rental tax; whereas regional transit operators may have special authority to levy those taxes based on special legislations. General obligation bonds and a quarter-cent sales tax would have to be approved by voter referendum, while additional vehicle registration fees and rental car taxes would need approval from the local governments, or a Regional Transit Authority. Property tax levied through Municipal Service Districts (MSDs) may be an option for cities to provide funding for transit. The administrative processes to levy these taxes are complex and require careful planning and implementation to gain the public support required for successful implementation. Depending on which source or sources are selected, the proposed funding source would need to be marketed to the public and show how the additional revenues would help the regional efforts. But these sources of funding can provide stability to sustain regional transit service and functions into the future.

5.3.1 Sales Taxes

G.S. 105 Article 43 allows counties and transportation authorities to levy sales and use tax to meet the needs of financing public transportation systems. All such taxes must be approved in a referendum. If voters approve the levy of the tax, the county board of commissioners may, by resolution, levy a one-quarter percent (1/4%) local sales and use tax in addition to any other state and local sales and use taxes levied. Higher tax rate and variations to the procedural requirements may be authorized by special legislation, as in the case of Mecklenburg County, PART and Go Triangle, to meet the specific circumstances and needs of a region. Please see **Table 8-2** for projected revenue.

5.3.2 Vehicle Registration Tax for Transit

Vehicle registration tax is a common source of funding for transit in North Carolina. G.S. 105 Article 51 and Article 52 provides that regional transit authorities and counties may collect vehicle registration tax to finance public transportation systems. The board of trustees of an authority or the county board of commissioners may by resolution levy a vehicle registration tax. The statute establishes a maximum tax per year: \$8 for a regional transit authority or \$7 for a county. Please see **Table 8-3** for projected revenue.

5.3.3 Vehicle Rental (U-Drive-It Vehicle) Tax

Counties and transportation authorities may collect a 5 percent rental car fee (or "U-Drive-It Vehicle Fee") by law to finance public transportation systems. For example, Mecklenburg County, Go Triangle (in all three counties that it serves), and PART (in seven of the counties that it serves) currently levy a 5 percent rental car fee. In general, the county's approval is required to levy a rental car fee. The process may vary depending on the nature of the transit operator. Please see **Table 8-4** for projected revenue.

5.3.4 Property Tax Levied Through Municipal Service Districts (MSDs)

G.S. 160A Article 23 provides that a city council may by ordinance define a Municipal Service District (MSD) based on its finding of need or petition by a majority of property owners within the district. The city council may define any number of service districts in order to finance, provide, or maintain for the district services, facilities, or functions in addition to or to a greater extent than those financed, provided or maintained for the entire city. The statute specifically authorizes establishment of an MSD to finance service and facilities for transit-oriented development, and more generally other public services a city may provide by law.

The city may levy property taxes within defined service districts in addition to those levied throughout the entire city. The property tax levied within an MSD cannot exceed the statutory limit of combined property tax rate of one dollar and fifty cents (\$1.50) on the one hundred dollars (\$100.00) appraised value of property subject to taxation, unless approved by qualified voters.

Establishing MSDs may be a potential way for the FBRMPO region to fund new regional transit services. MSDs can be created in areas served directly by the new services, in particular around terminals or bus stops. An MSD can be created by a city council in the form of adopting an ordinance defining the service district.

5.3.5 Bond Proceeds

Capital needs for regional transit may be funded through bond proceeds. Depending on the nature of the regional transit operator and state law, it may have the authority to issue bonds itself (e.g., PART and Go Triangle) or may have to rely on local governments to issue bonds. Issuing a general obligation bond may be required by law to receive voter approval through a referendum. Similarly, the state law may prescribe the process to issue other types of bonds.

Issuing bonds means additional funding requirements to cover debt service costs for the duration of the repayment period. Identifying the source of such additional funds and prudent financial planning are critical to maintaining the financial health of the bond-issuing entity and to maintaining the long-term financial sustainability of the regional service.

5.4 Regional Transit Plan Vision

The FBRMPO Regional Transit Plan vision was crafted based on discussions with the Steering Committee, Work Group, Project Management Team (PMT), and public input.

The vision for the future of public transportation in the French Broad River region was developed collaboratively and seeks to create a regional network that connects people to opportunities and provides mobility options for all residents, employees, and visitors.



The region is collaborative and provides transportation services that are efficient and attractive to current and new riders.



The region offers excellent quality of life through transportation services that offer frequent, convenient access to employment, healthcare, education, and leisure opportunities.



The system is well connected, providing equitable mobility options in both the urban and rural areas of the region, and ensures equal access for people regardless of ability, age, class, race, sex, or gender.



The system is funded sustainably and provides seamless and reliable service across boundaries.

GOVERNANCE & FUNDING

6 Governance and Funding Introduction

This memorandum documents the findings and recommendations with regard to regional governance and funding for the French Broad River Regional Transit Study. The assessment is based on a peer study and Steering Committee input. Section 6.1 presents the peer study process and key findings that are applicable to the French Broad River region. Section 7.1 documents the Steering Committee input, in particular from the January 21, 2021 workshop, that informed the development of governance recommendations; it also presents detailed recommendations for regional governance. Section 9.2 provides the estimated potential associated with the identified funding sources that could fund future regionalization efforts.

6.1 Peer Study

Case studies that showcase experience with regional transit integration across the country can provide valuable best practices and lessons learned for the French Broad River region. Several peer regions were identified and studied with regard to their regional transit governance model. Peers were selected from both within the state of North Carolina and out of the state to demonstrate a range of regional governance models.

6.2 Peer Selection

Table 6-1 below compares the selected peer regions and their governance models to the French Broad River region. The peer regions and their respective governance models are placed on a spectrum of increasing degrees of integration:

On the left end is the French Broad River region, which relies on independent local transit operators with limited connections.

On the right end is a fully consolidated regional model, under which a regional transit operator provides all transit services for both urban and rural areas. The peer selected for this model is West Piedmont Regional Transit Authority (WPRTA).

In between the two ends of the spectrum are several governance models with various degree of integration, including the following:

- City-operated regional transit, with Charlotte Area Transit Services (CATS) as the selected peer
- Independent regional agency that only operates regional routes, with Piedmont Authority of Regional Transportation (PART) as the in-state peer and Sound Transit as the out-ofstate peer

 Consolidated urban regional operator, with Dallas Area Rapid Transit (DART) as the selected peer

Table 6-1. Comparison of Governance Models

Model	Existing	City Service with Regional Routes	Independent Agency Operating Regional Routes Only	Independent Agency Operating Regional Routes Only	Consolidated Urban Regional Operator	Fully Consolidated Regional Operator
Peer Region	French Broad River Region	Charlotte, NC Metropolitan Area	Winston-Salem- Greensboro-High Point Region	Seattle Metropolitan Area	Dallas Metropolitan Area	Catawba, Alexander, Burke, and Caldwell Counties
Regional Transit Operator	Independent City and County Operations	CATS	PART	Sound Transit	DART	WPRTA

Connected Integrated

Table 6-2 provides the basic characteristics of the regions that the peer agencies serve, including locale or state, services provided, jurisdictions severed, service population area, service area size, and the year formed. Information for French Broad River region is also listed for comparison purposes.

Table 6-2. Peer Agency Characteristics

Peer Agency Reviewed	Locale, State	Services Provided	Jurisdictions Served	Service Population Area	Service Area (Sq. Mi.)	Year Formed
French Broad River Region	NC	N/A	Asheville, Buncombe County, Henderson County, Haywood County, and Madison County	458,356	1,287 sq. miles	N/A
PART	NC	Regional bus	Surry, Stokes, Yadkin, Forsyth, Davie, Davidson, Randolph, Guilford, Alamance, and Rockingham Counties	1,677,551	2,500 sq. miles	1997
WPRTA	NC	Fixed route, flex routes, and demand response van/paratransi t services	Alexander, Burke, Caldwell and Catawba Counties	342,142	1,665 sq. miles	2008
CATS	Charlotte Metropolitan Area, NC/SC	Commuter bus, demand response, light rail,	Rapid transit corridors extend outside of the county, Gaston and Morrisville	1,281,190	675 sq. miles	1999

Peer Agency Reviewed	Locale, State	Services Provided	Jurisdictions Served	Service Population Area	Service Area (Sq. Mi.)	Year Formed
		regional bus, streetcar rail, and vanpool, paratransit	And the other one to Indian Trail and stalling Connect Beyond: 12 counties and 2 states, except for Catawba			
DART	Dallas Metropolitan Area, TX	Light rail, commuter rail, streetcar, and light rail	Dallas, Texas, and 12 surrounding cities	2,407,830	698 sq. miles	1983
Sound Transit	Seattle Metropolitan Area, WA	Link light rail; Sounder trains; ST Express Bus; Tacoma Link light rail; and soon, Bus Rapid Transit	Pierce, King, and Snohomish Counties	3,158,800	1,087 sq. miles	1993

Sources: Data was collected during phone interviews and from the FTA (2019 Annual Agency Profiles). Service area and service population area data for the French Broad River Region does not include Madison County (data unavailable).

6.3 Summary of Key Findings and Lessons Learned

For the selected peer agencies, the consulting team conducted in-depth desktop research and phone interviews with their leadership to identify and analyze the following:

- Current governance model
- Funding sources
- Motivations and history of transit regionalization
- Coordination with regional transit partners

The key findings in each of the focus areas listed above are summarized for the selected peers in **Table 6-3**.

Table 6-3. Peer Agency Research

Peer Agency Reviewed	Governing Board Structure	Funding Sources	Motivations of its Creation and the Process of Formation	Coordination with Regional Partners
PART	PART Board of Trustees has 22 members representing each of the 10 member counties, four largest cities, four MPOs, two airports, and the state Board of Transportation. PART was created by a special state legislation, Chapter 160A, Article 27.	Regional bus service is funded by rental car fee from 7 members and \$1 registration fee from 1 member. 2 members provide no dedicated funding and therefore receive no service. The counties must consent to any tax.	PART was formed to provide a range of transportation related functions for the region with a strong highway focus but also including regional bus services.	PART's bus service compliments local service. Local service is bound to city limits based on local tax. PART is the entity that serves overlapping areas. Plenty of daily crossover throughout the area.

Peer Agency	Governing Board	Funding Sources	Motivations of its Creation and the	Coordination with
Reviewed	Structure		Process of Formation	Regional Partners
		The regional call center is funded by local and federal funds. TDM program has funds from the MPO.		
WPRTA	Seven-member board of directors, representing four counties and three cities. WPRTA is a Regional Transit Authority formed under Chapter 160A, Article 25 of the state statute.	Local contribution from general revenue State and federal funds	Driven by the need for seamless regional connections, more transit funding to the region, economy of scales, and a more specialized staff. The first rural, urban regional transit Authority in North Carolina.	WPRTA is a consolidated urban-rural transit agency that serves the four-county area.
CATS	CATS is a City Department. Metropolitan Transit Commission (MTC) is the policy board—one municipality one vote, plus one vote for County Commission and one vote for state. Ex-Officio members representing all mayors that share a border with Mecklenburg County.	County-wide sales tax since 1998 and local funding. State provided capital funding for the Blue Line. City of Charlotte funds streetcar service through general funds.	Driven by sales tax referendum to provide county-wide transit service. Impetus: 2030 Transit Corridor System Plan adopted 2006 which consists of multiple transit improvements in 5 corridors in Mecklenburg County	CATS operates express bus services through MOUs to outside of county, e.g. Gastonia, Rocky Hill, Union County, etc. CATS provides vehicles and operators, and splits costs with the local governments served.
DART	Created by state statute. Governing board is appointed by cities that DART serves. 13 cities, each has voting power proportional to population. Dallas has 7 votes and a fraction. Plano has two votes plus a fraction.	Sales tax collected in member cities. Cities may fund special projects that they request individually. DART and North Central Texas Council of Governments are both direct recipients of FTA funds.	Driven by need for regional transit services and sales tax referendum.	Interlocal agreements with non-member jurisdictions to provide regional services, e.g. A-Train, TRE.
Sound Transit	18-member Board of Directors with elected officials as members. Representation is proportional to the population of each county: 3 from Snohomish County; 10 from King County; and 4 from Pierce County.	Sales tax Motor vehicle excise tax Property tax	Formed to provide new services outside of counties—regional high capacity transit services.	Board members serve on County councils which oversee their own transit agencies, which leads to better coordination with local services. Contracts with 5 transit operators in the area to operate the regional express bus services.

Source: AECOM, based on interviews with transit agencies.

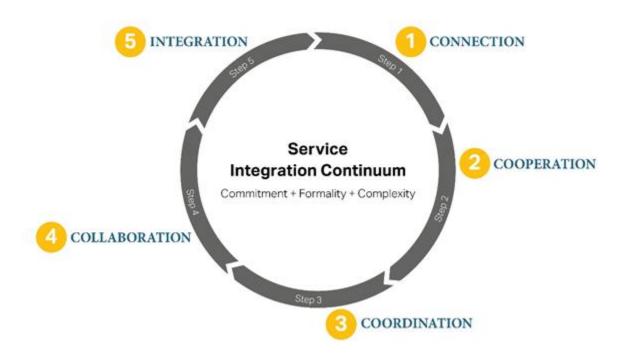
Based on the key findings from the peer study, the following best practices and common lessons learned have emerged:

- Governing board of the regional operator should represent the major jurisdictions and provide an effective channel for regional decision-making and coordination. The governance structure should also reflect local funding commitment.
- Stable funding sources are critical to the success of regional transit. Local funding contribution should be consistent with the services planned. Dedicated regional funding can be both a catalyst and a benefit of regionalization.
- Shared policy goals for the region (e.g., a strong and increasing need for regional transit service) are powerful drivers for effective regional governance.
- Champions for regionalization play a key role in educating the public, promoting community support, facilitating stakeholder conversations, and coordinating actions.
- The customers benefit from service coordination, and opportunities to improve seamless service increasing convenience and service reliability.

GOVERNANCE STRUCTURES

7 Governance Structures

The peer study provided a solid groundwork for guiding a more in-depth discussion with the Steering Committee to solicit input on targeted questions about potential governance structures, based on Levels of Integration discussed in Section 4.12. This section documents the Steering Committee's input, in particular from the January 21, 2021 workshop, that informed the development of governance recommendations. Based on the Steering Committee's feedback, detailed recommendations for regional governance have been developed and documented in this section.



7.1 Stakeholder Input: Steering Committee Workshop

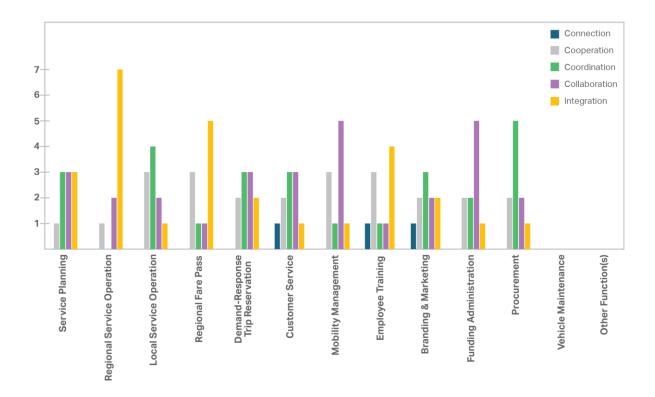
The Steering Committee Workshop took place on January 21, 2021 where the group discussed the region's collective vision for future regional transit governance. The workshop started with a brief presentation of the regional transit governance models of the peers. The consulting team also facilitated several exercises with the Steering Committee to elicit feedback on key decisions required to identify an appropriate regional governance model.

The questions asked during the exercises are provided below, along with the Steering Committee Members' responses.

- Exercise 1: What is the appropriate level of integration for transit administration and operating functions? [Participants were asked to select one of the five levels of integration for each function listed.]
 - Service Planning
 - Regional Service Operation
 - Regional Fare Pass
 - Demand-Response Trip Reservation
 - Customer Service
 - Mobility Management
 - Employee Training
 - Branding & Marketing
 - Funding Administration
 - Procurement
 - [Are there other functions that should be considered for integration? Please write them in.]

The bar chart below summarizes the Steering Committee members' votes for Exercise 1. The Steering Committee members are generally in favor of an increased level of integration for the listed functions. For some of the functions, the consensus of what is an appropriate level of integration is stronger, whereas the participants expressed diverging view for the other functions.

- **Service Planning**: differences of opinions on the level of integration
- Regional Service Operation: consensus on integrated regional service operation
- Regional Fare Pass: polarized desires of integrated regional fare pass
- **Demand-Response Trip Reservation**: differences of opinions on the level of integration
- **Customer Service**: differences of opinions on the level of integration
- Mobility Management: polarized desires of integrated regional fare pass
- **Employee Training**: polarized desires of integrated regional fare pass
- Branding & Marketing: differences of opinions on the level of integration
- Funding Administration: trending towards collaboration
- Procurement: trending towards coordination



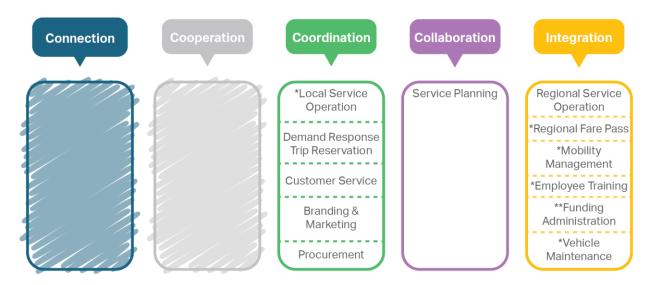
- Exercise 2: Which entity should perform any integrated functions?
 - o MPO
 - A new regional entity
 - One of the local agencies
 - o Other

Nine participants voted and all votes were for a new regional entity.

Exercise 3: Our agency is hesitant to participate in integration activities because...
[Participants were asked to write in their answers.] Funding and political buy-in are the most common concerns. Other factors mentioned include autonomy in decision making, differences in policy priorities, fleet ownership and responsibilities, and disparity in technical and financial capacity.

7.2 Opportunities for Integration: Operating and Administrative Functions

Based on the participants' votes during Exercise 1 of the workshop, different levels of integration may be appropriate and desired for the region. The chart below shows the operating and administrative functions by proposed level of integration.



^{*} Agencies can opt-in.

For the functions under "Integration," a new regional entity can perform those functions for the region. It is recommended that regional service be operated by the new regional entity to reap benefits of cohesion and economy of scale. For the other functions, each jurisdiction can decide whether to hand over those functions to the new regional entity and if so, the jurisdiction may execute an intergovernmental agreement with the new regional entity to define the responsibilities and roles. For example, some local operators may decide to accept the regional fare pass, but others may decide to opt out. Responsibilities of funding administration will likely be divided between the new regional entity, which will be best positioned to administer any regional funding dedicated to regional services, and the City of Asheville, which will continue to be the designated recipient of federal transit funding.

For the functions under "Collaboration" and "Coordination," formalized forums and processes for collaboration and coordination should be established for all local operators and the new regional entity. The region expressed the desire to have a higher level of integration for service planning. The new regional entity can be responsible for planning the regional service and facilitate collaboration with local operators in planning for better connectivity between systems. For the functions under "Coordination," the region indicated the need for maintaining autonomy but increased coordination among operators.

Currently, the agencies are operating under the connection and cooperation models, which provide the baseline for future levels of integration. The informal agreements that are in place could become more formal as the regional agency matures.

^{**} Identify the designated recipient.

7.3 Recommended Regional Governance Model

This section documents the recommendations of a regional governance model with details for major administrative and operating functions. The recommendations were developed based on the Steering Committee's input during and after the January 21, 2021 workshop.

Table 7-1. Integration Opportunities for Each Function

Function	Integration Opportunities
Service Planning	New regional entity will be responsible for service planning for regional routes. Region to establish a forum and process for service planning coordination. New regional entity could have input from local operators on planning for connections with local services.
Regional Service Operation	New regional entity to operate all regional routes.
Local Service Operation	Existing local transit operators will remain independent. A local jurisdiction can contract with the new regional entity to operate local service through an intergovernmental agreement.
Regional Fare Pass	New regional entity will implement a regional fare pass and manage fare revenue collected through the fare pass. Local jurisdictions can choose to accept the regional fare pass or opt out. The regional fare pass would be beneficial for the riders if implemented across the region.
Demand-Response Trip Reservation	New regional entity will coordinate with local transit operators to help demand- response riders access regional routes. A local jurisdiction can contract with the new regional entity to operate demand-response service through an intergovernmental agreement.
Customer Service	New regional entity and local transit operators will coordinate to provide riders with information about connection between regional and local services.
Mobility Management	 (1) New regional entity can take on mobility management for the region by hiring a mobility manager to coordinate rides for the region and hosting a new software system. OR (2) New regional entity and local transit operators can establish a forum to coordinate mobility management.
Employee Training	New regional entity will retain an on-call training consultant who will establish and carry out training modules. Local transit operators may send employees to receive training as needed. Consultants will provide training programs, and carry out training modules.
Branding & Marketing	The region can coordinate marketing efforts to increase transit ridership, e.g. develop consistent design and format for service information and other rider communication materials and launch joint advertising campaign.
Funding Administration	New regional entity will administer future regional funding or transit tax, if the region decides to levy such new tax. City of Asheville will continue to be the designated recipient of FTA 5307 funds. New regional entity and local transit operators can establish a forum and process to meet for funding discussion.
Procurement	New regional entity and local transit operators can find opportunities to share procurement contracts for services and goods.
Vehicle Maintenance	In the longer term, the Region may consider a shared vehicle maintenance facility and maintenance contractor. New regional entity can manage the vehicle maintenance facility and contract. Local transit operators can opt in as their current operating contracts expire and if they find this arrangement attractive.
Other Functions	Region can identify integration opportunities for other functions.

SERVICE RECOMMENDATIONS

8 Service Recommendations

In Section 4 (Opportunities and Constraints), key elements regarding transit operations and services were identified and considered:

- Existing service capabilities and limitations
- Current coordination efforts between the four regional transit providers
- The benefits of regional transit services
- Appropriate transit service options for the region
- Service integration strategies
- A vision statement for the Regional Transit Plan

The findings from this prior section were used to develop adequate and implementable recommendations for new and enhanced regional transit services. These recommendations are:

- Four regional express routes
- Microtransit service at five key transit system access points
- Vanpools

8.1 Proposed Regional Services

The regional transit recommendations were designed with a focus on the importance of enhancing the existing local service and providing improved connectivity to the local services and regional activity centers. An important consideration was to integrate the new services into the existing transit network at key access points throughout the region. **Figure 2-1** illustrates the current services and the access points for the new services:

8.2 Cross Jurisdictional Regional Express Routes

The four recommended regional express routes will operate from eight key locations in each quadrant of the region:

- Mars Hill and Weaverville in the northern quadrant
- Black Mountain and Swannanoa in the eastern quadrant
- Hendersonville and the Asheville Regional Airport Park and Ride in the southern quadrant
- Waynesville and Evergreen Packaging/Asheville Buncombe Technical (ABTech) College in the western quadrant

Table 9-1. Description of Regional Routes

Regional Express Route	Primary Access Point	Mid-Route Access Point	Connectivity to Existing Services
North	S. Main Street in Mars Hill	Weaverville Park and Ride	ART Station, Mountain Mobility
East	Starbucks Parking Lot in Black Mountain	Ingles in Swannanoa	ART Station, Mountain Mobility
South	Parking lot near Big Lots development off I-26 Exit 49 in Hendersonville	Asheville Regional Airport Park and Ride	ART Station, Apple Country Transit
West	First Baptist Church in Waynesville	Evergreen Packaging/AB Technical College	ART Station, Haywood Transit

The route alignments of the recommended regional express routes are displayed in **Figure 9-1** through **Figure 9-9**.

Figure 9-1. Regional Express Route Alignments

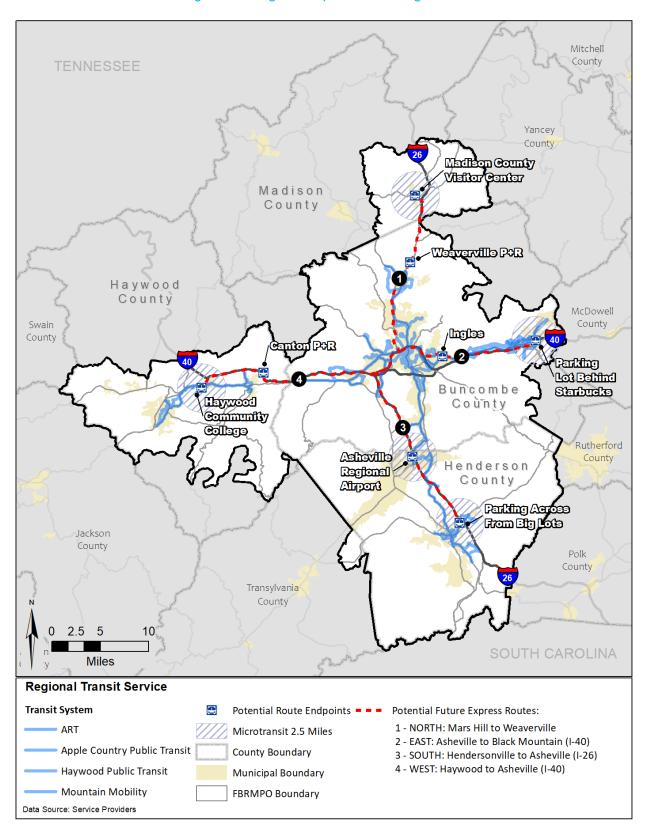


Figure 9-2. Potential North Route Midpoint



Figure 9-3. Potential North Route Endpoint

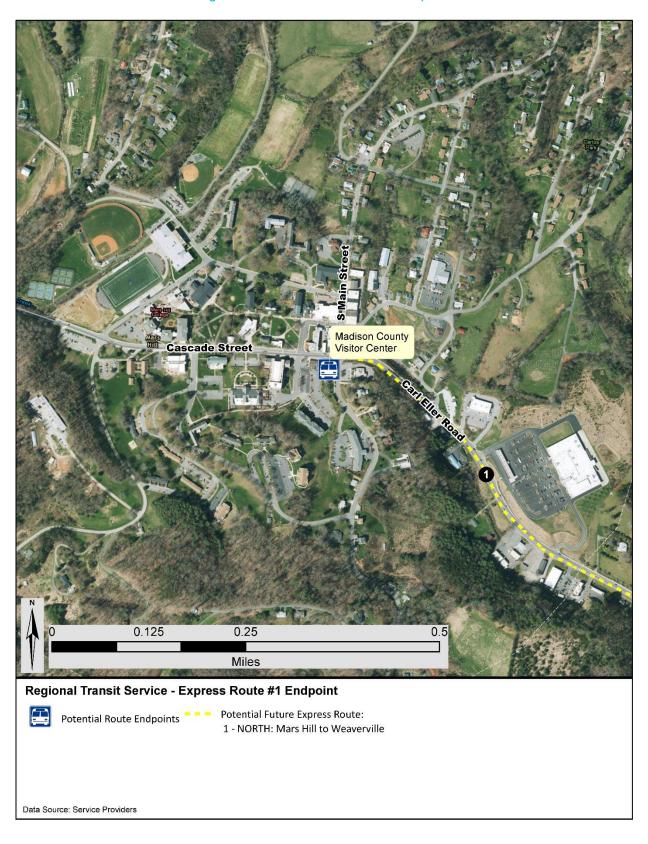


Figure 9-4. Potential East Route Midpoint



Figure 9-5. Potential East Route Endpoint



Figure 9-6. Potential South Route Midpoint



Figure 9-7. Potential South Route Endpoint

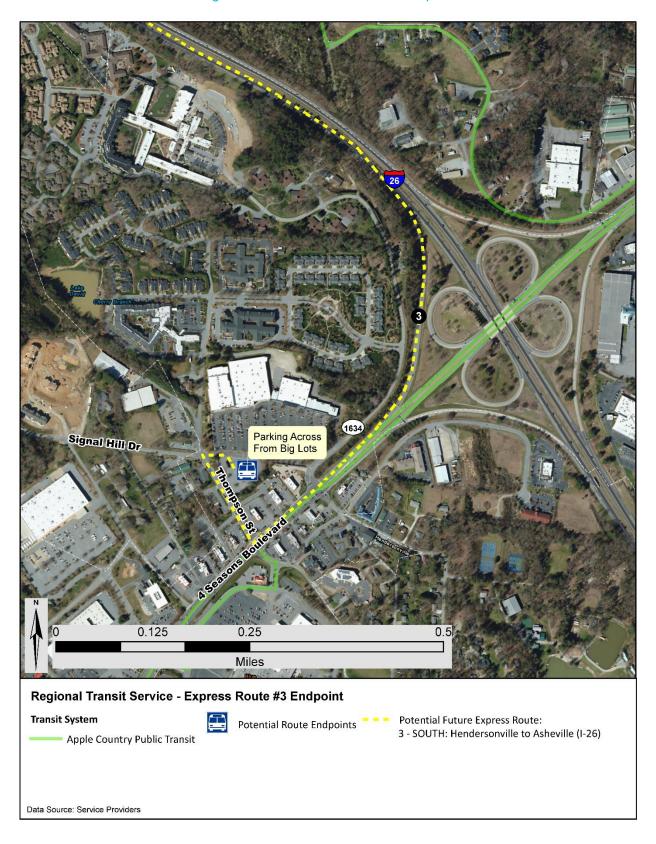
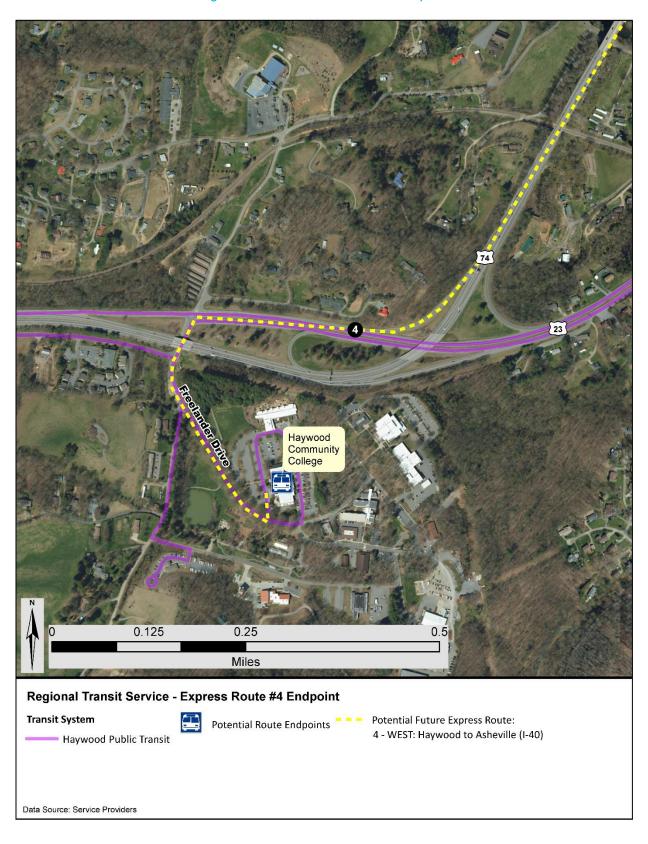


Figure 9-8. Potential West Route Midpoint



Figure 9-9. Potential West Route Endpoint



8.3 Cross-Jurisdictional Regional Connectivity Options

In order to provide access to the regional system, several mobility options were considered for implementation. These services are described in this section.

8.3.1 Microtransit

Microtransit is a privately owned and operated shared transportation system that can offer fixed routes and schedules, as well as flexible routes and on-demand scheduling. The vehicles generally include vans and buses. In the United States, public transportation agencies are experimenting with on-demand, shared, and dynamic models to augment traditional fixed-route bus and train services. These services, referred to as microtransit, are enabled by technology similar to ride sharing apps. The private sector provides the service, but with the help of taxpayer subsidy in most cases. Trips are typically scheduled using an app, but riders will also have an option to call a dedicated telephone number to schedule a trip. The services are available to everyone within the service area and vehicles are usually ADA accessible.

To accommodate first and last mile trips to connect with the regional routes and the Asheville Regional Airport, microtransit service is recommended for a five-mile radius around the end of the regional routes and the airport. These zones are presented in **Figure 9-1**.

8.3.2 Vanpool

Recognizing that fixed-route service is not always the most appropriate transit mode for the transit need, a vanpool program is recommended to serve employees and employers throughout the FBRMPO region. This would be one of the services the Regional Agency would offer, taking the lead role in promoting and implementing a vanpool program that would strive to achieve the initiatives of energy conservation, reducing congestion, improving air quality, reducing vehicle miles, and provide an enhanced regional connectivity. The vanpool program would be more flexible and would allow for more long-distance work commute travel that regional express route services cannot efficiently accommodate. Appendix D details the process to implement this type of service.

Vanpool Benefits

The new agency can provide employers with an opportunity to accommodate a target market of employees who have long commutes to and from the workplace, and it would also open opportunities to other markets that currently have no access to jobs across the region. The goal of this program would be to increase the use of alternative transportation in the region and connect individuals and employers with building a sustainable solution for work-related commuter trips. Employers would benefit through improved worker productivity, expanded labor market, increased worker retention, and reduced need to expand parking facilities. This would increase the diversity of the regional labor markets, bringing workers from many outlying areas to travel to employment centers.

Vanpool routes are usually designed to begin at a meeting/pick up location and travel to the worksite. Pick up locations can range from shopping centers, churches, businesses, or designated park and ride lots. In the MPO region, pick up locations could include the ART Transit Center and express routes stops, current and future park and ride lots, as well as shopping centers along major travel nodes convenient for vanpool participants.

Each van would have the seating capacity of 5 to 14 passengers, depending on the size configuration of the vehicle. Minivans are very popular and require fewer passengers, though some agencies deploy 14-passenger vans that can carry many more people. An important distinction between a vanpool program and other transit modes is that the vans are not directly operated by the transit agency. Instead, a vanpool participant would lease the van from the new regional agency and be responsible for driving and fueling. The vanpool driver would be allowed to park the vehicle at his or her residence, which is particularly convenient for the driver when the vanpool route is far from a transit hub.

8.4 Implement Regional Express Routes

Based on the further review of the future potential services and input received from the public meeting process, the following recommendations have been prepared. The recommendations regarding the proposed service options are grouped in three categories: Express route service, microtransit route service and vanpool service. Operating and capital cost estimates were prepared for the express and microtransit services based on assumptions derived from public survey results; PMT and Steering Committee input; and industry best practices:

- Hours of operation are weekdays from 6:00 a.m.-8:30 a.m., 11:00a.m. -2:00p.m. and 4:30p.m.-7:00p.m.
- The express routes will be implemented in a phased approach, with the North and South routes implemented in the initial phase and the East and West routes implemented in a second phase
- Smaller transit vehicles will be utilized initially for both the express and microtransit services to reduce capital costs, accelerate vehicle delivery time from the manufacturer and allow the ridership to grow over time into larger vehicles
- Operating costs for the express service assumed a rate of \$100.00 per vehicle revenue hour based on the 2019 National Transit Database report for the City of Asheville transit
- Operating costs for the microtransit service assumed a rate of \$60.00 per vehicle revenue hour based on the 2019 National Transit Database report for Buncombe County transit
- The number of vehicles required to operate the service is assumed to be 25 percent more that the peak vehicle requirement

8.4.1 Implementation of Regional Express Route Service

The express route services recommended for implementation and the estimated annual operating cost of implementing the recommendations are presented in **Table 9-2**. The recommended express service does not require implementation of complementary ADA paratransit service.

Table 9-2. Operations and Maintenance Costs for Express Route Services - Phase I

Express Route Service Statistics	Summary
Peak Vehicles	6
Fleet Vehicles	8
Annual Vehicle Revenue Hours	12,240
Annual Vehicle Revenue Miles	497,700
O&M Cost	\$1,224,000 ⁻¹

The operating and maintenance costs for implementing the East and West routes are shown in **Table 9-3** and are similar to Phase I. These costs might increase due to inflation depending on the implementation date.

Table 9-3. Operations and Maintenance Costs for Express Route Services - Phase II

Express Route Service Statistics	Summary
Peak Vehicles	5
Fleet Vehicles	6
Annual Vehicle Revenue Hours	10,200
Annual Vehicle Revenue Miles	387,600
O&M Cost	\$1,020,0002

8.4.2 Implementation of Microtransit Services

The microtransit services recommended for implementation and the estimated annual operating cost of implementing the recommendations are presented in **Table 9-4**.

Table 9-4. Operations and Maintenance Costs for Microtransit Services

Microtransit Service Statistics	Summary
Peak Vehicles	3
Fleet Vehicles	4
Annual Vehicle Revenue Hours	6,120
Annual Vehicle Revenue Miles	61,200
O&M Cost	\$367,200 ¹

¹Any cost and/or quantity opinions, estimates or forecasts provided by AECOM was on a basis of experience and judgment, but since AECOM has no control over market conditions or bidding procedures, AECOM cannot and does not warrant that bids, ultimate construction cost, or project economics will not vary from such opinions, estimates or forecasts.

Capital Costs

Table 9-5 displays the capital projection utilizing federal funding including estimated vehicle, passenger amenities, and office/computer equipment and subsidy funding requirements.

Table 9-5. Capital Costs for Regional Services

Capital Facility Improvement Cost Estimates						
Туре	Units	Estimated Unit Cost	Total	Federal Share (85%)	State/Local Share (15%)	
Transit Vehicles	12	\$55,000	\$660,000	\$561,000	\$90,000	
Potential Transfer Centers	3	\$100,000	\$300,000	\$255,000	\$45,000	
Software/Hardware	-	\$20,000	\$20,000	\$17,000	\$3,000	
Office Equipment	-	\$15,000	\$15,000	\$12,750	\$2,250	
Totals			\$995,000	\$845,750	\$149,250	

These are items that warrant greater focus to ensure continued compliance with FTA and NCDOT funding requirements:

- Shared-rides Service must be considered "public transportation" to be eligible for 5311 and CARES Act funding. In general, microtransit service is eligible if it provides shared-ride service open to the general public. For further details about the definition of public transportation and shared-ride services, see FTA's Shared Mobility FAQs. Also see 49 USC 5302.
- Americans with Disabilities Act (ADA) Demand response services like microtransit must be accessible to people of all abilities and be equivalent in response time, fares, geographic area of service, hours and days of service, trip purpose prioritization, availability of information and reservations capability, and any constraints on capacity or service availability. See 49 CFR 37.77(c).
- Civil Rights and Title VI Projects, programs, activities, and related employment decisions funded in part by FTA are prohibited from discrimination on the basis of race, color, religion, national origin, sex (including sexual orientation and gender identity), disability, or age. Discrimination may extend indirectly to the way services are provided. Access to service must be equal and equitable, including how customers pay for and obtain service. In this case, be particularly mindful of the impacts that cashless payment and app-based scheduling could have on specific populations and ensure these groups are not unduly impacted by the service model. It is also important that this project align with each agency's Title VI plan required by FTA and NCDOT. See 49 USC 5332 and Title VI of the Civil Rights Act of 1964.
- Drug and Alcohol Testing Transit agencies must ensure all drivers, including contracted drivers under a third-party contract, are included in a drug and alcohol testing program. See 49 CFR 655.
- Data and Reporting Ridership and finance data must be reported to the National Transit
 Database and through NCDOT's OpStats report each year. Other data requests, reports,
 and audits are required by NCDOT or FTA periodically.
- Compliance with Funding Agreements and Plans As a general reminder, funding agreements between NCDOT and regional transit providers establish many of the standards which the regional transit providers must meet in order to receive FTA and

NCDOT funding. Many of these standards extend to third-party contracts and should be reviewed to ensure continued compliance.

Additional Resources and Considerations

A list of additional resources has been prepared and can be found in the Appendix C.

FUNDING ALTERNATIVES AND STRATEGIES

9 New Transit Agency Funding Alternatives

This section explores funding sources that are made available to a new transit entity to fund the proposed new functions included in the governance model. Funding for these functions typically comes from federal, state and local sources, but there are other non-traditional alternatives that can be used to fund transit service, such as vehicle registration or sales taxes. Traditional funding sources may be more limited. Many transit systems desirous to expand transit service must generally find alternative ways to increase funding and those rely mostly on local sources. Finding a dedicated funding source that, over time, funds service improvements is one of the biggest challenges transit agencies face and the key to success. The information below describes various funding sources open to transit agencies.

9.1 Traditional Funding Sources

Table 8-1 shows proposed traditional funding sources for transit agencies. The table below provides the grant program name, program description, eligible recipients, and matching ratios for each of these funding sources. These sources are both federal and North Carolina state programs that provide annual allocations to transit agencies that qualify for funding and are formula-based funding. Some sources shown below are discretionary-based and are competitive in nature for funding. These potential funding sources are further split into those funding sources appropriate for three categories of planning and innovation, operating assistance, and capital asset acquisition.

Table 8-1. Potential Traditional Funding Sources

Grant Program Name	Program Description	Eligible Recipients	Matching Ratios
Planning and Innovation	n Grant Opportunities		
FTA Section 5303, 5304 and 5305 – Metropolitan and Statewide Planning formula funding	Support transit planning expenses.	Metropolitan Planning Organizations (MPOs)State DOTs	Up to 80% of eligible expenses
Integrated Mobility Innovation	FTA's Integrated Mobility Innovation (IMI) Program funds projects that demonstrate innovative and effective practices, partnerships and technologies to enhance public transportation effectiveness, increase efficiency, expand quality, promote safety and	 FTA Designated Recipients of urbanized areas. State DOTs and local government agencies Private non-profit organizations Transit Agencies 	Up to 88% of eligible capital expenses

Grant Program Name	Program Description	Eligible Recipients	Matching Ratios
	improve the traveler experience.		
FTA Section 5307 – Urbanized Area formula funding	Supports operating and capital costs of transit operators. Used by the State DOT to fund small urban transit systems.	Funding is made available to designated recipients, which must be public bodies. Typically, the State DOT is the designated recipient for urbanized areas between 50,000 and 200,000.	Up to 50% of eligible operating expenses
FTA Section 5311 – Rural Area formula funding	Supports operating and capital costs of transit operators in non-urbanized areas.	 State DOTs Federally recognized Indian Tribes Sub-recipients include state or local government authorities, non-profit organizations, and operators of public transportation or intercity bus service. 	Up to 50% of eligible operating expenses
Accelerating Innovative Mobility (AIM)	The AIM initiative will establish a national network of innovative transit agencies that will test solutions and share project results with their peers. They will work closely with and use FTA's technical assistance centers to promote the adoption of promising innovations in communities around the country.	Eligible applicants under this notice are providers of public transportation, including public transportation agencies, state/local government DOTs, and federally recognized Indian tribes	Up to 80 percent
Consolidation and Coordination of Public Transportation Systems (ConCPT)	NCDOT funding program established to consolidate or coordinate with other public transportation systems to maximize resources, gain efficiencies, and increase access to public transportation. These funds are available for two purposes: 1) to encourage transit systems to consolidate into single-agencies to reduce the number of grantees for which the Department has oversight, and 2) to encourage coordination between providers for longer-distance trips spanning multiple transit system service areas.	Eligible applicants must be subrecipients of FTA Section 5307 and/or 5311 funds through NCDOT	Up to \$200,000 maximum amount. Sliding scale for determining funding amount
FTA Section 5307 – Urbanized Area formula funding	Supports operating and capital costs of transit operators. Used by the State DOT to fund small urban transit systems.	Funding is made available to designated recipients, which must be public bodies. Typically, the State DOT is the designated recipient for urbanized areas between 50,000 and 200,000.	Up to 80% of eligible capital expenses

Grant Program Name	Program Description	Eligible Recipients	Matching Ratios
FTA Section 5311 – Rural Area formula funding	Supports operating and capital costs of transit operators in non-urbanized areas.	State DOTs Federally recognized Indian Tribes Sub-recipients include state or local government authorities, non-profit organizations, and operators of public transportation or intercity bus service.	Up to 80% of eligible capital expenses
FTA Section 5339(a) – Bus and Bus Facilities formula grant	Provides capital funding to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities.	 Designated Recipients of urbanized areas State DOTs that operate or allocate funding to fixed-route bus operators Sub-recipients include public agencies or private non-profits engaged in public transit 	Up to 80% of eligible capital expenses
FTA Section 5339(b) – Bus and Bus Facilities discretionary grant	Provides capital funding to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities.	 Designated Recipients of urbanized areas State DOTs that operate or allocate funding to fixed-route bus operators Sub-recipients include public agencies or private non-profits engaged in public transit 	Up to 80% of eligible capital expenses
Flexible Funding Program – Surface Transportation Block Grant Program (STBG)	Provides funding for a wide variety of projects that support operating and capital costs of transit operators. Used by the State DOT to fund small urban transit systems.	Designated Recipients of urbanized areas	Up to 88% of eligible capital expenses
Access and Mobility Partnership Grants	This program provides competitive funding to support innovative capital projects for the transportation disadvantaged that will improve the coordination of transportation services and non-emergency medical transportation services. This pilot program awards funds competitively to finance innovative capital projects for the transportation disadvantaged that improve the coordination of non-emergency medical transportation services.	 Designated Recipients of urbanized areas. State DOTs and local government agencies Private non-profit organizations Transit agencies 	Up to 88% of eligible capital expenses

9.2 Revenue Projection

There are several funding options at the local level that the partner agencies could use to fund the new regional agency. These options could also help strengthen local services, once regional and local priorities are established. As shown in the tables below, the highest potential revenue is obtained from the sales tax, followed by vehicle registration and rental car. The City of Asheville is the only agency currently taking advantage of the vehicle registration tax, which is used to fund transit operations. Calculations were made on an annual basis.

9.2.1 Sales Tax

Article 39 sales tax is one percent with half going to the general fund. Using that model, an additional quarter or half percent would generate the amounts by county shown in **Table 8-2**, as currently allowed by state law.

Table 8-2. Sales Tax Revenue Potential

County	1/4 cent	½ cent
Buncombe	\$7,541,000	\$15,081,000
Haywood	\$3,098,000	\$6,196,000
Henderson	\$5,844,000	\$11,687,000
Madison	\$918,000	\$1,835,000
Total	\$17,401,000	\$34,799,000

Source: State of NC Annual Audit 2019³

9.2.2 Vehicle Registration Fee

A vehicle registration fee for private vehicles can be collected by the agencies at either a \$5 or a \$10 fee.

Table 8-3. Vehicle Registration Fee Revenue Potential

County	\$5 Fee*	\$10 Fee*
Buncombe	\$1,045,000	\$2,090,000
Haywood	\$249,000	\$498,000
Henderson	\$470,000	\$940,000
Madison	\$87,000	\$174,000
Total	\$1,851,000	\$3,702,000

*The vehicle registration fee could use other tiers up to \$10. \$5 and \$10 were used to exemplify the revenue potential. Source: FHWA Highway Statistics 2019 and Census 1-Year Estimates

³ https://www.nctreasurer.com/links/state-and-local-government-finance/lgc/local-fiscal-management/annual-audit/annual-audit

9.2.3 Vehicle Rental Fee

Buncombe County already assesses a fee on vehicle rentals. The State has an 8 percent tax on rental vehicles.

Table 8-4. Vehicle Rental Fee Revenue Potential

County	1/4 cent	½ cent	1 cent
Buncombe	\$188,500	\$377,000	\$754,000

Source: Buncombe County Annual Financial Audit 4

Note: The fees featured above could be used for capital and operations expenses.

 $^{^{\}bf 4}\,\underline{\rm https://www.buncombecounty.org/common/finance/financial-reports/2018-2019/comprehensive-annual-financial-report.pdf}$

10 Funding Strategies

Three scenarios of proposed funding packages are presented as part of this study, along with advantages and disadvantages. In addition, a pathway for implementation is presented for each funding package. The funding packages are meant to be iterative in nature. Specifically, funding package 2 includes all funding options cited in funding package 1, plus some additional revenue sources. Similarly, funding package 3 includes all options from both funding packages 1 and 2, plus some additional sources.

10.1 Funding Package 1

Funding Package 1 is made up of traditional transit funding sources that each of the transit agencies in Asheville are currently utilizing for their transit operations. This funding package utilizes existing state and federal sources of funding. Funding from the FTA is the most common federal source of funding utilized in transit operations. In addition, NCDOT funding may also be used by transit agencies. This funding package presents several advantages and disadvantages and those are outlined below.

Advantages of this funding package:	Disadvantage of this funding package:
 Well vetted familiar funding sources Reliable sources with consistent funding amounts annually Some sources have broad ranges of eligibility 	 Currently maximized in the region Further dividing the funding amounts to allow addition of a regional entity may cause reductions in transit service Discretionary funding is not reliable on an annual basis

The pathway to implementation for this funding package presents some challenges. Currently, in the FBRMPO region, the traditional federal and state funding sources are obligated. Discretionary funding from the FTA may be an option to be used for capital purchases, but this type of funding is not reliable funding that may be utilized year after year.

10.2 Funding Package 2

As noted above, Funding Package 2 includes all traditional federal and state funding sources. In addition, this package adds two added revenue sources - a vehicle registration fee and a rental vehicle fee. Both the vehicle registration fee and the rental vehicle fee options were analyzed for project their funding potential. Two options were analyzed for the vehicle registration fee - a \$5 fee option and a \$10 fee option. Projected annual revenues for the vehicle registration fee are shown below per county.

Table 10-1. Vehicle Registration Fee Revenue Potential

County	\$5 Fee	\$10 Fee
Buncombe	\$1,045,000	\$2,090,000
Haywood	\$249,000	\$498,000
Henderson	\$470,000	\$940,000
Madison	\$87,000	\$174,000
Total	\$1,851,000	\$3,702,000

Source: FHWA Highway Statistics 2019 and Census 1-Year Estimates

The projected rental vehicle revenues are much more modest when compared with the vehicle registration fee. Currently, Buncombe County already assesses a fee on rental vehicles. North Carolina assesses an 8 percent tax on rental vehicles. This study projected potential additional revenue should an additional ¼ cent, ½ cent or 1 cent were added to the rental vehicle fee. The annual projected amounts are shown below.

Table 10-2. Vehicle Rental Fee Revenue Potential

County	¼ cent	½ cent	1 cent
Buncombe	\$188,500	\$377,000	\$754,000

Source: Buncombe County Annual Financial Audit 5

Funding Package 2 presents several advantages and disadvantages for this funding package when compared with the previous funding package.

Advantages of this funding package:	Disadvantage of this funding package:
 Introduces new funding into the region not currently being utilized 	New funding often means unfamiliar
 Introduction of locally controlled funding All four counties may benefit from the vehicle registration fee 	

The pathway to implementation for Funding Package 2 presents more opportunity for consistent funding to be utilized for the implementation of the proposed new transit recommendations. The vehicle registration fee could fund operations of all four new proposed regional routes. The rental vehicle fee could fund administration of the proposed new regional entity. Vehicle registration and rental vehicle could fund additional integration tasks such as mobility management, employee training, regional fare pass, and others. It should be noted that it is projected that funding package 2 will not produce sufficient funding to satisfy all required capital and operational needs.

10.3 Funding Package 3

The final funding package presented is Funding Package 3. Similar to funding package 2, this funding package contains all revenue options presented in the first two funding packages, along with one final funding source. The final revenue source analyzed for this study was the inclusion of funding from a local sales tax option. Two options for the sales tax were analyzed to determine the funding potential from this source - a $\frac{1}{4}$ cent option and a $\frac{1}{2}$ cent option.

In North Carolina, creating a dedicated local sales tax option requires, at minimum, a successful voter referendum with a defined project listing outlining the uses of the sales tax. The ¼ cent sales tax option may be instituted with a successful voter referendum. The ½ cent option requires North Carolina legislative approval.

In North Carolina, there are several other transit agencies that have utilized this funding source to fund significant new transit projects, including new transit mode additions. For instance, the Charlotte, North Carolina metro area has a dedicated transit tax that permits that area to simultaneously leverage additional federal revenue with the infusion of revenue from a sales tax.

 $^{^{5}\,\}underline{\text{https://www.buncombecounty.org/common/finance/financial-reports/2018-2019/comprehensive-annual-financial-report.pdf}$

The revenue-generating potential for a ¼ cent and ½ cent sales tax were evaluated as part of this study. The potential funding gains from the annual local sales tax is significant and are shown in the table below.

Table 10-3. Sales Tax Revenue Potential

County	1/4 cent	½ cent
Buncombe	\$7,541,000	\$15,081,000
Haywood	\$3,098,000	\$6,196,000
Henderson	\$5,844,000	\$11,687,000
Madison	\$918,000	\$1,835,000
Total	\$17,401,000	\$34,799,000

Source: State of NC Annual Audit 20196

Funding Package 3 presents several advantages and disadvantages for this funding package when compared with the previous funding packages.

Advantages of this funding package:	Disadvantage of this funding package:
 Introduces new funding into the region not currently being utilized Potential source of significant funding Introduction of locally controlled funding All four counties may benefit from the additional revenues 	 Possible negative public perception for new taxes ½ cent option requires legislative approval

Finally, the pathway to implementation for this funding package offers the most revenue and, therefore, all required recommendations from this study may be funded. The local sales tax (even ½ cent option) could fund all operational and capital needs required for the new recommendations. Other suggested integrative tasks suggested could be funded with either local sales tax or vehicle registration or rental car fees. The regional entity could offer a strong leadership role in the region in advancing transit and expand regional routes, as needed. Also, new transit modes may be studied for future implementation. The addition of the sales tax revenue offers much more flexibility in the recommendations that may be funded and allows Asheville to lead Western North Carolina in the growth and expansion of transit services.

 $^{^6}$ <u>https://www.nctreasurer.com/links/state-and-local-government-finance/lgc/local-fiscal-management/annual-audit/annual-audit</u>

IMPLEMENTATION PLAN

11 Options for Establish a New Regional Transit Operating Entity

Establishing a new, independent entity is the French Broad River region's preferred governance model for regional transit, according to the polling result and feedback from the stakeholder workshop in January 2021. There are several options to establish such new entity, which are explained in this section. Each option has its pros and cons, but among them, establishing a Regional Transit Authority under Article 25 of Chapter 160A of the General Statutes is recommended as the most suitable option for the region.

Though all these options are different, there is a common feature to all of them: the need for a local champion to help moving the process forward, negotiating terms of the new authority, bringing key stakeholders to the table and moving through the administrative and regulatory environments.

11.1 Option 1: Article 25 Regional Public Transportation Authority

Article 25 of Chapter 160A of the General Statutes authorizes several municipalities, including counties, cities, towns, etc., to establish a Regional Public Transportation Authority. This is a common statutory option in the State of North Carolina for establishing regional transit agencies, for example, West Piedmont Regional Transit Authority, Inter-County Public Transportation Authority, Kerr Area Transportation Authority, to name a few.

Article 25 provides reasonable flexibility needed for a typical regional transit authority. Key provisions of Article 25 include:

- Allows for a regional authority that serves multiple municipalities and up to five miles outside the municipal boundaries
- Additional municipalities may join an existing authority at a later time, subject to existing member municipalities' agreement
- The Board of Trustees of the authority may include up to eleven (11) members appointed by the governing bodies of the municipalities
- A broad range of funding sources are authorized, including appropriation from member municipalities, license and regulatory fees (e.g. motor vehicle registration fee and vehicle rental tax), and sales tax or bonds.

Implementation Process

If the Region determines that this is the most appropriate option to establish a new Regional Public Transportation Authority, here is a typical implementation process:

1. Secure start-up funding for implementation planning

- 2. Build regional support and form consensus
- 3. Determine funding sources and obtain required approvals
- 4. Negotiate and execute agreements to form the authority
- 5. Form the Board of Trustees
- 6. Hiring Staff and Operation Begins

Article 25 allows for an effective regional governance model that a typical regional transit authority needs. However, if the region determines that any limitations of Article 25 will be a hurdle, the next option—establishing an authority with new enabling legislation—can be considered.

11.2 Option 2: New Enabling Legislation

Article 25 has certain limitations on the powers of a public transportation authority that may be deemed unsuitable or too restrictive if the envisioned new authority requires certain special powers or governance structure. With a new legislation that enables a regional authority, the region can define the powers and limitations of the new authority based on its unique needs and desires. The new legislation can be drafted to incorporate additional authorities that Article 25 does not grant, such as:

- Define broader territorial jurisdiction of the authority
- Allow for broader membership of the authority's governing board
- Expand the authority's taxation power and borrowing authority

Examples of regional authorities established through a new legislation include Piedmont Authority of Regional Transportation and Go Triangle.

Implementation Process

The implementation process of this Option will resemble that of Option 1 but with a few additional steps:

- 1. Secure start-up funding for implementation planning
- 2. Build regional support
- 3. Form consensus on the powers and limitations of the new authority and draft legislation
- 4. Launch a legislative campaign and pass the legislation in the General Assembly
- 5. Determine immediate funding sources and obtain required approvals
- 6. Negotiate and execute agreements to form the authority
- 7. Form the Board of Trustees
- 8. Hiring Staff and Operation Begins

While this Option provides greater flexibility, it will be more costly, time consuming, and politically challenging than Option 1. It requires state legislative actions, which could take up to several years longer than following an existing statute like Article 25.

11.3 Option 3: Providing Regional Transit through Intergovernmental Agreements (IGAs)

Yet another option is to provide regional transit service through executing intergovernmental agreements among existing operators. The IGAs could designate one or more operators to operate the regional service for multiple counties and cities. Interested municipalities can negotiate the terms with the designated operator, which define the roles, responsibilities, and powers of each participating municipality. The IGAs typically specify the funding obligation of each participating municipality. As an example, City of Charlotte executed IGAs with neighboring municipalities to provide regional transit services operated by Charlotte Area Transit System (CATS).

Implementation Process

- 1. Build regional support and form consensus on the operator of regional transit service
- 2. Define the roles, responsibilities, and powers of each participating municipality, including funding obligations
- 3. Determine funding sources and obtain required approvals
- 4. Negotiate and finalize the terms of the IGAs
- 5. Execute the IGAs
- 6. Hiring Staff and Operation Begins

This option may be a relatively quicker process compared to Options 1 and 2, as it relies on an existing operator and does not involve establishing a new authority. However, without a separate authority and an independent governing body, the regional service may lack independence and autonomy. The region will need to make separate efforts to involve municipalities in the governance of the regional service in order to ensure that the region will be served equitably and efficiently.

11.3.1 Comparison of Three Options

Each of the three options identified above has their pros and cons, as summarized in the table below.

Options	Pros	Cons
Article 25	 Provides reasonable flexibility needed for a typical regional transit authority Relatively quick process without legislative actions Autonomy with joint decision-making Additional funding sources are available Common for establishing regional transit authorities in the state 	Must be established within the statutory confines, e.g. governing board structure, allowable funding sources
New legislation	 Greater flexibility in customizing powers and structure of the new authority Autonomy with joint decision-making 	 Requires drafting new legislation and legislative actions Resource intensive and time consuming

Options	Pros	Cons
	Additional funding sources are available	
Intergovernmental Agreements	Rely on existing operator/operatorsRelatively quick process	 Lacks independence and autonomy Funding availability and stability depends on each participating municipality

11.4 Recommended Implementation Plan

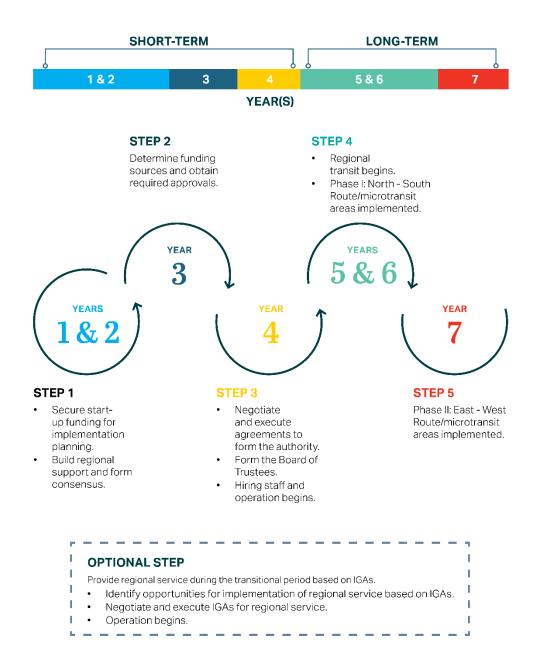
Based on the findings of this study, the consulting team recommends that the Region considers Option 1, i.e. establishing a new, independent authority based on Article 25 of Chapter 160A of the General Statutes. It became apparent during the course of the study that the French Broad Region values the autonomy and independence of a new agency and that additional funding would be required to support regional services. This option meets those key considerations. It provides a relatively broad range of powers that a typical regional transit operator would need, including an independent governing body with regional representation and common sources of funding for transit. It is reasonably flexible for new agencies to join at a later time. And historically, this option is a proven feasible and effective method in other regions within the state.

A transitional step would be available to the region while it works towards establishing an Article 25 authority, where agencies could execute IGAs as needed to provide regional service during the transition period. With such IGAs, the Region could begin smaller scale cooperation in the near future and citizens can benefit from new regional service sooner.

Implementation Process

The implementation process will require a coordinated effort from all the parties involved. The steps to implement a new regional entity are broken down in short (first five years) and long-term timeframes (more than 5 years). The process is outlined on the following page (**Figure 11-1**).

Figure 11-1. Implementation Process



Short-term - Years 1 & 2:

1. Secure start-up funding for implementation planning. The region should first identify and secure funding for implementation planning. NCDOT has historically been supportive of transit regionalism and provided funding in several instances for regional transit implementation planning. The region will need a champion, which could be one of the agencies or the MPO, to apply for the state funds and lead the implementation planning effort. This step will include a planning study to determine all the administrative and operational needs.

 Build regional support and form consensus. As a critical part of implementation planning, the region should build support from all interested agencies and their citizens through active stakeholder engagement. Interested agencies should discuss their needs and vision for future regional services and form consensus on how the new authority should be governed, funded, and organizationally structured.

Short-term - Year 3:

- 1. **Determine funding sources and obtain required approvals**. Interested agencies should determine the sources of funds to be contributed to the new authority and obtain the required approvals. Article 25 authorizes the following funding sources and requires certain approval process:
 - a. Appropriation from agencies, to be approved by the governing boards of the agencies
 - b. Sales tax or bonds the governing boards of agencies to call a special election and voters' approval required
 - c. License and regulatory fees and charges, to be approved by the governing boards of the agencies
 - d. Motor vehicle registration fee, up to \$8 per year per vehicle, subject to resolution by the Board of Trustee of the Authority this fee requires establishing the authority first

Short-term - Year 4:

- Negotiate and execute agreements to form the authority. Participating agencies should negotiate and enter into agreements to form the new authority. The agreements should formalize the powers of the authority, how the authority shall be governed, funded, and organizationally structured, and the roles and responsibilities of each participating municipality.
- 2. **Form the Board of Trustees**. Article 25 sets a limit of 11 members on the Board. The members must be appointed by the governing bodies of participating agencies.
- 3. **Hiring Staff and Operation Begins**. Once the Board of Trustees is established, the Board should hire the key executives of the Authority and the executives will then build a staff necessary to operate the planned services.

Staff will initiate the purchase of vehicles and equipment required to operate service, bus shelters and other amenities and create a brand and initiate promotion. Staff will also begin setting the processes to comply with federal and state regulations. The Authority will then begin operations.

Long-term – Years 5 & 6:

Regional Transit Service will begin at this point, once all the processes and capital and operational processes are established.

The first route to be implemented will be the Phase I: North – South Express Routes/microtransit areas, as recommended in Chapter 9. The routes will follow the interstate and stop in a mid-point to provide accessibility to primary destinations, ending in downtown Asheville. Though it is

recommended to implement microtransit services to connect to the express routes during running times, the routes will also connect to existing transit services.

Regional Express Route	Primary Access Point	Mid-Route Access Point	Connectivity to Existing Services
North	S. Main Street in Mars Hill	Weaverville Park and Ride	ART Station, Mountain Mobility
South	Parking lot near Big Lots development off I-26 Exit 49 in Hendersonville	Asheville Regional Airport Park and Ride	ART Station, Apple Country Transit

Long-term - Year 7:

The Phase II will be implemented in year 7. These routes and their microtransit areas will serve the East – West counties and municipalities. The routes will also connect to the existing transit services.

Regional Express Route	Primary Access Point	Mid-Route Access Point	Connectivity to Existing Services
East	Starbucks Parking Lot in Black Mountain	Ingles in Swannanoa	ART Station, Mountain Mobility
West	First Baptist Church in Waynesville	Evergreen Packaging/AB Technical College	ART Station, Haywood Transit

Optional Step:

Provide regional service during the transitional period based on IGAs. As the region plans for a new regional authority, municipalities may see the need and opportunity to provide regional service sooner by executing IGAs.

- a. **Identify opportunities for implementation of regional service based on IGAs**. For regional corridors with higher and more imminent demand, such as the South corridor municipalities may consider prioritizing implementation via IGAs.
- b. **Negotiate and execute IGAs for regional service**. Municipalities with direct interests and needs can start negotiating IGAs. The terms of IGAs will identify the operator and define the roles, responsibilities, and powers of each participating municipality, including funding obligations.
- c. **Operation begins**. With fully executed IGAs in place, operation of regional services could begin before the new regional authority is formed.

CONCLUSIONS

12 Conclusions

The French Broad River MPO and public transportation providers in the MPO area developed the Regional Transit Plan Feasibility Study to determine the need for connectivity across the region, and to identify service and governance options and funding strategies to provide regional public transportation.

The study analyzed transit services at local and regional level, demographic information, socioeconomic data focused on transit dependent population and looked at commuter patterns, to identify gaps and potential for regional service.

A peer review of five regional transit agencies was performed; each one of them featured different governance models, and offered best practices and lessons learned for the region as it embarks in the provision of regional service.

The community provided input and feedback through extensive outreach processes during the study development; social service agencies, businesses, community organizations, and community members were engaged to gauge public interest, and understand community needs and potential for the new service.

The development of the study was guided by the Steering Committee through bi-weekly meetings, and their input and feedback were key to identify the service and governance model that best serve the region.

Based on analysis of current conditions, peer systems, public input and discussions and guidance from the PMT and Steering Committee it was determined that regional service would improve mobility options for the most disadvantaged, and provide alternatives to access jobs, health, education, and other services or destinations. The recommendations include service options, a governance model, and funding strategies, as follows:

Service: four cross-town express routes that connect to local services and to microtransit areas are recommended; the study also proposes to establish vanpool services as an option to connect to employment hubs.

Governance: the study recommends establishing a Regional Authority under Article 25 of the North Carolina General Assembly.

Funding: three funding strategies were identified, giving options and control to the region to use the ones that best fit as the regional authority is created.

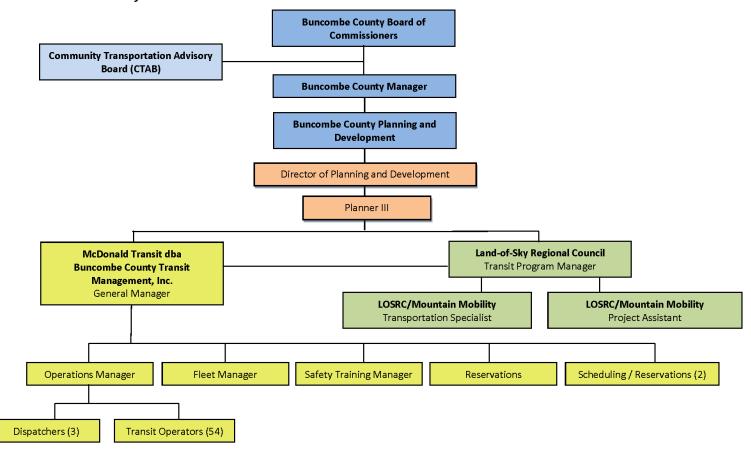
Finally, the study identifies a path for implementation that begins with the creation of the Regional Authority and evolves into providing the services the region needs.

APPENDICES

Appendix A – Service Provider Organizational Charts

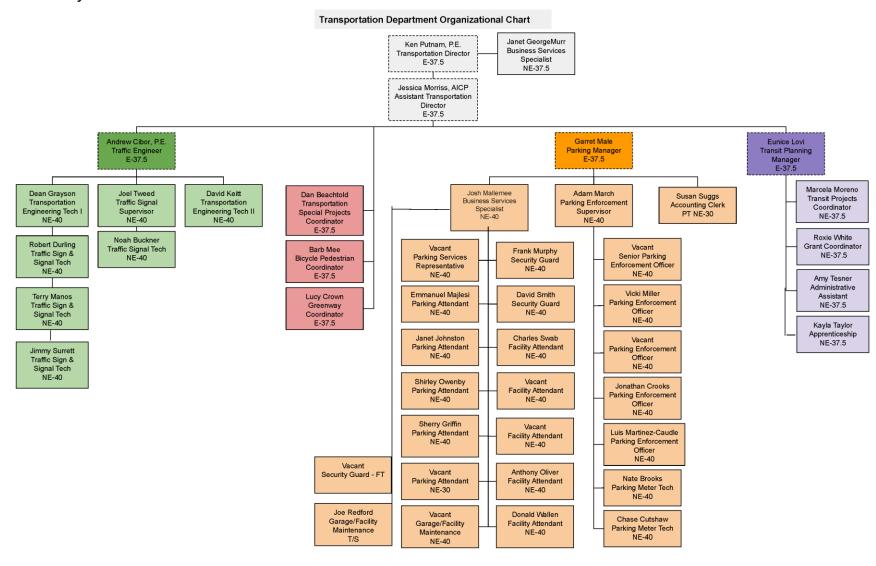
Mountain Mobility Organizational Structure

Source: Mountain Mobility

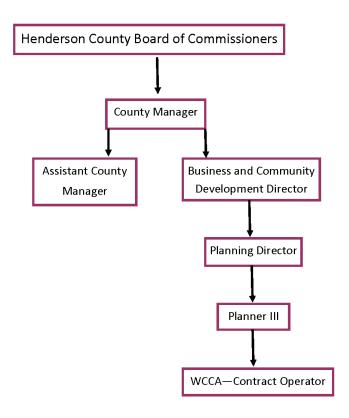


Asheville Rides Transit Organizational Structure.

Source: City of Asheville

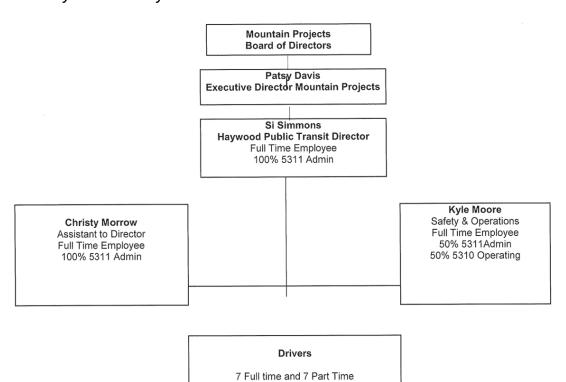


<u>Apple Country Public Transit Organizational Chart</u> Source: *Henderson County*



Haywood Public Transit Organizational Chart

Source: Haywood County



Work delegated from any of the above Fully report to the Transit Director

Debbie Trull, Sheila Ashe Dispatcher(s) Part Time Employee

Appendix B – Existing Plans Review

Existing plans in the region are summarized below.

NCDOT Commuter Bus Study - 2020

This study was conducted to identify, vet, and prioritize commuter transit markets and potential for commuter transit service enhancements in the five largest urban regions (Asheville Region included) in North Carolina. The study included an analysis of existing and potential future travel markets that supports commuter transit, a feasibility assessment of specific routes, and prioritization of potential investments within and across the regions.

Key Findings:

- Info can be used by NCDOT or local stakeholders to coordinate future transit service needs within the Asheville region
- Info can be used by local stakeholders to coordinate across organizations on the funding and delivery of regional transit service in markets that are not currently being served

Recommendations:

The recommendations are provided below.

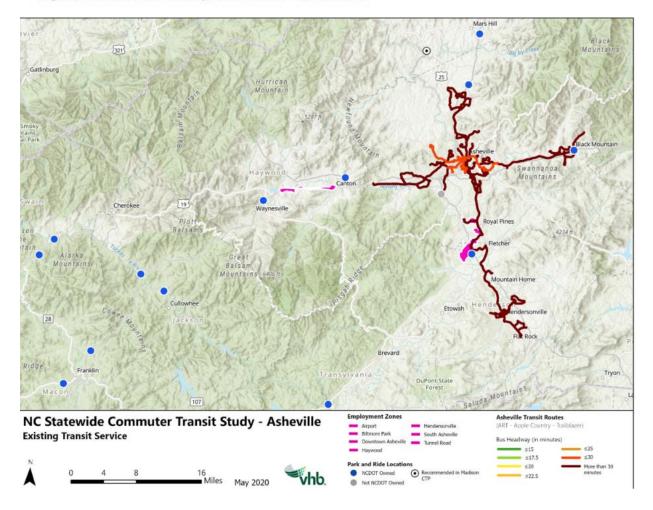
Table B-1. NCDOT Commuter Bus Study Recommendations

Recommendations	Time Frame	Cost	Responsible Party
Stakeholders should establish commuter-oriented transit service standards for the Asheville region to ensure a useful and equitable commuter transit system.	n/a	n/a	Regional Stakeholders
Transit service enhancements by additional investment in service or route modifications to possibly increase ridership on two routes	n/a	n/a	ART
Transit coverage in areas indicating growth markets for commuter transit: US 74 corridor; North-South Corridor on US 25; US 64 east of downtown Hendersonville; and NC 280 towards Brevard	n/a	n/a	Regional Stakeholders

Source: NCDOT Commuter Bus Study, 2020

Figure B-1. NC Statewide Commuter Transit Study – Asheville Region

Regional and Local Bus Headways and Park-and-Ride Locations



FBRMPO Coordinated Public Transportation & Human Services Transportation Plan – 2018

This Coordinated Public Transit-Human Services Transportation Plan ('CPT-HSTP', also known as Locally Coordinated Plan) was developed to serve both the French Broad River Metropolitan Planning Organization planning area as well as the Land of Sky Rural Planning Organization planning area, covering the counties of Buncombe, Haywood, Henderson, Madison, and Transylvania in Western North Carolina. This plan is required by the FTA for the programming of various Federal monies (Sections 5307, 5310, 5317, SAFETEA-LU, FAST Act, etc.) for the region. The LCP's purpose is to document the needs of the counties for potential funding as transit operators, local government, and other transportation providers, striving to improve the regional transportation system.

Key Findings:

- The five-county region has a significantly higher percentage of the population that is considered elderly (20.5%) compared to a little more than 14 percent for both the national and State averages. Buncombe County has the largest concentration of elderly residents, more than 44 percent of the region's elderly population.
- The region has a higher rate of individuals with disabilities (14.9%) than either NC (13.5%) or the country (12.4%). Haywood, Henderson, and Transylvania counties comprise the majority of residents with disabilities.
- Some of the needs and issues expressed during the 2015 LCP community input sessions still exist today. Needs include inter-city bus services to connect Western NC with nearby urban centers; additional funding assistance from NCDOT and local governments (due to increasing costs and the growth in the senior resident population). Topographic issues are a reality and can't be changed. The public and LCP Stakeholders stated that the biggest challenge is providing efficient regional transportation options. Workers are commuting across county boundaries, and space is limited at park and ride lots. Improving the quality and frequency of transit service for on-demand trips made across county lines is needed.

Recommendations:

The recommendations are provided below.

Table B-2. FBRMPO Coordinated Public Transportation & Human Services Transportation Plan (LCP)

Recommendations	Time Frame	Cost	Responsible Party
Service Improvements – Improve the current system through service expansions [frequency; hours of service; fare structure]	n/a	n/a	Buncombe, Haywood, Henderson, Madison, & Transylvania Counties and their transit service providers
Targeted Outreach – Target specific groups having unique transportation challenges	n/a	n/a	Buncombe, Haywood, & Madison Counties and their transit service providers
Information & Technology – Improve the transportation system through marketing, communication, or operating technology	n/a	n/a	Buncombe County and its transit service providers
Regional and Inter-regional Efforts – Enhance cross-county, cross- jurisdictional, or inter-regional transportation	n/a	n/a	Haywood & Transylvania Counties and their transit service providers
Intermodal Connectivity – Enhance connections between transit use & the needs of other complimentary modes (bicycle & pedestrian)	n/a	n/a	Buncombe, Henderson, & Transylvania Counties and their transit service providers

Source: FBRMPO Coordinated Public Transportation & Human Services Transportation Plan – 2018 (http://frenchbroadrivermpo.org/wp-content/uploads/2020/01/CPT-HSTP_2018_Final.pdf)

Figure B-2. Elderly Population for the Region (2018)

	Senior Population	Elderly Percentage
United States	44,628,618	14.1%
North Carolina	1,398,037	14.2%
5-County Region	96,156	20.5%
Buncombe	43,138	17.4%
Haywood	13,582	23.0%
Henderson	26,195	23.9%
Madison	4,161	19.8%
Transylvania	9,080	27.6%

Source: FBRMPO LCP 2018

Asheville In Motion: City of Asheville Mobility Plan - 2016

This study intended to consolidate a variety of modal plans into a cohesive strategy and to express a method for prioritizing transportation investments in a manner consistent with desired outcomes. This study was to consolidate the information from previous, singularly focused studies of various transportation modes and to provide integrated transportation strategies in a long-term mobility plan.

Key Findings:

- The AIM mobility strategy included the following elements: Framework Plans consideration for plans involving pedestrian, bicycle, and transit; Street Type a new set of categories; Community Type consistent method of considering community context; and Blended Typology method to deal with constrained physical settings.
- The City of Asheville continues its efforts towards a multimodal city having passed and instituted a 'Complete Streets Policy' in 2012.
- The transit experience is enhanced through the implementation of bicycle, pedestrian, greenway, and complete streets. These environment improvements invite easy access to transit stops whereby possibly increasing transit ridership.
- Slowing the speed of vehicles along routes where there is great or potential activity for walking, bicycling, or riding transit should be a priority for the City.

Recommendations:

The recommendations are provided below.

Table B-3. Asheville In Motion: City of Asheville Mobility Plan Recommendations

Recommendations	Time Frame	Cost	Responsible Party
Institute the mobility strategies based upon the needs expressed by the community.	n/a	n/a	City of Asheville
Institute transit service enhancements (sidewalks, concrete pads, benches, & ADA accessible shelters)	n/a	n/a	City of Asheville
Sweeten Creek Roads, served by the S1 ART route, should remain a priority transit investment corridor.	n/a	n/a	City of Asheville

Source: Asheville In Motion: City of Asheville Mobility Plan - 2016 (https://drive.google.com/file/d/1-

CWm7GvxcCDu6UORIniaknhWFDHdloCy/view)

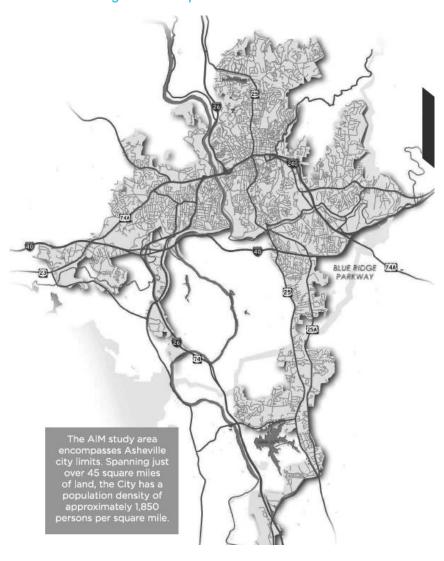


Figure B-3. Map of the ART Service Area

FBRMPO 2045 Metropolitan Transportation Plan - 2020

This plan serves as a comprehensive, long-range plan for transportation investments within the French Broad River MPO region through the planning horizon year of 2045. The plan identifies transportation needs and projects for the five-counties in the region served by the MPO. The recommendations are focused on a set of projects primarily funded through a combination of Federal, State (North Carolina Transportation Improvement Program), and local funding.

Key Findings:

- Throughout the region, 90 100 percent of public transit riders are 'transit dependent',
 highlighting the importance of renewing the commitment to equitable transit that attracts
 new riders.
- The demography of the region indicates that the older adult population is growing, indicating the future need for improved paratransit services.
- Financial constraints have limited transportation planning and expansion, and additional long-term effects of Corona virus in 2020 are yet known.
- An increase is shown in the number of workers commuting to employment sites outside of their counties of residence.

Recommendations:

The recommendations are provided below.

Table B-4. FBRMPO 2045 Metropolitan Transportation Plan Recommendations

Recommendations	Time Frame	Cost	Responsible Party
Increase coordination between transit agencies.	n/a	n/a	ART, Mountain Mobility, Apple Country Transit, Haywood Public Transit
Complete Regional Transit Feasibility Study & consider the development of a Regional Transit Authority	n/a	n/a	FBRMPO and Member Municipalities
Maintain and improve existing public transit services [add park & ride lots; consider transit partnerships with employers in CBDs; improve walkability & bikeability for 'first and last mile' trips; enhance convenience, attractiveness, & efficiency of service by modifying route service standards.	n/a	n/a	ART, Mountain Mobility, Apple Country Transit, Haywood Public Transit, City of Asheville, Hendersonville, NCDOT
Consider transit in land use planning & development.	n/a	n/a	NCDOT & local municipalities
Identify areas where Park & Ride lots will benefit commuters.	n/a	n/a	NCDOT, Regional tourism departments, & local municipalities

Source: FBRMPO 2045 Metropolitan Transportation Plan – 2020 (http://frenchbroadrivermpo.org/wp-content/uploads/2020/07/MTP 2045 Web.pdf)

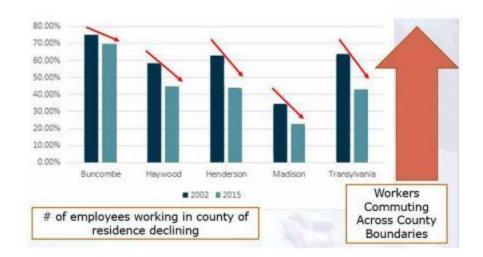


Figure B-4. Decline of Employees Working in Residence County

Figure B-5. Funding Requirements for Public Transit in the FBRMPO Region

	Local	State	Federal
2021-2025	\$73.466.447	\$1,221,753	\$19,387,863
2026-2030	\$73.889,319	\$1,221,753	\$19,387,863
2031-2035	\$74,316,420	\$1,221,753	\$19,387,863
2036-2040	\$74.747.792	\$1,221,753	\$19,387,863
2041-2045	\$75.183.477	\$1,221,753	\$19,387,863
TOTAL	\$371.513.459	\$6,108,765	\$96.939.315

Asheville Transit Master Plan - 2018

This study updated the Plans from previous years, aiming to serve as a guide on topics like how and where ART will provide service while ensuring safety, convenience, and accessibility for all residents, workers, and visitors. The Plan provides a vision for long term service expansion and infrastructure needs.

Key Findings:

- On-time performance (OTP) & overall system reliability are key to growth and sustainability of the network.
- Transferring between routes to get to a single destination is a major burden to riders and is a disincentive for potential riders to use the system.
- Equitable service coverage is of concern, i.e. preserving access to areas already served and increasing access to areas with few mobility options.
- There is need to access social services, medical centers, and grocery stores and to do so in a timely manner, i.e. even if on an hourly schedule.

Recommendations:

The recommendations are provided below.

Table B-5. Asheville Transit Master Plan Recommendations

Recommendations	Time Frame	Cost	Responsible Party
Create two new Crosstown routes; 1 direct route to apartment complex in West Asheville to improve OTP & reliability while improving frequency to 15-minutes; & extended service hours to 10 PM on weekdays; Late PM Saturday service on key corridors; & service until 8 PM on Sundays and holidays	FY2020	\$2.8 million	ART & City of Asheville
Through-routing of Crosstown route & additional bus on select routes	FY2021	n/a	ART & City of Asheville
New service in Enka & Sweeten Creek areas	FY2022 & FY2023	\$379,738	ART & City of Asheville
New service in Carrier Park & Swannanoa River Rd. areas and a downtown shuttle in CBD	FY2025		ART & City of Asheville
Additional vehicles & operating funds	FY2026 – FY2029		ART & City of Asheville
Service extensions outside City limits into Neighboring Counties	FY2026		Neighboring counties to Asheville City

Source: Asheville Transit Master Plan - 2018 (https://drive.google.com/file/d/10hn6Le2b-2e5pQogEieRDi6u0Bm7wg1L/view)

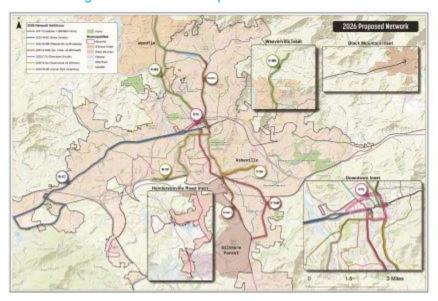


Figure B-6. FY 2026 Proposed ART Service Area

Buncombe County Community Transportation Service Plan – 2015

This study is a five-year vision for transportation and a requirement of the NCDOT-Public Transit Division (PTD) to receive Federal and State funding for transit. The focus is to evaluate existing services; identify ways to maximize efficiencies; and to enhance mobility options for Buncombe County citizens.

Key Findings:

- Mountain Mobility does a good job of serving clients but can be improved in the areas of capacity constraints and traffic congestion which impact its on-time performance and wait times for trips.
- Mountain Mobility currently provides approximately 600 trips per day and expects a demand for transports with population growth and aging, long-term residents.
- FTA 5307 Formula study for the Asheville region is to take place in FY2016 to determine how much funding Buncombe County will be eligible and receive to increase services. Increases for funding from NCDOT-PTD is not expected under the Community Transportation Program Section 5311 funds.

Recommendations:

The recommendations are provided below.

Table B-6. Buncombe County CTSP Recommendations

Recommendations	Time Frame	Cost	Responsible Party
Increase fleet size by 20% (12 vehicles) over the next five years	FY2021	n/a	Buncombe County
Perform a comprehensive route analysis to determine if route restructuring and/or a small expansion would improve level of service	FY2016	\$45,000	Buncombe County
Enhance coordination with surrounding counties	FY2016	n/a	Buncombe County & regional transit systems
Increase education & marketing efforts	FY2015	n/a	Buncombe County
Modify the RIDE Voucher Program	FY2015	n/a	Buncombe County & FBRMPO
Analyze the rates charged to contracting agencies	FY2016	n/a	Buncombe County

Source: Buncombe County CTSP - 2015 (https://www.buncombecounty.org/common/transportation/ctsp-service-plan.pdf)

Figure B-7. Buncombe County: Opportunities for Coordinated Trips with Other Regional Transit System Providers

- Potential to coordinate with transit agencies in surrounding counties to pick up each other's passengers
- Would require interagency agreements, fare structure review and technology interoperability (or a way to share trips)

	Clay	Graham	Haywood	Yancey
Travels to Buncombe County on specific scheduled days	Once every weekday (to increase soon)	Yes	Once every weekday	Twice every weekday
Days travel to Buncombe County	Monday through Friday 3 – 4 people/day	Tuesday and Thursday	Monday through Friday	Monday through Friday
"Usual" and frequent destinations	VA Hospital; Bone & Joint Orthopedic; pain clinic in Arden	Oteen Federal Credit Union; Vanderbilt Medical Park	redit Union; Vanderbilt Medical offices	
Vehicle sits idle while in Buncombe County	Sometimes	Sometimes	Will stay in Buncombe County if appointments last more than one hour	Sometimes
Willing to pick up Buncombe County residents on way to destinations	Varies based vehicle capacity (picks up passengers in Swain and Macon Counties on way)	Yes	Yes	Yes
Interest in providing transports during "down time" / wait time in Buncombe County	Possibly interested	Yes, if none interfere with pick-up schedule	Possibly interested	Possibly interested
Type of vehicle normally assigned to Buncombe County trips	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

Henderson County, NC 2020 Comprehensive Plan – 2004, Amended 2009

This Plan is intended to serve as a guide for the County's government & its appointed bodies in the development and management of growth and related public services and infrastructure. Recognizing the change that is taking place in the County, this Plan is to assist in guiding and influencing the future by setting growth and development objectives through the formulation of realistic policies and decisions.

Key Findings:

- Forty-six percent (46%) of the responding public to this Plan wants the County to develop a long-range transportation plan that includes public input for roads and alternate modes of travel.
- During the Public Involvement sessions for the Plan, 17.21 percent of all public comments focused on transportation, primarily related to road conditions and congestion and only a few regarding public transit.
- Recognizing the role of public transit, financial support for the system, Apple Country Transportation (a division of WCCA), is by the FTA Section 5307 Grant Program, the County, City of Hendersonville, and the Town of Fletcher.
- Noting growth in the County and the expansion and improvements of Apple Country, the County should consider creating a public transportation authority.

Recommendations:

The recommendations are provided below.

Table B-7. Henderson County 2020 Comprehensive Plan Recommendations

Recommendations	Time Frame	Cost	Responsible Party
Support the current bus system with a desire to maintain and expand it.	n/a	n/a	Henderson County
Continue participation in the FBRMPO that addresses multi- modal transportation issues3	n/a	n/a	Henderson County
Continue to work with other municipal & regional governments in the region towards the development of a sustainable bus system. Henderson County will explore ways to contribute to the funding of the system, including utilizing portions of fees and taxes upon automobiles.	n/a	n/a	Henderson County

Source: Henderson County Comprehensive Plan, Adopted 2004, Amended 2009

(https://www.hendersoncountync.gov/planning/page/view-ccp-online)

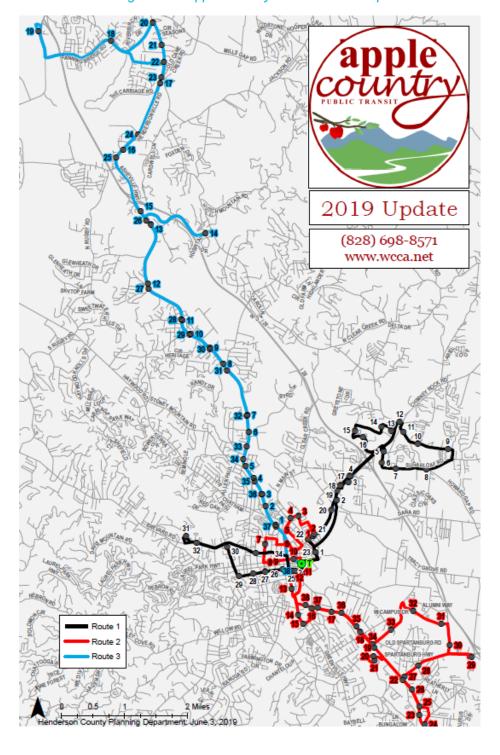


Figure B-8. Apple Country Transit Route Map

FBRMPO Comprehensive Transportation Plan - 2008

This Plan identifies recommendations to multimodal transportation systems in Buncombe, Haywood, and Henderson Counties. This Plan is intended to ensure that the region's transportation system is developed in a coordinated and efficient manner that anticipates future needs and minimizes negative impacts on communities, cultural resources, and the natural environment.

Key Findings:

- As a result of public comments from residents in Black Mountain disliking the proposed location of the terminal, a revised site has been selected near the Town Hall.
- Black Mountain residents oppose a selected site for the Park and Ride lot on NC 9 at I-40.
- Since estimates of growth in households and employment form the basis of the travel demand forecasts, coupled with transportation funding, environmental policies, and other variables, the FBRMPO recognizes that the CTP will need periodic updates and cannot be static.

Recommendations:

The recommendations are provided below.

Table B-8. FBRMPO (Including Rural Areas of Buncombe and Haywood Counties) CTP Recommendations

Recommendations	Time Frame	Cost	Responsible Party
Open passenger rail and intermodal terminals in Asheville & Black Mountain	n/a	n/a	NCDOT, FBRMPO
Improve existing bus service (service hours, increased service frequency, & improved coverage area)	n/a	n/a	Counties and Regional transit providers
Develop new express bus service between outlying service areas and Asheville	n/a	n/a	Counties and Regional transit providers
Develop a comprehensive park and ride system to support regional & local bus service and to provide improved access for those living in low density or rural portions of the county not well-served by fixed route transit	n/a	n/a	NCDOT, FBRMPO

Source: FBRMPO Comprehensive Plan,

(http://www.landofsky.org/pdf/LGS/MPO/FBRMPO_andRuralAreasofBuncombeHaywood_2008CTPReport.pdf)

Figure B-9. Recommended Public Transportation Projects from the FBRMPO CTP (2008)

Table 2-2 Recommended Public Transportation and Rail Projects

	Table 2-2 Recommended Public Transportation and Rail Proje	CIS		
Facili ID	ty and Segment Description	Distance (mi)	Other	Source
	Buncombe	(1111)	Mapo	Source
Rail				
A1	Open passenger rail terminal at Biltmore Station Shops in Biltmore Village			
A2	Construct intermodal center at Biltmore Station Shops in Biltmore Village including bus transfer center			
A3	Open passenger rail terminal at Depot in Black Mountain			
Α4	Maintain bus transfer center at Depot in Black Mountain to provide intermodal connector			
Bus Ro	utes			
A5	Express bus service between downtown Asheville and Black Mountain Depot	17		LRTP
A6	Express bus service between downtown Asheville and Mars Hill with stops in between	20		LRTP
A7	Express bus service between downtown Asheville and Waynesville with stops in between	30	æ B	LRTP
A8	Express bus service along I-26 to Hendersonville and points south	24+	æ c	
A9	Local bus service along US 25A (Sweeten Creek Rd) and US 25 (Hendersonville Rd) to Fletcher	13+	C C	
A10	Local bus service along NC 191 to Mills River and Hendersonville	18+	æ c	
A11	Local bus service along NC 146 (Long Shoals Rd) and Overlook Rd (SR 3503)	6		
A12	Local bus service along Mills Gap Rd (SR 3116/SR 1551) to Fletcher	8+	@ <u></u> C	
A13	Local bus service along Leicester Hwy (NC 63) to Leicester	7		LRTP
A14	Local bus service to Fairview via US 74A, Cane Creek Rd through Fletcher to Ag Center	21	a⊕ c	LRTP
A15	Local bus service along Wilma Dykeman Riverway	9	N A	LRTP
-	Improve existing bus routes, including frequency, coverage and service hours			
Park &	Ride			
A16	Proposed park and ride lot at Weaver Blvd @ US 19/23			
A17	Proposed park and ride lot at New Stock Rd @ US 19/23			
A18	Proposed park and ride lot in Woodfin			
A19	Proposed park and ride lot in Leicester along NC 63		A 🚐	
A20	Proposed park and ride lot at interchange of I-40 and Smokey Park Hwy (US 19/23)			
A21	Proposed park and ride lot at Biltmore Square Mall (intersection of NC 191 @ NC 112)			
A22	Proposed park and ride lot at Old National Guard Armory (NC 191 @ I-40)			
A23	Proposed park and ride lot at Ag Center, adjacent to bus transfer center			
A24	Proposed park and ride lot at Gerber Village Shopping Center (US 25 @ Gerber Rd)			
A25	Proposed park and ride lot along US 74A (Charlotte Hwy) near intersection with Old Fort Rd (SR 2776)		<u></u> А	
A26	Proposed park and ride lot in Black Mountain along NC 9, adjacent to I-40 interchange			
A27	Proposed park and ride lot in Swannanoa, near intersection of Patton Cove Rd @ US 70			
A28	Proposed park and ride lot at or near VA Hospital (US 70 @ Riceville Rd (SR 2002))			
A29	Proposed park and ride lot at Wal-Mart shopping center on NC 81 (Swannanoa River Rd)			
A30	Proposed park and ride lot at Asheville Mall on S Tunnel Rd			
A31	Proposed park and ride lot at Merrimon Ave (US 25) @ Beaverdam Rd (SR 2053)			
	Haywood			
Bus Ro				
B1	Express bus service between downtown Asheville and Waynesville with stops in between	30	A P	LRTP
Park &				
B2	Proposed park and ride lot at interchange of I-40 and NC 215 in Canton			
B3	Proposed park and ride lot at interchange US 23/74 and US 276 in Waynesville			
	Henderson			
Bus Ro				
C1	Express bus service along I-26 to Hendersonville and points south	24+	Æ A	
C2	Express bus service along NC 280 to Transylvania County	11+		
C3	Express and/or local bus service along US 64 to Etowah and Transylvania County	11+	~	
C4	Local bus service along US 25A (Sweeten Creek Rd) and US 25 (Hendersonville Rd) to Fletcher	13+	_@_ A	
C5	Local bus service along NC 191 from Hendersonville to Asheville, via Mills River	18+	_@_A	
C6	Local bus service along Mills Gap Rd (SR 3116/SR 1551) to Fletcher	8+	<u> </u>	
C7	Bus route from Asheville to Fairview along 74A, Cane Creek Rd, through Fletcher to Ag Center	21	<u> </u>	LRTP
C8	Local bus service along US 64 and Sugarloaf Rd (SR 1734)	9		
C9	Local bus service along Upward Rd (SR 1783) and Surgarloaf Rd (SR 1734)	8		
-	Improve existing bus routes, including frequency, coverage and service hours			\vdash
Park &				$\overline{}$
C10	Proposed park and ride lot at I-26 and US 64			

2030 Hendersonville Comprehensive Plan - 2009

This Plan articulates a vision of what Hendersonville wants to become over the next 20 years and describes how to achieve that vision. The Plan includes both short-term actions that the City can commence within the next five years, in furtherance of the long-term visions.

Key Findings:

- Steering Committee members and the general public voiced concerns about increasing traffic congestion and the need for alternative modes and routes.
- Citizens desire improved walkability and bikeability throughout the City.
- The bus system is perceived by citizens to be underutilized, although several persons expressed a desire for improved local and regional mass transit.
- Many bus stops are placed in poorly accessible, unsafe locations with no sidewalks.

Recommendations:

The recommendations are provided below.

Table B-9. 2030 Hendersonville Comprehensive Plan Recommendations

Recommendations	Time Frame	Cost	Responsible Party
Continue to collaborate with the County, other municipalities, and regional governments to maintain & enhance the transit system	n/a	n/a	Hendersonville and regional municipalities
Continue to provide financial support for a regional mass transit system.	n/a	n/a	Hendersonville and Henderson County
Consider increasing transit service levels to make the system more user friendly	n/a	n/a	Hendersonville & Apple Country
Coordinate the transit component of the Master Transportation Plan with other governments in the region	n/a	n/a	Hendersonville & FBRMPO
Make bus routes a priority for sidewalk improvements	n/a	n/a	Hendersonville
Provide sidewalk connections from bus stops to neighborhoods & destinations	n/a	n/a	Hendersonville
After analyzing bus ridership levels and needs, identify necessary changes to routes, stops, and facilities	n/a	n/a	Apple Country

Source: 2030 Hendersonville Comprehensive Plan – 2009

(https://www.hendersonvillenc.gov/sites/default/files/uploads/departments/planning/inside-cover-page.pdf)

FBRMPO Congestion Management Process - 2018

This Federally mandated process for the region incorporates methods for addressing congestion amidst the environmental constraints in the region and presenting unique opportunities to promote alternative transportation systems for managing the congestion.

Key Findings:

- The only roadway in the region that connects existing roadways outside of the existing radial corridor system is the Blue Ridge Parkway between US 70 Tunnel Road and NC 191 Brevard Road. It is not intended to serve such a function but does.
- The average Volume-to-Capacity (v/c) rate during the data collection tasks of this Plan was 1.28 persons per vehicle.
- Steep slopes and ridgelines prevent connectivity between major traffic corridors except at high-capacity nodes like the junctions of I-240, I-26, and I-40.
- The region's topography & traffic congestion position public transportation as a viable alternative.
- Two goals established by the TAC and TCC for the region are to "plan for and construct a regional public transportation system" & "promote regional connectivity and character".

Recommendations:

The recommendations are provided below.

Table B-10. FBRMPO Congestion Management Process Recommendations

Recommendations	Time Frame	Cost	Responsible Party
Develop circulator / shuttle bus service for downtown Hendersonville during peak seasons	n/a	n/a	Apple Country
Long-term fixed route circulator or shuttle service, particularly for major downtown events/festival	n/a	n/a	Haywood County
Park and ride lot at older, large, commercial developments or requirements on redevelopment to set aside spaces for carpoolers	n/a	n/a	Haywood County
Park and ride lots strategically located near interstates & US highways [ex: I-40 at Exit 37; US 23/74 – Exit 100; I-40 in Black Mountain; I-26 and NC 280 (Airport Road), etc.], or requirements for developers to set aside spaces for carpoolers & transit riders	n/a	n/a	Buncombe, Haywood, & Henderson Counties
Consider circulator transit service along Merrimon Ave. to downtown Asheville	n/a	n/a	Asheville
Transit signal priority system	n/a	n/a	Asheville
Alternative Transportation Incentive Programs (ex: Guaranteed/Emergency Ride Home)	n/a	n/a	Asheville, Buncombe, Haywood, & Henderson Counties

Source: FBRMPO Congestion Management Process – 2018 (http://frenchbroadrivermpo.org/wp-

content/uploads/2019/08/DraftCMP_2018-1-1.pdf)

Figure B-10. FBRMPO Defined Goals and Objectives for this Plan

Goal #2

- Improve the region's public transit system by connecting communities to key activity and employment centers;
- Plan for a system of multi-modal hubs throughout the region, including a system of park-and-ride lots;
- Design and construct a new central transit center to serve regional needs;
- Explore additional funding for public transportation;
- Integrate alternative fuel vehicles into transit fleets;
- Include bike lanes and greenways in the regional planning process;
- Improve pedestrian and bicycle safety around schools and other neighborhood centers;
- Encourage ridesharing activities such as carpool, vanpools, and HOV lanes; and
- Develop synergetic approaches tying transportation to commercial and private capabilities.

bjective

NCDOT 2040 Statewide Transportation Plan - 2011

The 2040 Plan is a broad investment strategy that lays out the policies and programs needed to enhance safety, improve mobility, & reduce traffic congestion for North Carolinians over the next 30 years. It is a policy-based document that identifies transportation needs, estimated revenue to fund the needs, and investment strategies and policies supporting them.

Key Findings:

- A prevailing thought brought forth by Stakeholders is that it is increasingly important to offer public transportation and non-motor vehicle options as the State's population diversifies and ages.
- Since increased funding is needed for projects, facilities, and services, NCDOT should streamline its operation and eliminate fund diversions at the State level.
- NCDOT needs to work more closely with the MPOs and RPOs, recognizing the varying transportation needs of the regions.
- In 2012, NCDOT gave public transportation system performance as a 'C', reflecting average ridership/market penetration, fleet age, and safety expenditures. Variances between transit systems reflect the dominant influence of local government policy and funding allocations.
- The 30-year needs total \$20.38 billion, inclusive of social service transportation, fixed-route bus service, and light-rail transit. At \$10.86 billion current investment, there is a 53 shortfall of identified needs [urban = 89% and rural = 11%].
- The ability of counties and local governments to provide the required matching funds to federal grants is an issue, at the time of rising demand for public transportation services.

Recommendations:

The recommendations are provided below.

Table B-11. NCDOT 2040 Transportation Plan Recommendations

Recommendations	Time Frame	Cost	Responsible Party
Seek more extensive public-private partnerships to fund capital investments in public transportation	n/a	n/a	NCDOT & private sector companies
Create funding and project priority flexibility to recognize regional and urban/rural diversity of needs	n/a	n/a	NCDOT & local governments
Continue to strengthen partnering efforts with local and regional partners and the transportation industry's private sector providers	n/a	n/a	NCDOT, FBRMPO, local municipalities, and private sector companies
Work with regional planning partners to increase flexibility and responsiveness (ex: improve relationships and communications)	n/a	n/a	NCDOT & FBRMPO
Increase funding flexibility to recognize regional, urban, and rural differences	n/a	n/a	NCDOT, FBRMPO, and local municipalities

Source: NCDOT 2040 Statewide Transportation Plan – 2011 (https://www.ncdot.gov/initiatives-

policies/Transportation/plan/Pages/default.aspx

Figure B-11. NCDOT 2040 Plan

30-Year Transportation Needs by Mode, Investment Goal, and Tier (Target LOS) (billions of 2011 dollars)							
	In	vestment Goal		Tier			30-Year
By Mode	Mobility	Safety	Health	Statewide	Regional	Subregional	Total
Aviation	0.76	0.15	1.31	0.06	1.68	0.47	2.22
Rail	3.38	0.14	0.02	1.22	1.42	0.90	3.54
Bicycle/Pedestrian	0.39	0.39	<u> </u>	0.02	0.06	0.69	0.77
Public Transportation	12.78	0.15	7.46	0.19	11.29	8.90	20.38
Ferry	0.24	z 	1.35	1.12	0.47	_	1.59
Ports	0.10	0.05	1.15	1.30			1.30
Highways	49.70	2.00	41.33	41.29	16.15	35.59	93.03
Total	67.35	2.88	52.62	45.20	31.07	46.55	122.83

Note: Table indicates that public transportation has the greatest shortfall of funds.

Figure B-12. NCDOT 2040 Plan

Public Transportation Needs (Target LOS) (billions of 2011 dollars)						
Investment Current Accruing 30-Year Total						
Mobility	6.88	5.90	12.78			
Safety	0.11	0.04	0.15			
Health 3.87 3.59 7.46						
Total	10.86	9.53	20.38			

NCDOT Complete Streets Policy and Guidance - 2019

This document defines North Carolina's approach to interdependent, multi-modal transportation networks that safely accommodates access and travel for all users. The Policy requires NCDOT to consider and incorporate multimodal facilities in the design and improvement of all appropriate transportation projects in NC.

Key Findings:

- NCDOT commits to working in partnership with local government agencies, interest groups, & the public to plan, fund, design, construct, and manage complete street networks.
- NCDOT commits to providing efficient multi-modal transportation network such that the access, mobility, and safety needs of motorists, transit users, bicyclists, and pedestrians are safely accommodated.
- The Integrated Mobility Division (oversees public transportation systems) Director is a member of the Complete Streets Review Team which must approve any exception to the Complete Streets Policy.

Recommendations:

The recommendations are provided below.

Table B-12. NCDOT Complete Streets Policy and Guidance Recommendations

Recommendations	Time Frame	Cost	Responsible Party
NCDOT planners, designers, and engineers are required to consider and incorporate multimodal facilities in the design and improvement of all appropriate transportation projects	n/a	n/a	NCDOT
NCDOT is committed to collaborate with cities, towns, and communities to ensure planned pedestrian, bicycle, and transit options are included as an integral part of their total transportation vision	n/a	n/a	NCDOT and municipalities
All STIP projects without a final environmental document are subject to the Policy	n/a	n/a	NCDOT
A Review Team evaluates Complete Street Project Sheets when exceptions to the policy (such as no existing/planned transit service) exist	n/a	n/a	NCDOT

Source: NCDOT Complete Streets Policy and Guidance – 2019 (https://connect.ncdot.gov/projects/BikePed/Pages/Complete-Streets.aspx)

AECOM | APPENDIX-27

North Carolina Vision Zero Initiative – 2015

A statewide program which aims to eliminate roadway deaths and injuries using data-driven prevention strategies. United in the effort and Vision Zero strategy are both State agencies and private non-profit agencies.

Key Findings:

- As of 2014, roadway fatalities (1,271 total) and injuries (totaling 110,426) are considered to be at unacceptable levels.
- A collaborative effort is needed to address the challenges involved with transforming traffic safety culture because the loss of just one life is too many.

Recommendations:

The recommendations are provided below.

Table B-13. NC Vision Zero Initiative Recommendations

Recommendations	Time Frame	Cost	Responsible Party
Executive Committee for Highway Safety establishes a long-term vision of zero fatalities on NC roadways through sustained efforts in engineering, enforcement, education, emergency response, and public policy	n/a	n/a	Executive Committee for Highway Safety, NCDOT, and other safety stakeholders (state government agencies, municipalities, MPOs, non- profit agencies)
Provide an organized interface to receive information on all safety initiatives operating and developing in the State	n/a	n/a	Executive Committee for Highway Safety, NCDOT, and other safety stakeholders (state government agencies, municipalities, MPOs, non- profit agencies)

Source: https://ncvisionzero.org/

NCDOT Statewide Regionalization Study – 2012

NCDOT-PTD was required by law to study the feasibility and appropriateness of developing regional transit systems. Examinations for consolidating systems based on regional travel patterns as well as the consolidation of single-county transit systems occurred.

Key Findings:

- Regional transit systems could demonstrate significant benefits in terms of addressing regional travel needs, improved regional planning, maximizing funding, and creating administrative and operating efficiencies.
- Successful efforts at regionalization do not necessarily require total consolidation of all transit functions under a single entity.
- The definition of 'regionalization' as used in NC means "(a) The full integration of the administration and operations of a minimum of two contiguous single county Community Public Transportation systems, and/or (b) Consolidation of an urban fixed-route system with at least once Community Transportation system into a single fully integrated system."
- There are two systems, referred to as 'Regional Urban' providers (PART and TTA) that provide transit services to meet regional travel needs between (or on top of) local areas that have their own transit systems. The Regional Urban providers were created under specific State authorizing legislation.
- Following a 2002 regionalization study and additional more centered studies, the Western Piedmont COG area eventually led to the creation of the Western Piedmont Regional Transit Authority (WPRTA) combining four county systems and the urban system in Hickory. Henderson County and the City of Hendersonville also consolidated.
- Educational efforts would be needed to bring the concept of regionalization and its potential benefits to County and City decision-makers, City and County Managers, and to the staffs and Board Members of human service agencies that contract for much of the service from CT systems. Transit system managers and policy boards would also need assistance.

Recommendations:

The recommendations are provided below.

Table B-14. NCDOT Statewide Regionalization Study Recommendations

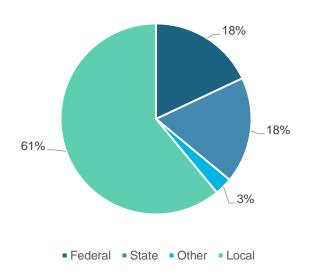
Recommendations	Time Frame	Cost	Responsible Party
Develop a framework for Regional Action that identifies a continuum from integration activities (ex: communication, coordination, collaboration) to consolidation.	n/a	n/a	NCDOT-PTD
Every transit system is to develop a Regional Action Plan (RAP) to NCDOT-PTD within three years (2015)	n/a	n/a	All NC transit systems
PTD will evaluate its internal practices and policies to eliminate barriers to regional transit action, and to increase incentives for systems that implement regional actions.	n/a	n/a	NCDOT-PTD
NCDOT-PTD will provide technical assistance to support the development of & implementation of the RAP	n/a	n/a	NCDOT-PTD & all transit systems

Source: NCDOT Statewide Regionalization Study – 2012

(https://connect.ncdot.gov/business/Transit/Documents/StatewideRegionalizationStudy.pdf)

Figure B-13. Funding Sources (FY2010) for Public Transit Systems

North Carolina Public Transportaiton Systems Operating Funding Sources, FY2010



NCDOT – Public Transportation Division Strategic Plan – 2018

This Plan establishes a collective transit vision of connecting North Carolinians to opportunities, and three strategies: Building Thriving Healthy Communities, Improving Access to Jobs and Economic Development, and Connecting Communities to Opportunities. The purpose is to establish a shared vision and a coordinated, updated approach for providing transit and mobility services to NC residents

Key Findings:

- It is believed that the greatest challenge facing transit in North Carolina is lack of funding. More than 50 percent of participants in the study are concerned about lack of local and State funding, and an additional nine percent are concerned about lack of available Federal monies.
- The most important aspects of transit in the future are access to jobs and affordable transportation. Access to medical care and livable communities are the next most important.
- The increasingly aging and urban population will require enhanced local transit services that are responsive to changing demographics.
- Twenty-five percent of central Buncombe County's 55,000 jobs are filled by commuters from outside Buncombe County.
- Transit, in partnership with employers, community planners, and economic development leaders, can be a leading force in strengthening job creation and economic development.
- In 2017, the NC General Assembly provided \$2 million in funding to encourage transit agencies to work together and to begin formalizing regional routes (called the 'Connected Statewide Network).

Recommendations:

The recommendations are provided below.

Table B-15. NCDOT – Public Transportation Division (PTD) Strategic Plan

Recommendations	Time Frame	Cost	Responsible Party
NCDOT should add State-funded commuter services across the State	n/a	n/a	NCDOT-PTD
Engage the business community in addressing access to employment and economic development in all areas of the State	n/a	n/a	NCDOT-PTD and the Business Community
Transit providers should team with rural employers to develop solutions for employee mobility 3	n/a	n/a	Regional transit providers and their local employers
NCDOT-PTD should foster multi- county collaboration between transit service providers and employers	n/a	n/a	NCDOT-PTD and transit providers
Partner with the NC Department of Commerce to add transit services as an element of the business recruitment process	n/a	n/a	NCDOT-PTD

Grow transit services to add frequency and expand service areas	n/a	n/a	Regional transit providers
Establish regional transit service districts	n/a	n/a	NCDOT-PTD
Expand regional and Statewide routes connecting communities to jobs, education, healthcare and recreation.	n/a	n/a	NCDOT-PTD and transit providers
Promote convenient connections between transit services	n/a	n/a	Regional transit providers
Plan for and build regional transfer facilities for rural connections	n/a	n/a	NCDOT-PTD
Establish regional transit service districts focused on travel markets	n/a	n/a	NCDOT-PTD and MPOs
Provide incentives to assist agencies consolidate with adjoining jurisdictions	n/a	n/a	NCDOT-PTD and transit providers

Source: NCDOT-Public Transportation Division (PTD) Strategic Plan – 2018 (NCDOT-Public Transportation Division (PTD) Strategic Plan)

City of Asheville Comprehensive Plan: 'Living Asheville' - 2018

The Plan is intended to be used as a policy-guiding document, outlining a vision and suggesting strategies that the City should undertake in order to implement the objectives of the Plan. It will be used by the Planning and Zoning Commission and the City Council when reviewing zoning amendments.

Key Findings:

- Eleven percent (11%) of Asheville households do not have access to a vehicle so transit service can be critical for access to jobs, services, and amenities.
- ART system performs in line with peers in terms of frequency of transit service, transit trips per service mile, and trip cost per rider.
- A 'Multimodal Transportation Commission' exists (with sub-committees focused on greenways, transit, and bike and pedestrian issues) to address the challenges of mobility around the City. In 2016 Asheville-in-Motion Mobility Plan (AIM) helped develop a methodology for identifying and prioritizing transportation investments to achieve desired community objectives while also incorporating the 'Vision Zero' safety philosophy.
- Using only data, most of the City isn't dense enough (at least seven units to the acre) to support effective public transit.
- During the public survey, about 75 percent of residents identified more frequent public transit and better geographic coverage as important priorities for the City.
- Many of Asheville's challenges are regional in nature and require integrated solutions between multiple levels of government, include City, State, and County. As the groin grows and the population totals of regional communities shift relative to one another, it is imperative that Asheville work closely with regional organization and surrounding communities.

Recommendations:

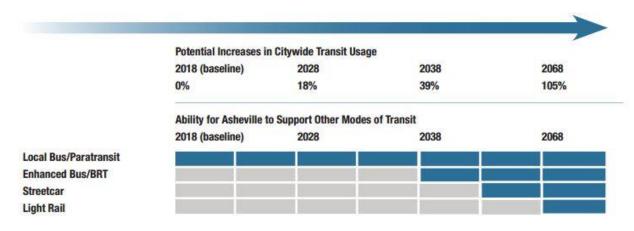
The recommendations are provided below.

Table B-16. City of Asheville Comprehensive Plan Recommendations

Recommendations	Time Frame	Cost	Responsible Party
Increase mixed-use development along transit corridors, seeking to become transit-supportive and possibly increase transit ridership, increase modal shift from cars, and have greater access to jobs, neighborhood services, and transit	n/a	n/a	City of Asheville
Develop a new zoning category for areas identified as 'transit-supportive centers' where necessary elements to sustain public transit and support walkability are the focus	n/a	n/a	City of Asheville
Coordinate with local partners to expand opportunities for alternative modes of transportation available to downtown employees and explore incentives to encourage workforce, as well as visitors, to use public transit.	n/a	n/a	City of Asheville and local partners
Improve Regional Collaboration, Coordination, and Communication	n/a	n/a	City of Asheville and regional municipalities
Support partnerships with Land of Sky regional Council and MPO on key planning issues	n/a	n/a	City of Asheville & LOSRC

Source: Living Asheville: A Comprehensive Plan for Our Future – 2018 (https://www.ashevillenc.gov/department/planning-urban-design/plans/comprehensive-plans/)

Figure B-14. Potential Increases in Transit Usage



Appendix C – Additional Resources and Considerations

Additional Resources to Implement Transit Services
The documents and webpages linked below provide additional guidance regarding third-party contracting and shared mobility services.

Third-Party Contracts

- NCDOT Transit Procurement Page Included here are federal requirements that are typically added to different types of third-party contracts.
- o FTA FAQs regarding third party procurements
- FTA Best Practices Procurement & Lessons Learned Manual In particular, see Appendix A – Federally Required and Other Model Contract Clauses. Here you will find a complete listing of the clauses that should be considered for inclusion in third-party contracts, including the flow-down applicability of each clause and recommended contractual language.
- <u>FTA Circular 4220.1</u> Third-Party Contracting Guidance. In particular, see Item 2 in Chapter IV, "Federal Requirements That May Affect a Recipient's Acquisitions". Within this section, refer to Section F "Public Transportation Services Special Requirements"
- All Certifications and Assurances required by FTA. Some of these mainly apply to NCDOT or the transit providers but many also extend to third-party contracts or could impact third-party contracted services.
- FTA Master Agreement
- Examples of FTA clauses included in other similar third-party contracts:
 - https://www.rtd-denver.com/sites/default/files/files/2017-06/ftaterms.pdf
 - https://nvcogct.gov/wp-content/uploads/2019/02/FTA-Clauses-for-PO-for-FTA-funded-purchases.pdf
 - http://www.mrta.us/sites/default/files/pdf/PPP AppendixD.pdf

Shared Mobility Resources

- FTA's Shared Mobility Definitions
- FTA's Shared Mobility FAQs
- TCRP <u>Legal Research Digest 53</u> Legal Considerations in Evaluating Relationships Between Transit Agencies and Ride-sourcing Service Providers
- <u>FTA Presentation</u> Compliance with Requirements in Transit/Shared Mobility Partnerships
- TCRP Partnership Playbook Informed Decision-Making for Transit Agencies Interested in Partnering with TNCs

Other Considerations

These are items that should be considered under the new service model to ensure client expectations continue to be met or exceeded.

- Promotion consider reducing or eliminating fares for a certain period, and having
 extra staff, volunteers and resources readily available after launch to ensure all clients
 can adapt seamlessly to the new service. If there are groups of riders that may find the
 new service particularly difficult, special accommodations should be made to ensure
 they are not disadvantaged in any way by the new service.
- Ride Booking and Payment new models of paying for and booking trips may be a particularly difficult transition for some riders. Additional resources should be available during the initial launch period for travel training and other technical assistance to help riders acclimate to the new system. If there are unique barriers in place for some riders that prevent them from using the new model of payment and booking (e.g., no cell phone or land line, no cell coverage or internet access, limited access to stores selling prepaid debit cards, etc.), special accommodations should be made so these riders have equal access to service.
- Transfer Integration consider creating a transfer system that allows the riders to
 move through the region with one single fare. Passes, tickets books, cards or other
 media could be used to facilitate transfers. A regional pass, that includes trips on local
 transit systems, would be the most convenient for transit users.
- Marketing and Public Notification The public should receive as much advance notification about the new service model as possible. Those who will be most impacted by the change should have ample opportunity to absorb information about the new model, ask questions, express concerns, and raise any unforeseen issues in advance of service starting. At a minimum, it is important that a targeted and comprehensive marketing effort is established preceding service to maximize public awareness and understanding of the new service.
- Metrics of Success The regional transit providers should establish both qualitative and quantitative indicators of success. The new service as envisioned will improve access and mobility for residents by reducing wait times and increasing convenience and reliability of service. Data should be collected to determine if this vision is achieved, to inform policy discussions about long term service models, and to help other North Carolina communities determine if this service model is appropriate for them.

Appendix D – Implementation of Vanpool Service

It is recommended that the new regional agency identify potentially interested local employers and conduct internal, employee surveys with these employers to assess employee interest and to note the trip patterns made to the workplaces. Interested local employers may be identified through several means: North Carolina Department of Commerce, the Chambers of Commerce in the region, and municipal economic development departments. The agency may also receive direct requests from employers for transit services. In addition, the US Census Bureau's LEHD dataset provides quantitative information on commute patterns as well as concentrations of jobs and workers. The agency may use this dataset to identify likely vanpool partners by focusing on employers that have higher job concentrations paired with higher concentrations of worker origins.

Once the identification of potential vanpool partners and surveys is completed, the agency should review and analyze similar work trips and schedules in order to recommend potential vanpool participants. The data collected from these surveys should be stored in a database to be routinely updated to reflect the listing of employees who could benefit from the vanpool service. It is recommended that the respective human resource departments of the participating agencies be involved in this process, as this gathering of data is effective at new employee orientation. Since the vanpool program would be a new service, the agency would need to procure vans for implementation as well as providing necessary insurance coverage. Before initiating the program, the agency would also need to establish the fare structure. Typically vanpool fares are based on fixed, operational and depreciation expenses associated with the van's total monthly mileage. These expenses include fixed costs (insurance, contingency), operational costs (maintenance repair, gasoline, oil, tires, and parts), and depreciation costs (monthly vehicle depreciation). The fleet size would be defined based on demand once the agency determines interest in the region.

In addition to the vanpool program, the agency may also encourage transportation alternatives to address regional mobility, congestion, and air quality by encouraging carpooling, bicycling, and walking as forms of transportation. The regional transit agency may partner with the Share the Ride NC (STRNC), which is a statewide program in cooperation with NCDOT. STRNC works by matching commuters with carpools, vanpools, public transit routes, walking partners, and biking partners. Commuters enter data to include their home and work addresses on the STRNC website and the tool finds other commuters with similar commutes. Commuters can then contact other commuters and arrange carpools, vanpools, walking, or biking to work.

Incentives could be offered by the regional transit agency or employers through the STRNC website to further encourage ridesharing. If the new agency were to partner with STRNC, then its express routes and vanpool options would be made available to commuters. A partnership with STRNC has the potential to build the express routes and vanpool ridership for the agency while addressing congestion and sustainable initiatives in the region.