FAST

FAYETTEVILLE AREA SYSTEM OF TRANSIT

Transit Development Plan
2023–2032

AUGUST 2022

PREPARED FOR THE
CITY OF FAYETTEVILLE

PREPARED BY
VHB

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Introduction

The 2022-2032 City of Fayetteville Transit Development Plan (TDP) updates the plan previously completed in May 2014. The ten-year plan provides a business development plan for the transit agency over the next decade and beyond. It provides recommendations related to improved services, infrastructure, technology, plans and policies.

As much has changed since 2014, the TDP will delve into how changes affect FAST's services. For example, transportation network companies (e.g., Uber and Lyft) began operating in Fayetteville just a couple months after the adoption of the last TDP. FAST's Transit Center opened in 2017 so several routes were reconfigured to converge at this location. The COVID-19 pandemic has shifted transportation patterns. All of these concerns will be examined in the TDP.

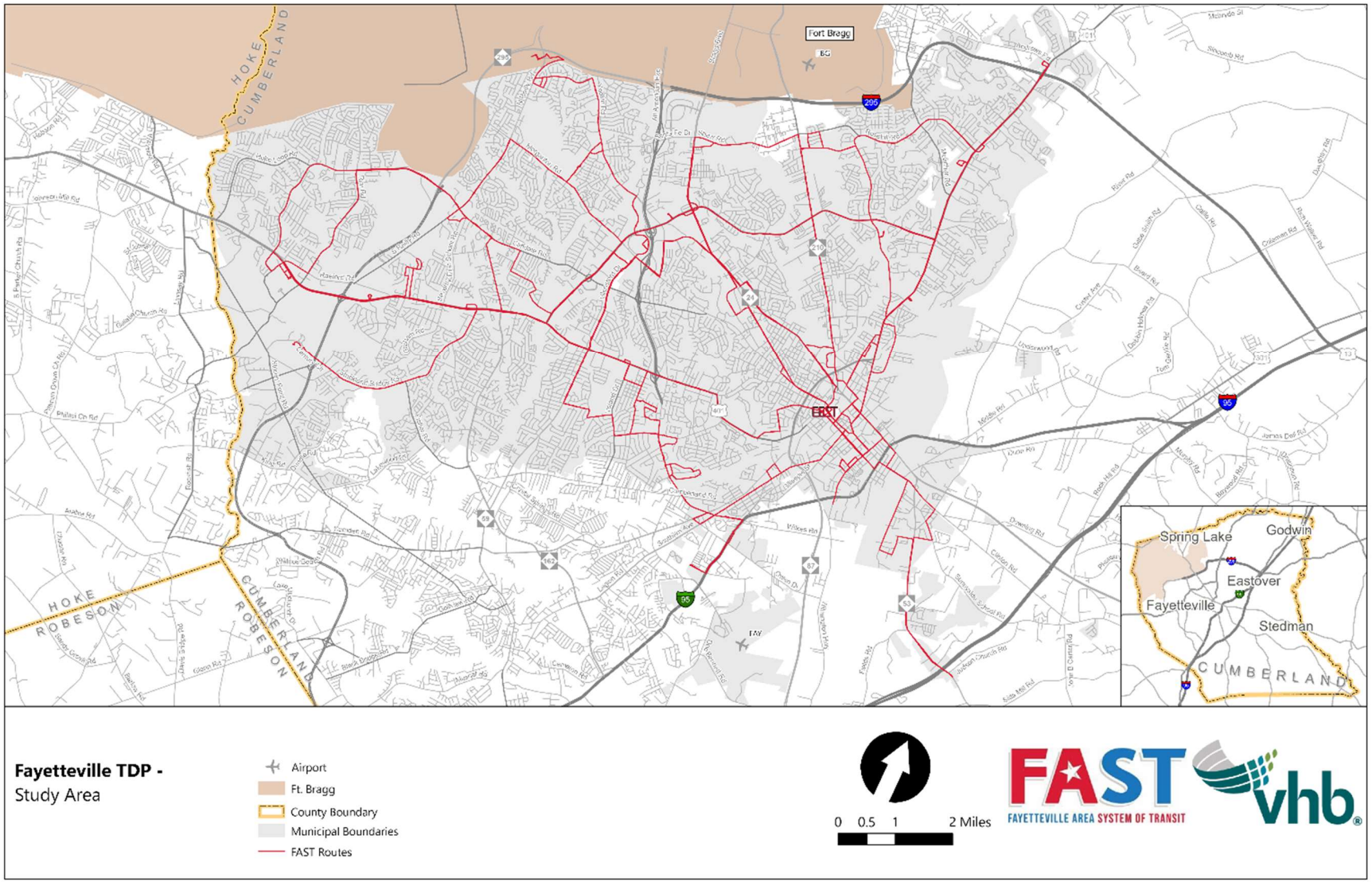
Study Area

The sixth largest city in North Carolina by population, Fayetteville is located within the eastern portion of North Carolina. Fayetteville is 64 miles south of Raleigh, NC, and 138 miles east of Charlotte, NC. Fort Bragg is located within Fayetteville city limits and has a population of approximately 60,000 soldiers. As such, it is ranked as the most populous US Army post in the United States. The recently approved

infrastructure bill will allocate $910 million over the next five years to improve public transportation for the state of North Carolina. Fayetteville will benefit from the additional funding allowing the city to continue successful growth and development.

The study area for this project is the entire City of Fayetteville jurisdiction, including Fort Bragg. Shown in Figure 1-1, the Fayetteville Area System of Transit (FAST) operates 18 fixed local bus routes seven days per week as well as complementary paratransit service. All of these current services will be evaluated, and potential changes recommended.

Figure 1-1 Study Area



Report Organization

This report is divided into several chapters:

- **Chapter 2 System Performance Evaluation** looks at the current system's performance including goals and objectives, service profiles, peer review and trend analysis.
- **Chapter 3 Population and Land Use** focuses on reviewing how current plans impact transit and identifying transit markets.
- **Chapter 4 Public Involvement** summarizes outreach activities and input received.
- **Chapter 5 Market Analysis** provides ridership projections and opportunities for intermodal connections.
- **Chapter 6 Alternatives Evaluation** provides a list of proposed alternatives and an evaluation of each alternative.
- **Chapter 7 Finance Plan** summarizes the implementation plan and financial impact of that plan.
- **Chapter 8 Regionalization** provides an overview of opportunities to grow regionally.

2

System Performance

This section provides an overview of FAST's current transit services including a comparison of key metrics over time and to other transit agencies. It also includes a review of recent changes to FAST's goals.

FAST Overview

FAST is the primary transit service provider for the City of Fayetteville, North Carolina. The Fayetteville City Council serves as FAST's governing board. The City of Fayetteville began providing public transportation in 1976 when the city assumed operations from a private transportation system operated by Cape Fear Transit Bus Company. The company provided operational service seven days a week, from 5:30 AM to midnight. After FAST assumed operations, it continued to expand its service capabilities in order to maximize efficiency.

Today, FAST is operating a more limited schedule due to COVID impacts and operator shortages, but prior to COVID, FAST operated 18 routes per weekday. Service primarily runs on 60-minute headways with a major hub in downtown Fayetteville. In non-COVID years, FAST provides more than 1.4 million trips annually on fixed route and paratransit services.

Goals and Objectives

The City of Fayetteville recently completed its FY 2021 Strategic Plan, in which it provided in-depth detail on updated City goals and objectives for the City. Following the completion of the Strategic Plan, each City department was asked to develop its own goals and objectives related to its service area. To assist with the development of these goals, FAST staff reviewed its prior goals, examined the City's new goals and objectives, and completed a brainstorming exercise. A snapshot of one piece of the virtual whiteboard used for the FAST goals brainstorming session is displayed in Figure 2-1.

Figure 2-1 FAST White Board | Goal #2 Brainstorming Session

During staff discussions, the following themes were noted as being part FAST's overall vision for itself and its future:

- Connecting all of Fayetteville's residents, workers, and visitors
- Becoming a primary transportation choice for Fayetteville residents
- Providing a safe atmosphere
- Prioritizing innovation
- Being environmentally conscious
- Going beyond expectations
- Being an employer of choice

Table 2-1 provides the list of updated City of Fayetteville and FAST mission and goals.

Table 2-1 City of Fayetteville and FAST Mission and Goals

	City of Fayetteville	FAST
Mission	To provide quality and sustainable public services for our community to thrive and businesses to grow	To improve the quality of life by connecting Fayetteville's residents, workers, visitors, and places with a highly-valued safe, efficient, reliable and innovative transportation.
Goal 1	Safe and Secure Community	Provide a safe and secure public transit system – both on buses and at bus stops – for the entire Fayetteville community.
Goal 2	Responsive City Government Supporting a Diverse and Viable Community	Stimulate economic activity through business and community partnerships.
Goal 3	City investment in Today and Tomorrow	Strategically invest in sustainable transportation options
Goal 4	Desirable place to Live, Work, and Recreate	Enhance quality of life through public transit to retain current customers (and attract new ones) by providing services that connects our communities.
Goal 5	Financially Sound City Providing Exemplary City Services	Ensure cost-effective, efficient, and responsible use of resources and aggressively

		pursue funding partnerships to minimize use of local resources.
Goal 6	Collaborative Citizen & Business Engagement	Build strategic, collaborative partnerships by creating environments of community engagement.

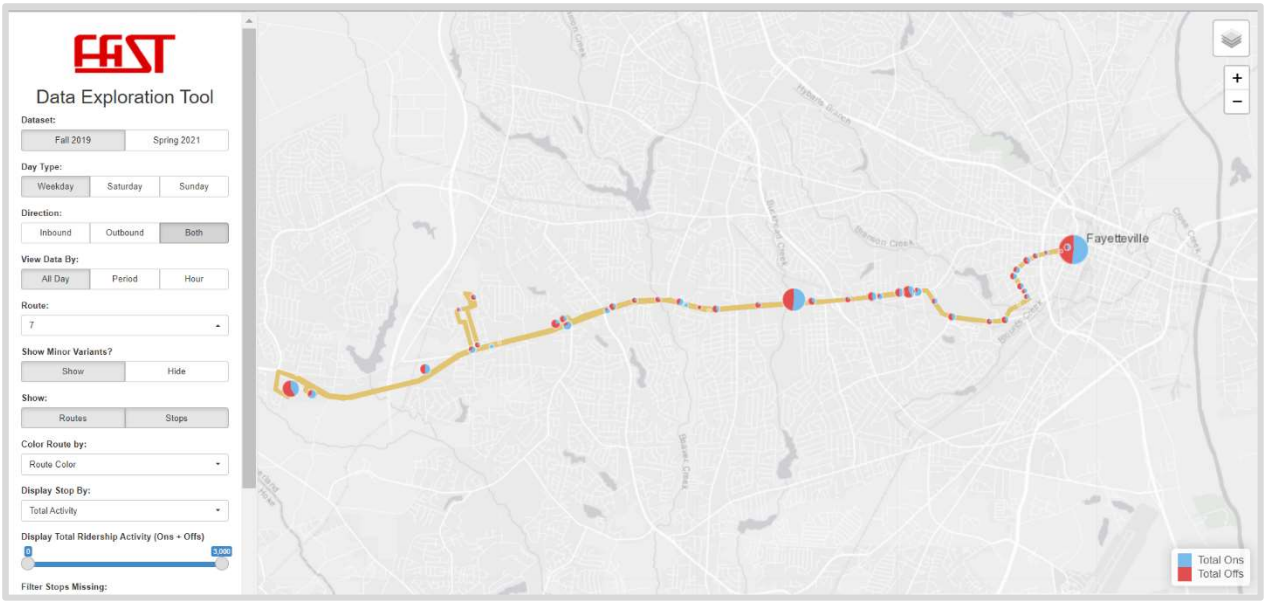
Fixed Route Transit

FAST operates two primary types of transit: fixed route and paratransit. Fixed route services, or local bus service, provides daily service throughout the City of Fayetteville. Many of the routes converge at the FAST Transit Center in downtown Fayetteville and radiate through the city from there. There is another smaller transfer hub at Cross Creek Mall. The system is designed to maximize transfers so there are also many points where two or three routes connect throughout the city.

To provide a more in-depth review of the current service, a data exploration tool called DataTripper® was employed. Data related to routing, on-time performance, boardings and alightings, bus stop locations, and bus stop amenities was loaded into the DataTripper tool. The DataTripper tool allows for exploration of data spatially, temporally, directionally, and as a network. Figure 2-2 displays Route 7 boardings and alightings by stop on weekdays within the DataTripper tool. While the DataTripper tool will be used to develop near-term and long-term recommendations for improvements to the FAST system, it will be of use to staff after the TDP is completed.

Figure 2-2 DataTripper Screenshot

Pandemic Service Changes



It should be noted that at the time of TDP production, FAST was still operating modified bus service due to the COVID-19 pandemic and difficulties hiring additional operators. At present, the primary lingering service impacts are a lack of evening service, reduced frequency on Route 12, and the discontinuation of Route 30.

Weekday

As shown in Table 2-2, FAST operates 18 fixed routes on weekdays, which are named after Fayetteville landmarks or popular destinations. No service is provided on the following holidays: New Year's Day, Easter, Independence Day, Thanksgiving and Christmas. Most routes operate on 60-minute headways although Route 12 typically operates on a 30-minute schedule and Routes 11 and 17 have longer headways.

Table 2-2 Weekday Route Schedule

Rte #	Name	Destinations	Freq. (min)	Hours of Service	
				Typical Service	COVID Service
3	Cedar Creek/E Fayetteville/ Deep Creek	Cape Fear Plaza, Old Wilmington Rd Transfer Center	60	6:00 AM – 6:55 PM	5:50 AM – 6:55 PM
4	Hillsborough/DSS/Rosehill Rd	Maiden Ln Library, Hickory Hills Country Club	60	6:00 AM – 7:25 PM	6:00 AM – 6:55 PM
5	Ramsey St/Methodist Univ/ VA Hospital	Methodist University, Blueberry Place, Veterans Affairs Center	60	7:00 AM – 8:55 PM	7:00 AM – 6:55 PM
6	University Estates/Bragg Blvd	Cross Creek Mall, Shaw Rd	60	5:30 AM – 9:55 PM	5:30 AM – 6:55 PM
7	Raeford Rd/Savoy Hgts/VA Health Center	FAST Transit Center, Gillis Hill Retail Area	60	6:00 AM – 7:55 PM	6:00 AM – 6:55 PM
8	Southern Ave/Owen Dr/Cape Fear Valley MC	FAST Transit Center, Massey Hill, Bordeaux	60	6:30 AM – 10:25 PM	6:30 AM – 6:55 PM
9	Rosehill Rd/Stacy Weaver/ Ramsey	College Lakes Library, Methodist University	60	5:30 AM – 9:30 PM	5:30 AM – 6:55 PM
10	Strickland Brdg Rd/Skibo Rd	West Regional Library, Sykes Call Center	60	6:00 AM – 7:26 PM	6:00 AM – 6:55 PM
11	Ramsey/County Club/ Pamalee	Cross Creek Mall, Methodist University	120/60	6:30 AM – 8:53 PM	6:30 AM – 7:02 PM
12	Murchison Rd/FSU	Fayetteville State University, University Estates	30	5:30 AM – 10:30 PM	6:00 AM – 6:55 PM
14	Fort Bragg Rd/FTCC/ Sycamore Dairy	Cross Creek Mall, Westwood, FTCC	60	6:00 AM – 10:26 PM	6:00 AM – 6:55 PM
15	Cape Fear Valley MC/CC Mall	Cross Creek Mall, Walter Reed Rd	60	6:00 AM – 10:26 PM	6:00 AM – 6:55 PM
16	Bragg Blvd/Eutaw/CC Mall	FAST Transit Center, Cross Creek Mall	60	5:30 AM – 10:25 PM	5:30 AM – 6:55 PM
17	W Fayetteville/Reilly/ Cliffdale Rd	Montebello Shopping Ctr, Murray Fork Shopping Ctr	90	5:45 AM – 8:28 PM	5:45 AM – 6:58 PM
18	Skibo/Cliffdale Rd/Hollywood Hgts	Cross Creek Mall	60	6:30 AM – 10:30 PM	6:30 AM – 6:55 PM
19	Yadkin Rd/Fort Bragg/CC Mall	Cross Creek Mall, Ft Bragg Connection	60	6:00 AM – 7:55 PM	6:00 AM – 6:55 PM
30	Downtown/Old Wilmington Rd/PWC	FAST Transit Center, Beasley Broadcasting	60	8:25 AM – 5:54 PM	N/A
31	SE Fayetteville/Owen Dr/ Enterprise Ave	Food Lion, Walmart	60	7:24 AM – 7:24 PM	7:24 AM – 6:49 PM

Saturday

As displayed in Table 2-3, Saturday service includes 16 of the 18 weekday routes, with Route 16 and 30 being weekdays only. Route 12 only operates 30-minute headways for a portion of the day while Routes 7, 11 and 17 continue to have longer headways.

Table 2-3 Saturday Route Schedule

Rte #	Name	Destinations	Freq. (min)	Hours of Service	
				Typical Service	COVID Service
3	Cedar Creek/E Fayetteville/ Deep Creek	Cape Fear Plaza, Old Wilmington Rd Transfer Center	60	8:00 AM – 5:55 PM	7:50 AM – 5:55 PM
4	Hillsborough/DSS/Rosehill Rd	Maiden Ln Library, Hickory Hills Country Club	60	8:30 AM – 5:25 PM	8:30 AM – 5:25 PM
5	Ramsey St/Methodist Univ/VA Hospital	Methodist University, Blueberry Place, Veterans Affairs Center	60	8:00 AM – 8:55 AM	8:00 AM – 6:55 PM
6	University Estates/Bragg Blvd	Cross Creek Mall, Shaw Rd	60	8:30 AM – 9:55 PM	8:30 AM – 6:55 PM
7	Raeford Rd/Savoy Hgts/VA Health Center	FAST Transit Center, Strickland Ridge Road	90	8:00 AM – 7:55 PM	8:00 AM – 6:54 PM
8	Southern Ave/Owen Dr/Cape Fear Valley MC	FAST Transit Center, Massey Hill, Bordeaux	60	8:30 AM – 10:25 PM	8:30 AM – 6:55 PM
9	Rosehill Rd/Stacy Weaver/ Ramsey	College Lakes Library, Methodist University	60	8:02 AM – 9:30 PM	8:18 AM – 6:55 PM
10	Strickland Brdg Rd/Skibo Rd	West Regional Library, Sykes Call Center	60	8:00 AM – 7:26 PM	8:00 AM – 6:55 PM
11	Ramsey/County Club/ Pamalee	Cross Creek Mall, Methodist University	120/60	8:53 AM – 10:53 PM	8:30 AM – 6:50 PM
12	Murchison Rd/FSU	Fayetteville State University, University Estates	30/60	7:30 AM – 10:30 PM	8:00 AM – 6:55 PM
14	Fort Bragg Rd/FTCC/ Sycamore Dairy	Cross Creek Mall, Westwood, FTCC	60	7:00 AM – 10:26 PM	7:00 AM – 6:54 PM
15	Cape Fear Valley MC/CC Mall	Cross Creek Mall, Walter Reed Rd	60	7:00 AM – 7:30 PM	8:30 AM – 6:55 PM
17	W Fayetteville/Reilly/Cliffdale Rd	Montebello Shopping Ctr, Murray Fork Shopping Ctr	90	7:10 AM – 6:40 PM	7:00 AM – 6:56 PM
18	Skibo/Cliffdale Rd/Hollywood Hgts	Cross Creek Mall	60	8:30 AM – 10:30 PM	8:30 AM – 6:55 PM
19	Yadkin Rd/Fort Bragg/CC Mall	Cross Creek Mall, Ft Bragg Connection	60	7:00 AM – 6:55 PM	7:00 AM – 6:55 PM
31	SE Fayetteville/Owen Dr/ Enterprise Ave	Ireland Drive, Walter Reed Rd	60	8:24 AM – 7:24 PM	8:24 AM – 6:49 PM

Sunday

As shown in Table 2-4, the Sunday schedule only includes 10 fixed routes and Route 7 has a 90-minute headway.

Table 2-4 Sunday Route Schedule

Rte #	Name	Destinations	Freq. (min)	Hours of Service	
				Typical Service	COVID Service
3	Cedar Creek/E Fayetteville/ Deep Creek	Cape Fear Plaza, Old Wilmington Rd Transfer Center	60	9:00 AM – 5:55 PM	8:50 AM – 5:55 PM
5	Ramsey St/Methodist Univ/ VA Hospital	Methodist University, Blueberry Place, Veterans Affairs Center	60	9:00 AM – 6:55 PM	9:15 AM – 6:55 PM
6	University Estates/Bragg Blvd	Cross Creek Mall, Shaw Rd	60	9:30 AM – 6:55 PM	9:27 AM – 6:55 PM
7	Raeford Rd/Savoy Hgts/VA Health Center	FAST Transit Center, Strickland Ridge Road	90	9:30 AM – 6:25 PM	9:30 AM – 6:25 PM
8	Southern Ave/Owen Dr/Cape Fear Valley MC	FAST Transit Center, Massey Hill, Bordeaux	60	9:30 AM – 6:55 PM	9:30 AM – 6:55 PM
12	Murchison Rd/FSU	Fayetteville State University, University Estates	60	9:00 AM – 6:25 PM	9:00 AM – 6:55 PM
14	Fort Bragg Rd/FTCC/ Sycamore Dairy	Cross Creek Mall, Mental Health FTCC	60	9:00 AM – 6:55 PM	9:00 AM – 6:54 PM
15	Cape Fear Valley MC/CC Mall	Cross Creek Mall, Walter Reed Rd	60	9:30 AM – 5:55 PM	9:30 AM – 5:55 PM
17	W Fayetteville/Reilly/Cliffdale Rd	Montebello Shopping Ctr, Murray Fork Shopping Ctr	60	9:30 AM – 7:13 PM	9:30 AM – 7:13 PM
18	Skibo/Cliffdale Rd/ Hollywood Hgts	Cross Creek Mall	60	9:00 AM – 5:55 PM	9:00 AM – 5:55 PM

Complementary Paratransit Service

FAST provides Americans with Disabilities (ADA) complementary paratransit services through its FAST*Trac!* service. FAST*Trac!* service is available during the same timeframes as the fixed route service. Reservations can only be made from 8:00 AM to 5:00 PM Monday through Friday. Trips may be scheduled over the phone up to seven days in advance. Same day reservations are not accepted for FAST*Trac!* service. Complementary paratransit service is provided for eligible passengers needing a ride that starts and ends within ¾-mile of a FAST bus routes.

Eligibility for FAST*Trac!* service is guided by the ADA and is determined through a standard assessment. The FAST*Trac!* Paratransit Operations Manager reviews applications to determine eligibility. Riders may be

determined eligible for ADA service if they are unable to access fixed-route service independently due to a disability.

Infrastructure Review

FAST maintains a number of capital resources to support its transit service within the City of Fayetteville. This section details FAST assets including facilities and bus stops.

FAST Transit Center

The FAST Transit Center has been the main activity hub and primary transit center in Fayetteville since being constructed in 2017. Located at 502 Franklin St. in Downtown Fayetteville, the bus plaza has 16 bus bays serving 18 weekday routes. Additionally, restrooms and an information booth are accessible at the plaza. The Transit Center acts as a multimodal transit hub providing connections to both local and intercity transportation options including Greyhound intercity buses, Megabus transit vehicles, and taxi vehicles.

The FAST Transit Center has been designated LEED Silver due to its innovative construction, energy efficiency capabilities, and rainwater harvesting collection system. The FAST Transit Center houses the FAST customer operations call center, which provides information and assistance to customers.

Bus Stops

There are 623 bus stops within the FAST system. Amenities at each bus stop location can include a shelter, seating (e.g., two-seat bus pole or bench), trash can, and/or bike rack. FAST tries to add a bench to any stop with 10 or more boardings per day and it tries to add a shelter to any stop with 20 or more boardings per day. Approximately 25 percent of FAST bus stops include a shelter and bench. These stops account for 78 to 80 percent of systemwide boardings. FAST compares favorably to its peers in providing shelter and seating for its waiting passengers.

Fares

Table 2-5 includes the fare type and rates for regular and discounted fixed route and FAST*Trac!* service. Individuals aged 65 and older or individuals with a disability quality for reduced fares. Once approved, passengers are required to show their FAST reduced fare photo identification to receive the discount.

Table 2-5 FAST Fares

Fare Type	Regular Fare	Reduced Fare
Adult One-Way Trip	$1.25	$0.75
FAST*Trac!*	$2.00	$1.50
One-Day Pass	$3.00	$2.50
5-Day Rolling Pass	$11.00	$10.50

Children under six years old and under 42" tall can ride free with a paying adult. Students enrolled at FSU, FTCC, and MU are eligible to use the student semester pass which offers a discounted rate if individuals apply through the mobile ticketing application.

Bus fares and passes may be purchased both on the bus or in-person at the FAST Transit Center. In-person payments can be made either at the booth with cash, debit card, or credit card. A select set of passes are also available for purchase at four Carlie C's grocery stores.

FAST also distributes passes to school principals, athletic directors, faculty sponsors of school clubs and coaches throughout Cumberland County Public Schools for after-school programs and activities.

The City of Fayetteville began providing campus service in conjunction with regular transit service to Fayetteville State University, Fayetteville Technical College, and Methodist University. FAST offers a semester pass program that allows students unlimited fixed-route access to FAST services.

Fixed Route Trend Analysis and Peer Review

A trend analysis and peer review are provided for both the fixed route and the FAST*Trac!* systems. The purpose of the trend analysis is to understand how FAST's performance has changed over a period of time. The purpose of the peer review is to understand how FAST's performance compares to other regional and national peer transit agencies.

Metrics

The trend analysis and peer review for both fixed route and complementary paratransit services used three categories of metrics: General Performance Indicators, Effectiveness Measures, and Efficiency Measures. Data for all measures were gathered through the National Transit Database (NTD). The measures related to each category are provided in Table 2-6.

Table 2-6 Trend and Peer Data Analysis Categories

General Performance Indicators	Effectiveness Measures	Efficiency Measures
Passenger Trips	Passenger Trips per Revenue Mile	Operating Expense per Passenger Trip
Revenue Miles	Passenger Trips per Revenue Hour	Operating Expense per Revenue Mile
Revenue Hours	Revenue Miles Between Failures	Operating Expense per Revenue Hour
Operating Expense		Farebox Recovery
Vehicles Operated in Maximum Service		
Passenger Fare Revenues		

Peer Selection Methodology

The first step in the peer review was to select a group of peers for the review. Using the Florida Transit Information System, a national clearinghouse for NTD data, every transit agency in the United States was analyzed for its comparability to FAST. Comparability was measured on a myriad of system and community characteristics including annual passenger trips, service area, number of vehicles operated in maximum service, etc. In addition to the NTD-based analysis, FAST reviewed which systems were operating in an area with a major military installation. Using this information, FAST selected a group of regional and national peers to compare itself.

National Peers

- Fort Wayne, IN | Fort Wayne Public Transportation Corporation (FWPTC)
- Huntington, WV | Tri-State Transit Authority (TTA)
- Mobile, AL | Wave Transit System (WTS)

Regional Peers

- Asheville, NC | Asheville Transit System (ATS)
- Clarksville, TN | Clarksville Transit System (CTS)
- Columbus, GA | Metropolitan Transit System (METRA)
- Durham, NC | Durham Area Transit Authority (Go Durham)
- High Point, NC | High Point Transit System (HPTS)
- Wilmington, NC | Cape Fear Public Transportation Authority (CFPTA)
- Winston-Salem, NC | Winston-Salem Transit Authority (WSTA)

Table 2-7 provides a sampling of peer data on which comparability was based. All of the peers are selected due to sharing similarities with FAST, but Regional Peers are often included because they are proximate to the agency and therefore decision makers are familiar with them. For example, Durham is rather large compared to FAST, but due to its proximity, it makes a useful peer.

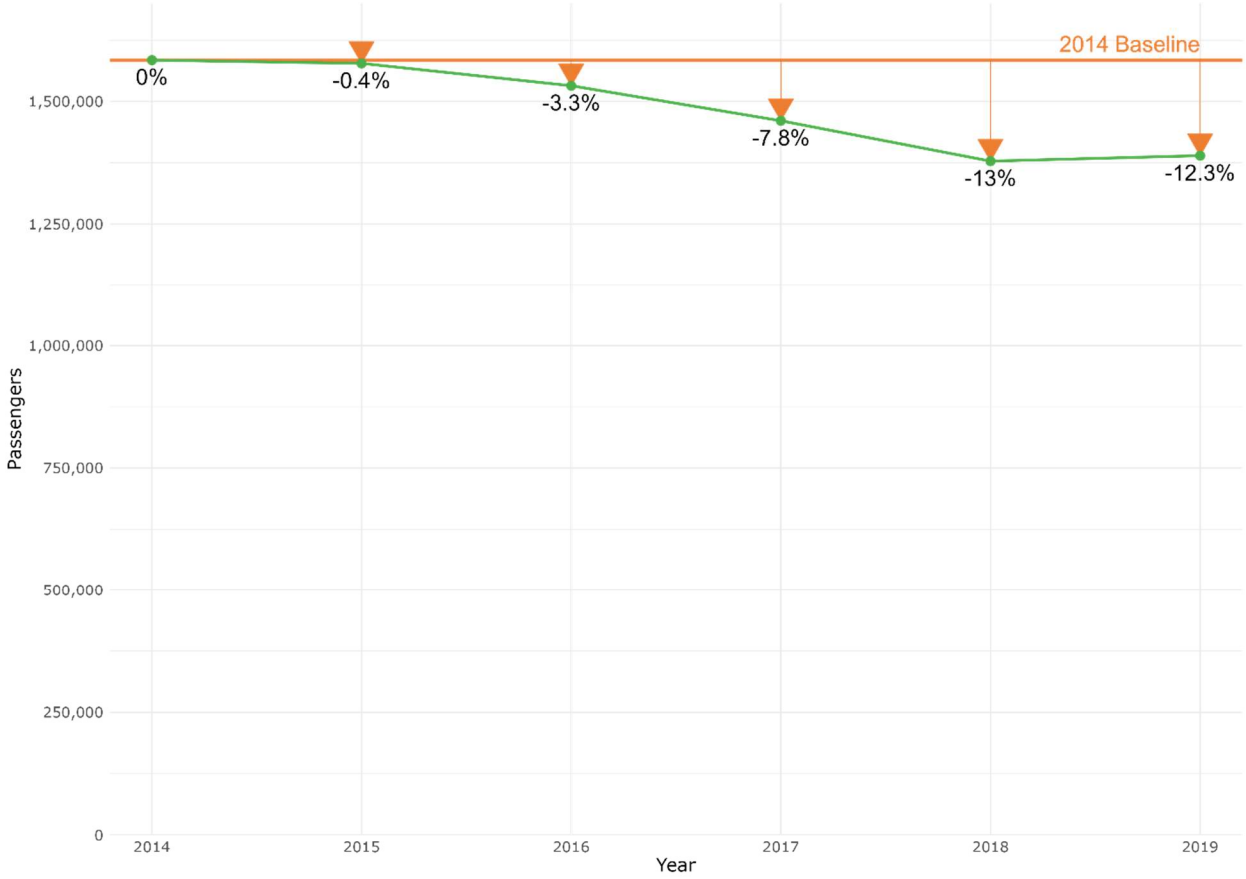
Table 2-7 Peer Agency Comparison

Peer City	Urban Area Population	Service Area (Sq Mi)	Annual Revenue Miles	Annual Operating Budget	Military Base	Annual Passenger Trips
Fayetteville	333,366	95	1,754,765	$9,800,780	Fort Bragg	1,389,419
National Peers						
Fort Wayne	329,170	111	1,876,603	$14,086,054	N/A	1,600,996
Huntington	199,133	92	1,218,963	$6,233,746	N/A	917,289
Mobile	328,610	138	1,720,471	$10,188,922	N/A	849,876
Regional Peers						
Asheville	312,618	45	1,090,122	$7,807,142	N/A	1,978,720
Clarksville	183,798	105	1,550,315	$6,358,724	Fort Campbell	648,536
Columbus	249,510	132	1,413,534	$4,768,349	Fort Benning	1,256,080
Durham	391,371	93	391,371	$26,856,272	N/A	6,562,498
High Point	173,324	95	523,218	$3,780,496	N/A	977,206
Wilmington	260,170	200	1,543,191	$8,724,747	N/A	1,194,745
Winston-Salem	416,394	134	3,511,315	$18,880,645	N/A	2,471,647

General Performance Indicators

General performance indicators provide a snapshot of data to understand a system's operation. Passenger trips represent annual unlinked passenger boardings. It is commonly referred to as a ridership count. Figure 2-3 examines passenger trips over a five-year period from 2014 to 2019, the most recent NTD data available. The data indicates that ridership has continued to decrease with the highest percentage of decrease occuring between 2017-2018. FAST is part of a national trend for cities with a population over 200,000 that experienced ridership declines during this timeframe.

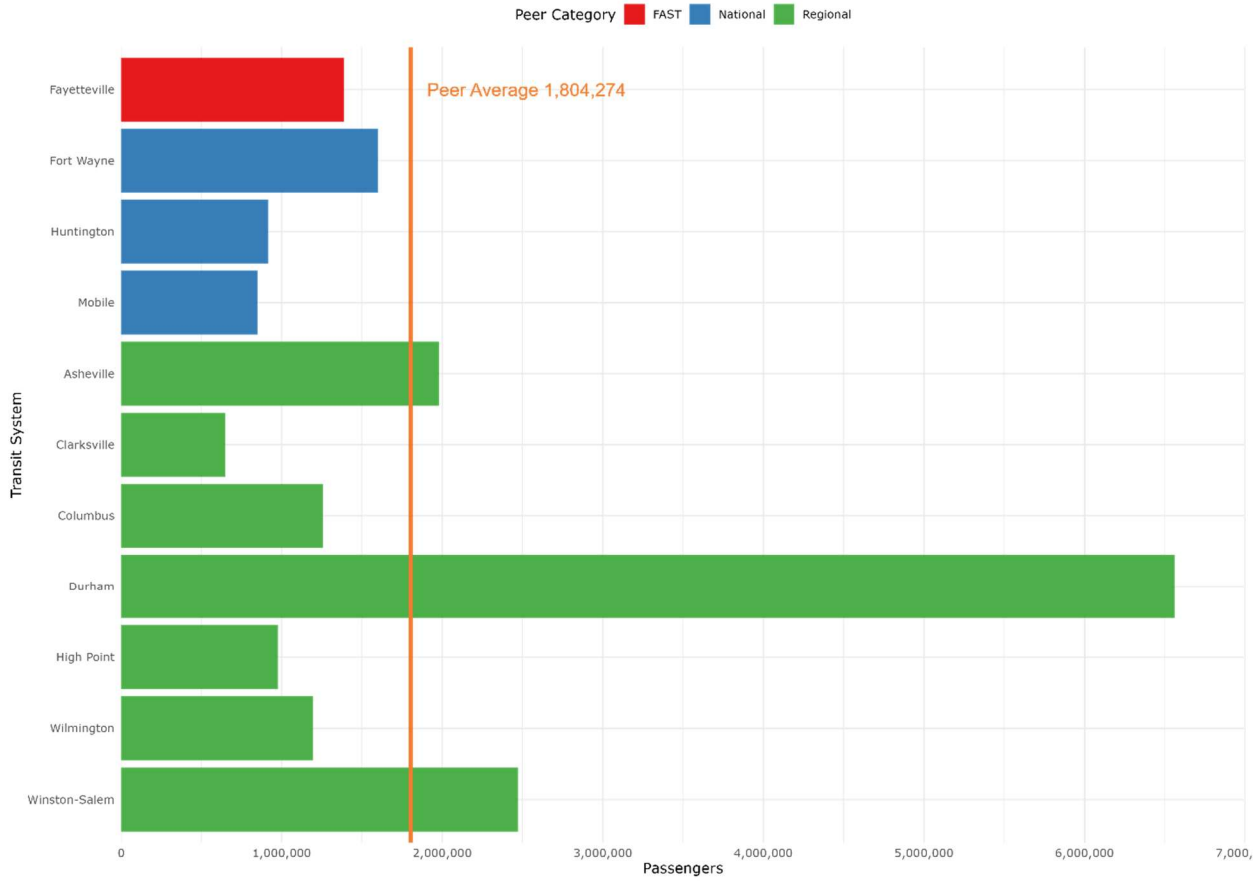
Figure 2-3 Fixed Route Trend | Passenger Trips



Source: NTD 2014-2019

Figure 2-4 presents the number of passenger trips undertaken by FAST and its peers in 2019. FAST fell below the peer average, but the number of annual passenger trips provided in Durham is more than double any other transit agency.

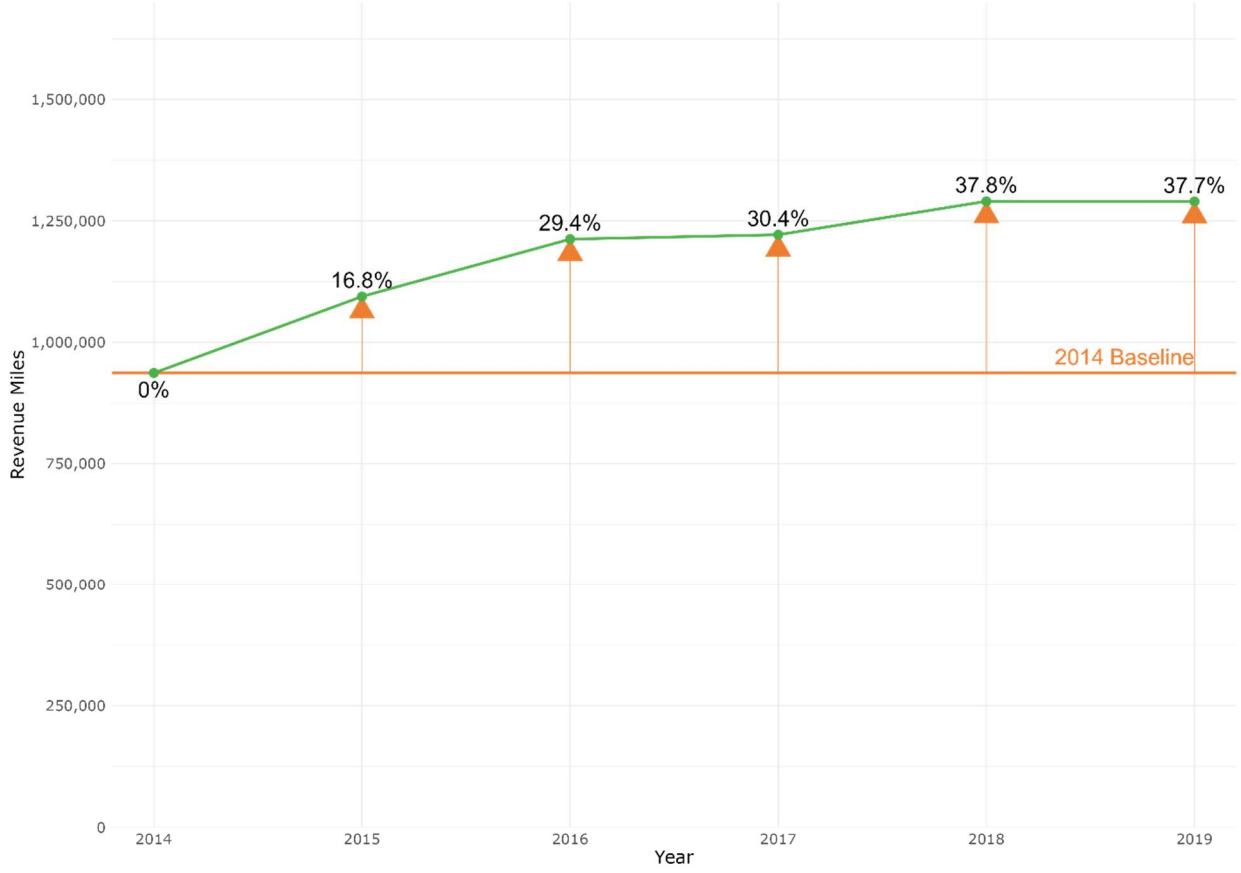
Figure 2-4 Fixed Route Peer Review | Passenger Trips



Source: NTD 2019

Revenue miles represents the number of miles a vehicle travels in revenue service. Figure 2-5 shows FAST's revenue hours' trend between 2014 and 2019. The data indicates that FAST increased its annual revenue miles by almost 38 percent over the five-year timeframe.

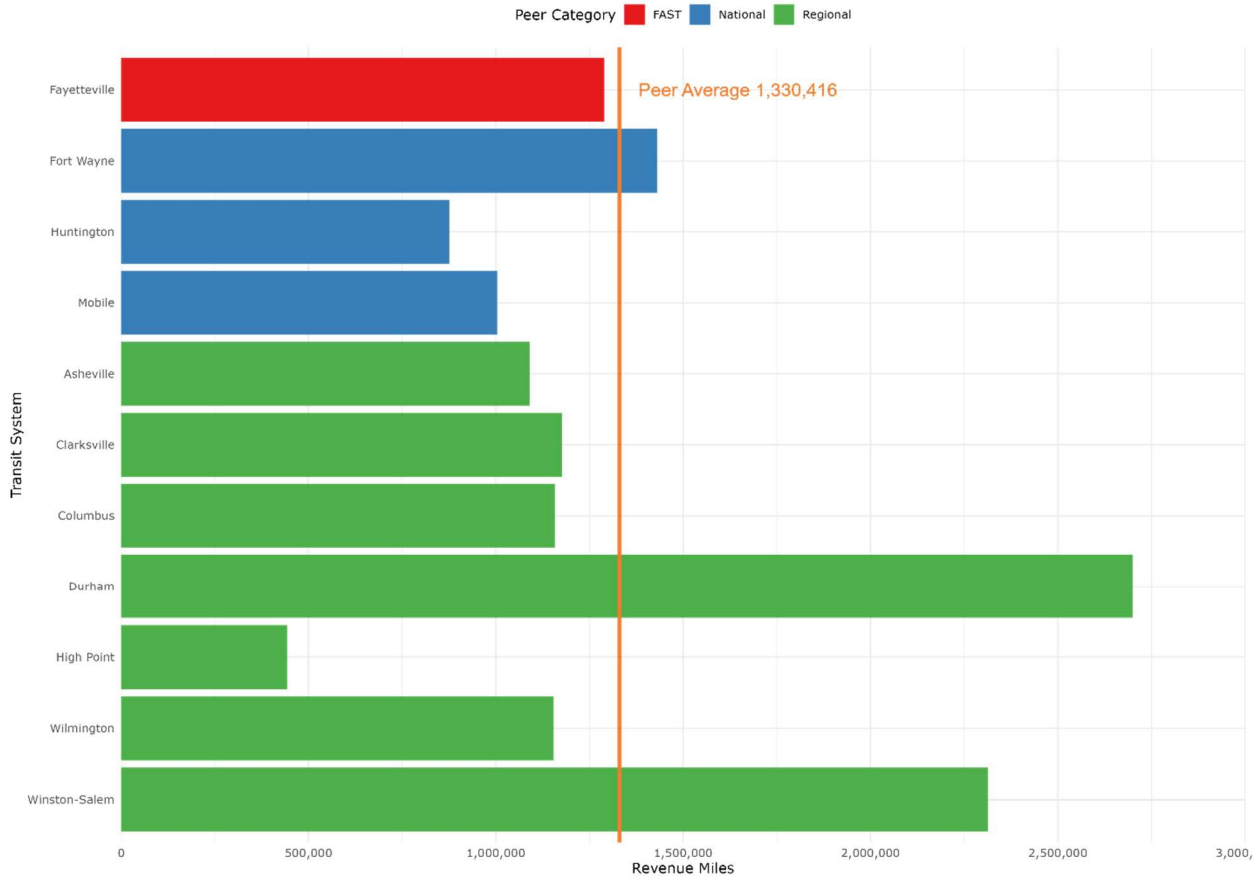
Figure 2-5 Fixed Route Trend | Revenue Miles



Source: NTD 2014-2019

Figure 2-6 shows that Durham and Winston-Salem provided the greatest number of revenue miles while FAST falls just under the peer average.

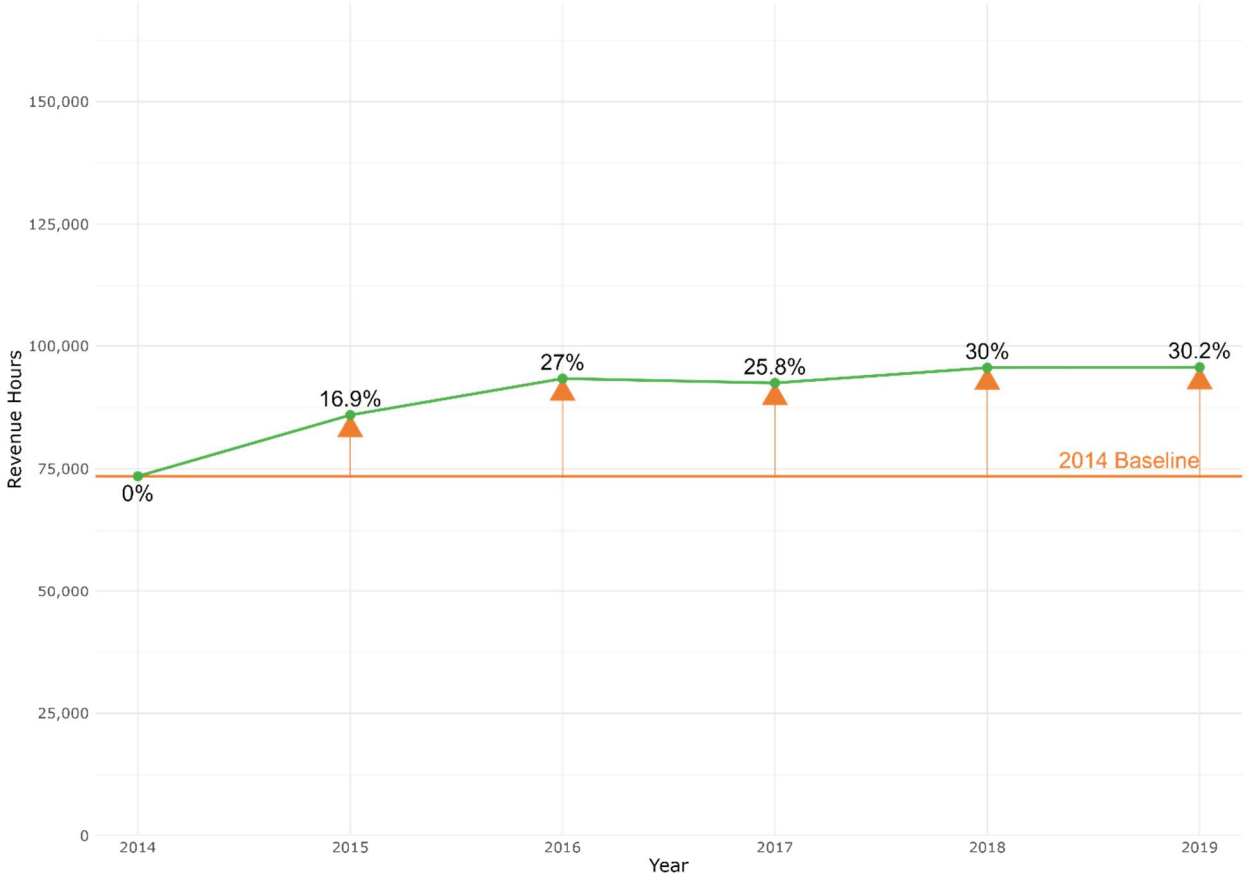
Figure 2-6 Fixed Route Peer Review | Revenue Miles



Source: NTD 2019

Revenue hours represents the number of hours that vehicles are in revenue service including layover and recovery time. Figure 2-7 is the annual number of revenue hours over a five-year period for FAST. Overall, there was an upward trend in the number of revenue hours operated except between 2016 and 2017.

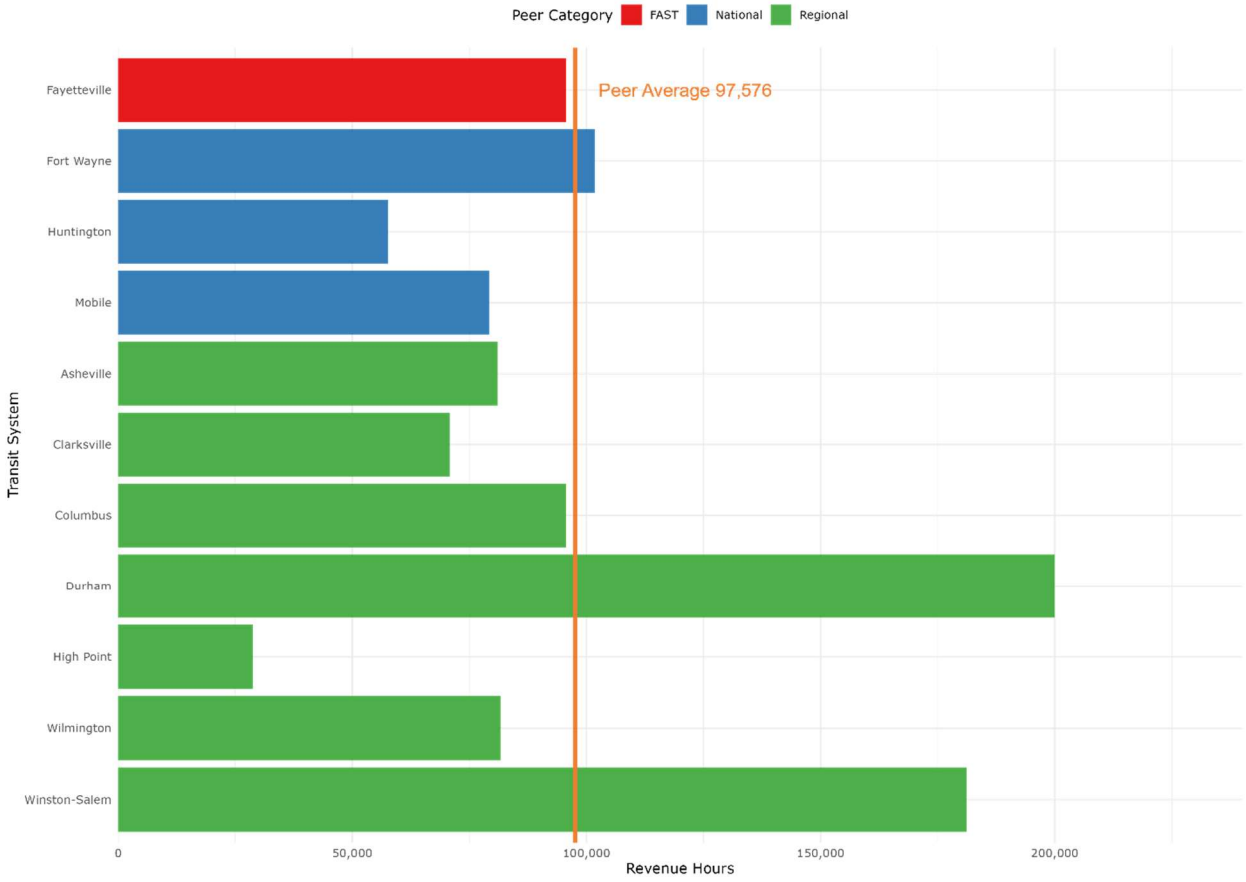
Figure 2-7 Fixed Route Trend | Revenue Hours



Source: NTD 2014-2019

Figure 2-8 presents annual revenue hour data for FAST and its peers. FAST provided slightly fewer revenue hours of service than the peer average. Regional peers Durham and Winston-Salem had the highest amount of revenue hours while Fort Wayne had the highest number of revenue hours from a national perspective.

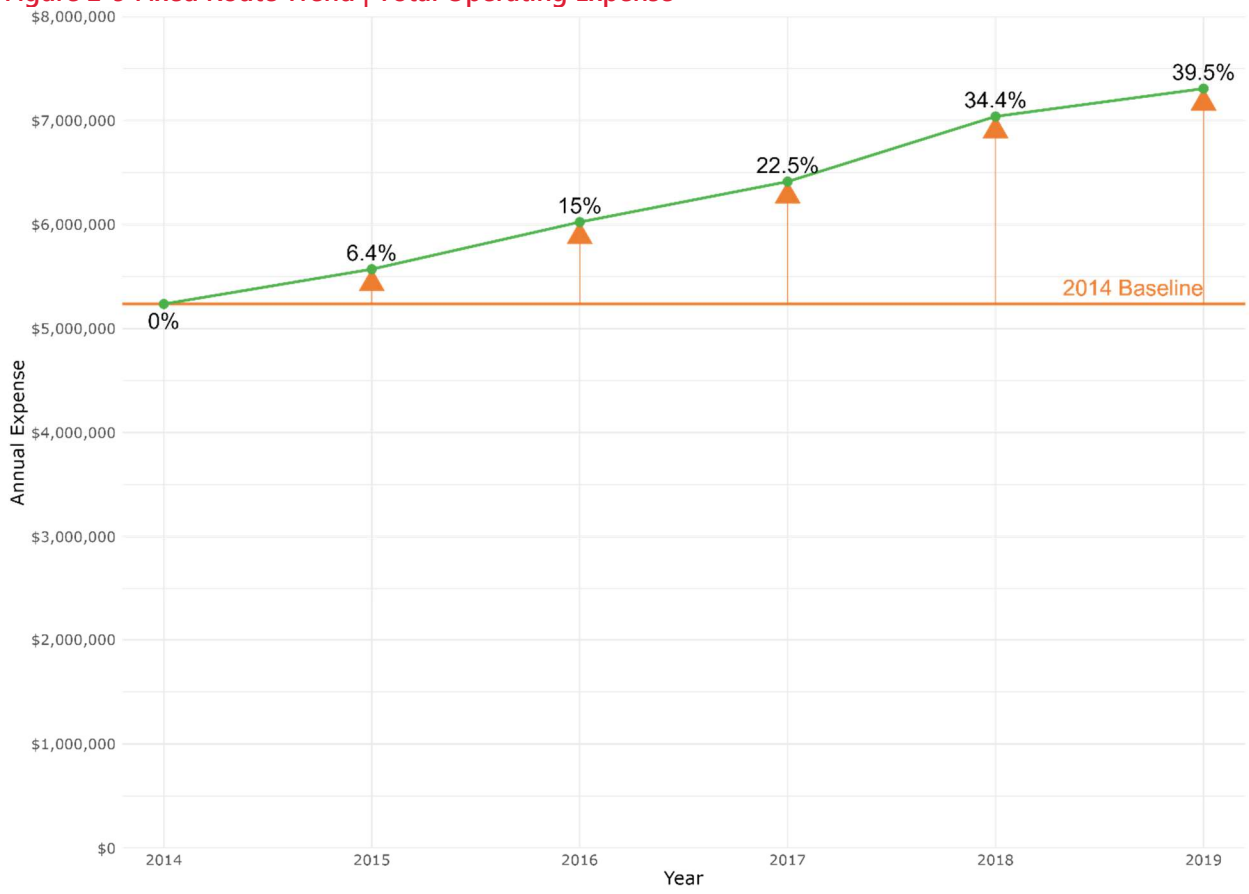
Figure 2-8 Fixed Route Peer Review | Revenue Hours



Source: NTD 2019

Total operating expenses are the expenses associated with the operation of a transit agency. Capital expenses, which are related to the purchase of capital equipment and capital projects, are not included in operating expenses. Figure 2-9 provides a snapshot of FAST's total operating expense over a five-year period. The data indicates that total operating expenses have increased by almost 40 percent over the five years. Growth in operating expenses outpaced both the growth in annual revenue hours (30.2%) and revenue miles (37.7%) over the same period.

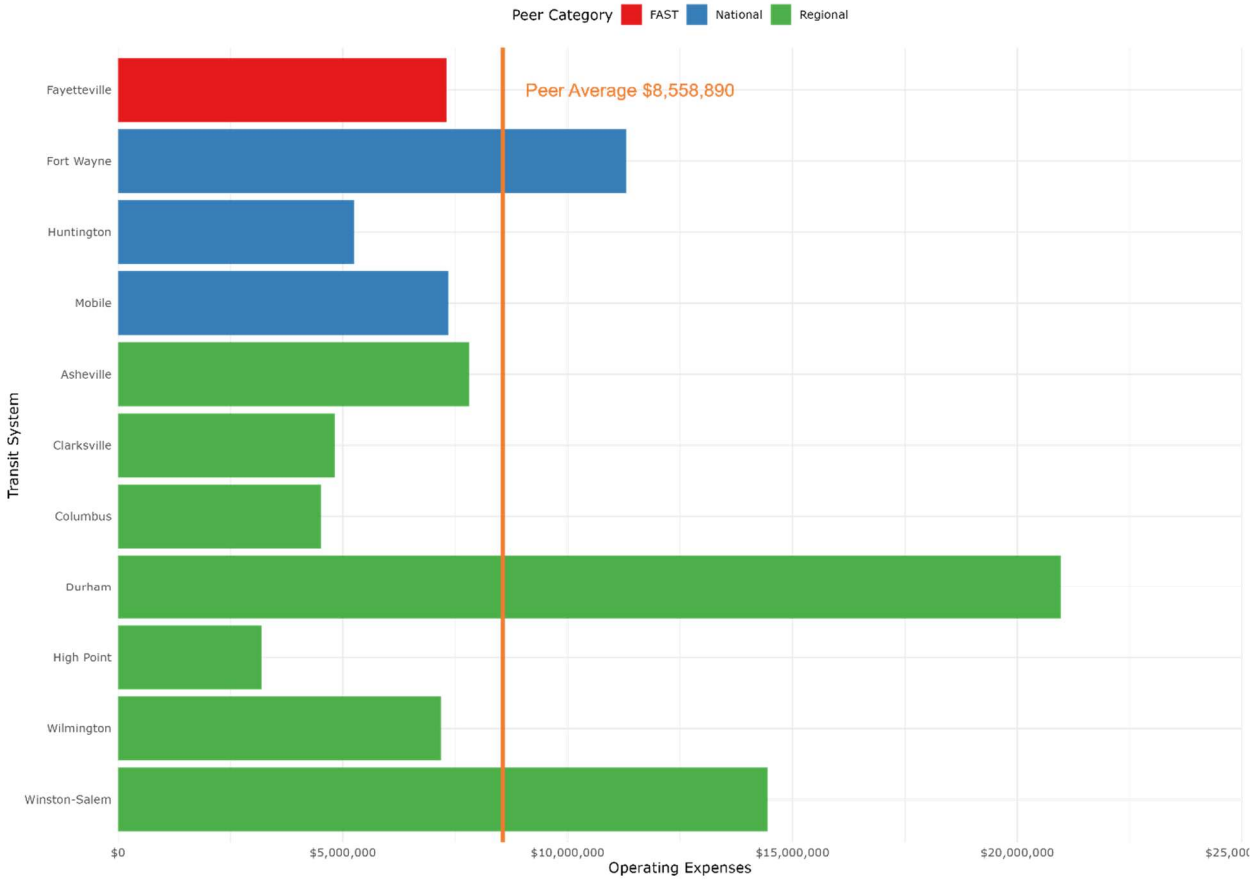
Figure 2-9 Fixed Route Trend | Total Operating Expense



Source: NTD 2014-2019

As shown in Figure 2-10, FAST's annual operating expenses fell below the peer agency average. Given FAST is below average on the number of total revenue miles and revenue hours provided when compared to its peers, it is good that its total operating expenses are also lower than average.

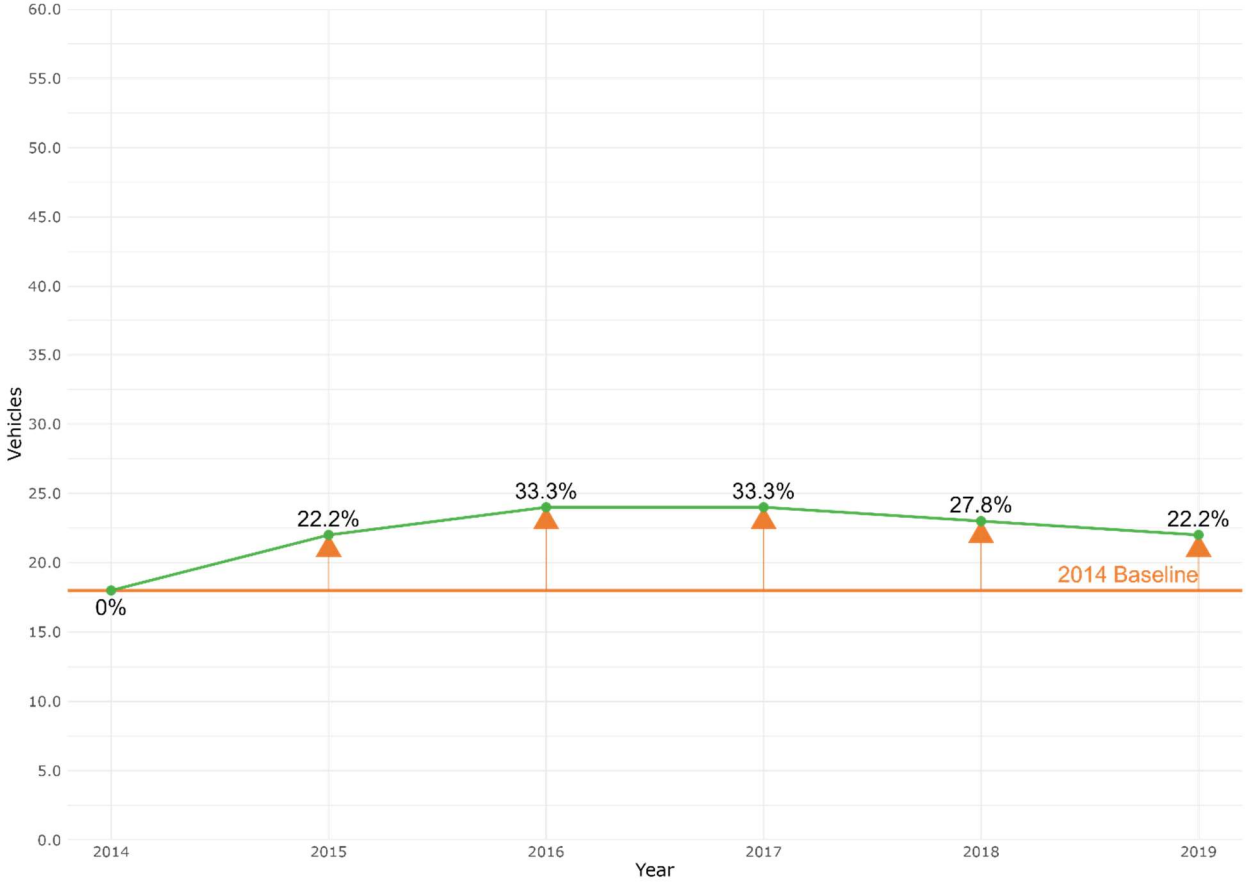
Figure 2-10 Fixed Route Peer Review | Total Operating Expense



Source: NTD 2019

Vehicles operated in maximum service (VOMS) sums the number of vehicles available to meet the annual maximum service requirement, which is the revenue vehicle count during the hour and day of the year with the most service provided. Figure 2-11 shows that, beginning in 2017, VOMS began to decline at FAST.

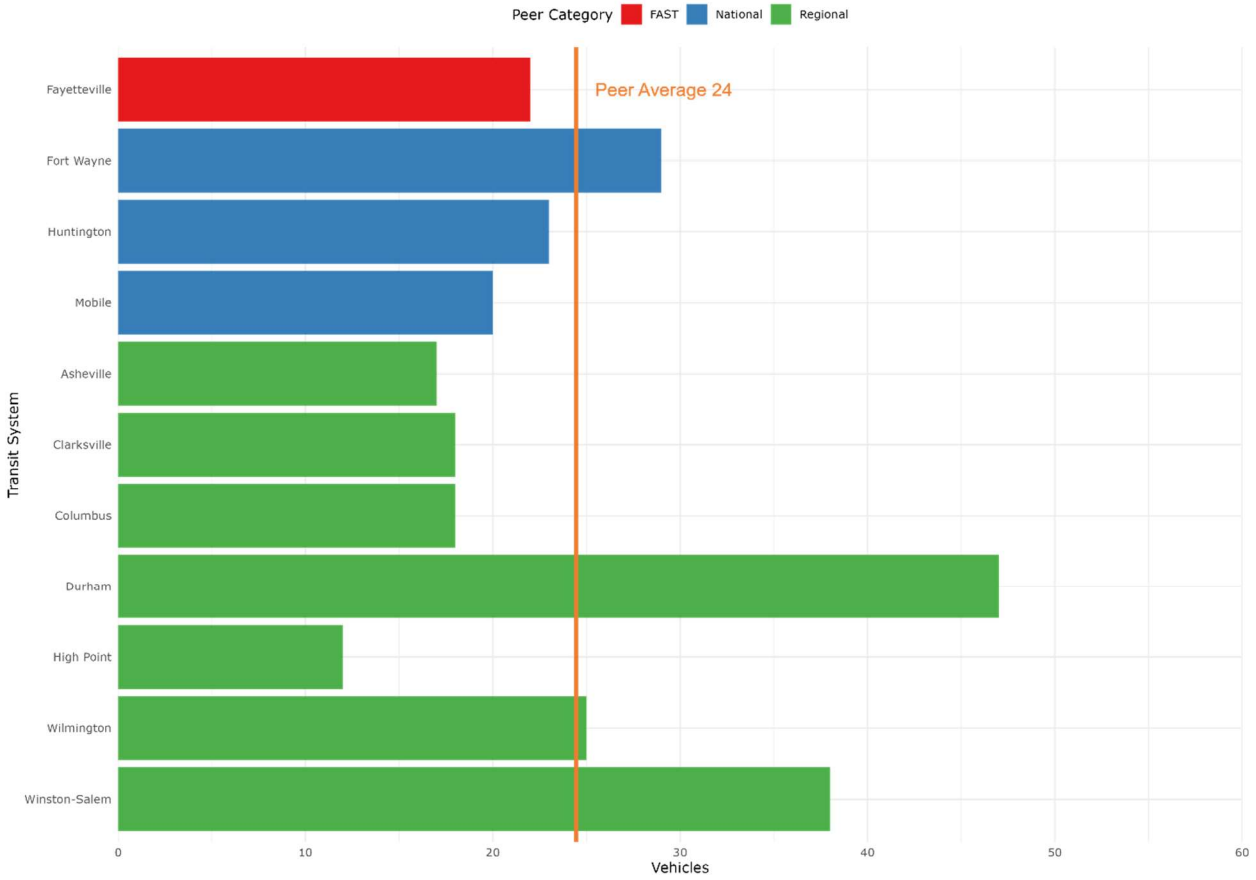
Figure 2-11 Fixed Route Trend | Vehicles Operated in Maximum Service



Source: NTD 2014-2019

As shown in Figure 2-12, FAST operates fewer vehicles in maximum service than the peer average.

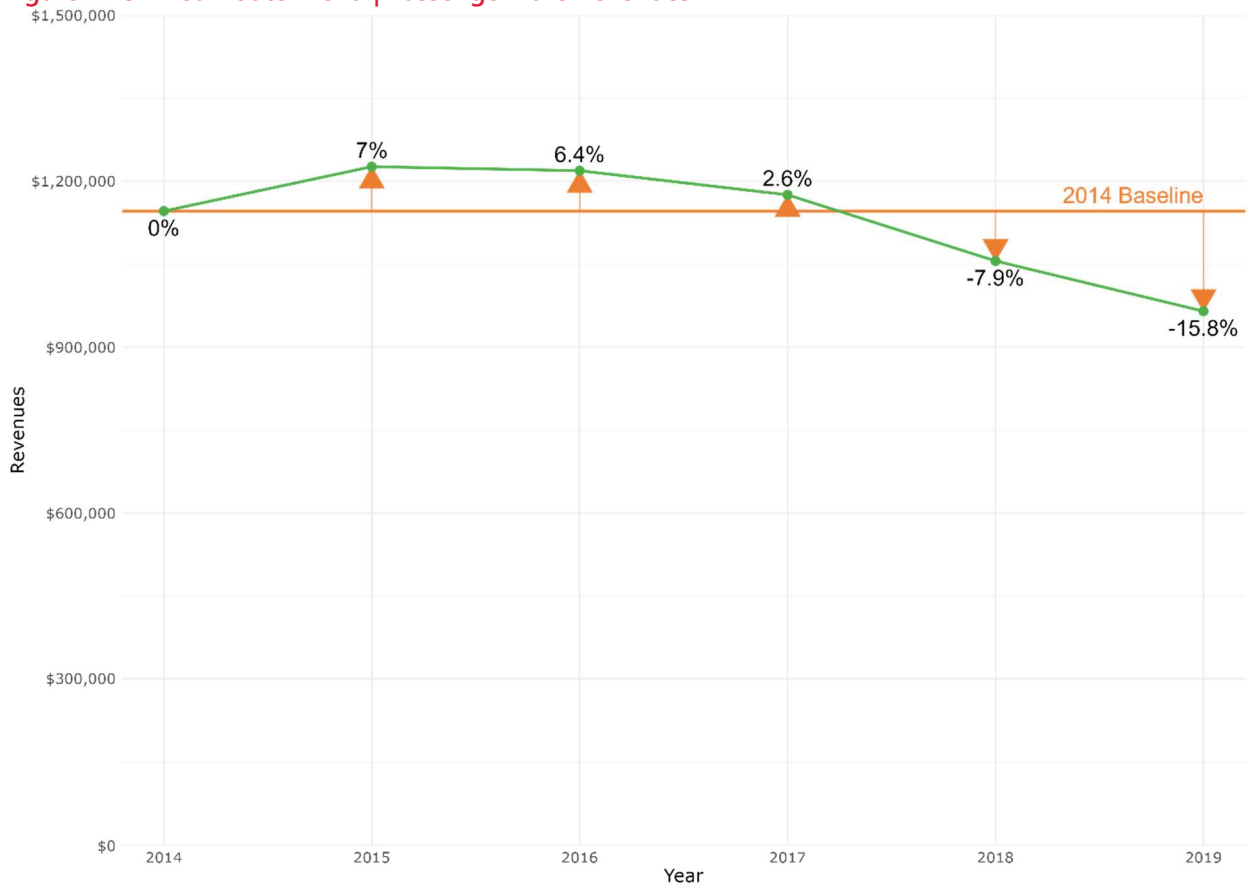
Figure 2-12 Fixed Route Peer Review | Vehicles Operated in Maximum Service



Source: NTD 2019

Passenger fare revenues include all fares earned from bus service on an annual basis. Figure 2-13 shows that FAST fare revenue peaked in 2015 and has been falling since. Since passenger fare revenue fell more sharply than passenger trips, this may suggest that passengers are making greater use of passes as opposed to paying for each trip.

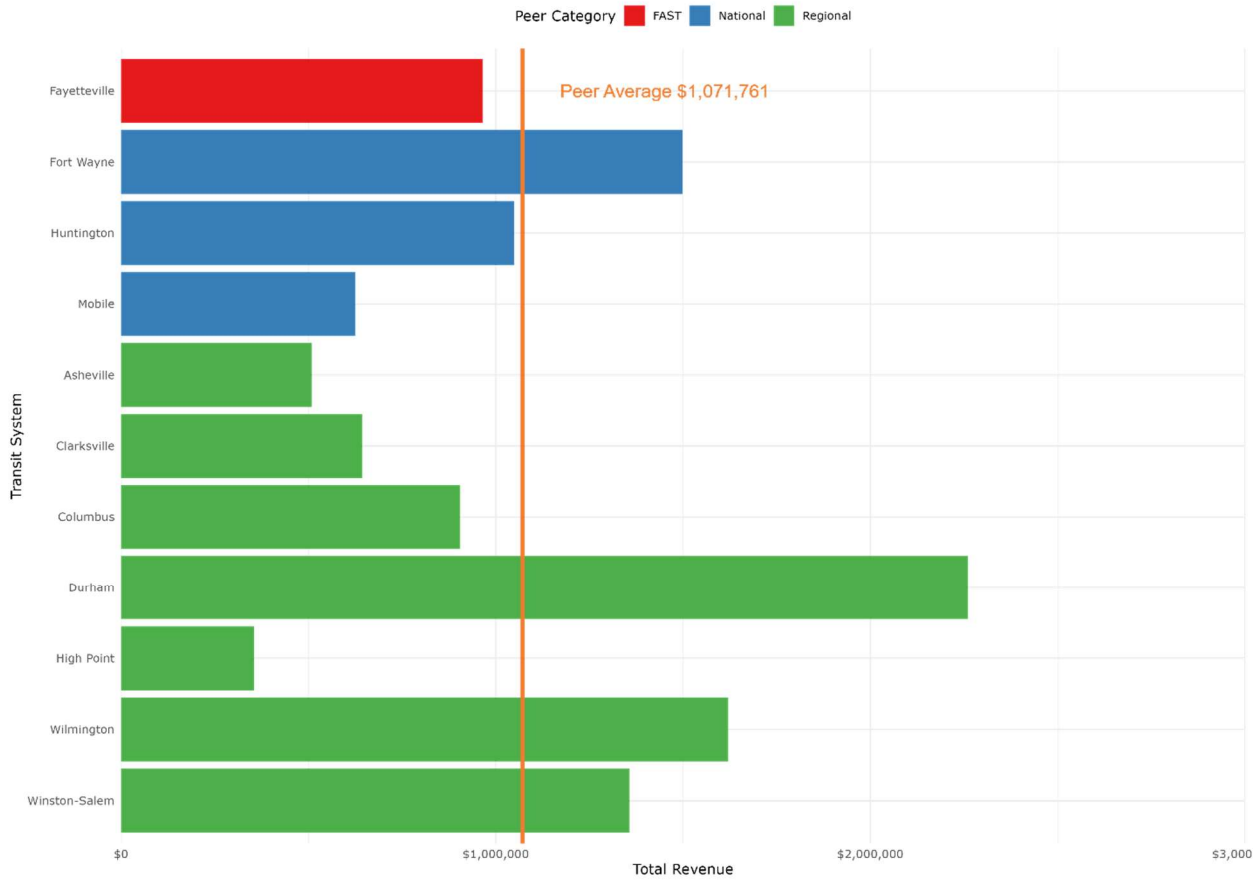
Figure 2-13 Fixed Route Trend | Passenger Fare Revenues



Source: NTD 2014-2019

Figure 2-14 indicates that total passenger revenue is the highest for Durham, followed by Wilmington and Winston-Salem. FAST fell slightly below the peer average on fare revenues.

Figure 2-14 Fixed Route Peer Review | Passenger Fare Revenue



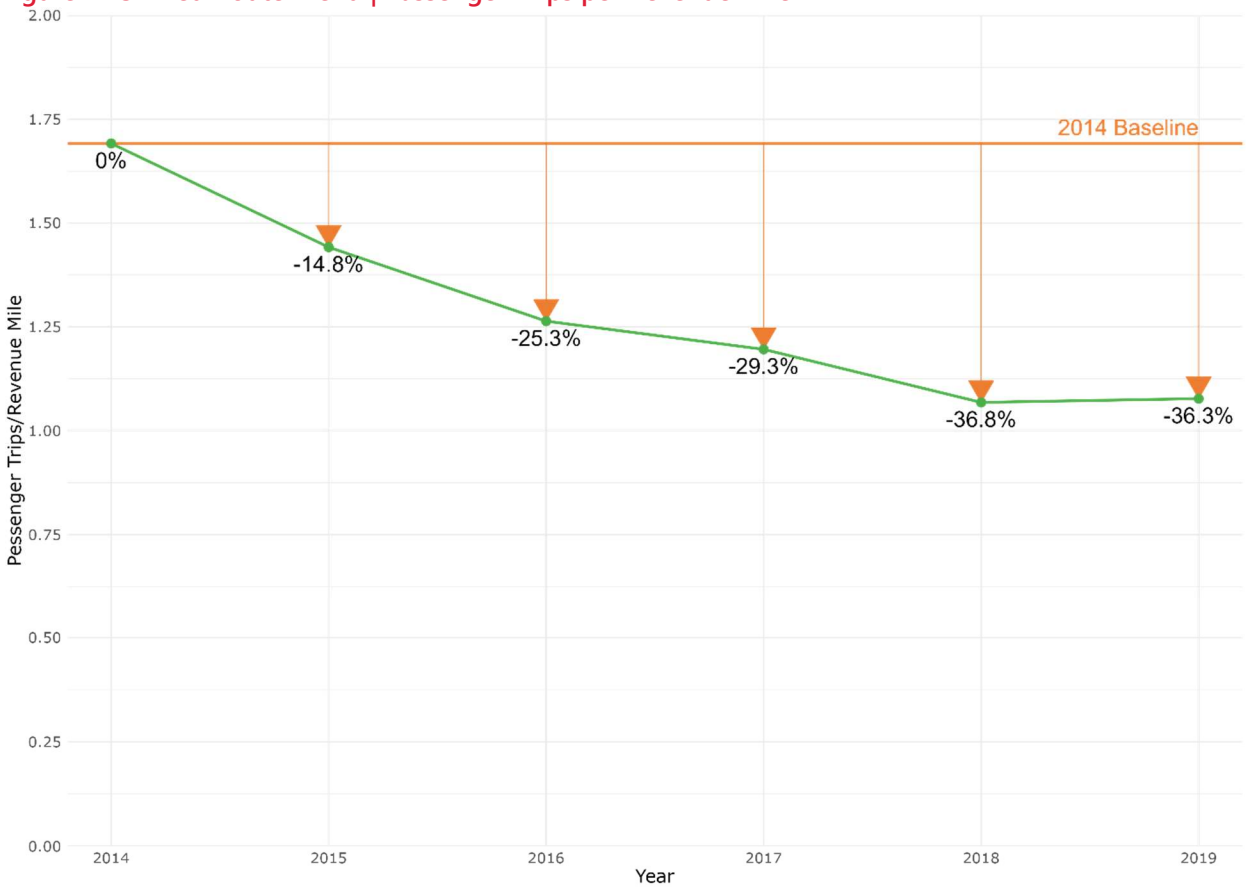
Source: NTD 2019

Effectiveness Measures

Effectiveness measures analyze the supply of transit services compared to how well the agency produces a desired result such as generating passenger trips or reducing vehicle failures.

Passenger trips per revenue mile represents the number of times a passenger boards a bus for every mile when the bus is providing transit service. Figure 2-15 examines FAST's trend in terms of number of passenger trips per revenue mile over a five-year period. FAST's passenger trips per revenue mile declined every year between 2014 and 2019 except the final year which saw a slight rebound. This trend is due to both declining ridership and increasing revenue miles.

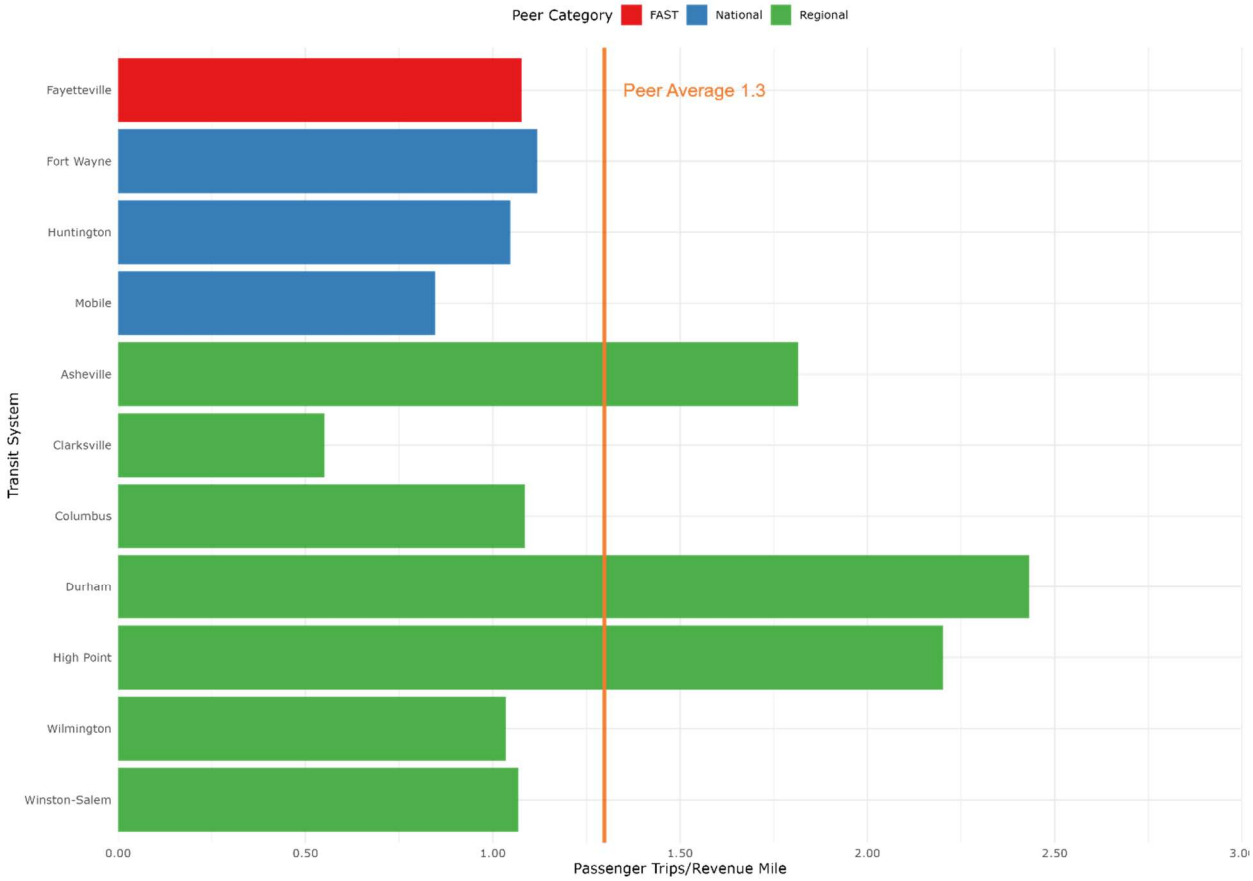
Figure 2-15 Fixed Route Trend | Passenger Trips per Revenue Mile



Source: NTD 2014-2019

Figure 2-16 displays passenger trips per revenue mile for FAST and each peer agency. The data indicates that FAST attracts fewer passengers per revenue mile than the peer average. This trend would suggest that despite FAST adding service, it is not growing its ridership.

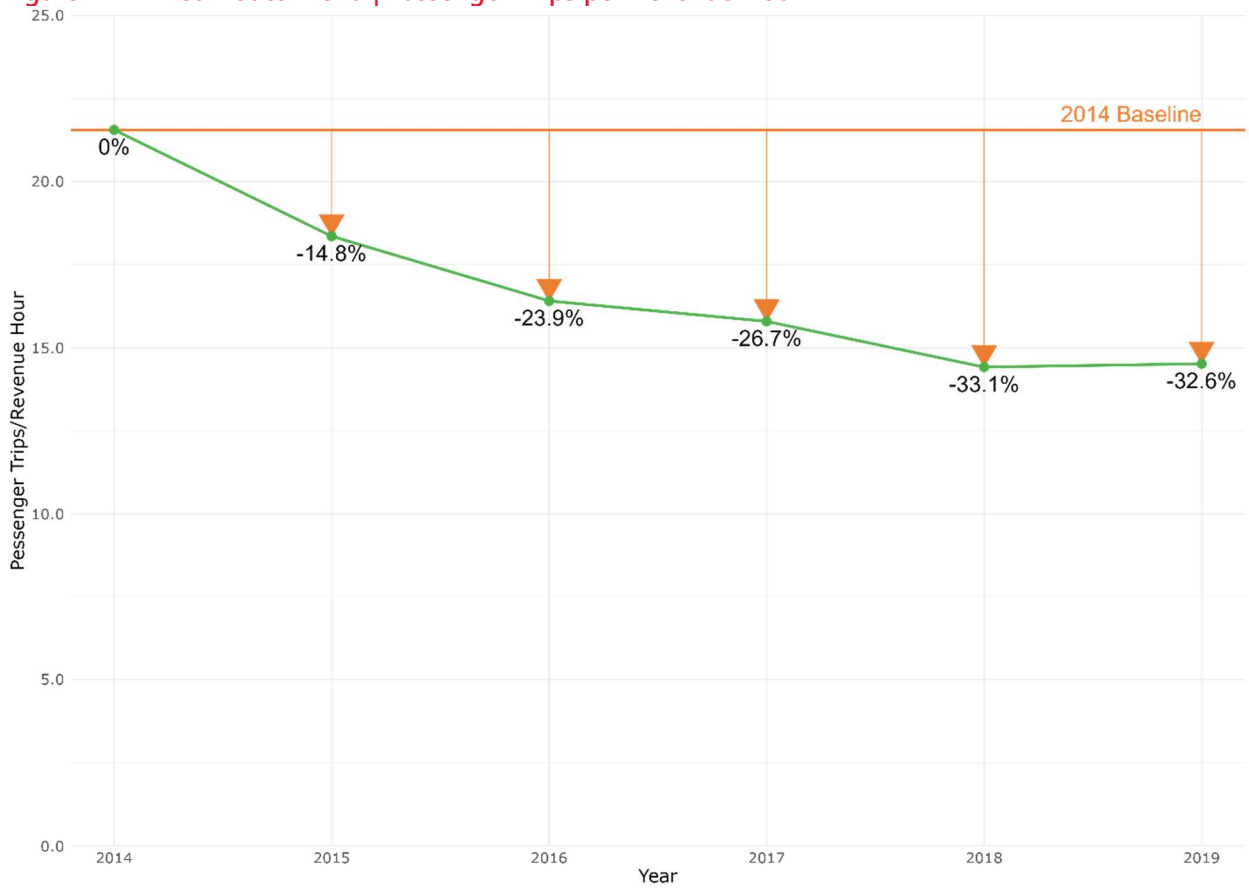
Figure 2-16 Fixed Route Peer Review | Passenger Trips per Revenue Mile



Source: NTD 2019

Passenger trips per revenue hour represents the number of times a passenger boards a bus as compared to the number of revenue hours of service the transit agency operates. Figure 2-17 shows that the number of passenger trips per revenue hour has been declining for the last five years at FAST although there was a small rebound in the final year. As with revenue miles, this trend is due to increasing revenue hours and decreasing passenger trips.

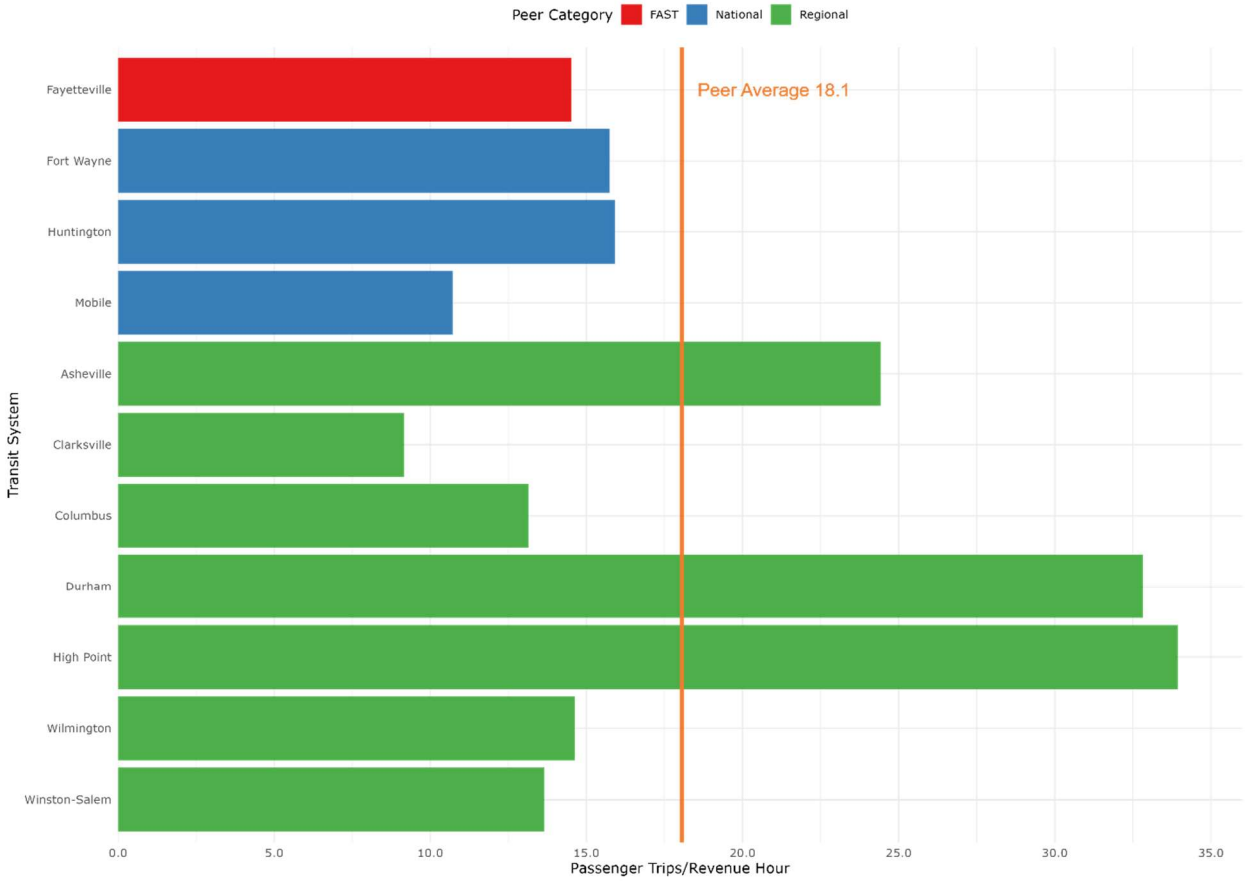
Figure 2-17 Fixed Route Trend | Passenger Trips per Revenue Hour



Source: NTD 2014-2019

Figure 2-18 shows that High Point transit attracts the largest number of passengers per revenue hour followed by Durham and Asheville. FAST is below the peer average with regard to this metric.

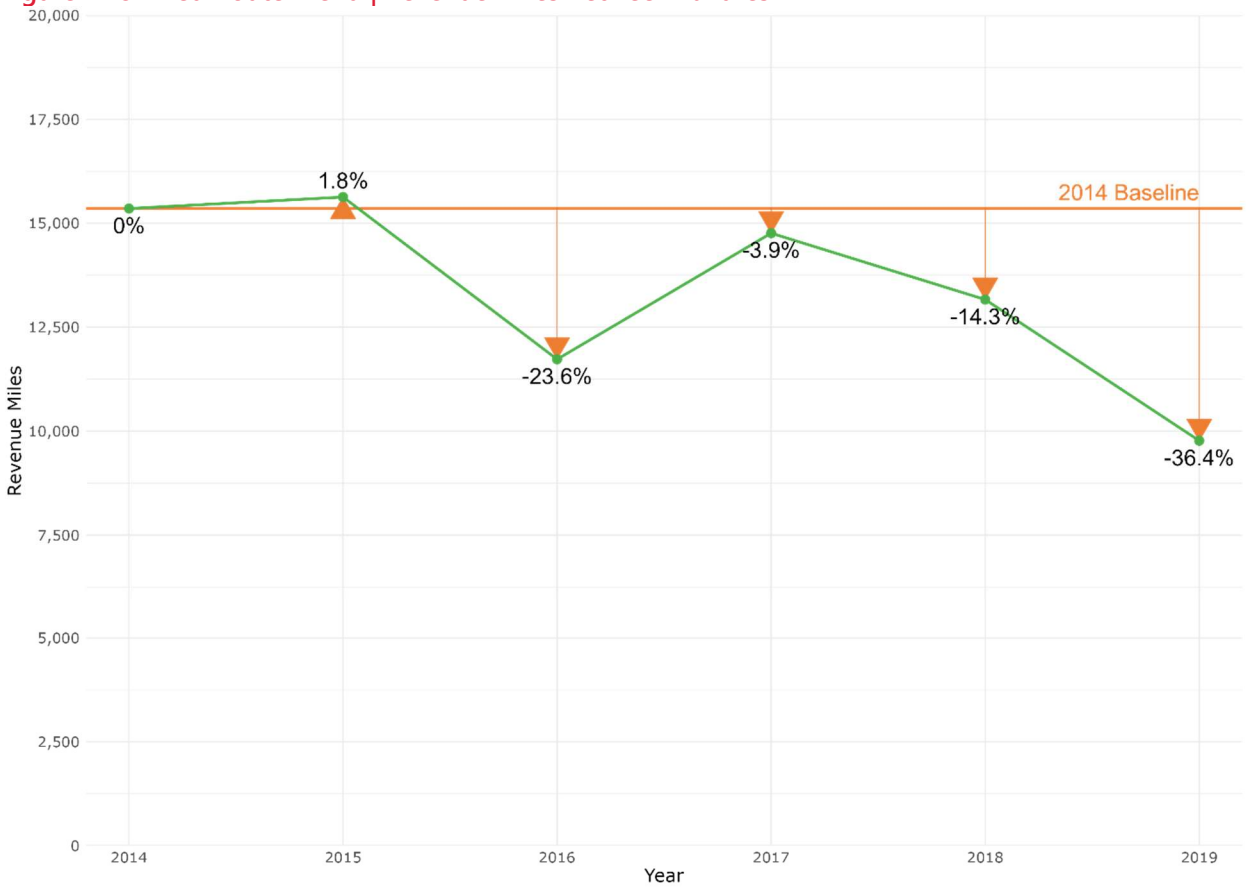
Figure 2-18 Fixed Route Peer Review | Passenger Trips per Revenue Hour



Source: NTD 2019

Revenue miles between failures is a measure of the number of miles an agency's vehicles travel between breakdowns. Figure 2-19 shows that FAST has been a bit volatile in terms of revenue miles between failures from year to year. Volatility is not unusual for this measure and this metric often falls as the average age of the fleet increases. Ultimately, FAST operated 36 percent fewer miles between failures in 2019 than 2016.

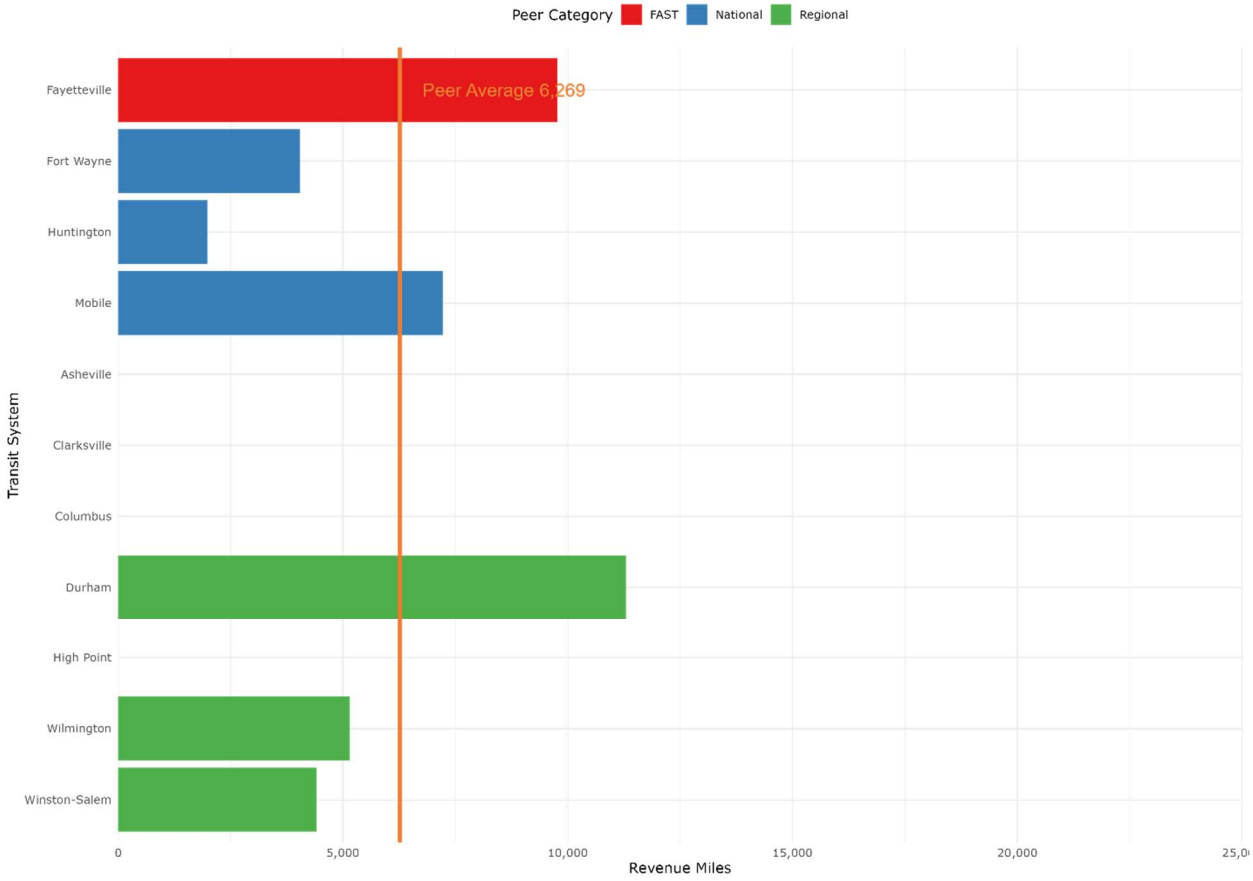
Figure 2-19 Fixed Route Trend | Revenue Miles Between Failures



Source: NTD 2014-2019

Figure 2-20 provides revenue miles between failures for FAST and its peer agencies. Data was only available for a subset of the peer agencies, but FAST beat everyone in the field except Durham in this metric. FAST was well beyond the average for the peer systems.

Figure 2-20 Fixed Route Peer Review | Revenue Miles Between Failures



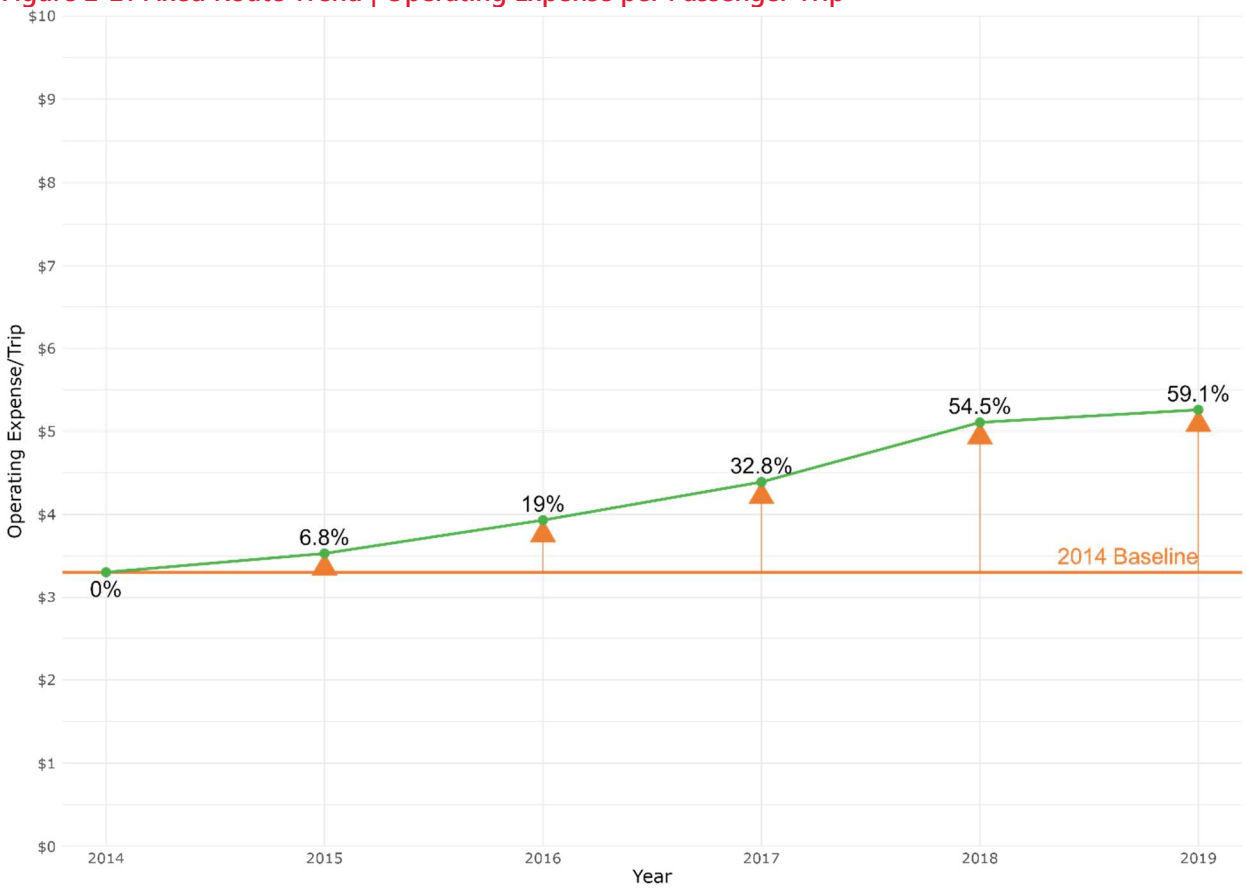
Source: NTD 2019

Efficiency Measures

Efficiency measures how well FAST provides service when compared to the extent of resources it is expending.

Operating expense per passenger trip is a calculation where the total annual operating expense is divided by the number of annual passenger trips. The data displayed in Figure 2-21 indicates that FAST has been experiencing a continual increase in operating expenses per passenger trip from 2014 to 2019. This trend is due in part to increasing operating expenses and in part to declining passenger trips.

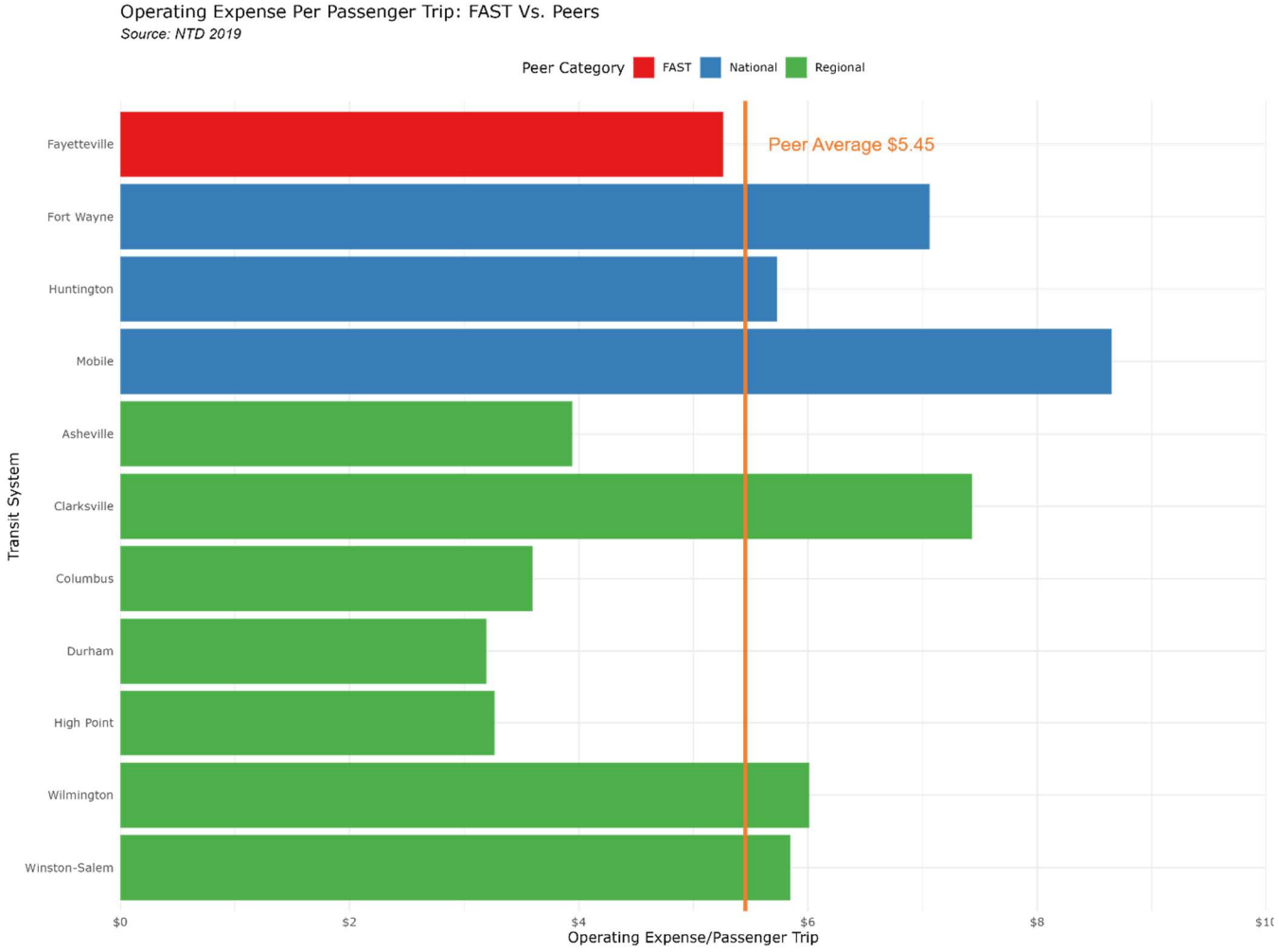
Figure 2-21 Fixed Route Trend | Operating Expense per Passenger Trip



Source: NTD 2014-2019

For operating expense per passenger trip in Figure 2-22, many of the regional peers have more efficient rates than FAST. FAST is, however, still below average on this measure.

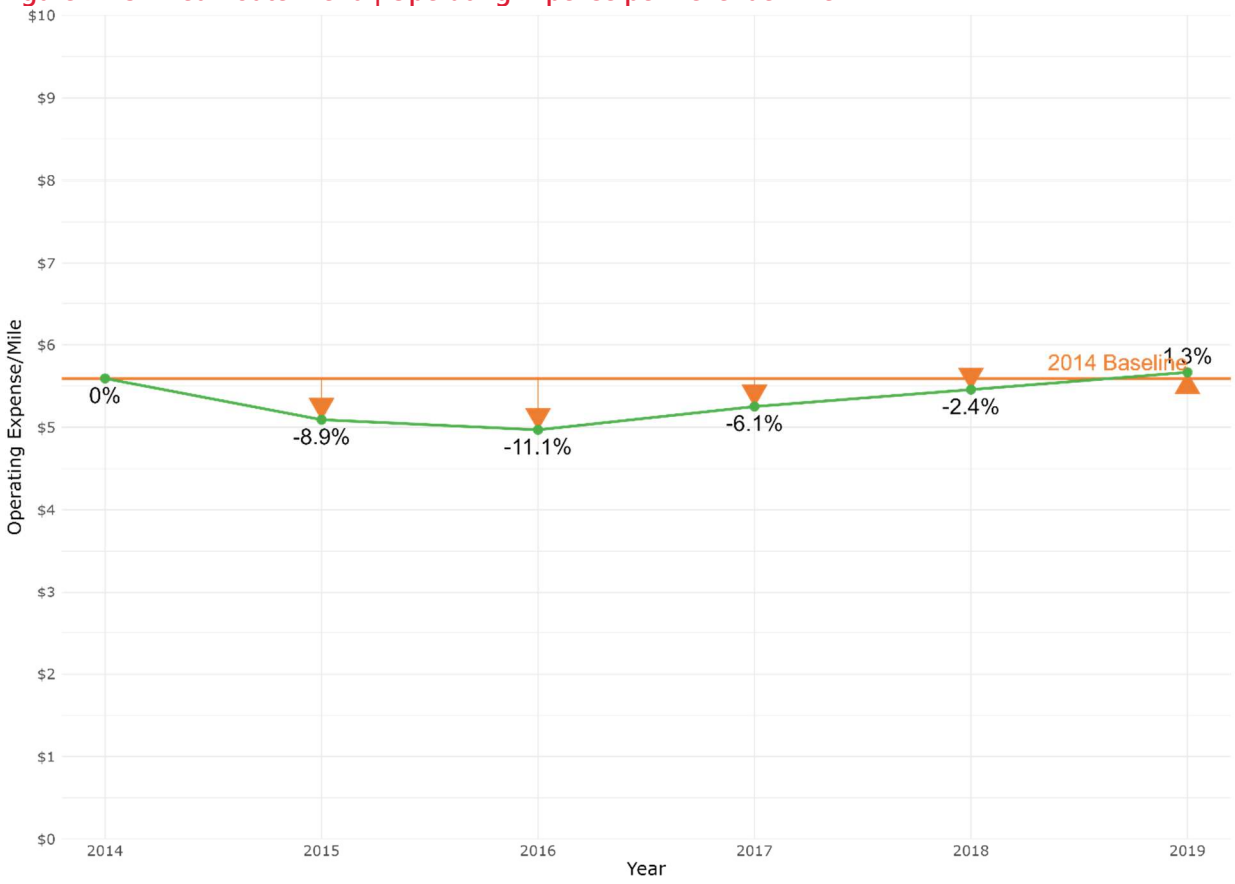
Figure 2-22 Fixed Route Peer Review | Operating Expense per Passenger Trip



Source: NTD 2019

Operating expense per revenue mile is a calculation where the total annual operating expense is divided by the number of annual revenue miles. Shown in Figure 2-23, the data indicates that FAST experienced a decrease in operating expenses per revenue mile from 2014 to 2016 before it began to increase from 2016 to 2019. Given that revenue miles were increasing each year during this timeframe, FAST must have been decreasing their operating expenses between 2014 and 2016 to achieve a downward trend.

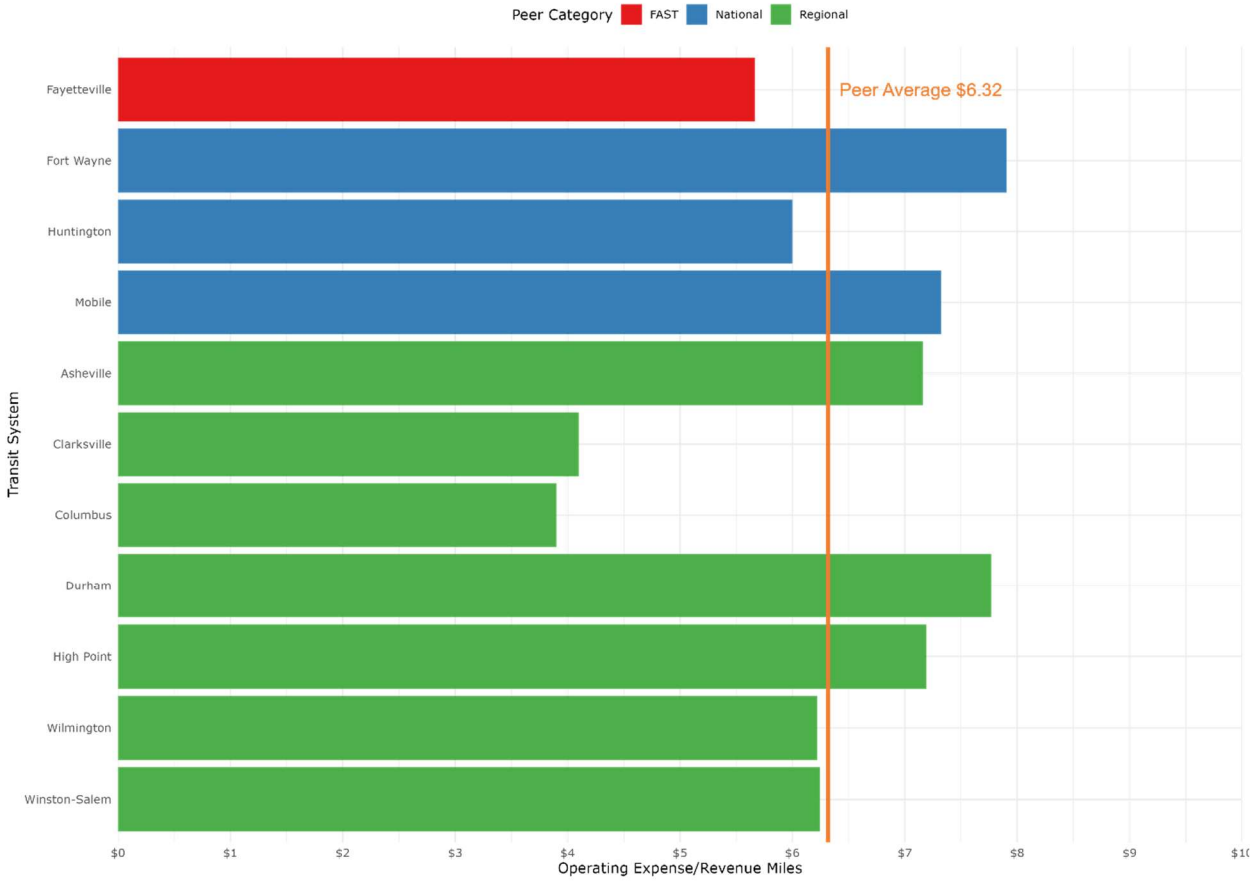
Figure 2-23 Fixed Route Trend | Operating Expense per Revenue Mile



Source: NTD 2014-2019

Despite trending upward since 2016, FAST's operating expense per revenue mile was still below average when compared to its peers. Figure 2-24 suggests that FAST is operating efficiently when it comes to this metric.

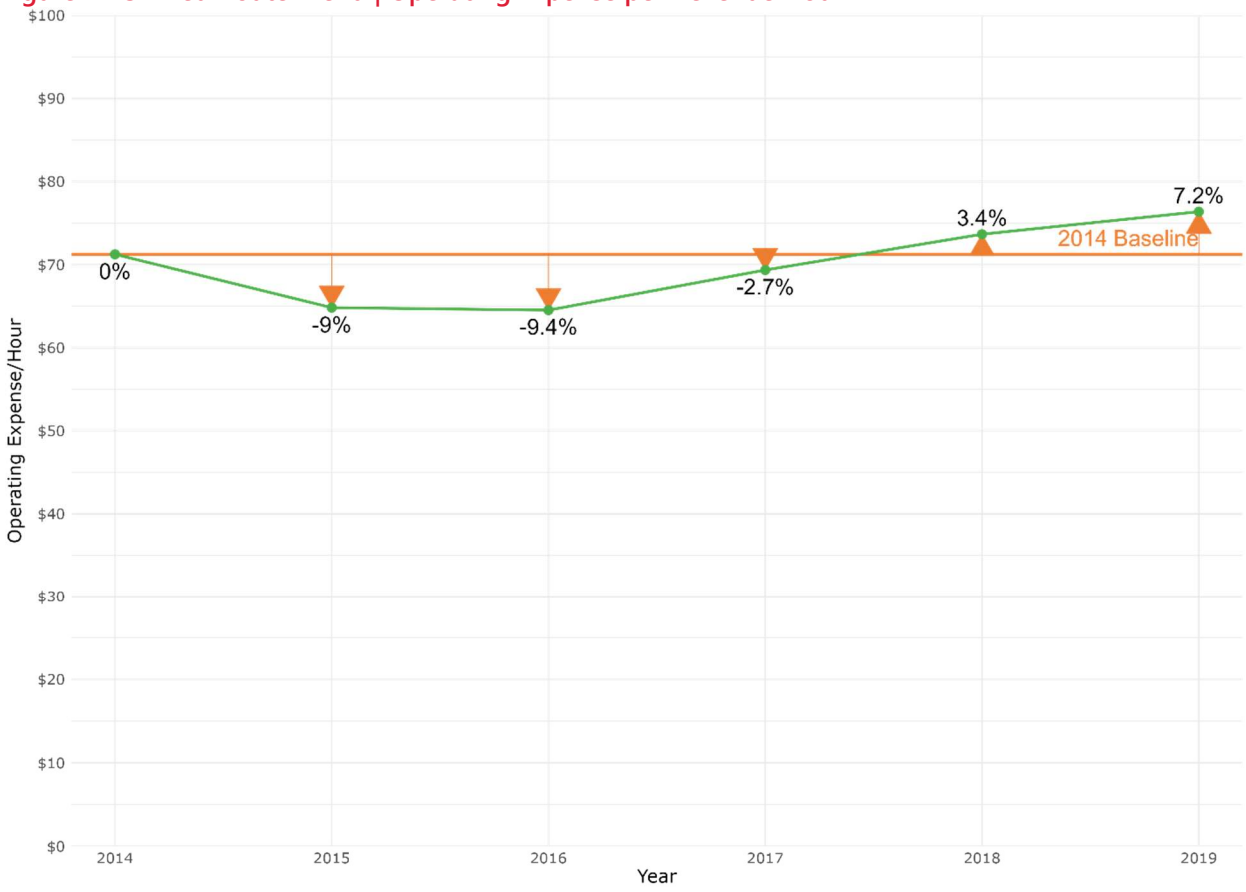
Figure 2-24 Fixed Route Peer Review | Operating Expense per Revenue Mile



Source: NTD 2019

Operating expense per revenue hour is a calculation where the total annual operating expense is divided by the number of annual revenue hours. The data, shown in Figure 2-25, indicates that FAST experienced a decrease in operating expenses per revenue hour from 2014 to 2016, but then an increase between 2016 and 2019.

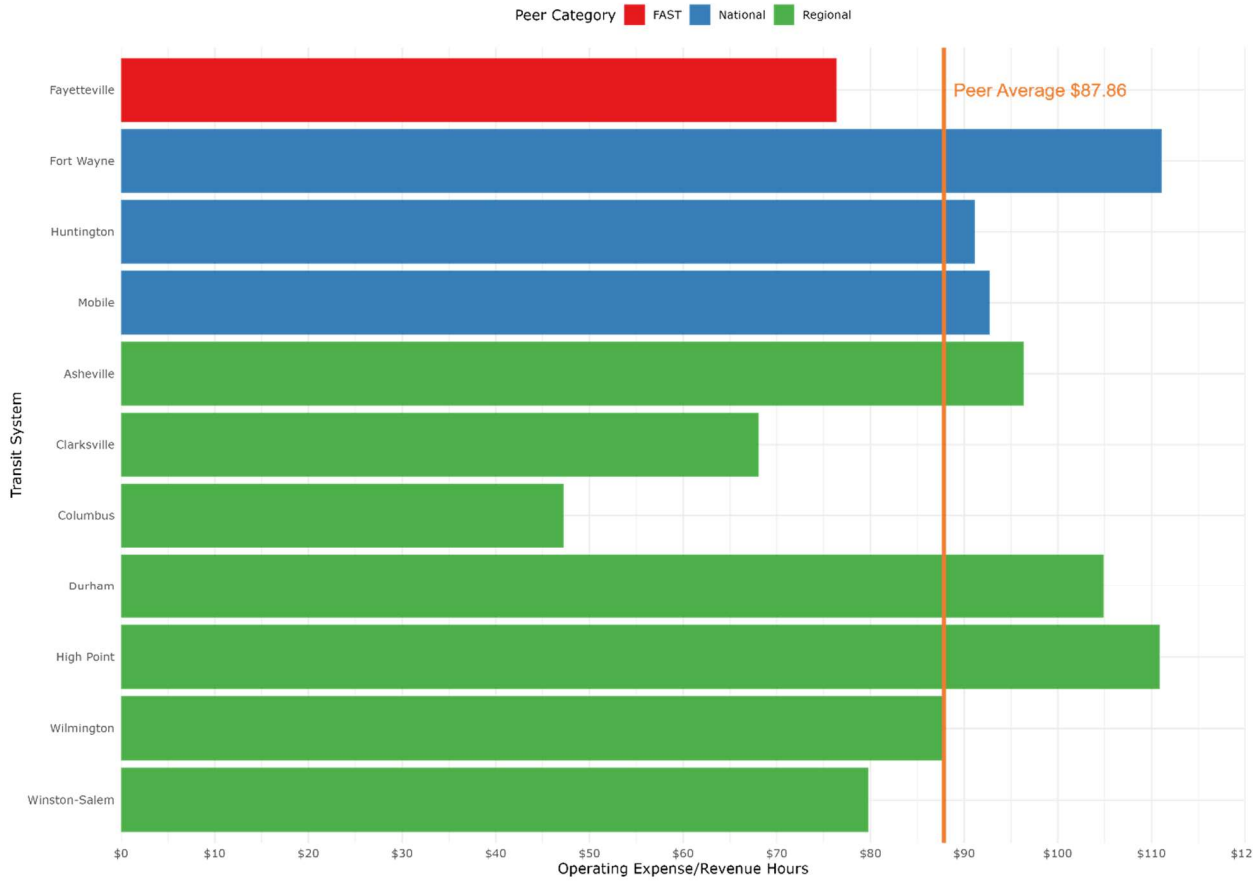
Figure 2-25 Fixed Route Trend | Operating Expense per Revenue Hour



Source: NTD 2014-2019

FAST was more efficient than the peer group average as shown in Figure 2-26. Columbus has the most efficient operation of the peer group when considering operating expense per revenue hour.

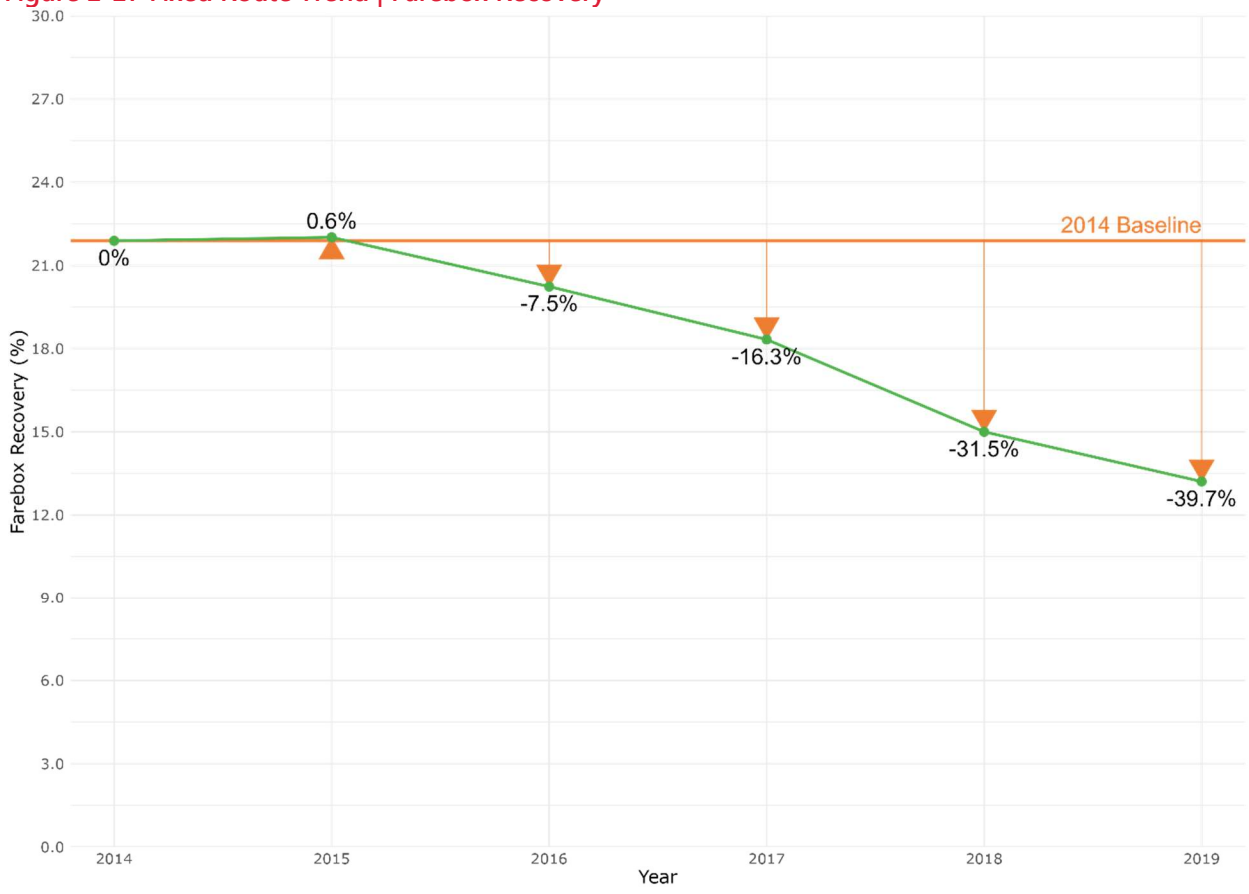
Figure 2-26 Fixed Route Peer Review | Operating Expense per Revenue Hour



Source: NTD 2019

Farebox recovery is the portion of operating expenses that are covered by the fares paid by passengers. As shown in Figure 2-27, the data indicates that the percentage of farebox recovery increased slightly from 2014 to 2015, but then fell for the rest of the timeframe. The recovery ratio was over 21 percent in 2014, but below 14 percent in 2019. In 2018, Fayetteville City Council considered an increase in fares, but ultimately decided not to raise fares. An increase in fares would have assisted in maintaining a higher farebox recovery ratio.

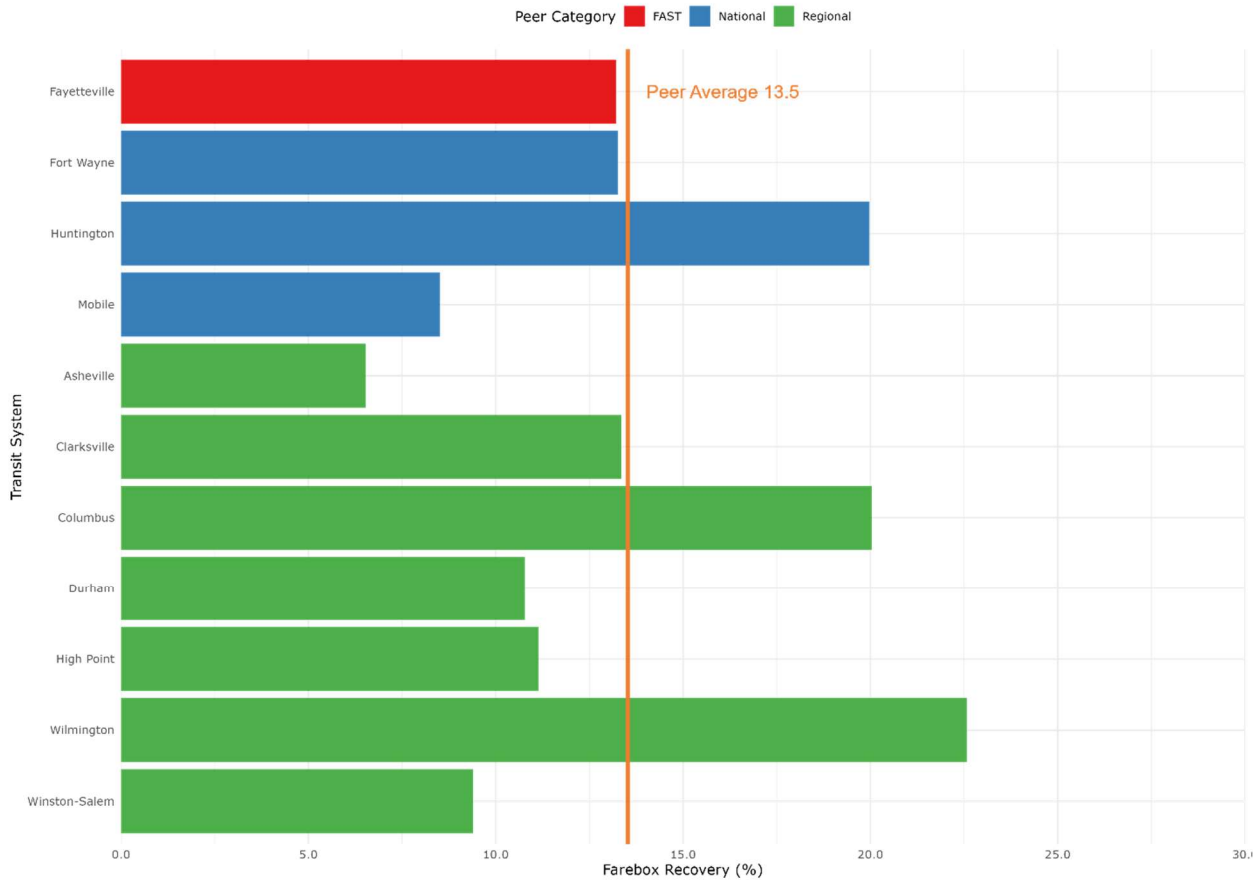
Figure 2-27 Fixed Route Trend | Farebox Recovery



Source: NTD 2014-2019

Figure 2-28 indicates that Wilmington had the highest farebox recovery rate of the peer group followed by Columbus and Huntington. FAST was right below the peer average of 13.3 percent.

Figure 2-28 Fixed Route Peer Review | Farebox Recovery



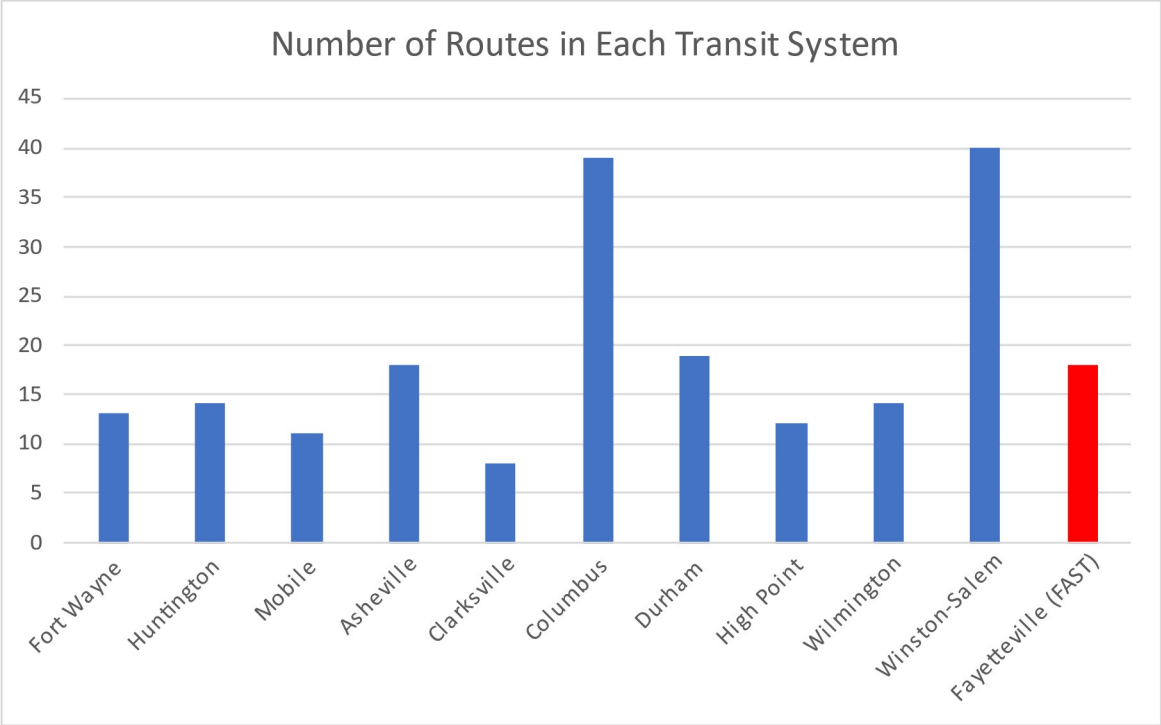
Source: NTD 2019

Service Comparison

FAST was compared to Peer Agencies in regard to number of routes, hours of service, service provided after 8:00 pm, Sunday service, and route frequencies. Those charts are shown below.

Figure 2-29 shows the number of routes in each transit system. FAST provides 18 routes, while Winston-Salem provides the most at 40 routes.

Figure 2-29 Number of Routes in each Transit System



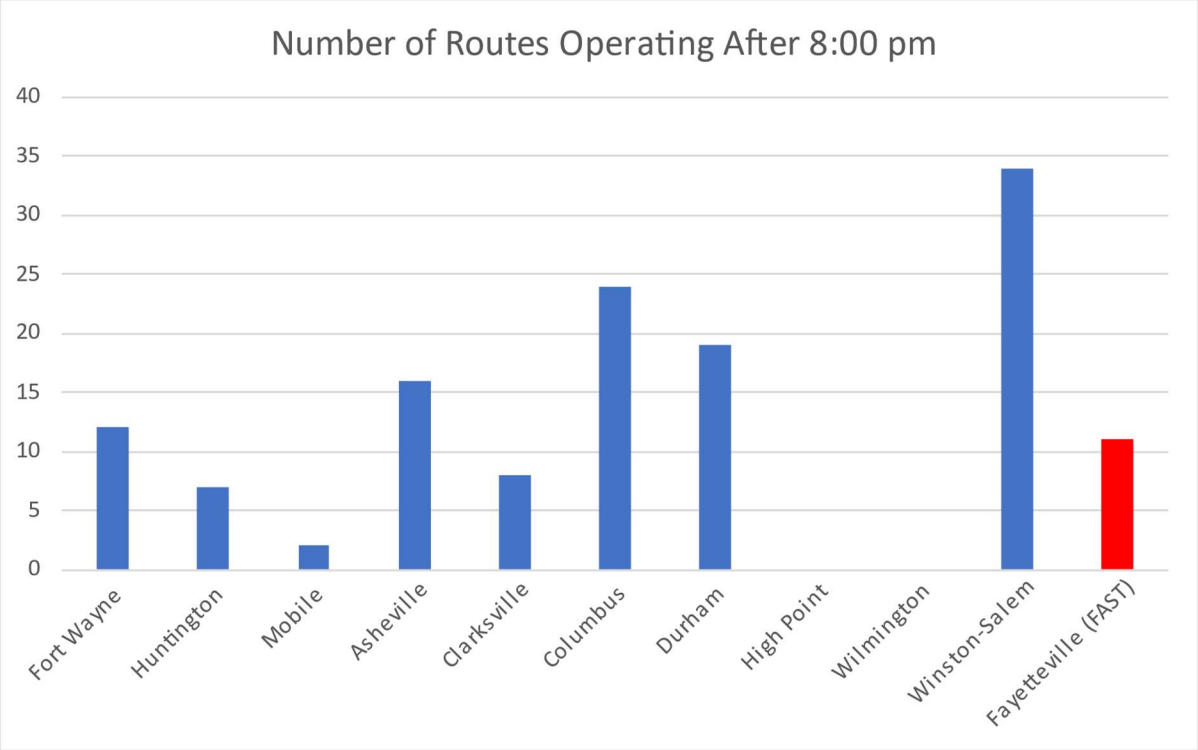
Below, Table 2-8 shows the hours of service that FAST operates under in comparison with peer agencies. Durham runs the longest hours, from 5:00 am to 12:00 am, while Wilmington and High Point run the shortest.

Table 2-8 Hours of Service

	AM												PM												AM
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Fort Wayne						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■			
Huntington							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
Mobile						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■			
Asheville						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
Clarksville						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Columbus						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
Durham						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
High Point						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Wilmington							■	■	■	■	■	■	■	■	■	■	■	■	■	■					
Winston-Salem						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
Fayetteville (FAST)						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■			

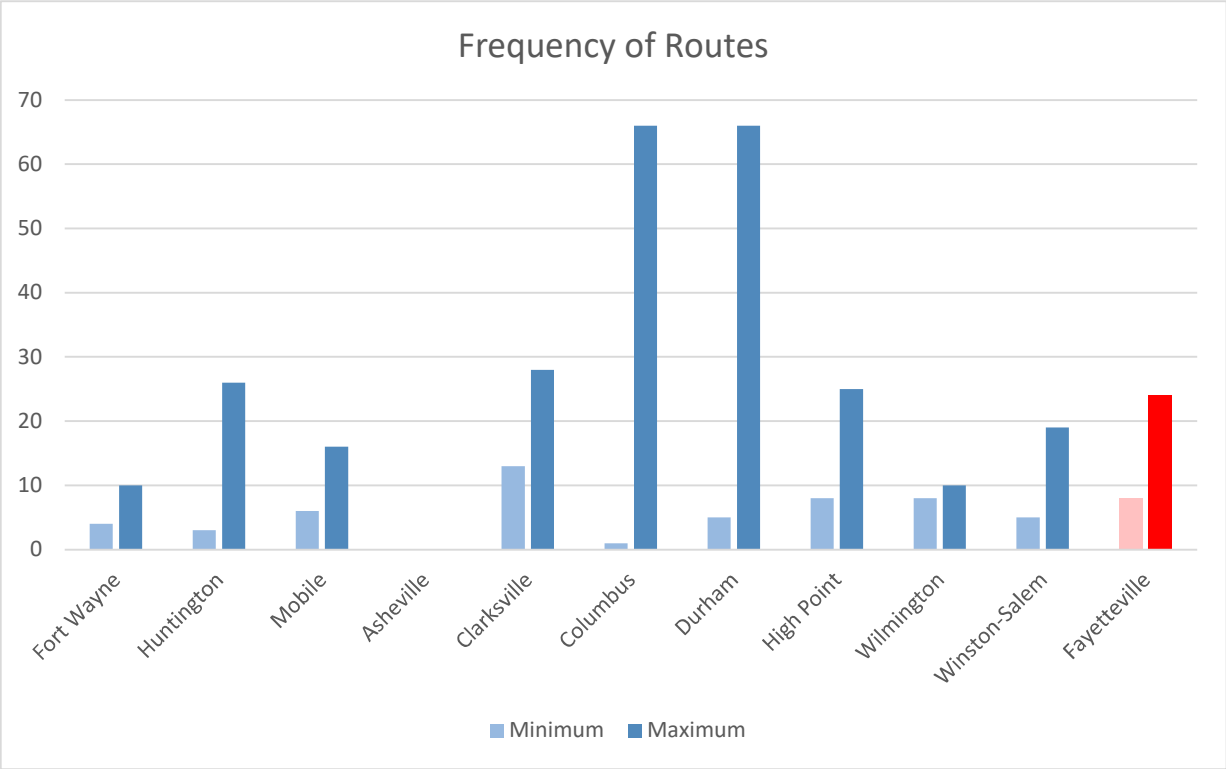
Figure 2-30 identifies the number of routes in each system that operate after 8:00 pm. Winston Salem has the most at 34 routes, while Mobile has the least at 2. FAST runs 11 routes after 8:00 pm.

Figure 2-30 Routes Operating after 8:00 pm



Frequency of buses stopping at each stop is lowest at 8, and highest at 24 for the FAST system. Durham and Columbus show the widest range of number of times bus stops at each bus stop. Figure 2-31 shows the minimum and maximum number of times a bus in each system stops at a bus stop.

Figure 2-31 Frequency of Routes



FAST does operate on Sunday service schedule, along with five of its peers. Table 2-9 below shows those that offer Sunday service and those that do not.

Table 2-9 Sunday Service

System	Sunday Service
Fort Wayne	No
Huntington	No
Mobile	No
Asheville	**Yes**
Clarksville	No
Columbus	**Yes**
Durham	**Yes**
High Point	No
Wilmington	**Yes**
Winston-Salem	**Yes**
Fayetteville (FAST)	**Yes**

Summary

A summary of FAST's fixed-route trend analysis and peer review is provided in Table 2-10. Despite following the national trend of declining in ridership over the five-year period, FAST has demonstrated its ability to operate efficiently. In particular, FAST has kept total operating expenses as well as operating expense per passenger trip, per revenue mile, and per revenue hour below the peer average.

Table 2-10 Fixed Route | Summary of Trend Analysis and Peer Review

Measure	Trend Analysis	Peer Review
General Measures		
Passenger Trips	Decreasing	Below Average
Revenue Miles	Increasing	Below Average
Revenue Hours	Increasing	Below Average
Operating Expense	Increasing	Below Average
Vehicles Operated in Maximum Service	Increasing	Below Average
Passenger Fare Revenues	Decreasing	Below Average
Effectiveness Measures		
Passenger Trips per Revenue Mile	Decreasing	Below Average
Passenger Trips per Revenue Hour	Decreasing	Below Average
Revenue Miles Between Failures	Decreasing	Above Average
Efficiency Measures		
Operating Expense per Passenger Trip	Increasing	Below Average
Operating Expense per Revenue Mile	Increasing	Below Average
Operating Expense per Revenue Hour	Increasing	Below Average
Farebox Recovery	Decreasing	Below Average

Decreasing ridership is a national trend within metropolitan regions. According to a 2019 Congressional Research Service report, public transit ridership continued to decline despite the increase in frequency being provided by transit agencies. The American Public Transportation Association (APTA) found that 2018 marked the fourth straight year of declining ridership. Total ridership on U.S. transit buses in 2018 was below 10 billion for the first time since 2005. The decline in ridership has occurred despite the U.S population continuing to grow.

Factors that have affected transit ridership include:

- Low price of gasoline
- Popularity of shared-use mobility providers such as bike sharing services, scooters, and ride sourcing applications

- Transit fares have risen faster than inflation

Some overall recommendations for increasing ridership have been made and include the following:

- Consider partnerships with shared-use mobility providers
- Encourage transit-oriented development
- Reconsider fare policy
- Increase public funding commitment to supplying transit

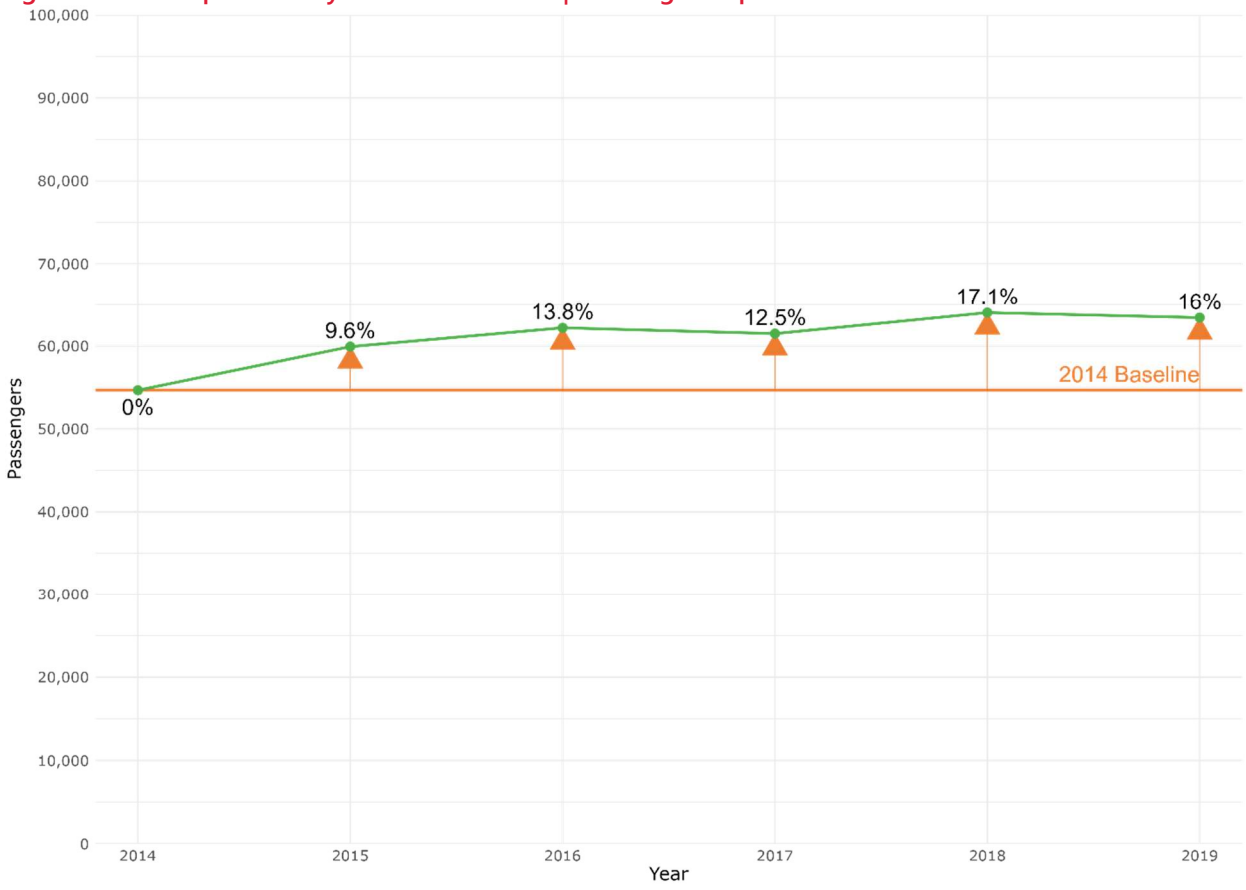
Complementary Paratransit Trend Analysis and Peer Review

The following section provides a trend analysis and peer review for the FAST*Trac!* service. The metrics used in this analysis mirror those found in the fixed route section. The same set of peers were also used although not all peers had NTD data available for all metrics. Where data was unavailable, the peer was still included in the graphic so that it would be obvious that data was unavailable. For example, Asheville does not provide complementary paratransit services so no data is available for this system.

General Performance Indicators

The first general performance indicator is annual passenger trips. Figure 2-32 examines complementary paratransit passenger trips over a five-year period for FAST. FAST*Trac!* ridership increased every year except between 2016 and 2017. Over the same time period, FAST fixed route ridership declined. As with many providers, demand for complementary paratransit services is continuing to increase as the population ages.

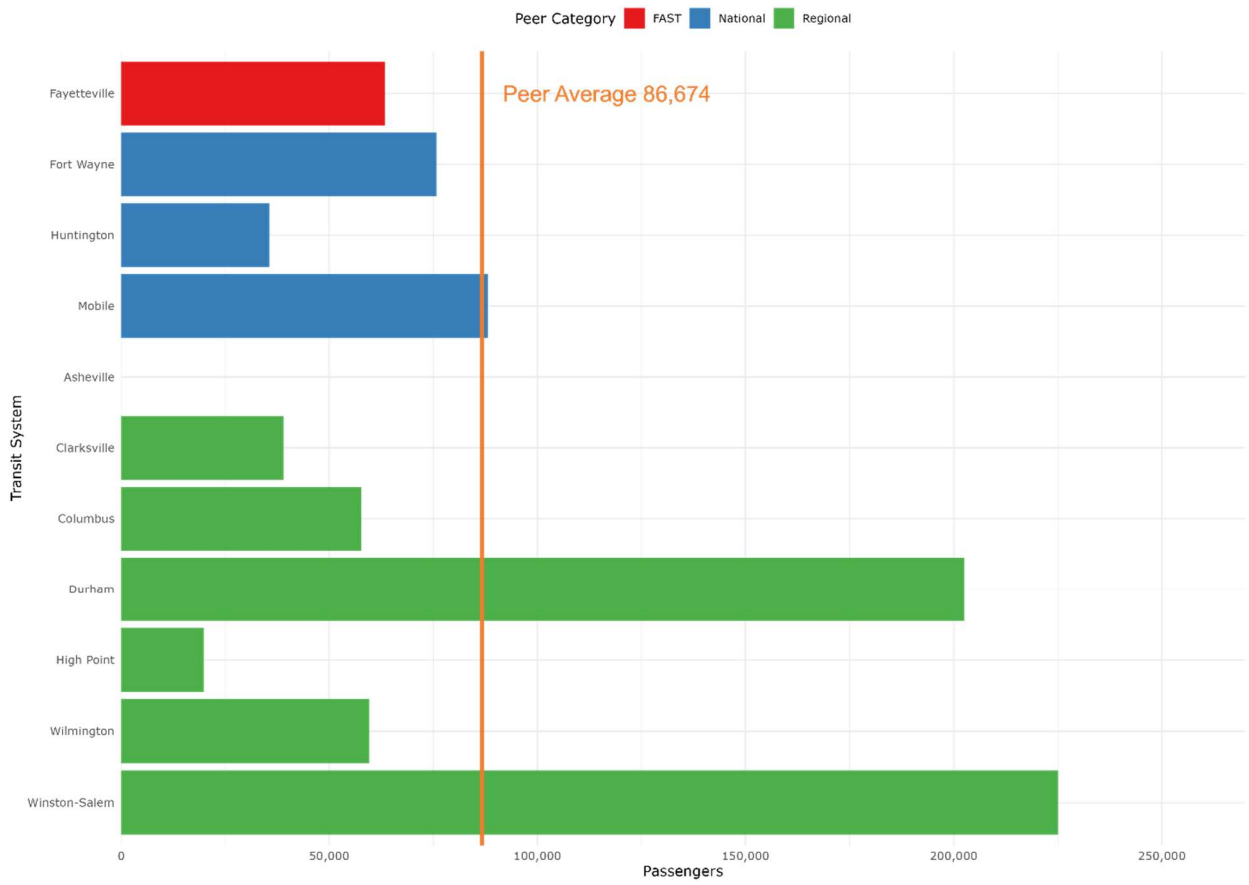
Figure 2-32 Complementary Paratransit Trend | Passenger Trips



Source: NTD 2014-2019

Despite increasing ridership, FAST provides fewer complementary paratransit trips than its peers as shown in Figure 2-33. There is a significant variation in the number of complementary paratransit trips provided by the peer group. Given the relative cost of providing a complementary paratransit trip versus fixed route trips, it will be increasingly beneficial to remove barriers to FAST fixed route service such as missing pedestrian infrastructure.

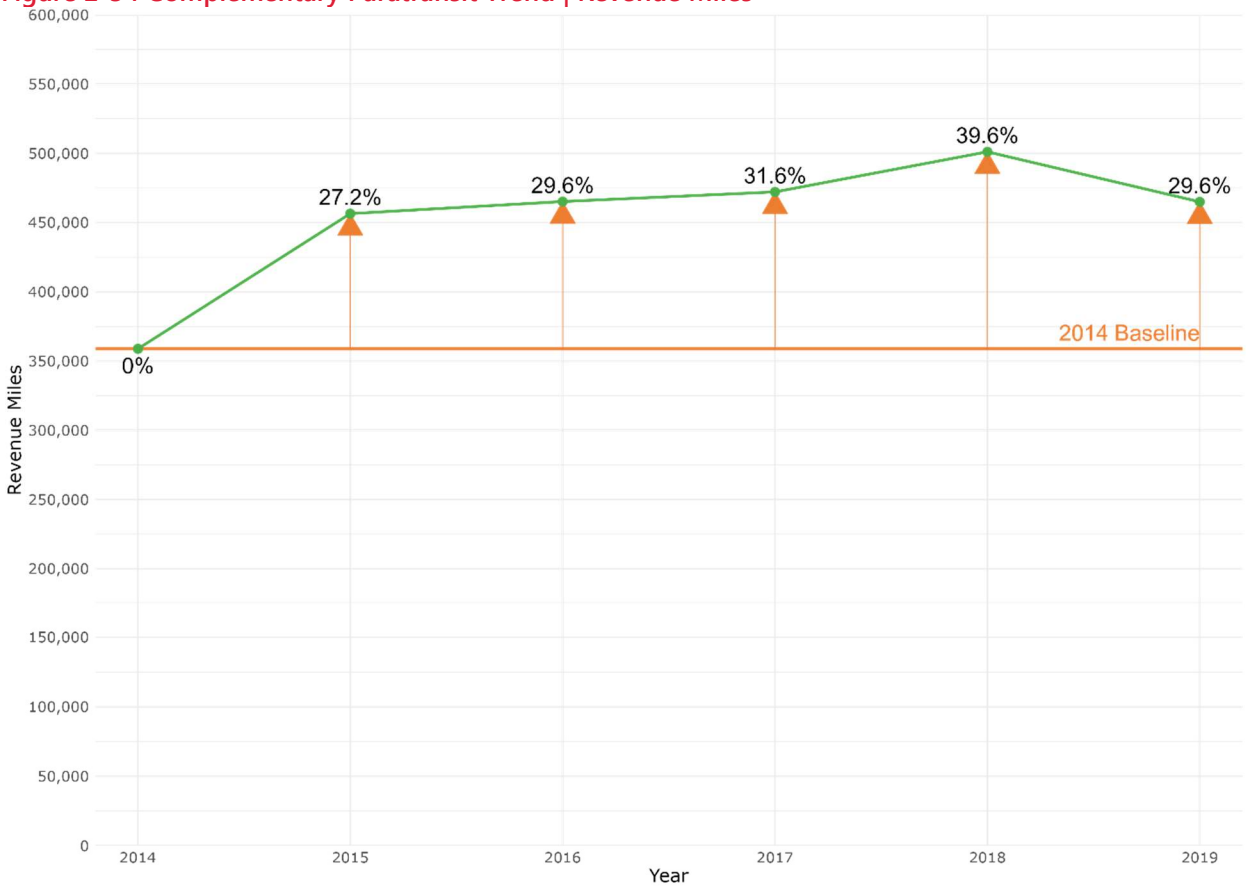
Figure 2-33 Complementary Paratransit Peer Review | Passenger Trips



Source: NTD 2019

Figure 2-34 indicates that FAST increased complementary paratransit hours of service to provide the increased number of passenger trips. FAST*Trac!* revenue miles increased year-over-year from 2014 to 2018, but declined from 2018 to 2019.

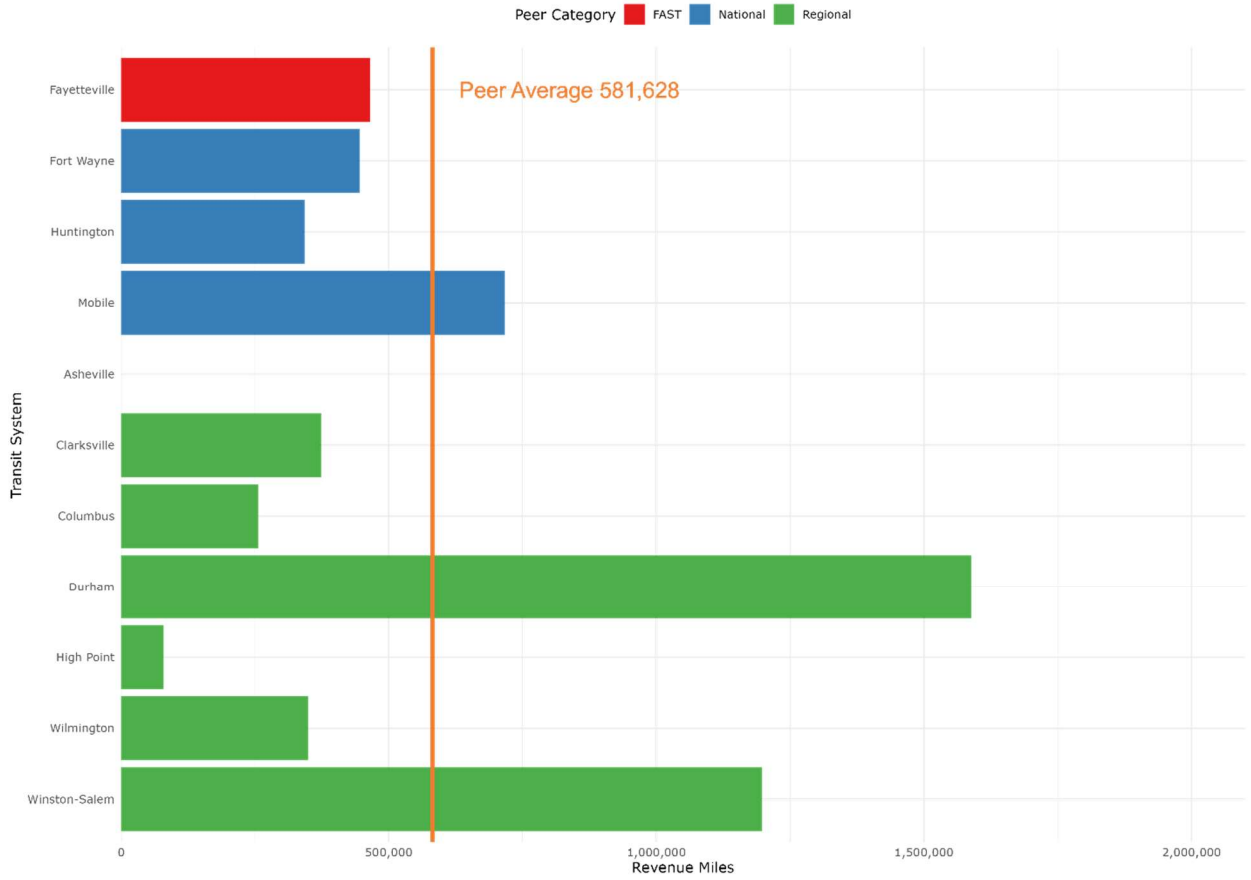
Figure 2-34 Complementary Paratransit Trend | Revenue Miles



Source: NTD 2014-2019

FAST is below average when compared to its peers in providing revenue miles of complementary paratransit service. Shown in Figure 2-35, Durham and Winston-Salem lead the pack.

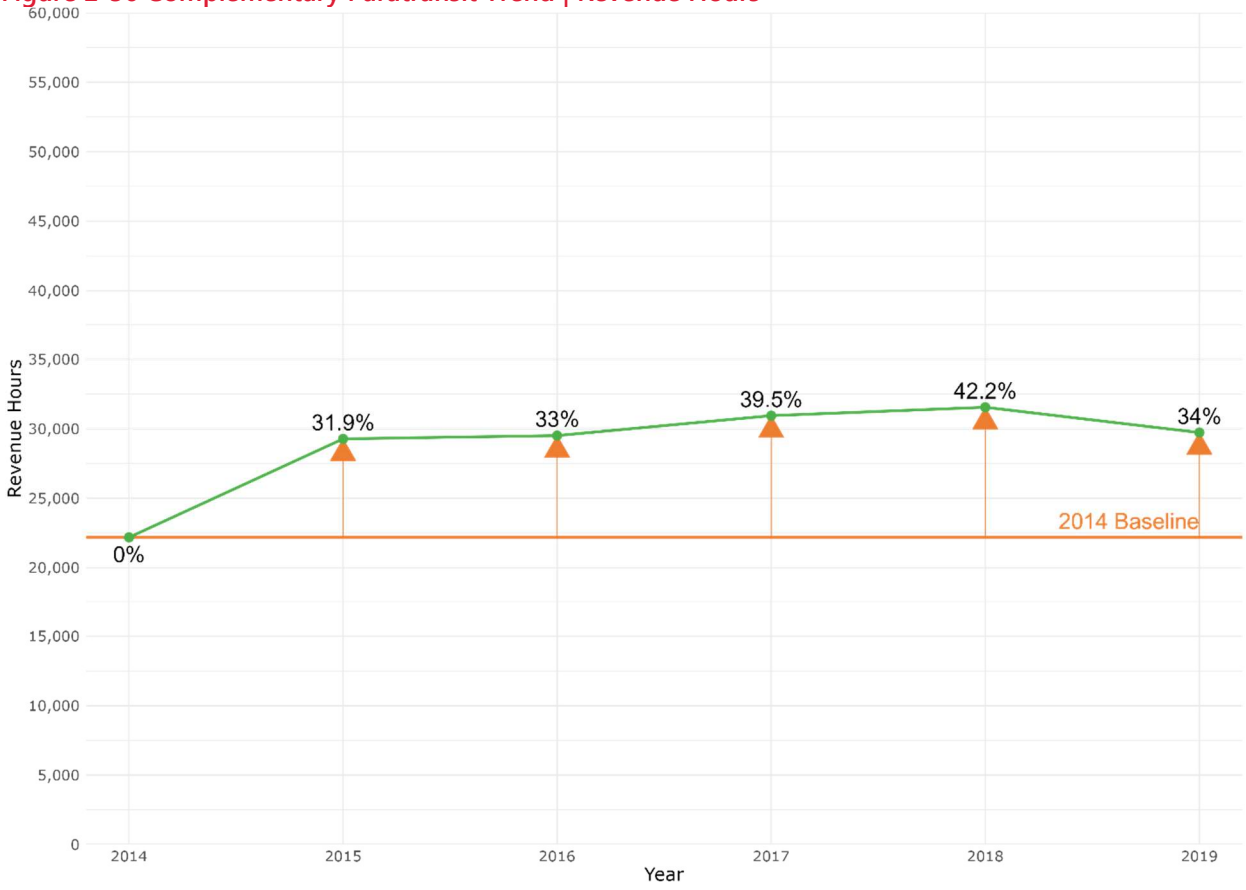
Figure 2-35 Complementary Paratransit Peer Review | Revenue Miles



Source: NTD 2019

Figure 2-36 shows that the FAST*Trac!* revenue hours trend mirrors that of FAST*Trac!*'s revenue miles trend. Both increased from 2014 to 2018 and then fell between 2018 and 2019. Revenue miles increased at a lesser pace than revenue hours did.

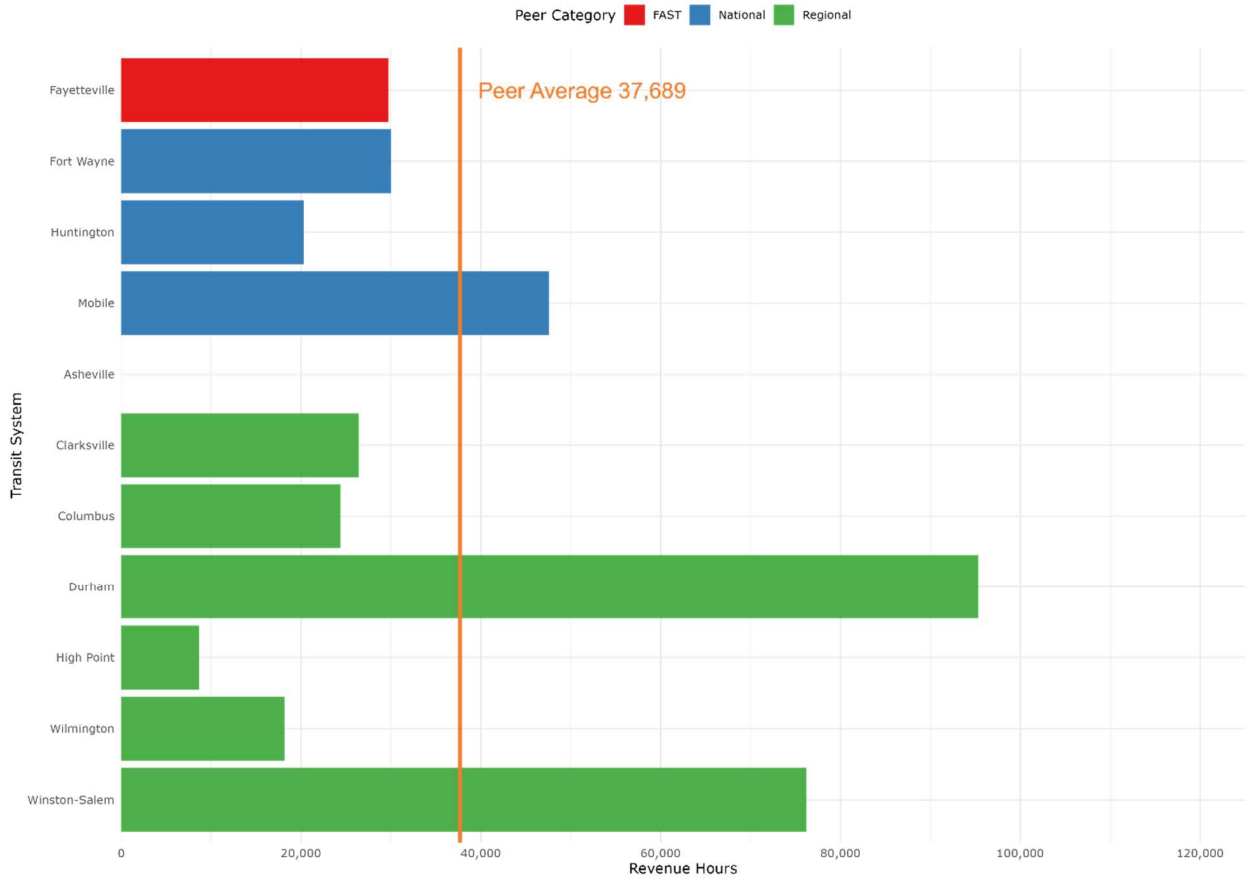
Figure 2-36 Complementary Paratransit Trend | Revenue Hours



Source: NTD 2014-2019

As shown in Figure 2-37, FAST is providing fewer complementary paratransit revenue hours than its peers. Durham, Winston-Salem and San Saba outpaced the rest of the peers in providing complementary paratransit service.

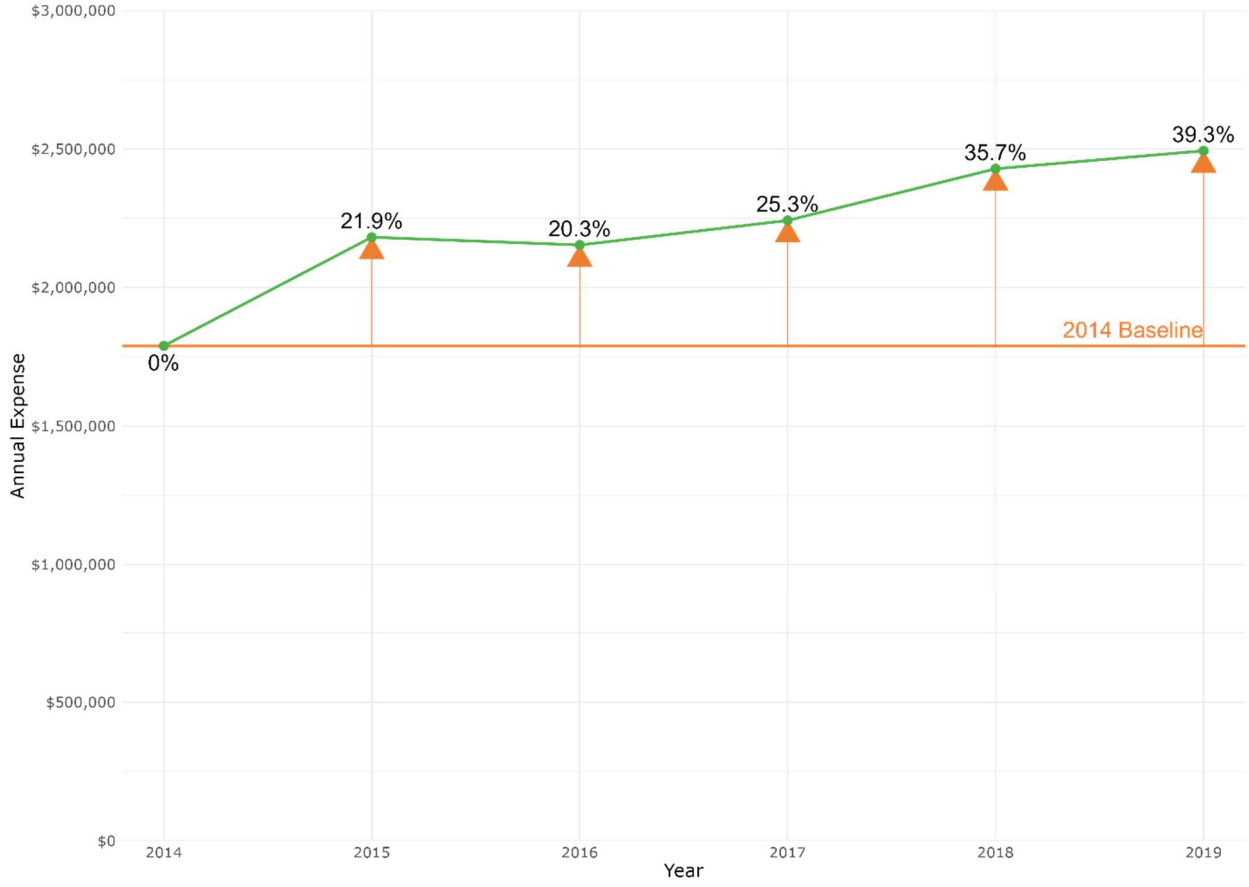
Figure 2-37 Complementary Paratransit Peer Review | Revenue Hours



Source: NTD 2019

As shown in Figure 2-38, FAST*Trac!* operating expenses have increased 39.3 percent between 2014 and 2019. The increase in operating expenses has largely come from providing increased complementary paratransit service, but the increase in cost has outpaced the increase in ridership.

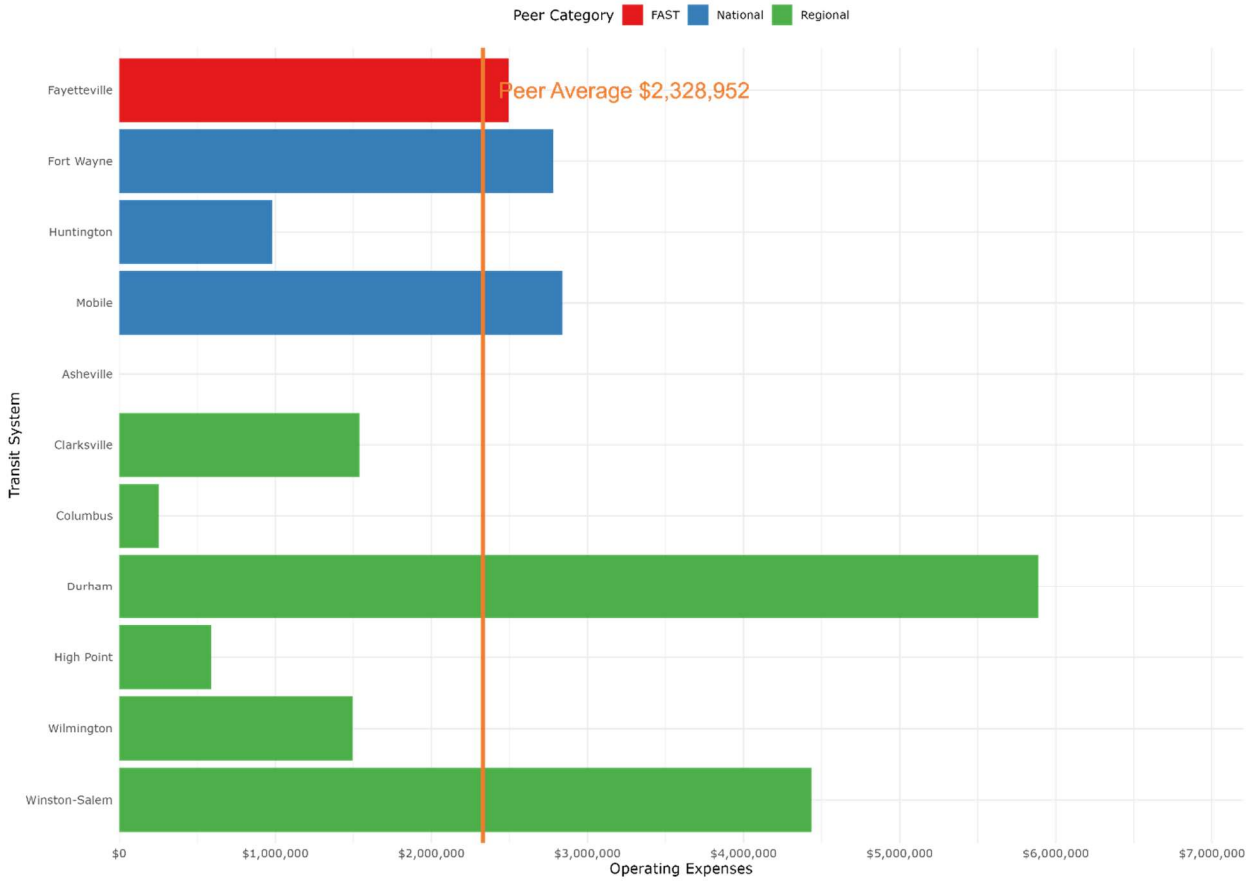
Figure 2-38 Complementary Paratransit Trend | Total Operating Expense



Source: NTD 2014-2019

FAST*Trac*!'s total operating budget is just above the peer average as shown in Figure 2-39.

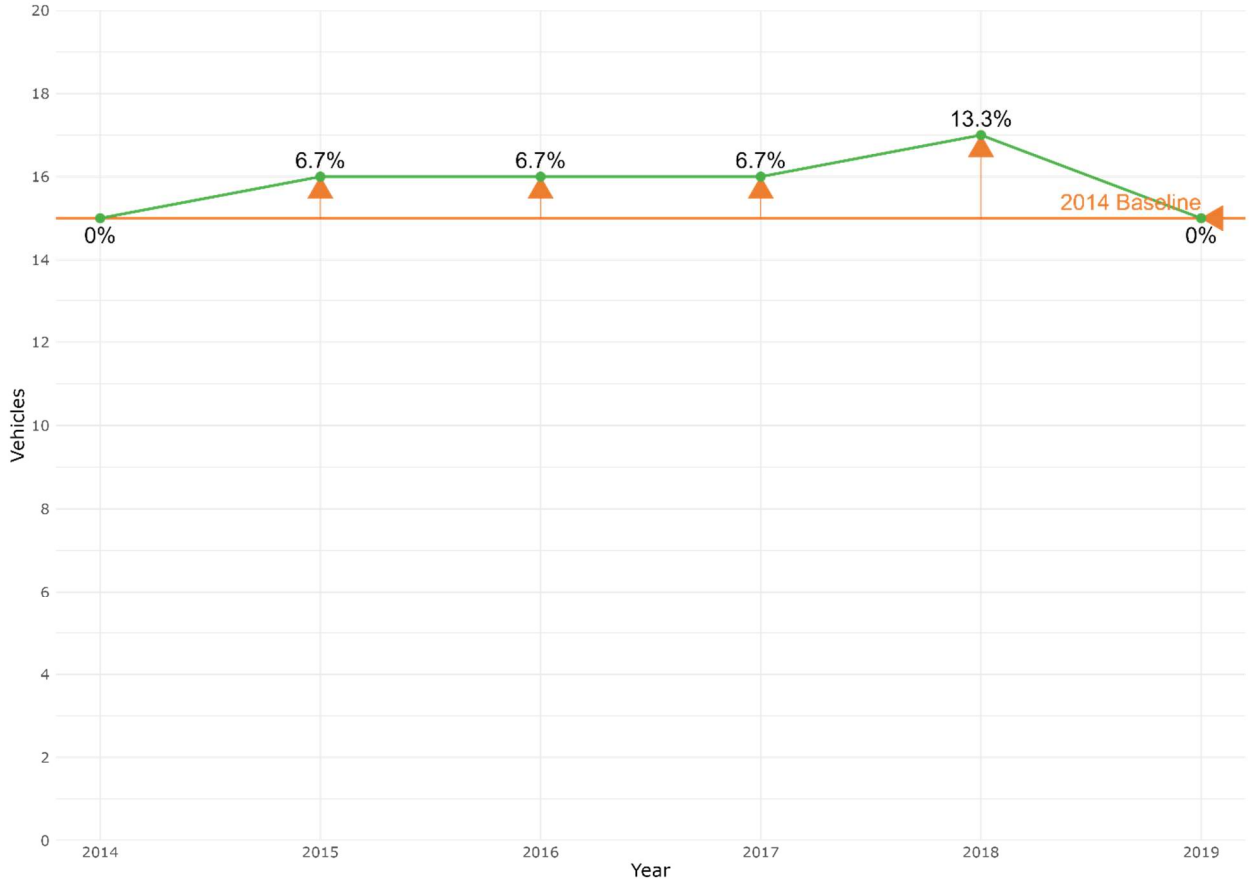
Figure 2-39 Complementary Paratransit Peer Review | Total Operating Expense



Source: NTD 2019

Figure 2-40 shows a slight increase in the number of FAST*Trac!* vehicles operated in maximum service over the five-year period, although ultimately, FAST*Trac!* returned to a baseline of 15 vehicles operated in maximum service in 2019.

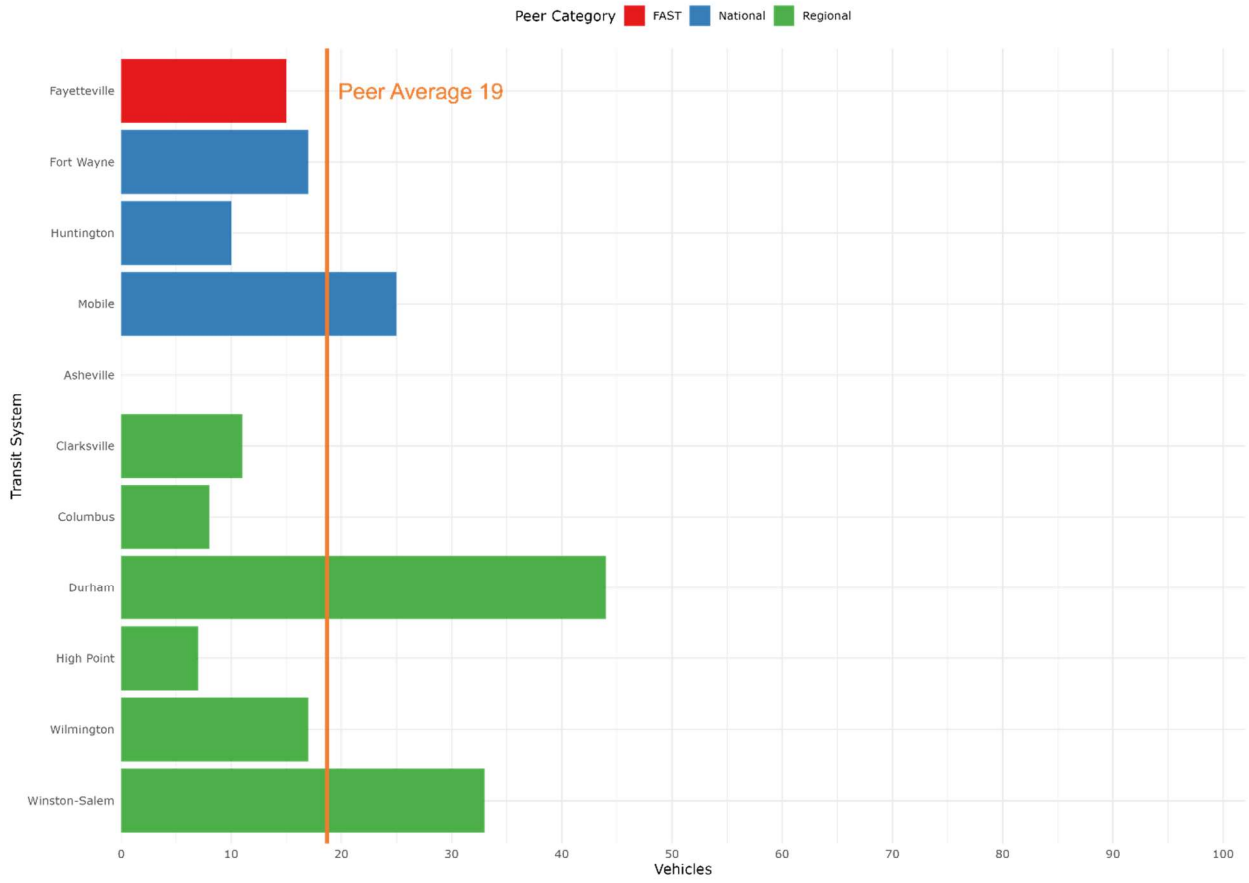
Figure 2-40 Complementary Paratransit Trend | Vehicles Operated in Maximum Service



Source: NTD 2014-2019

As shown in Figure 2-41, FAST*Trac!* operates fewer than average vehicles in maximum service. Durham and Winston-Salem lead the group in vehicles.

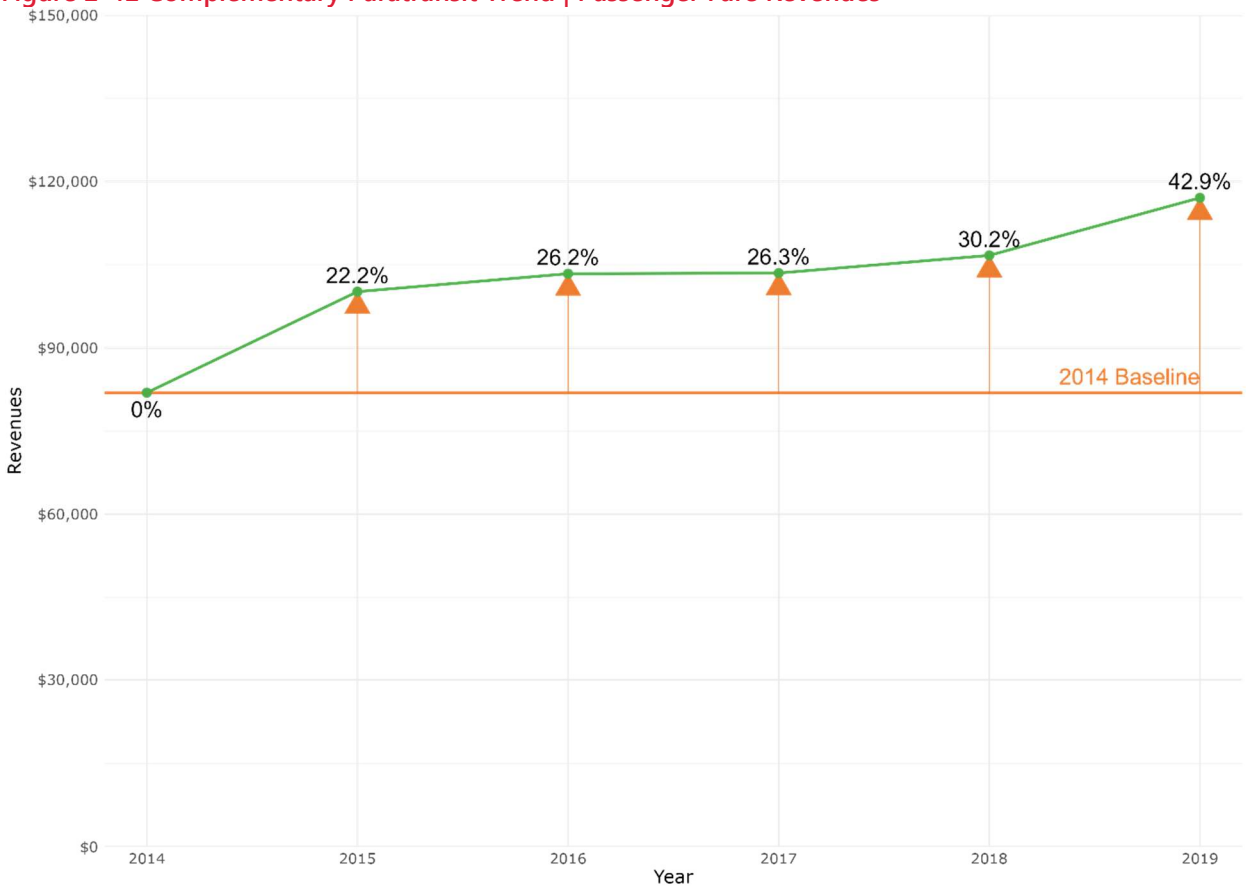
Figure 2-41 Complementary Paratransit Peer Review | Vehicles Operated for Maximum Service



Source: NTD 2019

Figure 2-42 shows that FAST*Trac!* passenger fare revenues have continued to rise over the five-year period. While ridership has also grown during this period, passenger fare revenue growth has outpaced ridership growth and operating expense growth.

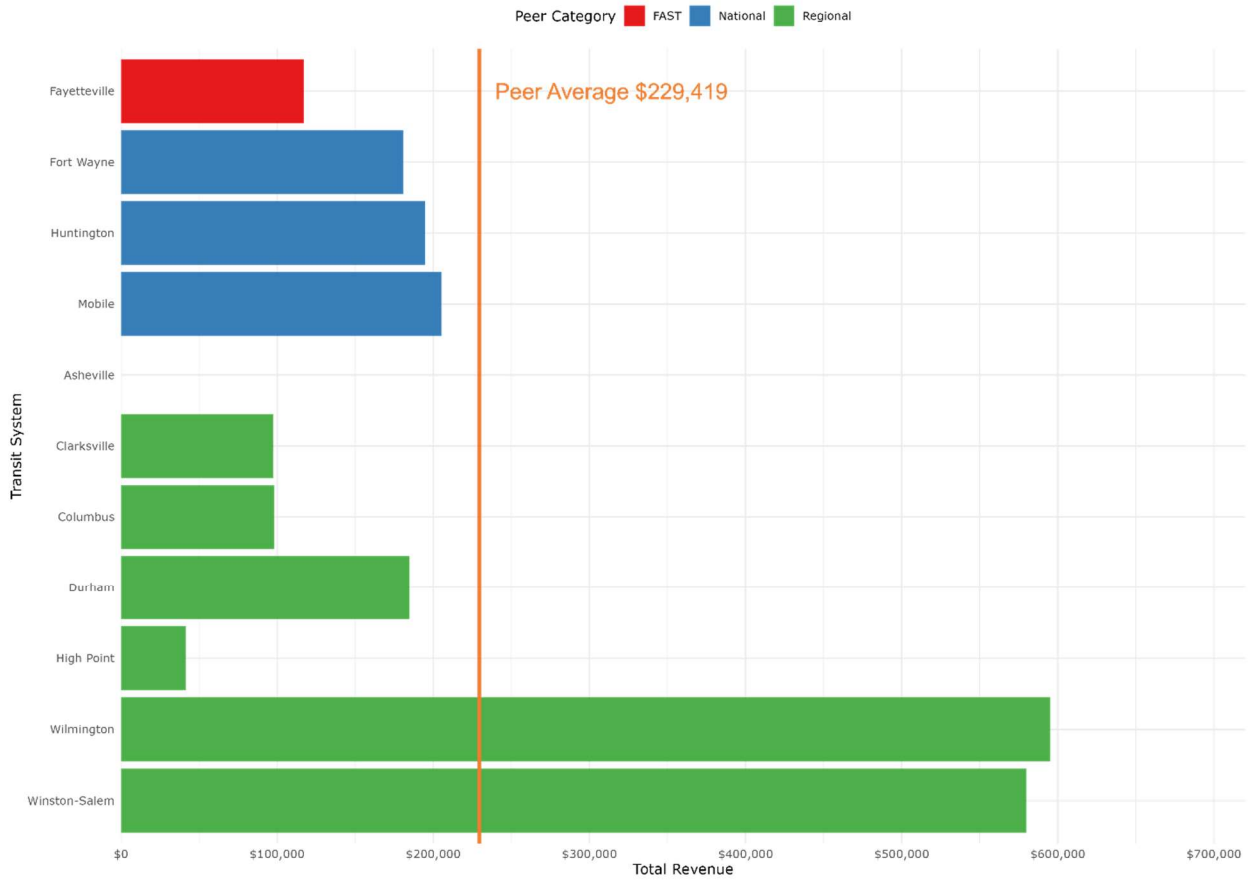
Figure 2-42 Complementary Paratransit Trend | Passenger Fare Revenues



Source: NTD 2014-2019

As shown in Figure 2-43, FAST*Trac!*'s fare revenues fall below the peer average despite increasing significantly over the five-year trend period. Wilmington and Winston-Salem far outpace the other agencies in this metric, which may be due to slightly different accounting practicies. For example, some systems may converst subsidies into fare revenues. Some systems may include rural as well as urban trips or non-emergency Medicaid transportation in these figures. These figures are also affected by the fact that not every system charges the maximum complementary paratransit fare (i.e., twice that of the fixed rate fare).

Figure 2-43 Complementary Paratransit Peer Review | Passenger Fare Revenues

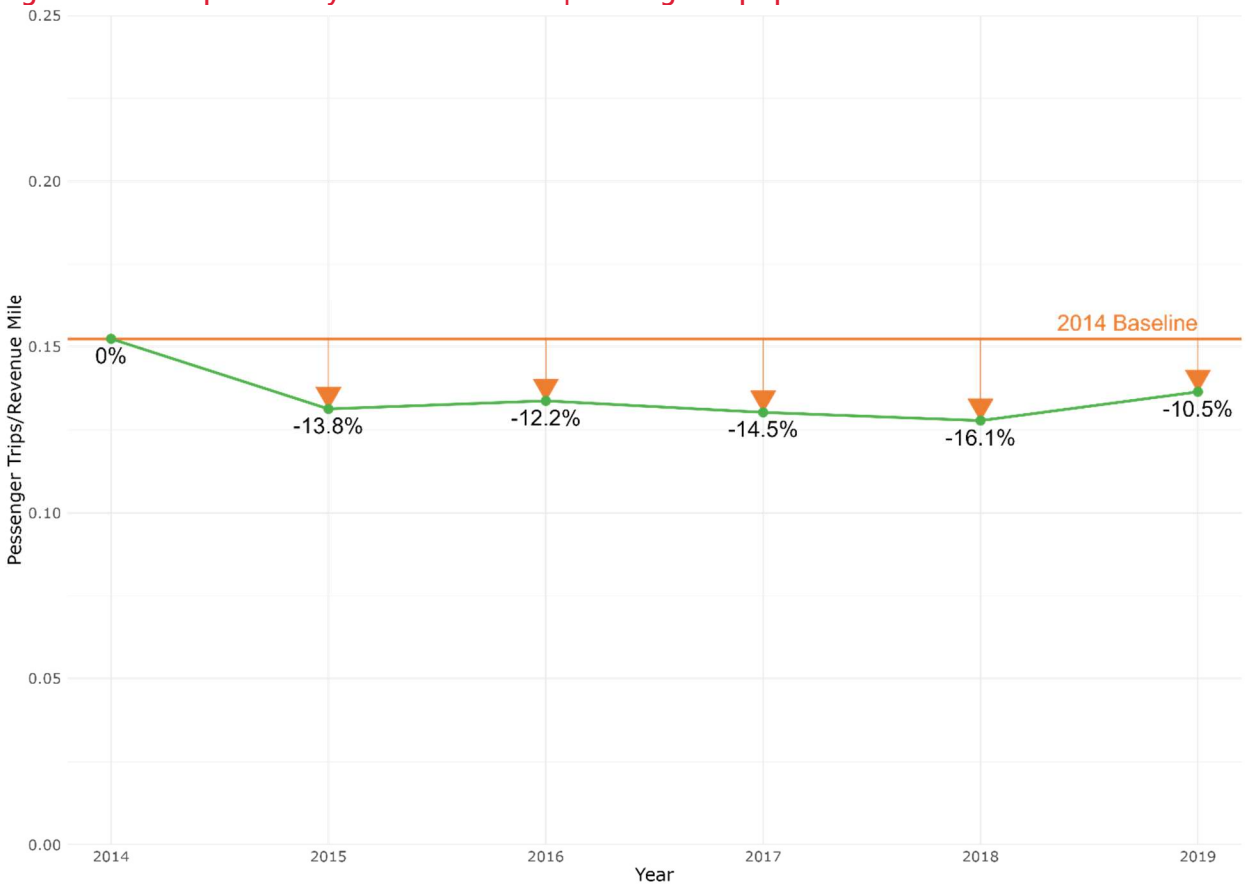


Source: NTD 2019

Effectiveness Measures

Switching to effectiveness measures, Figure 2-44 displays FAST*Trac!* passenger trips per revenue mile. FAST's delivery of complementary paratransit services per revenue mile has decreased over the five-year timeframe. The decrease in passengers per revenue mile is due to the increase in revenue miles outpacing the increase in riders.

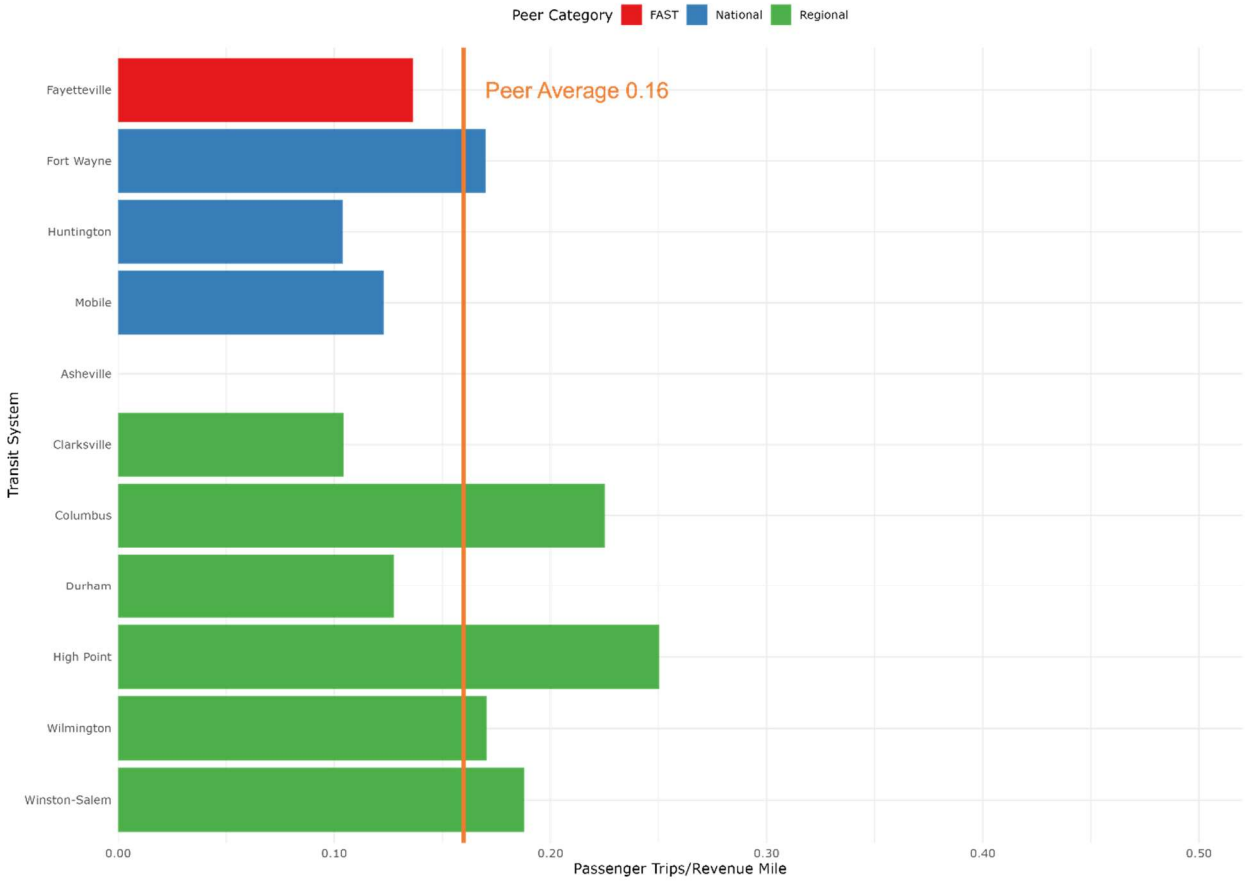
Figure 2-44 Complementary Paratransit Trend | Passenger Trips per Revenue Mile



Source: NTD 2014-2019

With regard to passenger trips per revenue mile, Figure 2-45 shows the peer group clustered more closely around the peer average than many of the peer metrics. FAST is slightly below the peer average.

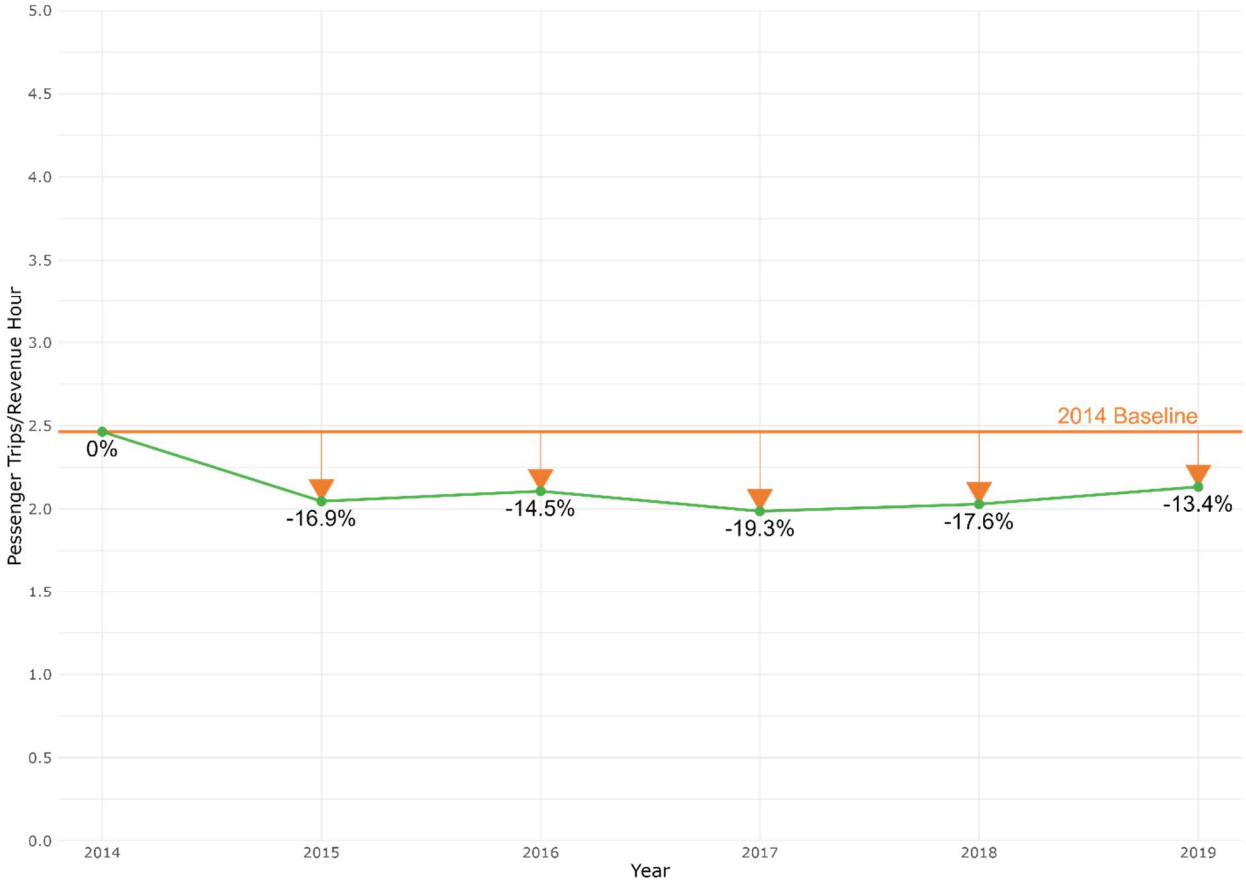
Figure 2-45 Complementary Paratransit Peer Review | Passenger Trips per Revenue Mile



Source: NTD 2019

Similar to passenger trips per revenue mile, Figure 2-46 shows a decline in FAST*Trac!* passenger trips per revenue hour over a five-year period. The increase in the number of revenue hours of service outpaced the increase in ridership over the five-year period, which led to this decline.

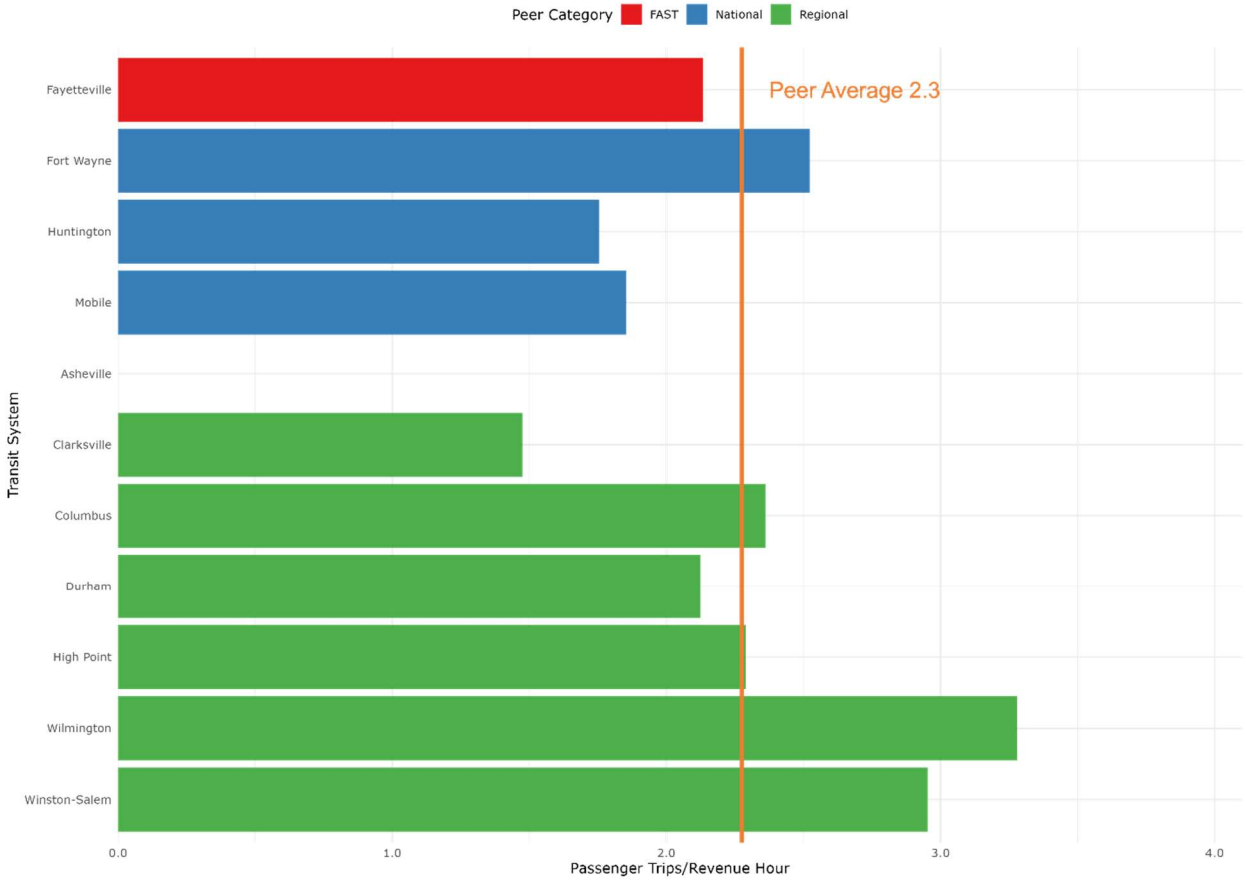
Figure 2-46 Complementary Paratransit Trend | Passenger Trips per Revenue Hour



Source: NTD 2014-2019

As shown in Figure 2-47, FAST is just below the peer average for passenger trips per revenue hour. Several of the regional peers are above average on this metric indicating FAST is less efficient in providing complementary paratransit service.

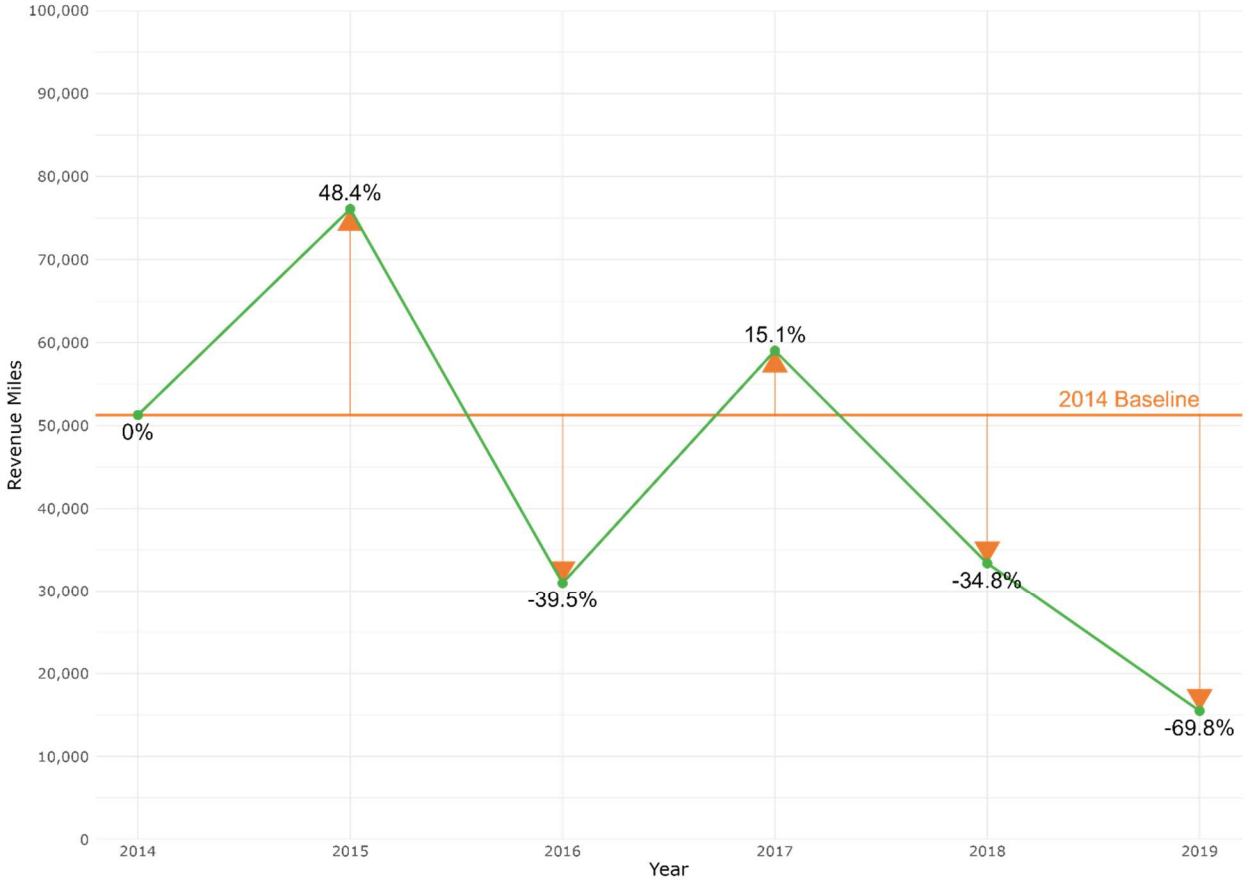
Figure 2-47 Complementary Paratransit Peer Review | Passenger Trips per Revenue Hour



Source: NTD 2019

Figure 2-48 shows inconsistency in the number of revenue miles between failures for FAST*Trac!* vehicles over a five-year timeframe. It is typical for this metric to be more volatile than other metrics. It appears that the overall FAST trend is downward, which may be due to an aging fleet.

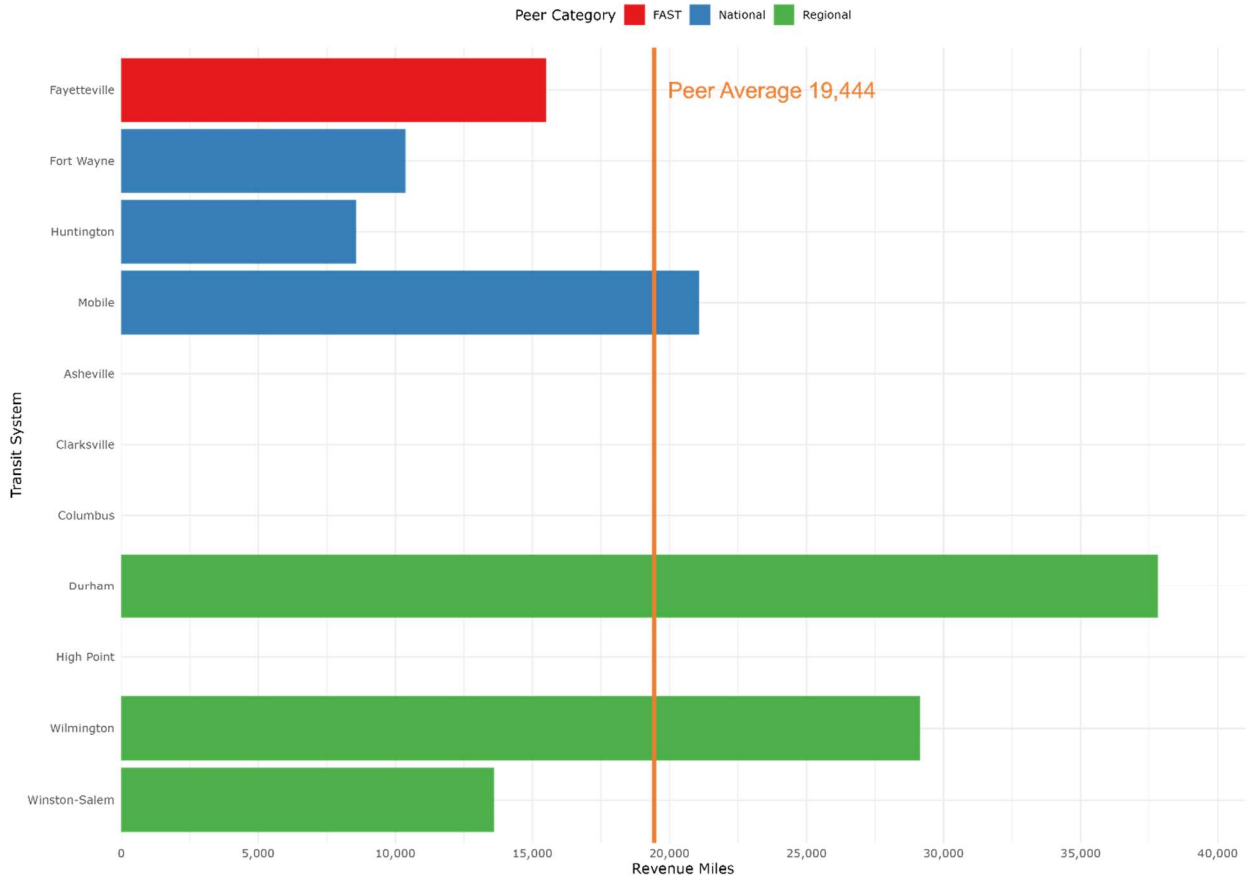
Figure 2-48 Complementary Paratransit Trend | Revenue Miles Between Failures



Source: NTD 2014-2019

Regional peers, Durham and Wilmington, led the peer group in number of revenue miles between failures. FAST was below average in this metric as shown in Figure 2-49.

Figure 2-49 Complementary Paratransit Peer Review | Revenue Miles Between Failures

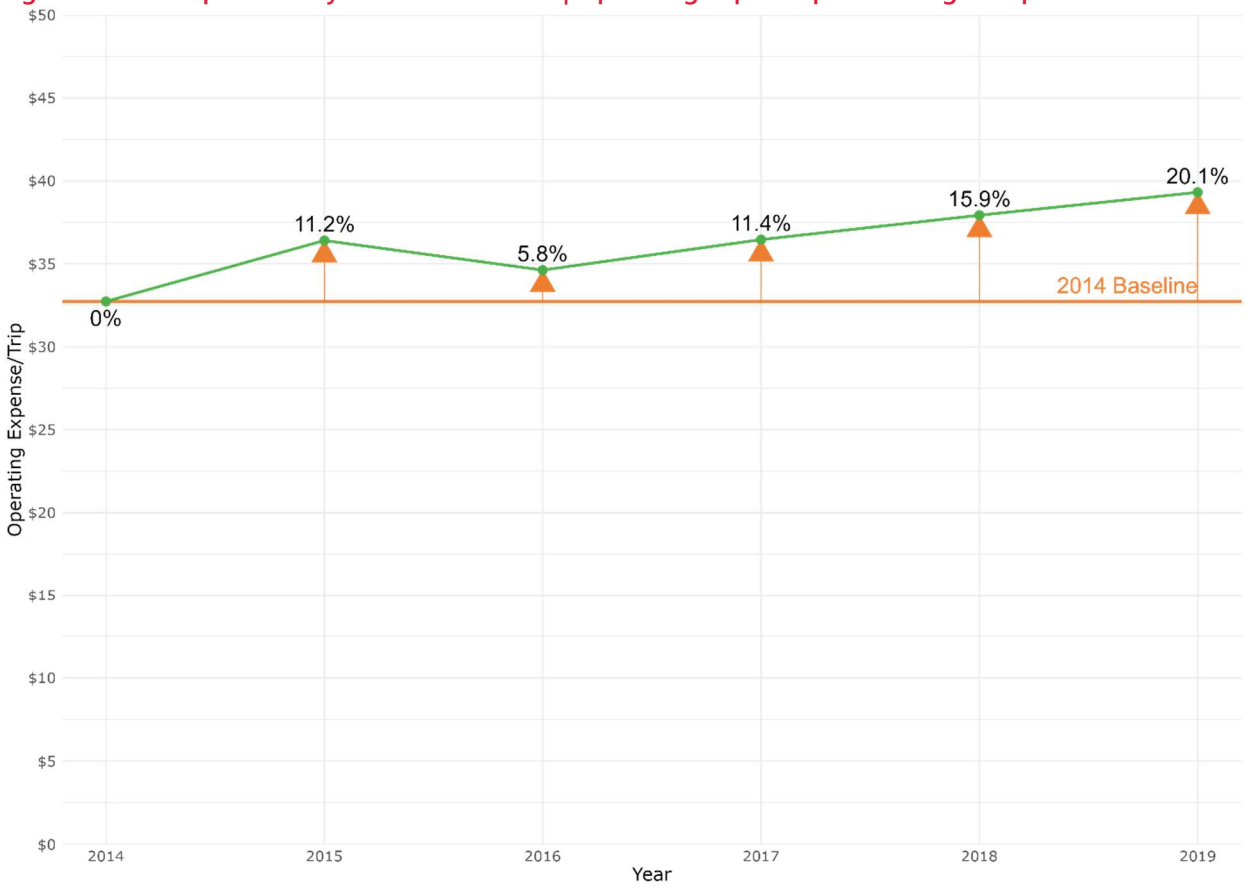


Source: NTD 2019

Efficiency Measures

Over the five-year study period, operating expense per passenger trip increased approximatley 20 percent as shown in Figure 2-50. This increase is due to operating expense increases outpacing ridership increases.

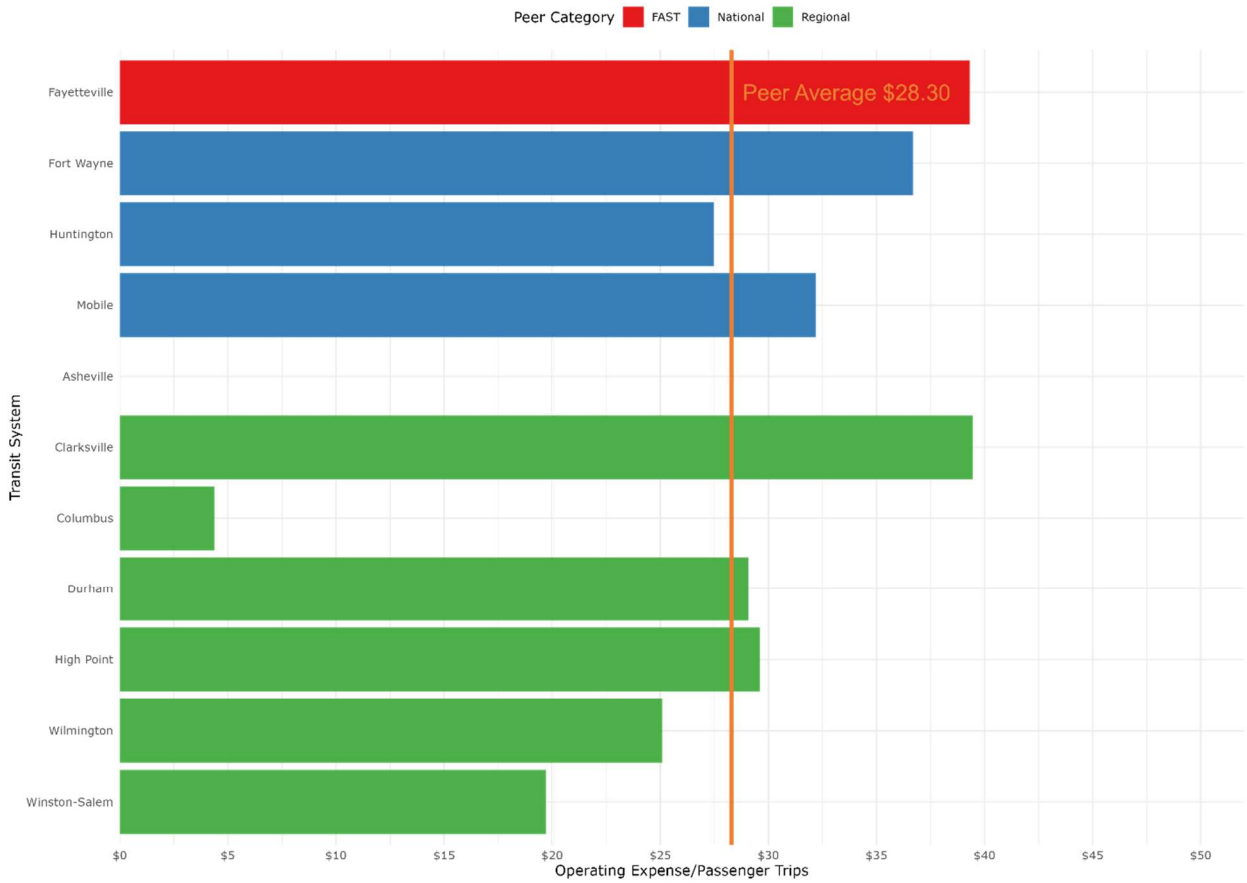
Figure 2-50 Complementary Paratransit Trend | Operating Expense per Passenger Trip



Source: NTD 2014-2019

FAST*Trac!* operating expense per passenger trip is above average for the peer group as shown in Figure 2-51. Columbus is the most efficient in this category with a very low operating expense per passenger trip. It is unclear how Columbus is able to operate with such a low operating expense per passenger trip.

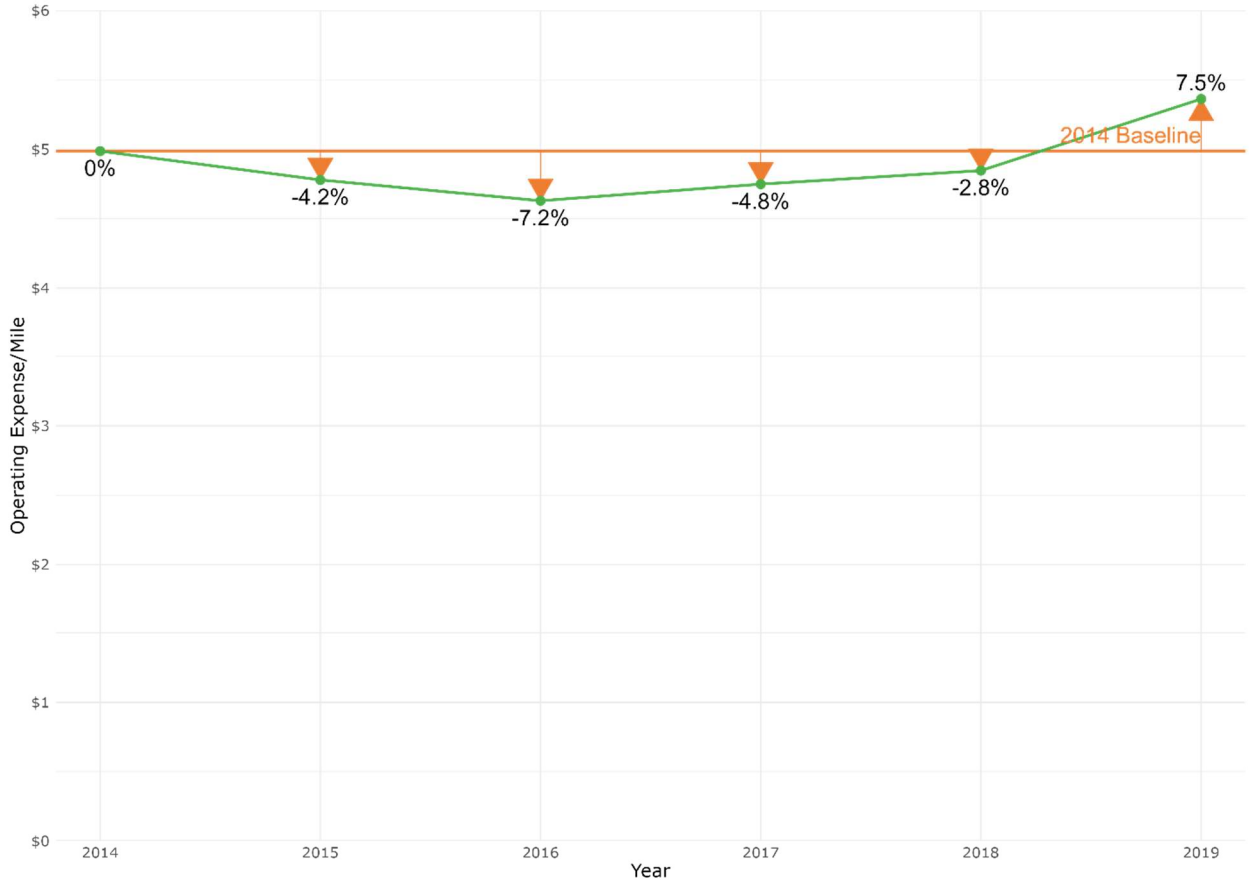
Figure 2-51 Complementary Paratransit Peer Review | Operating Expense per Passenger Trip



Source: NTD 2019

Figure 2-52 indicates that FAST experienced a decrease in operating expense per revenue mile from 2014 to 2016; however, that trend reversed from 2016 to 2019. FAST has steadily increased operator wages, which accounts for a significant portion of the increase in operating expense per revneue mile.

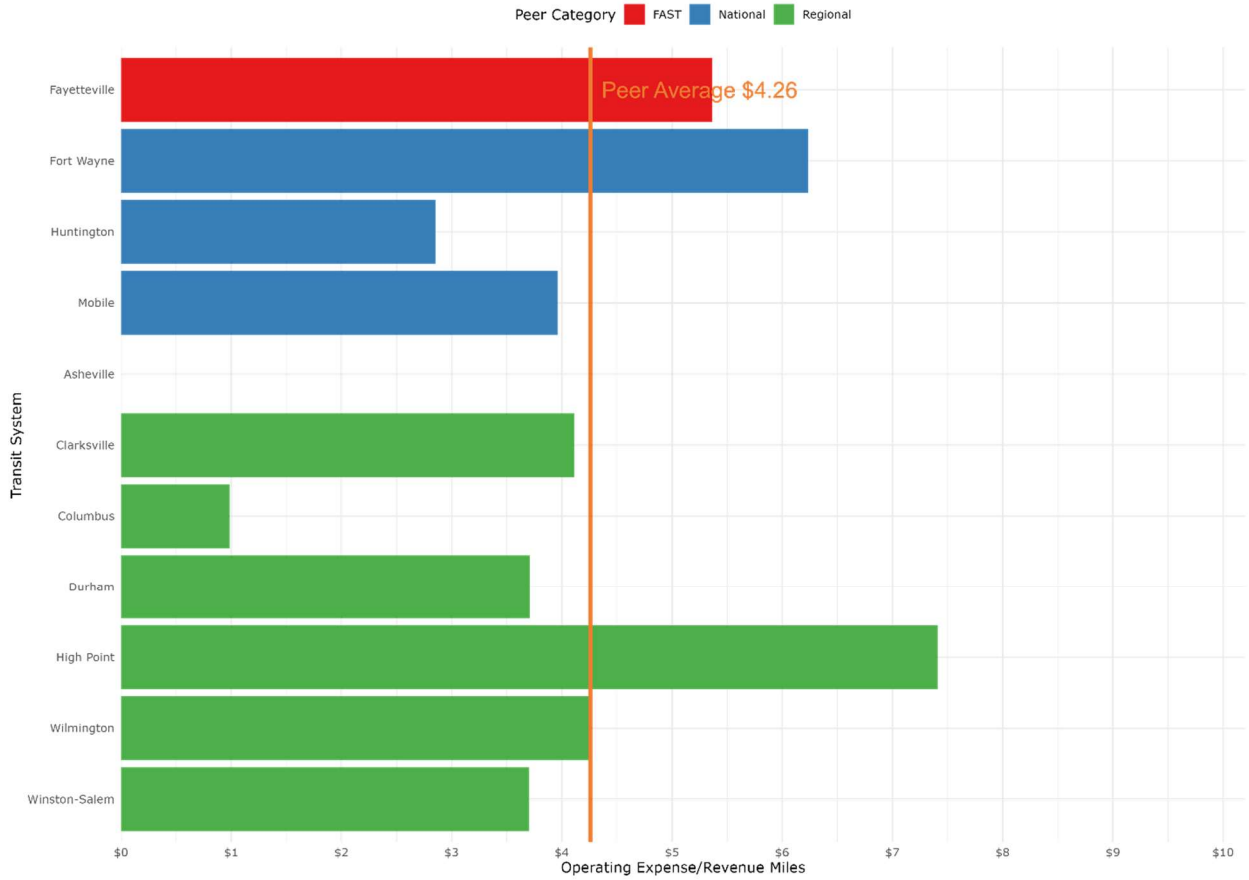
Figure 2-52 Complementary Paratransit Trend | Operating Expense per Revenue Mile



Source: NTD 2014-2019

Figure 2-53 shows FAST*Trac!* exceeded the peer average in the complementary paratransit operating expense per revenue mile metric. Most of the regional peers were below the peer average in this metric.

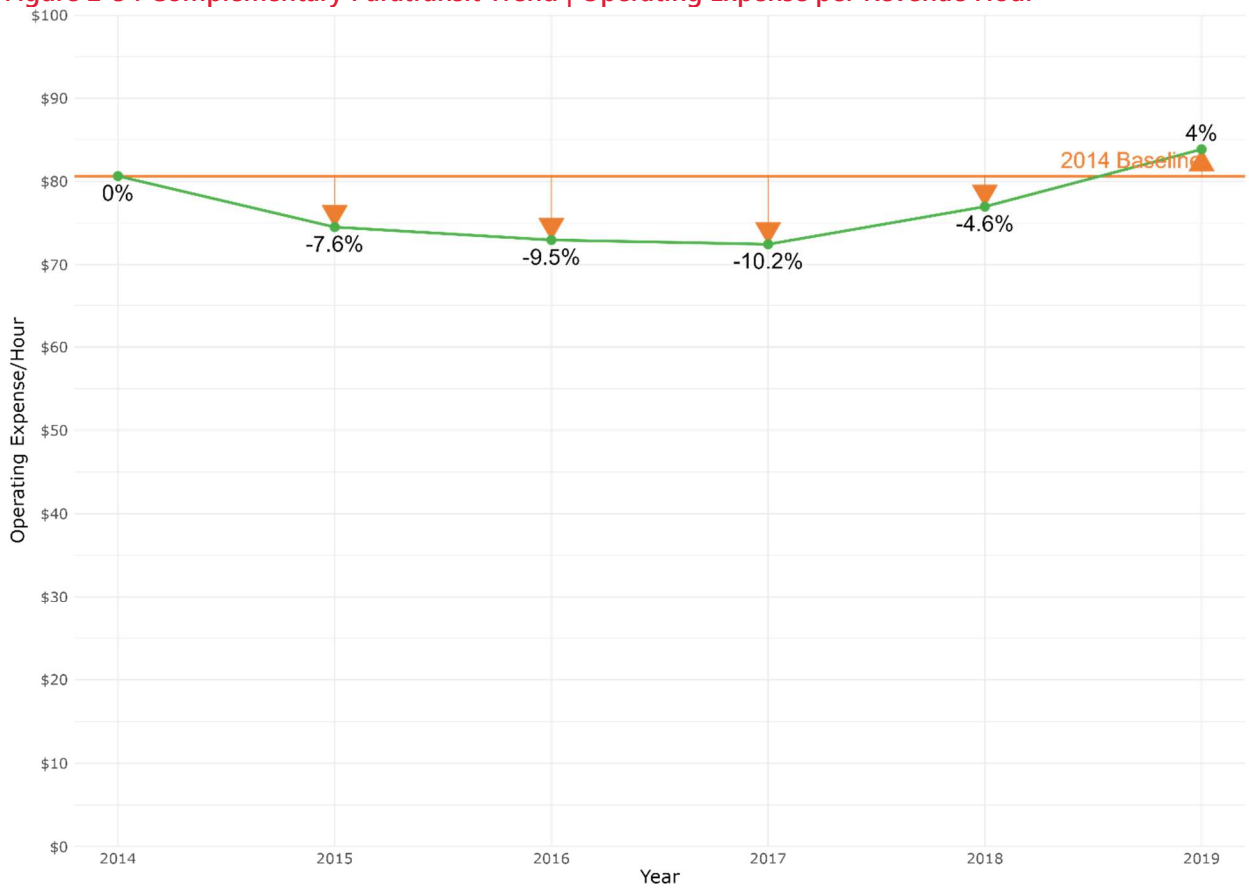
Figure 2-53 Complementary Paratransit Peer Review | Operating Expense per Revenue Mile



Source: NTD 2019

Figure 2-54 examines operating expense per revenue hour for complementary paratransit service over a five-year period. The data indicates that FAST experienced a decrease in operating expenses per revenue hour from 2014 to 2017 followed by an increase in this metric between 2017 and 2019.

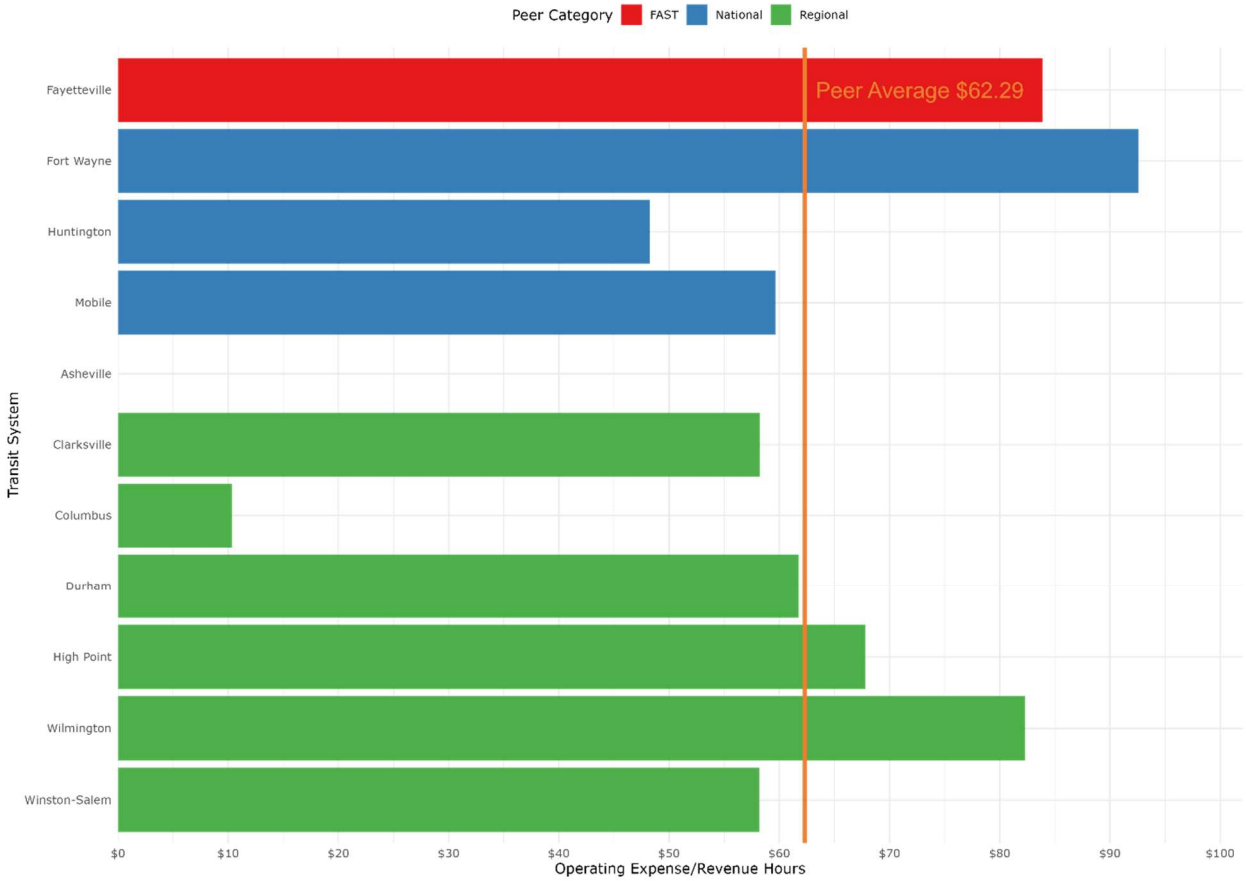
Figure 2-54 Complementary Paratransit Trend | Operating Expense per Revenue Hour



Source: NTD 2014-2019

Figure 2-55 shows that FAST*Trac!* had a higher operating expense per revenue hour than many of its peers. Only one agency outpaced FAST in this category, which was Fort Wayne.

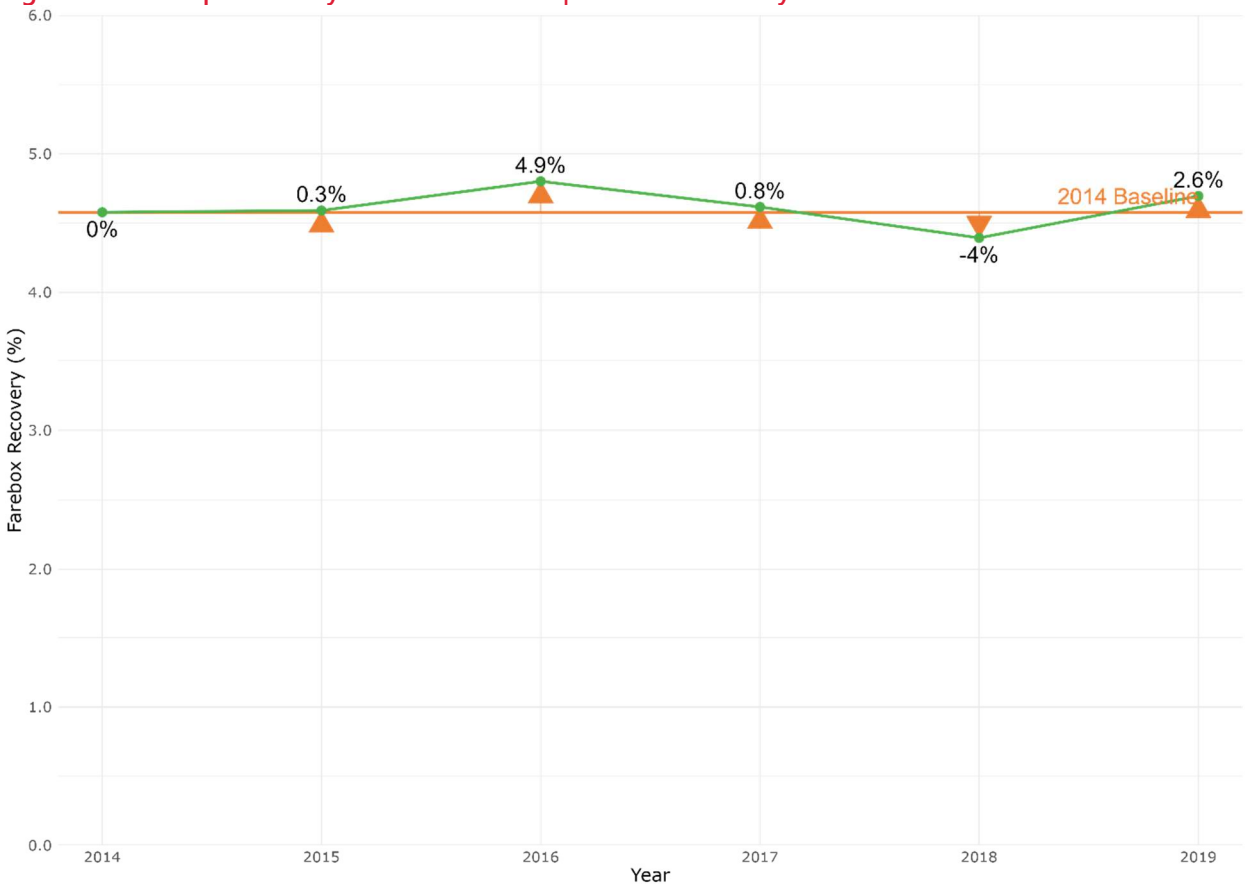
Figure 2-55 Complementary Paratransit Peer Review | Operating Expense per Revenue Hour



Source: NTD 2019

Figure 2-56 suggests that FAST's farebox recovery for complementary paratransit service has hovered around 4.5% over the trend period.

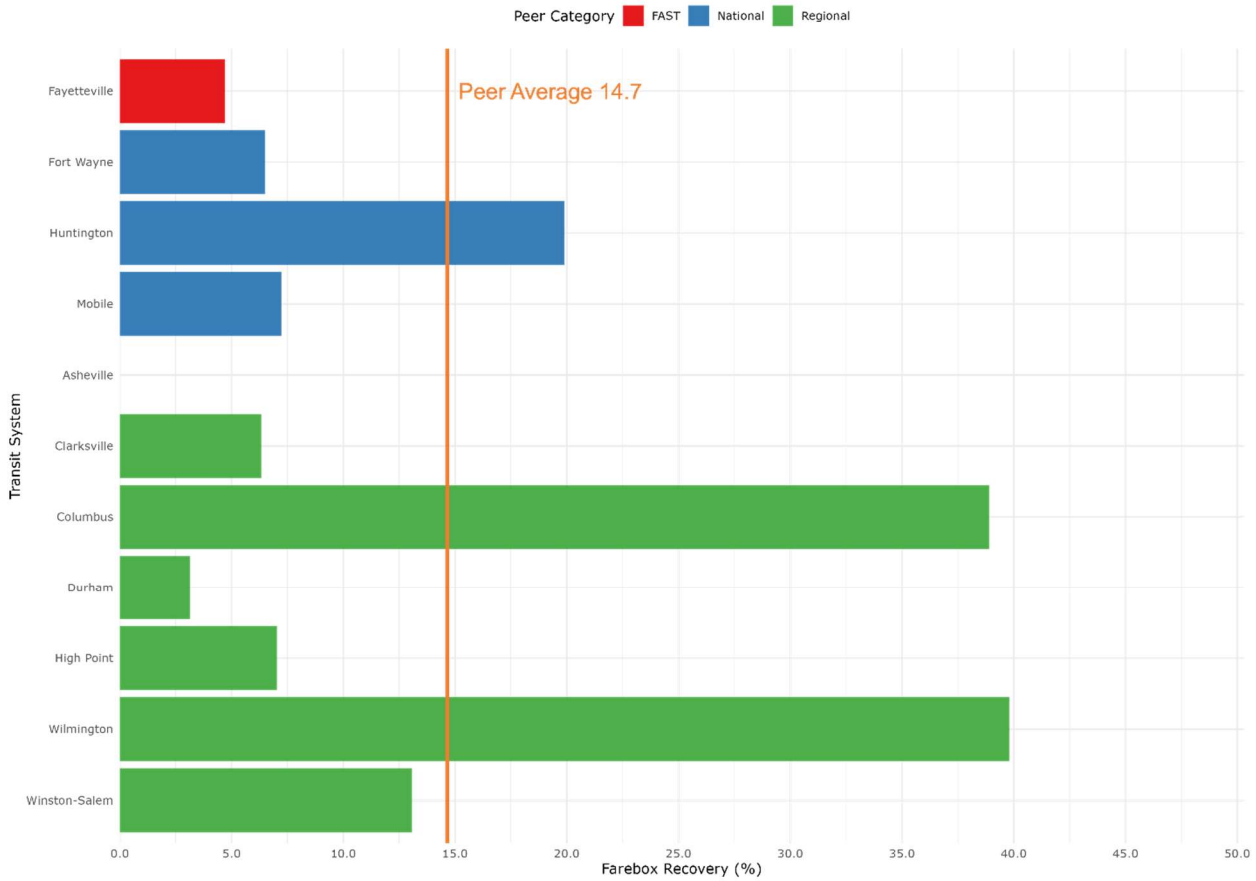
Figure 2-56 Complementary Paratransit Trend | Farebox Recovery



Source: NTD 2014-2019

Figure 2-57 shows FAST below the farebox recovery average for the peer group while Wilmington and Columbus were far above the average.

Figure 2-57 Complementary Paratransit Peer Review | Farebox Recovery



Source: NTD 2019

Summary

A summary of FAST*Trac!*'s trend analysis and peer review is provided in Table 2-11. Trends were reviewed for an overall trend since 2014. Again, FAST is demonstrating its ability to provide a lot with limited resources in that it is providing above average revenue miles with below average operating expenses.

Table 2-11 Complementary Paratransit | Summary of Trend Analysis and Peer Review

Measure	Trend Analysis	Peer Review
General Measures		
Passenger Trips	Increasing	Below Average
Revenue Miles	Increasing	Below Average
Revenue Hours	Increasing	Below Average
Operating Expense	Increasing	Above Average
Vehicles Operated in Maximum Service	--	Below Average
Passenger Fare Revenues	Increasing	Below Average
Effectiveness Measures		
Passenger Trips per Revenue Mile	Decreasing	Below Average
Passenger Trips per Revenue Hour	Decreasing	Below Average
Revenue Miles Between Failures	--	Below Average
Efficiency Measures		
Operating Expense per Passenger Trip	Increasing	Above Average
Operating Expense per Revenue Mile	Increasing	Above Average
Operating Expense per Revenue Hour	Increasing	Above Average
Farebox Recovery	--	Below Average

Conclusions

Over the last several years, FAST has focused on improving its services, infrastructure and other aspects of its operations. Key accomplishments include the following items:

- During the COVID-19 pandemic, FAST kept core operations running and suspended fare payments for passengers.
- FAST built and opened the FAST Transit Center in 2017.
- FAST has continued to raise hourly pay rates for its transit operators and other staff.

- Despite a request by FAST to raise base transit fares from $1.25 to $1.50, City Council denied that request in 2018. FAST has not increased fares since April 2013.
- FAST secured grant funding for electric buses as well as a cashless fare system.
- Between 2014 and 2019, FAST's fixed route system increased the number of revenue hours, revenue miles, and vehicles in service for Fayetteville passengers while keeping operating expenses below the peer average.
- Between 2014 and 2019, FAST*Trac!* increased the number of passenger trips, revenue hours, revenue miles, and revenues from passenger fares.
- FAST funding levels are lower than many of its peers. Table 2-12 and Figure 2-58 provide a detailed reviews of funding sources for FAST and its peers. On a per capita basis, FAST receives almost $10 less than the peer average, yet it provides 98 percent of the revenue hours and 97 percent of the revenue miles as its peer group.

Table 2-12 Peer Funding Comparison

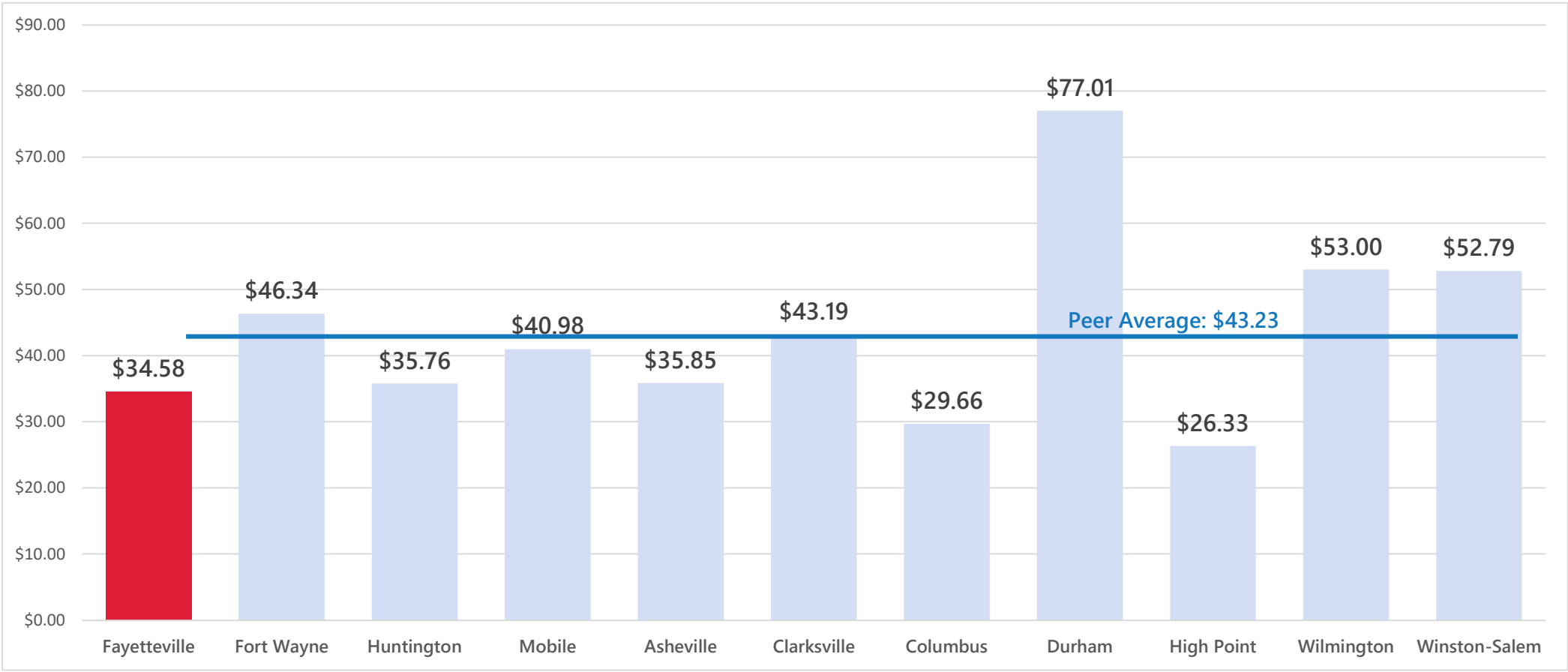
Transit System	Funding					Service Area Population	Funding per Capita				
	Federal	State	Local	Directly Generated	Total		Federal	State	Local	Directly Generated	Total
Fayetteville	$3,939,477	$779,699	$5,525,631	$1,282,199	$11,527,006	333,366	$11.82	$2.34	$16.58	$3.85	$34.58
National Peers											
Fort Wayne	$3,599,813	$2,093,009	$7,635,676	$1,924,078	$15,252,576	329,170	$10.94	$6.36	$23.20	$5.85	$46.34
Huntington	$2,026,517	$0	$2,843,780	$2,251,101	$7,121,398	199,133	$10.18	$0.00	$14.28	$11.30	$35.76
Mobile	$6,109,801	$0	$6,168,477	$1,188,823	$13,467,101	328,610	$18.59	$0.00	$18.77	$3.62	$40.98
Regional Peers											
Asheville	$4,043,402	$1,510,594	$5,145,657	$509,193	$11,208,846	312,618	$12.93	$4.83	$16.46	$1.63	$35.85
Clarksville	$3,783,489	$1,376,088	$1,894,540	$883,235	$7,937,352	183,798	$20.59	$7.49	$10.31	$4.81	$43.19
Columbus	$1,383,080	$466,463	$4,435,347	$1,116,707	$7,401,597	249,510	$5.54	$1.87	$17.78	$4.48	$29.66
Durham	$5,191,892	$3,435,295	$15,725,494	$5,788,154	$30,140,835	391,371	$13.27	$8.78	$40.18	$14.79	$77.01
High Point	$2,173,385	$412,887	$1,534,323	$443,312	$4,563,907	173,324	$12.54	$2.38	$8.85	$2.56	$26.33
Wilmington	$7,777,218	$1,404,216	$2,125,827	$2,480,651	$13,787,912	260,170	$29.89	$5.40	$8.17	$9.53	$53.00
Winston-Salem	$6,910,073	$4,081,793	$8,908,640	$2,081,297	$21,981,803	416,394	$16.60	$9.80	$21.39	$5.00	$52.79
Peer Average											
Average	$4,267,104	$1,414,549	$5,631,217	$1,813,523	$13,126,394	$288,860	$14.81	$4.48	$17.82	$6.13	$43.23

Source: 2019 NTD, Form F10. Funding includes both fixed route and paratransit funds.

Note: Blue shading indicates peer receiving higher levels of funding than FAST.

Note: Directly generated funds can include fares, advertising, concessions, rents, identification cards, fines, etc.

Figure 2-58 Peer Funding Comparison



3

Population and Land Use

This section provides an overview of trends related to the City of Fayetteville's population and land use. It includes demographic data such as income and age as well as information on zoning, commute patterns, and unemployment. Information from these trends is used in designing the universe of transit alternatives to be explored for implementation over the coming years.

Population

The City of Fayetteville has the highest population density of anywhere in Cumberland County, with an average density of 39.5 residents per acre. The majority of the county has fewer than 10 persons per acre. Within Fayetteville, population density near the central business district (CBD) is low, while it increases along the NC-24 corridor (Figure 3-1). Areas along the I-295/NC-295 corridors near Fort Bragg have higher population density compared to the rest of the city. Lower population densities on the western edge of the city occur south of the U.S. 401 corridor, along the All-American Freeway near U.S. 401, and near NC-210 at Shaw Road.

Table 3-1 Population in Fayetteville, Cumberland County, and North Carolina

	City of Fayetteville	Cumberland County	North Carolina
Total Population	208,501	334,728	10,439,388
Population per Sq Mile	1,390.74	508.71	193.98
Population Growth since 2010	4.0%	4.8%	9.5%

Source: US 2020 Census

The City of Fayetteville grew approximately 4 percent between 2010 and 2020 decennial censuses, a rate slightly slower than Cumberland County (4.8%) and much slower than the state of North Carolina (9.5%) as a whole. As shown in Figure 3-2, the highest population growth occurred in the western and northwestern areas of the city. The town of Eastover largely saw strong population growth. Spring Lake and Fort Bragg saw mixed growth patterns akin to Fayetteville. Population growth was concentrated in the outer edges of Fayetteville and along the I-95 corridor.

Figure 3-1 Population Density

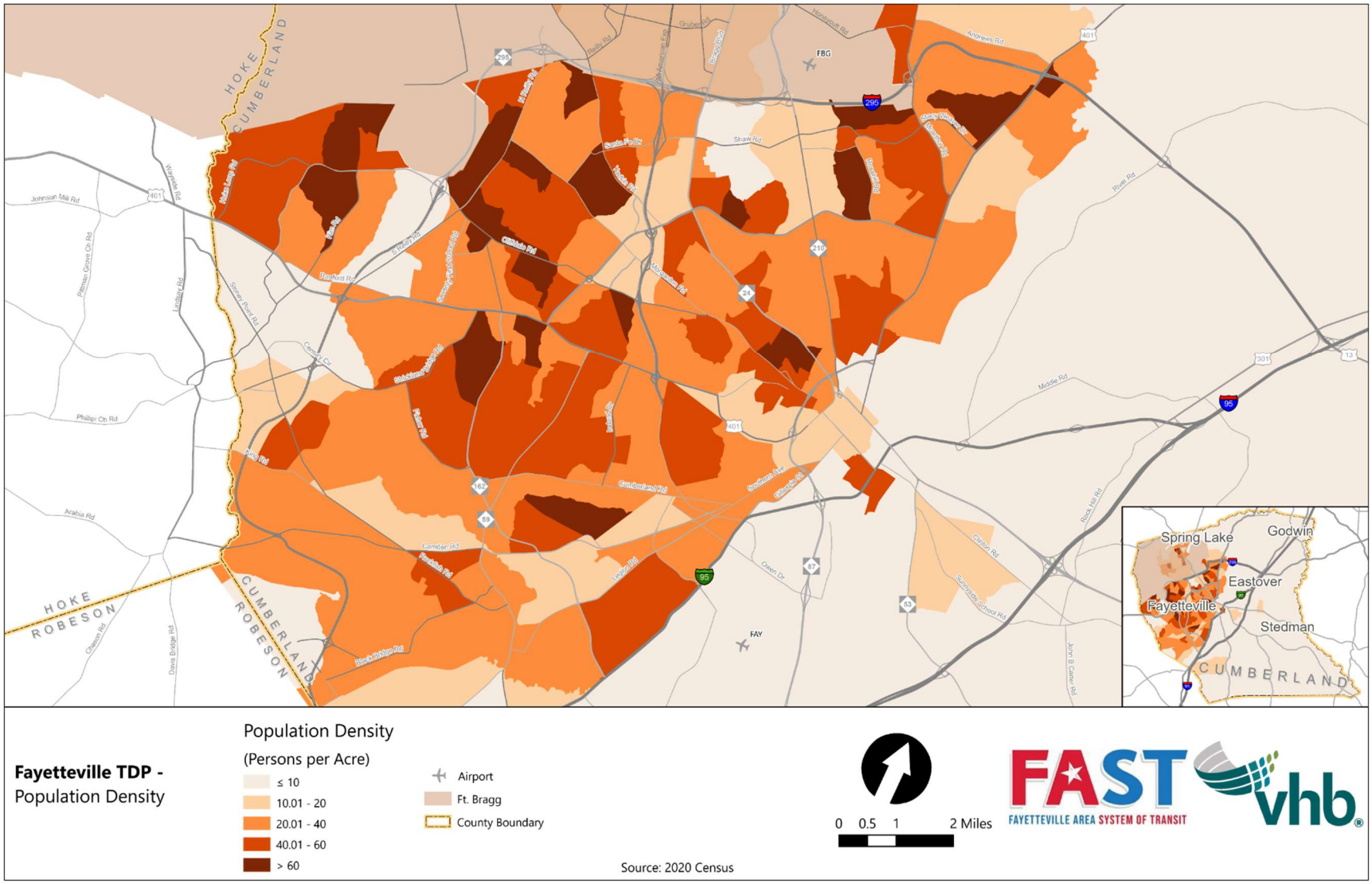
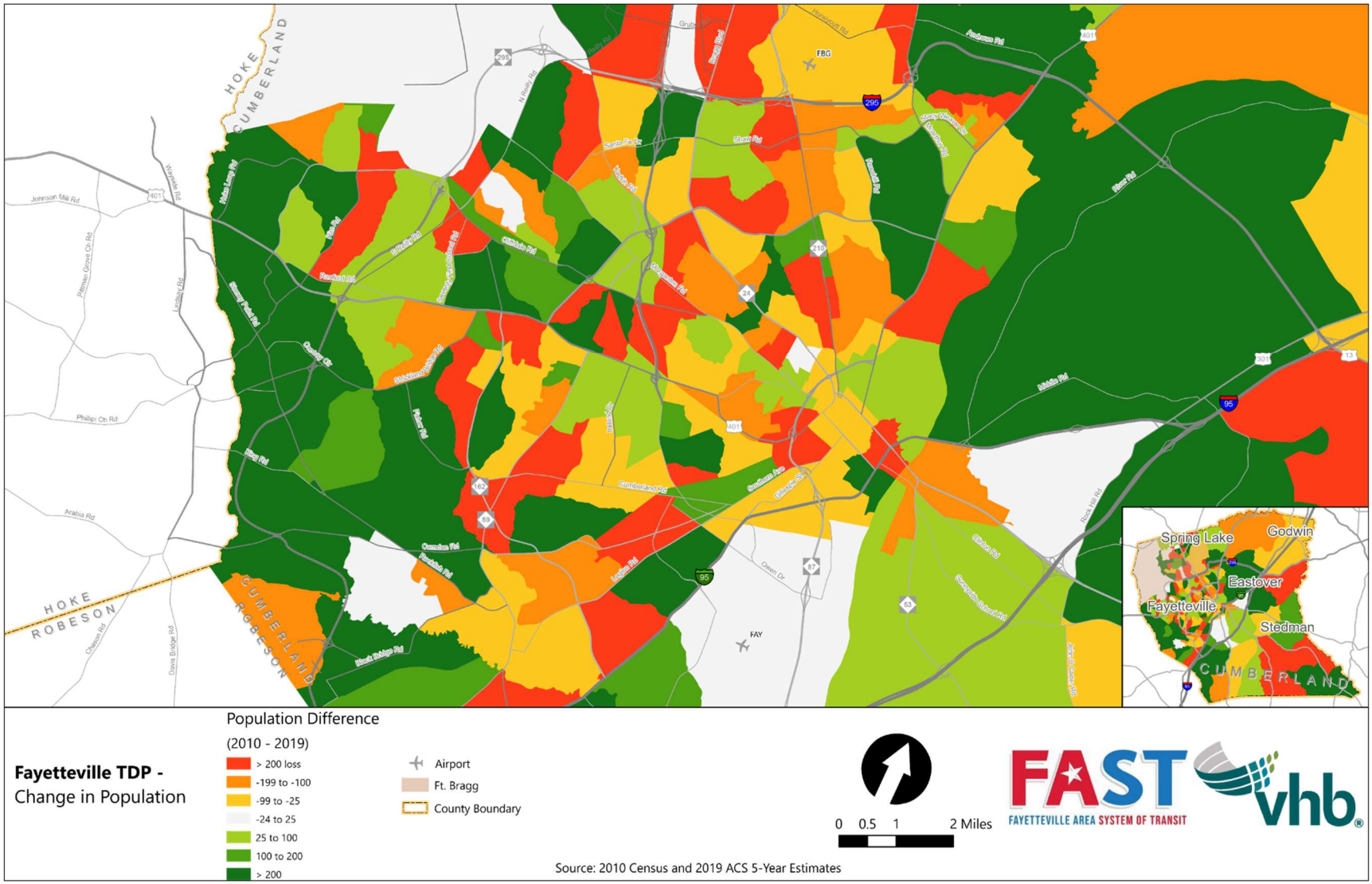


Figure 3-2 Population Density



As shown in Table 3-2 and Figure 3-3, the median household income of Fayetteville is $45,024, slightly less than the county median of $46,875. The county and city's income are approximately 14 percent and 17 percent, respectively, below the state's median income of $54,602. Shown in Figures 3-3 and 3-4, household median income and poverty concentrations mirror each other near Fayetteville's CBD. Lower income households are concentrated along the NC-210 corridor and the Cumberland Road corridor. Areas of high household income can be found in the western portion of Fayetteville, near the towns of Spring Lake and Stedman, and the southwestern portion of the county.

Table 3-2 Income and Poverty Levels in Fayetteville, Cumberland County, and North Carolina

	City of Fayetteville	Cumberland County	North Carolina
Total Population	210,432	332,861	10,264,876
Percent with Incomes in Poverty Level	19.3%	18.4%	14.7%
Median Household Income	$45,024	$46,875	$54,602

Source: US Census ACS 2019 5-Year Estimates

The City of Fayetteville has a higher proportion of their population living in poverty (19.3%) than Cumberland County (18.4%) and the State of North Carolina (14.7%). As seen in Figure 3-4, a large population living in poverty exists to the east and north of Fayetteville's CBD. Additional high poverty areas exist near the I-295 at NC-210 and U.S. 401 at Skibo Road. Cumberland County has lower poverty rates than the City of Fayetteville, except for the Spring Lake area.

Figure 3-3 Median Household Income

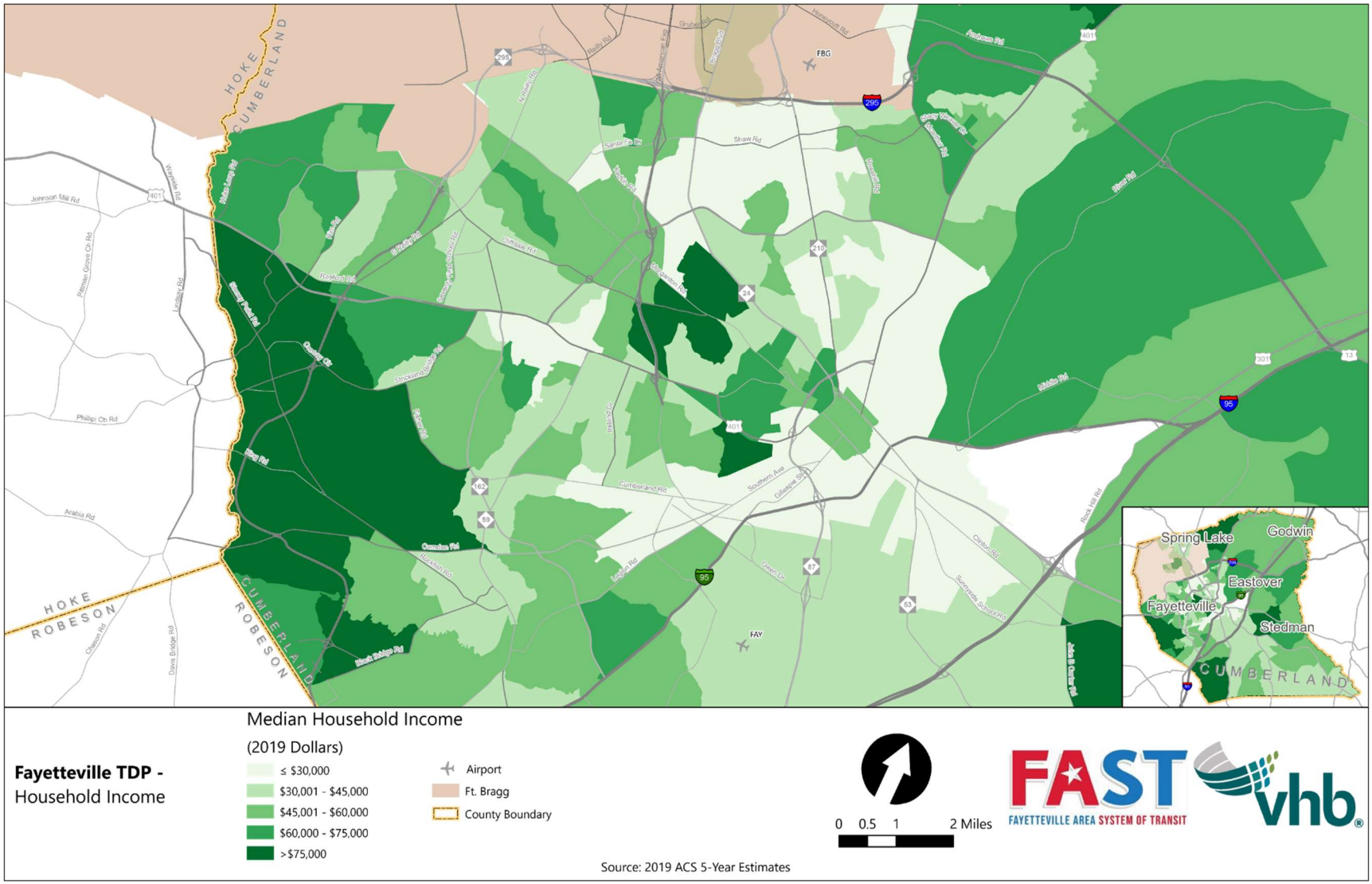
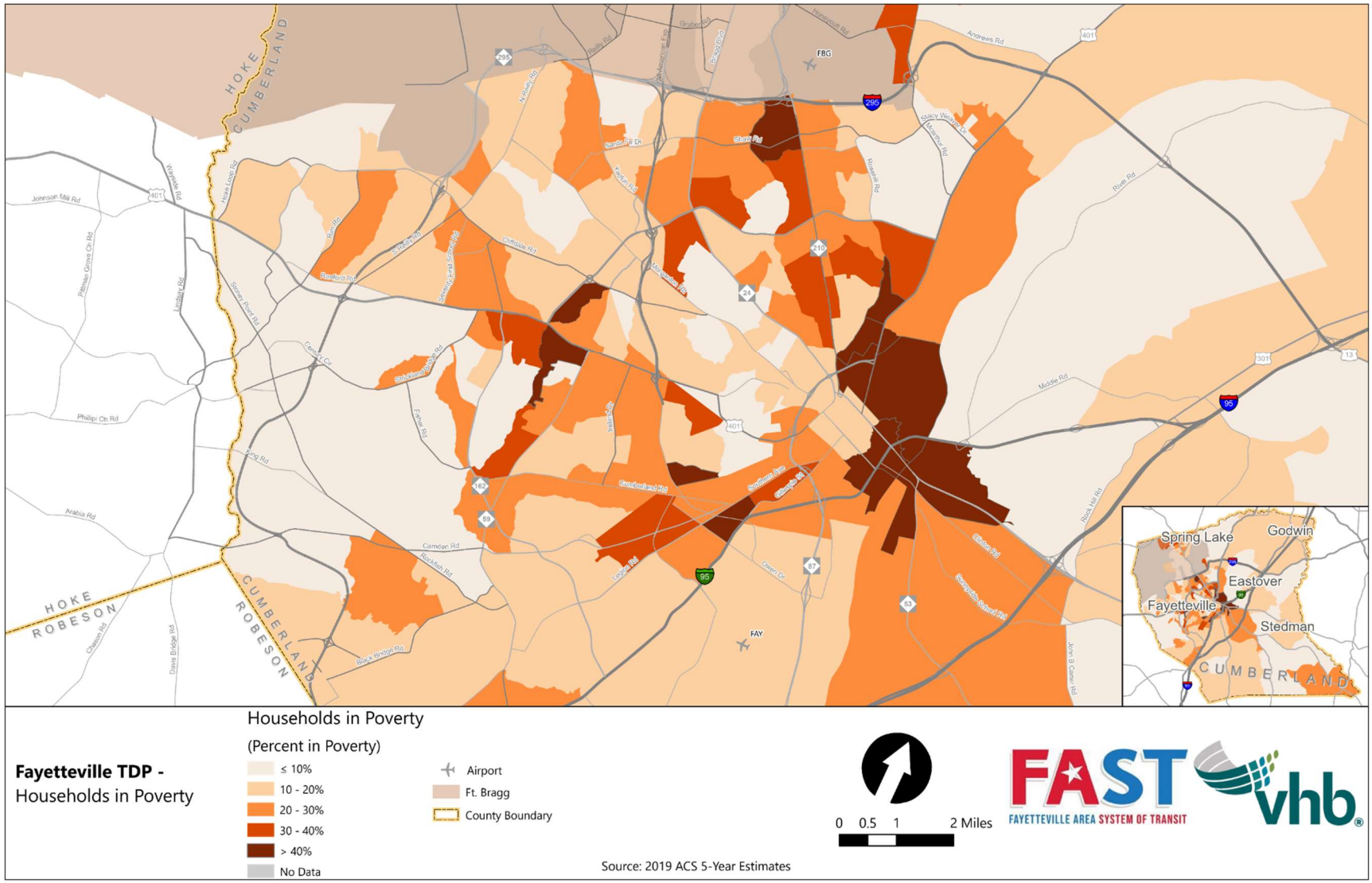


Figure 3-4 Households in Poverty



Children under the age of 18 constitute 23.5 percent of Fayetteville's population as shown in Table 3-3. This figure is slightly less than that of Cumberland County (24.7%) and slightly greater than that of North Carolina as a whole (22.4%). A large concentration of children live on the city's western side, particularly near the county border (Figure 3-5). Additional areas with higher concentrations of children include the northeast section of the county such as the towns of Eastover, Godwin and Spring Lake. The youth population of the county is largely centered in higher populated areas.

Table 3-3 Age Distribution ion Fayetteville, Cumberland County, and North Carolina

	City of Fayetteville	Cumberland County	North Carolina
Total Population	210,432	332,861	10,264,876
Percent Age Under 18	23.5%	24.7%	22.4%
Percent Age 65 and Greater	11.6%	11.6%	15.9%

Source: US Census ACS 2019 5-Year Estimates

In contrast to the high concentration of children who live on the city's western edge, Fayetteville's older adult population (i.e., aged 65+) primarily resides northwest of the CBD (Figure 3-6). A large concentration resides between Business U.S. 401, NC-210, and the All-American Highway. The county has a high concentration of older adults in the southeastern quadrant, near Eastover, and other less populated areas of Cumberland County.

Figure 3-5 Proportion Youth Population

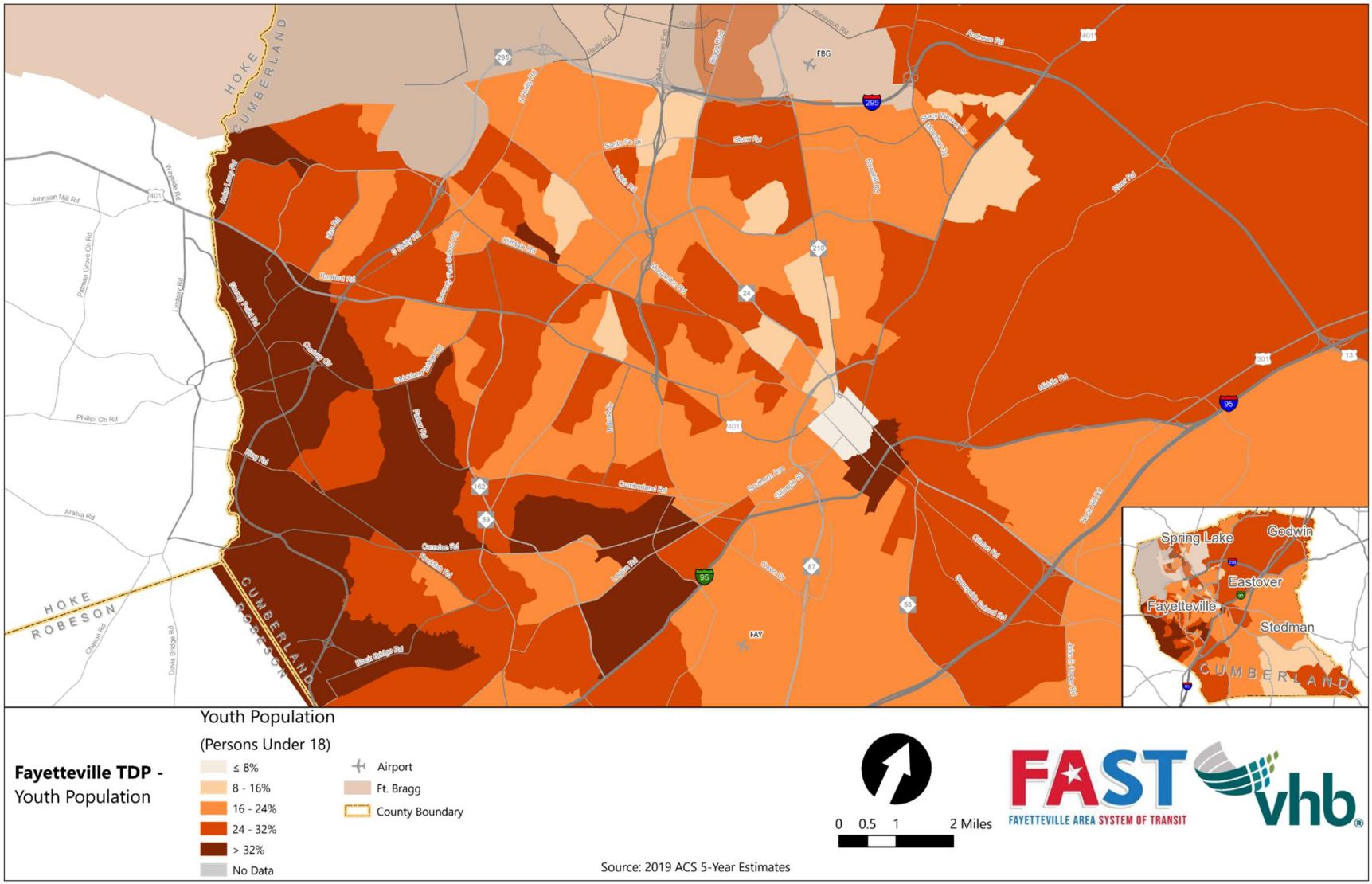
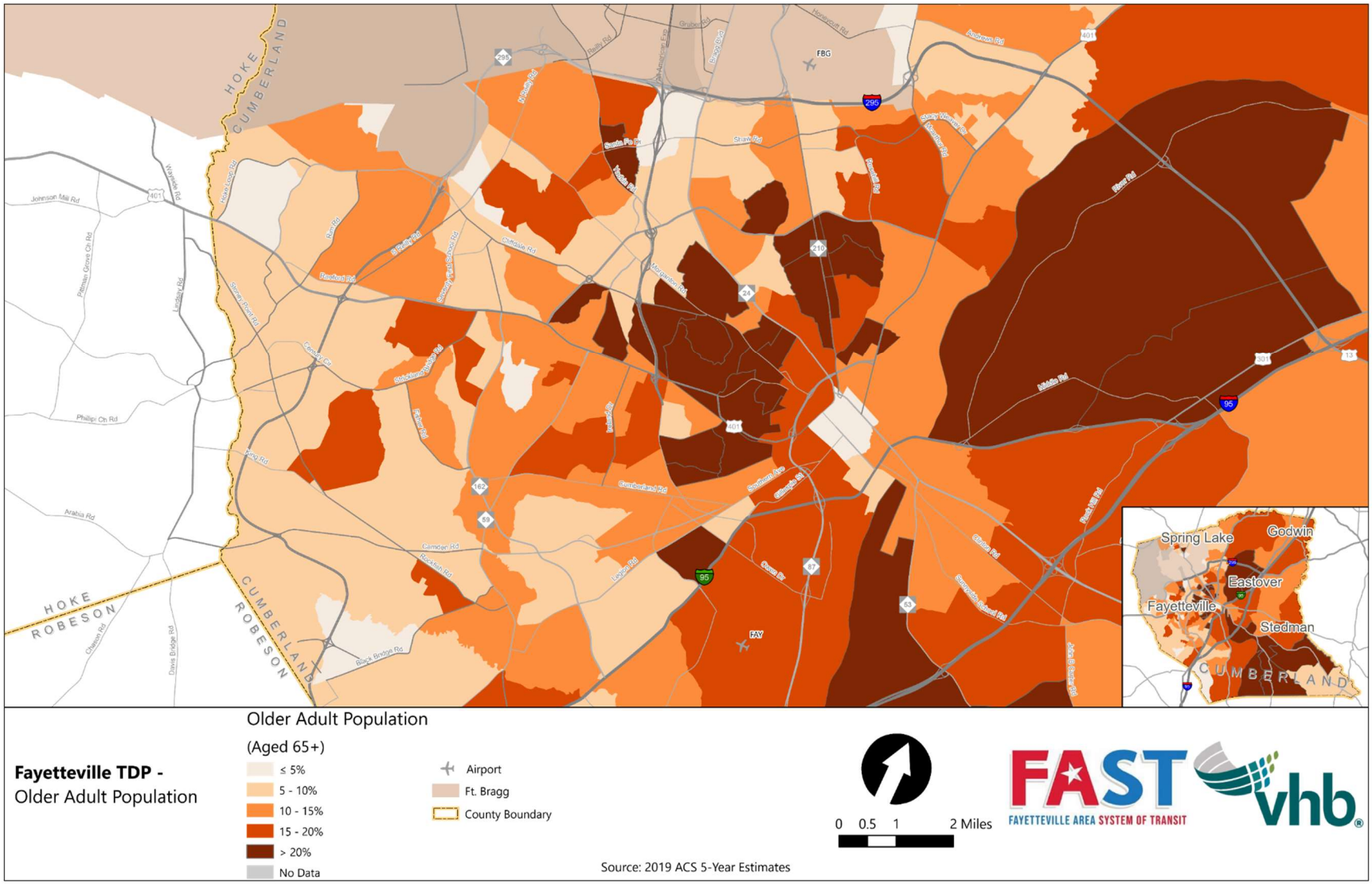


Figure 3-6 Proportion Older Adult Population



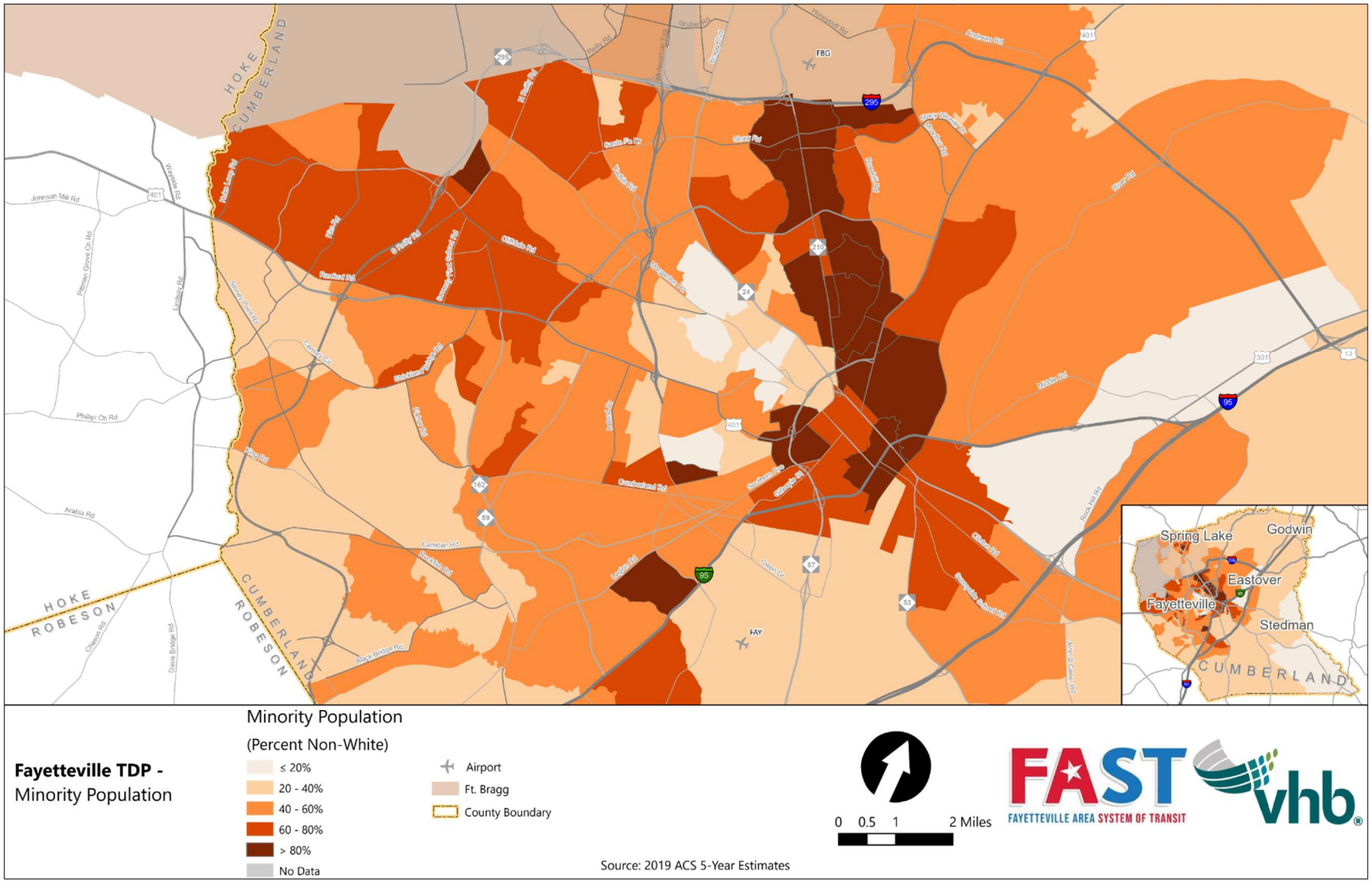
The City of Fayetteville and Cumberland County are 'minority-majority' localities in which the individuals who identify as a minority race outnumber those who identify as white (Table 3-4). In Fayetteville, 65.5 percent of the residents in the city identify as non-white. This figure is slightly higher than the County (60.2%) and significantly higher than North Carolina (39.5%). Concentrations of non-white residents predominately reside within the City of Fayetteville (Figure 3-7). Within the city, minority residents tend to live along the NC-210 corridor, around the CBD, and north of the U.S. 401 corridor near Fort Bragg as shown in Figure 3-7. The Town of Spring Lake is also home to a high proportion of minority residents.

Table 3-4 Race and Ethnicity in Fayetteville, Cumberland County, and North Carolina

	City of Fayetteville	Cumberland County	North Carolina
Total Population	208,501	334,728	10,439,388
Percent White	34.5%	39.8%	60.5%
Percent Black	41.8%	37.1%	20.2%
Percent Hispanic/Latino	12.6%	11.8%	10.7%
Percent Asian	3.6%	3.1%	3.3%
Percent Indigenous	1.0%	1.4%	1.0%
Percent Multiple or Other Race	5.9%	6.8%	4.3%

Source: US 2020 Census

Figure 3-7 Minority Population



Both the City of Fayetteville and Cumberland County have a higher proportion of households with no vehicle accessibility than the State of North Carolina (Table 3-5). The largest concentration of zero-vehicle households is in and immediately surrounding Fayetteville's CBD. Areas with zero-vehicle households largely mirror those areas with higher numbers of households in poverty. Additional areas with higher concentrations of zero-vehicle households include the NC-87 and NC-53 corridors south of the CBD and NC-210 and NC-24 north of the CBD (Figure 3-8).

Table 3-5 Housing Data for Fayetteville, Cumberland County, and North Carolina

	City of Fayetteville	Cumberland County	North Carolina
Total Housing Units	80,956	125,427	3,965,482
Percent No Vehicles Available	7.5%	6.8%	5.8%

Source: US Census ACS 2019 5-Year Estimates

Both the City of Fayetteville and Cumberland County have higher numbers of households with a person with a disability than the State of North Carolina (Table 3-6). Fayetteville has 30.1 percent of its households with at least one person who has a disability compared to just 26.2 percent of all households in the State. Households with individuals with a disability are not as concentrated in certain geographic areas as previously presented metrics, though clustering is present south of Fayetteville's CBD and on the east side of NC-210 as shown in Figure 3-9.

Table 3-6 Disability Characteristics in Fayetteville, Cumberland County, and North Carolina

	City of Fayetteville	Cumberland County	North Carolina
Total Housing Units	80,956	125,427	3,965,482
Percent with a Disability	30.1%	31.2%	26.2%

Source: US Census ACS 2019 5-Year Estimates

Figure 3-8 Zero-Vehicle Households

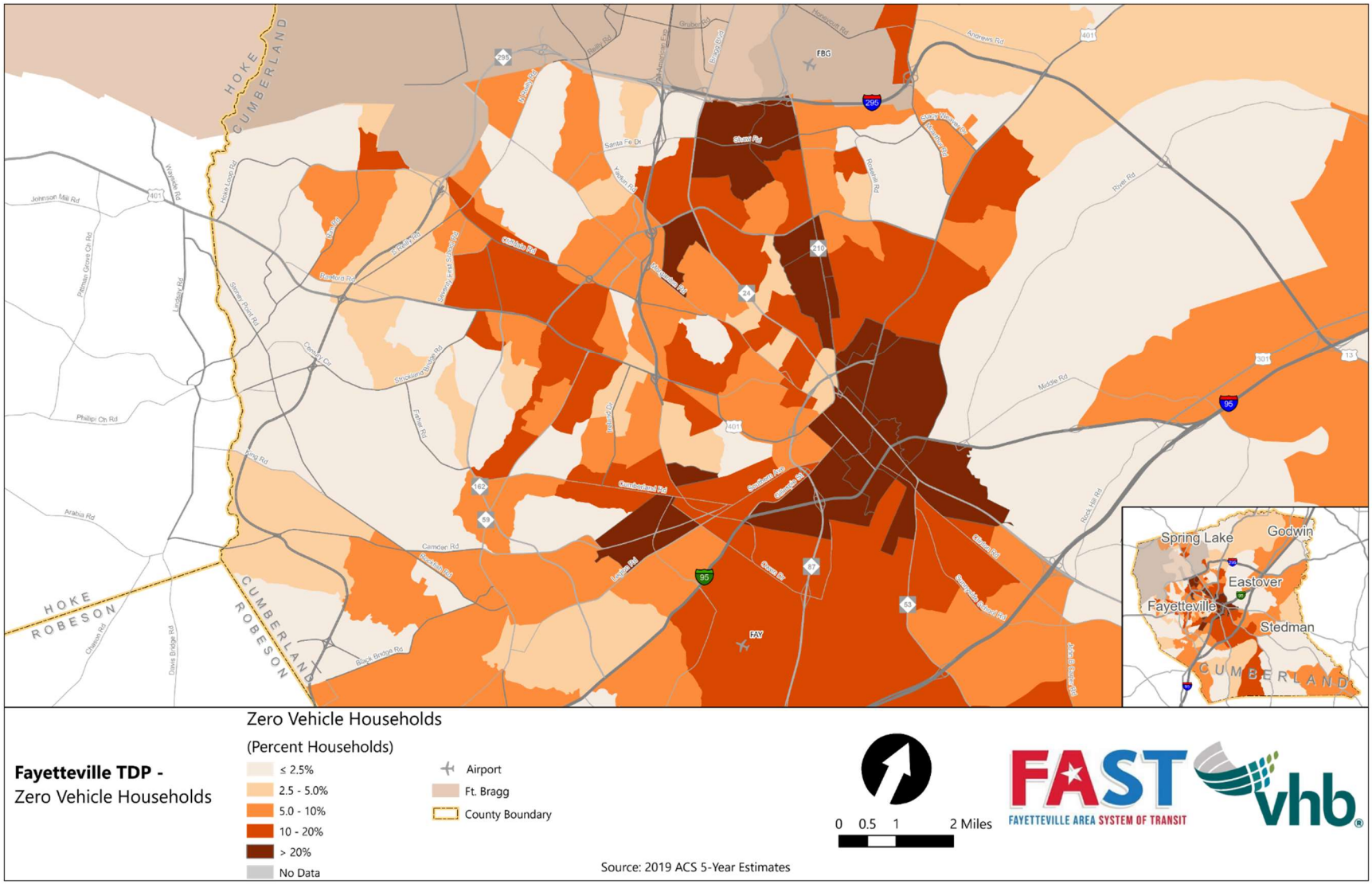
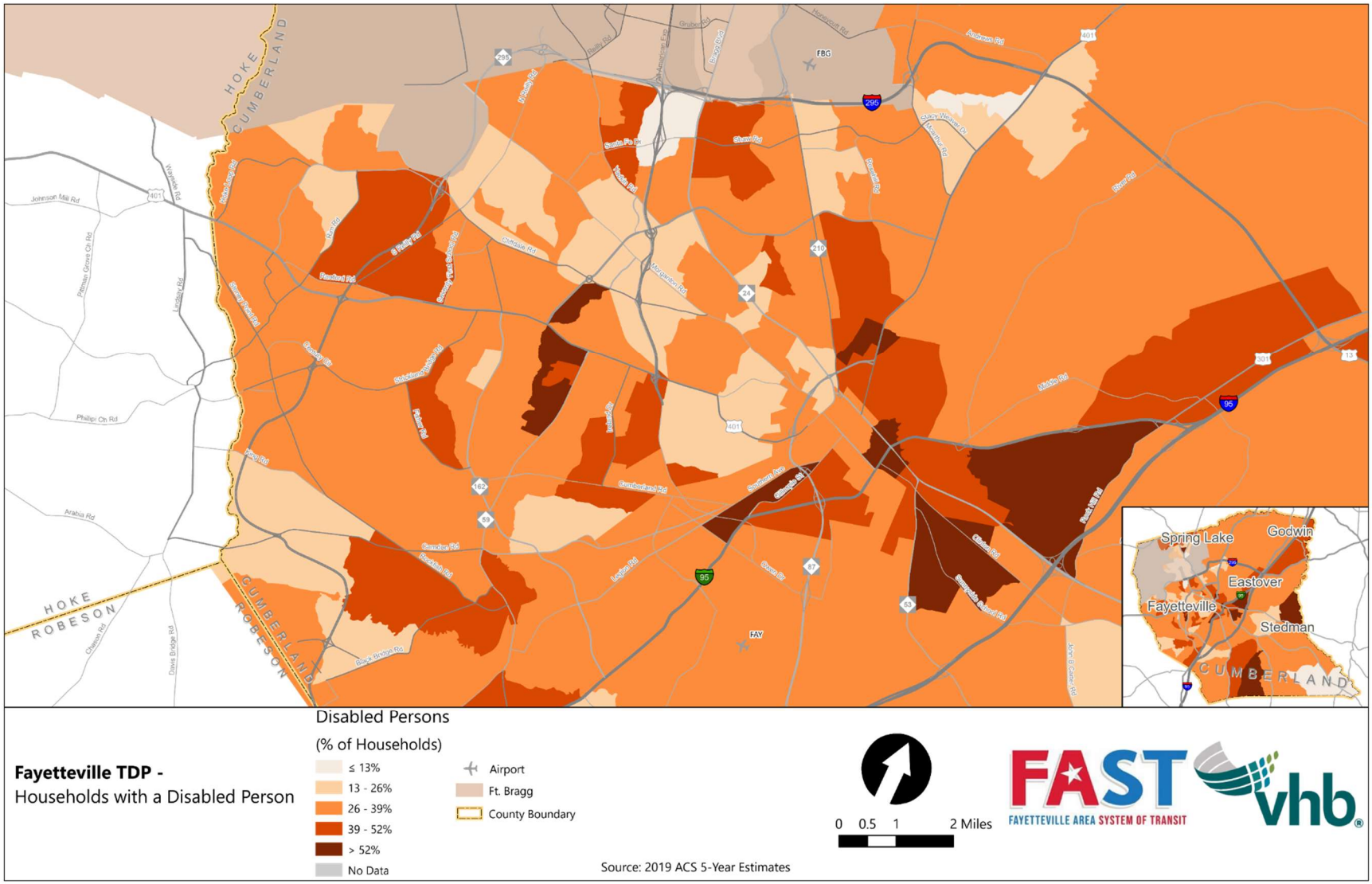


Figure 3-9 Households with a Disabled Person



To assist in identifying areas of the city with higher concentrations of individuals with demographic characteristics typically associated with transit usage, a Transit Need Index (TNI) was developed. The TNI uses a composite score based on eight measures: households in poverty, youth (aged 10 - 17), older adults (aged 65+), zero-vehicle households, households with a person with a disability, maximum education of high school or less, limited English proficiency (LEP) households, and foreign-born persons.

For each measure, if the block group is above the county average, the block group is given a score of one; otherwise, a score of zero is assigned. The scores for each measure are summed for each block group to calculate a TNI Score between zero and eight for the block group.

Based on the TNI assessment, the highest transit need areas can be found south of Fayetteville's CBD between Business I-95 and I-95 where several block groups obtained a score of six or seven on the TNI scale (Figure 3-10 and Figure 3-11). Additional corridors of interest due to high scores include U.S. 401, NC-210, NC-24, NC-87, and NC-53. The Town of Spring Lake has two block groups that score highly on the TNI scale, both along the NC-24 corridor. Most of Cumberland County scored moderately on the TNI scale with scores ranging from three to five out of a possible eight points

Figure 3-10 Transit Need Index Score of Cumberland County

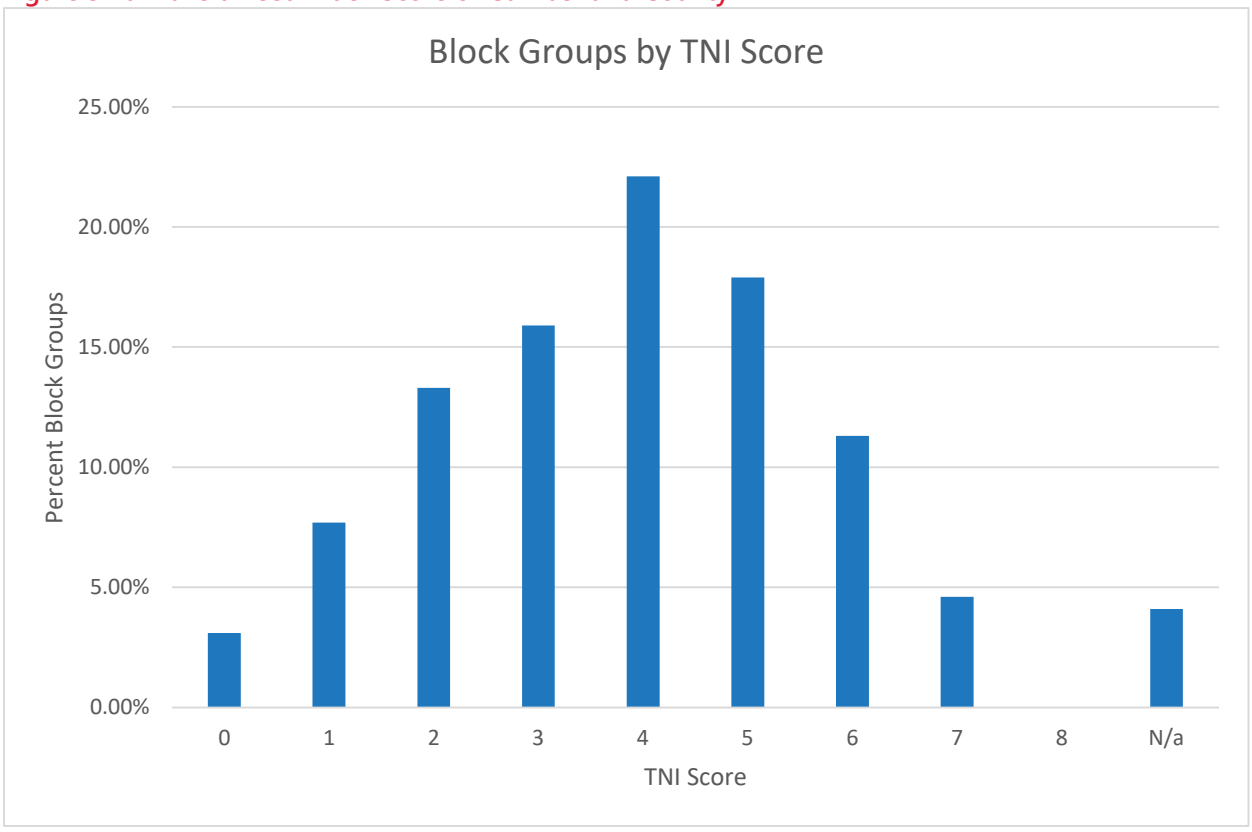
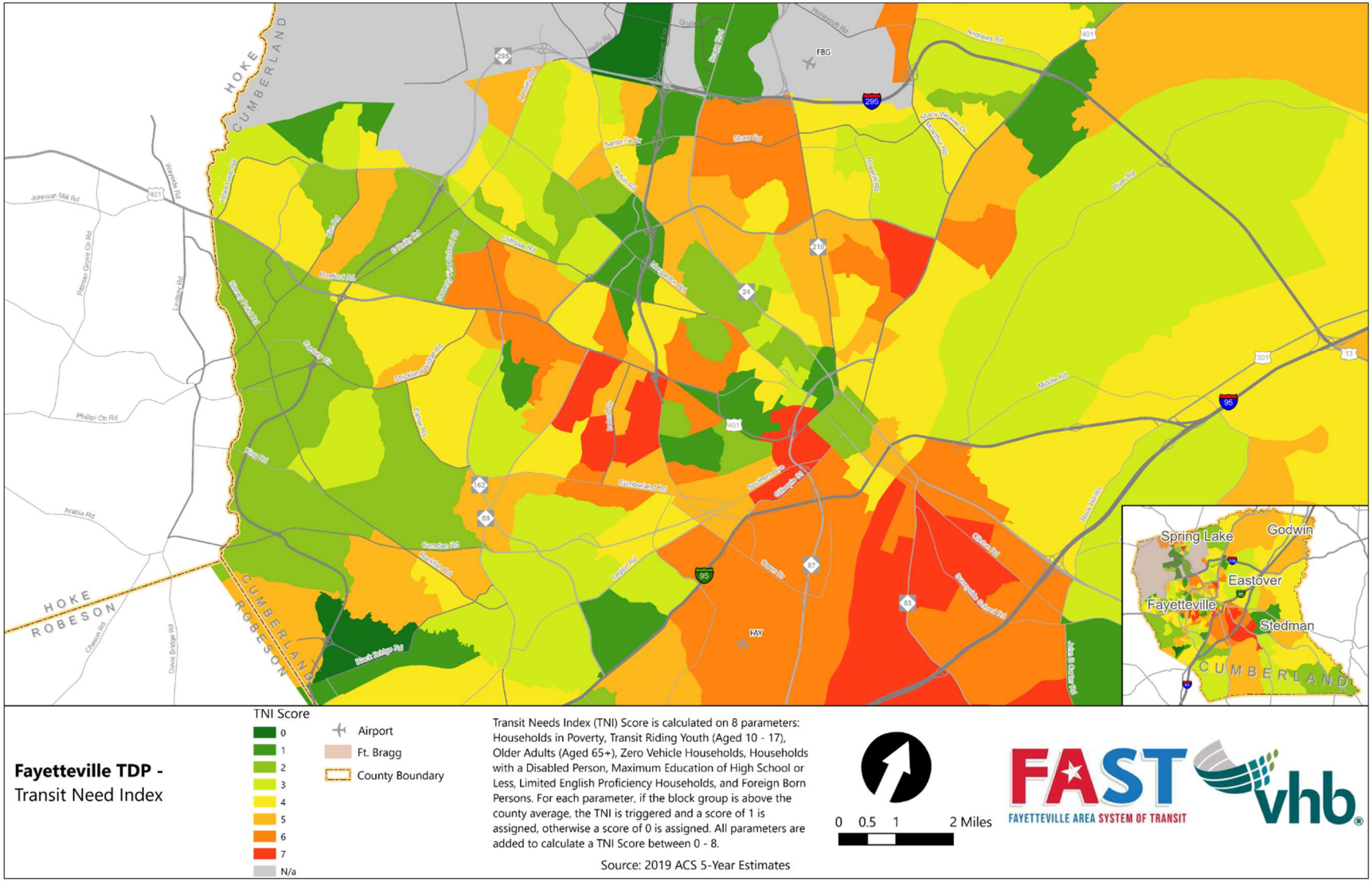


Figure 3-11 Transit Needs Index



Employment

The employment density for Cumberland County centers within the City of Fayetteville (Figure 3-12). Fayetteville's CBD is host to numerous employment opportunities. The city has a sprawled network of employment centers along several corridors including the All American Highway, Business U.S. 401, U.S. 401, NC-24, NC-59, and Southern Avenue / Legion Road. An additional employment cluster exists in Spring Lake near the intersection of NC-24 and NC-210. Major employers can be found in Table 3-7.

Both the City of Fayetteville and Cumberland County have had stable employment levels between 2010 and 2018. Employment opportunities have increased along the Business I-95, All American Highway, U.S. 401, NC-53, and Morganton Road (Figure 3-13). However, employment opportunities have decreased along the NC-24, NC-210, southern NC-59, and Camden Road corridors. Despite areas of employment loss, the county gained approximately 6,600 employment positions between 2010 and 2018.

The median unemployment rate for Cumberland County was 7.5 percent. There is a concentration of high unemployment block groups near Fayetteville's CBD along the NC-24, Business I-95, and NC-210 corridors (Figure 3-14). Additional concentration areas include the Southern Avenue / Legion Road corridor in Fayetteville and southern Spring Lake. Elevated unemployment levels can be seen in more rural Cumberland County, particularly along the eastern edge of the County.

Table 3-7 Major Employers of Cumberland County

Employer	Industry	Size (# of employees)
Department of Defense	Military	5,000+
Cumberland County Schools	Education	5,000+
Cape Fear Valley Health Systems	Healthcare	5,000+
Wal-Mart Associates Inc.	Retail Trade	2,000 – 4,999
Goodyear Tire and Rubber Inc	Manufacturing	2,000 – 4,999
County of Cumberland	Government	2,000 – 4,999
Veterans Administration	Healthcare	1,000 – 1,999
City of Fayetteville	Government	1,000 – 1,999
Fayetteville Technical Community College	Education	250 – 499
Food Lion	Retail Trade	250 - 499

Figure 3-12 Employment Density (2018)

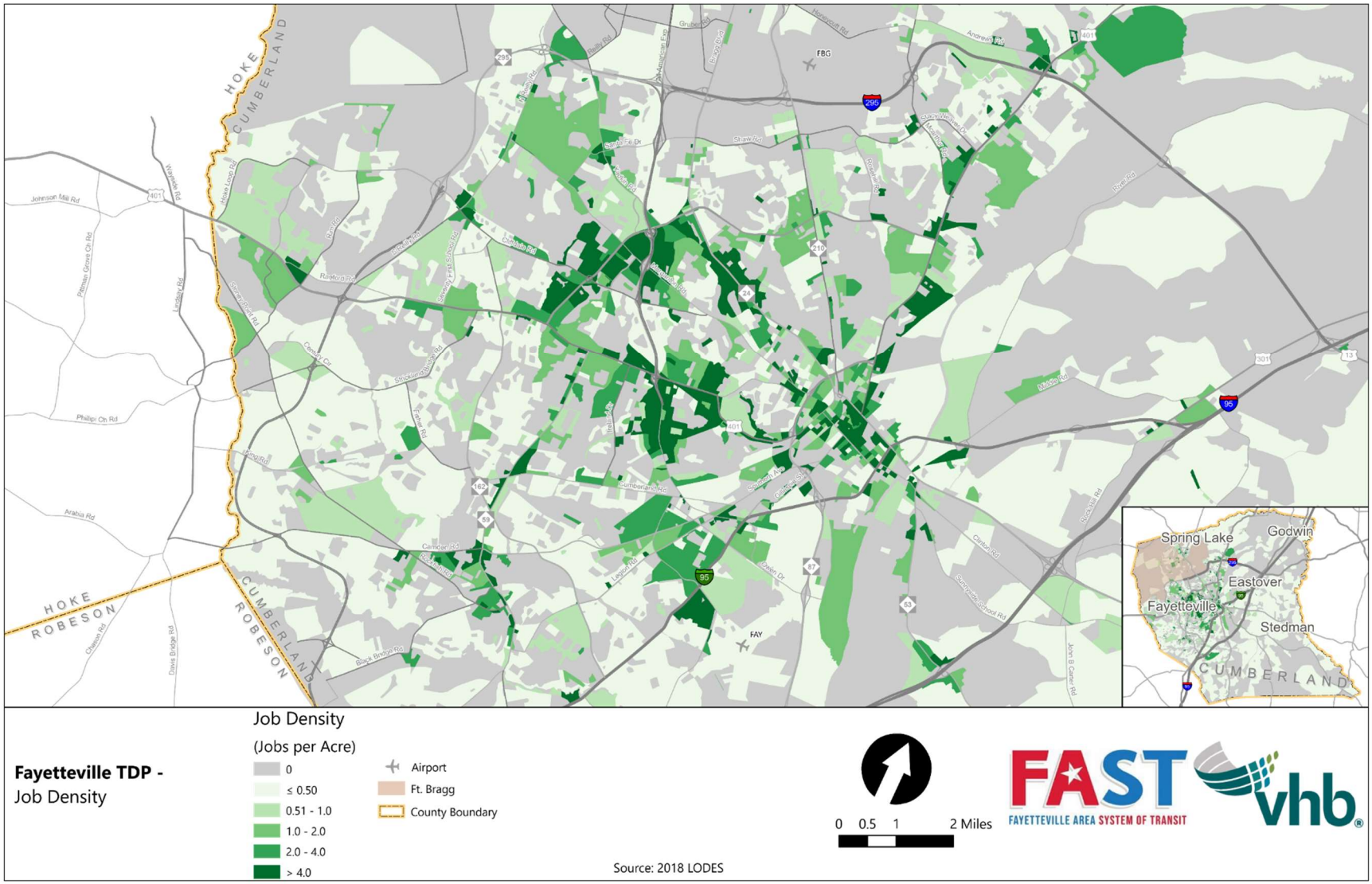


Figure 3-13 Employment Change (2010-2018)

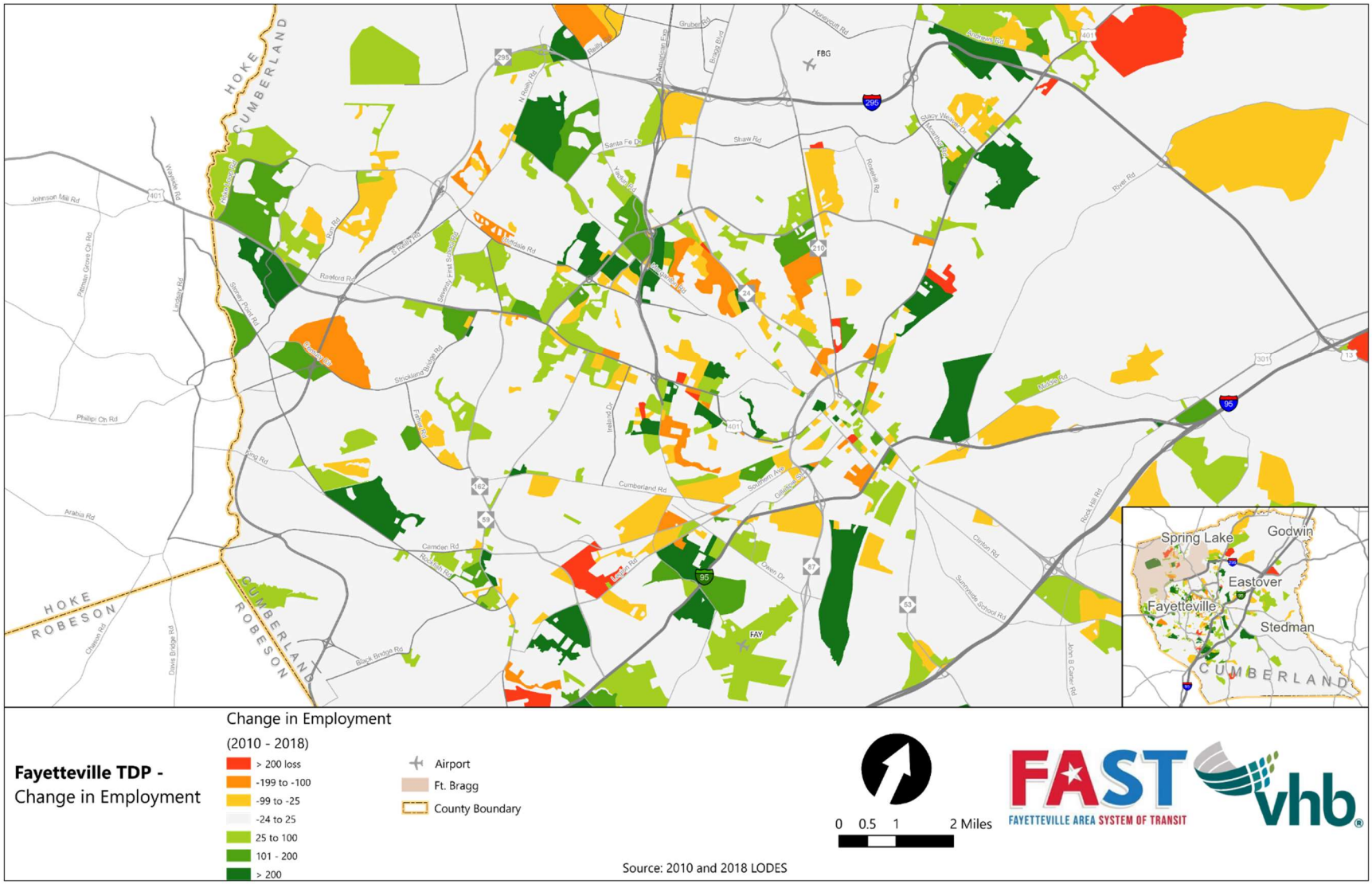
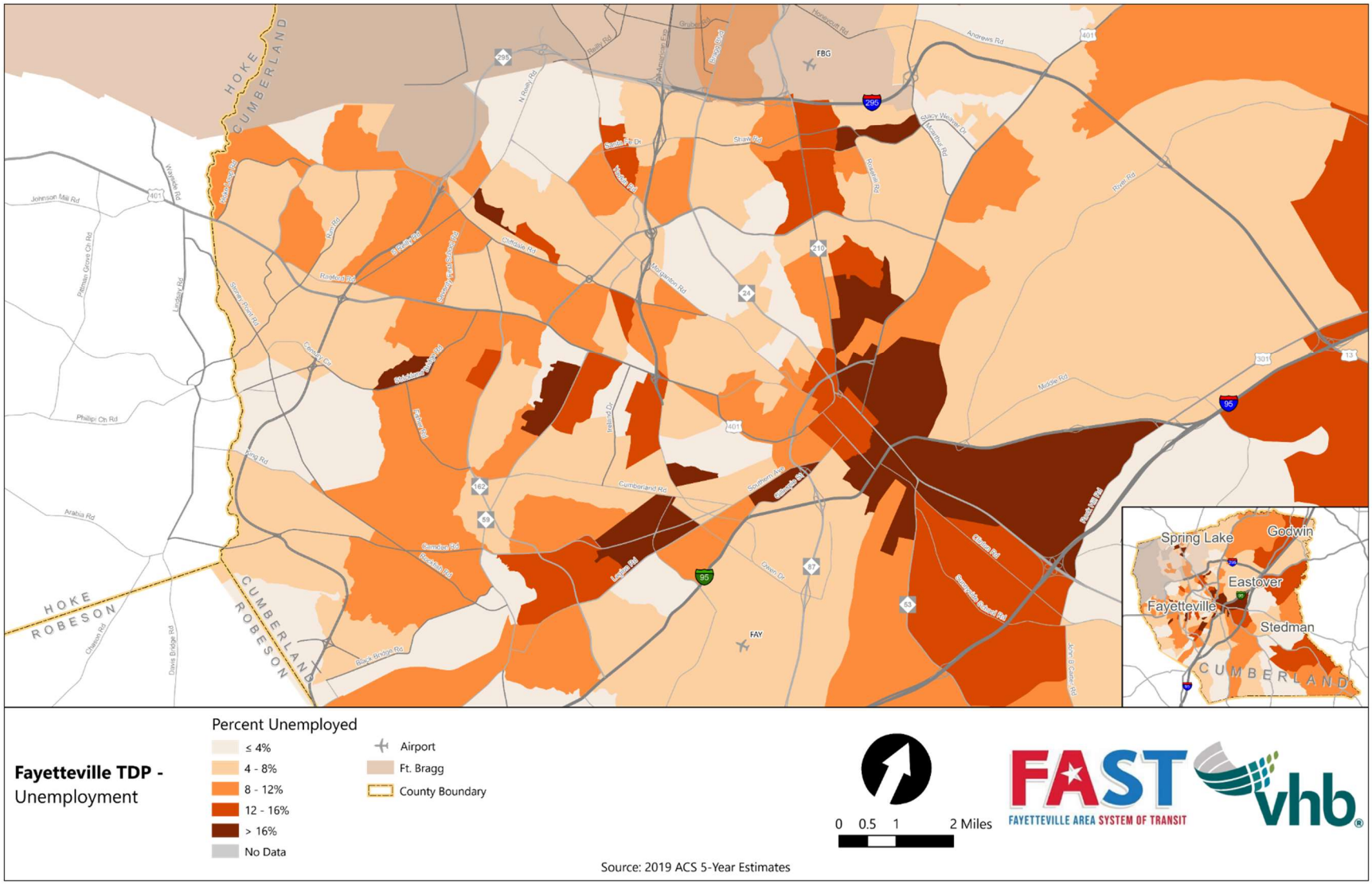


Figure 3-14 Unemployed Persons



The Transit Cooperative Research Program (TCRP) has published data which can help guide communities on transit investment decisions. Specifically, TCRP has published minimum thresholds of dwelling unit and employment density to support various levels of transit investment. As shown in Table 3-8, lower densities support lower levels of investment. These levels are meant to act as a guide or "rule of thumb" and should not be assumed to dictate the locations of transit investments. It is often necessary for a transit route to go through areas that are less transit supportive to connect areas with higher transit supportiveness.

Figure 3-15 is a composite map that indexes dwelling unit and employment densities to show the level of transit investment supported in these areas. Fayetteville's CBD includes areas of high and very high investment areas due to its employment center concentration. Moving away from CBD, minimum and high investment areas sit along the U.S. 401 corridor north of downtown and the U.S. 401 and NC-24 corridors west of the CBD. Areas near the convergence of Business-401, the All-American Highway, and U.S. 401 are high transit investment areas as is the Owen Drive corridor just south of this hotspot. Cliffdale Road west of Business U.S. 401 has a large stretch of minimum to high transit investment areas on its northern side. Additional clusters of high to very high transit investment areas can be observed near the Fayetteville airport, near major highways and interchanges, and within or near Fort Bragg.

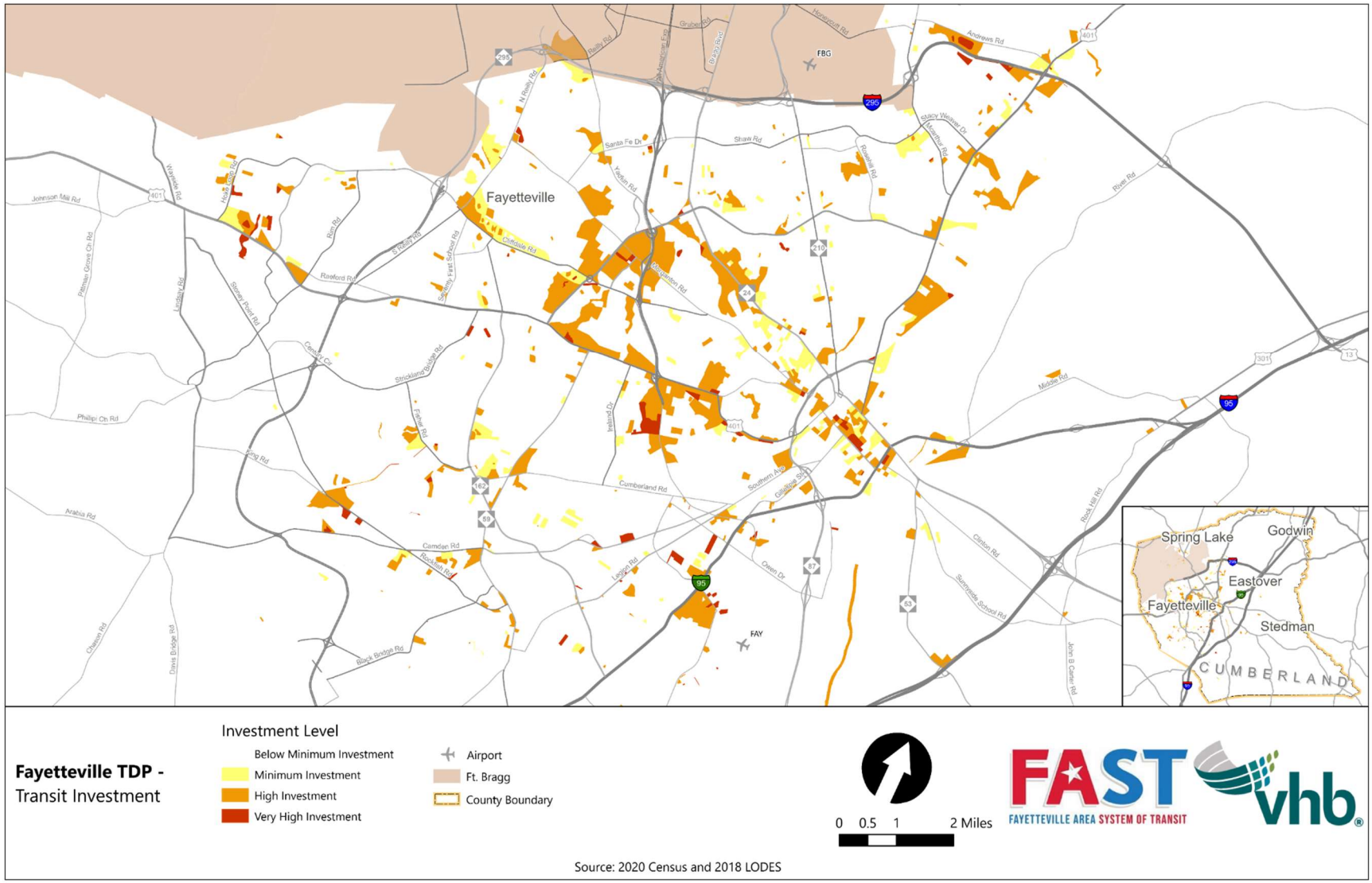
Table 3-8 Transit Investment Thresholds

Level of Transit Investment	Dwelling Unit Density Threshold[1]	Employment Density Threshold[2]
Minimum Investment	4.5 dwelling units/acre	4 employees/acre
High Investment	6 dwellings units/acre	5 employees/acre
Very High Investment	28 dwellings unites/acre	27 employees/acre

[1] TRB, National Research Council, TCRP Report 16, Volume 1 (1996), Transit and Land Use Form, November 2002, MTC Resolution 3434 TOD Policy for Regional Transit Expansion Projects.

[2] Based on a review of research on the relationship between transit technology and employment densities.

Figure 3-15 Transit Investment Level Areas



Land Use

The City of Fayetteville can be characterized as a low-density residential community (Figure 3-17). Higher density residential areas border larger travel corridors or cluster around commercial or employment nodes. The majority of the residential zoning for the city occurs west of the City's CBD. Employment centers are scattered throughout Fayetteville with a primary focus south of the city center along the Business I-95 corridor toward the airport (Figure 3-19). Additional employment centers are located near I-295 and U.S. 401. A significant regional commercial and employment center occupies a stretch of Business U.S. 401 and the All-American Highway. The current zoning pattern focuses employment and commercial activities along major corridors with residential filling in the gaps. To the east side of the city lies conservation and rural development, more in-line with the rest of Cumberland County.

From a county perspective, most of the land use is classified as an agricultural district (Figure 3-18). Concentrations of residential zoning can be seen near Fayetteville on the west side of the I-95 corridor and within established towns. Low-density residential zoning transitions to an agricultural district moving away from Fayetteville. Current and planned industrial centers are largely concentrated between the I-95 and Business I-95 corridors near the Fayetteville Regional Airport and generally along the I-95 corridor (Figure 3-18). Commercial zoning is largely confined within and immediately adjacent to the existing towns of the County. Conservation corridors are located near riparian features such as the Cape Fear River that cuts through the center of the County.

The County's 2030 Land Use plan calls for an extension of urban and urban fringe growth (Figure 3-20). Additional urban area growth is centered on Fayetteville with extensions along the U.S. 401, NC-53, NC-87, NC-24, and Chicken Foot Road corridors. The Fort Bragg and Spring Lake communities are classified as urban areas. Urban fringe extends out from the urban area and act as a step back from urban density as it transitions into community growth or rural areas. This classification can be seen in the Town of Eastover. Other established towns and residential areas are classified as community growth areas, which predominately extend along the NC-24 and US-301 corridors. The remainder of the County is classified as either rural or conservation, with conservation lands existing primarily along riparian corridors

Opportunity Zones

Figure 3-16 represents opportunity zones within Cumberland County encompassing the City of Fayetteville. Opportunity zones serve as an economic development tool showing distressed areas that would offer the highest rate of return on investment from economic development. Developers select opportunity zones for investment opportunities within a specific region. The regions that have the highest density of opportunity zones includes the area where Interstate 210, Interstate 24 and Interstate 87 meet. The other region that represents an opportunity zone is the area where Interstate 162 and Interstate 401 converge.

Figure 3-16 Fayetteville Opportunity Zones

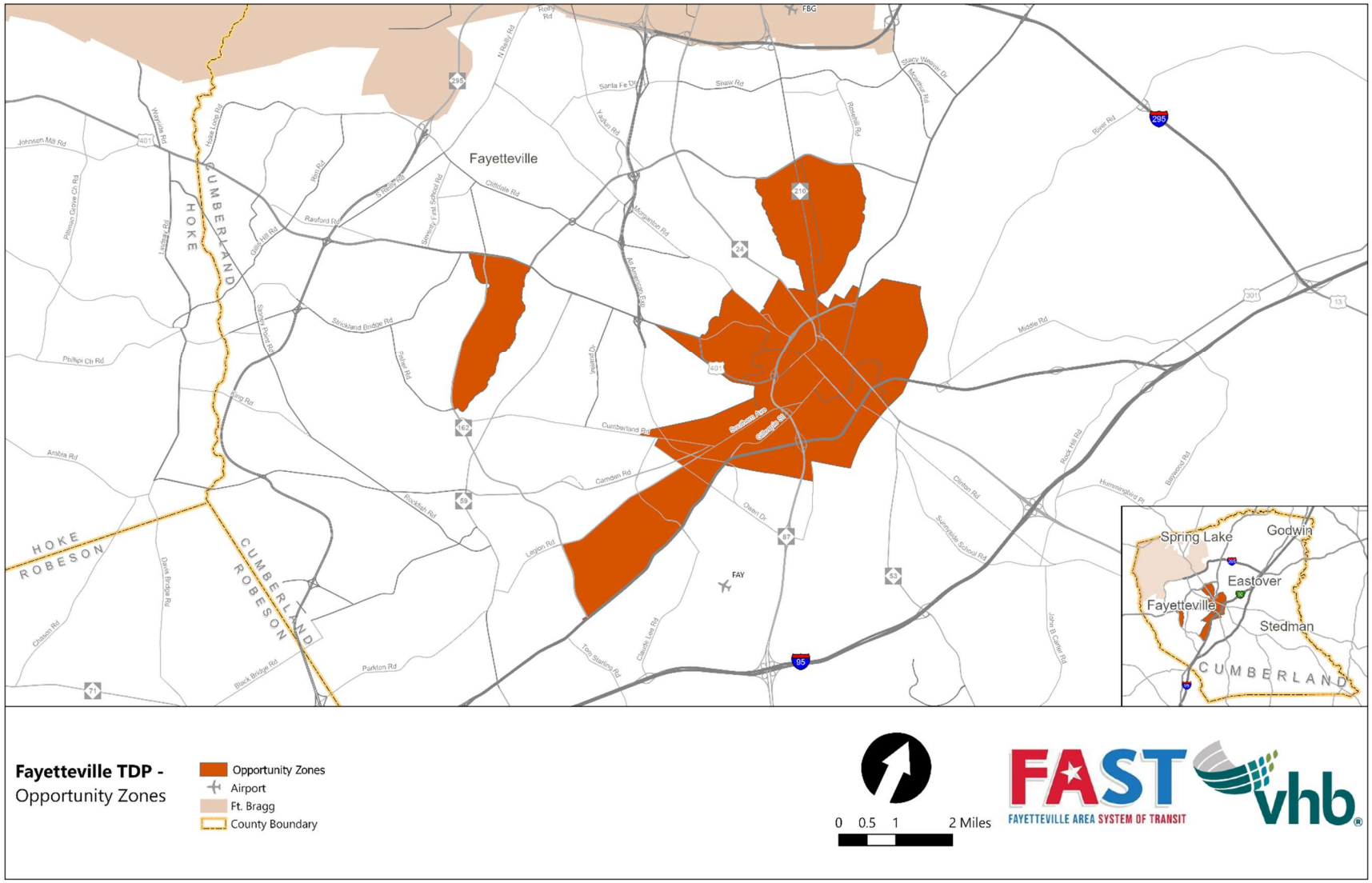


Figure 3-17 Fayetteville Land Use

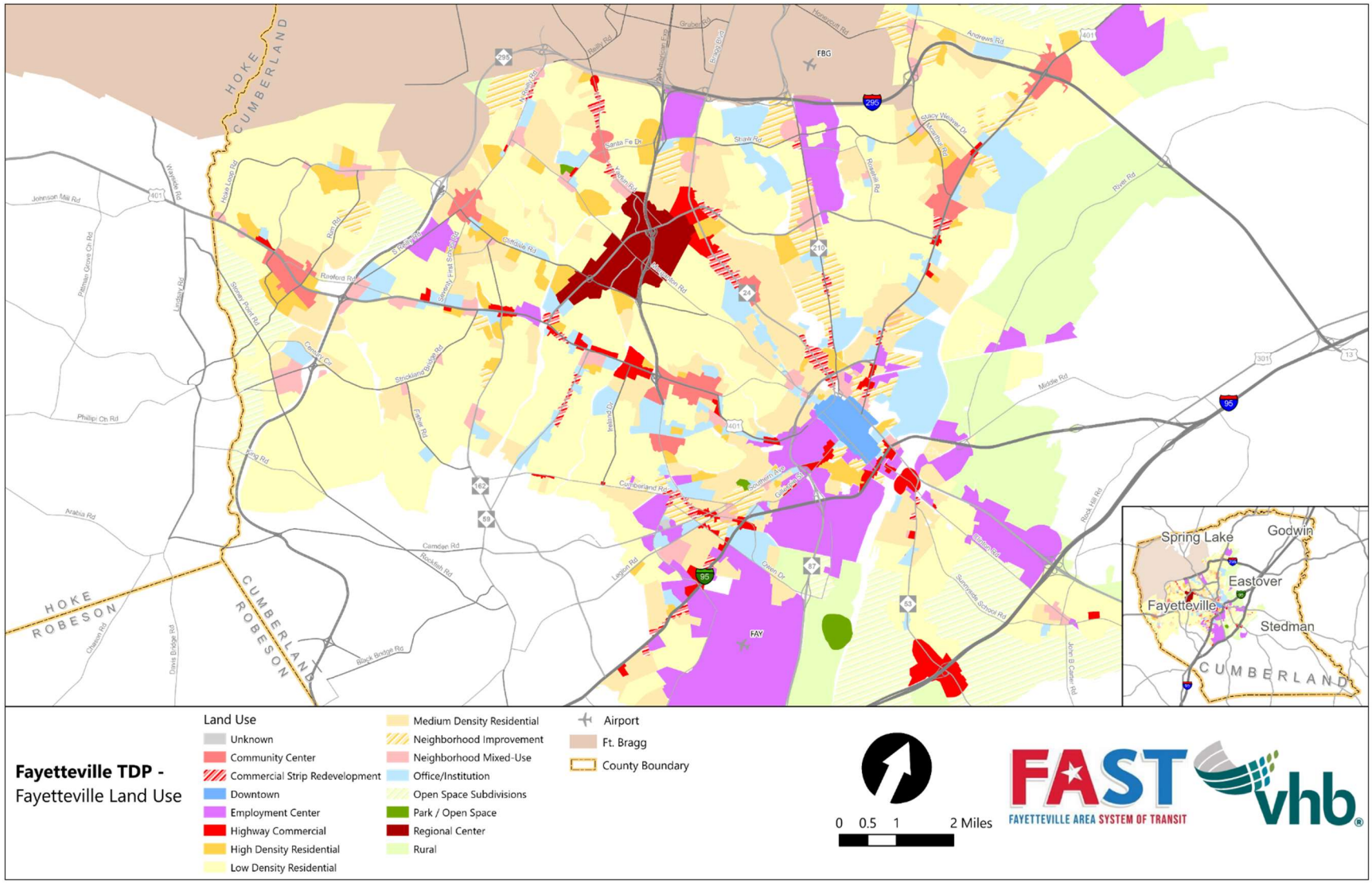


Figure 3-18 Cumberland County Zoning

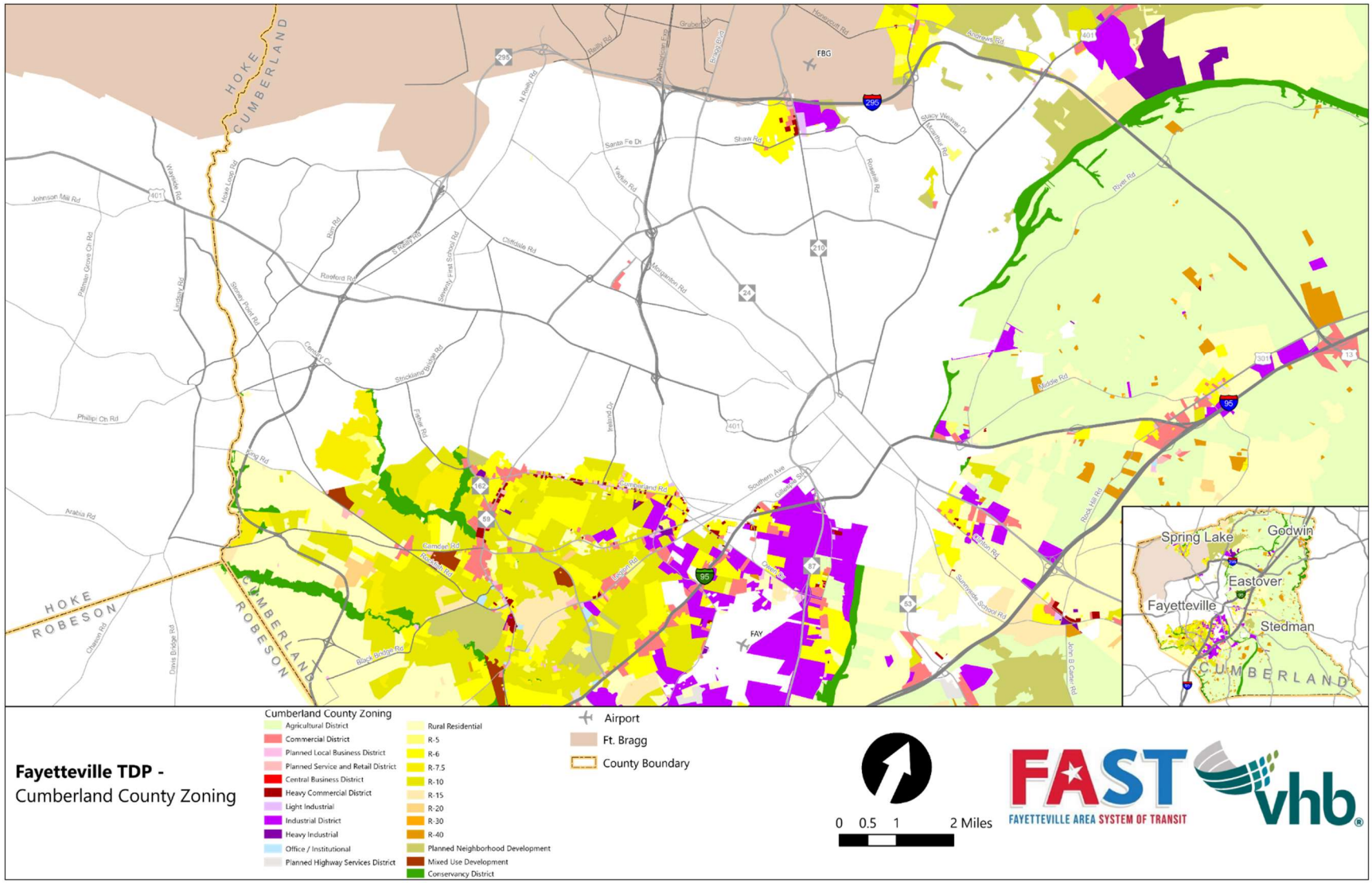


Figure 3-19 Fayetteville Land Use and Cumberland County Zoning

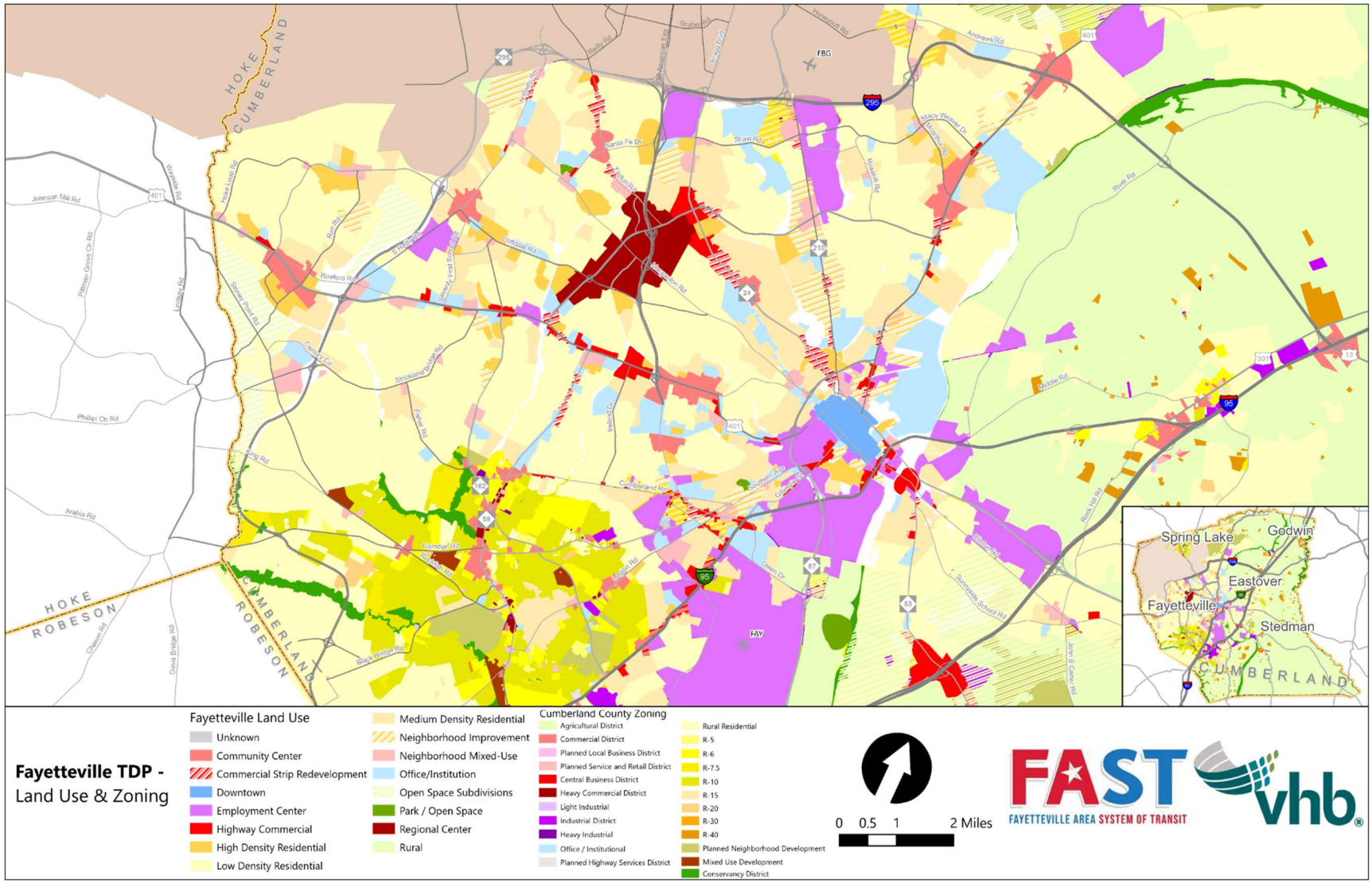
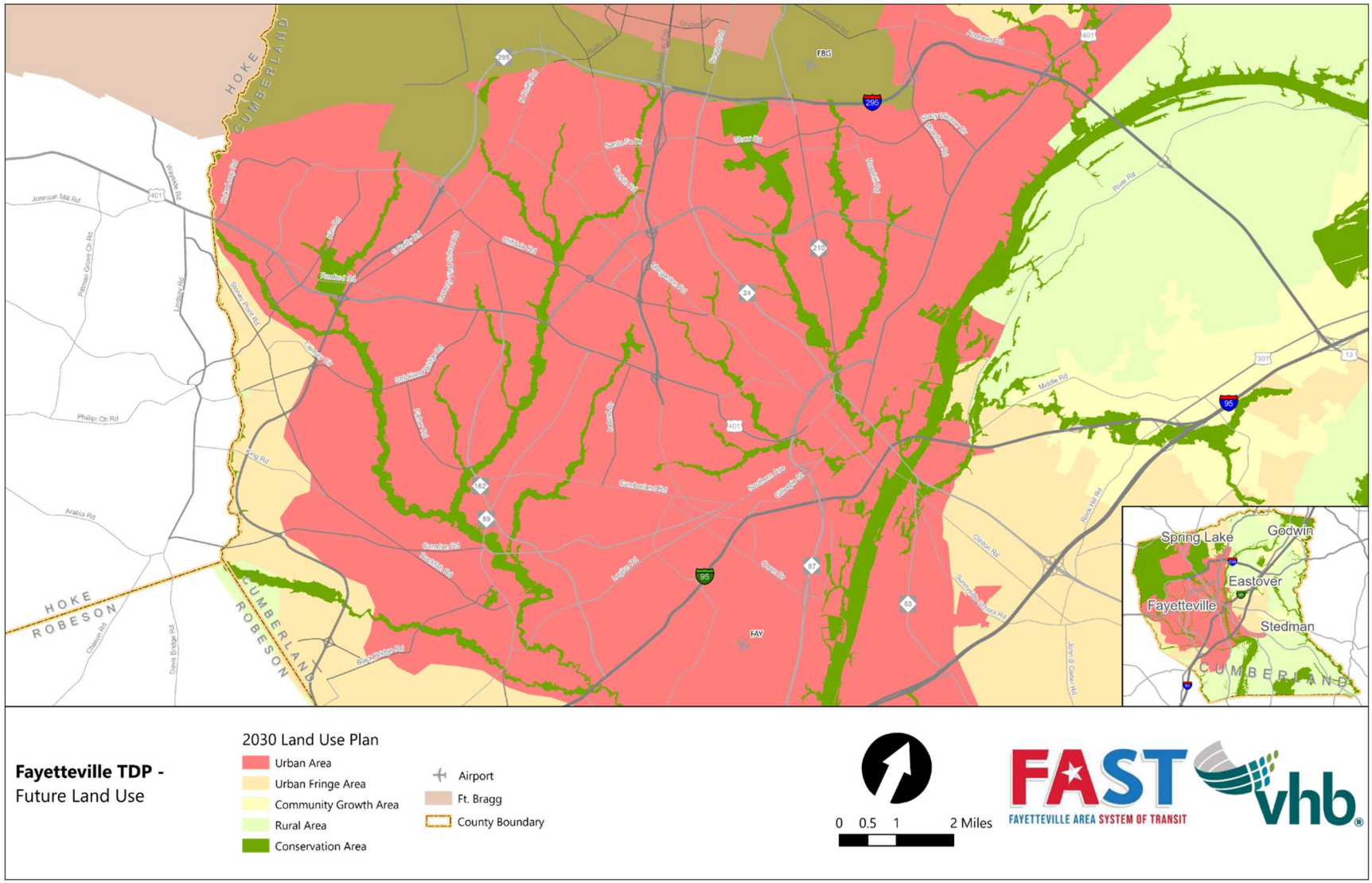


Figure 3-20 Cumberland County 2030 Land Use Plan



Activity Centers

There are several major activity centers in Fayetteville or its immediate vicinity. These activity centers draw residents and tourists alike. In 2019, the Fayetteville Convention and Visitors Bureau estimated that monthly visitor room nights ranged between 120,000 and 130,000. The larger activity centers are described in the following section, and all are displayed on Figure 3-21.

Foremost is Fort Bragg, a U.S. Army military installation. It is one of the largest military installations in the world with over 50,000 personnel and over 10,000 contractors. It is estimated that the base supports approximately a quarter million people including military families, contractors, retired personnel, and others.

Fayetteville Regional Airport, also known as Grannis Field, served 480,000 passengers annually before the COVID-19 pandemic. The airport has two commercial carriers, American Airlines and Delta Air Lines, which travel directly to three destinations: Atlanta, Charlotte and Dallas/Fort Worth. Passengers can reach over 300 destinations with one-stop service.

Fayetteville has a variety of museums in downtown that offer both tourists and residents access to culturally enriching activities and events. The Fascinate U-Children's Museum attracts 50,000 visitors per year. The Museum of Cape Fear offers visitors a variety of historical buildings to visit including the famous "1897 Poe House," which was home to a local businessman.

The Fayetteville Area Transportation and Local History Museum provides visitors access to the early history of development within Fayetteville. The Airborne and Special Operations serves as an academic and cultural center for military history. The Market House Museum serves as a vital historical landmark on the National Historic Registry. The museum offers a local farmers market that provides fresh seasonal goods to be purchased every Saturday morning from April through December.

Segra Stadium is located within Downtown Fayetteville and is home to the Fayetteville Woodpeckers, a Minor League Baseball team associated with the Houston Astros. The ballpark accommodates approximately 5,200 spectators, but that figure can increase during special events. Additionally, the Crown Coliseum is located south of Fayetteville near downtown Hope Mills. This facility serves as a multi-purpose arena and is primarily home to the Fayetteville Marksmen, members of the Southern Professional Hockey League, and the Fayetteville Fury, men's and women's teams that are members of the National Indoor Soccer League. The stadium has a maximum capacity of 10,000 individuals.

Fayetteville State University is located north of Downtown Fayetteville near the Veteran Affairs hospital. The university is a historically black public regional university established in 1867 that focuses on providing students with a basic liberal-arts foundation, specialized professional training and graduate level programs. The University campus is approximately 200 acres and has an enrollment of about 6,000 students.

Located north of Fayetteville, Methodist University is regionally accredited by the Southern Association of Colleges and Schools Commission on Colleges. Methodist University offers more than 80 majors and concentrations. The university campus is approximately 640 acres and has an enrollment of 2,350 students for both undergraduate and postgraduate programs.

Fayetteville Technical Community College is located west of Downtown Fayetteville. The College provides over 190 occupational, technical, general education, college transfer and continuing education programs

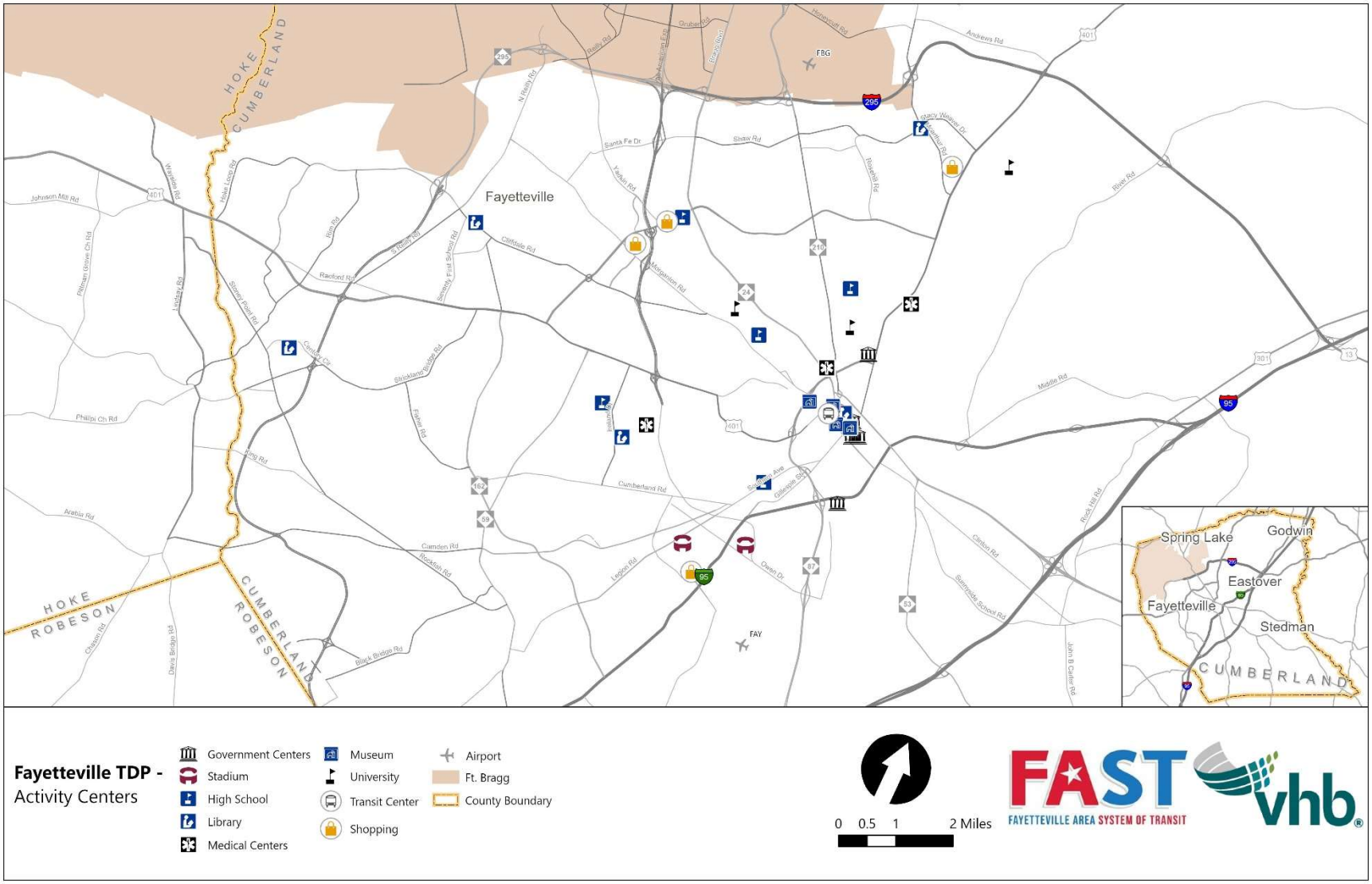
throughout multiple campuses in North Carolina. The university campus is approximately 150 acres and has an enrollment of approximately 32,500 students. Fayetteville Technical Community College has one of the largest continuing education programs in the country and ranks as third largest community college in the state.

Located southwest of Downtown Fayetteville, Cape Fear Valley Hospital is part of the Cape Fear Valley Health System, North Carolina's eighth largest health system. Cape Fear Valley Health specializes in providing cardiac care, cancer treatment, pediatrics, rehabilitation, etc. The hospital system has a capacity of 490 beds with a request for expansion submitted to supply the necessary beds to account for accelerated population growth.

Located north of downtown, Fayetteville Veteran Affairs Medical Center is 10 miles from Fort Bragg and provides medical services to service members in the region. The facility offers services such as general surgery, amputee services, mental health, visually impaired service, etc. The facility has a capacity of 127 hospital beds separated between general medical and long-term care.

The Cross Creek Shopping mall is located west of Downtown, and adjacent to Fayetteville Technical Community College. The facility contains 150 retail establishments within over 1,000,000 sq. ft of retail space. The Cross Creek mall is the only regional mall within a 60-mile radius and was awarded the 2014 Best Non-residential property by the Fayetteville/Cumberland County Joint Appearance Commission.

Figure 3-21 Fayetteville Activity Centers



Pedestrian and Bicycle Facilities

The pedestrian facilities network of Cumberland County is largely restricted to the City of Fayetteville and Fort Bragg area (Figure 3-22). The downtown core of Fayetteville is well connected for pedestrian use. Pedestrian facilities are generally present along major routes within Fayetteville and some residential neighborhoods. Proposed and planned pedestrian facilities are largely restricted to inside the City of Fayetteville. Additional pedestrian facilities are planned for the Town of Spring Lake and along the US-301 corridor.

The existing bicycle network is exclusively confined to the City of Fayetteville (Figure 3-23). Much of the bicycle network consists of multi-use paths or bicycle lanes in short segments not conducive for recreational riding or trips. The proposed bicycle network is largely within the City of Fayetteville with regional connectors planned to Fort Bragg, Spring Lake, and Stedman. Planned and proposed bicycle routes will follow several regional corridors such as NC-24, U.S. 401, and NC-210. Additional facilities are located along local and secondary roads within Fayetteville and Fort Bragg.

Figure 3-22 Existing and Proposed Pedestrian Facilities

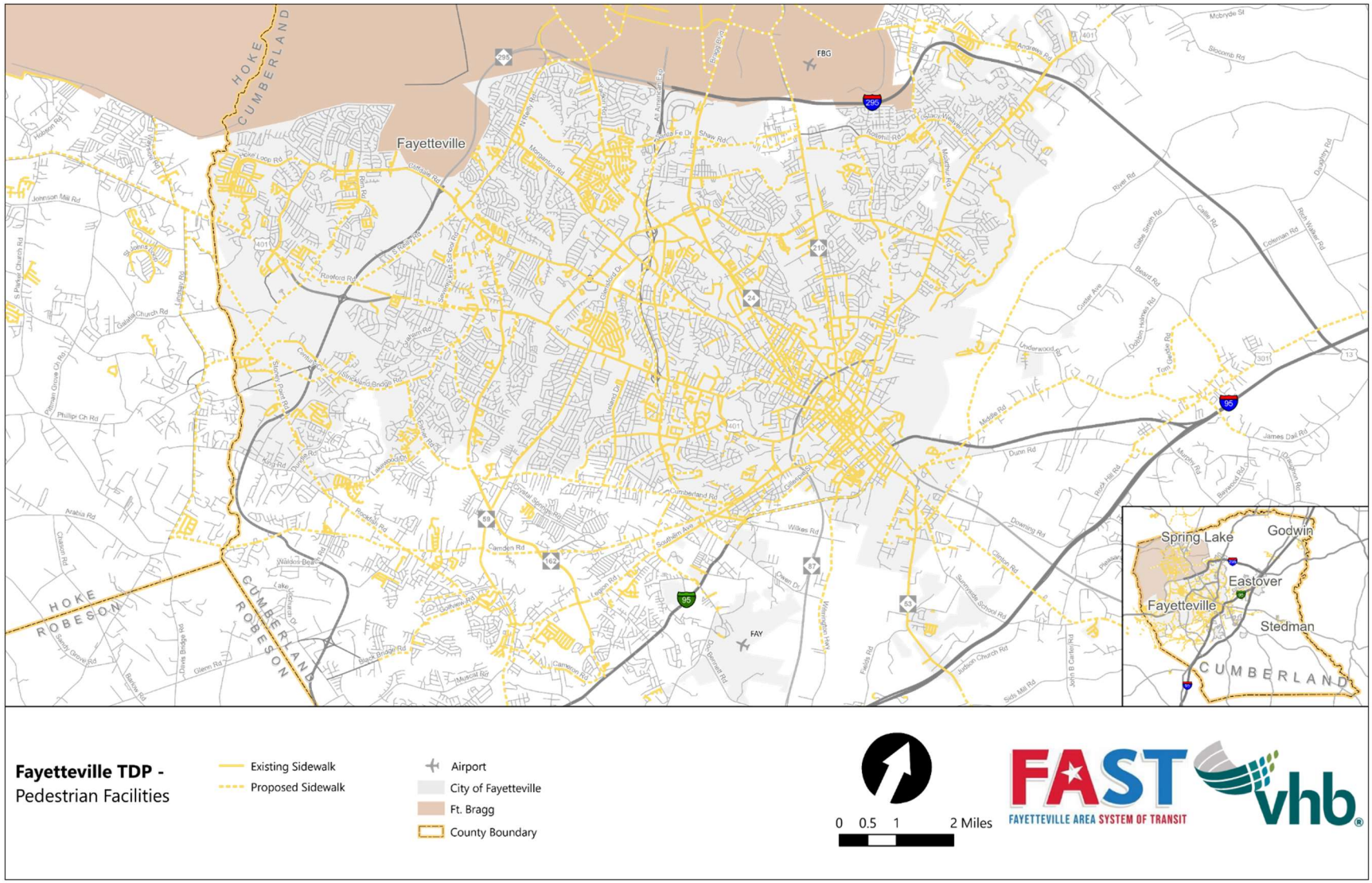
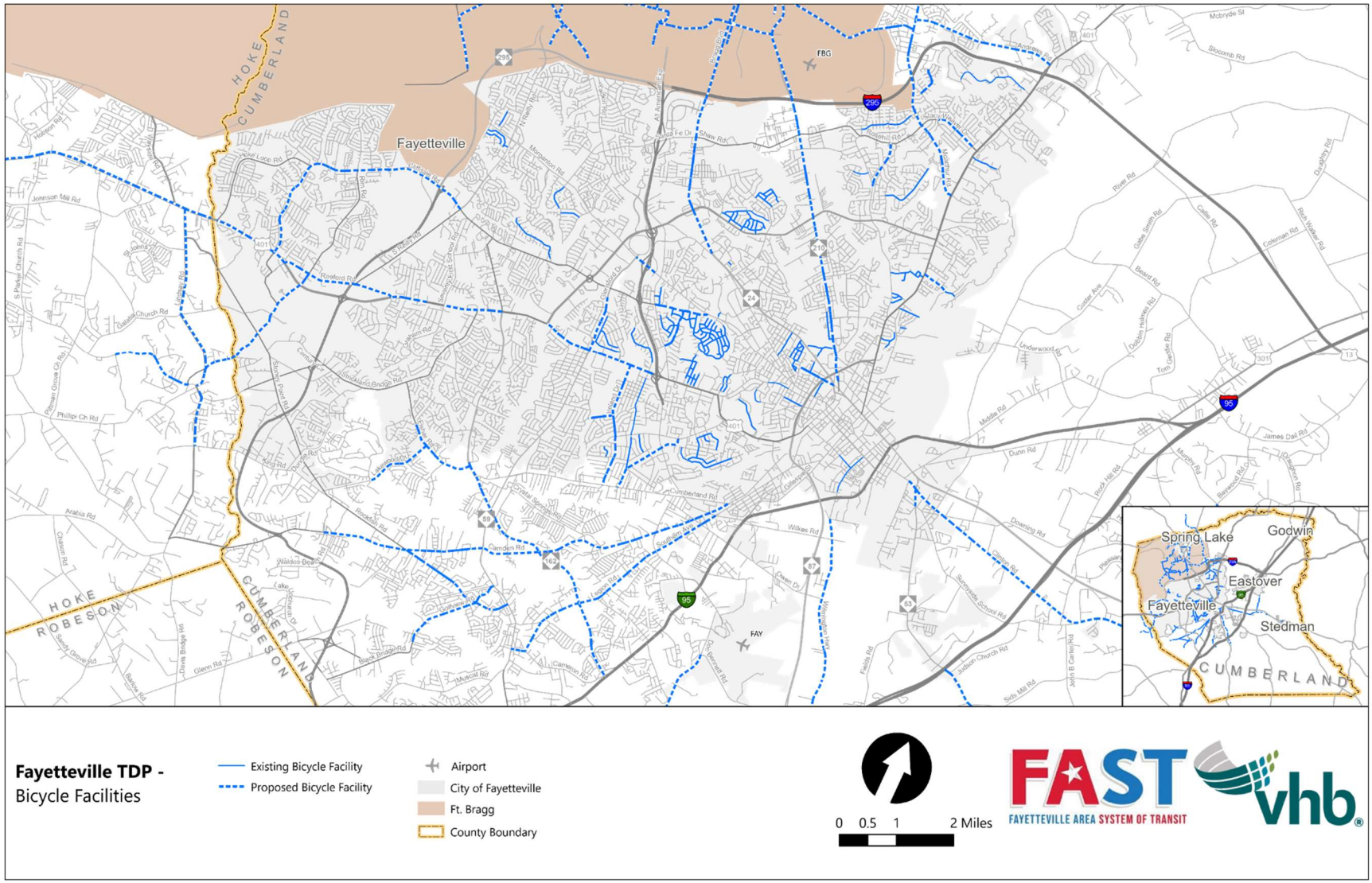


Figure 3-23 Existing and Proposed Bicycle Facilities



Plan Review

To better understand other plans that have been made and how they might impact the TDP, the following plans were reviewed, and key findings have been summarized in Table 3-10.

Table 3-10 Past Plans

Title/Agency/ Adoption Year	Summary	Key Findings
Urban Design Implementation Plan City of Fayetteville Planned Adoption 2022-2023	Provide guidance on creating a vibrant downtown area.	• Plan is currently being developed
Fayetteville Bicycle Plan City of Fayetteville 2020	Provide guidance to improve biking in Fayetteville	• No bike racks were identified outside of the Downtown Center, impeding riding a bike to a bus stop
Future Land Use Plan City of Fayetteville 2020	Provides land use guidance to staff for long-term land use	• Recommended revising parking to allow for more public transit use • Recommends ensuring pedestrian facilities when new connections are developed • Noted a community desire for transit connections to key locations
Metropolitan Transportation Plan 2045 FAMPO 2019	Provide safe and reliable transit service to residents in the metropolitan area	• Noted a lack of accommodations between transit stops as a constraint to walking and biking • Goal identified to improve access to transit facilities • More frequent and later evening service, and better stop facilities were the top three improvements desired by FAST riders • Other regional transit providers: HATS, SEATS, CTP, Spring Lake
Fayetteville Comprehensive Pedestrian Plan City of Fayetteville NCDOT 2018	Provide guidance to improve walking in Fayetteville	• Pedestrian activity is notable in Downtown, FTCC, Cross Creek Mall • Recommendation: improve lighting around transit stops

Title/Agency/ Adoption Year	Summary	Key Findings
Transit Development Plan FAST 2014	Develop strategies to address current and projected needs of FAST	• Significant development is anticipated in West and Southwest Fayetteville • Route 14 had the highest ridership (over 1,000 boardings) • Long-term recommendations: Operate established routes every 30 minutes on weekdays until 7:00 pm • Long-term recommendations: Additional neighborhood routes could be established in areas such as Fisher Lake Road, Bingham Drive, Fisher Road, and Lakewood Drive if development warrants service
Regional ITS Strategic Deployment Plan Update FAMPO 2013	To apply ITS solutions to FAMPO region's growing mobility needs	• Gap identified in coordination between FAST and Cumberland County Community Transportation • Desire for FAST to provide consistent customer information on transit operations • Long term goal: regional transit payment card
Fayetteville Walks & Bikes FAMPO 2011	Comprehensive Analysis of Bicycle and Pedestrian Facilities	• Deficiencies noted between transit stops • Lack of crosswalks, refuge islands, curb ramps noted • Fewer sidewalks are available in suburban regions

4

Public Engagement

One of the key elements of the TDP is gathering public input. It is important to understand community transportation needs when developing the TDP. Several outreach techniques were undertaken during the TDP process and are documented in this chapter.

Survey

In the spring of 2021, FAST released a survey to gather feedback and input from the riders, stakeholders and the general public. In the fall of 2021, the survey was promoted as part of the TDP process through a press release and the first listening session. A Spanish version of the survey was also published.

In total, 87 individuals participated in the survey. The full results as provided by the survey software can be reviewed in Appendix A. Highlights from the survey are included here. Respondents tended to be female (63.2%) from a variety of age groups. The plurality of respondents were white (49.4%) with a smaller percentage identifying as Black (28.7%).

About one-third of respondents indicated that they ride FAST one to five times per week while over half of the respondents (62.1%) indicated that FAST is their primary source of transportation. When they are not using FAST, most indicated that they walk or ask a family member or friend to give them a ride. The vast majority (62.1%) were still paying with cash for their bus fare.

Participants rated drivers highest in the category of keeping them safe with a score of 4.4 out of 5.0. Drivers scored 4.2 in the areas of helpfulness, professionalism and politeness. FAST vehicles were rated 4.1 in terms of cleanliness, reliability, and being on time. When asked how FAST handled its response to COVID, 60.5 percent indicated FAST handled it very well or better than expected.

When asked what would encourage respondents to ride the bus more often, respondents indicated that if the bus stop were closer to their home or work and if the bus went more places they would ride more often. Increased frequency was the third most popular reason given that would encourage respondents to ride more often.

When asked where respondents would want the bus to go, the most popular response was Hope Mills. (36.8%) followed by Fayetteville Airport (35.6%). Fort Bragg (29.9%) and Fort Bragg Womack Medical Center (32.2%) rated highly as well. Employment locations such as Campbell Soup/Fayetteville Business Park (27.6%), Goodyear (14.9%), Mann+Hummel (14.9%), and Hoke County Hospital (19.5%) were also rated by respondents. It should be noted that this question was multiple choice so respondents were choosing from a selection of responses and not writing these answers into a comment box.

Project Advisory Committee

FAST formed a Project Advisory Committee (PAC) to provide input to the TDP development process. As shown in Table 4-1, FAST invited a wide array of community representatives to join the PAC.

The PAC met three times over the course of the study. The dates of the meetings and overview of the agenda topics are provided below.

- September 30, 2021 | This meeting's agenda included defining the PAC's role, introductions to the TDP, FAST services, the benefits of transit, and a conversation about new development in Fayetteville.
- December 9, 2021 | The agenda included a review of stakeholder and public input received, a discussion about universe of alternatives, and a preview of the alternatives evaluation process.
- March 23, 2022 | At this meeting, input was sought on the draft recommendations and finance plan being put forth in the TDP.

Each meeting included time and opportunity for the group to provide feedback and input that was used in the development of the TDP. Copies of the presentations from each PAC meeting are provided in Appendix A.

Table 4-1 Project Advisory Committee Members

Name	Title	Organization
Christopher Cauley	Economic and Community Development (ECD) Director	City of Fayetteville
Tiera Daugherty*	Civil Rights Program Analyst/Compliance Manager	City of Fayetteville
Valerie Dawson	Health Promotions Coordinator	Fort Bragg
Taurus Freeman	Assistant Economic & Community Development Director	City of Fayetteville
Robert Van Geons	President/CEO	Fayetteville Cumberland County Economic Development Corporation (FCCEDC)
Ron Godbolt	Pastor	Christ Gospel Church of Hope Mills
Hank Graham	Executive Director	Fayetteville Area Metropolitan Planning Organization (FAMPO)
Elizabeth Morin	Senior Administrative Assistant	City of Fayetteville
Hannah Prentice-Dunn	Project Manager for Cancer Intervention Research	University of North Carolina (UNC) Lineberger Comprehensive Cancer Center
Erick Redrick	Veteran Services Director	Cumberland County
Joanie Rodriguez	Senior Veteran Services Officer	Cumberland County
Steve Schultz	Corporate Safety Director	Cumberland Hospital System Inc.
Bianca Shoneman	President/CEO	Cool Spring Downtown District Inc.
Anthony Sumter	Integrated Mobility Division	NCDOT
Tyron Taylor	Lieutenant Colonel (LTC)	Fort Bragg
Terri Thomas	Executive Director	Vision Resource Center
Eric Vitale*	City Transportation Planner	City of Fayetteville
Telly Whitfield	Assistant City Manager	City of Fayetteville
Michael Worrell	Business Representative Committee Member	Fayetteville Advisory Committee on Transit (FACT)

**Added to final PAC meeting only.*

Stakeholder Interviews

Individual stakeholder interviews were conducted with the PAC members between October 19, 2021, and November 16, 2021. The purpose of the interviews was to better understand the needs and concerns of

the stakeholders as well as the constituents they represent. PAC meetings provided opportunities for stakeholders to learn from one another.

While each interview was unique, a set of standard questions was prepared to guide the conversation:

- What are the current strengths of FAST?
- What are the most important challenges?
- What is the most important thing FAST could do to increase ridership?
- How well does FAST engage with the community?
- What places could be served or better served in the community?
- What are the most important safety concerns?
- Any comments related to Fort Bragg?
- Any other comments or recommendations you suggest?

The following themes were identified from the interviews:

- Participants were generally positive about FAST services, and in particular, FAST's resiliency during the pandemic. It was also noted that FAST has made significant improvements over the last few years.
- An increase in transit service and more marketing could lead to an increase in ridership.
- Several participants noted that FAST would benefit from an increase in staff, both drivers and administrative staff.
- Safety concerns were expressed around accessing transit such as the lack of sidewalks and lighting at stops.
- FAST has a beautiful facility in downtown and should take advantage of it.
- Improving service to Fort Bragg is important.

For more details on the information gathered during the stakeholder interviews, see Appendix A.

Bus Operator Conversations

Bus operators are the first line of customer service for a transit agency, and as such, provide valuable insight into the needs of current riders. FAST leadership host monthly all-employee meetings and dedicated time on the December 19, 2021, agenda to the TDP. During the virtual meeting, bus operators, dispatchers and supervisors were divided into three virtual break-out rooms. To ensure open communication, the break-out rooms were led by the consultant team and FAST leaders did not join any break-out rooms.

The facilitated discussions focused on the following questions:

- What do you love about your job?
- What would you change to make your job easier/more enjoyable?
- What concerns/complaints do you hear from riders?
- What are your safety concerns?

- Do you have any other comments or recommendations?

Participation during the break-out sessions was robust and provided significant input to the TDP team. The following themes were gained from the discussions:

- By and large, bus operators enjoy their jobs and working for FAST.
- Operators expressed concerns about maintaining the published schedule on a few bus routes as well as some of the maneuvering they have to do in traffic to make certain turns.
- They expressed a desire to provide more regular input to FAST leadership as well as to hear more about the direction of the agency.
- The operators noted riders often ask for service to areas like Hope Mills, Spring Lake, and the local airport.
- They indicated that evening service needs to return to pre-pandemic levels.
- They also noted a few stops where individuals experiencing homelessness present actual or perceived risks to waiting passengers and stopped buses.

At the March 20, 2022, all-staff meeting, the consultant team provided a summary of the comments gathered during the bus operator discussion group and a few of the ways FAST leadership was responding.

Public Listening Sessions

FAST hosted two rounds of virtual public meetings. The first round focused on obtaining general feedback from participants on FAST and its services while the second round of public meetings focused on gathering input on the draft TDP recommendations.

First Round

The first public listening session took place on November 9, 2021, at 5:30 P.M. The focus of the listening session was to understand what FAST was doing well and where improvements could be made. It was also to understand the priorities of the Fayetteville community. Marketing efforts included FAST social media posts and a press release which resulted in news coverage (print and television). Stakeholders were asked to promote the meetings to their constituencies. Signs were posted inside FAST vehicles and the FAST Transit Center. All of these promotional activities also directed individuals to take the FAST survey.

Figure 4-59 Screenshot of Print and Television Media

Source: CBS 17

Thirty-seven (37) individuals registered for the evening listening session. Registrants were asked to provide their residential ZIP code and represented 14 different Fayetteville-area ZIP codes. The most popular ZIP code was 28301, which includes downtown Fayetteville and areas to the north. The second most popular ZIP code was 28314, which covers western Fayetteville.

The meeting included a presentation and group activity. A copy of the PowerPoint for the meeting can be found in Appendix A. The presentation covered the following points:

- TDP Overview
- FAST Overview
- Benefits of Transit
- FAST Goals

Interactive polling was used throughout the presentation to keep the audience engaged and gather feedback. After the presentation, participants were divided into virtual break-out rooms and guided through an interactive activity. After introductions, the participants were asked to provide input on what FAST does well and areas where FAST could improve. Notes were taken in each breakout room to document the information provided and summarized in the following:

- Increased frequency
- Improve overcrowding of buses during COVID
- Providing connections to outlying areas
- Providing additional service to Fort Bragg and during peak periods
- Providing marketing and advertising for FAST services
- Additional bus shelters

- Additional payment methods for Fare purchases
- Cashless Fares and WIFI on the buses
- Direct routes to Raeford Road and Skibo Road
- Later service provided for Route 11

Second Round

The second round public listening session took place on March 2, 2022, at 5:30 P.M. The focus of the listening session was to present the TDP recommendations and get feedback on them. Marketing efforts included FAST social media posts, an eblast sent to attendees of the first round listening session, and a press release. Stakeholders were asked to promote the meetings to their constituencies. Signs were posted inside FAST vehicles and the FAST Transit Center.

Eighteen individuals attended the listening session. After the recommendations were presented, a poll asked if the recommendations would make them more likely to ride FAST and 92 percent indicated that the proposed plan would make them more likely to ride FAST. Comments were very positive following the presentation. A copy of the presentation can be found in Appendix A.

Previously Received Comments

FAST operates a customer service telephone line where customers can call in with questions, commendations, and complaints. A brief review of the complaints received between January 2018 and September 2021 was undertaken. During the timeframe, a total of 695 complaints were received of which 71.7 percent were related to fixed-route service. The remaining complaints were related to FAST*Trac!* service.

The vast majority of complaints are related to a specific, isolated incident such as a near-miss with a car as a bus changed lanes, a conflict between a passenger and an operator over a mask, or a complaint about a bus being earlier than scheduled causing the passenger to miss the bus. Each complaint is investigated through the on-board video system (if possible) to determine the appropriate course of action.

The review did not reveal any significant trends, but rather a smattering of calls related to different routes, different issues, different operators, etc.

Fort Bragg Survey

A survey was conducted by the Fort Bragg Department of Public Health in April and May 2021. Of the 3,281 respondents, 23 percent were service members, 38 percent were family of service members, 26 percent were retired military or family of retired members, 21 percent were civilian employees, 3 percent were contractors, and 2 percent identified as "other." The survey covered a number of health-related topics:

- Transportation
- Housing

- Community events
- Family Advocacy Program (FAP)
- Women, Infants, and Children (WIC) services
- Food insecurity & healthy food access
- Access to information
- Tobacco and vaping cessation and prevention
- Vaccination
- COVID-19 Pandemic

More than half of the respondents of the survey stated that they would prefer a FAST Express bus service to be offered that would provide service to off-post locations and Downtown Fayetteville events. Respondents indicated that they would utilize the Fort Bragg Shuttle service if the following were improved or created:

- An application that provides bus routes and locations in real time (53%)
- The shuttle offered more convenient stops in order to serve more members (41%)
- It was easier to find route schedule and maps (34%)
- If frequency of service was increased to provide additional services (19%)

At the time of the survey, FAST did and currently still offers a smart phone app for accessing real-time information so the results of the survey may suggest a need for marketing rather than a new real-time information app.

Themes

The following themes were identified through the public engagement process:

- FAST needs to reinstate evening service. This service was removed due to the COVID-19 pandemic.
- To truly be a provider of choice transit services, FAST needs to reduce its headways.
- FAST and its staff are generally well respected in the community. Among stakeholders, it was noted that staff may be stretched too thin.
- FAST needs to be more proactive with its marketing as many people do not know about the service or do not know how to use the service.
- Service to Fort Bragg is very important and FAST should explore this option.
- Commuter service is needed to Hope Mills and Spring Lake.
- The FAST Transit Center in downtown Fayetteville is an asset to FAST and the community and should be leveraged to encourage transit use.
- Pedestrian safety is a concern for individuals accessing transit and should be addressed.

5

Market Analysis

Understanding the environment in which FAST is operating is crucial to planning future improvements. This chapter includes a situation appraisal, which reviews outside forces influencing FAST's operating environment. It also includes a review of other transportation options in and around the City of Fayetteville. These other transportation options can both complement FAST services as well as compete with it.

Situation Appraisal

The situation appraisal provides an overview of the context in which FAST is operating and what implications that context has for transit operations. This section includes a review of planning and other studies which collectively provides an overview of the future direction for the City of Fayetteville and Cumberland County.

Pandemic

Governor Roy Cooper announced the creation of a Novel Coronavirus Task Force for North Carolina on February 11, 2020. The first confirmed case of COVID-19 was identified on March 3, 2020, with a secondary case appearing on March 6, 2020. The governor issued an executive order declaring a state of emergency on March 10, 2020, to combat the rise in COVID-19 cases. By March 12, 2020, Governor Cooper suspended in-person classes at all University of North Carolina system schools, cancelled large scale events, prohibited gatherings of 100 people or more, and recommended social distancing to combat the virus.

FAST began modifying service on March 20, 2020, through the reduction of service hours for routes 4, 7, 12 and 17. From there, FAST continued to adjust service levels and add safety measures as needed to keep passengers and operators safe. At the beginning of the pandemic, FAST ridership fell to approximately 40 percent of its typical level.

To ease the burden of added regulatory compliance (e.g., mask mandate) and loss of revenue from lower ridership, the Federal government provided funding to assist transit agencies through the Coronavirus Aid, Relief, and Economic Security (CARES) Act. The emergency funding provided $25 billion for transit agencies across the country. FAST received approximately $9 million in CARES Act funding. Another $14 billion was allocated to transit agencies through the Coronavirus Response and Relief Supplemental Appropriations Act of 2021 (CRRSAA) in December 2020. Specifically, North Carolina received $85.6 million. In March 2021, the American Rescue Plan (ARP) Act established additional emergency funding for public transit and $218 million in funds to the State of North Carolina.

These funds have assisted in lessening the financial blow to FAST caused by the COVID-19 pandemic. Without these funds, FAST would have struggled to keep services operating and passengers and operators safe.

Federal Funding

The Biden Administration has prioritized public transit funding as part of its infrastructure bill, providing $20 billion for public transit across the country. In March 2022, FTA released its Notice of Funding for Low or No Emission and Grants for Buses and Bus Facilities. It is anticipated that federal funding for transit will continue to be a priority under the Biden Administration.

The FTA is also putting structure around the Justice40 initiative announced in President Biden's Executive Order 14008, released January 27, 2021. The Justice40 initiative aims to deliver at least 40 percent of the overall benefits from Federal investments in climate and clean energy to disadvantaged communities. When FTA released its grant program for bus purchases in the fall of 2021, the grant application included requirements to comply with the Justice40 initiative.

Population and Employment

The City of Fayetteville has the highest population density in Cumberland County, but is growing at a slightly slower pace than the rest of the county and North Carolina. The highest population growth occurred in the Western and Northwestern areas of Fayetteville. Due to being home to a large military base, a large number of individuals who live in the City of Fayetteville moved there from other regions of the country. The city also supports a large number of visitors. The Visitors Bureau estimates that the population increases between 120,000 and 130,000 people a month due to visitors. Individuals who come from outside of North Carolina bring with them varying levels of experience with transit, which can translate into an opportunity to encourage transit use.

Cumberland County's employment densities are highest within the city limits. Employment has continued to increase along Business I-95, All-American Freeway, US-401, NC-53 and Morgantown Road. Fayetteville's largest employers include Department of Defense, Cumberland County Schools and Cape Fear Valley Health. Despite a decrease in employment due to the COVID-19 pandemic, Fayetteville

continues to experience increasing job growth throughout the primary sectors of employment. Continued job growth can increase the demand for improved transit related services.

Recently, a new Amazon distribution center has announced that it is locating in Fayetteville and will create 500 full-time positions and hundreds of part-time positions. The facility will be located in Military Business Park off Bragg Boulevard and is expected to open in 2023.

Land Use

Land use is an important factor in the provision of transit services. The examination of Fayetteville land use in Chapter 3 revealed the following:

- Residential land uses in Fayetteville are predominately low-density;
- Higher density residential areas are located along heavily populated travel corridors or near commercial/employment nodes; and
- The majority of residential zoning areas occur west of the City's core.

Fayetteville's development patterns can be a barrier to efficient transit service except in the more densely populated areas such as downtown. The large areas of single-family residential use not only lack the density to support transit, but many neighborhood streets may not support the use of large transit vehicles. Many areas also lack pedestrian infrastructure needed to safely carry pedestrians to and from transit services.

Technology

For the size of its operations, FAST offers a number of technology options that improve its operations. FAST uses automatic passenger counters (APCs) to count passengers as they board and alight from the vehicle, which is used to calculate ridership and load factor (i.e., number of people on the bus). Automatic vehicle locators (AVL) are used to collect on-time performance data. Using this same technology, FAST makes real-time transit data available to riders through the TransLoc app. FAST riders can use Google maps for trip planning purposes as well.

FAST uses Genfare fareboxes to collect fares on the vehicles. The fareboxes accept cash and transit cards. FAST has a full suite of transit technology installed on its vehicles, but, of course, technology changes rapidly so the agency must continue to upgrade its systems.

Base Coordination

FAST has been actively working to advance its relationship with Fort Bragg to improve transit service to the base. At present, only Route 19 goes on base, but there is need for more service to the base so FAST is meeting regularly with base officials to coordinate service. As a pilot effort, FAST operated transit service on the base in celebration of New Year's Eve 2021. Despite ridership being low, the service was operationally successful and proved that FAST could provide service to the base community. Ridership was low due to a lack of marketing.

Fort Bragg presents unique challenges to transit operations, but other bases have been able to overcome similar challenges. Operational challenges include the need for a passenger waiting area prior to entering

the base for any passenger without base privileges to wait while the FAST vehicle is serving the base. There are also periods of elevated security risk that may require greater vehicle inspection which could delay transit vehicles or even cause the base to disallow the vehicles altogether.

It will be imperative for the Fort Bragg Shuttle and FAST to coordinate services so that passengers can transfer between the two services in a seamless manner. The coordination would need to take into account hours of service, days of service and frequency.

6

Alternatives Evaluation and Recommendations

Combining the technical analysis, public input, and situation appraisal results, a list of potential alternatives are detailed in this chapter. The alternatives fall into four categories: service, infrastructure, technology, and plans and policies. Each alternative is evaluated to determine how well it supports FAST's system goals documented in Chapter 2.

Alternatives Development

TDP alternatives are developed through a robust process that includes public and stakeholder input, staff experience, technical analysis, and professional judgment. The alternatives are meant to include a multitude of options for improving FAST over the next decade and they are needs based.

Alternatives are evaluated individually to determine if they are appropriate to include in the final list of TDP recommendations. At times, alternatives may propose duplicative solutions to address the same need (e.g., recommendations for different types of services serving the same geography), but these conflicts will be resolved in the recommendations.

Alternatives fall into four categories:

- **Service alternatives** are related to transit and complementary paratransit services. They can include improvements to frequency, service hours, or days of service. They can also include the addition of service to new areas or new types of services.

- **Infrastructure alternatives** are related to physical assets such as vehicles, transfer centers, park and ride lots, administrative and maintenance facilities, and bus stop amenities that support transit services.
- **Technology alternatives** include improvements such as fare collection devices, internet access, trip planning services, smart phone "apps," and other similar improvements.
- **Plans and policy alternatives** are related to future studies and plans needed to implement improvements or improve organizational effectiveness. Policy improvements can be related to fare levels, complementary paratransit eligibility, and other policies.

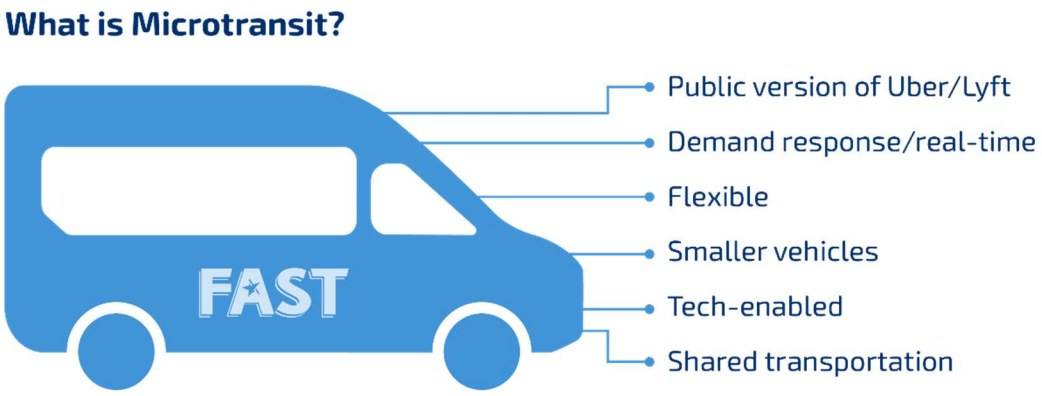
Alternatives for each category are presented in the following sections.

Service Alternatives

- **Existing Fixed Route Service |** Under this alternative, fixed route service will be maintained without cutting or reducing service to any existing routes. Under this alternative, short-term improvements may be made to improve efficiency to fixed route transit service.
- **Existing FAST*Trac!* Service |** Complementary paratransit service will be maintained without cutting or reducing service. As required by federal law, FAST will continue to operate complementary paratransit service for all residents who live within ¾-mile of a bus stop. Complementary paratransit service will be offered during the same hours of operation as the fixed route service. Complementary paratransit service will be expanded to other geographies or times of day if FAST fixed route services are expanded.
- **Nighttime Fixed Route Service |** Prior to the COVID-19 pandemic, FAST operated evening fixed route and complementary paratransit services until approximately 10:30 P.M. Approximately half of the daytime routes operated at night. Due to a lack of operators, FAST has not yet restored this service. Under this alternative, FAST would re-instate the same nighttime fixed route service that it operated pre-pandemic.
- **Nighttime Microtransit Service |** FAST is committed to returning service to all passengers impacted by pandemic service reductions, but the agency is also taking the opportunity provided by the pandemic to rethink its strategy for providing this service. Because nighttime ridership is lower than daytime ridership, there is a potential for re-imagining the service. Under this alternative, FAST would replace nighttime fixed route service with microtransit service.

  Microtransit service is an on-demand, real-time service that operates in a manner similar to Uber and Lyft. The transit vehicle is summoned by the passenger via a smart phone "app" as opposed to the service operating on a fixed route schedule. Microtransit is a shared service so multiple passengers may be in the vehicle at one time. Transit agencies typically use smaller vehicles than they use for fixed route service. Under this alternative, FAST would use microtransit services to pick up the passenger at their point of origin and deliver them to a fixed route service which takes them to their ultimate destination.

Figure 6-1 Microtransit



- **Fort Bragg Service |** Under this alternative, transit service would be expanded to better serve Fort Bragg and connect with existing on-base transportation. Exact service alignment and hours will have to be established in coordination with Base leadership. Security concerns will also have to be addressed.
- **Increased Frequency |** Increasing frequencies would cut headways in half on all routes. For example, the majority of FAST routes operate on 60-minute headways so that under this alternative, these routes would operate on 30-minute headways. Other routes operating on 30- or 90-minute headways would also be cut in half.
- **Airport Fixed Route |** Fayetteville residents have expressed interest in FAST providing direct service to the Fayetteville Regional Airport. Under this alternative, a transit route would be developed to provide service from downtown Fayetteville to the Fayetteville Regional Airport.
- **West Fayetteville Fixed Route |** City Council has indicated a desire for a new transit route to serve the West Fayetteville area and has provided funding for the addition. To date, the new service has not yet been implemented due to an operator shortage. This new service could be a new fixed route or a microtransit area (see the following bullet, Microtransit Areas).
- **Microtransit Areas |** Microtransit service (see definition under Nighttime Microtransit Service) serves as a cost-effective alternative to augment already existing fixed route transit service. Under this alternative, microtransit service would be implemented to provide a flexible alternative for Fayetteville residents and commuters in certain areas of the community. Microtransit services can be used to build transit demand in an area and eventually transitioned into fixed route transit service.

  Several areas were noted as potential microtransit areas:

  - **West Fayetteville |** Due to low ridership levels on certain portions of Routes 17, new microtransit service would replace this fixed route service as well as the proposed new West Fayetteville transit route (noted under West Fayetteville Service).

  - **South Fayetteville |** The area south of downtown Fayetteville has minimal transit service although it was previously served. At some point, FAST reduced service to only the portions of South Fayetteville that were within the city limits. New microtransit service would add additional transit service to South Fayetteville and potentially replace some routing in this area.
  - **Downtown Fayetteville |** While there are several routes operating in downtown Fayetteville, the existing routes are typically designed to bring passengers to the FAST Transit Center and transport them back out of downtown. Microtransit service could act as a circulator service in downtown Fayetteville to encourage internal movement.

- **Hope Mills Commuter Express Service |** Public engagement input consistently noted an interest in transit service to Hope Mills, a community southwest of downtown Fayetteville. In particular, the request was for a service connecting commuters living in Hope Mills to jobs in Fayetteville. Under this alternative, a new commuter service would be established to serve the community of Hope Mills. The service is assumed to operate primarily during peak morning and evening commute periods with only one or two trips in the middle of the day. There are two alternatives noted below that would assist commuters in accessing this service. One option is to develop a park and ride lot and the other is to operate a circulator service.
- **Spring Lake Commuter Express Service |** Commuter transit service was also requested for Spring Lake during public engagement meetings. Under this alternative, a new commuter service would be established to serve the community of Spring Lake and provide access to downtown Fayetteville. The service is assumed to operate primarily during peak morning and evening commute periods with only one or two trips in the middle of the day. There are two alternatives noted below that would assist commuters in accessing this service: a park and ride lot or a circulator service.
- **Hope Mills Circulator/Microtransit |** Under this service alternative, FAST would operate a circulator or microtransit service in Hope Mills to assist passengers in accessing the commuter express service. The service would transport passengers between their origins and a central starting point for the Hope Mills express service. The service could be a circulator operating on a set route or a microtransit area where service is provided when requested by a passenger.
- **Spring Lake Circulator/Microtransit |** Under this service alternative, FAST would operate a circulator or microtransit service in Spring Lake to assist passengers in accessing the commuter express service. The service would transport passengers between their origins and a central starting point for the Spring Lake express service. The service could be a circulator operating on a set route or a microtransit area where service is provided when requested by a passenger.

Infrastructure Alternatives

- **Transfer Hub Modernization |** FAST has several hub areas where multiple routes come together to facilitate transfers between routes: Cross Creek Mall, University Estates, and Food Lion (Raeford Road and Ireland Drive). Under this alternative, these transfer areas would be upgraded and modernized. Improvements could include seating, shelter, wireless internet, and other amenities.

- **Upgraded & Modernized Bus Shelters |** FAST continuously adds and replaces shelters at its bus stops. FAST will continue to modernize shelters by adding new and replacement shelters annually. These new shelters will meet ADA requirements.
- **Bus Stop Signs |** FAST is adding new bus signs to its bus stops. Under this alternative, new bus stop signs would be added annually to the system.
- **FAST*Trac!* Stop Amenities |** There are certain destinations that are particularly popular with FAST*Trac!* passengers. Under this alternative, FAST would review these popular destinations to determine if amenities could be incorporated to make waiting at these locations more enjoyable.
- **Electrification of Transit Vehicles |** FAST is working to transition its vehicle fleet to electric vehicles instead of diesel vehicles. FAST has already received federal and state grant funds to replace up to five vehicles. Diesel vehicles will be replaced as they reach the end of their useful lives. Transition to electric vehicles on longer routes may require further investment to allow for in-route charging.
- **Bus Pullouts |** Bus pullouts are designed for buses to pick up and unload passengers more safely by removing the vehicle from the traffic lane. Under this alternative, additional bus pullouts would be constructed to improve safety for bus operators and passengers. It is unlikely that FAST would construct pullouts; it is typical for the roadway owner and operator to construct these types of facilities.
- **Park and Ride Lots |** This alternative includes the addition of park and ride lots to serve the expansion of express services to Hope Mills and Spring Lake. Park and ride lots allow transit users to drive their private automobiles to a single location so that it is easier for them to access transit. It also improves transit operational efficiency by reducing the number of locations for picking up passengers.
- **Sidewalk Analysis |** Most FAST passengers access the fixed route transit system as pedestrians. As such, sidewalk infrastructure, or lack thereof, is a significant barrier to accessing FAST services. While FAST constructs landing pads and short sidewalk connections between its stops and existing sidewalks, it is not the role of the transit agency to provide sidewalks generally. Under this alternative, FAST would provide a prioritized list of bus stops needing sidewalk infrastructure to the City of Fayetteville with the hope that the City would prioritize its sidewalk building program to address the needs of FAST passengers.

Technology Alternatives

- **Website |** While FAST has an operational website, its functionality can be a bit difficult for FAST residents and visitors to quickly access information. Public input indicated interest in an easier to use website for FAST. Under this alternative, updates would be made to the FAST website to make it more user friendly and interactive.
- **Wi-Fi |** FAST passengers have expressed interest in having Wi-Fi access on FAST vehicles. Under this alternative, Wi-Fi would be added on all transit and complementary paratransit vehicles. There is a separate project that may lead to Wi-Fi being added to fixed route services on Murchison Road.

- **FAST*Trac!* Application** | Stakeholders have indicated a need for a complementary paratransit application process that is accessible to those with visual impairments. Under this alternative, an ADA-accessible application would be developed to assist visually impaired passengers in completing the application.
- **Cashless Fare System |** FAST has received a grant to explore the implementation of a cashless fare system, meaning passengers would not be able to pay for bus fares using cash. Under this alternative, the current fare collection system would be converted to add other payment mechanisms.

Planning and Policy Alternatives

- **Fort Bragg Transit Plan |** Fort Bragg personnel have expressed interest in having a transit connection serving Fort Bragg. FAST service currently does not go onto the secure portion of the Base so, under this alternative, a study would be conducted to determine the type and level of transit service for Fort Bragg.

  In addition to providing service, FAST may explore a universal pass program with Fort Bragg. Universal pass programs are a form of contract between a transit agency and a large employer or university. The employer or university provides a set amount of financial support to the transit agency in exchange for all employees and/or students receiving free, unlimited rides on the fixed route transit system. Under this alternative, a universal pass program would be explored with Fort Bragg.
- **Good Repair Principles |** Transit agencies are required by federal statute to maintain existing transit assets in a state of good repair. Under this alternative, FAST would continue to repair and maintain assets in accordance with this requirement.
- **Marketing Plan |** Much of the public input received during the TDP process related to a need to market FAST services. Under this alternative, a comprehensive marketing plan would be developed that targets specific audiences, educates riders on transit and promotes the benefits of using transit services with the goal of increasing ridership.
- **Compensation & Benefits Study |** A compensation and benefits study analyzes market rate compensation and benefits for staff in comparable geographies with comparable job responsibilities. Ideal outcomes of this study are recommendations that reduce employee turnover and improve organizational effectiveness. The City of Fayetteville is already undertaking a study to ensure appropriate levels of compensation and benefits for all City staff, including FAST employees.
- **Staffing Review Study |** Both stakeholder input and the peer evaluation indicated that FAST may need to adjust staffing levels. Staffing increases will be particularly important as the recommended service alternatives are rolled out. Under this alternative, a staffing study would be conducted to determine the functionality and staffing levels needed within each FAST department.
- **Bus Operator Training Program |** At present, operator shortages are constraining FAST services (i.e., nighttime service) such that a bus operator training program is needed. FAST recently entered a partnership with Fayetteville Technical Community College to provide scholarship

money for students entering FTCC's Class B Commercial Driver's License training program if the student agrees to work for FAST for a period of time. FAST also added an operator trainee position to provide an internship for one student to work while in the training program.

- **TDP Update |** It is recommended that the TDP be updated every five years to address evolving community needs. The next update would be completed in 2027.
- **Transit Design Guidelines |** The establishment of transit design guidelines allows FAST to communicate best practices to developers to improve the transit supportiveness of new development in Fayetteville. Under this alternative, a handbook would be created for developers to educate them on these best practices.
- **Planning and Zoning Collaboration Day |** An established relationship between transit agencies and a city's planning and zoning department is crucial to improve transit services. Under this alternative, FAST would host a day annually to collaborate, coordinate and meet with Fayetteville Planning and Zoning Division staff. While collaboration should happen all year long, this event would allow FAST to focus on improving its relationship with the Planning and Zoning Division.
- **Developer Award |** Offering recognition to developers who implement transit friendly design can be useful to encouraging transit supportive development. Under this alternative, an award would be created to recognize developers who implement transit friendly design.
- **Fixed Route Barrier Study |** While some individuals cannot use fixed route transit service under any circumstances, other individuals could use fixed route transit service if it were not for barriers preventing them. For example, if there is no sidewalk connecting a residence to a bus stop, individuals dependent on mobility aides may not be able to access the fixed route system. This study would look at barriers to fixed route access across the FAST service area and make recommendations for addressing them.
- **Transit Asset Management Plan |** Federal statute requires transit agencies to develop and update a transit asset management (TAM) plan. A TAM plan provides a strategic process to operate, maintain, rehabilitate, and replace transit assets to manage their performance. Under this alternative, FAST would develop a TAM plan in compliance with this requirement.
- **Title VI Plan |** Federal statute requires transit agencies to develop and update a Title VI plan every three years. Title VI ensures equity in transit service and fare changes. Under this alternative, FAST will develop a Title VI Plan in compliance with this requirement.

Evaluation

The alternatives evaluation process provides insight into how effective each alternative is at supporting FAST's goals. Understanding the extent to which each alternative supports FAST's goals is used in the development of the ten-year phased implementation plan. Alternatives that provide more support for FAST goals can receive higher priority in the phasing of the ten-year plan.

It should be noted that the evaluation process is one piece of information used in the development of the phased 10-year plan. Other inputs include a desire to spread costs out over the 10-year timeframe, a need to logically time improvements (i.e., building a park and ride lot before starting commuter express bus service), and professional judgment. It may also be difficult to compare evaluation scores across alternative categories (i.e., services versus technology) as they are very different types of improvements. It is best to review evaluation scores within the same category.

Criteria

Evaluation criteria were developed to measure how well each alternative supported FAST goals and objectives. For each goal, at least one metric was developed to measure how well an alternative supports that FAST goal. For more information on FAST goals, see Chapter 2.

The following evaluation criteria were developed.

- Improve quality of life
- Increase safety and security
- Stimulate economic activity
- Support equity
- Sustainability of improvement
- Maintain or increase ridership
- Cost effectiveness
- Connectivity to other transportation modes
- Support from prior plans
- Public input

Scoring

Each alternative received a score indicating how well it supports each metric. The scores were based on a three-tier scoring system measuring whether each alternative was very supportive, somewhat supportive or not supportive in each metric category. Table 6-1 provides an overview of the alternative scores in each evaluation metric.

Table 6-1 Evaluation Results | Scoring

Alternatives	Quality of Life	Safety & Security	Economic Activity	Equity	Sustainability	Ridership	Cost Effectiveness	Connection	Prior Plans	Input	Total Score
Service											
Existing Fixed Route Service	◆	◇	◆	◆	◆	◆	◆	◆	◆	◆	◆◆◆◆◆◆◆◆◆
Existing FAST*Trac!* Service	◆	◇	◆	◆	◆	◆	◆	◆	◆	◆	◆◆◆◆◆◆◆◆◆
Nighttime Fixed Route Service	◆	◇	◆	◆	◆	◆	◐	◆	◆	◆	◆◆◆◆◆◆◆◆◐
Nighttime Microtransit Service	◆	◇	◐	◆	◆	◆	◆	◆	◐	◐	◆◆◆◆◆◆◆◐
Fort Bragg Service	◆	◇	◆	◆	◐	◆	◐	◆	◐	◆	◆◆◆◆◆◆◆◐
Increased Frequency	◆	◇	◆	◆	◇	◆	◇	◐	◆	◆	◆◆◆◆◆◆◐
Airport Fixed Route	◇	◇	◆	◐	◐	◇	◐	◆	◇	◆	◆◆◆◆◐
West Fayetteville Fixed Route	◆	◇	◆	◆	◐	◆	◐	◆	◆	◆	◆◆◆◆◆◆◆◆
Microtransit in West Fayetteville	◆	◇	◐	◆	◆	◆	◆	◆	◐	◐	◆◆◆◆◆◆◆◐
Microtransit Areas	◆	◇	◐	◆	◆	◆	◆	◆	◐	◐	◆◆◆◆◆◆◆◐
Hope Mills Commuter Express Route	◆	◇	◆	◆	◐	◐	◐	◆	◐	◆	◆◆◆◆◆◆◆
Hope Mills Circulator/Microtransit	◆	◇	◆	◆	◐	◇	◐	◐	◐	◇	◆◆◆◆◆
Spring Lake Commuter Route	◆	◇	◆	◆	◐	◐	◐	◆	◐	◆	◆◆◆◆◆◆◆
Spring Lake Circulator/Microtransit	◆	◇	◆	◆	◐	◇	◐	◐	◐	◇	◆◆◆◆◆
Infrastructure											
Transfer Hub Modernization	◆	◐	◐	◆	◆	◐	◐	◇	◐	◆	◆◆◆◆◆◆◐
Upgraded & Modernized Bus Shelters	◆	◆	◐	◆	◆	◐	◐	◇	◐	◆	◆◆◆◆◆◆◆
Bus Stop Signs	◆	◇	◇	◐	◆	◇	◆	◇	◇	◇	◆◆◆◐
FAST*Trac!* Stop Amenities	◆	◐	◐	◆	◐	◐	◐	◇	◇	◆	◆◆◆◆◆◐
Electrification of Transit Vehicles	◆	◇	◐	◆	◐	◇	◇	◇	◐	◐	◆◆◆◆
Bus Pullouts	◆	◆		◐	◇	◇	◇	◇	◐	◆	◆◆◆◐
Park and Ride Lots	◆	◇	◇	◇	◆	◆	◇	◇	◐	◐	◆◆◆◆
Sidewalk Analysis	◆	◆	◐	◆	◆	◐	◆	◇	◆	◆	◆◆◆◆◆◆◆◆
Technology											
Website	◆	◇	◇	◐	◆	◐	◆	◇	◇	◆	◆◆◆◆◆
Wi-Fi	◆	◇	◐	◆	◐	◐	◐	◐	◇	◆	◆◆◆◆◆◐
FAST*Trac!* Application	◆	◇	◆	◐	◆	◐	◆	◐	◇	◐	◆◆◆◆◆◆
Cashless System	◆	◇	◇	◇	◐	◇	◇	◇	◇	◇	◆◐

◆ Very Supportive ◐ Somewhat Supportive ◇ Not Supportive

Table 6-1 Evaluation Results | Scoring (Continued)

Alternatives	Quality of Life	Safety & Security	Economic Activity	Equity	Sustainability	Ridership	Cost Effectiveness	Connection	Prior Plans	Input	Total Score
Policies & Plans											
Fort Bragg Transit Plan	◆	◇	◆	◐	◐	◆	◆	◆	◇	◆	◆◆◆◆◆◆◆
Fort Bragg Universal Pass Program	◆	◇	◆	◐	◐	◆	◆	◆	◇	◇	◆◆◆◆◆◆
Good Repair Principles	◆	◆	◇	◆	◆	◐	◆	◇	◇	◇	◆◆◆◆◆◐
Marketing Plan	◆	◇	◆	◆	◐	◆	◐	◇	◇	◆	◆◆◆◆◆◆
Compensation & Benefits Study	◆	◇	◐	◆	◐	◇	◐	◇	◇	◇	◆◆◆◐
Staffing Review Study	◆	◇	◐	◆	◐	◇	◐	◇	◇	◆	◆◆◆◆◐
Bus Driver Training Program	◆	◆	◐	◆	◇	◐	◆	◇	◇	◐	◆◆◆◆◆◐
TDP Update	◐	◇	◐	◐	◐	◇	◐	◇	◇	◇	◆◆◐
Transit Design Guidelines	◐	◇	◇	◆	◐	◇	◐	◇	◐	◐	◆◆◆◐
Planning and Zoning Coordination Day	◐	◇	◐	◐	◐	◇	◆	◐	◐	◇	◆◆◆◆
Developer Award	◇	◇	◇	◇	◐	◇	◆	◆	◇	◇	◆◆◐
Fixed Route Barrier Study	◆	◆	◐	◆	◐	◐	◐	◇	◐	◆	◆◆◆◆◆◆◐

◆ Very Supportive ◐ Somewhat Supportive ◇ Not Supportive

Recommendations

The recommendations for FAST improvements fall into three steps:

- **Step 1 Rebuild Service** | The first step focuses on returning service levels to those operating prior to the COVID-19 pandemic. Returning service does not necessarily mean that service will operate exactly as it had before the pandemic. FAST is taking the opportunity created by the pandemic to consider how to improve service efficiency.
- **Step 2 Improve Service** | The second step focuses on taking current services to the next level. Primarily, this step focuses on improving frequencies of fixed route services and creating more comfortable spaces for waiting passengers.
- **Step 3 Expand Service** | After improving current services in Step 2, FAST will move to expanding services in Step 3 to areas where it is not currently offering service.

The timeline for the improvements is roughly a decade with the bulk of the time being spent in Step 2 to improve current services. More details about the improvements made in each step are provided in the following section.

Figure 6-2 Recommendation Timeline

Step 1 Rebuild Service (2023 – 2024)

Rebuilding service focuses on re-establishing service to passengers who lost it during COVID and strengthening the current network to remedy any missing service.

- FAST will continue to operate all current fixed route service and FAST*Trac!* service.
- FAST will re-instate nighttime service through the use of core fixed routes augmented by microtransit services. Microtransit service will replace areas previously served by fixed route service where operating fixed route services in the evening was inefficient.
- FAST will continue to replace transit vehicles as they reach the end of their useful lives. Replacement vehicles will be electric. As vehicles are replaced, FAST will also consider upgrading them to include wireless internet access.
- FAST will invest annually in modernizing bus shelters and improving bus stops to meet ADA requirements.
- FAST will continue to maintain its assets in a state of good repair.

- FAST recently was awarded a grant to review a cashless fare system so it will conduct that study.
- The Fayetteville community made clear through the public input process that improvement in service to Fort Bragg was imperative. Unlike other areas, FAST has to collaborate with Fort Bragg in order to begin serving secure areas of the base. FAST has begun conversations with Fort Bragg and hopes to add service in the near future. During this process, FAST will work to determine if Fort Bragg can support its military members through a universal pass, or similar, program.
- The City of Fayetteville is already undertaking a compensation and benefits study to ensure competitive salaries and benefits for FAST employees. More competitive compensation packages will help FAST recruit and retain operators to fill new operator positions created by adding new transit service.
- FAST has already begun a partnership with FTCC to recruit and train operators. FAST will continue this partnership.
- FAST will develop a marketing plan to promote its services. The marketing plan will target individual market segments (e.g., students, military service members, seniors) and provide marketing messages for each. FAST will provide staffing resources to implement the marketing plan.
- In preparation for the move to Step 2, FAST will conduct a staffing review. Current staffing levels may not adequately meet the needs of an expanding system so FAST will determine where there may be deficiencies. It is anticipated that FAST will need to increase transit operator and marketing staff, among other areas for capacity increases.

Step 2 Improve Service (2025 – 2030)

The second step focuses on improving current services to better meet the needs of current passengers and attract future passengers. The steps are intended to be layered such that all of the improvements undertaken in Step 1 will continue for the duration of the next steps.

- The primary focus is on increasing the frequency of fixed route service. Over approximately a four-year timeframe, FAST will reduce the headways on its service by half (i.e., the bus will pass by each bus stop twice as often). Prior to increasing frequencies, FAST will conduct a comprehensive operations (COA) analysis to review low ridership segments, improve on-time performance, and generally ensure that the routes are operating efficiently.

  It is anticipated that FAST will begin frequency improvements on routes with the highest ridership levels, but the COA will also contribute to understanding which routes should be prioritized for improvements. It is anticipated that the improvements will occur over a four-year timeframe. Table 6-2 provides an example of the timeline, but as noted, the exact order of the routes for improved frequency will be determined through a COA.

Table 6-2 Frequency Improvements Timeline

Year	Routes
2025	3, 5, 7, 8
2026	4, 6, 9, 14, 16, 18
2027	11, 12, 15, 17, 19
2028	10, 30, 31

- To reduce headways, FAST will need to purchase many new vehicles. The FAST maintenance building is already operating at capacity and in need of replacement. FAST will need to study the best way to increase capacity, which could include building a new facility to store and maintain all of the new vehicles.
- FAST will focus on improving infrastructure with modernization and improvement of the Cross Creek, University Estates and Food Lion (Raeford Road and Ireland Drive) transfer locations.
- FAST will work with the City of Fayetteville to improve the functionality of its website. As technology continues to evolve, the website will need to continue to be upgraded to ensure its relevance.
- FAST will review popular FAST*Trac!* destinations to determine if there are any potential improvements to be made for waiting passengers.
- FAST will undertake a study to determine what barriers there are to using the fixed route system for FAST*Trac!* passengers. Addressing these barriers can enable FAST*Trac!* passengers to transition to the fixed route system which provides greater mobility for these individuals and reduces costs for the transit agency.
- Again, a marketing plan will be developed to promote FAST services to various segments of the community.
- Other planning activities will be undertaken such as an update to the TDP after a five-year period. FAST will prepare a transit design guidelines document to assist developers in understanding transit friendly design. It will pair the launch of the development guidelines with its new developer award to recognize transit friendly design in Fayetteville. Finally, FAST will begin to meet with the Planning and Zoning Division on an annual basis to ensure coordination. Coordination will include discussions about sidewalk needs and bus pullouts.

Step 3 Expand Service (2031 – 2032)

The final phase focuses on expanding transit services to areas that are not currently served. The timing of Step 3 will depend on the duration of Step 2.

- Expansion of service will include commuter express services to Hope Mills and Spring Lake. These services will allow residents of these communities to access employment opportunities in

Fayetteville. As noted in Chapter 5, FAMPO has included a regional transit study in its UPWP. It is anticipated that this study will be completed before FAST enters Step 3 and the study will help FAST, with the assistance of FAMPO, to refine this recommendation.

- FAST will have to determine how residents of Hope Mills and Spring Lake will access commuter express services. FAST could implement a park and ride system to allow residents to drive and park to access the bus or it could implement a circulator/microtransit system to pick up passengers to connect with the commuter service. A study to determine the best option will be undertaken.
- In addition to adding express route service to Hope Mills and Spring Lake, it is recommended that FAST also consider opportunities for express routes to high demand areas within the City of Fayetteville. The determination of potential areas for express service will be determined by ridership levels on existing fixed route services within the City of Fayetteville. These routes may need park and ride lots to support express service.
- FAST will also add service to the Fayetteville Regional Airport.
- Expansion of microtransit services in West Fayetteville and the southern portion of Fayetteville will be explored during Step 3.

Below is a table to express the projected ridership based on the implementation of recommended improvements as part of this TDP. These projections are based on 2019 ridership numbers.

Table 6-3 Projected Ridership

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Current Ridership (2019)	1.8M	1.8M	1.8M	1.8M	1.8M	1.8M	1.8M	1.8M	1.8M	1.8M
Fort Bragg Service	44K	50K	56K	63K	63K	63K	63K	63K	63K	63K
Increased Frequency				217K	577K	745K	1.0M	1.1M	1.2M	1.2M
Airport Fixed Route										385K
Spring Lake Commuter Route									300K	343k
Spring Lake Circulator/Microtransit									332k	332k
Hope Mills Commuter Express Route									300k	343k
Hope Mills Circulator/Microtransit									332k	332k
Totals:	**1.84M**	**1.85M**	**1.85M**	**2.0M**	**2.4M**	**2.6M**	**2.9M**	**3.0M**	**4.3M**	**4.8M**

Next Steps

To implement the recommendations in this plan, FAST will need support from City Council. Not only does City Council approve this plan and the vision presented herein, it will also need to assist FAST in funding these recommendations. Each year, the City's annual budget will need to address the recommended improvements.

7

Finance Plan

The TDP finance plan provides planning-level expense and revenue projections for continuing current transit services and adding improvements over the ten-year time frame. This section begins with an overview of potential funding available to FAST followed by an overview of the projected expenses and revenues associated with the improvements recommended in Section 6.

Revenue

This section provides an overview of potential funding sources available through federal, state and local sources. Some revenue sources are distributed based on legislatively defined formulas such that FAST will receive funding from these sources on an annual basis. Other revenue sources are competitive and limited to funding certain project types such that FAST may not be eligible for these funds every year. Each funding source has a unique set of requirements to access the funding.

Federal Revenue

The following funding sources are available from the federal government. Federal funding programs are complex and require recipients to follow rigorous guidelines for funding usage. From year to year, FAST's use of these funding programs may vary based on its funding needs and ability to compete for competitive programs.

- **Urbanized Area Formula Grants (49 U.S.C. 5307) |** Federal government resources available to urbanized areas for transit capital and operating assistance. Funds are apportioned based on legislative formulas.

- **Rural Area Formula Grants (49 U.S.C. 5311) |** Federal government resources available to non-urbanized areas for transit capital and operating assistance. Funds are apportioned based on legislative formulas.
- **Public Transportation Innovation (49 U.S.C. 5312) |** A competitive grant program designed to encourage innovation in public transportation. Recipients' projects must be related to research, development, demonstration and deployment projects, or evaluation of technology of national significance to public transportation. In January 2021, FTA announced $355,000 in funding for FAST under this program for a contactless fare payment system. The system will eliminate the collection of cash fares for FAST complementary paratransit and fixed route passengers.
- **Bus and Bus Facilities (49 U.S.C. 5339) |** This program makes funding available to replace, rehabilitate, or purchase buses and related equipment. Eligible projects include fleet expansion, maintenance, bus malls, transportation centers, park-and-rides, intermodal terminals, and fareboxes. Funds are apportioned based on legislative formulas.
- **Enhanced Mobility of Seniors & Individuals with Disabilities (49 U.S.C. 5310) |** Formula funding for the purpose of meeting transportation needs of older adults and people with disabilities. Funds are apportioned based on legislative formulas.
- **Flexible Funding Programs (49 U.S.C. 5334) |** This program allows Federal-Aid Highway Program funds designated for public transportation projects to be flexed or transferred to FTA.
- **Rebuilding American Infrastructure with Sustainability and Equity (RAISE) |** This discretionary grant program provides funding for transit projects with significant local or regional significance. Statutorily defined criteria require projects to be related to safety, environmental sustainability, quality of life, economic competitiveness and opportunity, state of good repair, partnership or innovation.
- **COVID-19 Pandemic-Related Funding |** The following federal funding programs were initiated in response to the COVID-19 pandemic. Funds were apportioned based on legislative formulas. These funds have all been apportioned at this time and are only available to the extent FAST has not yet expended all of its apportionment.
    - **Coronavirus Aid, Relief and Economic Security (CARES) Act |** One-time funding provided to assist transit agencies to support service and account for increased costs during the COVID-19 pandemic.
    - **Coronavirus Response and Relief Supplemental Appropriations Act of 2021 (CRRSAA) |** A second round of funding to assist transit agencies in providing services during the COVID-19 pandemic.
    - **American Rescue Plan (ARP) Act of 2021 |** A third pandemic relief package for transit agencies.
- **Bipartisan Infrastructure Law |** Signed into law in November 2021, the Bipartisan Infrastructure Law provides up to $108 billion dollars for public transportation with $91 billion being guaranteed. This funding increases available federal funding for transit including increases to formula funding programs such as Urbanized Area Formula Grants.

State Revenue

North Carolina uses a streamlined unified grant application program to access all transit-related funding opportunities provided through the North Carolina Department of Transportation (NCDOT). There are fewer opportunities for urban-system funding at the state level for transit.

- **State Maintenance Assistance Program (SMAP) |** This state program provides assistance for operating expenses. Funds are apportioned based on state legislative formulas.
- **Advanced Technology Grants |** This state grant program is not always available, but when it is, it provides financial assistance for systems investing in improved software that benefits transportation delivery.
- **Urban State Match |** NCDOT provides the match portion for urban systems that are direct recipients of federal funds. These matching funds are available for capital and operating grants.
- **ConCPT Grant |** Another potential grant opportunity through the (NCDOT) is the ConCPT grant program. This grant can be used to consolidate or coordinate with other public transportation systems to maximize resource, gain efficiencies, and increase access to public transportation. Consolidation requires two systems to merge while coordination requires three or more counties to participate in five-day per week services.

Local Revenue

Local funding comes in several different forms including funds generated by the transit agency. The following funding sources are currently engaged to support FAST. For a discussion on additional funding sources not yet available to FAST, see the Dedicated Funding Sources section.

- **Motor Vehicle License Tax |** A portion of the motor vehicle license tax collected in the City of Fayetteville is used to fund transit.
- **Fare Revenue |** FAST collects fare revenue from passengers on both fixed route and complementary paratransit services. These fares provide a significant stream of revenue for the transit agency. Fare collections were suspended during the COVID-19 pandemic, but FAST has since restored fare collections. More information on fare levels is presented in Chapter 2.
- **Advertising |** FAST has a bus wrap program available to potential advertisers. Funds from advertising are used to support transit services.
- **FAST Transit Center Rentals |** Local organizations can rent space in the FAST Transit Center for meetings and events. Rental fees support the transit agency and its upkeep of the facility.

Dedicated Funding Sources

Given the robust nature of the recommended 10-year plan, FAST may need to access funding beyond its current local revenue sources. Dedicated funding sources provide long-term funding stability needed to grow the system. There are many transit dedicated funding mechanisms in use across the country and

within North Carolina. This section provides a snapshot of these funding sources, which are not currently being used by FAST. The only dedicated funding source FAST currently uses is a motor vehicle license tax.

It should be noted that these funding sources cannot be secured directly by FAST. These sources require an act by an official governing body such as the City of Fayetteville Council.

- **Property (or Ad Valorem) Tax |** Some transit agencies receive a small portion of a county or city's ad valorem tax revenue to support transit services. The tax rate is proportional to the value of the property.
- **Sales Tax |** In some communities, the use of a dedicated sales tax to fund transit is more desirable than an ad valorem tax. Sales tax can come in many denominations such as a quarter cent, half cent or full cent tax.
- **Visitor Tax |** Other communities look to visitor taxes to subsidize transit. Visitor taxes can take the form of taxes or fees assessed on hotel rooms, rental cars, or other tourist expenditures.
- **Gas Tax |** For states that levy a gas tax, a portion can be used to subsidize transit.
- **Lottery or Casino Revenues |** Some states allocate a portion of the revenues received from lottery or casino proceeds to support public transportation.
- **Toll Revenues |** Many communities use toll revenues as a funding source for transit.
- **Parking Fees or Fines |** Locally, some communities choose to use a portion of parking fees and fines to finance transit systems.
- **Realty Transfer or Mortgage Filing Fees |** Localities can sometimes make use of realty transfer fees or mortgage filing fees to support transit.
- **Tax Increment Finance (TIF) Districts |** TIF districts aim to recoup increased property tax income realized from public improvements made to the local community and re-invest them in that local community. These funds can be used to support transit.

Finance Plans

Ten-year operating and capital finance plans were prepared to provide guidance on the order of magnitude of funding needed to continue current FAST operations as well as incorporate the recommended improvements over the next ten years. The finance plans were developed at a planning level and should not be considered a budget. The provide guidance for long-term decision making, but annual cost estimates will be needed for each budget cycle.

It should also be noted that City Council's approval of the TDP does not obligate funds for the proposed projects. Council approval indicates agreement with the proposed direction of the agency. Annual budgets will be developed and approved separately to allocate funding for existing services and improvements.

The expense portion of the finance plans were based on the following assumptions:

- **Inflation Rates:** Considering recent trends in inflation rates, near-term inflation rates for expenses were assumed to be higher than in recent years. As such, an annual inflation rate of 5.0 percent was assumed for the first five years of the TDP while an annual inflation rate of 2.5 percent was assumed for the final five years of the TDP. Inflation rates were applied to all costs over the course of the ten-year finance plan.
- **Vehicle Costs**: Using current contractual rates as a basis, the following 2022 vehicle purchase prices were assumed.
  - Diesel Fixed Route Vehicle: $540,000 with a 12-year useful life
  - Electric Fixed Route Vehicle: $900,000 with a 12-year useful life
  - Complementary Paratransit Vehicle: $100,000 with a 5-year useful life
- **Cost per Revenue Hour**: New service cost projections were based on a 2022 cost per revenue hour of approximately $71.00.
- **Other Costs**: Where possible, non-service expenses were based on known costs from prior purchases (e.g., cost for developing prior TDPs). When prior costs were not available, reasonable assumptions as to non-service expenses were made.

The revenue portion of the finance plans were based on the following assumptions:

- **Inflation Rates:** Current revenue streams were assumed to continue into the future with an annual inflation rate of 2.0 percent.
- **Farebox Recovery**: For new services, farebox recovery was assumed to be 8.0 percent of operating costs.
- **Grant Funding**: It was assumed that FAST would be successful in securing a federal grant for the purchase of electric vehicles. The finance plan includes an assumption that 80 percent of the cost of the purchase of electric vehicles is covered by a federal grant.

Projections for operating expenses are provided in Table 7-1. Expenses for current services are separated from the expenses for recommended improvements. Expenses are projected at a planning level and are presented in millions of dollars. Annual operating expenses range between $13 million and $31 million.

Table 7-2 provides an overview of the capital expenses anticipated with implementation of the recommendations. Replacement vehicles are included for existing and new services based on the useful life replacement schedule.

Figure 7-1 illustrates the expenses and revenues on one chart. The difference between revenues and expenses provides an indication of the funding needed through additional sources to implement the planned improvements. Additional funding could come from federal, state or local sources. In 2025, capital expenses are significant due to the need for a new maintenance facility to accommodate the new vehicles required for the increased in frequency. Operating expenses steadily increase during Step 2 due to the increases in frequency.

Table 7-1 Finance Plan | Operating Expenses (in millions)

	Step 1 Rebuild Service		Step 2 Improve Service						Step 3 Expand Service		
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	10-Year Total
CURRENT SERVICES											
Fixed Route Operations	$6.9 M	$7.3 M	$7.6 M	$8.0 M	$8.4 M	$8.6 M	$8.8 M	$9.1 M	$9.3 M	$9.5 M	$83.7 M
FASTTRAC! Operations	$3.0 M	$3.2 M	$3.3 M	$3.5 M	$3.7 M	$3.7 M	$3.8 M	$3.9 M	$4.0 M	$4.1 M	$36.3 M
Non-Program Expenditures	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.4 M
Transit Administration	$1.9 M	$2.0 M	$2.1 M	$2.2 M	$2.3 M	$2.3 M	$2.4 M	$2.4 M	$2.5 M	$2.6 M	$22.5 M
Transit Facilities Maintenance	$1.2 M	$1.3 M	$1.3 M	$1.4 M	$1.5 M	$1.5 M	$1.6 M	$1.6 M	$1.6 M	$1.7 M	$14.7 M
Total Current Services	**$13.0 M**	**$13.7 M**	**$14.4 M**	**$15.1 M**	**$15.8 M**	**$16.2 M**	**$16.6 M**	**$17.1 M**	**$17.5 M**	**$17.9 M**	**157.4 M**
NEW SERVICES											
Nighttime Fixed Route & Microtransit Service	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.0 M
Fort Bragg Service	$0.3 M	$0.3 M	$0.4 M	$0.4 M	$0.4 M	$0.4 M	$0.4 M	$0.4 M	$0.4 M	$0.4 M	$3.9 M
Increased Frequency				$2.8 M	$5.0 M	$7.3 M	$9.7 M	$9.9 M	$10.2 M	$10.4 M	$55.2 M
Airport Fixed Route										$0.4 M	$0.4 M
West Fayetteville Service									$0.4 M	$0.4 M	$0.8 M
Spring Lake Commuter Route									$0.3 M	$0.3 M	$0.6 M
Spring Lake Circulator/Microtransit										$0.3 M	$0.3 M
Hope Mills Commuter Express Route									$0.3 M	$0.3 M	$0.6 M
Hope Mills Circulator/Microtransit										$0.3 M	$0.3 M
Total New Services	**$0.3 M**	**$0.3 M**	**$0.4 M**	**$3.1 M**	**$5.4 M**	**$7.7 M**	**$10.1 M**	**$10.3 M**	**$11.6 M**	**$12.9 M**	**$62.0 M**
GRAND TOTAL	$13.4 M	$14.0 M	$14.7 M	$18.2 M	$21.2 M	$23.9 M	$26.7 M	$27.4 M	$29.0 M	$30.8 M	$219.5 M

Note: Totals may not sum due to rounding.

Table 7-2 Finance Plan | Capital Expenses (in millions)

	Step 1 Rebuild Service		Step 2 Improve Service						Step 3 Expand Service		
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	10-Year Total
INFRASTRUCTURE											
Replacement Vehicles Fixed Route - Diesel	$0.99 M	$1.04 M	$1.09 M	$1.15 M	$1.21 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$5.48 M
Replacement Vehicles Fixed Route - Electric	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$3.30 M	$3.38 M	$3.46 M	$3.55 M	$3.64 M	$17.33 M
Replacement Vehicles Paratransit	$0.29 M	$0.31 M	$0.32 M	$0.34 M	$0.36 M	$0.37 M	$0.38 M	$0.38 M	$0.39 M	$0.40 M	$3.55 M
Expansion Vehicles Fixed Route - Diesel	$0.00 M	$0.00 M	$3.28 M	$3.45 M	$3.62 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$10.35 M
Expansion Vehicles Fixed Route - Electric	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$4.12 M	$0.00 M	$0.00 M	$2.54 M	$1.30 M	$7.96 M
Maintenance Facility	$0.00 M	$0.00 M	$10.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$10.00 M
University Estates Transfer Hub Modernization	$0.00 M	$0.00 M	$0.00 M	$0.10 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.10 M
Food Lion Transfer Hub Modernization	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.10 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.10 M
Cross Creek Mall Transfer Hub Modernization	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.13 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.13 M
Upgraded and Modernized Bus Shelters	$0.05 M	$0.05 M	$0.05 M	$0.05 M	$0.05 M	$0.05 M	$0.05 M	$0.05 M	$0.05 M	$0.05 M	$0.50 M
ADA Improvements	$0.09 M	$0.09 M	$0.09 M	$0.09 M	$0.09 M	$0.09 M	$0.09 M	$0.09 M	$0.09 M	$0.09 M	$0.90 M
Bus Stop Signs	$0.01 M	$0.01 M	$0.01 M	$0.01 M	$0.01 M	$0.01 M	$0.01 M	$0.01 M	$0.01 M	$0.01 M	$0.06 M
FAST*Trac!* Stop Amenities	$0.00 M	$0.00 M	$0.00 M	$0.04 M	$0.00 M	$0.04 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.08 M
Bus Pullouts	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M
Sidewalk Analysis	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M
TECHNOLOGY											
Website	$0.00 M	$0.00 M	$0.05 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.05 M
Wi-Fi	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M
FAST*Trac!* Application	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M
Cashless Fare System	$0.36 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.36 M

Note: Table continued on next page.

Table 7-2 Finance Plan | Capital Expenses (in millions) (Continued)

	Step 1 Rebuild Service		Step 2 Improve Service						Step 3 Expand Service		
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	10-Year Total
PLANS & POLICIES											
Fort Bragg Transit Plan	$0.11 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.11 M
Good Repair Principles	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M
Marketing Plan	$0.00 M	$0.00 M	$0.03 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.03 M
Compensation & Benefits Study	$0.05 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.05 M
Staffing Review Study	$0.00 M	$0.03 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.03 M
Bus Operator Training Program	$0.00 M	$0.00 M	$0.01 M	$0.01 M	$0.01 M	$0.01 M	$0.01 M	$0.01 M	$0.01 M	$0.01 M	$0.06 M
TDP Updates	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.17 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.19 M	$0.35 M
Transit Design Guidelines	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.13 M	$0.00 M	$0.00 M	$0.00 M	$0.13 M
Planning & Zoning Collaboration Day	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M
Developer Award	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M
Fixed Route Barrier Study	$0.00 M	$0.00 M	$0.12 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.00 M	$0.12 M
Transit Asset Management Plan	$0.02 M	$0.00 M	$0.00 M	$0.02 M	$0.00 M	$0.00 M	$0.02 M	$0.00 M	$0.00 M	$0.02 M	$0.08 M
Title VI Plan	$0.00 M	$0.00 M	$0.02 M	$0.00 M	$0.00 M	$0.02 M	$0.00 M	$0.00 M	$0.02 M	$0.00 M	$0.06 M
GRAND TOTAL	$1.97 M	$1.53 M	$15.06 M	$5.24 M	$5.60 M	$8.13 M	$4.06 M	$4.00 M	$6.66 M	$5.71 M	$57.97 M

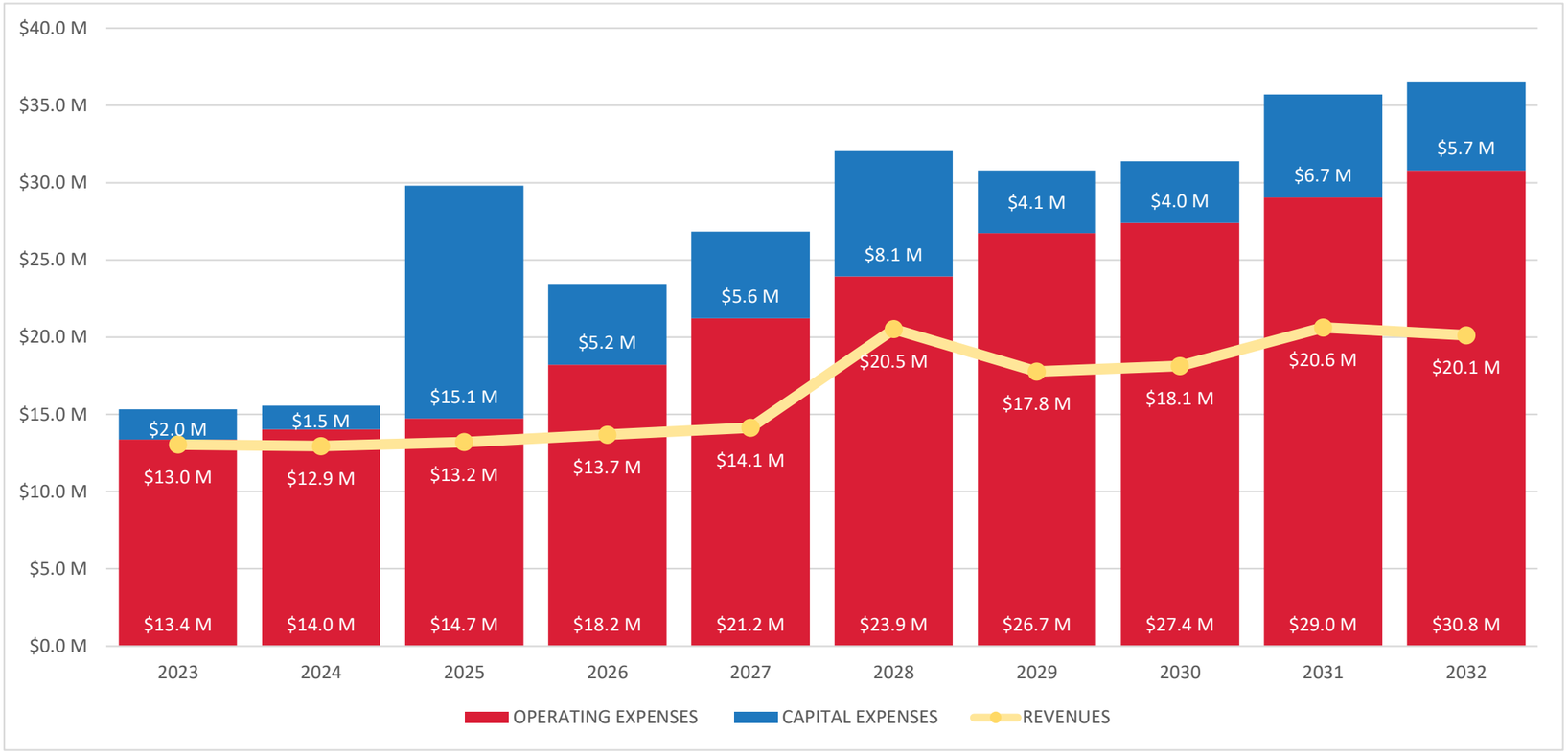
Note: Totals may not sum due to rounding.

Table 7-3 Finance Plan | Revenue (in millions)

	Step 1 Rebuild Service		Step 2 Improve Service						Step 3 Expand Service		
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	10-Year Total
Revenue	$12.7 M	$12.9 M	$13.2 M	$13.4 M	$13.7 M	$14.0 M	$14.3 M	$14.5 M	$14.8 M	$15.1 M	$138.7 M
Fare Revenue - New Services	$0.0 M	$0.0 M	$0.0 M	$0.2 M	$0.4 M	$0.6 M	$0.8 M	$0.8 M	$0.9 M	$1.0 M	$4.8 M
Cashless Fare System Grant	$0.4 M	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.4 M
Electric Vehicle Funding	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$0.0 M	$5.9 M	$2.7 M	$2.8 M	$4.9 M	$4.0 M	$20.2 M
GRAND TOTAL	$13.0 M	$12.9 M	$13.2 M	$13.7 M	$14.1 M	$20.5 M	$17.8 M	$18.1 M	$20.6 M	$20.1 M	$164.1 M

Note: Totals may not sum due to rounding.

Figure 7-160 Finance Plan | Total Expenses and Revenues



8

Regional Transportation Options

Travel Patterns

In 2018, there were 110,202 people employed in Cumberland County. Of those, 50,355 (45.7%) traveled from outside the County to work. As shown in Table 3-9 and Figure 3-22, 59,847 (54.3%) of the County's residents lived and worked within Cumberland County. The remaining 46,781 (43.9%) residents were employed outside of Cumberland County.

Table 8-1 Employment Travel Flows of Cumberland County

Employed in Cumberland County	**110,202**	**100.0%**
Employed in Cumberland County but Living Outside of County	50,355	45.7%
Employed and Living in Cumberland County	59,847	54.3%
Living in Cumberland County	**106,628**	**100.0%**
Living in Cumberland County but Employed Outside of County	46,781	43.9%
Living and Employed in Cumberland County	59,847	56.1%

The median travel time to work in Cumberland County is 24.2 minutes. The shortest commute times in the County are around Fort Bragg, areas surrounding Fayetteville's CBD, and along the All American Highway corridor (Figure 3-23). Travel times tend to increase as a place of residence increases in distance away from downtown Fayetteville or the regional center along the All American Highway. Rural Cumberland County has the longest average commute times.

The transit mode share for Cumberland County is just 1 percent of commuters. Depending on block group, this may range between 0 percent and 42 percent. High transit utilization areas exist immediately east of downtown Fayetteville and south-central Fayetteville near Owen Drive (Figure 3-24). Additional high transit use areas include North Fayetteville bounded by I-295, U.S. 401, and NC-24; southern Spring Lake and Fort Bragg, and along the U.S.301 and I-95 corridor.

Figure 8-1 Cumberland County Employment Travel Flow

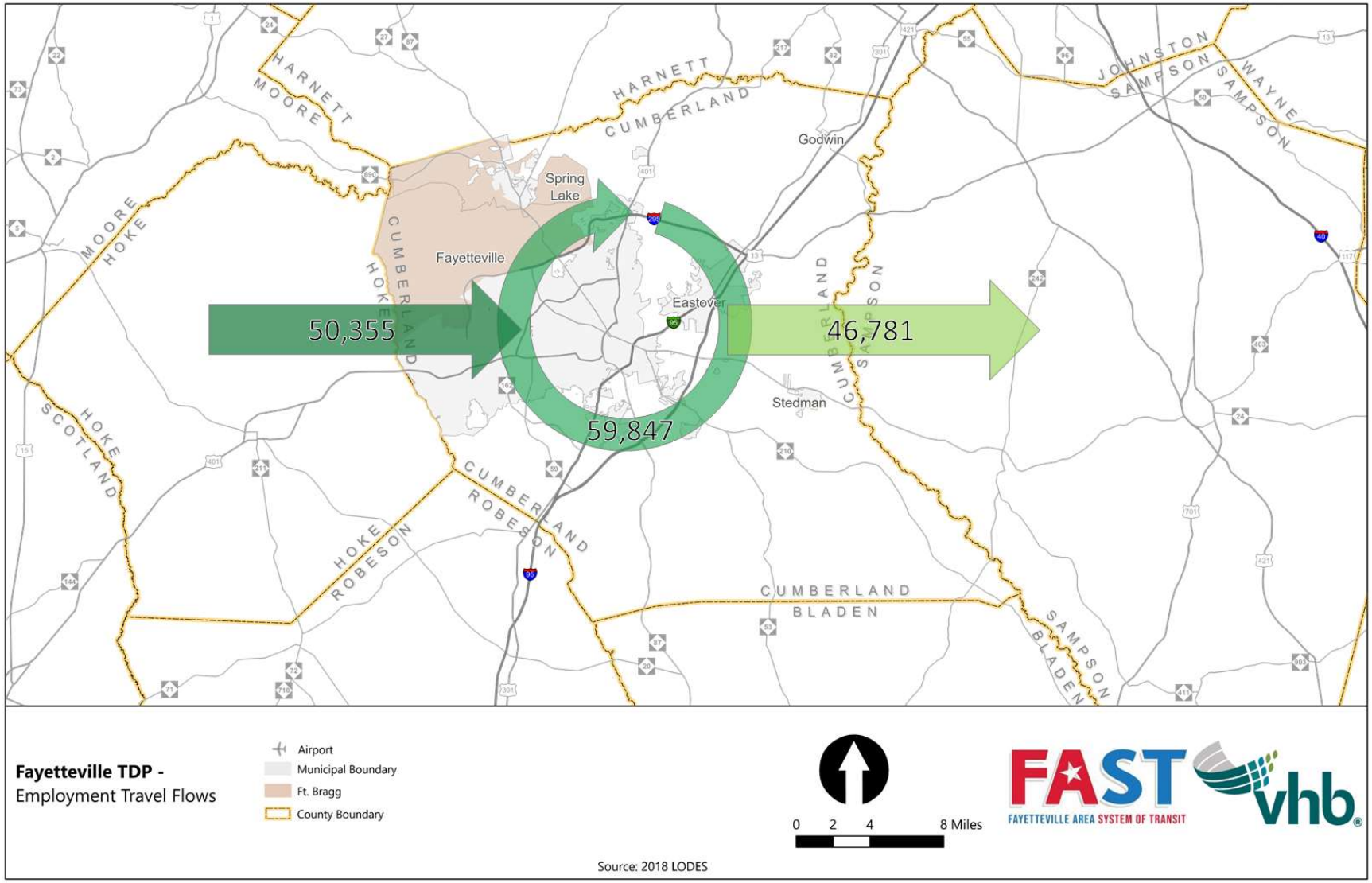


Figure 8-2 Average Commute Time

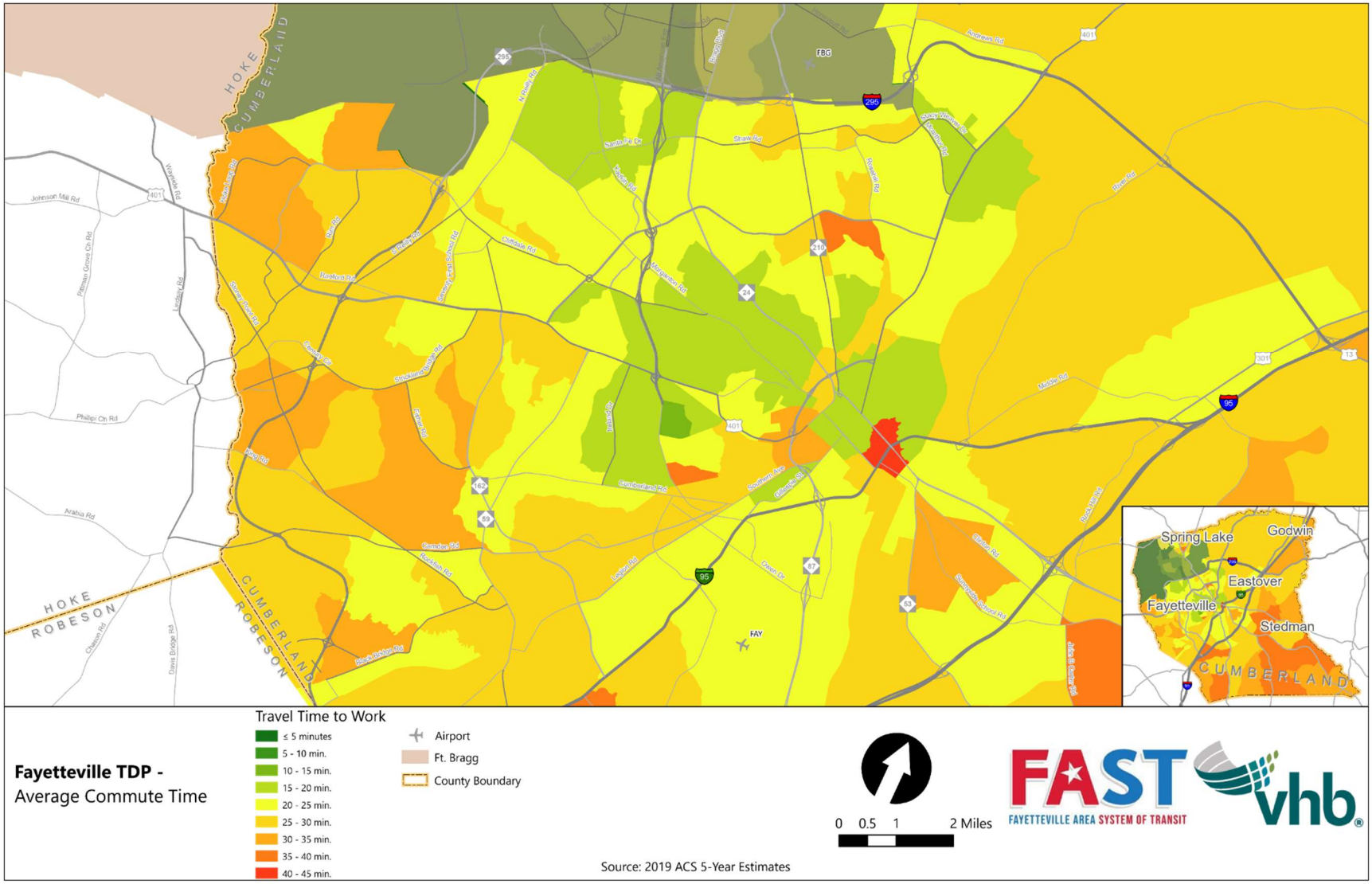
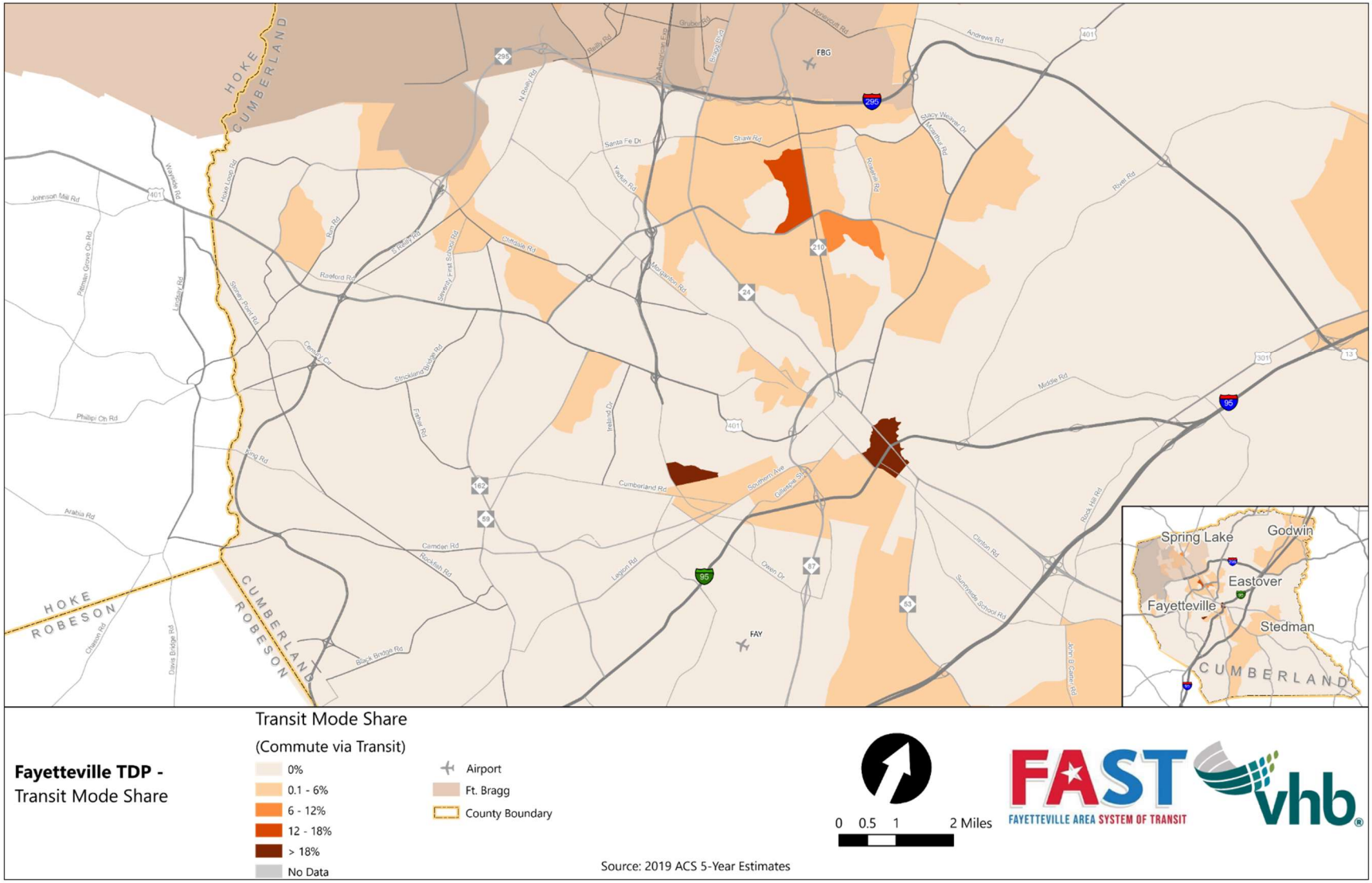


Figure 8-3 Transit Commute Mode Share



Regional Coordination

FAST has begun strengthening its relationship with Cumberland County in order to provide better service and gather feedback from the County as well. FAST's Transit Director was recently appointed to the County's Transportation Advisory Committee (TAC) giving FAST greater access to information regarding transportation improvements being made at the county level.

FAST is also working to build a better relationship with the Fayetteville Area Metropolitan Planning Organization (FAMPO) and the City of Fayetteville Planning & Zoning Division. These organizations impact FAST operations and planning in various ways so strengthening the relationships can assist with future efforts. For example, FAMPO has earmarked funding for a regional transit study in its Unified Planning Work Program (UPWP) and the Planning & Zoning Division influences land use decisions that could support FAST services.

Multimodal Connections

There are several other entities that provide transportation services within the FAST service area. These services can complement or compete with FAST service within the region. There are also important multimodal connections that support FAST services. Each of these is explored below.

Spring Lake Transit Service

The City of Spring Lake operated bus transit service with access to Fort Bragg, University Estates and the City of Spring Lake. Spring Lake contracted its bus services through Majestic Mobility. Transit service was suspended indefinitely as of October 22, 2021. The transit service included the following features.

- Fares: $1 per trip each way
- Days of Operation: Monday-Friday (No weekend service)
- Hours of Operation: 6:00 AM to 10:00 AM and 1:00 PM to 4:00 PM

Health & Human Service Organizations

Often health and human service organizations provide transportation services and/or information to clients, such as seniors or individuals with disabilities. Cumberland County operates the Community Transportation Program. The Community Transportation Program focuses on providing trips to three distinct groups for distinct purposes: medical transportation for the elderly and individuals with disabilities, work or school trips for urban residents, and work, school, medical or shopping trips for rural residents. These programs have limited funds, so they are not always available.

Intercity Bus and Rail Service

Greyhound provides intercity bus service to Fayetteville. The Greyhound station is located at 505 Franklin Street within the FAST Transit Center. The station is open seven days a week from 12:00 AM to 4:00 AM, 10:30 AM to 1:00 PM, and 4:30 PM to 7:00 PM. At present, Fayetteville has buses that depart daily for

destinations north and south along the New York – Miami route and east and west on the Charlotte – Wilmington route. Transfers provide access to a nationwide network of destinations.

StarLine Coach and Wanda Coach also offer intercity bus service in Fayetteville. Both pick up passengers at the Fayetteville Motor Speedway. Passengers can reach destinations like New York City and Washington, DC via these services. Megabus recently reinstated service to Fayetteville. Fayetteville passengers can use Megabus to travel to Atlanta (GA), Columbia (SC), Durham (NC), New York (NY), Richmond (VA), or Washington (DC).

Amtrak provides intercity train connectivity through Fayetteville. The Amtrak station is located at 472 Hay Street and is very close to the FAST Transit Center. The station is open 10:00 AM to 6:00 PM. Trains arrive once a day in the northbound and southbound directions.

Ridesharing Programs

There are ridesharing services including Uber and Lyft operating in Fayetteville. Riders use a smart phone application to book travel on either service. Services are available 24 hours a day, seven days a week, assuming drivers are available.

First Mile/Last Mile Connections

In 2017, Fayetteville was ranked last for walkability among cities with more than 200,000 residents by Walk Score. Fayetteville is also overrepresented in the number of pedestrian crashes and severe injuries/deaths in North Carolina. Recently, City leadership and other agencies have been working to improve pedestrian safety and infrastructure in the city.

NCDOT is currently conducting a pedestrian safety study for Raeford Road. The assessment is reviewing crosswalk locations, lighting, and gaps between signalized intersections. NCDOT will also be conducting a study to potentially recommend a major intersection change for US 402 and Skibo Road. The assessment could include pedestrian improvements.

In 2018, Fayetteville City Council approved Lime to begin its mobility sharing service. Lime is a bike and scooter rental service that first began offering rental bicycles to students attending Fayetteville State University. Students can order a rental bicycle through Lime's mobile application. Lime does not offer any scooters for rent in the region.

Funding Options

To enhance regional connections, various funding opportunities can be leveraged. Options include ways that These options are listed below:

- Increased sales tax
- Dedicated property tax
- Increased vehicle registration fees
- Infrastructure trust funds
- Tax Increment Financing Districts (TIF)

- State Funding (North Carolina Department of Transportation grants)
- Federal financing (Federal Transit Administration (FTA), United States Department of Transportation (USDOT), Federal Highway Administration (FHWA))
- Public Private Partnerships

More details on funding options can be found in Chapter 7: Finance Plan.

Appendix A

Short-Term Recommendations

Strengths

The consultant noted the following strengths and the need to preserve these strengths:

- Three higher ridership corridors:
  - Route 4 from downtown Ray Avenue, Moore Street, and Hillsboro Street, continuing with Route 5 on Ramsey St (US 401)
  - Route 12 on Murchison Road
  - Routes 8, 15, and 31 from Food Lion at Ireland Drive, extending on Owen Drive to Southern Avenue
- FAST has numerous opportunities for transfer and is well-designed for this purpose:
  - Two primary hubs
    - FAST Transit Center
    - Cross Creek Mall
  - Two other major hubs
    - Wal Mart at Skibo Road
    - University Estates

Overall Service Considerations

- Return evening service
- Prior to implementing the recommendation to increase frequency, do a complete Comprehensive Operations Analysis
  - At the very least, all timepoints should be reviewed to ensure they still make sense given changes in routing and development patterns.

Route-by-Route Recommendations

- Route 3
  - This route has a lot of apartment complexes and is a very complex route
  - Consider connecting Oak Run Apartment residents to a Wal-Mart or similar shopping center
  - Consider removing the Cedar Creek Road portion (SE of downtown) and replacing with Microtransit or alternative transportation option
    - Or reduce the route to a simple, straight trunk line with microtransit feeding into it
  - Another idea would be to split this into two routes: serve the downtown area with one and serve the area SE of downtown with the other

        - If you split this route, could you extend the piece outside of downtown to include the Campbell Soup factory as that was a requested destination
        - This extension would also allow FAST to serve the Vision Resource Center
    - Whatever change is undertaken on this route, it needs to be communicated and marketed carefully. The individuals who live SE of downtown already feel that they do not receive as much service so the changes need to provide greater service to these individuals.
    - Any changes should also be reviewed for equity concerns
    - Timepoints should be reviewed to ensure they make sense. Operators indicated it is difficult to keep the schedule on this route.
- Route 4
    - Timepoints should be reviewed to ensure they make sense. Operators indicated it is difficult to keep the schedule on this route.
- Route 5
    - Schedule adherence is an issue on this route.
    - Wal-Mart APC data is incorrectly coded in the GTFS data so that should be updated.
    - Consider cutting service to Methodist University
        - Ridership is low and on-time performance is suffering
        - Consider adding microtransit option for the university
- Route 6
    - Ridership has been declining on this route
        - When Route 14 was added, it provided a way to go directly to Wal-Mart instead of going indirectly on Route 6
    - Consider interlining with Route 12
    - To connect to Amazon, consider extending Route 6, which already connects to Cross Creek Mall and University Estates, with a 5-minute extension in each direction (10-minute addition to cycle)
- Route 7
    - Consider streamlining and removing diversions into the neighborhood
    - It is a very long route so could consider truncating it or dividing it into two routes
    - Consider adding a stop between Bunce Road and Skibo Road on Raeford Road
- Route 9
    - Remove loop – make one-way both inbound and outbound; consider replacing with microtransit
    - Serves a lot of seniors so do not want to remove service altogether, but it is hard for the larger buses
    - Overlaps with Route 11
- Route 10
    - Consider modifying route along Raeford Road
    - Consider replacing with microtransit
    - Understanding that it is serving newly annexed area, still need to provide service
- Route 11
    - Overlaps with Route 9 service
    - Consider extending up to Goodyear Service Plant off of Bethune Drive
    - Consider ending at the Senior Center in the big turn

- Route 12
  - Consider adding a loop to hit the new Amazon facility, but only do it on runs during Amazon shift changes
  - Consider interlining with Route 6
  - Ridership declined when reduced frequency due to COVID; Need to return to pre-COVID levels
- Route 14
  - Timepoints should be reviewed to ensure they make sense. Operators indicated it is difficult to keep the schedule on this route.
  - Staying on schedule is particularly hard during the Christmas shopping season
- Route 17
  - Consider replacing with microtransit
  - If remains fixed route, re-examine time points as it struggles to meet up with Route 18 for transfers. Also consider eliminating stop on Cliffdale as it blocks turning lane traffic.
  - If it remains fixed route, consider re-routing to a 60-minute schedule instead of 90-minute
- Route 18
  - Consider replacing with microtransit
- Route 19
  - Not a well-used route; the only riders transfer from Route 17
  - Consider re-routing to Mini Mall instead of South PX
- Route 30
  - Discontinued after COVID
- Route 31
  - N/A