



FAYETTEVILLE AREA SYSTEM OF TRANSIT

Transit Development Plan 2023–2032

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PREPARED FOR THE
CITY OF FAYETTEVILLE

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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.

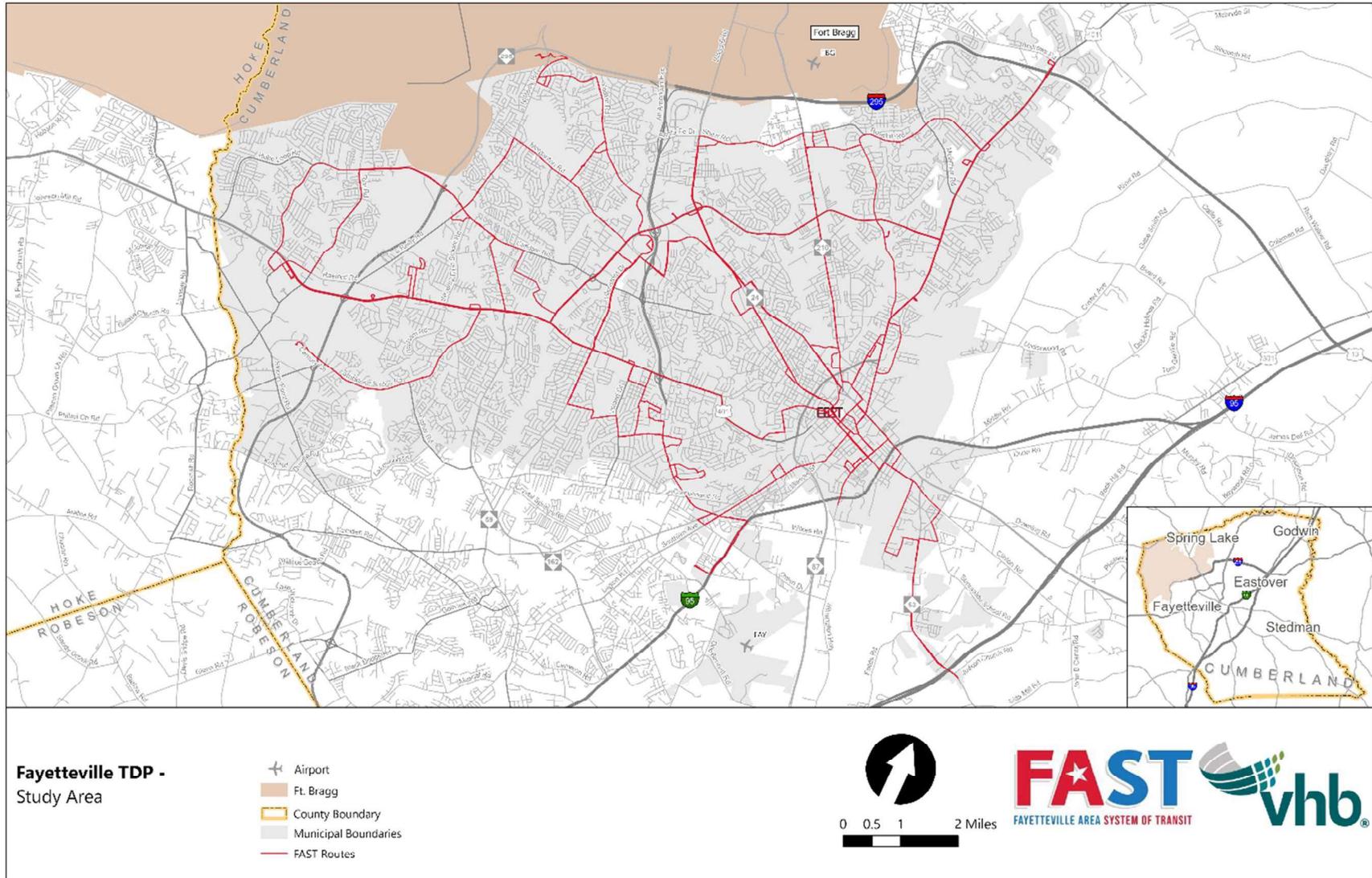
Study Area

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.



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.

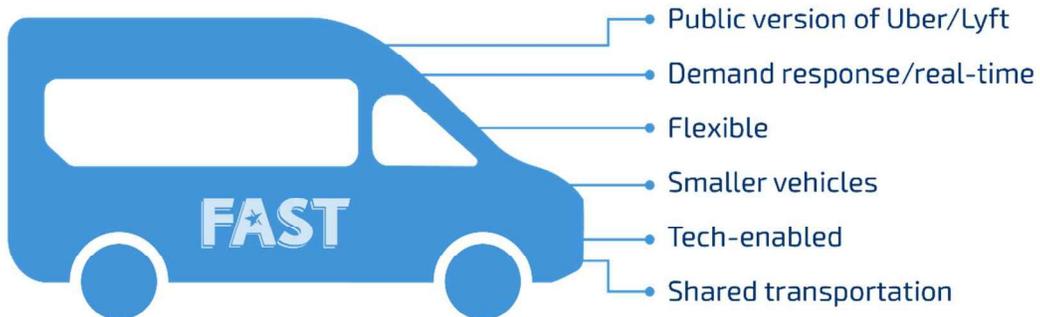
Service Alternatives

- **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 FASTTrac! 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 ¼-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

What is 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.
- **FASTTrac! Stop Amenities** | There are certain destinations that are particularly popular with FASTTrac! 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.

- **FASTTrac! 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 FASTTrac! 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	◆	◇	◇	◇	◆	◇	◆	◇	◇	◇	◆◆◆◆◆◆◆◆◆◆
FASTTrac! Stop Amenities	◆	◇	◇	◆	◇	◇	◇	◇	◇	◆	◆◆◆◆◆◆◆◆◆◆
Electrification of Transit Vehicles	◆	◇	◇	◆	◇	◇	◇	◇	◇	◇	◆◆◆◆◆◆◆◆◆◆
Bus Pullouts	◆	◆		◇	◇	◇	◇	◇	◇	◆	◆◆◆◆◆◆◆◆◆◆
Park and Ride Lots	◆	◇	◇	◇	◆	◆	◇	◇	◇	◇	◆◆◆◆◆◆◆◆◆◆
Sidewalk Analysis	◆	◆	◇	◆	◆	◇	◆	◇	◆	◆	◆◆◆◆◆◆◆◆◆◆
Technology											
Website	◆	◇	◇	◇	◆	◇	◆	◇	◇	◆	◆◆◆◆◆◆◆◆◆◆
Wi-Fi	◆	◇	◇	◆	◇	◇	◇	◇	◇	◆	◆◆◆◆◆◆◆◆◆◆
FASTTrac! 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 FASTTrac! 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 FASTTrac! passengers. Addressing these barriers can enable FASTTrac! 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						
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.



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

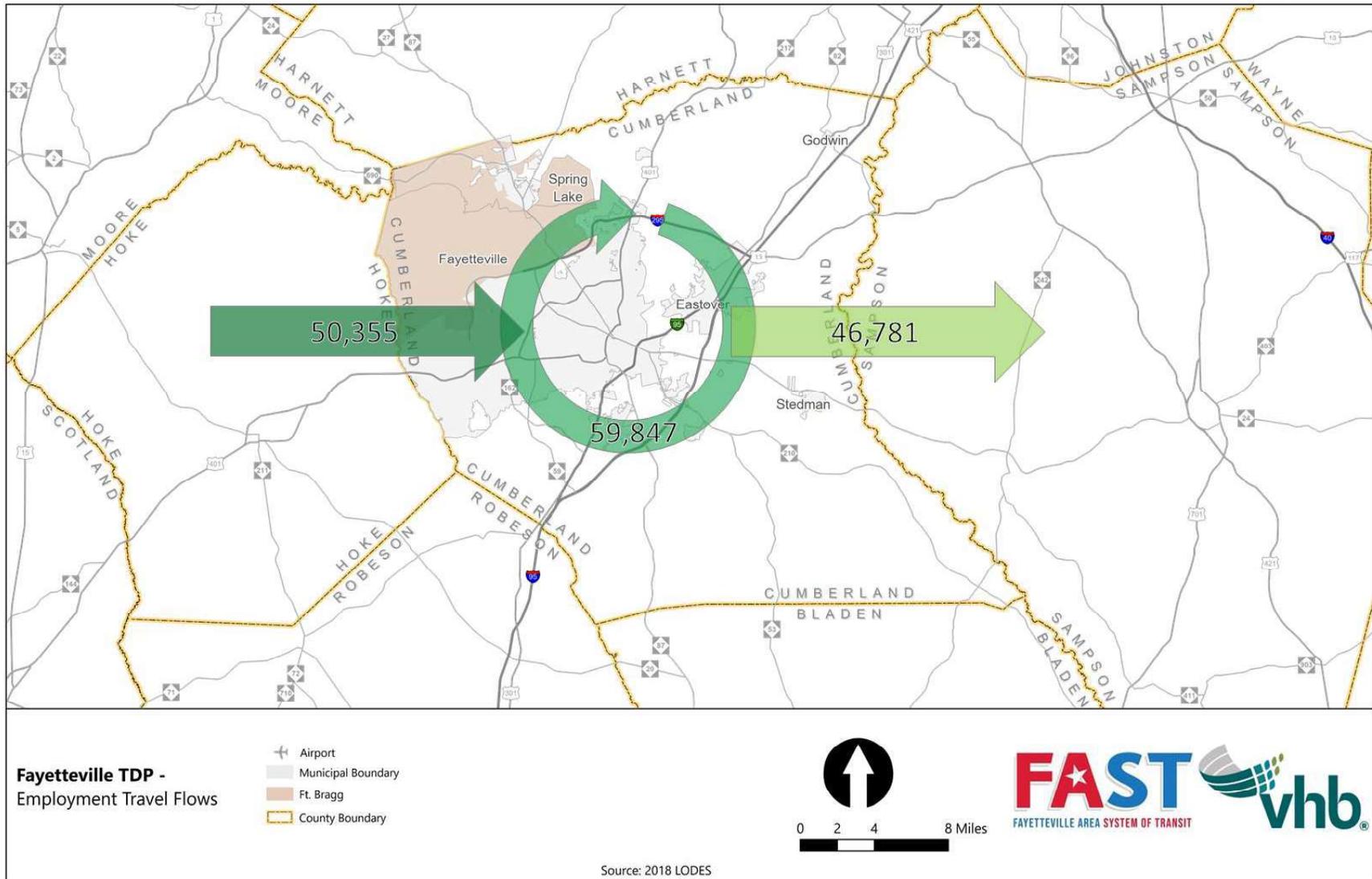


Figure 8-2 Average Commute Time

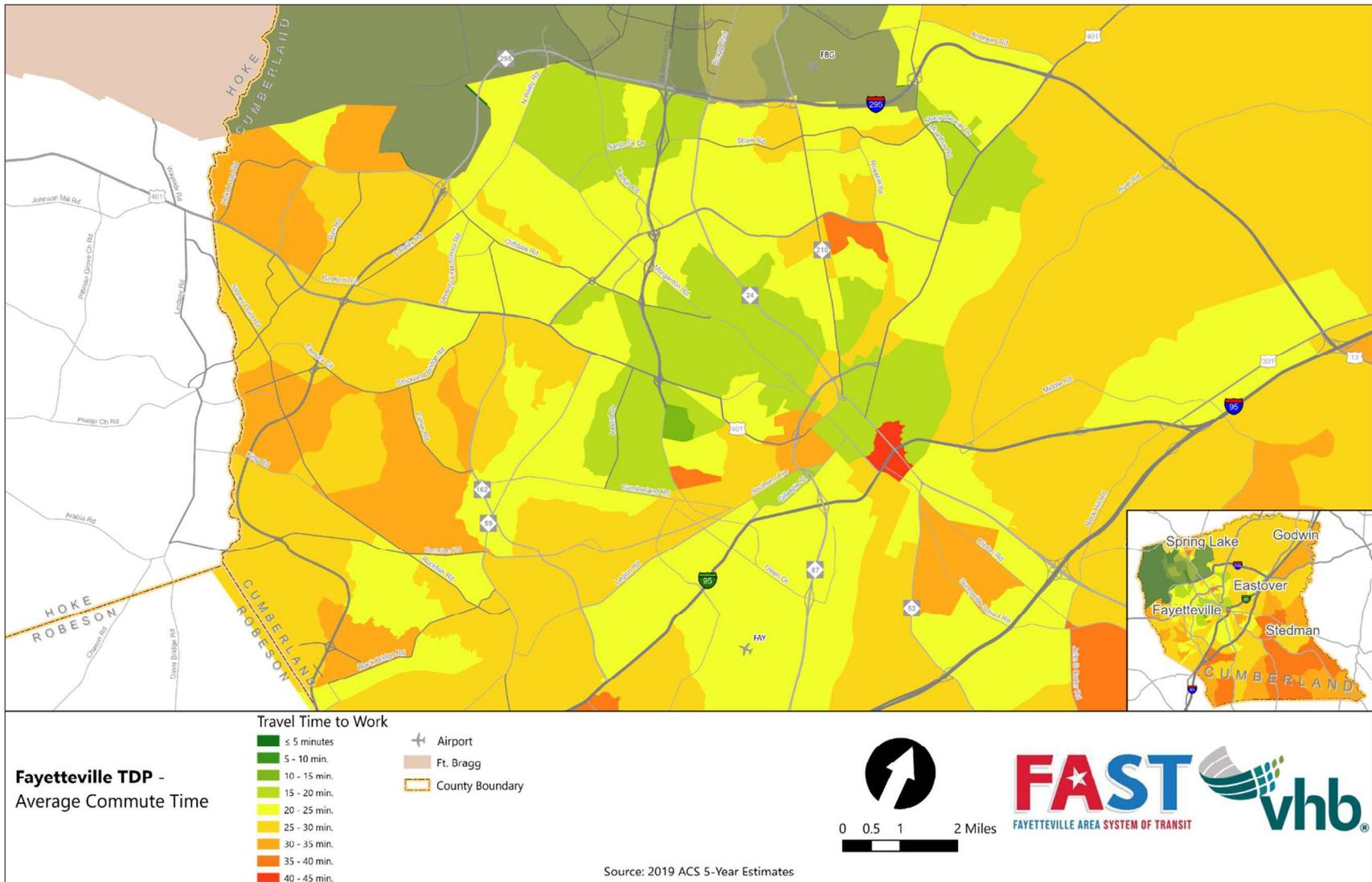
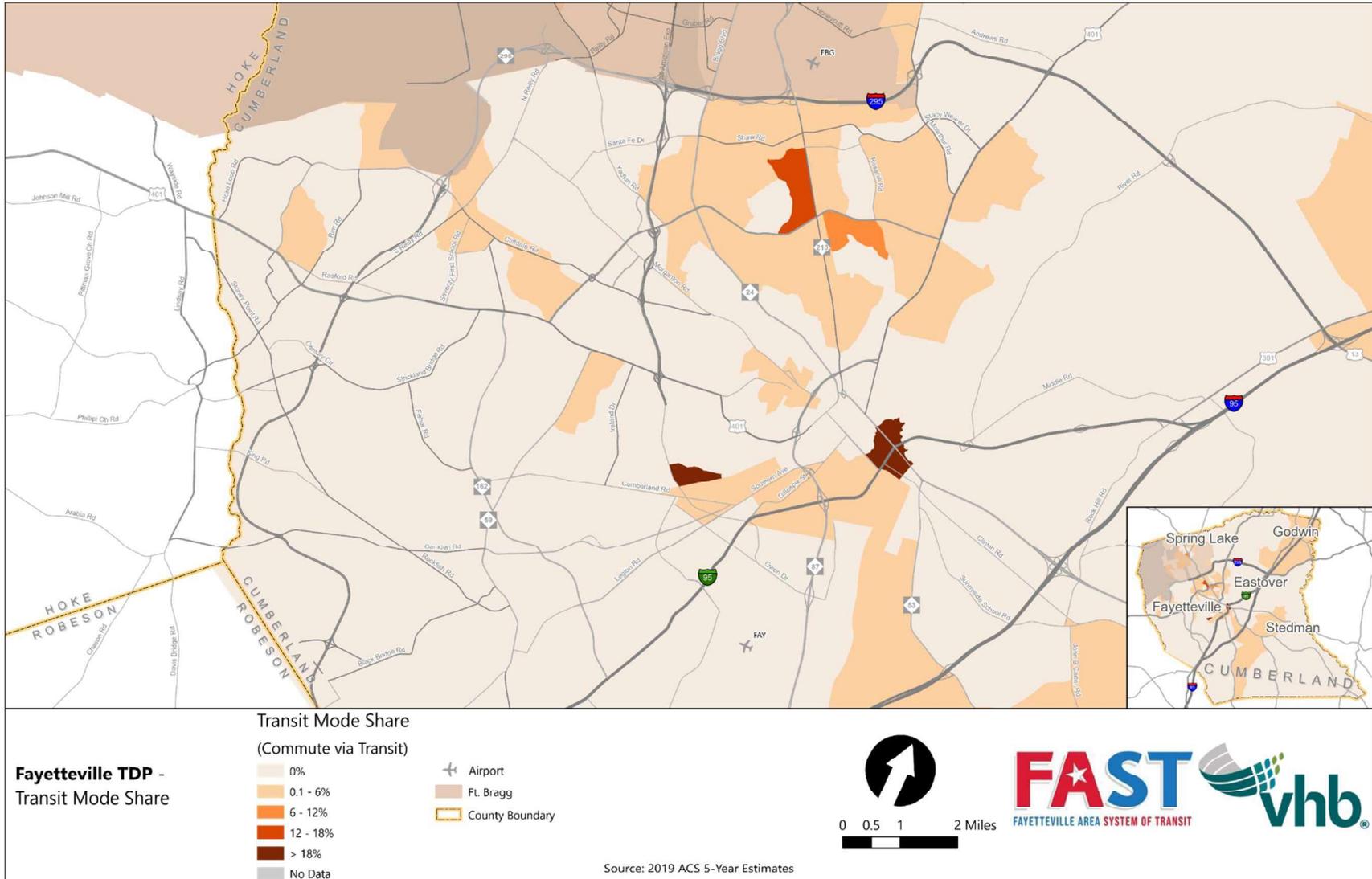


Figure 8-3 Transit Commute Mode Share



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