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Your Say.....**



Escambia County Area Transit

Comprehensive Operations Analysis Final Report

June 2023



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1.0 Introduction

Since 1950, Escambia County Area Transit (ECAT) has provided bus services to residents with routes covering 285 miles and over 1,000 stops throughout the Pensacola area. The fixed-route system has 20 routes that offer weekday and/or weekend service. As shown in **Figure 1**, the system is centered around the City of Pensacola, with one route providing service to the town of Century, Florida. In addition to the primary fixed routes, ECAT provides the Pensacola Beach Trolley, University of West Florida On-Campus Trolley, and Jury Trolley. This study only covers the fixed-route system and does not include these additional routes. ECAT has provided its services with the mission of providing efficiency, responsiveness, enhancing quality of life, meeting common needs, and promoting a safe and healthy community.

Purpose of the COA

This report documents the Comprehensive Operations Analysis (COA) for the ECAT network. A COA is a thorough review of a system's efficiency and effectiveness and determines whether a system has the resources necessary to meet community needs. The primary objective is to identify system or route changes to improve performance without negatively affecting riders.

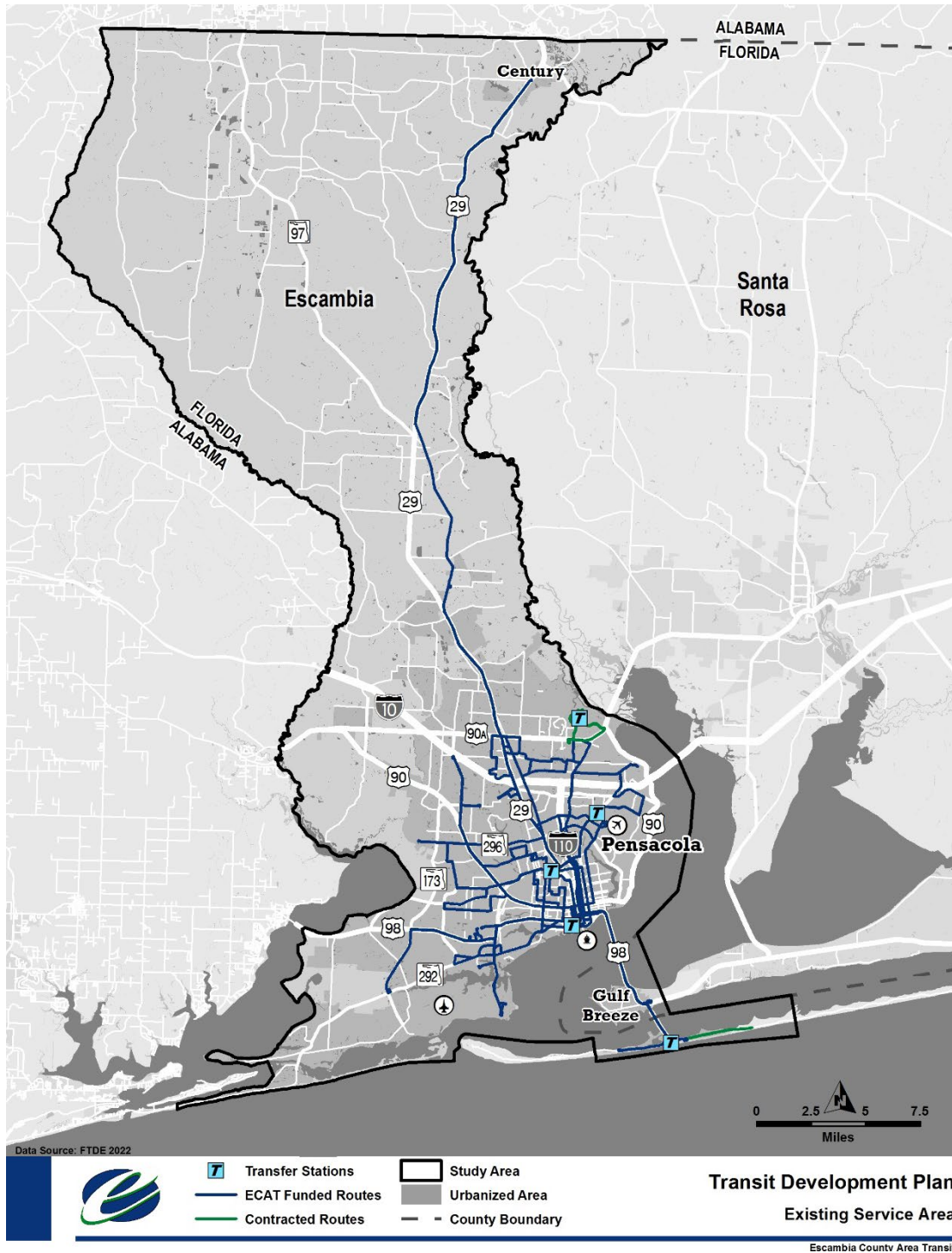
Every five years, ECAT develops a Transit Development Plan (TDP), which identifies new services needs based on the county's growth. A TDP is a Florida Department of Transportation (FDOT) required, 10-year horizon plan to be updated annually with a major update to be conducted every five years. The TDP defines the transit needs and develops a plan to meet both short-term and long-term transit goals. In response to the TDP, ECAT conducted a COA to understand how its existing services could be improved within its available budget.





Escambia County Area Transit Comprehensive Operations Analysis

Figure 1. Existing Service Area





2.0 Goals & Objectives

In accordance with the current rider environment in ECAT's service area, Goals and Objectives were developed to further enhance the overall effectiveness of the system to its riders in Escambia County and the surrounding areas. The Goals and Objectives were created as guiding principles and aided in steering the analysis into parts of the system which could be improved in a quantifiable or measurable way.

The goals of the COA include:

1. Increasing access to education, jobs, and other essential services
2. Improving Key Performance Indicators (KPIs), such as ridership and system efficiency
3. Implementing innovative technologies to effectively serve low-density or low-ridership areas
4. Prioritizing service along major corridors to lower overall travel times

The ECAT COA began with the development of six (6) different route scenarios customized for the Pensacola area (GOAL 1). Subsequent analysis and presentations to the Steering Committee narrowed down the 6 route alternatives to two preferred concepts. These two concepts were then evaluated on their performance and costs (GOAL 2). Within all six route concepts, Mobility on Demand (MoD) zones were proposed to serve as first and last mile connectors (GOAL 3). Based upon the results of the evaluation, recommendations were developed to address potential improvements to the Steering Committee and Board of County Commissioners. (GOAL 4). The following page includes Goals and Objectives listed as a data matrix (**Table 1**).

Included in the data matrix are several objectives for each goal listed. These objectives further specify key aspects of the ECAT system which can be modified to come into alignment with the stated goals. The objectives are in effect grounding for the more abstract aspects of the goals within the matrix. The objectives give value to the goals by creating actionable items that this COA will address in further detailed analysis.

Key Performance Indicators (KPI's) are included in the table as well. These indicators allow a better understanding of measurable impact related to the Goals and Objectives listed to the left of them. For example, the first goal listed is related to maximizing opportunity access, the KPI indicates that at least two thirds of all elements of education in the ECAT service area will have access to the system. By using these KPIs the ECAT System will have better accountability and efficiency.





Escambia County Area Transit

Comprehensive Operations Analysis

Table 1. ECAT COA Goals & Objectives

Goals	Objectives	Performance Measures
ECAT shall maximize access to opportunity for the community by providing service to educational institutions, major employers and dense employment areas, and other essential services within Escambia County.	Provide access to middle schools, high schools, institutes of higher learning, and other training centers where access is defined as destination is within 0.5 mile of a transit route or within a Mobility on Demand service area.	At least 67 percent of the middle schools, high schools, institutes of higher education, and other training centers will be within 0.5 mile of an ECAT route.
	Provide access to major employment destinations and areas with at least 500 persons and/or employees per square mile where access is defined as transit is within 0.5 miles of the targeted destinations.	At least 75 percent of the available jobs in Escambia County are within 0.5 mile of an ECAT Route.
	Provide access to key services (medical, social, government, etc.) within the Pensacola Urbanized Area where access is defined as transit service is within 0.5 mile of the destination or the destination is within a Mobility on Demand service area.	At least 50 percent of locations providing life sustaining activities (medical, social, government, etc.) are accessible via ECAT.
ECAT shall make efficient use of available resources through effective network design that increases overall ridership, decreases operating subsidy per riders, and improves on-time performance.	Increase total system ridership (fixed route or Mobility on Demand service) within five years of implementing proposed service changes.	The modeled ridership of the recommended alternative shows at least a 10 percent increase when compared to year 2022 network.
	Decrease the average subsidy per rider within five years of implementing the proposed service change.	The modeled ridership along with the projected system costs will show at least a 5 percent decrease in average subsidy per rider when compared to year 2022 network.
	Design the recommended alternative to improve On Time Performance through evaluating route average speeds and including layover times for operators at transfer points.	The proposed routes will ensure there is at least 5 minutes of layover at transfer points and network median speed does not exceed 15 miles per hours, excluding express routes, within the next five years.





Escambia County Area Transit

Comprehensive Operations Analysis

Goals	Objectives	Performance Measures
ECAT shall implement new mobility technologies to reduce barriers to access the network and provide different service levels based on area characteristics.	Create MoD zones to provide curb to curb and curb to stop service within neighborhoods in the ECAT Service Area.	Implement at least 5 new MoD zones with each zone providing access to at least 1000 persons or jobs within the service area during the next five years.
	Implement mobile fare technology to decrease the time it takes to board the transit vehicle and improve the customer experience.	Mobile fare technology will be implemented by FY2025.
	Implement a mobile app that merges all mobility options into a single platform to make it easier for Escambia County residents and visitors to travel without a car.	All mobility options, such as MoD, paratransit, and bike/scooter sharing, will be available on a single application platform by FY2025.
ECAT System shall prioritize fixed route service on major corridors to decrease travel times, improve the overall performance, increase the attractiveness of the network.	Decrease average travel time through prioritization of fixed route service along collector and arterials.	Transit travel time between the transfer points (Rosa Parks, Pensacola State College, Downtown, and University of West Florida) will be decreased by at least 10 percent.
	Decrease the average number of transfers to complete the trip.	Only one transfer will be required to travel east/west or north/south on major corridors, where corridor is defined as a major arterial with a min. distance of 5 miles.
	Improve the attractiveness of the ECAT system through decreased travel times when compared to travel between same destinations by personal automobile.	The average travel time between five major transit origins and destinations in Escambia County will be less than 2X by personal automobile as measured by Google Maps within five years





3.0 Study Methodology and Report Organization

Spanning across nine months, the COA study involved five major work tasks:

- **Market Analysis**, which included a review of the service area's population, employment, density, and activity centers. (See **Section 4**)
- **Evaluation of Existing Services**, which included a technical analysis memo of the overall system and detailed profiles of ECAT's individual routes. (See **Section 4**)
- **Customer Survey**, which allowed for users to provide feedback on ECAT's current system and suggest additional features that they would like added in the future. (See **Section 4**)
- **Alternative Route Service Design**, which involved an iterative process of sketch planning 6 route concepts that met COA Goals & Objectives and customer needs. (See **Section 5**)
- **Final Recommendations**, providing performance overview of the selected route concept and an implementation strategy. (See **Section 5 and 6**)



4.0 ECAT System and Service Area

The ECAT transit system covers approximately 189 square miles and operates mostly within the Pensacola FL-AL Urbanized Area. ECAT currently serves over 1,000 stops covering 285 miles of routes with over 770,000 annual passenger trips. The fixed-route system has 20 routes that offer weekday and/or weekend service. The system is centered around the City of Pensacola, with one route providing service to the town of Century, Florida. In addition to the primary fixed route system, ECAT also provides contracted transportation services. These services include the Pensacola Beach Trolley for seasonal island transport, the University of West Florida via the UWF Campus Trolley and to aid in Jury service there is the Jury Trolley as well. This study only covers the fixed-route system and does not include these other contracted routes.

Given the current scope of the ECAT system, a COA is needed to address the complexities involved in a system of this size. ECAT's area of service extending into two different states provides a unique set of challenges which this COA will address. A practical method of beginning the process is to analyze the route profiles in their present conditions.

Route Profiles

Evaluating the overall performance of each route involves looking at different measures associated with service productivity (Ridership, Riders per Revenue Hour, Riders per Revenue Mile, and Riders per Round Trip) and financial performance (Daily Revenue, Subsidy per Revenue-Hour, Subsidy per Revenue-Mile, Subsidy per Round Trip, Daily Operating Cost, Cost per Rider, Farebox Recovery Ratio, and Subsidy per Rider). Each of these measures is provided for the overall route and by service period (Weekday and Saturday/Weekend). By looking at each of these measures and factoring in the service characteristics, operating parameters, and populations served, understanding is gained as to how effectively each route is performing. The Route Profiles are in **APPENDIX A – Route Profiles**.

Since each of these measures looks at different aspects of route performance, it can be challenging to compare each route against each other to get an idea of their overall standing in the system. Therefore, three key measures were used to rank the routes. These performance measures are:

- **Average Daily Ridership** – the annual ridership by service period (Weekday, Saturday/Weekend) divided by the total number of service days.
- **Operating Costs** – the average overall cost to operate each route with costs defined as the labor, fuel, and maintenance needs of each route. The overall cost normalizes the costs across the different service periods allowing for a direct comparison; and
- **Subsidy per Rider** – the **Overall Operating Costs** less fare revenue generated divided by the **Average Daily Ridership**

Population and Employment

Understanding the size and distribution of population and employment in the service area was a critical part to understanding current travel demand and markets within the service area. This is because





commuting to work is a frequent reason for travel, with routine trip patterns. Alongside this, bus services located in high employment density will provide direct connections to job opportunities and promote economic development.

Figure 2 represents several findings regarding the service area:

- Employment is highly concentrated in downtown Pensacola, Escambia County offices and serves, Baptist Hospital, Cordova Mall, Pensacola Christian College, Pensacola State College, Sacred Heart Hospital, Pensacola Square, University Town Plaza, and West Florida Hospital. Many of these areas are directly served by at least one ECAT fixed-route service.
- Population is highest in the NAS Pensacola area. Other locations in the county with high population density include Pensacola Christian College, Pensacola Village Apartments at Fairfield & Davis, and Oakwood Terrace Apartments located south of Massachusetts Avenue on Truman & Warehouse.
- There are also moderate population clusters on Scenic Highway in southeastern Pensacola south of Hyde Park Road and at The Moorings Apartments located east of Olive Road on Old Spanish Trail Road.
- In general, population and employment density located north and west of the service area is low, except for the Navy Federal Credit Union located in the west.

Overall, the existing system provides service to the dense parts of the community except for area just east of downtown adjacent to Pensacola Bay. Challenges exist, however, in how transit is provided in the less dense areas such as near Saufley Field or Mobile Highway near 9 Mile Road/Interstate 10.

Population & Employment Density Per Sq. Mile

- ≤ 500
- 501 - 1,500
- 1,501 - 3,000
- 3,001 - 4,500
- > 4,500

Total Ridership Per Stop*

- ≤ 5
- 6 - 10
- 11 - 20
- > 20

Legend:

- Transfer Stations
- ECAT Funded Routes
- Contracted Routes
- Study Area
- Urbanized Area
- County Boundary

* Stops with red outlines overlap with other routes.

Transit Development Plan

Population & Employment Density & Ridership Map



Existing High Density Employment Routes

Existing route services extend to many of the medical facilities and areas but employers, such as the Navy Federal Credit Union Office on 9 Mile Road. **Table 2** shows a list of the major employers in the service area. The robustness of the system in downtown Pensacola is helpful but it neglects to consider riders needs for a more direct system of transit from home to work. Specific instances of this include Routes 43 and 52 which were mentioned previously. Opportunities for employment are not diverse and only a small subset of commuters use public transit bus services for employment transport uses.

Table 2. Major Employers

Company	Employees
Navy Federal Credit Union	8,697
Baptist Health Care	7,347
Sacred Heart Health Systems	4,820
Gulf Power Company	1,774
Ascend Performance Materials	1,288
West Florida Healthcare	1,200
Innisfree Hotels	750
GE Wind Energy	700
Santa Rosa Medical Center	521
Medical Center Clinic	500
International Paper	500
CHCS Services/iGate	409
Hitachi Cable Florida, Inc	360
Armstrong World Industries	300
MediaCom	300
American Water	298

Source: FloridaWest Economic Development Alliance, 2020.

Activity Centers

Major activity in the area typically occurs around the southern portion of Escambia County and downtown Pensacola. These are highly trafficked zones where citizens recreate, work and commute. Represented in **Figure 3**, specific areas of highest activity include the following:

- Pensacola Beach Area
- Visit Pensacola Tourist Information Center
- Vince J. Whibbs Sr. Community Maritime Park
- Pensacola Bay Center
- University of West Florida Campus
- West Florida Hospital

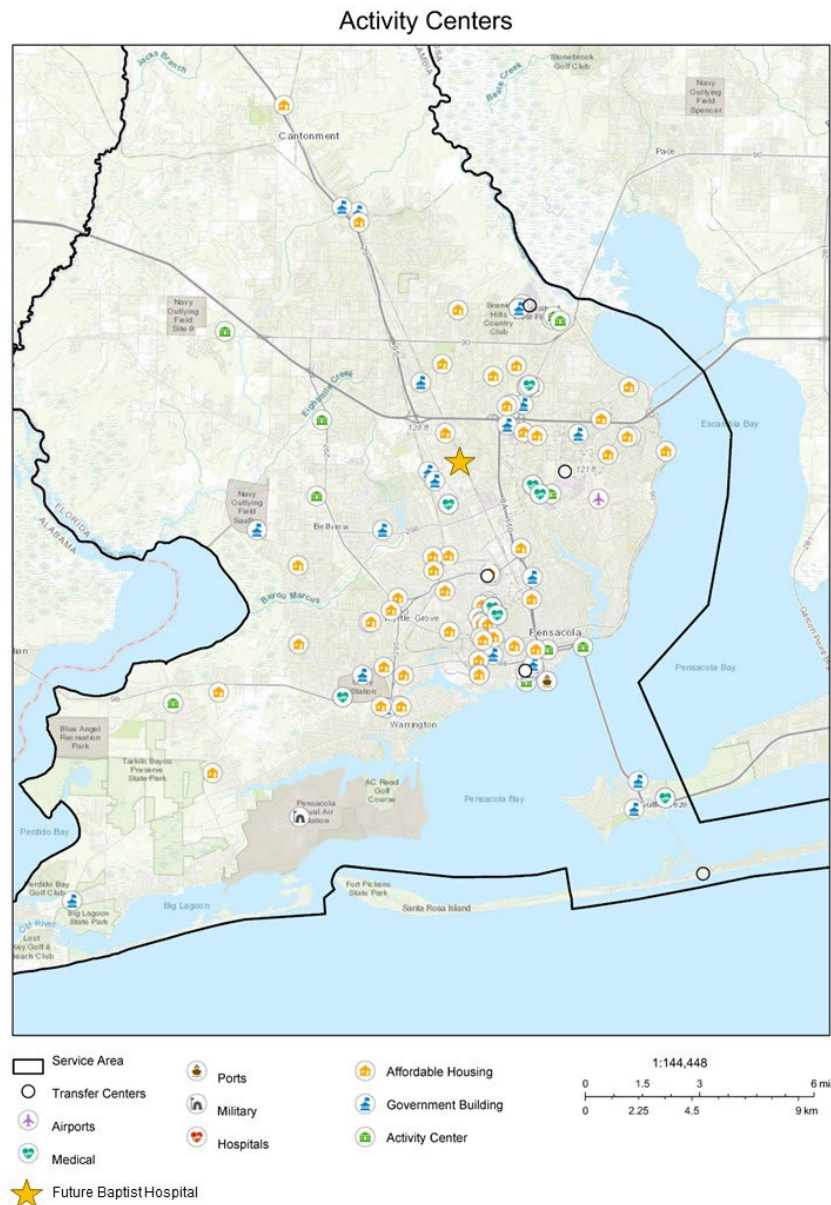




- Florida School of Science and Engineering
- Moorings Apartment Complex

In addition, a new major activity center coming to the Pensacola area includes the future site of the Baptist Hospital. The hospital will be highly trafficked and the ECAT fixed route system plans to have a bus stop located near the entrance to the hospital. Providing access to the activity centers helps to promote service equity and ensures access to life-sustaining activities for low-income and minority residents.

Figure 3. Activity Centers

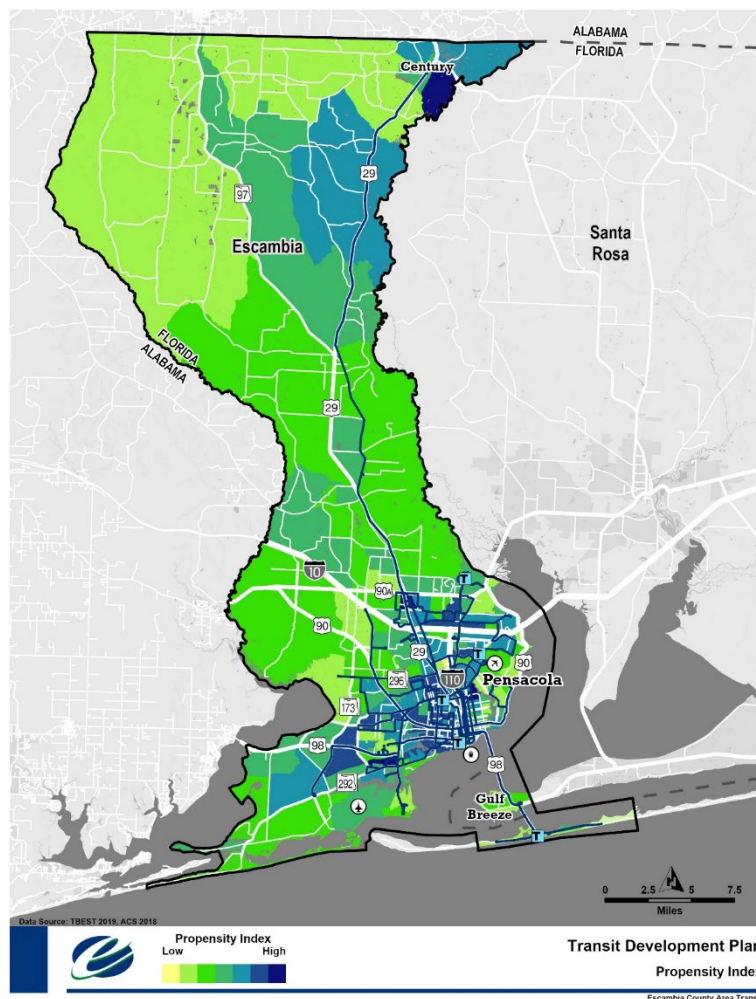




Transit Needs Index

The Transit Needs Index was created by analyzing various socioeconomic factors of the population and combining them into a single figure. These include population below poverty line, minority population, zero vehicle households, population age 65 and above, population age below 18, and the disabled population. The data for these socioeconomic factors was derived from both surveys and publicly available sources. Based on this assessment (**Figure 4**), the only area not currently served by existing transit is the area east of Pensacola International Airport. Between the Lavallet neighborhood immediately east of the airport and East Pensacola Heights to the south, there is a high population and employment density. East Pensacola Heights has some of the highest density in the region. As ECAT service went through the proposed redesign, this area was included and prioritized for analysis. Additionally, there are other areas in the west and northwest part of Escambia County that would benefit from improved transit service.

Figure 4. Transit Propensity Index





Customer Survey

Proposing changes to the ECAT system also requires an understanding of how the customers are using it today and how the system can be improved to better meet community needs in the future. While the route analysis provides some of this information regarding travel patterns, a customer survey was developed to obtain additional information from the users. The survey was conducted during December 2022 and January 2023. The survey questions were designed to gain valuable information about the customer to make sure their needs are understood and considered as part of the COA. The results of this survey were analyzed to determine current and prospective customer needs in the system redesign and were used along with the Goals and Objectives to evaluate the different design alternatives.

Appendix A – Customer Survey Results provides the survey questions and results. Key findings from the customer survey include:

- Work is the most common trip destination for users
- Over 45% of users ride the bus everyday
- Over 50% of users want increased weekend service
- Over 35% of users want more frequent service
- Over 45% of users want service to extend later into the evening.

System Wide Performance Metrics

Baseline performance metrics of the ECAT system are shown below in **Table 3** and in **Figure 5 to Figure 8**. This information provides the No Build/Existing Conditions scenario to compare the proposed alternatives against.

Table 3. Performance Measures

Performance Measure	2022 Values
Ridership	615,000
Revenue Miles	1,104,819
Revenue Hours	77,817
Operating Expense per Revenue Mile	\$2.47
Operating Expense Per Revenue Hour	\$71.07





Figure 5. Historic Ridership

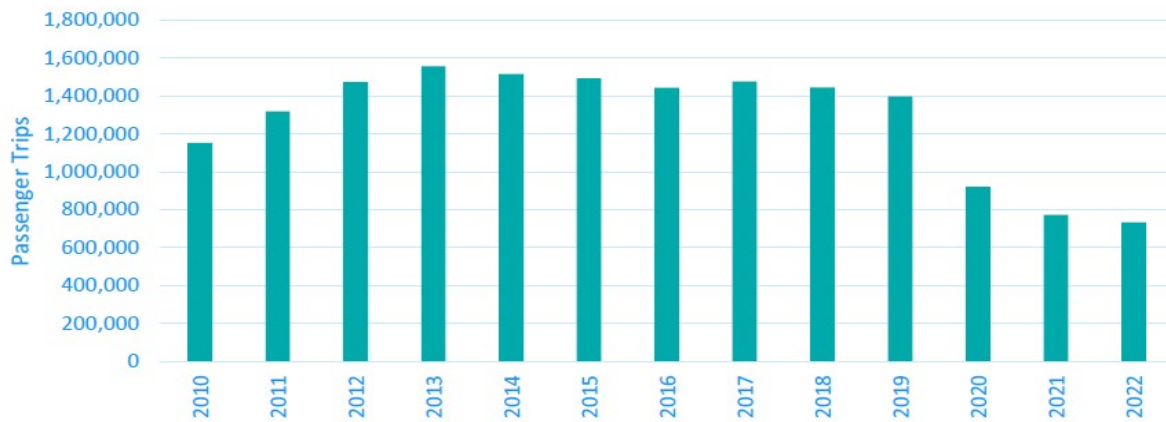


Figure 6. Vehicles in Maximum Service (FY2022)

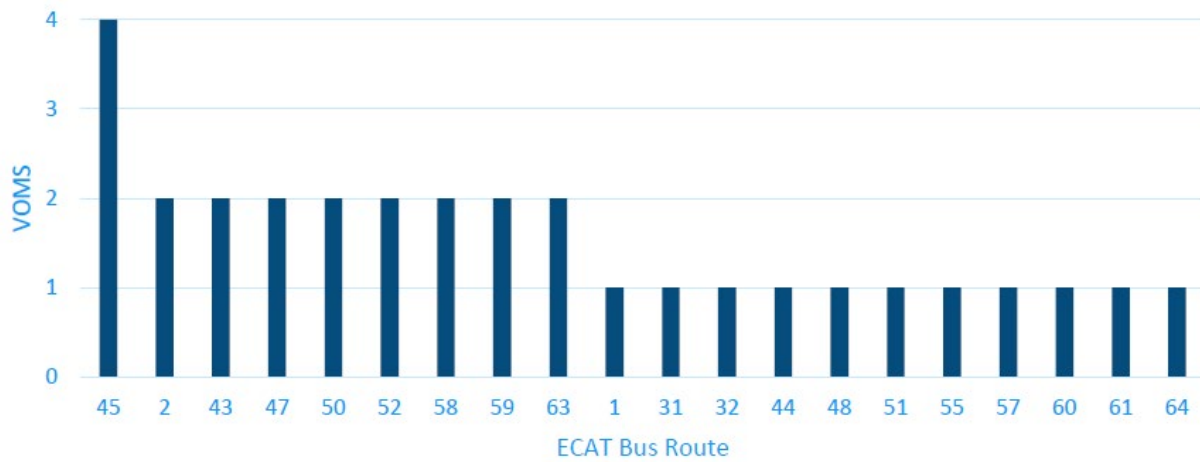




Figure 7. Cost Per Mile

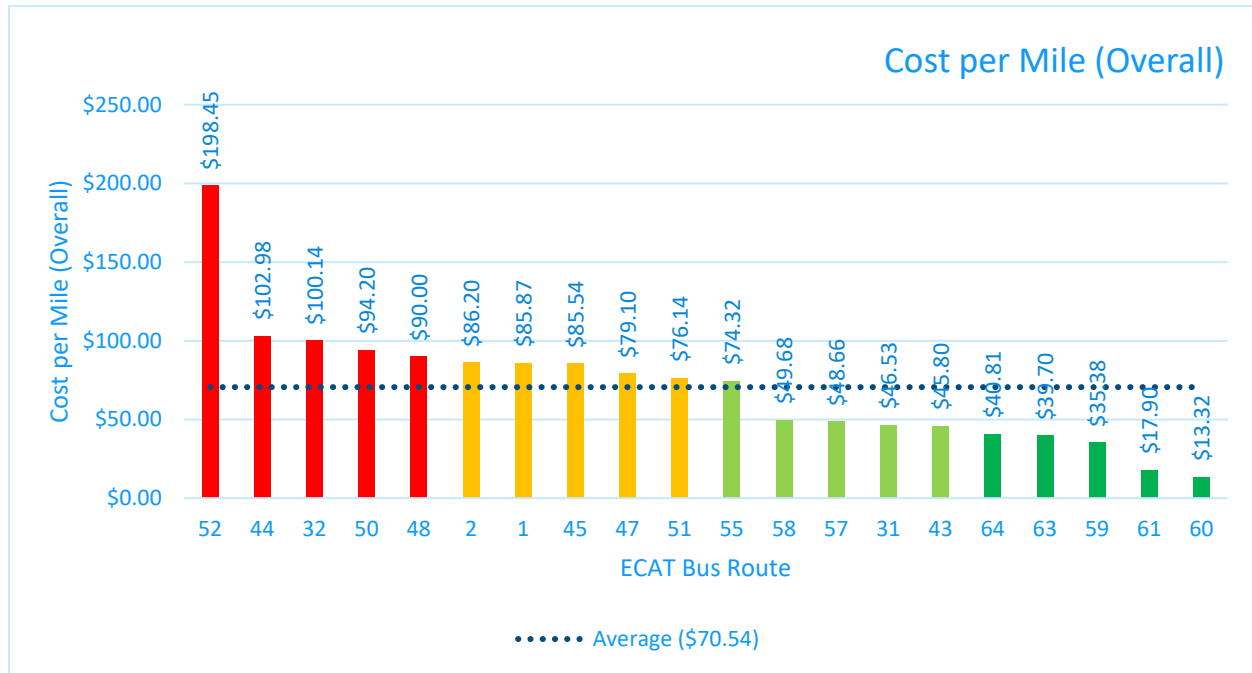
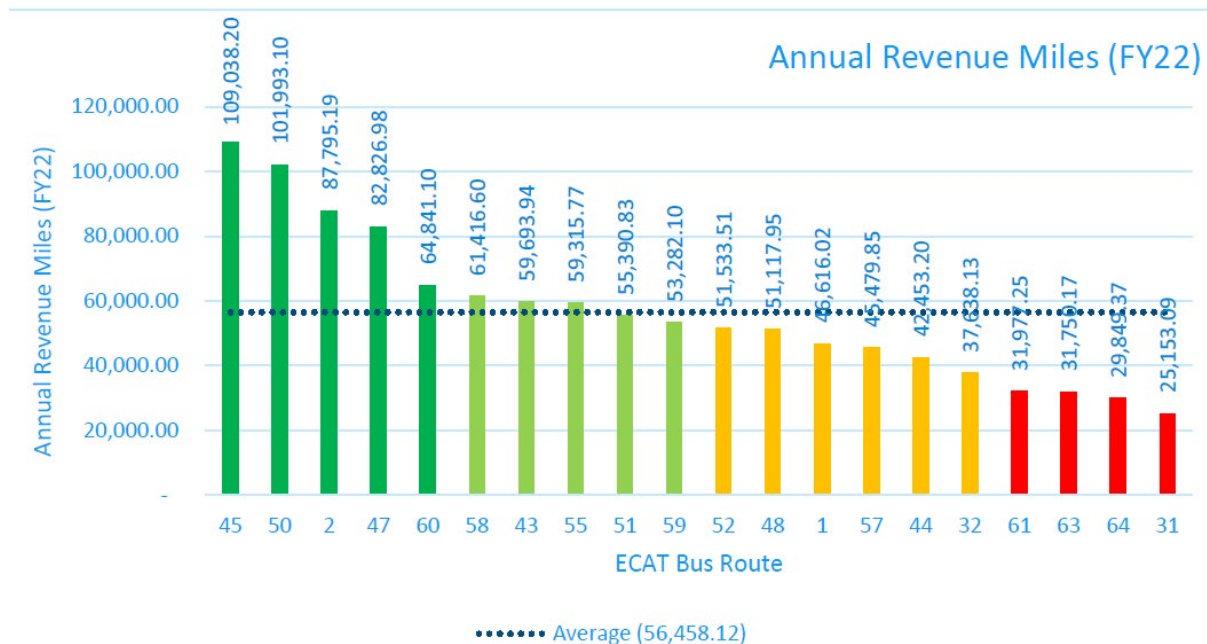


Figure 8. Annual Revenue Miles (FY22)



In addition to the system performance measures, individual route profiles were created for each of the 20 ECAT routes (**Appendix B – Route Profiles**). The profiles outline key characteristics of each route including span of service, frequency, and route distance. Operating statistics, demographic data, service productivity, financial performance, and on-time performance measures are also included. Additionally,



maps and charts displaying population and employment density along with stop ridership, route activity centers, ridership trends by stops, a summary of route incidents observed during October 2022 field analysis, and a route assessment help tell the story of each route's strengths and weaknesses.

As described previously, a ranking system was established using the following key performance indicators: average daily ridership, average daily operating costs, and average subsidy per rider. The average was calculated for each measure and quartiles were applied to visualize how each route performed. **Figure 9** shows Route 45, which serves Downtown and Davis Highway north of I-10, as having the highest average daily ridership. This number includes weekday, weekend, and holiday ridership. Route 61, which crosses the Pensacola Bridge and serves the beaches, had the lowest average daily ridership. Due to its round-trip distance and four buses operating on the routes, Route 45 (**Figure 10**) has the highest daily operating cost, while Route 61 has the lowest. **Figure 11** shows Route 60, which extends north to Century, has the highest subsidy per rider, while Route 55, which serves West Pensacola has the lowest.

Figure 9. Average Daily Ridership Overall

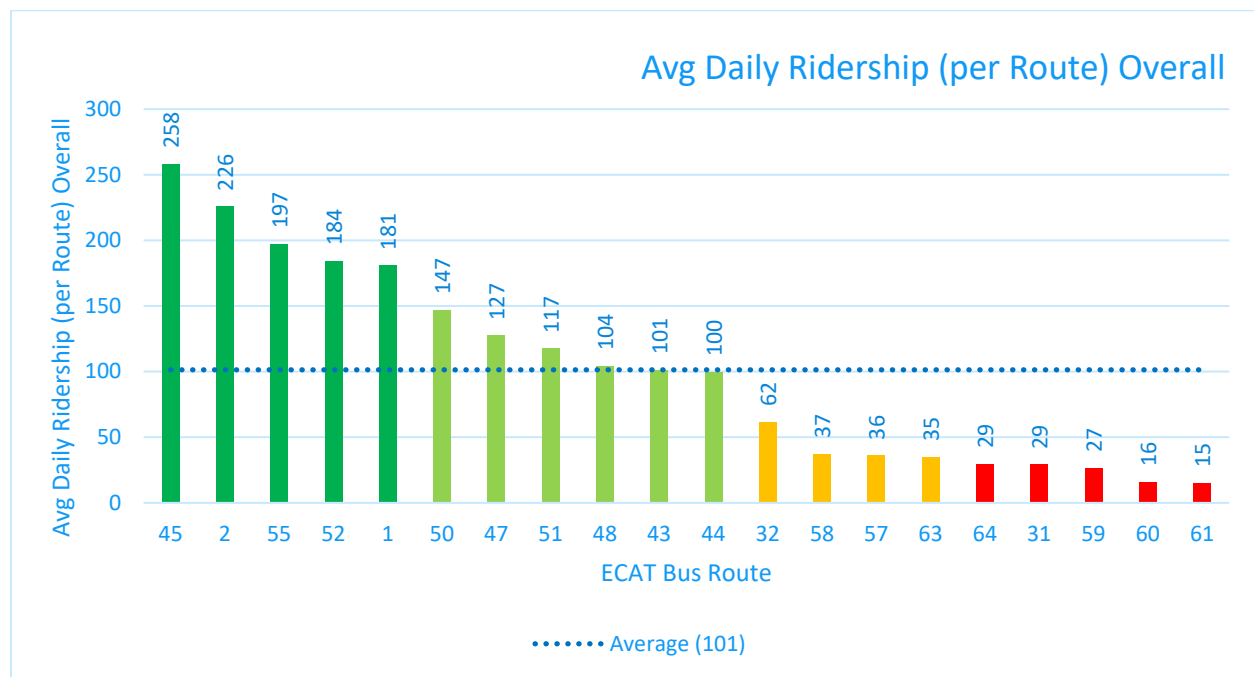




Figure 10. Daily Operating Cost Overall

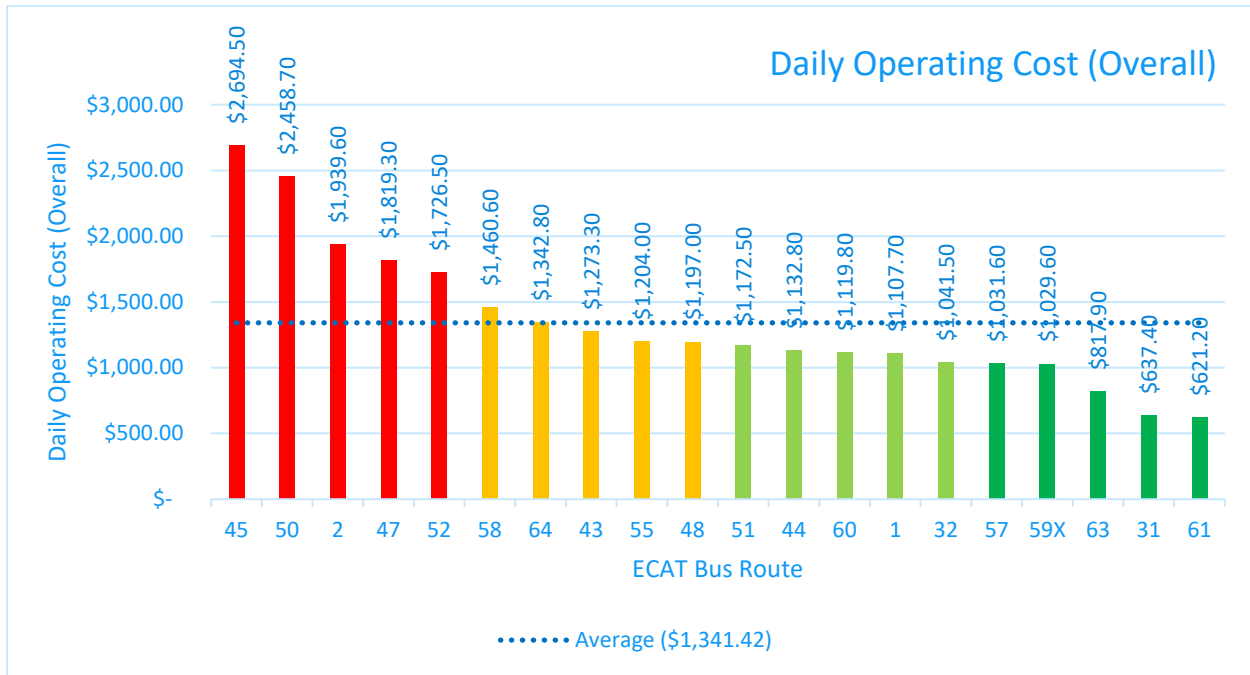
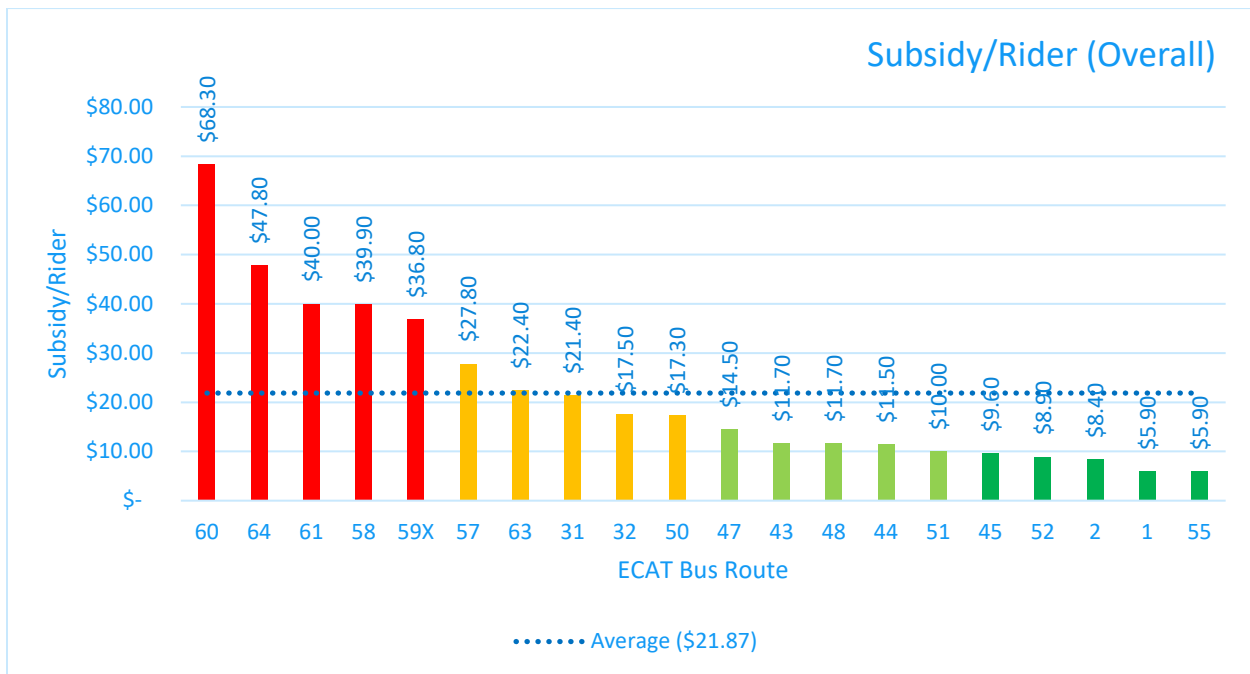


Figure 11. Subsidy/Rider Overall (FY22)





System Deficiencies

Based on the review of the ECAT transit network, the following system deficiencies were identified. To address these deficiencies, best practices were identified. The proposed network alternatives will incorporate these different techniques to create a more efficient transit network.

Key Takeaway: Redundancy/Ridership Dilution

Significant portions of major corridors within the ECAT service area are served by multiple routes creating route redundancy. While the routes themselves may serve different destinations, the more the routes overlap they become less effective as the ridership along those corridors is divided between them. This also creates an appearance problem when those routes are operating on the same frequency with the buses bunching together, creating an aura of inefficiency.

Best Practice

Routes may overlap near transfer points, but the most effective routes provide customized access to destinations making them more essential in the service they provide. To the extent possible, major corridors should be served by a single route operating as frequently as possible. This can shorten travel times, make the system more legible to customers, and provide opportunities for additional investments, such as higher frequencies, bus prioritization, and eventually premium transit.

Key Takeaway: Overextended Bus Routes

When one route serves too many destinations or has too long of a runtime, it can negatively impact the customer experience and makes the route less attractive for regular patronage. Customers are particularly impacted when a bus route is extended and service levels are not maintained, service becomes less reliable, or when the route alignment becomes too indirect.

Best Practice

Routes function best when they are direct and serve a specific purpose. Purpose means the route is designed to serve a particular part of the community, specific activity center, or a designated corridor. Path efficiency and runtime should be planned from the customer perspective, ensuring that the amount of time required to reach their destination is not likely to disrupt their schedule.

Key Takeaway: Unsafe and Challenging Operating Conditions

Unsafe and challenging conditions like speed humps and unprotected left turns can cause discomfort for the rider and difficulty for the operator, potentially making the route take longer to complete.

Best Practice

Routes should be planned with consideration for how comfortable the physical experience aboard the bus will be for riders. Conditions that make the route more difficult for the operator should be avoided. These conditions include unprotected left turns, tight turns, lane changes, and stops in the right turn lane.





Examples of these conditions are evident in Route 1 and 2. In addition, ECAT should work with local jurisdictions and Florida Department of Transportation to make roadway infrastructure more transit supportive.

Key Takeaway: Visibility and Frequency

Consistent, frequent service and high visibility are essential for attracting regular ridership and new riders.

Best Practice

Routes should maximize visibility by locating stops strategically in areas with high foot traffic to increase the opportunities for non-riders to see the route and consider transit to make their trip. Headways should be no longer than 30 minutes so that if a rider misses one bus, waiting for the next will not take so much time that they are incentivized to make use of a different mode of transportation to complete their trip. This is determined by availability and prioritization of funding.

When designing bus routes, here are some considerations to guide decision-making:

- In most urban environments, average speed of a bus is approximately 12.5 miles per hour (mph). The average operating speed within ECAT should be between 12 to 15 mph, with lower speeds in more congested areas and higher speeds along more suburban/rural corridors. Appropriate speed contributes to the frequency, reliability, and competitiveness of transit service. Maintaining consistent on-time performance reinforces the reliability of the service and helps to maintain ridership.
- Bus service should be planned to facilitate seamless transfers. Routes should be scheduled to arrive at transfer points at the same time to reduce the time patrons need to wait between transferring from one bus to another.
- From a planning perspective, appropriate frequency helps ensure that ridership is well distributed throughout the span of service. While there are standards for determining service frequency (e.g., peak hours necessitating greater frequency), service planning should be consistently evaluated to adapt to the changing needs and behaviors of the community being served.
- From a customer perspective, frequency needs to be balanced with coverage. Within the available funding and resources of a transit agency, this balance needs to be struck between allocating resources to increased frequency and allocating resources to expanding service area coverage. This allocation should be based on the unique conditions of the community being served. Ideally buses are running frequently enough that customers can have confidence that, without consulting a schedule, buses will arrive within a reasonable amount of time. Concurrently, routes should aim to maximize access to transit for as many potential riders as possible; and
- Routes should be designed to serve a variety of trip purposes and destinations with ridership-generating anchors at both ends of the route. This helps make certain that ridership is evenly balanced throughout the day and between inbound and outbound trips.





5.0 Alternative Concepts

Developing new alternatives to the ECAT transit network involves using the individual route analyses and key takeaways to propose changes in how transit service is provided to different parts of the community to improve efficiency and provide a better experience for the customers. Through this assessment, alignments for potential new bus routes were determined based on the population and employment density, stop level ridership, location of destinations and activity centers, and additional equity components.

Evaluating equity components is a federal and state transportation planning requirement. It also provides the opportunity to evaluate future ECAT service for its ability to improve mobility and access for historically underserved communities – low-income and minority populations. Therefore, any new system design needs to fully consider these areas and understand the residents lived experience accessing jobs, services, and other daily needs.

Concept Terminology

To better understand the route concepts, there are several key terms to define:

Mobility on Demand (MoD)

Mobility on Demand (MoD) is a transportation service requested by an app like Uber, Via, or Circuit. This service helps bring modal options to areas that are not easily served by bus routes.

Microtransit

Microtransit is a transportation service that operates small-scale, on-demand public transit services that can offer fixed routes and fixed schedules, as well as on-demand scheduling.

Micromobility

Micromobility involves a self-service rental program of e-bikes or e-scooters requested by an app such as Veo. This service can serve as first and last mile connectors and works well in downtown and tourist areas.





Veo - Micromobility

Veo, is an e-scooter and e-bike rental service provided in multiple cities throughout the country, including Pensacola. Veo rentals are available at any time of day and can be borrowed through scanning a QR code within the Veo app. Veo's bicycles and e-scooters are valuable for many peoples' first and last miles on their transportation journeys, serving as a successful micromobility option.



RIDE - Mobility on Demand

RIDE, located in Wilson, North Carolina, is a successful example of MoD. RIDE is a partnership between the City of Wilson and VIA, a leader in micro-transit service. RIDE alleviated the City's fixed route system, by serving most of the Wilson city limits. RIDE allows riders to request a trip at any time. Service can be requested through the app, website, or by phone.



Density Thresholds

Guided by the determination of transit service levels and route development is population and employment density since the concentration of human activity is a primary factor in where and when transit service can be most effective. This information determines ridership potential along a route, leading to different transit service thresholds (**Table 4**).



Table 4. Density Thresholds

Density Level	Transit Service Level	Population & Employment Density Threshold
Very Low	Too low to support fixed-route or microtransit service (although a transit agency or other service provider could offer lifeline service depending on policy direction)	≤ 500 people and jobs per square mile
Low	Can support fixed-route or microtransit service, with less frequent and more specialized service (e.g., service during peak hours or weekends only)	501- 1,500 people and jobs per square mile
Medium Low	Can support fixed-route or microtransit service at a more consistent frequency	1,501- 3,000 people and jobs per square mile
Medium	Can support greater levels of fixed-route or microtransit service with more frequent headways and a longer span of service	3,001- 4,500 people and jobs per square mile
High	Can support the greatest level of transit investment, more frequent service to generate high ridership, and the longest span of service	> 4,500 people and jobs per square mile

Based on the five designations listed above, alternatives were developed by evaluating opportunities to link destinations along the same corridor or in the same service area with new or modified bus routes. Microtransit service can complement fixed route bus service by extending coverage into new areas or by replacing fixed route service in areas lacking density and/or transit supportive infrastructure where conditions make bus operation less feasible.

Methodology

Designing and evaluating a new transit network can be a challenging task. It requires having a detailed understanding of the current network, organizational goals & objectives, customer needs, and the availability of resources (funding, number of vehicles, infrastructure, etc.). This process was iterative with previous steps or analysis revisited to make sure key issues are being addressed, existing customers do not lose access, and the operational integrity of the system is maintained. The redesign of the ECAT system would be considered a success if it is able to address network shortcomings, preserve and ideally expand access, and improve overall network efficiency.

Scenario Development

Scenario Development consisted of sketch planning efforts to propose different route and/or service ideas to address the current network shortcomings and customer needs. For the purposes of this project, sketch planning is defined as drawing routes and/or micromobility service areas on a map without a focus on the resources needed. It is an unconstrained network development with each scenario guided by one or





more overarching themes that influence how a route is drawn, what areas are being served, how an area is served, or how customers use the system. The scenarios developed incorporated one or more of the following themes:

- Timed transfer-based network;
- Prioritization of service on major corridors;
- Neighborhood circulators/micro-mobility service areas;
- Expanded Service Area; or
- Reduced Service Area.

A mapping interface was created to facilitate the sketch planning efforts. This tool allowed for the creation of new routes or micromobility service areas within Escambia County by providing the current route network (**Figure 12**), the population/employment density, the location of activity centers within the study area (**Figure 13**). The scenarios consisted of drawing routes, connecting activity centers, and creating MoD zones within this planning environment. This approach led to the creation of six network alternatives.

Figure 12. Sketch Planning Instrument, Current Network

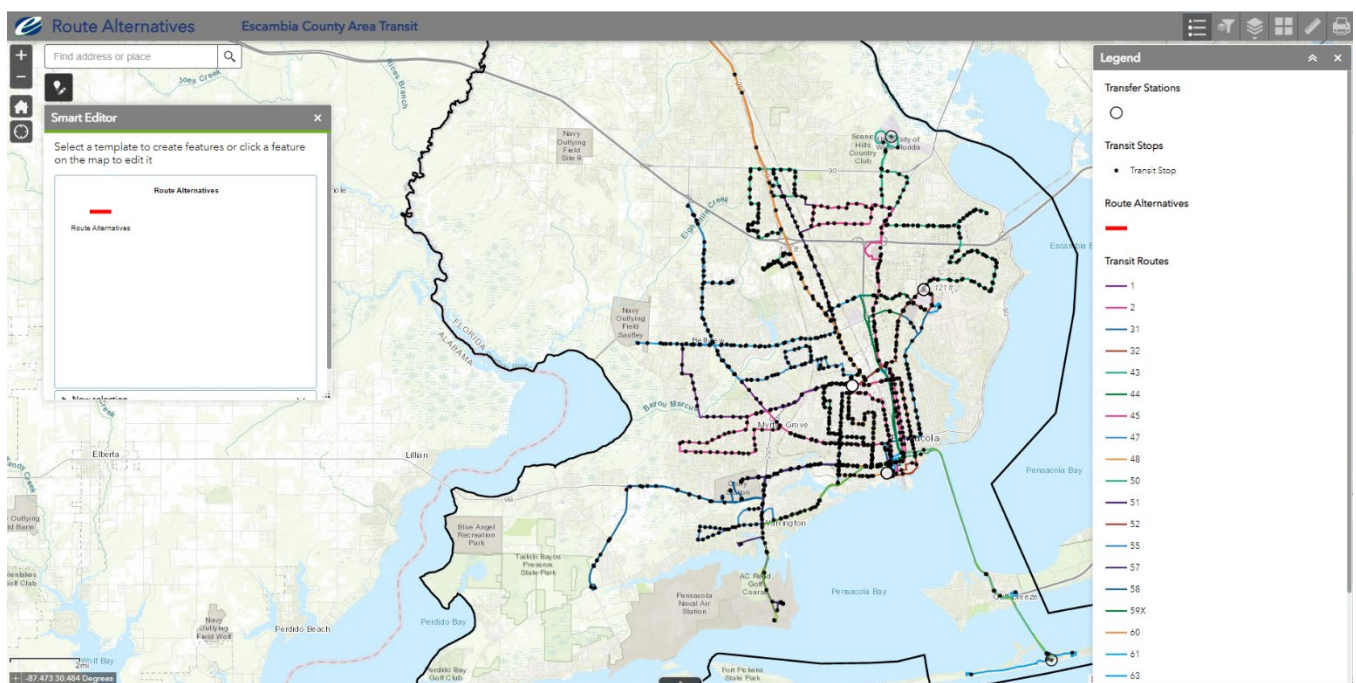
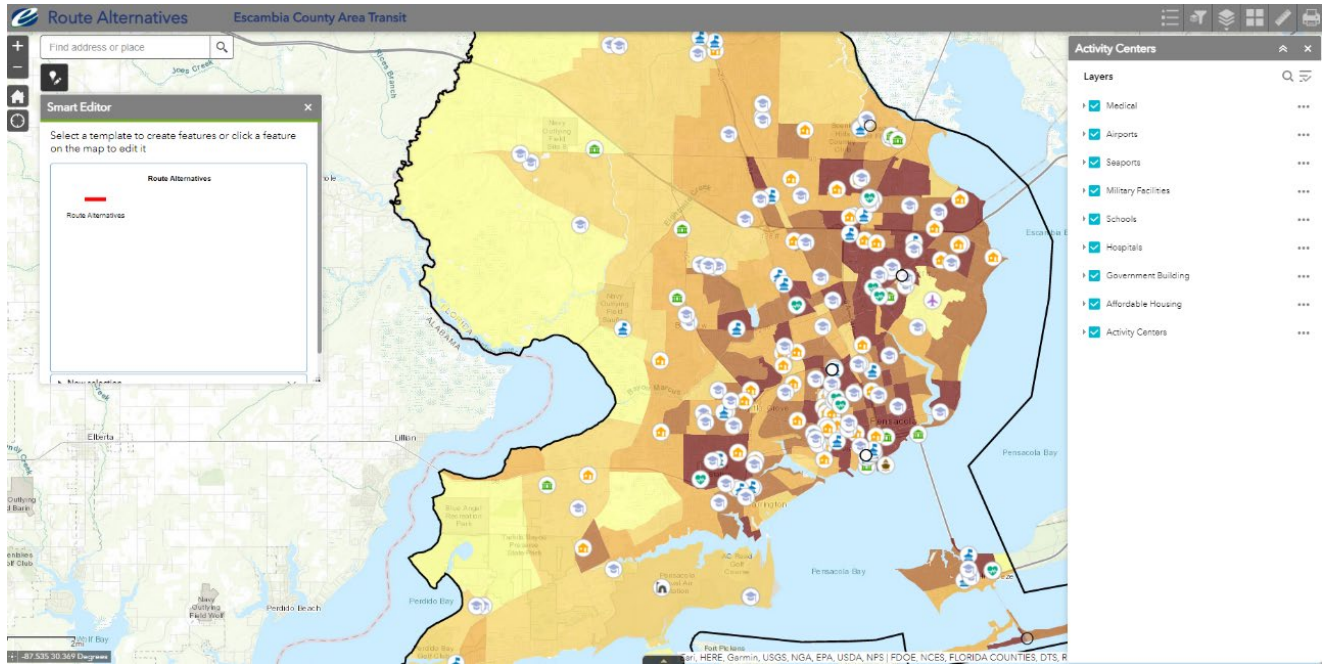




Figure 13. Sketch Planning Instrument - Pop/Emp Density & Activity Centers



Using this sketch planning approach and the related themes, six route concepts were created.



Timed Transfer

The focus of the Timed Transfer design (**Figure 14**) is to establish defined service areas around each of the transfer points: Downtown, Rosa Parks, Pensacola State College (PSC), and University of West Florida (UWF). To improve connectivity on the northwest side of the service area, a fifth transfer center, potentially at the Walmart Supercenter, is proposed near the intersection of Nine Mile Road and N. Palafox Street. Under this concept, customers access the transfer centers either by fixed route or Mobility on Demand (MoD) where they can transfer to another fixed route to access either another transfer center or different part of the current center catchment area. The current express bus serves as a local route starting south of Nine Mile Road to provide service on Pensacola Boulevard.

Pros:

- Maintains accessibility to neighborhoods and low-density areas
- Generally, follows current route structure
- Simplifies beach and military service
- Extends service to new Navy Federal Credit Union complex

Cons:

- Multiple transfers required to travel crosstown, increasing travel time
- Some redundancy as catchment areas for the different transfer centers overlap
- Non-continuous service on major corridors
- Potentially uses all available resources limiting ability to add buses for frequency improvements

Key Takeaway: Redundancy/Ridership Dilution - Overall the Time Transfer approach reduces redundancy and ridership dilution. However, redundant service exists where catchment areas for the different transfer centers overlap, such as Downtown and on the west side of the service area.

Key Takeaway: Overextended Bus Routes – Since the routes are designed to feed into the different transfer centers with separate routes connecting the transfer centers, most routes are short. The exception is the route from Rosa Parks to UWF. However, this sticks to the major corridor and should be able to maintain a constant speed.

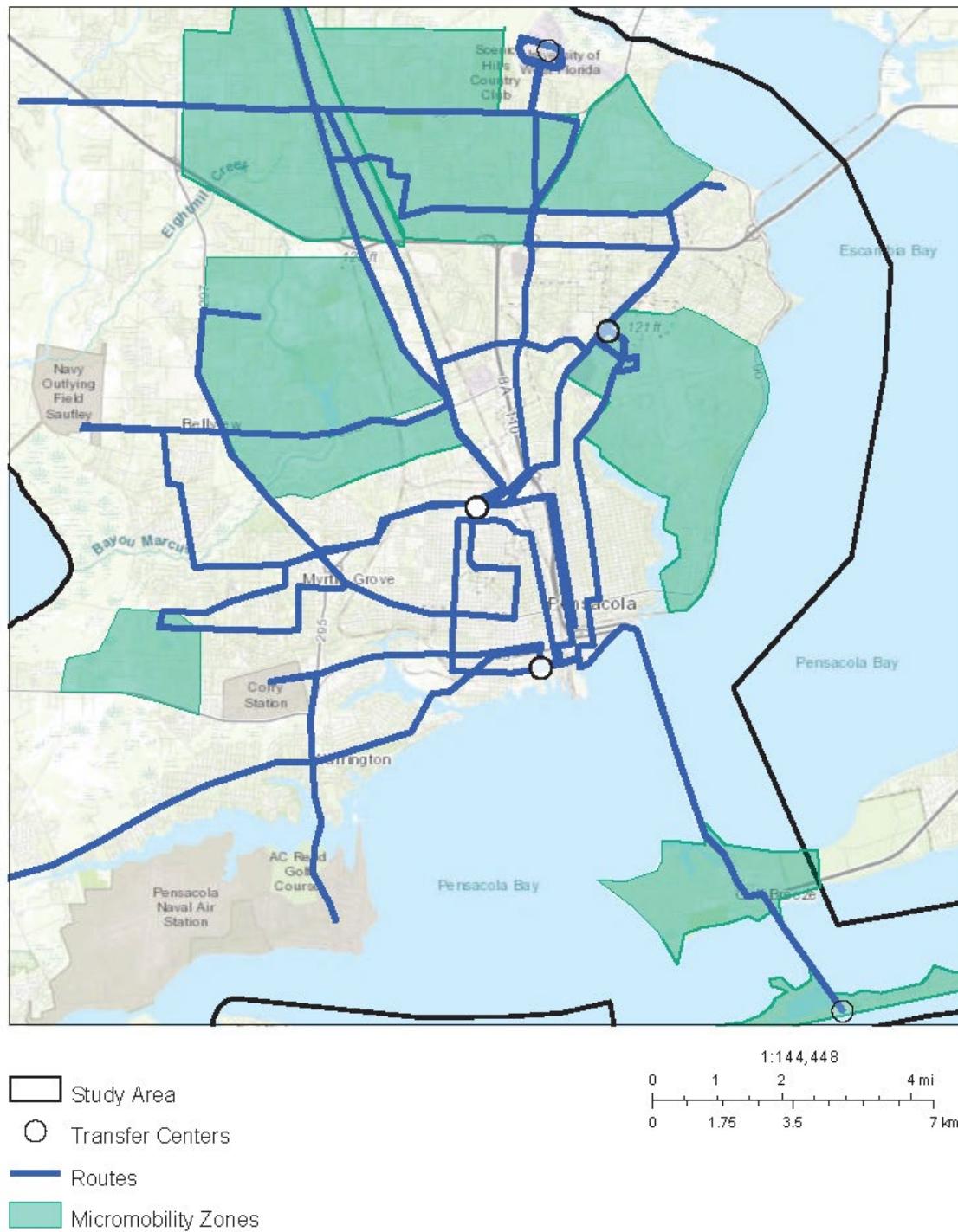
Key Takeaway: Unsafe and Challenging Operating Conditions – Routes are mostly out of the neighborhoods and not using roads with speed control devices (e.g., speed humps). Unprotected left turns or lane changes should be minimized. However, routes operating south of Rosa Parks or in the western portion of the service area may still experience these challenges.

Key Takeaway: Visibility and Frequency – Routes are not prioritized to operate on major corridors and potentially all resources are used. This limits the ability to add buses to routes to increase frequency and connect transfer centers, and 3) ending in microtransit zones. Microtransit is used to provide circulation between routes and activity centers.





Figure 14. Timed Transfer



Esri, HERE, Garmin, USGS, NOAA, EPA, USDA, NPS, IFDOE, NCE, FLORIDA COUNTIES, DTS, RPCs, Florida Department of Transportation, Systems Planning Office | ArcGIS Web AppBuilder



Decentralized

The focus of this network design (**Figure 15**) is the development of crosstown routes to serve the various destinations. Service is focused on the major corridors. Transfers occur at the transfer points or at the end of the routes where they share the same terminus. For example, three crosstown routes meet near Saufley field where transfer can occur. The number of transfers can be reduced through interlining the routes at the transfer stations. Service is out of the neighborhoods, requiring MoD to help maintain access.

Pros:

- Streamlined, simplified route structure
- Crosstown routes providing potentially direct access to major destinations
- Concept consists of fewer routes, freeing up resources for improved frequency
- Minimized redundancy

Cons:

- Service is no longer in neighborhoods, requiring alternate modes to feed people into fixed route service
- Since transfer points are potentially at the midpoint of the routes which can create route timing challenges
- New infrastructure would be needed at termini of the routes to facilitate transfers

Key Takeaway: Redundancy/Ridership Dilution – The decentralized approach assigns single routes each corridor, thereby minimizing redundancy.

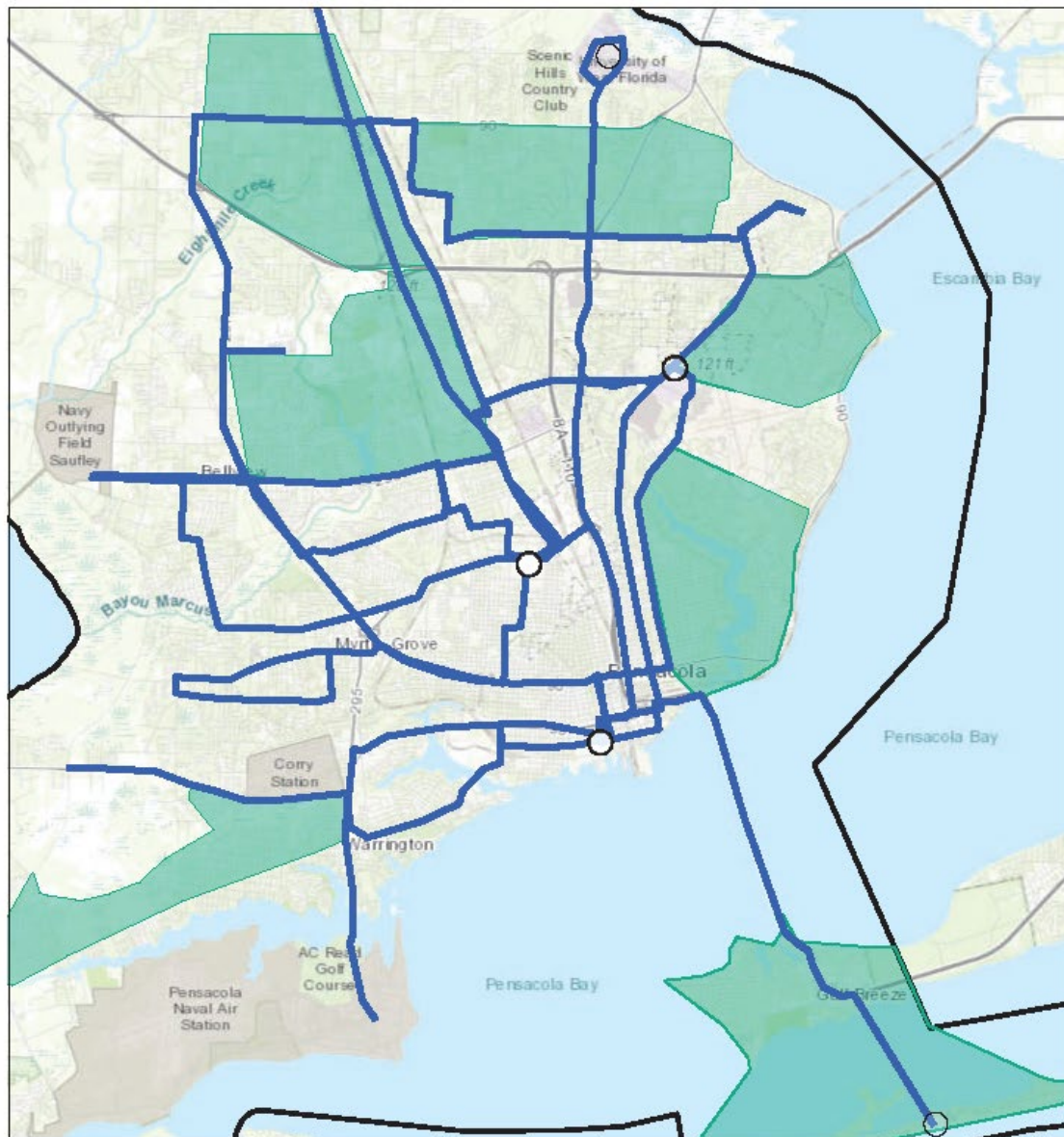
Key Takeaway: Overextended Bus Routes – Crosstown routes are longer than existing routes, but this can be mitigated by having routes pass through transfer centers.

Key Takeaway: Unsafe and Challenging Operating Conditions - Keeping routes out of neighborhoods and on major corridors should minimize lane changes, unprotected left turns, and other operational issues.

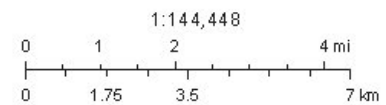
Key Takeaway: Visibility and Frequency – Visibility is improved because routes operate on major corridors and fewer routes are needed to provide sufficient coverage, leaving resources available to improve frequencies where needed.



Figure 15. Decentralized



- Study Area
- Transfer Centers1
- Routes
- Micromobility Zones



Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS | FDOE, NCES, FLORIDA COUNTIES, DTS, RPCs, | Florida Department of Transportation, Systems Planning Office | ArcGIS Web AppBuilder



Microtransit Heavy

Fixed route service is streamlined and microtransit service is heavily used to supplement and connect to the bus routes (**Figure 16**). Where existing routes are removed, microtransit service is used to serve lower density and lower ridership areas. Routes are 1) focused on major corridors, 2) focused on linking transfer centers, and 3) ending in microtransit zones. Microtransit is used to provide circulation between routes and activity centers.

Pros:

- Some existing routes are redrawn to avoid speed control devices, while still providing local access
- Current fixed route service with lower ridership covered by microtransit areas
- Parallel routes streamlined into one (e.g. Pensacola Blvd routes and Palafox St routes)

Cons:

- Fewer routes than current service
- Some corridor redundancy accessing UWF and on Fairfield Drive
- Route near Scenic Highway used to exist but was removed from service (brought back to target higher density area)

Key Takeaway: Redundancy/Ridership Dilution –There is some redundancy in providing access to UWF transfer centers and on Fairfield Drive to and from Rosa Parks transfer center.

Key Takeaway: Overextended Bus Routes –There are some longer routes connecting transfer centers. There is a particularly long route connecting the Downtown transfer center to the UWF transfer center. The route from Rosa Parks linking Cory Station and Saufley Field is also a bit long.

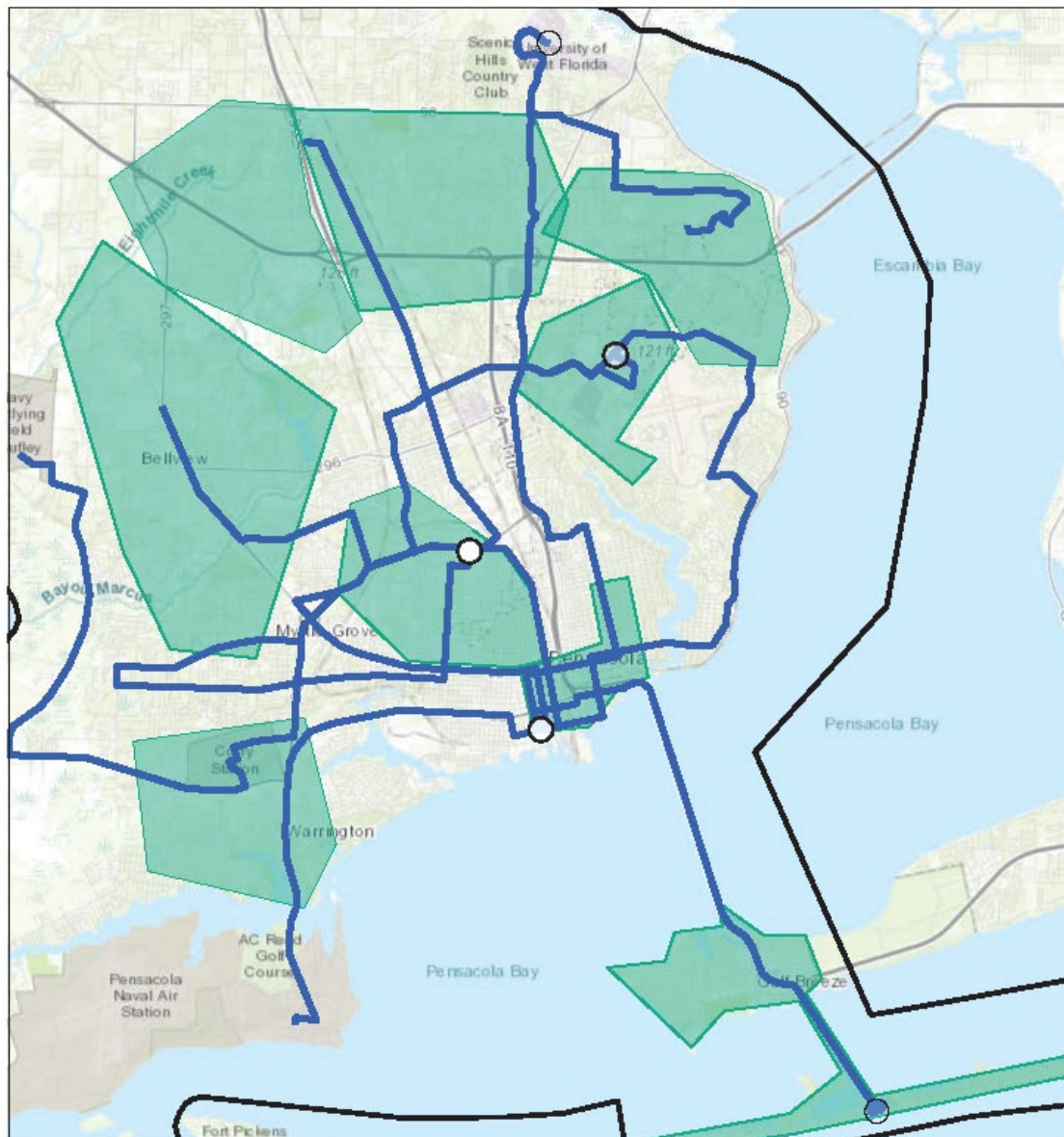
Key Takeaway: Unsafe and Challenging Operating Conditions – Generally routes are focused along major corridors, so neighborhood streets with speed humps are avoided.

Key Takeaway: Visibility and Frequency – Focusing on major corridors increases visibility. The concept includes fewer routes than the current system, so higher frequency should be possible with the existing vehicle fleet. The focus on microtransit with consistent circulation also provides good visibility.





Figure 16. Microtransit Heavy



- Study Area
- Transfer Centers
- Routes
- Micromobility Zones

1:144,448

0 1 2 4 mi

0 1.75 3.5 7 km

Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS | FDOE, NCES, FLORIDA COUNTIES, DTS, RPCs, | Florida Department of Transportation, Systems Planning Office | ArcGIS Web AppBuilder



Radial Routes

Routes are designed to radiate from transfer centers out to service areas (**Figure 17**). Because transfer centers are less connected, the overall service area functions with zones. Each transfer center has a zone defined by the extent of its radiating routes. Microtransit is used to serve lower and higher density areas and to provide links between zones.

Pros:

- Route redundancy is minimal
- All high ridership stops are served either by fixed route or microtransit service
- Transfer centers with the greatest number of activity centers in proximity (Rosa Parks and Downtown) is linked by routes

Cons:

- There are only a few links between transfer centers
- It is more difficult for riders at the end of routes to connect to other routes
- There are activity centers in low density areas without fixed route or microtransit service

Key Takeaway: Redundancy/Ridership Dilution – Redundancy is avoided in this concept with each route focused on a different area. There are a couple routes linking Rosa Parks transfer center and Downtown transfer center, to increase access to that area's concentration of activity centers, so there is some overlap.

Key Takeaway: Overextended Bus Routes – Because routes are radiating from transfer centers, they are, not overextended. Connections between areas is de-prioritized so routes are shorter.

Key Takeaway: Unsafe and Challenging Operating Conditions – Major corridors are prioritized to avoid speed humps. Routes are as direct as possible, so unprotected left turns can also be avoided.

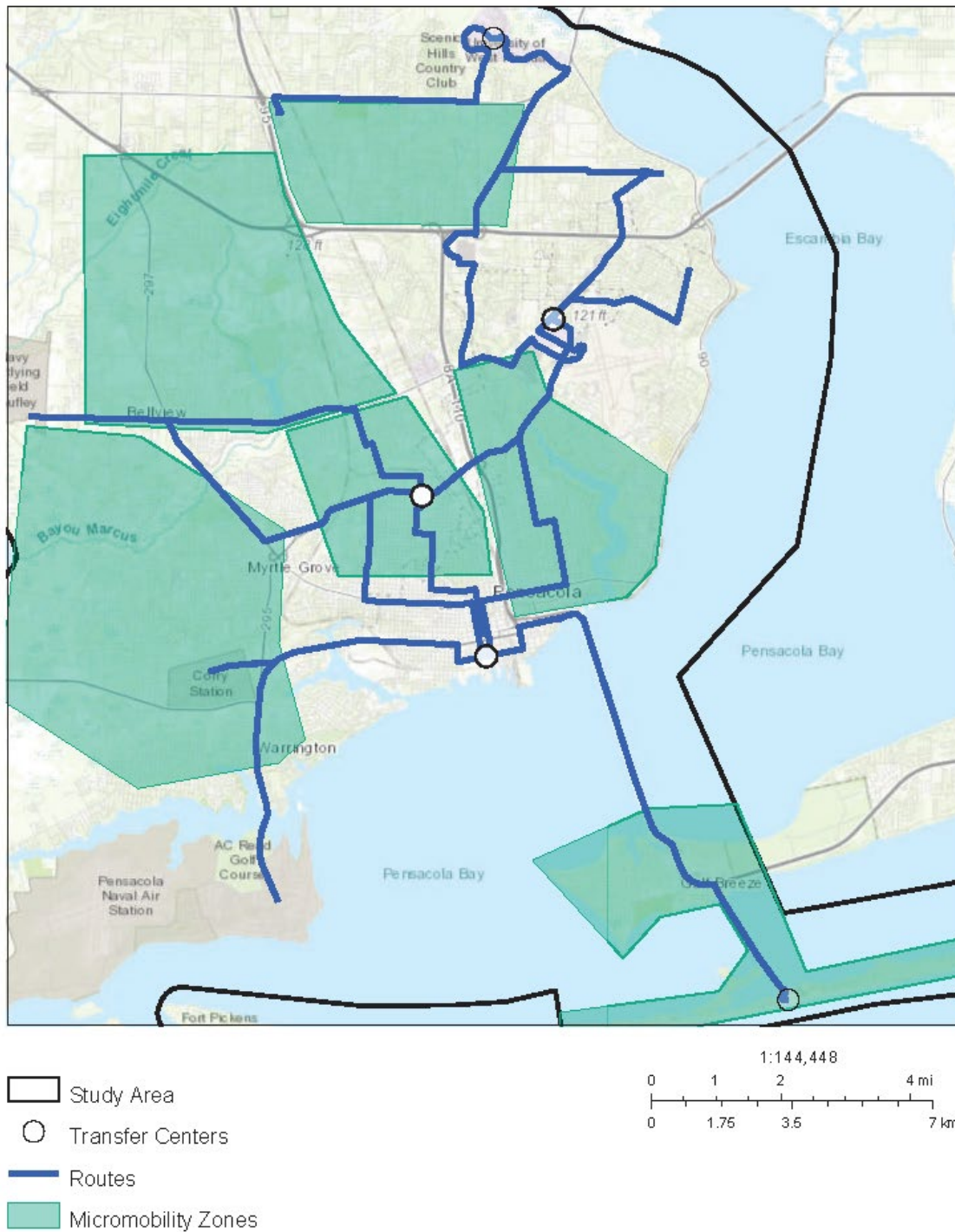
Key Takeaway: Visibility and Frequency – Routes across the entire system are less connected, so

visibility is not very high. There are fewer routes than the current system, so higher frequency service should be possible.





Figure 17. Radial Routes



Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS | FDOE, NCES, FLORIDA COUNTIES, DTS, RPCs | Florida Department of Transportation, Systems Planning Office | ArcGIS Web AppBuilder



Concentrated Areas

Concentrated Areas (**Figure 18**) focuses on serving areas of dense population and employment. In this approach, routes serve dense areas such as Downtown Pensacola, Baptist Hospital, Sacred Heart Hospital, North Davis Highway, and University of West Florida. These routes aim to minimize awkward turns, using signalized left turns and U-turns for heading inbound. Routes are supplemented by surrounding micromobility service areas for last mile connections.

Pros:

- Routes serve densest areas
- Utilizes signalized turns, minimizing unsafe operations
- Shorter routes equate to shorter ride time for user

Cons:

- Less dense areas lack service
- Lack of Northwest service, may exclude users that commute into city for work
- Certain routes are looped, to avoid unsafe operations

Key Takeaway: Redundancy/Ridership Dilution – Because this approach only focuses routes to dense areas it increases redundancy and ridership dilution.

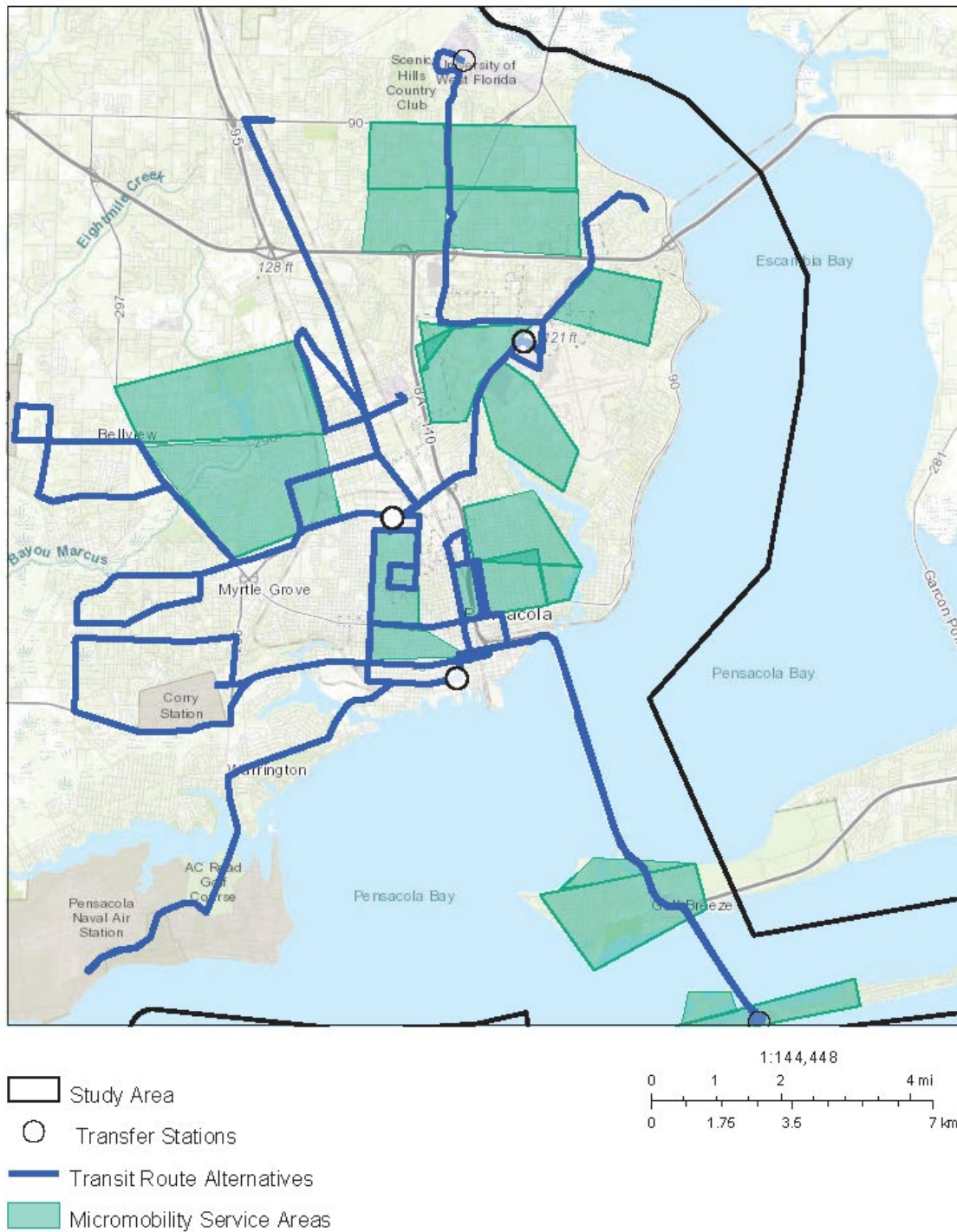
Key Takeaway: Overextended Bus Routes – Routes are shorter to focus on dense areas, minimizing overextended routes.

Key Takeaway: Unsafe and Challenging Operating Conditions – Routes utilize signalized turns, minimizing unsafe operations.

Key Takeaway: Visibility and Frequency – Visibility is achieved through routes following dense population and employment areas. Shorter routes will have increased frequency.



Figure 18. Concentrated Areas



Esri, HERE, Garmin, USGS, NOAA, EPA, USDA, NPS | FDOT, NCES, FLORIDA COUNTIES, DTS, RPCs | Florida Department of Transportation, Systems Planning Office | ArcGIS Web AppBuilder



Major Corridors

The Major Corridors concept (**Figure 19**) utilizes major roadways to connect users to activity centers. Routes that follow major roadways connect to all transfer centers. Routes are longer but offer more coverage by being placed on major roadways. Micromobility service areas are designated near major corridors for last mile connections.

Pros:

- Routes on major corridors offer more area coverage
- Extended routes serve more users
- All activity centers are accessible

Cons:

- Longer routes equate to longer ride times
- Routes are looped for inbound, which may add more travel time
- Lack of west service for users

Key Takeaway: Redundancy/Ridership Dilution - The Major Corridors approach minimizes redundancy as single routes are assigned to a major corridor.

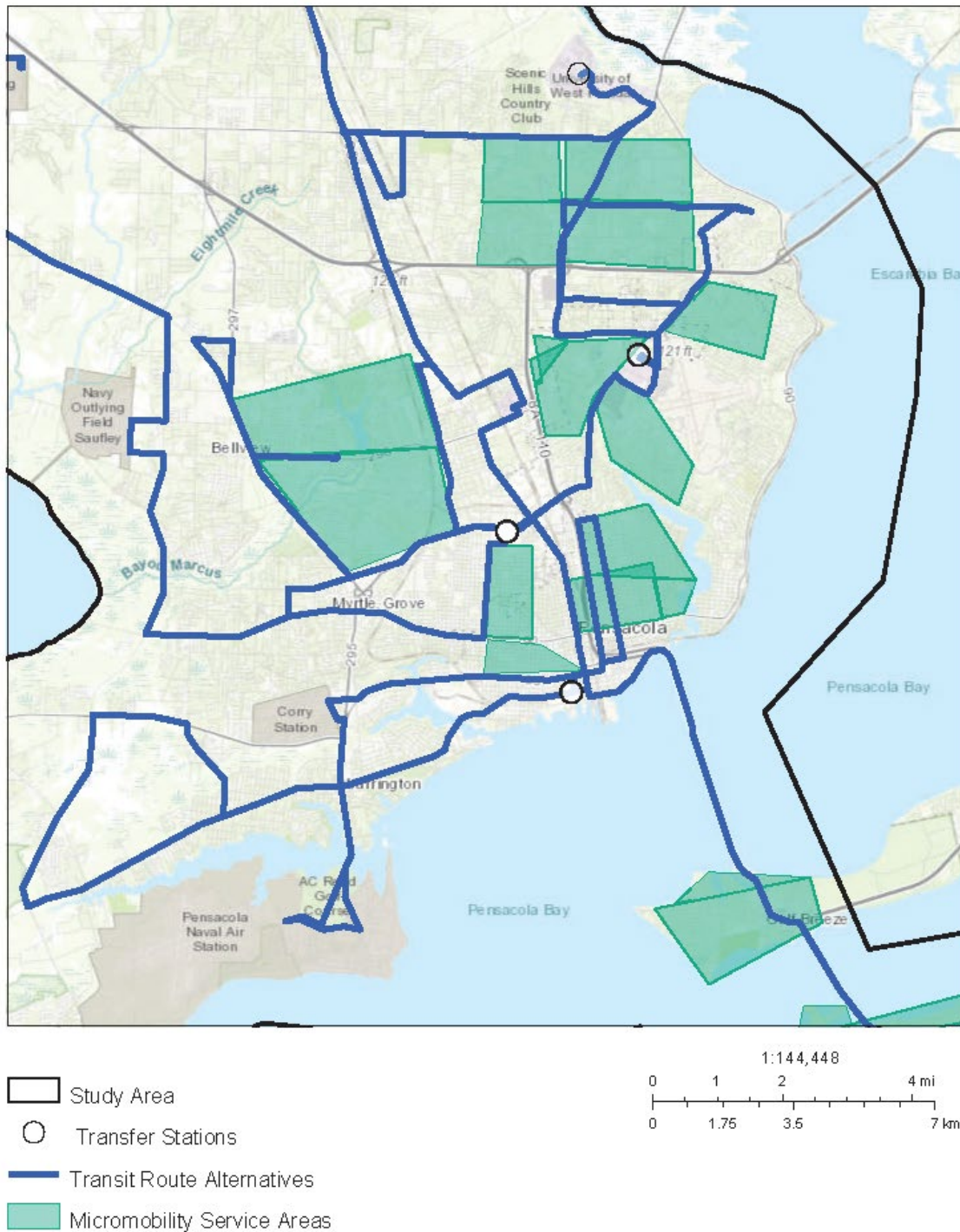
Key Takeaway: Overextended Bus Routes – While routes are longer, they connect to transfer centers and offer wider coverage of activity centers.

Key Takeaway: Unsafe and Challenging Operating Conditions – Sticking to major corridors improves operations and safety by minimizing lane changes and unprotected left turns. Signalized turns on inbound of routes minimizes or eliminates unprotected left turns.

Key Takeaway: Visibility and Frequency – Visibility is achieved through routes following major corridors. This approach also allows frequency to be adjusted to serve major activity centers.



Figure 19. Major Corridors



Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS | FDOE, NCEs, FLORIDA COUNTIES, DTS, RPCs | Florida Department of Transportation, Systems Planning Office | ArcGIS Web AppBuilder



Alternatives Evaluation

The six concepts were presented to ECAT staff in February 2023. **Table 5** highlights the Key Takeaway Evaluation that took place for the six concepts.

Table 5. Alternative Concept Key Takeaway Evaluation

<i>Takeaway</i>	<i>Timed Transfer</i>	<i>Decentralized</i>	<i>Microtransit Heavy</i>	<i>Radial Routes</i>	<i>Concentrated Areas</i>	<i>Major Corridors</i>
<i>Redundancy/Ridership Dilution</i>						
<i>Overextended Bus Routes</i>						
<i>Unsafe and Challenging Operating Conditions</i>						
<i>Visibility and Frequency</i>						



Poor



Fair



Best

After review of the Key Takeaway Evaluation, the Steering Committee recommended the Microtransit Heavy and Decentralized for further analysis. These alternatives were also refined based on feedback from the Steering Committee. Microtransit Heavy is represented as **(Figure 20), rebranded Concept A**, and Decentralized **(Figure 21), rebranded Concept B**. The analysis of these options consisted of modeling the fixed route and MoD separately to determine ridership and estimated costs.



Figure 20. ECAT System Concept A

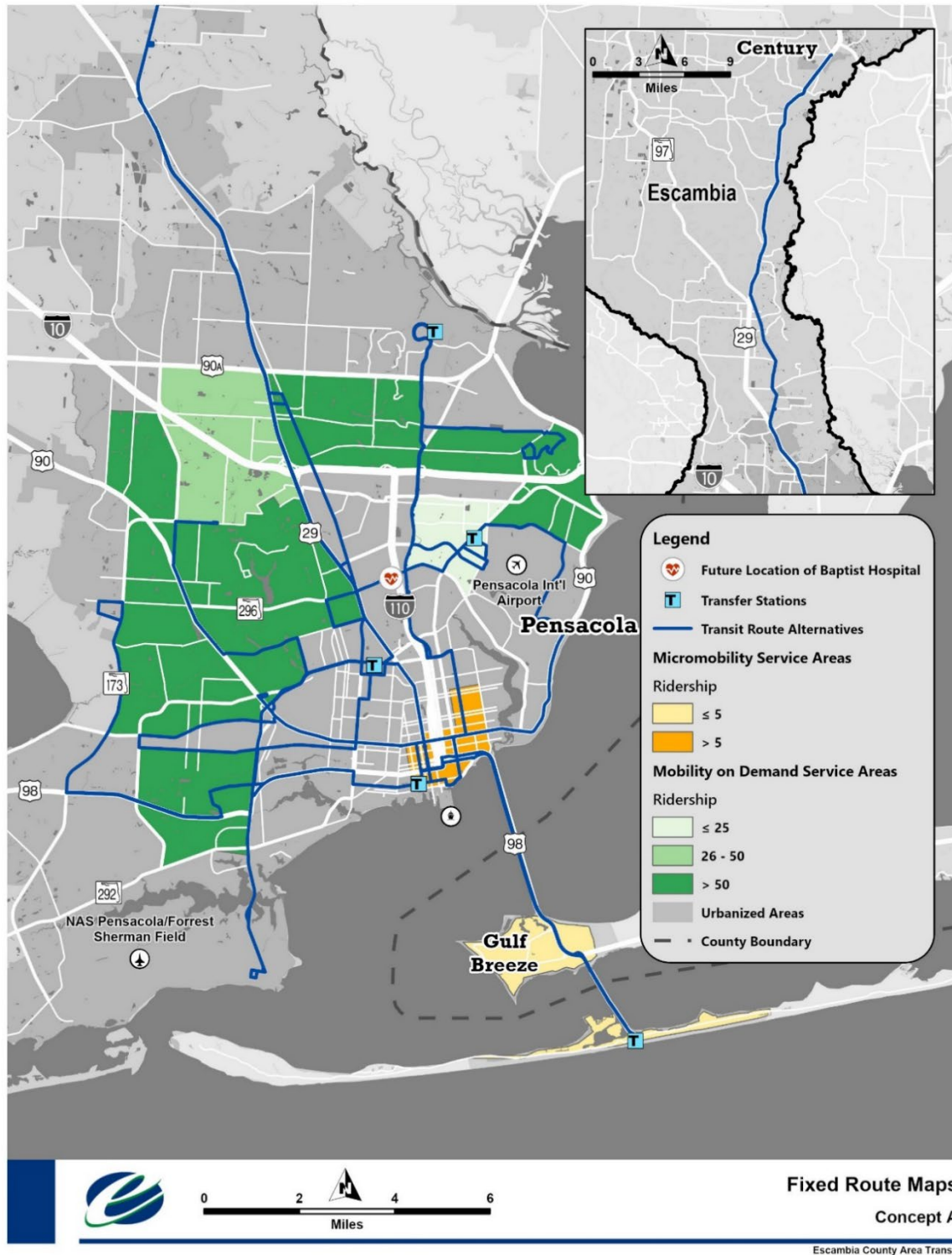
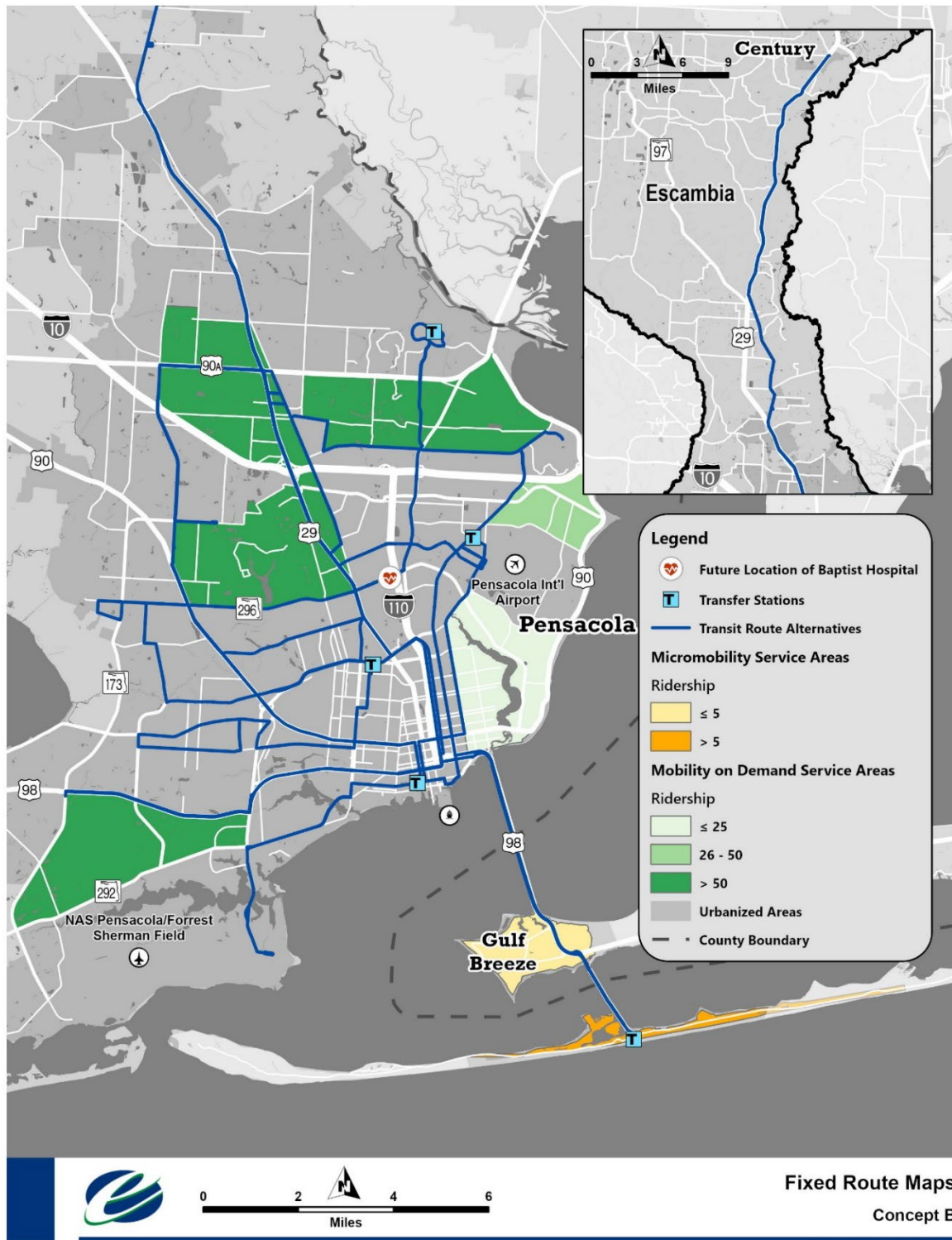




Figure 21. ECAT System Concept B





Fixed Route Methodology

Analysis of the fixed route service in the concepts consisted of providing operational information (span of service, route frequency, and number of vehicles) to the proposed routes along with the round-trip distance obtained from the sketch planning tool. This information allows for calculating the daily and annual revenue hours and miles. For the purposes of the evaluation, each route was assumed to operate on a 60-minute frequency for 13-hour span (6am to 7pm) on weekdays and 10-hour span (7am to 5pm) on Saturdays¹ to standardize the routes for comparison between existing service and proposed alternatives. While shorter frequencies and longer span of services create a more attractive network, these assumptions were used to ensure the concepts were in line with the existing budget. Higher frequencies and longer spans should be considered after the recommended alternative is implemented and ridership rebounds to earlier levels. This information was imported into TBEST² to project current year (FY2022) and future year (FY2028) ridership estimates for the fixed route system. The model was run for both years and used to determine the expected change in ridership when compared to the existing system for both concepts.

MoD Modeling

As previously discussed, MoD is an emerging mobility option that is primarily designed to provide transportation options in low-density/low ridership areas. Since it is a new option, research is only beginning to emerge on ridership and cost parameters that can be used project service demand, number of vehicles, and budgetary impacts. MoD ridership was projected for the concepts using two different methods: Area Mode Choice and Existing Ridership. In each of the proposed concepts, the MoD zones (**Figure 22** and **Figure 23**) were revised to match the road network and other boundaries, such as neighborhoods, to define the impact area.

The Area Mode Choice method involved importing the MoD zones into TBEST to determine the number of person-trips and applying a 0.8 percent transit mode share (**Table 6**). The transit mode share was determined by obtaining travel behavior information for all trips within the study area as provided by the Replica dataset. Replica employs smartphone location, census, and other datasets to run a seasonal, high-fidelity simulation to represent the population and its travel patterns for the whole country. This information is used to improve planning and monitoring of transportation and land use systems, and to understand how people interact with the built environment. To project 2028 MoD ridership, the estimated 0.47 percent urban area growth rate was used (**Table 7**). Based on industry research, it is estimated that one vehicle can support 25 trips per day.

¹ Century Service does not operate on Saturdays in both concepts

² <https://tbest.org/>



Figure 22. Concept A MoD Zones



Figure 23. Concept B MoD Zones





Table 6. Mod TBEST Modeling (FY22)

2022			
Person Trips*		MOD Trips	MOD Vehicle Needs
		0.8%	25
Escambia County		1,286,016	10,288
Concept A		560,623	4,485
Concept A - zone 0	61,287	490	20
Concept A - zone 1	32,854	263	11
Concept A - zone 2	63,095	505	20
Concept A - zone 3	23,008	184	7
Concept A - zone 4	18,486	148	6
Concept A - zone 5	58,172	465	19
Concept A - zone 6	180,846	1,447	58
Concept A - zone 7	76,860	615	25
Concept A - zone 8	45,513	364	15
Concept B		327,532	2,620
Concept B - zone 0	24,716	198	8
Concept B - zone 1	8,962	72	3
Concept B - zone 2	28,533	228	9
Concept B - zone 3	60,182	481	19
Concept B - zone 4	44,910	359	14
Concept B - zone 5	53,350	427	17
Concept B - zone 6	36,471	292	12
Concept B - zone 7	70,229	562	22



Table 7. MoD TBEST Modeling (FY28)

2028			
Person Trips*		MOD Trips	MOD Vehicle Needs
		0.8%	25
Escambia County		10,582	423
Concept A		4,613	185
Concept A- zone 0	63,035	504	20
Concept A- zone 1	33,791	270	11
Concept A- zone 2	64,895	519	21
Concept A- zone 3	23,664	189	8
Concept A- zone 4	19,014	152	6
Concept A- zone 5	59,832	479	19
Concept A- zone 6	186,006	1,488	60
Concept A- zone 7	79,053	632	25
Concept A- zone 8	46,812	374	15
Concept B		2,695	108
Concept B- zone 0	25,421	203	8
Concept B- zone 1	9,218	74	3
Concept B- zone 2	29,348	235	9
Concept B- zone 3	61,899	495	20
Concept B- zone 4	46,192	370	15
Concept B- zone 5	54,872	439	18
Concept B- zone 6	37,511	300	12
Concept B- zone 7	72,232	578	23

These results show that the MoD zones in either alternative could generate thousands of trips per day, requiring over 100 vehicles in operation. This represents a significant increase in existing ridership and is not realistic in the near term due to funding constraints.

The Existing Ridership method sought to mitigate the significant demand generated by the Area Mode Choice approach by shifting existing riders from stops no longer served by the proposed fixed route alternatives to the MoD Service. This approach, however, also recognizes the popularity of these programs experienced by other transit agencies across the country by employing a 4 percent annual growth rate in MoD ridership. **Table 8** and **Table 9** provide the results of this approach.



Table 8. MoD Ridership (FY22)

	2022	
	MOD Trips	MOD Vehicle Needs
	Adjusted Passenger Boardings	25
Concept A	487	19
Concept A - zone 0	203	8
Concept A - zone 1	4	0
Concept A - zone 2	48	2
Concept A - zone 3	0	0
Concept A - zone 4	19	1
Concept A - zone 5	32	1
Concept A - zone 6	118	5
Concept A - zone 7	38	2
Concept A - zone 8	25	1
Concept B	264	11
Concept B - zone 0	0	0
Concept B - zone 1	38	2
Concept B - zone 2	16	1
Concept B - zone 3	2	0
Concept B - zone 4	28	1
Concept B - zone 5	77	3
Concept B - zone 6	34	1
Concept B - zone 7	69	3



Table 9. MoD Ridership (FY28)

	2028	
	MOD Trips	MOD Vehicle Needs
	Adjusted Passenger Boardings	25
Concept A	616	25
Concept A- zone 0	203	8
Concept A- zone 1	4	0
Concept A- zone 2	48	2
Concept A- zone 3	0	0
Concept A- zone 4	19	1
Concept A- zone 5	32	1
Concept A- zone 6	118	5
Concept A- zone 7	38	2
Concept A- zone 8	25	1
Concept B	334	13
Concept B- zone 0	0	0
Concept B- zone 1	38	2
Concept B- zone 2	16	1
Concept B- zone 3	2	0
Concept B- zone 4	28	1
Concept B- zone 5	77	3
Concept B- zone 6	34	1
Concept B- zone 7	69	3

The projected values using this approach, while based on expected travel behavior, are significantly less than what previous and what other agencies have experienced. Therefore, the expected MoD usage are trips generated from this approach plus new trips. Since the new trips are hard to quantify, the Existing Ridership values were doubled during subsequent analysis. These new values are expected to be more in line with actual usage after implementation as evidenced by experiences reported by other transit agencies.

To determine the cost for MoD service, a literature review was performed to identify other agencies who have implemented this service. **Table 10** provides the report, transit agency(ies), and average costs per trip for MoD service. Based on this information, the average cost of \$8.17 per trip was used.



Table 10. MoD Cost Research

Article Name	Agency	Cost Per Trip
Demand for Emerging Transportation Systems: Chapter 3³	Pinellas Suncoast Transit Agency	\$6.00
A Simulation Study of an On-Demand Transportation System⁴	Simulation runs	\$5.75 to \$9.30
Mobility on Demand (MOD) Sandbox Demonstration: DART First and Last Mile Solution, FTA Report No.0164⁵	Dallas Area Regional Transit	\$5.13
Mobility on Demand (MOD) Sandbox Demonstration: Pierce Transit Limited Access Connections. FTA Report No. 0237⁶	Pierce Transit	\$11.70
Mobility on Demand (MOD) Sandbox Demonstration: Los Angeles County and Puget Sound First and Last Mile Partnership with Via. FTA Report No. 0239⁷	Los Angeles County	\$11.09
	Puget Sound	\$11.91
On-Demand ride hailing as publicly subsidized mobility: An empirical case study of Innisfil Transit⁸	Innisfil Transit (Canada)	\$4.45*

Results

Both concepts were presented to the project Steering Committee in April 2023 with the preliminary performance measures to discuss them and determine if any revisions were needed. The Steering Committee accepted the concepts without any changes and approved moving forward with modeling and further analysis. Overall, Concept A performs better than Concept B. It has a higher average daily revenue than Concept B or the current system. In addition, Concept A costs less per rider, resulting in a lower

³ <https://www.sciencedirect.com/science/article/abs/pii/B9780128150184000036>

⁴ <https://onlinelibrary.wiley.com/doi/abs/10.1111/itor.12476>

⁵ <https://www.transit.dot.gov/research-innovation/mobility-demand-mod-sandbox-demonstration-dart-first-and-last-mile-solution>

⁶ <https://www.transit.dot.gov/research-innovation/mobility-demand-sandbox-demonstration-pierce-transit-limited-access-connections>

⁷ <https://www.transit.dot.gov/research-innovation/mobility-demand-sandbox-demonstration-los-angeles-county-and-puget-sound-first>

⁸ <https://www.sciencedirect.com/science/article/pii/S2213624X22002449>



subsidy per rider needed. With the inclusion of MoD service, Concept A represents an increase in ridership with fewer buses needed than Concept B or the current system. **Table 11** and **Table 12** below compare the financial and performance measures of the current system to Concepts A and B for the year 2022.

Table 11. Current System vs. Concept A 2022

Performance Measures	Current System	Concept A
Average daily revenue	\$1,621.95	\$2,256.67
Daily operating cost	\$29,449.16	\$31,025.01
Cost/rider	\$13.67	\$12.18
Subsidy/rider	\$12.03	\$11.29
Total weekday boardings	2,154	2,683
Buses Needed	30	21
MoD Vehicles	-	39

Table 12. Current System vs. Concept B 2022

Performance Measures	Current System	Concept B
Average daily revenue	\$1,621.95	\$1,756.22
Daily operating cost	\$29,449.16	\$38,132.84
Cost/rider	\$13.67	\$19.23
Subsidy/rider	\$12.03	\$18.39
Total weekday boardings	2,154	2,105
Buses Needed	30	27
MoD Vehicles	-	22

The same Concepts were applied to 2028 projections and compared directly to each other in **Table 13** and **Table 14** below to display the future implications of the two concepts. The analysis for these projections was done using the FY2022 dollar values.

Table 13. Current System vs. Concept A 2028

Performance Measures	Current System	Concept A - Draft
Average Daily Revenue	\$1,752.08	\$2,525.37
Daily Operating Cost	\$30,382.92	\$33,793.63
Cost/rider	\$14.72	\$11.85
Subsidy/rider	\$12.03	\$11.85
Total weekday boardings	2,215	3,023
Buses needed	31	21
MoD Vehicles	-	49



Table 14. Current System vs. Concept B 2028

Performance Measures	Current System	Concept B - Draft
Average Daily Revenue	\$1,752.08	\$1,917.08
Daily Operating Cost	\$30,382.92	\$40,241.86
Cost/rider	\$14.72	\$18.60
Subsidy/rider	\$12.03	\$18.59
Total weekday boardings	2,215	2,280
Buses needed	31	28
MoD Vehicles	-	27

Recommended System, Concept A

Concept A was selected as the recommended system based on its route performance, consistency with goals, and alignment with implementing micromobility/MoD options. In addition, Concept A is reflective of the COA's Goals, Objectives, and KPIs. These goals include:

1. Increasing access to education, jobs, and other essential services
2. Improving Key Performance Indicators (KPIs), such as ridership and system efficiency
3. Implementing innovative technologies to effectively serve low-density or low-ridership areas
4. Prioritizing service along major corridors to lower overall travel times

Concept A offers more direct routing serving specific activity centers, meaning shorter average cycle time and increased visibility (GOAL 1). The concept focuses on major corridors to avoid some of the unsafe conditions, which means higher average speed, more comfortable ride for patrons, and easier for operators (GOAL 2). The MoD service utilizes innovative technology to efficiently serve low density areas (GOAL 3). Prioritizing service along major corridors to lower overall travel times, the system overall marries fixed service routes with mobility options (GOAL 4). The system maintains connections to major activity centers such as the Airport, and more direct connections to future centers such as the Baptist Hospital. It also includes good coverage of existing affordable housing.

Access to education centers fulfills one of the main objectives of GOAL 1, as well as the previously mentioned access to medical facilities. Over two-thirds of these centers will be accessed by this recommendation, with most of the locations providing access to areas of life sustaining activities which keep the Concept in line with the COA's KPIs. With reference to GOAL 2, this is fulfilled through the addition of a deliberate route planning analysis, where the safest roads are used for most of the transit system. The modeling shows that ridership and system cost will decrease, allowing for a measured and palpable fulfillment the ECAT system goals. By allowing for MoD systems to fill in for more costly fixed route service, GOAL 3 can be fully implemented. By measuring a 10 percent decrease in transit time between major transfer points such as Pensacola state college and the downtown area, KPIs will be met.





OPTIBUS Assessment

Since Concept A performs better in the modeling effort than Concept B, it was selected for further analysis in OPTIBUS¹. OPTIBUS is a transportation management software designed to help with the planning and scheduling of routes. For the COA, it provides a fatal flaw analysis to ensure that the proposed routes are functional in terms of proposed headways, number of buses needed, travel times, layovers, and facilitating transfers at key stops. In addition, it allows an additional comparison between current operations and proposed service in terms of vehicle and operator efficiency as well as daily operating costs. **Table 15** provides a comparison between Concept A and the Current System. Total costs are generalized values associated with the operation of the system and does not include administrative and maintenance costs.

Table 15. OPTIBUS Concept Comparison

Performance Measure	Current System ^[2]		Concept A	
	Weekday ^[3]	Saturday	Weekday	Saturday
Vehicle Efficiency	97.89%	97.99%	90.51%	88.56%
Operator Efficiency	86.02%	85.66%	90.23%	89.01%
Daily Operational Cost (Crew + Vehicles)	\$14,403	\$9,079	\$11,882	\$9,258

As shown by the OPTIBUS analysis, Concept A performs better in terms of crew efficiency and total cost of providing the service. Vehicle efficiency is reduced under Concept A, however, this is due to the generalized parameters used in optimizing the service and does not include travel time from the Rosa Parks facility to the start of the route (deadhead). As the proposed concept moves to implementation, a more detailed operating plan will be created that should improve the overall performance of the proposed system.

Title VI

Methodology

The Title VI Analysis was developed by analyzing various socioeconomic factors of the population based on the American Community Survey (ACS) from the Census Bureau (2020). These include: No Socio-Economic Majority, Majority Poverty Population, Majority Minority Population, and Both Majority Minority and Poverty Populations.

These categories are representing a combination of scores created based on the existing ACS (2020) Census Block Group data. The percentage of population that is classified as minorities and the percentage of population that live under the poverty level for each Block Group are calculated. Minority populations in this case equals the total population minus the white non-Hispanic population, which is divided by the

^[1] Transportation Management Software - Optibus

^[2] Jan 2023 Sign Up Period

^[3] Monday – Thursday Service





total population to create a percentage. Poverty populations are already defined in the census data as the percent of population with income in the past 12 months below the poverty level.

A score of 0 or 1 is calculated for each type on each Block Group to determine its class. A score of 1 are those Block Groups where the calculated percentage of each group (minority or poverty) is greater than the mean percentage of that group. A score of 0 is where the mean percentage is less than the calculated percentage. Therefore, the categories are assigned by the following scores:

- No Socio-Economic Majority (0 Minority Score, 0 Poverty Score)
- Majority Poverty Population (0 Minority Score, 1 Poverty Score)
- Majority Minority Score (1 Minority Score, 0 Poverty Score)
- Both Majority Minority and Poverty Populations (1 Minority Score, 1 Poverty Score).

Analysis

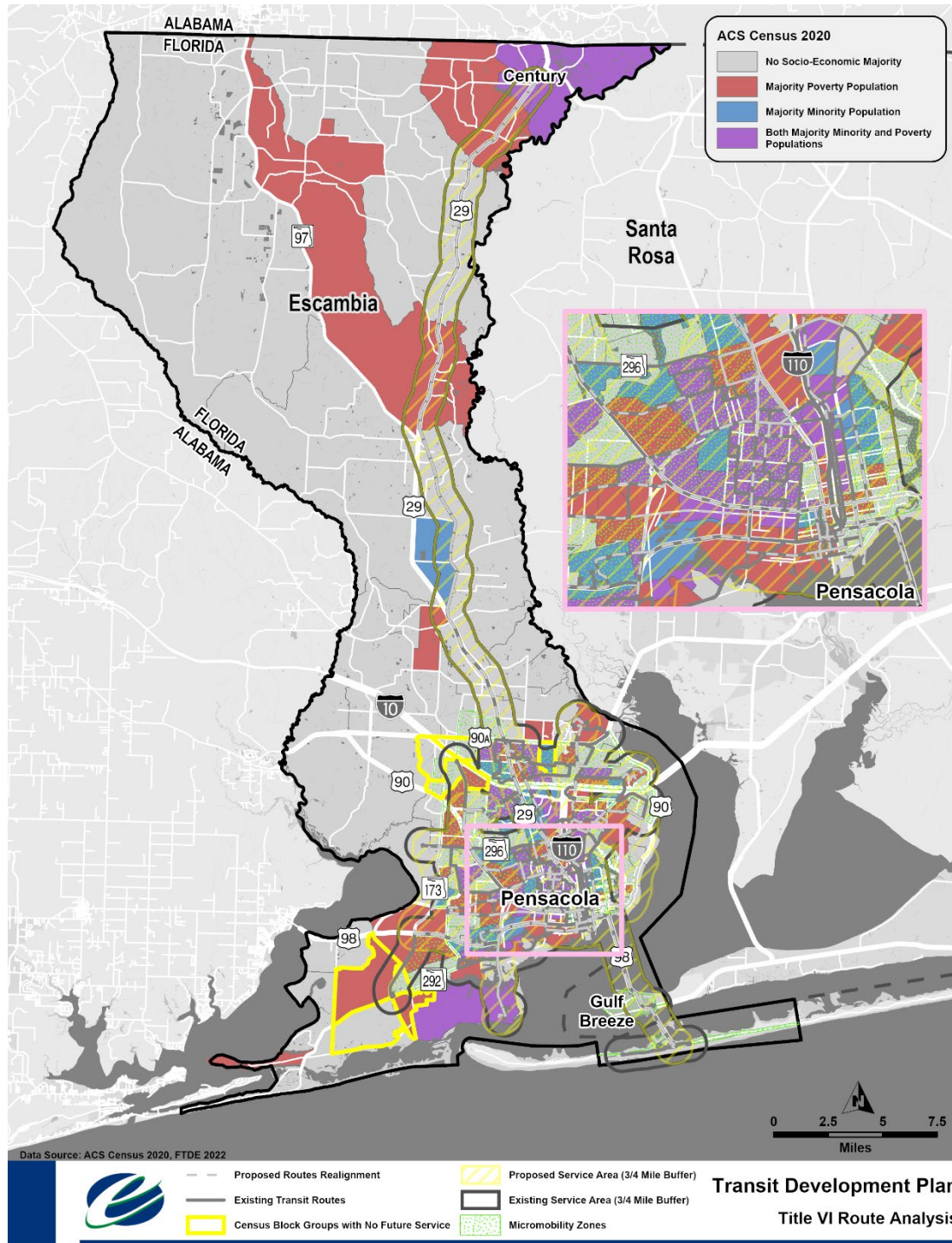
Concept A was analyzed for its impact on minority and lower income communities in Escambia County. The Title VI analysis compares the census block groups in the county that currently have access to the ECAT bus system to the census block groups in the county that will be served by Concept A's fixed route and/or MoD and microtransit systems. The analysis evaluates census block groups within three quarters of a mile from a fixed bus route and/or within an MoD/microtransit zone. 2020 American Community Survey (ACS) 5-year estimates were used.

There are nine Escambia County census block groups that will no longer have access to fixed route transit with the implementation of Concept A service. Of these, all but a few will be within service areas for MoD service. The census block groups that will no longer have access to fixed route or MoD transit service are concentrated in the western part of the county – the area around the National Naval Aviation Museum and Tarkiln Bayou Preserve State Park and a small area adjacent to Pensacola Interstate Fair between US Route 90, Interstate 10, and Nine Mile Road. Only two of these census block groups are a majority low-income and none have a majority minority population.

Figure 24 provides a closer look at Escambia County's census block groups and their current and future provision of transit service. Block groups with either a majority minority, majority low-income, or both majority minority and low-income are identified. Most of these block groups are continuing to receive service with the implementation of Concept A. For the few majority low-income census block groups losing service, future phases of Concept A could extend MoD or microtransit service to those areas. Further analysis will take place as the recommended alternative moves towards implementation to see what specific changes are needed to mitigate the potential impact to these areas.



Figure 24. Title VI Route Analysis Map





6.0 Implementation Plan

Implementing a new route design is a challenging task. It is a whole organization effort with administration, operators, and maintenance crews having specific responsibilities to educate the public and install, relocate, and/or upgrade transit infrastructure. Compounding this challenge is adding a new service concept, MoD/Microtransit, to the community. This requires additional resources to set up, train customers, and implement the service. Therefore, it is important to establish a realistic timeline to implement the new system.

There are two ways to implement a transit service redesign: all at once or a phased approach. The all at once approach is just as it sounds: one day it operates the current system (typically a Friday) and the next day (such as the following Monday) the new service is in place. This approach is typically accompanied by a period of fare-free transit service to raise awareness of the change and lessen the number of responsibilities the operators must deal during this startup period to allow them to assist the customers. It also requires a detailed implementation strategy with responsibilities assigned to each division with clear due dates. On the implementation day, all staff available to help the customers navigate the new system. The drawback to this approach is that it is a significant shock to the transit system, requiring time for customers to adjust and ridership to normalize. There can be significant pressure during this period to amend the routes to address unforeseen issues. These changes should be taken after considerable deliberations and analysis to ensure they do not have adverse impacts on the rest of the system.

Alternatively, a phased approach could be implemented. This approach involves identifying routes or sections in the service area and applying the changes incrementally to each route or zone until the redesign is fully implemented. A phased approach allows for a more targeted implementation plan be developed to focus staff and resources on the part of the community that is being affected. The shock to the system is lessened with the next phase implemented after the system has normalized. When each phase is implemented, it is important that the updated routes/service plans still synchronize with the rest of the system. While this approach does allow for a gradual launch of the new system, the disruption to the network experienced as each phase implemented could postpone the start of subsequent phases or lead to changes to system not considered or evaluated as part of this COA. Since this COA is recommending MoD in different parts of the community, there is a degree of uncertainty of how the MoD zones will interact with the fixed route system. Therefore, the phased approach is recommended.

Following the acceptance of the recommended option, the next step is to divide the service area up into the necessary phases and establish a timeline for each phase as well as the entirety of the project. Each phase should consist of MoD zone(s) and the supporting route(s). It is recommended the first phase be the area along 9 Mile Road and the Pensacola Beach area. Both areas have low ridership and allow for ECAT to test out MoD while still preserving the core fixed route service. Once the system has normalized following the initial system changes, the rest of the phases can be implemented, ideally working from the edge of the service area into the core to minimize disruptions. Each phase is comprised of three components: Engagement & Education, Maintenance, and Operations.





Engagement & Education

Engagement & Education is the process of making sure the proposed changes meet the needs of the existing and potential customers in the affected area, educating them of the proposed change, and aiding the customers in navigating the new service for a period after it is implemented. It begins with sharing the recommended concept in its entirety and how it will provide them more travel options. Specifically, to the affected area, it is consisting of meeting the residents and business to explain how MoD works, its interaction with the fixed route system, and how they get to the services they need. This is accomplished through surveys, listening sessions, and meetings with community leaders in the affected area. The information obtained from this effort is then used to refine the MoD boundaries and routes serving this area.

Once service plan is agreed to for the targeted area, the efforts transition from engagement to education. Here, the goal is to educate the affected customers on how the new system will work. This is accomplished through providing trip tables, example itineraries, and training on how the MoD service would work. These training sessions should take place at key bus stops and scheduled public meetings. Ideally, these efforts should take place at least two months prior to launch of the new service.

After the new service is underway, it should be offered fare free for a period to encourage customers to try out the new system. Staff should be on hand to help people navigate the new service through expanding the customer service help line, riding the new routes to answer questions, and preparing itineraries for customers. Implementing a transit ambassador program through obtaining volunteers from other county departments has also shown success for agencies that have implemented service changes.

Maintenance

Maintenance role in the service change is responsible for relocating and/or installing new infrastructure. Administration staff needs to identify the stops that are being added, relocated, or removed to maintenance staff along with schedule for completion. For new stops, tear away vinyl should be used with the new route information covered by an 'out of service' label to avoid confusion during the implementation period. Relocated stops should be kept a minimum and should only be moved as close as possible to the actual launch. However, benches or shelters can be moved prior to the launch provided notification is provided to the affected riders. Infrastructure identified for removal should be clearly marked after the service change occurs and removed after the new service is normalized and no more changes are identified. Upgrading infrastructure should also occur after the new service is normalized.

Operations

The operations component consists of collaborating with the coach operators to create the new bid sheets and educating the operators. Once the new service is finalized from the Engagement & Education efforts, it should be imported into the scheduling software, such as OPTIBUS, to create conduct the fatal flaw analysis and develop the corresponding operator bid sheets. These bid sheets will be used to train the operators on the new routes so they both know how to drive them as well as assisting the customer





navigate the new system prior to launch. Training of the new routes should coincide with the public education of the new service. COA, system improvements were the primary focus. As this implementation moves forward, the public should be involved and provide input. Workshops should take place to inform the public of this change and the implementation of micromobility and MoD options.

Recommended Timeline

The following timeline assume a late spring/early summer 2024 launch of the 9 Mile Road and Beach Area MoD zones.

July 2023 – December 2024

- Begin public engagement efforts
- Finalize the boundaries of the MoD and micromobility zones
- Identify a prioritized list of potential operators for MoD and micromobility service and conduct procurement efforts (if necessary)
 - List of potential operators:
 - Via
 - FreeBee
 - Circuit
 - Lyft
 - Uber
- Secure additional funding (**Funding Opportunities**)

January 2024 – April 2024

- Negotiate agreements with MoD Service providers
- Begin Public and Operator Education efforts
- Start the Maintenance work with the adding and/or relocating new infrastructure.

May 2024 – September 2024

- Implement the new service with at least a two-week fare free period
- Assist new and existing customers
- Monitor the change and identify changes after period of data collection
- Start removing unneeded infrastructure and upgrade infrastructure
- Identify the next phase

Funding Opportunities

With the adoption of the Infrastructure Investment and Jobs Act in 2021 along with the updated census boundary changes, ECAT should expect to receive additional federal and state formula funds to help implement the recommended concept. In addition, the following discretionary programs could be used to support the change:





Federal Grants

Areas of Persistent Poverty Program: This program improves transit service in areas to address Climate Change, Sustainability, Racial Equity, and Barriers to Opportunity.

Innovative Corridors & Mobility Program: This program provides competitive funding to support innovative projects for the transportation disadvantaged that will improve the coordination of transportation services and non-emergency medical transportation services.

Carbon Reduction Program (CRP): This program provides funds for projects designed to reduce transportation emissions, defined as carbon dioxide (CO₂) emissions from on-road highway sources. Funding is provided by formula to the state and transit is an eligible use of funds. Sixty-five percent of the CRP funds must be obligated based on urbanized area population shares. Transit providers should coordinate with their metropolitan planning organization and FDOT District office interested in seeking CRP funds for an eligible project.

Mobility on Demand Sandbox Program: This program allows communities to creatively leverage a range of mobility options from bike- and car-sharing systems to demand-responsive bus services.

State Funding Options

FDOT Service Development Program: Section 341(5)(e) F.S. allows the department to fund up to 50 percent of the capital and net operating costs of transit service development projects that are local in scope and that will improve system efficiencies, ridership, or revenues.

Innovative Service Development Grant: This grant allows communities to demonstrate a project or service that enhances regional connectivity and increases transportation disadvantaged groups' access to daily activities.

High-Capacity Transit Corridor Program (New/Under Development): This program is currently under development by FDOT and will include transit corridor projects that are undertaken by a public agency and designed to relieve congestion and improve capacity within an identified transportation corridor by increasing people-carrying capacity of the system through the use and facilitated movement of high-occupancy conveyances.





7.0 Conclusion

To conclude, the recommendation of Concept A as a new system lays the foundation for ECAT's future. Through the implementation of this new system, ECAT will ensure that it is better serving the community and implementing new, innovative technologies. Concept A remains consistent with the COA goals and ECAT's greater mission of providing efficient, responsive services that enhance quality of life, meet common needs, and promote a safe and healthy community.





Appendix A – Customer Survey Results



Escambia County Area Transit Ridership Survey

Thank you for taking this survey. Escambia County Area Transit (ECAT) would like your feedback on the transit system. Your responses will be used to help develop changes to the network to improve its efficiency and operation. The goal is to create a system that improves access to key destinations, provides additional options, and make it easier to use transit to get around the community.

* 1. Please select the zip code for where you live.

- | | | |
|--|-----------------------------|---|
| ☐ 32501 | ☐ 32507 | ☐ 32535 |
| ☐ 32502 | ☐ 32508 | ☐ 32561 |
| ☐ 35503 | ☐ 32514 | ☐ 32568 |
| ☐ 32504 | ☐ 32526 | ☐ 32577 |
| ☐ 32505 | ☐ 32533 | ☐ Outside of County - Santa Rosa County |
| ☐ 32506 | ☐ 32534 | ☐ Outside of County - Alabama |
| ☐ Other (please specify) | | |

* 2. Please select the zip code for your place of employment or destination for your most common trip.

- | | | |
|-----------------------------|-----------------------------|---|
| ☐ 32501 | ☐ 32507 | ☐ 32535 |
| ☐ 32502 | ☐ 32508 | ☐ 32561 |
| ☐ 32503 | ☐ 32514 | ☐ 32568 |
| ☐ 32504 | ☐ 32526 | ☐ 32577 |
| ☐ 32505 | ☐ 32533 | ☐ Outside of County - Santa Rosa County |
| ☐ 32506 | ☐ 32534 | ☐ Outside of County - Alabama |

☐ Other (please specify)

* 3. How often do you ride the bus?

- | | |
|--|---|
| ☐ None | ☐ 2 to 3 times per Week |
| ☐ 1 - 2 times per month | ☐ Everyday |
| ☐ Once a week | |
| ☐ Other (please specify) | |

* 4. Where are you typically coming FROM when you board the bus?

- | | |
|--|----------------------------------|
| ☐ Home | ☐ Shopping |
| ☐ School | ☐ Recreation |
| ☐ Work | |
| ☐ Other (please specify) | |

* 5. What is your destination for your most common trip?

- ☐ Home
 ☐ School
 ☐ Recreation
- ☐ Work
 ☐ Shopping
 ☐ Medical
- ☐ Other (please specify)

* 6. For your most common trip, what routes do you ride when traveling to/from your destination? Check all routes you use.

- | | | |
|---|-----------------------------------|---|
| ☐ Route 1 | ☐ Route 47 | ☐ Route 59X |
| ☐ Route 2 | ☐ Route 48 | ☐ Route 60 |
| ☐ Route 31 | ☐ Route 50 | ☐ Route 61 |
| ☐ Route 32 | ☐ Route 51 | ☐ Route 63 |
| ☐ Route 41 | ☐ Route 52 | ☐ Beach Jumper (Route 64) |
| ☐ Route 43 | ☐ Route 55 | ☐ UWF Trolley |
| ☐ Route 44 | ☐ Route 57 | ☐ Beach Trolley (Seasonal) |
| ☐ Route 45 | ☐ Route 58 | |
| ☐ Other (please specify) | | |

--

* 7. On a scale from 1 to 10 with 1 being not very good and 10 being excellent, how would you rate your ECAT commute?

A horizontal number line with tick marks at 0, 5, and 10. A circle is drawn at the 0 mark, and a rectangular box is drawn at the 10 mark.

8. Describe your commute on an ECAT bus. What is your experience like?

* 9. When you ride the bus, what challenges do you face? Select as many that apply.

- | | |
|---|--|
| ☐ Lack of sidewalk/safe path to the bus stop | ☐ More than one transfer |
| ☐ Long walk (> 1/4 mile) to the bus stop | ☐ Long wait between transfers |
| ☐ No bench or shelter at the bus stop | ☐ No challenges |
| ☐ Other (please specify) | |

* 10. What improvements could ECAT make to better serve you? Check all that apply.

- | | |
|---|--|
| ☐ More frequent service | ☐ A stop closer to where I live |
| ☐ Extend service to later into the evening | ☐ A stop closer to where I work/most frequent destination |
| ☐ More Weekend Service | ☐ Safer journey to/from the bus stop |
| ☐ More access connections to destinations or essential services (shopping, medical offices, public buildings, schools, recreation, etc.) | ☐ More amenities (bench, shelter, lighting, etc.) at bus stop |
| ☐ Other (please specify) | |

11. What did we miss? Anything else we should consider?

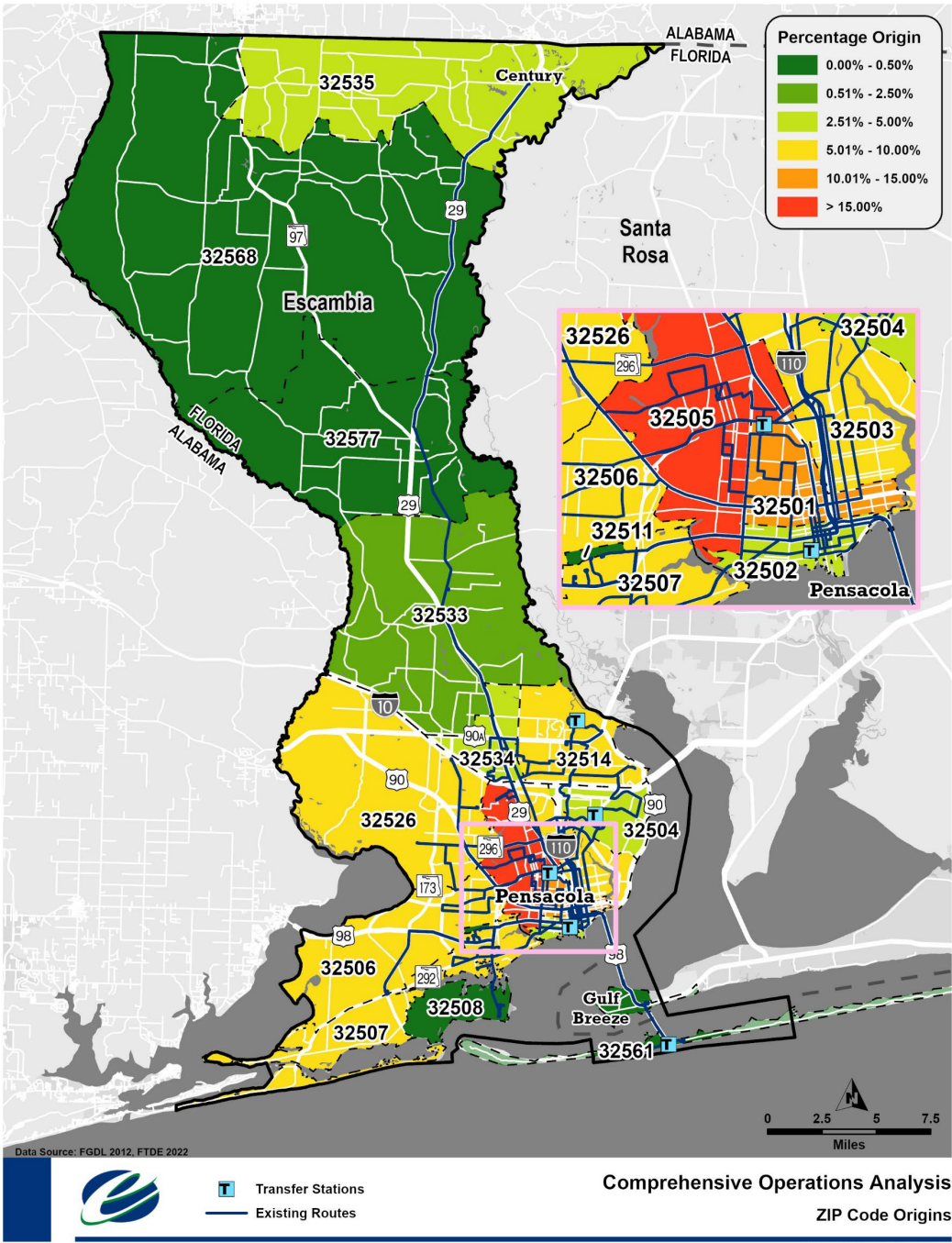
ESCAMBIA COUNTY AREA TRANSIT

Transit Ridership Survey Results



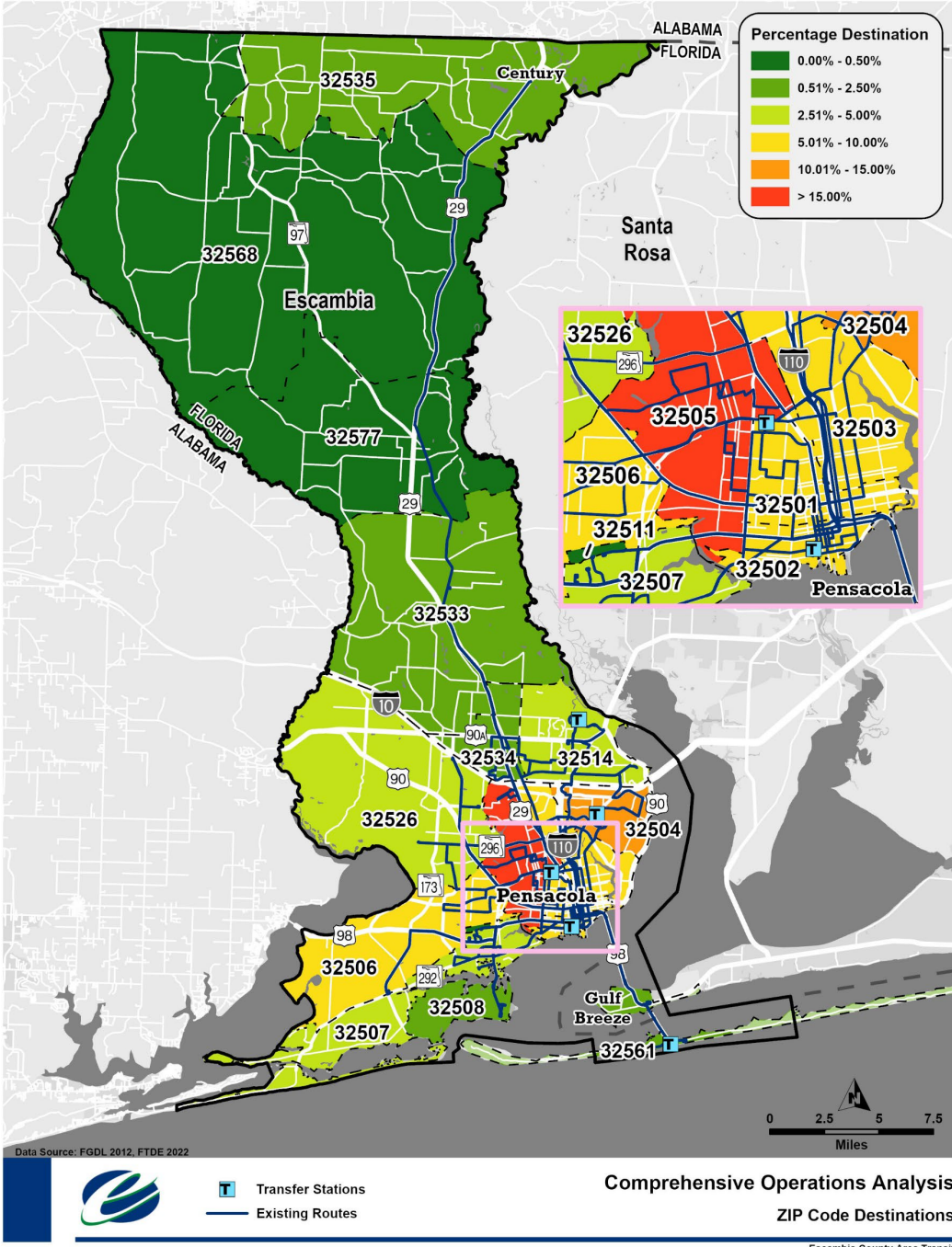
Question #1

Residential and Origin
Zip Codes for Users

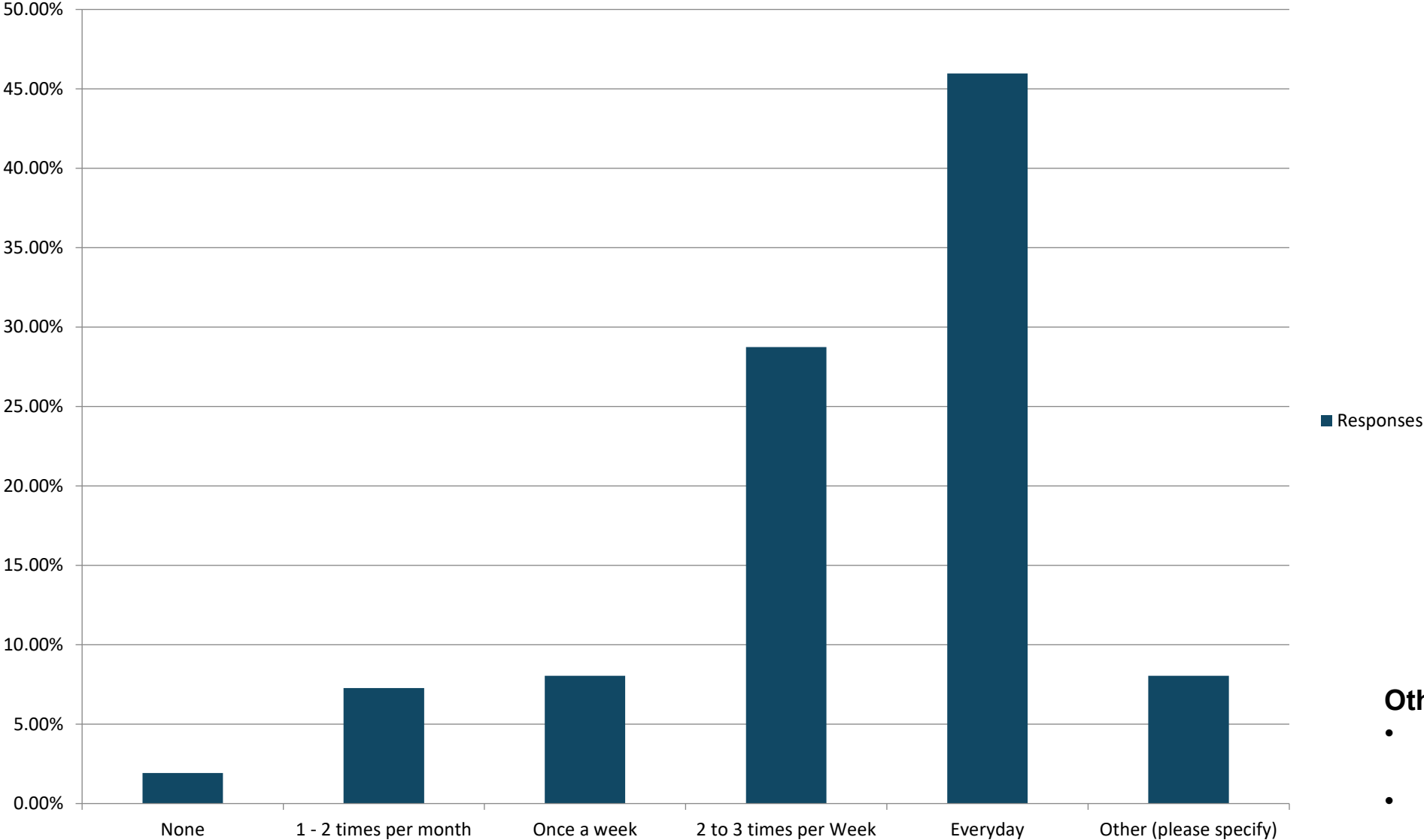


Question #2

Employment and Destination Zip Codes for Users



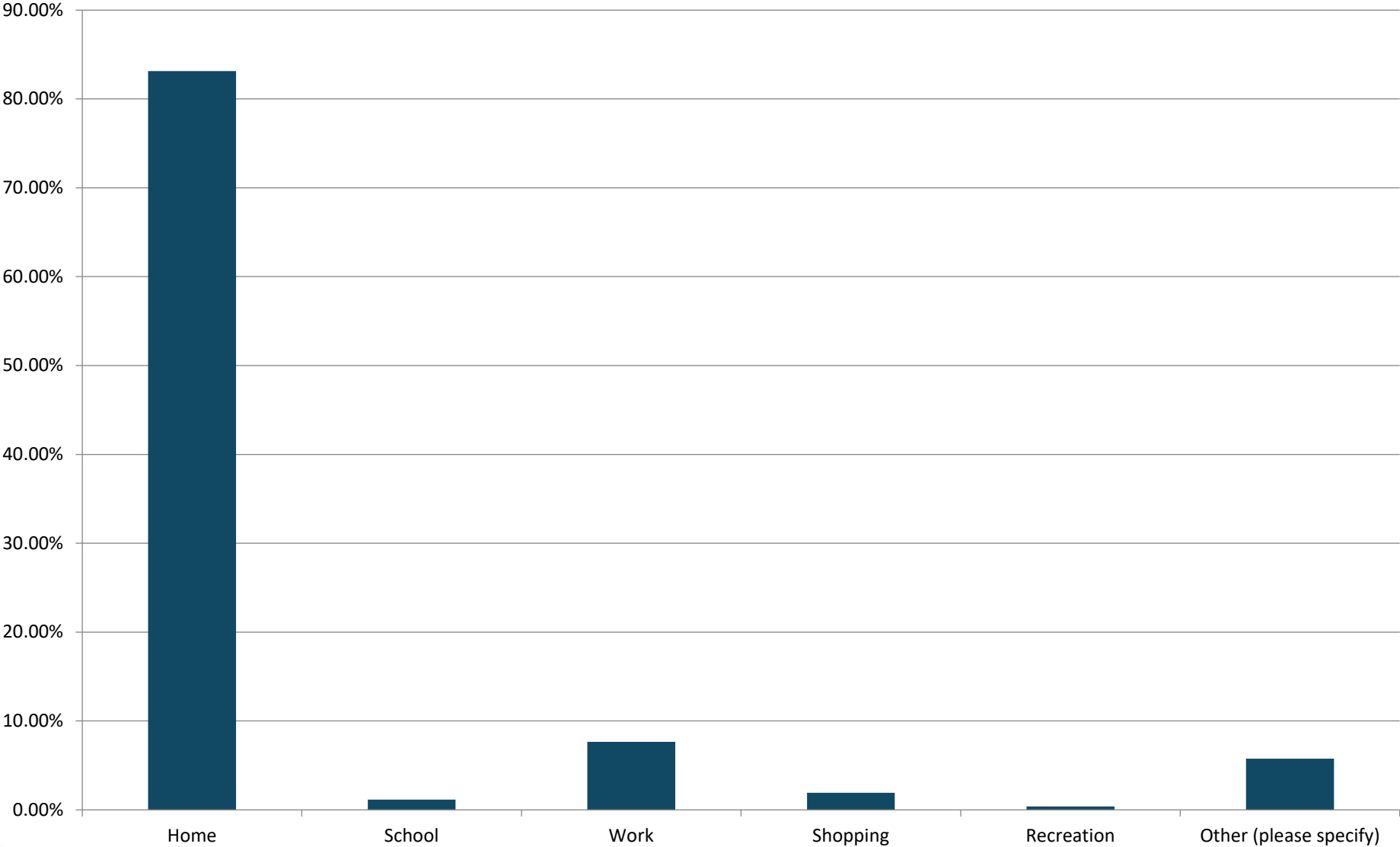
How often do you ride the bus?



- Other Responses:**
- 3 to 4 times per Week
 - Every Weekday



Where are you typically coming FROM when you board the bus?

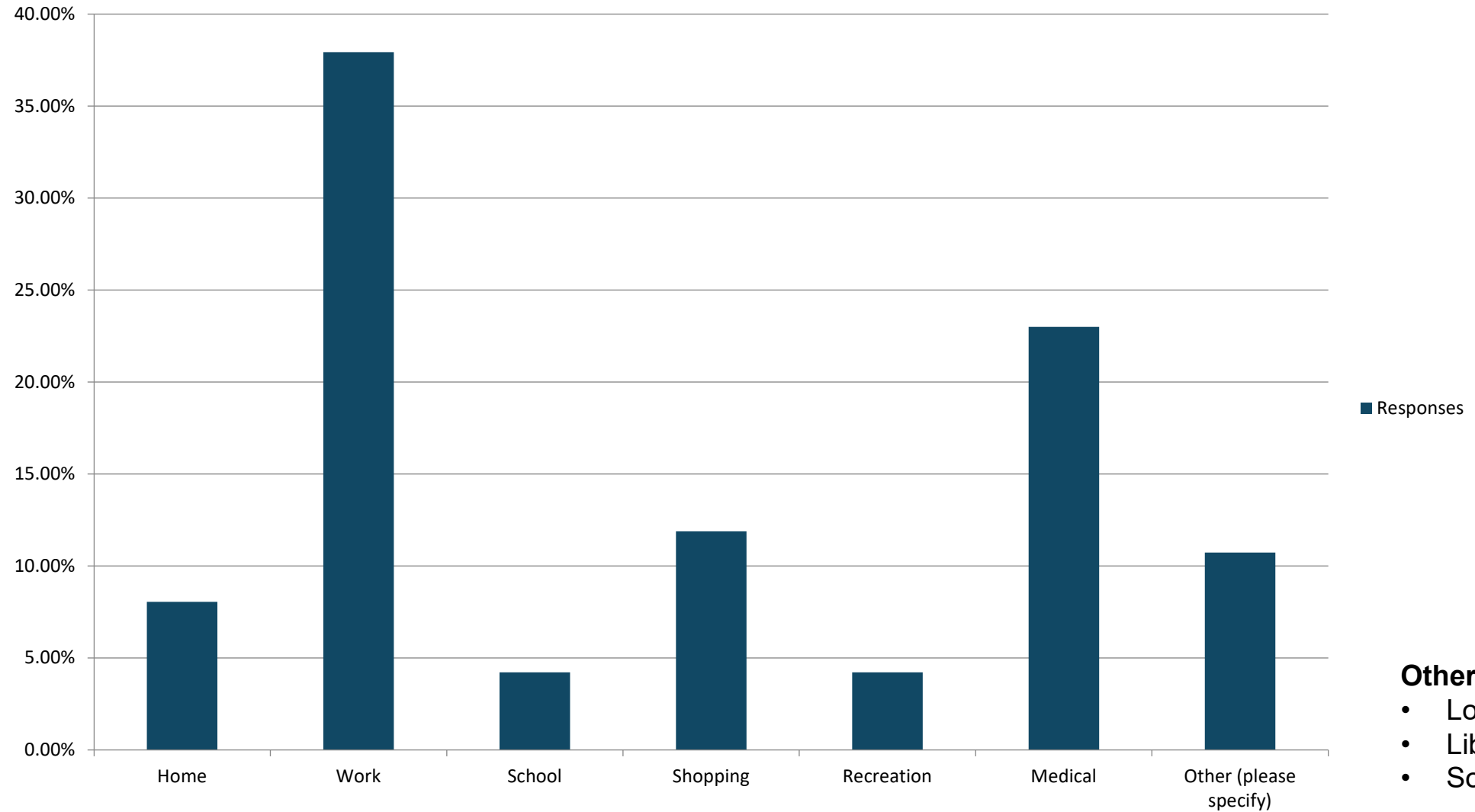


■ Responses

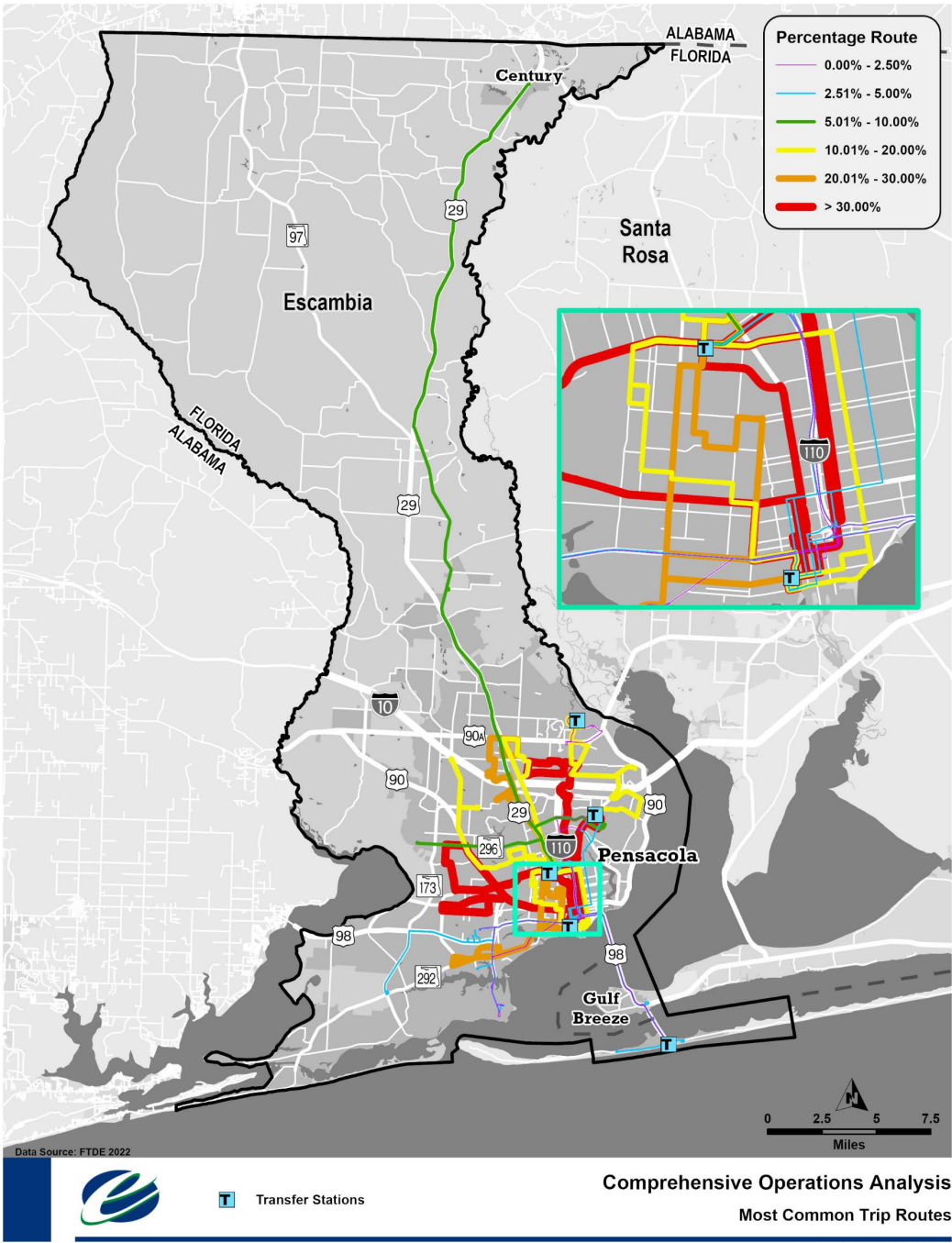
- Other Responses:**
- Homeless
 - Did not specify



What is your destination for your most common trip?



Most Common Trip Routes for Users

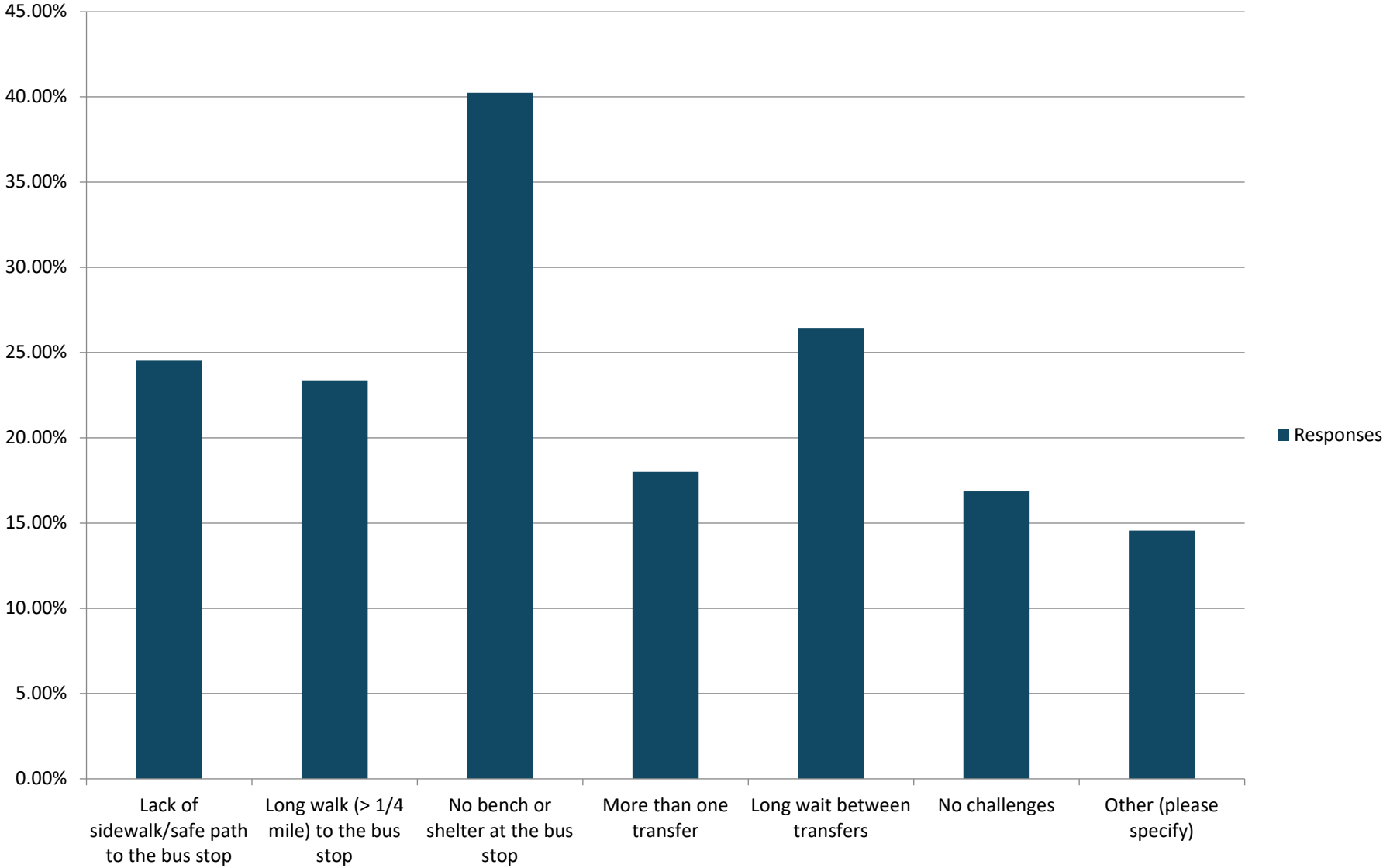


Describe your commute on an ECAT bus. What is your experience like?

- "It's fine, drivers get us where we need to go."
- "I just get on, ride to where I am going, and get off. I have no problems with anyone."
- "Good, sometimes the bus brakes down but replacement buses come right away."
- "Comfortable. Drivers are really helpful."
- "Low crowds. Clean bus. Normally great service. Few times rude drivers but rarely."
- "Quiet, safe, and comfortable."
- "I would like to see buses more often like every 15 mins to half hour."
- "Most drivers are helpful and have knowledge with routes with directions. Some bus drivers are rude and lacking good communication."
- "Hours of weekend service is confusing."
- "Later buses, drivers don't show up on time."
- "Sometimes it's a bumpy ride. The driver takes off before I get seated. That is not good for elderly riders. People on canes and walkers."
- "I ride 45 and 51 if they run late and I miss the 51 I must run the rest of the route back to the station. I don't want to miss my bus that cuts my travel time in half if I get my 51."
- "Too long of a wait to get a bus back to century."
- "Not enough stops. Some drivers do not observe times for stops. Too many buses going into a 5-mile area. 57 doesn't run often enough."



When you ride the bus, what challenges do you face? Select as many that apply.



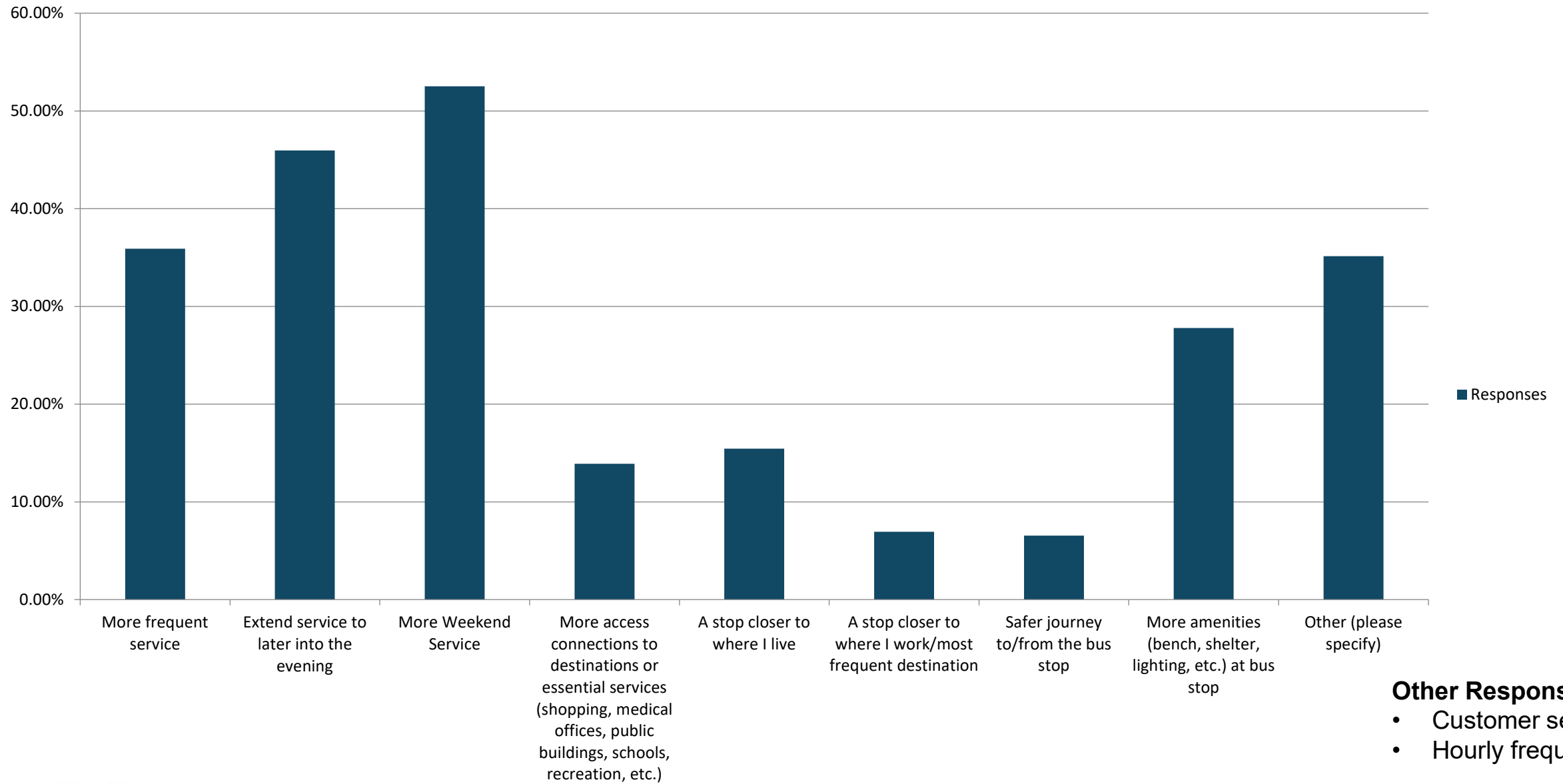
Other Responses:

- Lack of trash cans at stops
- Did not specify



What improvements could ECAT make to better serve you? Check all that apply.

Question #10



What did we miss? Anything else we should consider?

- "From Century, I would like to see the system go to every 2 hours from Century."
- "I get off at 3 and have to wait until 5 to catch a bus."
- "More shelters and benches."
- "Wi-Fi service."
- "Having to cross Cervantes to a bus stop. Weekend schedules need improvement."
- "Need services Saturday through Sunday to cover weekend workers holiday schedule, ECAT needs to accommodate us."
- "More service to Warrington due to increased employment opportunities."
- "No side walks (Mission Rd) I am disabled. No drainage for this area. Need service until at least 11pm."
- "Rt. 47 does not come back to Truman Arms anymore on return trip . Not safe crossing to Andrews. Drivers late back to buses to leave station on time and put the peddle to the metal to catch up."
- "I'm a senior citizen and could use a stop closer to my apartment. The bus stop floods when it rains."
- "Every 2-hour service on weekends causes me to miss my transfer due to time."
- "Not feeling safe with passengers riding with no destination."
- "Have the drivers not stop in the bike lanes. School buses don't stop in the bike lanes."
- "Keep getting more new buses."





Appendix B – Route Profiles



ROUTE 1: OAKCREST TO CERNY HEIGHTS							
Characteristics ¹		Weekday		Saturday		TOP 10 STOPS	
Span of Service		5:30 AM – 6:25 PM		7:30 AM – 6:25 PM		Avg. Weekday Activity ²	
Frequency		Once very hour		Once every 2 hours		Rosa Parks Transfer Center	139
Cycle Time		55 min		55 min			
Route Distance		12.9 miles		12.9 miles		Fairfield Dr at Sunrise Apartments	34
Avg. Operating Speed		14.1 mph		14.1 mph			
Number of Buses		1		1			
Operating Statistics		Weekday		Saturday			
Round Trips per Day		13		6		Mobile Highway at Walmart	24
Annual Revenue-Miles		42,350		3,878.2			
Annual Revenue-Hours		3,003		275		Fairfield Dr & Louisiana Dr	24
Annual Deadhead Hours		0		0			
Annual Deadhead %		0%		0%			
Demographic Data ³				Within ¼-mile of stops			
Population		12,819	Seniors	2,146		Patricia Dr and Hayward Ave	15
Jobs		5,888	Youth	2,395			
Poverty		2,246	W/ Disabilities	1,368		Fairfield Drive @ Captain D's Seafood	13
Minority		5,515	No Vehicles	344			
Service Productivity		Weekday		Saturday			
Avg. Daily Ridership		200		93		Fairfield Dr & Emerald Ave	12
Riders/Revenue-Hour		16.8		16.9			
Riders/Revenue-Mile		1.2		1.2			
Riders/Round Trip		15.4		15.5			
Financial Performance		Overall	Weekday	Saturday			
Avg. Daily Revenue		\$111.9	\$134.7	\$62.7		Fairfield Drive & P St	12
Subsidy/Revenue-Hour		\$99.6	\$102.0	\$94.4			
Subsidy/Revenue-Mile		\$7.1	\$7.2	\$6.7		Fairfield Drive @ Town & Country Mall	11
Subsidy/Round Trip		\$91.3	\$93.5	\$86.6			
Daily Operating Cost		\$1,107.7	\$1,350.4	\$582.1		Saufley Field & W of Mobile Hwy	11
Cost/Rider		\$6.6	\$6.8	\$6.3			
Farebox Recovery Ratio		10.2%	10.0%	10.8%			
Subsidy/Rider		\$5.9	\$6.1	\$5.6			
On-Time Performance ⁴				Weekday			
Time Period		Early		On-Time		Late	
Overall		0.0%		62.5%		37.5%	

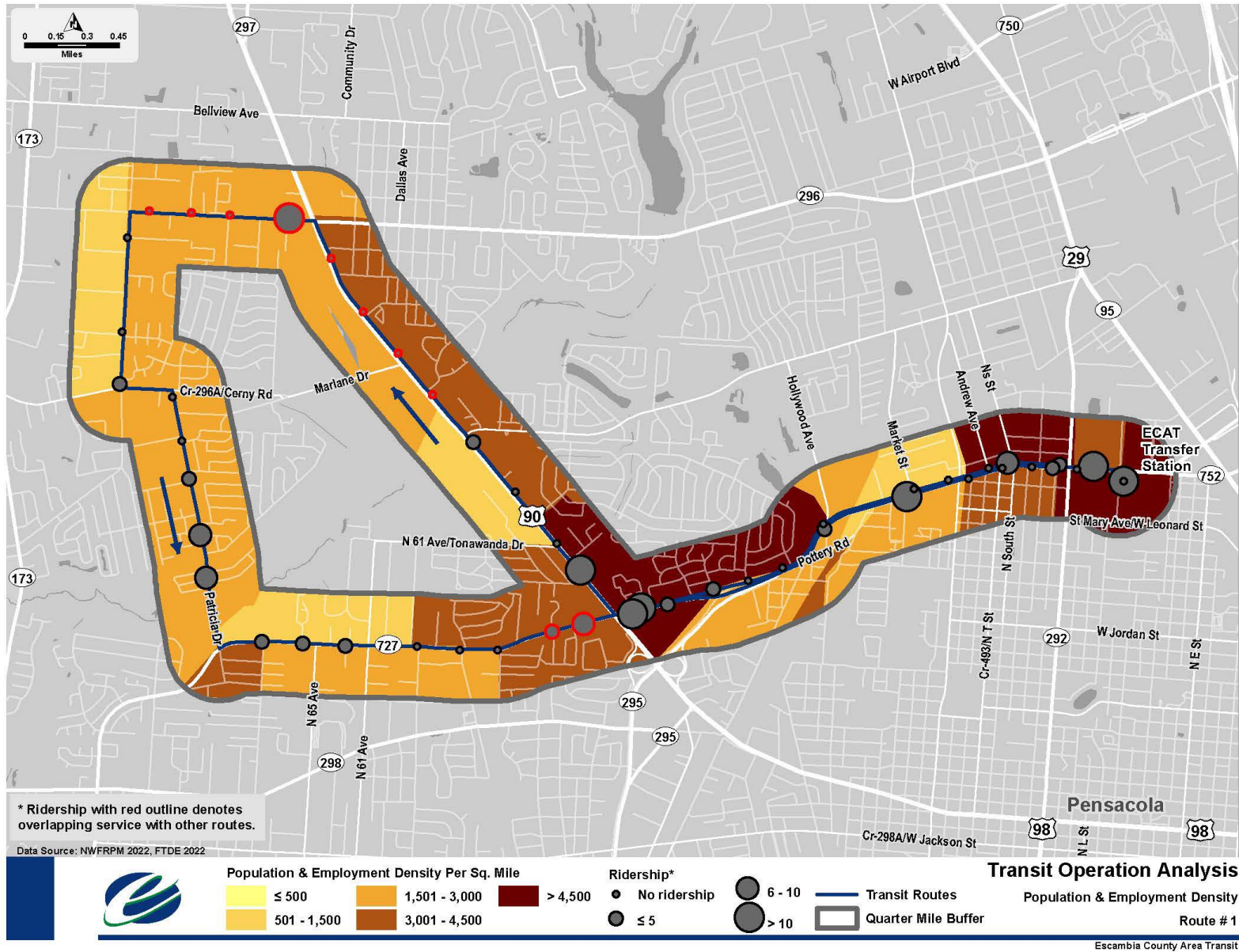
¹ Characteristics come from the Summer 2022 schedule in ECAT's Optibus account, the February 2022 General Transit Specification Feed (GTFS) in the Florida Geographic Data Library (FGDL), and ECAT's June 2021 Ride Guide

² Stop-level ridership data is based on random sampling in August to November 2022, calibrated to FY2022 annual route-level weekday ridership volumes.

³ Jobs information is from the Northwest Florida Regional Planning Model (NWRPM), in which 2015 data is projected to 2020. All other demographics are from the 2020 American Community Survey (ACS) administered by the United States Census Bureau.

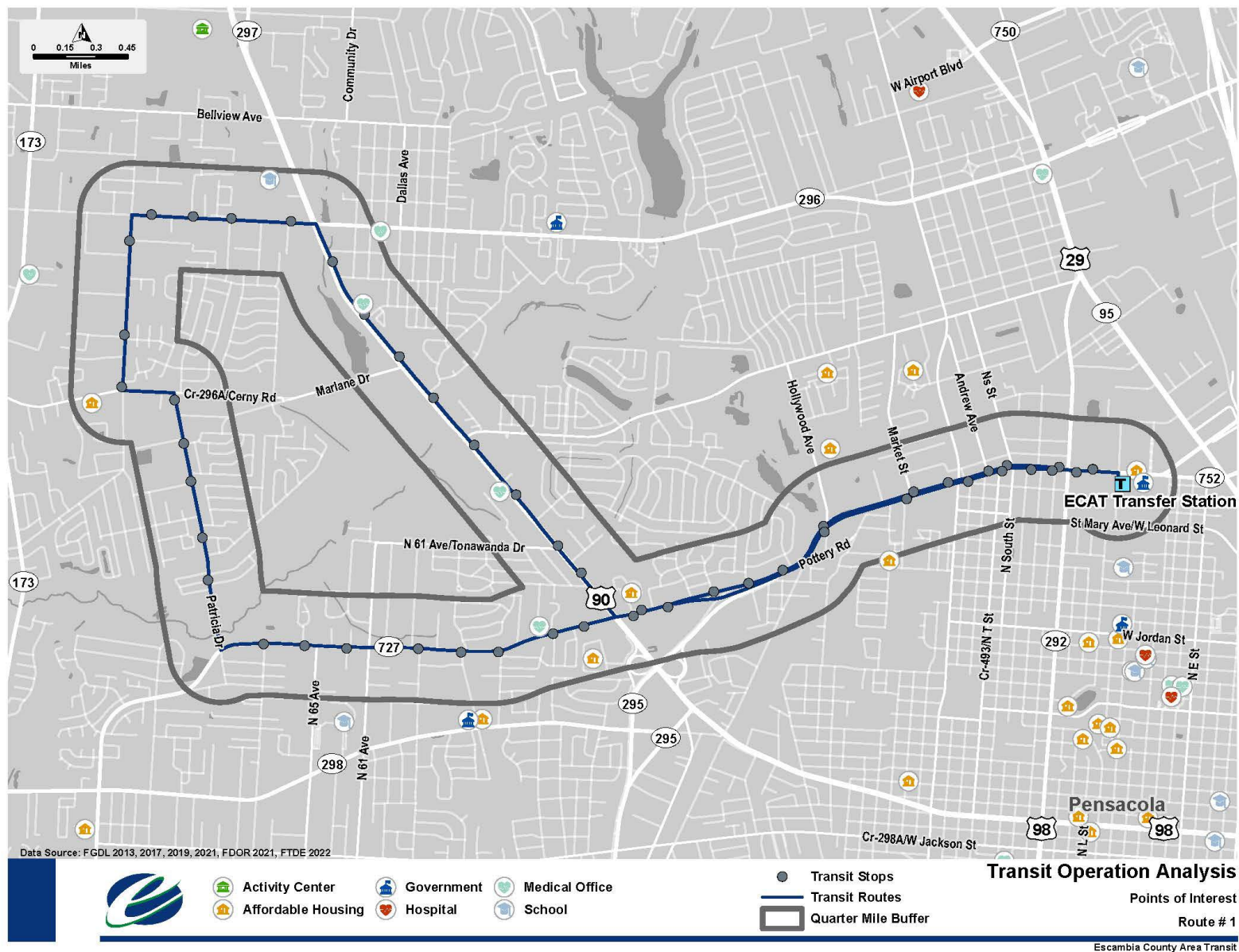
⁴ On-time is defined as between 0 minutes early and 5 minutes late.

DEMOGRAPHICS

Population + Employment Density and Ridership (2020)⁵

⁵ Population and employment data is from the transportation analysis zones (TAZ's) of the NWFRPM, projected from 2015 to 2020. Ridership with a red outline denotes overlapping service with other routes.

PATRONAGE

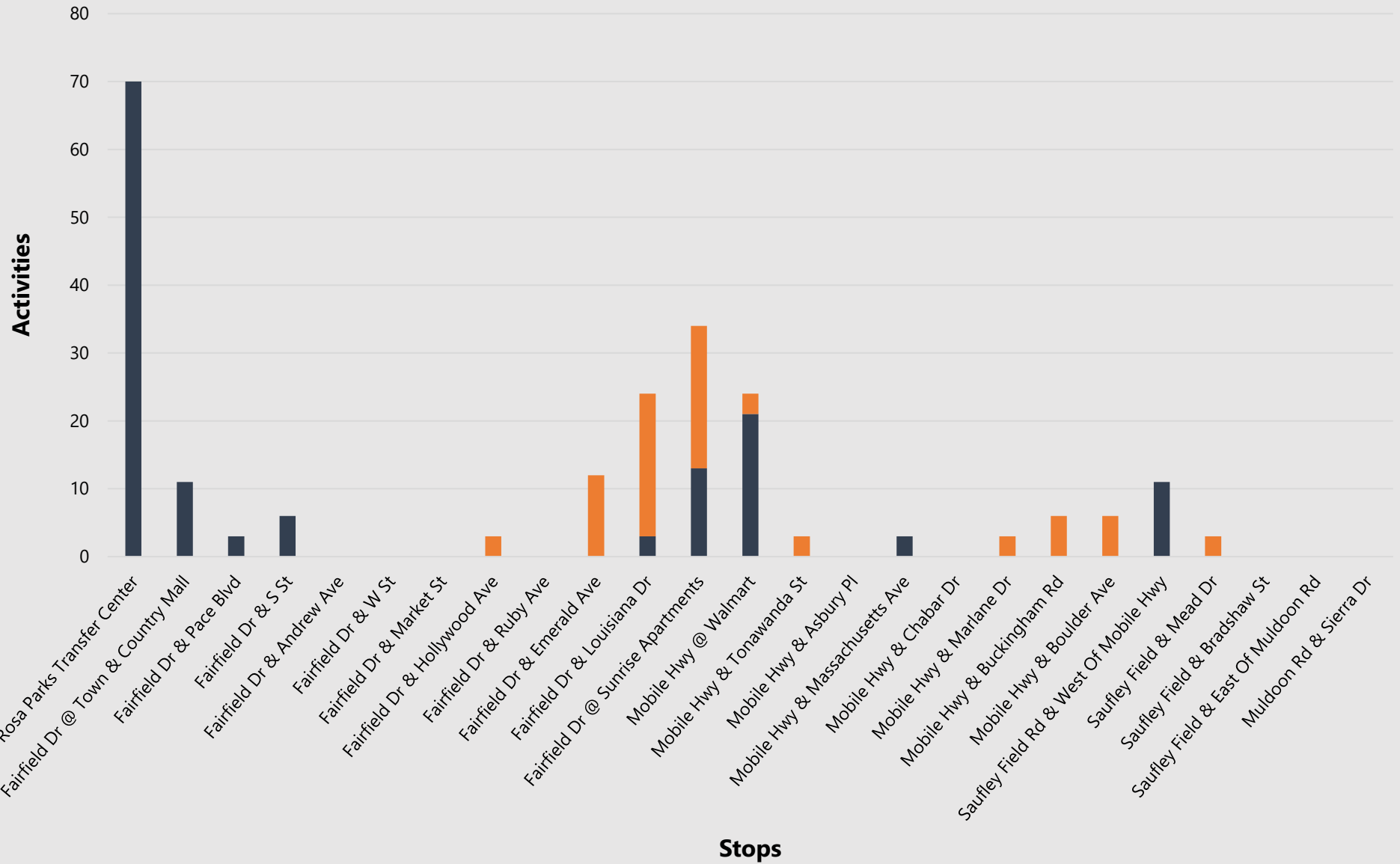
Activity Centers⁶

⁶ Points of Interest data is from the Florida Geographic Data Library (FGDL) 2013 - 21, and Florida Department of Revenue (FDOR) 2021.

RIDERSHIP TRENDS BY STOP (Weekday)⁷

Outbound

Boardings Alightings

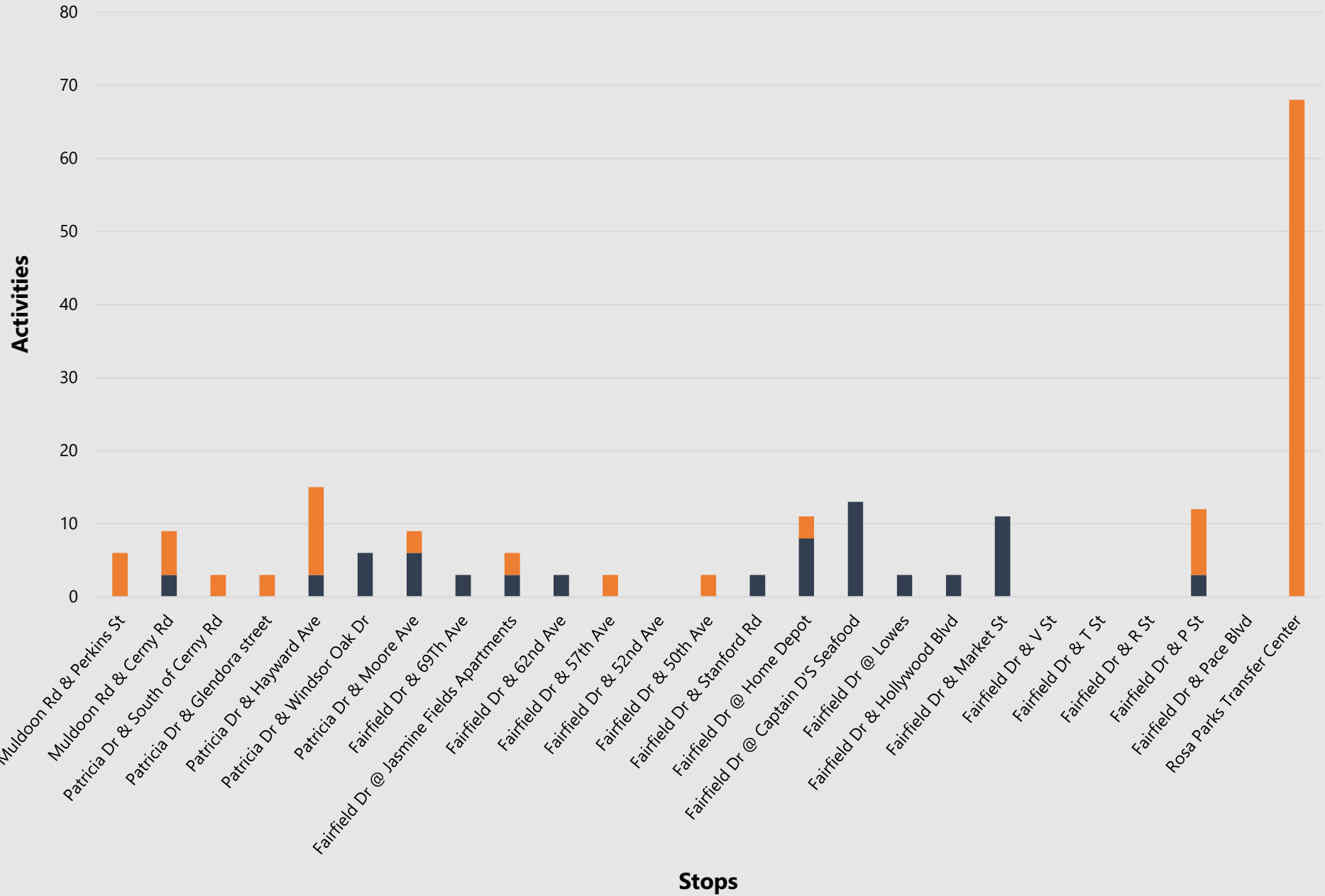


⁷ 0 activities does not mean no activity; it just means that no activity was reported during the sample period or runs. Route 1 ridership by stop data was sampled from 6 total runs.

Route 1: Oakcrest to Cerny Heights

Inbound

Boardings Alightings



ROUTE INCIDENTS

Observations



#	Type	Description
1	Tight Turn	Lane change needed to make left turn
2	Stop in Right Turn Lane	Two different bus stops in a turn lane
3	Lane Change	Right lane ends
4	Lane Change	Right lane ends
5	Other	Stop in front of Twice the Ice holds up traffic

ROUTE ASSESSMENT**Service Alignment**

Route 1 service begins at the Rosa Parks Transit Complex along Fairfield Drive. The route goes west along Fairfield, northwest up Mobile Highway, making a loop beginning at Sauflay Field Road, to Muldoon Road and Patricia Drive, and then connecting back to Fairfield Drive. The route terminates back at the Rosa Parks Transit Complex.

System Interaction and Transfer Opportunities

Along its route, Route 1 intersects with several other routes. It shares a portion of its Fairfield Drive alignment with Routes 2 and 44, shares a portion of its Sauflay Field Road alignment with Route 53, and shares a portion of its Mobile Highway alignment with Route 47. At the Rosa Parks Transit Complex, patrons can transfer from Route 1 to Routes 2, 32, 44, 45, 47, 48, 50, 51, 52, 55, 60, and 61.

Route Utility

Route 1 serves activity centers near the Rosa Parks Transit Complex, along Fairfield Drive by the Sunrise Apartments just before the intersection with Mobile Highway going west, and along Mobile Highway near the Walmart going southeast back to Fairfield. This is reflected in the route's ridership with these three stops being the #1, #3, and #2 highest ridership stops respectively. These areas also have some of the highest density in terms of population and employment.

The route's one way loop makes it inefficient for patrons traveling to activity centers along Mobile Highway. These riders must board at the Rosa Parks Transit Complex, and then ride the entire Fairfield Drive to Patricia Drive to Sauflay Field Road loop to access Mobile Highway. To access this activity center-heavy corridor, patrons must ride more than half of Route 1's alignment, taking them almost all the way back to the route starting point.

Observations

As noted in the accompanying Activity Centers Map, while there are not many activity centers along Patricia Drive, Cerny Road, or Muldoon Road, there are a few locations along this portion of the route garnering some ridership. These include a couple mobile home parks, Tradewind Food Mart, and several places of worship. There is only one stop along this stretch that is one of the top 10 stops: Patricia Drive and Moore Avenue, location of the Sabal Palm Mobile Home Park. As shown on the Incident Map along Mobile Highway (incident #2), there are two bus stops in a turn lane. This makes it difficult for the bus to get back into the general traffic, especially during periods of high congestion, slowing the route down. Observed through fieldwork and symbolized on the Incident Map (incident #5), the Route 1 stop on Fairfield Drive just west of the intersection with N Pace Blvd and outside of Twice the Ice, the bus must navigate merge lanes to access this stop.

ROUTE 2: BROWNSVILLE TO MYRTLE GROVE						
Characteristics ¹	Weekday		Saturday	TOP 10 STOPS		
Span of Service	5:00 am – 7:25 pm		6:00 am – 7:25 pm	Avg. Weekday Activity ²		
Frequency	Once every hour		Once every 2 hours	Rosa Parks Transfer Center	177	
Cycle Time	85 min		85 min			
Route Distance	22.5 miles		22.5 miles	Palafox & Maxwell St	34	
Avg. Operating Speed	15.9 mph		15.9 mph			
Number of Buses	2		1	Fairfield Dr @ Home Depot	32	
Operating Statistics			Weekday			Saturday
Round Trips per Day	14		7			
Annual Revenue-Miles	79,258		7,863			
Annual Revenue-Hours	4,998		496			
Annual Deadhead Hours	0		0	Cervantes & Lynch St	19	
Annual Deadhead %	0%		0%			
Demographic Data ³			Within ¼-mile of stops			
Population	18,826	Seniors	2,977	Cervantes & L St	14	
Jobs	21,549	Youth	4,117			
Poverty	4,350	W/ Disabilities	2,245			
Minority	9,567	No Vehicles	1,033	Gregory St & Baylen St	13	
Service Productivity			Weekday			Saturday
Avg. Daily Ridership	248		124	Gregory Street & Baylen Street	13	
Riders/Revenue-Hour	12.5		12.5			
Riders/Revenue-Mile	0.79		0.79			
Riders/Round Trip	18		18	Palafox St & Jackson St	13	
Financial Performance		Overall	Weekday			Saturday
Avg. Daily Revenue	\$175.2	\$210.2	\$105.1			
Subsidy/Revenue-Hour	\$105.6	\$108.6	\$99.6			
Subsidy/Revenue-Mile	\$6.7	\$6.8	\$6.3			
Subsidy/Round Trip	\$149.5	\$153.8	\$141.0	Cervantes St & New Warrington Rd	11	
Daily Operating Cost	\$1,939.6	\$2,363.2	\$1,092.4			
Cost/Rider	\$9.3	\$9.5	\$8.8	Mobile Hwy & Webb Ln	11	
Farebox Recovery Ratio	9.1%	8.9%	9.6%			
Subsidy/Rider	\$8.4	\$8.7	\$8.0			
On-Time Performance ⁴			Weekday			
<u>Time Period</u>	<u>Early</u>		<u>On-Time</u>	<u>Late</u>		
Overall	0.0%		83.3%	16.6%		

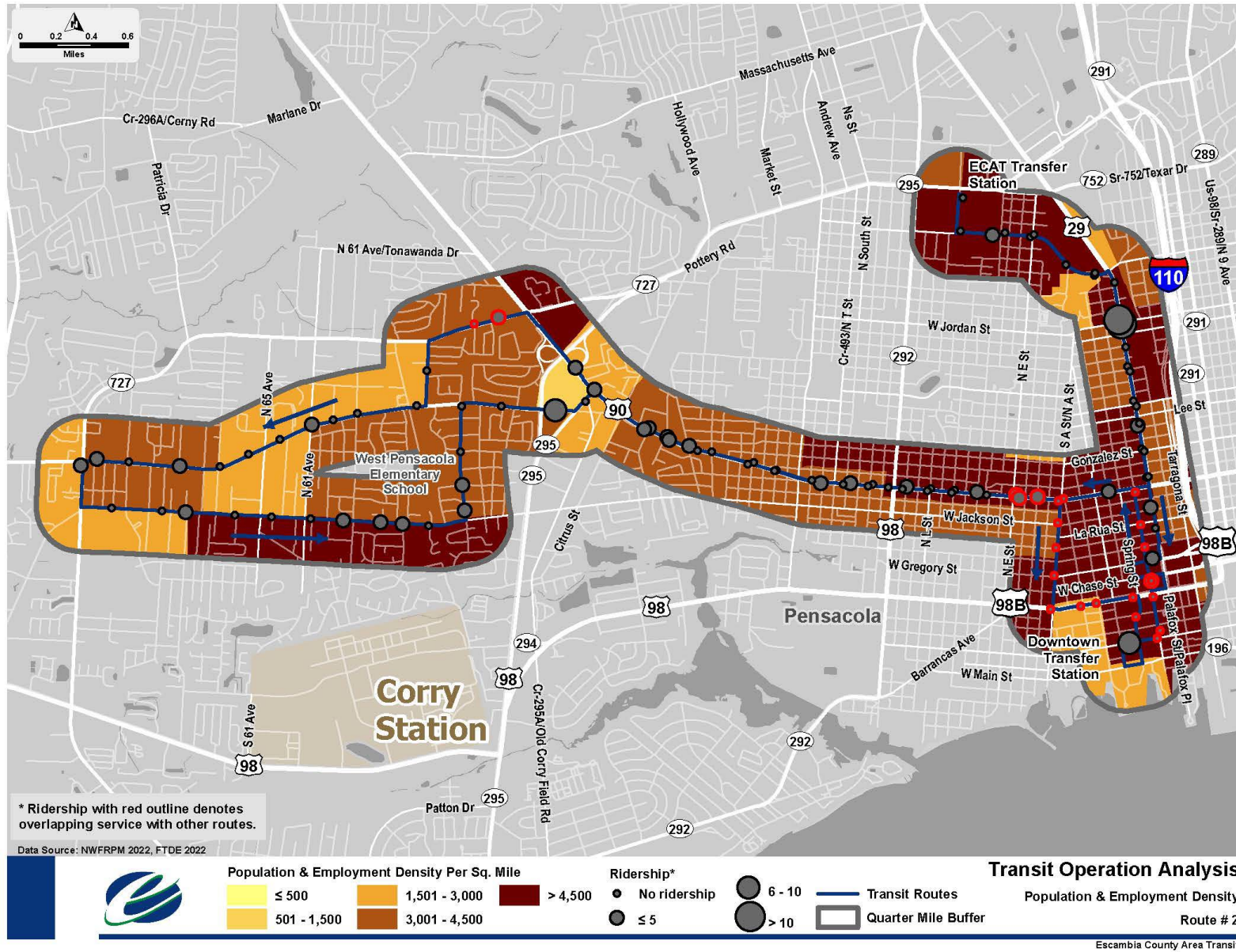
¹ Characteristics come from the Summer 2022 schedule in ECAT's Optibus account, the February 2022 General Transit Specification Feed (GTFS) in the Florida Geographic Data Library (FGDL), and ECAT's June 2021 Ride Guide

² Stop-level ridership data is based on random sampling in August to November 2022, calibrated to FY2022 annual route-level weekday ridership volumes.

³ Jobs information is from the Northwest Florida Regional Planning Model (NWRPM), in which 2015 data is projected to 2020. All other demographics are from the 2020 American Community Survey (ACS) administered by the United States Census Bureau.

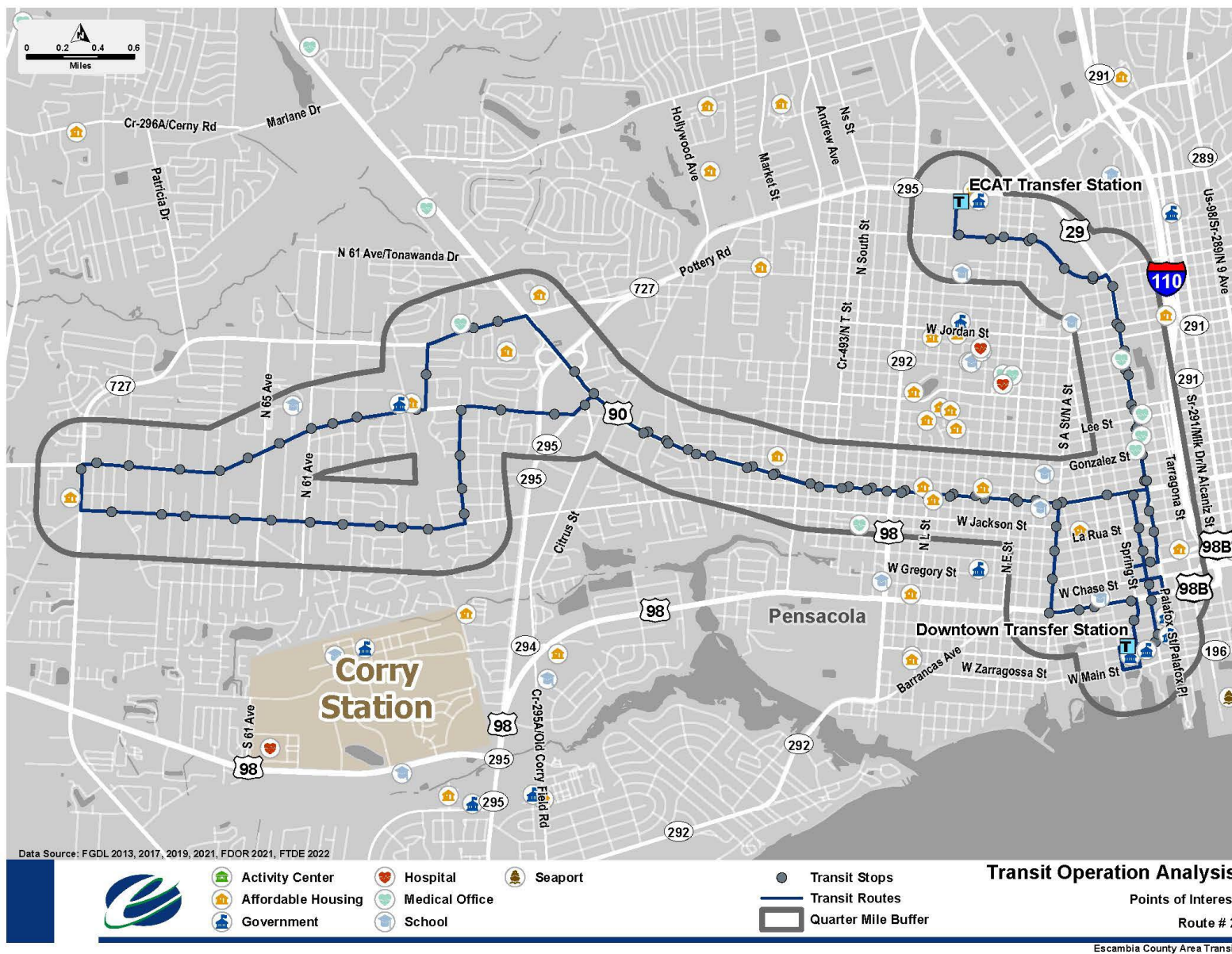
⁴ On-time is defined as between 0 minutes early and 5 minutes late.

DEMOGRAPHICS

Population + Employment Density and Ridership (2020)⁵

⁵ Population and employment data is from the transportation analysis zones (TAZ's) of the NWFRPM, projected from 2015 to 2020. Ridership with a red outline denotes overlapping service with other routes.

PATRONAGE

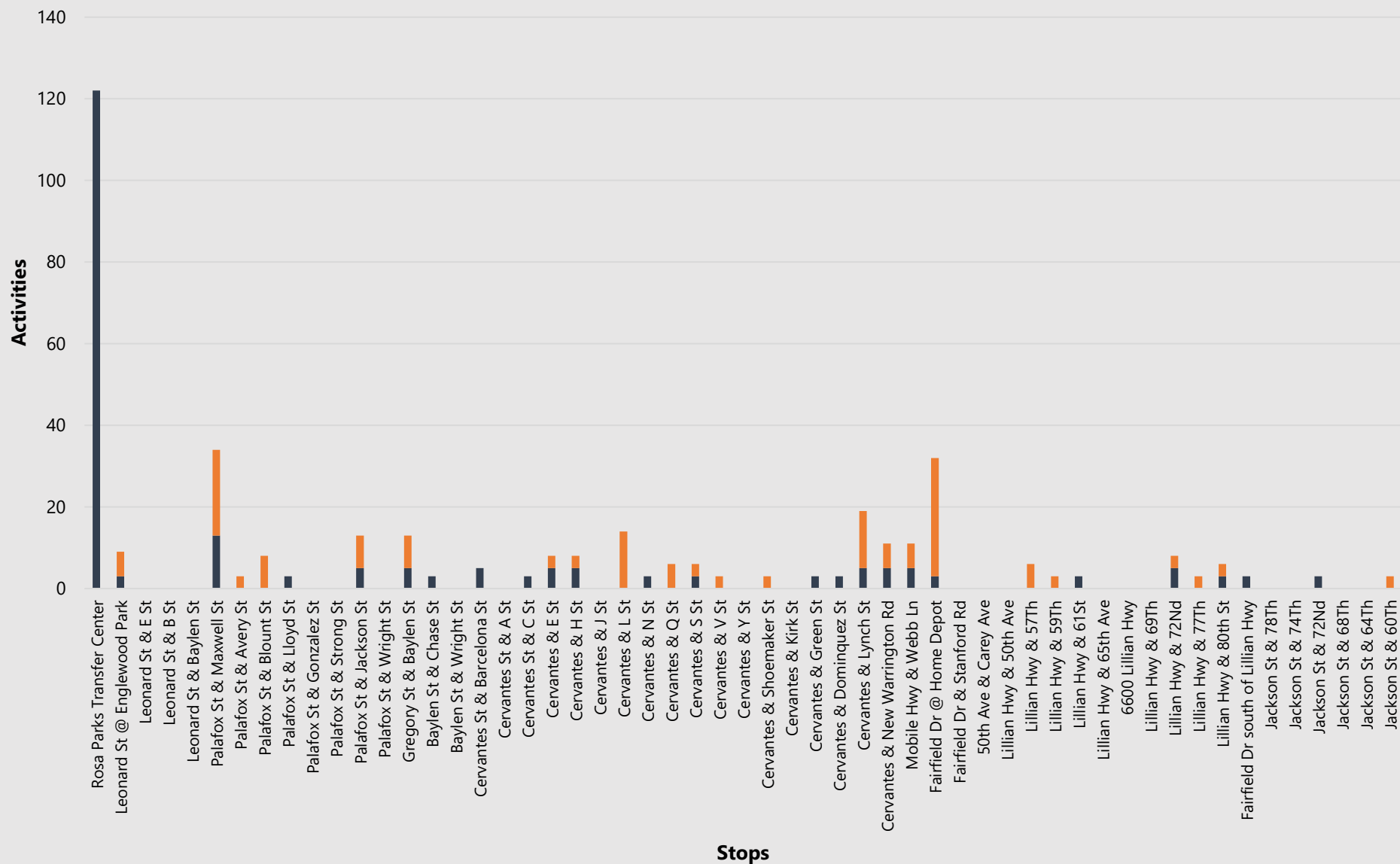
Activity Centers⁶

⁶ Points of Interest data is from the Florida Geographic Data Library (FGDL) 2013 – 21, and Florida Department of Revenue (FDOR) 2021.

RIDERSHIP TRENDS BY STOP (Weekday)⁷

Outbound

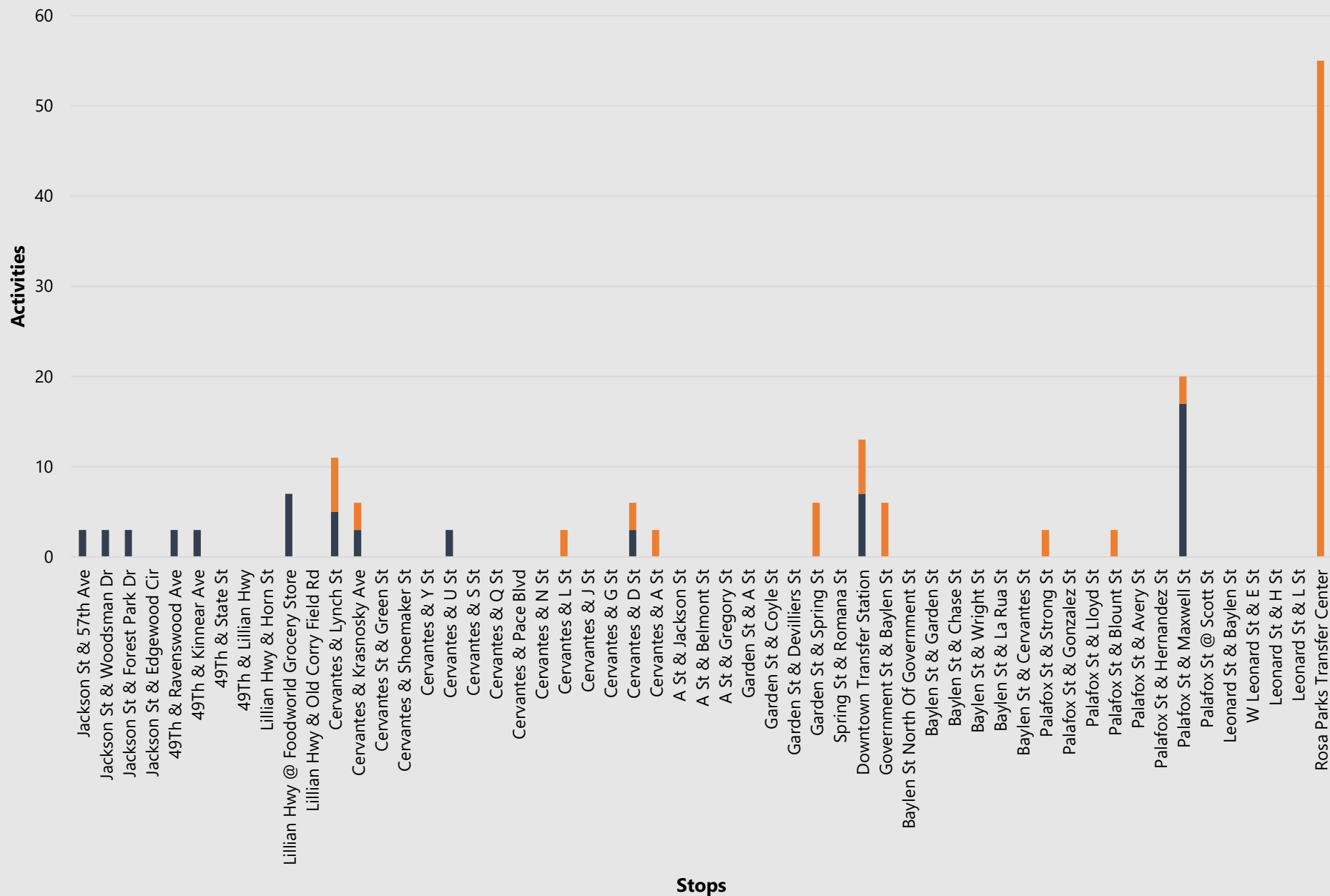
■ Boardings ■ Alightings

⁷ 0 activities does not mean no activity just means that no activity was reported during the sample period or runs. Route 2 ridership by stop data was sampled from 6 total runs.

Route 2: Brownsville to Myrtle Grove

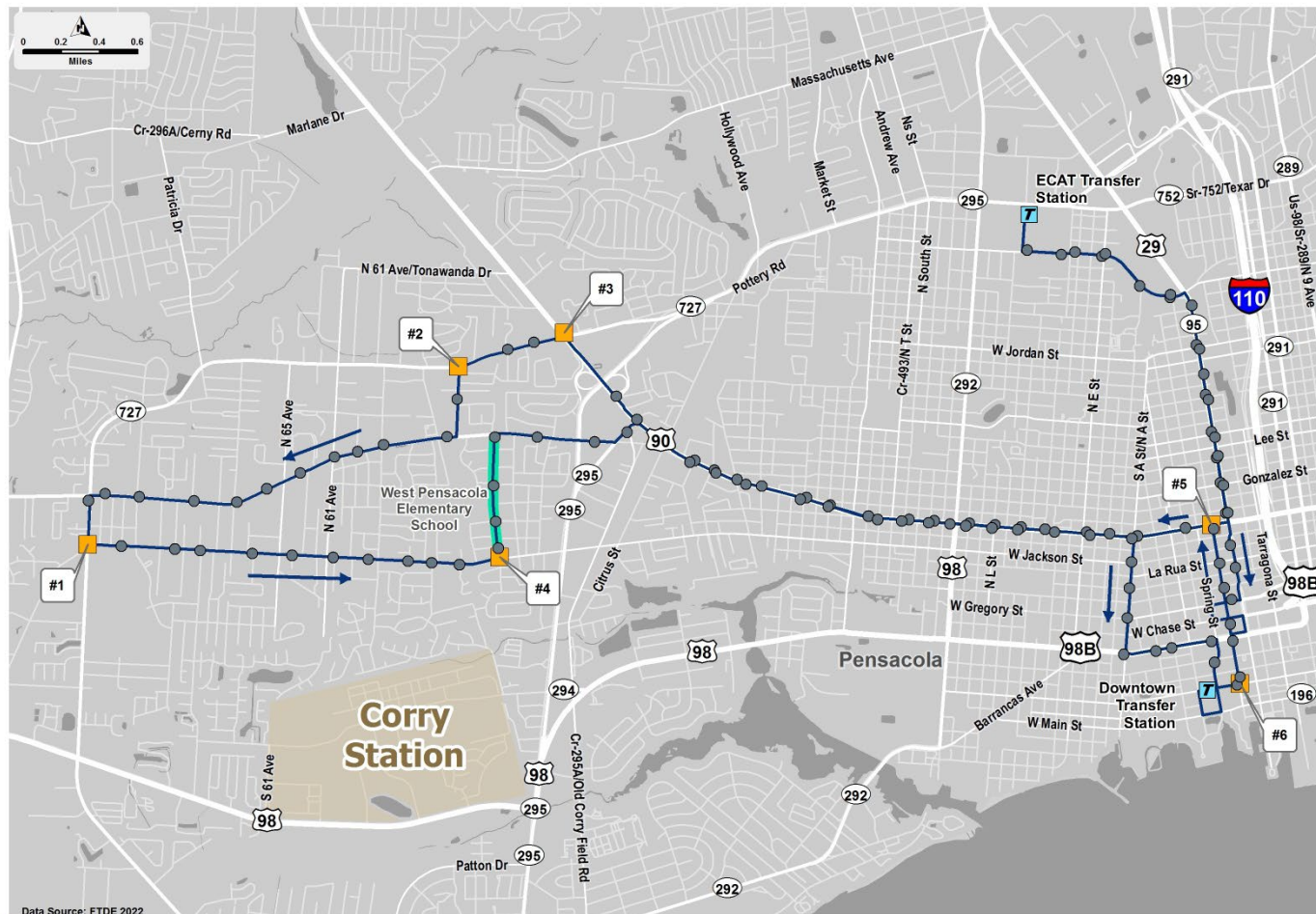
Inbound

Boardings Alightings



ROUTE INCIDENTS

Observations



Data Source: FTDE 2022



● Transit Stops
— Transit Routes

Route Incidents
■ Left Turn without Protected Movement
■ Speed Humps

Transit Operation Analysis
Incidents Map

Route # 2

Escambia County Area Transit

#	Type	Description
1	Left Turn without Protected Movement	Unprotected left turn
2	Left Turn without Protected Movement	Unprotected left turn
3	Left Turn without Protected Movement	Dangerous unprotected left turn
4	Left Turn without Protected Movement	Unprotected left turn
5	Left Turn without Protected Movement	Unprotected left turn
6	Left Turn without Protected Movement	Unprotected left turn

ROUTE ASSESSMENT**Service Alignment**

Route 2 service begins at the Rosa Parks Transit Complex along Fairfield Drive. The route then heads southeast along Leonard Street to Palafox Street to serve Downtown Pensacola and connect to the Downtown Transfer Center. It then heads west along Cervantes Street and completes a western-bound loop along Fairfield Drive and Lillian Highway, and then goes along Jackson Street back towards Cervantes Street, terminating back at the Rosa Parks Transit Complex.

System Interaction and Transfer Opportunities

Along its route, Route 2 intersects with several other routes. Other routes sharing the Route 2 corridor downtown include Routes 31, 32, 44, 48, 57, 58, and 61. Route 2 shares a portion of Fairfield Drive with Route 1. At the Rosa Parks Transit Complex, patrons can transfer from Route 2 to Routes 1, 32, 44, 45, 47, 48, 50, 51, 52, 55, 60, and 61. At the Downtown Transfer Center, patrons can transfer from Route 2 to Routes 31, 32, 41, 44, 45, 48, 57, 58, and 61.

Route Utility

Route 2 serves the greatest number of activity centers between its starting and ending point at the Rosa Parks Transit Complex and the portion of the route serving Downtown Pensacola. This stretch of the route has some of the highest ridership, as noted in the top 10 stops and on the Density and Ridership Map. As shown on the Activity Centers Map, the Route provides access to activity centers along Mobile Highway/Cervantes Street where it intersects with Fairfield Drive as well as where it intersects with Lillian Highway by Foodworld Grocery Store, another top 10 highest ridership stop.

Observations

While there are some activity centers in Downtown Pensacola served by Route 2, it is noted that the route's path gets a bit convoluted in this area. Several unprotected left turns identified through fieldwork are noted on the Incident map. These occur at the following intersections:

- Cervantes Street and Baylen Street
- A Street and Chase Street
- Baylen Street and Government Street
- 49th Avenue and Jackson Street
- Fairfield Drive and Jackson Street
- 50th Avenue and Fairfield Drive

Also noted on the Incident Map (incidents #3), observed via fieldwork, and noted by operators, there is a dangerous unprotected left turn at the intersection of Mobile Highway and Fairfield Drive. Operators noted that the issue is with the traffic light at this intersection. Either they must sit through more than one traffic light cycle or the left turn arrow does not always appear.

Heading east towards the route's end, Route 2 utilizes Jackson Street and 49th Avenue to get back to Cervantes Street. 49th Avenue is in a very residential area, even passing by West Pensacola Elementary School along the route. As a residential street, 49th Avenue has several speed humps, which are not ideal for the customer experience on the bus. Also noted in this area, there are not many activity centers along Jackson Street between Fairfield Drive and 49th Ave.

ROUTE 31: CORDOVA MALL TO 12 TH AVENUE										
Characteristics ¹		Weekday		Saturday		TOP 10 STOPS				
Span of Service		7:00 am – 5:55 pm		7:00 am – 5:55 pm		Avg Weekday Activity ²				
Frequency		Once every 2 hours		Once every 2 hours		PSC Transfer Station		16		
Cycle Time		55 min		55 min		Underwood Ave & Tippin Ave		14		
Route Distance		13.7 miles		13.7 miles						
Avg. Operating Speed		14.9 mph		14.9 mph						
Number of Buses		1		1						
Operating Statistics		Weekday		Saturday						
Round Trips per Day		12		6		12 th Ave & Summit Blvd		8		
Annual Revenue-Miles		20,647		4,097						
Annual Revenue-Hours		1,386		275						
Annual Deadhead Hours		72		15		Baylen St North Of Government St		7		
Annual Deadhead %		2%		5%						
Demographic Data ³		Within ¼-mile of stops								
Population		8,736	Seniors	1,174		Downtown Transfer Center		5		
Jobs		23,407	Youth	1,515						
Poverty		1,112	W/ Disabilities	416						
Minority		3,019	No Vehicles	257		Bayou Blvd & Target		3		
Service Productivity		Weekday		Saturday						
Avg. Daily Ridership		29		29		Baylen St & Wright St		3		
Riders/Revenue-Hour		5.3		5.3						
Riders/Revenue-Mile		0.4		0.4						
Riders/Round Trip		4.8		4.8						
Financial Performance		Overall		Weekday		Saturday				
Avg. Daily Revenue		\$17.2		\$17.2		\$17.2		12 th Ave & Baars		2
Subsidy/Revenue-Hour		\$112.8		\$120.9		\$104.7				
Subsidy/Revenue-Mile		\$7.6		\$8.1		\$7.0		Spring St & Jackson St		2
Subsidy/Round Trip		\$68.9		\$55.4		\$95.9				
Daily Operating Cost		\$637.4		\$682.1		\$592.8				
Cost/Rider		\$22.0		\$23.5		\$20.4		12 th Ave & Maura St		2
Farebox Recovery Ratio		2.7%		2.5%		2.9%				
Subsidy/Rider		\$21.4		\$22.9		\$19.8				
On-Time Performance ⁴				Weekday						
<u>Time Period</u>		<u>Early</u>		<u>On-Time</u>		<u>Late</u>				
Overall		0%		60%		40%				

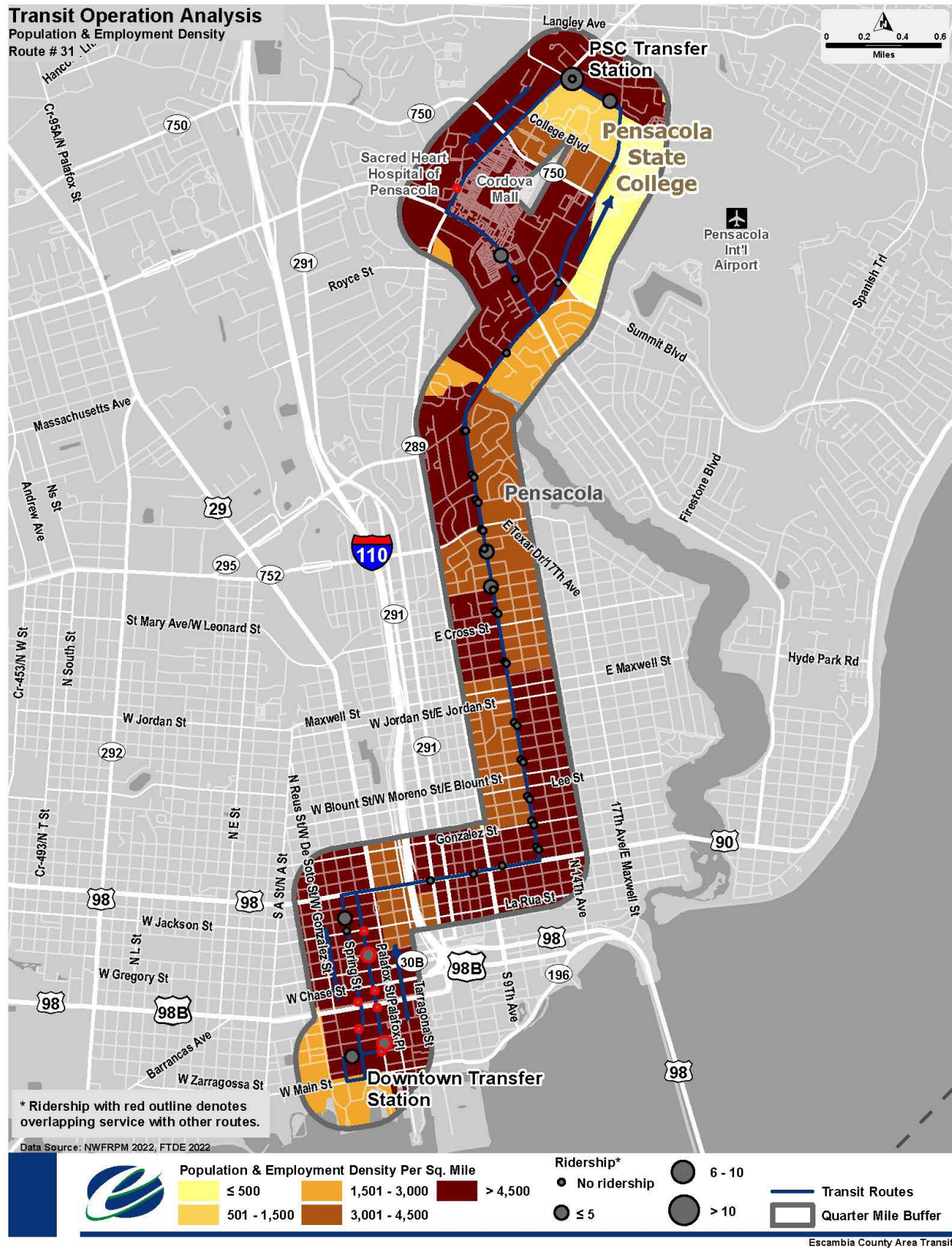
¹ Characteristics come from the Summer 2022 schedule in ECAT's Optibus account, the February 2022 General Transit Specification Feed (GTFS) in the Florida Geographic Data Library (FGDL), and ECAT's June 2021 Ride Guide.

² Stop-level ridership data is based on random sampling in August to November 2022, calibrated to FY2022 annual route-level weekday ridership volumes.

³ Jobs information is from the Northwest Florida Regional Planning Model (NWRPM), in which 2015 data is projected to 2020. All other demographics are from the 2020 American Community Survey (ACS) administered by the United States Census Bureau.

⁴ On-time is defined as between 0 minutes early and 5 minutes late.

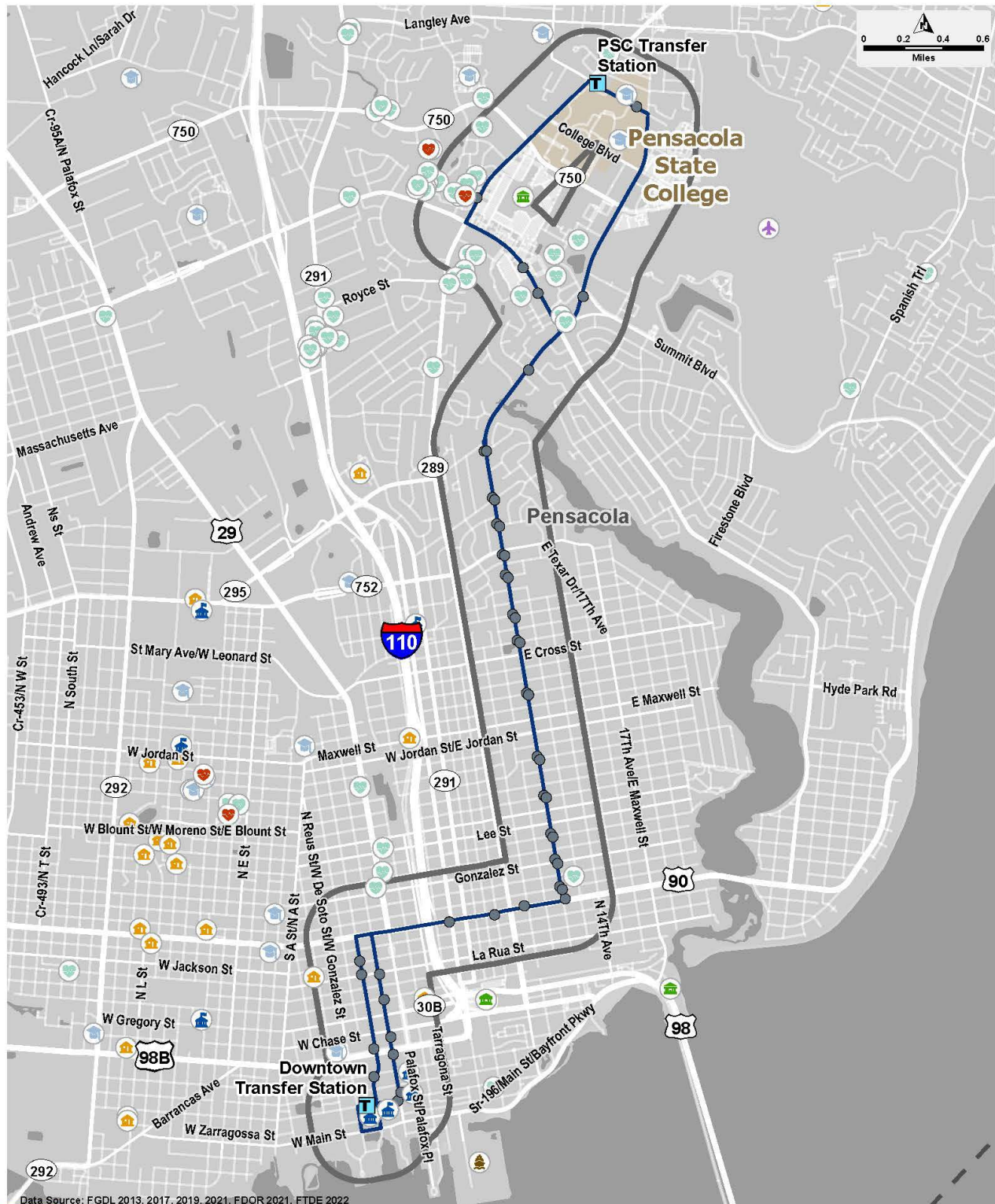
DEMOGRAPHICS

Population + Employment Density and Ridership (2020)⁵

⁵ Population and employment data is from the transportation analysis zones (TAZ's) of the NWFRPM, projected from 2015 to 2020. Ridership with a red outline denotes overlapping service with other routes.

PATRONAGE

Activity Centers⁶



Data Source: FGDL 2013, 2017, 2019, 2021, FDOR 2021, FTDE 2022



- Activity Center
- Affordable Housing
- Airport

- Government
- Hospital
- School

- Seaport
- Medical Office

- Transit Stops
- Transit Routes
- Quarter Mile Buffer

Transit Operation Analysis

Points of Interest

Route # 31

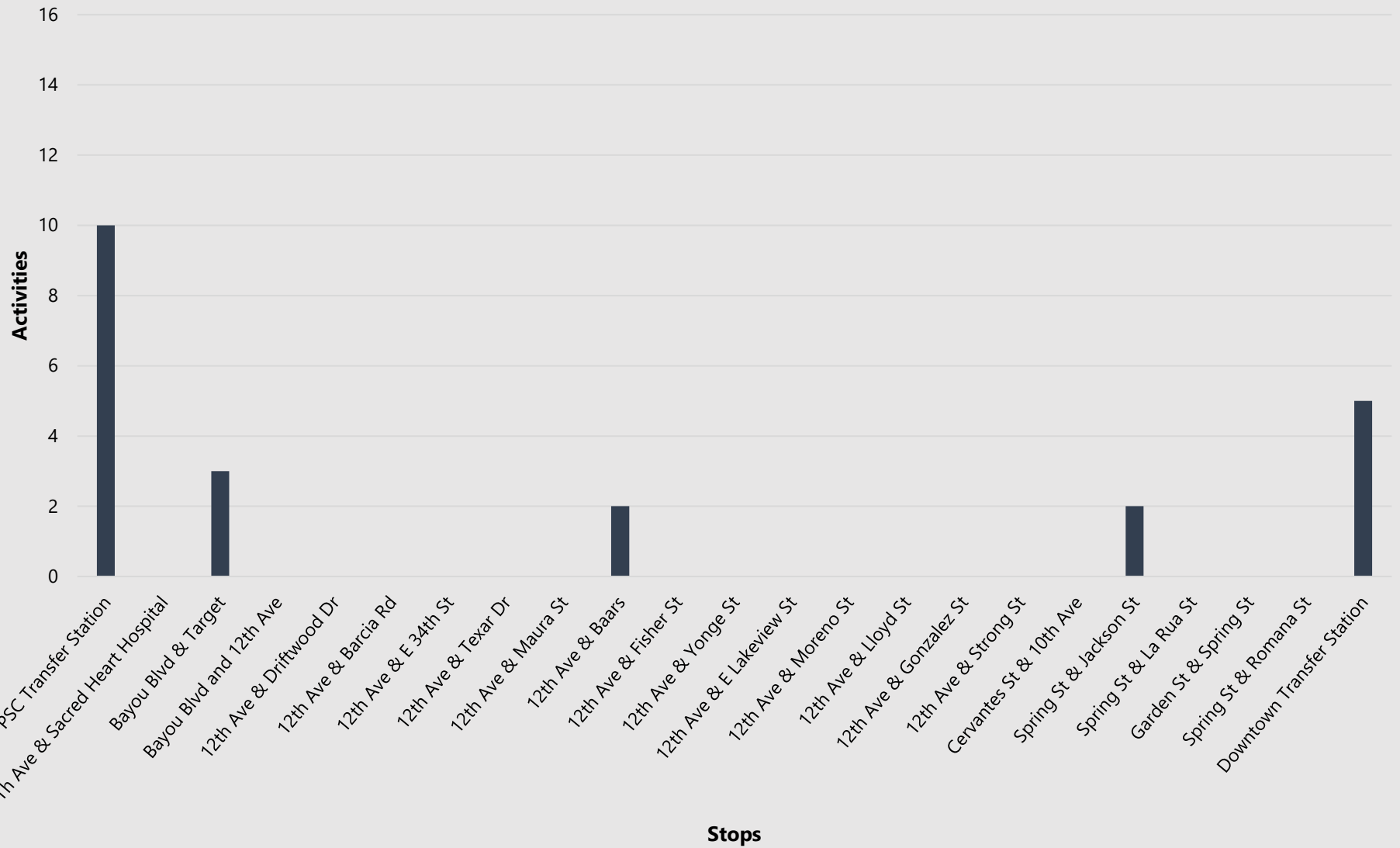
Escambia County Area Transit

⁶ Points of Interest data is from the Florida Geographic Data Library (FGDL) 2013 - 21, and Florida Department of Revenue (FDOR) 2021.

RIDERSHIP TRENDS BY STOP (Weekday)⁷

Outbound

Boardings Alightings

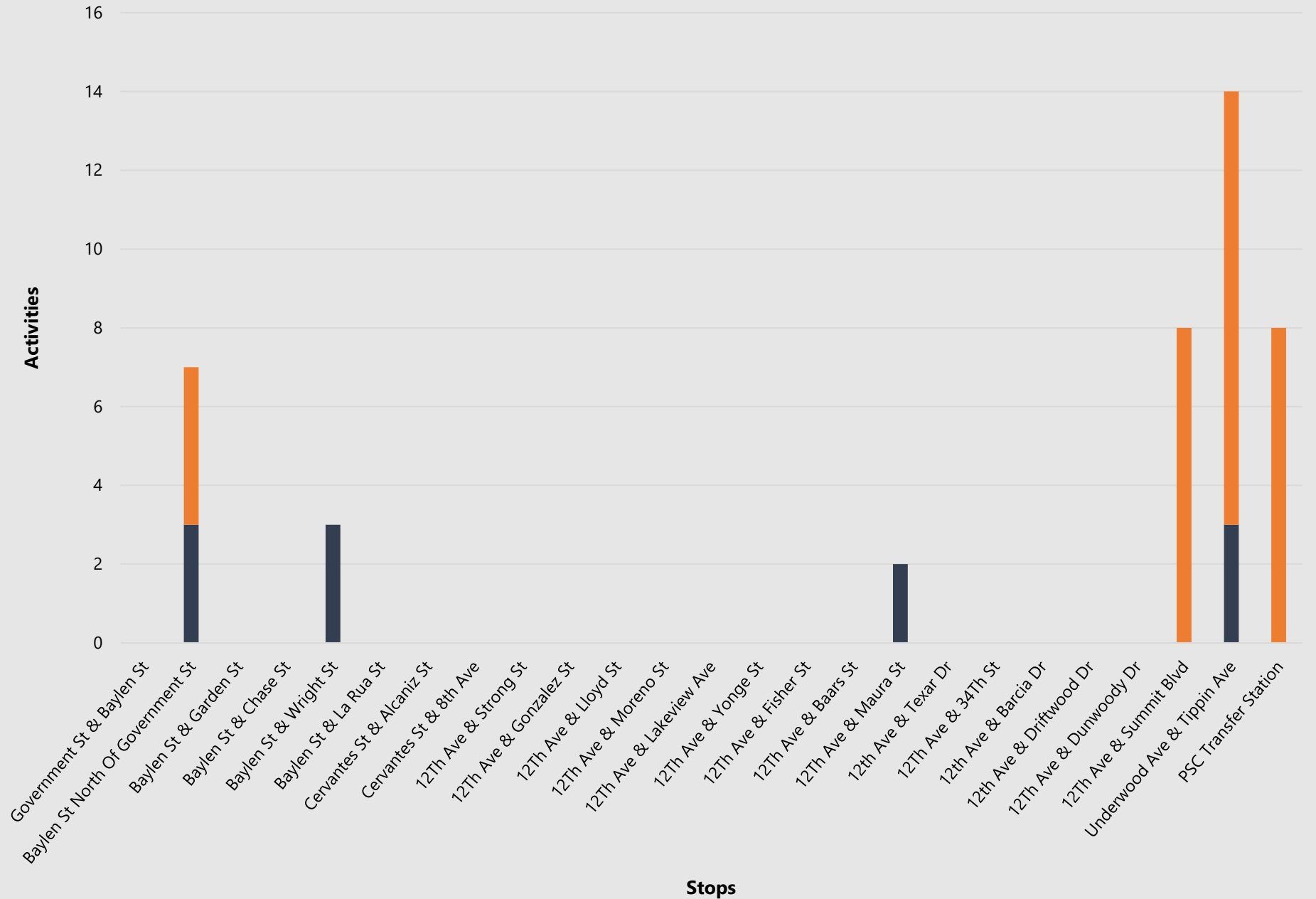


⁷ 0 activities does not mean no activity; it just means that no activity was reported during the sample period or runs. Route 31 ridership by stop data was sampled from 6 total runs.

Route 31: Cordova Mall to 12th Avenue

Inbound

■ Boardings ■ Alightings



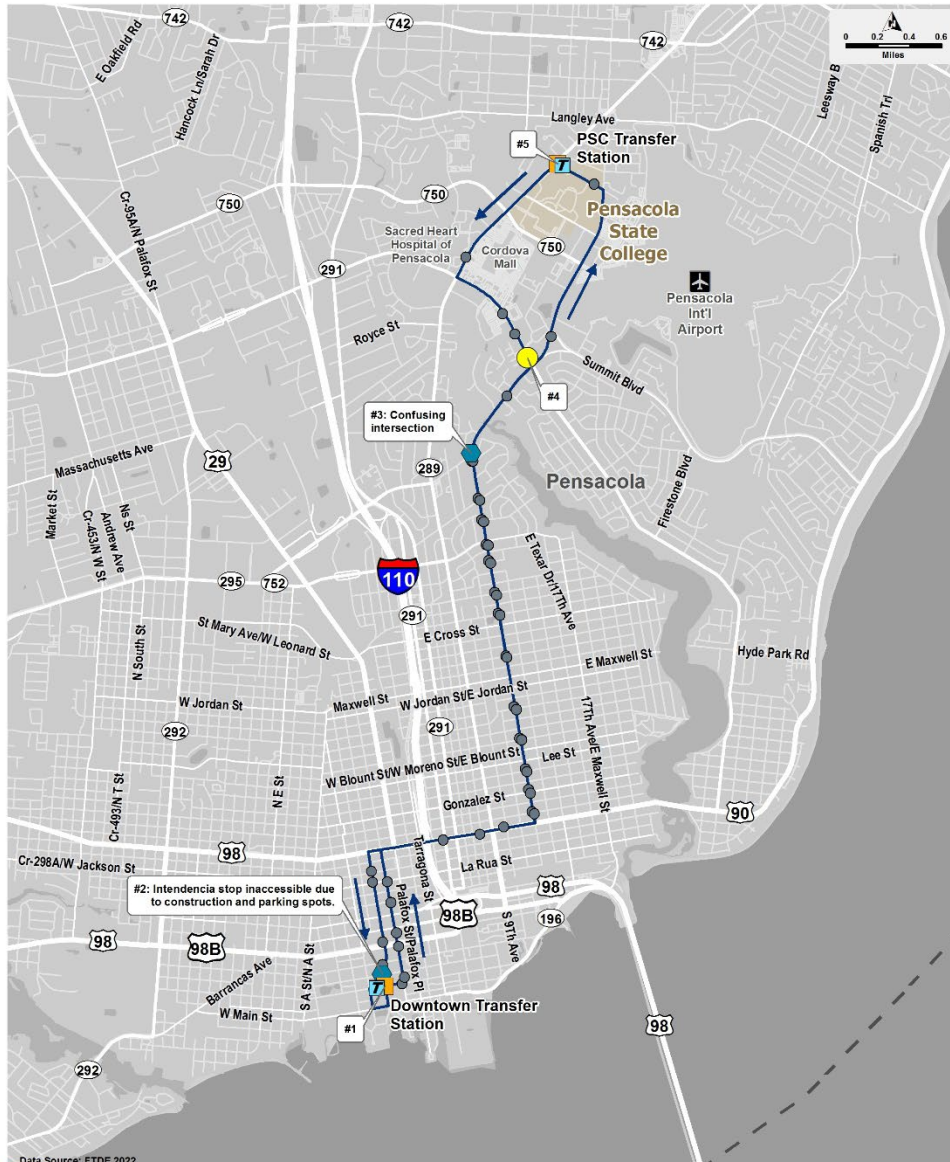
ROUTE INCIDENTS

Observations

#

Type

Description



Data Source: FTDE 2022



Route Incidents

Left Turn without Protected Movement

Stop in Right Turn Lane

Other

Transit Operation Analysis

Incidents Map

Route # 31

Escambia County Area Transit

ROUTE ASSESSMENT**Service Alignment**

Route 31 begins service at the PSC Transfer Center. The route then goes south via 9th Avenue, Bayou Boulevard, and 12th Avenue, before going east on Cervantes Street to serve downtown to connect to the Downtown Transfer Station. From here the route connects back to 12th Avenue via Cervantes to return to and terminate at the PSC Transfer Center.

System Interaction and Transfer Opportunities

At its terminus of PSC Transfer Center, patrons can transfer from Route 31 to routes 43, 52, and 63. Route 31 shares a portion of its northern alignment with these routes as well. Within Downtown Pensacola, Route 31 shares a portion of its alignment with routes 2, 57, and 58. At the Downtown Transfer Station, patrons can transfer from Route 31 to routes 1, 2, 32, 44, 45, 47, 48, 50, 51, 52, 55, 60, and 61.

Route Utility

Adjacent to its terminus at the PSC Transfer Center, Route 31 serves several activity centers including Pensacola State College, Sacred Heart Hospital of Pensacola, and Cordova Mall. This portion of the route is also near Pensacola International Airport. As shown on the Density and Ridership Map, this area has some of the highest ridership and densest concentration of population and employment. As the route turns from 12th Avenue onto Cervantes Street, there are a significant number of downtown activity centers being served.

Observations

As noted on the Density and Ridership Map, the 12th Avenue corridor has a high density of population and employment. However, as noted with other routes serving downtown, the navigation downtown could be more streamlined. Spring Street specifically was noted as being difficult to navigate. Also downtown and #2 on the Incidents Map, the Intendencia stop is inaccessible due to construction and parking. 12th Avenue and Fairfield Drive, #3 on the Incident Map, was noted as a particularly confusing intersection. There are also unprotected left turns at the PSC Transfer Station and the Downtown Transfer Station. During fieldwork it was also noted that the portion of the route serving Pensacola State College skirts the roads surrounding the college but does not enter the campus.

ROUTE 32: 9 TH AVENUE TO DOWNTOWN							
Characteristics ¹		Weekday		Saturday		TOP 10 STOPS	
Span of Service		6:00 am – 6:55 pm		7:00 am – 5:55 pm		Avg. Weekday Activity ²	
Frequency		Once every hour		Once every 2 hours		Downtown Transfer Center	37
Cycle Time		55 min		55 min			
Route Distance		10.4 miles		10.4 miles		Rosa Parks Transfer Center	36
Avg. Operating Speed		11.4 mph		11.4 mph			
Number of Buses		1		1			
Operating Statistics		Weekday		Saturday			
Round Trips per Day		13		6		9 th Ave & Gasden St	12
Annual Revenue-Miles		34,194		3,131			
Annual Revenue-Hours		3,003		275		Texar & F St	11
Annual Deadhead Hours		0		0			
Annual Deadhead %		0%		0%			
Demographic Data ³		Within ¼-mile of stops					
Population		6,148	Seniors	870		9 th Ave & Gregory St	8
Jobs		15,679	Youth	987			
Poverty		852	W/ Disabilities	417		Government St & Baylen St	6
Minority		3,046	No Vehicles	282			
Service Productivity		Weekday		Saturday			
Avg. Daily Ridership		68		32		9 th Ave & Leonard St	6
Riders/Revenue-Hour		5.7		5.8			
Riders/Revenue-Mile		0.5		0.5			
Riders/Round Trip		5.2		5.3			
Financial Performance		Overall	Weekday	Saturday			
Avg Daily Revenue		\$38.4	\$46.2	\$21.7		Main St & Baylen St	4
Subsidy/Revenue-Hour		\$100.4	\$102.7	\$95.2			
Subsidy/Revenue-Mile		\$8.8	\$9.0	\$8.4		9 th Ave & Hayes St	4
Subsidy/Round Trip		\$92.0	\$94.2	\$87.3			
Daily Operating Cost		\$1,041.5	\$1,270.6	\$545.2		9 th Ave & Fisher St	4
Cost/Rider		\$18.2	\$18.7	\$17.0			
Farebox Recovery Ratio		3.7%	3.6%	4.0%			
Subsidy/Rider		\$17.5	\$18.0	\$16.4			
On-Time Performance ⁴				Weekday			
Time Period		Early		On-Time		Late	
Overall		14.3%		28.6%		57.1%	

¹ Characteristics come from the Summer 2022 schedule in ECAT's Optibus account, the February 2022 General Transit Specification Feed (GTFS) in the Florida Geographic Data Library (FGDL), and ECAT's June 2021 Ride Guide.

² Stop-level ridership data is based on random sampling in August to November 2022, calibrated to FY2022 annual route-level weekday ridership volumes.

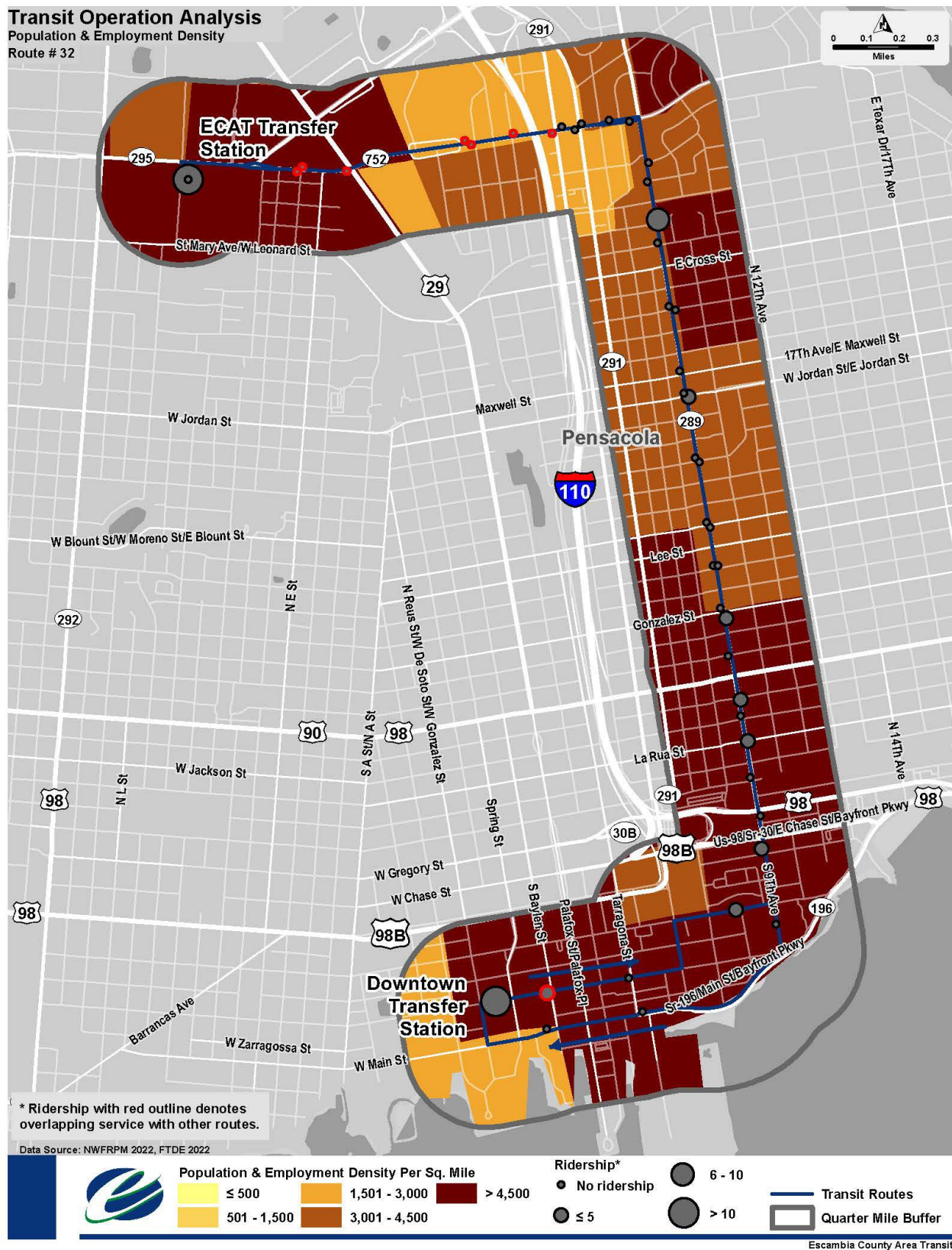
³ Jobs information is from the Northwest Florida Regional Planning Model (NWRPM), in which 2015 data is projected to 2020. All other demographics are from the 2020 American Community Survey (ACS) administered by the United States Census Bureau.

⁴ On-time is defined as between 0 minutes early and 5 minutes late.

DEMOGRAPHICS

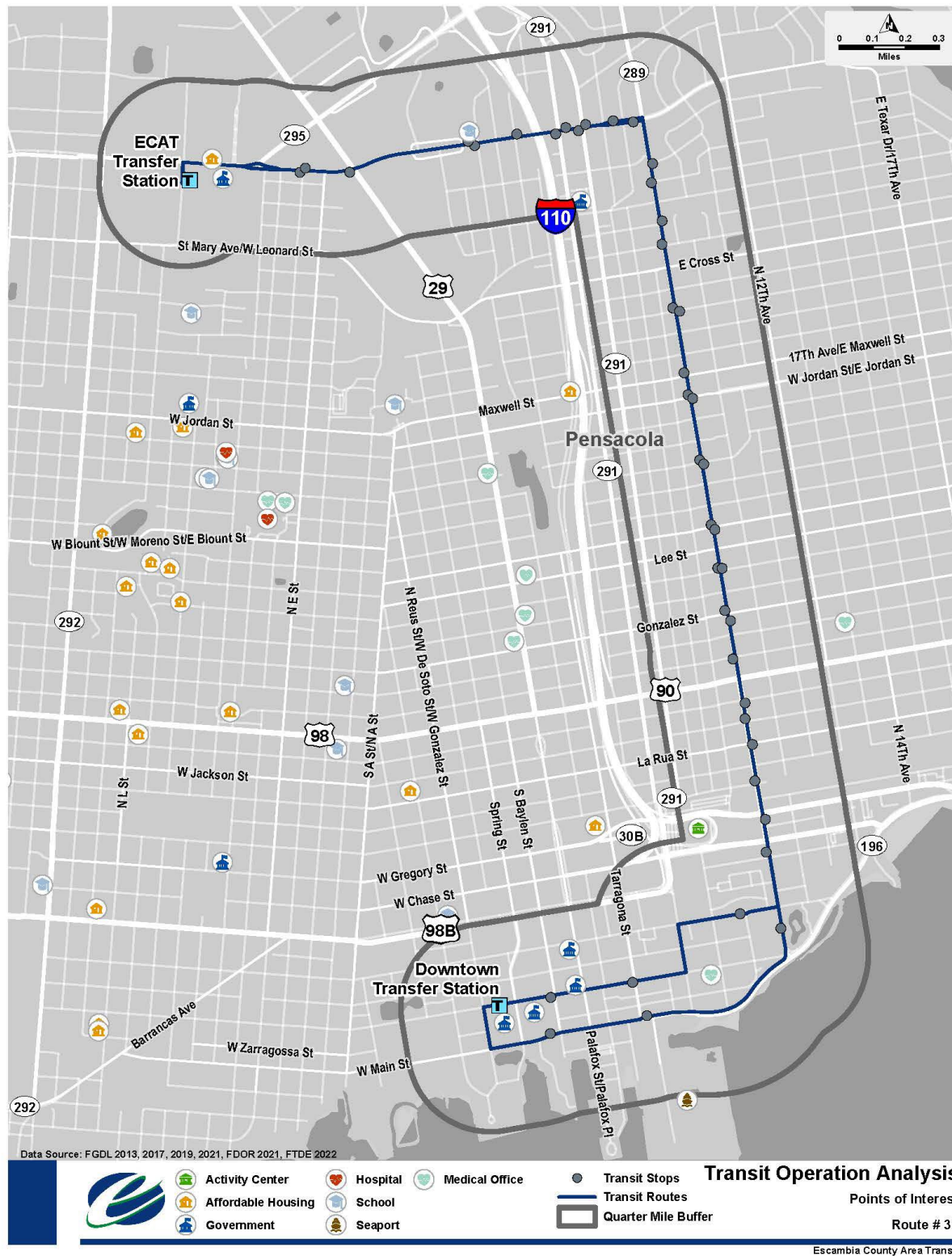
Population + Employment Density and Ridership (2020)⁵

Transit Operation Analysis

Population & Employment Density
Route # 32

⁵ Population and employment data is from the transportation analysis zones (TAZ's) of the NWFRPM, projected from 2015 to 2020. Ridership with a red outline denotes overlapping service with other routes.

PATRONAGE

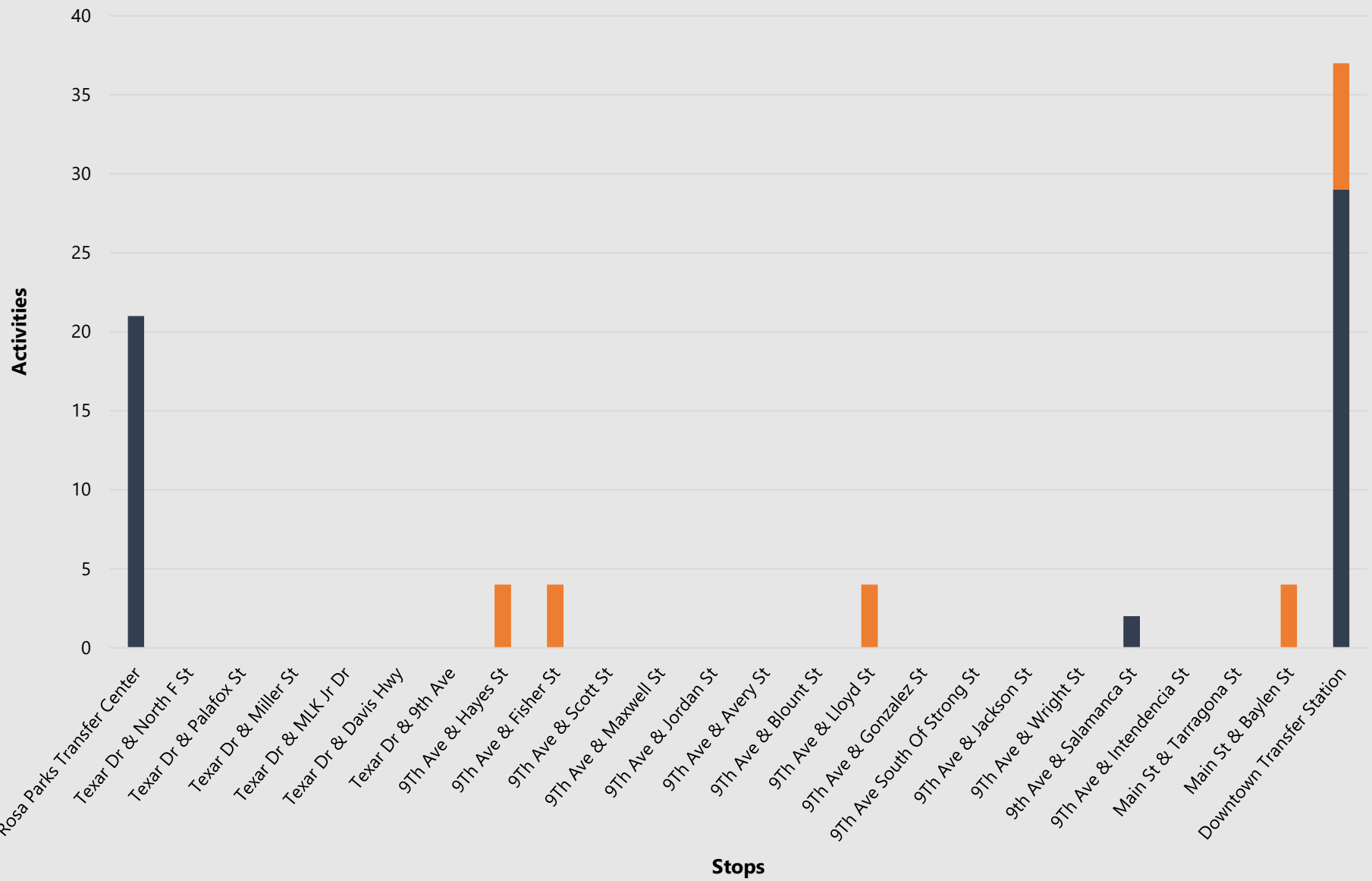
Activity Centers⁶

⁶ Points of Interest data is from the Florida Geographic Data Library (FGDL) 2013 – 21, and Florida Department of Revenue (FDOR) 2021.

RIDERSHIP TRENDS BY STOP (Weekday)⁷

Outbound

■ Boardings ■ Alightings

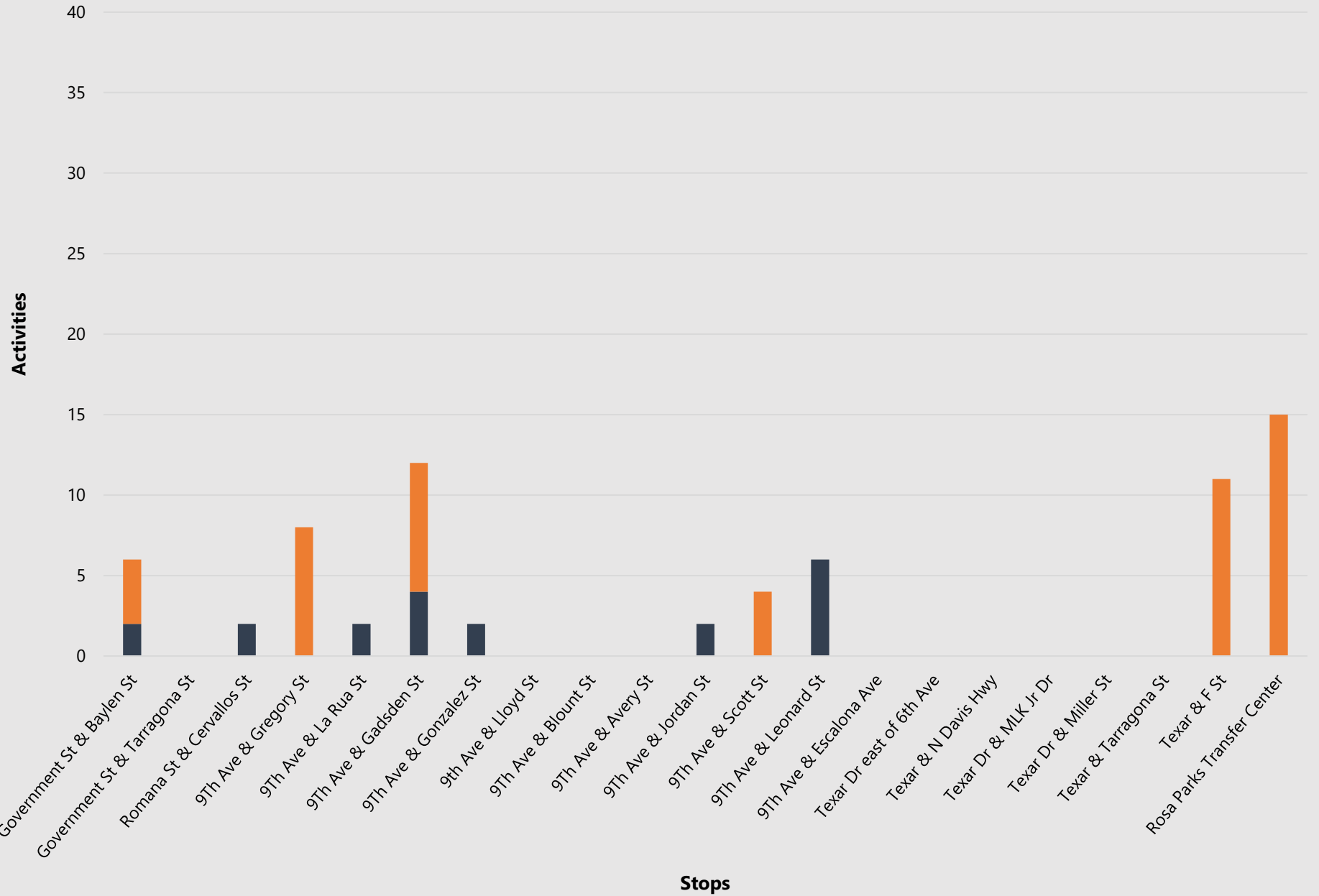


⁷ 0 activities does not mean no activity; it just means that no activity was reported during the sample period or runs. Route 32 ridership by stop data was sampled from 6 total runs.

Route 32: 9th Avenue to Downtown

Inbound

■ Boardings ■ Alightings



ROUTE ASSESSMENT**Service Alignment**

Route 32 service begins at the Rosa Parks Transit Complex. After going east along Fairfield Drive/Texar Drive, the route turns to take 9th Ave south to serve downtown, connecting to the Downtown Transfer Station. From downtown the routes utilizes 9th Avenue to return to its terminus at the Rosa Parks Transit Complex.

System Interaction and Transfer Opportunities

At the Rosa Parks Transit Complex, patrons can transfer from Route 32 to routes 1, 2, 44, 45, 47, 48, 50, 51, 52, 55, 60, and 61. The route shares its Fairfield Drive alignment with Route 45. At the Downtown Transfer Station, patrons can transfer from Route 32 to routes 2, 31, 44, 45, 48, 57, 58, and 61.

Route Utility

There is a cluster of activity centers near Route 32's terminus at the Rosa Parks Transit Complex. There is also a high concentration of activity centers towards the southern portion of 9th Avenue, as well as downtown. The Downtown Transfer Station and Rosa Parks Transit Complex have the #1 and #2 highest ridership, respectively, for the route as shown in the top 10 stops and Density and Ridership Map. Also shown on this map, these portions of the route have the greatest density of population and employment.

Observations

Route 32's alignment along 9th Avenue serves some of the densest concentrations of population and employment. Six of the top 10 highest ridership stops for Route 32 are along the 9th Avenue corridor. As noted with other routes serving downtown, the alignment for this portion of Route 32 could be simplified. There is an unprotected left turn at the intersection of 9th Avenue and Romana Street (#1 on the Incidents Map).

ROUTE 43: UWF TO SCENIC HEIGHTS							
Characteristics ¹		Weekday		Saturday		TOP 10 STOPS	
Span of Service		5:30 am – 6:55 pm		5:30 am – 6:55 am		Avg. Weekday Activity ²	
Frequency		Once every 2 hours		Once every 2 hours		PSC Transfer Station	41
Cycle Time		85 min		85 min			
Route Distance		27.8 miles		27.8 miles		Campus Dr & Campus Ln	15
Avg. Operating Speed		19.6 mph		19.6 mph			
Number of Buses		2		1			
Operating Statistics		Weekday		Saturday			
Round Trips per Day		13		7		Davis Hwy @ West Florida Hospital	14
Annual Revenue-Miles		49,000		9,722			
Annual Revenue-Hours		2,499		496			
Annual Deadhead Hours		133		14		9 th Ave @ East Gate Plaza	13
Annual Deadhead %		3%		3%			
Demographic Data ³		Within ¼-mile of stops					
Population		20,243	Seniors	3,082		Creighton Rd & 9 th Ave	9
Jobs		9,593	Youth	4,005			
Poverty		3,209	W/ Disabilities	1,302			
Minority		6,662	No Vehicles	496		7100 9 th Ave	9
Service Productivity		Weekday		Saturday			
Avg. Daily Ridership		101		101		Campus Dr & Building #4	7
Riders/Revenue-Hour		10.2		10.2			
Riders/Revenue-Mile		0.5		0.5			
Riders/Round Trip		7.8		14.4			
Financial Performance		Overall	Weekday	Saturday		University Pkwy & Target Shopping Center	
Avg. Daily Revenue		\$92.1	\$92.1	\$92.1		Old Spanish Trail & Moorings Apts	7
Subsidy/Revenue-Hour		\$119.1	\$128.1	\$110.1			
Subsidy/Revenue-Mile		\$6.1	\$6.5	\$5.6			
Subsidy/Round Trip		\$118.1	\$97.7	\$156.0		University Pkwy & Governors Dr	6
Daily Operating Cost		\$1,273.3	\$1,362.5	\$1,184.1			
Cost/Rider		\$12.6	\$13.5	\$11.7			
Farebox Recovery Ratio		7.3%	6.8%	7.8%			
Subsidy/Rider		\$11.7	\$12.6	\$10.8			
On-Time Performance ⁴				Weekday			
Time Period		Early		On-Time		Late	
Overall		0.0%		33.4%		66.6%	

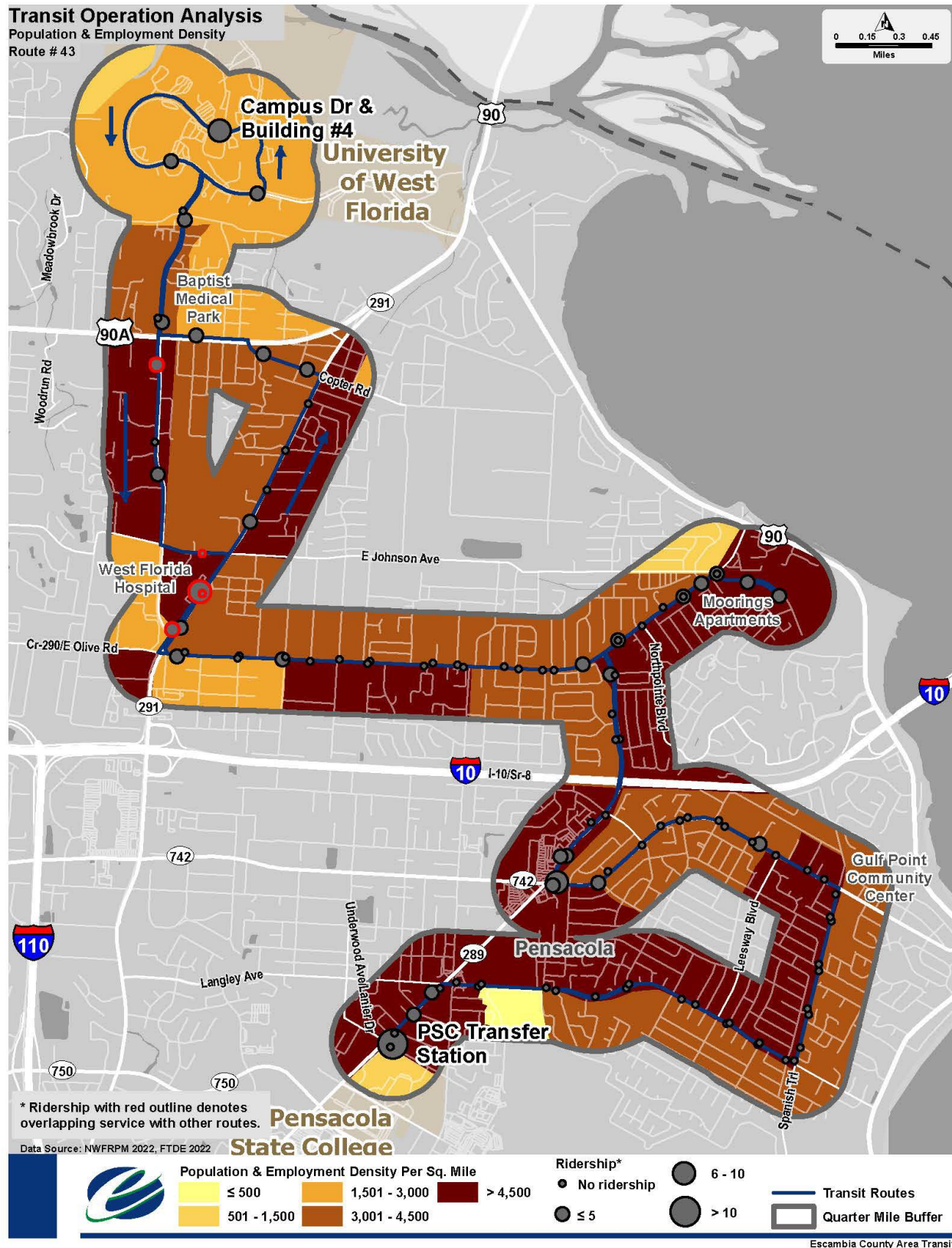
¹ Characteristics come from the Summer 2022 schedule in ECAT's Optibus account, the February 2022 General Transit Specification Feed (GTFS) in the Florida Geographic Data Library (FGDL), and ECAT's June 2021 Ride Guide.

² Stop-level ridership data is based on random sampling in August to November 2022, calibrated to FY2022 annual route-level weekday ridership volumes.

³ Jobs information is from the Northwest Florida Regional Planning Model (NWRPM), in which 2015 data is projected to 2020. All other demographics are from the 2020 American Community Survey (ACS) administered by the United States Census Bureau.

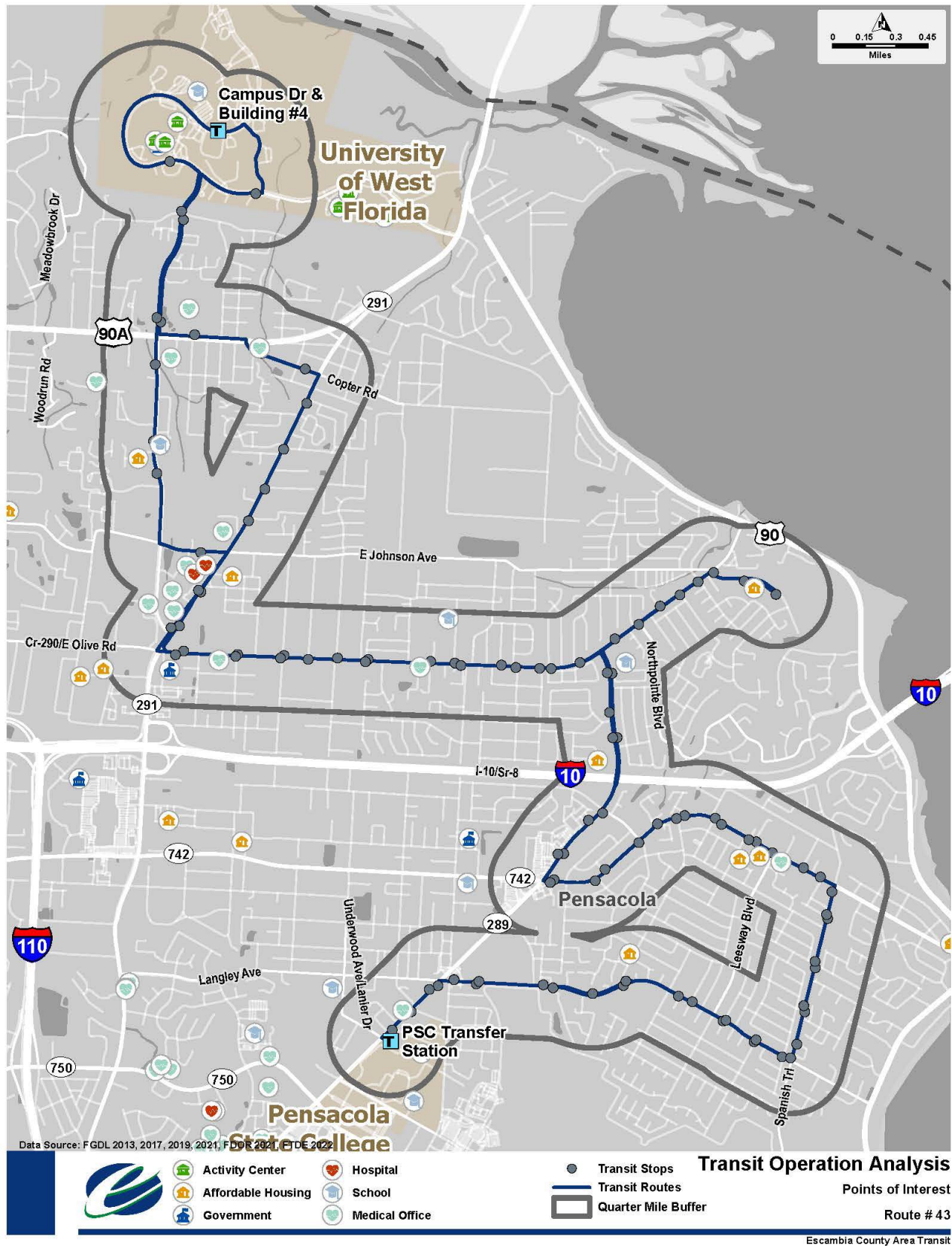
⁴ On-time is defined as between 0 minutes early and 5 minutes late.

DEMOGRAPHICS

Population + Employment Density and Ridership (2020)⁵

⁵ Population and employment data is from the transportation analysis zones (TAZ's) of the NWFRPM, projected from 2015 to 2020. Ridership with a red outline denotes overlapping service with other routes.

PATRONAGE

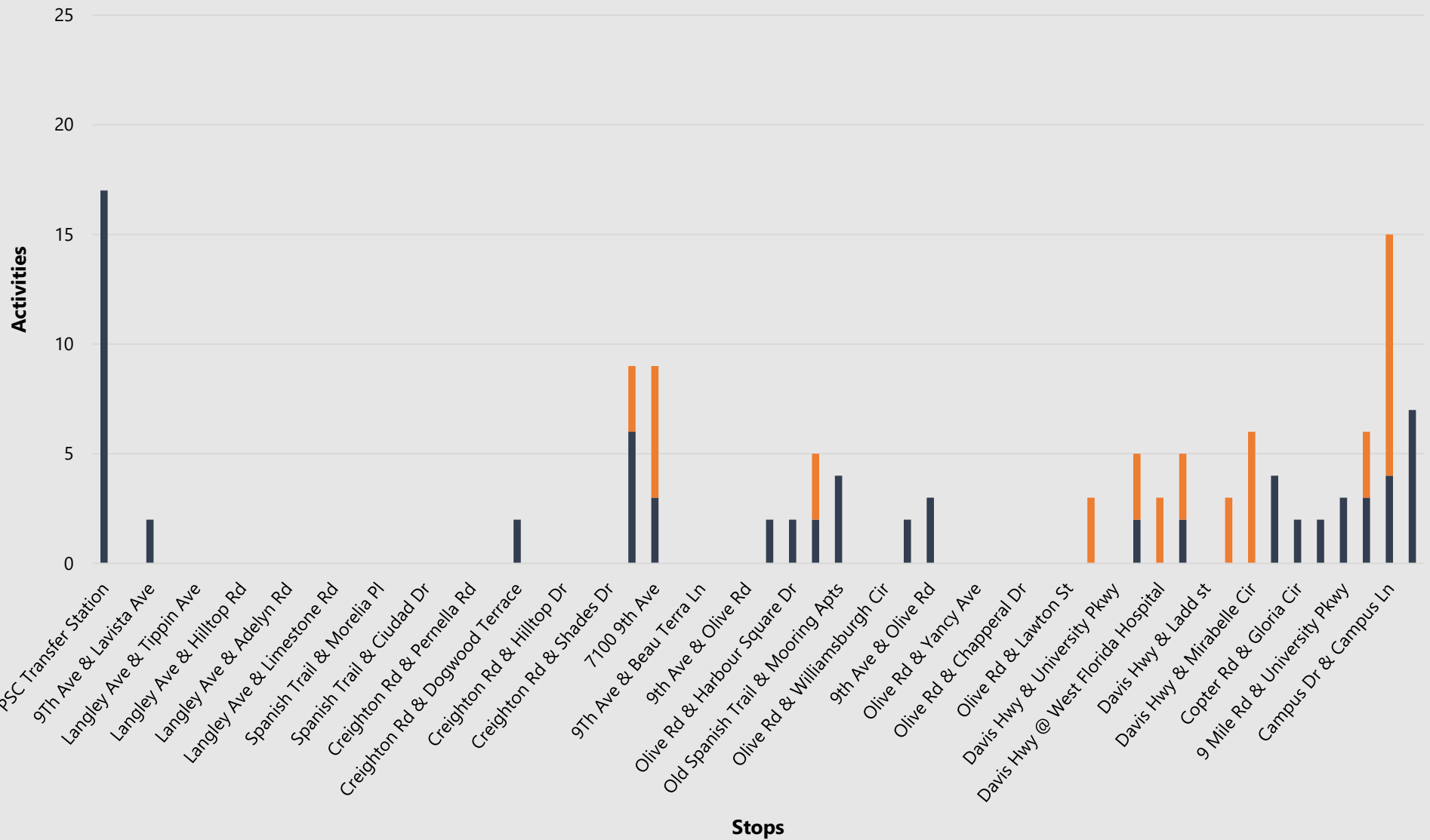
Activity Centers⁶

⁶ Points of Interest data is from the Florida Geographic Data Library (FGDL) 2013 - 21, and Florida Department of Revenue (FDOR) 2021.

RIDERSHIP TRENDS BY STOP (Weekday)⁷

Outbound

Boardings Alightings

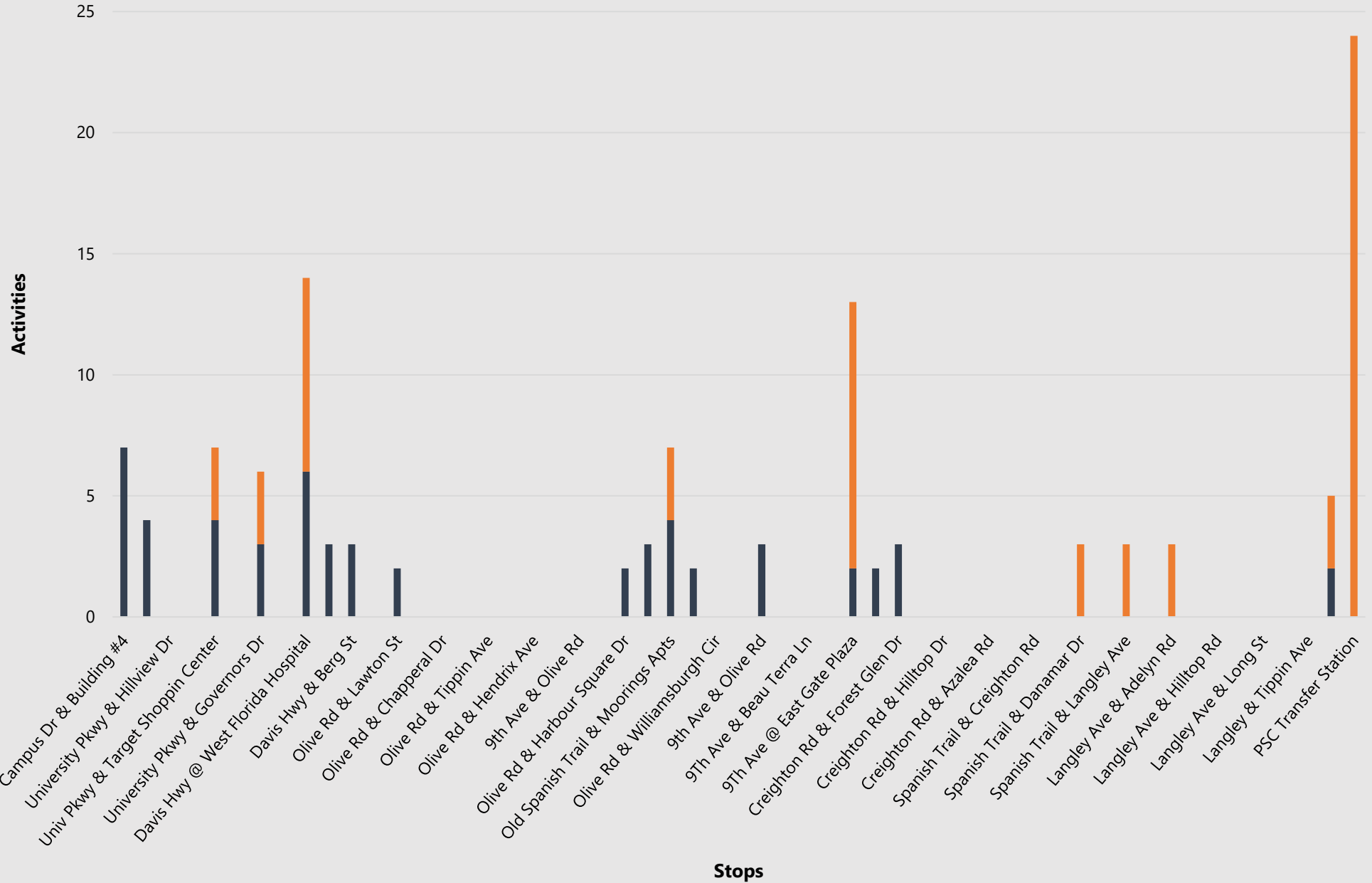


⁷ 0 activities does not mean no activity; it just means that no activity was reported during the sample period or runs. Route 43 ridership by stop data was sampled from 3 total runs.

Route 43: UWF to Scenic Heights

Inbound

Boardings Alightings



ROUTE INCIDENTS

Observations

#

Type

Description



Data Source: FTDE 2022



● Transit Stops
— Transit Routes

Route Incidents

▲ Lane Change
■ Left Turn without Protected Movement

● Stop in Right Turn Lane
● Other

Transit Operation Analysis

Incidents Map

Route # 43

Escambia County Area Transit

ROUTE ASSESSMENT**Service Alignment**

Route 43 service begins at the PSC Transfer Center. From here the route utilizes 9th Avenue, Langley Avenue, Spanish Trail, and Creighton Road to go east to connect to the Gulf Point Community Center and Moorings Apartments before taking Olive Road west and Davis Highway north to eventually connect to the University of West Florida School of Science & Engineering. The route then goes south to link back to its terminus at the PSC Transfer Center.

System Interaction and Transfer Opportunities

Route 43 shares a portion of its alignment along Davis Highway with Route 45. At the PSC Transfer Center, patrons can transfer from Route 43 to routes 31, 52, and 63.

Route Utility

Route 43 connects Pensacola State College to University of West Florida. As shown on the Density and Ridership Map and in the top 10 stops, these two locations have the highest ridership of the route. The area around University of West Florida includes several apartment complexes and Florida State University College of Medicine. The area in proximity to Pensacola State College also includes Sacred Heart Hospital and Cordova Mall. This area also has some of the greatest population and employment density of the entire route. Other major activity centers that Route 43 serves include Gulf Point Community Center, Moorings Apartments, West Florida Hospital, and Baptist Medical Park.

Observations

Route 43 serves the Title IX community of Moorings Apartment. The stop serving this apartment has the 4th highest ridership for the route and high population and employment density. As noted on the Incidents Map (#1), there is an unprotected left turn at the intersection of Spanish Trail and Langley Ave. Also noted on the Map (#2), there is a stop in a right turn lane along Olive Road. This makes it difficult for the bus to serve this stop and then get back onto the Olive Road corridor.

Number 3 on the Incident Map notes a location along Davis Highway just before the bus needs to turn onto Olive Road at which it is difficult for the bus to get from the stop to the left turn lane. The northern portion of Route 43 serves the Baptist Medical Park (#4 on the Incidents Map). It was noted during fieldwork that there are two stops, north and south, serving this location. The stop on the southern side is adjacent to a ditch and in a turn lane, making it less desirable for patrons and more difficult to navigate for operators.

ROUTE 44: BROWNSVILLE TO NORTH HILL							
Characteristics ¹		Weekday		Saturday		TOP 10 STOPS	
Span of Service		5:00 am – 6:55 pm		7:00 am – 5:55 pm		Avg. Weekday Activity ²	
Frequency		Once every hour		Once every 2 hours		Rosa Parks Transfer Center	88
Cycle Time		55 min		55 min			
Route Distance		11.0 miles		11.0 miles			
Avg. Operating Speed		12.0 mph		12.0 mph		Downtown Transfer Station	25
Number of Buses		1		1			
Operating Statistics		Weekday		Saturday			
Round Trips per Day		14		6		Fairfield Dr & Pace Blvd	11
Annual Revenue-Miles		38,822		3,301			
Annual Revenue-Hours		3,234		275			
Annual Deadhead Hours		0		0		Cervantes & D St	11
Annual Deadhead %		0%		0%			
Demographic Data ³		Within ¼-mile of stops					
Population		8,606	Seniors	1,622		Brainerd St & T St	11
Jobs		12,297	Youth	1,906			
Poverty		2,265	W/ Disabilities	825			
Minority		5,369	No Vehicles	628		Fairfield Dr & P St	11
Service Productivity		Weekday		Saturday			
Avg. Daily Ridership		111		48		T St & Brainerd St	9
Riders/Revenue-Hour		8.7		8.7			
Riders/Revenue-Mile		0.7		0.7			
Riders/Round Trip		7.9		8			
Financial Performance		Overall		Weekday		Saturday	
Avg. Daily Revenue		\$65.3	\$78.9	\$34.1		Brainerd St & S St	9
Subsidy/Revenue-Hour		\$99.4	\$101.5	\$94.5			
Subsidy/Revenue-Mile		\$8.3	\$8.5	\$7.9			
Subsidy/Round Trip		\$91.1	\$93.0	\$86.6		Gonzales St & J St	9
Daily Operating Cost		\$1,132.8	\$1,381.0	\$553.6			
Cost/Rider		\$12.2	\$12.4	\$11.5		Gonzales St & D St	9
Farebox Recovery Ratio		5.8%	5.7%	6.2%			
Subsidy/Rider		\$11.5	\$11.7	\$10.8			
On-Time Performance ⁴				Weekday			
Time Period		Early		On-Time		Late	
Overall		50%		17%		33%	

¹ Characteristics come from the Summer 2022 schedule in ECAT's Optibus account, the February 2022 General Transit Specification Feed (GTFS) in the Florida Geographic Data Library (FGDL), and ECAT's June 2021 Ride Guide.

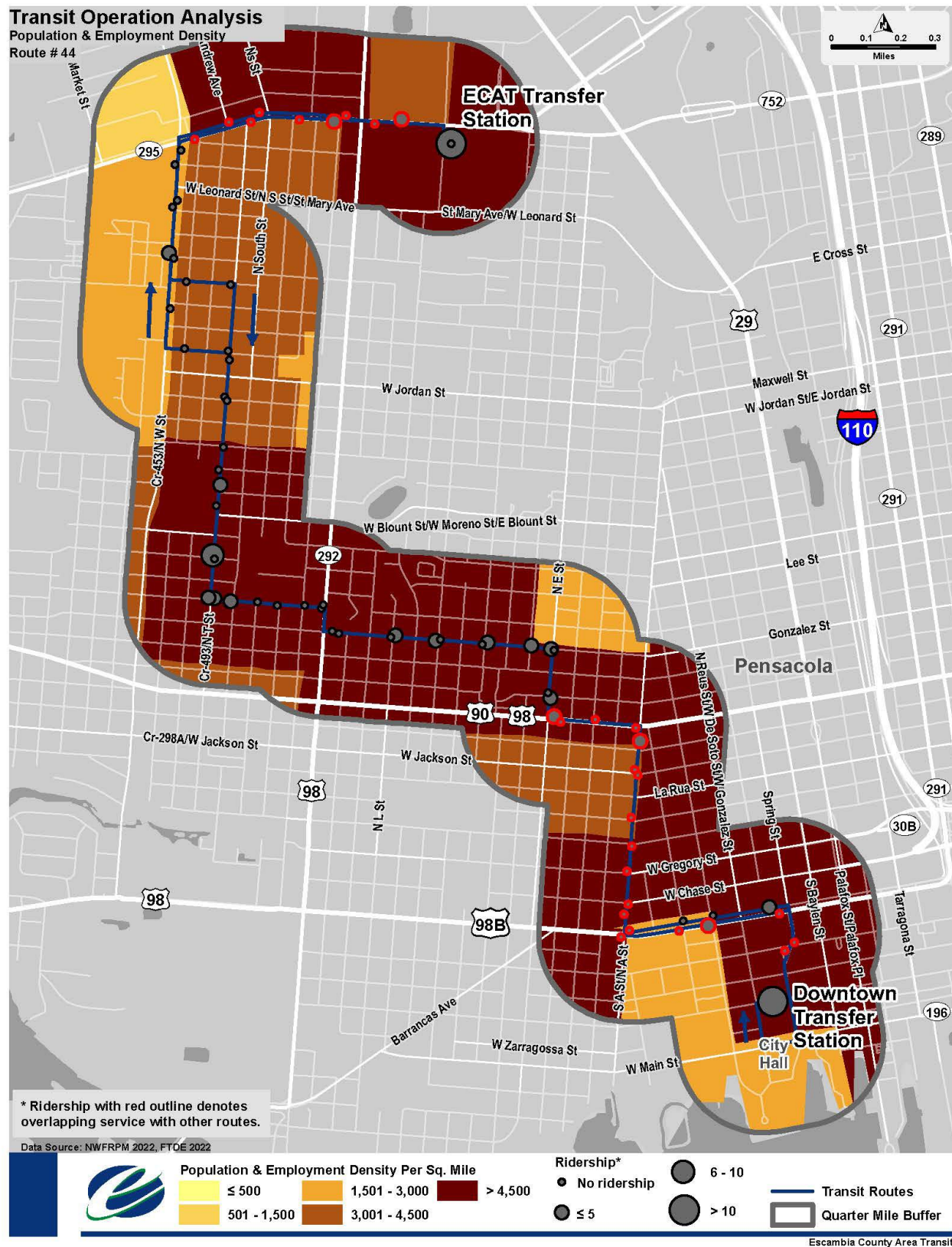
² Stop-level ridership data is based on random sampling in August to November 2022, calibrated to FY2022 annual route-level weekday ridership volumes.

³ Jobs information is from the Northwest Florida Regional Planning Model (NWRPM), in which 2015 data is projected to 2020. All other demographics are from the 2020 American Community Survey (ACS) administered by the United States Census Bureau.

⁴ On-time is defined as between 0 minutes early and 5 minutes late.

DEMOGRAPHICS

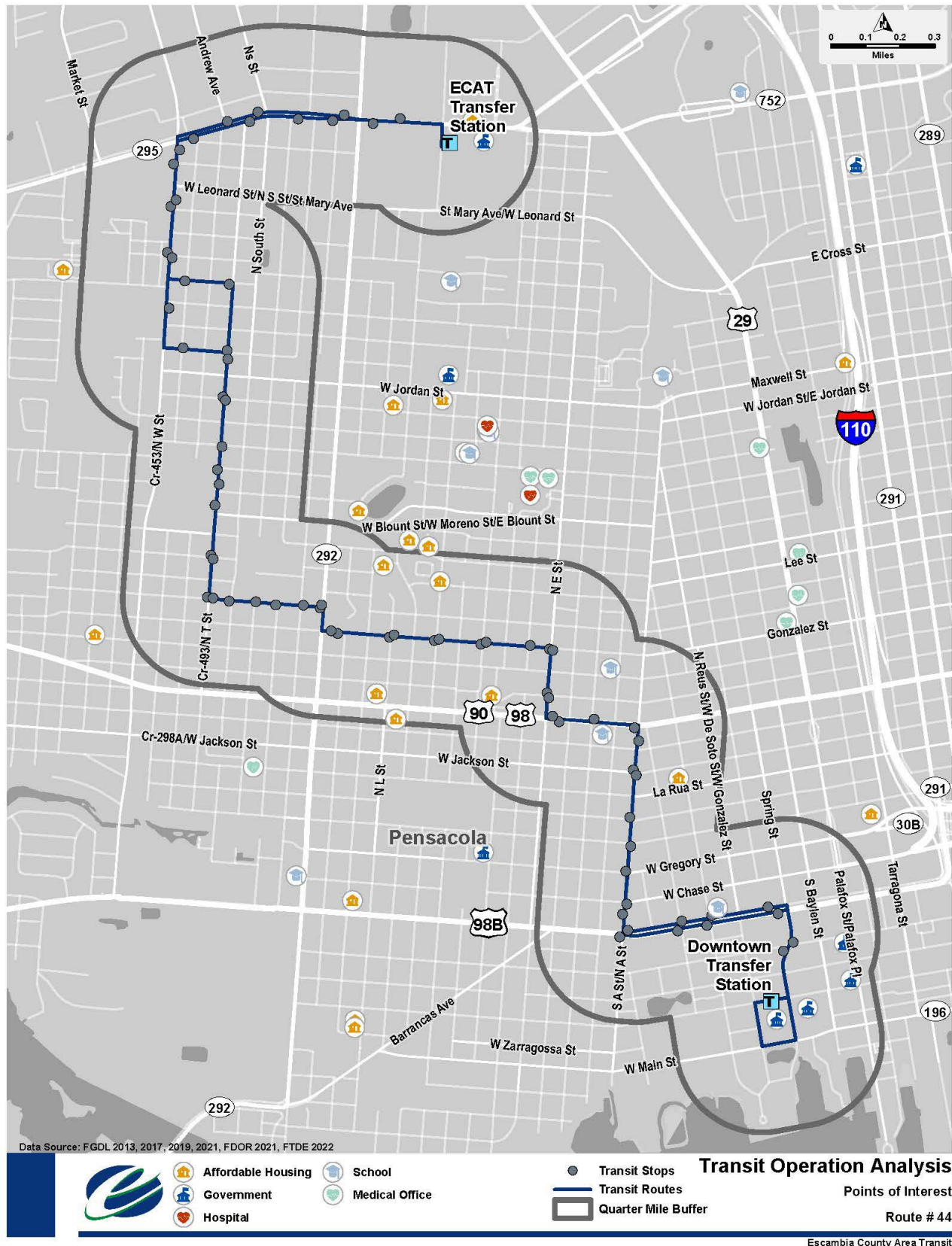
Population + Employment Density and Ridership (2020)⁵



⁵ Population and employment data is from the transportation analysis zones (TAZ's) of the NWFRPM, projected from 2015 to 2020. Ridership with a red outline denotes overlapping service with other routes.

PATRONAGE

Activity Centers⁶

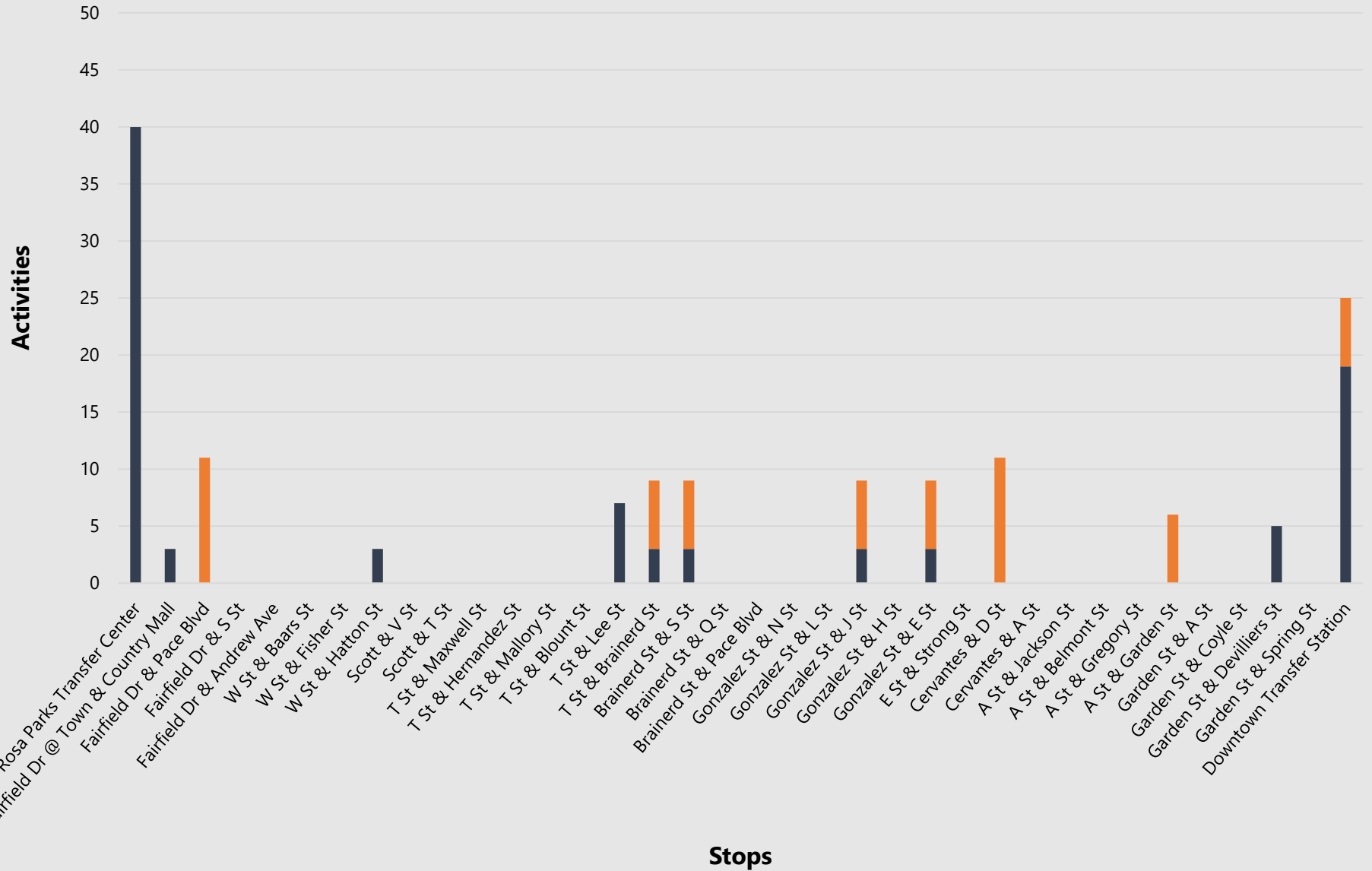


⁶ Points of Interest data is from the Florida Geographic Data Library (FGDL) 2013 - 21, and Florida Department of Revenue (FDOR) 2021.

RIDERSHIP TRENDS BY STOP (Weekday)⁷

Outbound

■ Boardings ■ Alightings

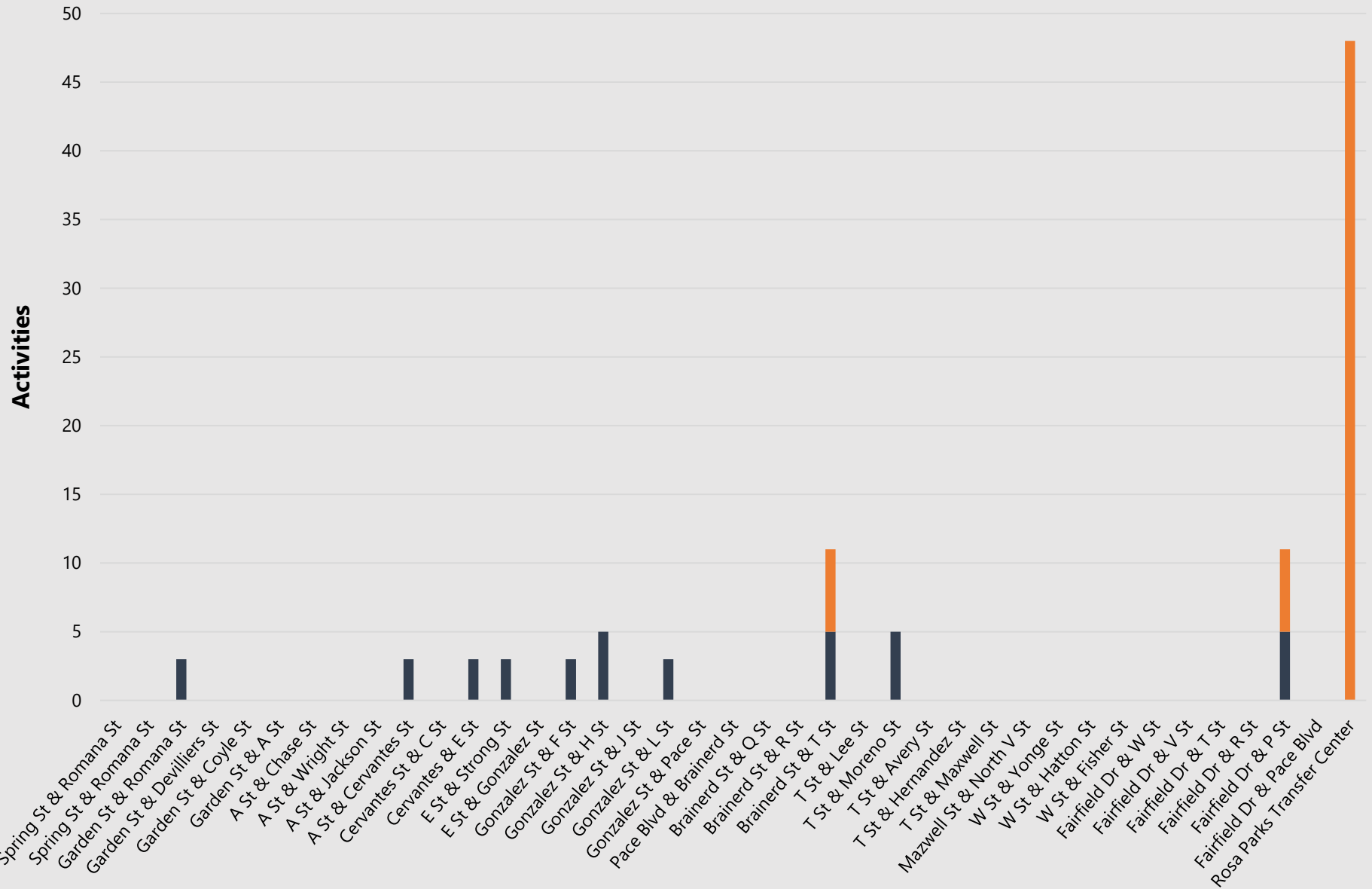


⁷ 0 activities does not mean no activity; it just means that no activity was reported during the sample period or runs. Route 44 ridership by stop data was sampled from 6 total runs.

Route 44: Brownsville to North Hill

Inbound

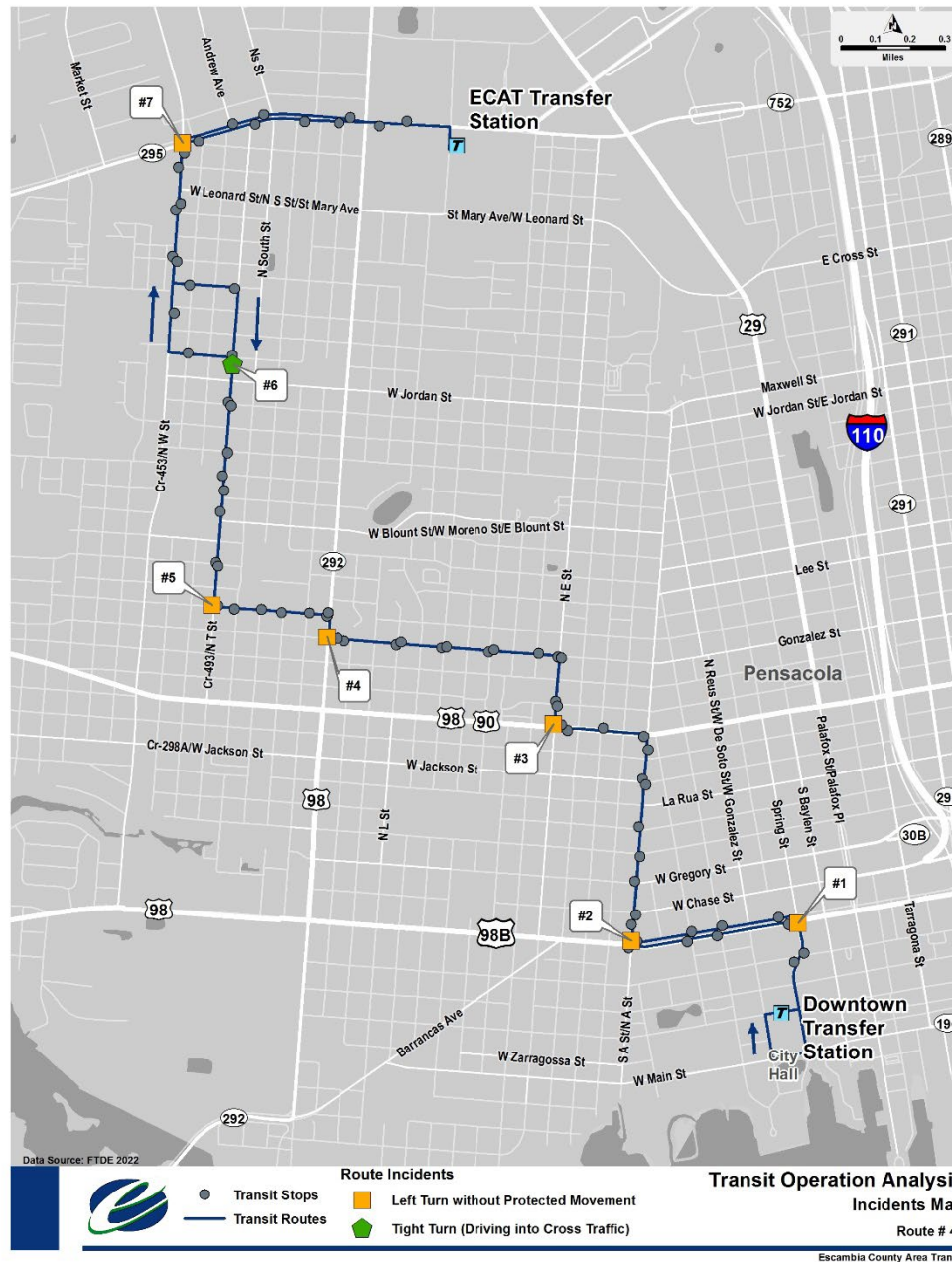
Boardings Alightings



ROUTE INCIDENTS

Observations

#	Type	Description
1	Left Turn without Protected Movement	Unprotected left turn
2	Left Turn without Protected Movement	Unprotected left turn
3	Left Turn without Protected Movement	Unprotected left turn
4	Left Turn without Protected Movement	Unprotected left turn
5	Left Turn without Protected Movement	Unprotected left turn
6	Tight Turn	Driving into cross traffic
7	Left Turn without Protected Movement	Unprotected left turn



ROUTE ASSESSMENT**Service Alignment**

Route 44 service begins at the Rosa Parks Transit Complex. The route goes west along Fairfield Drive before heading south via W Street and T Street. At the intersection of T Street and Brainerd Street, the route moves east to A Street before going south to serve downtown and connect to the Downtown Transfer Center. From here, the route follows that same alignment back to the Rosa Parks Transit Complex.

System Interaction and Transfer Opportunities

At the Rosa Parks Transit Complex, patrons can transfer from Route 44 to routes 1, 2, 32, 45, 47, 48, 50, 51, 52, 55, 60, and 61. Route 44 shares a portion of its Fairfield Drive alignment with Route 1. Route 44 also shares a portion of its alignment on Cervantes Street with Route 2 and a portion of A Street with Route 48. Route 44 shares much of its downtown alignment with several routes, and at the Downtown Transfer Center patrons can transfer from Route 44 to routes 2, 31, 32, 45, 48, 57, 58, and 61.

Route Utility

The highest concentration of activity centers served by Route 44 are adjacent to the Rosa Parks Transit Complex and Downtown Transfer Center. These two areas, respectively, have the #1 and #2 highest ridership stops of Route 44. Other activity centers served by Route 44 include the Englewood Senior Apartments and City Hall. In addition to the Rosa Parks Transit Complex and Downtown Transfer Center, the east-west section of Route 44 between T Street and A Street also has some of the highest population and employment density as well as some of the top 10 highest ridership stops.

Observations

Overall, the incidents along Route 44 noted during fieldwork were predominantly unprotected left turns along the route. Number 7 on the Incidents Map was noted as a particularly dangerous unprotected left turn. Notably, there is a quick and tight turn just after the stop at the intersection of T Street and Maxwell Street (#6 on the Incidents Map).

ROUTE 45: DAVIS HIGHWAY						
Characteristics ¹		Weekday		Saturday	TOP 10 STOPS	
Span of Service		6:00 am – 6:55 pm		6:00 am – 6:55 pm	Avg. Weekday Activity ²	
Frequency		Once every hour		Once every hour	Rosa Parks Transfer Center	187
Cycle Time		115 min		115 min		
Route Distance		29.8- 31.5 miles		29.8 miles		
Avg. Operating Speed		15.9 mph		15.9 mph		
Number of Buses		4		2	Downtown Transfer Station	32
Operating Statistics		Weekday		Saturday		
Round Trips per Day		27		12	Davis Hwy & Amber St	21
Annual Revenue-Miles		90,115		17,880		
Annual Revenue-Hours		5,796		1,150		
Annual Deadhead Hours		0		0	Davis Hwy & Corday St	19
Annual Deadhead %		0%		0%		
Demographic Data ³			Within ¼-mile of stops			
Population		16,641	Seniors	2,354	MLK Jr Dr & Anderson St	18
Jobs		27,765	Youth	3,093		
Poverty		3,091	W/ Disabilities	1,338		
Minority		8,900	No Vehicles	771	Davis Hwy & Olive Rd	18
Service Productivity		Weekday		Saturday		
Avg. Daily Ridership		258		258	Davis Hwy & Plantation Rd	17
Riders/Revenue-Hour		11.2		11.2		
Riders/Revenue-Mile		0.7		0.7		
Riders/Round Trip		21.5		21.5		
Financial Performance		Overall	Weekday	Saturday	Johnson Ave & Barnes Rd	13
Avg. Daily Revenue		\$218.3	\$218.3	\$218.3		
Subsidy/Revenue-Hour		\$107.7	\$115.4	\$99.9	MLK Jr Dr & Avery St	12
Subsidy/Revenue-Mile		\$6.9	\$7.4	\$6.4		
Subsidy/Round Trip		\$206.4	\$221.2	\$191.5		
Daily Operating Cost		\$2,694.5	\$2,872.9	\$2,516.1	Davis Hwy & Burgess Rd	12
Cost/Rider		\$10.4	\$11.1	\$9.8		
Farebox Recovery Ratio		8.1%	7.6%	8.7%		
Subsidy/Rider		\$9.6	\$10.3	\$8.9		
On-Time Performance ⁴				Weekday		
Time Period		Early		On-Time	Late	
Overall		33.3%		66.7%	0%	

¹ Characteristics come from the Summer 2022 schedule in ECAT's Optibus account, the February 2022 General Transit Specification Feed (GTFS) in the Florida Geographic Data Library (FGDL), and ECAT's June 2021 Ride Guide.

² Stop-level ridership data is based on random sampling in August to November 2022, calibrated to FY2022 annual route-level weekday ridership volumes.

³ Jobs information is from the Northwest Florida Regional Planning Model (NWRPM), in which 2015 data is projected to 2020. All other demographics are from the 2020 American Community Survey (ACS) administered by the United States Census Bureau.

⁴ On-time is defined as between 0 minutes early and 5 minutes late.

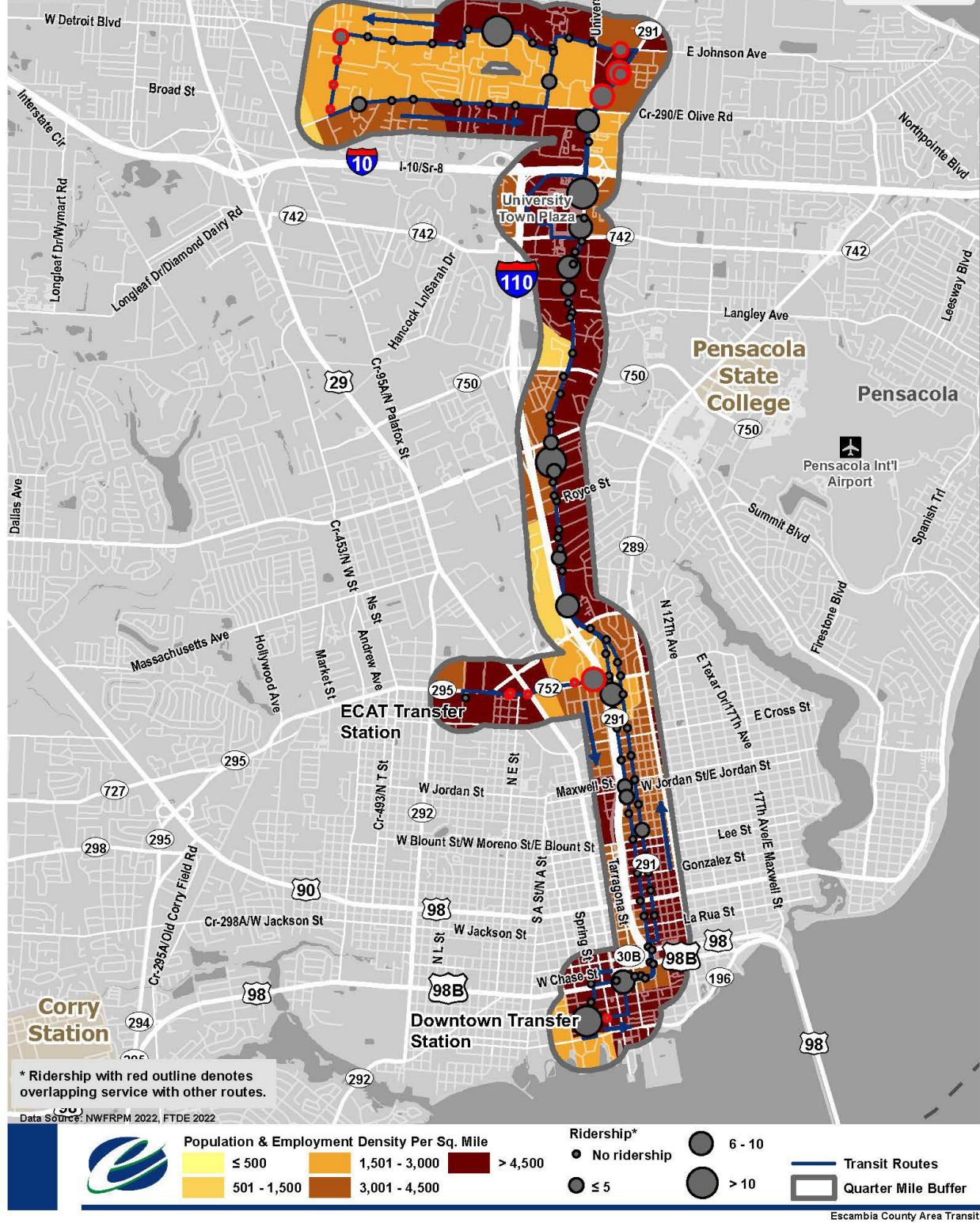
DEMOGRAPHICS

Population + Employment Density and Ridership (2020)⁵

Transit Operation Analysis

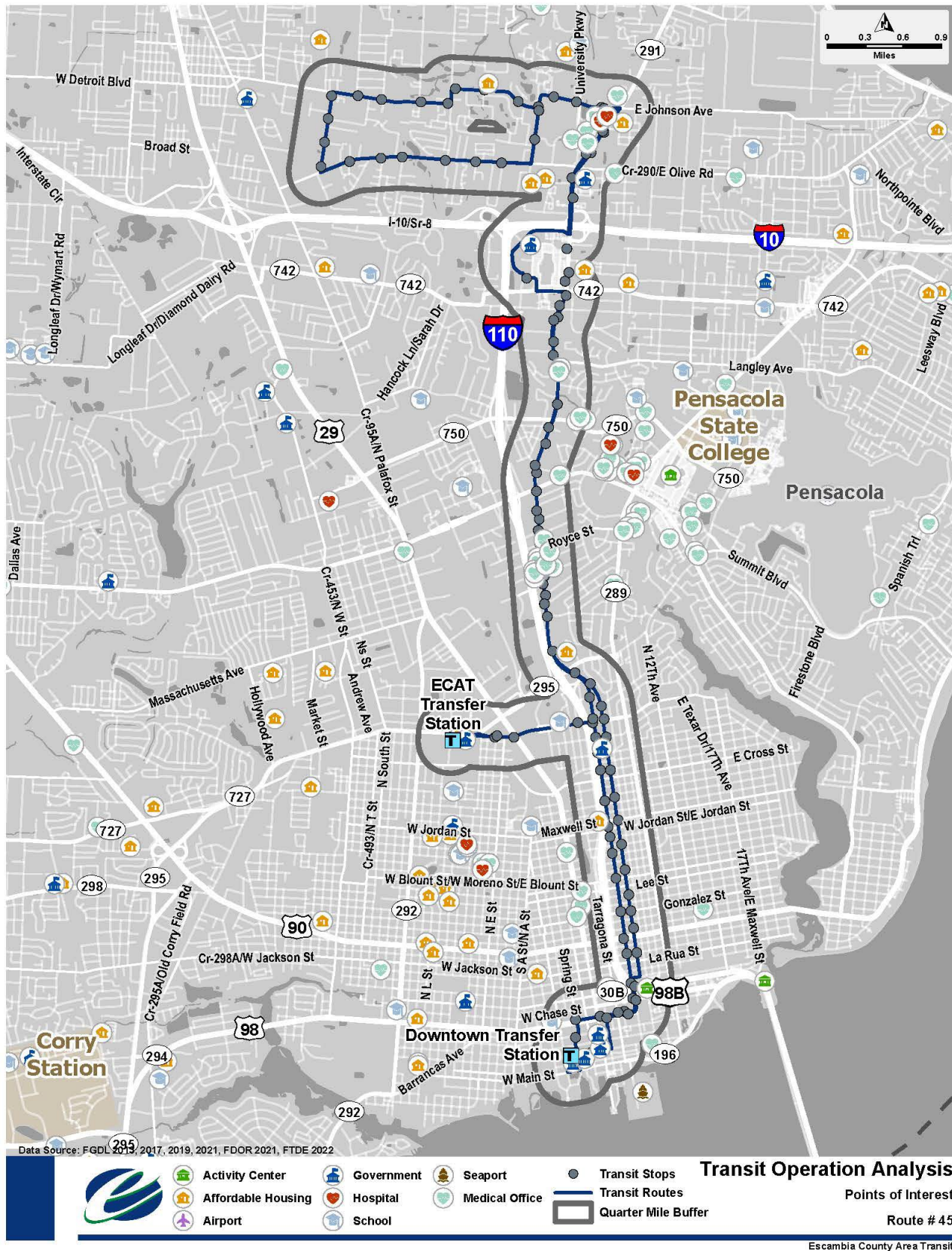
Population & Employment Density

Route # 45



⁵ Population and employment data is from the transportation analysis zones (TAZ's) of the NWFRPM, projected from 2015 to 2020. Ridership with a red outline denotes overlapping service with other routes.

PATRONAGE

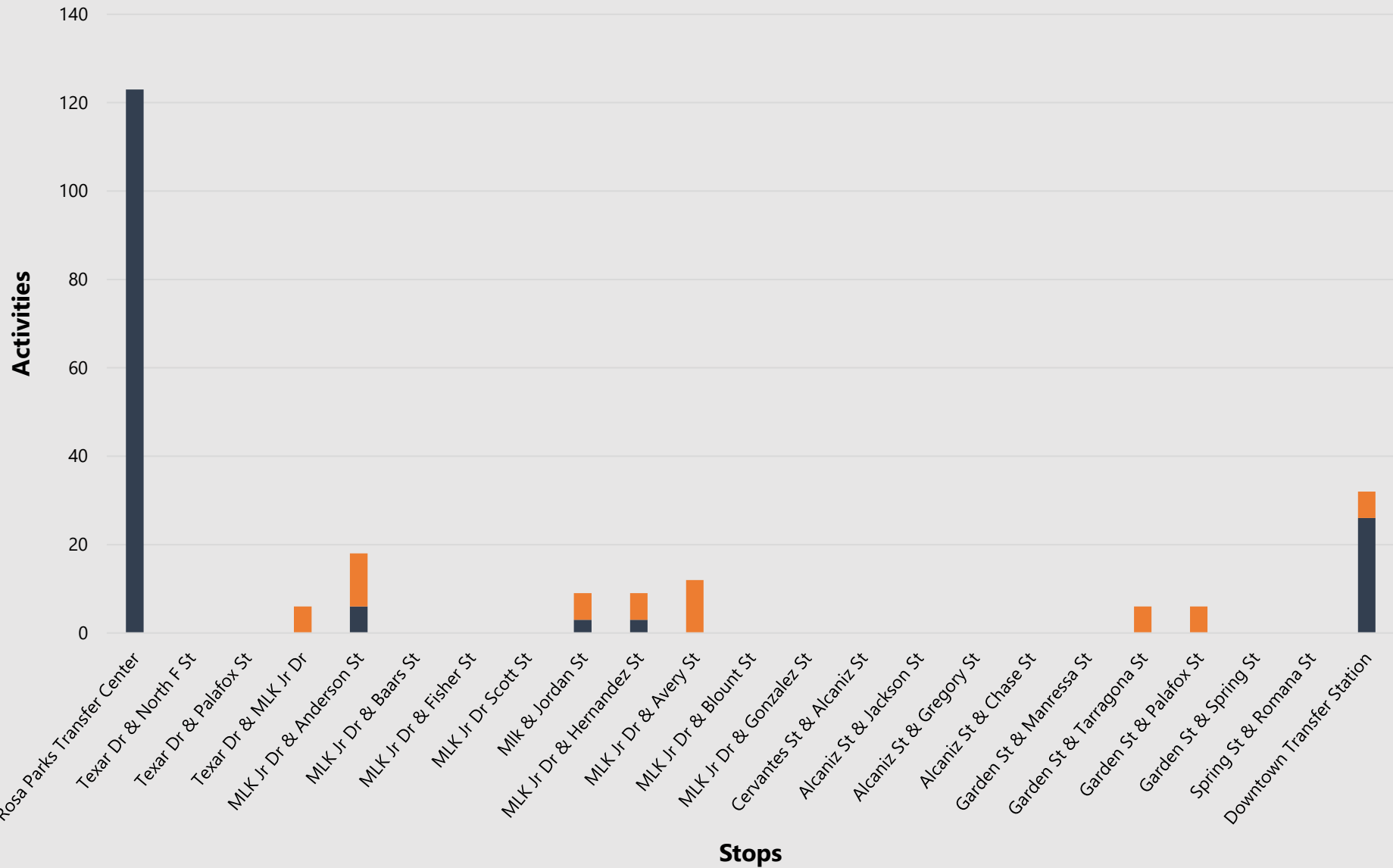
Activity Centers⁶

⁶ Points of Interest data is from the Florida Geographic Data Library (FGDL) 2013 - 21, and Florida Department of Revenue (FDOR) 2021.

RIDERSHIP TRENDS BY STOP (Weekday)⁷

Outbound

■ Boardings ■ Alightings

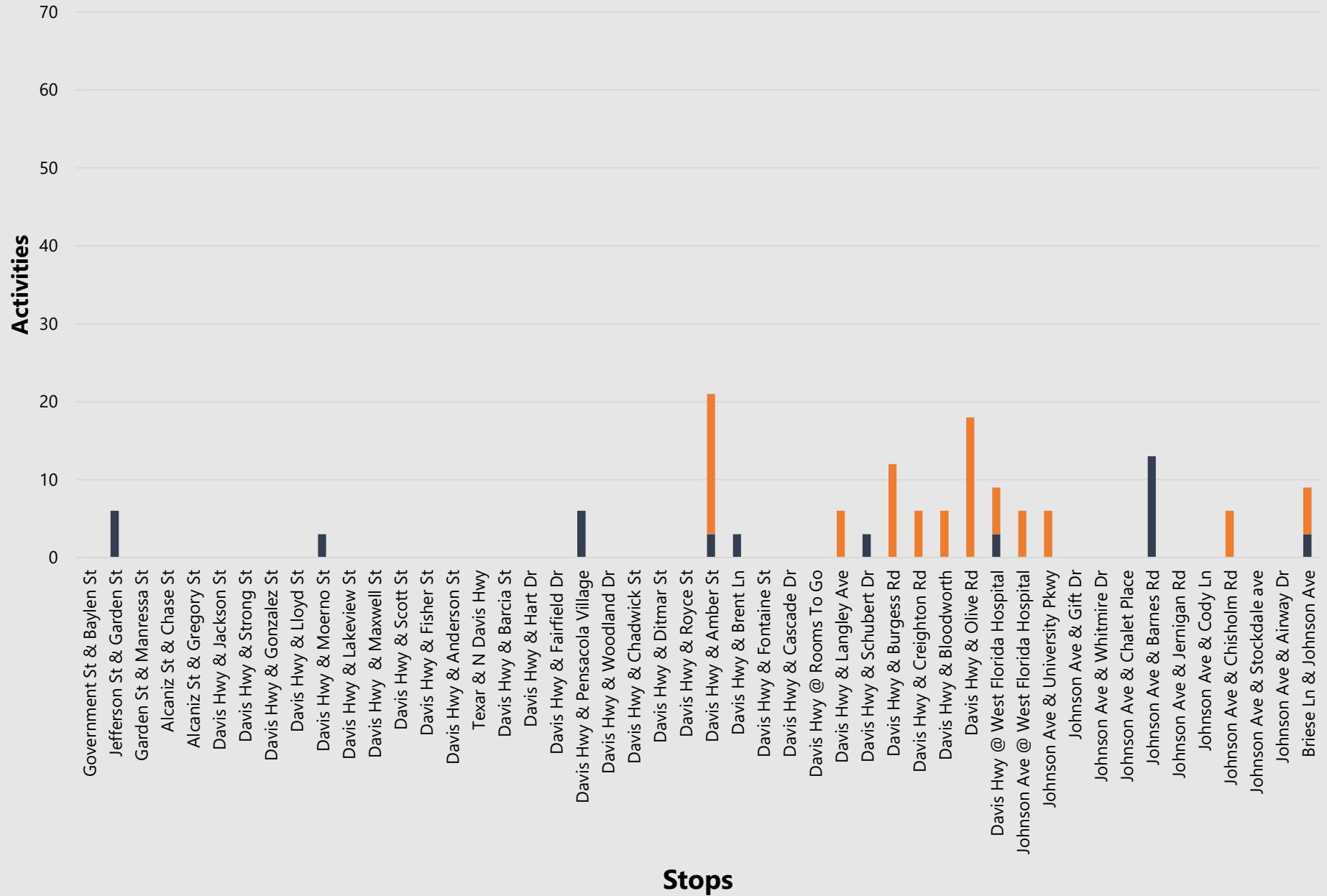


⁷ 0 activities does not mean no activity; it just means that no activity was reported during the sample period or runs. Route 45 ridership by stop data was sampled from 5 total runs.

Route 45: Davis Highway

Outbound (Continued)

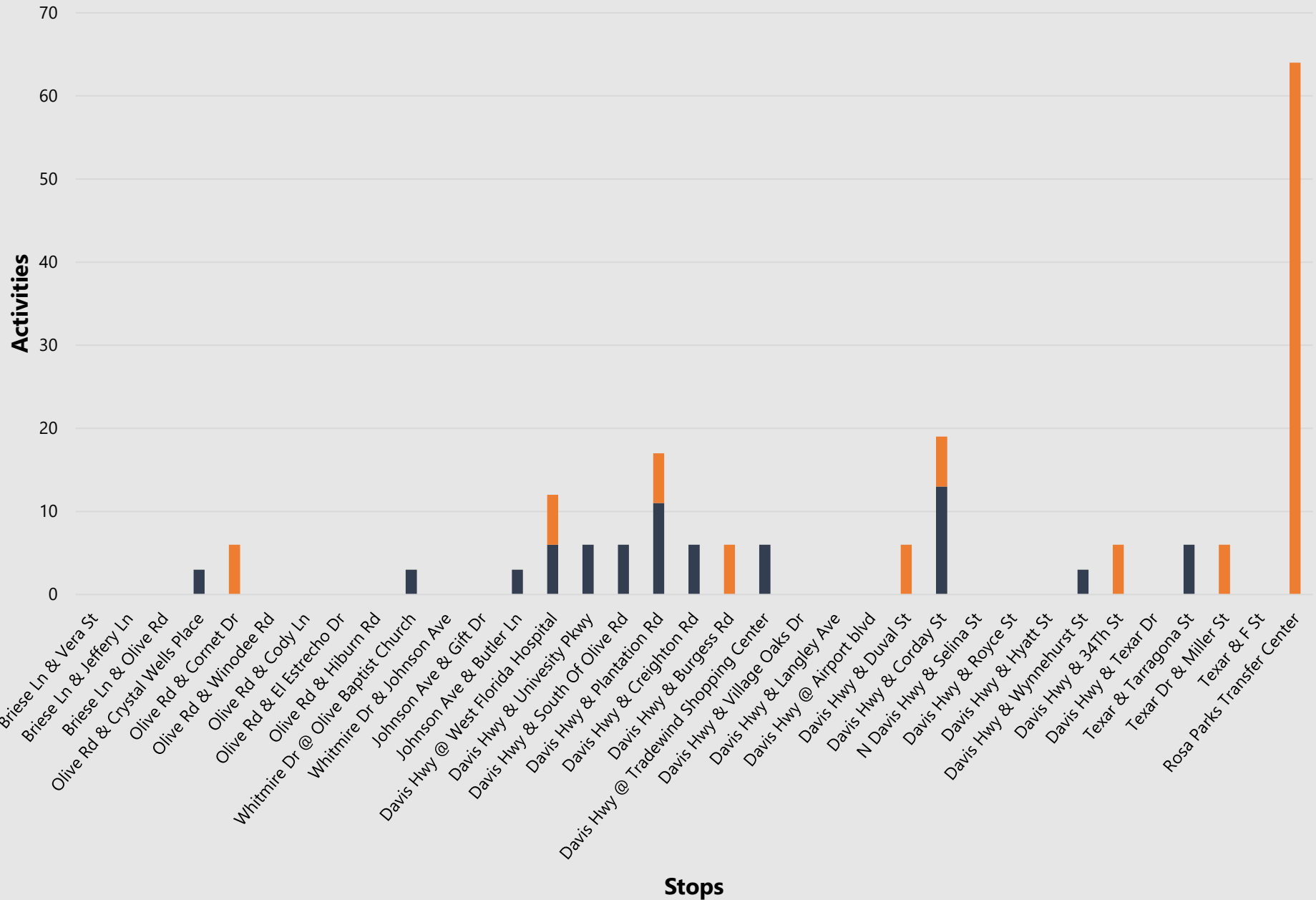
■ Boardings ■ Alightings



Route 45: Davis Highway

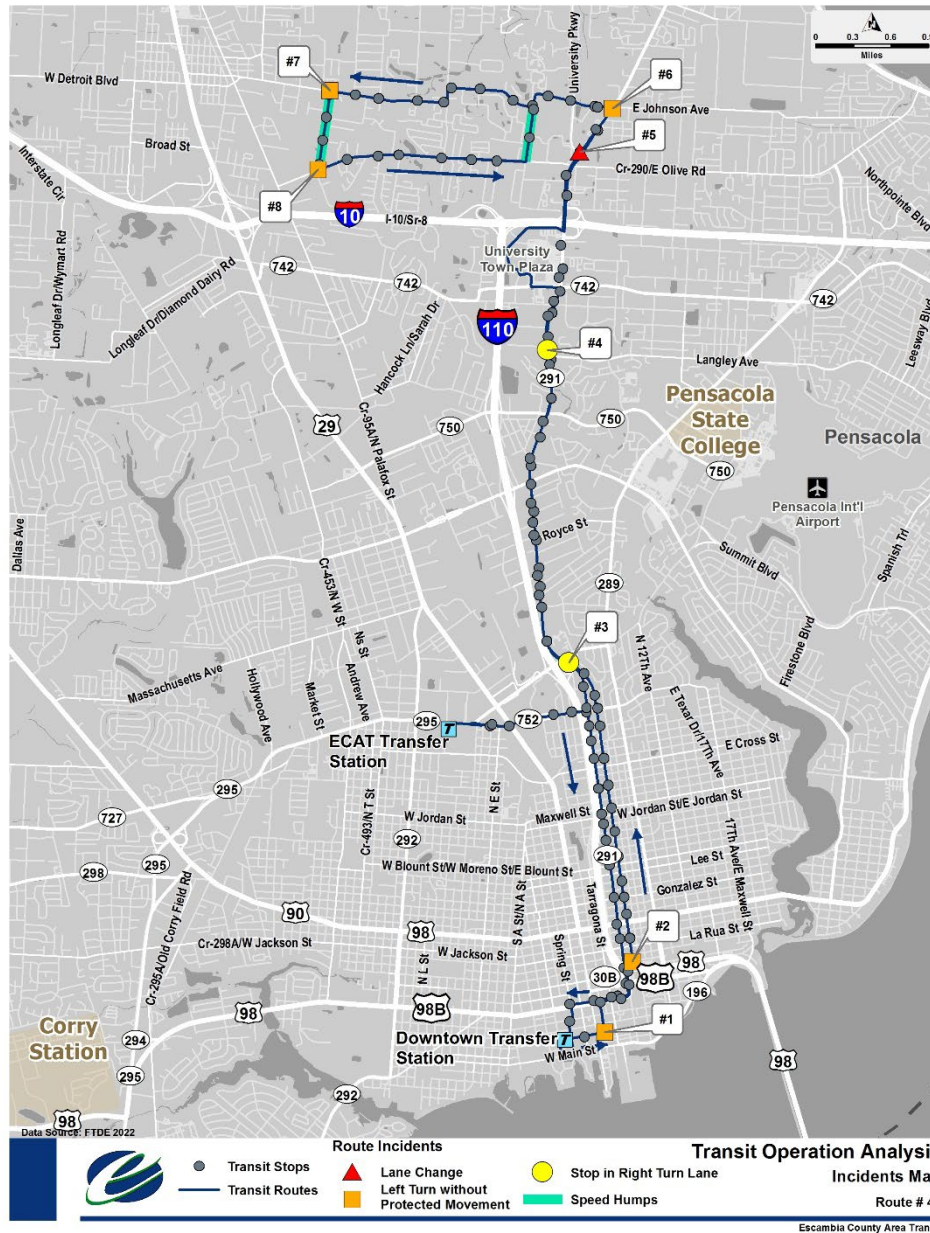
Inbound

Boardings Alightings



ROUTE INCIDENTS

Observations



#	Type	Description
1	Left Turn without Protected Movement	Unprotected left turn
2	Left Turn without Protected Movement	Unprotected left turn
3	Stop in Right Turn Lane	Stop in right turn lane
4	Stop in Right Turn Lane	Stop in right turn lane
5	Lane Change	Lane change required
6	Left Turn without Protected Movement	Unprotected left turn
7	Left Turn without Protected Movement	Unprotected left turn
8	Left Turn without Protected Movement	Unprotected left turn

ROUTE ASSESSMENT**Service Alignment**

Route 45 service begins at the Rosa Parks Transit Complex, heads east along Fairfield Drive, then south along Dr. Martin Luther King Drive to the Downtown Transfer Center before heading back north along Davis Highway. The route utilizes Davis Highway going north all the way to Johnson Avenue, taking Johnson Avenue west before heading back south and then east via Briese Lane and Olive Road. The route takes Davis Highway south to terminate at the Rosa Parks Transit Complex.

System Interaction and Transfer Opportunities

At the Rosa Parks Transit Complex, patrons can transfer from Route 45 to routes 1, 2, 32, 44, 47, 48, 50, 51, 52, 55, 60, and 61. Route 45 shares a portion of its Fairfield Drive alignment with Route 32. Route 45 also shares a portion of its Davis Highway alignment with Route 43. The route shares much of its downtown alignment with several other routes, and patrons can transfer from Route 45 to routes 2, 31, 32, 44, 48, 57, 58, and 61 via the Downtown Transfer Center.

Route Utility

There are high concentrations of activity centers adjacent to the Rosa Parks Transit Complex and Downtown Transfer Center that are served by Route 45. There is also a concentration of activity centers along Davis Highway between its intersection with Palisades Road and intersection with I-10 being served by Route 45. These three locations, the Rosa Parks Transit Complex, Downtown Transfer Center, and Davis Highway alignment, have some of highest density of population and employment and represent all but two of the top 10 highest ridership stops.

Observations

Compared to the other routes, Route 45 is noted as being very long. There are several unprotected left turns noted along the route on the Incidents Map. Number 6 on the map is a particularly dangerous unprotected left turn. The route utilizes Davis Highway and Plantation Road to serve the University Town Plaza shopping center. Along the northern portion of the route beginning at the intersection of Davis Highway and E Johnson Avenue, there are also several speed humps on the more residential streets.

ROUTE 47: BELLVIEW TO MONTCLAIR							
Characteristics ¹		Weekday		Saturday		TOP 10 STOPS	
Span of Service		5:30 am – 6:55 pm		6:30 am – 5:55 pm		Avg. Weekday Activity ²	
Frequency		Once every hour		Once every 2 hours		Rosa Parks Transfer Center	115
Cycle Time		85 min		85 min			
Route Distance		23.0 miles		23.0 miles		Chellie Rd	19
Avg. Operating Speed		16.2 mph		16.2 mph			
Number of Buses		2		1			
Operating Statistics		Weekday		Saturday			
Round Trips per Day		13		6		Massachusetts Ave & Hollywood Ave	15
Annual Revenue-Miles		75,247		6,891			
Annual Revenue-Hours		4,641		425			
Annual Deadhead Hours		0		0		Longleaf Dr @ Community Dr	11
Annual Deadhead %		0%		0%			
Demographic Data ³		Within ¼-mile of stops					
Population		14,421	Seniors	2,156		Pine Forest Rd @ Pine Forest Dr	11
Jobs		6,096	Youth	3,313			
Poverty		2,737	W/ Disabilities	1,243			
Minority		6,539	No Vehicles	395		Mobile Hwy & Michigan Ave	7
Service Productivity		Weekday		Saturday			
Avg. Daily Ridership		141		65		Pine Forest Rd & Godwin Ln	7
Riders/Revenue-Hour		7.7		7.6			
Riders/Revenue-Mile		0.5		0.5			
Riders/Round Trip		10.8		10.8			
Financial Performance		Overall	Weekday	Saturday			
Avg. Daily Revenue		\$106.4	\$128.2	\$59.1		Mobile Hwy & Bellview Ave	7
Subsidy/Revenue-Hour		\$110.7	\$113.8	\$104.1			
Subsidy/Revenue-Mile		\$6.8	\$7.0	\$6.4		Truman Ave & Andrews Ave	7
Subsidy/Round Trip		\$156.8	\$161.2	\$147.4			
Daily Operating Cost		\$1,819.3	\$2,223.3	\$943.8		L St & Herman St	5
Cost/Rider		\$15.4	\$15.8	\$14.5			
Farebox Recovery Ratio		5.9%	5.8%	6.3%			
Subsidy/Rider		\$14.5	\$14.9	\$13.6			
On-Time Performance ⁴				Weekday			
Time Period		Early		On-Time		Late	
Overall		20%		60%		20%	

¹ Characteristics come from the Summer 2022 schedule in ECAT's Optibus account, the February 2022 General Transit Specification Feed (GTFS) in the Florida Geographic Data Library (FGDL), and ECAT's June 2021 Ride Guide.

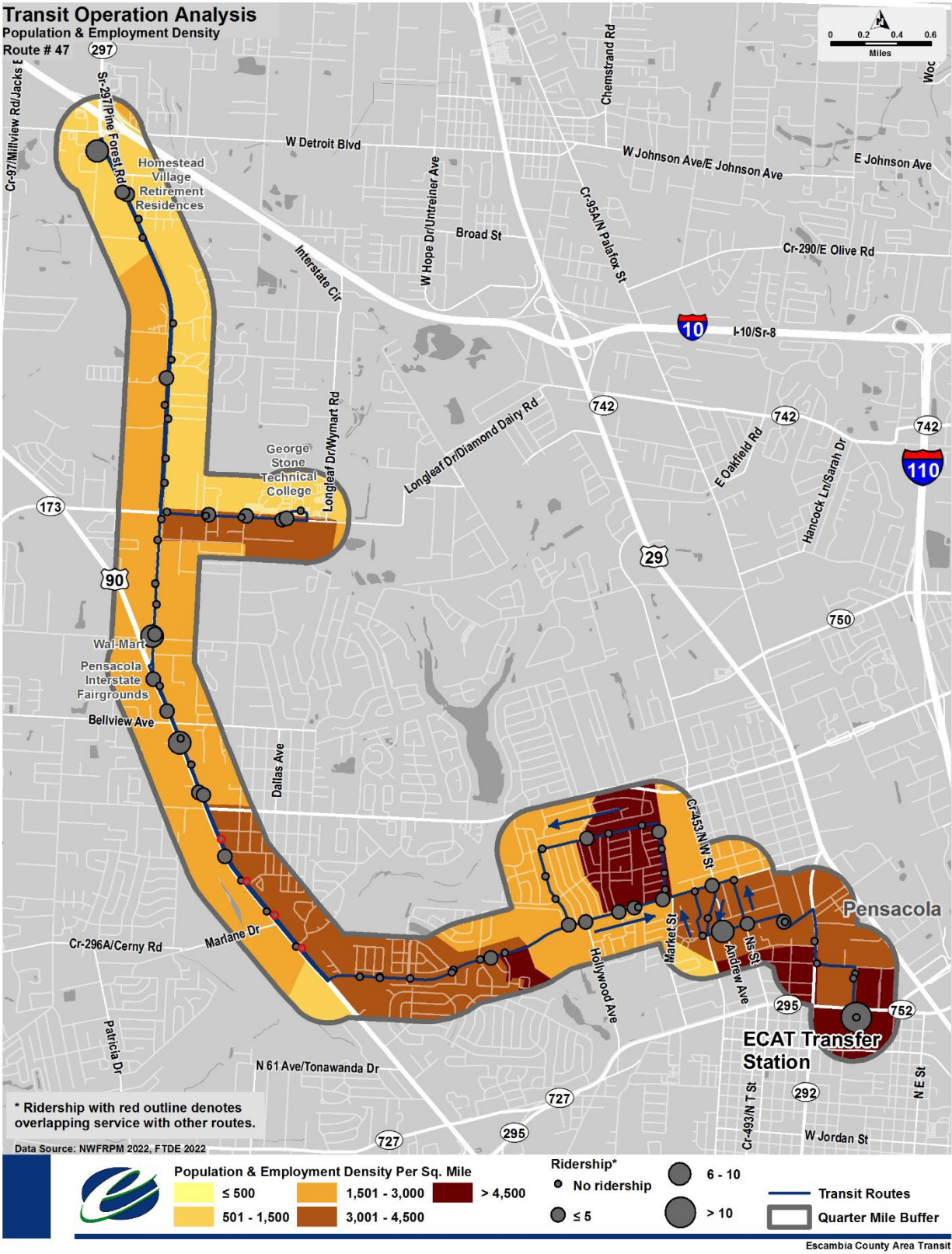
² Stop-level ridership data is based on random sampling in August to November 2022, calibrated to FY2022 annual route-level weekday ridership volumes.

³ Jobs information is from the Northwest Florida Regional Planning Model (NWRPM), in which 2015 data is projected to 2020. All other demographics are from the 2020 American Community Survey (ACS) administered by the United States Census Bureau.

⁴ On-time is defined as between 0 minutes early and 5 minutes late.

DEMOGRAPHICS

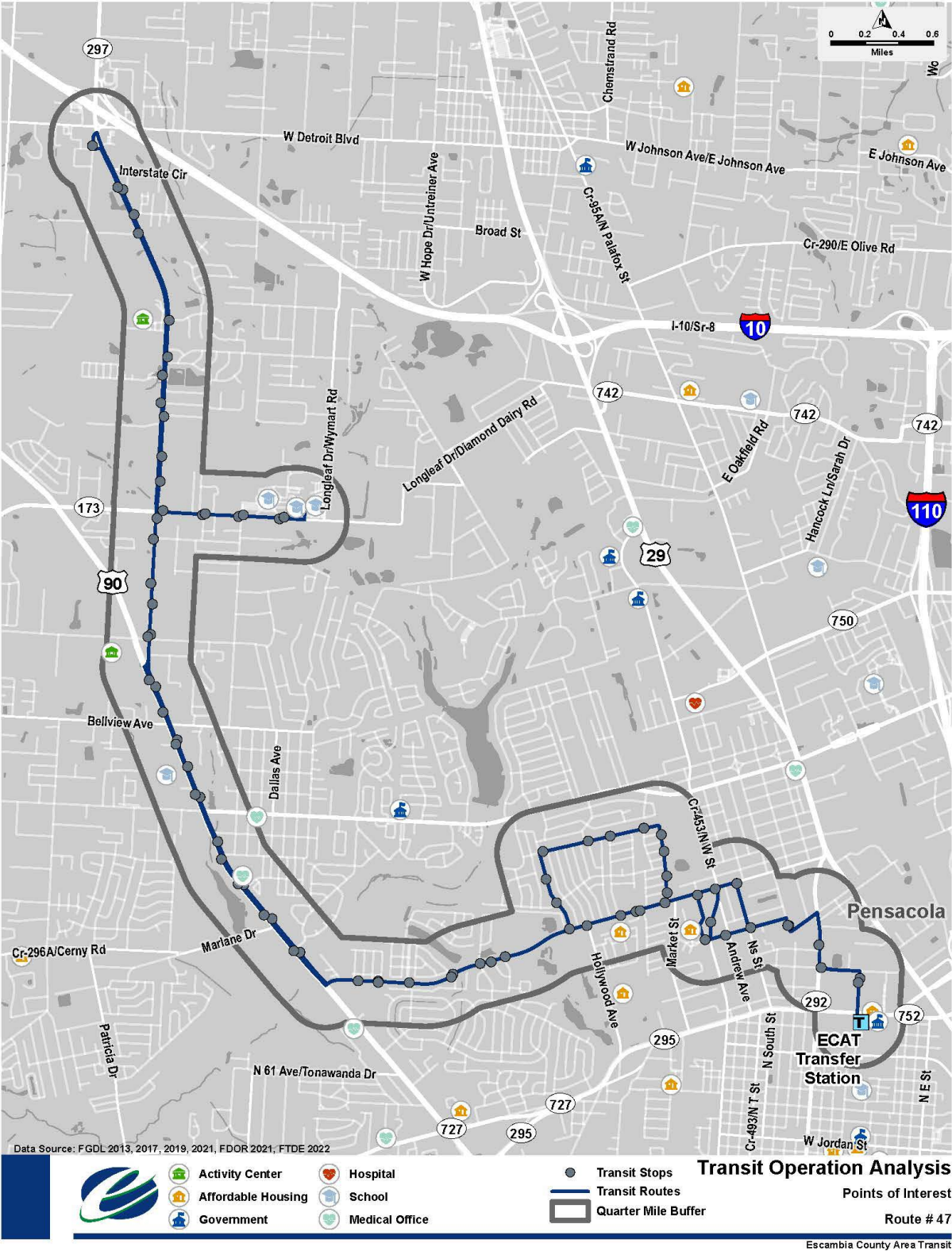
Population + Employment Density and Ridership (2020)⁵



⁵ Population and employment data is from the transportation analysis zones (TAZ's) of the NWFRPM, projected from 2015 to 2020. Ridership with a red outline denotes overlapping service with other routes.

PATRONAGE

Activity Centers⁶

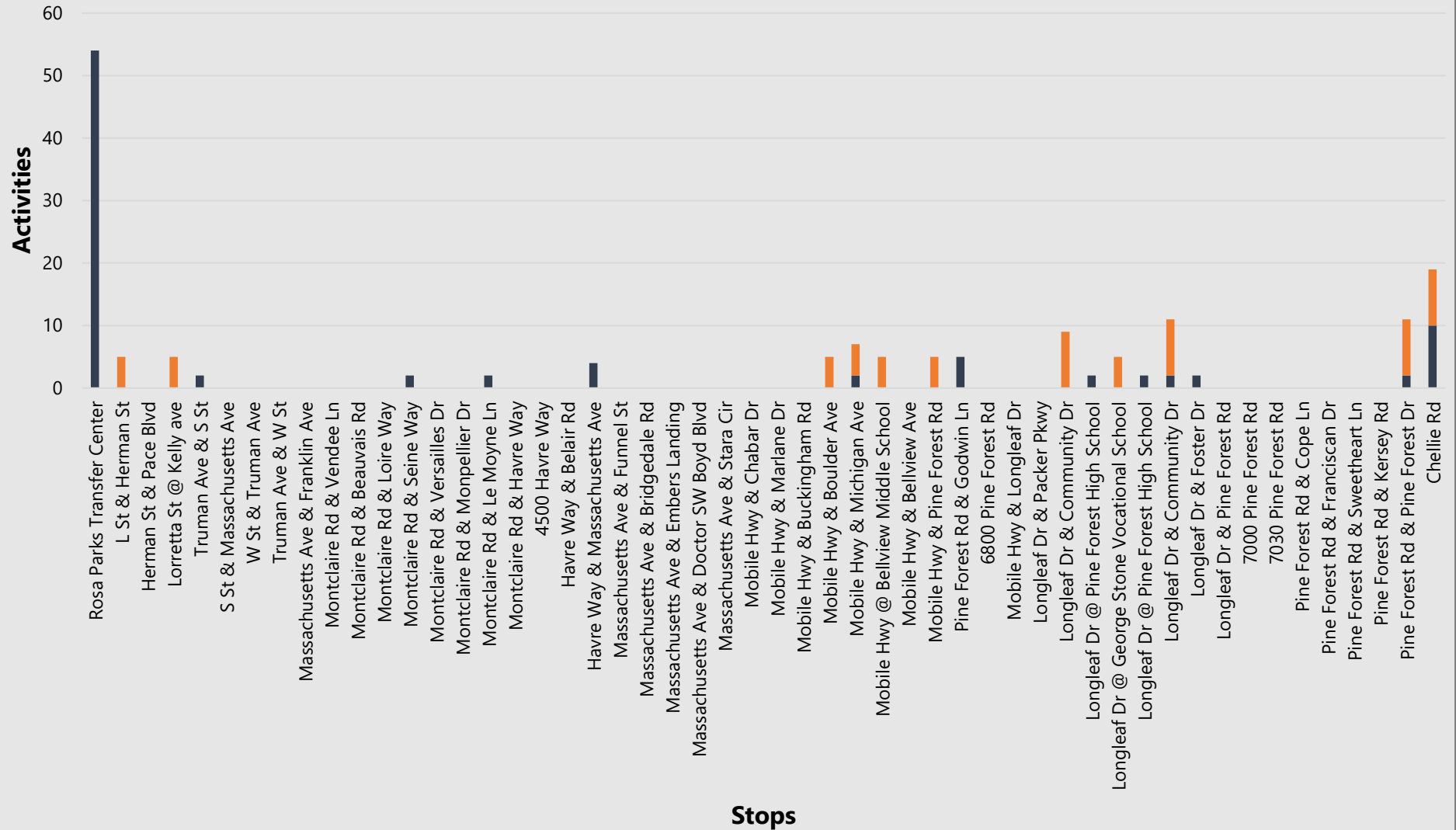


⁶ Points of Interest data is from the Florida Geographic Data Library (FGDL) 2013 - 21 and Florida Department of Revenue (FDOR) 2021.

RIDERSHIP TRENDS BY STOP (Weekday)⁷

Outbound

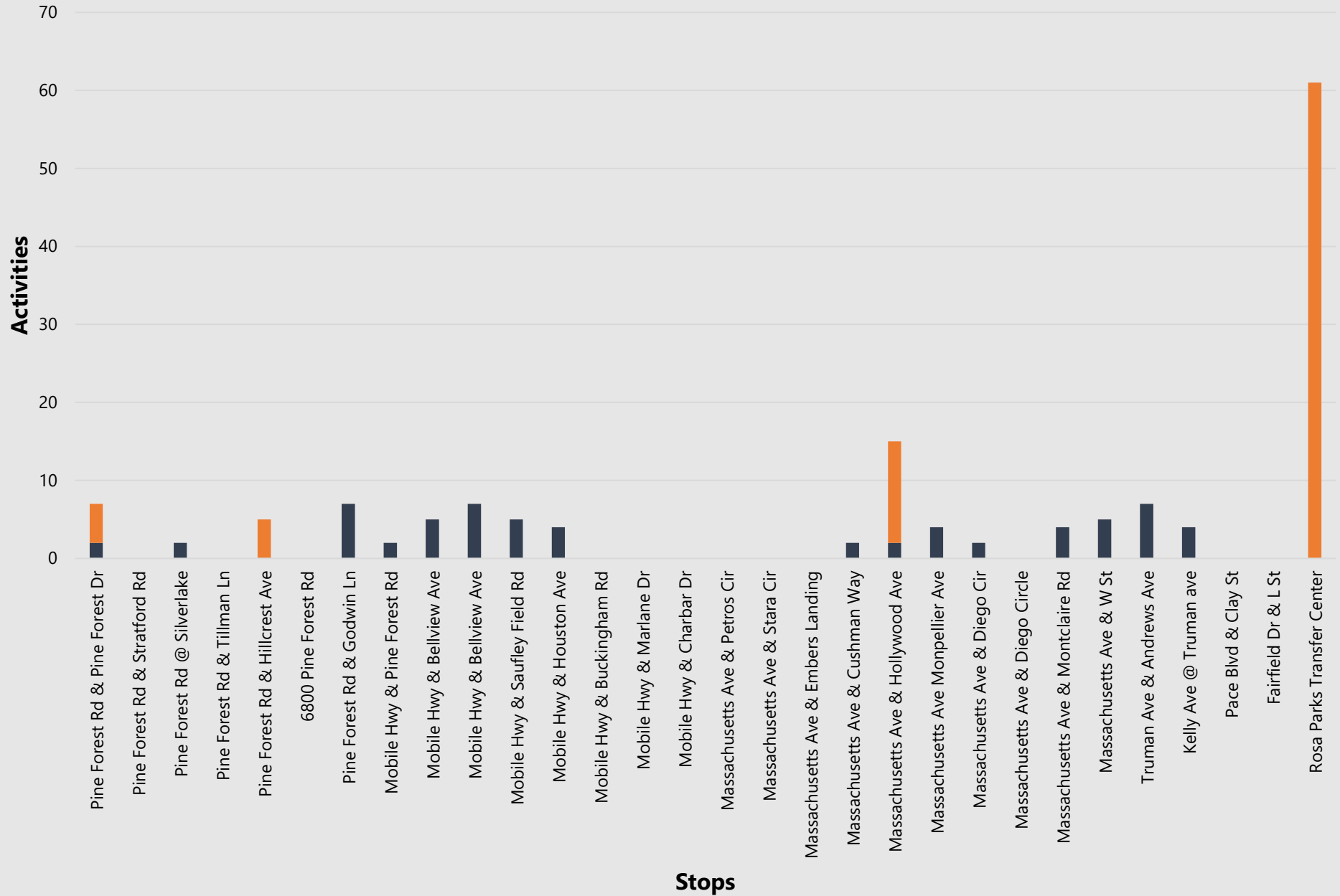
Boardings Alightings

⁷ 0 activities does not mean no activity; it just means that no activity was reported during the sample period or runs. Route 47 ridership by stop data was sampled from 5 total runs.

Route 47: Bellview to Montclair

Inbound

■ Boardings ■ Alightings



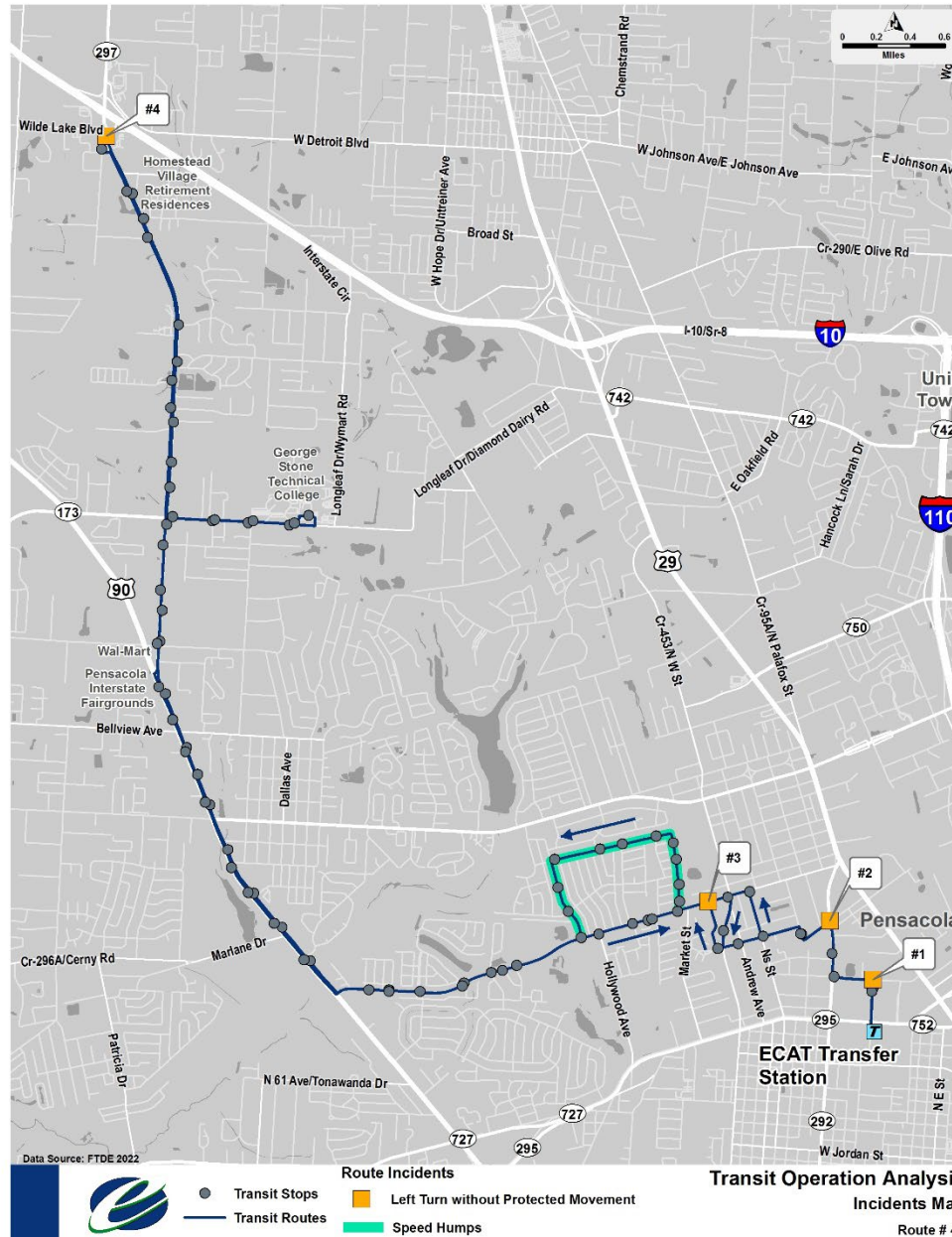
ROUTE INCIDENTS

Observations

#

Type

Description



1

Left Turn
without
Protected
Movement

Unprotected left turn

2

Left Turn
without
Protected
Movement

Unprotected left turn

3

Left Turn
without
Protected
Movement

Unprotected left turn

4

Left Turn
without
Protected
Movement

Unprotected left turn

ROUTE ASSESSMENT**Service Alignment**

Route 47 service begins at the Rosa Parks Transit Complex, then heads northwest to Massachusetts Avenue. From here, the route goes north on Mobile Highway and Pine Forest Road up to I-10. The route then returns to the Rosa Parks Transit Complex.

System Interaction and Transfer Opportunities

At the Rosa Parks Transit Complex, patrons can transfer from Route 47 to routes 1, 2, 32, 44, 45, 48, 50, 51, 52, 55, 60, and 61.

Route Utility

There are a lot of activity centers near the Rosa Parks Transit Complex that are served by Route 47. There are also a couple activity centers adjacent the route on the northern portion of its alignment. In addition to the Rosa Parks Transit Complex, the other highest density of population and employment on the route is along Massachusetts Avenue between Havre Way and Montclair Road. This area has the Route's #7, #9, and #10 highest ridership stops, and include an elementary school and a few apartment buildings including two affordable housing complexes.

Observations

There are a significant number of speed humps noted along Route 47, particularly along E Montclair Road and Havre Way. As the route extends north on Pine Forest Road past Longleaf Drive, there are very few activity centers to be served. Along Longleaf Drive, George Stone Technical College is noted as an important location. The northern tip of the route on Pine Forest Road approaching I-10 and the junction of Mobile Highway and Pine Forest Road have high ridership but low density of population and employment. While the northern tip of the route does not have a high density of population and employment, it does serve the Homestead Village Retirement Residences as well as a large group of hotels. At the junction of Mobile Highway and Pine Forest Road are the Pensacola Interstate Fairgrounds and a Walmart store.

ROUTE 48: BAPTIST HOSPITAL TO MC BLANCHARD							
Characteristics ¹		Weekday		Saturday		TOP 10 STOPS	
Span of Service	5:30 am – 7:25 pm		6:30 am – 5:25 pm		Avg. Weekday Activity ²		
Frequency	Once every hour		Once every 2 hours		Rosa Parks Transfer Center	178	
Cycle Time	55 min		55 min				
Route Distance	13.3 miles		13.3 miles				
Avg. Operating Speed	14.5 mph		14.5 mph		Downtown Transfer Center	55	
Number of Buses	1		1				
Operating Statistics		Weekday		Saturday			
Round Trips per Day	14		6		L St & Moreno St	39	
Annual Revenue-Miles	46,746		3,975				
Annual Revenue-Hours	3,234		275				
Annual Deadhead Hours	0		0		E St & Lakeview St	33	
Annual Deadhead %	0%		0%				
Demographic Data ³		Within ¼-mile of stops					
Population	8,212	Seniors	1,198		E St & Avery St	20	
Jobs	23,272	Youth	1,722				
Poverty	1,786	W/ Disabilities	677				
Minority	4,359	No Vehicles	497		L St & Avery St	17	
Service Productivity		Weekday		Saturday			
Avg. Daily Ridership	116		50		Government St & C St	17	
Riders/Revenue-Hour	9.0		9.1				
Riders/Revenue-Mile	0.6		0.6				
Riders/Round Trip	8.3		8.3				
Financial Performance		Overall	Weekday	Saturday			
Avg. Daily Revenue	\$60.9	\$73.5	\$31.7		Pace Blvd & Garden St	12	
Subsidy/Revenue-Hour	\$105.8	\$107.9	\$100.9				
Subsidy/Revenue-Mile	\$7.3	\$7.5	\$7.0				
Subsidy/Round Trip	\$97.0	\$98.9	\$92.5		E St & Avery St	10	
Daily Operating Cost	\$1,197.0	\$1,458.5	\$586.8				
Cost/Rider	\$12.3	\$12.6	\$11.7		Maxwell St & A St	10	
Farebox Recovery Ratio	5.1%	5.0%	5.4%				
Subsidy/Rider	\$11.7	\$11.9	\$11.1				
On-Time Performance ⁴		Weekday					
<u>Time Period</u>	<u>Early</u>		<u>On-Time</u>		<u>Late</u>		
Overall	0%		25%		75%		

¹ Characteristics come from the Summer 2022 schedule in ECAT's Optibus account, the February 2022 General Transit Specification Feed (GTFS) in the Florida Geographic Data Library (FGDL), and ECAT's June 2021 Ride Guide.

² Stop-level ridership data is based on random sampling in August to November 2022, calibrated to FY2022 annual route-level weekday ridership volumes.

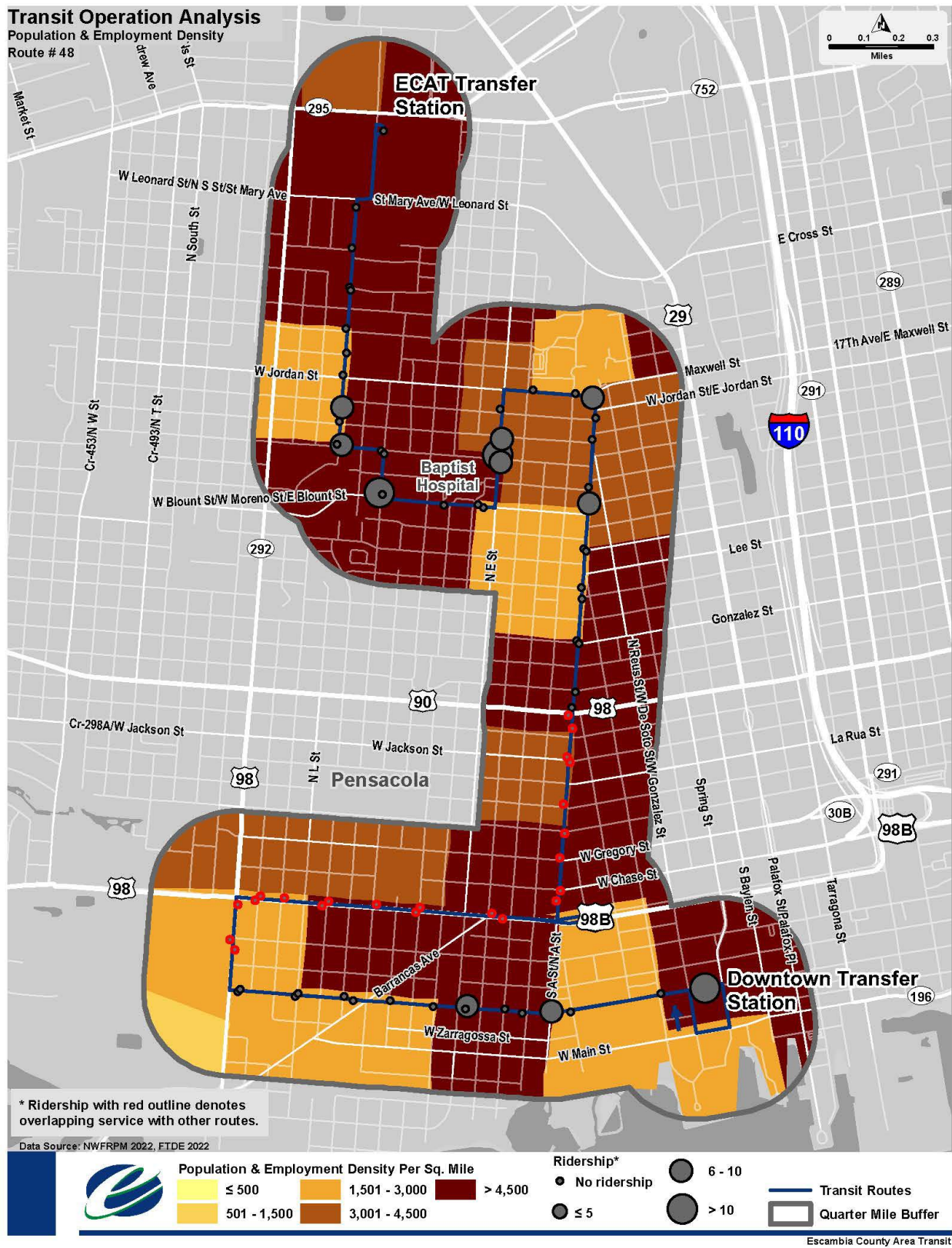
³ Jobs information is from the Northwest Florida Regional Planning Model (NWRPM), in which 2015 data is projected to 2020. All other demographics are from the 2020 American Community Survey (ACS) administered by the United States Census Bureau.

⁴ On-time is defined as between 0 minutes early and 5 minutes late.

DEMOGRAPHICS

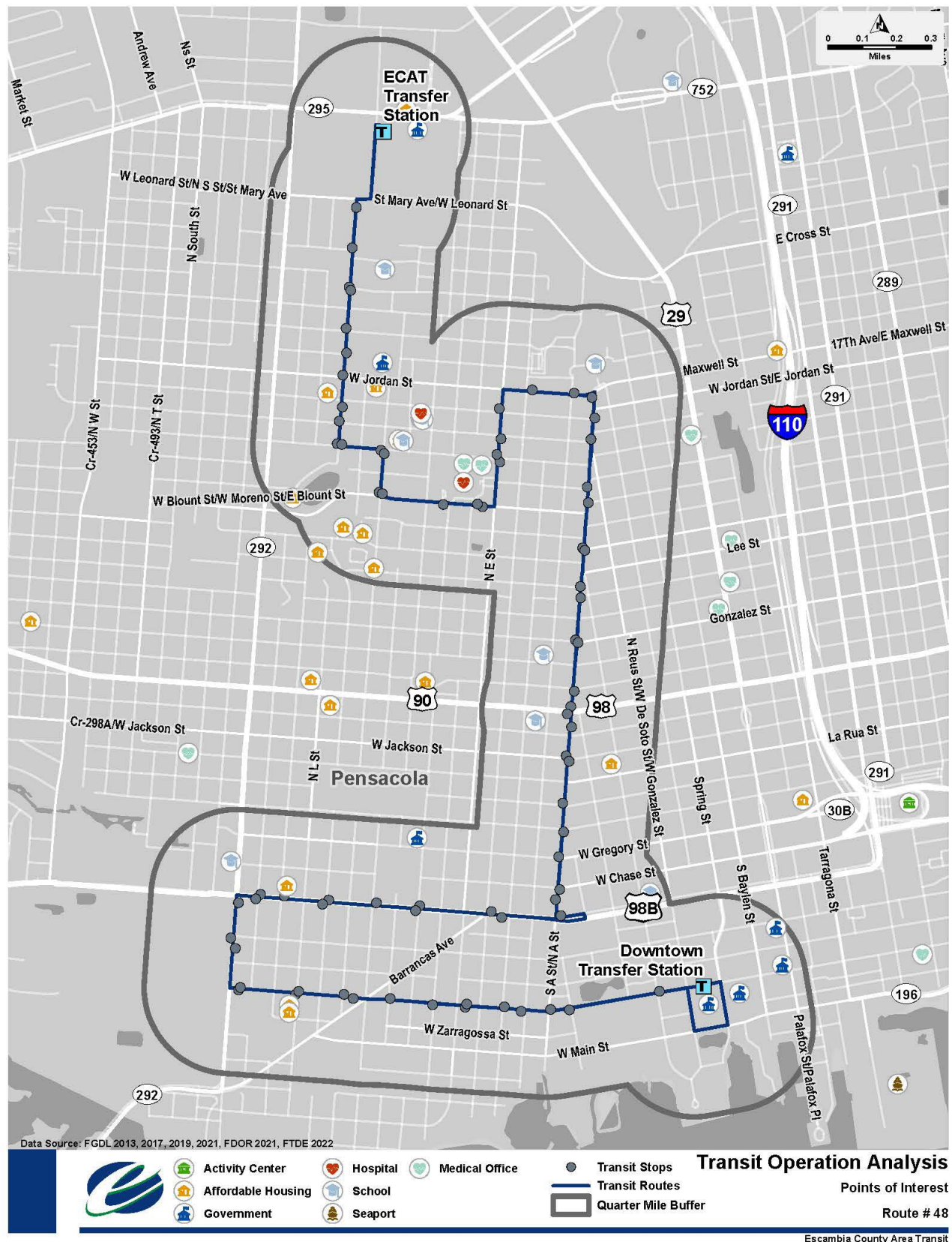
Population + Employment Density and Ridership (2020)⁵

Transit Operation Analysis

Population & Employment Density
Route # 48

⁵ Population and employment data is from the transportation analysis zones (TAZ's) of the NWFRPM, projected from 2015 to 2020. Ridership with a red outline denotes overlapping service with other routes.

PATRONAGE

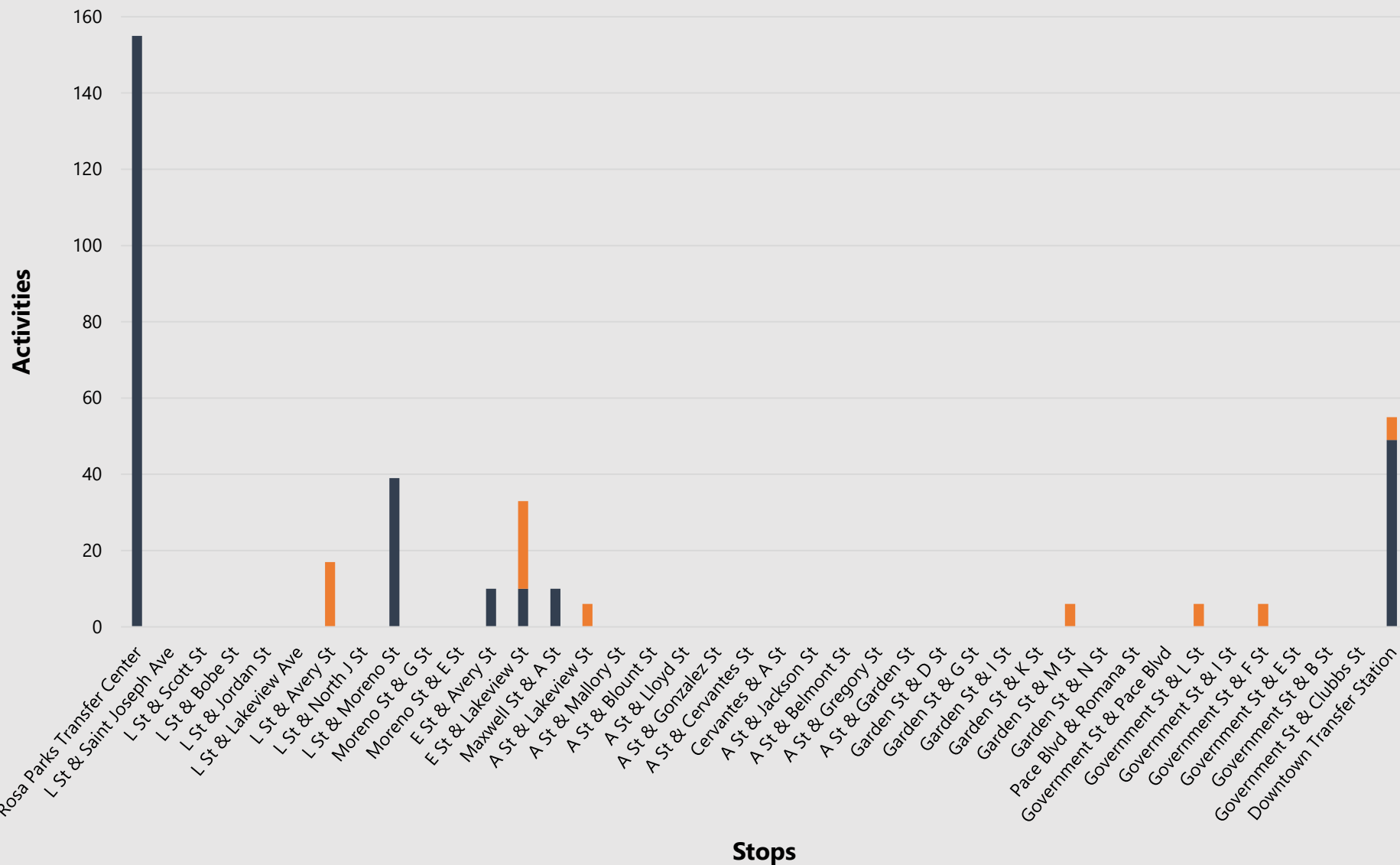
Activity Centers⁶

⁶ Points of Interest data is from the Florida Geographic Data Library (FGDL) 2013 – 21, and Florida Department of Revenue (FDOR) 2021.

RIDERSHIP TRENDS BY STOP (Weekday)⁷

Outbound

Boardings Alightings

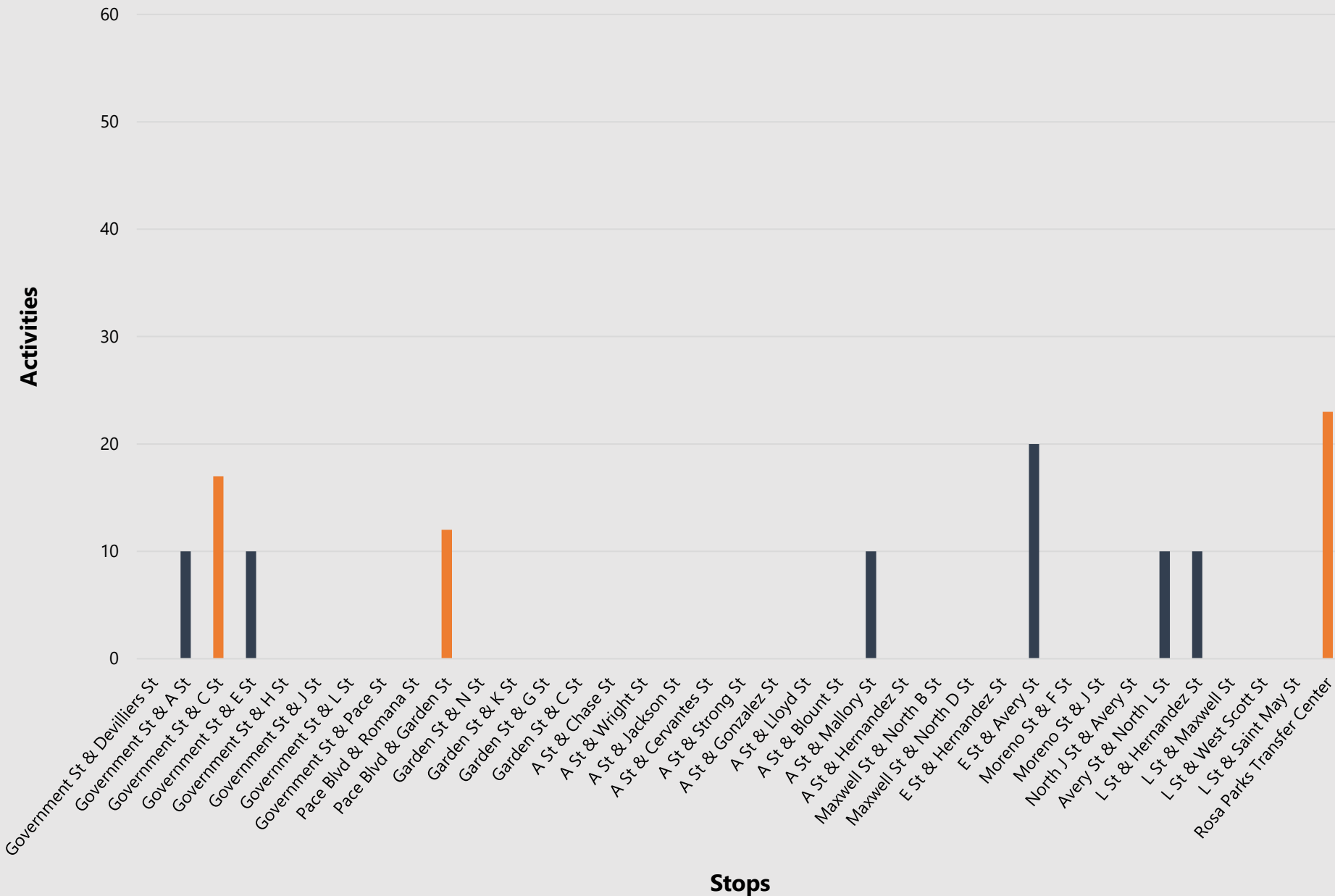


⁷ 0 activities does not mean no activity; it just means that no activity was reported during the sample period or runs. Route 48 ridership by stop data was sampled from 4 total runs.

Route 48: Baptist Hospital to MC Blanchard

Inbound

Boardings Alightings



ROUTE ASSESSMENT**Service Alignment**

Route 48 service begins at the Rosa Parks Transit Complex before heading south on L Street. After going east via Avery Street, Moreno Street, and Jordan Street, the route goes south on A Street. At the intersection of A Street and Garden Street, the route goes west to Pace Boulevard, then utilizes Government Street to get to the Downtown Transfer Center. From here the route goes north to return to the Rosa Parks Transit Complex.

System Interaction and Transfer Opportunities

At the Rosa Parks Transit Complex, patrons can transfer from Route 48 to routes 1, 2, 32, 44, 45, 47, 50, 51, 52, 55, 60, and 61. Route 48 shares a portion of its downtown alignment with routes 44, 55, 58, 59X, and 64. At the Downtown Transfer Center, patrons can transfer from Route 48 to routes 2, 31, 32, 44, 45, 57, 58, and 61.

Route Utility

In addition to the many activity centers near the Rosa Parks Transit Complex and Downtown Transfer Center served by Route 48, there is also a concentration of activity centers, including Baptist Hospital, along Moreno Street accessible via Route 48. There is consistently high population and employment density between the Rosa Parks Transit Complex and the area around Baptist Hospital as well as surrounding the Downtown Transfer Center. These three areas have the #1, #3, and #2 highest ridership stops of the Route, respectively.

Observations

Along Route 48's alignment, some redundancy was noted around the Garden Street, Pace Boulevard, Government Street loop. During fieldwork it was noted that this area might be better served by another route. Also noted is a tight turn along Jordan Street, as well as unprotected left turns (# 1 and #2 on the Incidents Map) at either end of this portion of the route's alignment, as well as an unprotected left turn (#3) on Avery Street. The northern portion of the route along L Street is noted as having speed humps that impede on the smoothness of the ride and impact the customer experience.

ROUTE 50: WEDGEWOOD TO LINCOLN PARK							
Characteristics ¹		Weekday		Saturday		TOP 10 STOPS	
Span of Service		5:00 am – 7:55 pm		6:00 am – 7:55 pm		Avg. Weekday Activity ²	
Frequency		Once every hour		Once every 2 hours		Rosa Parks Transfer Center	134
Cycle Time		115 min		115 min			
Route Distance		26.1 miles		26.1 miles		Hood Dr @ Advanced Auto Parts	19
Avg. Operating Speed		13.6 mph		13.6 mph			
Number of Buses		2		1			
Operating Statistics		Weekday		Saturday			
Round Trips per Day		14		7		Palafox St & Jacquelyn Way	15
Annual Revenue-Miles		92,076		9,134			
Annual Revenue-Hours		6,762		671		Palafox St & Murphy Ln	14
Annual Deadhead Hours		0		0			
Annual Deadhead %		0%		0%			
Demographic Data ³		Within ¼-mile of stops					
Population		9,296	Seniors	1,527		9 Mile Rd & Palafox St	13
Jobs		11,277	Youth	1,605			
Poverty		1,577	W/ Disabilities	692		Palafox St & Pace Blvd	10
Minority		4,873	No Vehicles	305			
Service Productivity		Weekday		Saturday			
Avg. Daily Ridership		161		81		Pensacola Blvd & Kenmore Rd	10
Riders/Revenue-Hour		6		6.03			
Riders/Revenue-Mile		0.4		0.4			
Riders/Round Trip		11.5		11.6			
Financial Performance		Overall	Weekday	Saturday			
Avg. Daily Revenue		\$111.0	\$133.1	\$67.0		Pensacola Blvd & Yoakum Ct	10
Subsidy/Revenue-Hour		\$104.1	\$106.3	\$99.6			
Subsidy/Revenue-Mile		\$7.6	\$7.8	\$7.3		Pensacola Blvd & W Oakfield Rd	8
Subsidy/Round Trip		\$199.5	\$203.8	\$191.0			
Daily Operating Cost		\$2,458.7	\$2,986.1	\$1,403.8		Hampton Rd & Wagner Rd	8
Cost/Rider		\$18.1	\$18.5	\$17.3			
Farebox Recovery Ratio		4.6%	4.5%	4.8%			
Subsidy/Rider		\$17.3	\$17.7	\$16.5			
On-Time Performance ⁴				Weekday			
Time Period		Early		On-Time		Late	
Overall		25%		25%		50%	

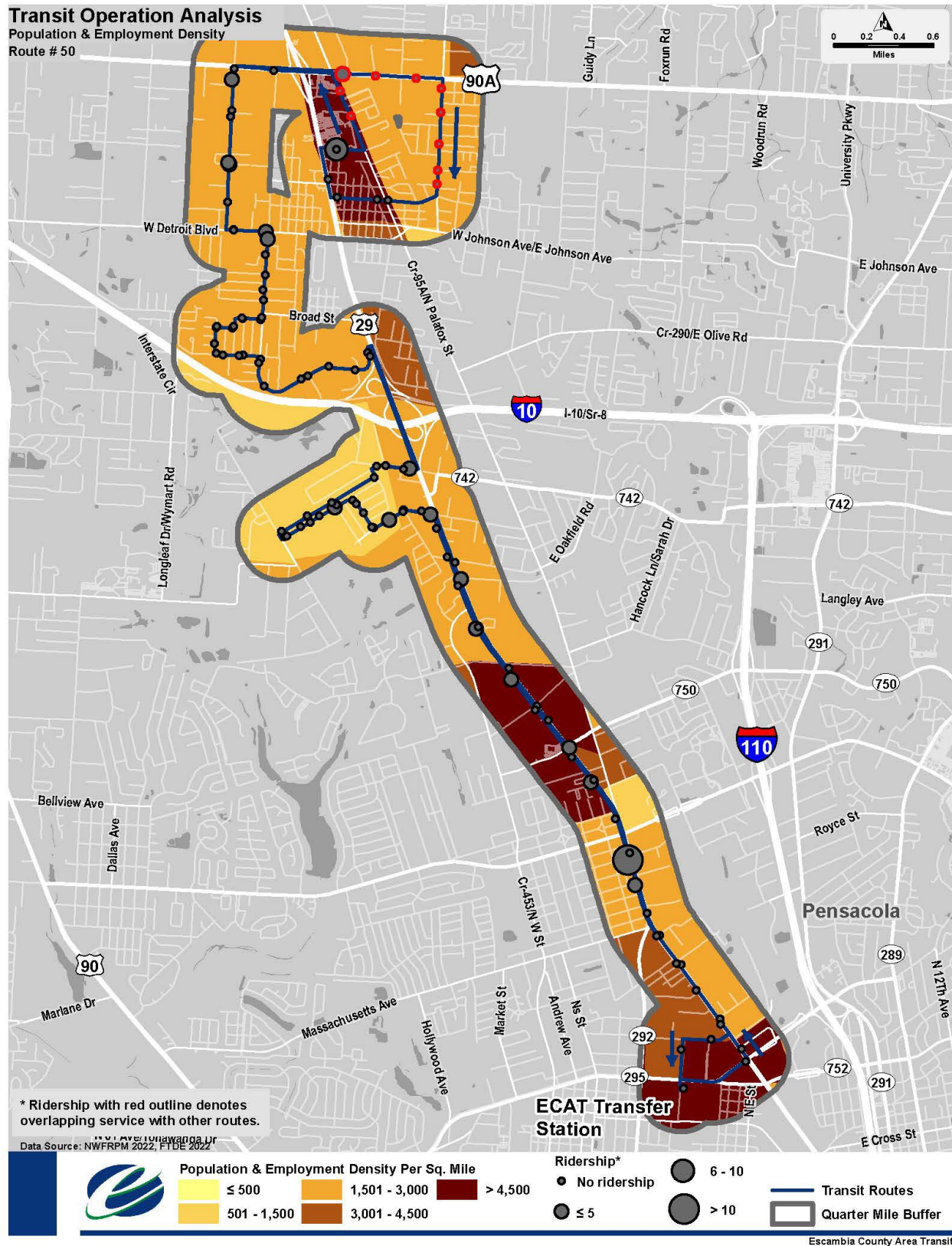
¹ Characteristics come from the Summer 2022 schedule in ECAT's Optibus account, the February 2022 General Transit Specification Feed (GTFS) in the Florida Geographic Data Library (FGDL), and ECAT's June 2021 Ride Guide.

² Stop-level ridership data is based on random sampling in August to November 2022, calibrated to FY2022 annual route-level weekday ridership volumes.

³ Jobs information is from the Northwest Florida Regional Planning Model (NWRPM), in which 2015 data is projected to 2020. All other demographics are from the 2020 American Community Survey (ACS) administered by the United States Census Bureau.

⁴ On-time is defined as between 0 minutes early and 5 minutes late.

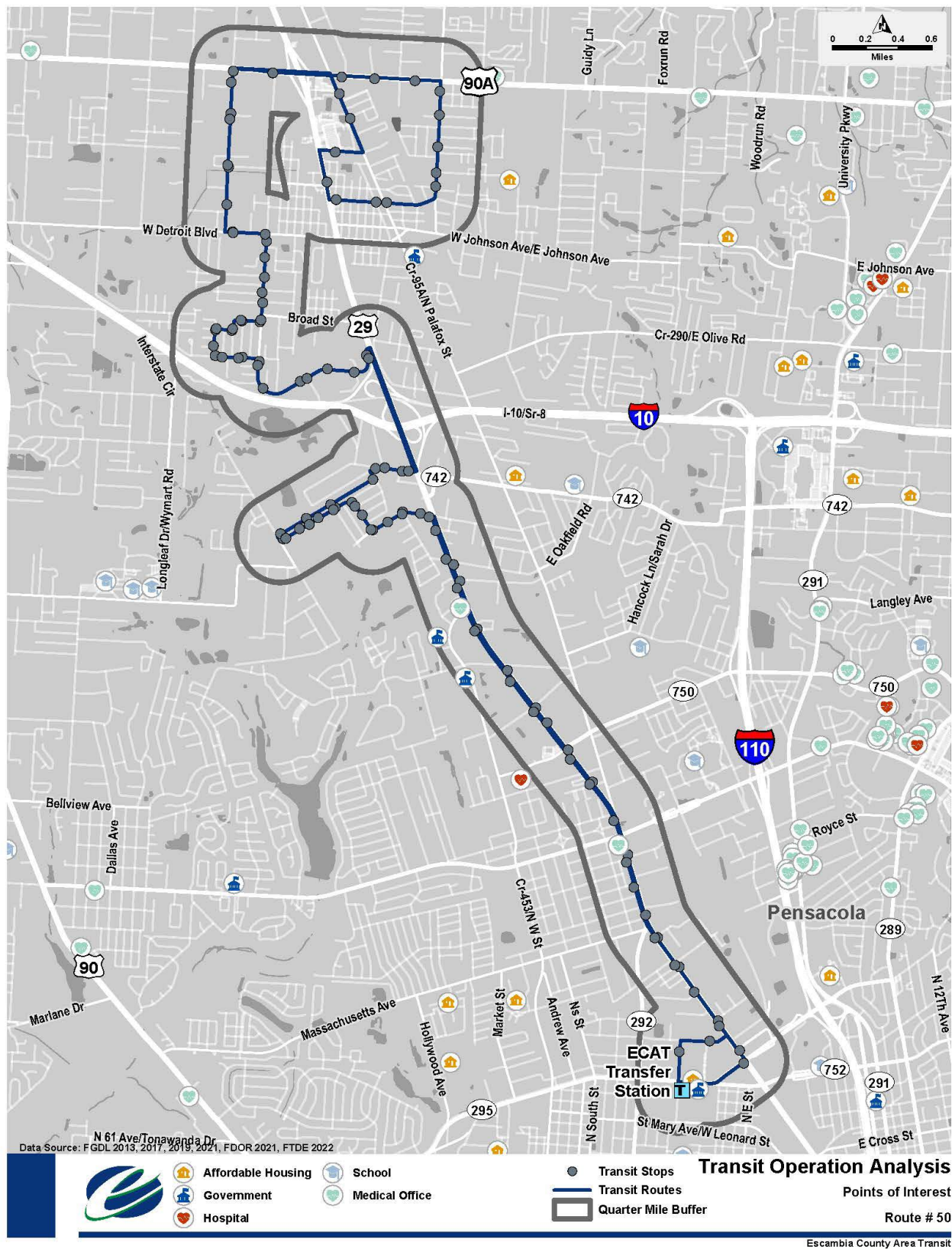
DEMOGRAPHICS

Population + Employment Density and Ridership (2020)⁵

⁵ Population and employment data is from the transportation analysis zones (TAZ's) of the NWFRPM, projected from 2015 to 2020. Ridership with a red outline denotes overlapping service with other routes.

PATRONAGE

Activity Centers⁶

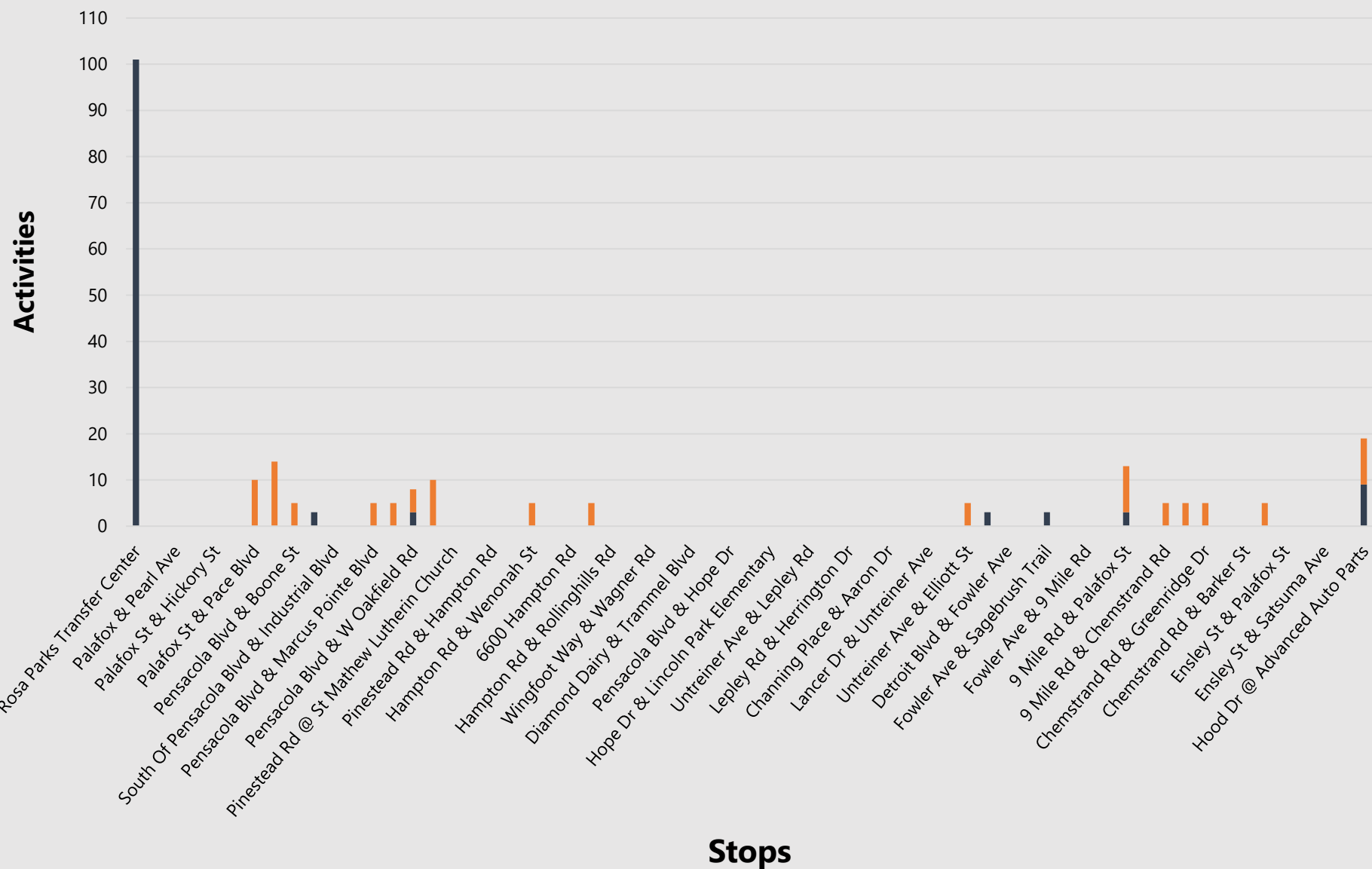


⁶ Points of Interest data is from the Florida Geographic Data Library (FGDL) 2013 - 21, and Florida Department of Revenue (FDOR) 2021.

RIDERSHIP TRENDS BY STOP (Weekday)⁷

Outbound

■ Boardings ■ Alightings

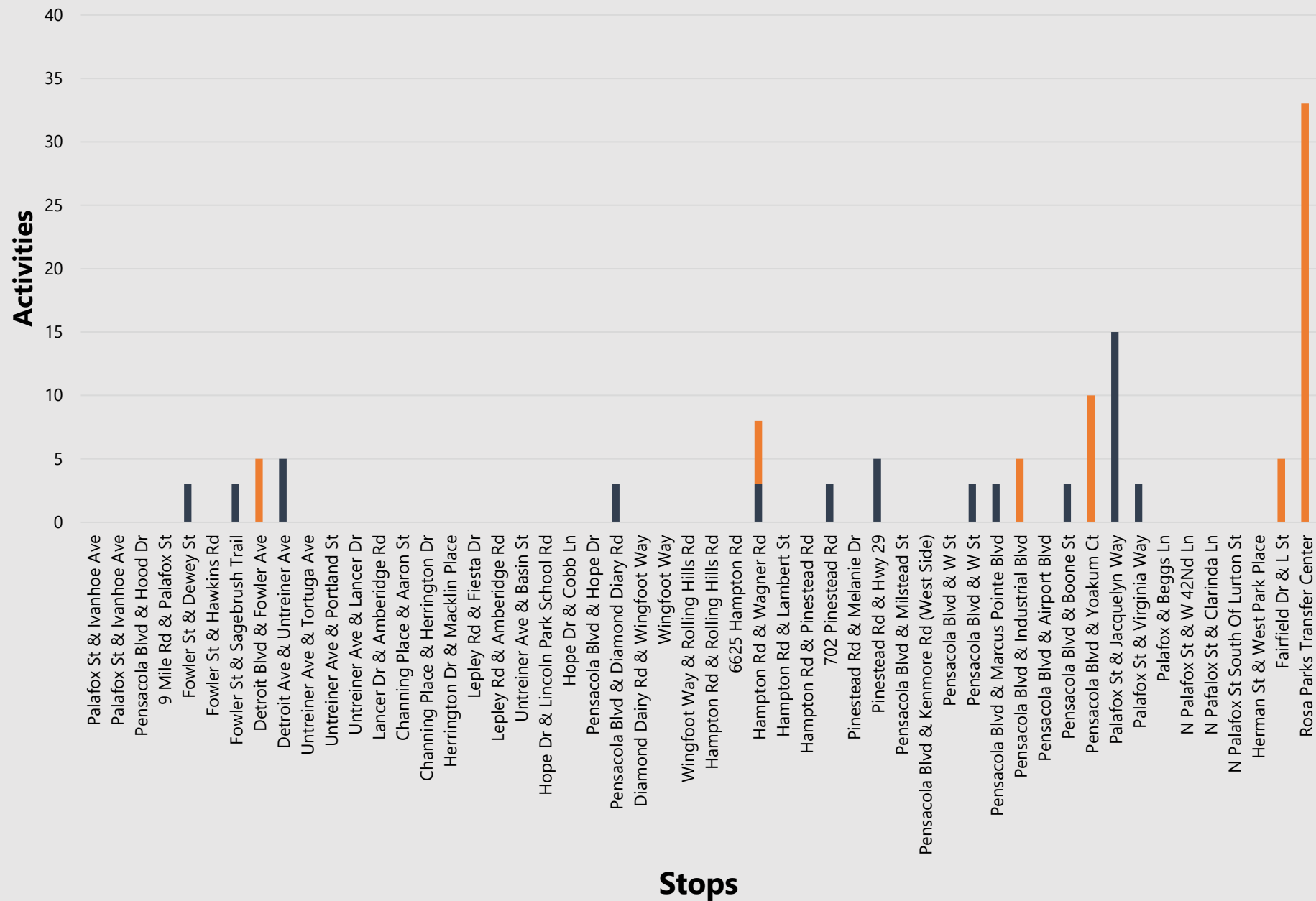


⁷ 0 activities does not mean no activity; it just means that no activity was reported during the sample period or runs. Route 50 ridership by stop data was sampled from 5 total runs.

Route 50: Wedgewood to Lincoln Park

Inbound

■ Boardings ■ Alightings



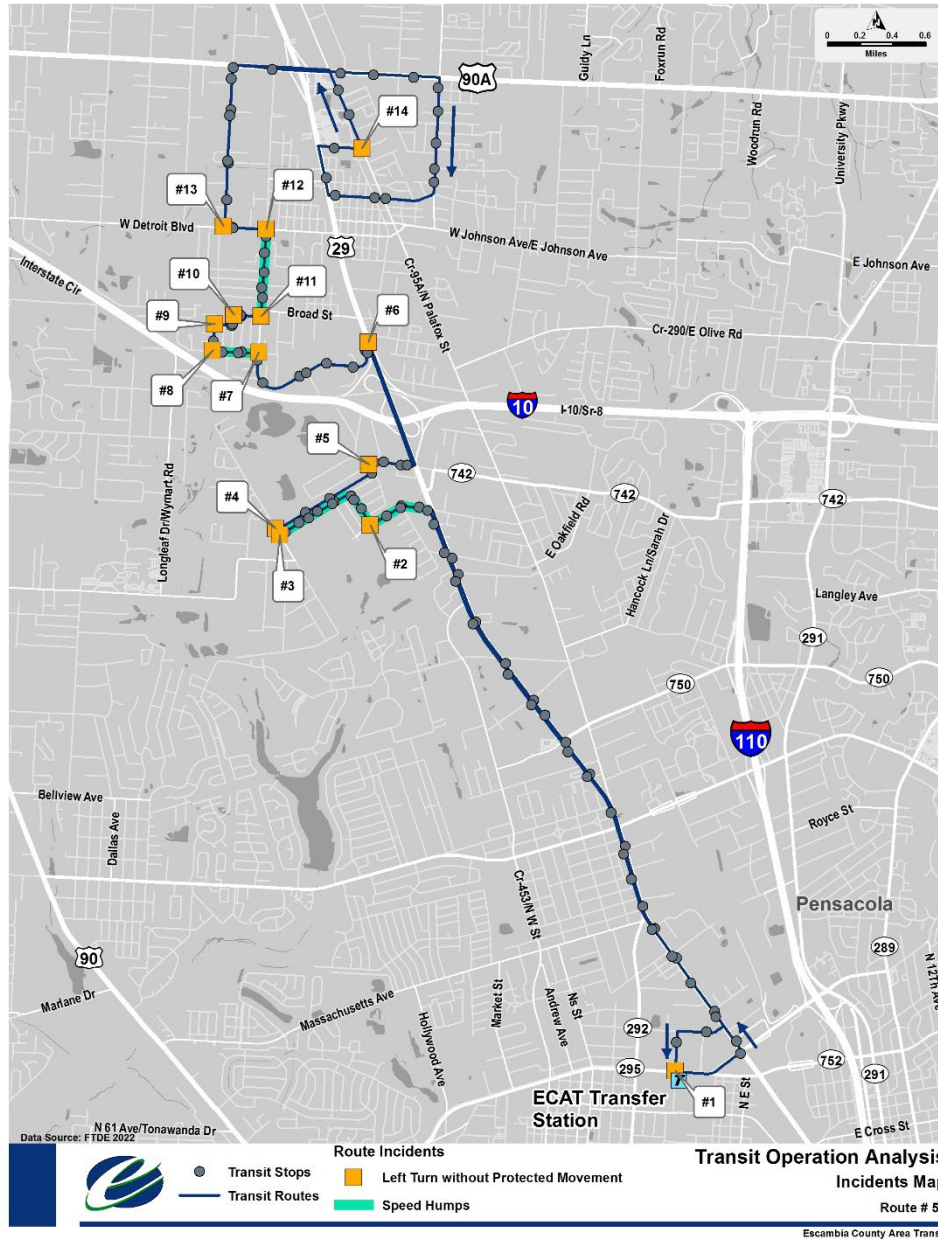
ROUTE INCIDENTS

Observations

#

Type

Description



#	Type	Description
1	Left Turn without Protected Movement	Unprotected left turn
2	Left Turn without Protected Movement	Unprotected left turn
3	Left Turn without Protected Movement	Unprotected left turn
4	Left Turn without Protected Movement	Unprotected left turn
5	Left Turn without Protected Movement	Unprotected left turn
6	Left Turn without Protected Movement	Unprotected left turn
7	Left Turn without Protected Movement	Unprotected left turn
8	Left Turn without Protected Movement	Unprotected left turn
9	Left Turn without Protected Movement	Unprotected left turn
10	Left Turn without Protected Movement	Unprotected left turn
11	Left Turn without Protected Movement	Unprotected left turn
12	Left Turn without Protected Movement	Unprotected left turn
13	Left Turn without Protected Movement	Unprotected left turn
14	Left Turn without Protected Movement	Unprotected left turn

ROUTE ASSESSMENT**Service Alignment**

Route 50 service begins at the Rosa Parks Transit Complex, then goes north along Palafox Street. After making a small loop via Hampton Road and Wingfoot Way, the route continues north along Pensacola Boulevard and Fowler Avenue. At Nine Mile Road the route goes east to Chemstrand Road, south to Johnson Ave, then east and north to Hood Drive, connecting back to Palafox Street before heading back to the Rosa Parks Transit Complex.

System Interaction and Transfer Opportunities

At the beginning of the route at the Rosa Parks Transit Complex, patrons can transfer from Route 50 to routes 1, 2, 32, 44, 45, 47, 48, 51, 52, 55, 60, and 61. Route 50 shares a majority of its Palafox Street alignment, outbound and inbound between Fairfield Drive and Nine Mile Road, with routes 51 and 60. This can be seen on the Density and Ridership Map.

Route Utility

In addition to the many activity centers near the Rosa Parks Transit Complex, there is a significant number of activity centers at the northern tip of Route 50 between Pensacola Boulevard, Nine Mile Road, and Palafox Street. In addition to the area along Pensacola Boulevard known as Car City, these represent the highest density of population and employment along Route 50. Collectively these areas have most of the top 10 highest ridership stops along the Route.

Observations

The most notable observations along Route 50 are the significant amount of unprotected left turns and speed humps along the route's northern alignment beginning at Pinestead Road going towards Nine Mile Road. As noted on other routes, unprotected left turns can be difficult or dangerous for operators to make, and speed humps can negatively impact the experience on the bus for patrons and the vehicle itself.

ROUTE 51: ENSLEY TO BRENTWOOD							
Characteristics ¹	Weekday		Saturday	TOP 10 STOPS			
Span of Service	5:30 am – 6:25 pm		7:30 am – 6:25 pm	Avg. Weekday Activity ²			
Frequency	Once every hour		Once every 2 hours	Rosa Parks Transfer Center	86		
Cycle Time	55 min		55 min				
Route Distance	15.4 miles		15.4 miles				
Avg. Operating Speed	16.8 mph		16.8 mph	Palafox & Murphy Ln	32		
Number of Buses	1		1				
Operating Statistics	Weekday		Saturday				
Round Trips per Day	13		6	Palafox St & Jacquelyn Way	19		
Annual Revenue-Miles	50,322		4,608				
Annual Revenue-Hours	3,003		275				
Annual Deadhead Hours	0		0	Briese Ln & Johnson Ave	13		
Annual Deadhead %	0%		0%				
Demographic Data ³			Within ¼-mile of stops				
Population	8,549	Seniors	1,213	Pensacola Blvd & Boone St	12		
Jobs	9,395	Youth	1,220				
Poverty	1,748	W/ Disabilities	628				
Minority	3,605	No Vehicles	427	L St & Herman St	12		
Service Productivity			Weekday			Saturday	
Avg. Daily Ridership	130		60				
Riders/Revenue-Hour	10.9		10.9		Palafox St & Boone St	9	
Riders/Revenue-Mile	0.7		0.7				
Riders/Round Trip	10.0		10.0				
Financial Performance		Overall	Weekday	Saturday	Palafox St & Burgess Rd	8	
Avg. Daily Revenue		\$81.4	\$98.1	\$45.3			
Subsidy/Revenue-Hour		\$109.3	\$111.6	\$104.1			
Subsidy/Revenue-Mile		\$6.5	\$6.7	\$6.2	Palafox St & Oakfield Rd	8	
Subsidy/Round Trip		\$100.2	\$102.3	\$95.5			
Daily Operating Cost		\$1,172.5	\$1,428.3	\$618.1			
Cost/Rider		\$10.8	\$11.0	\$10.3	Pensacola Blvd & Yoakum Ct	7	
Farebox Recovery Ratio		7.0%	6.9%	7.3%			
Subsidy/Rider		\$10.0	\$10.2	\$9.5			
On-Time Performance ⁴			Weekday				
<u>Time Period</u>	<u>Early</u>		<u>On-Time</u>	<u>Late</u>			
Overall	16.65%		16.65%	66.7%			

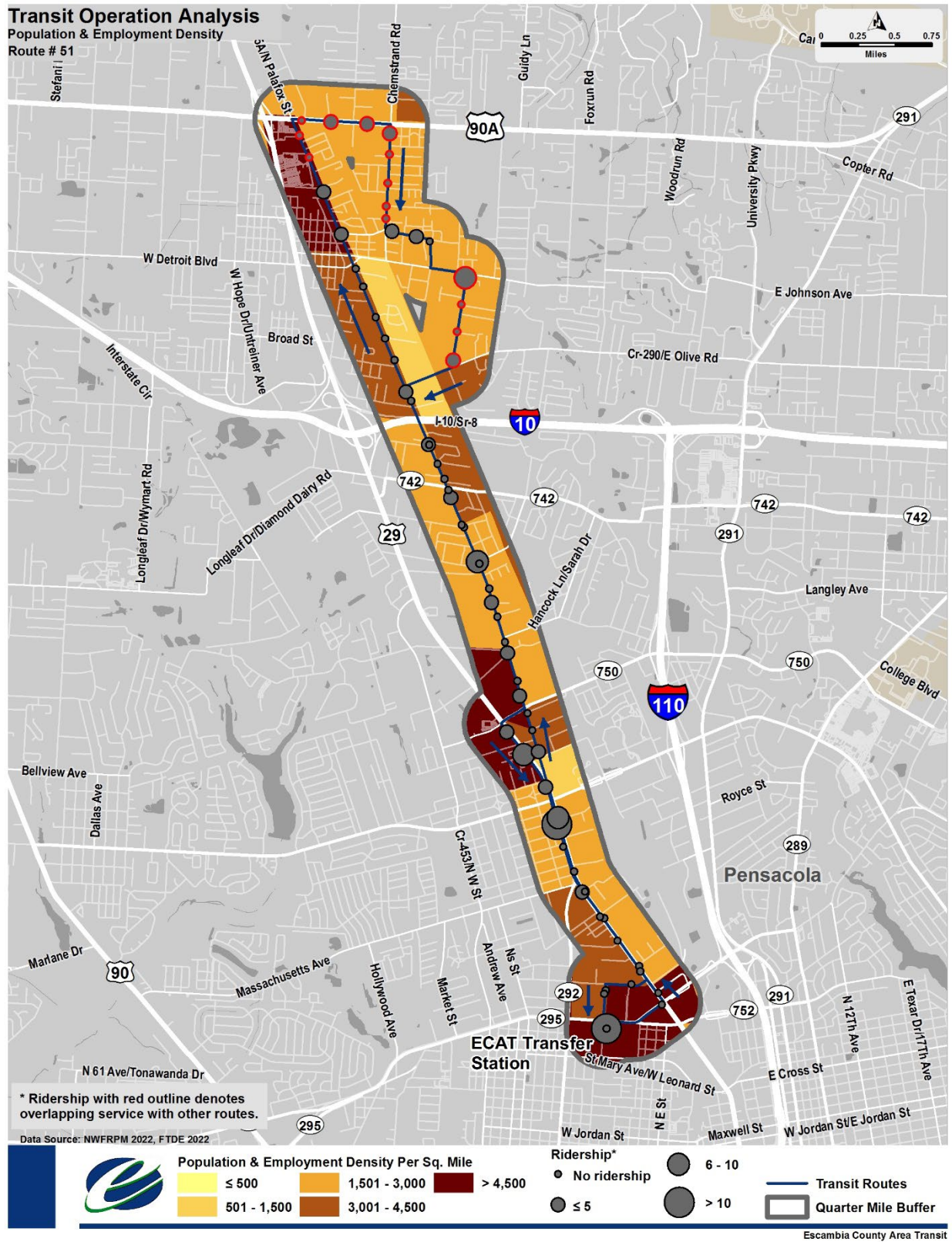
¹ Characteristics come from the Summer 2022 schedule in ECAT's Optibus account, the February 2022 General Transit Specification Feed (GTFS) in the Florida Geographic Data Library (FGDL), and ECAT's June 2021 Ride Guide.

² Stop-level ridership data is based on random sampling in August to November 2022, calibrated to FY2022 annual route-level weekday ridership volumes.

³ Jobs information is from the Northwest Florida Regional Planning Model (NWRPM), in which 2015 data is projected to 2020. All other demographics are from the 2020 American Community Survey (ACS) administered by the United States Census Bureau.

⁴ On-time is defined as between 0 minutes early and 5 minutes late.

DEMOGRAPHICS

Population + Employment Density and Ridership (2020)⁵

⁵ Population and employment data is from the transportation analysis zones (TAZ's) of the NWFRPM, projected from 2015 to 2020. Ridership with a red outline denotes overlapping service with other routes.

The map displays the proposed transit route for Route #51, which is highlighted in blue. A thick grey line indicates the quarter-mile buffer around the route. The route starts at the ECAT Transfer Station and travels north through the city of Pensacola, following major corridors like I-10 and I-110. The map includes various points of interest marked with icons: Activity Centers (green house), Affordable Housing (yellow house), Government (blue building), Hospitals (red heart), Schools (blue schoolhouse), and Medical Offices (green heart). Major roads and highways are labeled, including I-10, I-110, US-90, US-29, and US-742. The map also shows the locations of several schools and medical offices. A scale bar in the top right corner indicates distances in miles (0, 0.2, 0.4, 0.6). The map is titled "Transit Operation Analysis" and "Points of Interest" and "Route # 51".

Transit Operation Analysis
Points of Interest
Route # 51

Legend:

- Activity Center
- Affordable Housing
- Government
- Hospital
- School
- Medical Office
- Transit Stops
- Transit Routes
- Quarter Mile Buffer

Map Labels:

- W Detroit Blvd
- W Hope Dr/Untreiner Ave
- Broad St
- Longleaf Dr/Diamond Dairy Rd
- Longleaf Dr/Wynart Rd
- Interstate Cir
- Bellview Ave
- Dallas Ave
- Massachusetts Ave
- Hollywood Ave
- Market St
- Andrew Ave
- Ns St
- N South St
- St Mary Ave/W Leonard St
- NE St
- ECAT Transfer Station
- Cr-290/E Olive Rd
- Woodrun Rd
- University Pkwy
- Copter Rd
- E Johnson Ave
- Langley Ave
- Royce St
- E Cross St
- N 12th Ave
- Guidy Ln
- Foxrun Rd
- Cr-453 N N St
- Hancock Ln/Sarah Dr
- US-90
- US-29
- US-742
- US-110
- US-291
- US-750
- US-752
- US-295
- I-10/Sr-8
- I-110

Data Source: FGDL 2013, 2017, 2019, 2021, FDOR 2021, FTDE 2022

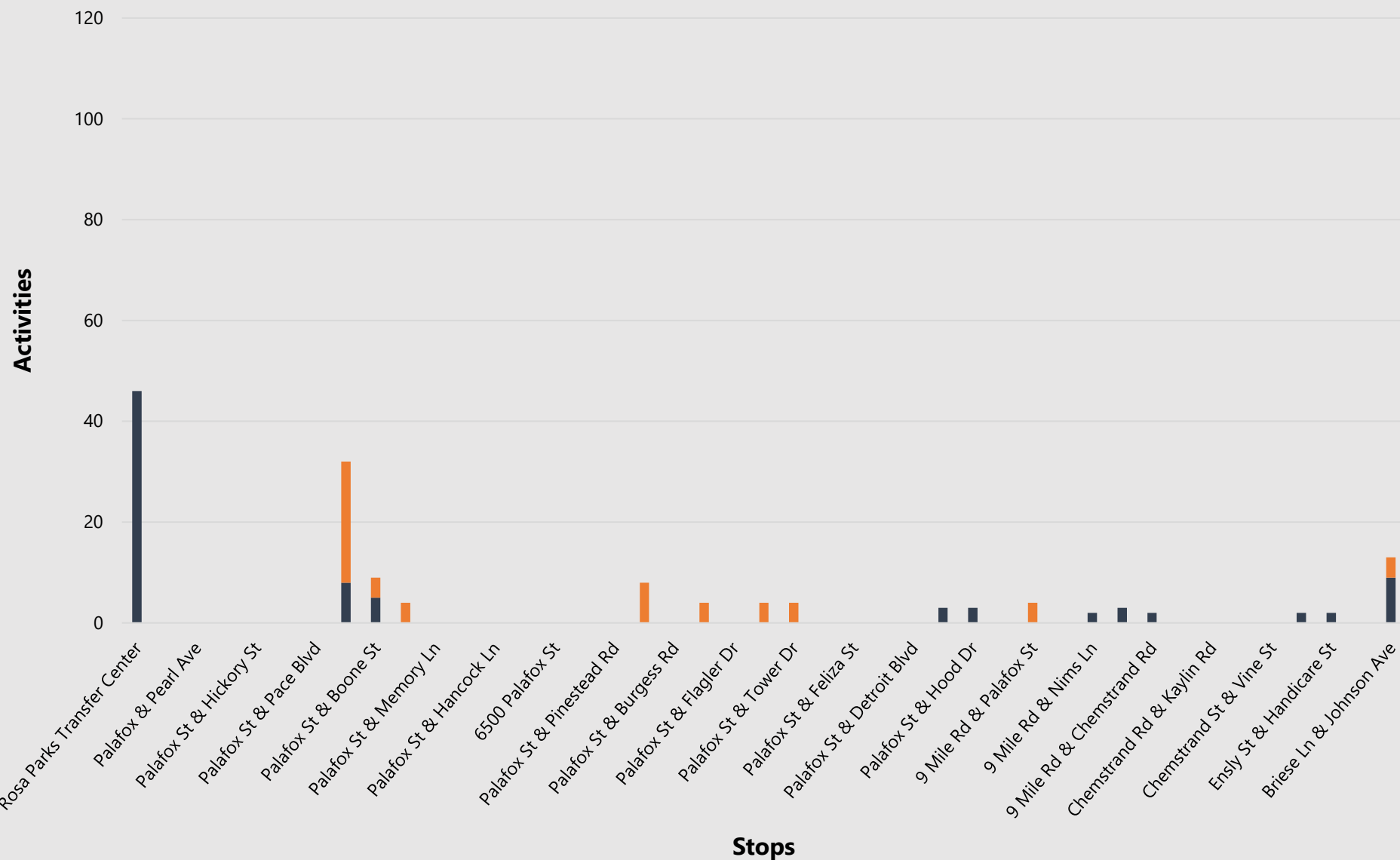
Scale: 0 0.2 0.4 0.6 Miles

Page 3

RIDERSHIP TRENDS BY STOP (Weekday)⁷

Outbound

Boardings Alightings

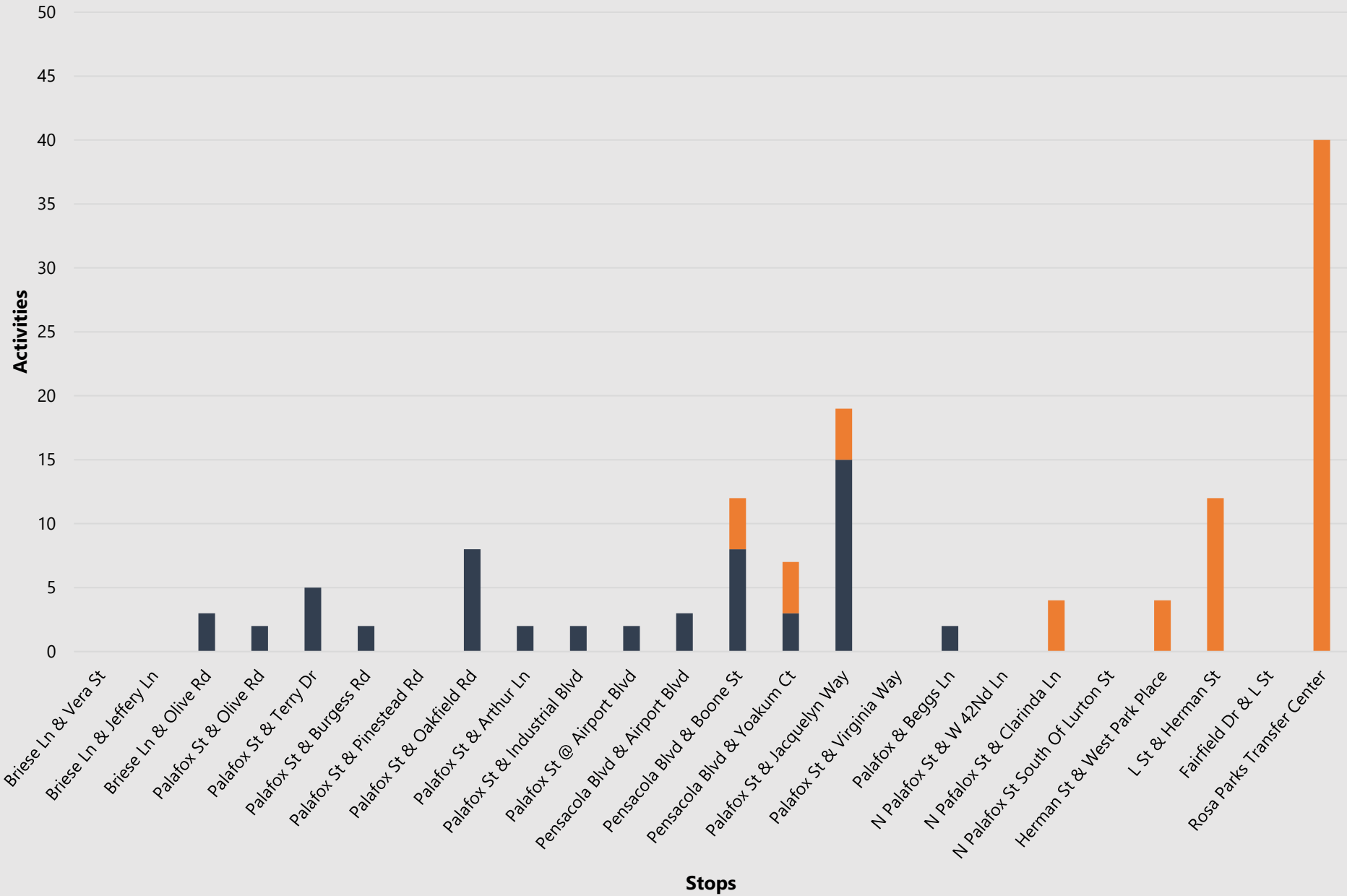


⁷ 0 activities does not mean no activity; it just means that no activity was reported during the sample period or runs. Route 51 ridership by stop data was sampled from 6 total runs.

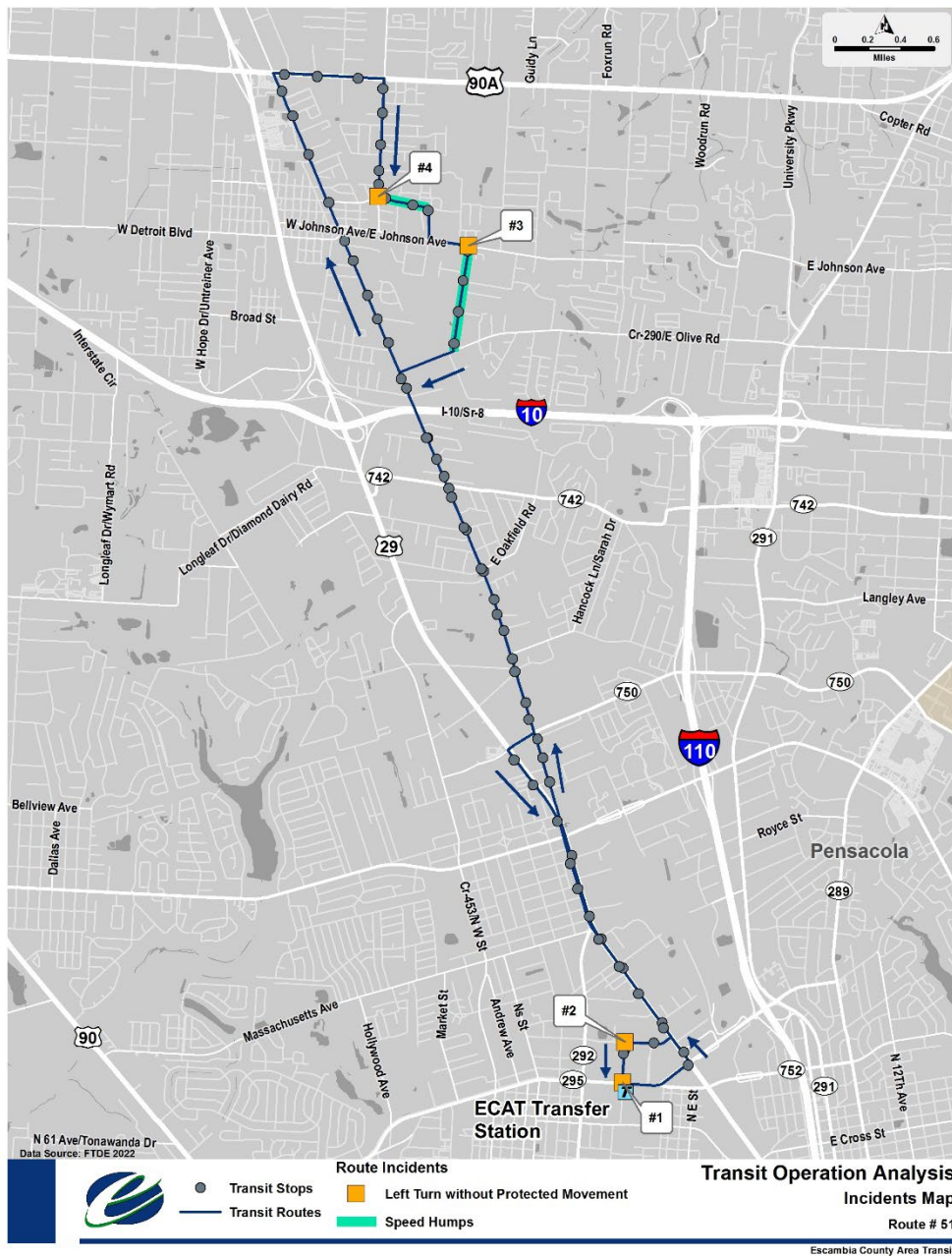
Route 51: Ensley to Brentwood

Inbound

Boardings Alightings



ROUTE INCIDENTS

[illegible]

ROUTE ASSESSMENT**Service Alignment**

Route 51 service begins at the Rosa Parks Transit Complex before heading north on Palafox Street. The route utilizes Palafox Street all the way to Nine Mile Road where it makes a loop via Chemstrand Road, Ensley Street, and Brieese Lane before heading back to the Rosa Parks Transit Complex on Palafox Street.

System Interaction and Transfer Opportunities

At Route 51's terminus, the Rosa Parks Transit Complex, patrons can transfer from Route 51 to routes 1, 2, 32, 44, 45, 47, 48, 50, 52, 55, 60, and 61. Route 51 shares a portion of its Palafox Street alignment with routes 50 and 60. It also shares the portion of its alignment on Brieese Lane with Route 45. On Brieese Lane as noted on the Density and Ridership Map, patrons can transfer from Route 51 to Route 45.

Route Utility

There are many activity centers near the Rosa Parks Transit Complex served by Route 51. There is also a concentration of activity centers served by Route 51 along Palafox Street adjacent to its intersection with Nine Mile Road, which has a high density of population and employment. There is a top 10 highest ridership stop at the intersection of Brieese Lane and Johnson Avenue. While this area does not have a high density of population and employment, there is an elementary school and early learning center in close proximity to the stop.

Observations

There were relatively few incidents noted along Route 51 during fieldwork. There are a few unprotected left turns both at the terminus of the route near the Rosa Parks Transit Complex and between E Johnson Avenue and Chemstrand Road along the northern portion of the route. Speed humps are also noted between Olive Road and Chemstrand Road.

ROUTE 52: CORDOVA MALL TO PENSACOLA STATE COLLEGE							
Characteristics ¹		Weekday		Saturday		TOP 10 STOPS	
Span of Service		6:00 am – 7:25 pm		6:00 am – 6:55 pm		Avg. Weekday Activity ²	
Frequency		Every 30- 60 mins		Once every 2 hours		Rosa Parks Transfer Center	181
Cycle Time		55 min		55 min			
Route Distance		8.7 miles		8.7 miles		PSC Transfer Station	71
Avg. Operating Speed		9.5 miles		9.5 miles			
Number of Buses		1- 2		1			
Operating Statistics		Weekday		Saturday			
Round Trips per Day		22		7		9Th Ave & Sacred Heart Hospital	32
Annual Revenue-Miles		48,187		3,042			
Annual Revenue-Hours		5,082		321		9Th Ave & Springhill Dr	26
Annual Deadhead Hours		0		0			
Annual Deadhead %		0%		0%			
Demographic Data ³		Within ¼-mile of stops					
Population		5,841	Seniors	664		Fairfield Dr @ Pensacola Village	23
Jobs		11,596	Youth	1,065			
Poverty		1,148	W/ Disabilities	395		9th Ave & Airport Blvd	20
Minority		3,065	No Vehicles	307			
Service Productivity		Weekday		Saturday			
Avg. Daily Ridership		210		67		Fairfield Dr & W Highland Dr	15
Riders/Revenue-Hour		10.4		10.4			
Riders/Revenue-Mile		1.1		1.1		9Th Ave & Springdale Dr	12
Riders/Round Trip		9.5		9.6			
Financial Performance		Overall	Weekday	Saturday			
Avg. Daily Revenue		\$134.3	\$160.8	\$51.3		Underwood Ave @ Psc Baseball Fields	12
Subsidy/Revenue-Hour		\$93.2	\$95.3	\$86.4			
Subsidy/Revenue-Mile		\$9.8	\$10.1	\$9.1		12th Ave & College Blvd	10
Subsidy/Round Trip		\$85.4	\$87.4	\$79.2			
Daily Operating Cost		\$1,726.5	\$2,083.0	\$606.0			
Cost/Rider		\$9.7	\$9.9	\$9.0			
Farebox Recovery Ratio		7.9%	7.7%	8.5%			
Subsidy/Rider		\$8.9	\$9.2	\$8.3			
On-Time Performance ⁴				Weekday			
Time Period		Early		On-Time		Late	
Overall		14.3%		57.1%		28.6%	

¹ Characteristics come from the Summer 2022 schedule in ECAT's Optibus account, the February 2022 General Transit Specification Feed (GTFS) in the Florida Geographic Data Library (FGDL), and ECAT's June 2021 Ride Guide.

² Stop-level ridership data is based on random sampling in August to November 2022, calibrated to FY2022 annual route-level weekday ridership volumes.

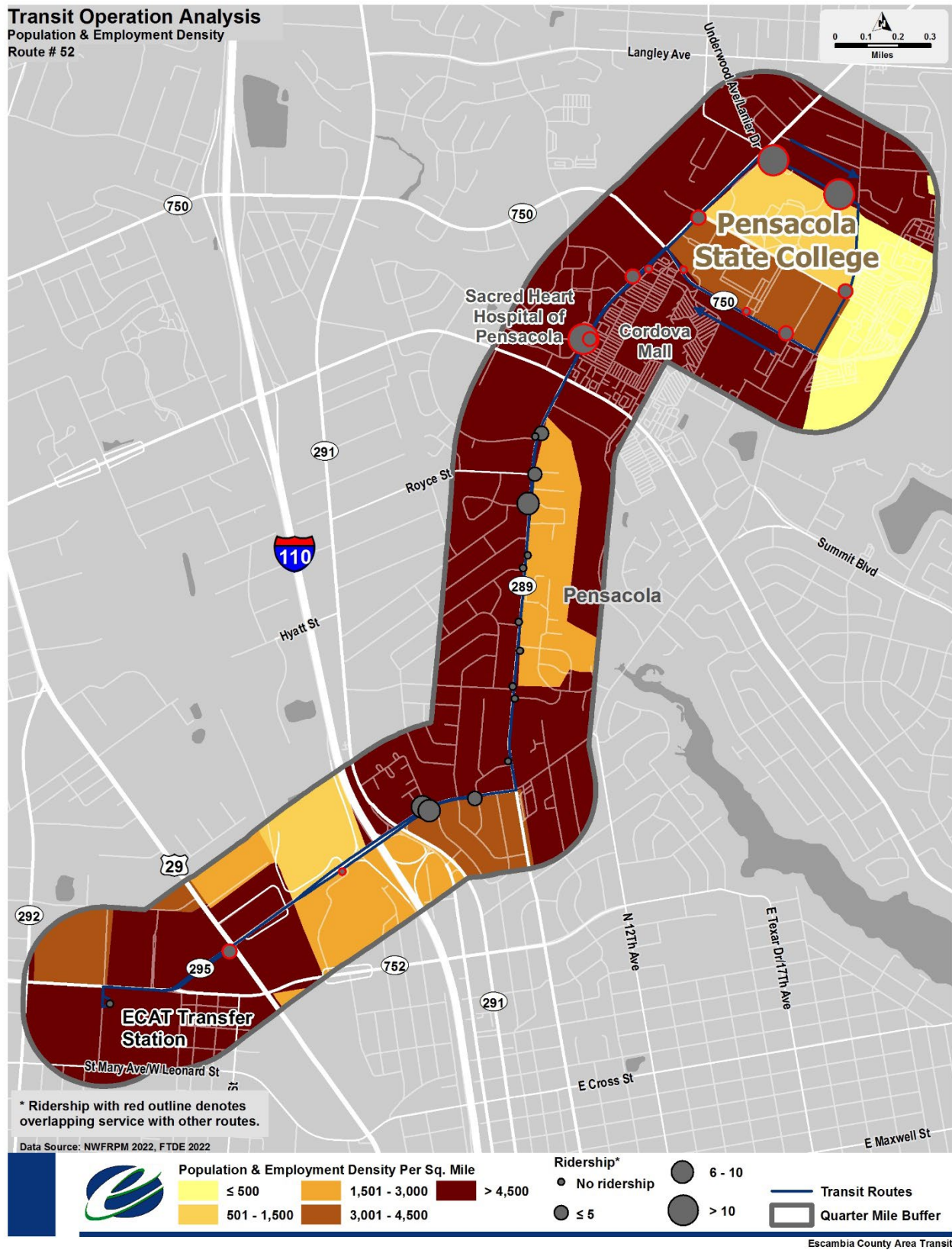
³ Jobs information is from the Northwest Florida Regional Planning Model (NWRPM), in which 2015 data is projected to 2020. All other demographics are from the 2020 American Community Survey (ACS) administered by the United States Census Bureau.

⁴ On-time is defined as between 0 minutes early and 5 minutes late.

DEMOGRAPHICS

Population + Employment Density and Ridership (2020)⁵

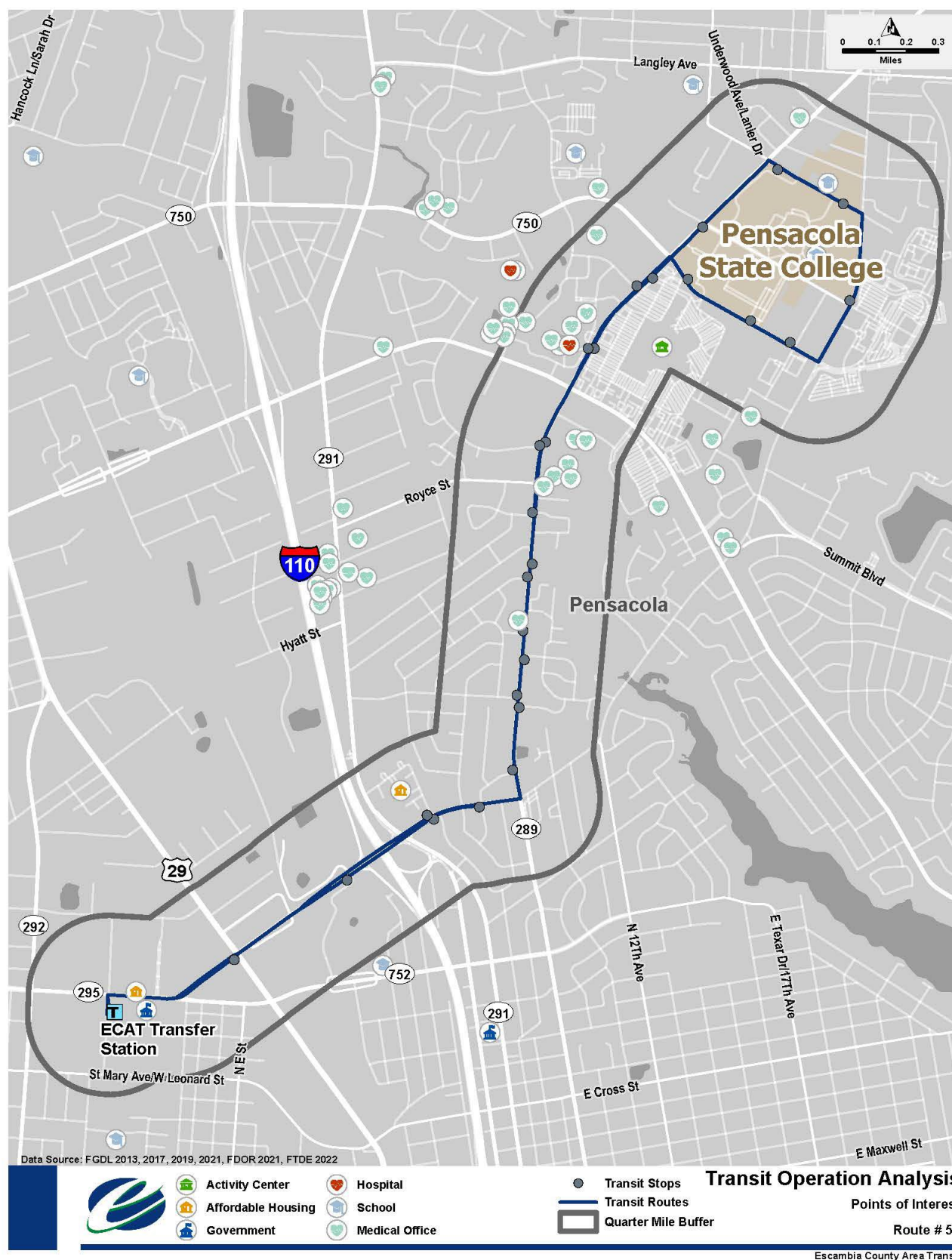
Transit Operation Analysis

Population & Employment Density
Route # 52

⁵ Population and employment data is from the transportation analysis zones (TAZ's) of the NWFRPM, projected from 2015 to 2020. Ridership with a red outline denotes overlapping service with other routes.

PATRONAGE

Activity Centers⁶

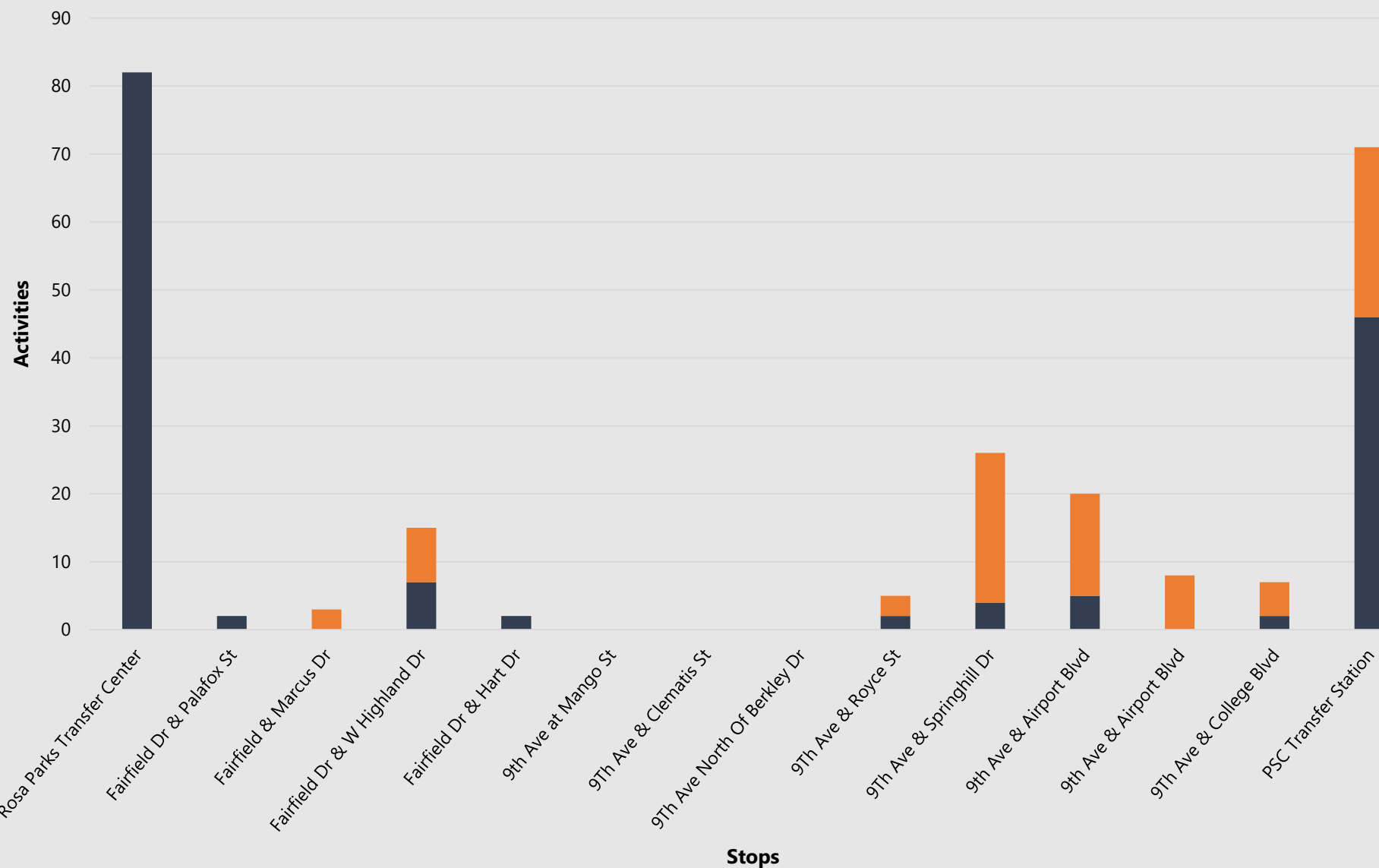


⁶ Points of Interest data is from the Florida Geographic Data Library (FGDL) 2013 - 21, and Florida Department of Revenue (FDOR) 2021.

RIDERSHIP TRENDS BY STOP (Weekday)⁷

Outbound

Boardings Alightings

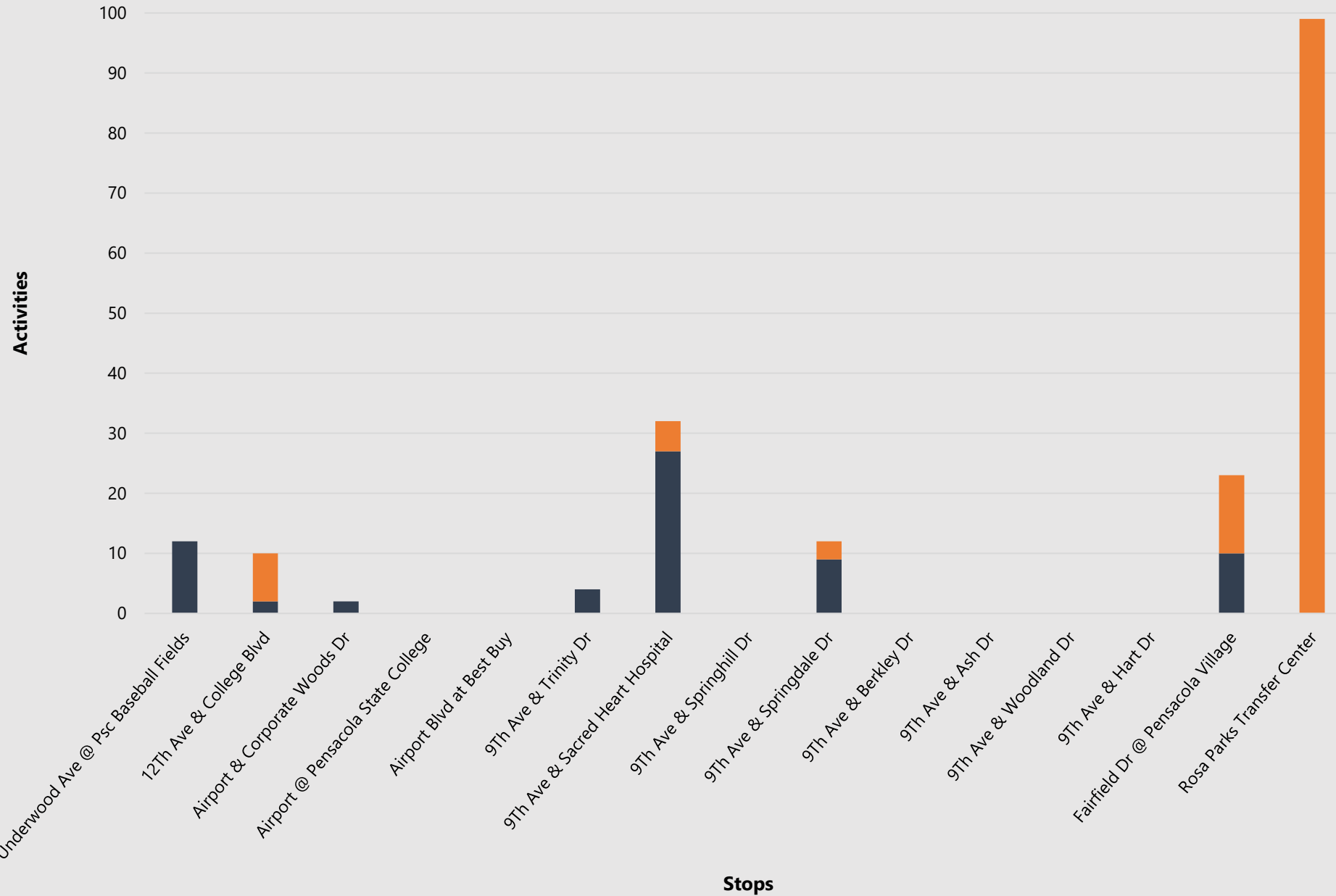


⁷ 0 activities does not mean no activity; it just means that no activity was reported during the sample period or runs. Route 52 ridership by stop data was sampled from 10 total runs.

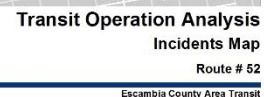
Route 52: Cordova Mall to Pensacola State College

Inbound

Boardings Alightings



#	Type	Description
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[illegible]

ROUTE ASSESSMENT**Service Alignment**

Route 52 service begins at the Rosa Parks Transit Complex. After going east via Fairfield Drive, the route moves north along 9th Avenue to the PSC Transfer Center before making a loop via Underwood Avenue, 12th Avenue, and Airport Boulevard to connect back to 9th Avenue to return to the Rosa Parks Transit Complex.

System Interaction and Transfer Opportunities

At the Rosa Parks Transit Complex patrons can transfer from Route 52 to routes 1, 2, 32, 44, 45, 47, 48, 50, 51, 55, 60, and 61. Route 52 shares a portion of its Fairfield Drive alignment with Route 61 and a portion of its 9th Avenue alignment with routes 31 and 63. At the PSC Transfer Center patrons can transfer from Route 52 to routes 31, 43, and 63.

Route Utility

Route 52 serves the concentration of activity centers near the Rosa Parks Transit Complex. Activity centers served near the PSC Transfer Center include Sacred Heart Hospital of Pensacola, Pensacola State College, and Cordova Mall. These two areas are represented in the top 10 highest ridership stops for Route 52.

Observations

The main observation noted along Route 52 during fieldwork pertains to the portion of the route serving Pensacola State College. The route skirts the roads surrounding the college but does not enter the campus. Number 1 on the Incident Map notes a stop in a right turn lane on Fairfield Drive close to where the bus needs to turn left onto N 9th Avenue. There is not much time for the bus to get from that right turn lane into the left lane so that it can make the turn.

ROUTE 55: PACE BLVD TO WARRINGTON							
Characteristics ¹		Weekday		Saturday		TOP 10 STOPS	
Span of Service		6:00 am – 6:55 pm		6:00 am – 6:55 pm		Avg. Weekday Activity ²	
Frequency		Once every hour		Once every 2 hours		Rosa Parks Transfer Center	
Cycle Time		55 min		55 min		171	
Route Distance		16.2 miles		16.2 miles		Navy Blvd & Patton Dr	
Avg. Operating Speed		17.7 mph		17.7 mph		28	
Number of Buses		1		1			
Operating Statistics		Weekday		Saturday			
Round Trips per Day		13		7		Pace Blvd & Moreno St	
Annual Revenue-Miles		53,151		5,678		25	
Annual Revenue-Hours		3,003		321			
Annual Deadhead Hours		0		0		Barrancas Ave & Lona St	
Annual Deadhead %		0%		0%		15	
Demographic Data ³		Within ¼-mile of stops					
Population		11,849	Seniors	1,604		Pace Blvd & Lakeview St	
Jobs		7,771	Youth	1,986		11	
Poverty		2,675	W/ Disabilities	1,263			
Minority		5,182	No Vehicles	716		Gulfbeach Hwy & Mills Ave	
Service Productivity		Weekday		Saturday		11	
Avg. Daily Ridership		216		116			
Riders/Revenue-Hour		18.1		18.1		Pace Blvd & Garden St	
Riders/Revenue-Mile		1.02		1.02		11	
Riders/Round Trip		17		17			
Financial Performance		Overall	Weekday	Saturday		Corry Field Rd & Barrancas Ave	
Avg. Daily Revenue		\$129.8	\$154.8	\$83.5		10	
Subsidy/Revenue-Hour		\$106.6	\$109.2	\$101.7			
Subsidy/Revenue-Mile		\$6.0	\$6.2	\$5.7		Pace Blvd & Yonge St	
Subsidy/Round Trip		\$97.7	\$100.1	\$93.2		8	
Daily Operating Cost		\$1,204.0	\$1,456.0	\$736.0			
Cost/Rider		\$6.6	\$6.8	\$6.3		Pace Blvd & Garden St	
Farebox Recovery Ratio		10.9%	10.6%	11.3%		7	
Subsidy/Rider		\$5.9	\$6.1	\$5.6			
On-Time Performance ⁴				Weekday			
Time Period		Early		On-Time		Late	
Overall		0.0%		83.3%		16.7%	

¹ Characteristics come from the Summer 2022 schedule in ECAT's Optibus account, the February 2022 General Transit Specification Feed (GTFS) in the Florida Geographic Data Library (FGDL), and ECAT's June 2021 Ride Guide.

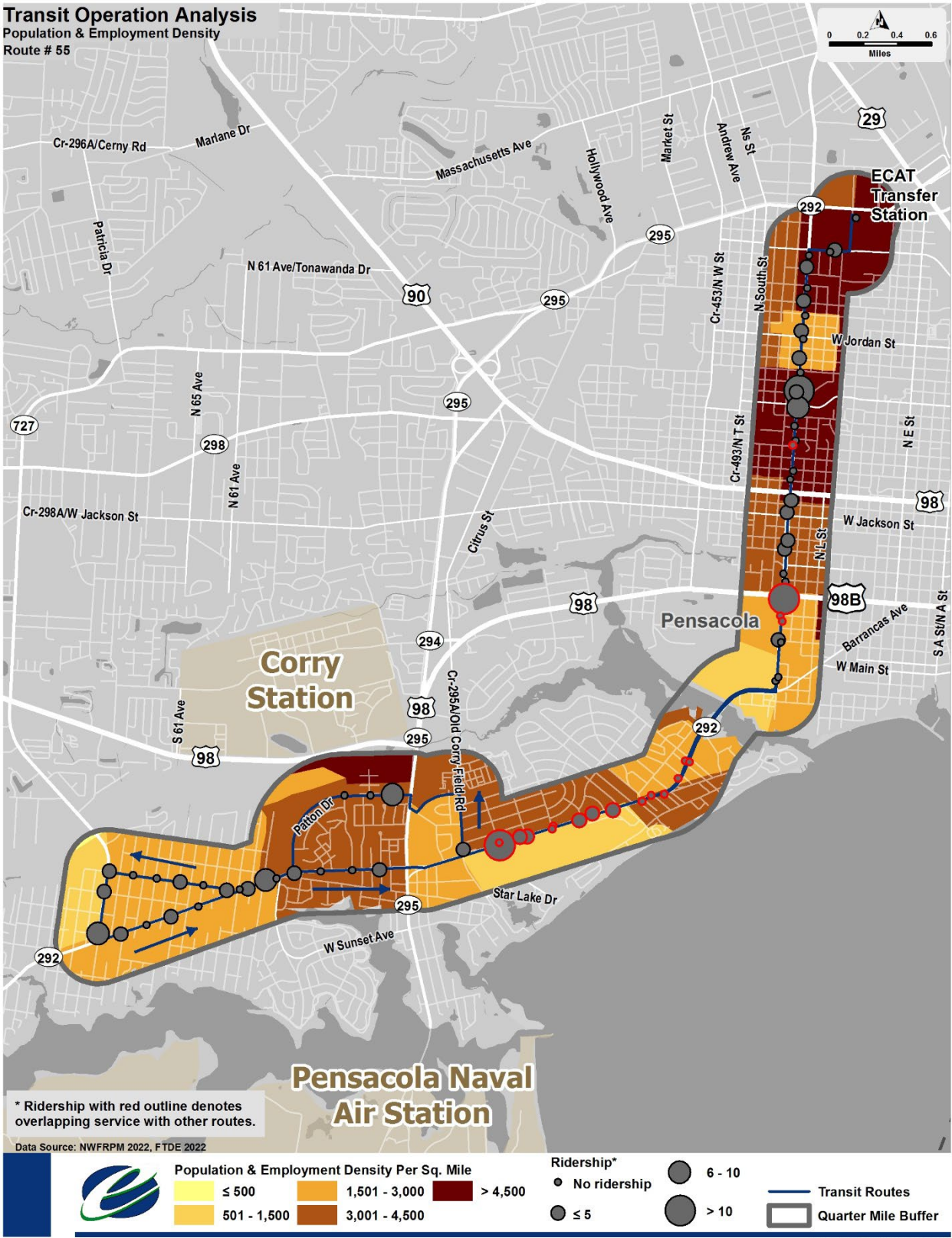
² Stop-level ridership data is based on random sampling in August to November 2022, calibrated to FY2022 annual route-level weekday ridership volumes.

³ Jobs information is from the Northwest Florida Regional Planning Model (NWFRPM), in which 2015 data is projected to 2020. All other demographics are from the 2020 American Community Survey (ACS) administered by the United States Census Bureau.

⁴ On-time is defined as between 0 minutes early and 5 minutes late.

DEMOGRAPHICS

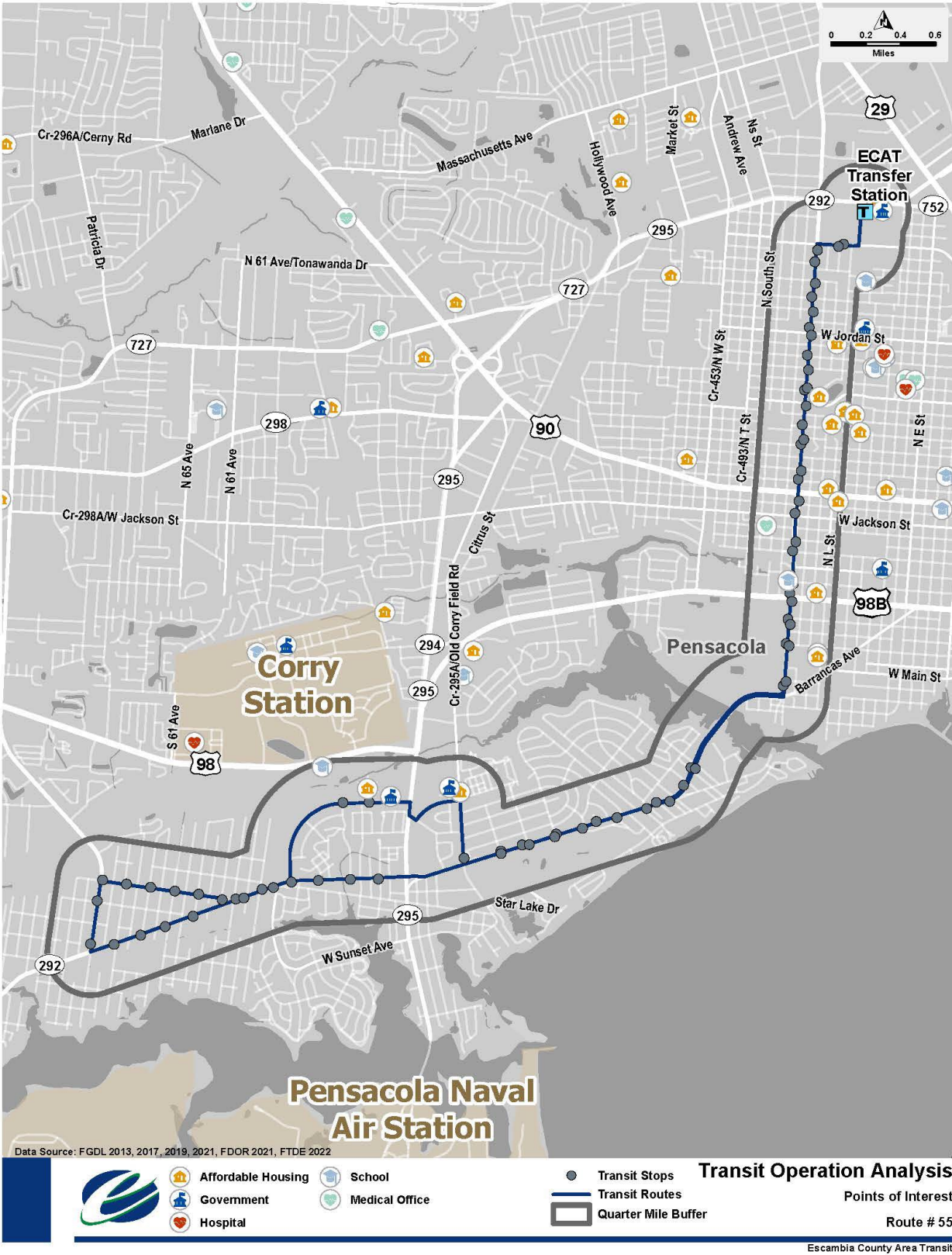
Population + Employment Density and Ridership (2020)⁵



⁵ Population and employment data is from the transportation analysis zones (TAZ's) of the NWFRPM, projected from 2015 to 2020. Ridership with a red outline denotes overlapping service with other routes.

PATRONAGE

Activity Centers⁶

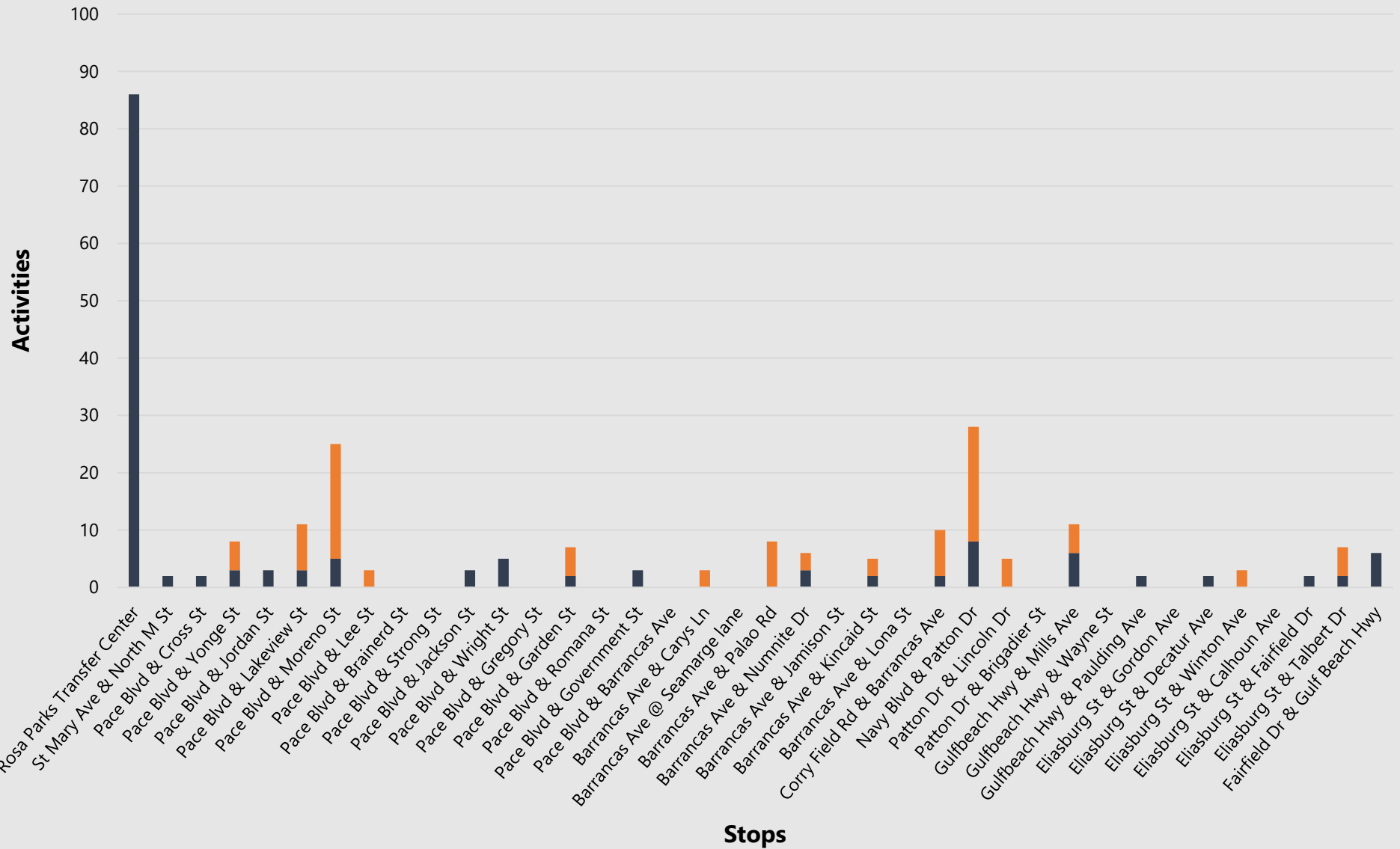


⁶ Points of Interest data is from the Florida Geographic Data Library (FGDL) 2013 - 21, and Florida Department of Revenue (FDOR) 2021.

RIDERSHIP TRENDS BY STOP (Weekday)⁷

Outbound

■ Boardings ■ Alightings

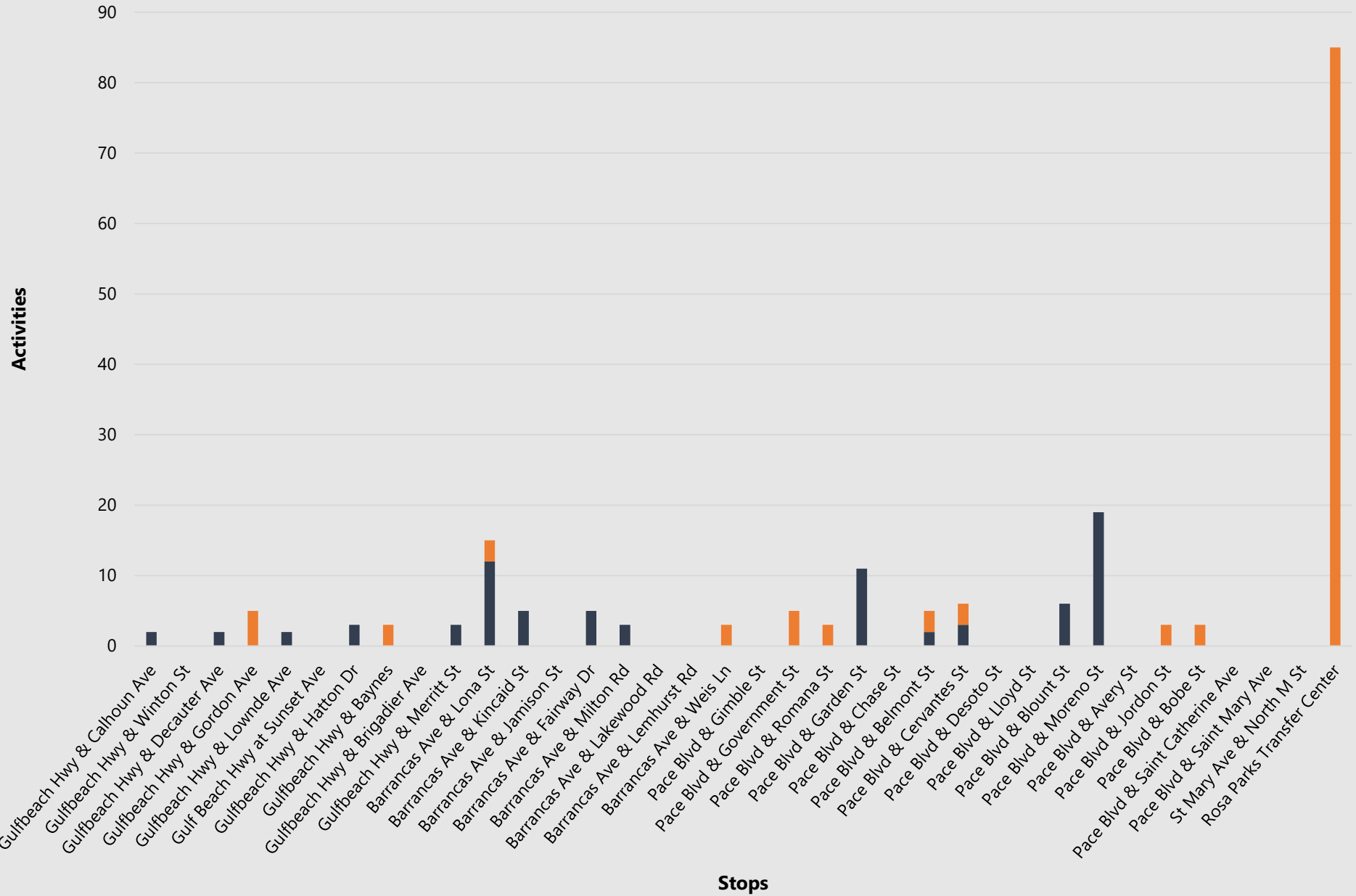


⁷ 0 activities does not mean no activity; it just means that no activity was reported during the sample period or runs. Route 55 ridership by stop data was sampled from 10 total runs.

Route 55: Pace Blvd to Warrington

Inbound

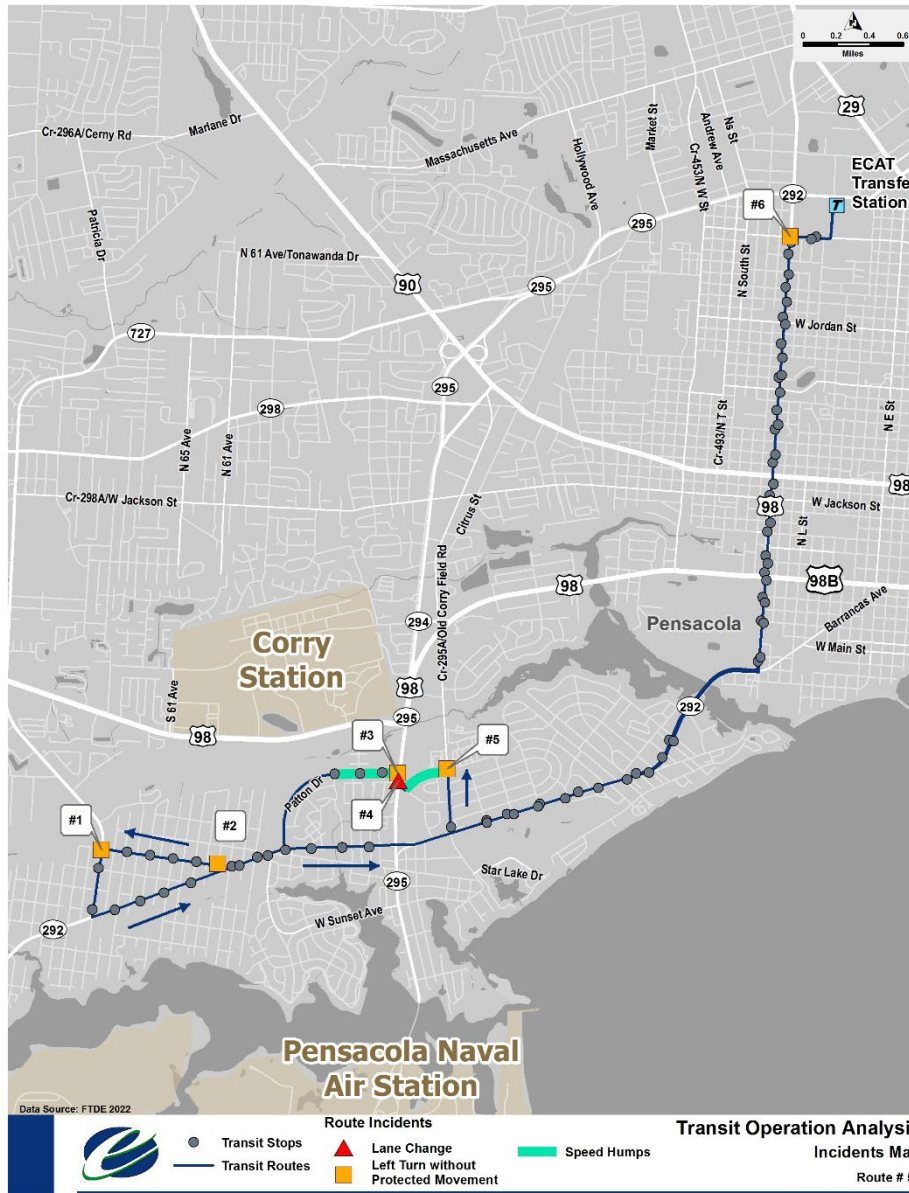
Boardings Alightings



ROUTE INCIDENTS

Observations

#	Type	Description
---	------	-------------



1	Left Turn without Protected Movement	Unprotected left turn
2	Left Turn without Protected Movement	Unprotected left turn
3	Left Turn without Protected Movement	Unprotected left turn
4	Lane Change	Lane change required to make left turn
5	Left Turn without Protected Movement	Unprotected left turn
6	Left Turn without Protected Movement	Unprotected left turn

ROUTE ASSESSMENT**Service Alignment**

Route 55 service begins at the Rosa Parks Transit Complex before moving south along Pace Boulevard. At Barrancas Avenue the route moves west, makes a loop via Old Corry Field Road, Brandon Avenue, and Patton Street, before continuing west to Fairfield Drive. At Fairfield Drive the route heads back towards the Rosa Parks Transit Complex.

System Interaction and Transfer Opportunities

At the Rosa Parks Transit Complex, patrons can transfer from Route 55 to routes 1, 2, 32, 44, 45, 47, 48, 50, 51, 52, 60, and 61. Route 55 shares a portion of its Barrancas Avenue alignment with Route 64 and shares a portion of its Pace Boulevard alignment with Route 44.

Route Utility

While there are a few activity centers along Route 55's alignment, the majority of activity centers served are near the Rosa Parks Transit Complex. In addition to the high density of population and employment around the Rosa Parks Transit Complex, there is also a high density of population and employment along Pace Boulevard between Avery Street and Cervantes Street. Both the Rosa Parks Transit Complex and this section of Pace Boulevard have some of the top 10 highest ridership stops along Route 55.

Observations

Throughout Route 55's alignment there are several unprotected left turn lanes noted. At Patton Drive and N New Warrington Road (#3 and #4 on the Incidents Map), in addition to the unprotected left turn there is a lane change required to make the turn. It was noted during fieldwork that this turn onto Patton Drive cannot always be made in time before the traffic light changes. Speed humps were also noted along Patton Drive and Brandon Avenue.

ROUTE 57: NSA PENSACOLA TO NAVY POINT							
Characteristics ¹		Weekday		Saturday		TOP STOPS	
Span of Service	6:00 am – 5:40 pm		6:00 am – 5:40 pm		Avg. Weekday Activity ²		
Frequency	Every 100 mins		Every 100 mins		Downtown Transfer Station	31	
Cycle Time	75 mins		75 mins				
Route Distance	21.2 miles		21.2 miles				
Avg. Operating Speed	16.9 mph		16.9 mph				
Number of Buses	1		1		Navy Blvd @ Walmart	4	
Operating Statistics		Weekday		Saturday			
Round Trips per Day	7		7		Chiefs Way & Old Corry Field Rd	4	
Annual Revenue-Miles	37,332		7,407				
Annual Revenue-Hours	2,205		438				
Annual Deadhead Hours	80		17		Garden St & N St	3	
Annual Deadhead %	3%		3%				
Demographic Data ³		Within ¼-mile of stops					
Population	8,885	Seniors		886	Chiefs Way	3	
Jobs	14,357	Youth		1,751			
Poverty	1,192	W/ Disabilities		751			
Minority	3,947	No Vehicles		350	Nas Pensacola Uso	3	
Service Productivity		Weekday		Saturday			
Avg. Daily Ridership	36		36		Spring St & Romana St	2	
Riders/Revenue-Hour	4.1		4.1				
Riders/Revenue-Mile	0.2		0.2				
Riders/Round Trip	5.1		5.1				
Financial Performance		Overall	Weekday	Saturday	Navy Blvd & Chan St	2	
Avg. Daily Revenue	\$31.3	\$31.3	\$31.3				
Subsidy/Revenue-Hour	\$114.3	\$119.4	\$109.2	Chiefs Way & New Warrington Rd	2		
Subsidy/Revenue-Mile	\$6.8	\$7.1	\$6.5				
Subsidy/Round Trip	\$142.9	\$149.3	\$136.5				
Daily Operating Cost	\$1,031.6	\$1,076.2	\$987.0	Chiefs Way @ Prieto Dr	2		
Cost/Rider	\$28.7	\$29.9	\$27.4				
Farebox Recovery Ratio	3.0%	2.9%	3.2%				
Subsidy/Rider	\$27.8	\$29.0	\$26.5				
On-Time Performance ⁴				Weekday			
<u>Time Period</u>	<u>Early</u>		<u>On-Time</u>		<u>Late</u>		
Overall	0%		60%		40%		

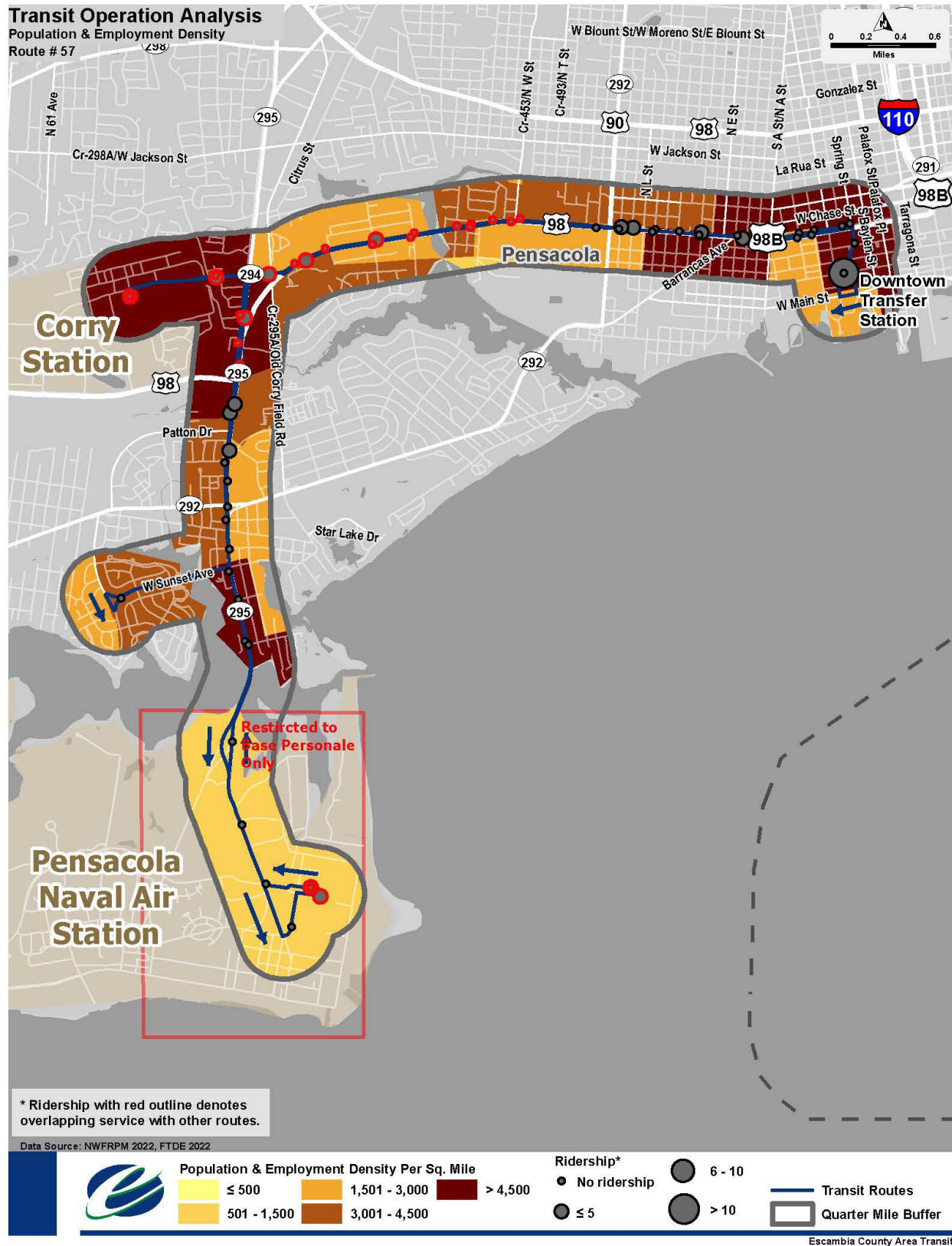
¹ Characteristics come from the Summer 2022 schedule in ECAT's Optibus account, the February 2022 General Transit Specification Feed (GTFS) in the Florida Geographic Data Library (FGDL), and ECAT's June 2021 Ride Guide.

² Stop-level ridership data is based on random sampling in August to November 2022, calibrated to FY2022 annual route-level weekday ridership volumes.

³ Jobs information is from the Northwest Florida Regional Planning Model (NWRPM), in which 2015 data is projected to 2020. All other demographics are from the 2020 American Community Survey (ACS) administered by the United States Census Bureau.

⁴ On-time is defined as between 0 minutes early and 5 minutes late.

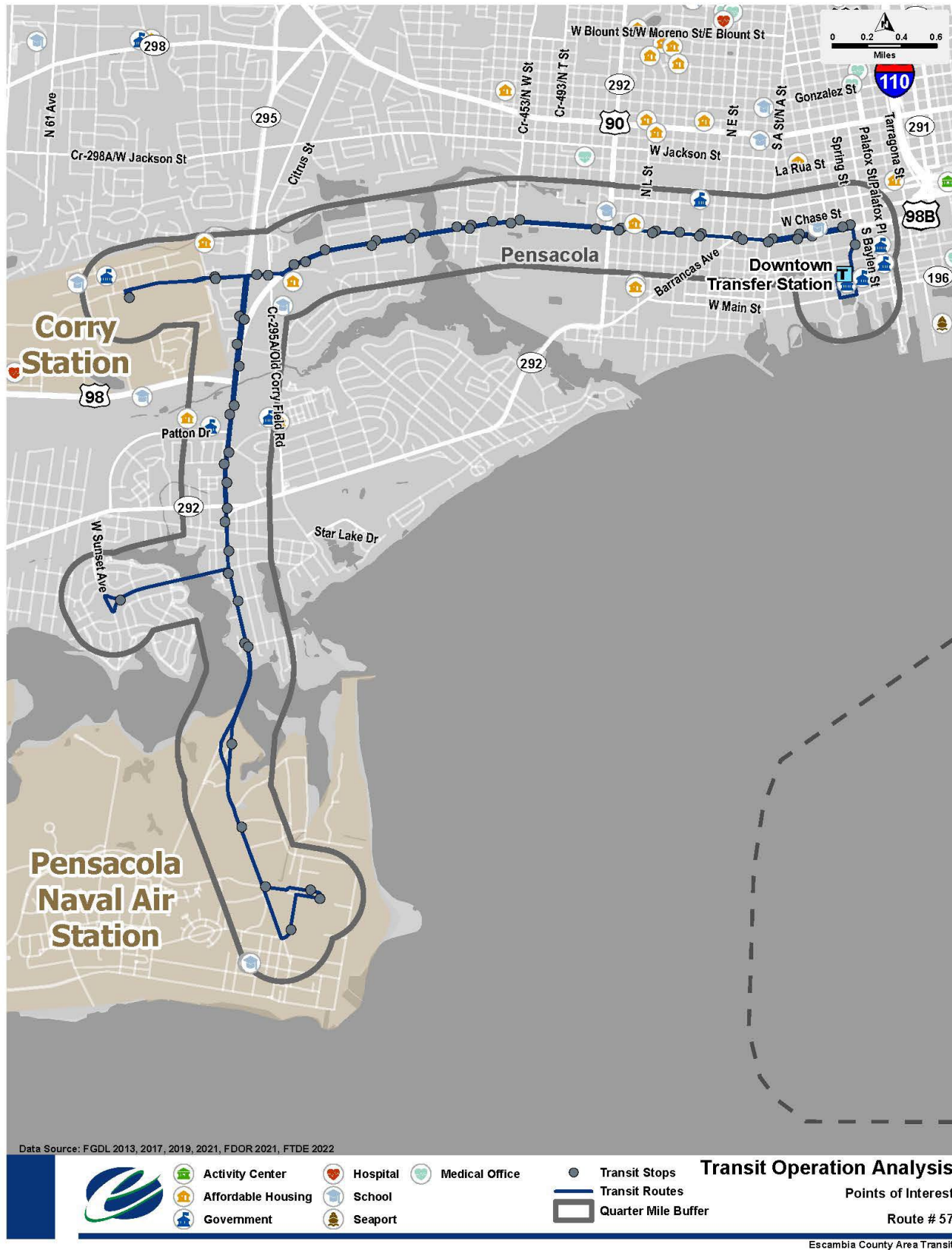
DEMOGRAPHICS

Population + Employment Density and Ridership (2020)⁵

⁵ Population and employment data is from the transportation analysis zones (TAZ's) of the NWFRPM, projected from 2015 to 2020. Ridership with a red outline denotes overlapping service with other routes.

PATRONAGE

Activity Centers⁶

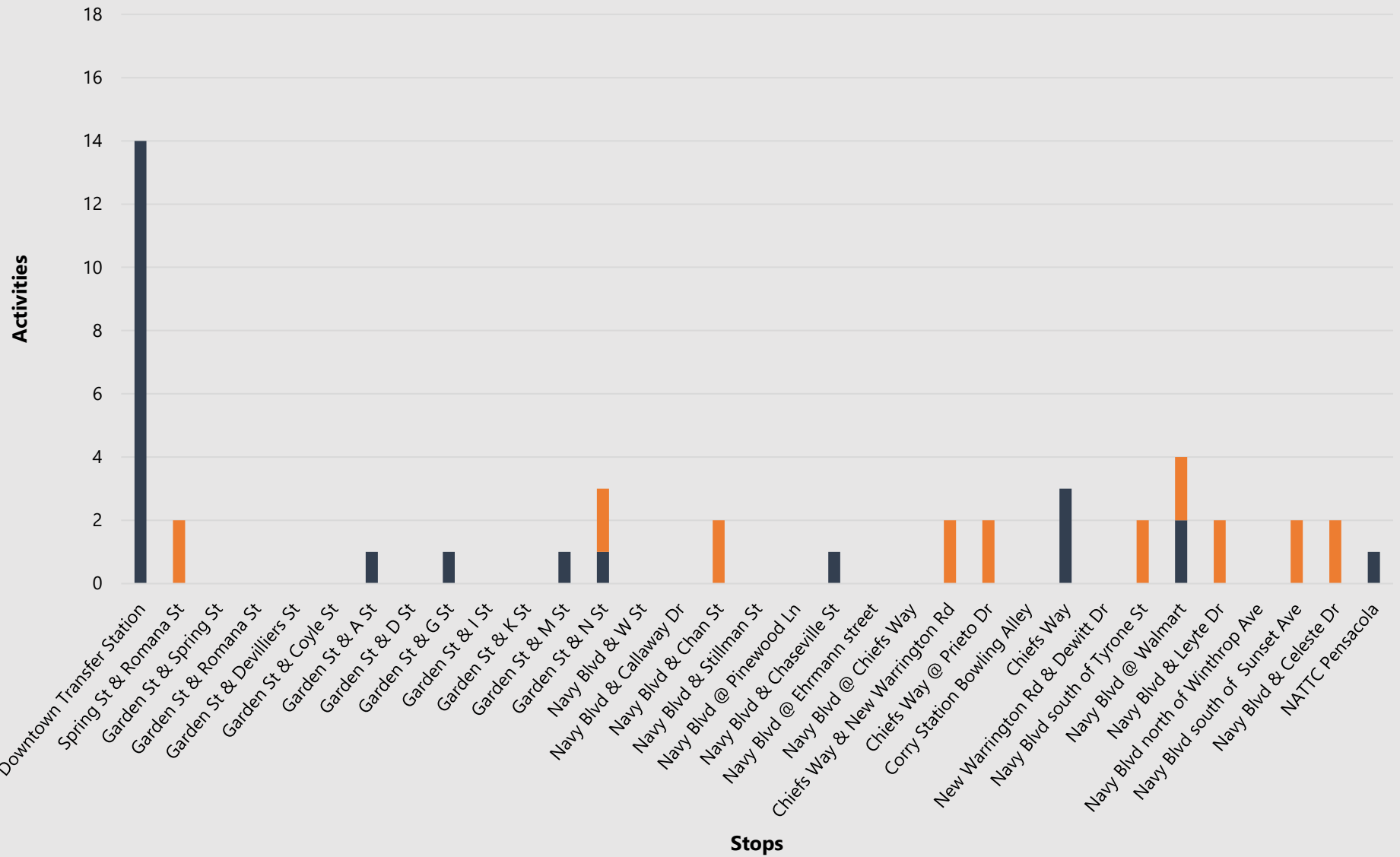


⁶ Points of Interest data is from the Florida Geographic Data Library (FGDL) 2013 - 21 and Florida Department of Revenue (FDOR) 2021.

RIDERSHIP TRENDS BY STOP (Weekday)⁷

Outbound

■ Boardings ■ Alightings

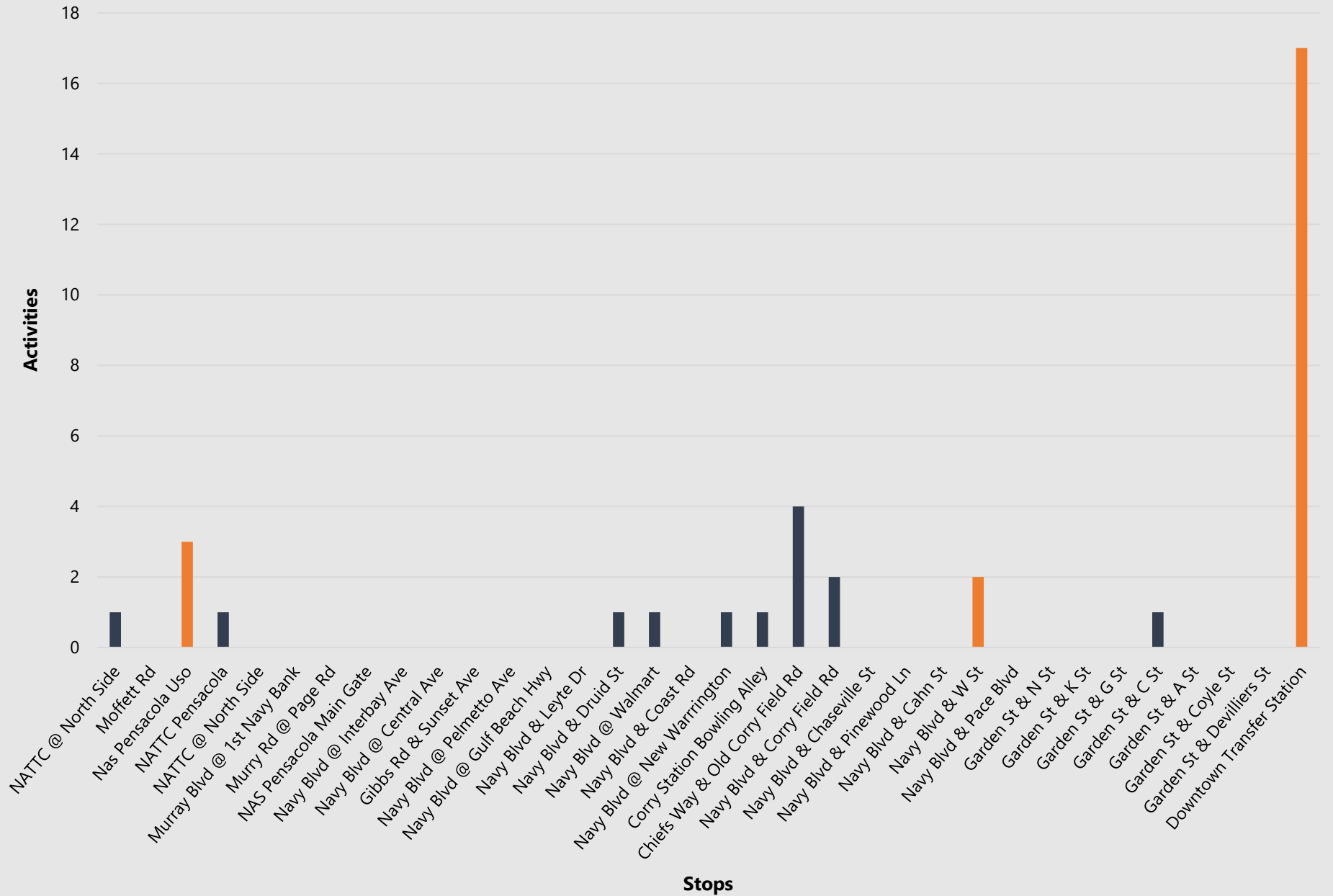


⁷ 0 activities does not mean no activity; it just means that no activity was reported during the sample period or runs. Route 57 ridership by stop data was sampled from 7 total runs.

Route 57: NAS Pensacola to Navy Point

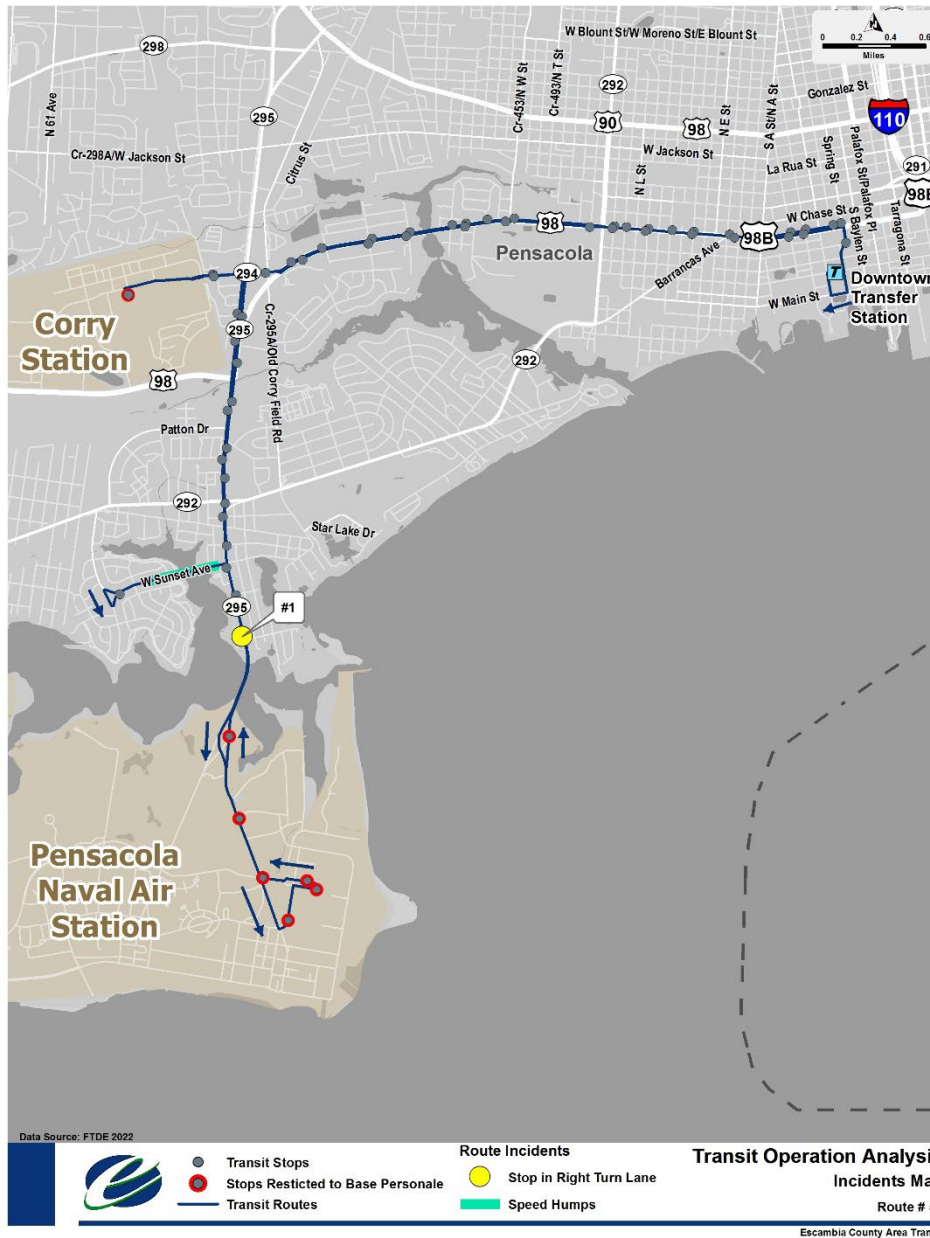
Inbound

■ Boardings ■ Alightings



ROUTE INCIDENTS

Observations

[illegible]

ROUTE ASSESSMENT**Service Alignment**

Route 57 service begins at the Downtown Transfer Center before utilizing W Navy Boulevard to go west and then S Navy Boulevard to go south. At the Naval Air Station, the route begins its return to Downtown Transfer Center via the same path.

System Interaction and Transfer Opportunities

At the Downtown Transfer Center, patrons can transfer from Route 57 to routes 2, 31, 32, 44, 45, 48, 58, and 61. Route 57 shares portions of its W Navy Boulevard and S Navy Boulevard alignment with routes 48, 58, 59X, and 64.

Route Utility

There are concentrations of activity centers both at the Downtown Transfer Center, and along S Navy Boulevard just past SW Greenway going south. Notably this route also serves Corry Station and the Naval Air Station. The area near the Downtown Transfer Center and the area around Corry Station have a high density of population and employment, as well as the #1 (Downtown Transfer Center) and #2, #3, #4 (Corry Station) highest ridership stops of Route 57.

Observations

Most notable along Route 57 is the riders experience approaching the Pensacola Naval Air Station. As the bus moves south on Navy Boulevard onto Murray Road, civilian riders are required to disembark the bus. They then must wait and board an inbound bus to get back on the route. Speed humps and an unprotected left turn were also noted during fieldwork along Sunset Avenue.

ROUTE 58: CORRY STATION TO NAVAL HOSPITAL							
Characteristics ¹		Weekday		Saturday		TOP 10 STOPS	
Span of Service		5:30 am – 7:25 pm		7:30 am – 7:25 pm		Avg. Weekday Activity ²	
Frequency		Every 2 hours		Once every 2 hours		Downtown Transfer Station	
Cycle Time		115 mins		115 mins		23	
Route Distance		29.4 miles		28.6 to 29.4 miles		Pensacola VA Clinic*	
Avg. Operating Speed		15.3 mph		15.2 mph		5	
Number of Buses		2		2			
Operating Statistics		Weekday		Saturday			
Round Trips per Day		7		6		Hwy 98 @ 4 Bk East of Blue Angel	
Annual Revenue-Miles		51,862		8,820		5	
Annual Revenue-Hours		3,381		575			
Annual Deadhead Hours		164		35			
Annual Deadhead %		5%		5%		Chiefs Way	
						5	
Demographic Data ³		Within ¼-mile of stops					
Population		11,648	Seniors	1,390		Navy Blvd @ Chiefs Way	
Jobs		19,048	Youth	3,017		4	
Poverty		1,563	W/ Disabilities	1,088			
Minority		5,871	No Vehicles	400		Chiefs Way & New Warrington Rd	
						4	
Service Productivity		Weekday		Saturday			
Avg. Daily Ridership		38		33		Garden St & Spring St	
Riders/Revenue-Hour		2.8		2.9		3	
Riders/Revenue-Mile		0.2		0.2			
Riders/Round Trip		5.4		5.5			
Financial Performance		Overall		Weekday		Saturday	
Avg. Daily Revenue		\$28.1	\$29.9	\$26.0		Chiefs Way & Old Corry Field Rd	
Subsidy/Revenue-Hour		\$113.8	\$119.9	\$106.6		3	
Subsidy/Revenue-Mile		\$7.4	\$7.8	\$7.0			
Subsidy/Round Trip		\$218.1	\$229.9	\$204.4		Navy Blvd & Pace Blvd	
Daily Operating Cost		\$1,460.6	\$1,639.2	\$1,252.1		3	
Cost/Rider		\$40.7	\$43.1	\$37.9			
Farebox Recovery Ratio		1.9%	1.8%	2.1%		Hwy 98 @ Perdido Liquors	
Subsidy/Rider		\$39.9	\$42.3	\$37.2		2	
On-Time Performance ⁴				Weekday			
Time Period		Early		On-Time		Late	
Overall		33.3%		66.7%		0.0%	

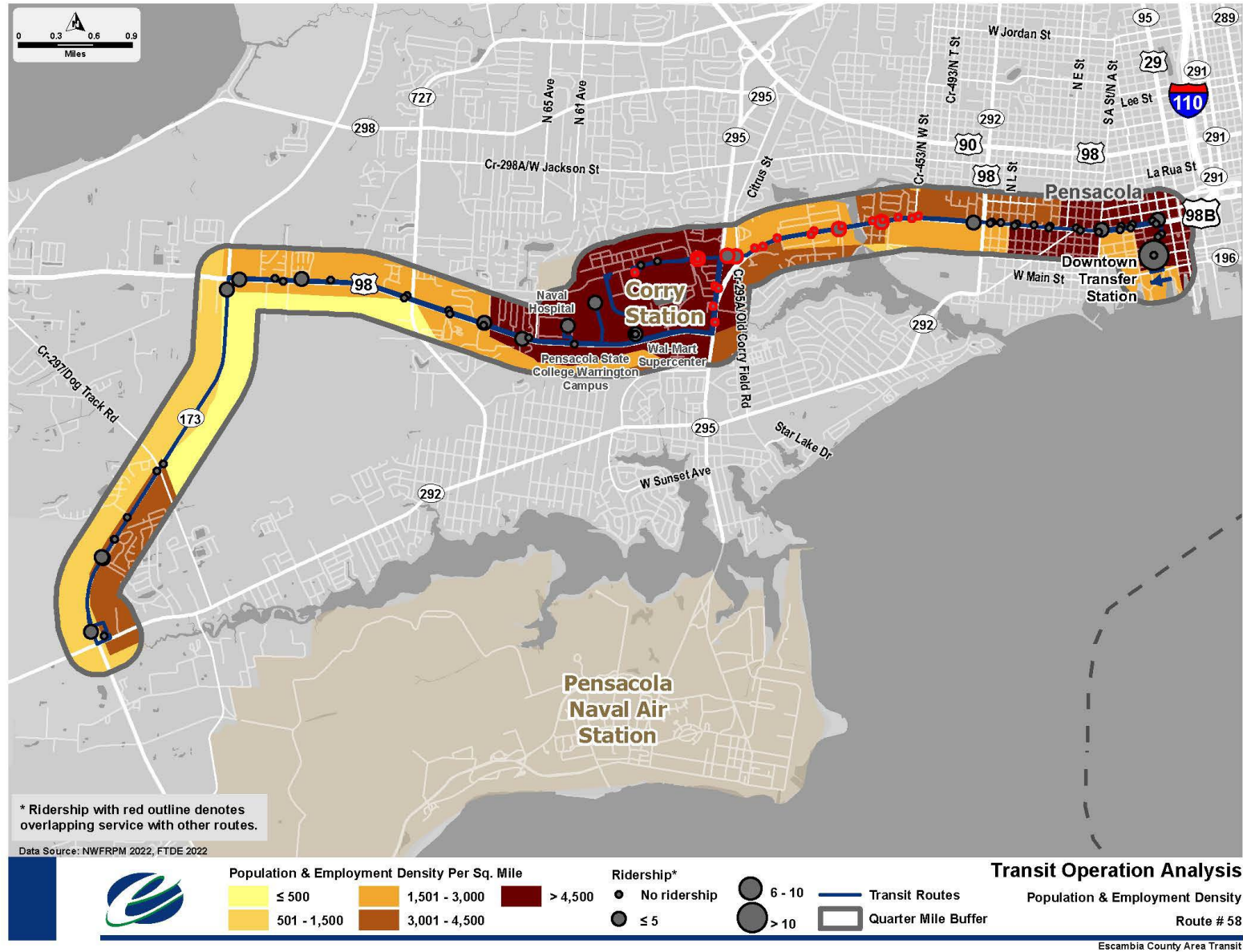
¹ Characteristics come from the Summer 2022 schedule in ECAT's Optibus account, the February 2022 General Transit Specification Feed (GTFS) in the Florida Geographic Data Library (FGDL), and ECAT's June 2021 Ride Guide

² Stop-level ridership data is based on random sampling in August to November 2022, calibrated to FY2022 annual route-level weekday ridership volumes.

³ Jobs information is from the Northwest Florida Regional Planning Model (NWRPM), in which 2015 data is projected to 2020. All other demographics are from the 2020 American Community Survey (ACS) administered by the United States Census Bureau.

⁴ On-time is defined as between 0 minutes early and 5 minutes late.

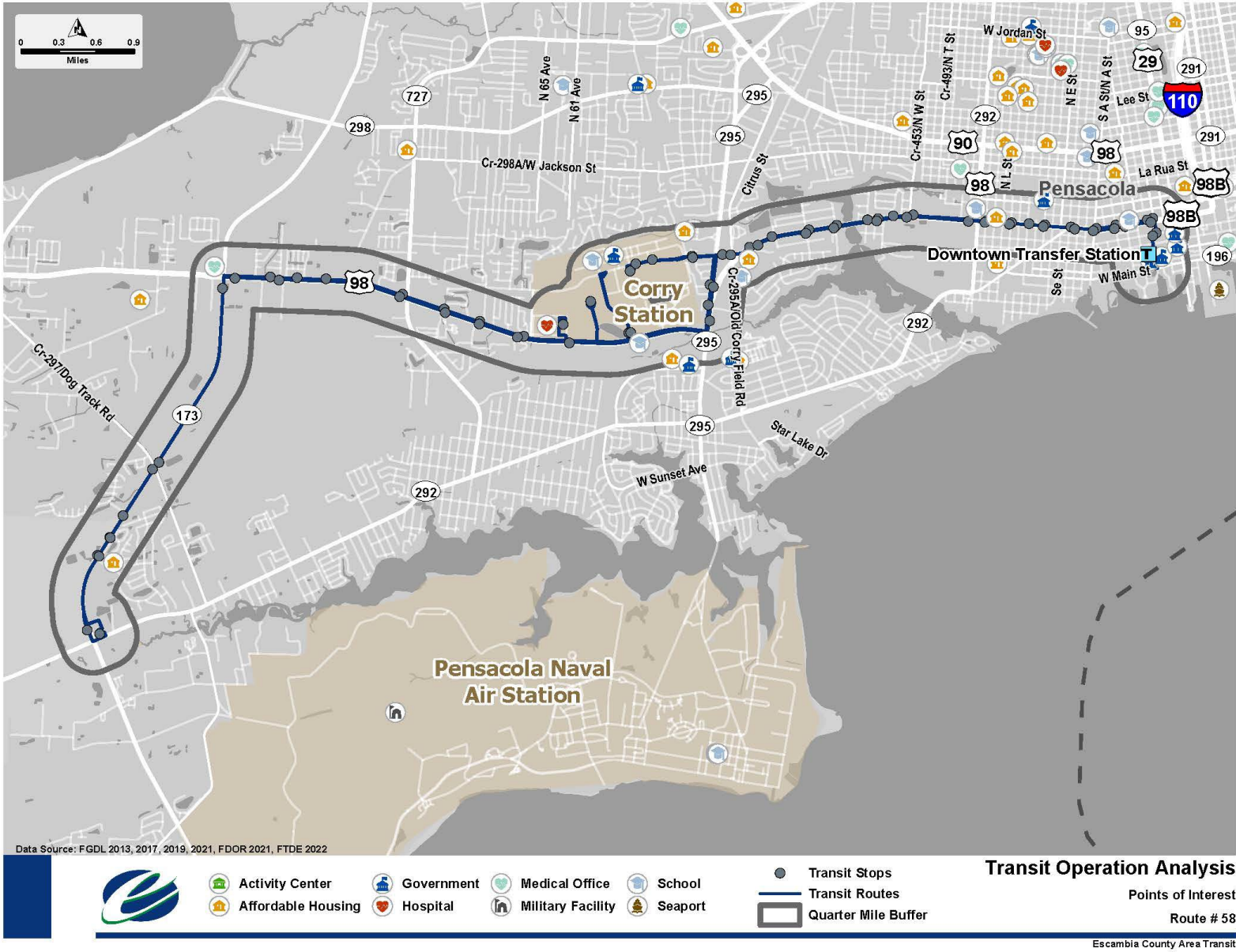
DEMOGRAPHICS

Population + Employment Density and Ridership (2020)⁵

⁵ Population and employment data is from the transportation analysis zones (TAZ's) of the NWFRPM, projected from 2015 to 2020. Ridership with a red outline denotes overlapping service with other routes.

PATRONAGE

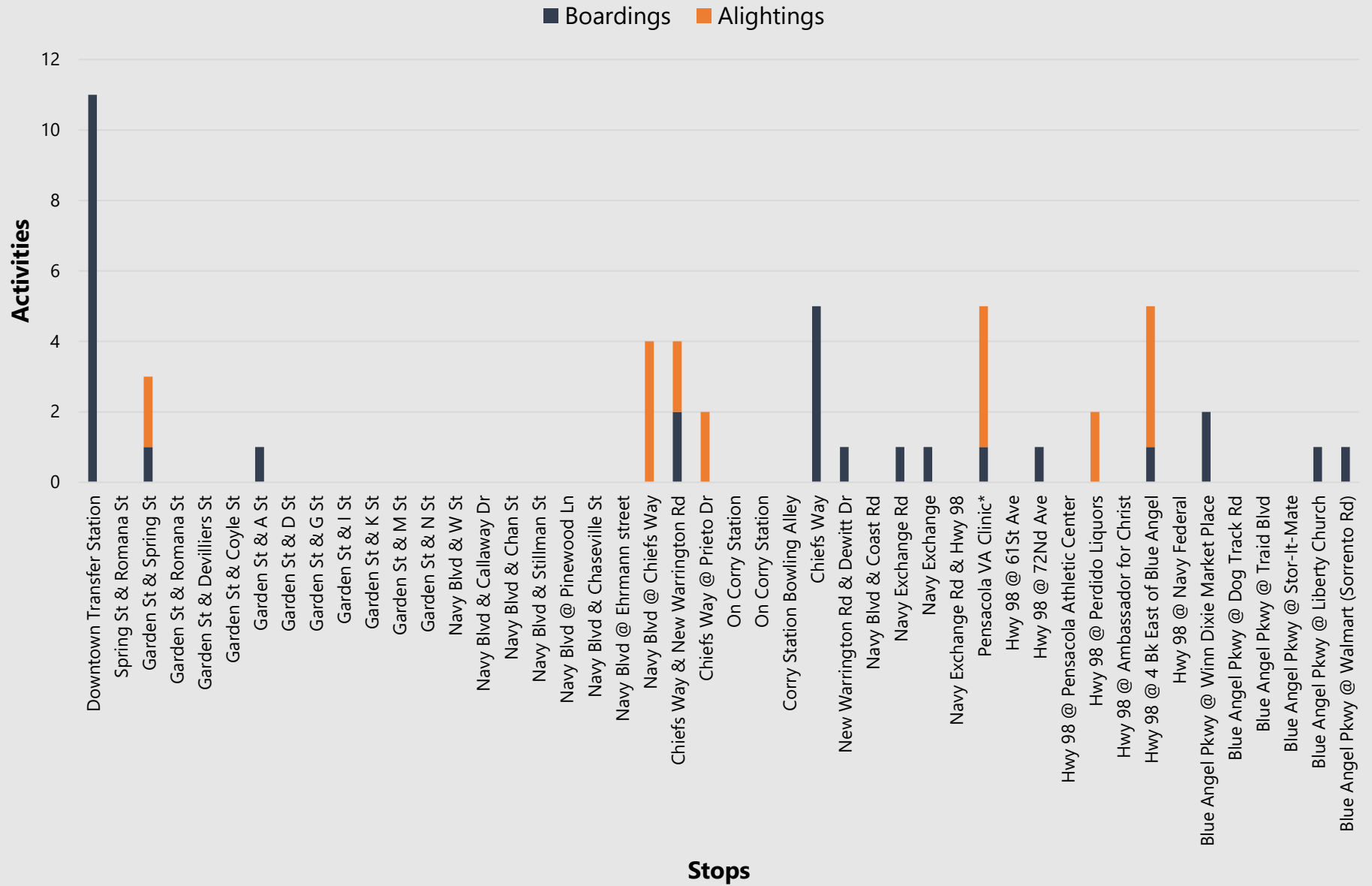
Activity Centers⁶



⁶ Points of Interest data is from the Florida Geographic Data Library (FGDL) 2013 - 21 and Florida Department of Revenue (FDOR) 2021.

RIDERSHIP TRENDS BY STOP (Weekday)⁷

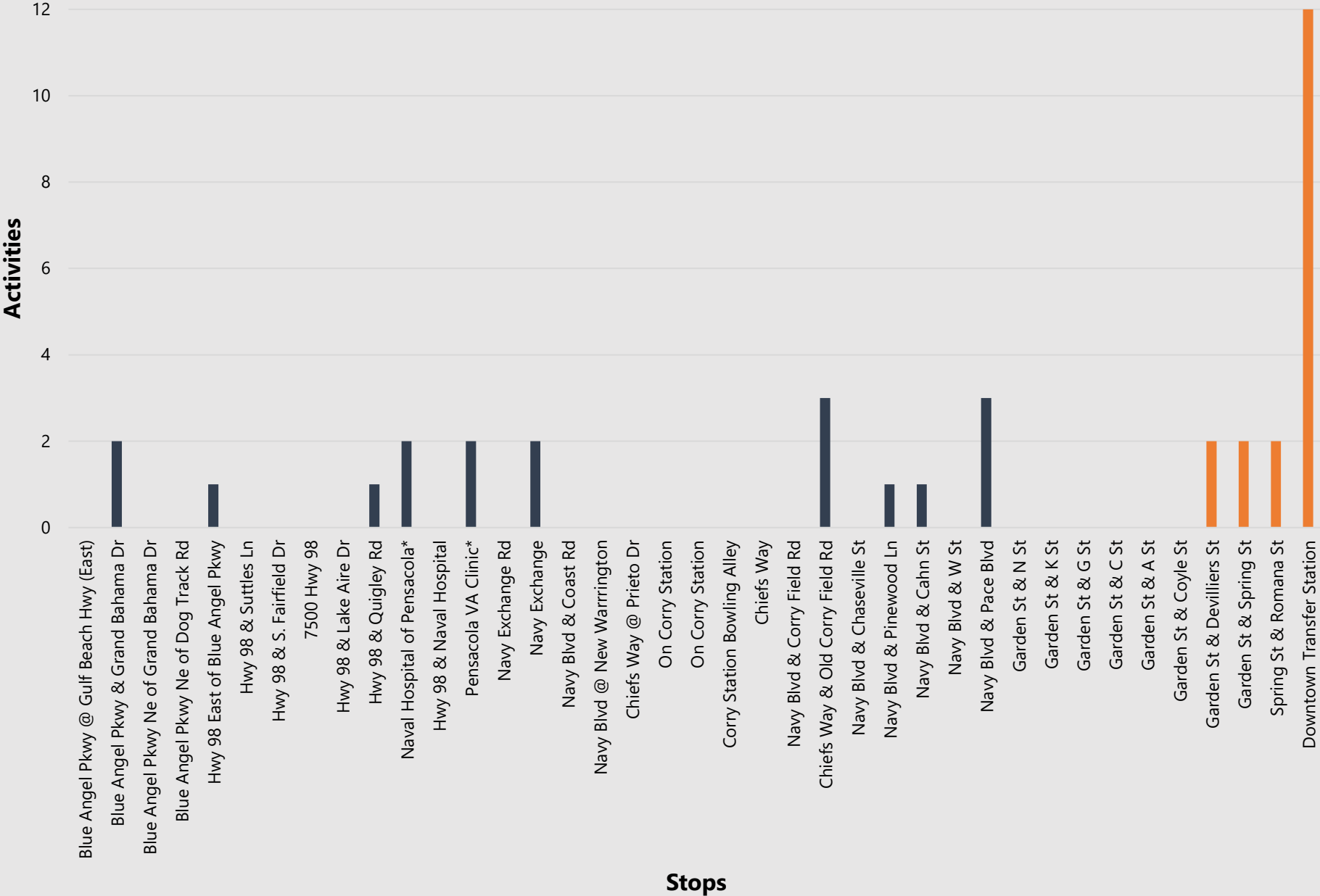
Outbound



⁷ 0 activities does not mean no activity; it just means that no activity was reported during the sample period or runs. Route 58 ridership by stop data was sampled from 6 total runs.

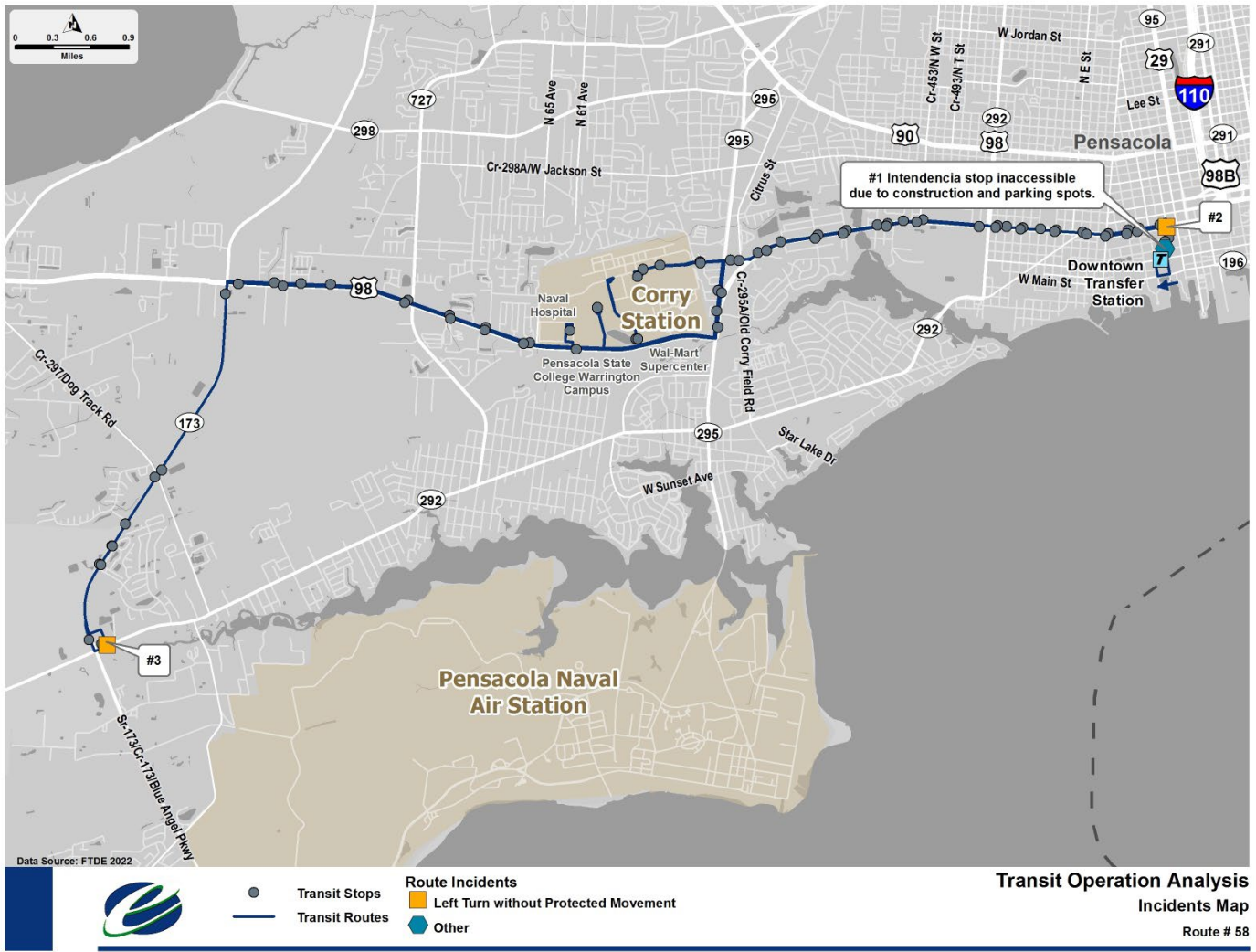
Inbound

Boardings Alightings



ROUTE INCIDENTS

Observations



#	Type	Description
1	Other	Intendencia stop is inaccessible due to construction and parking spots
2	Left Turn without Protected Movement	Unprotected left turn
3	Left Turn without Protected Movement	Unprotected left turn

ROUTE ASSESSMENT**Service Alignment**

Route 58 service begins at the Downtown Transfer Center before heading west along Garden Street and W Navy Boulevard, doing a loop to serve the VA Outpatient Clinic and Post Exchange, and then heading south along S Blue Angel Parkway. After ending at Sorrento Road, Route 58 returns to the Downtown Transfer Center.

System Interaction and Transfer Opportunities

At the Downtown Transfer Center, patrons can transfer from Route 58 to routes 2, 31, 32, 44, 45, 48, 57, and 61. Route 58 shares a portion of its Garden Street and W Navy Boulevard alignment with routes 44, 48, 57, and 59X.

Route Utility

There is a concentration of activity centers near the Downtown Transfer Center served by Route 58. The route also serves the area around Corry Station which includes the Naval Hospital and Pensacola State College Warrington Campus. These two areas, around Downtown Transfer Center and Corry Station, have a high density of population and employment as well as several of the top 10 highest ridership stops for Route 58.

Observations

Route 58 serves Corry Station, and as the bus approaches the station, civilian riders are required to disembark the bus. Along Route 58 west of Corry Station going all the way down to Sorrento Road is noted as not having much development, though there is a Walmart Supercenter. Number 2 on the incident map also notes a bus stop that is inaccessible due to construction and parking.

ROUTE 59X: CORRY STATION TO NAS PENSACOLA TO CORDOVA MALL								
Characteristics ¹		Weekday		Saturday		TOP 10 STOPS		
Span of Service	1:55 pm – 10:00 pm		12:15 pm – 9:49 pm		Avg. Weekday Activity ²			
Frequency	Usually every 40 mins		Usually every 100 mins		9th Ave @ Cordova Mall	23		
Cycle Time	95 mins		95 mins					
Route Distance	29.1 miles		29.1 miles		Corry Station Bowling Alley	20		
Avg Operating Speed	18.9 mph		19.3- 20 mph					
Number of Buses	2		2					
Operating Statistics		Weekday		Saturday				
Round Trips per Day	8 M-Th; 11 Fri		13 Sat; 9.5 Sun		Jefferson St & Garden St	8		
Annual Revenue-Miles	36,666		7,275					
Annual Revenue-Hours	1,995		880					
Annual Deadhead Hours	64		0		NATTC @ North Side	4		
Annual Deadhead %	3%		0%					
Demographic Data ³		Within ¼-mile of stops						
Population	19,714	Seniors		1,958		-	-	
Jobs	29,402	Youth		3,542				
Poverty	3,003	W/ Disabilities		1,542				
Minority	9,050	No Vehicles		9,050		-	-	
Service Productivity		Weekday		Saturday				
Avg Daily Ridership	26		28					
Riders/Revenue-Hour	3.3		3.2		-	-		
Riders/Revenue-Mile	0.2		0.2					
Riders/Round Trip	3.0		2.5					
Financial Performance		Overall		Weekday				
Avg Daily Revenue	\$39.2		\$37.7		\$40.6		-	-
Subsidy/Revenue-Hour	\$119.7		\$137.1		\$103.8			
Subsidy/Revenue-Mile	\$6.5		\$7.5		\$5.6			
Subsidy/Round Trip	\$100.2		\$126.2		\$80.4		-	-
Daily Operating Cost	\$1,029.6		\$1,123.1		\$944.7			
Cost/Rider	\$38.3		\$43.2		\$33.7			
Farebox Recovery Ratio	3.8%		3.4%		4.3%		-	-
Subsidy/Rider	\$36.8		\$41.7		\$32.3			
On-Time Performance ⁴		Weekday						
<u>Time Period</u>	<u>Early</u>		<u>On-Time</u>		<u>Late</u>			
Overall	0%		25%		75%			

¹ Characteristics come from the Summer 2022 schedule in ECAT's Optibus account, the February 2022 General Transit Specification Feed (GTFS) in the Florida Geographic Data Library (FGDL), and ECAT's June 2021 Ride Guide.

² Stop-level ridership data is based on random sampling in August to November 2022, calibrated to FY2022 annual route-level weekday ridership volumes.

³ Jobs information is from the Northwest Florida Regional Planning Model (NWRPM), in which 2015 data is projected to 2020. All other demographics are from the 2020 American Community Survey (ACS) administered by the United States Census Bureau.

⁴ On-time is defined as between 0 minutes early and 5 minutes late.

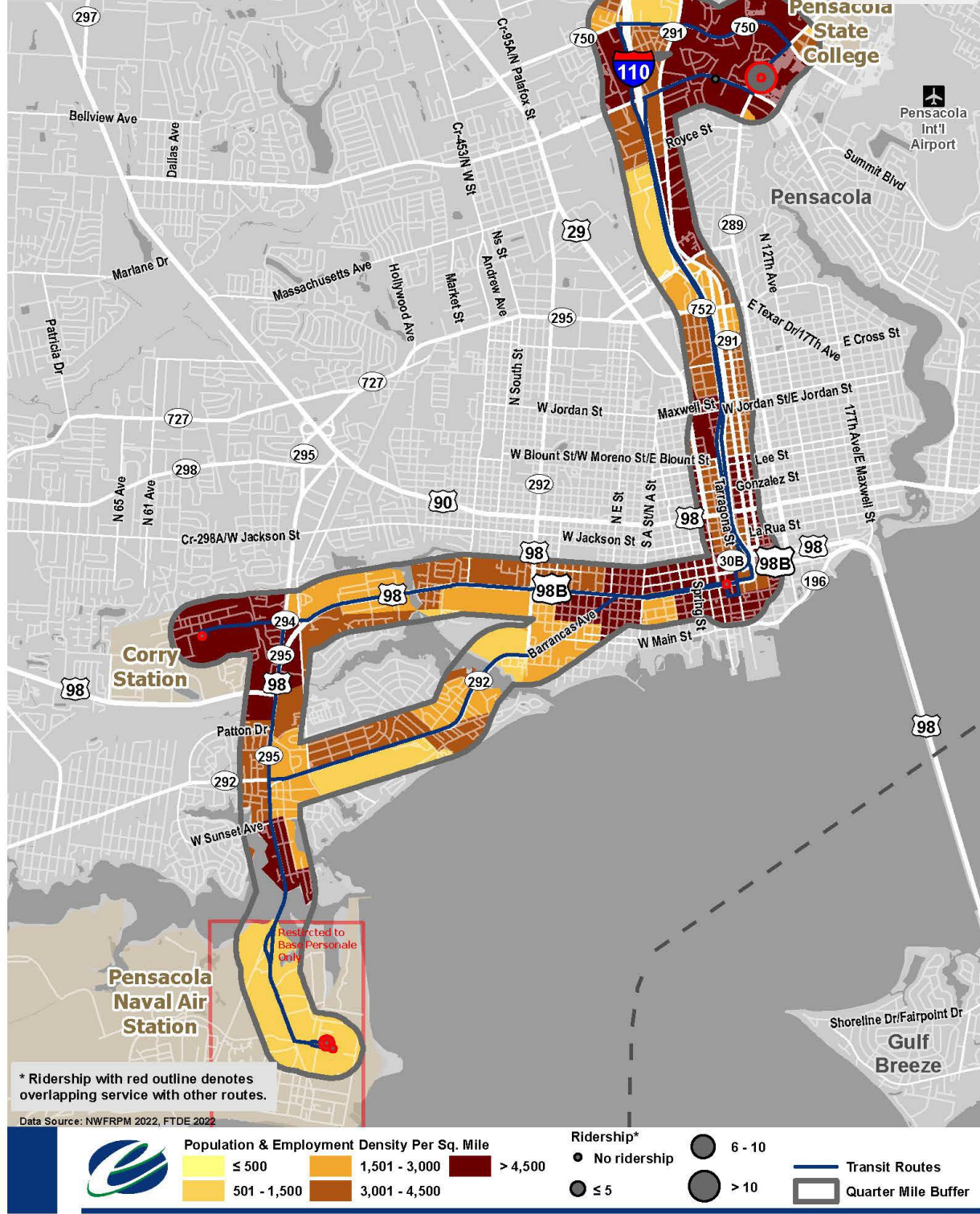
DEMOGRAPHICS

Population + Employment Density and Ridership (2020)⁵

Transit Operation Analysis

Population & Employment Density

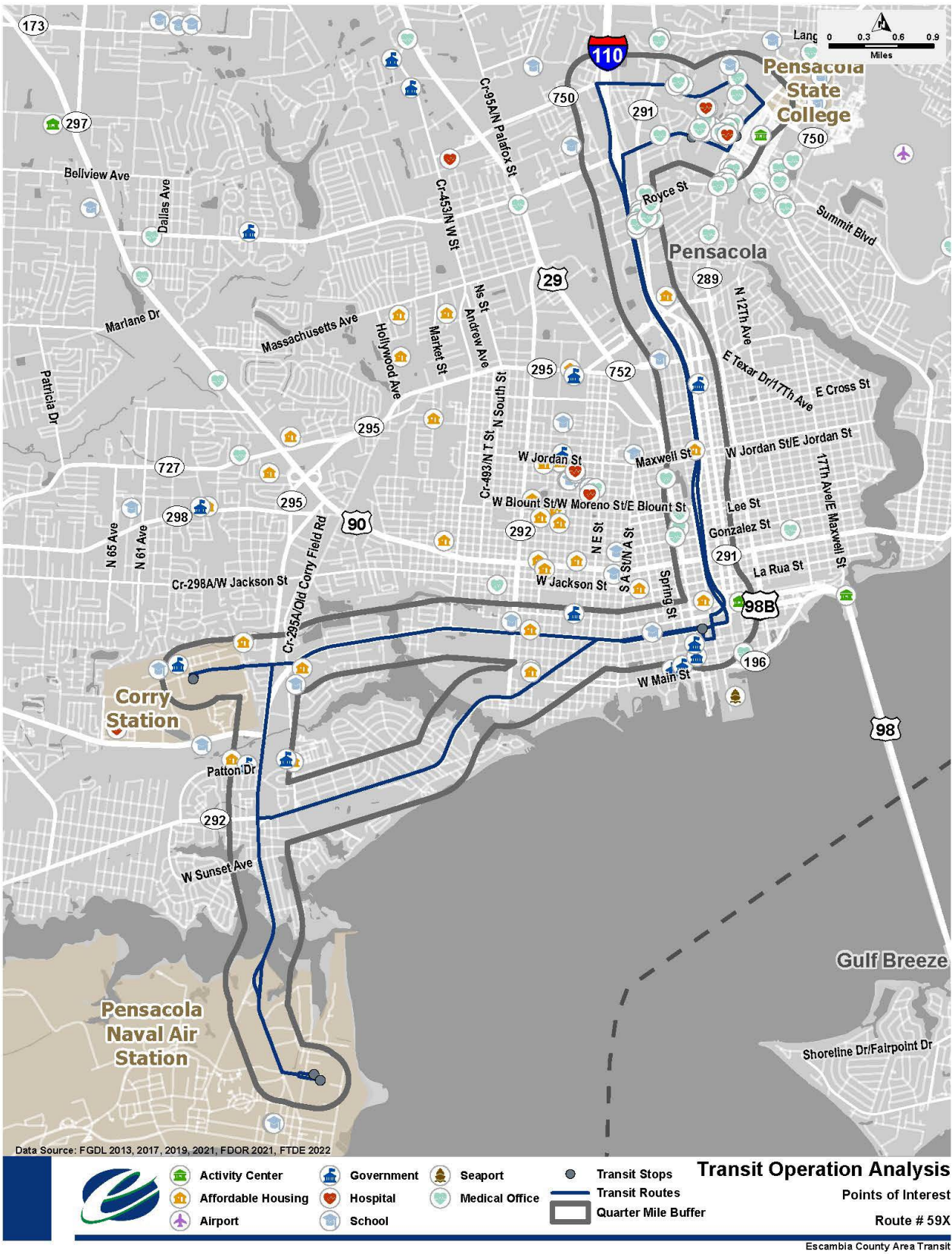
Route # 59X



⁵ Population and employment data is from the transportation analysis zones (TAZ's) of the NWFRPM, projected from 2015 to 2020. Ridership with a red outline denotes overlapping service with other routes.

PATRONAGE

Activity Centers⁶

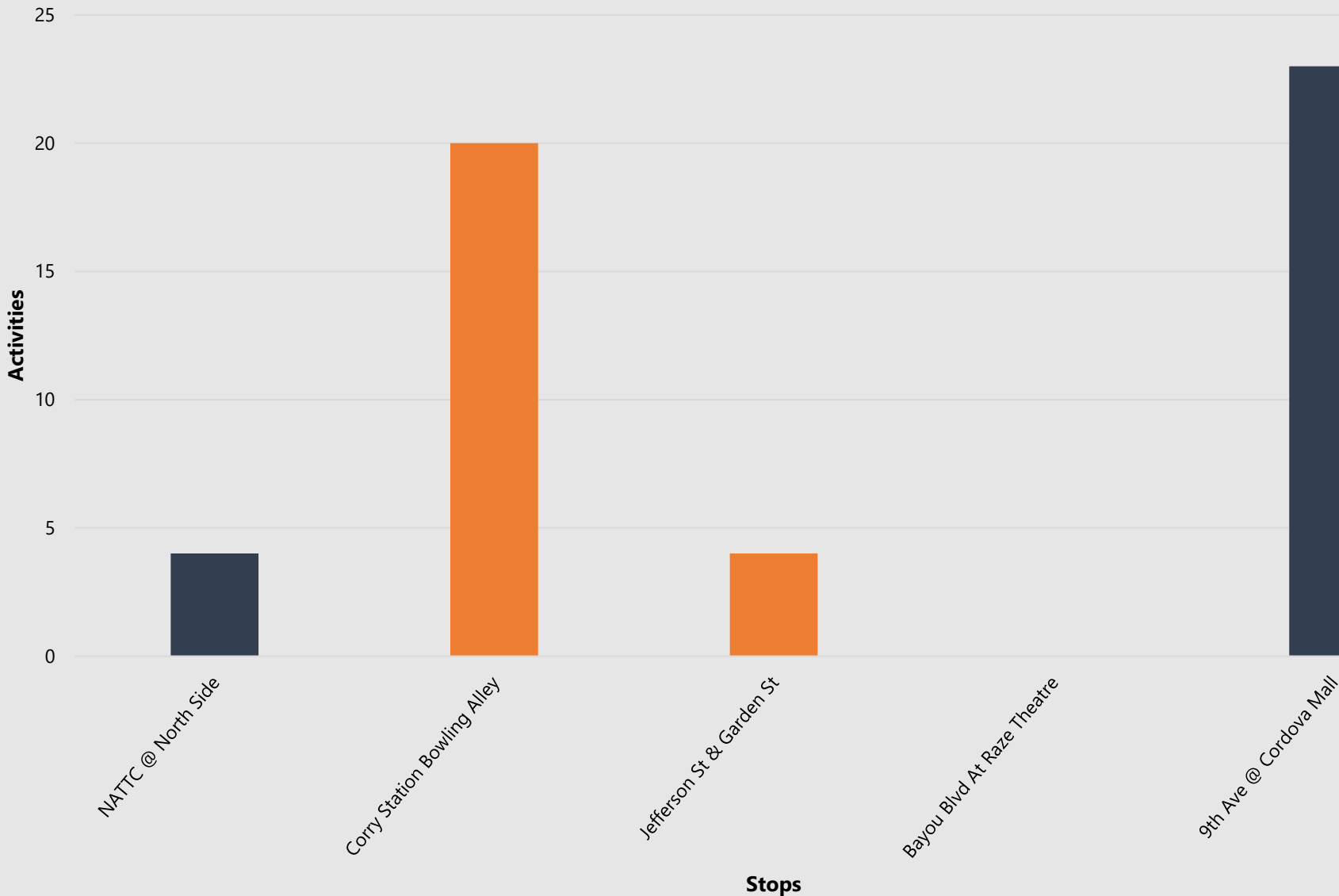


⁶ Points of Interest data is from the Florida Geographic Data Library (FGDL) 2013 - 21, and Florida Department of Revenue (FDOR) 2021.

RIDERSHIP TRENDS BY STOP (Weekday)⁷

Outbound

Boardings Alightings



⁷ 0 activities does not mean no activity; it just means that no activity was reported during the sample period or runs. Route 59X ridership by stop data was sampled from 2 total runs.

Inbound

Boardings Alightings

Activities
5
4
3
2
1
0

Jefferson St & Garden St

NATTC Pensacola

Stops

ROUTE ASSESSMENT**Service Alignment**

Route 59X service begins at the Naval Air Technical Training Center before moving north along S Navy Boulevard and west along W Navy Boulevard. Once downtown, the route goes north along I-110 to Airport Boulevard. At Airport Boulevard, the route makes a loop before returning to its terminus at the Naval Air Technical Training Center.

System Interaction and Transfer Opportunities

Route 59X shares a portion of its S Navy Boulevard and W Navy Boulevard alignment with routes 48, 57, and 58. Downtown, Route 59X shares much of its alignment with several other routes. The route also shares a portion of its I-110 alignment with Route 61.

Route Utility

Route 59X serves the Naval Air Station and Corry Station. The route serves the denser concentration of activity centers downtown, as well as activity centers at the northern tip of its alignment including Cordova Mall and Sacred Heart Hospital of Pensacola. The areas along the route with the highest density of population and employment include Corry Station, the area around Cordova Mall, and Downtown Pensacola.

Observations

The main observation noted for Route 59X is that the major activity centers served by this route are also served by other routes, causing some redundancy. Additionally, as the bus approaches both the Naval Air Station and Corry Station, civilian riders are required to disembark the bus.

ROUTE 60: CENTURY					
Characteristics ¹		Weekday		TOP 10 STOPS	
Span of Service	5:20 am – 7:05 pm			Avg. Weekday Activity ²	
Frequency	Approx. every 6 hours			Rosa Parks Transfer Center	12
Cycle Time	115 min				
Route Distance	84.1 miles				
Avg. Operating Speed	43.3 mph				
Number of Buses	1			Century Court House	11
Operating Statistics		Weekday			
Round Trips per Day	3			Hwy 29 @ Hood Dr	4
Annual Revenue-Miles	63,580				
Annual Revenue-Hours	1,449				
Annual Deadhead Hours	0			Hwy 29 & Tedder Rd	2
Annual Deadhead %	0%				
Demographic Data ³		Within ¼-mile of stops		Casey Ln @ Hwy 95	2
Population	9,989	Seniors	1,632		
Jobs	11,220	Youth	1,793		
Poverty	1,121	W/ Disabilities	736		
Minority	4,051	No Vehicles	307		
Service Productivity		Weekday		Hwy 29 & Kingsfield Rd	1
Avg. Daily Ridership	16				
Riders/Revenue-Hour	2.8			Winn-Dixie Hwy 29 North	1
Riders/Revenue-Mile	0.1				
Riders/Round Trip	5.3				
Financial Performance		Weekday		Becks Lake Rd	1
Avg. Daily Revenue	\$26.3				
Subsidy/Revenue-Hour	\$190.2			Upton Rd	1
Subsidy/Revenue-Mile	\$4.3				
Subsidy/Round Trip	\$364.5				
Daily Operating Cost	\$1,119.8				
Cost/Rider	\$70.0			Hwy 29 & Hwy 95A	1
Farebox Recovery Ratio	2.4%				
Subsidy/Rider	\$68.3				
On-Time Performance ⁴		Weekday			
<u>Time Period</u>	<u>Early</u>	<u>On-Time</u>	<u>Late</u>		
Overall	50%	50%	0%		

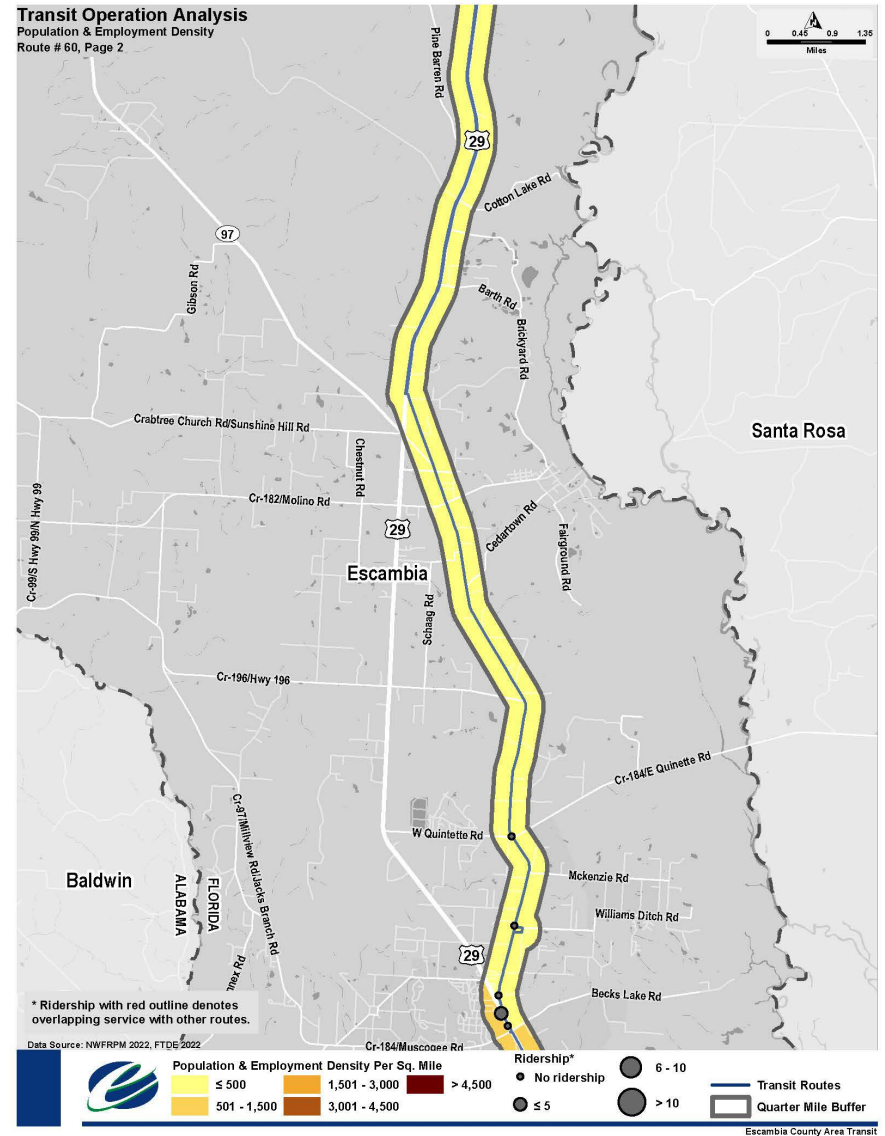
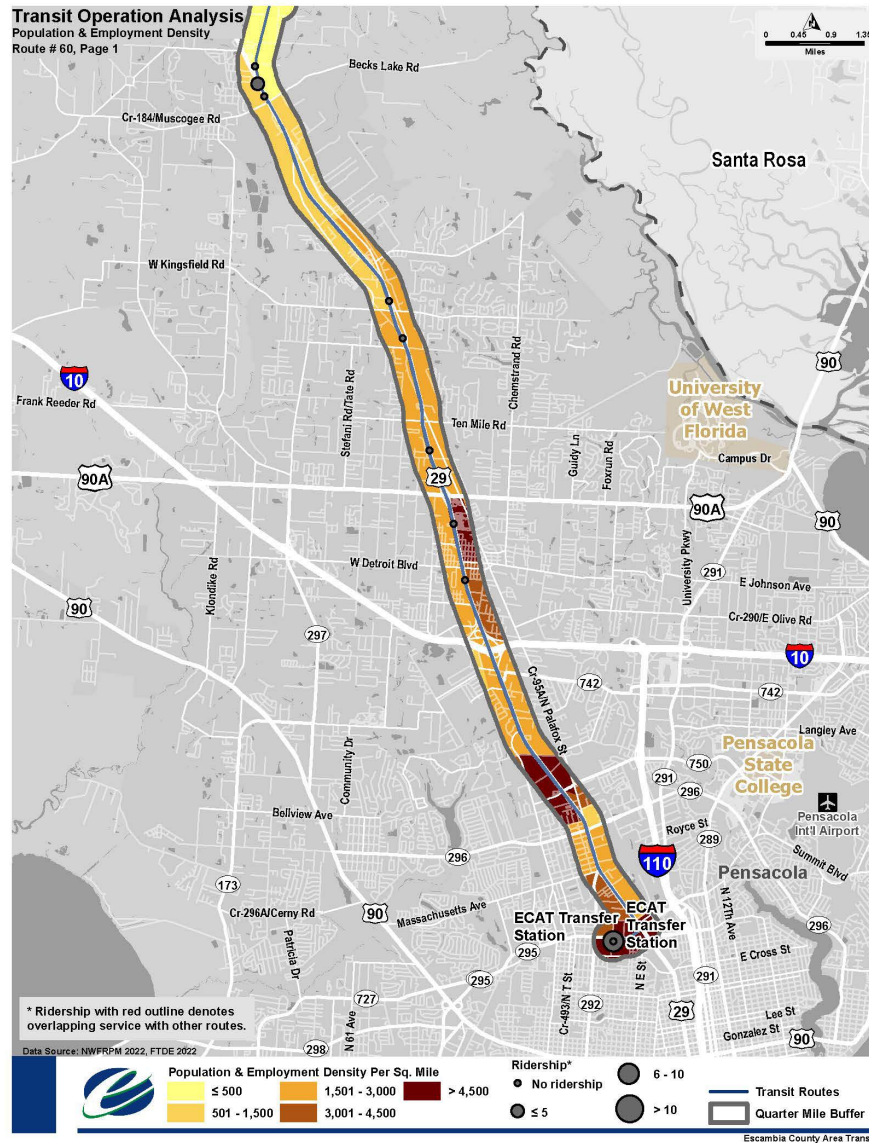
¹ Characteristics come from the Summer 2022 schedule in ECAT's Optibus account, the February 2022 General Transit Specification Feed (GTFS) in the Florida Geographic Data Library (FGDL), and ECAT's June 2021 Ride Guide

² Stop-level ridership data is based on random sampling in August to November 2022, calibrated to FY2022 annual route-level weekday ridership volumes.

³ Jobs information is from the Northwest Florida Regional Planning Model (NWRPM), in which 2015 data is projected to 2020. All other demographics are from the 2020 American Community Survey (ACS) administered by the United States Census Bureau.

⁴ On-time is defined as between 0 minutes early and 5 minutes late.

DEMOGRAPHICS

Population + Employment Density and Ridership (2020)⁵

⁵ Population and employment data is from the transportation analysis zones (TAZ's) of the NWFRPM, projected from 2015 to 2020. Ridership with a red outline denotes overlapping service with other routes.

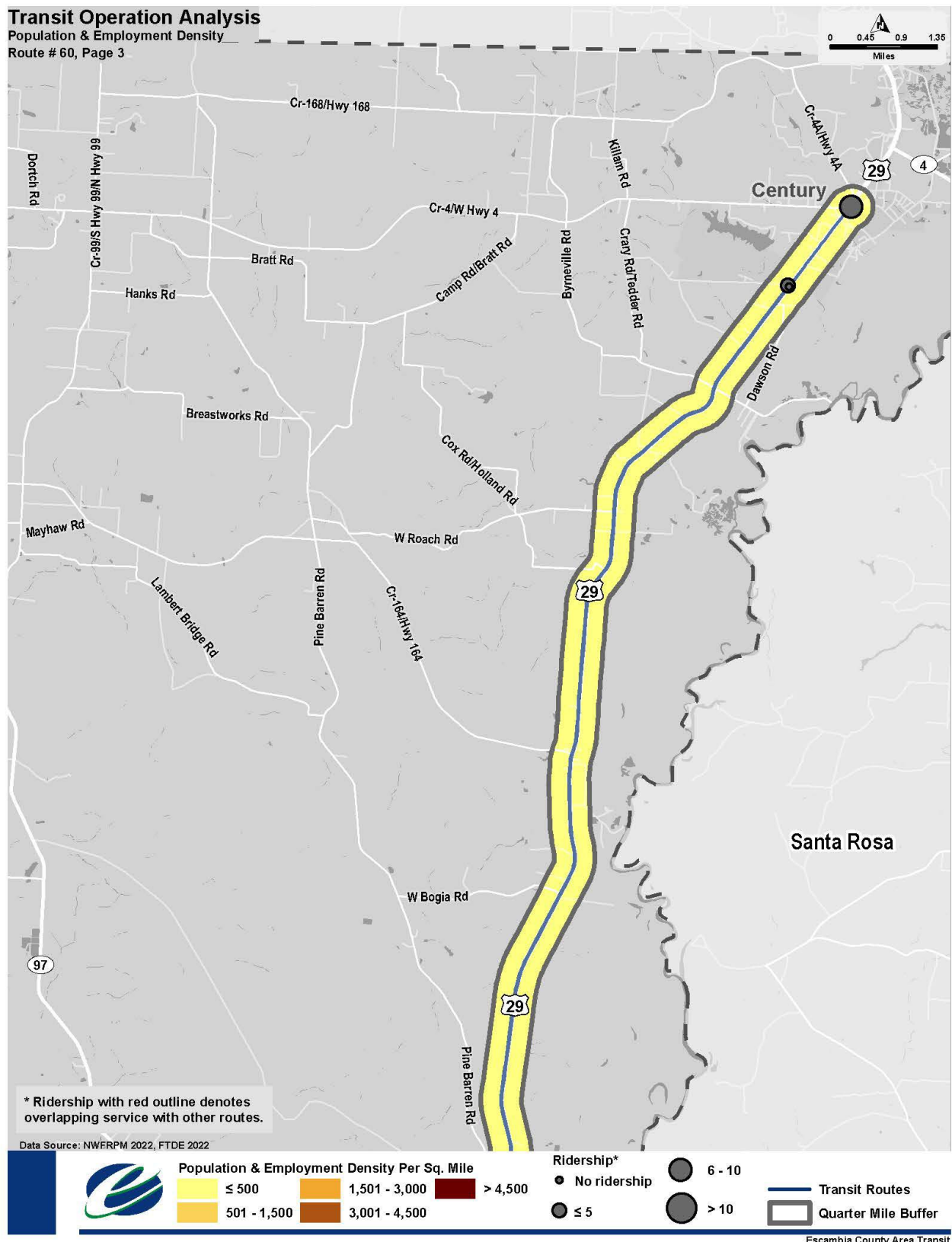
DEMOGRAPHICS

Population + Employment Density and Ridership (2020)⁶

Transit Operation Analysis

Population & Employment Density

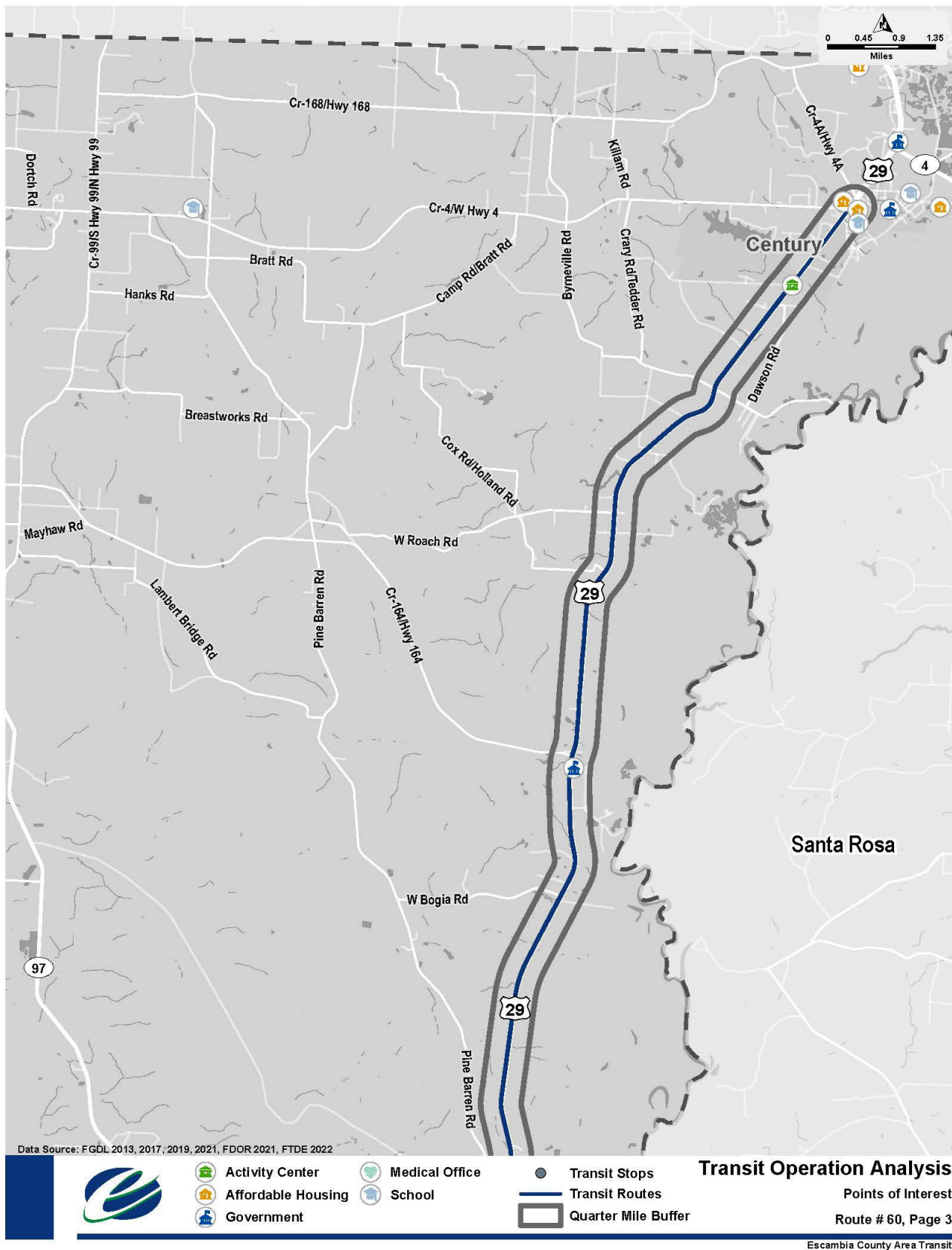
Route # 60, Page 3



⁶ Population is from the transportation analysis zones (TAZ's) of the NWFRPM, projected from 2015 to 2020.

PATRONAGE

Activity Centers⁸

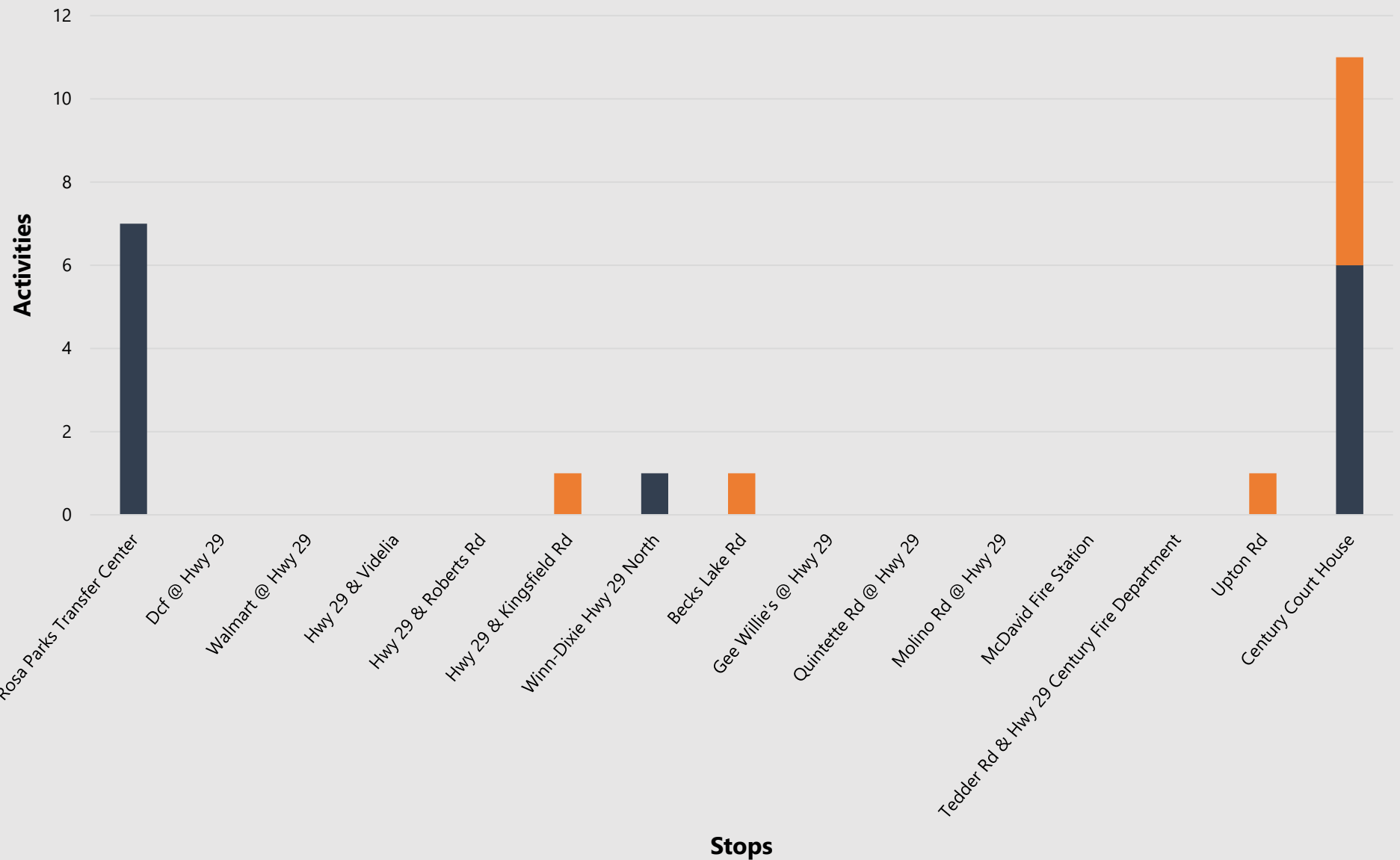


⁸ Points of Interest data is from the Florida Geographic Data Library (FGDL) 2013 - 21, and Florida Department of Revenue (FDOR) 2021.

RIDERSHIP TRENDS BY STOP (Weekday)⁹

Outbound

Boardings Alightings

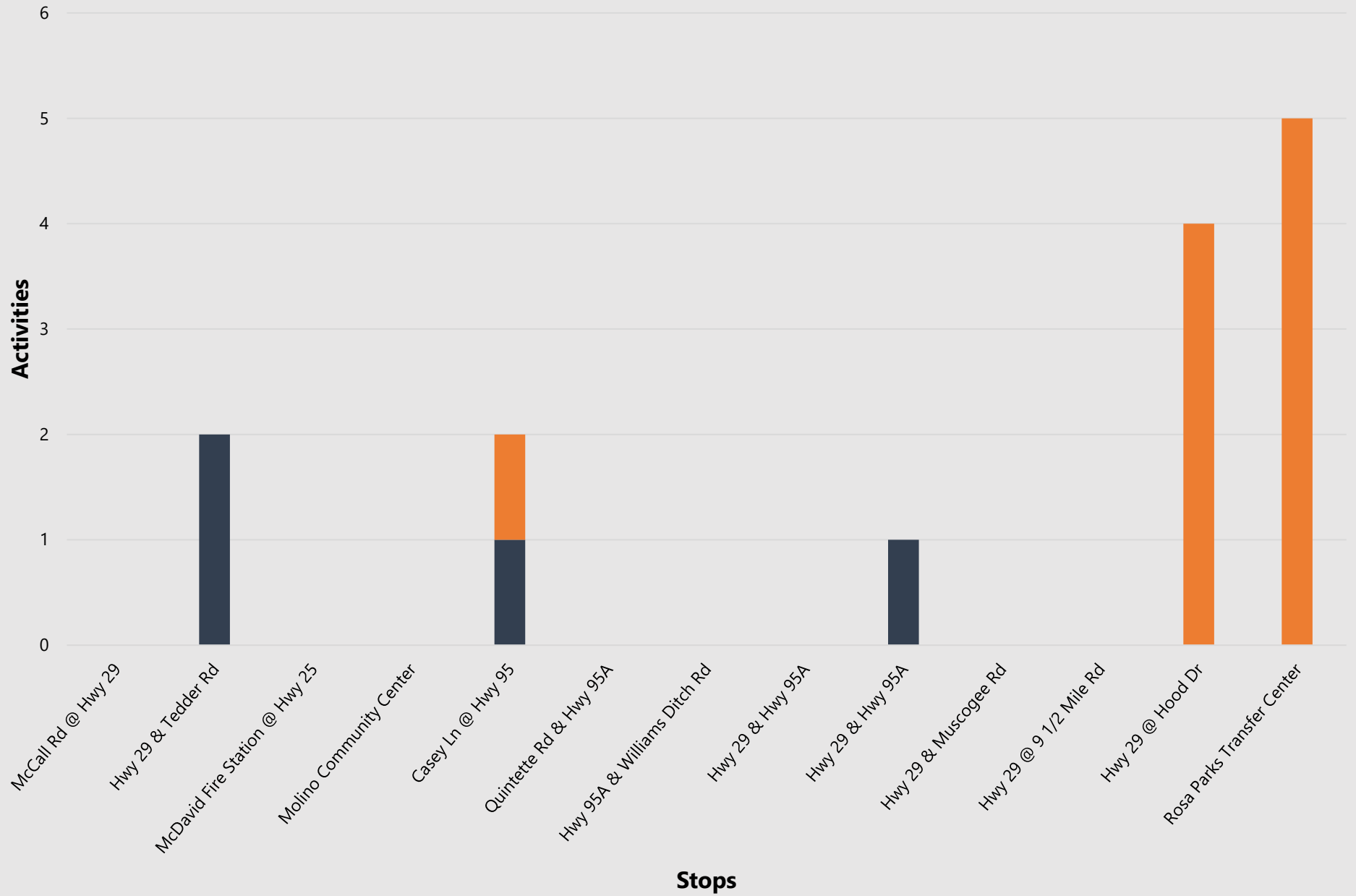


⁹ 0 activities does not mean no activity just means that no activity was reported during the sample period or runs. Route 60 ridership by stop data was sampled from 3 total runs.

Route 60: Century

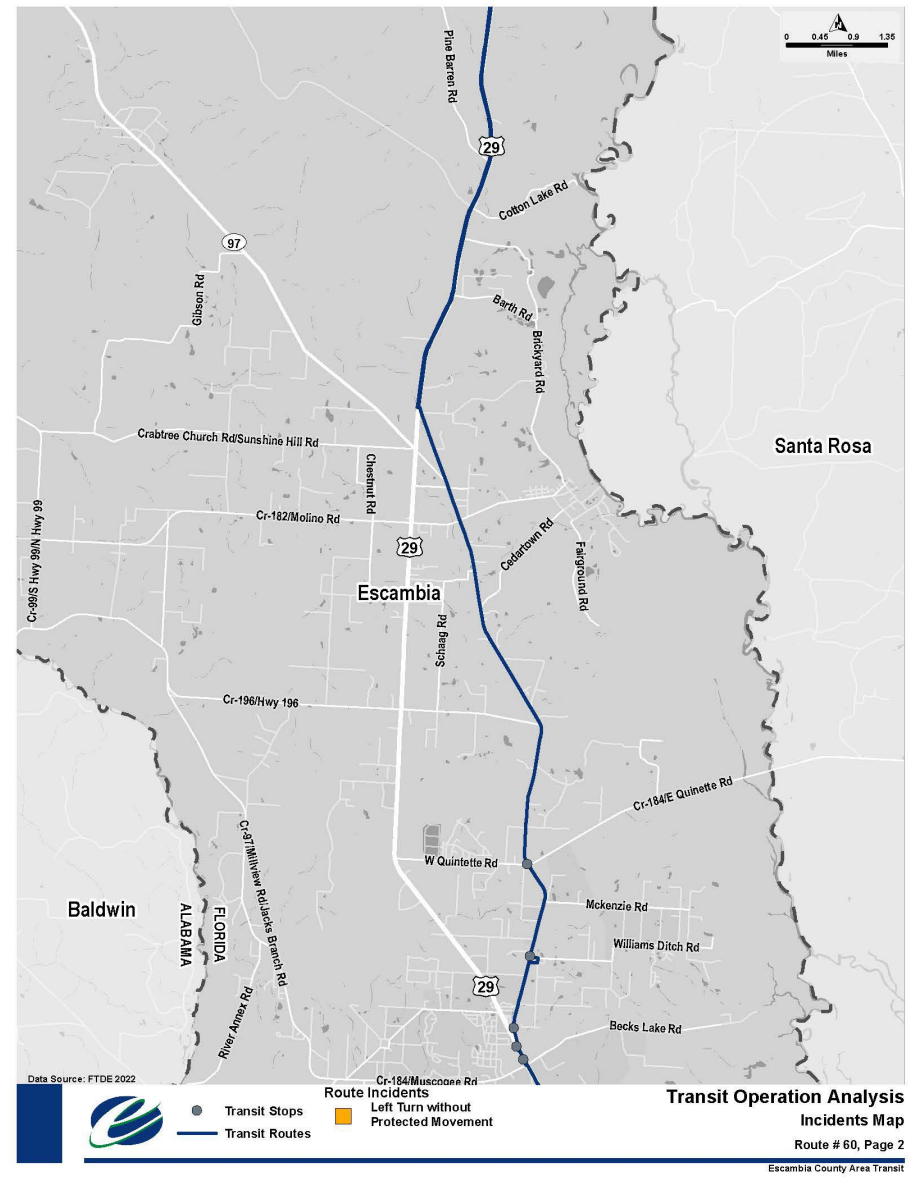
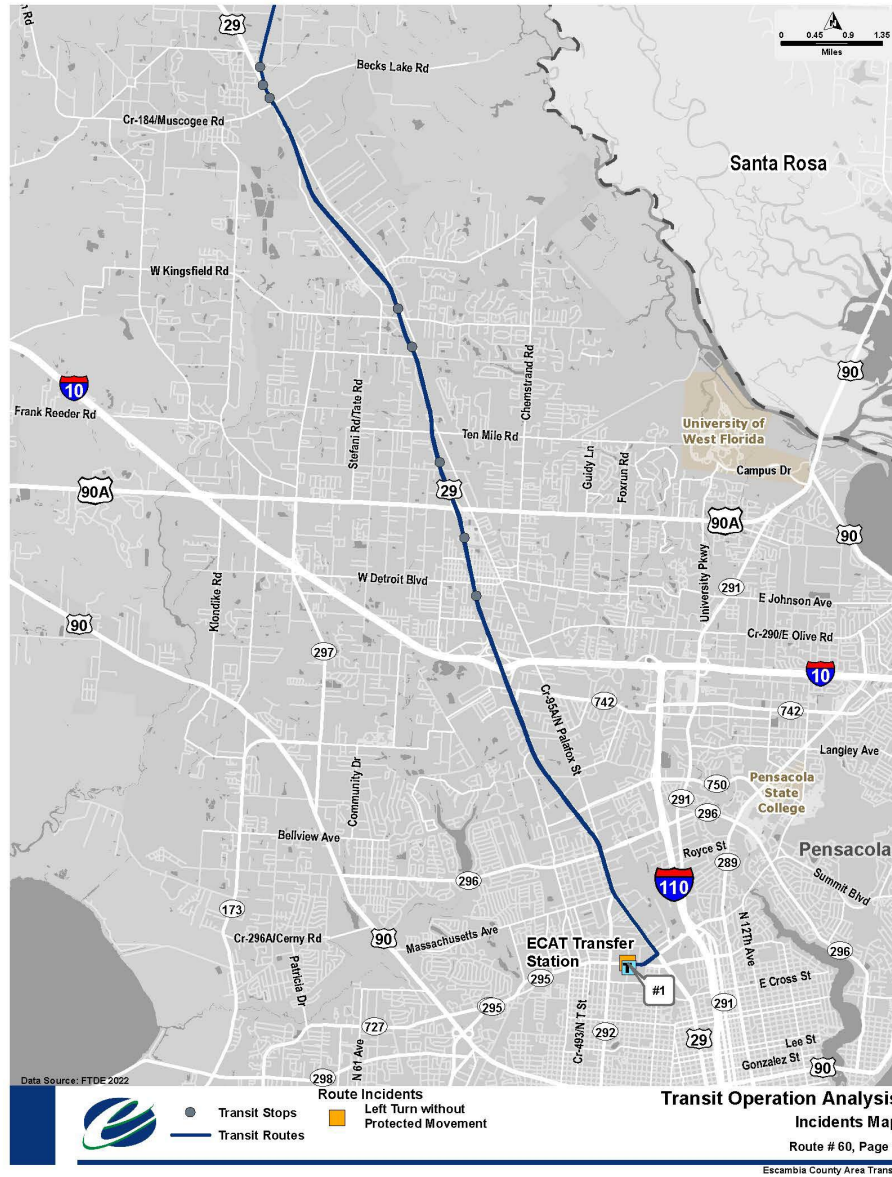
Inbound

Boardings Alightings



ROUTE INCIDENTS

Observations



Observations

Transit Operation Analysis Incidents Map

Route Incidents

- Left Turn without Protected Movement
- Protected Movement

Transit Stops

Transit Routes

Route # 60, Page 3

Escambia County Area Transit

ROUTE ASSESSMENT**Service Alignment**

Route 60 service begins at the Rosa Parks Transit Complex. The route then goes north via Palafox Street and Pensacola Boulevard all the way up to Century Courthouse before returning to the Rosa Parks Transit Complex.

System Interaction and Transfer Opportunities

At the Rosa Parks Transit Complex, patrons can transfer from Route 60 to routes 1, 2, 32, 44, 45, 47, 48, 50, 51, 52, 55, and 61. Route 60 shares a portion of its Palafox Street and Pensacola Boulevard alignment with routes 50 and 51.

Route Utility

In addition to the concentration of activity centers around the Rosa Parks Transit Complex, Route 60 also serves the group of activity centers between Pensacola Boulevard and Palafox Street at their intersection with Nine Mile Road and the Car City area along Pensacola Boulevard. These three areas have the highest density of population and employment.

Observations

During fieldwork there were unprotected left turns noted at the beginning and end of the route.

ROUTE 61: PENSACOLA BEACH						
Characteristics ¹		Weekday		Saturday	TOP 10 STOPS	
Span of Service		8:00 am – 5:00 pm		8:30 am – 6:00 pm	Avg. Weekday Activity ²	
Frequency		Approx. every 4 hours		Approx. every 4 hours	Rosa Parks Transfer Center	
Cycle Time		90 mins		90 mins		
Route Distance		34.7 miles		34.7 miles	Pensacola Beach Visitors Info Center	
Avg. Operating Speed		23.2 mph		23.2 mph		
Number of Buses		1		1	Via De Luna Dr & 10Th Ave	
Operating Statistics		Weekday		Saturday		
Round Trips per Day		3		3	Fort Pickens Rd & Casino Beach Blvd	
Annual Revenue-Miles		26,248		5,208		
Annual Revenue-Hours		1,134		225	Quietwater Beach Boardwalk Parking Lot	
Annual Deadhead Hours		0		0		
Annual Deadhead %		0%		0%	Fort Pickens Rd & Park West	
Demographic Data ³		Within ¼-mile of stops				
Population		9,649	Seniors	1,253	Gulf Breeze Pkwy at McDonalds	
Jobs		21,587	Youth	1,305		
Poverty		1,230	W/ Disabilities	570	Gregory St West Of Alcaniz St	
Minority		3,736	No Vehicles	432		
Service Productivity		Weekday		Saturday	Chase St & 11th Ave	
Avg. Daily Ridership		15		15		
Riders/Revenue-Hour		3.3		3.3	-	
Riders/Revenue-Mile		0.1		0.1		
Riders/Round Trip		5.0		5.0	-	
Financial Performance		Overall	Weekday	Saturday		
Avg. Daily Revenue		\$20.7	\$20.7	\$20.7		
Subsidy/Revenue-Hour		\$133.4	\$143.3	\$123.5		
Subsidy/Revenue-Mile		\$5.8	\$6.2	\$5.3		
Subsidy/Round Trip		\$200.2	\$215.0	\$185.3		
Daily Operating Cost		\$621.2	\$665.8	\$576.6		
Cost/Rider		\$41.4	\$44.4	\$38.4		
Farebox Recovery Ratio		3.4%	3.1%	3.6%		
Subsidy/Rider		\$40.0	\$43.0	\$37.1		
On-Time Performance ⁴						
Weekday						
Time Period		Early		On-Time		
Overall		0%		50%		
				Late		
		50%				

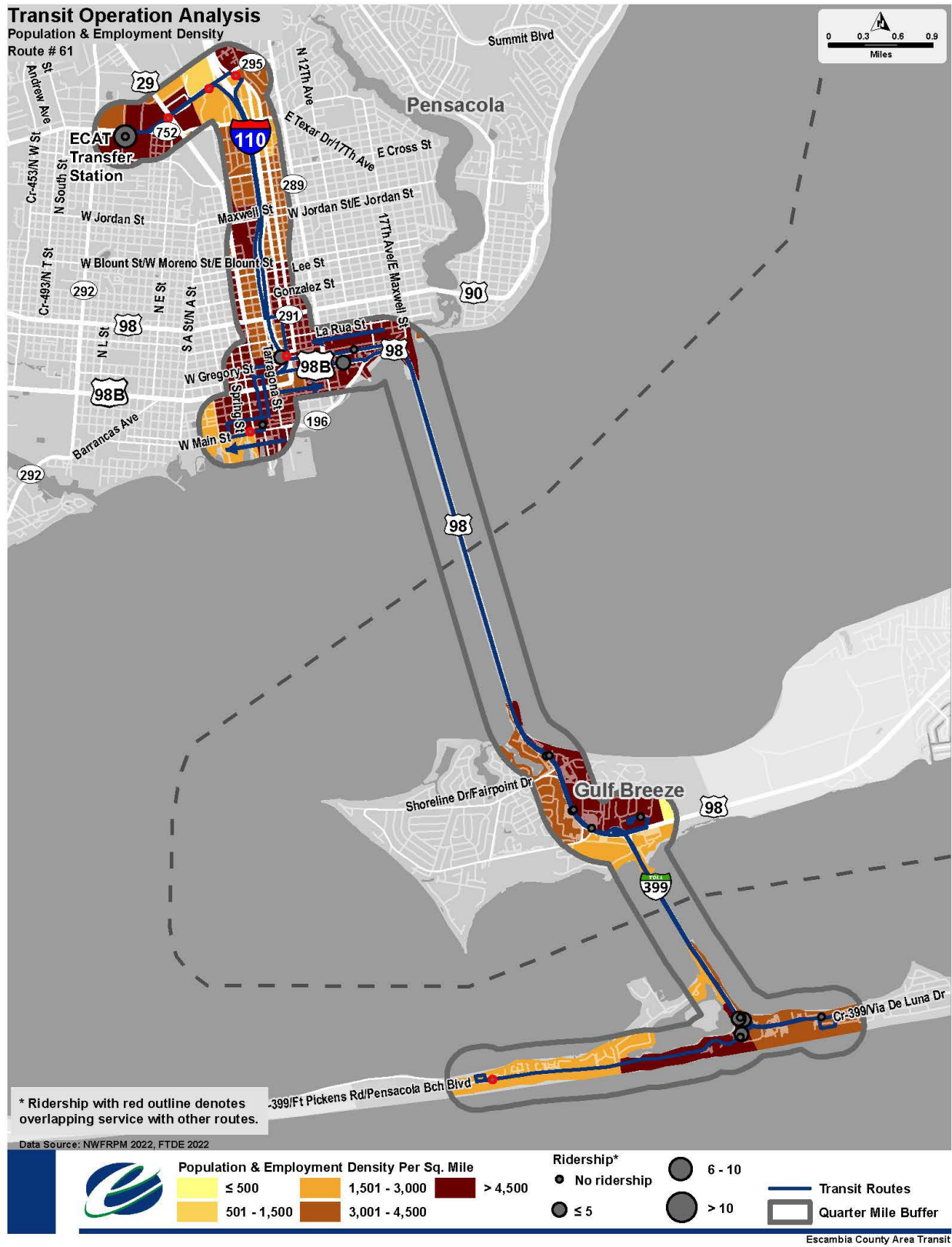
¹ Characteristics come from the Summer 2022 schedule in ECAT's Optibus account, the February 2022 General Transit Specification Feed (GTFS) in the Florida Geographic Data Library (FGDL), and ECAT's June 2021 Ride Guide.

² Stop-level ridership data is based on random sampling in August to November 2022, calibrated to FY2022 annual route-level weekday ridership volumes.

³ Jobs information is from the Northwest Florida Regional Planning Model (NWRPM), in which 2015 data is projected to 2020. All other demographics are from the 2020 American Community Survey (ACS) administered by the United States Census Bureau.

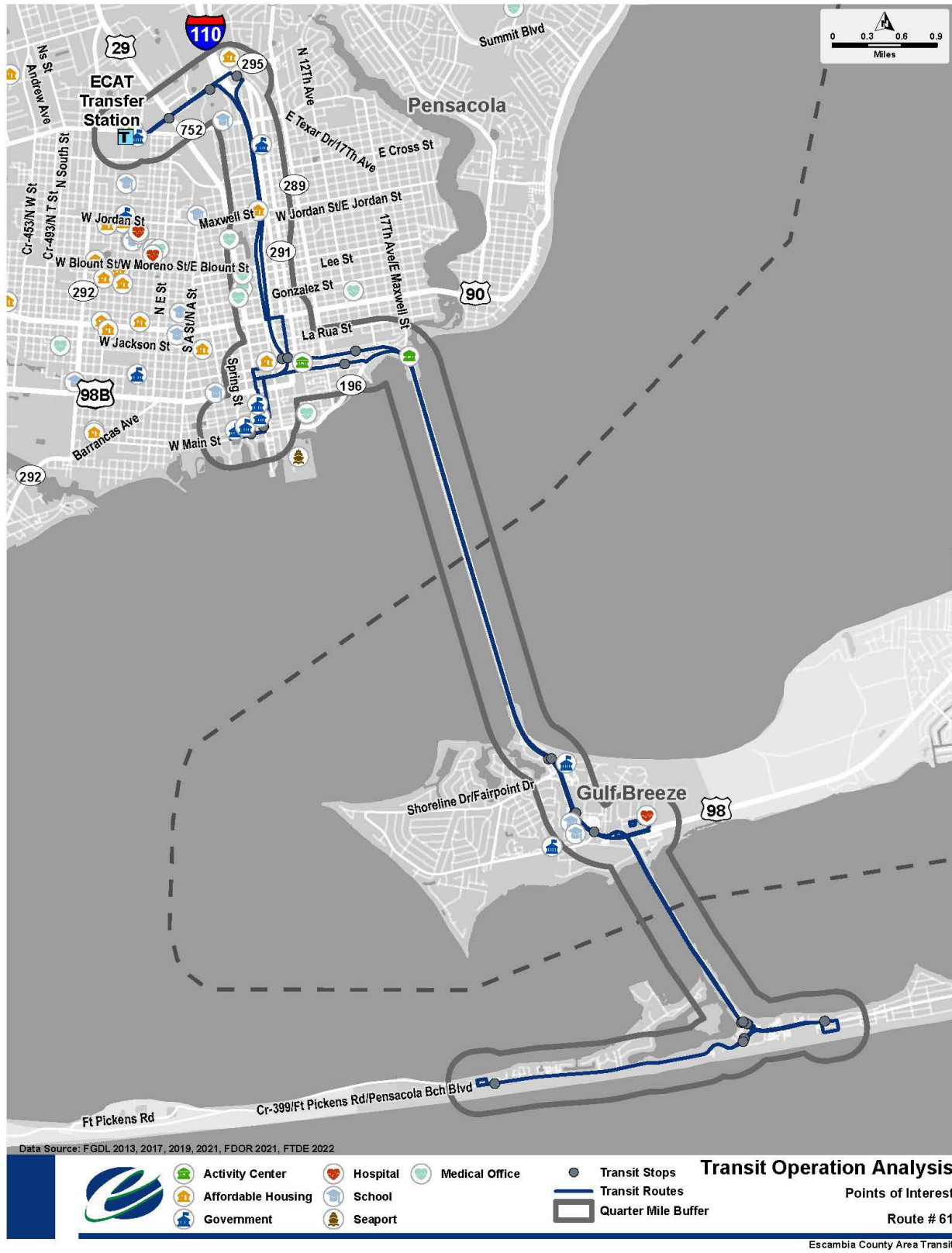
⁴ On-time is defined as between 0 minutes early and 5 minutes late.

DEMOGRAPHICS

Population + Employment Density and Ridership (2020)⁵

⁵ Population and employment data is from the transportation analysis zones (TAZ's) of the NWFRPM, projected from 2015 to 2020. Ridership with a red outline denotes overlapping service with other routes.

PATRONAGE

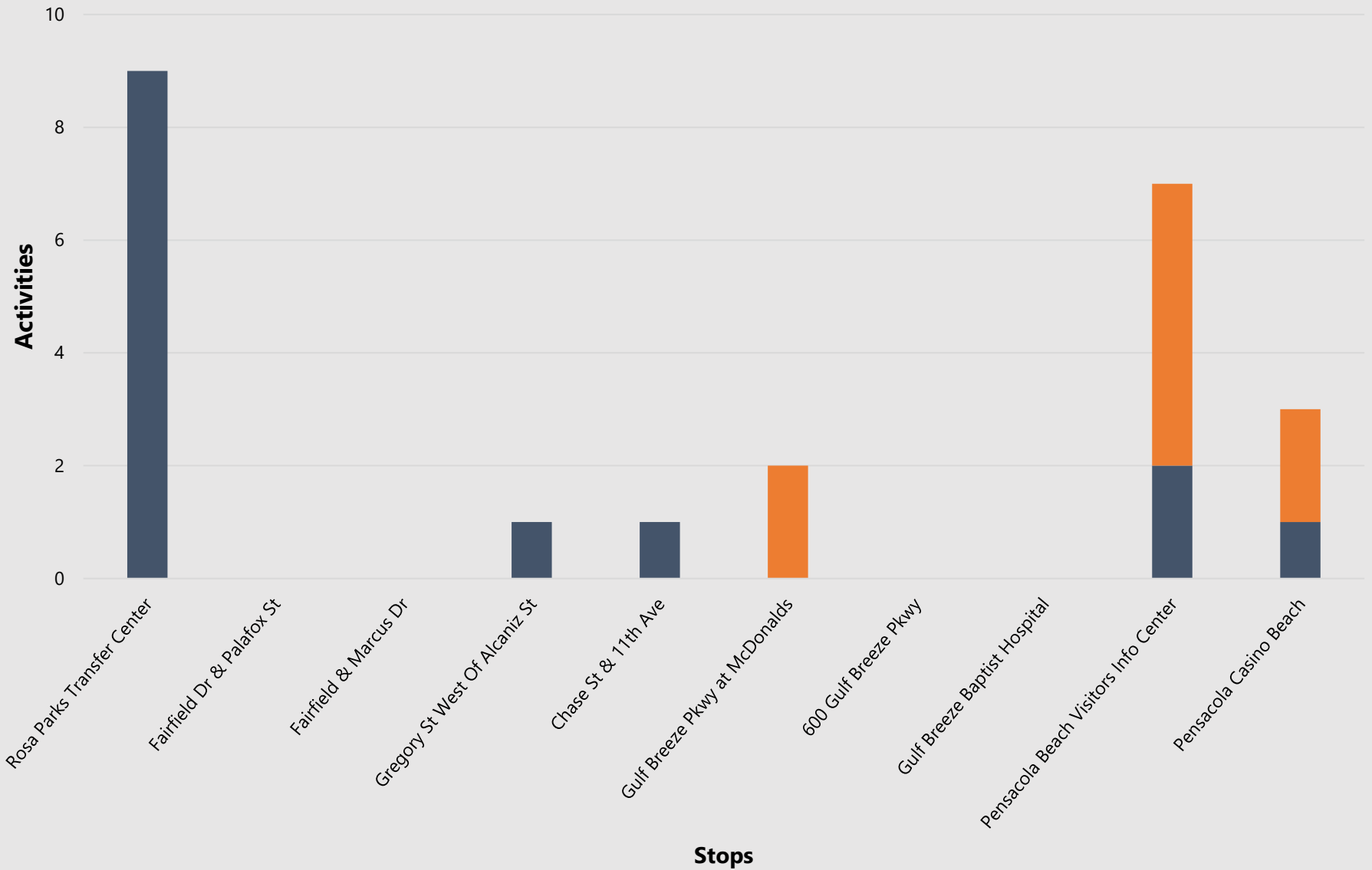
Activity Centers⁶

⁶ Points of Interest data is from the Florida Geographic Data Library (FGDL) 2013 - 21, and Florida Department of Revenue (FDOR) 2021.

RIDERSHIP TRENDS BY STOP (Weekday)⁷

Outbound

■ Boardings ■ Alightings



⁷ 0 activities does not mean no activity; it just means that no activity was reported during the sample period or runs. Route 61 ridership by stop data was sampled from 4 total runs.

Inbound

Boardings Alightings

Activities

6
5
4
3
2
1
0

Fort Pickens Rd & Park West
Fort Pickens Rd & Casino Beach Blvd
Via De Luna Dr & 10Th Ave
Quietwater Beach Boardwalk Parking Lot
Boardwalk
Gulf Breeze Pkwy at Publix
600 Gulf Breeze Pkwy
Gulf Breeze Pkwy & Pfeiffer St
E Gregory & 12Th Ave
Alcaniz St & Gregory St
Zarragossa St & Palafox St
Main St & Baylen St
Davis Hwy & Fairfield Dr
Rosa Parks Transfer Center

Stops

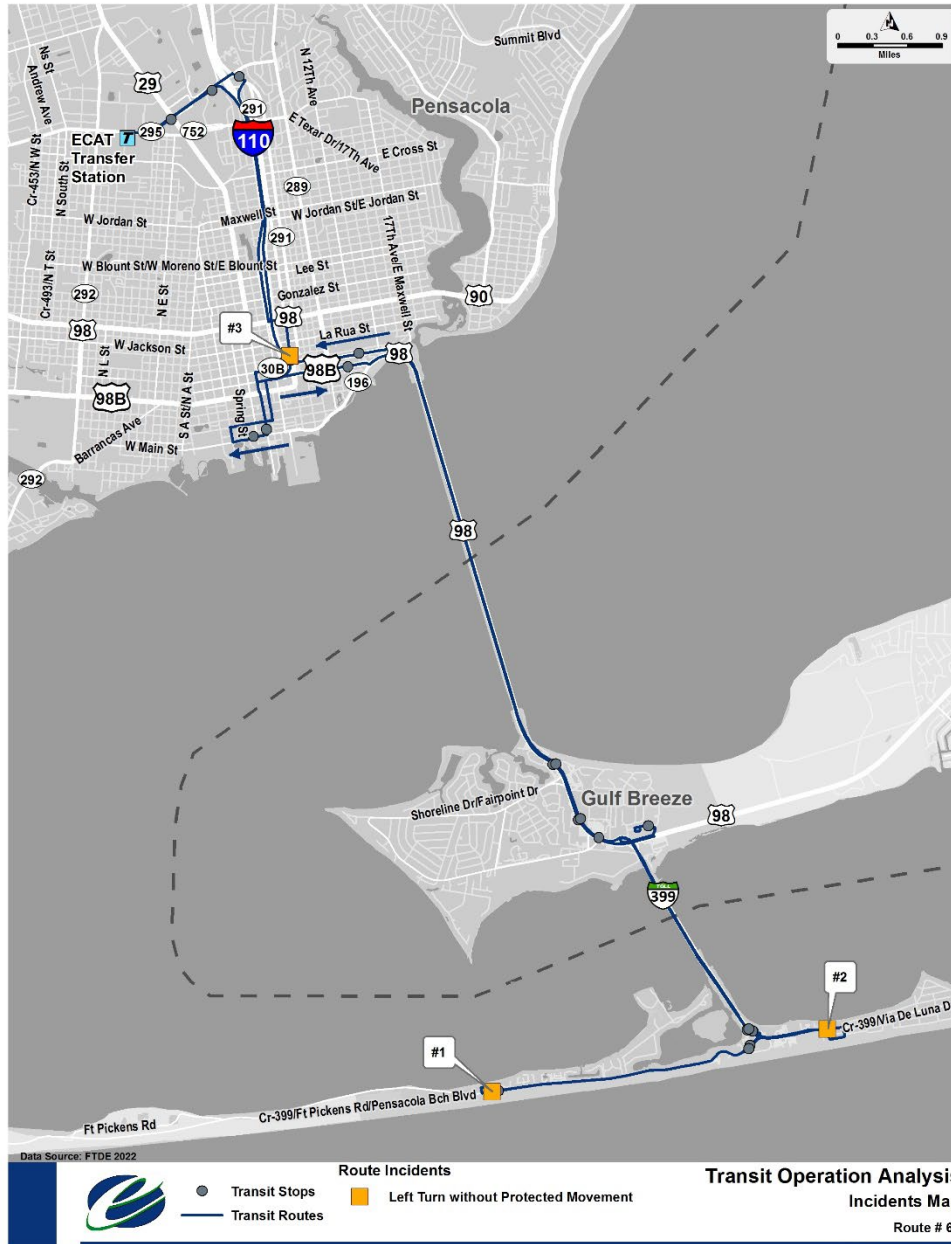
ROUTE INCIDENTS

Observations

#

Type

Description



1

Left Turn
without
Protected
Movement

Unprotected left turn

2

Left Turn
without
Protected
Movement

Unprotected left turn

ROUTE ASSESSMENT**Service Alignment**

Route 61 service begins at the Rosa Parks Transit Complex. The route then goes east on Fairfield Drive and south on I-110 to get downtown, before taking the Pensacola Bay Bridge south to Fort Pickens Road on Gulf Islands. From here the route returns to terminate at the Rosa Parks Transit Complex.

System Interaction and Transfer Opportunities

At the Rosa Parks Transit Complex, patrons can transfer from route 61 to routes 1, 2, 32, 44, 45, 47, 48, 50, 51, 52, 55, and 60. Route 61 shares Fairfield Drive with routes 32, 45, 52, and 60, and shares a portion of I-110 with Route 59X. At the Downtown Transfer Center, patrons can transfer from Route 61 to routes 2, 31, 32, 44, 45, 48, 57, and 58.

Route Utility

Route 61 serves the concentration of activity centers both at the Rosa Parks Transit Complex and the Downtown Transfer Center, as well as Gulf Breeze. These three areas have a high density of population and employment.

Observations

For Route 61, the portion of the alignment serving Gulf Breeze was noted as being somewhat confusing in the path that it takes. The alignment could be streamlined in this area to be more direct. There are two unprotected left turns noted here as well.

ROUTE 63: MICHIGAN AVE TO PENSACOLA INT'L AIRPORT								
Characteristics ¹		Weekday		Saturday		TOP 10 STOPS		
Span of Service		8:00 am – 5:20 pm		8:00 am – 5:20 pm		Avg. Weekday Activity ²		
Frequency		Once every two hours		Once every two hours		PSC Transfer Station		27
Cycle Time		80 mins		80 mins		9Th Ave & College Blvd		9
Route Distance		20.6 miles		20.6 miles				
Avg. Operating Speed		15.5 mph		15.5 mph				
Number of Buses		2		1				
Operating Statistics		Weekday		Saturday				
Round Trips per Day		12		5		Pensacola Blvd & Buick/GMC/ Cadillac		7
Annual Revenue-Miles		26,062		5,171				
Annual Revenue-Hours		1,680		333				
Annual Deadhead Hours		181		20		Michigan Ave & Glass Dr		5
Annual Deadhead %		4%		5%				
Demographic Data ³		Within ¼-mile of stops						
Population		12,248	Seniors	1,446		Airport Blvd East Of Davis Hwy		5
Jobs		9,451	Youth	2,175				
Poverty		1,674	W/ Disabilities	709				
Minority		4,151	No Vehicles	154		Pensacola Blvd & Boone St		3
Service Productivity		Weekday		Saturday				
Avg. Daily Ridership		35		35		Michigan Ave & W St		3
Riders/Revenue-Hour		5.3		5.3				
Riders/Revenue-Mile		0.3		0.3				
Riders/Round Trip		2.9		7.0				
Financial Performance		Overall	Weekday	Saturday				
Avg. Daily Revenue		\$33.2	\$33.2	\$33.2		Michigan Ave & Esperanto Dr		3
Subsidy/Revenue-Hour		\$117.7	\$131.1	\$104.3				
Subsidy/Revenue-Mile		\$7.6	\$8.5	\$6.7				
Subsidy/Round Trip		\$92.3	\$72.8	\$139.1		Underwood Ave & Tippin Ave		3
Daily Operating Cost		\$817.9	\$907.1	\$728.7				
Cost/Rider		\$23.4	\$25.9	\$20.8		Brent Ln & Hanson Blvd		2
Farebox Recovery Ratio		4.1%	3.7%	4.6%				
Subsidy/Rider		\$22.4	\$25.0	\$19.9				
On-Time Performance ⁴		Weekday						
<u>Time Period</u>		<u>Early</u>		<u>On-Time</u>		<u>Late</u>		
Overall		0%		83.3%		16.7%		

¹ Characteristics come from the Summer 2022 schedule in ECAT's Optibus account, the February 2022 General Transit Specification Feed (GTFS) in the Florida Geographic Data Library (FGDL), and ECAT's June 2021 Ride Guide

² Stop-level ridership data is based on random sampling in August to November 2022, calibrated to FY2022 annual route-level weekday ridership volumes.

³ Jobs information is from the Northwest Florida Regional Planning Model (NWRPM), in which 2015 data is projected to 2020. All other demographics are from the 2020 American Community Survey (ACS) administered by the United States Census Bureau.

⁴ On-time is defined as between 0 minutes early and 5 minutes late.

0 0.3 0.6 0.9
Miles

W Detroit Blvd
W Johnson Ave/E Johnson Ave
E Johnson Ave
E Johnson Ave
I-10/Sr-8
742
742
742
Sr-742/Burgess Rd/Creighton Rd
Langley Ave
PSC Transfer Station
Pensacola State College
Sacred Heart Hospital of Pensacola
Pensacola Int'l Airport
Summit Blvd
Firestone Blvd
Pensacola
E Texas Dr/11th Ave
11th Ave
Maxwell St
Gonzalez St
Lee St
N 127th Ave
US-98/Sr-289 N 9 Ave
E Cross St
Maxwell St
SA SUN A St
W Jordan St
N 493 N T St
N South St
N 5 St
Hollywood Ave
Massachusetts Ave
Pottery Rd
727
295
295
N 61 Ave/Tonawanda Dr
N 61 Ave
N 65 Ave
Cr-296A/Cerny Rd
Marlane Dr
Patricia Dr
Bellview Ave
Dallas Ave
Community Dr
Sr-297/Pine Forest Rd
Longleaf Dr/Wymart Rd
Broad St
W Hope Dr/Untreiner Ave
Cr-39A/N Palatka St
W Pinestead Rd
Hancock Ln/Sarah Dr
742
742
742
95
296
291
750
29
752
291
291
291
90
173

* Ridership with red outline denotes overlapping service with other routes.

Data Source: NWFRPM 2022, FTDE 2022

Population & Employment Density Per Sq. Mile

≤ 500	1,501 - 3,000	> 4,500
501 - 1,500	3,001 - 4,500	

Ridership*

● No ridership	● 6 - 10	— Transit Routes
● ≤ 5	● > 10	□ Quarter Mile Buffer

Transit Operation Analysis

Population & Employment Density

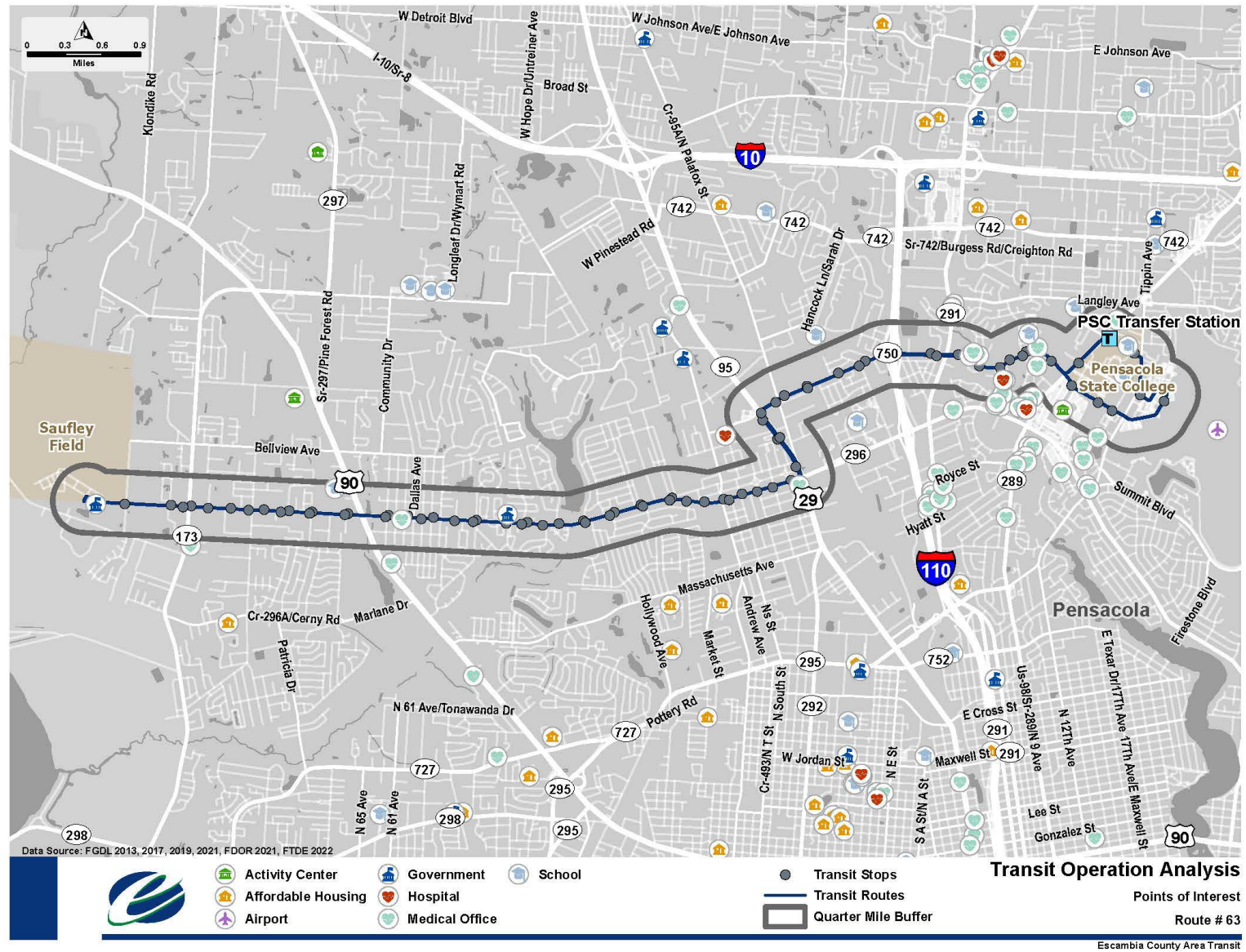
Route #

Escambia County Area Tran

Page 2

PATRONAGE

Activity Centers⁶

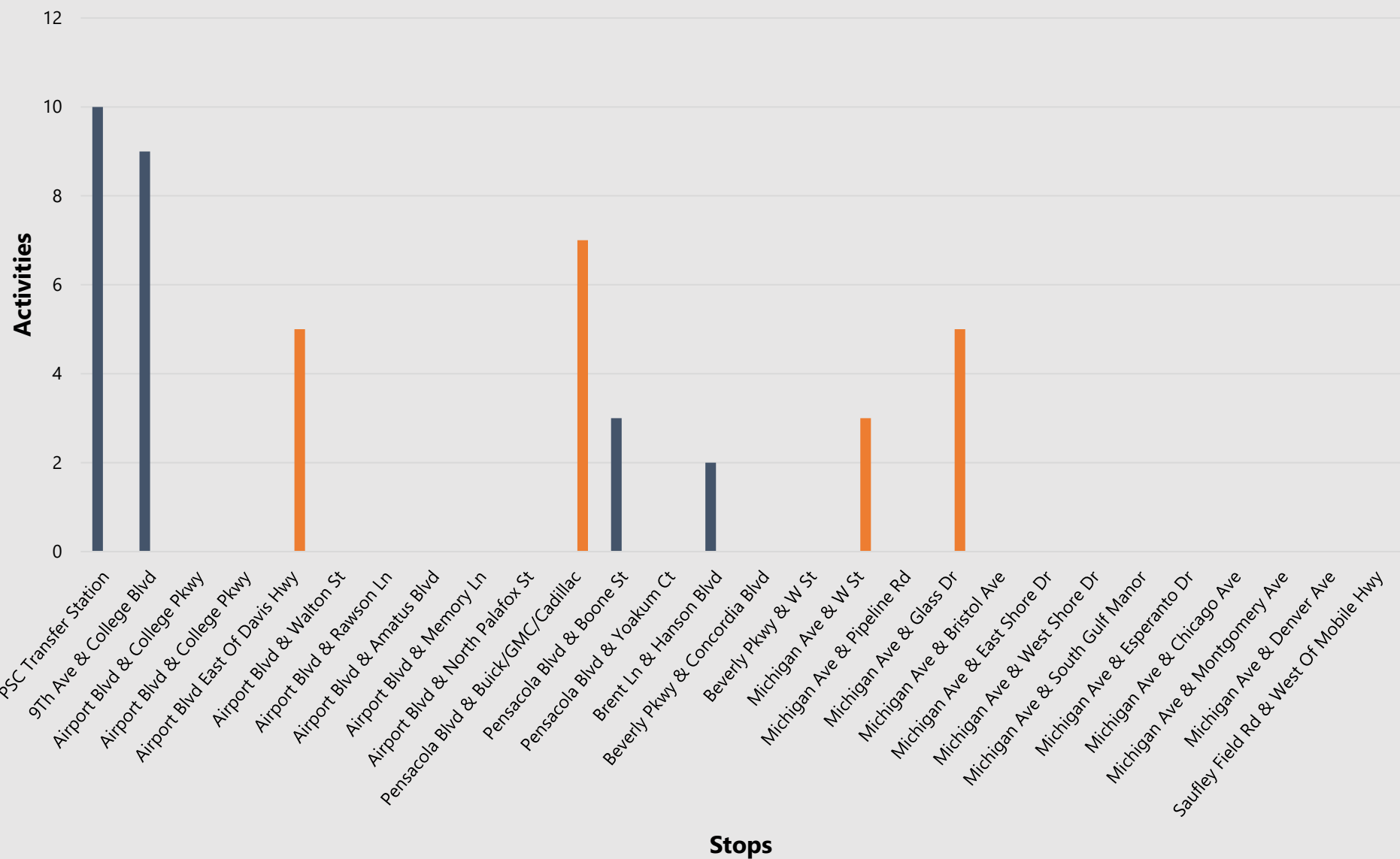


⁶ Points of Interest data is from the Florida Geographic Data Library (FGDL) 2013 - 21, and Florida Department of Revenue (FDOR) 2021.

RIDERSHIP TRENDS BY STOP (Weekday)⁷

Outbound

Boardings Alightings

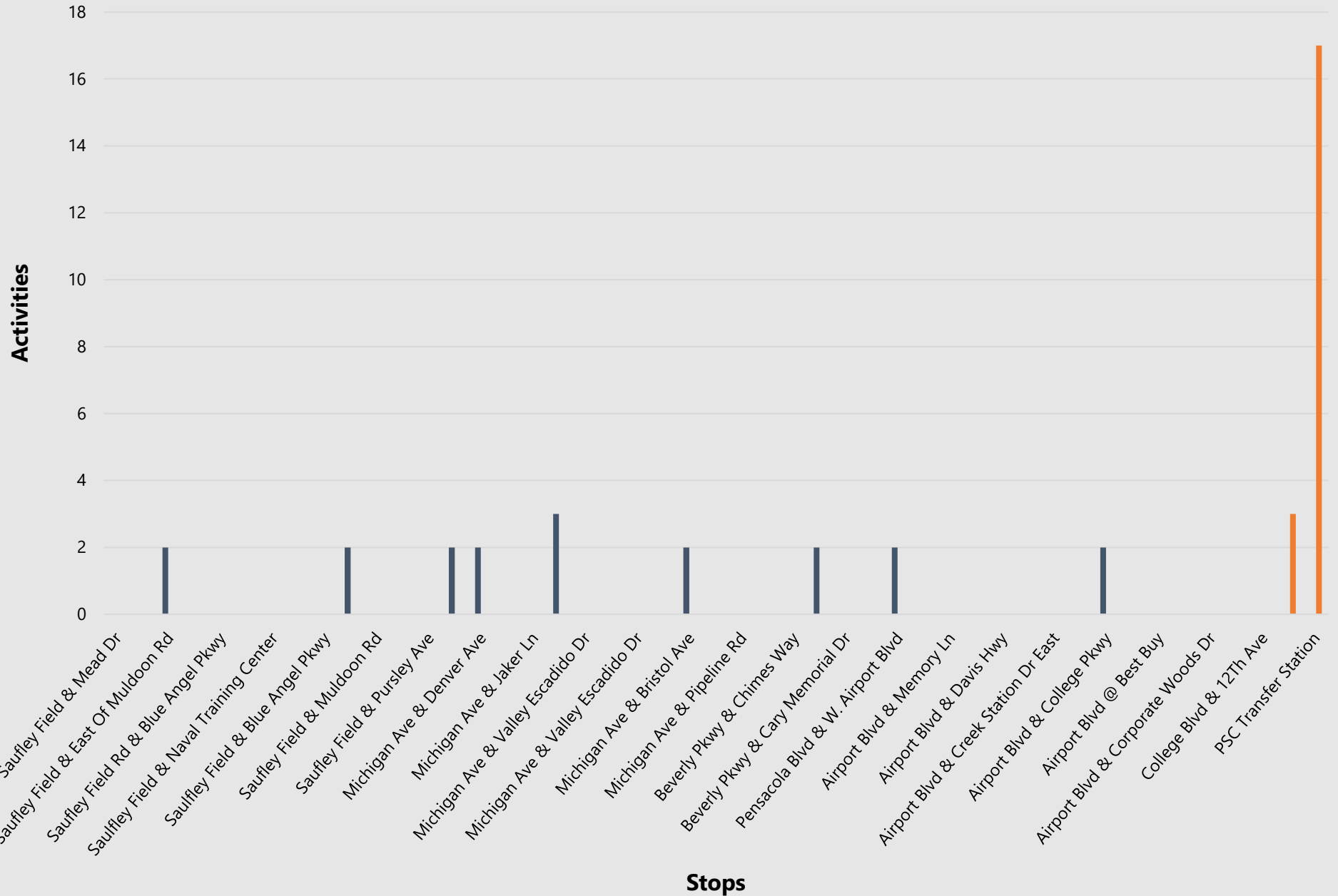


⁷ 0 activities does not mean no activity; it just means that no activity was reported during the sample period or runs. Route 63 ridership by stop was sampled from 4 total runs.

Route 63: Michigan Ave to Pensacola Int'l Airport

Inbound

■ Boardings ■ Alightings



ROUTE INCIDENTS

Observations



#	Type	Description
1	Stop in Right Turn Lane	Stop in right turn lane
2	Left Turn without Protected Movement	Unprotected left turn
3	Left Turn without Protected Movement	Unprotected left turn

ROUTE ASSESSMENT**Service Alignment**

Route 63 service begins at the PSC Transfer Center before heading west via Airport Boulevard, Beverly Parkway, Michigan Avenue, and Saufley Field Road. At Saufley Field Gate, the route returns east, making a loop around Pensacola State College to serve Pensacola International Airport before returning to the PSC Transfer Center.

System Interaction and Transfer Opportunities

At the PSC Transfer Center, patrons can transfer from Route 63 to routes 31, 43, and 52. Route 63 shares a portion of its western-bound alignment with routes 1, 50, 59X, and 60. There is a transfer point with Route 1 at the intersection of Muldoon Road and Saufley Field Road, but it is not timed.

Route Utility

There are several activity centers around the PSC Transfer Center served by Route 63 including Pensacola State College, Sacred Heart Hospital of Pensacola, and Pensacola International Airport. This area is one of the densest in terms of population and employment and has the top three highest ridership stops of the Route. There are some additional activity centers served by Route 63 along Airport Boulevard.

Observations

Along Route 63 it was noted that the portion of the alignment going west of Mobile Highway does not serve many activity centers, however the final outbound stop provides access to the Naval Education and Training Center. Two unprotected left turns are noted near the beginning of the route near the PSC Transfer Station. During fieldwork it was also noted that the portion of the route serving Pensacola State College skirts the roads surrounding the college, but does not enter the campus.

ROUTE 64: BEACH JUMPER							
Characteristics ¹		Friday		Weekend		TOP STOPS	
Span of Service	2:50 pm – 9:30 pm		10:40 am – 9:05 pm		Avg. End of Week Activity ²		
Frequency	Once every 100 mins		Once every 100 mins		Casino Beach Boardwalk @ Casino Beach	61	
Cycle Time	100 mins		100 mins		Jefferson St & Garden St (Inbound)	6	
Route Distance	32.9 miles		32.9 miles				
Avg. Operating Speed	19.8 mph		19.7 mph				
Number of Buses	1		1				
Operating Statistics		Friday		Weekend			
Round Trips per Day	4		7		Nas Pensacola Uso (Outbound)	3	
Annual Revenue-Miles	6,582		23,267				
Annual Revenue-Hours	333		1,178				
Annual Deadhead Hours	35		75				
Annual Deadhead %	9%		6%		-	-	
Demographic Data ³		Within ¼-mile of stops					
Population	8,482	Seniors	956		-	-	
Jobs	15,593	Youth	962				
Poverty	824	W/ Disabilities	489				
Minority	1,592	No Vehicles	213		-	-	
Service Productivity		Friday		Weekend			
Avg. Daily Ridership		20	34				
Riders/Revenue-Hour		3.0	2.9		-	-	
Riders/Revenue-Mile		0.2	0.1				
Riders/Round Trip		5.0	4.9				
Financial Performance		Overall		Friday		Weekend	
Avg. Daily Revenue	\$35.1	\$24.3	\$41.4		-	-	
Subsidy/Revenue-Hour	\$140.6	\$183.4	\$116.2				
Subsidy/Revenue-Mile	\$7.1	\$9.3	\$5.9				
Subsidy/Round Trip	\$234.5	\$305.9	\$193.7		-	-	
Daily Operating Cost	\$1,342.8	\$1,247.9	\$1,397.0				
Cost/Rider	\$49.0	\$62.4	\$41.1				
Farebox Recovery Ratio	2.6%	1.9%	3.0%		-	-	
Subsidy/Rider	\$47.8	\$61.2	\$39.9				
On-Time Performance ⁴		Weekend					
<u>Time Period</u>	<u>Early</u>		<u>On-Time</u>		<u>Late</u>		
Overall	33.3%		66.7%		0.0%		

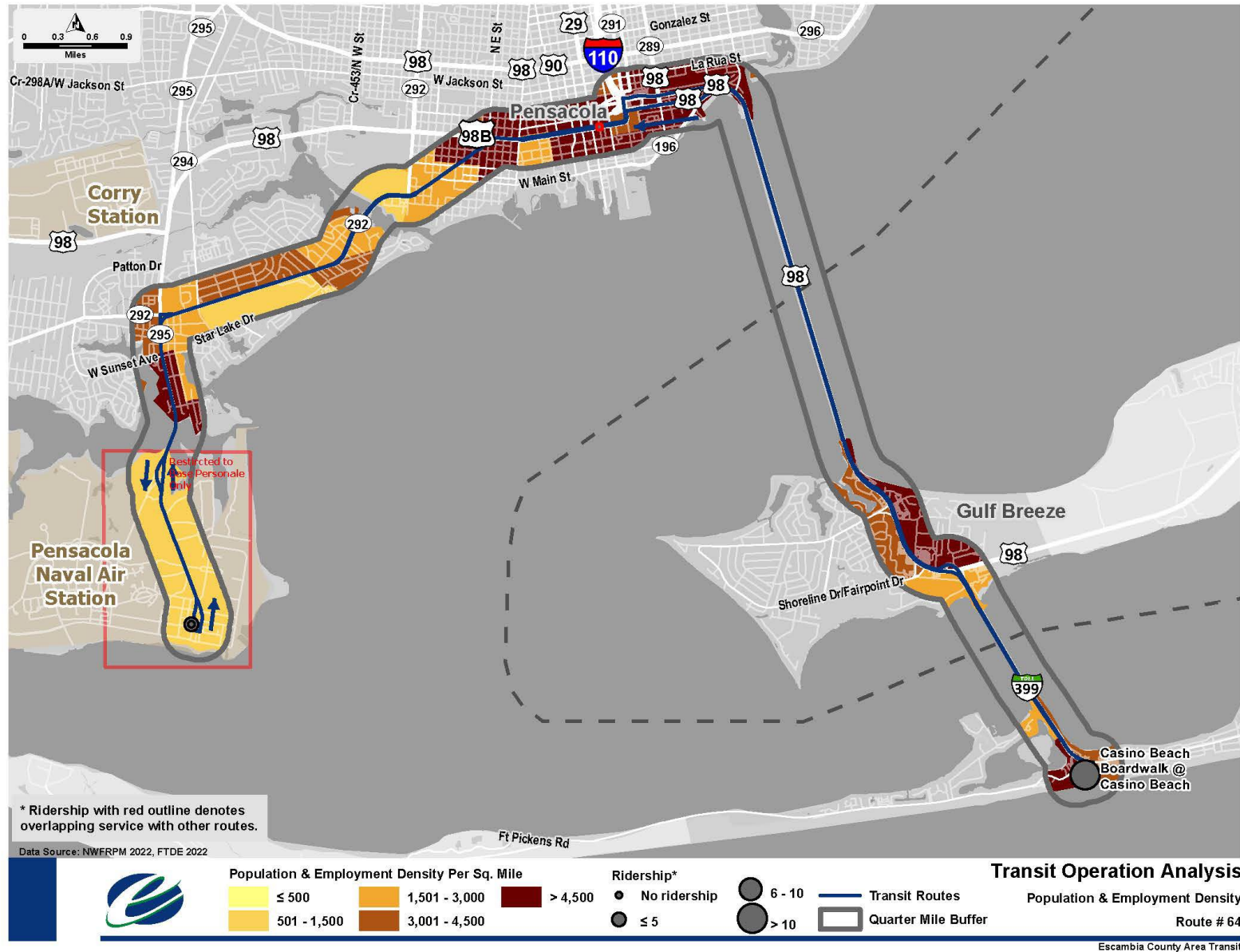
¹ Characteristics come from the Summer 2022 schedule in ECAT's Optibus account, the February 2022 General Transit Specification Feed (GTFS) in the Florida Geographic Data Library (FGDL), and ECAT's June 2021 Ride Guide

² Stop-level ridership data is based on random sampling in August to November 2022, calibrated to FY2022 annual route-level weekday ridership volumes.

³ Jobs information is from the Northwest Florida Regional Planning Model (NWFRPM), in which 2015 data is projected to 2020. All other demographics are from the 2020 American Community Survey (ACS) administered by the United States Census Bureau.

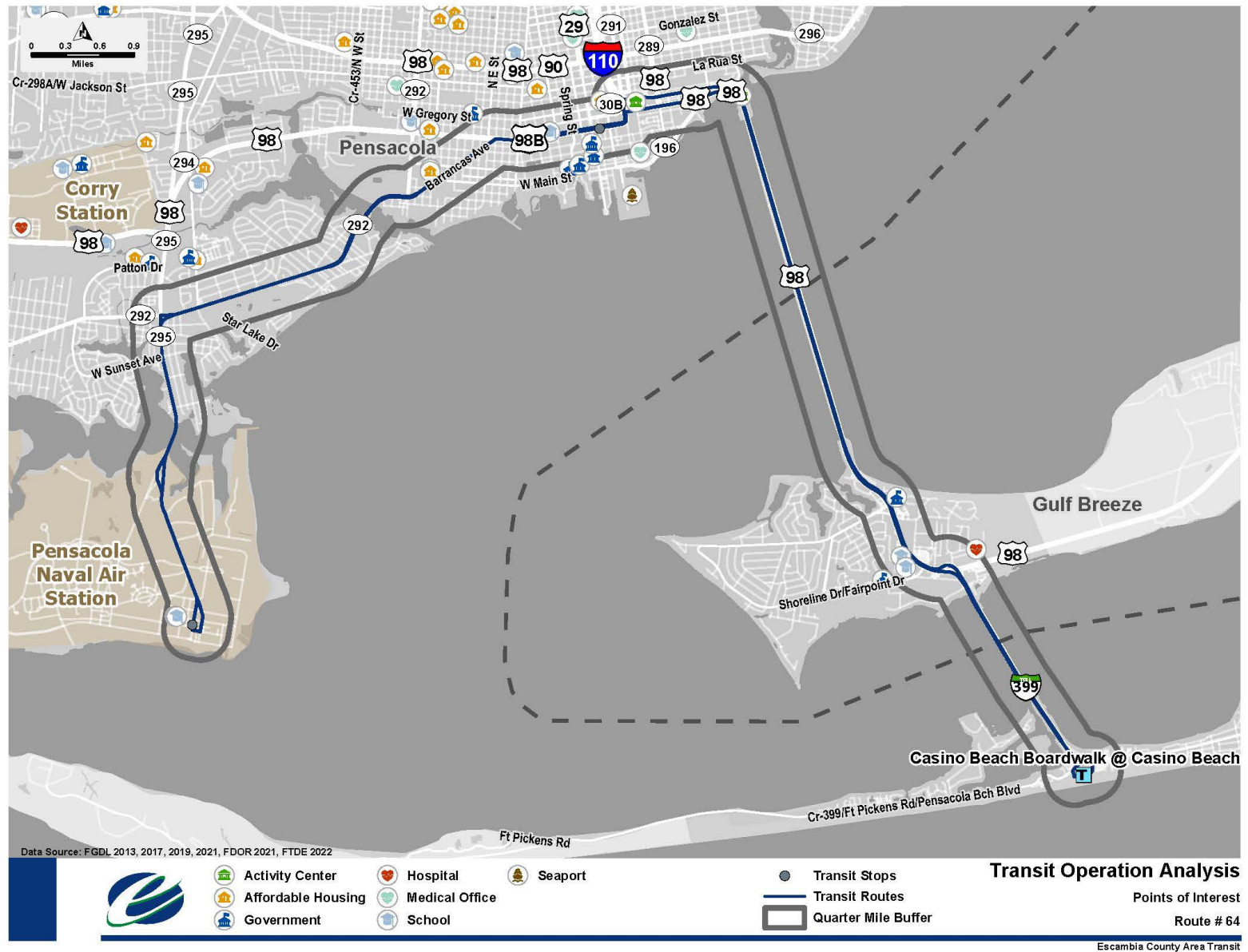
⁴ On-time is defined as between 0 minutes early and 5 minutes late.

DEMOGRAPHICS

Population + Employment Density and Ridership (2020)⁵

⁵ Population and employment data is from the transportation analysis zones (TAZ's) of the NWFRPM, projected from 2015 to 2020. Ridership with a red outline denotes overlapping service with other routes.

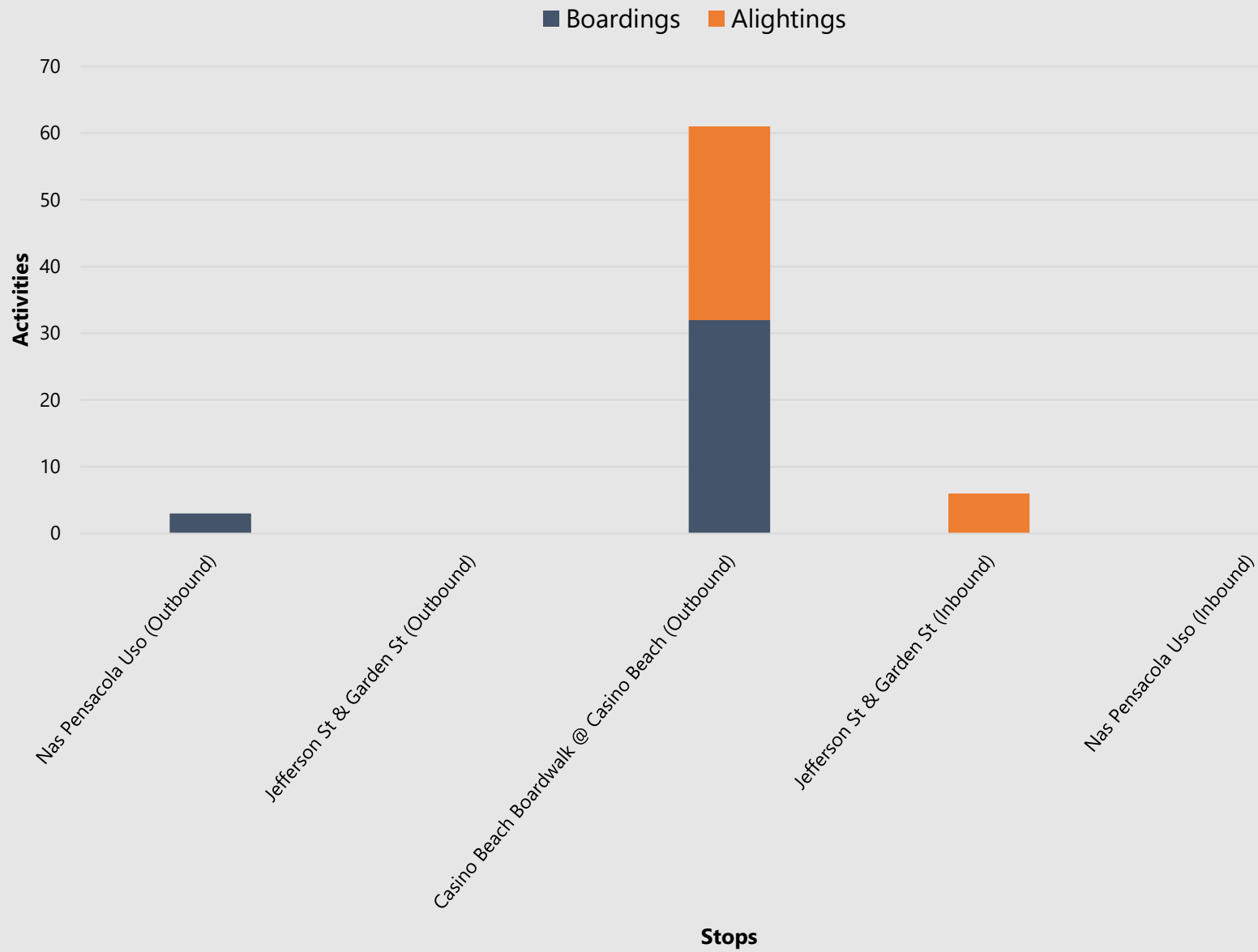
PATRONAGE

Activity Centers⁶

⁶ Points of Interest data is from the Florida Geographic Data Library (FGDL) 2013 - 21, and Florida Department of Revenue (FDOR) 2021.

RIDERSHIP TRENDS BY STOP (Weekday)⁷

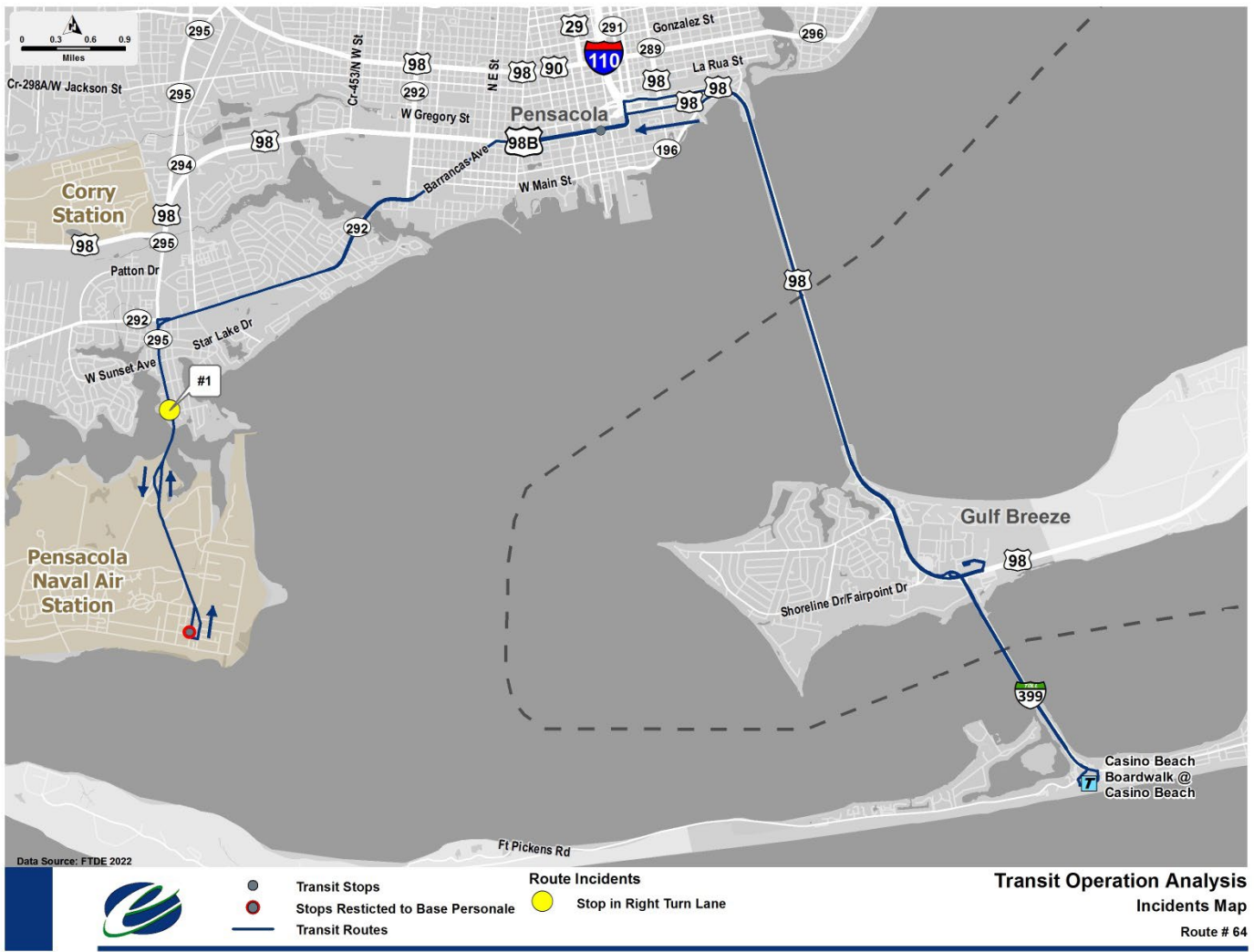
Outbound & Inbound



⁷ 0 activities does not mean no activity; it just means that no activity was reported during the sample period or runs. Route 64 ridership by stop was sampled from 2 total runs.

ROUTE INCIDENTS

Observations



#	Type	Description
1	Stop in Right Turn Lane	Stop in right turn lane

ROUTE ASSESSMENT**Service Alignment**

Route 64 service begins at the Naval Air Station Pensacola USO before going north along Murray Road and S Navy Boulevard. The route takes Barrancas Avenue and Government Street east through downtown before heading south via Pensacola Bay Bridge to the Casino Beach Pavilion. From here the route returns to the Naval Air Station Pensacola USO.

System Interaction and Transfer Opportunities

Route 64 shares a portion of its Murray Road and S Navy Boulevard alignment with routes 55, 57, and 59X. The route also shares the Pensacola Bay Bridge segment with Route 61.

Route Utility

Route 64 serves the Naval Air Station, the high concentration of activity centers in Downtown Pensacola, as well as the activity centers on Pensacola Beach. The Naval Air Station and Pensacola Beach stops have the highest ridership of Route 64 and, in addition to Downtown Pensacola, represent the densest areas of population and employment along the route.

Observations

Route 64 enters the Pensacola Naval Air Station. Civilians are not permitted to enter the station, so they are required to disembark the bus just before the station entrance.



**Your Service,
Your Say.....**



Rodriques Kimbrough
Mass Transit Director
Escambia County Area Transit