

## Chapter Four – Existing Services and Performance Evaluation

This chapter provides a brief history of transit services in St. Johns County, as well as an overview of the various public and private transportation services available in St. Johns County. This is followed by a performance evaluation of both the fixed-route and demand response systems, including a comparison of similar systems in Florida and throughout the country.

### 4.1 Existing Services

Public transportation can be defined in many terms, including any form of transportation where a person pays another party for transportation in a vehicle. For the purposes of this TDP, we will focus on the services provided by the St. Johns COA; however, all other services in the County will be documented.

#### St. Johns County COA

The COA is a private non-profit organization that offers paratransit (or door-to-door) mobility options and services for those over the age of 60 and for the transportation disadvantaged as well. The COA receives funding from many sources, including the State of Florida and St. Johns County. In its role as the Community Transportation Coordinator, the COA provided 87,000 passenger trips in 2010.

The COA also operates the Sunshine Bus Company, a public transportation system for riders of all ages. The Sunshine Bus Company is a fixed-route public transportation service that can accommodate some route deviation. The system was initiated in 2002 and operates Monday-Saturday with seven routes. Major areas served include the cities of St. Augustine and St. Augustine Beach, Hastings/Flagler Estates, the I-95 outlet mall area, and the US 1 corridor up to the Avenues Mall in Jacksonville.

Currently, the Sunshine Bus operates a deviated fixed-route system, whereby the bus can divert as much as  $\frac{3}{4}$  of a mile off the regular route by calling in advance. The basic fare is \$1.00, with deviations costing an additional \$1.00. Daily and monthly passes are available, and discounts are provided for students, seniors, and those with disabilities.

The COA has made an effort to switch able-bodied riders from the demand response service to the fixed-route service. This initiative has been successful, as ridership on the demand response system has declined by  $\frac{1}{3}$  since 2004. Conversely, the fixed route system has seen significant growth in ridership, from 57,000 in 2004 to 186,000 in 2010.

#### St. Augustine Historic Downtown Shuttle

The City of St. Augustine, via a private operator, operates a shuttle connecting their satellite parking garage with visitor destinations. The shuttle is free of charge and runs seven days a week.

## Jacksonville Transportation Authority (JTA) and Greyhound (Putnam County) Connection

Currently, users of transit services in St. Johns County can connect to services in neighboring Putnam and Duval counties. Putnam County uses Greyhound connection bus service that stops at the Kmart shopping center on US 1 and at the Greyhound station on A1A near the Visitor Center complex in downtown St. Augustine. This bus comes twice a day and costs \$1 to/from Palatka.

Connections to the JTA system can be made by taking the Sunshine Bus Purple route to the Avenues Mall. The Purple route currently goes from St. Johns County to the Avenues Mall and back four times a day and the fare is \$1. JTA works closely with the St. Johns County COA and provides some funding for several of the Sunshine Bus routes.

## Amtrak

Intercity rail service last served St. Augustine in 1968, when the Florida East Coast Railway (FEC) discontinued its service. Over the past few years, there has been discussion about resuming passenger rail service, likely provided by Amtrak, and several studies have been completed. In 2010, FDOT submitted a stimulus grant application to the USDOT for the Amtrak/FEC corridor service. While the grant was not funded, FDOT and its partners continue to work to resume the service. As part of the grant application, FDOT and the City of St. Augustine identified a potential station location on US 1, just north of San Marco Avenue.

## Private Carriers

As a tourist destination, there are a number of tour bus, trolley, and other carriers that transport visitors to points of interest in St. Augustine. Additional information on all the carriers in St. Johns County can be found in the Appendix D.

## **4.2 Performance Review**

In order to evaluate the St. Johns County transit services (both fixed-route and demand response) a review of peer communities was conducted. Using information from the FY 2009/10 National Transit database (NTD), 5 peer communities in Florida and 4 others in the southeast were selected. They include:

- Fort Walton Beach - <http://rideoct.org/>
- Pensacola - <http://baytowntrolley.org/>
- Fort Pierce - [http://www.stlucieco.gov/community/transportation\\_dept.htm](http://www.stlucieco.gov/community/transportation_dept.htm)
- Vero Beach - <http://www.golineirt.com/>
- Brooksville - <http://www.hernandobus.com/>
- Hagerstown, MD - [http://www.washco-md.net/public\\_works/commuter/trans.shtm](http://www.washco-md.net/public_works/commuter/trans.shtm)
- Huntsville, AL - [http://www.hsvcity.com/Publictran/public\\_trans.php#blank](http://www.hsvcity.com/Publictran/public_trans.php#blank)
- Johnson City, TN - <http://www.johnsoncitytransit.org/rideguide.html>
- Greenville, SC - <http://www.greenvillesc.gov/RideGreenlink/>

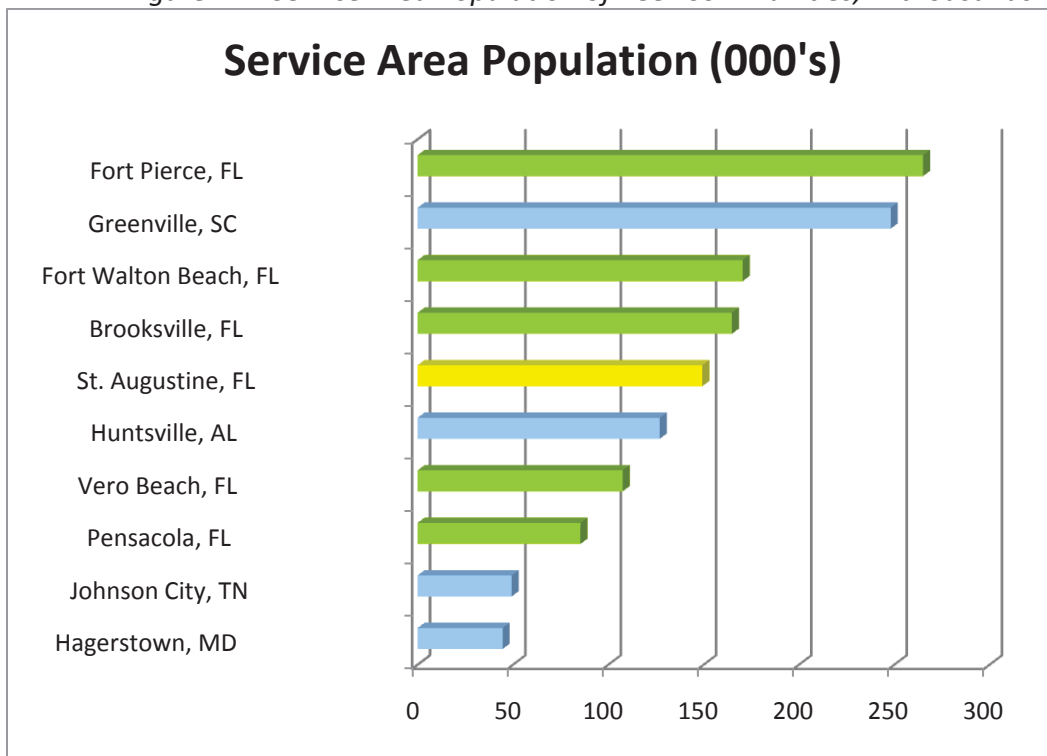
The fixed-route and demand response services were compared separately, and data from each will be detailed below. For both services, the following data was collected:

- Service Area
- Passenger Statistics
- Revenue Statistics
- Bus Fleet data
- Fare Information
- Operation and Maintenance Costs
- Farebox Recovery

**Service Area**

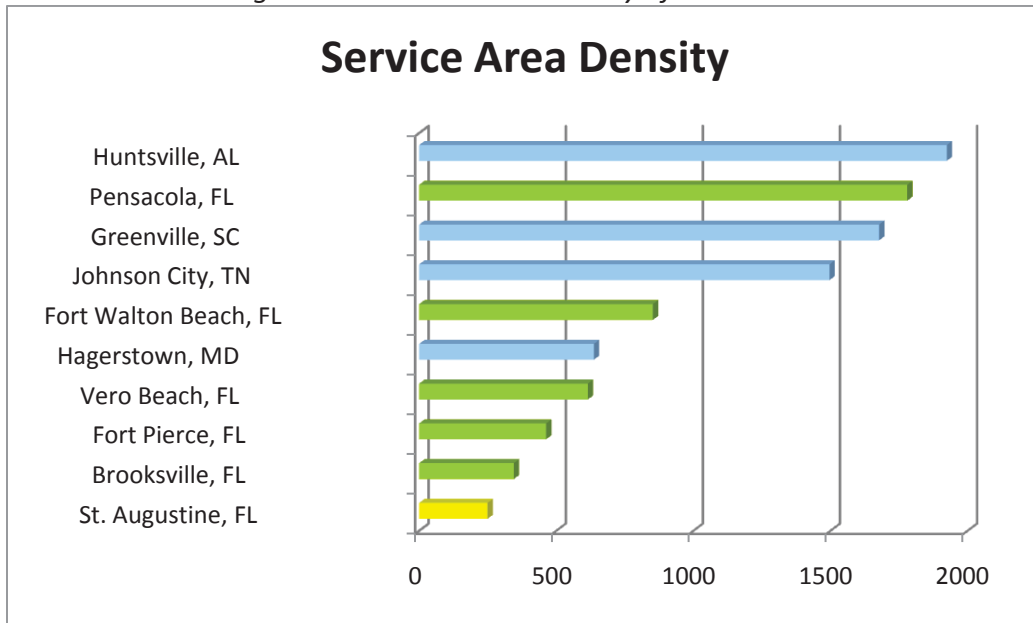
The service area is the same for the fixed route and demand response services. As shown below in Figure 4.1, the Sunshine Bus service area population is 149,300, which is in the mid-range of the peer transit communities. Four of the peer communities have a larger service area population, the largest of which is Fort Pierce, Florida (service area population 265,108). Five of the peer communities have a smaller service area population, the smallest of which is Hagerstown, Maryland, with a service area population of 44,608.

*Figure 4.1: Service Area Population of Peer Communities, in thousands*



The Service Area density, calculated by dividing the service area population by the number of square miles in the service area, is shown below in Figure 4.2. St. Augustine is the least dense of all the peer transit communities, with 249 people per square mile. By contrast, the Huntsville, Alabama service area has a density of 1,924 people per square mile. This is a result of St. Augustine having the largest service area: 600 square miles.

Figure 4.2: Service Area Density of Peer Communities



#### 4.2.1 Fixed Route Service Comparisons:

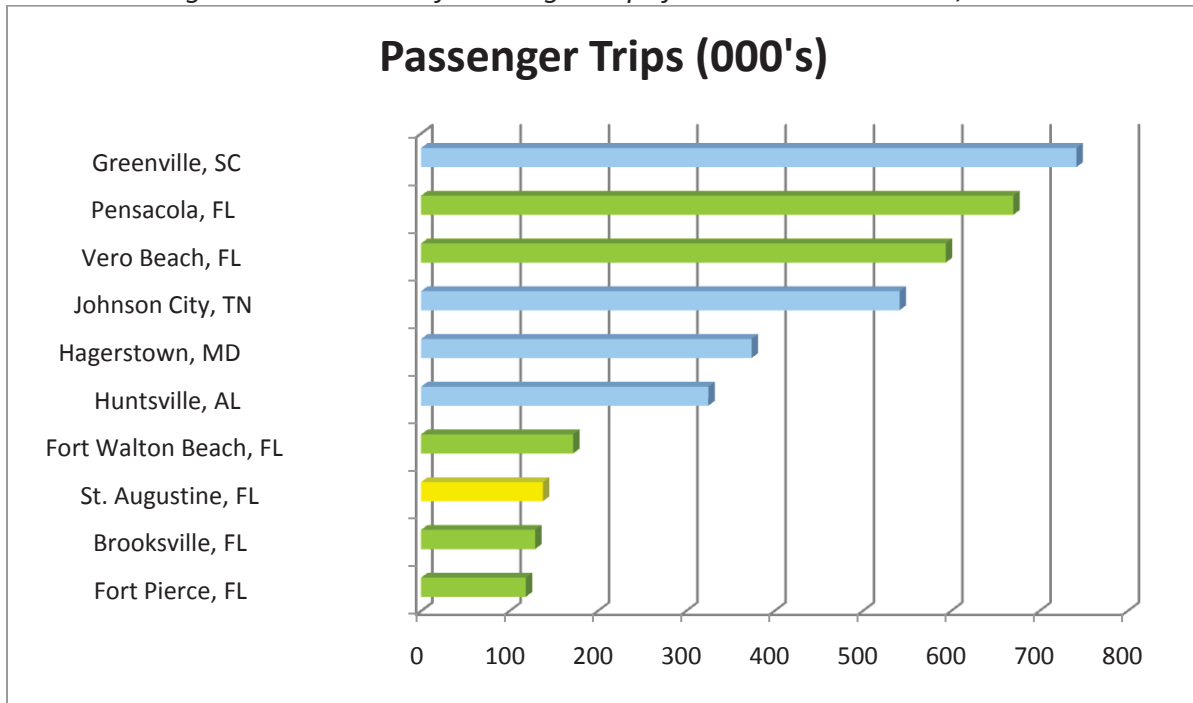
The statistics examined below convey characteristics of the fixed route transit service for the ten peer-reviewed communities.

##### Passenger Trip Statistics

The following figures detail passenger characteristics, including: passenger trips; passenger miles; passenger trips per capita; average passenger trip length; passenger trips per vehicle in maximum service; passenger trips per revenue mile; and passenger trip per revenue hour.

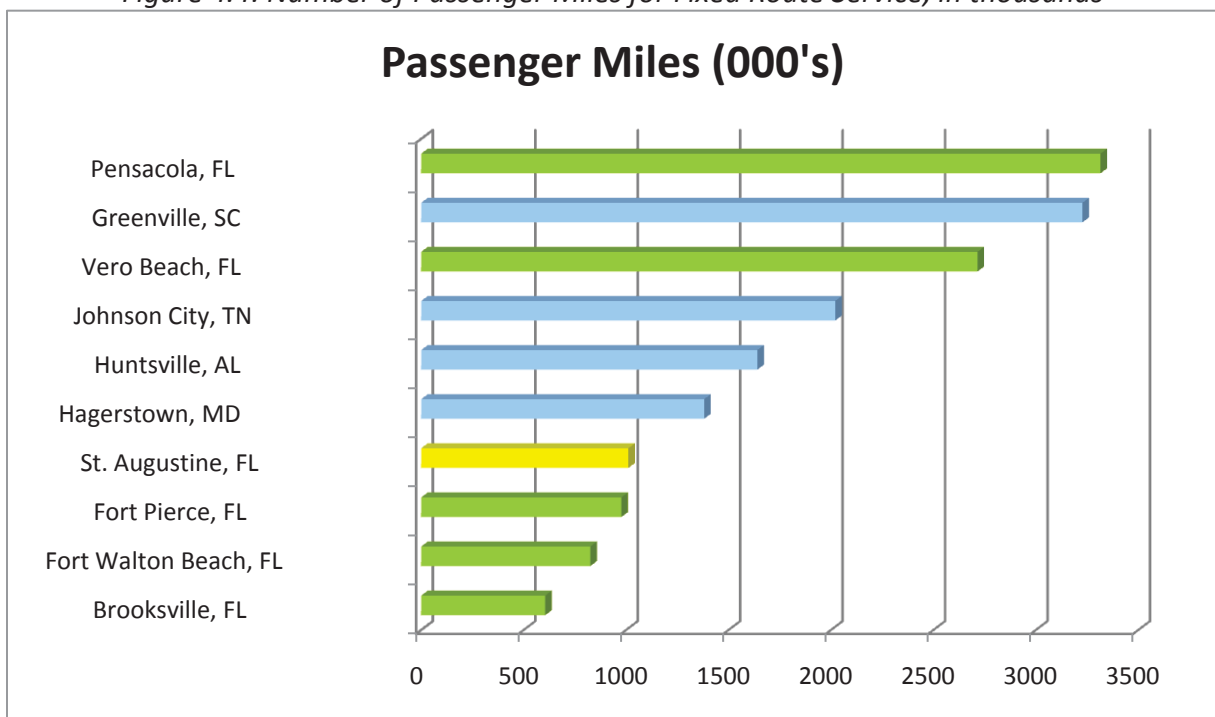
Figure 4.2 shows the total number of passenger trips in FY 09/10 in the peer reviewed communities. Greenville, SC had the highest number of passenger trips with 742,100, while St. Augustine had 137,928 in 2009/10.

Figure 4.3: Number of Passenger Trips for Fixed Route Service, in thousands



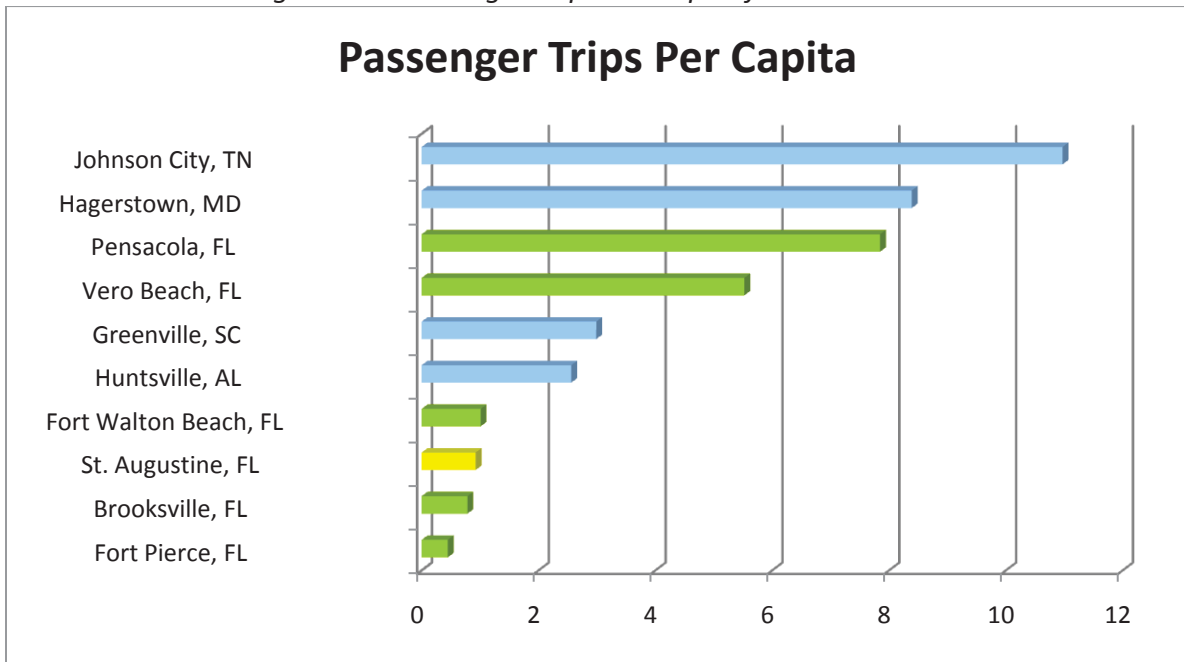
Shown below in Figure 4.4, St. Augustine falls in the mid range for total number of passenger miles with just over one million total passenger miles. Pensacola and Greenville lead the peer communities in total passenger miles, with 3,315,512 and 3,227,576, respectively.

Figure 4.4: Number of Passenger Miles for Fixed Route Service, in thousands



Passenger trips per capita were calculated for the peer review communities by dividing the number of passenger trips by the service area population. As shown below in Figure 4.5, St. Augustine was found to have one of the lower passenger trips per capita of the peer-reviewed communities for the fixed route service, with 0.92 passenger trips per capita.

Figure 4.5: Passenger Trips Per Capita for Fixed Route Service



The average passenger trip length shows how far the average transit rider travels on their transit trip. This measure is calculated by dividing the number of passenger miles by passenger trips. As detailed below in Figure 4.6, the results show that of the peer reviewed communities, St. Augustine has the second highest average passenger trip length of 7.33 miles. It is behind only Fort Pierce, which has an average passenger trip length of 8.23 miles.

Figure 4.6: Average Passenger Trip Length for Fixed Route Service

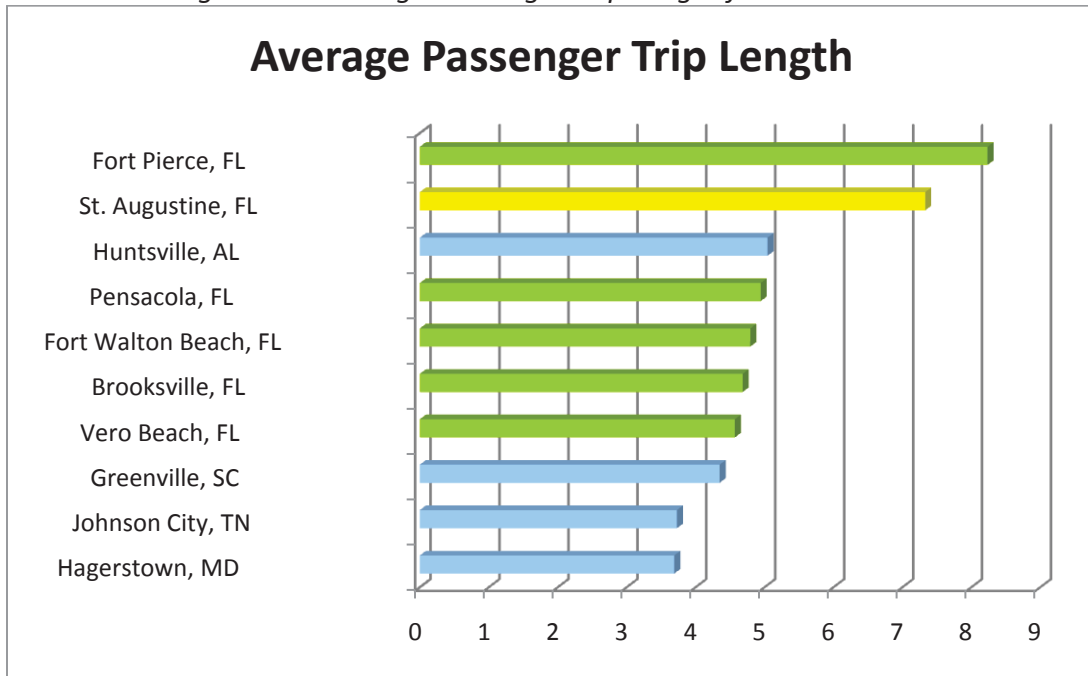


Figure 4.7 below shows the number of passenger trips divided by the number of vehicles in maximum service for each peer-reviewed community. St. Augustine only has 7 vehicles in maximum service, whereas other peer communities have a substantially higher number: for example, Greenville has 16 vehicles. Also, St. Augustine has one of the lower number of total passenger trips.

Figure 4.7: Passenger Trips per Vehicles in Maximum Service for Fixed Route Service

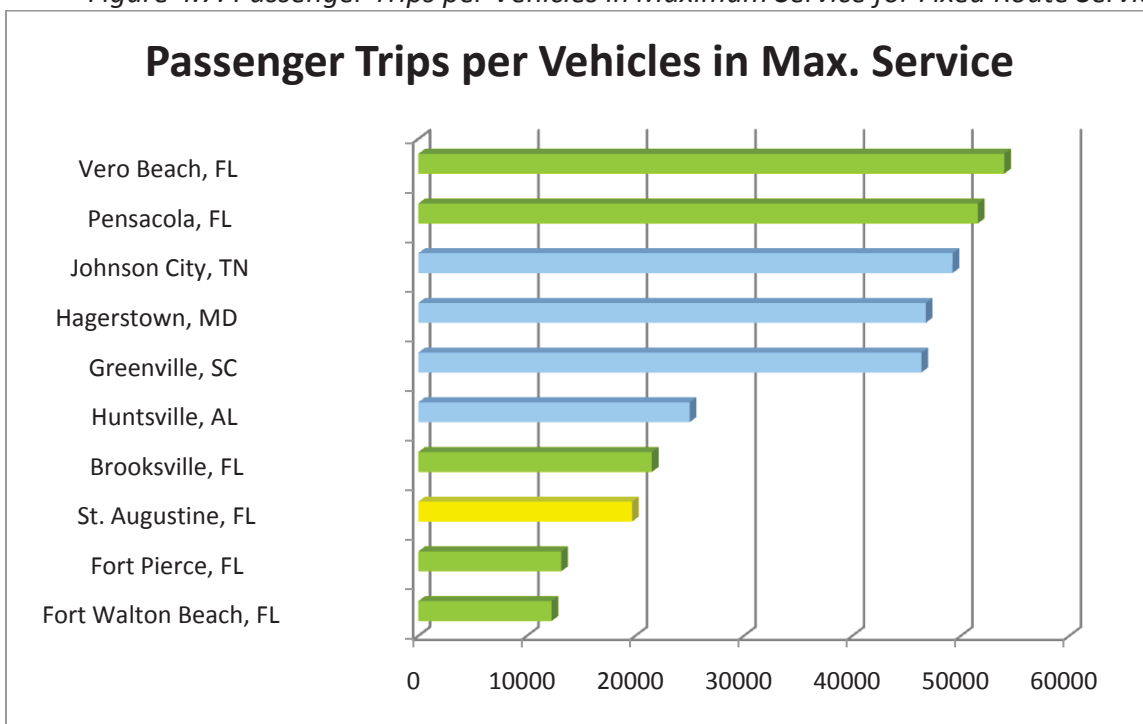


Figure 4.8 shows the number of passenger trips divided by the number of revenue miles for each peer-reviewed community. In this measure, St. Augustine also scores near the bottom, with 0.4 passenger trips per revenue mile.

Figure 4.8: Passenger Trips per Revenue Mile for Fixed Route Service

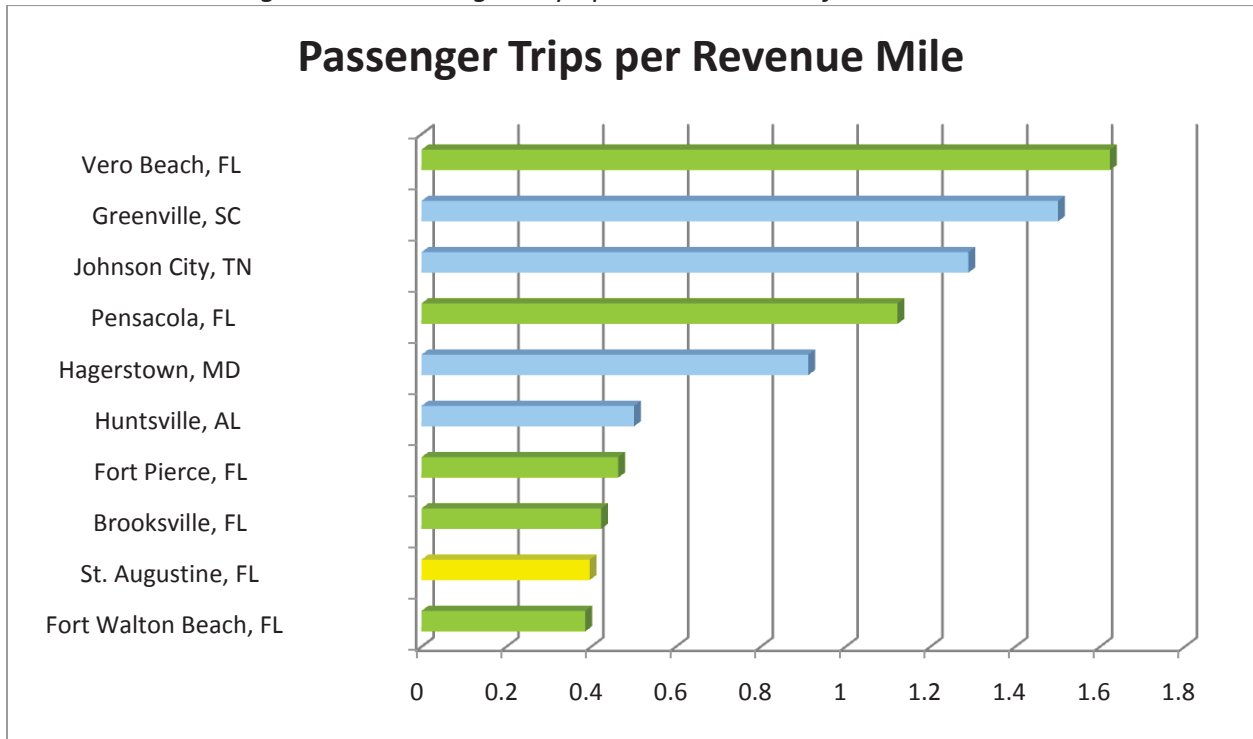
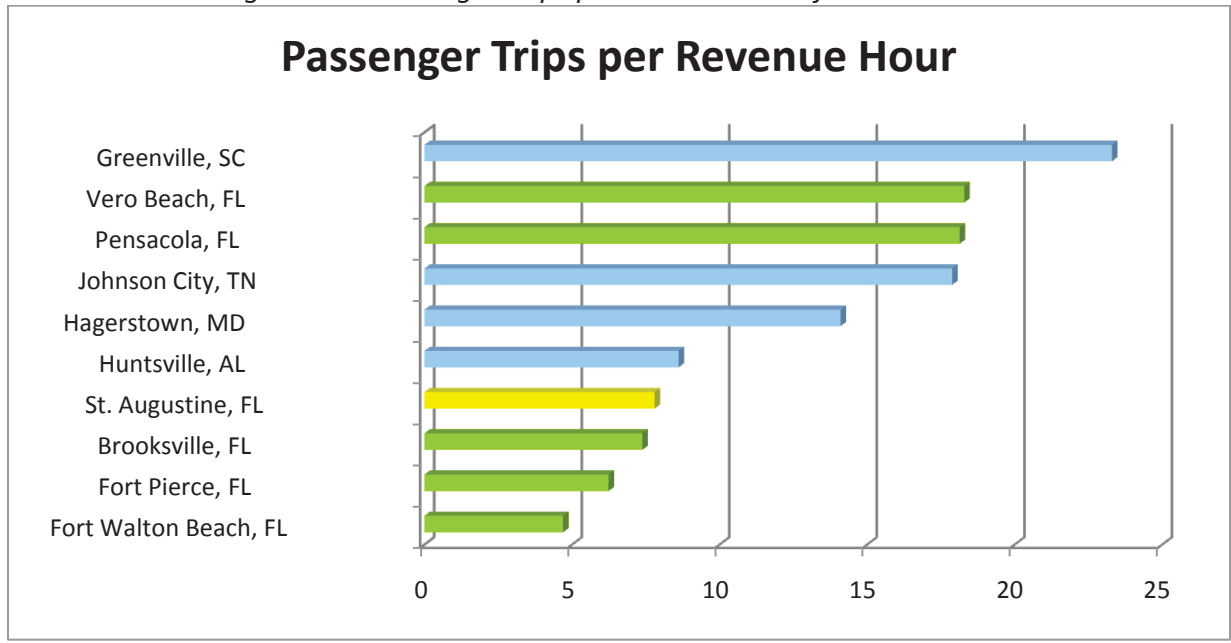


Figure 4.9 shows the number of passenger trips divided by the number of revenue hours for each peer-reviewed community. In this measure, St. Augustine also scores seventh out of the 10 peer-reviewed communities with 7.8 passenger trips per revenue hour.



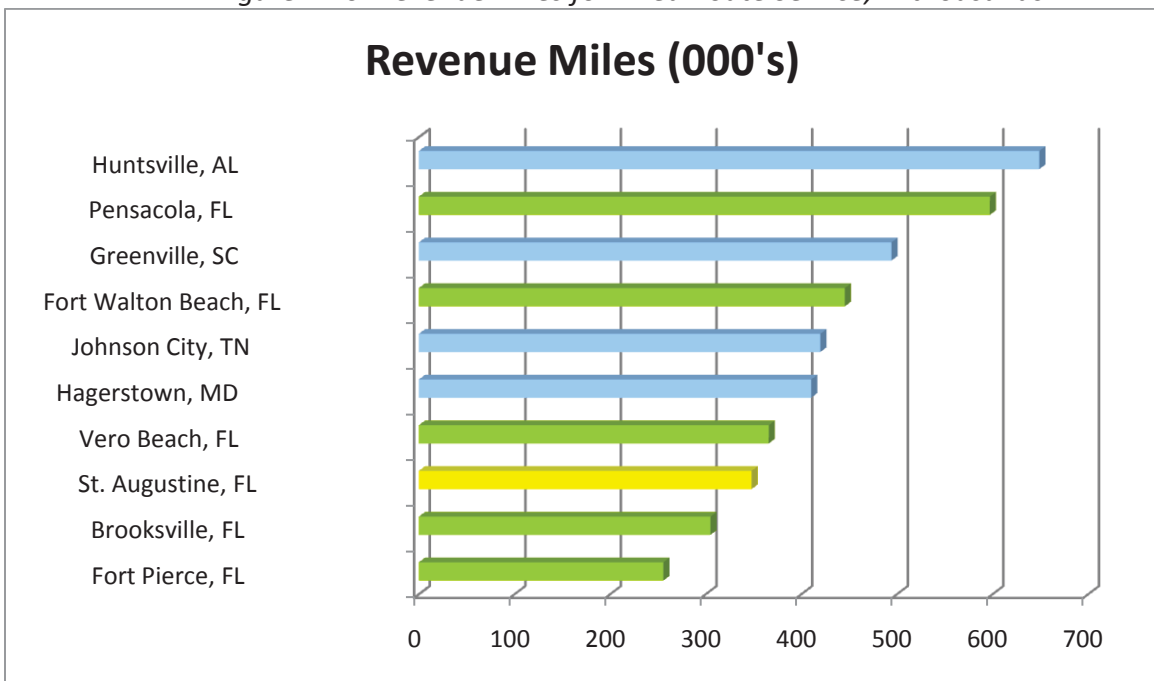
Figure 4.9: Passenger Trips per Revenue Hour for Fixed Route Service



Revenue Statistics

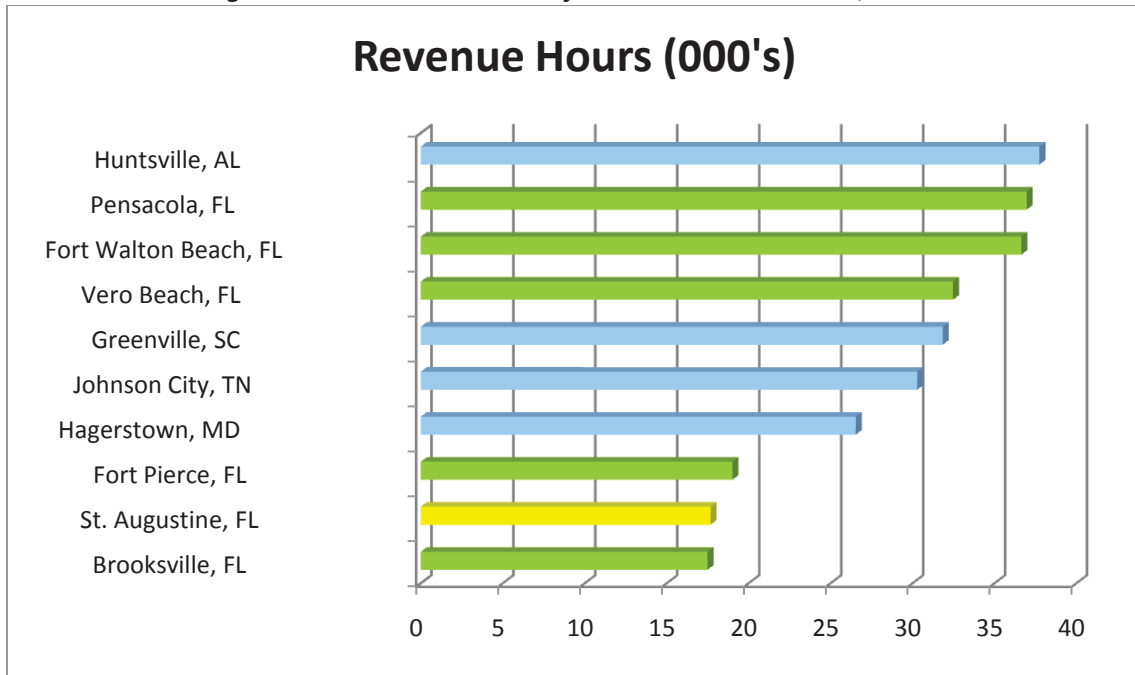
The tables below detail revenue characteristics for the ten reviewed communities for the fixed route service. Figure 4.10 showcases the number of revenue miles for the peer-reviewed communities. In this measure, St. Augustine comes in eighth with 347,987 revenue miles.

Figure 4.10: Revenue Miles for Fixed Route Service, in thousands



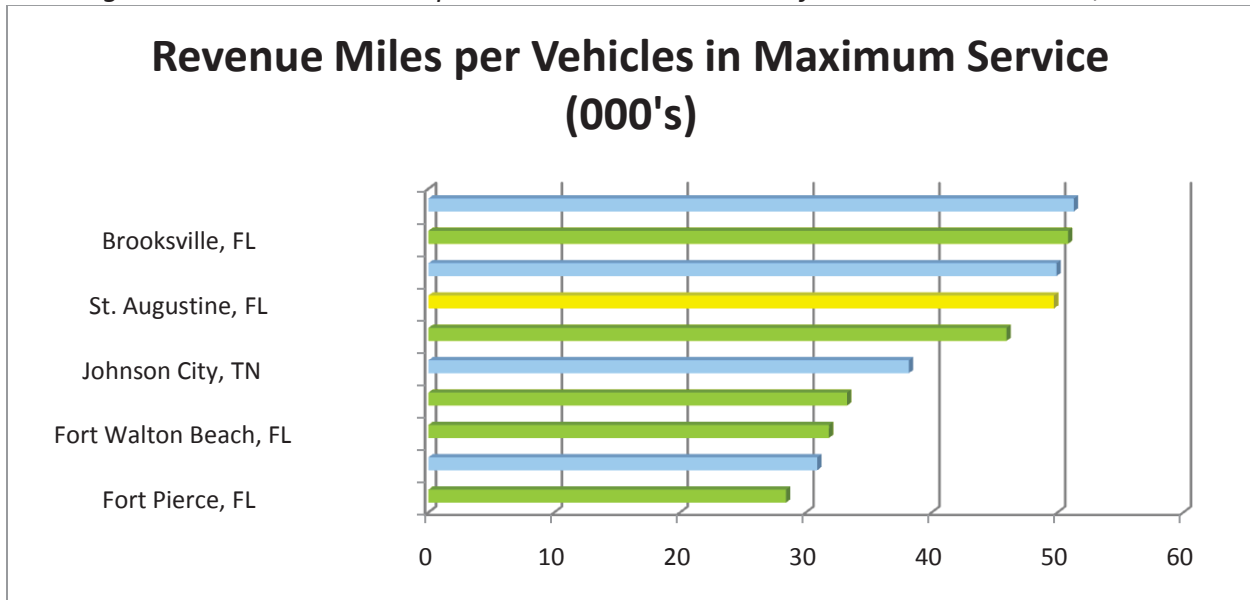
Concerning revenue hours, St. Augustine ranks second lowest, with 17,678 revenue hours reported in FY 2009/10. Huntsville, AL had the highest number, with 37,746 revenue hours. Figure 4.11 shows revenue hours for the 10 peer-reviewed communities.

Figure 4.11: Revenue Hours for Fixed Route Service, in thousands



Revenue miles per vehicles in maximum service are calculated by dividing total revenue miles by the number of vehicles in maximum service. For this characteristic, St. Augustine came out in the middle, with 49,712 revenue miles per vehicles in maximum service, as shown below in Figure 4.12.

Figure 4.12: Revenue Miles per Vehicles in Max. Service for Fixed Route Service, in thousands

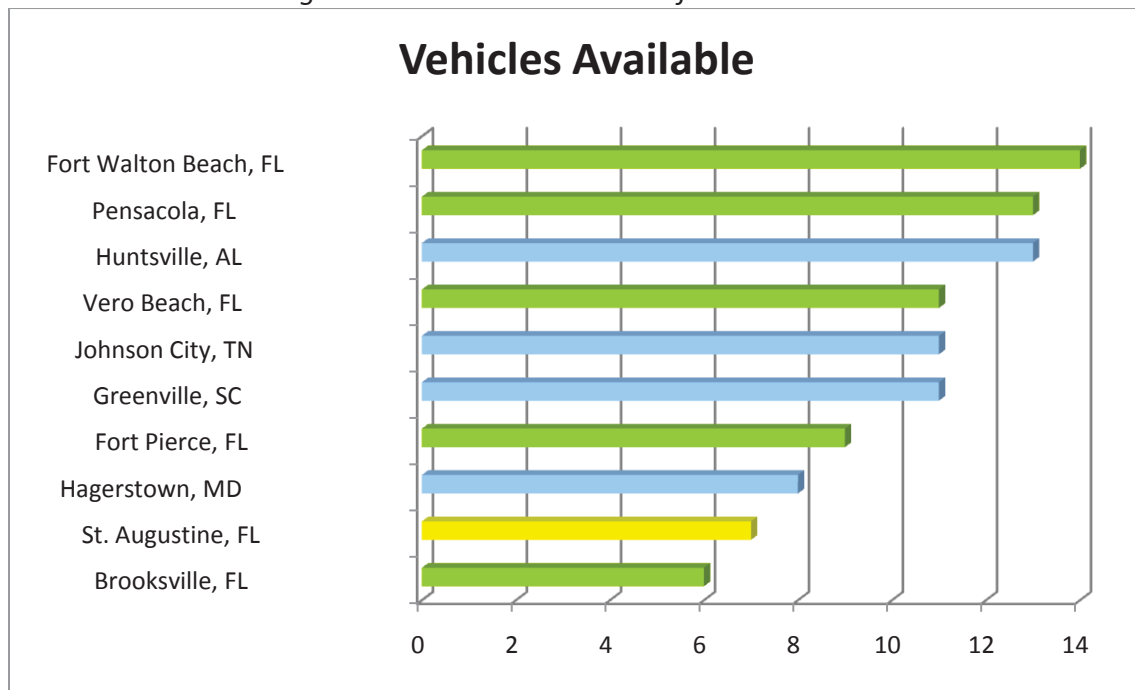


## Bus Fleet data

Statistics assessing the condition of the transit fleet for the peer reviewed communities is available in the National Transit Database, including: availability of vehicles; number of vehicles in maximum service; the average age of the transit fleet; and the vehicle miles per capita. These characteristics are reviewed more in-depth below.

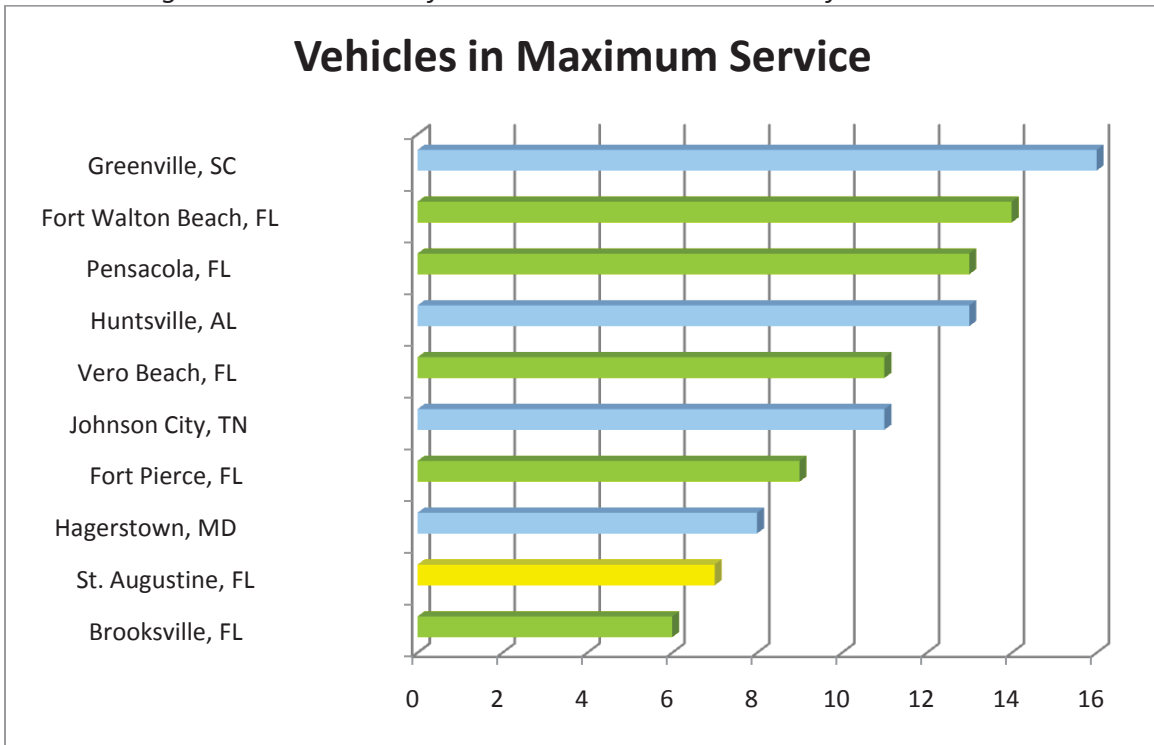
Figure 4.13 shows that as far as vehicle availability, St. Augustine ranks second to last of the ten peer-reviewed communities, with 7 available vehicles. By contrast, Ft. Walton Beach had 14 available vehicles in FY 09/10.

*Figure 4.13: Vehicles Available for Fixed Route Service*



Also assessed is the number of vehicles within a bus fleet used in maximum service, shown below in Figure 4.14. St. Augustine ranks ninth, with 7 vehicles listed as in maximum service.

Figure 4.14: Number of Vehicles in Maximum Service for Fixed Route Service



The average age of the fleet is an important indicator of bus fleet condition. St. Augustine is found to have one of the younger bus fleets, with an average age of 3.4 years. Hagerstown, MD has the oldest average age of 7.7 years, as shown below in Figure 4.15.

Figure 4.15: Average Age of Fleet in Years for Fixed Route Service

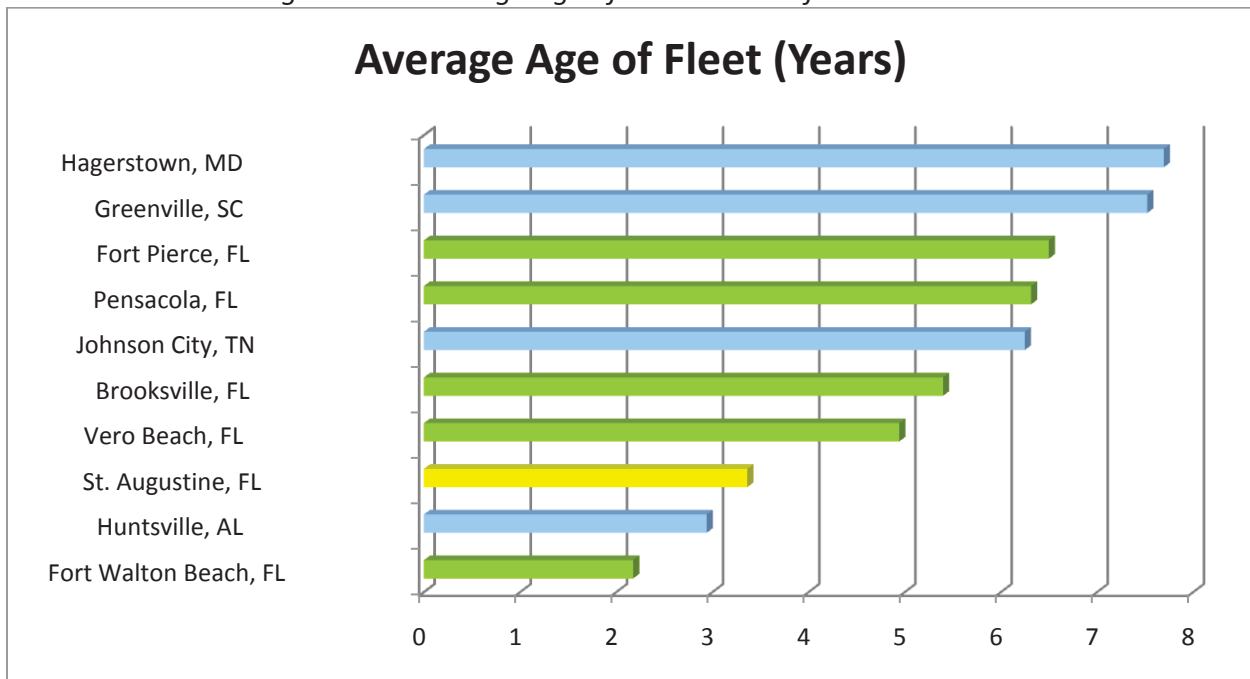
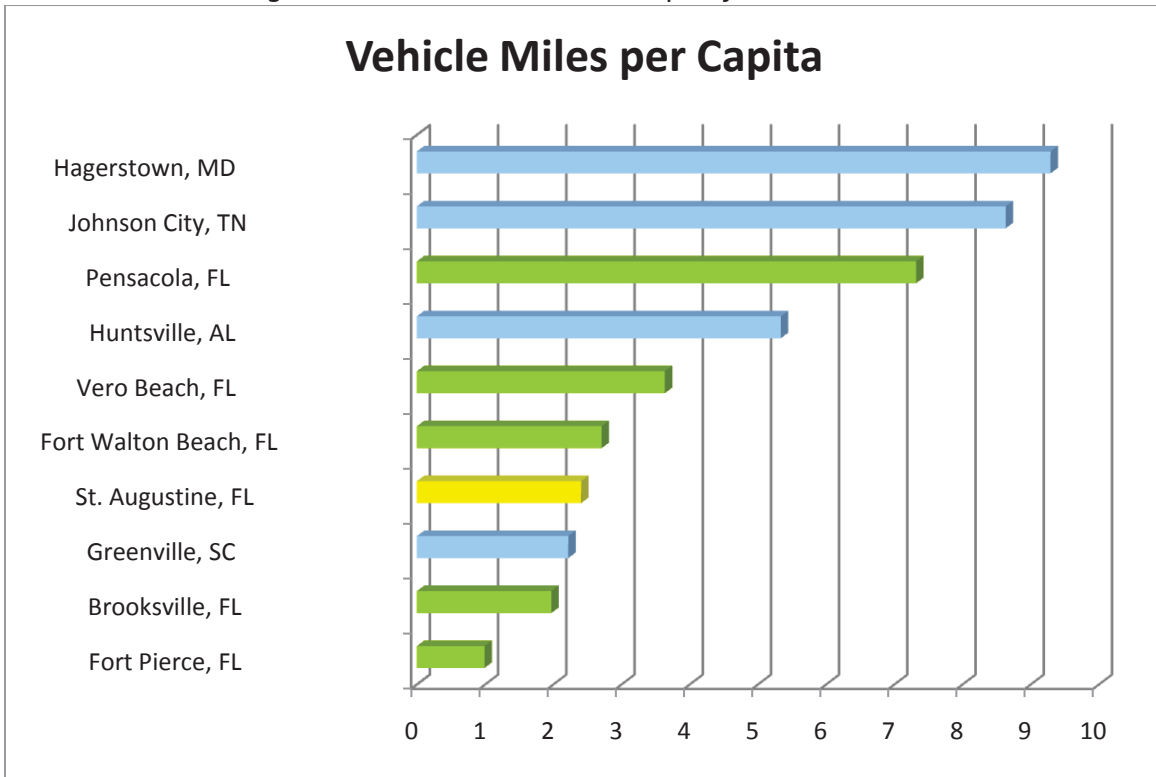


Figure 4.16 shows the number of vehicle miles per capita, which is the vehicle miles divided by the service area population. St. Augustine ranks seventh out of the ten peer-reviewed communities, with 2.4 vehicle miles per capita. Hagerstown, MD has the most vehicle miles per capita at 9.3.

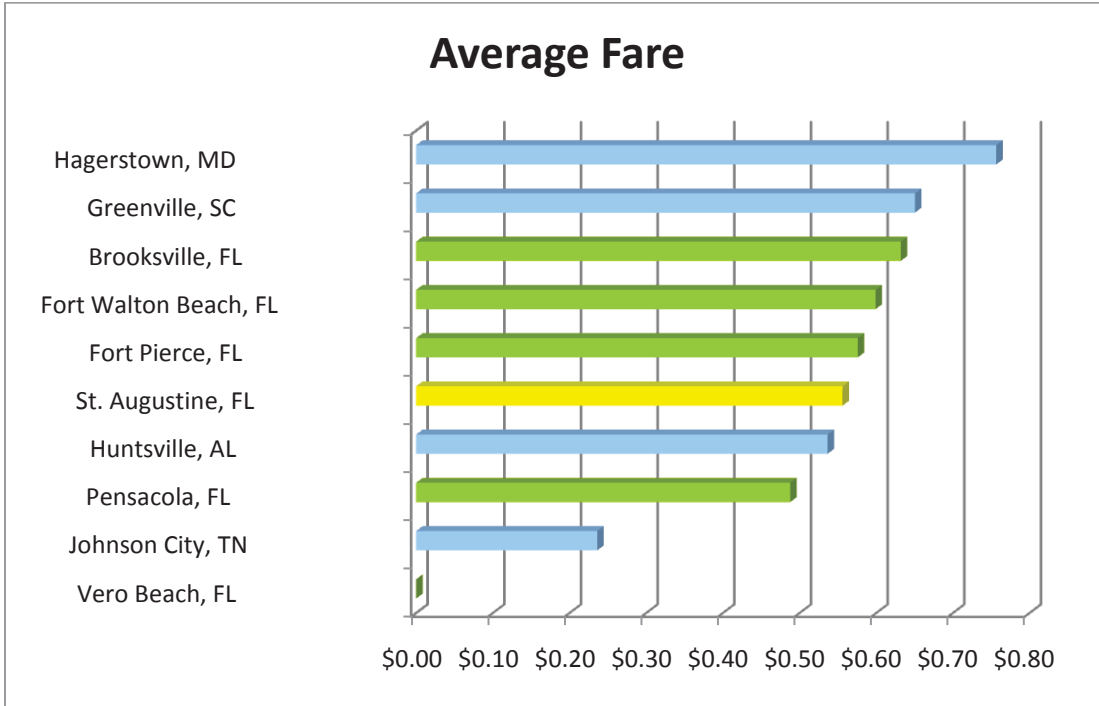
Figure 4.16: Vehicle Miles Per Capita for Fixed Route Service



Fare Information

As shown in Figure 4.17, St. Augustine had a mid-range average fare (\$0.56) as compared to the other peer-reviewed communities. The average fare was calculated by dividing the total fares earned by the number of passenger trips.

Figure 4.17: Average Fare for Fixed Route Service



### Operating Expenses

The National Transit Database contains a number of indicators related to operation and maintenance expenses for fixed route transit services. How St. Augustine compares to its peer communities in terms of operation and maintenance costs is detailed below.

Figure 4.18 shows that St. Augustine had the lowest operating expenses in FY 2009/10 at \$311,000. Greenville, SC had the highest operating expenses at \$1,190,460 in FY 2009/10.

Figure 4.18: Operating Expenses for Fixed Route Service, in thousands

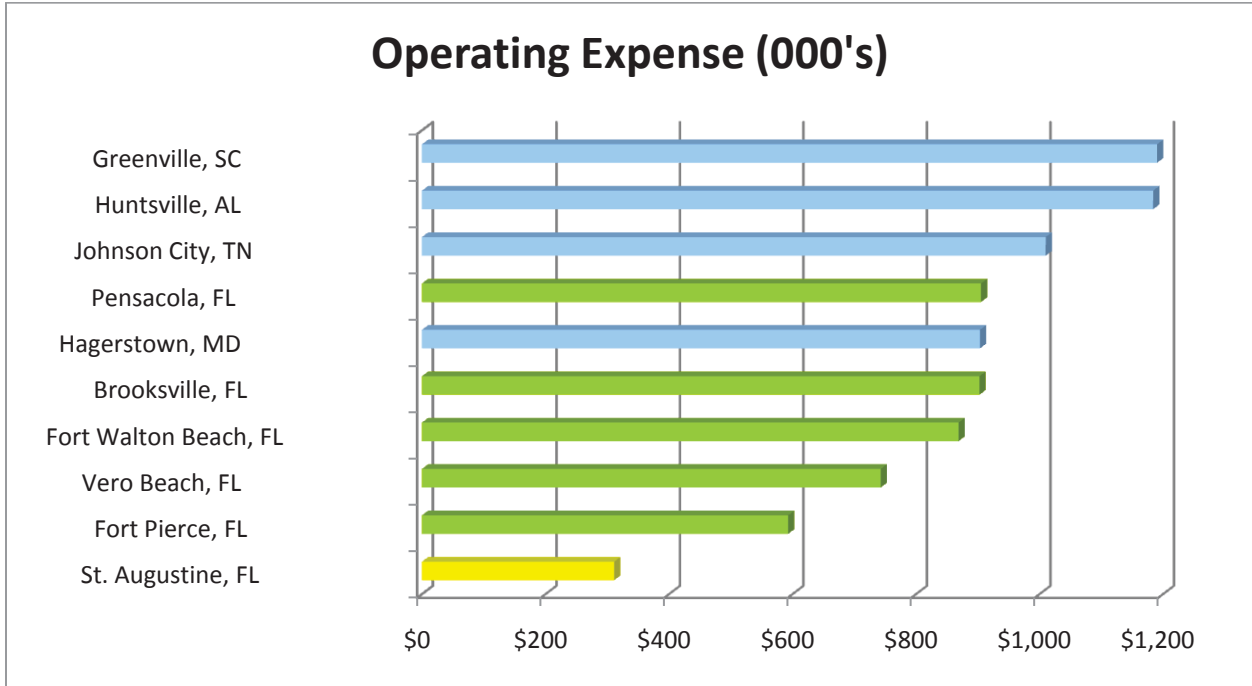
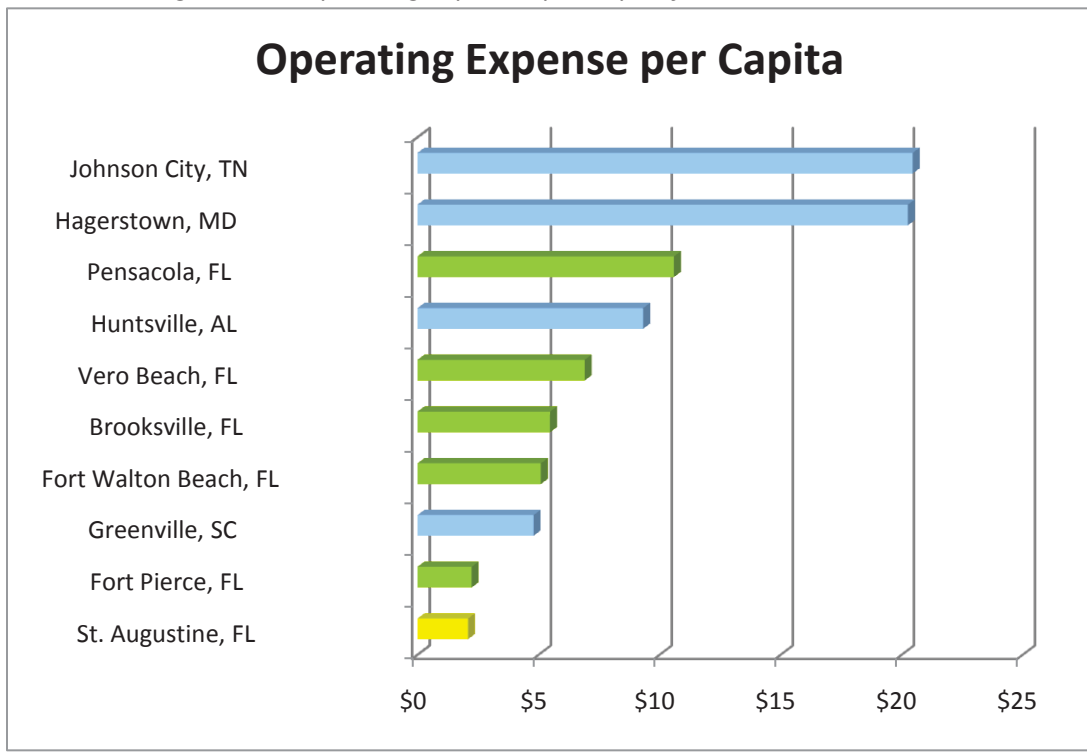


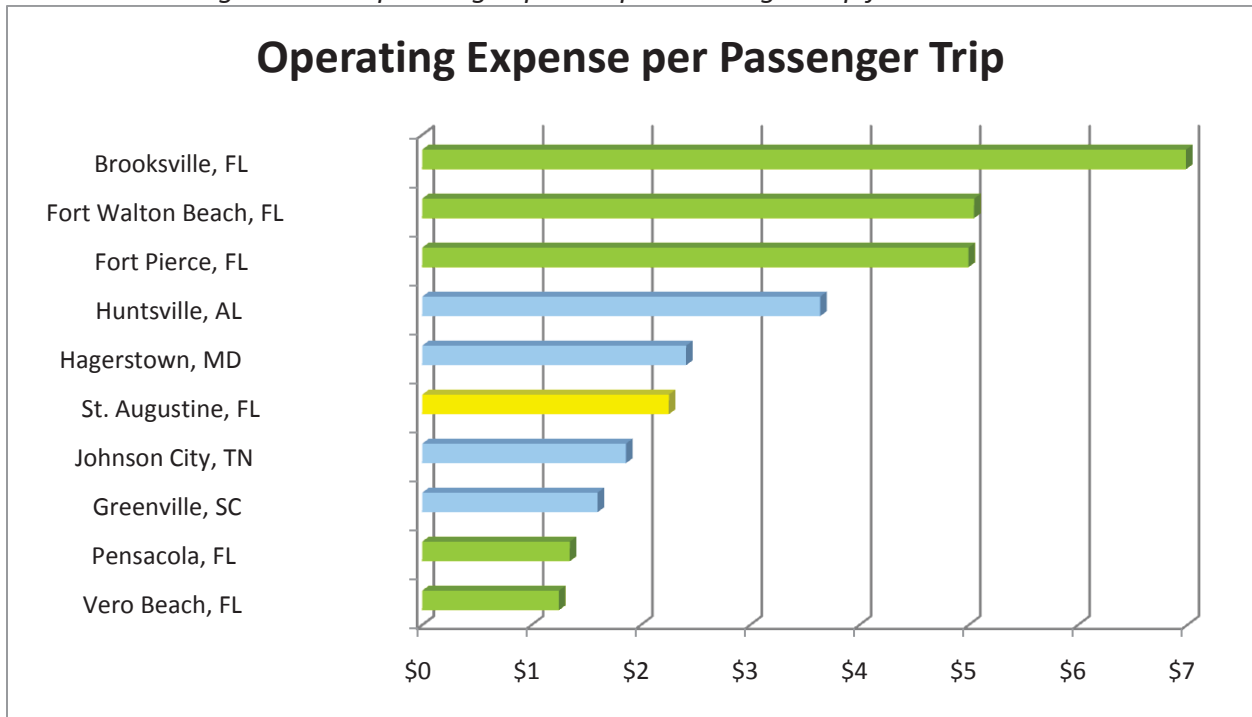
Figure 4.19 shows St. Augustine as having the lowest operating expense per capita (defined as total operating expenses divided by the service area population) of \$2.08. Johnson City, TN had the highest operating cost of \$20.46 per capita.

Figure 4.19: Operating Expenses per Capita for Fixed Route Service



Also calculated is the operating expense per passenger trip, which is the operating expenses divided by the number of passenger trips. The results are shown below in Figure 4.20. In this measure, St. Augustine falls in the mid-range of the peer communities, with a figure of \$2.26 of operating expenses per passenger trip. Brooksville, FL had the highest operating expense per passenger trip (\$6.99) and Vero Beach, FL had the lowest (\$1.25).

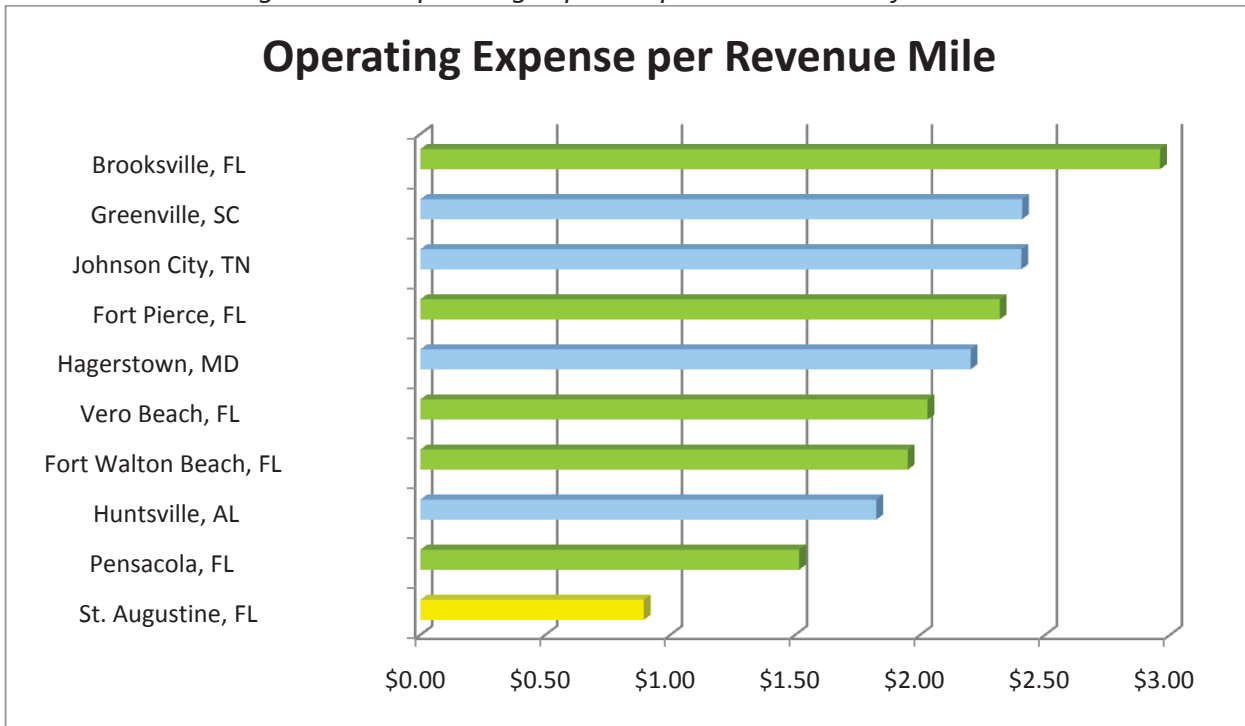
Figure 4.20: Operating Expenses per Passenger Trip for Fixed Route Service



Shown below in Figure 4.21 is the operating expenses per revenue mile for the peer reviewed communities. St. Augustine had the lowest operating expenses per revenue mile at \$0.89.

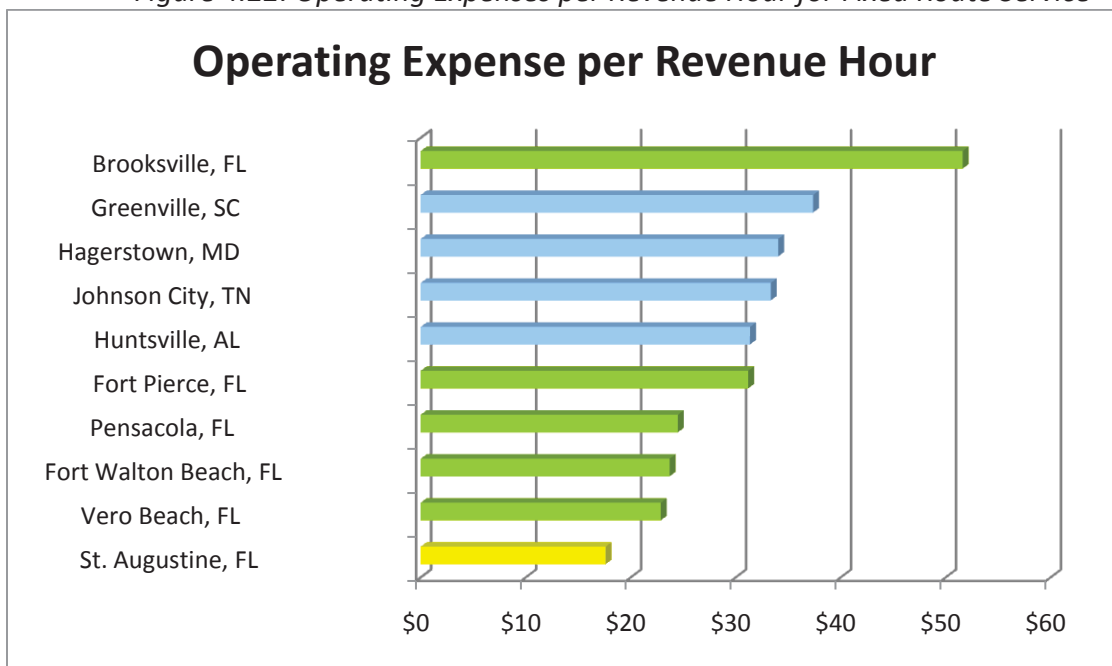


Figure 4.21: Operating Expenses per Revenue Mile for Fixed Route Service



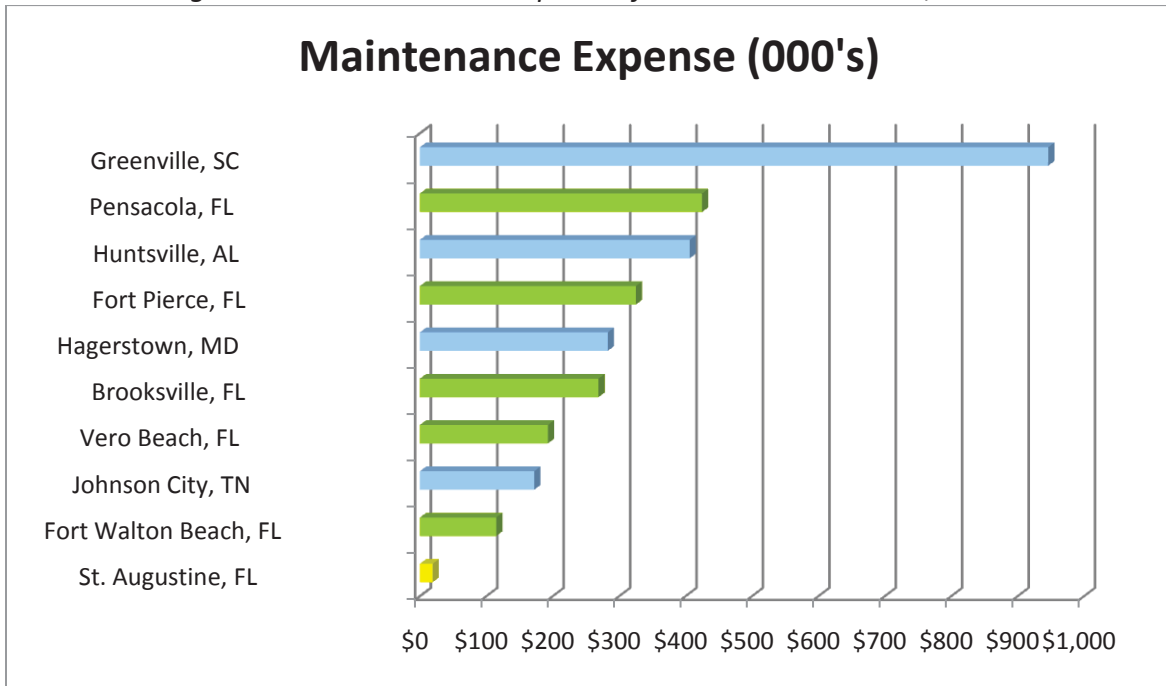
St. Augustine also measured the lowest on operating expense per revenue hour, as shown below in Figure 4.22. St. Augustine was found to have an operating expense per revenue hour of \$18 in FY 2009/10, whereas the highest operating expense per revenue hour was Brooksville, FL with a \$52 operating expense per revenue hour.

Figure 4.22: Operating Expenses per Revenue Hour for Fixed Route Service



St. Augustine also measured the lowest on maintenance expenses, as shown below in Figure 4.23. St. Augustine’s maintenance expenses were \$19,000 in FY 2009/10, whereas the highest maintenance expenses were found in Greenville, SC at a cost of \$946,000.

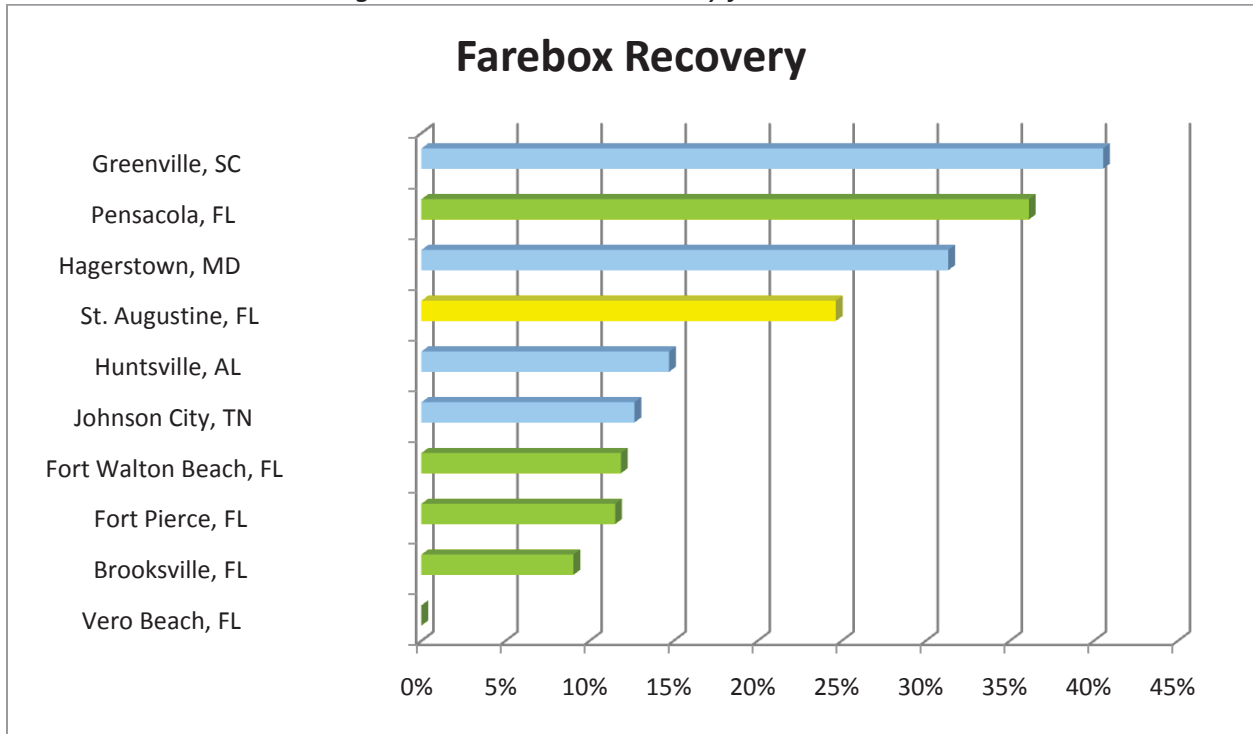
Figure 4.23: Maintenance Expenses for Fixed Route Service, in thousands



Farebox Recovery

The Farebox Recovery figure refers to how much of the operating expenses are covered by the fares collected. As shown in Figure 4.24, St. Augustine’s farebox recovery accounts for approximately 25% of total operating expenses. Some peer communities, notably Greenville, SC, earned a much higher amount in fares (\$482,795 versus St. Augustine’s \$76,705) and therefore had a higher farebox recovery.

Figure 4.24: Farebox Recovery for Fixed Route Service



#### 4.2.2 Demand Response Service Comparisons:

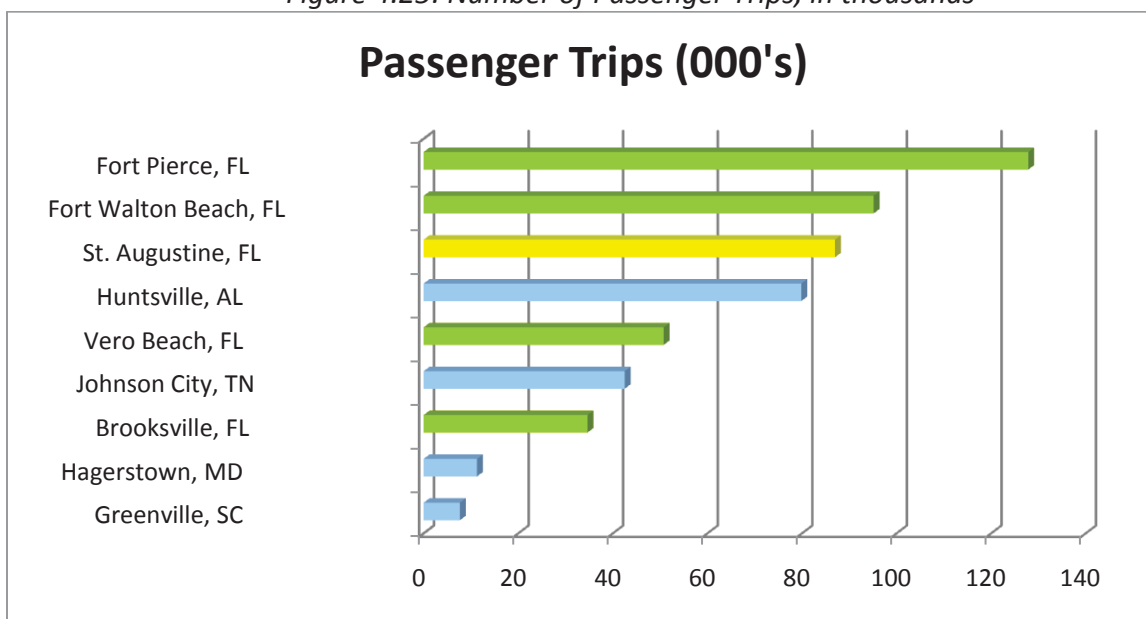
The statistics detailed below convey characteristics of the demand response service for the ten peer-reviewed communities.

##### Passenger Trip Statistics

The following figures detail passenger characteristics, including: passenger trips, passenger miles, passenger trips per capita, average passenger trip length, passenger trips per vehicle in maximum service, passenger trips per revenue mile, and passenger trip per revenue hour.

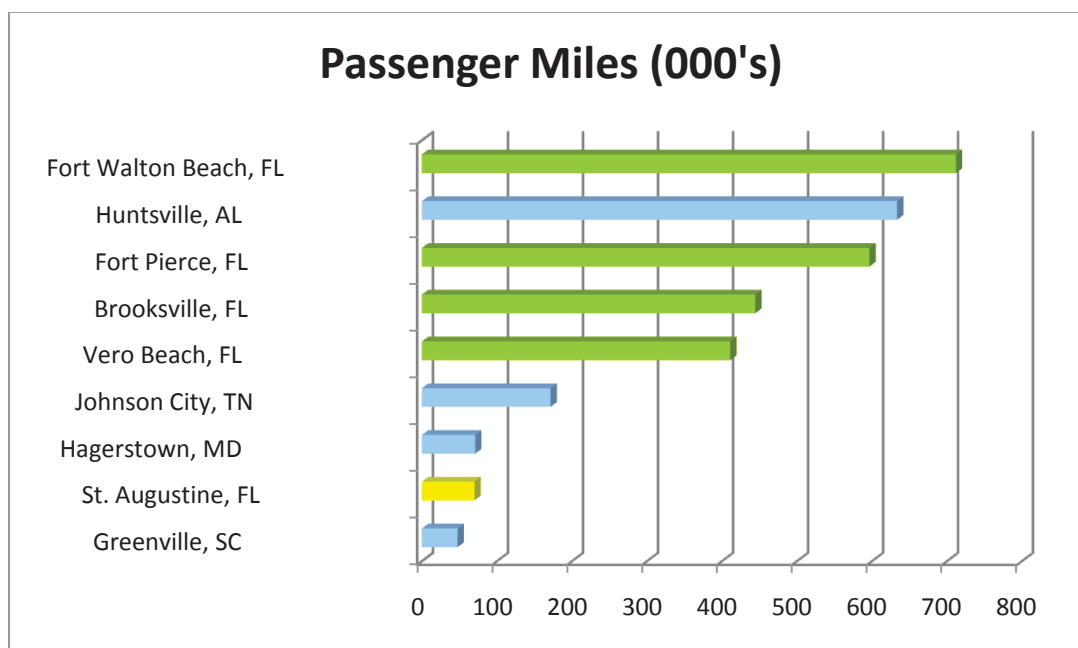
Figure 4.25 shows the total number of passenger trips in FY 09/10 in the peer reviewed communities. Fort Pierce, FL had the highest number of passenger trips with 127,875, while St. Augustine had above the mean with 87,000 trips in 2009/10.

Figure 4.25: Number of Passenger Trips, in thousands



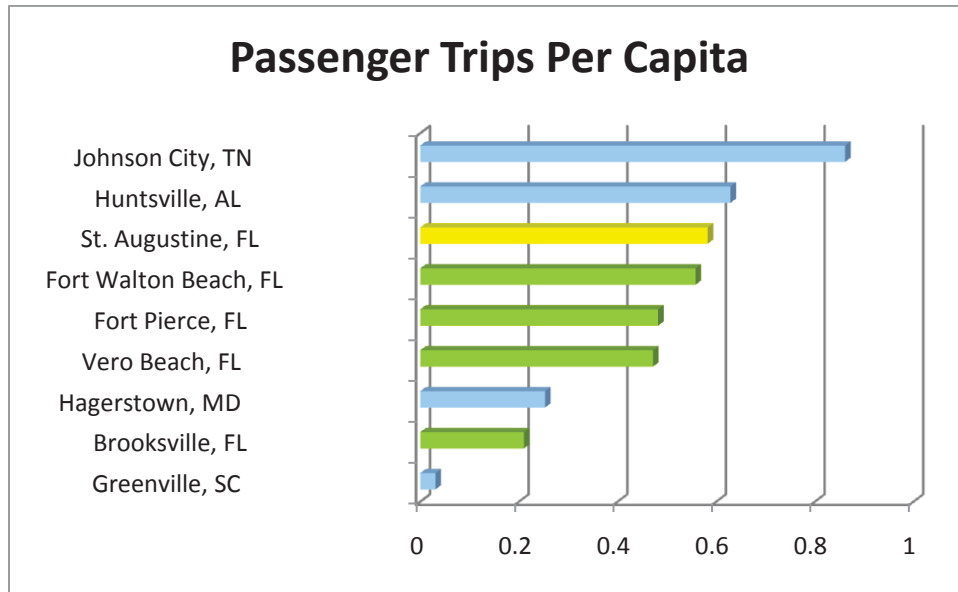
As shown below in Figure 4.26, St. Augustine is second to last for total number of passenger miles for the demand response system with 69,996 total passenger miles. However, based on a review of other statistics and discussion with staff, it seems likely that passenger miles were underreported in the NTD. Ft. Walton Beach, FL and Huntsville, AL lead the peer communities in total passenger miles, with 711,978 and 633,528, respectively.

Figure 4.26: Number of Passenger Miles, in thousands



Passenger trips per capita were calculated for the peer review communities by dividing the number of passenger trips by the service area population. As shown below in Figure 4.27, St. Augustine was found to be in the middle, with approximately 0.6 trips per capita.

Figure 4.27: Passenger Trips Per Capita for Demand Response Service



The average passenger trip length shows how far the average transit rider travels on their transit trip. This measure is calculated by dividing the number of passenger miles by passenger trips. As detailed below in Figure 4.28, the results show St. Augustine with an average trip length of less than one mile. This data may be flawed however, as it seems that passenger miles were underreported in the NTD.

Figure 4.28: Average Passenger Trip Length for Demand Response Service

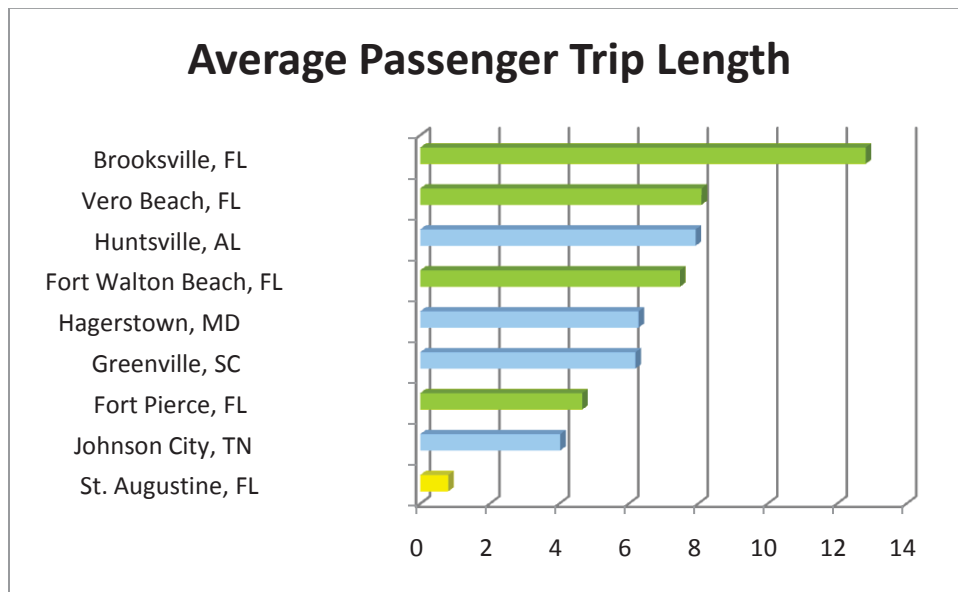


Figure 4.29 below shows the number of passenger trips divided by the number of vehicles in maximum service for each peer-reviewed community. As shown below, St. Augustine scores much higher than other peer communities; however, the number of vehicles in service may be underreported in the NTD.

Figure 4.29: Passenger Trips per Vehicles in Maximum Services for Demand Response Service

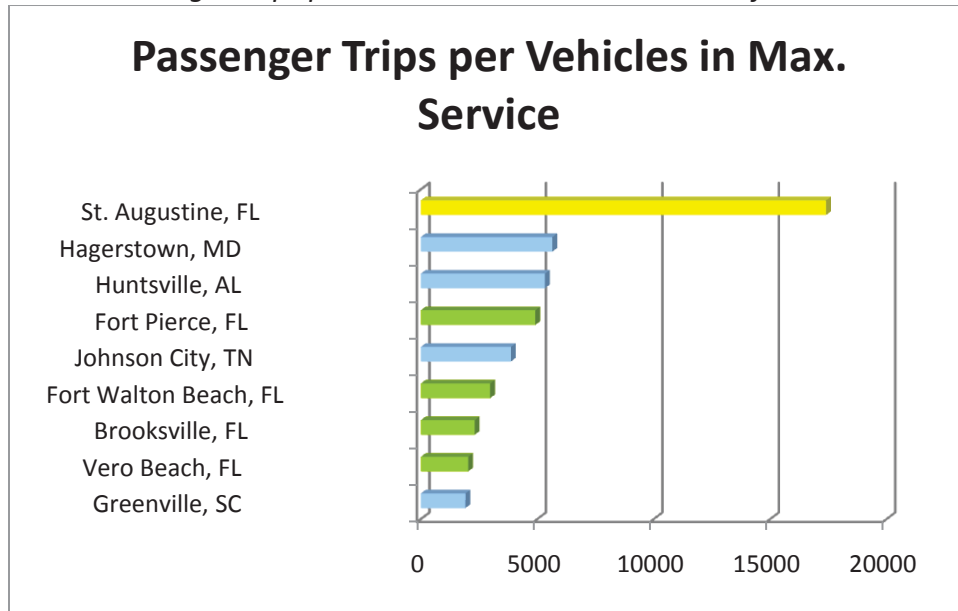


Figure 4.30 shows the number of passenger trips divided by the number of revenue miles for the demand response service. In this measure, St. Augustine scores much higher than the peer communities, but again this may be due to underreporting in the NTD.

Figure 4-30: Passenger Trips per Revenue Mile for Demand Response Service

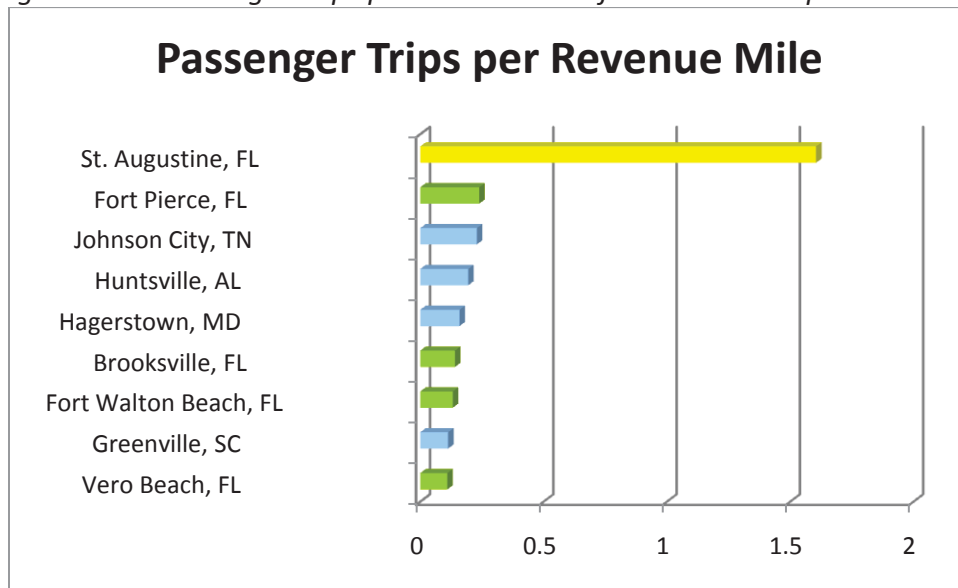
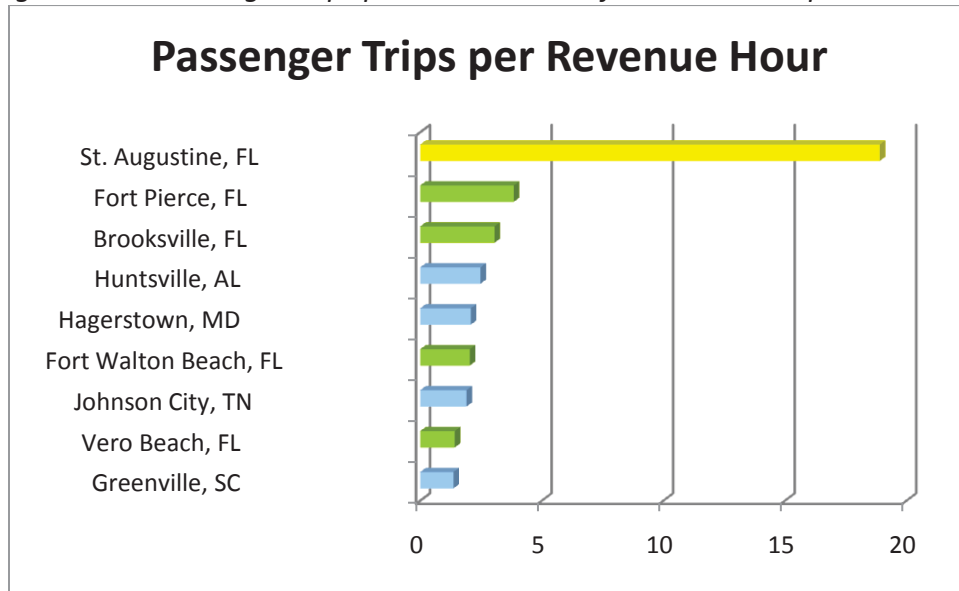


Figure 4.31 shows the number of passenger trips divided by the number of revenue hours for each peer-reviewed community. As with the charts above, St. Augustine rates much higher than its peer communities, but that is likely due to underreporting in the NTD.

Figure 4.31: Passenger Trips per Revenue Hour for Demand Response Service

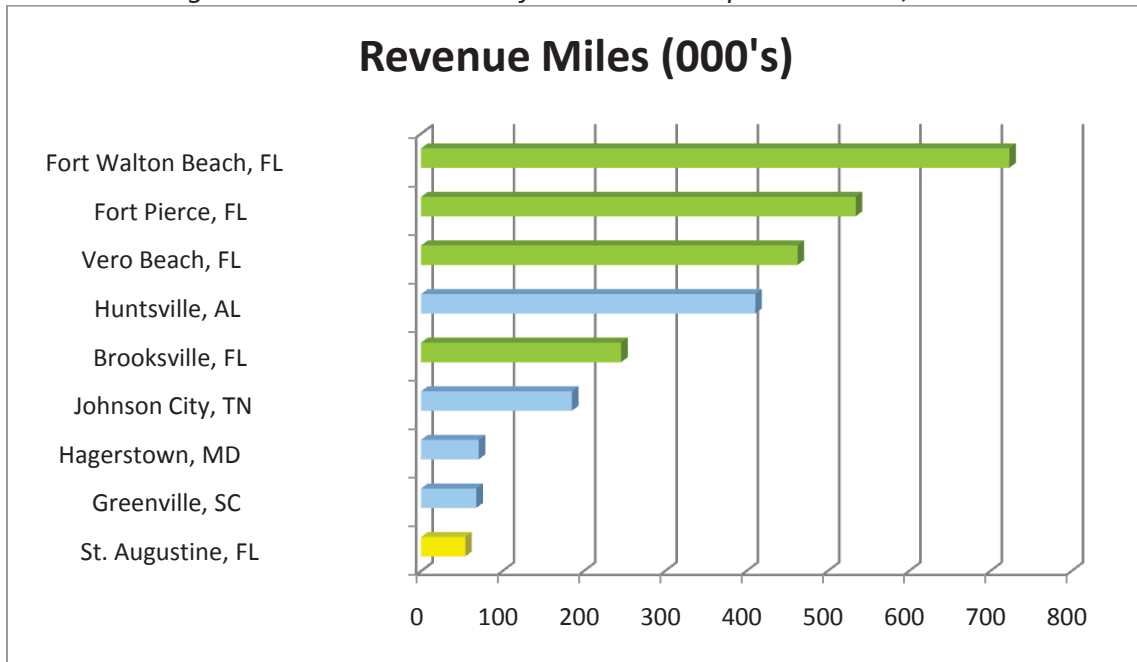


Revenue Statistics

Shown below are characteristics related to revenue for the ten peer-reviewed communities for the demand response transit service.

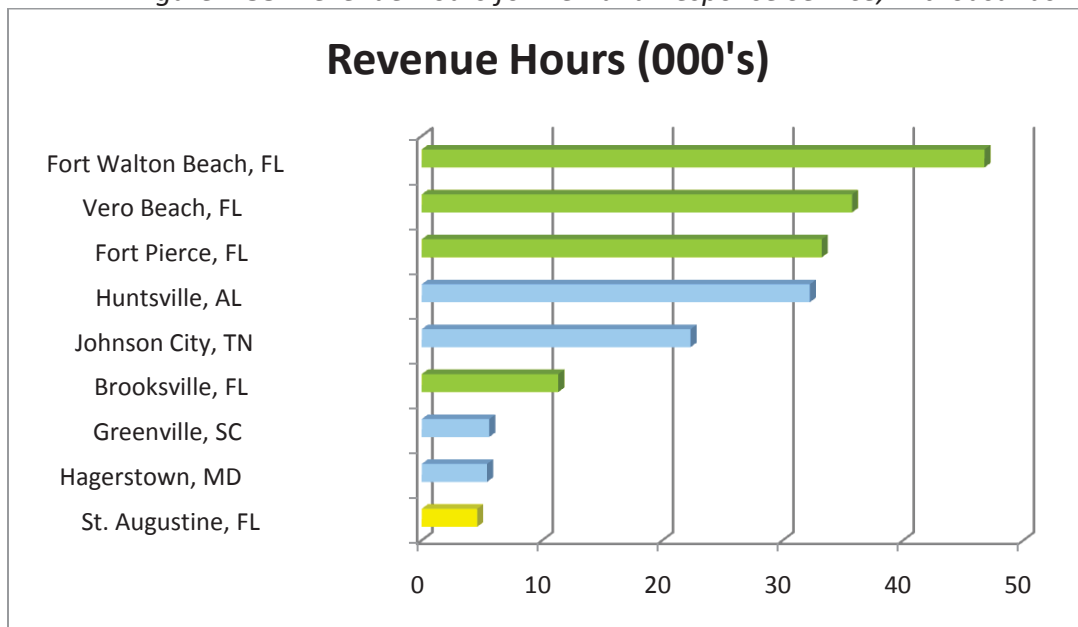
Figure 4.32 showcases the number of revenue miles for the peer-reviewed communities. St. Augustine had the smallest number of revenue miles at 54,207 in FY 2009/10, whereas Ft. Walton Beach had 723,544.

Figure 4.32: Revenue Miles for Demand Response Service, in thousands



Concerning revenue hours, St. Augustine had the lowest number of revenue hours for the demand response system, with 4,603 revenue hours reported in FY 2009/10. Ft. Walton Beach, FL had the highest number, with 46,767 revenue hours. Figure 4.33 shows revenue hours for the 10 peer-reviewed communities.

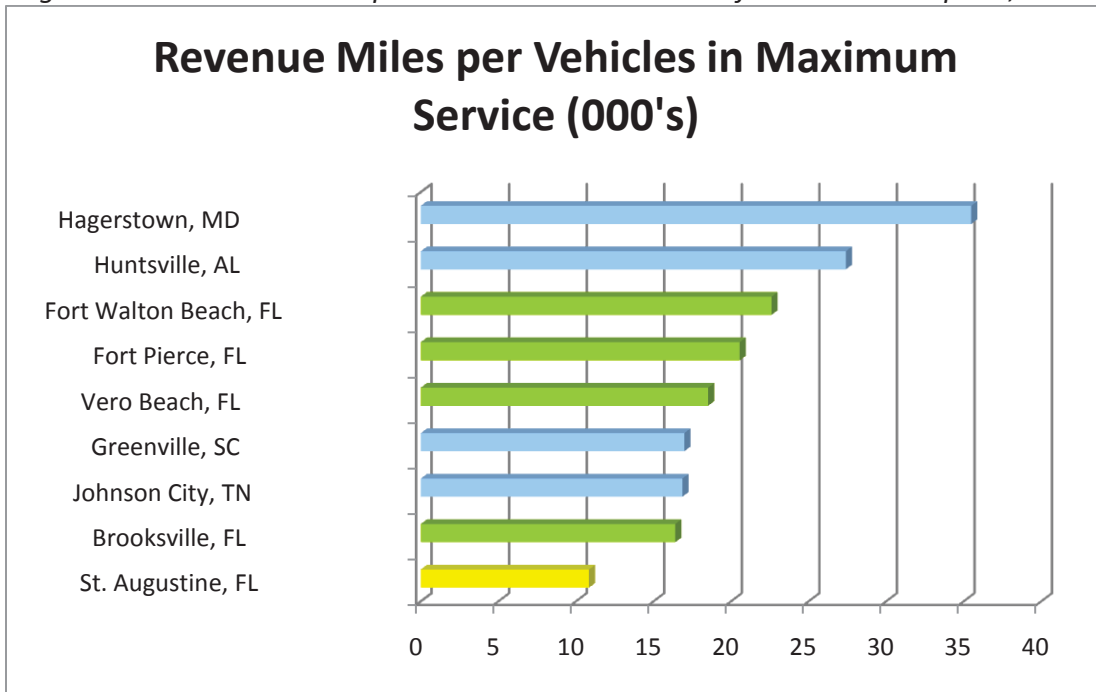
Figure 4.33: Revenue Hours for Demand Response Service, in thousands





Revenue miles per vehicles in maximum service are calculated by dividing total revenue miles by the number of vehicles in maximum service. For this statistic, St. Augustine came in last, with 10,841 revenue miles per vehicles in maximum service, as shown below in Figure 4.34. The community with the highest number of revenue miles per vehicles in maximum service was Hagerstown, MD, with 35,487 in FY 2009/10.

Figure 4.34: Revenue Miles per Vehicles in Max. Service for Demand Respond, in thousands

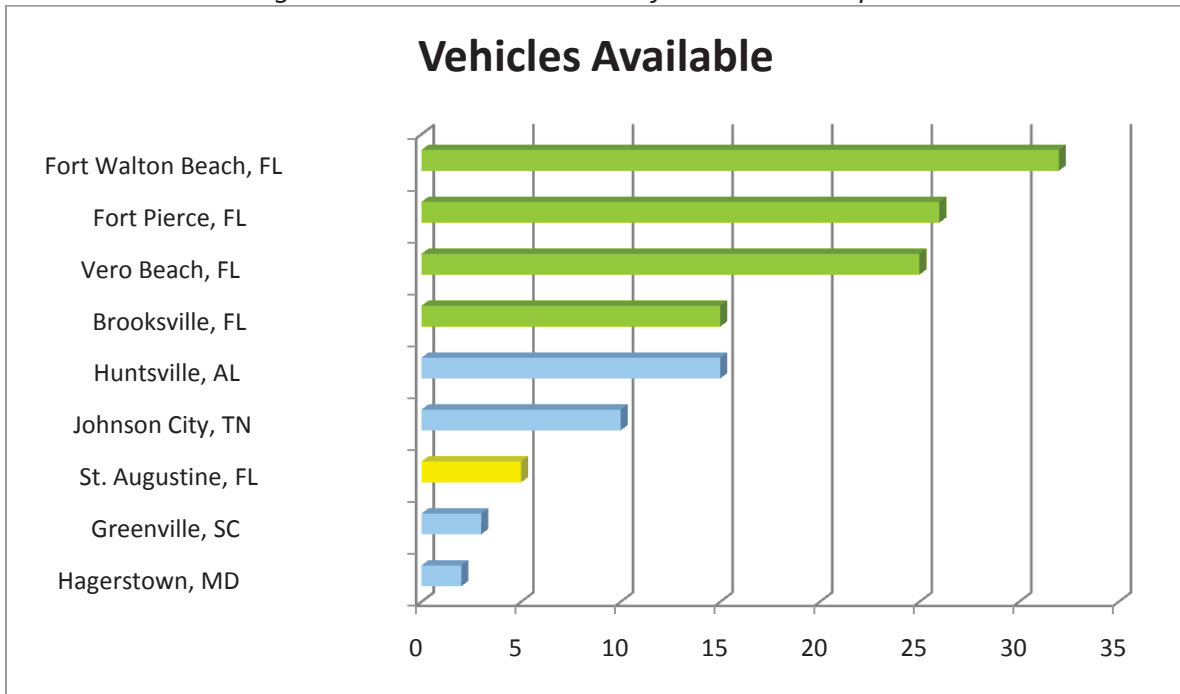


Bus Fleet data

The following data shows characteristics of the condition of the transit fleet for the demand response systems of the peer reviewed communities as available in the National Transit Database. The following data is discussed more in-depth below: availability of vehicles, number of vehicles in maximum service, the average age of the transit fleet, and the vehicle miles per capita.

Figure 4.35 shows that concerning vehicle availability, St. Augustine ranks third to last of the ten peer-reviewed communities for the demand response service, with 5 available vehicles. Based on a review of the system and discussion with staff, this number is likely underreported in the NTD. By contrast, Ft. Walton Beach had 32 available vehicles in FY 09/10.

Figure 4.35: Vehicles Available for Demand Response Service



Similarly, St. Augustine also has the third lowest number of vehicles in maximum service (5), as shown below in Figure 4.36.

Figure 4.36: Number of Vehicles in Maximum Service for Demand Response Transit

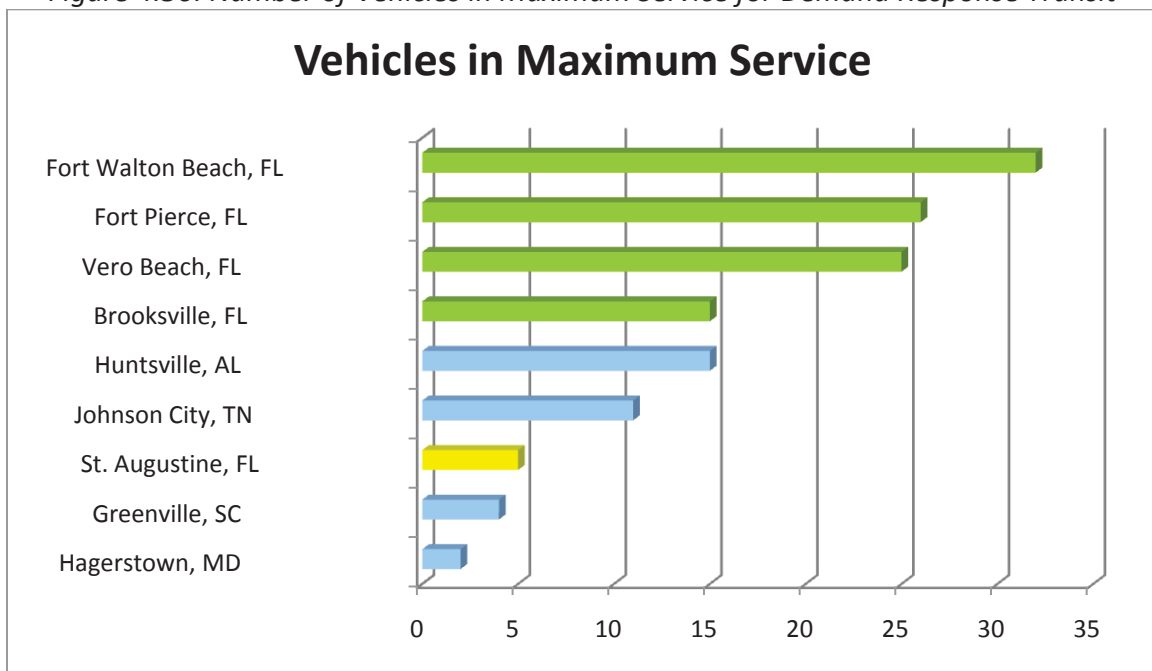
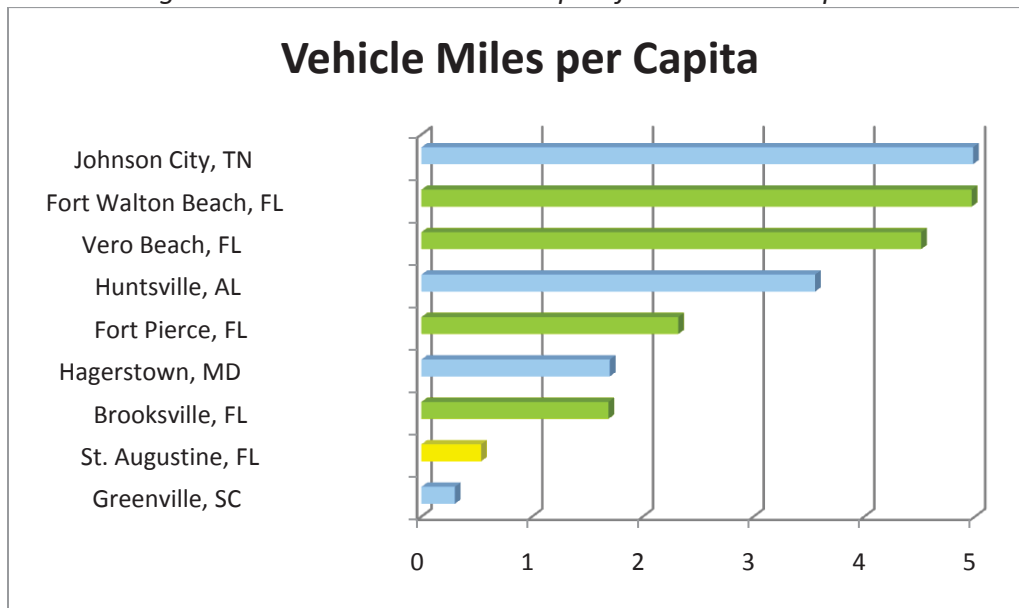


Figure 4.37 shows the number of vehicle miles per capita, which is the vehicle miles divided by the service area population. St. Augustine ranks eighth out of the ten peer-reviewed communities, with 0.54 vehicle miles per capita. Johnson City, TN has the most vehicle miles per capita at 4.98.

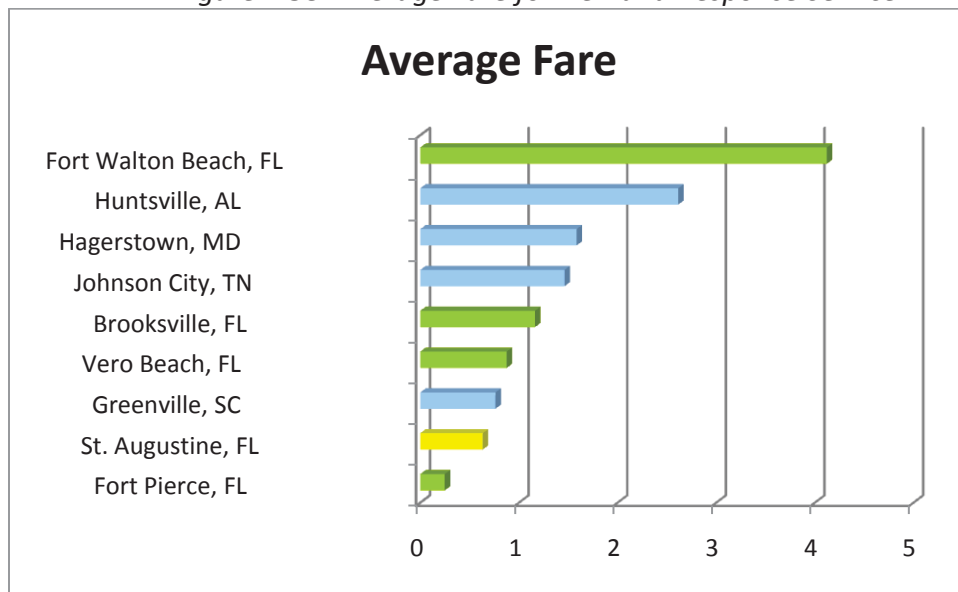
Figure 4.37: Vehicle Miles Per Capita for Demand Response Service



Fare Information

The average fare was calculated by dividing the total fares earned by the number of passenger trips. Figure 4.38 shows St. Augustine as having the second lowest average fare (\$0.63) for its demand response system as compared to the other peer-reviewed communities.

Figure 4.38: Average Fare for Demand Response Service



## Operating Expenses

The National Transit Database contains a number of indicators related to operation and maintenance expenses for demand response transit services. St. Augustine is compared to its peer communities in terms of operation and maintenance costs below.

Figure 4.39 shows that St. Augustine had the second lowest operating expenses for its demand response service in FY 2009/10 at \$161,136. Fort Pierce, FL had the highest operating expenses at \$1,414,981 in FY 2009/10.

*Figure 4.39: Operating Expenses for Demand Response Service, in thousands*

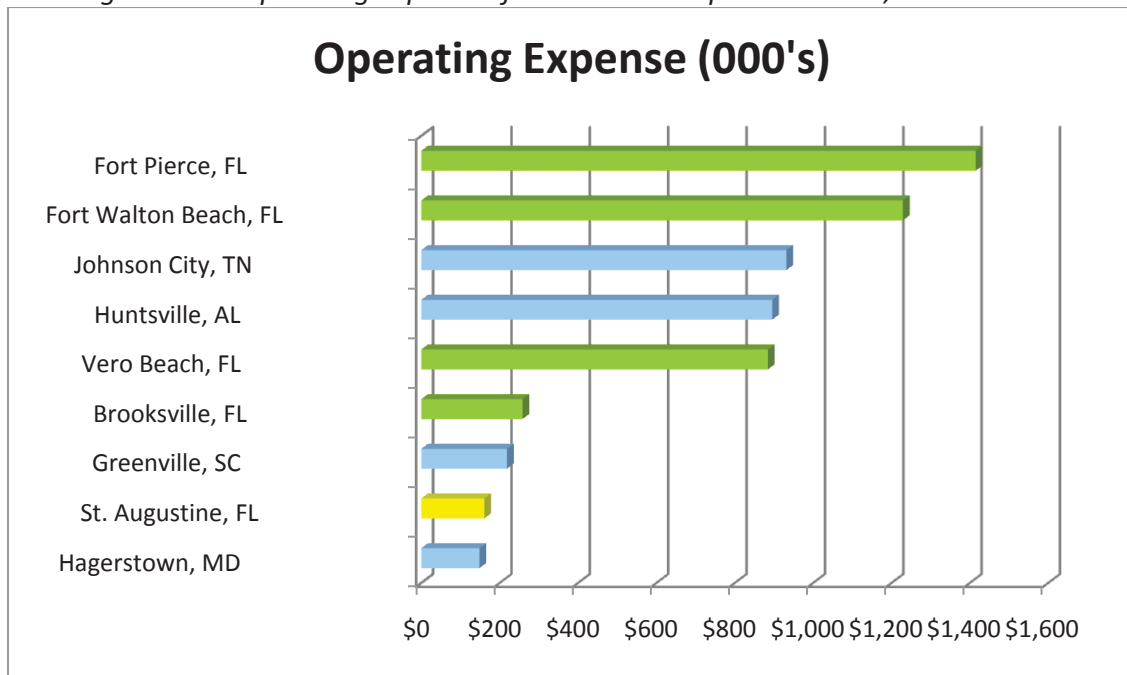
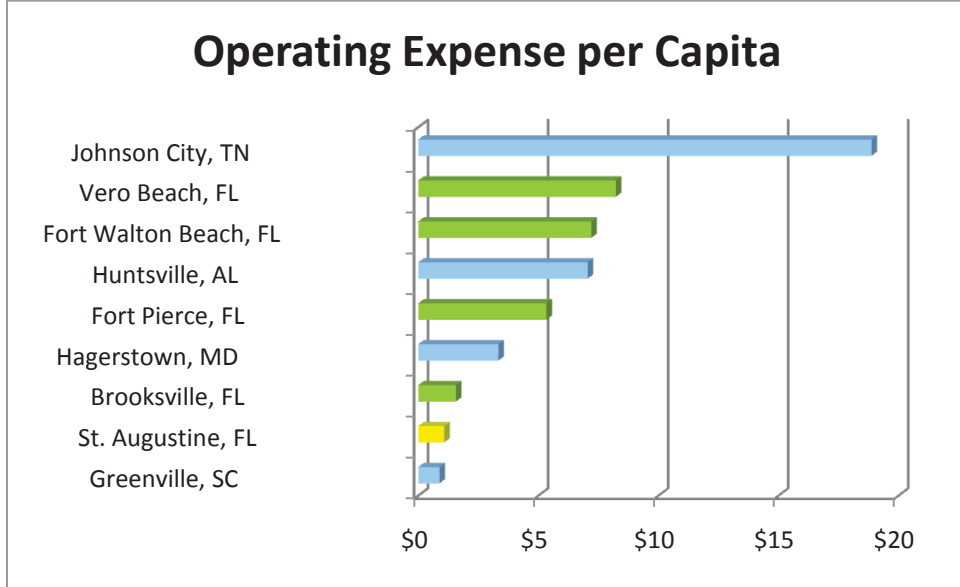


Figure 4.40 shows St. Augustine as having the second lowest operating expense per capita (defined as total operating expenses divided by the service area population) of \$1.08. Johnson City, TN had the highest operating cost of \$18.88 per capita.

Figure 4.40: Operating Expenses per Capita for Demand Response Service



Also calculated is the operating expense per passenger trip for the demand response system, which is the operating expenses divided by the number of passenger trips. The results are shown below in Figure 4.41. In this measure, St. Augustine had the lowest figure, with an average of \$1.85 of operating expenses per passenger trip. Based on review of the peer communities, this statistic may not be correct, meaning that operating expenses were likely underreported in the NTD.

Figure 4-41. Operating Expenses per Passenger Trip for Demand Response Transit Service

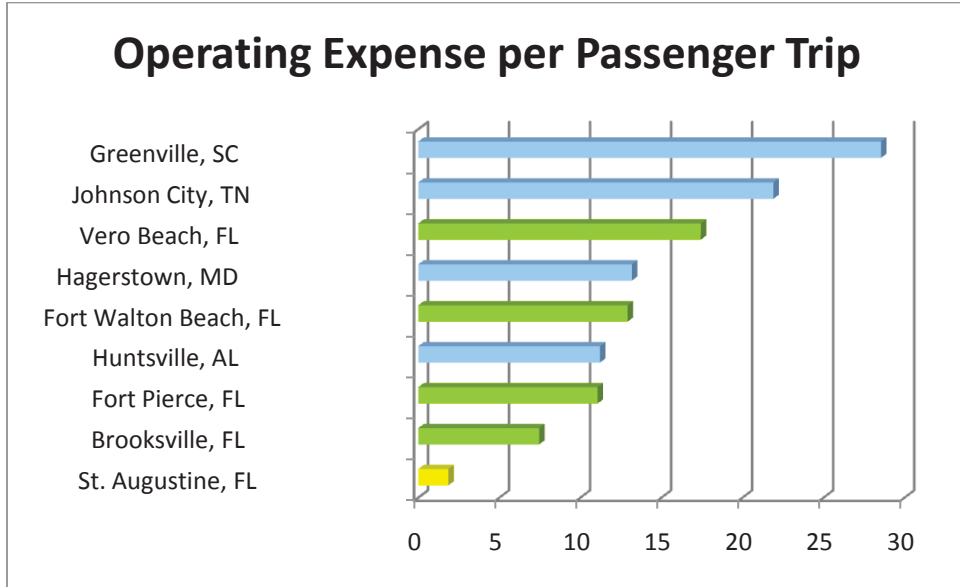
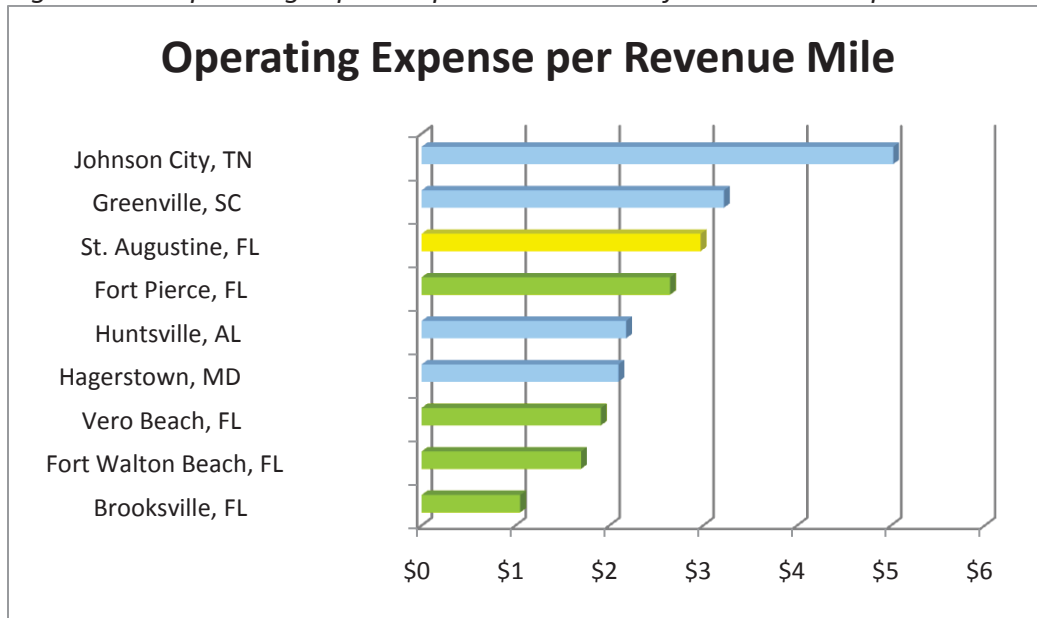


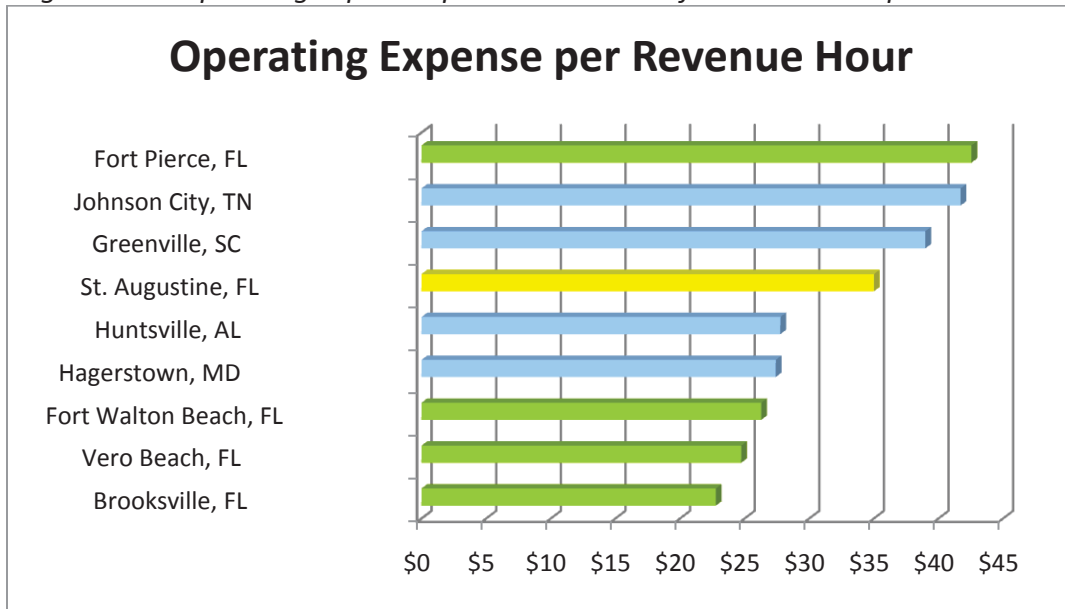
Figure 4.42 below shows the operating expenses per revenue mile for the demand response service for the peer reviewed communities. St. Augustine had the third highest operating expenses per revenue mile at \$2.97. Johnson City, TN had the highest operating expenses per revenue mile at \$5.02 while Brooksville, FL had the lowest operating expenses per revenue mile at \$1.05 in FY 2009/10.

Figure 4.42: Operating Expenses per Revenue Mile for Demand Response Service



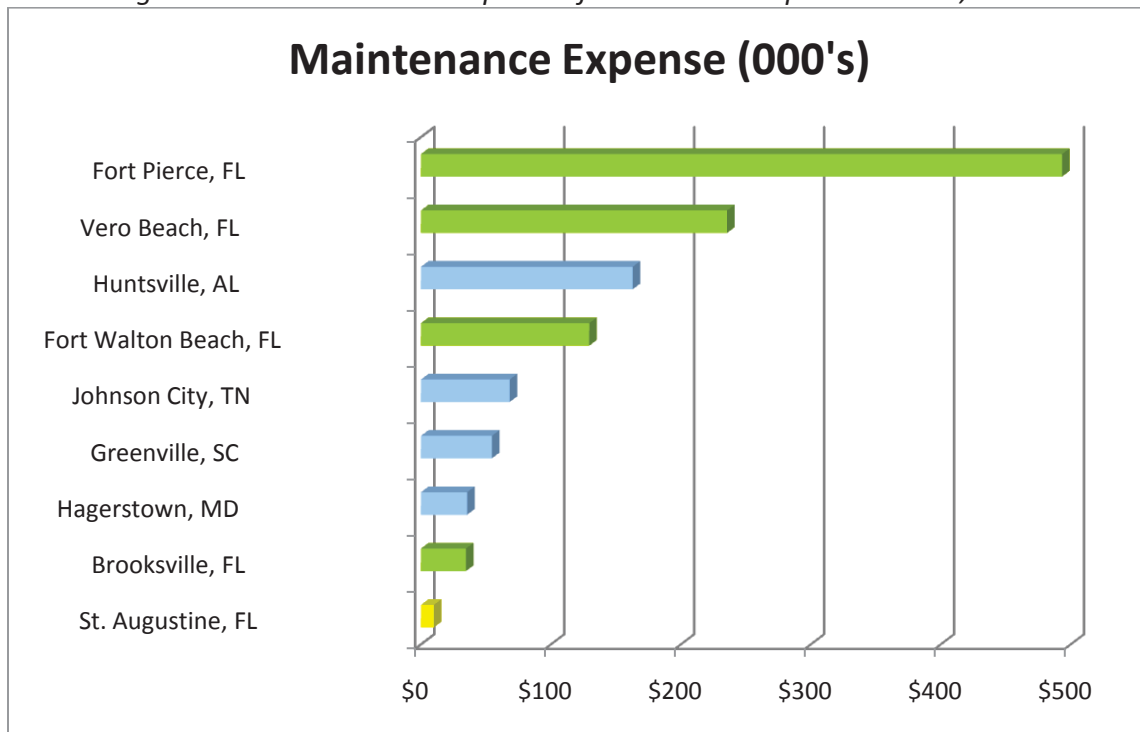
St. Augustine was in the mid-range on operating expense per revenue hour in FY 2009/10 for its demand response system, as shown below in Figure 4.43. St. Augustine had an operating expense per revenue hour of \$35, whereas the highest operating expense per revenue hour was Fort Pierce, FL with a \$42.56 operating expense per revenue hour.

Figure 4.43: Operating Expenses per Revenue Hour for Demand Response Service



St. Augustine measured the lowest on maintenance expenses, as shown below in Figure 4.44. St. Augustine’s maintenance expenses were \$9,854 in FY 2009/10 for the demand response service, whereas the highest maintenance expenses were found in Fort Pierce, FL at a cost of \$493,397. It is likely that this data is not correct for many of the communities, including St. Augustine.

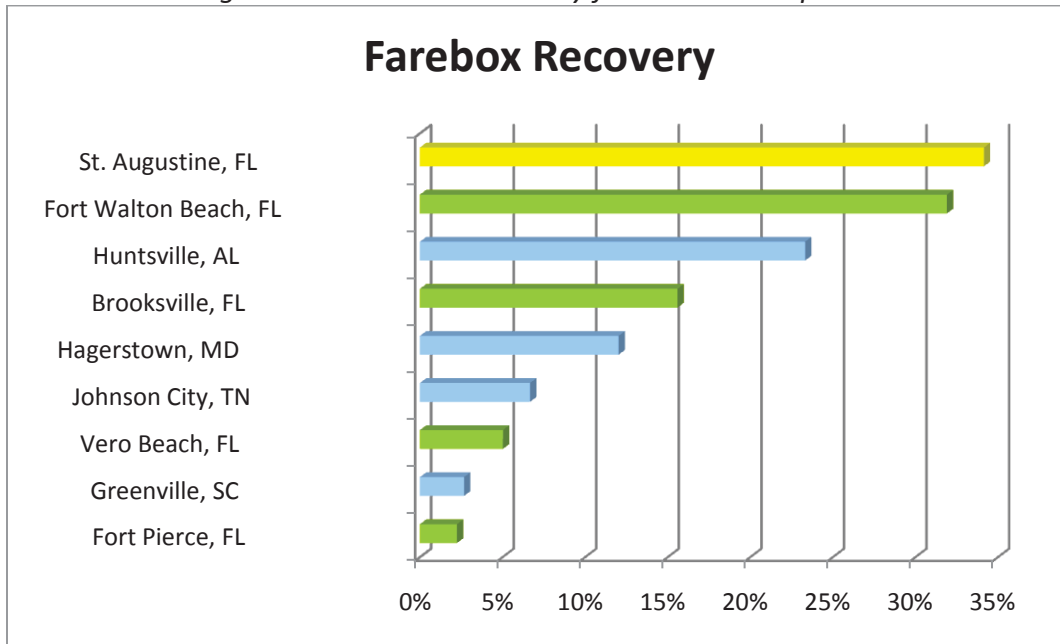
Figure 4.44: Maintenance Expenses for Demand Response Service, in thousands



## Farebox Recovery

The Farebox Recovery figure refers to how many of the operating expenses are covered by the fares collected. As shown in Figure 4.45, St. Augustine's farebox recovery for the demand response service is approximately a third (34%). While this led the peer communities in pure percentage, some of the larger systems collected much more revenue. For example, Fort Walton Beach, FL, earned a much higher amount in fares (\$392,292 versus St. Augustine's \$55,025).

Figure 4.45: Farebox Recovery for Demand Response Service



## Summary

Overall, the data shows that the fixed-route service in St. Johns County has expended significantly over the past five years. Even so, there is still room to grow in comparison with similar sized communities in the southeast. Due to the size of the service area, the average trip length on the fixed-route system is relatively high. Also worthy of note is that the bus fleet went from being one of the oldest in the last TDP to one of the newest. Average fares for the fixed-route system seem to be on par with the peer communities, while the demand response service fare is low in comparison.

One key area that needs improving is in reporting to the NTD. Some of the reporting is done by the St. Johns COA and some by the county itself. Better coordination and collaboration between these entities to ensure that the reporting is complete and accurate is necessary.