

# Connecting Jackson County



## Final Report

February 2018



**REGION 2**  
PLANNING COMMISSION



## Table of Contents

<b>Introduction</b>	<b>3</b>
Goals of the Plan	4
<b>Review of Previous Plans</b>	<b>5</b>
<b>Existing Services</b>	<b>6</b>
Fixed Route	6
Reserve-A-Ride	7
<b>Peer Comparison</b>	<b>8</b>
Demographic & Socioeconomic Conditions	8
<b>Gaps &amp; Opportunities Analysis</b>	<b>10</b>
Customer Questionnaire Results	10
Ridership Activity Data Collection Results	10
Latent Demand	12
Other Locations Outside of Jackson County	13
Inter County Transportation Services	14
Multimodal Gaps & Opportunities	16
Infrastructure	17
<b>Funding Gaps &amp; Opportunities</b>	<b>18</b>
<b>Implementation Plan</b>	<b>20</b>
System Improvements	20
Education and Outreach	25
Organization and Initiatives Plan	27
Staffing Levels	27
Performance Monitoring	28
<b>Implementation Strategy</b>	<b>30</b>
<b>Appendices</b>	<b>35</b>
Appendix A: Review of Recent Plans and Studies	
Appendix B: Inventory of Services	
Appendix C: Gaps and Opportunities	
Appendix D: Implementation Plan	

## Introduction

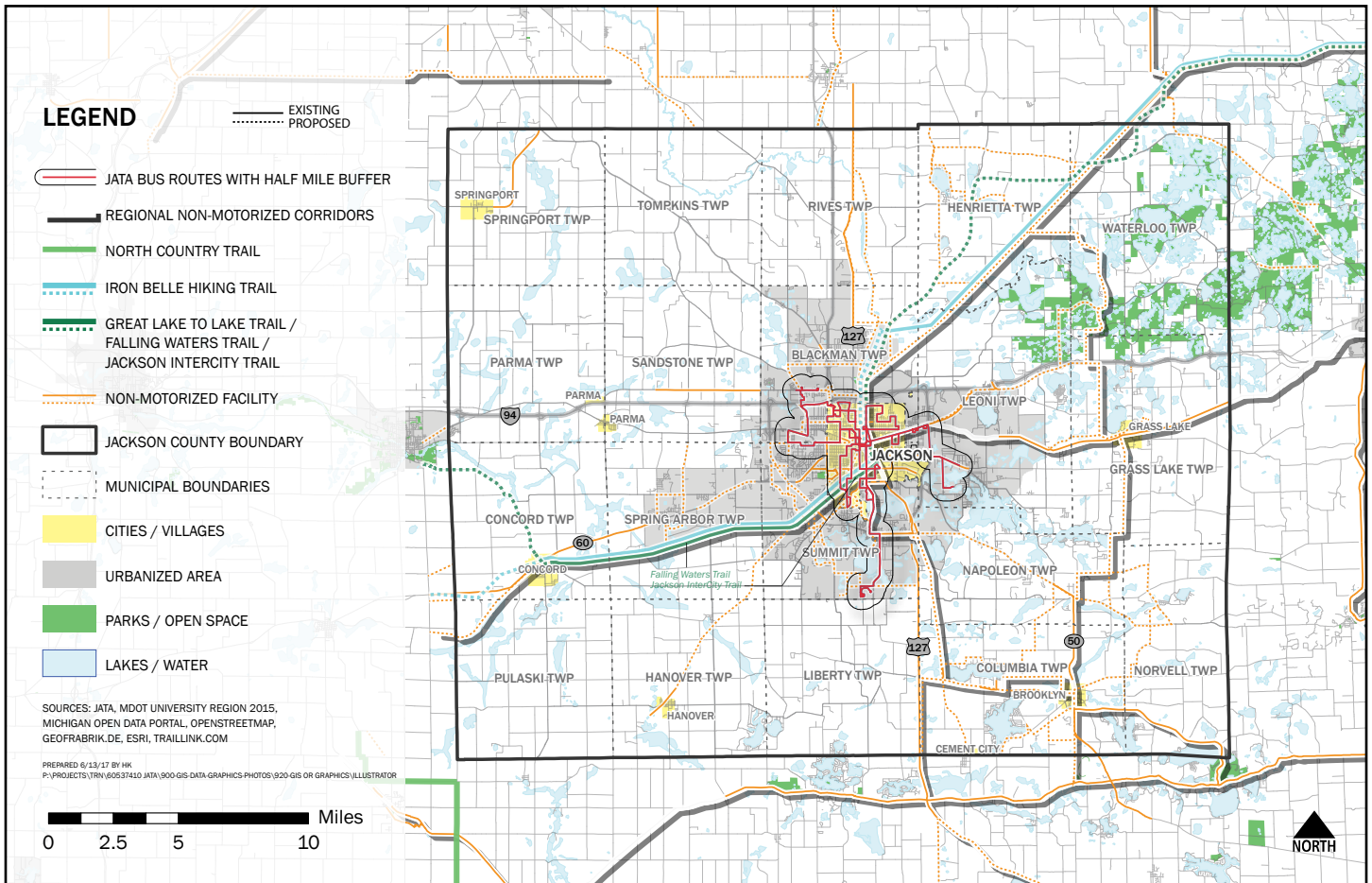
Great transportation is an essential part of a vibrant community. The Jackson Area Transportation Authority (JATA) desires to ensure easy access to transportation options for the City of Jackson and surrounding areas of Jackson County. With a service area of 58 square miles, which includes just over 90,000 residents, this endeavor is no small task.

JATA has been serving the Jackson area for more than 50 years. It was initially formed through a partnership between the Chamber of Commerce and local merchants after a private transportation provider discontinued service in the area. From there it grew, gained new funding sources, and became an authority under Michigan's Public Act 196 in 1986. JATA now operates nine fixed routes and demand response service seven days a week in the City of Jackson and three days a week in the rest of Jackson County.

In order to have the most efficient mobility system possible in Jackson County, we must understand how different modes of transportation function and how they complement each other. Public transit is a great service to citizens but without proper access it becomes difficult or even impossible to use. Whether you drive a car or utilize public transit, everyone is a pedestrian first to one degree or another. Allowing pedestrians to access each mode of transportation in their trip and allowing all modes of travel to utilize transit are ideal ways to reduce congestion, minimize the region's carbon footprint, and improve quality of life. To solve these issues we must focus on "Connecting Jackson County".







Existing JATA Bus Routes and Current and Proposed Non-Motorized Facilities

## Goals of the Plan

This plan will serve as a tool for JATA to realize ways to achieve better efficiencies in both existing services and capturing new riders. There were two primary goals identified by JATA for this process:

- Quantify Demand
  - Evaluate the existing public transportation system's ability to provide effective transport for Jackson area residents to get to basic services such as employment, school, medical facilities, retail, etc.
- How to Best Serve Demand
  - Develop implementable solutions to overcome barriers and eliminate inefficiencies.

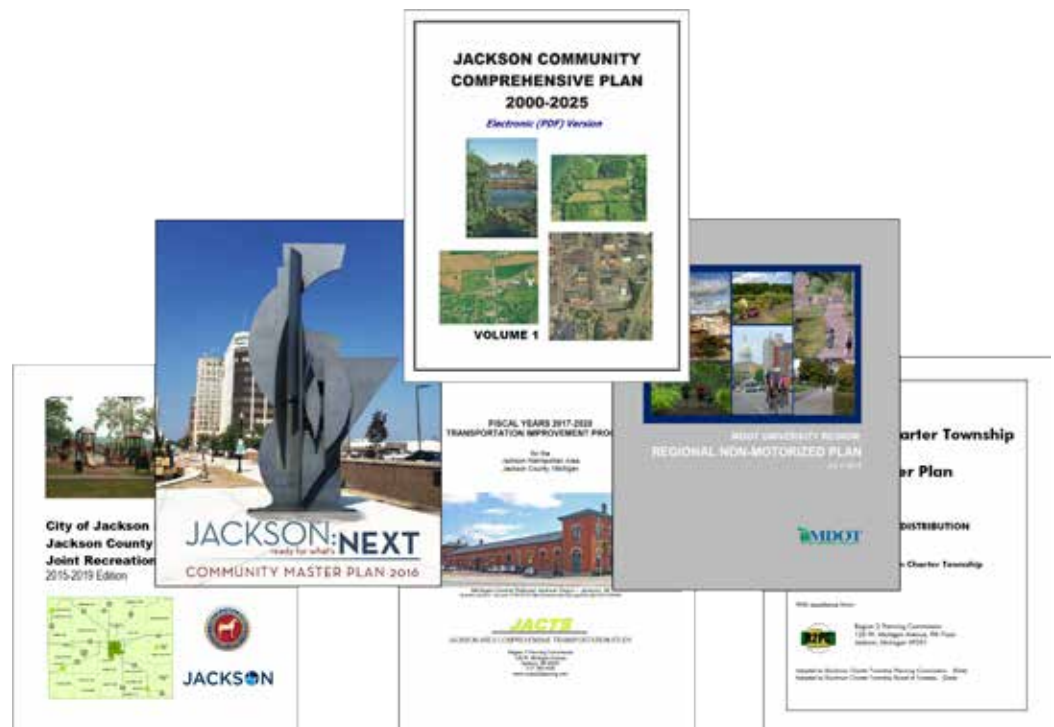
## Review of Previous Plans

A thorough review of previous planning work from the Jackson area was completed in an attempt to understand the makeup of Jackson County and how the transit system fits in with communities, employers, and other stakeholders. Plans and studies were collected from a variety of sources, including: the Region 2 Planning Commission, MDOT, Cities, Villages, and Townships within the County. Documents were reviewed to determine their relationship to the transit and non-motorized environment to assess each plan's desires for transit and its connections to other modes of travel.

Recent urban development patterns suggest that central Jackson is positioned to grow, and this pattern supports robust public transit and other passenger transportation services. City, county, MPO and MDOT resolutions supporting complete streets help to create an environment that supports urban redevelopment and efficient transit. Within the expansive JATA service area, urban development pockets offer the greatest opportunity for transit service growth.

As with most US communities, roadway enhancements in Jackson during the past 75 years have far outweighed capital investments in public transit. Outlying areas present challenges for cost-effective service delivery. Transit service innovations and partnerships will be necessary to provide transportation choices in these areas and compete with emerging transportation options such as rideshare networks. Transit authority partnerships with rideshare providers are increasingly common in US urban edge areas.

Although the Jackson Area plans reviewed in this report almost universally support non-motorized trails, aging in place, and safe transportation infrastructure, they largely leave out issues of public transportation. For whatever reasons, community planning in the region is not prioritizing this important aspect of sustainable growth and multi-generational mobility. Public comments on existing plans reflect a demand for expanded service options. As the urban core grows, this demand can be expected to grow with it. Burgeoning employment and educational opportunities in nearby metropolitan regions present fresh demand for intercity passenger transportation. Detailed summaries of all of the previous planning documents can be found in Appendix A: Review of Recent Studies and Plans.



*A number of local planning documents were reviewed as part of this study*

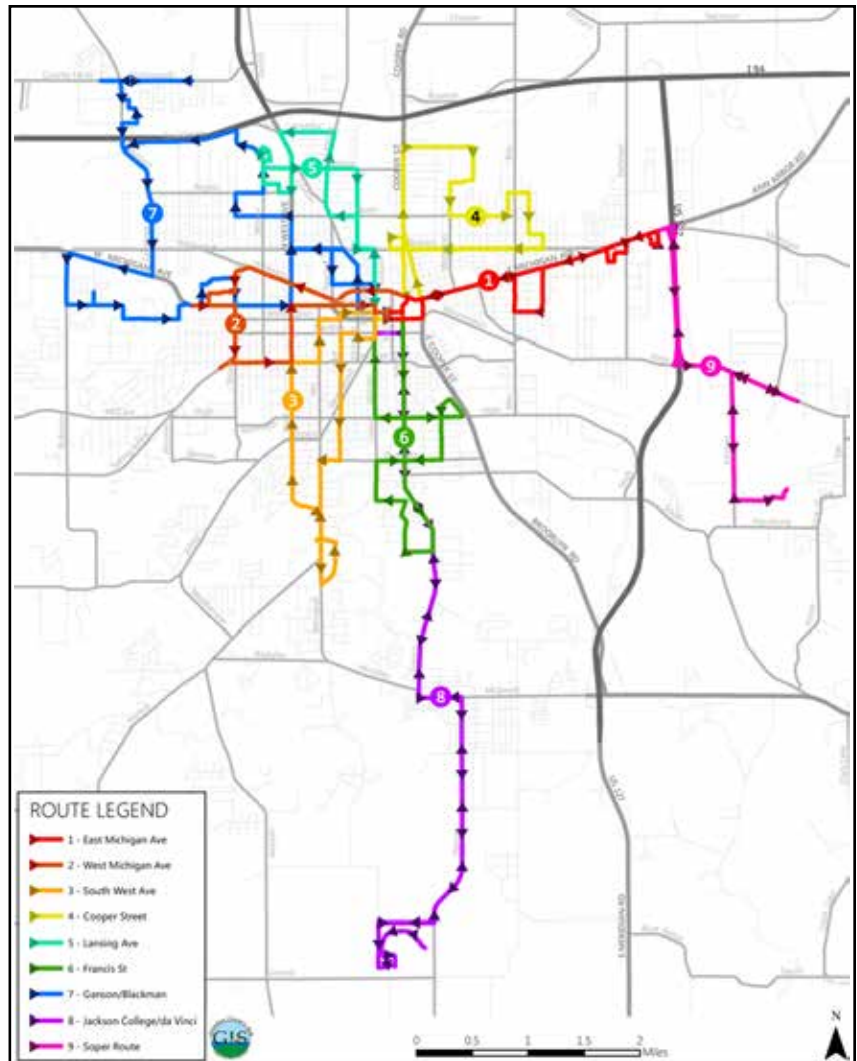
## Existing Services

JATA is a multi-service system providing transit services to residents within Jackson County. JATA provides curb-to-curb transportation services to and from work, school, medical appointments, shopping, and social activities. JATA provides traditional bus service and many special programs like Reserve-A-Ride and Ride & Shop. However, JATA's fixed-route service is currently focused within the City of Jackson limits. Routes that go outside of the city limits must be funded partially or in whole by outside agencies and/or meet the needs of city residents. Routes 1,2,7,8, and 9 currently meet one or both of those requirements and extend beyond the city limits. Previously service was also available to Summit Township which ended in 2014 due to lack of ridership. These areas are now served several days a week with the Reserve-A-Ride program.

### Fixed Route

Fixed-route services operate on weekdays from 6:15 a.m. to 6:15 p.m. and Saturdays from 10:15 a.m. to 6:15 p.m. There is no JATA fixed-route service on Sundays or on major holidays (New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving, and Christmas Day). Most routes operate at a service frequency of either every 30 minutes or every 60 minutes.

For fixed-route services JATA currently charges \$1.50 per trip for standard trips but also offer many discounts to students, seniors, children, and persons with disabilities. Transfers are offered at no additional cost. Both 31 day passes and ticket books are available. The 31 day pass could be a financial benefit if a person rides the bus more than 36 times in the 31 day period. The ticket books however, do not offer any incentive financially to rider. A full breakdown of costs is shown in Table 2 in Appendix B: Inventory of Services.



JATA - Existing Route Network

JATA Annual Total Ridership by Route: 2015 & 2016										
	Route 1	Route 2	Route 3	Route 4	Route 5	Route 6	Route 7	Route 8	Route 9	Total
2016	104,431	88,071	47,954	38,642	90,959	54,952	42,065	25,421	NA	492,495
2015	85,588	76,027	44,208	31,390	84,194	54,499	37,448	50,647	NA	464,001

Total ridership on the JATA system rose by nearly 30,000 rides between 2015 and 2016, mostly from large gains on Routes 1, 2 and 5.  
Source: JATA; Annual Ridership

## Reserve-A-Ride

JATA operates demand-response service in the City of Jackson and the remainder of Jackson County via the Reserve-A-Ride program. City service is operated during the same hours of service as the fixed-route service plus additional evening and weekend service hours (weekdays 6 a.m.-10 p.m., Saturdays 10 a.m.- 10 p.m., and Sundays 7 a.m.- 4 p.m.). County service is operated Mondays, Wednesdays, and Fridays from 6 a.m. to 6 p.m.

The service is curb-to-curb and requires one day advance scheduling, though passengers may schedule up to two weeks in advance. Requests are scheduled according to space available without regard to trip purpose. However, passengers who are certified with Americans with Disabilities (ADA) Para-transit Certification are given priority in scheduling. Service is provided using accessible vehicles (lift or ramp equipped).

With regard to the County service provided outside of the City of Jackson, the Table to the right provides a summary of the number of trips taken in 2016 by other townships. Over 92% of the trips taken outside the City were taken by residents of the immediately adjacent townships (Blackman, Leoni, and Summit) in Zone 2. Zone 3 accounted for almost 8% of the total Reserve-A-Ride trips outside of Jackson. Other popular residence townships for Reserve-A-Ride passengers were Spring Arbor, Napoleon, and Waterloo. As noted, County service is provided Mondays, Wednesdays and Fridays, with Wednesdays being the busiest days, primarily due to the number of medical appointments.



JATA Reserve-A-Ride Zone Map  
Source: JATA, AECOM

Township	Trips Taken by Residents in 2017
<b>Zone 2</b>	
Blackman Township	3,287
Leoni Township	3,485
Summit Township	2,576
<b>Zone 3</b>	
Columbia Township	16
Concord Township	15
Hanover Township	17
Liberty Township	31
Napoleon Township	138
Norvell Township	2
Parma Township	7
Pulaski Township	10
Rives Township	16
Sandstone Township	32
Spring Arbor Township	369
Waterloo Township	115
<b>Total</b>	<b>10,116</b>

Source: JATA Rural Reserve-A-Ride Fact Sheet, 2017



## Peer Comparison

To better understand JATA's performance, a comparison of similarly-sized agencies can provide metrics to reveal areas that could be addressed. The table below is a comparison chart of several peer transit agencies from across the country, showing some of the key categories that FTA reviews as it can determine funding for future transit needs. This table shows that JATA fits right in the average part of the curve for both trips per revenue mile and cost per revenue mile. However, JATA is in a unique situation in that the service area population is larger than the urbanized area population. The Table below shows how JATA compares to the peer systems around the country.

Metric	Transit Agency Peer									
	JATA	Bay City, MI	Fort Smith, AR	Kenosha, WI	Decatur, IL	Altoona, PA	Saginaw, MI	Holland, MI	Concord, NC	Average
Urbanized Area Population	90,057	70,585	122,947	124,064	93,863	79,930	126,265	99,941	214,881	116,560
Service Area Population	160,248	107,000	86,209	124,064	81,337	69,608	127,000	71,572	95,043	95,229
Service Area (miles)	58	40	65	51	53	25	63	42	63	50
Operating Expenses (Millions \$)	\$4.53	\$8.26	\$2.30	\$5.90	\$6.14	\$4.53	\$6.49	\$3.92	\$3.02	\$5.07
Annual Unlinked Trips	588,701	548,766	272,987	1,319,931	1,497,237	642,524	988,376	488,697	470,015	778,567
Annual Passenger Miles	1,714,952	3,958,526	N/A	4,424,925	4,363,749	1,911,397	3,394,144	1,951,424	N/A	3,334,028
Annual Vehicle Revenue Miles	714,331	1,471,697	467,217	1,008,991	1,139,239	573,866	876,395	805,599	597,289	867,537
Cost Per Passenger Trip	\$7.69	\$15.05	\$8.43	\$4.47	\$4.10	\$7.05	\$6.56	\$8.02	\$6.42	\$7.51
Trips Per Revenue Mile	0.82	0.37	0.58	1.31	1.31	1.12	1.13	0.61	0.79	0.9
Unlinked Trips per Operating Dollar	0.13	0.07	0.12	0.22	0.24	0.14	0.15	0.12	0.16	0.15
Cost Per Revenue Mile	\$6.34	\$5.61	\$4.92	\$5.85	\$5.39	\$7.90	\$7.40	\$4.87	\$5.05	\$5.87

Source: National Transit Database, 2014 and Urban Integrated Transit Database (<http://ftis.org/INTD-Urban>)

### Demographic & Socioeconomic Conditions

The existing socioeconomic conditions analysis was developed using JATA's service area (identical to the Jackson County Boundary) and with data obtained from the Michigan Department of Transportation (MDOT) and the United States Census Bureau. The demographic indicators will be used to determine the areas in Jackson County with the greatest potential for transit ridership and the results will guide the findings and recommendations in this plan.

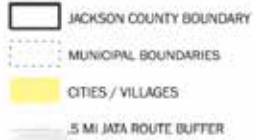
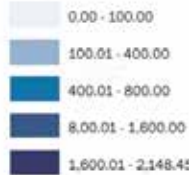
Development patterns, socioeconomic indicators, and the location of major activity centers such as employers and schools are the basis for transit service demand. The following maps highlight the population and employed densities in Jackson County. Additional density maps can be found in Section 3 of Appendix B: Inventory of Services.



## CONNECTING JACKSON COUNTY

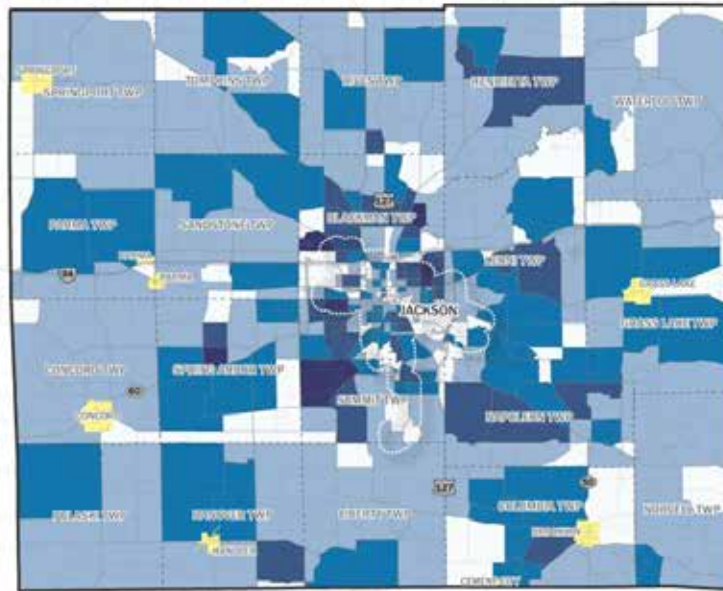
### Total Population 2014

#### RESIDENTS BY TRAFFIC ANALYSIS ZONE



SOURCES: AMERICAN COMMUNITY SURVEY 5-YEAR DATA 2010  
MICHIGAN OPEN DATA PORTAL, MICHIGAN DEPARTMENT OF TRANSPORTATION

PREPARED FOR: JATA  
J. JATA/REGION 2 PLANNING COMMISSION



2014 Total Population within Jackson County

## CONNECTING JACKSON COUNTY

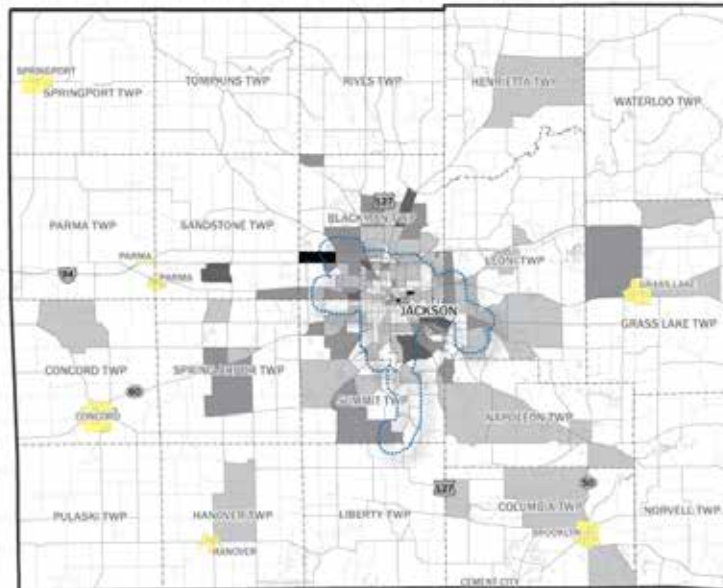
### Total Employment 2014

#### EMPLOYEES BY TRAFFIC ANALYSIS ZONE



SOURCES: AMERICAN COMMUNITY SURVEY 5-YEAR DATA 2010  
MICHIGAN OPEN DATA PORTAL

PREPARED FOR: JATA  
J. JATA/REGION 2 PLANNING COMMISSION



2014 Total Employment within Jackson County



## Gaps & Opportunities Analysis

To better understand the gaps and opportunities the project team identified areas of deficiency in the transportation network and formulated an initial set of strategies necessary to address these deficiencies. The analysis evaluated the “gaps” between JATA’s current and future transit environment and determined the potential for providing new and effective service in an expanded market. This process also addressed existing and future population growth, along with the implications of other modes of travel such as planned non-motorized facilities. Gaps can occur in various forms, including transit service based gaps, land use, infrastructure, and funding gaps. The resulting analysis laid out the challenges and opportunities for transit within Jackson County, and begins the process of recommending a series of actions to make transit an efficient and effective travel option, ideally providing competition with automobile travel but more importantly providing all residents a connection to other modes and provide mobility options.

### **Customer Questionnaire Results**

A customer questionnaire was distributed to JATA customers to collect information such as trip purpose, frequency with which riders use JATA services, service improvement desires, and whether customers have access to transportation other than JATA. This questionnaire was administered on buses during the stop activity count days (September 1st and September 6th, 2017), and was also made available for riders to take at the JATA Transfer Center until September 15th, 2017 or online in a mobile-friendly format. All customers that completed the questionnaire were offered a pass good for one free ride on any JATA fixed route as an incentive for participating in the questionnaire. In total 233 questionnaires were collected.

The customer questionnaire results indicate that the typical respondent:

- Earns less than \$10,000 annually (44%)
- Identifies as Female (54%) more than Male (29%) or other gender identities (one respondent)
- Identifies as White / Caucasian (45%) more than a race or ethnicity other than White / Caucasian (36%)
- Belongs to the age range 45-64 (38%) or 21-44 (34%)
- Is a long time rider who has been riding for over 5 years (48%) and rides daily (55%) or at least 1-2 times per week (30%)
- Does not have access to a vehicle (79%) and would Walk / Bike to make the same trip (43%) if JATA was not available
- Principally was traveling for Shopping (30%), Work (26%), or a Medical related trip (16%)

### **Ridership Activity Data Collection Results**

Over the days of Friday, September 1st and Wednesday, September 6th, stop-level activity data (customer boardings and alightings) was collected for all JATA fixed route buses. Stop level data geographically illustrates customer demand, and assists in understanding route dynamics and service expansion opportunities. This data additionally provides insight into high-need locations for bus stop amenities. Although this kind of stop-level data is not currently available for the JATA system, the agency is currently in the process of procuring automatic passenger counters which would provide this information in the future. Over

the course of the data collection, study period, 712 trips were recorded. The on/off data collection shows some of JATA's most popular destinations, such as the following:

- Park Forest Apartments and Meijer along Airport Road
- Cluster of businesses near Jackson Crossing and between N W Avenue, N Wisner Street, 1-94 and W Argyle Street
- Apartments and church at the intersection of N Blackstone Street and W Monroe Street
- Walmart Supercenter and Westwood Mall commercial area at N Brown and W Michigan Avenue
- Area at Wildwood and Steward Avenues encompassing Jackson High School and Reed Manor
- Hospitals and retail areas along the E Michigan Avenue corridor
- Francis Street corridor from E Franklin Street to Prospect Street, with a significant activity cluster at the location of the Family Dollar and Dollar general at Francis and Prospect
- Jackson College and Jackson Preparatory / Da Vinci academic campuses

Although most riders opted for very specific location responses, there were also more general service requests, most of which were not able to be mapped. Six responses indicated a desire for service outside of the City of Jackson or all over Jackson County, and one rider stated an interest in seeing service outside Jackson County. Other riders requested more service in more specific regions. Requests were categorized to best

express their location, and are listed in order of popularity below:

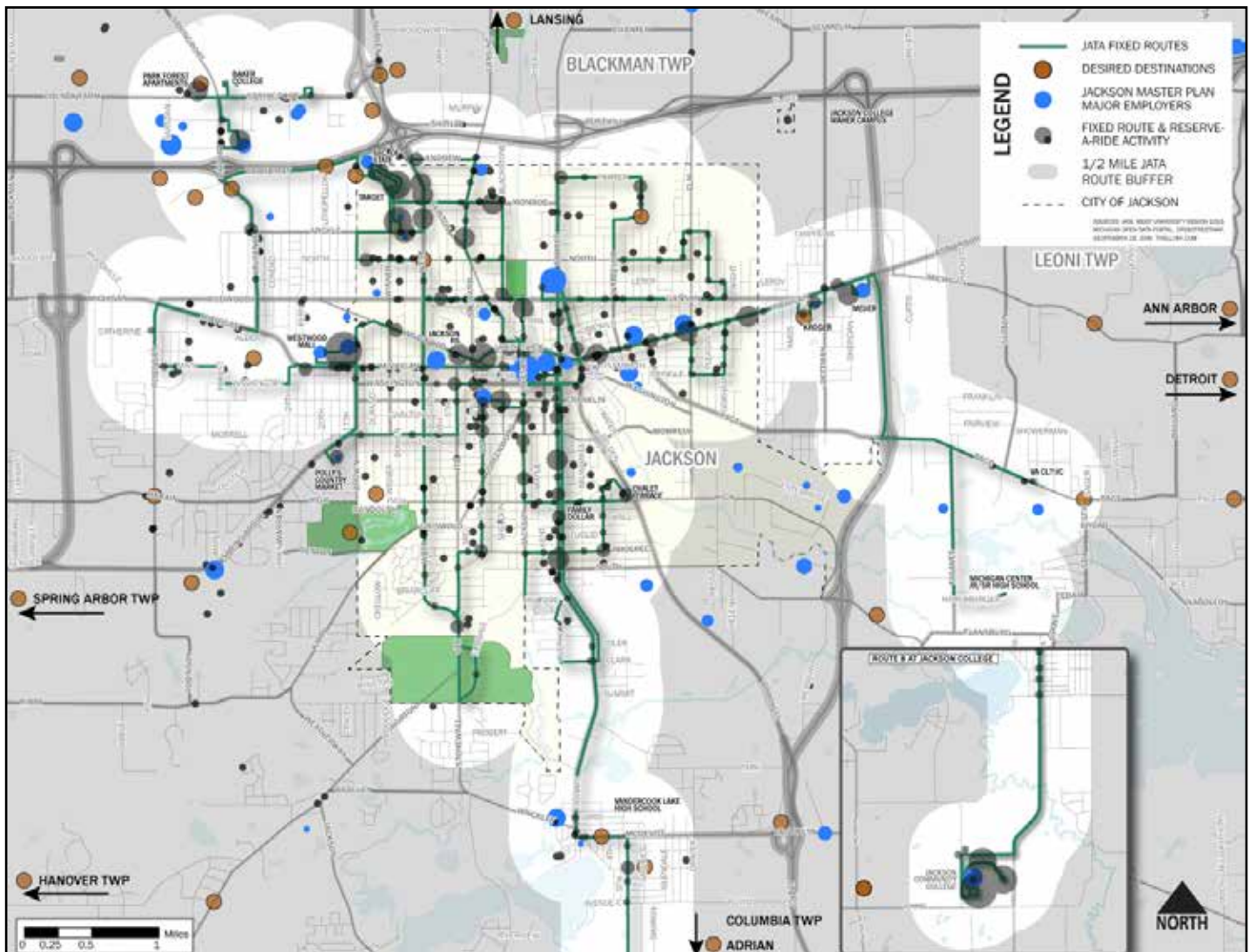
- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Sam's Club (7 responses)</li> <li>• Northwest Jackson destinations (near border with Blackman Township – 7 responses)</li> <li>• Vandercook Lake area (5 responses)</li> <li>• Blackman Township destinations (near border with Jackson – 4 responses)</li> <li>• Michigan Center (4 responses)</li> <li>• The Cascades (4 responses)</li> <li>• Summit Township destinations (4 responses)</li> <li>• Gordon Food Service (3 responses)</li> <li>• Spring Arbor (2 responses)</li> <li>• Planet Fitness (2 responses)</li> <li>• Xfinity (2 responses)</li> </ul> | <ul style="list-style-type: none"> <li>• Lansing (2 responses)</li> <li>• Detroit, MI (2 responses)</li> <li>• East Jackson (2 responses)</li> <li>• North Jackson (1 response)</li> <li>• Northeast Jackson (1 response)</li> <li>• Horton, MI (1 response)</li> <li>• Adrian, MI (1 response)</li> <li>• Ann Arbor, MI (1 response)</li> <li>• Leoni Township / Indian Village Mobile Home Community (1 response)</li> </ul> |
|---|--|

Other responses:

- Page Avenue
- The Oaks Apartments
- Frost Elementary
- Meat Market
- Park
- "All the way down Ganson"

## Latent Demand

In order to fully understand the needs of transit users in Jackson County, it is important to review a number of key items. First, incorporating ridership activity from both fixed route and Reserve-A-Ride reveals current customer activity. Second, overlaying ridership and route data with customers' desired destinations (generated from on-board questionnaires) shows whether customers are able to travel or already traveling near these locations using existing services. Lastly, layering a selection of major employers identified in the Jackson County Master Plan shows the coincidence of travel patterns, desired destinations, and Jackson's employment-based destinations. Adding a layer of major employers assists in explaining existing high transit activity patterns, and identifying areas that are currently not accessible by transit - but could serve as trip generators if the location were made accessible via a new service. The visualization of this review can be seen in the map shown below.



2017 JATA Rider Survey Results - Desired Destinations and Major Employers



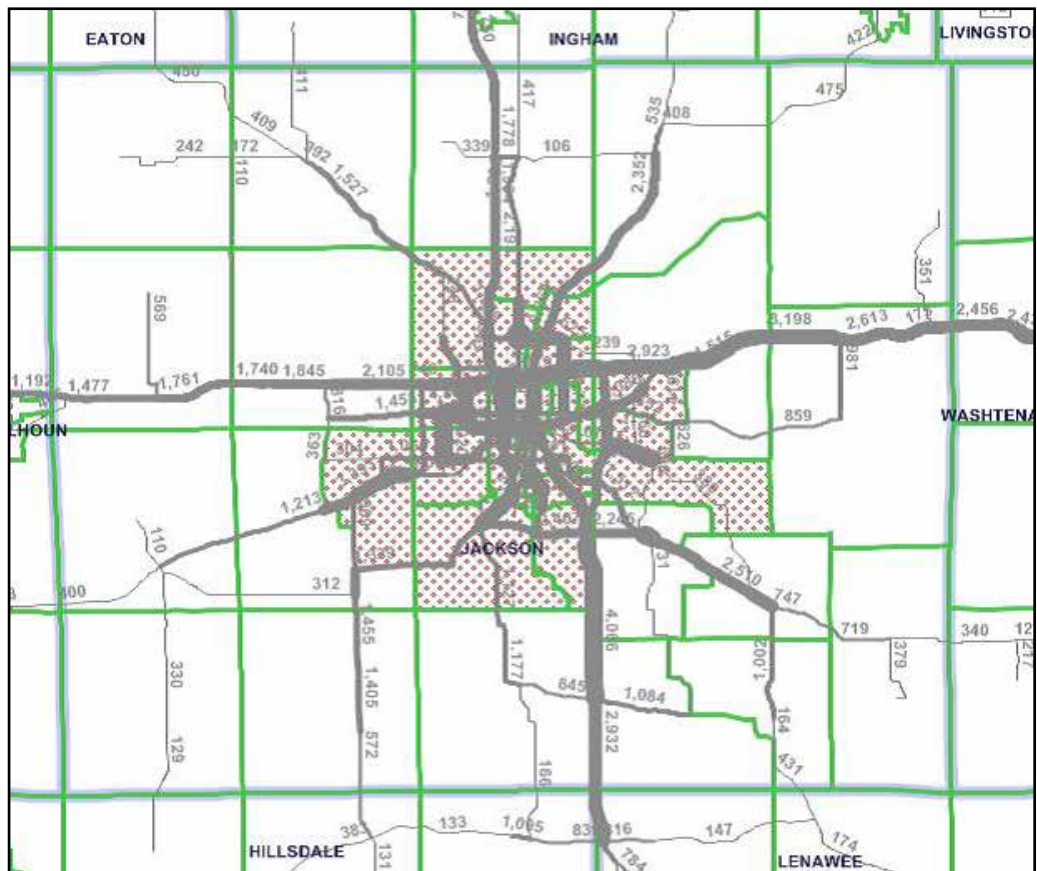
The trends from this data review emerged as follows:

- The vast majority of activity and demand is located in and around the City of Jackson. There is very little demand to better serve the outer edges of Jackson County.
- Areas outside of the City of Jackson that do show transit needs and potential are Spring Arbor, Blackman Township along the Parnall Road corridor, Summit Township along the Robinson Road corridor, and to a lesser extent the south Cooper Street and High Street corridors.
- The Reserve-A-Ride system currently sees fair activity levels in the Ashton Ridge Apartments which is an affordable housing neighborhood, technically within the City of Jackson. This facility is immediately adjacent to Jackson Community College North Campus and a medical facility.

### **Other Locations Outside of Jackson County**

Data was accessed from MDOT and their statewide travel model which is showing total numbers of one-way home-based work passenger vehicle trips per day (in 2015) in order to discover an estimate of the proportion of work trips leaving Jackson County for various surrounding cities.

Approximately 75,000 total home-based work trips (2015) originate in Jackson County according to the numbers in the MDOT statewide travel model. Of these trips, 61,156 both start and end within Jackson County. Of these trips, roughly 33,700 trips originate in the Jackson urbanized area and end within Jackson County. This shows that 82% of all home-based work trips originating in Jackson County stay within the County. This is a strong relationship of residents to job opportunities and ranks higher than most Counties in Michigan in a similar comparison according to MDOT. The limited tripmaking that does cross County lines is primarily destined for Ingham and Washtenaw Counties.



Annual Average Daily Traffic in Jackson County. Source: MDOT Statewide Travel Model

## Inter County Transportation Services

Amtrak provides train service nationally by connecting thousands of points throughout the 21,000 miles traveled by the company's many routes. While Amtrak long distance services pass through most of the contiguous 50 states, Michigan is served by state-supported regional routes only. One of these services, the Wolverine route, is among the premier higher-speed passenger rail services in the Midwest, traveling at speeds up to 110 MPH along much of its corridor between Pontiac, Detroit and Chicago, including a Jackson station.

The Jackson station is located at 501 East Michigan Avenue, roughly one-half mile east of the Greyhound station and JATA transfer station. While the station is directly accessible only by Routes 1 and 4, this station is within a 10-minute walk distance of the Greyhound and JATA transfer station. Therefore, although slightly less accessible due to the added walk, like the Greyhound station, the Amtrak station is also accessible by JATA's local Routes 1-8 and those traveling on Route 9 can connect to Route 1 for station access. All intercity passenger modes would generally benefit from a co-located station, providing passengers with multiple travel options from a single location.



Amtrak Michigan Service Schedule. Source: Amtrak, October 2016



Jackson's Current Amtrak Station

Greyhound's inter-city bus service comes right into the center of Jackson, providing options for stops and transfers at the JATA transfer station. While the terminal location is accessible by most of JATA's bus routes, some of Greyhound's departure times extend beyond JATA's service hours. JATA does not run on Sundays, and makes Greyhound inter-city trips inaccessible for transit riders on Sundays. In addition, the evening eastbound Greyhound service, leaving the terminal at 11:30 P.M., departs well after JATA bus service ends. Although riders could technically access this Greyhound bus, a JATA rider would need to arrive to the transfer station early, before local transit service stops for the day (which is typically around 6:00 P.M., aside from Route 8, which runs until 9:30 P.M. Monday-Thursday). The 9:30 A.M. eastbound bus is also inaccessible on the weekend, as service does not begin until 10:00 A.M. on the weekend. Both the westbound and northbound Greyhound buses are available by bus throughout the week, but may require some coordination on Saturday, as the buses stop running from around 2:00-3:00 P.M.

A dozen Michigan Flyer motor coaches a day operate, shuttling about 550 passengers from East Lansing and Ann Arbor to and from Detroit Metropolitan Airport. The Michigan Flyer Program previously had a stop in Jackson but that was discontinued in 2012 as the service was rebranded as AirRide and the route was changed from US-127 to US-23. The service had served Jackson since 2006 and provided 8 daily trips stopping in Jackson at the Baymont Hotel, which is located just west of US-127 and just north on I-94. In early November of 2017 the Michigan Flyer (AirRide) also indicated that it is working with Livingston Essential Transportation Service (LETS) to potentially serve one or more park-and-ride locations along the existing route.



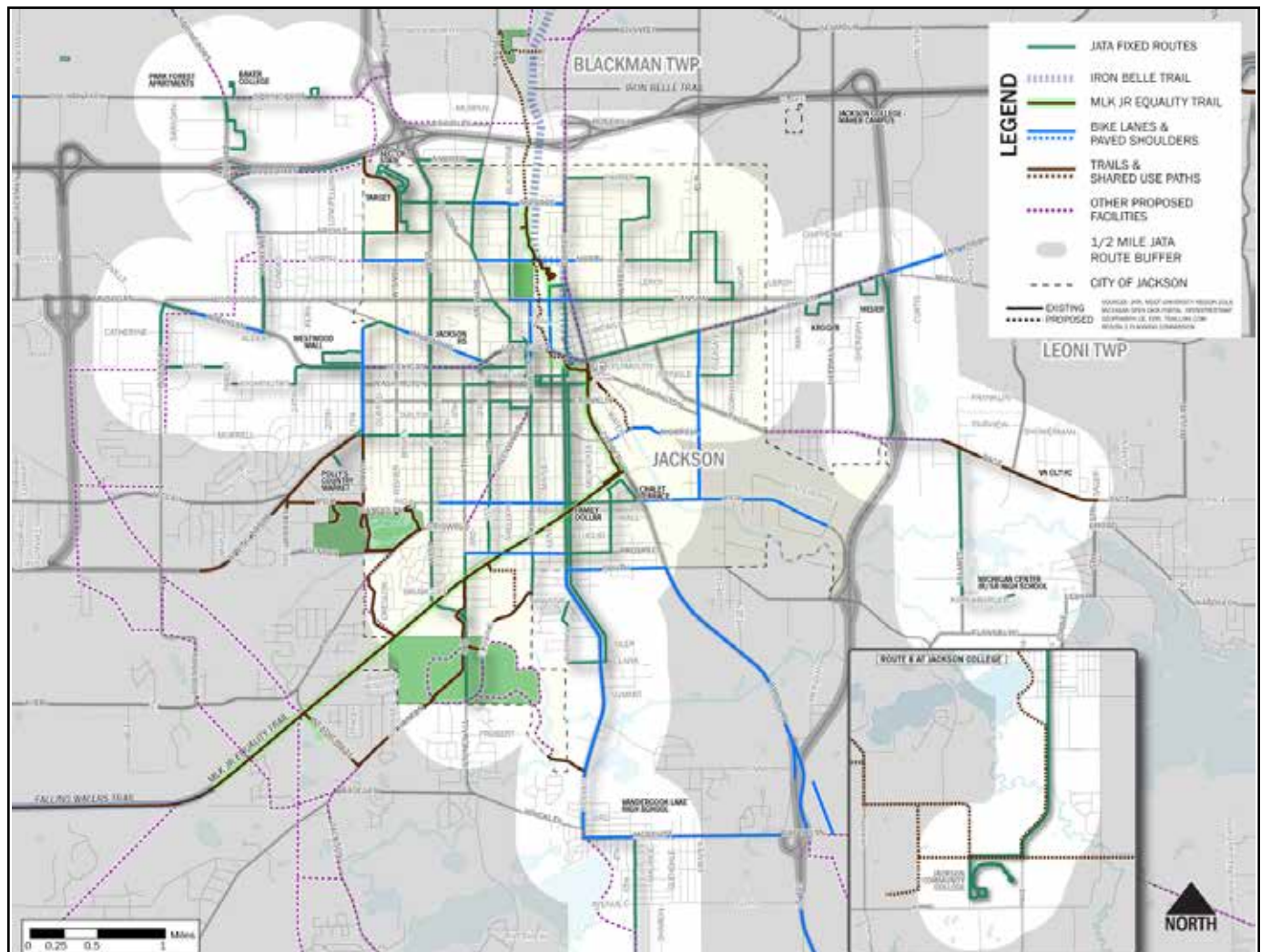
Michigan Flyer Shuttle Service. Source: [Transportation4Michigan.com](http://Transportation4Michigan.com)



## Multimodal Gaps & Opportunities

All transit users are pedestrians or bicyclists at the beginning or end of their transit trip. As the walking and bicycling environment to transit facilities is improved, individuals may be encouraged to take non-motorized modes in lieu of driving. For existing transit users who do not own an automobile, accessing transit by a non-motorized mode will become less of an effort and more convenient.

Jackson currently has a number of bicycle facilities throughout the JATA Service Area and more planned for the future, as shown in the map below. JATA should work to improve the connections between non-motorized facilities and transit to improve “last mile” connections for transit riders. Opportunities for bicycle infrastructure existing along many of the low traffic neighborhood streets surrounding Downtown Jackson. Improving the bicycle and pedestrian environment is a desirable method for increasing the amount of multi-modal travel because it is a relatively inexpensive and an environmentally friendly strategy.



Jackson Area Regional Nonmotorized Network



## Infrastructure

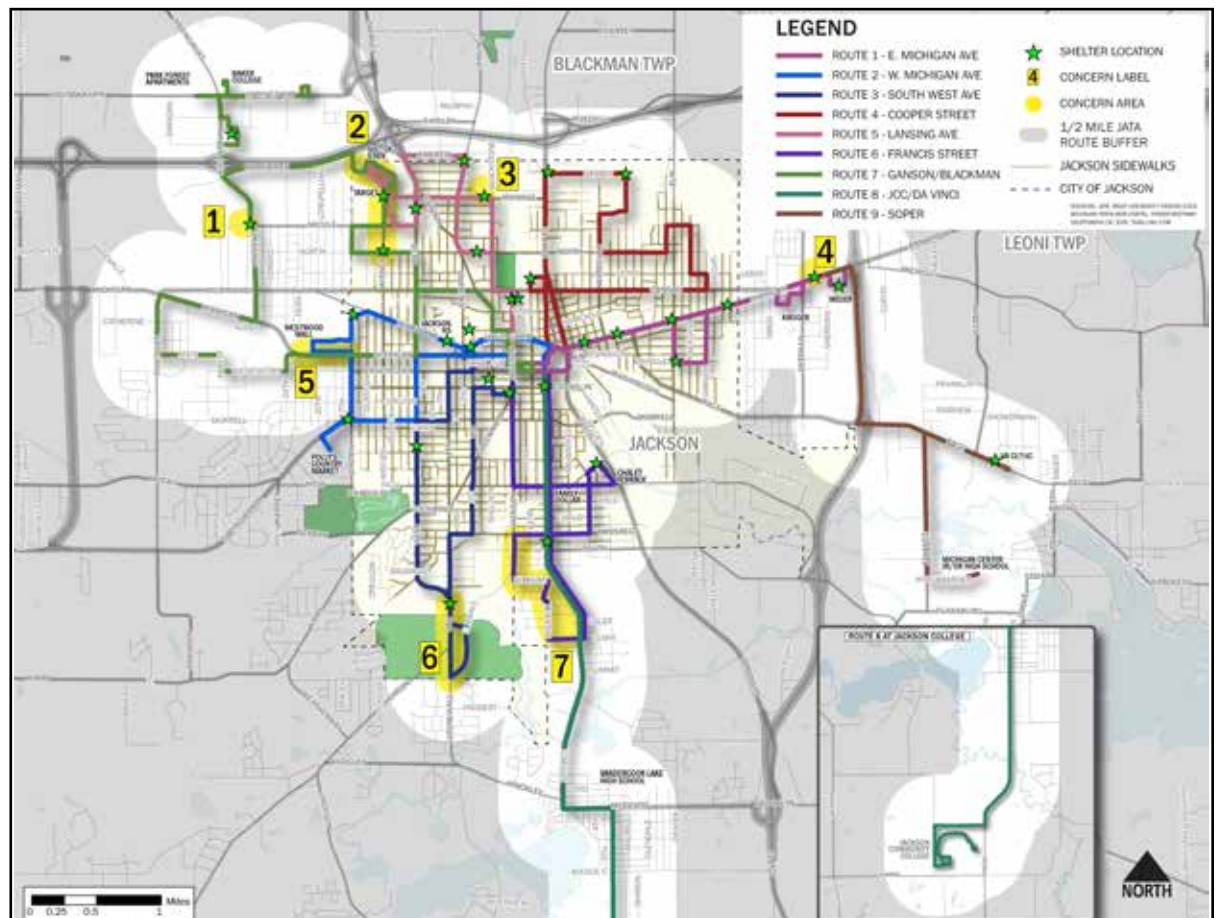
Individuals can achieve a greater degree of freedom when they have full access to a variety of transit modes, but this can only be achieved when the pathways to transit – the infrastructure and conditions in the built environment – allow full access to transit stops, stations, and vehicles. Driven by the passage of the ADA in 1990, many transit agencies and governmental jurisdictions have made significant progress in this area. Policy initiatives, incremental enhancements, modifications, and other measures undertaken by transit agencies and their partners have significantly improved access to transit for persons with disabilities, others who rely on public transportation, and individuals who choose to utilize these services.

Providing defined access to and from the bus stop is important. The map below shows the locations within the JATA Service Area that are lacking sidewalks, marked as “Concern Areas”. Sidewalks should be constructed of impervious non-slip material and should be well drained. Access to the bus stop from the intersection or land use should be as direct as possible. To accommodate wheelchairs, sidewalks should be a minimum of 3 feet wide (preferably 4 to 5 feet wide) and equipped with wheelchair ramps at all intersections. Other improvements include defined pedestrian crosswalks and signals at intersections. Pedestrian enhancements, such as sidewalks, should be coordinated with roadway improvements to help improve bus patron comfort and convenience.

Additional information regarding infrastructure gaps and opportunities can be found in Section 3.6 of Appendix C: Gaps and Opportunities.



*Shelter in front of Jackson Hunt Club on Daniel Road*

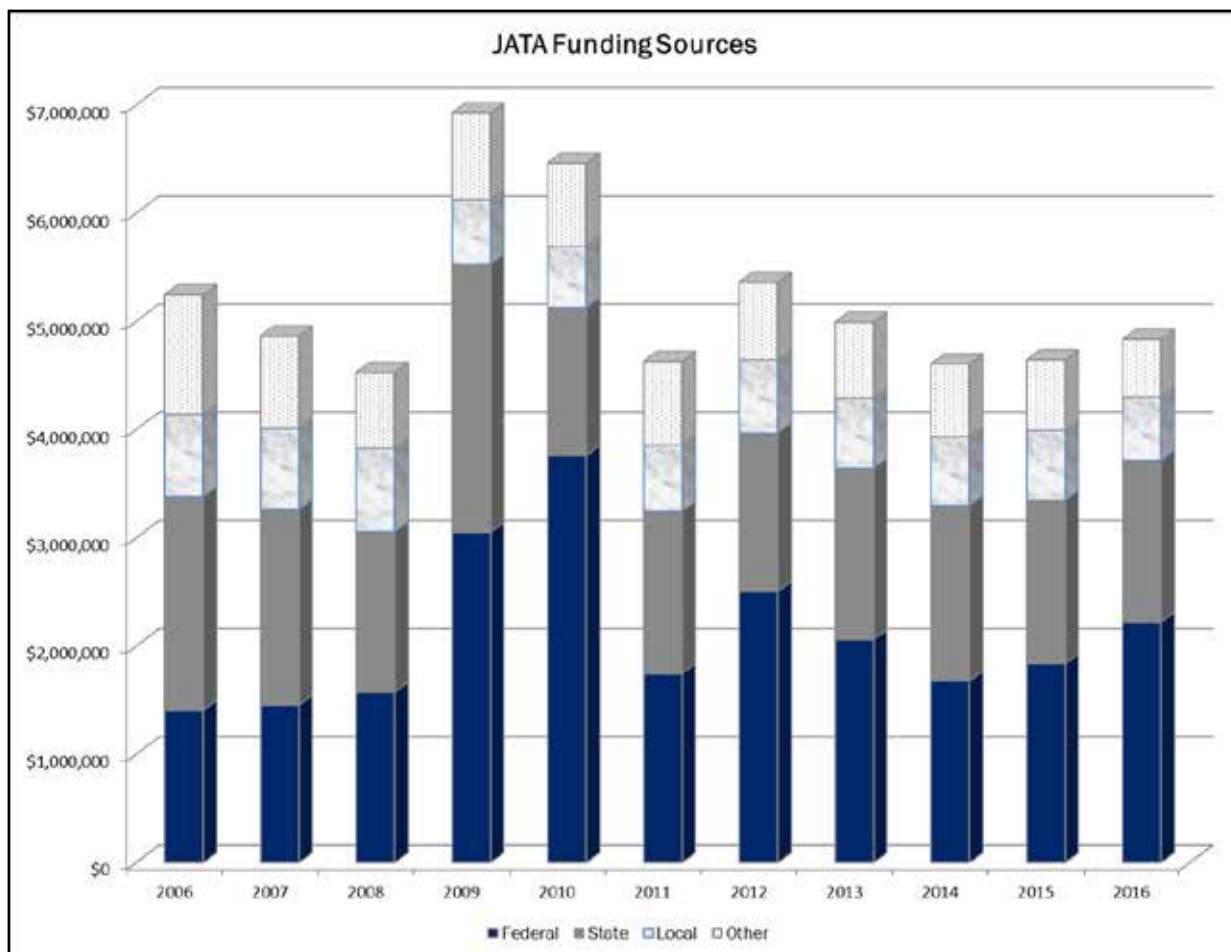


*JATA Service Area - Areas of Infrastructure and Access Concern*

## Funding Gaps & Opportunities

To provide truly high-quality service for passengers, transit systems require dedicated sources of revenue which are not solely capital-related and cannot be used to pay for other automobile-related transportation improvements, such as highways. Transit systems themselves must respond by providing service which gains a reasonable return on investment. Routes with low ridership are costly for taxpayers to subsidize and may divert resources from more intense areas of the system. Implementing standards for bus route performance helps to ensure that transit systems do not continue to run highly unprofitable service.

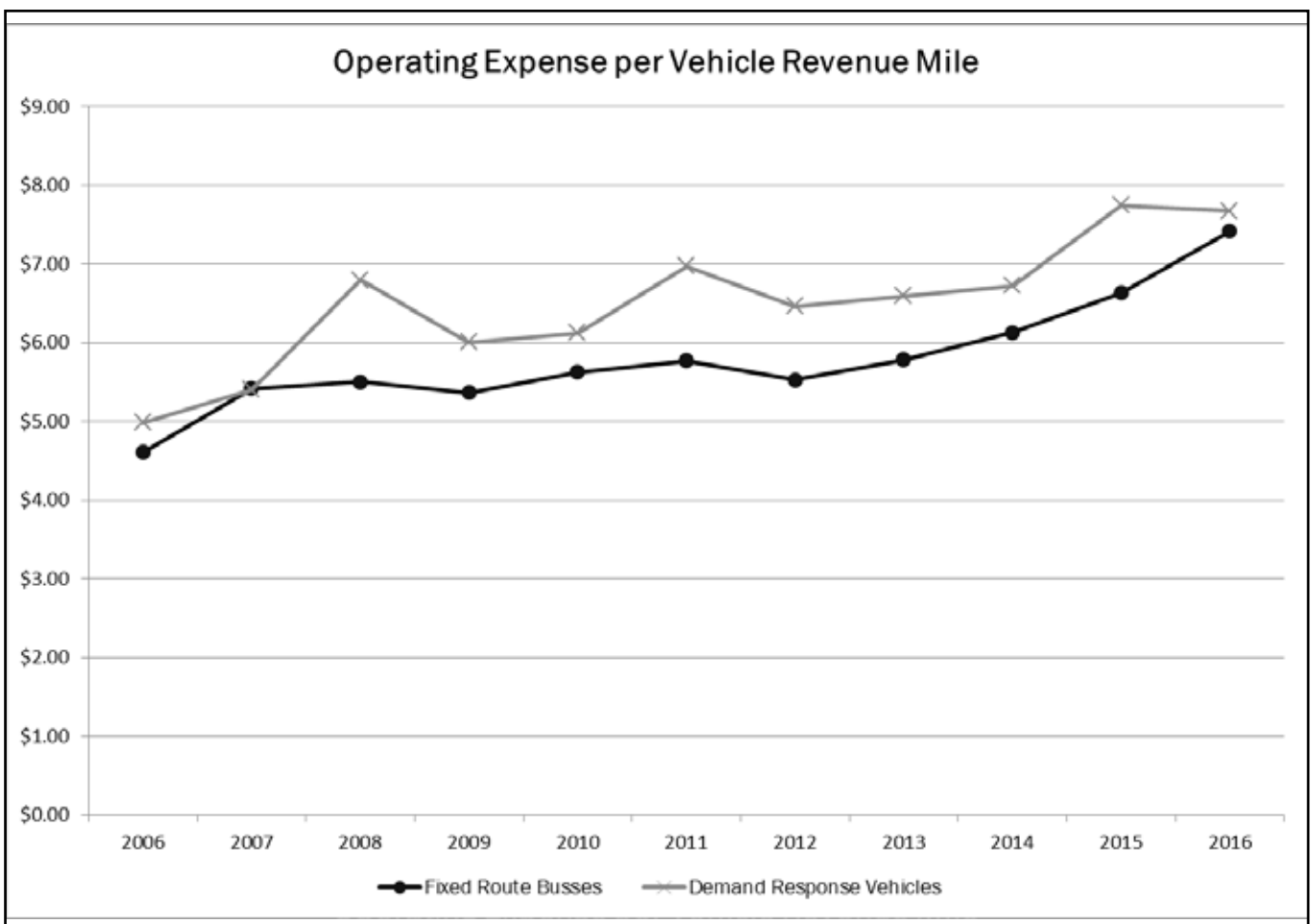
JATA currently receives funding from federal, state, and local sources in addition to traditional farebox revenue. Funding is provided by various Federal Transit Administration (FTA) programs, State programs and the State Transportation Improvement Program (STIP), and local sources such as local property tax. Currently, roughly 14% of JATA operating costs are covered by fare revenue (not including ADA paratransit). While JATA fares are fairly standard, this cost recovery rate is low compared to other peers in the industry. Several JATA routes return under 10% of costs in fare revenue. These routes may need to be evaluated to improve cost recovery.



JATA Funding Sources - 2006 to 2016

Operating expenses per vehicle revenue mile for JATA fixed route and demand response vehicles has increased gradually over the past decade. The operating expenses for fixed route service have risen more gradually, with a stable period between 2007 and 2013. Expenses since 2013 have increased nearly \$2.00 per vehicle revenue mile for fixed route buses. Demand response operating expenses per revenue mile have also increased, but less gradually. Spikes in 2007, 2010 and 2015 have pushed the cost per revenue mile up over the years. JATA's operating costs are consistent with peer agencies and, because the figures are not adjusted for inflation, costs are expected to increase over time.

For full results on the funding breakdowns and comparisons see the Gaps & Opportunities Report in Appendix C. This Gaps and Opportunities report includes the results of this review and analysis of all the information collected in this plan. The conclusions reached by the project team, including JATA and R2PC staff, along with the AECOM Team, indicate general areas of need and/or concern.



JATA Operating Expenses per Vehicle Revenue Mile for Fixed Route and Demand Response Services - 2006 to 2016



## Implementation Plan

This Implementation plan provides a generalized framework to guide JATA decision making over the short and long term planning horizon. This plan is intended to be a living document that will be continually updated as projects are implemented. The implementation plan developed herein was built upon historic and proposed future funding availability and informed through a public outreach process that reached out JATA users, JATA and R2PC staff, community members, along with community representatives such as the Walkable Communities Coalition. This outreach was tied into the development of the plan, which set forward a list of recommendations (alternatives) for service adjustments and improvements, staff planning, capital improvements, and potential legislative actions.

This plan provides a set of recommendations for JATA in a number of areas including system improvements, education and outreach, organizational and initiatives planning, and capital programming. Following these recommendations this plan will provide a suggested phasing approach to these recommendations, as well as a potential funding solution to achieve them.

### **System Improvements**

Although most customers are generally happy with the services that JATA currently provides, there are a few key items that could be implemented to improve the connectivity of Jackson County. These options could enhance the connectivity of the multi-modal network in Jackson County and allow for the coordination of other agencies to create a more efficient overall transportation network. The primary areas where recommendations are being considered are for the JATA fixed route services, the Reserve-A-Ride program, the overall operations and maintenance process being used by JATA, and new technology and partnership opportunities that would enhance the network. These improvements have the potential to further enhance JATA operating performance, convenience, and customer satisfaction.

#### **Fixed Route Service**

Potential modifications to existing routes would address issues from JATA's lowest performing routes, as measured by ridership. The potential changes presented below are intended as a point of departure to discuss how JATA might service destinations desired by customers, provide some additional connections to jobs and avoid duplicating service. The proposed service changes for each route are detailed in Section 2 of Appendix D: Implementation Plan.

Recommendations:

#### **Route 3 Southwest Ave.**

- Adjust Route 3 northbound to serve Jackson Cascades, Frost and Cascades Elementary Schools


#### **Route 4 Cooper Street**

- Discontinue service on N. Waterloo St. to stay on Ellery St. southbound, continue south via Gorham St., Tyson St. and S. Roberts St. before returning downtown via Page Ave.
- Extend service to new commercial destinations and jobs along Page Ave

#### **Route 5 Lansing Ave.**

- Provide service to Jackson West shopping plaza, including Gordon Food Service





#### Route 7 Ganson / Blackman

- Discontinue service to Jackson West, instead turn west along Argyle St. to Laurence Ave. during northbound trip
- Serve Sam's Club and Kmart shopping area, continue north to Meijer along existing route path
- Serve TAC Manufacturing and Windham Hills residential area before beginning southbound trip
- Route 8 JCC / Da Vinci
- Turn east on Floyd Ave., north on Draper Rd. and west on E. McDevitt Ave. during northbound trips to serve mobile home residential area and Vandercook Lake commercial destinations along E. McDevitt Ave.

#### Route 9 Soper

- Adjust route start time to 7:00 am to allow two morning trips to Michigan Center High School before bell ring at 7:30 am
- Operate either inbound or outbound trips on 5th St. to serve the Michigan Center commercial area

#### New Fixed Route Services

Potential new fixed routes are intended to provide access to destinations and service at times of day identified by customers in the 2017 customer questionnaire. Many customers requested evening service which could allow mobility options for shopping and employment trips. Because fixed route services end at 6:15pm, customers may be relying on demand response services for trips occurring later in the evening.

In addition, customers also seek transportation to areas outside of the City of Jackson limits. Although funding partners must be identified in order for routes to exist in areas outside of the City of Jackson, providing potential options should serve as a starting point for discussion. Reaching out to institutions for partnership opportunities could allow the JATA fixed route system to expand and provide more mobility options to county residents.

#### Recommendations:

##### N/S Evening Route

- Combine portions of Route 5 in northern section and Route 6 in southern section to run as a pilot between 6pm and 11pm weeknights

##### E/W Evening Route

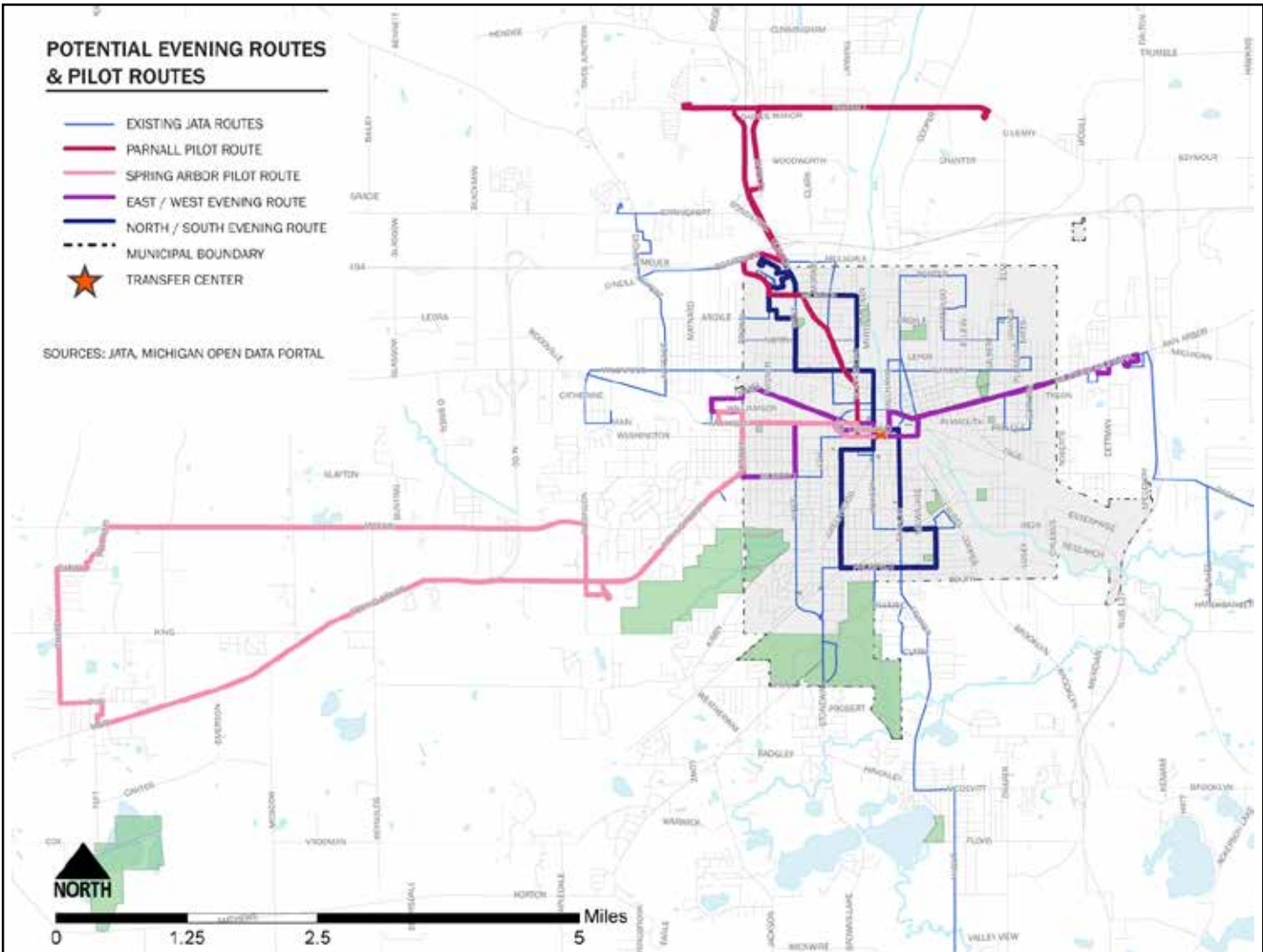
- Combine portions of Route 1 and Route 2 to run as a pilot between 6pm and 11pm weeknights

##### Spring Arbor Pilot Route

- Pilot service options to Spring Arbor, including local schools, Downtown Spring Arbor and Spring Arbor University, McCain Rd. and Robinson Rd. destinations

##### Parnall Road Pilot Route

- Offer express service from Downtown Jackson to Jackson Crossing and serving the correctional complex and Lakeland Trail Trailhead
- Serve Walnut Ridge and The Reserves residential communities before departing inbound to Jackson Crossing and returning express to Downtown Jackson



Potential New Fixed Route service for JATA. These routes should be piloted before beginning any permanent service to determine the demand levels in the new service areas. Some of these services extend far outside the existing JATA service area and would likely need funding partnerships to implement.



### New Mobility, Technology, and Partnership Opportunities

The goal for implementing New Mobility Technology and Partnerships is to help address issues like last-mile access and lack of service without adding high cost traditional fixed route service. By exploring new mobility initiatives, JATA may be able to address last-mile connections using Transportation Network Companies or Microtransit or improve job access by introducing vanpool or intercity passenger service. More details regarding new mobility options can be found in Appendix D.

#### *Vanpooling*

Vanpools are offered by the MDOT sponsored Michivan program and could provide commuting alternatives for Jackson residents who need to travel long distances for their daily job commute. This service can increase commuting options to residents at a small cost to the agency, and provide cost effective options to users.

#### *Inter-City Passenger Service*

Michigan Flyer services are a desired option for intercity travel and non-daily trips. Greyhound, another long haul provider, currently serves the JATA Transfer Center several times daily. Re-establishing more regular inter-city service options will require new conversations with these private operators to align pick-up and drop-off locations and times. A new intermodal station at the historic railroad station which serves as the existing Amtrak station could coordinate local and inter-city services.

#### *Mobility as a Service (MaaS)*

MaaS is the integration of various forms of transportation services into a single mobility service accessible on demand. A successful MaaS service also allows ways to organize and operate the various transportation options, with advantages for transit operators like JATA, including access to improved user and demand information and new opportunities to serve unmet demand. To meet a customer's needs, a MaaS program would provide a diverse menu of transportation options, like public transit, ride-, car- or bike-sharing, taxi or car rental/lease, or a combination thereof.

#### *Microtransit*

Jackson could benefit from new mobility companies and research clusters in Michigan and partner with companies providing automated vehicle services that are seeking partners to test their technology. Low-density areas that are difficult to serve with fixed route transit, such as between Jackson and Spring Arbor, may be a good candidate for microtransit. Although no microtransit companies operate in Michigan, several cities operate paratransit or demand response shuttles that are similar to microtransit.

#### *Transportation Network Company Partnerships*

A transportation network company (TNC) provides prearranged rides using a digital platform that connects passengers with drivers using a personal vehicle. Uber and Lyft are the most popular TNCs, but there are a number of other TNC's that provide similar services. Coordinating with and providing TNC service and applying the TNC model of on-demand service and dispatch to the existing transit provided by JATA could greatly improve the flexibility and reliability of JATA paratransit services.

### Bike Share

Providing a bike share system is a great way to add new mobility options and promote active transportation. An expanded system with multiple locations, specifically with one in the JATA fixed route area, would not only create transportation options for local residents but it would also likely make a bike share system more economically sustainable. Many communities are experimenting with dockless bike share services, which are unlocked via a smartphone app and are typically priced in the \$1-2 range for a 30 minute ride. Bikes can be left anywhere, and are found by new customers through the same phone application.

### Reserve-A-Ride

The Reserve-A-Ride system in Jackson is designed to provide mobility options to customers who may not be able to access the fixed routes offered by JATA. This system needs to efficiently meet service needs in a way that is both cost effective and realistic. The goal for the Reserve-A-Ride system moving forward is to identify efficiencies and reduce the growing cost burden to the system.

Paratransit demand and costs are growing in Jackson County. JATA's Reserve-A-Ride program provides shared-ride, door-to-door and transit feeder services for daily trips and nonemergency transport. Typically, reservations are made by telephone and are often set up as reoccurring trips. Passengers are assigned pickup times within time windows of roughly 30-minutes and they must meet the vehicle within five minutes. Efficiently scheduling these trips can be difficult and can have large cost implications.

While JATA provides demand response transit for residents in Jackson County, they are not the only service provider. There are a number of other providers in the area, specifically social service agencies, that could be an option for medical trips. Many of these options may be a better financial option for these customers. Having an awareness of these outside programs should be a main job task for JATA schedulers. By understanding the options available for customers based on trip purpose or the customer's individual circumstance the scheduler may be able to create efficiencies within the JATA Reserve-A-Ride program. Additionally, partnerships may be a reality with many of these outside providers to help alleviate the high cost of providing some trips.

After reviewing the current characteristics of the Reserve-A-Ride cost structure it is very evident that users who either start or end in Zones 2 and 3 of the Reserve-A-Ride network are paying a disproportionately lower rate than those in Zone 1. In addition to paying comparatively lower fare percentages as compared to the cost to service the trip, they are likely to also not be residents of the City of Jackson and thus not paying into the tax program that helps to fund JATA. The table on the next page shows the costs to serve these different trips on average, the associated fare that would be charged, and the percentage of these costs being covered.





JATA Reserve-A-Ride Operating Cost by Zone							
		To Zone 1		To Zone 2		To Zone 3	
Average Trip Length (miles)	From Zone 1	1.6		3.8		10.6	
Average Trip Cost		\$14.38		\$34.16		\$95.29	
Fare Type		Reduced	Full	Reduced	Full	Reduced	Full
Fare		\$2.00	\$4.00	\$2.50	\$5.00	\$3.00	\$7.50
% of Cost Covered by Fare		14%	28%	7%	15%	3%	8%
Avg Trip Length	From Zone 2	3.6		4.3		11.2	
Avg Trip Cost		\$32.36		\$38.66		\$100.69	
Fare Type		Reduced	Full	Reduced	Full	Reduced	Full
Fare		\$3.00	\$7.50	\$3.00	\$7.50	\$3.00	\$7.50
% of Cost Covered by Fare		9%	23%	8%	19%	3%	7%
Avg Trip Length	From Zone 3	10.1		11.3		N/A For Study Period	
Avg Trip Cost		\$90.80		\$101.59			
Fare Type		Reduced	Full	Reduced	Full		
Fare		\$3.00	\$10.50	\$3.00	\$10.50		
% of Cost Covered by Fare		3%	12%	3%	10%		

Source: AECOM, JATA

#### Maintenance

Several Reserve-A-Ride vehicles are in service beyond their expected life span. The new vehicles would allow the agency to retire two of the 11 Dodge Caravans that exceed their useful life by one to four years or one of eight of the agency's higher capacity Daimler Sprinter vehicles. Although some vehicles operate efficiently beyond a useful expectancy, others may contribute unequally to JATA's maintenance obligations. The expanded reserve-a-ride service area adds to vehicle stress due to the extra miles placed on these already aging vehicles.

#### **Education and Outreach**

JATA must build awareness of the transit services and how to use them. If users are not aware of the full breadth of service or even aware of the service at all, capturing their ridership is difficult. Creating awareness that local and regional public transportation services are available and where to go to find out about them should be a primary objective in providing access to JATA services. Marketing efforts should build awareness by educating the general public about what transportation options are available, how to get more information, and how to access services. Then, when an individual is ready to consider using transit, they will be able to translate their interest into action.

A public participation plan is different from a marketing plan. It outlines the agency's strategy for creating dialogue and meaningful input opportunities for customers and non-customer stakeholders, as well as how JATA intends to comply with Title VI of the Civil Rights Act of 1964, which states that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

A strategy for increasing JATA's news value is to join forces with other organizations that are promoting transportation even if by other modes of travel. By collaborating with bicycle and pedestrian advocates, JATA may be able to raise the overall visibility and interest in non-auto travel. There are a number of organizations, such as the Walkable Communities Coalition, which will generate significant social media presence. In addition, many of these organizations publish and distribute their own newsletters (either hard copy or electronic). They can disseminate information about JATA to their own constituents, who are likely already open to the concept of public transportation.

Marketing the services of JATA is an integral part of making it successful. Having a strong brand that is known and respected in the community can help all of JATA's services to gain riders and create a better quality of life for everyone in Jackson. A comprehensive marketing plan for the JATA system should be developed to assist in enhancing the systems public awareness. A strong marketing plan is crucial for establishing the foundation for future marketing strategies.

A strong transit identity for JATA will enhance service coordination and marketing efforts. User-friendly and easy to understand transit systems have intuitive information materials and signage. Most potential new users will have little experience with transit, particularly demand responsive services. Developing a recognizable brand and will be a critical element in increasing familiarity with JATA for potential users. The JATA brand underwent a change a few years ago when the agency changed from JTA to JATA. However, many of the stop locations and even the bus wraps still have the JTA logo and/or name. The goal is to roll out the new brand system wide to avoid any confusion. This is an element that can be undertaken in partnership with area agencies and even with private partnerships who may wish to advertise on buses, shelters, or benches.

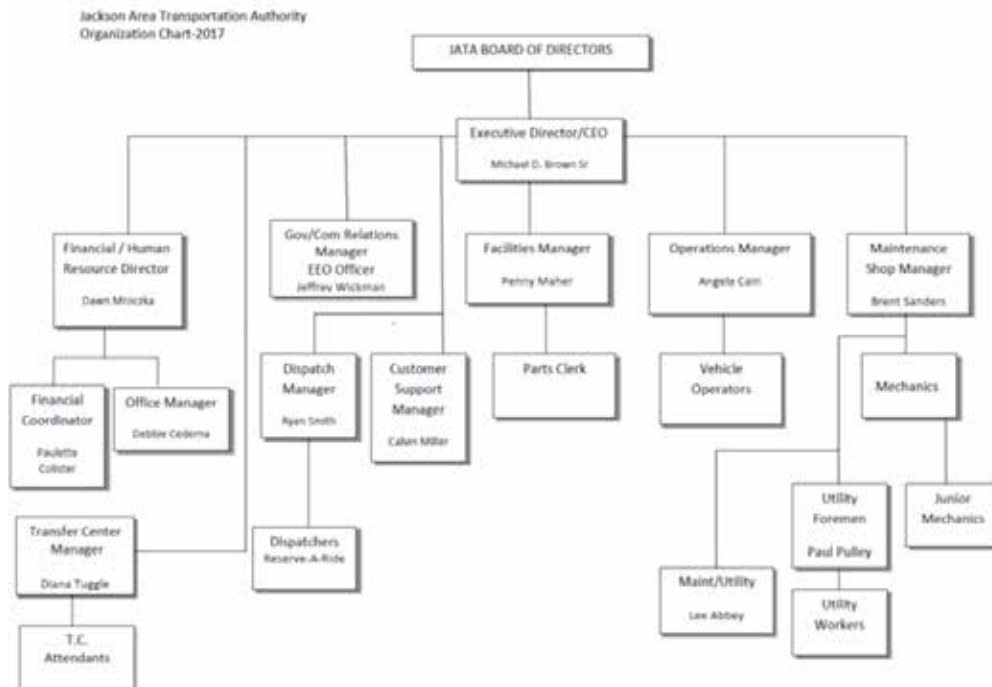
JATA staff indicated during the Connecting Jackson County Plan process that changes to the agency website are difficult to make, as each change requires the assistance of an external website administrator that in turn incurs costs. This situation limits JATA's ability and discourages staff to communicate digitally with customers and partners, as well as hinders maintaining an up-to-date web presence. At the time of the writing of this report, several maps were outdated on the JATA website. JATA does have a Facebook page, Twitter presence and Flickr account although these accounts do not post regular updates and do not have a dedicated staff member tasked with engaging customers through social media



## Organization and Initiatives Plan

Implementation of the plans above will affect JATA staffing needs. The baseline scenario represents the current JATA structure, and would not require additional operators or supervisor staffing for implementation. Due to the number of vehicles reaching the end of their useful lives, however, JATA may require additional mechanic and vehicle maintenance staffing. At this time, though, there is no additional operating revenue for these positions. The JATA staff and impacts of the implementation plan are described below. All JATA duties are performed under the Executive Director.

The overall organizational structure is shown below, but it is important to note that some employees may be shared with other departments within JATA, and that total employees shown on this chart may differ from what is reported to NTD. This does not imply that current staffing levels are desirable. Currently, JATA operates more unlinked trips per full-time employee than any other peer transit agency in the state. While this efficiency keeps operating costs low it places a large burden on existing staff and limits staff to only performing the most necessary tasks to place service on the road.



## Staffing Levels

Due to the aging fleet and the potential service growth there will likely be continued strain on the maintenance staff. For this reason, it is assumed that additional mechanic and parts staff will be needed and possibly an additional supervisor to handle the increased staffing. These additional positions will help support the increasing maintenance demands of the fleet. If new funding is not secured, as much as 76 percent of the JATA fleet may be older than the expected useful life span by 2018. Currently, there is one full-time mechanic to service vehicles for every 56,000 vehicle revenue mile driven. The national average is one mechanic per 30,000 annual miles driven. The implementation plan would also

result in additional annual hours for existing mechanics. If additional funding is located for replacement buses, the need for additional mechanics will be reduced. It was also assumed that one additional operator will be needed for every 2,000 of additional annual hours that are needed each year for any new or expanded routes or growth in the reserve-a-ride program.

**Recommendations:**

- Strive to meet the staffing levels as set in what will be developed in the JATA service standards
- Maintain a full time mechanic for every 30,000 annual miles driven



Source: Winsor Star

As the JATA services continue to expand, it is likely that their span of service will also expand, requiring the services of qualified mechanics for extended hours. Having a program of shifts for maintenance staff will be needed. Additionally, road calls will now occur at prolonged hours if the service span is broadened.

**Recommendations:**

- Develop a schedule for maintenance staff that allows the mechanics to work in a shift based schedule.
- Create a set of performance measures that can be included in the maintenance standards that can monitor the success of the maintenance program. These performance measures should reflect maintenance quality and effectiveness, asset condition, and overall state of good repair. These measures could include:
  - Total Road Calls
  - Revenue Miles between Road Calls

**Performance Monitoring**

The provision of cost efficient and effective bus transit service is the basic premise upon which transit service is developed and the goal that all public transportations agencies strive to achieve. To attain this goal, public transit agencies must design their services around clear and defined principles, as well as a process to monitor the results achieved and to respond accordingly. This requires service design standards, an effective performance measurement system, and a systematic and continuous service evaluation methodology.

By having service standards JATA will have a base on which to measure the effectiveness of their service in a number of areas. These standards can provide measureable categories on how service will be delivered and guidelines on how to base decisions regarding the development of new service, the elimination or modification of current service, and in some cases to justify no modification where a request has been made to do so. Service standards can also function as a template to measure fixed route operating performance and ensure compliance with Title VI regulations which prohibits discrimination based



on color, race or national origin and consider environmental justice issues involving low-income populations.

Recommendations:

- Develop service standards that include key performance indicators (KPI's) by which the system can be measured against in an ongoing fashion.
- Update/review the service standards on an annual basis.

Creating performance standards can allow for not only proper state of good repair procedures but can also measure the effectiveness of the given maintenance program and how it impacts the service operations. By developing a set of maintenance practices JATA will have a benefit for both workers and management. The primary benefit to workers is that practices provide a clear set of instructions on how to accomplish specific maintenance tasks that can be referred to over time. For new hires and seasoned workers alike, defined practices can serve as a convenient refresher to ensure that all job procedures have been correctly followed. Set procedures can also provide workers with other essential information, such as safety requirements, replacement parts, and tools needed for the job. The primary benefit to management is that practices help ensure consistency between jobs regardless of who performs the work. Written practices are also useful to management in that they can easily become part of the agency's training curriculum.

Recommendations:

- Develop maintenance standards that include key performance indicators (KPI's) by which the system can be measured against in an ongoing fashion.
- Update/review the maintenance standards on an annual basis.



# Implementation Strategy

Section 2: System Improvements		Subsection 2.1: Fixed Route Service Changes			
Goal	Address low ridership on existing routes by adding access to destinations desired by riders during the times that customers need.		Cost Estimate	Timeframe	Possible Implementors
2.1.1	Route 3 Southwest Ave	Adjust Route 3 northbound to serve the Jackson Cascades, Frost and Cascades Elementary Schools via Randolph St., Brown St. and Elmwood Ave.	Medium	Mid	JATA
		Test initial route changes as a seasonal pilot, and if successful consider as a permanent change			
	Route 4 Cooper Street	Discontinue service on N. Waterloo St. to stay on Ellery St. southbound, and then continue south via Gorham St., Tyson St. and S. Roberts St. before returning downtown via Page Ave.	Medium	Mid	JATA
		Extend service to new commercial destinations and jobs along Page Ave; areas of Ganson St. that are discontinued continue to be served within a half mile walking distance			
	Route 5 Lansing Ave	Provide service to Jackson West shopping plaza, including Gordon Food Service	Low	Short	JATA
	Route 7 Ganson / Blackman	Discontinue service to Jackson West, instead turning west along Argyle St. to Laurence Ave. during northbound trip	Medium	Long	JATA, Blackman Twp, Private Partnerships
		Serve Sam's Club and Kmart shopping area, continue north to Meijer along existing route path			
		Serve TAC Manufacturing and Windham Hills residential area before beginning southbound trip			
	Route 8 JCC / Da Vinci	Turn east on Floyd Ave., north on Draper Rd. and west on E. McDevitt Ave. during northbound trips to serve mobile home residential area and additional Vandercook Lake commercial destinations along E. McDevitt Ave.	Low	Short	JATA, JCC, DaVinci
	Route 9 Soper	Adjust route start time to 7:00 am to allow two morning trips to Michigan Center High School before bell ring at 7:30 am	Low	Mid	JATA, VA, Leoni Twp
		Operate either inbound or outbound trips on 5th St. to serve the Michigan Center commercial area			
2.1.2	N/S Evening Route	Combine portions of Route 5 Lansing in northern section and Route 6 Francis in southern section to run as a pilot between 6pm and 11pm weeknights	High	Long	JATA
	E/W Evening Route	Combine portions of Route 1 East Michigan and Route 2 West Michigan to run as a pilot between 6pm and 11pm weeknights	High	Long	JATA
	Spring Arbor Pilot	Pilot service options to Spring Arbor, including local schools, Downtown Spring Arbor and Spring Arbor University, McCain Rd. and Robinson Rd. destinations	High	Long	JATA, Spring Arbor University, Spring Arbor Twp
	Parnall Road Pilot	Offer express service from Downtown Jackson to Jackson Crossing before heading northwest to access correctional complex and Lakeland Trail Trailhead at Parnall Rd. near Cooper St.	High	Long	JATA, Blackman Twp, Private Partnerships
Serve Walnut Ridge and The Reserves residential communities before departing inbound to Jackson Crossing and returning express to Downtown Jackson					
Section 2: System Improvements		Subsection 2.2: Operational Improvements			
Goal	Seek new ways to meet the needs of an evolving and diverse community.		Cost Estimate	Timeframe	Possible Implementors
2.2.1	Span of Service	Extend weekday hours on existing routes or on new evening routes to at least 11:00 pm	High	Mid	JATA
		Extend Saturday hours on existing routes or on new evening routes to at least 11:00 pm	High	Mid	JATA
		Add Sunday hours on existing routes or utilizing new evening routes to at least 6:00 pm	High	Mid	JATA
2.2.2	Route Transfers	Adjust Route 9 Soper departures to align with Route 1 East Michigan arrivals	Low	Short	JATA
		Review schedules for Route 7 Ganson/Blackman, Route 2 West Michigan and Route 5 Lansing Ave. for potential transfer opportunities	Low	Mid	JATA

Section 2: System Improvements		Subsection 2.3: Maintenance Improvements			
Goal	Optimize maintenance expenses and allow for longer life spans of buses.		Cost Estimate	Timeframe	Possible Implementors
2.3.1	Vehicle Lifespans	Update and align agency maintenance practices with industry standards	Low	Short - Mid	JATA
		Monitor JATA spare vehicle ratio and decide whether to keep or retire spare vehicles beyond their useful life	Low	Short	JATA
		If additional spare vehicles are kept, develop a contingency fleet plan for older spare vehicles as an alternative to removing from stock, and store and maintain these vehicles according to this plan	Low	Short-Mid	JATA
		Develop maintenance standards that clearly identify when a useful lifespan has been achieved and when mid-life overhauls should be performed (see also section 4.2.2 Maintenance Standards)	Low	Mid	JATA
		Proactively identify funding for state of good repair needs in coordination with R2PC to program funding requests in the regional Transportation Improvement Program	Low	Short	JATA
Section 2: System Improvements		Subsection 2.4: New Mobility, Technology and Partnership Options			
Goal	Solve issues like last-mile access and the high cost of providing traditional fixed route service in low-density parts of the county via partnerships with existing programs, and also through piloting new mobility initiatives.		Cost Estimate	Timeframe	Possible Implementors
2.4.1	Vanpooling and Carpooling	Coordinate with MDOT to establish JATA as the Local Rideshare Office in Jackson County	Low	Short - Mid	R2PC, MDOT, JATA, Jackson County, City of Jackson
		Assign a staff person or potential new Mobility Coordinator position (Section 4.1.3) to manage and grow the MichiVan presence locally through: community and employer outreach & marketing / digital resources	Low - High	Short - Long	R2PC, MDOT, JATA, Jackson County, City of Jackson
2.4.2	Intercity Service Providers	Assign a staff member or potential new Mobility Coordinator position (Section 4.1.3) to work with local partners to establish county and regional needs for intercity bus service	Low - High	Short - Long	R2PC, MDOT, JATA, Jackson County, City of Jackson
		Approach Michigan Flyer with service requests and to come to an agreement of needs, and potentially offer to financially guarantee a certain number of reservations during a limited pilot period	Low - Medium	Short - Mid	R2PC, MDOT, JATA, Jackson County, City of Jackson
		Provide information on connecting to intercity services online and in printed materials at the Transfer Center and through partner agencies (see Section 3.2.3)	Low - Medium	Short	R2PC, MDOT, JATA, Jackson County, City of Jackson
		Engage with City of Jackson, Jackson County and other relevant officials and planners to discuss potential customer benefits from a combined multi-modal facility	Low	Short	R2PC, MDOT, JATA, Jackson County, City of Jackson
2.4.3	Mobility as a Service (MaaS)	Engage with local partners to review interest, required resources, and to develop a realistic timeline for implementing a MaaS program that would serve Jackson County	Low	Short	R2PC, MDOT, JATA, Jackson County, City of Jackson
		Identify and consult with existing MaaS companies to assist in reviewing the feasibility of a MaaS program that would serve Jackson County	Low	Short - Mid	R2PC, MDOT, JATA, Jackson County, City of Jackson
2.4.4	Microtransit	Develop a list of private companies, and engage with them to understand potential options for creating a microtransit demonstration or pilot project in Jackson County	Low	Short	R2PC, MDOT, JATA, Jackson County, City of Jackson
		Meet with AAATA to understand the operational considerations of their FlexRide pilot service, and to discuss potential future service opportunities in Jackson County	Low	Short	R2PC, MDOT, JATA, Jackson County, City of Jackson
2.4.5	TNC Partnerships	Develop a list of TNCs (e.g. Lyft, Uber, Taxi service, Liberty Mobility) and engage with them to determine options and costs for a pilot program which would connect residents within a determined distance of fixed route service to bus stops via a public private partnership	Low	Short	R2PC, MDOT, JATA, Jackson County, City of Jackson
2.4.6	Bike Share	Conduct a cost benefit analysis of expanding the existing bike share system or moving toward other bike share technology that would serve more than just recreational trips	Low	Mid	R2PC, MDOT, JATA, Jackson County, City of Jackson
		Begin discussions with local partners such as the City of Jackson to determine receptivity to expansion of the area bike share system, whether dockless or dock-based (pending outcome of cost benefit analysis)	Low	Mid	R2PC, MDOT, JATA, Jackson County, City of Jackson
		Engage with companies who provide these technologies to understand options for last-mile connections in Jackson, and to determine any potential costs and funding mechanisms	Low	Short - Mid	R2PC, MDOT, JATA, Jackson County, City of Jackson
2.4.7	Real Time Arrival	Contract with a competent developer to implement technology for real time arrival, possibly using https://onebusaway.org technology	High	Mid - Long	JATA, R2PC, Jackson County
		Alternatively, JATA could attempt to partner with relevant programs at Michigan State University, University of Michigan, Michigan Technological University, or other research institutes to implement this technology	Low	Short - Mid	JATA, R2PC, Jackson County
		Market any developments appropriately (see Section 3.2)	Low	Mid	JATA, R2PC, Jackson County

Section 2: System Improvements		Subsection 2.5: Reserve-A-Ride			
Goal	The Reserve-A-Ride system in Jackson is designed to provide mobility options to customers who may not be able to access the fixed routes offered by JATA. This system needs to efficiently meet service needs in a way that is both cost effective and realistic. The goal for the Reserve-A-Ride system moving forward is to identify efficiencies and reduce costs.		Cost Estimate	Timeframe	Possible Implementors
2.5.1	Trip Scheduling	Review Routematch scheduling technology to determine if its capabilities meet all of JATA's needs, and also whether the technology is able to perform on-demand ride reservations through multiple channels (phone calls, smartphone or tablet apps, SMS, wearable technology etc.)	Low	Short	JATA, R2PC, Jackson County
		If cost effective, combine paratransit services with potential microtransit service routing through purchased technology (see section 2.4.4 on Microtransit)	Medium - High	Mid - Long	JATA, R2PC, Jackson County
2.5.2	Medical Programs / Social Service Agencies	Ensure JATA Reserve-A-Ride staff receive ongoing training of other low-cost transportation services in the region, in order to relay these options to customers	Low	Short	JATA, R2PC, Jackson County
		Develop a comprehensive list of services already available in the region which may provide synergies with JATA Reserve-A-Ride service, and engage with them to develop service agreements	Low	Mid - Long	JATA, R2PC, Jackson County
2.5.3	Volunteer Driver Programs	Initiate conversations with community organizations to gauge interest in a potential volunteer driver program targeting difficult to serve areas of Jackson County and/or for trips needed by sensitive populations	Low	Short	JATA, R2PC, Jackson County
		Discuss potential expansion of the existing volunteer driver program in Jackson run by RSVP – Catholic Charities	Low	Short	JATA, R2PC, Jackson County
		Explore options and catalog resources necessary to initiate a new volunteer driver program, such as:	Low	Mid-Long	JATA, R2PC, Jackson County
		Deciding whether a volunteer driver program would potentially operate separately from JATA or as a sponsored part of JATA Reserve-A-Ride services			
		Carefully anticipating possible labor issues arising from participating in a volunteer driver program			
		Establishing a certification program to ensure drivers are properly trained and safe			
2.5.4	Fare Structure	Review and amend current Reserve-A-Ride fare levels to ensure future financial sustainability	Medium	Mid	JATA
		Once other mobility partners are established, explore options to refine cost structure based on partnership and new mobility opportunities (Microtransit, TNC subsidy, etc.)	Low	Long	JATA
Section 3: Education and Outreach		Subsection 3.1: Service and Program Awareness			
Goal	Build awareness of the transit services and how to use them. If users are not aware of the full breadth of service or even aware of the service at all, capturing their ridership is difficult.		Cost Estimate	Timeframe	Possible Implementors
3.1.1	Public Participation Plan	Create a robust public participation plan and program that identifies:	Low - Medium	Mid	R2PC, MDOT, JATA, Jackson County, City of Jackson
		How JATA incorporates public feedback to produce customer-focused outcomes			
		Citizen committees and other ongoing opportunities for residents to participate in JATA planning and project development processes			
		Recurring events, such as monthly or annual meetings to report out on JATA's activities, performance, upcoming grants, service changes etc.			
		JATA's plan for Title VI compliance, including access and outreach plans for minority and limited English proficient populations in the agency's service area			



Section 3: Education and Outreach		Subsection 3.2: Marketing			
Goal	Marketing the services of JATA is an integral part of making it successful. Having a strong brand that is known and respected in the community can help all of JATA's services to gain riders and create a better quality of life for everyone in Jackson.		Cost Estimate	Timeframe	Possible Implementors
3.2.1	Marketing Plan	Create a marketing plan that addresses:	Low - High	Mid	JATA
		Overall system image			
		Graphics			
		Community outreach			
		Advertising			
		An appropriate marketing budget			
		Coordination techniques with other organizations			
		Special campaigns			
		Progress indicators for the JATA marketing program (events held, number of brochures distributed, ridership counts, surveys measuring awareness of JATA services etc.)			
3.2.2	Strong Transit Identity	Strengthen JATA's identity by completing the following:	Medium - High	Mid - Long	R2PC, MDOT, JATA, Jackson County, City of Jackson
		Developing a coordinated brand for the transit vehicles, stops, facilities and materials to increase awareness and improve the visibility of the transit network			
		Creating and adhere to an agency-wide style guide. Share with and educate internal staff and external partners on how to use the agency logo (sizing, acceptable variations, colors, etc.).			
		Organizing materials in a conveniently located folder or place on the agency website, so that access to current materials for branding is never an obstacle to proper use and sharing.			
3.2.3	User-Friendly Materials	Bring website update capabilities in house, and reserve contracted activities to more complex tasks such as maintaining website back-ups, upgrading content management systems or trouble-shooting issues	Low - Medium	Mid	R2PC, MDOT, JATA, Jackson County, City of Jackson
		Ensure availability of commonly accessed items like route maps and schedules are mobile friendly	Medium	Mid	R2PC, MDOT, JATA, Jackson County, City of Jackson
		Task a staff member with website analytics, updates, and social media engagement	Low	Short - Mid	R2PC, MDOT, JATA, Jackson County, City of Jackson
		Set monthly goals for social media posts and track and report out social media "reach"/engagement as part of ongoing customer service activities	Low	Short - Mid	R2PC, MDOT, JATA, Jackson County, City of Jackson
		Develop print materials and brochures for distribution at the JATA Transfer Center and to partners to provide accurate information and to promote awareness of JATA services	Medium	Short - Mid	R2PC, MDOT, JATA, Jackson County, City of Jackson
3.2.4	Target Markets	Focus marketing activities on target markets including the following groups:	Low - Medium	Short - Mid	R2PC, MDOT, JATA, Jackson County, City of Jackson
		Low wage workers and employers of low wage workers			
		Persons with disabilities and the agencies that serve their needs			
		Low income families and the places they frequent - schools, grocery stores etc. in low-income areas			
		Students of all ages and the schools they attend			
		Senior citizen groups			
		Create a master contact list for local organizations working with sensitive populations and periodically connect to ensure they have the knowledge and tools they need to communicate transportation options to clients			
		Include these organizations in news releases			
		Develop print and web materials as necessary to assist partner organizations in disseminating relevant transportation information (see also Section 3.2.3 User Friendly Materials)			

Section 4: Organization and Initiatives Planning		Subsection 4.1: Staffing Levels			
Goal	Maintain staffing levels in line with peer agencies to provide acceptable service based on JATA's service standards.		Cost Estimate	Timeframe	Possible Implementors
4.1.1	Maintenance Staff Levels	Staffing levels should correspond with yet-to-be-developed JATA maintenance standards (see Section 4.2.2)	High	Mid	JATA, MDOT, R2PC
		Maintain a fulltime mechanic for every 30,000 annual miles driven	High	Mid	JATA, MDOT, R2PC
		Develop a schedule for maintenance staff that allows the mechanics to work in a shift based schedule	Low	Long	JATA, MDOT, R2PC
4.1.2	Coordinator of Partnerships and New Mobility Initiatives	Assign or hire a mobility manager to coordinate inter-agency agreements and work with new mobility technology options increase access to transportation options for area residents	High	Mid	R2PC, MDOT, JATA, Jackson County, City of Jackson
Section 4: Organization and Initiatives Planning		Subsection 4.2: Performance Monitoring			
Goal	The provision of cost efficient and effective bus transit service is the basic premise upon which transit service is developed and the goal that all public transportations agencies strive to achieve.		Cost Estimate	Timeframe	Possible Implementors
4.2.1	Service Standards	Develop service standards that include key performance indicators that regularly measure system performance	Medium	Mid	JATA, MDOT, R2PC
		Update/review the service standards on an annual basis	Low	Mid	JATA, MDOT, R2PC
4.2.2	Maintenance Standards	Create a set of performance measures that can be included in the maintenance standards to monitor the maintenance program success. These performance measures should reflect maintenance quality and effectiveness, asset condition, and overall state of good repair. These measures could include:	Low	Short - Mid	JATA, MDOT, R2PC
		Total Road Calls			
		Revenue Miles between Road Calls			
		Update and review maintenance standards on an regular basis	Low	Mid	JATA, MDOT, R2PC



## Appendices

**Appendix A: Review of Recent Plans and Studies**

**Appendix B: Inventory of Services**

**Appendix C: Gaps and Opportunities**

**Appendix D: Implementation Plan**