Appendix D: Implementation Plan



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1. 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 community. JATA has been the public transportation provider for Jackson County since 1964. It was initially formed through a partnership between the Chamber of Commerce and local merchants. The Agency is funded by federal, state, and local funds, including a tax supplement in the City of Jackson. However, true to its roots, service is also subsidized by local businesses and other local social service agencies.

The issues and parameters facing transit systems like JATA are many. Obvious issues include funding, efficiency in operations, technology, demographic change in the community, continuing and increasing traffic congestion in the area, and the unstable price of fuel. In the fall of 2016 JATA looked to review its system and its core functions and develop a plan of how to identify measures that can be taken by JATA and other agencies such as the Region 2 Planning Commission (R2PC) and Jackson County to support the mobility of the community including the growing aging population who are beyond their driving years. 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.

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 to JATA users, JATA and R2PC staff, community members, as well as 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. As stated previously, this is intended to be a living document so as some items are implemented, they may produce results that would alter the order of the phasing approach. This should be monitored by JATA staff moving into the future.

2. 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. Recommendations are primarily for JATA's fixed route services and the Reserve-A-Ride program, the agency's overall operations and maintenance process, 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.

2.1 Fixed Route Service Changes

Fixed route transit service changes propose to address low ridership on existing routes by adding access to destinations desired by riders during the times that customers need, as well as providing new routes to access previously inaccessible destinations.

2.1.1 **Existing Route Modifications**

Potential modifications to existing routes would address issues from JATA's lowest performing routes, as measured by ridership (see Figure 2.1 below). 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.

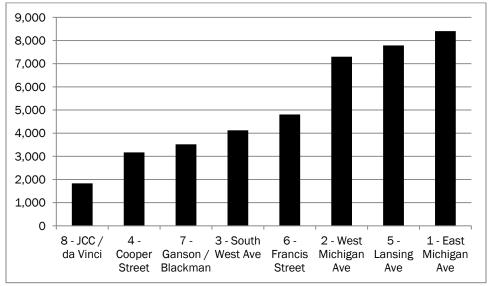


Figure 2.1 Average Monthly Ridership by Route March 2015 - May 2017*

- Route 3 Southwest Ave. (Map 2.1)
 - Adjust Route 3 northbound to serve the Jackson Cascades, Frost and Cascades Elementary Schools via Randolph St., Brown St. and Elmwood Ave.
 - Test initial route changes as a seasonal pilot, and if successful consider as a permanent change
- Route 4 Cooper Street (Map 2.2)
 - 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.
 - 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 9 - Soper summary data was not available

- Route 5 Lansing Ave. (Map 2.3)
 - Provide service to Jackson West shopping plaza, including Gordon Food Service
- Route 7 Ganson / Blackman (Map 2.4)
 - Discontinue service to Jackson West, instead turning 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 (Map 2.5)
 - o 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.
- Route 9 Soper (Map 2.6)
 - 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

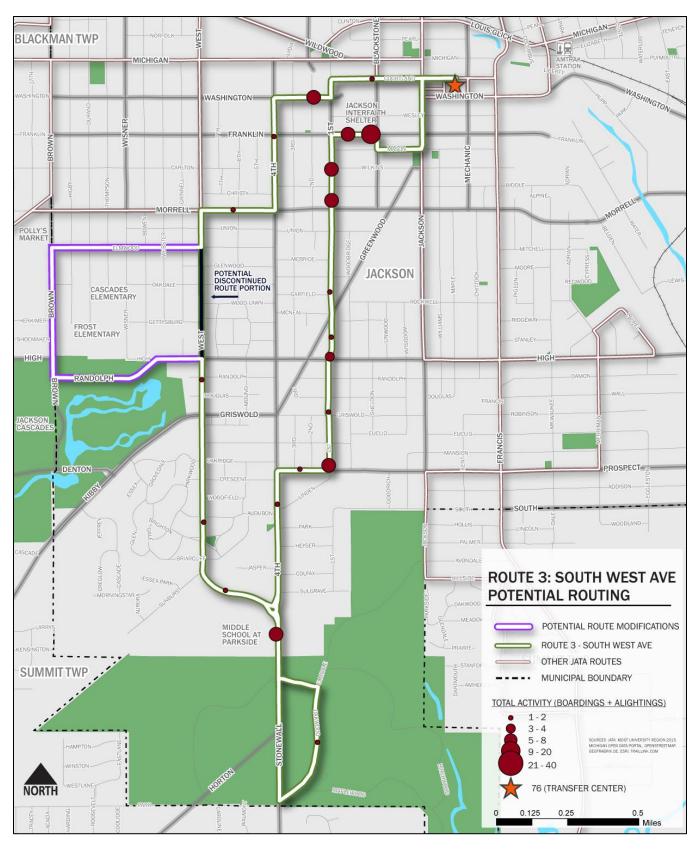
Potential New Fixed Route Services 2.1.2

There are a number of areas in Jackson County that might benefit from fixed route transit access. 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. A review of the Reserve-A-Ride trips shows Jackson residents apparently using this service to make trips that could normally be made via fixed route. Because fixed route services end at 6:15pm, customers may be relying on demand response services for trips occurring later in the evening.

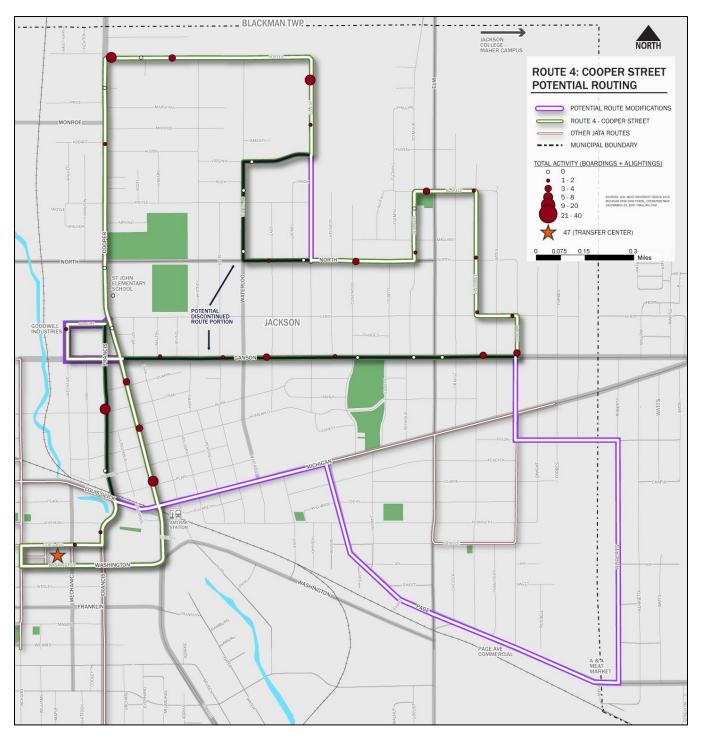
In addition to expanded service hours, customers also seek transportation to areas outside of the City of Jackson limits. Although funding partners must be identified in order for routes to exist in areas outside of the City of Jackson, providing potential options should serve as a starting point for discussion. The Parnall Road corridor shows high employment levels and is also home to destinations like Polly's Market, which is a proven transit activity generator elsewhere in the JATA service area. Spring Arbor University may also benefit from providing a route for its students, as Jackson College provides with Route 8. A route in this direction (southwest of Downtown Jackson) might also benefit Jackson Lumen Christi Schools. Reaching out to these institutions for partnership opportunities could allow the JATA fixed route system to expand, gain new riders, and provide more mobility options to county residents.

- N/S Evening Route (Map 2.7)
 - 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
- E/W Evening Route (Map 2.7)
 - Combine portions of Route 1 East Michigan and Route 2 West Michigan to run as a pilot between 6pm and 11pm weeknights
- Spring Arbor Pilot Route (Map 2.7)
 - 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 (Map 2.7)
 - 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.
 - Serve Walnut Ridge and The Reserves residential communities before departing inbound to Jackson Crossing and returning express to Downtown Jackson

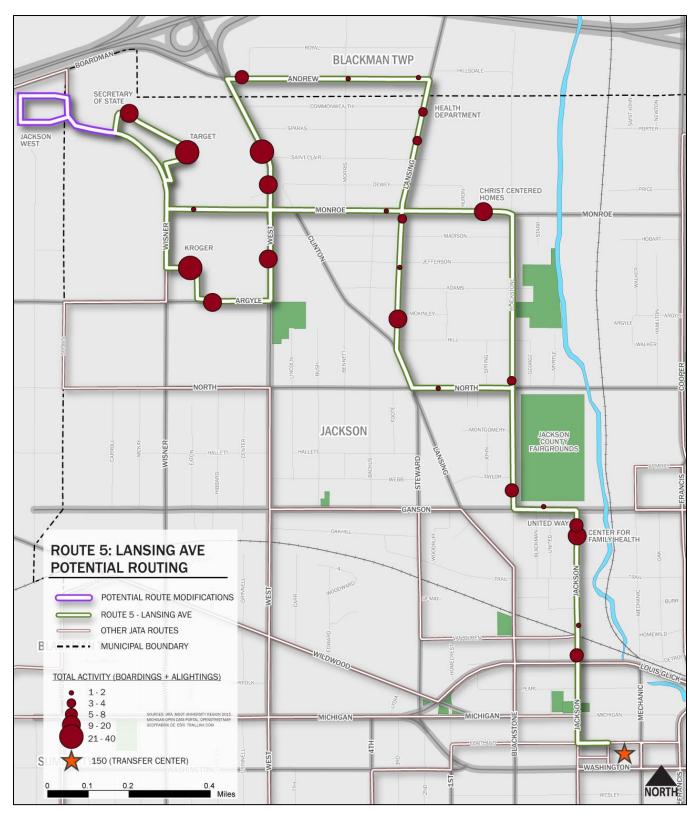
Map 2.1 Route 3 Southwest Ave. Potential Modifications



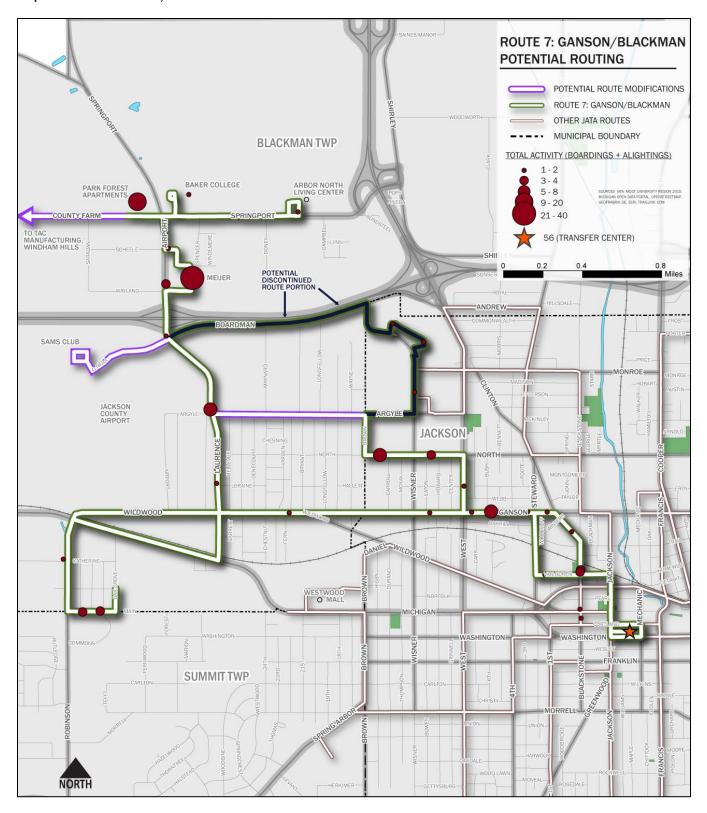
Map 2.2 Route 4 Cooper Street Potential Modifications



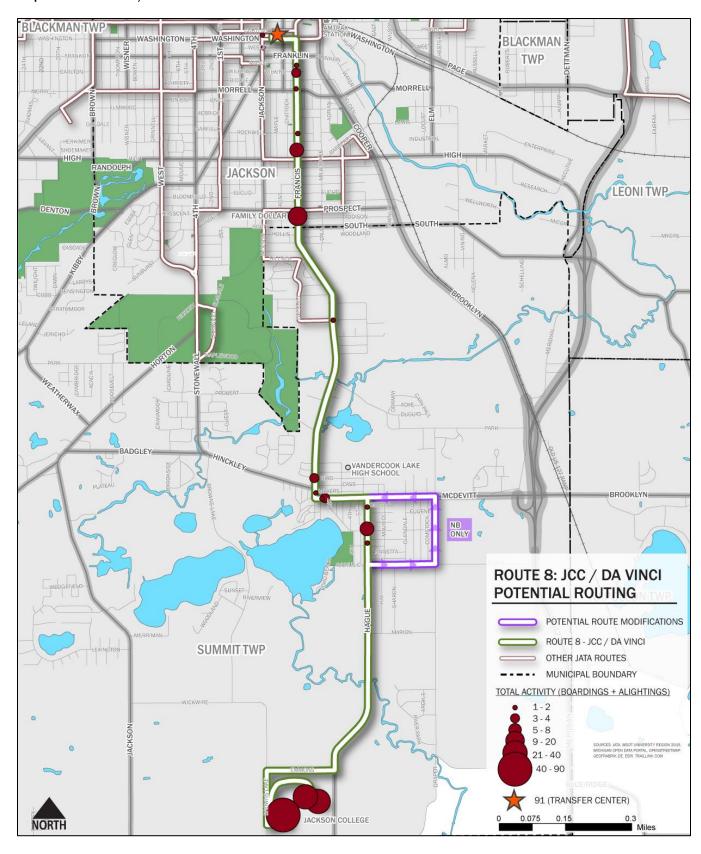
Map 2.3 Route 5 Lansing Ave. Potential Modifications



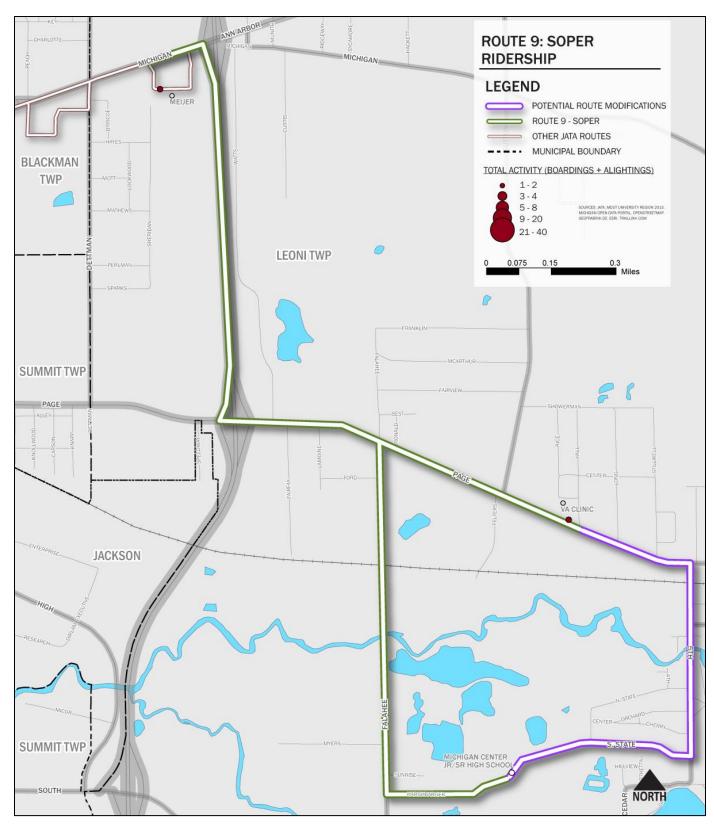
Map 2.4 Route 7 Ganson / Blackman Potential Modifications



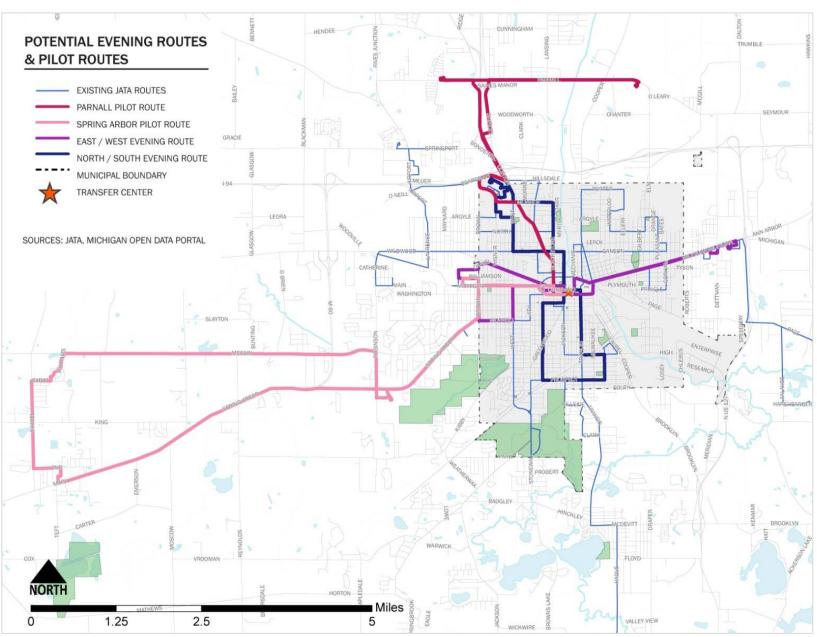
Map 2.5 Route 8 JCC / Da Vinci Potential Modifications



Map 2.6 Route 9 Soper Potential Modifications



Map 2.7 Potential Evening and Pilot Routes



2.2 Operational Improvements

Operational improvements seek new ways to meet the needs of an evolving and diverse community.

Span of Service 2.2.1

JATA customers overwhelmingly desire a longer span of service on fixed routes, including later evening hours on weekdays, and additional service offerings on weekends. Demonstrating this need is the existence of Reserve-A-Ride trips originating in the fixed route service area at times when JATA fixed routes are no longer operating. Extending service hours of existing routes or providing new supplemental evening route service (See Map 2.7) should be considered. Comparing the cost of extending weekday hours to the cost of providing supplemental evening routes serving popular corridors and locations should be considered, as evening routes may be more cost effective. The span of service recommendations shown below were identified in the Jackson Area Comprehensive Transportation Study 2040 Long Range Transportation Plan completed in 2013.

Table 2.1 Fixed Route Span of Service

	Existing	Proposed		
Monday	6:15am -6:15pm	6:15am - 11:00pm		
Tuesday	6:15am -6:15pm	6:15am - 11:00pm		
Wednesday	6:15am -6:15pm	6:15am - 11:00pm		
OThursday	6:15am -6:15pm	6:15am - 11:00pm		
Friday	6:15am -6:15pm	6:15am - 11:00pm		
Saturday	10:15am -6:15pm	10:15am - 11:00pm		
Sunday	No Service	10:15am - 6:00pm		

- Extend weekday hours on existing routes or on new evening routes to at least 11:00 pm
- Extend Saturday hours on existing routes or on new evening routes to at least 11:00 pm
- Add Sunday hours on existing routes or utilizing new evening routes from 10:15 am to at least 6:00 pm

Image 2.1 JATA Schedule and Route Map Display at the Transfer Center



2.2.2 Route Transfers

A few route crossings could allow for transfers to occur outside of the Transfer Center, however the timing of these routes would require adjustment to make these connections more useful. The timing of Route 9 Soper should be reviewed for efficiency. There are a few instances during the typical day where the Route 9 bus leaves the connection point just minutes before the Route 1 East Michigan arrives. The specific reason that Route 9 misses this connection with Route 1 is unclear. Route 7 Ganson/Blackman also crosses Route 2 West Michigan and Route 5 Lansing Ave.. though since it does not follow the 30 minute schedule that Routes 1 through 6 follow, a connection at these crossing points could save riders time if transfers were optimized for each route.

Recommendations:

- Adjust Route 9 Soper departures to align with Route 1 East Michigan arrivals
- Review schedules for Route 7 Ganson/Blackman, Route 2 West Michigan and Route 5 Lansing Ave. for potential transfer opportunities

2.3 Maintenance Improvements

Maintenance improvements seek to economize maintenance expenses and allow for overall longer fleet life span.

2.3.1 Vehicle Lifespans

The maintenance costs for fixed-route vehicles have steadily increased over the last several years. In 2016, JATA's maintenance costs were \$300,000 more than they had been in 2006. Of JATA's 14 fixed route diesel buses, one vehicle is past its useful life, two are five years old and will likely require a mid-life overhaul in 2018, and seven are expected to reach their remaining useful life in 2020.

Several Reserve-A-Ride vehicles are in service beyond their expected life span. A recent Transportation Improvement Program amendment facilitated funding to purchase two new Reserve-A-Ride vehicles, which could help lower these costs. The new vehicles would allow the agency to retire two of the 11 Dodge Caravans that have exceeded their useful life or one of the agency's eight higher capacity Daimler Sprinter vehicles. Although some vehicles operate efficiently beyond a useful expectancy, others may contribute unequally to JATA's maintenance obligations. The extent of JATA's county-wide Reserve-A-Ride service area adds to vehicle stress due to the extra miles placed on these already aging vehicles. According to JATA 2016 NTD reporting, the agency's spare ratio is approximately 50%; this may indicate that the agency should pare down the quantity of vehicles that are not in revenue service at any given point in time.

- Update and align agency maintenance practices with industry standards (see below highlight)
- Monitor JATA spare vehicle ratio and decide whether to keep or retire spare vehicles beyond their useful life
- 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
- Develop maintenance standards that clearly identify when a useful lifespan has been achieved and when midlife overhauls should be performed (see also section 4.2.2 Maintenance Standards)
- Proactively identify funding for state of good repair needs in coordination with R2PC to program funding requests in the regional Transportation Improvement Program

Maintenance Highlight - Industry Resources and Best Practices in Vehicle Maintenance

The American Public Transit Association has a well-developed listing of free Bus Transit Maintenance resources available on their website (http://www.apta.com/resources/tcrp/Pages/Bus-Transit-Maintenance.aspx). The materials are primarily sourced from the Transit Cooperative Research Program, which is administered by the National Research Council to undertake research and other technical activities that respond to the needs of transit service providers.

Some reports that may assist JATA in staying current with industry best maintenance practices include:

Transit Cooperative Research Program Synthesis 22 "Monitoring Bus Maintenance Performance" (1997)

This synthesis describes maintenance performance practices in order to identify how maintenance performance measures drive day-to-day and strategic decisions. This report addresses traditional maintenance performance measures such as Section 15 indicators, as well as others used for decision making and those that affect customer service.

TCRP Synthesis 54 "Maintenance Productivity Practices" (2004)

This synthesis summarizes the experiences of transit properties that vary in size, union affiliation, and operating conditions in using various maintenance productivity improvements and programs. It also provides descriptions of successful programs and creative modifications to existing programs.

TCRP Report 109: A Guidebook for Developing and Sharing Transit Bus Maintenance Practices (2006)

The guidebook contains detailed instructions on how a maintenance manager can develop a maintenance practice based on the local operating environment. The report provides seven sample practices developed using the guidance.

TCRP Synthesis 81 "Preventive Maintenance Intervals for Transit Buses" (2010)

This report explores preventive maintenance measures taken by a sampling of transit agencies to ensure buses are on time, protect taxpayer investments, and promote passenger satisfaction and public safety.

TCRP Synthesis 111 "Optimizing Bus Warranty" (2014)

This synthesis explores how some transit agencies address key aspects of their warranty programs. The report examines the steps taken to more accurately monitor warranty coverage periods, optimize the warranty process, and maximize warranty reimbursement to fulfill U.S. Federal Transit Administration requirements and taxpayer expectations.

TCRP Report 184: "Maintenance Technician Staffing Levels for Modern Public Transit Fleets" (2016)

This report identifies existing tools and practices used to determine optimum maintenance technician staffing levels, and provides an analysis of variables that influence maintenance technician staffing needs.



2.4 New Mobility, Technology and Partnership Options

The goal for implementing New Mobility Technology and Partnerships is to solve issues like last-mile access and the high cost of providing traditional fixed route service in low-density parts of the county. This can be achieved via partnerships with existing programs, and also through piloting new mobility initiatives.

Vanpooling and Carpooling

The MichiVan service is an MDOT sponsored rideshare operated by Enterprise Rideshare. The service provides commuting alternatives for Jackson residents who need to travel long distance for their daily commute. This service can increase commuting options to residents at a small cost to the agency, and provide cost effective options to non-drivers as well as existing drivers. This service is already active in Jackson County with 1 current van that travels to and from Lansing, daily.

The MichiVan program involves:

- A fully insured passenger van available to commuter groups of 5 to 15 along an established route
- A monthly participation fee as low as \$55 per month based on daily round trip/monthly commute mileage and the size of van
- The MichiVan operator provides the vehicle and pays for the maintenance/repairs, insurance, titling, and licensing
- A vanpool group usually meets at a centralized location such as a shopping mall, grocery store or carpool lot
- A free ride home is offered for unexpected emergencies (program rules and guidelines apply)

- Coordinate with MDOT to establish JATA as the Local Rideshare Office in Jackson County
- 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

Table 2.2 MichiVan Cost Estimates by Vehicle Type and Mileage (Source: VRide)

			8			
New Round		8	Passenger			
Trip Mileage	7	Passenger	Ford	10		
Band - Home	Passenger	Ford	Transit -	Passenger		
to Work	Premium	Transit -	Medium	Luxury	12	15
Commute	SUV	Low Roof	Roof	Conversion	Passenger	Passenger
40	\$100	\$79	\$82	\$90	\$65	\$55
60	\$105	\$83	\$86	\$95	\$70	\$60
80	\$120	\$86	\$89	\$100	\$75	\$65
100	\$135	\$100	\$103	\$115	\$85	\$75
120	\$155	\$107	\$110	\$120	\$90	\$80
140	\$165	\$126	\$129	\$140	\$95	\$85
160	\$185	\$135	\$137	\$150	\$100	\$90
180	\$205	\$153	\$146	\$160	\$105	\$95

Image 2.2 Example of a MichiVan Vanpool Vehicle (Source: michigan.gov)



Vanpool Case Study - AAATA iShareaRide.org

In the Ann Arbor area, MichiVan service is organized by the transit agency, Ann Arbor Area Transportation Authority (AAATA). The agency launched the <u>iShareaRide.org</u> website in 2013, with input from the University of Michigan. Thousands of users were already registered at launch based on employer participation.

The website assists Ann Arbor area commuters to create carpools and find ways to publicly share rides. Users create their own password-protected profile to list their employer, home address and details of their commute. The website offers the choice to carpool only with people at the same workplace, or with anyone from the community. Trips can be arranged on a recurring or one-time basis, for example for a special event like a sports game.

In addition to carpools, the website assists AAATA in promoting its VanRide system. The vanpool allows groups of five or more to rent a van from AAATA on a monthly basis. Riders pay a monthly fee ranging from \$79 to \$139 per person, while in most cases the driver of the van is not required to pay a fee. Participation is tax-deductible.

Users interested in vanpooling sign up at iShareaRide.org to access a customized list of other commuters that live and work near them. Users can search for existing groups to join, or start their own vanpool.



To initiate a new vanpool, users can solicit other riders by posting notices at work, or talking to friends and co-workers about signing up with iShareaRide.org. Notices are recommended to include relevant pick up points, start and stop times, along with the organizers' phone number and email. Alternatively, organizers can have interested parties contact a AAATA point person via MyVanRide@TheRide.org.

Employers are not required to participate, however employers can choose to have a portal on the website so that employees can choose to only search for carpool or vanpool partners among co-workers. For example, employees at the University of Michigan have their own portal, located at isharearide.org/u-m. The website offers a feature for businesses and organizations to be able to track the data of their employees participating in alternative commutes. Employers with a special portal also have the capability of messaging all their employees who have registered on the website.

To gain an employer portal, a business must pay an annual fee ranging from \$500 to \$2,000 based on the size of the company. Vanpools whose cost is sponsored by an employer are paid for by special monthly rates negotiated on a case-by-case basis.

AAATA dedicates staff resources to coordinate and administer the program, and prepares a monthly VanRide Enewsletter for distribution that lists riders wanted, helpful hints and other updates.

Sources:

iShareaRide.org

http://www.annarbor.com/news/aata-launches-new-ridesharing-website-for-ann-arbor-area-commuters/

2.4.2 Intercity Service Providers

The 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 schedules. One potentially promising way of coordinating local and inter-city services is the plan to build a new intermodal facility at the site of the existing Amtrak station.

Recommendations:

- 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
- Approach Michigan Flyer with service requests and to come to an agreement of needs
 - Potentially offer to financially guarantee a certain number of reservations during a limited pilot period
- 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)
- Engage with City of Jackson, Jackson County and other relevant officials and planners to discuss potential customer benefits from a combined multi-modal facility

2.4.3 Mobility as a Service (MaaS)

According to a 2017 report by the Ann Arbor based nonprofit Center for Automotive Research entitled "Future Cities: Navigating the New Era of Mobility", Mobility-as-a-Service (MaaS) is a "mobility distribution model in which a person satisfies transportation needs over a single interface." Transportation modes like public transit, ride-hailing (e.g. Lyft, Uber) ride-sharing (Lyft Line, UberPOOL), car-sharing (e.g. Zipcar) or bike-sharing, taxi or car rental/lease, or a combination thereof are bundled together in an integrated solution. "That solution then is presented to the user through a smartphone app and the service is paid via a single account. MaaS aims to provide end-to-end transportation by linking different transportation modes and making better use of the existing transportation options in a given area. Companies like TransLoc, Xerox, and moovel N.A. are developing transportation aggregator apps, including employee commute benefits, and are developing partnerships with local authorities."

Urban regions with at least two or three transportation modes other than private cars can benefit from a MaaS program. For the user, MaaS can offer added value through use of a single application to provide access to mobility, with a single payment channel instead of multiple ticketing and payment operations. For its users, MaaS should be the best value proposition, by helping them meet their mobility needs and solve the inconvenient parts of individual journeys as well as the entire system of mobility services. Some of the public sector advantages of providing a MaaS program include meeting sustainability targets through reduced personal automobile trips, less congestion and greater road space to allocate to other modes, receiving access to improved user and demand information, and new opportunities to serve unmet demand.

"One important item of note is that MaaS implementation requires strong local and regional cooperation between public agencies and private providers. Each of these stakeholders may bring their innovative ideas and strengths into the transportation planning sphere to change the future of urban mobility." Rolling out a MaaS program, especially in less dense areas outside of a major city may be costly and difficult to achieve comprehensively across modes. However, in recent years some companies like Liberty Mobility Now have emerged that specialize operating MaaS programs for rural and small urban areas (see case study, below).

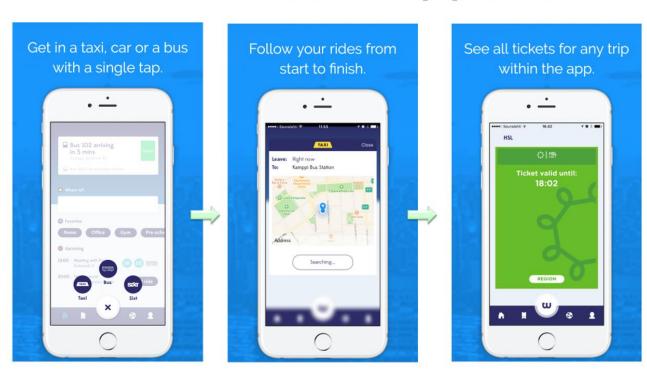
- Engage with local partners to review interest, required resources, and to develop a realistic timeline for implementing a MaaS program that would serve Jackson County
- Identify and consult with existing MaaS companies to assist in reviewing the feasibility of a MaaS program that would serve Jackson County

Image 2.3 Example of Helskinki, Finland's MaaS "Whim" Application User Interface (Source: sfmcon.dk)

Monthly subscription for all transportation



Much more than a trip planner



Ridehailing, Volunteer Driver and MaaS Case Study - Liberty Mobility Now

Liberty Mobility Now (Liberty) started deploying software with transit providers in Nebraska in the summer of 2016 after a year of feasibility testing supported by a Federal Transit Administration grant. The company anticipates operating nationwide in 2020.

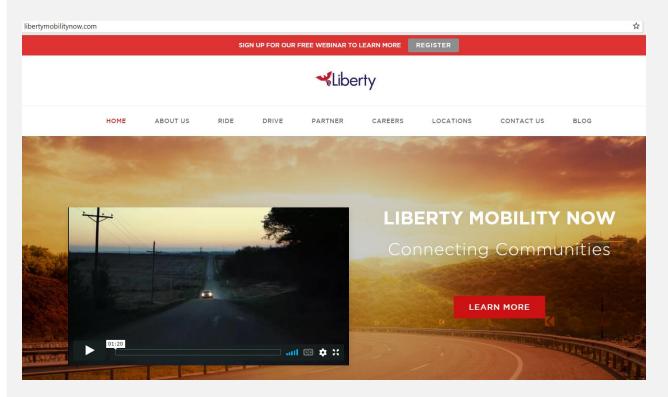
Liberty's core service includes a ride-hailing platform and operating environment for rural areas. The company's smartphone application is meant to work in low cell service environments, and customers can also call to reserve rides over the phone. An initial ride reservation costs \$1.25. Passengers pay \$1.00 a mile, while drivers keep up to \$0.80. Local social services agencies can pay a monthly fee to request rides for clients through an "enterprise portal." Drivers are recruited at relevant community organizations, like local Lions and Rotary Clubs. Liberty's model also provides options for volunteer drivers looking to serve their community.

Although limited information is available on their website, Liberty is now offering to combine transportation modes in a Mobility as a Service style environment. Liberty Mobility Now is not currently operating in Michigan, but accepts applications of interest from communities outside of their existing market.

Sources:

http://libertymobilitynow.com

https://www.nytimes.com/2017/06/17/opinion/sunday/the-anti-uber.html



2.4.4 Microtransit

According to a 2017 report by the Ann Arbor based nonprofit Center for Automotive Research entitled "Future Cities: Navigating the New Era of Mobility", Microtransit is "a broad category encompassing various private transit services that use vans or small buses and develop flexible routes and schedules based on customer demand. Microtransit resembles current route-deviation services and bridges the gap between single-user transportation and fixed-route public transit."

These services began around 2012 in the United States, popularized by companies such as Via and Chariot. "Microtransit works similarly to jitney services and city-operated paratransit or flexible route services. What sets them apart are wireless connectivity and data analytics. Better data on mobility patterns and broad smartphone access have made flexible, on-demand transit more convenient for the users and more profitable for providers."

Although no microtransit companies operate in Michigan, several cities operate paratransit or demand response shuttles that are similar. AAATA is launching a service called FlexRide that will provide connections to its fixed-route transit network as well as other destinations in southeast Ypsilanti Township. Users will be able to reserve same-day rides by calling AAATA; companies like Chariot and Via allow reservations over a smartphone app and pick up riders in a matter of minutes.

Agencies operating in Jackson County should capitalize on its close proximity to new mobility companies and research clusters near Ann Arbor and at the University of Michigan. Companies providing automated vehicle services are often seeking partners to test out real-life applications of their technology. A low-density area that is difficult to serve with fixed route transit, such as between Jackson and Spring Arbor, may be a good candidate for microtransit.

Some organizations and companies to consider for more information on microtransit, or further discussions include:

- Transloc http://transloc.com
 - Microtransit technology company partnered with Google
 - Client list is soon to include the Office of Mobility Innovation in the City of Detroit
- Via https://platform.ridewithvia.com
 - Microtransit technology company
 - o Clients have included Austin's Capital Metropolitan Transportation Authority
- Chariot https://www.chariot.com
 - o Currently operating in San Francisco, Seattle, New York, Austin, San Antonio and Columbus
- Lyft Shuttle https://www.lyft.com/shuttle
 - Microtransit shuttle with fixed pick-up points
 - No current routes in Michigan
- AAATA http://www.theride.org/Services/FlexRide
 - o Currently piloting a flex route service called "FlexRide" in Ypsilanti Township
- May Mobility http://maymobility.com
 - Automated shuttle fleet operator and automated vehicle technology company
 - Key partner in automated vehicle pilot in Downtown Detroit
- Center for Automotive Research http://www.cargroup.org
 - Non-profit automotive research organization with reports on trends in new mobility and their impact and proliferation within Michigan

- 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
- Meet with AAATA to understand the operational considerations of their FlexRide pilot service, and to discuss potential future service opportunities in Jackson County

Microtransit Case Study - OC Flex

The Orange County Transportation Authority (OCTA) is utilizing TransLoc microtransit technology to roll out OC Flex, an on-demand shared ride service, beginning summer 2018. A one-year pilot program has been approved as an extension of OCTA's OC Bus 360° initiative, which was designed to improve bus ridership and expand the agency's transit service offerings to better meet public needs.

OCTA is aiming for wait times of 15 minutes or less, and curb-to-curb pickup and drop off for as low as \$5 per trip, with free transfers to buses and rail lines. The service will be accessible through a cellphone app, but will not require users to have a credit card. TransLoc software will coordinate rides, navigate routes, and accept payments. But riders also can reserve and pay for rides via phone. All rides will be shared, and riders will be picked up and dropped off at locations near to their homes and destinations.

During the pilot phase, OC Flex will be offered initially in two zones chosen based on transit usage, demographics and key community destinations. The service areas include major activity centers for shopping, entertainment and employment, and connectivity to other transit options.



To gauge the success of the program, OCTA will measure productivity and cost-effectiveness, and the number of shared rides and connecting transit trips, as well as customer satisfaction. The \$1.4 million pilot includes the purchase of four wheelchair-accessible vehicles.

Sources:

http://blog.octa.net/on-demand-shared-ride-service-coming-to-orange-county https://www.dailybreeze.com/2017/10/23/la-orange-county-transit-agencies-seek-their-own-ride-sharing-services/ https://www.businesswire.com/news/home/20171116005340/en/California-Transit-Agencies-Deploying-Next-**Generation-Microtransit-Services**

2.4.5 Transportation Network Company Partnerships

A transportation network company (TNC) is a company that provides prearranged rides for compensation using a digital platform that connects passengers with drivers using a personal vehicle. Most people are already familiar with TNCs like Uber and Lyft, both of which operate in Jackson, but there are a number of other TNCs that also provide similar services. Partnering with an existing TNC service to provide connections to JATA fixed route services in a defined area could introduce cost savings by reducing Reserve-a-Ride trips.

It is important to note that utilizing TNCs to directly provide for trips, such as paratransit trips, through purchased service (rather than subsidy) has limited precedents. This type of arrangement would also involve resolving complex issues, such as drug and alcohol testing, liability for loading customers and even Buy America requirements. In order to optimize scheduling operations, JATA should rather focus on upgrading its technology to improve efficiency, number of trip denials and cost as recommended in section 2.5.1.

Recommendations:

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

TNC Partnership Case Study - Pinellas Suncoast Transit Authority "Direct Connect" Program

The Pinellas Suncoast Transit Authority (PSTA), FL was the first public agency to sign a partnership with a ridehailing company to expand access to its public transit network through a 6-month pilot program, which has now been extended. This innovative partnership brings together competing transportation providers to serve riders in Pinellas County.

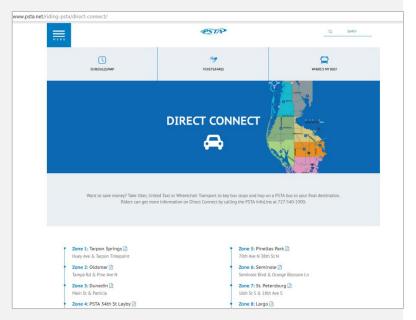
In 2015, PSTA identified Pinellas Park and East Lake as two areas in Pinellas County where fixed-route service was experiencing low ridership. Following a lead from a Florida state senator, PSTA approached Uber to assist the transit agency with serving the underserved areas of Pinellas Park and East Lake. During the pilot program, Uber and United Taxi provided service to the designated area in exchange for a subsidy provided by PSTA.

The Direct Connect partnership's goal is to provide viable and reliable connectivity where public transit services do not exist or may be discontinued in the future. In 2015, PSTA carried out a comprehensive review of its existing transportation network and community needs to identify inefficient routes. The review process identified regular fixed routes that served low-density areas of the county. In order to save money, PSTA eliminated several fixed-route services, including the Pinellas Park and East Lake routes. At the time, PSTA was spending \$150,000 on the Pinellas Park route and PSTA projected that the Direct Connect partnership would cost \$40,000 for six months to operate, saving the transit agency \$70,000 to provide fixed-route service to the same area.

Because of the elimination of the fixed-route services, there was a need to provide a secondary transit network in the affected areas. PSTA identified Uber and United Taxi as a way to bridge the gap. Through the Direct Connect program which includes Uber, local taxi company United Taxi and accessible transportation service Wheelchair Transport - PSTA subsidizes half of a rider's fare, up to \$5 per ridehailing trip, to and from designated transit stops.

Riders must request a ride within the geofence area that PSTA has provided to receive the discount. The geofence sets a boundary around a specific area of Pinellas County, and the rider must travel in the Uber or taxi to or from a PSTA bus stop to qualify for the subsidy. Wheelchair van service is available for those needing assistance by calling PSTA's on-demand line for "same-day PSTA service." From qualifying stops, riders can connect with the regular PSTA public transit bus system. On the return trip, transit riders can use Direct Connect to travel from the designated stop back home or to work.

A rider can use each service's native application on a smartphone to request a driver in the area, or call a provided number for a ride to their desired destination/bus stop.



Sources:

https://www.psta.net/riding-psta/direct-connect

Center for Automotive Research "Future Cities: Navigating the New Era of Mobility" Report, 2017 TCRP Research Report 188 "Shared Mobility and the Transformation of Public Transit," 2016 TCRP Research Report 191 "Public Transportation Guidebook for Small- and Medium-Sized Public-Private Partnerships (P3s)," 2017

2.4.6 Bike Share

A bike share system is an effective way to add new mobility options and promote active transportation. The Jackson area is home to a B-Cycle station at the Falling Waters trailhead. While it provides mobility for users of the trail, it is not easily accessible without the use of an automobile. An expanded system with multiple locations within the JATA fixed route area would create transportation options for local residents and improve the system's utilization. Many formula funds already accessible to JATA through the Federal Transit Administration allow use of matching funds up to 90% toward bicycle projects, including 5307, 5309, 5339 and 5310 funding streams through Title 49.

Many communities are experimenting with dockless bike share services. Dockless bikes in these programs are typically unlocked via a smartphone app and priced in the \$1-2 range for a 30 minute ride. Bikes can be parked in any appropriate location, and are found by new customers through the same phone application. Because companies are aggressively seeking new markets and since there are zero capital costs associated (the provider supplies and maintains the bicycles), the barrier to implementing this

kind of program is very low.

Popular companies offering these services include:

- LimeBike http://www.limebike.com
 - Offers cash payment options for customers without credit cards or smartphones
 - Offers monthly memberships
- Mobike https://mobike.com/us
- Spin https://www.spin.pm
 - o Offers monthly memberships
- SoBi socialbicycles socialbicycles.com
 - Offers monthly and annual memberships

South Bend Tribune)

Image 2.4 LimeBike in South Bend, Indiana (Source:

Recommendations:

- 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
- 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)
- 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

Dockless Bike Share Case Study - LimeBike in South Bend, Indiana

Launching in 2017, the LimeBike bike sharing program has been popular in South Bend, with more than 5,000 individual trips taken as of August 2017, and roughly 10,000 people downloading the smartphone app used to rent the bicycles. According to a LimeBike representative interviewed by WSBT, on average the bikes are being used at least twice a day. The bikes cost \$1 per half hour and .50 cents for students. The LimeBike launch manager anticipates bringing the number of bikes in South Bend to over 1,000.

The South Bend Tribune quoted Tim Corcoran, South Bend's director of planning, as saying that the wide disbursement of LimeBikes "greatly exceed our expectations," and "This would simply not have been possible with a traditional dockbased bike share system."

Sources:

https://www.southbendtribune.com/news/business/limebike-pedals-through-vandalism-repairs-and-trial-and-error-in/article 4d21fd78-b6ec-5641-b0ff-21e211874632.html

http://wsbt.com/news/local/south-bend-bike-share-program-limebike-is-a-success

http://www.limebike.com

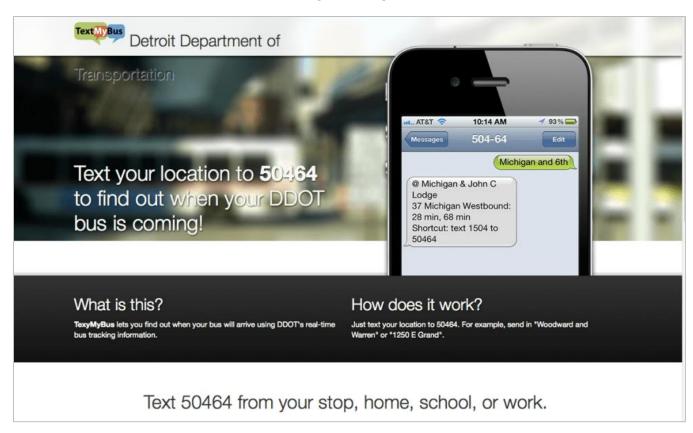
2.4.7 Real Time Arrival

Real time arrival technology can be very high-tech, but it can also be implemented on a shoestring budget through partnerships or low-cost projects with IT contractors if JATA is willing to dedicate resources to coordinating the project development.

One Bus Away is an open source real-time transit software project that can be deployed without license fees, and has the ability to use simple GPS data feeds without requiring expensive Automatic Vehicle Location equipment. One Bus Away is used by agencies as large as NYC MTA, but was also deployed locally by the Detroit Department of Transportation through a partnership with Code for America, branded as the "TextMyBus" service. Since the service can be accessed using SMS, smart and non-smart phone users alike can use the system to locate buses.

- Contract with a competent developer to implement technology for real time arrival, possibly using https://onebusaway.org technology
- 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
- Market any developments appropriately (see Section 3.2)

Image 2.5 DDOT Text My Bus Service (Source: www.legaltechdesign.com)



2.5 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 costs.

Trip Scheduling 2.5.1

Paratransit demand and costs are growing in Jackson County. Applying new dispatch technology to the existing Reserve-A-Ride service could potentially improve its reliability and offer cost savings. JATA's Routematch scheduling software is an upgrade from manual scheduling processes, but it still lacks the integration of the newest technology available to demand-response service providers. Currently, riders with closest origins are matched, whether or not this pairing is ideal for their final destinations or trip timing. The scheduling process currently involves mostly telephone reservations, which are set up as recurring trips. Customers are assigned pickup times within 30-minute time windows, and they must meet the arrived vehicle within five minutes. Efficiently scheduling these trips can be difficult, and even minor mismanagement can have large cost implications.

Luckily, improvements in the field of paratransit ride scheduling are expanding exponentially. In contrast to the historical format of accepting reservations by phone and requiring one day's notice, more modern arrangements involve the following technological upgrades:

- Multi-Channel Reservations customers can reserve trips immediately, through multiple channels depending on their abilities and situation:
 - Phone calls 0
 - SMS text messages
 - Smartphone and tablet applications
 - Wearable devices like emergency alert necklaces
- Ride Matching new technology matches riders automatically during the reservation phase based on multiple factors, such as:
 - Origin
 - Destination
 - Timing requested
 - Vehicle type need
 - Presence of a companion

- 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.)
- If cost effective, combine paratransit services with potential microtransit service routing through purchased technology (see section 2.4.4 on Microtransit)

2.5.2 Medical Programs / Social Service Agencies

While JATA provides paratransit service for residents in Jackson County, they are not the only service provider available to customers. There are a number of other providers in the area, especially for medical trips, that present alternative options, including many which may be financially competitive for customers.

Maintaining an awareness of these outside programs would be a valuable training addition for JATA employees interfacing with Reserve-A-Ride customers. By understanding the options available to customers based on trip purpose or the customer's individual circumstance, JATA schedulers 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. Table 2.3 below lists several medical and social service transportation providers in Jackson County.

- 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
- 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



Image 2.7 Mobility Matters 360 Transportation Van

Image 2.6 Thome PACE Transportation Services Vehicle



Table 2.3 Medical and Social Service Transportation Providers in Jackson County

Name	Service Description	Eligibility
Ann Arbor Healthcare System	Provides non-emergency transportation for Veterans who live in remote areas or lack personal or public transportation. Veterans may be picked up by a shuttle at fixed sites and transported to and from their medical appointments at the VA Ann Arbor Healthcare System (VAAAHS). Fixed sites include Meijer parking lots in Allen Park, Belleville, Brighton, Canton, Hartland, Howell, Jackson, Livonia, Northville, Taylor, Westland, and Wixom. Other fixed sites include Chelsea Lumber in Chelsea, MI; Harbor Light in Monroe and Cabela's in Dundee.	Veterans
Catholic Charities of Jackson, Lenawee and Hillsdale Counties	Provides medical transportation for seniors as well as volunteer opportunities for retired senior citizens throughout the entire Jackson community. Catholic Charities will provide up 4 appointments per month, and one of the four rides may be out of town up to a 35 mile radius for medical transportation.	Ages 60 and older and must not be able to take themselves to their own medical appointments; Seniors must be mobile, no wheelchairs or scooters
Center for Family Health	Coordinates and provides transportation to and from medical appointments for established patients who have no other means of transportation available to them.	Established for Center For Family Health patients only
Huron Valley Ambulance	Provides nonemergency transportation for individuals who require routine medical services and who, because of financial problems or their physical condition, are unable to use other available means of transportation.	Senior citizens and individuals who use wheelchairs who live in Jackson, Lenawee, Monroe, Oakland and Washtenaw Counties
Jackson County Government	Assists with transportation to and from Ann Arbor VA Hospital.	Veterans with an appointment at the VA Hospital. First come, first served.
Lifespan A Community Service	Offers living supports such as shopping/errand running, meal preparation, in home respite, personal care and transportation to medical appointments to adults who are elderly or disabled.	Jackson and Hillsdale county residents ages 18 or older with a physical or mental disability
Mission of Hope Cancer Fund	Offers assistance to cancer patients: new merchandise for any Michigan resident holding a cancer benefit; educational information and emotional and grief support on cancer-related issues; and financial assistance such as travel expenses (mostly as prepaid gas cards), prescription cost and co-pays, lodging expense (for stays out of town for treatment, health insurance premiums, medical equipment and supplies, and medical expense (due to cancer treatment).	Residents of Michigan who have been diagnosed with cancer
Unified - HIV Health and Beyond	Provides non-emergency transportation for individuals who require routine medical services and who, because of financial problems or their physical condition, are unable to use other available means of transportation.	Transportation assistance to medical appointments is available to Unified-HIV Health and Beyond case management clients
NETS (Non- Emergency Transportation Services)	Provides non-emergency transportation in ADA compliant accessible van. Can accommodate walker or wheelchair. Out-of-county transportation available. Walker or ambulatory fee: \$27.50 each way, plus \$2 per mile. Wheelchair: \$45 each way, plus \$2 per mile. P.O. Box 761, Jackson, MI 49204 Phone: (517) 764-6387	

Name	Service Description	Eligibility
RSVP- Catholic Charities	Provides medically necessary transportation using retired senior volunteers with private cars; occasionally can do out-of-county transportation. Veterans can be transported to Jackson, Ann Arbor, or Battle Creek clinics. Need initial intake visit by agency staff. Please provide 2-week notice for ride request. Fee: Donation appreciated Contact: call Mondays-Thursdays between 8AM - 4PM for scheduling. 407 S. Mechanic, Jackson, MI 49201 Phone: (517) 783-6102	Seniors 60 or older, caregiver of a senior, or veterans any age, and independent in transfers or have a caregiver able to provide transfer help. No wheelchairs can be transported.
Veteran's Transportation	1715 Lansing Ave., Suite #265, Jackson, MI 49202 Phone: 517-788-4425	
Chanter Road Service	Van provides transportation for appointments at Veteran's Hospital, Ann Arbor, on Mondays, Tuesdays, Wednesdays, and Thursdays. Van leaves at 7:30 AM from Chanter Rd at the north jail complex, and will make a second stop at downtown bus station if needed. Van cannot transport wheelchairs or oxygen tanks. Phone: 517-788-4425 to reserve ride.	
East Meijer and Catholic Charities Site Service	Veteran's Hospital van makes 3 trips daily Mondays – Fridays from east side Meijer (3333 E. Michigan Ave) and Catholic Charities (407 S Mechanic) to VA Ann Arbor Hospital. Van can accommodate wheelchairs and portable oxygen. Caregivers allowed. Cost: None Phone: 734-222-7145 – call to reserve a ride.	Veteran with medical appointment and their caregivers. Call to reserve ride.
Private Duty Home Care Agencies	Most agencies have workers available with their own cars to transport clients who are ambulatory (no wheelchairs) for errands or medical appointments. Fees are hourly and vary depending on agency, but typically \$18 per hour.	Clients must be previously set up as a client (visited by agency staff for paperwork) and rides subject to staff availability.
Starlite Cab	General taxi transportation for ambulatory clients. For travel outside city limits: Call for price, which is 20% discount for seniors. Cost: \$7 flat fee within City limits Phone: (517) 782-0222	Ambulatory clients
Thome PACE Nursing Home	Medical transportation available to Thome PACE program participants http://umrc.com/thomepace	Thome PACE serves Jackson, Lenawee and Hillsdale counties. Most participants who have both Medicare and Medicaid pay nothing more for PACE services.
Adrian Taxi & Mobility Matters 360	Mobility Matters 360 works alongside governmental agencies that are in need of transportation for their client(s); pharmaceutical companies, HMO Insurance Companies, pharmacies that dispense prescriptions and supplies to consumers; companies that manufacture medical devices and supplies; along with providing transportation for medical appointments. They offer a one-stop shop for transportation service, convenient for all in need of mobility. 217 W. Maumee St., Adrian, MI 49221 Adrian Taxi 517-263-TAXI (8294) Mobility Matters 517-266-RIDE (7433) www.adriantaxi.com	Sedan, shuttle and wheelchair accessible vehicles are available 24 hours a day, 7 days a week, 365 days a year. Office hours are Mon-Fri 8:00 AM – 5:00 PM.

Table Sources:

http://www.referweb.net/UWSE/MatchList.aspx?c;;0;;N;0;0;Transportation;Transportation%20Services;1787;Medical%20Appointments%20Transportation

http://www.jacksonhealthnetwork.org/sites/default/files/community resource list 1.2015 0.pdf

2.5.3 Volunteer Driver Programs

One of the biggest expenses and barriers to providing rural and demand response service is the cost of labor. In some communities, volunteer drivers with clean driving records are recruited to assist their neighbors in getting around. Drivers receive compensation for their mileage, and also the experience of making a positive contribution to their community. Volunteer driver programs can be organized through community and civic organizations, and potentially through the large network of places of worship in Jackson County. Launching a program such as this would also take up-front and ongoing marketing and coordinating investment on behalf of JATA. The case study for Liberty Mobility Now in Section 2.4.3 describes how even structured demand-response programs can recruit volunteer drivers.

The Community Transportation Association of America has a very helpful resource section on its website devoted to all things related to volunteer driver programs (web1.ctaa.org/webmodules/webarticles/anmyiewer.asp?a=776).

Recommendations:

- 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
 - Discuss potential expansion of the existing volunteer driver program in Jackson run by RSVP Catholic Charities
- Explore options and catalog resources necessary to initiate a new volunteer driver program, such as:
 - 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

Case Study - Mid-East Area Agency on Aging Senior Transportation and Rides Program

Mid-East Area Agency on Aging (MEAAA) in Manchester, Missouri operates the Senior Transportation and Rides (STAR) volunteer transportation program. The STAR program serves older adults age 60 and older who live in St. Charles County, Missouri. Eligible clients must be non-drivers or lack access to a vehicle, and live independently. STAR has 16 dedicated volunteers who serve 175 riders annually using their own vehicles. Riders who use wheelchairs are referred to OATS Inc., the specialized transportation provider in the region. Riders may schedule up to three rides per month by contacting the STAR coordinator. In 2012, volunteers provided 1,810 one way rides and drove approximately 33,094 miles. The STAR operating budget is approximately \$40,000 annually.



MEAAA contracts with OATS to provide transportation to medical centers, shopping, and senior centers in the four counties that MEAAA serves. Because OATS operates on a limited basis, it can be difficult for riders to schedule their medical appointments. STAR volunteers can take eligible clients to their medical appointments on a more flexible schedule. Using volunteers gives the program a more personal and neighborly feel. Friendships are formed and volunteers are attuned to listen for any rider issues on which a coordinator can follow up.

Sources:

https://www.n4a.org/files/NCST%20Volunteer%20Transportation%20Info%20Brief.pdf www.seniortransportation.net https://www.agingmissouri.org/Transportation

2.5.4 Fare Structure

In order for JATA to maintain its Reserve-A-Ride service to Jackson County residents who live outside of the urban area of the City of Jackson, they must have a feasible cost structure. While the majority of the transit provided by JATA is funded through federal, state, and local taxes, the fare box revenue also plays a key role in keeping the system in operation. The general goal for the cost structure of the Reserve-A-Ride program is to have prices that are compassionate, consistent, and convenient. Compassionate discounted rates for seniors, students, and persons with disabilities make the service affordable. Having a consistent pricing system that charges riders a similar rate for comparable travel distances can enhance the sustainability of the Reserve-A-Ride system in the long term. A convenient price system that drivers and call center agents can quote easily could simplify using the system for users.

After reviewing the current characteristics of the Reserve-A-Ride cost structure it is evident that users who either start or end in Zones 2 and 3 are paying a disproportionately lower rate than those in beginning and ending in Zone 1. In addition to paying comparatively lower fare percentages relative to the cost of servicing the trip, these riders are potentially also not residents of the City of Jackson, and thus not paying into the tax program that helps to fund JATA. Table 2.4 below shows the average costs to serve these different trips, the associated fare costs, and the percentage of these costs that are covered by fares.

Table 2.4 Reserve-A-Ride Proportional Customer Cost by Zone

		To Zo	one 1	To Zone 2		To Zone 3	
Avg Trip Length (Miles)		1	.6	3.8		10.6	
Avg Trip cost (Cost per mile x Avg Trip Length)	Zone 1	\$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		3	.6	4	.3	11.2	
Avg Trip cost (Cost per mile x Avg Trip Length)	From	\$32.36		\$38.66		\$100.69	
Fare Type	W. W. W. W. W.	Reduced	Full	Reduced	Full	Reduced	Full
Fare	Zone 2	\$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	Avg Trip Length		0.1	11	11.3		
Avg Trip cost (Cost per mile x Avg Trip Length)	From	\$90	0.80	\$10	1.59	N/A for study period	
Fare Туре	Fare Type Fare % of cost covered by fare	Reduced	Full	Reduced	Full		
Fare		\$3.00	\$10.50	\$3.00	\$10.50		
% of cost covered by fare		3%	12%	3%	10%		
2016 Avg Cost per Mile	\$8.99						

- Review and amend current Reserve-A-Ride fare levels to ensure future financial sustainability
- Once other mobility partners are established, explore options to refine cost structure based on partnership and new mobility opportunities (Microtransit, TNC subsidy, etc.)

3. Education and Outreach

The transportation system affects quality of life and provides a link to essential needs and services. This is particularly true of public transportation which, in most cases, provides service to populations with limited incomes or mobility choices. As such, continued public involvement in the implementation of transit service for the Jackson area will be very important. Public input should be solicited and incorporated into the development of future service operations, facilities and marketing. Special attention and effort must be offered to reach out to traditionally underserved populations in future phases of transit implementation. These population groups include residents with greater barriers to accessing employment, education, recreation, and shopping than the population at large.

3.1 Service and Program Awareness

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 directing residents to information 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.

3.1.1 Public Participation Plan

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."

- Create a robust public participation plan and program that identifies:
 - 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

3.2 Marketing

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.

3.2.1 Marketing Plan

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.

According to the American Public Transit Association (APTA) the average transit agency allocates roughly 2% of its annual operating budget for communication and marketing efforts. In 2016 JATA had an operating budget of just over \$4.8 million. That would indicate a marketing budget of roughly \$96,000 would be appropriate for JATA. In this same time period, according to NTD reports, JATA spent just over \$46,000 on such efforts. This budget does not include the cost of producing and installing signage or vehicle graphics as these should be covered under capital budgets.

Recommendations:

- Create a marketing plan that addresses:
 - 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.)

Image 3.1 Marketing Plan (source: Marin Transit)



Strong Transit Identity 3.2.2

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 should be to introduce the new branding 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.

- Strengthen JATA's identity by completing the following:
 - 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.

orunswick **explorer Getting Around Brunswick Just Got Easier.** for Everyone brunswick Explorer

Image 3.2 Example of Strong Transit Identity Design and Collateral (source: transitmarketing.com)

3.2.3 **User-Friendly Materials**

It is important that the public has convenient access to information about the JATA transit services. A user friendly web site to provide basic information about the hours of operation, route schedules and maps, fares, reserve-a-ride services and requirements, and other relevant rider information is very important. The use of social media is an excellent way to communicate news from JATA to current and prospective riders. Additionally, printed informational materials should be distributed in a wide variety of locations and be easily accessible to the public. The availability of system information is essential to developing public awareness of transit services and building ridership.

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.

- 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
- Ensure availability of commonly accessed items like route maps and schedules are mobile friendly
- Task a staff member with website analytics, updates, and social media engagement
- Set monthly goals for social media posts and track and report out social media "reach"/engagement as part of ongoing customer service activities
- 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

User Friendly Resources Case Study: My Way There - Southwest Michigan Planning Commission

The Southwest Michigan Planning Commission (SWMPC) took advantage of a Federal Transit Administration 5317 grant and funding from the Michigan Department of Passenger Transportation to create http://www.mywaythere.org, a one-stop information center for transportation resources in southwest Michigan.

Instead of just focusing on local transit and paratransit services, SWMPC included information on inter-city travel resources, bicycles, taxis as well as carpooling and other modes. The website is an example of the type of resource that JATA could provide to better make residents aware of local services.



3.2.4 Target Markets

For transit marketing efforts to be effective, they must address target groups for whom the transit system will offer distinct advantages. Making potential transit users more aware of the transit services available and how to use them is a key goal of this plan. JATA can begin with building awareness among those individuals and organizations that provide assistance to groups most likely to have a need for public transportation – the gatekeepers who work with low-income families, senior citizens, job seekers, students, and persons with disabilities.

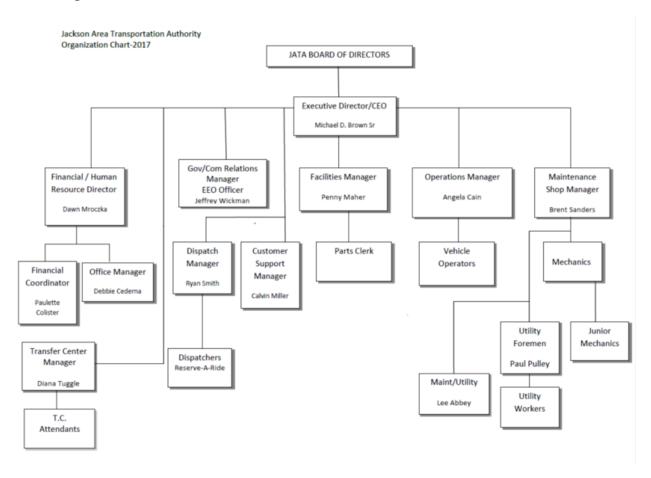
For some populations, including non-English speaking, persons with disabilities, and seniors, the best way to provide transit information is through a "gatekeeper" such as a case worker, language instructor or social service provider. Comprehensive outreach efforts are necessary to ensure that these individuals and organizations have the tools they need to effectively communicate transportation options to their clients.

- Focus marketing activities on target markets including the following groups:
 - Low wage workers and employers of low wage workers
 - Persons with disabilities and the agencies that serve their needs
 - o Low income families and the places they frequent schools, grocery stores etc. in low-income areas
 - o Students of all ages and the schools they attend
 - o 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)

4. Organization and Initiatives Planning

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. However, due to the number of vehicles reaching the end of their useful lives, JATA may require additional mechanic and vehicle maintenance staffing. At this time 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.

Figure 4.1 JATA Organizational Structure



The overall organizational structure is shown in Figure 4.1, 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 desirous. Currently, JATA operates more unlinked trips per full-time employee than any other peer transit agency in the state. In fact, in this metric they outperform SMART and Flint MTA, both of which are much larger agencies (Figure 4.2). 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.

The operations staff, which includes the bus operators and their manager, makes up the largest full-time staff portion (62%), followed by the maintenance crew (21%). Overhead staff includes financial, human resources, community relations, and facilities positions. JATA also has dispatch and transfer center staff.

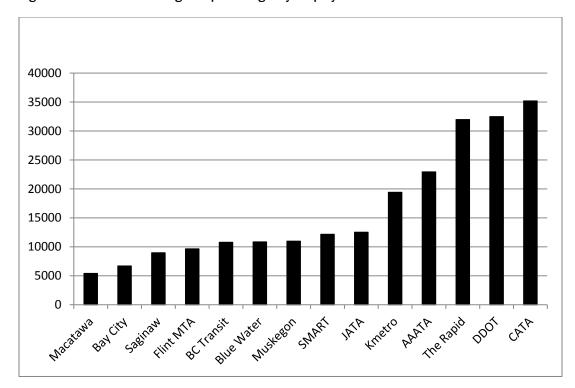


Figure 4.2 Unlinked Passenger Trips Per Agency Employee

4.1 Staffing Levels

The goal of managing staffing levels is to maintain agency workforce capacity in line with peer agencies to provide acceptable service based on JATA's service standards.

4.1.1 Maintenance Staff Levels and Shifts

The prospect of an aging fleet and potential service growth could mean potential strain on maintenance staff. For this reason, additional mechanic and inventory staff are likely needed along with appropriate supervisory capacity 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 at JATA to service vehicles for every 56,000 vehicle revenue miles driven. The equivalent national average is one mechanic per 30,000 annual miles driven. Certain recommendations in this implementation plan would also implicate changes for existing mechanic staffing. For example, 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 additional annual hours that are needed each year for any new or expanded routes or growth in the Reserve-A-Ride program.

As the JATA services continue to expand, it is likely that their span of service will also expand. Having expanded service hours will also require the services of qualified mechanics for extended hours. Having a program of shifts for maintenance staff will be needed to achieve this. Additionally, road calls would occur at prolonged hours if the service span is broadened. Road calls occur when a maintenance vehicle is required to tow or assist a revenue vehicle while it is in service.

Recommendations:

- Staffing levels should correspond with yet-to-be-developed JATA maintenance standards (see Section 4.2.2)
- Maintain a fulltime mechanic for every 30,000 annual miles driven
- Develop a schedule for maintenance staff that allows the mechanics to work in a shift based schedule

4.1.2 Coordinator of Partnerships and New Mobility Initiatives

The concept of mobility management is built on the principle of coordination to maximize efficiency. In order to maximize mobility JATA or R2PC should work within the service area to identify gaps and help to close those gaps by facilitating inter-organizational agreements and relationships, such as between transportation providers, major employment and medical providers, and cities or Jackson County; identifying additional resources; or bringing additional transportation partners together. This collaboration should be at a community, county, or regional level to help improve transportation services. One impactful way to achieve such a high degree of coordination is to create a Mobility Manager position dedicated to forging partnerships and moving forward new mobility initiatives in the region. Nearly all of the recommendations contained in Section 2.4: New Mobility, Technology and Partnership Options could be undertaken by a Mobility Manager.

Recommendations:

 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

Mobility Manager Case Study - Kansas Department of Transportation

Roles and Responsibilities of a Mobility Manager

The core concept of mobility management is that coordination maximizes efficiency. Mobility managers identify and work toward closing service area transportation gaps by facilitating inter-organizational agreements and relationships, such as between transportation providers, major employment and medical providers, and cities or counties. Managers would also identify additional resources or bring additional transportation partners together. Mobility managers might work at a community, county, or regional level to help improve transportation services.

The American Public Transportation Association has outlined three main goals for mobility management professionals:

- Creating partnerships between a diverse range of community organizations (public, private, non-profit, for-profit, etc.) to ensure that transportation resources are coordinated effectively
- 2) Using these partnerships to develop and enhance travel options
- 3) Developing ways to effectively communicate those options to the public to inform customers' decision-making

Funding and Administering a Mobility Management Position

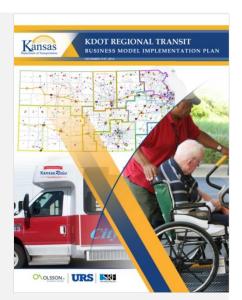
A myriad of models can be applied to funding mobility managers. In Kansas, KDOT committed to funding mobility manager positions within each of its Coordinated Transportation Districts at 100 percent for the first year, and then 80 percent for subsequent years. The local match can be generated through funding agreements either directly with a regional coordination board, or indirectly through multiple transit agencies, cities, and counties through an agreed-upon formula. The overall cost of the position—including salary, benefits, and administration—may be lower if the position is hired through an existing organization such as a transit agency or city or county government. In this scenario, even though a single agency may have "hired" the mobility manager, funding, duties, and oversight for the position could come from a regional coordination board made up of regional representatives. Flint Hills Area Transportation Agency is the most robust example implementing a mobility manager position in the KDOT system.

Sources:

NCHRP Research Report 861 "Best Practices in Rural Regional Mobility" (2017)

KDOT Regional Transit Business Model Implementation Plan (2014):

https://ksdot.org/Assets/wwwksdotorg/bureaus/burTransPlan/pubtrans/pdf/KD0T%20Regional%20Transit%20Business%20Model%20Implementation%20Volume%20I-II.pdf



4.2 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.

4.2.1 Service Standards

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 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 that regularly measure system performance
- Update/review the service standards on an annual basis

4.2.2 Maintenance Standards

While virtually every transit agency uses a basic checklist to conduct preventive maintenance inspections, many, especially smaller agencies like JATA, simply do not have the time or staff to develop instructions for other essential maintenance and repair activities. 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 of maintenance standards is providing managers and workers with a clear set of instructions on how to accomplish specific maintenance tasks. 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. For managers, standard practices help to ensure consistency between jobs regardless of who performs the work. Written practices can easily become part of the agency's training curriculum.

Recommendations:

- 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
 - o Revenue Miles between Road Calls
- Update and review maintenance standards on an regular basis

5. Implementation Strategy

This section summarizes the implementation activities for the various components of the Connecting Jackson County Plan. Activities are identified by category. The responsible party and an estimated time frame are provided. Many activities can be undertaken concurrently, while some are dependent upon other recommendations. The time frames given indicate an estimated range within which the actions could be completed, but does not necessarily indicate when they should be completed or in what order (for prioritized recommendations, see Section 5.2). The estimated ranges for categorizing recommendations - or a combination of ranges if the activity is dependent upon another item - are below:

- Short Term (Short) 6- 12 months
- Mid Term (Mid) 1-3 years
- Long Term (Long) 3-6 years

Cost estimates for many of the recommendations are generalized as low, medium, and high, and not calculated to dollar amounts. This is due to the fact that JATA or other possible implementing agencies could choose a number of different avenues to implement these items. The exception to this generalization is the fixed route service changes, whose additional costs can be estimated using the assumptions provided by the Nation Transit Database (NTD). JATA annually reports data such as average costs per revenue mile, miles traveled, total passengers, etc. The items can be seen in Table 5.1.

Recommendations for implementation are presented by category in Section 5.1 below, while prioritized recommendations are presented in Section 5.2. Not all low cost and short term recommendations are suggested as priority actions; in some cases items long-term and high-cost actions will be most impactful for the Jackson area and its mobility needs.

5.1 Implementation Overview

Below is a summary of all of the Connecting Jackson County Plan recommended actions, organized by report section.

	ction 2: System mprovements	Subsection 2.1: Fixed Route Service Changes					
Goal	Address low riders	hip on existing routes by adding access to destinations desired by riders during the times that customers need.	Cost Estimate	Timeframe	Possible Implementers		
	Route 3	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		
	Southwest Ave	Test initial route changes as a seasonal pilot, and if successful consider as a permanent change	Medium	IVIIU	JATA		
	Route 4 Cooper	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		
	Street	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	Medium	Mid	JAIA		
	Route 5 Lansing Ave	Provide service to Jackson West shopping plaza, including Gordon Food Service	Low	Short	JATA		
2.1.1		Discontinue service to Jackson West, instead turning west along Argyle St. to Laurence Ave. during northbound trip	Medium		JATA, Blackman Twp, Private Partnerships		
	Route 7 Ganson / Blackman	Serve Sam's Club and Kmart shopping area, continue north to Meijer along existing route path		Long			
		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		
	Noute 9 Soper	Operate either inbound or outbound trips on 5th St. to serve the Michigan Center commercial area	LOW	IVIIU	JATA, VA, LEUTI TWP		
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		

	Section 2: System Improvements		Subsection 2.1: Fixed Route Service Changes					
Go	oal	Address low riders	Address low ridership on existing routes by adding access to destinations desired by riders during the times that customers need.		Timeframe	Possible Implementers		
	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, Spribg 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.		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	High	Long			

	ection 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 Implementers				
		Extend weekday hours on existing routes or on new evening routes to at least 11:00 pm	High	Mid	JATA				
2.2.1	Span of Service	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				
2.2.2	Noute Hallsleis	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 expense	es and allow for longer life spans of buses.	Cost Estimate	Timeframe	Possible Implementers	
		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	
2.3.1	Vehicle Lifespans	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 Low 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 Implementers	
		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	
2.4.1	Vanpooling and Carpooling	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	
	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	
2.4.2		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	

Section 2: System Improvements		Subsection 2.4: New Mobility, Technology	and Partnership Opt	ions	
Goal		ss and the high cost of providing traditional fixed route service in low-density parts of the isting programs, and also through piloting new mobility initiatives.	Cost Estimate	Timeframe	Possible Implementers
		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
2.4.2	Makiliku oo a Camica (MacC)	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
2.4.3	Mobility as a Service (MaaS)	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	Microtropolit	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
2.4.4	Microtransit	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
		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
2.4.6	Bike Share	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
		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
2.4.7	Real Time Arrival	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	n 2: System Improvements	Subsection 2.5:	Reserve-A-Ride		
Goal	to access the fixed routes offer	lackson is designed to provide mobility options to customers who may not be able red by JATA. This system needs to efficiently meet service needs in a way that is c. The goal for the Reserve-A-Ride system moving forward is to identify efficiencies	Cost Estimate	Timeframe	Possible Implementers
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 ondemand 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
0.5.0	Medical Programs / Social	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
2.5.2	Service Agencies	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
		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		Short	JATA, R2PC, Jackson County
2.5.3	Volunteer Driver Programs	Explore options and catalog resources necessary to initiate a new volunteer driver program, such as:			
2.0.0	voidinoon Brivoi Frogramo	Deciding whether a volunteer driver program would potentially operate separately from JATA or as a sponsored part of JATA Reserve-A-Ride services		Mid-Long	JATA, R2PC, Jackson County
		Carefully anticipating possible labor issues arising from participating in a volunteer driver program	Low	iviid-Long	JATA, RZPC, Jacksoff County
		Establishing a certification program to ensure drivers are properly trained and safe			
2.5.4	Fore Structure	Review and amend current Reserve-A-Ride fare levels to ensure future financial sustainability	Medium	Mid	JATA
2.5.4	Fare Structure	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		services and how to use them. If users are not aware of the full breadth of service or even turing their ridership is difficult.	Cost Estimate	Timeframe	Possible Implementers		
		Create a robust public participation plan and program that identifies:					
		How JATA incorporates public feedback to produce customer-focused outcomes					
3.1.1	Public Participation Plan	Citizen committees and other ongoing opportunities for residents to participate in JATA planning and project development processes	Low - Medium	m Mid	Mid	MIG I ' '	R2PC, MDOT, JATA, Jackson County, City of Jackson
		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		is an integral part of making it successful. Having a strong brand that is known and respected of JATA's services to gain riders and create a better quality of life for everyone in Jackson.	Cost Estimate	Timeframe	Possible Implementers	
		Create a marketing plan that addresses:				
		Overall system image				
		Graphics				
3.2.1	Marketing Plan	Community outreach	Low - High	Mid	JATA	
		Advertising				
		An appropriate marketing budget				
		Coordination techniques with other organizations				

Section	3: Education and Outreach	Subsection 3.2: Marketing	g				
Goal		is an integral part of making it successful. Having a strong brand that is known and respected of JATA's services to gain riders and create a better quality of life for everyone in Jackson.	Cost Estimate	Timeframe	Possible Implementers		
		Special campaigns					
		Progress indicators for the JATA marketing program (events held, number of brochures distributed, ridership counts, surveys measuring awareness of JATA services etc.)					
		Strengthen JATA's identity by completing the following:					
		Developing a coordinated brand for the transit vehicles, stops, facilities and materials to increase awareness and improve the visibility of the transit network			DODO MDOT JATA Jaskasa		
3.2.2	Strong Transit Identity	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.).	Medium - High	Mid - Long	Mid - Long	Mid - Long	R2PC, MDOT, JATA, Jackson County, City of Jackson
		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.					
		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		
3.2.3	User-Friendly Materials	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		
		Focus marketing activities on target markets including the following groups:					
3.2.4	Target Markets	Low wage workers and employers of low wage workers	Low - Medium	ow - Medium Short - Mid	R2PC, MDOT, JATA, Jackson		
		Persons with disabilities and the agencies that serve their needs			County, City of Jackson		
		Low income families and the places they frequent – schools, grocery stores etc. in low-income areas					

Section	3: Education and Outreach	Subsection 3.2: Marketing				
Goal		is an integral part of making it successful. Having a strong brand that is known and respected f JATA's services to gain riders and create a better quality of life for everyone in Jackson.	Cost Estimate	Timeframe	Possible Implementers	
		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 standards.	with peer agencies to provide acceptable service based on JATA's service	Cost Estimate	Timeframe	Possible Implementers		
	standards (see Section	Staffing levels should correspond with yet-to-be-developed JATA maintenance standards (see Section 4.2.2)	High	Mid	JATA, MDOT, R2PC		
4.1.1		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		and effective bus transit service is the basic premise upon which transit service is public transportations agencies strive to achieve.	Cost Estimate	Timeframe	Possible Implementers			
4.2.1	Service Standards	Develop service standards that include key performance indicators that regularly measure system performance	Medium	Mid	JATA, MDOT, R2PC			
4.2.1 Service Standards		Update/review the service standards on an annual basis	Low	Mid	JATA, MDOT, R2PC			
		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:		Chort Mid	JATA, MDOT, R2PC			
4.2.2	Maintenance Standards	Total Road Calls	Low	Short - Mid				
		Revenue Miles between Road Calls						
		Update and review maintenance standards on an regular basis	Low	Mid	JATA, MDOT, R2PC			

5.2 Financial Costs of Service Implementations

Table 5.1 Estimated Costs of Potential Route Modifications and Pilots

Route	Improvement / Route Change Description	Average Monthly Ridership (2015- 2017)	Current Mileage	New Mileage	Change %	Current Cost / Month (Est)	New Cost / year (Est)	Change in Annual Cost	Phasing
Parnall Road	New proposed route to access mobile home communities, employment and trip activity along Parnall Road with express service to Jackson Crossing	-	-	14.9	100%	-	\$403,979	(\$403,979)	Long Term
Spring Arbor	Pilot service options to Spring Arbor, including local schools, Downtown Spring Arbor and Spring Arbor University, McCain Rd. and Robinson Rd. destinations	-	-	21.6	100%	-	\$585,633	(\$585,633)	Long Term
North / South 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	-	-	10.5	100%	-	\$121,539	(\$121,539)	Mid Term
East / West Evening Route	Combine portions of Route 1 East Michigan and Route 2 West Michigan to run as a pilot between 6pm and 11pm weeknights	-	-	10.5	100%	-	\$121,539	(\$121,539)	Mid Term

Route	Improvement / Route Change Description	Average Monthly Ridership (2015- 2017)	Current Mileage	New Mileage	Change %	Current Cost / Month (Est)	New Cost / year (Est)	Change in Annual Cost	Phasing
Route 3 Southwest Ave	Seasonal routing to serve The Cascades Park and closer service to Polly's Market via Oakdale	4,124	6.76	7.84	14%	\$183,282	\$212,563	(\$29,282)	Short Term
Route 4 Cooper Street	Reduce deviation on northern side of route to stay on Ellery southbound; Provide access south of Michigan to A & A Meat Market and commercial district along Page Avenue	3,171	7.51	8.24	9%	\$203,616	\$223,408	(\$19,792)	Short Term
Route 5 Lansing	Serve "Jackson West" (Gordon Food Service etc.) previously served by Route 7 Ganson Blackman	7,790	6.54	7.29	10%	\$177,317	\$197,651	(\$20,335)	Mid Term
Route 7 Ganson Blackman	Service to Sam's Club, employers (TAC Manufacturing) and Windham Hills housing along County Farm Road. Service to "Jackson West" now provided by Route 5.	3,521	15.2	17.5	13%	\$412,113	\$474,472	(\$62,359)	Mid Term
Route 8 JCC / Da Vinci	Add service to Draper Road and commercial strip along McDevitt, and access for mobile home community in response to customer requests for additional "Vandercook Lake" service	1,833	16.3	17.3	6%	\$441,937	\$469,049	(\$27,113)	Short Term
Route 9 Soper	Operate either inbound or outbound trips on 5th St. to serve the Michigan Center commercial area	NA	10.36	9.67	(7%)	\$79,946	\$74,621	\$5,325	Short Term

5.3 Potential Funding Sources

There are many funding options that are used in other communities but not all options will currently work in Jackson. A key to the successful development and implementation of any plan is the support of stakeholders. In addition to support, funding is needed. The following tables outline several options for funding that are potentially eligible to cover the costs associated with the recommendations documented in this plan. This will give R2PC and JATA, amongst other agencies a snapshot of available funding for adding mobility options to the Jackson community.

Transit Funding 5.3.1

Federal revenues are generally provided by the Federal Transit Administration (FTA) through Sections 5303, 5307, 5308, 5309, 5310, 5311, 5316 and 5317 among others. These federal aid programs for transportation are authorized and defined by multi-year acts affecting federal aid for both highway and public transportation programs. A portion of the Annual Allocation of Section 5307 is used to offset some of the operating costs of the service. Sections 5303, 5304 & 5305 (Metropolitan and Statewide Planning) provide funding to support comprehensive planning for making transportation investment decisions in metropolitan areas and statewide. It helps the transit agency to preserve its ability to continually provide transit services in its service area.

Table 5.2 Federal Funding Options

Program	Eligible Recipient	Eligible Activities
Section 5303	State Departments of Transportation (DOTs) and Metropolitan Planning Organizations (MPOs). Federal planning funds are first apportioned to State DOTs. State DOTs then allocate planning funding to MPOs.	(A) to support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency; (B) to increase the safety of the transportation system for motorized and non-motorized users; (C) to increase the security of the transportation system for motorized and non-motorized users; (D) to increase the accessibility and mobility of people and for freight; (E) to protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns; (F) to enhance the integration and connectivity of the transportation system, across and between modes, for people and freight; (G) to promote efficient system management and operation; and (H) to emphasize the preservation of the existing transportation system. Major new fixed guideway projects, or extension to existing systems financed with New Starts funds, typically receive these funds through a full funding grant agreement that defines the scope of the project and specifies the total multi-year Federal commitment to the project.
Section 5307	Funding is made available to designated recipients that must be public bodies with the legal authority to receive and dispense Federal funds. Governors, responsible local officials and publicly owned operators of transit services are to designate a recipient to apply for, receive, and dispense funds for transportation management areas. Generally, a transportation management area is an urbanized area with a population of 200,000 or over. The Governor or Governor's designee is the designated recipient for urbanized areas between 50,000 and 200,000.	Eligible activities include planning, engineering design and evaluation of transit projects and other technical transportation-related studies; capital investments in bus and bus-related activities such as replacement of buses, overhaul of buses, rebuilding of buses, crime prevention and security equipment and construction of maintenance and passenger facilities; and capital investments in new and existing fixed guideway systems including rolling stock, overhaul and rebuilding of vehicles, track, signals, communications, and computer hardware and software. All preventive maintenance and some Americans with Disabilities Act complementary paratransit service costs are considered capital costs. For urbanized areas with populations less than 200,000, operating assistance is an eligible expense. In these areas, at least one percent of the funding apportioned to each area must be used for transit enhancement activities such as historic preservation, landscaping, public art, pedestrian access, bicycle access, and enhanced access for persons with disabilities. For urbanized areas with 200,000 in population and over, funds are apportioned and flow directly to a designated recipient selected locally to apply for and receive Federal funds. For urbanized areas under 200,000 in population, the funds are apportioned to the Governor of each state for distribution. A few areas under 200,000 in population have been designated as transportation management areas and receive apportionments directly.

Program	Eligible Recipient	Eligible Activities
Section 5308	Eligible applicants under this program are designated recipients, which are entities designated to receive Federal urbanized formula funds under 49 U.S.C. 5307. Applicants must be in areas that are maintenance or nonattainment for ozone or CO.	The current transportation authorization act grants authority to the Secretary to make grants under this section to assist recipients to finance eligible projects such as the following; (1) Purchasing or leasing clean fuel buses, including buses that employ a lightweight composite primary structure and vans for use in revenue service. The purchase or lease of non- revenue vehicles is not an eligible project. (2) Constructing or leasing clean fuel bus facilities or electrical recharging facilities and related equipment. Facilities and related equipment for clean diesel buses are not eligible. (3) Projects relating to clean fuel, biodiesel, hybrid electric, or zero emissions technology buses that exhibit equivalent or superior emissions reductions to existing clean fuel or hybrid electric technologies. Funds made available under this program cannot be used to fund operating expenses or preventive maintenance. Funds made available under this program cannot be used to reimburse projects that have incurred prior eligible expenses without a Letter of No Prejudice (LONP) issued by FTA for the project before the costs are incurred.
Section 5309	Eligible applicants under the New Starts program are public bodies and agencies (transit authorities and other state and local public bodies and agencies thereof) including states, municipalities, other political subdivisions of states; public agencies and instrumentalities of one or more states; and certain public corporations, boards, and commissions established under state law.	Eligible activities are light rail, rapid rail (heavy rail), commuter rail, monorail, automated fixed guideway system (such as a "people mover"), or a busway/high occupancy vehicle (HOV) facility, or an extension of any of these. Projects become candidates for funding under this program by successfully completing the appropriate steps in the major capital investment planning and project development process. Major new fixed guideway projects, or extension to existing systems financed with New Starts funds, typically receive these funds through Full Funding Grant Agreement (New Starts) or a Project Construction Grant Agreement (Small Starts) that defines the scope of the project and specifies the total multi-year Federal commitment to the project.
Section 5310	States are direct recipients. Eligible sub-recipients are private non-profit organizations, governmental authorities where no non-profit organizations are available to provide service and governmental authorities approve to coordinate services.	Capital expenses that support transportation to meet the special needs of older adults and persons with disabilities.
Section 5311	A sub-recipient of the program includes a State or local governmental authority, a nonprofit organization, or an operator of public transportation or intercity bus service that receives federal transit program grant funds indirectly through a recipient.	An eligible recipient may use the funding for capital, operating, and administrative expenses for public transportation projects that meet the needs of rural communities. Examples of eligible activities include: capital projects; operating costs of equipment and facilities for use in public transportation; and the acquisition of public transportation services, including service agreements with private providers of public transportation services. The state must use 15 percent of its annual apportionment to support intercity bus service, unless the Governor certifies, after consultation with affected intercity bus providers that the needs of the state are adequately met.
Section 5316	States and public bodies are eligible designated recipients. Eligible subrecipients are private nonprofit organizations, State or local governments, and operators of public transportation services including private operators of public transportation services.	Capital, planning and operating expenses for projects that transport low income individuals to and from jobs and activities related to employment, and for reverse commute projects.

Program	Eligible Recipient	Eligible Activities
Section 5317	States and public bodies are eligible designated recipients. Eligible subrecipients are private nonprofit organizations, State or local governments, and operators of public transportation services including private operators of public transportation services.	Capital and operating expenses for new public transportation services and new public transportation alternatives beyond those required by the American with Disabilities Act of 1990 (ADA), that are designed to assist individuals with disabilities.
Congestion Mitigation and Air Quality (CMAQ) Improvement Program	Flexible funding source for State and local governments to support transportation projects and programs that help improve air quality and reduce traffic congestion in non- attainment areas.	Could be used for capital projects and some operating expenses.
Veterans Transportation and Community Living Initiative Capital Grants Program	Direct Recipients under FTA's Section 5307 Urbanized Area Formula program, local governments, States, and Indian Tribes.	Available to local governmental agencies to finance capital costs of implementing, expanding, or increasing access to local One-Call/One-Click Transportation Resource Centers. These Centers simplify access to transportation for the public by connecting customers in one place to rides and transportation options provided in their locality by a variety of transportation providers and programs.

5.3.2 Other Mobility Funding Options

Bicycle and pedestrian projects are broadly eligible for funding from nearly all major federal highway, transit, safety, and other programs. To be eligible for federal funding, bicycle projects must be principally for transportation, rather than recreation purposes, and must be designed and located pursuant to the transportation plans required of states and Metropolitan Planning Organizations, and transit agencies.

Table 5.3 Additional Funding Options

Program	Eligible Activities					
Transportation Alternatives Program (TAP) Grants	Transportation Alternatives Program (TAP) is a competitive grant program that uses federal transportation funds for specific activities that enhance the intermodal transportation system and provide safe alternative transportation options.					
National Highway Transportation Safety Administration (NHTSA) 402 Safety Fund	The 402 Safety Fund supports State highway safety programs designed to reduce traffic crashes and resulting deaths, injuries, and property damage, including programs that improve pedestrian and bicycle safety.					
MDNR Recreation Passport Grant Program	The Local Public Recreation Facilities Fund is to be used for the development of public recreation facilities for local units of government.					
Michigan Natural Resources Trust Fund (MNRTF)	The MNRTF projects provide for natural resource protection and outdoor recreation by funding land acquisition and park development projects.					

Program	Eligible Activities
Community Development Block Grant (CDGB) Program	Funds are distributed for projects that consider poverty, population, housing overcrowding, age of housing, and population growth lag in relation to other metropolitan areas.
Surface Transportation Program	The Surface Transportation Program provides states with flexible funds that may be used for a wide variety of projects on any federal-aid highway, bridges on any public road, and transit facilities.
National Highway System	Bicycle and pedestrian facilities within NHS corridors are eligible activities for NHS funds, including projects within interstate rights-of-way (23 U.S.C. 103(b)(6)).
City and Township Millages	Millages can be levied by municipalities in Jackson County to fund specific projects located within the jurisdiction issuing the millage. Funds collected could be used for greenways, onstreet facilities, and transit infrastructure improvements.
Public/private partnerships	Thanks to the generosity of private donors in Michigan, several of the largest and most successful trail projects have been funded in large part by grants from private benefactors, notably Frederik Meijer and the Kresge Foundation. Additionally, some communities hold fund drives to raise private funds or other grants of labor and materials in small increments from the community. Community and private foundations may also provide an important funding source for non-motorized transportation development. For example, MDOT Transportation Enhancement grants will pay for the construction of shared-use path but not for any feasibility studies or engineering work. Foundations can play an important part in filling the gaps left by other funds. Other facility amenities such as picnic grounds or boardwalks may also be paid in part with grants from foundations.