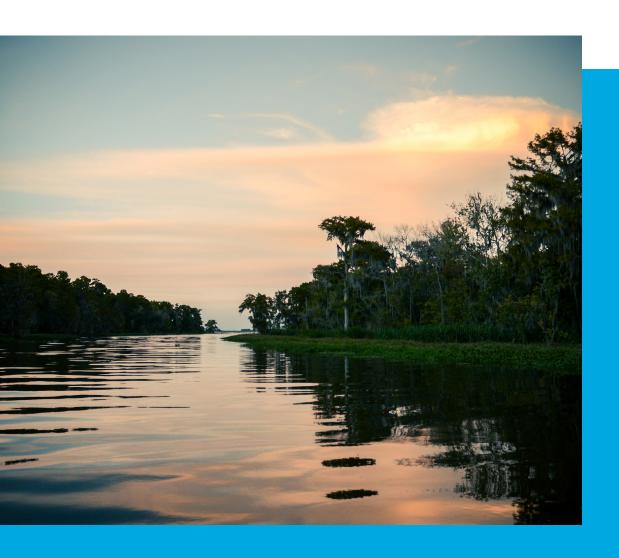


Transit Feasibility Study

River Parishes Transit Authority (RPTA)

December 2020







Executive summary.

This report provides guidance to the River Parishes Transit Authority (RPTA), regarding the feasibility, costs, and benefits of a portfolio of potential transit alternatives in the RPTA service area. Through data analysis and stakeholder interviews, the project team assessed the performance of the current prescheduled demand-response service, the level and distribution of need for public transit throughout St. Charles and St. John parishes, the types of service that could meet those needs, and the financial considerations associated with providing a sustainable transit service.

The study concluded that RPTA's current service suffers from high operating costs and inefficiencies, and that there is a need for improved public transportation in the River Parishes. In particular, the current service lacks the capacity and operational approach to serve all residents that request a ride, while deterring other potential customers with inconsistent service quality. The small group of about 35-40 riders per day that

currently use the service are likely transit dependent, meaning that traveling by private automobile may not be an option because of income, disability, or another reason. In addition to this need for "lifeline" mobility, there may also be an opportunity to provide affordable transportation for community college students in Reserve and Boutte, as well as expanded connections to Jefferson Parish for work commutes.

Further, RPTA has substantial budget challenges. Founded in 2009 as part of Hurricane Katrina recovery efforts, RPTA has largely relied on federal disaster recovery grants requiring no local funding match. As these grant programs have expired, RPTA has struggled to either increase local funding or lower operational costs to align with the reduced budget¹. RPTA's funding will soon only meet about 75-80% of its annual operating expenses.

In assessing the feasibility of different transit service models to meet the needs of River Parish residents, the service analysis determined the following:

¹RPTA has relied on depleting carryover funds from previous grants to fill the budget shortfall.

- Service model and routing: A shared, demandresponse service — where vehicles are routed based on-demand — will provide the most cost-effective transit coverage in St. John and St. Charles parishes.
 Fixed route buses are unlikely to generate enough ridership to justify higher costs, due to low population and employment densities.
- Operating model: RPTA should pursue lower per vehicle hour operating costs to ensure financial sustainability and the potential to add capacity to serve trip denials and new customers. Demand-response vehicle hour costs of neighboring transit services are 22% 40% lower than RPTA's current vehicle hour costs. An alternative operating model or purchased transportation arrangement with lower fixed costs and the ability to incrementally add supply could allow RPTA to achieve annual operating costs of between \$0.72m \$1.1m, while increasing capacity to serve trip requests that are currently denied service.
- Partnerships: Partnerships with neighboring or inzone public transportation providers could consolidate resources and aggregate demand on buses. Given the demand flow from St. James Parish toward the New Orleans area, a partnership between RPTA and St. James could coordinate services that already may overlap, increasing pooling and funding, and potentially lowering overall operational costs. A possible agreement structure would be allowing St. James to serve RPTA customers in corridors with overlapping routes and demand patterns. As another example, St. Charles Council on Aging, which is based in Hahnville, spends ~\$275k per year on transportation for seniors and receives FTA funding. Through a partnership with the Council, RPTA could pool riders and resources, potentially increasing service efficiency and funding.
- Funding: Given the rural nature of St. Charles and St.
 John parishes, a demand-response service allows for
 the maximization of federal funding through the FTA's
 5311 grant program, while fixed route service would
 limit the area and population served therefore reducing
 available formula funding.

Below, we summarize our recommendations for nearterm next steps:

- 1. Issue RFP for more cost-effective purchased transportation. RPTA should determine which alternative operating model is most appropriate and scope an RFP based on this decision. In the interim, RPTA may elect to temporarily extend its current contract to provide enough time to develop a competitive RFP process.
- 2. Outreach to St. James Parish. RPTA should proactively engage St. James to explore a potential partnership between the two agencies. RPTA should examine a reimbursement model where St. James provides trips for RPTA's customers in areas in RPTA's service zone that the St. James transit service currently travels through.
- Outreach to St. Charles Council on Aging. RPTA should proactively engage St. Charles Council on Aging to explore mutual cost advantages from service consolidation.

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SECTION 1

Current transit conditions and system evaluation.

| 1.1 | Methodology |
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Current transit conditions and system evaluation.

Through qualitative and quantitative analyses, we assessed RPTA's current transit system as well as regional conditions that underline the value of a transit system to serve the River Parishes. We concluded the following:

- RPTA's service is significantly more expensive than peer agencies and the national average.

 RPTA pays \$65.20 per trip, which is about 70% higher than peer agencies' demand-response services and the national average, as well as almost three times the cost of a trip in neighboring St. James Parish.

 Although certain RPTA service characteristics pose inherent challenges, the substantial difference in costs suggests there may be an opportunity to adopt mobility strategies that could meaningfully lower RPTA's operating costs.
- The current RPTA service is characterized by a high rate of trip denials. This means those calling RPTA and requesting a ride are sometimes denied service because RPTA does not have capacity to serve their trip. On average, about 10% to 20% of trip requests are denied per day, with as many as 20 trip denials in a day. RPTA does not currently record the origin and destination address of denied trip requests, preventing close analysis of demand patterns for denials. We recommend that RPTA track this data to inform service improvement.

RPTA serves a small group of customers that may rely on the service for most or all of their travel needs. RPTA serves a small group of 35-40 unique riders per day who are likely transit dependent, meaning that traveling by private automobile may not be an option because of income, disability, or another reason. Customers utilize the RPTA service for work commutes, access to healthcare, and shopping. Further, RPTA trips take considerably longer than a private vehicle alternative, which suggests RPTA customers may not have other transportation options.

- Service efficiency challenges are partially due to trip dispersion, geographic barriers, and low trip volume. RPTA provides only about 70 rides per weekday, with the majority of trips to / from the LaPlace area and other trips linearly dispersed along the Highway 44/48 and 18 corridors. Among the dispersed origin-destination pairs, many appear to serve only one customer, inhibiting the ability to efficiently group passengers. Further, limited bridge access adds substantial distance and time to trips between the east and west banks of the Mississippi River.
- Aggregation potential is highest with
 LaPlace Kenner trips. The highest trip volumes
 disproportionately come from travel between LaPlace
 and Kenner, which indicates that a service more
 focused on this specific corridor could allow for
 efficiency improvements.

- RPTA demographics suggest transit demand could be higher. Demographic and socioeconomic indicators of transit need demonstrate a higher number of potential riders than existing low demand volume.
- Opportunities for connectivity with neighboring systems. Neighboring transit systems in St. James and Jefferson parishes, as well as intercity projects such as the proposed Baton Rouge-New Orleans rail system and the former LA Swift commuter bus service, offer models for more efficient regional transit.

1.1 Methodology.

This section evaluates transit conditions in RPTA's service area through the following steps:

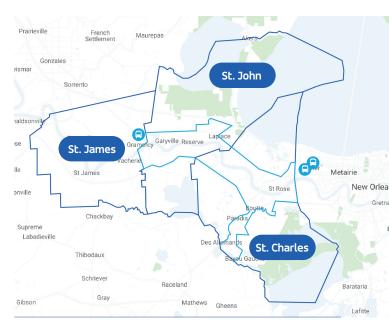
- Comparative analysis with similar transit systems. To better understand how the RPTA service performs, we compared the service against transit systems with similar characteristics as well as national benchmarks, especially on financial aspects such as cost per trip and cost per revenue hour. The analysis provides a basis for the metrics and targets that will measure the success of new and existing transit modes in the region.
- In-depth assessment of RPTA trips. Through
 review of origin and destination data as well as
 stakeholder interviews, we developed a strong
 understanding of RPTA ridership demographics,
 travel patterns, and use cases. We also identified
 and evaluated challenges to providing transit service
 efficiently in the service area.
- Transit market analysis. We collected demographic
 and socioeconomic data to assess the value of transit
 in the service area. This spatial analysis provides a basis
 for our understanding of potential transit ridership not
 currently using the existing demand-response service.
- Regional transit systems and intercity mobility
 projects. To evaluate opportunities for enhanced
 regional connectivity, we examined neighboring transit
 systems as well as past, present, and proposed intercity
 mobility projects. This provides us with a framework to

assess service designs that maximize access to adjacent parishes while improving service efficiency.

1.2 Service background.

The River Parishes Transit Authority (RPTA) provides a curb-to-curb, demand-response service in the populated areas of St. John the Baptist and St. Charles parishes, which are part of the New Orleans Metropolitan Area. The service zone is approximately 143 square miles and extends into neighboring St. James and Jefferson parishes at selected stops to provide transfers to neighboring transit systems, Jefferson Transit (JeT) and St. James Parish Transit.

- Hours: The service operates Monday through Friday from 5:00am to 7:30pm and Saturday from 5:30am to 7:30pm.
- Vehicles: The services utilizes three 10-12 passenger vehicles at peak service. All of RPTA's vehicles are ADA accessible.
- Customer notes: Customers must schedule rides 24 hours in advance, and there is a 29-minute pickup window. Fare for a one-way trip is \$2.00.



The RPTA service area is in light blue, and the boundary lines for each parish are dark blue. St. James Parish is also under RPTA's jurisdiction, but runs a separate transit service along its Mississippi River corridor.

1.3 Comparative service analysis.

In the following table, we compare RPTA service characteristics with about 20 demand-response services operated by agencies with similar service population size, residential density, and annual volume of trips². We also provide the national demand-response average for each metric as well as the neighboring St. James Parish's transit service performance. As shown, RPTA's cost-per-trip and cost-per-vehicle-revenue-hour are significantly higher than peer agencies, the national average, and St. James, which suggests there may be room for improvement.

| | Cost per passenger | Cost per vehicle revenue hour ³ | Service area density" | Service area population | Total trips per year | Passengers per vehicle revenue hour | Vehicle revenue miles | Average trip length (miles) | Vehicle revenue hours |
|----------------------|-----------------------|---|-----------------------------|-------------------------------|----------------------------|--|-----------------------------|-----------------------------------|-----------------------------|
| RPTA | \$65.20 | 97.02 | 690 | 98,704 | 18,227 | 1.5 | 237,496 | 13.0 | 12,249 |
| St. James Parish⁵ | \$23.41 | \$58.14 | | | 41,805 | 2.5 | 268,265 | 6.4 | 16,834 |
| Peer average | \$37.32 | \$73.44 | 813 | 123,659 | 29,406 | 2.0 | 211,057 | 7.6 | 15,067 |
| Peer median | \$39.12 | \$64.30 | 725 | 120,099 | 22,326 | 1.9 | 204,023 | 9.1 | 14,986 |
| National average | \$39.51 | \$72.88 | | | | 1.8 | | 9.4 | |

Measures of cost per trip and cost per vehicle revenue hour are important indicators of service efficiency. Cost per trip minus the average fare collected demonstrates how much a public transit authority must subsidize each ride — with \$2 fares, this means RPTA pays about \$63.20 per trip. Comparatively, RPTA's cost per trip is about 70% higher than the peer and national averages, and almost three times the cost of a St. James trip. If RPTA could lower the cost per trip by as little as 10% to \$58.70, it could save almost \$120,000 per year on its operating costs.

Cost per trip is derived from (a) the cost of a vehicle revenue hour, and (b) how many passengers an operator can transport per vehicle revenue hour. RPTA's service transports 1.5 passengers per hour, which suggests that its 10-12 seat buses only hold 1-2 passengers on average. As shown in the table above,

this is lower than the peer and national averages, as well as St. James, which indicates that the RPTA service is less efficient. By increasing the number of passengers transported per hour, RPTA would need fewer vehicle revenue hours to serve the same number of trips, therefore reducing the cost of each trip.

The cost per vehicle revenue hour breaks down total operating costs to the price of one vehicle transporting passengers for one hour. This can include driver wages, vehicle maintenance, fuel, dispatch labor, overhead, and profit margin. Lowering the cost per hour depends on spending less for these underlying factors. Although these costs can be reflective of unique local conditions, RPTA's vehicle revenue hour costs are about 33% higher than the peer and national averages, and 67% higher than neighboring St. James.

²Data retrieved from 2018 NTD Data Reports.

³ NTD defines vehicle revenue hours as the hours that vehicles travel when "available to the general public and there is an expectation of carrying passengers." In short, vehicle revenue hours exclude deadhead.

⁴Measured as people per square mile within the service area.

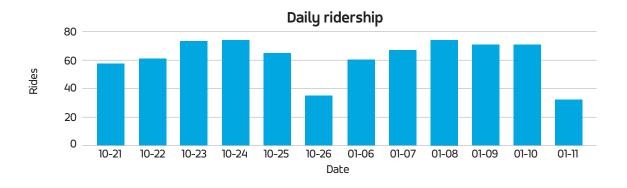
⁵Service area population and density were not reported by St. James Dept of Human Resources, which oversees its transit service.

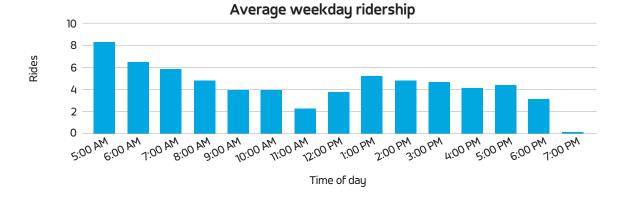
1.4 Current RPTA ridership.

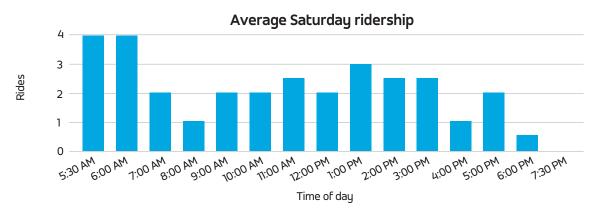
RPTA serves a small group of customers that likely rely on the service for most or all of their travel needs. There are about 35 to 40 unique riders during weekdays and about 20 unique riders on weekends, with customers mostly booking round trips. Both weekday and weekend ridership trends illustrate an early morning peak and an early afternoon mini-peak, which suggests a segment of riders may use the service for work commutes. Riders also use the service for medical trips (e.g. dialysis), shopping, and trips to the airport (which may also be for

commutes to jobs at the airport), among other reasons.⁶

In the following charts, we illustrate weekly and daily ridership trends for the RPTA service. There is a median of 69 trips per weekday, and 34 trips per Saturday. As shown, the busiest hour during weekdays (5am-6am) only averages about 8 trips across the two weeks of trips data, illustrating relatively low trip volumes even during peak times. It is important to note that the difference between a "peak" and "nonpeak" period is only a few rides.

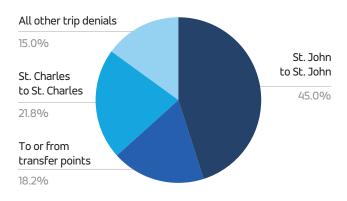






^{**}RPTA provided trips data for 10/21/19 - 10/26/19 and 1/06/20 - 1/11/20, which included origins, destinations, and pickup and dropoff times.

Trip type for denials in February 2020



Trip denials.

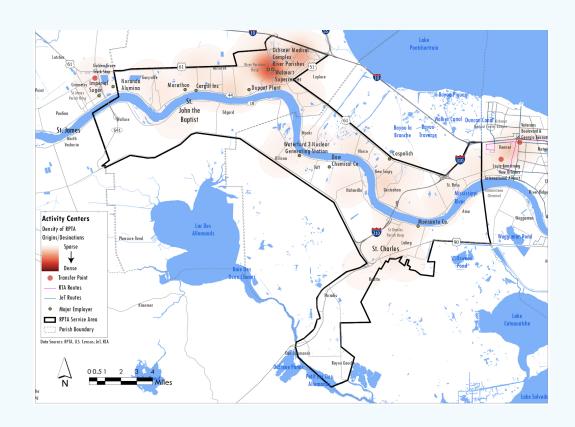
The current RPTA service is characterized by a high rate of trip denials, which means those calling RPTA and requesting a ride are sometimes denied service because RPTA does not have capacity to serve their trip. On average, about 10% to 20% of trip requests are denied per day, with as many as 20 trip denials in a day. Thus, RPTA actually has more customers than it is currently capable of serving.

 $^{7}\mbox{This}$ is based on trip denial data provided by RPTA. The data analyzed is pre-COVID.

As shown in the chart to the right, the highest percentage of trip denials occur for trip requests within St. John. However, RPTA does not track the origin and destination address of denied trip requests (just the parish), so the project team could not ascertain particular demand patterns for denials. We recommend RPTA track this data in order to identify residents unserved by the current RPTA service, which would help inform plans for service improvement.

Spatial demand patterns.

As shown in the map below, most RPTA trips are to / from the LaPlace area, with other trips linearly dispersed along the Highway 44/48 and 18 corridors. Key trip generators include the airport, Walmart, Ochsner Medical Complex and other medical facilities, and transfers to Jefferson Transit (JeT) in Kenner. The low trip volume, wide distribution of origins and destinations, and limited bridge access between the east and west banks create obstacles for grouping customers together efficiently. These factors partially explain RPTA's high average trip length, illustrated in more detail on the following map.



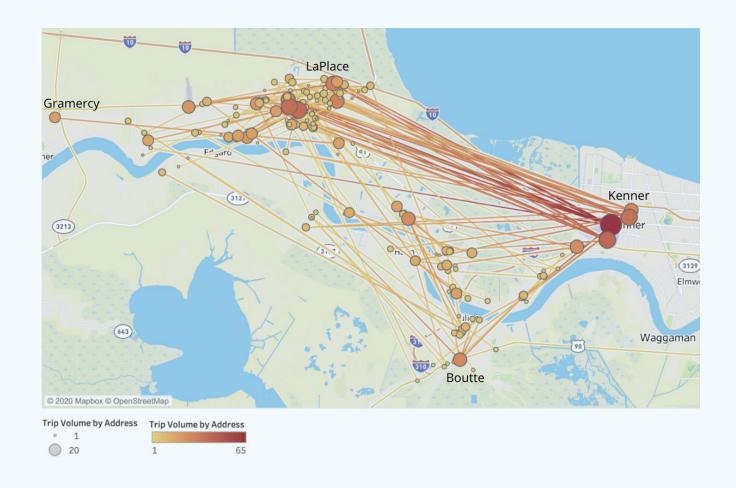
Route patterns.

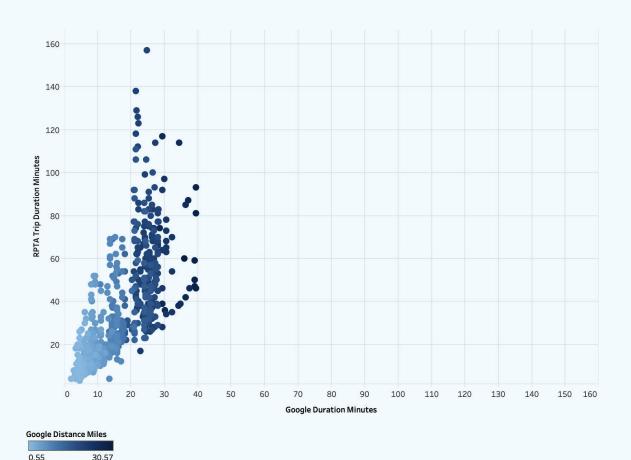
To develop a clearer picture of RPTA travel paths, we connected origins and destinations in the map below. We identified several patterns:

Long trip lengths. As shown, there are a number of long trips which can inhibit service efficiency — actual trip lengths are longer due to operator efforts to group passengers together, which creates detours. Trip distance is also underrepresented by the fact that trips between the east and west banks are not direct due to limited bridge access.

Unique destinations for individual customers. Given the low trip volume, there are a number of unique origin and destination pairs, such as between LaPlace and Gramercy. This suggests that only one rider may be regularly traveling to certain destinations, which limits the ability to pool customers.

Disproportionately high trip volume between LaPlace and Kenner. The relatively high volume of trips between LaPlace and Kenner implies the potential to improve the aggregation of customers along this specific corridor.





Transit vs. private vehicle

RPTA trip times are much higher than a rider would experience if using a private vehicle for the same trip, which, along with anecdotal information from the RPTA team and other stakeholders, implies that customers may be transit dependent.⁸ Average ride time among all RPTA trips is about 30 minutes, while almost 15% of trips reviewed had a ride time of an hour or greater.

Using Google API, we computed the estimated duration of each RPTA trip as if the trip were completed by a private vehicle. On average, direct trips were about 16 minutes shorter, with some trips being over an hour shorter than the RPTA equivalent. Given there are few limits to parking in the service area to this substantial difference implies that River Parish residents would

be heavily inclined to use a private vehicle if one were available or feasible. The difference in trip times also doesn't account for other convenience factors, such as the ability to travel spontaneously with a private vehicle as opposed to scheduling an RPTA ride at least 24 hours in advance.

In the chart below, we illustrate the difference in trip durations between an RPTA trip and an estimated private vehicle alternative. For each origin-destination trip pair, the x-axis shows the estimated trip duration if an RPTA rider used a private vehicle, while the y-axis shows the actual RPTA ride time. As shown, RPTA trips across the dataset have demonstrably longer durations, with trips of similar duration likely indicating when an RPTA customer did not need to share a ride.

⁸Travel by private automobile may not be an option because of income, disability, or another reason.

⁹It is important to note that Google trip durations are not historical, meaning the Google duration may not account for unexpected events that occurred on the day of the actual trip, such as heightened traffic or road closures. Further, dropoff times might not always be accurate if, for example, a driver forgot to log a dropoff.

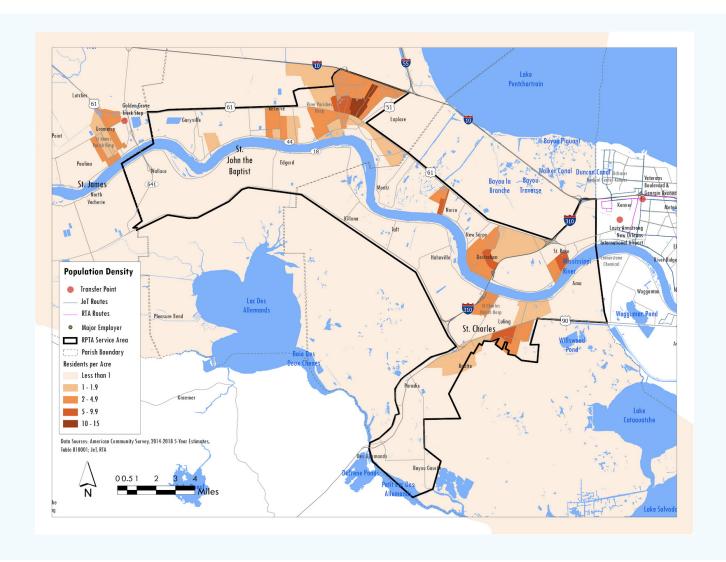
¹⁰Limited parking is also an important factor for choosing transit.

1.5 Transit market analysis.

In addition to assessing the performance of the existing RPTA demand-response service, we assessed the potential market for transit services in the RPTA service area by reviewing indicators of transit need and propensity to use transit such as population, employment, age, income, vehicle ownership, and more. This provides the foundation for developing new transit modes by understanding where potential riders live and work, as well as the location of other key trip generators. In brief, transit demand appears concentrated in the LaPlace-Kenner corridor, while indicators of transit need in the more populated areas of St. John and St. Charles show greater potential demand for transit.

Population density.

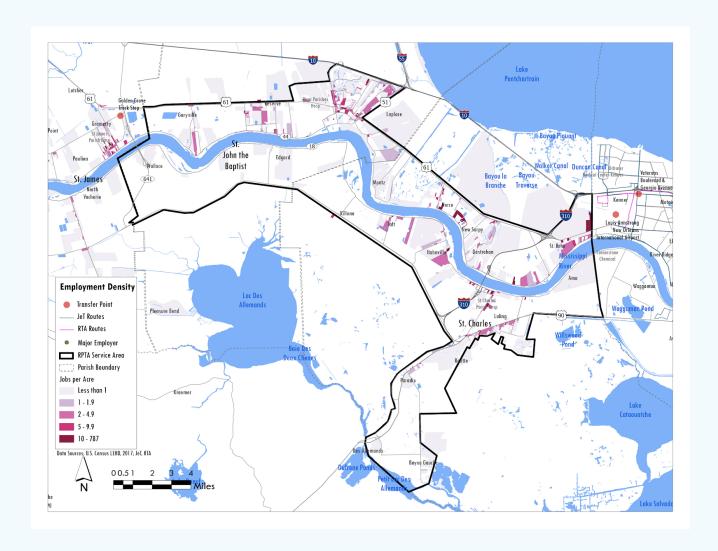
The map below shows population density by census block. The RPTA service zone has a total population of about 96,700 persons within an approximately 143 square mile service area. At a high level, much of the service area is sparsely populated with pockets of density linearly distributed along the Mississippi River corridor. Most of the population resides on the east bank, with persons on the west bank primarily concentrated in the Luling / Boutte area. LaPlace is the most populated area in the service zone with about 30,000 persons, almost a third of the total service area population. Population density corresponds closely with the density of actual RPTA trips, as illustrated on page 11.



Employment density.

The map below shows the location of employers in the service area. The colors indicate the density of jobs in a particular location, with areas in dark red indicating sites of high employment density. St. Charles and St. John have a large presence of oil and gas, petrochemical, and agricultural companies, such as Bayer Crop Science (Monsanto) in Luling and Valero and Shell in the Norco / New Sarpy area. However,

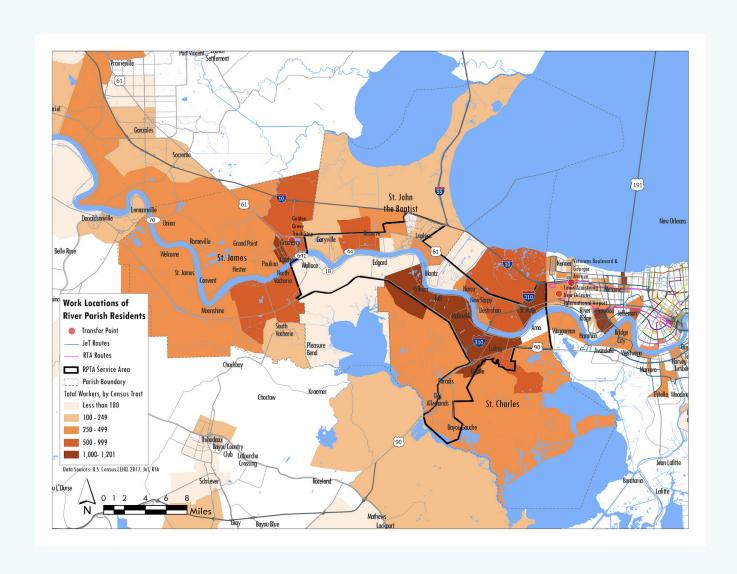
based on trips data analysis, it does not appear that RPTA ridership utilizes the demand-response service to access these job types. Based on conversations with stakeholders, industrial plant and office workers likely use a private vehicle or may benefit from corporate shuttle programs. In turn, riders that use the RPTA service for commutes likely travel to jobs outside of the service area, given the bulk of trips during peak commute times are to transfer points in Kenner.



Employment locations.

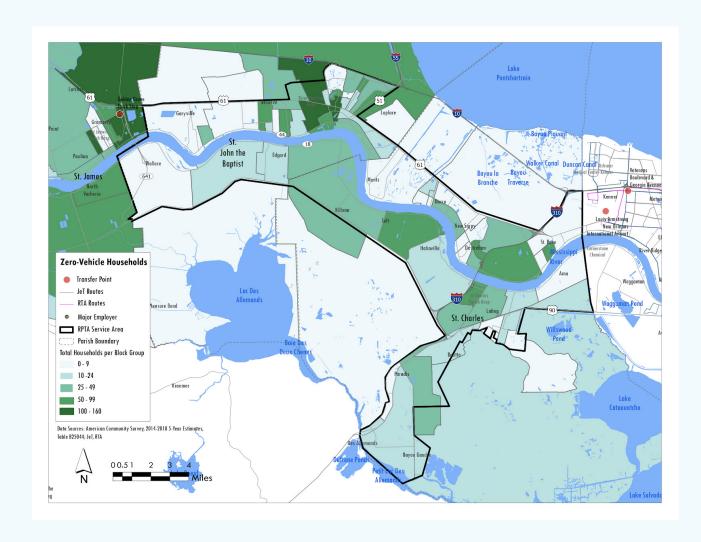
The following map shows the work locations for residents of St. John and St. Charles. In particular, this map shows that a significant number of St. John and St. Charles residents commute to jobs in neighboring parishes. As discussed previously, a segment of RPTA

ridership utilizes the service for transfers in order to access jobs, especially in Jefferson Parish. The map shows that residents commute to jobs on both the east and west banks, and highlights the value of interconnectivity between regional transit systems for River Parish residents.



Zero-vehicle households.

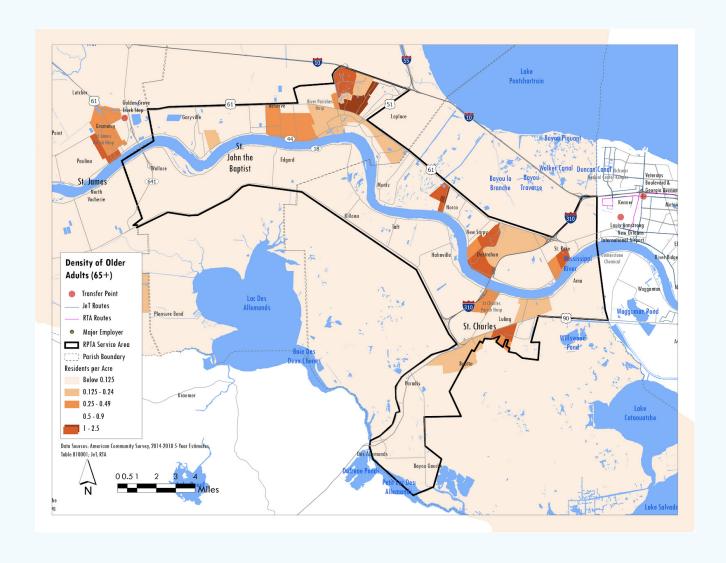
The map below shows the number of households that do not own a vehicle. Households without access to a private vehicle are more likely to rely on transit. Certain areas of LaPlace have relatively high numbers of households without vehicles, as well as census blocks in St. Charles that include Destrehan, Luling, St. Rose, and Hahnville / Taft. This could be indicative of greater transit need.



Senior population.

The map below shows the density of persons aged 65+ by census block. Seniors more frequently depend on transit

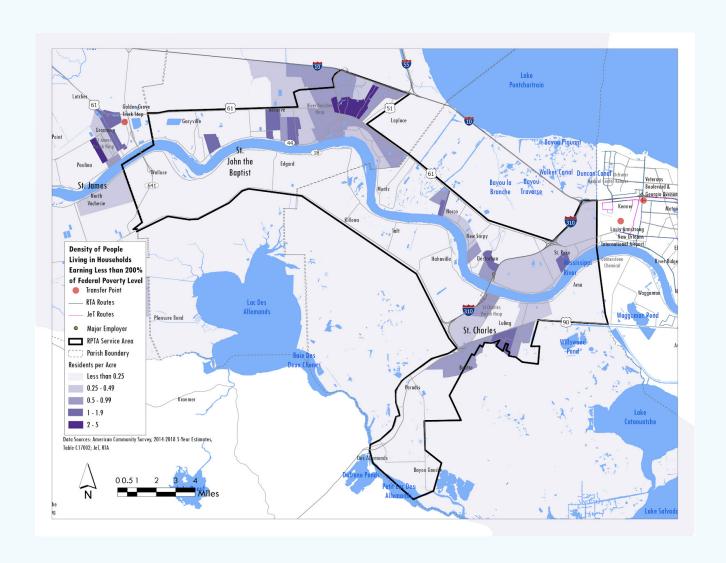
given they are less likely to be able to drive a private vehicle as compared to other demographics. This map matches closely with population density, with the exception of a slightly larger concentration of seniors in Norco.



Low-income households.

The map below shows the density of people living in households that earn less than 200% of the federal poverty level." Low-income households rely on public transportation more frequently than other demographics given that transportation can account

for a significant portion of total household expenses. This demographic can also be indicative of latent transit demand if transit access, reliability, and convenience improves relative to a private vehicle. This map tracks closely to population density in the service area.



¹¹This ranges based on household size. For example, this would be \$25,520 for an individual, and \$52,400 for a household of four persons.

1.6 Regional transit overview

The River Parishes are part of the Baton Rouge-New Orleans region, a group of parishes lying along the I-10 corridor. For the River Parishes, transit connection to the New Orleans area in particular provides residents access to jobs and amenities. In the following section, we examine neighboring transit systems that connect to the RPTA's service, as well as regional mobility projects that could further enhance regional connectivity.

Connectivity with neighboring transit systems:

- St. James Parish Transit. St. James runs a deviated fixed route service along highways 44 and 18, which includes both the east and west bank. The service utilizes about 15 vehicles and provides over 40,000 trips per year. Despite St. James falling under RPTA's jurisdiction, the service runs independently within St. James Parish only. RPTA provides a transfer point in St. James (Gramercy), and allows St. James residents to schedule RPTA trips. Although only one unique RPTA rider appears to use this transfer, it is possible that extending the St. James service into St. John or vice versa may serve latent demand and could consolidate resources.
- Jefferson Transit (JeT) and New Orleans Regional Transit Authority (RTA). JeT provides fixed route transit access throughout Jefferson Parish and in parts of Orleans Parish (e.g. New Orleans CBD), while RTA provides fixed route service throughout Orleans Parish, including bus and streetcar routes, with several transit lines that extend to Kenner in Jefferson Parish. The overlap between the services has spurred coordination between the two agencies, such as the Regional Ride pass, which allows customers to pay one fare to ride both transit systems. RPTA currently has transfer points in Jefferson Parish that allow for connections to JeT, and could identify similar opportunities for improved coordination with the neighboring transit systems.

Past and proposed regional mobility projects:

- Baton Rouge-New Orleans Intercity Rail System.

 This proposed passenger rail line between Baton Rouge and New Orleans would include a stop in LaPlace, which could create an important connection point in the River Parishes. A recent paper estimates that the LaPlace stop will account for 44,631 boardings annually, which is about 860 boardings per week. Further, the paper outlines a multimodal transportation hub that could be built in LaPlace if train service is initiated. This project has the potential to attract significant transit ridership in the River Parishes by providing a convenient commuter service across the Baton Rouge-New Orleans region. That said, the project still has not received necessary funding, and it is unclear the near-term path to implementation.
- New Links. The New Orleans Regional Planning
 Commission (NORPC) is currently engaging in a
 transit network redesign for public transportation in
 Orleans, Jefferson, and St. Bernard Parishes (all to
 the east of the River Parishes). The project is jointly
 run by NORPC and RTA, in collaboration with JeT
 and St. Bernard Urban Rapid Transit (SBURT), and
 will generate a network redesign plan for all available
 transit modes (bus, streetcar, ferry) in the defined area.
 Although the scope does not include the River Parishes,
 the New Links project provides an opportunity for
 RPTA to engage with neighboring transit systems that
 transport River Parish residents and be part of the
 broader rethinking of regional transit access.
- LA Swift. Between 2005 and 2013, the LA Swift bus provided intercity service between Baton Rouge and New Orleans, and it included stops in LaPlace and Kenner. At only \$5 per trip, the service was very popular and increased regional transit access, initially as part of the Katrina rebuilding effort, but eventually lost funding. The service ran on a set schedule four ride times in both the morning and evening and served regular commutes, among other trip types. Such a service could potentially address RPTA's largest trip volume between LaPlace and Kenner, and preview the LaPlace multimodal hub model in advance of the intercity train service.

¹²LaPlace Multi-Modal Transportation Center Plan (link here).

SECTION 2

Operational and management alternatives.

| 2.1 | Traditional purchased |
|-----|-------------------------|
| | operations and |
| | maintenance or direct |
| | operations + technology |
| 2.2 | Turnkey bundled |
| | service costs |
| | assumptions / inputs |
| 2.3 | Partnerships |

Operational and management alternatives.

RPTA's current operational model limits the volume and quality of transit service provided in the River Parishes service area due to its high costs. This operational model does not provide enough capacity to serve existing demand within the current budget, resulting in a high rate of trip denials. Lowering operational costs may allow RPTA to both meet existing demand and potentially add the capacity necessary to better meet customer needs and even to attract new ridership with a higher quality of service.

To assess operational and management alternatives, we examined regional cost comparisons to understand RPTA's position relative to peer agencies, feasibility and value of technology integration that could increase service efficiency, feasibility and value of partnerships with neighboring transit agencies and local entities, zand different models for purchased or directly operated transportation. We concluded the following:

 RPTA could likely achieve lower operating costs through alternative operating models. RPTA's current cost per vehicle hour is substantially higher than regional transit agencies (e.g., St. James Parish, Terrebonne Parish, and Jefferson Parish), peer agencies that have similar characteristics (e.g., population density, service area size, number of annual trips, etc.), and the national average.¹³ This strongly suggests RPTA could lower its operating costs through several potential approaches — for example by directly operating a service, by partnering with a neighboring entity like St. James Parish that may be able to serve the RPTA service area at a lower cost, by purchasing transportation services at a lower cost per vehicle hour, or potentially by pursuing an alternative operating model like turnkey bundled service or a TNC partnership. If RPTA continues to purchase transportation services, when the agency next issues a Request for Proposals (RFP) it should seek to achieve a cost per vehicle hour that is competitive with average regional and national costs (at least 20%-25% lower than current costs).14

| RPTA cost per revenue hour | Regional cost per revenue hour for demand-response | National averages per reve- nue hour for demand-response | |
|----------------------------|---|---|--|
| \$97 | St. James Parish \$58 Direct operations Terrebonne Parish \$67 Direct operations Jefferson Parish \$76 Purchased transportation | Direct operations \$60 Purchased transportation \$66 | |

This operating cost difference is not explained by RPTA purchasing transportation, while other agencies may operate transit directly. Other factors that underlie vehicle hour costs (e.g., driver pay, vehicle maintenance, miles driven) and efficiency (e.g. trips per vehicle hour) are main determinants, and can be tied to regional and local market characteristics.

¹⁴RPTA's current operational contract includes grants management, which has been cited by the operator as a key contributor to RTPA's comparatively high operating costs. These functions may be handled more efficiently by the parish governments that support RPTA.

• A technology platform could reduce operating costs and improve quality of service for demand-response. As technology advances, some providers utilize transit technology platforms that perform automated, algorithmic routing and trip assignment, which has the potential to increase service efficiency with higher rates of vehicle sharing and reduction in the number of staff required to manage and operate the service. Further, some providers also have a mobile application where riders can book trips, pay fares, and monitor their vehicle in real-time, as well as allow both pre-scheduled and on-demand rides using the same technology platform.

On the next two pages, we summarize the costs and benefits of alternative operating models:

| Purchased Transportation | |
|--|---|
| Traditional operations & maintenance model (current model). RPTA covers capital costs, acquires technology, and bids out operations. | Pros Competitive vendor pool may offer lower costs Implementation of technology may create efficiencies and quality of service gains Cons RPTA still separately covers capital costs Separate operations and technology RFPs require additional administrative hassle RPTA relies on vendor instead of direct in-house management To achieve savings, RPTA may need to exclude grants management and procurement from the purchased transportation contract by in-housing these services within a member government or through a separate contract Estimated cost savings \$10-\$40 per vehicle hour, depending on new vendor operating rates and fleet size¹⁵ |
| Turnkey Bundled Service. One contractor provides all aspects of the transit service, including technology, vehicles, drivers, and operations management. | Pros Distributed costs across multiple services, lowering RPTA fixed costs Configured technology in the provision of service directly by operator, maximizing efficiencies Greater flexibility to incrementally expand service (e.g., adding an additional vehicle) Cons RPTA relies on vendor instead of direct in-house management To achieve savings, RPTA may need to exclude grants management and procurement from the contract by in-housing these services within a member government or by addressing them through a separate contract Estimated cost savings \$30-\$50 per vehicle hour, depending on new vendor operating rates and fleet size |

¹⁵ This is based on our review of purchased transportation costs for comparable agencies in the region and national averages.

Direct Operations

Pros

- RPTA has direct control over operations, using their employees to supply the necessary labor to operate the revenue vehicles and manage the service
- RPTA may be able to leverage resources from parish governments, helping control costs

RPTA directly operates the transit service.

RPTA takes operations in-house and does not use third-party vendors for primary functions.

Cons

- RPTA would need to obtain operations know-how to set up and manage service
- RPTA would need to hire and train employees

Estimated cost savings

\$10-\$40 per vehicle hour; however, upfront costs may be higher, while savings may be delayed

Upfront costs include technology installation and licensing, driver devices (e.g., tablets), a vehicle storage facility, and employee acquisition costs.

Partnerships

Intergovernmental agreement with St. James Parish. St. James Parish serves all trip requests in RPTA's service zone. RPTA funds the delivery of trips by St. James Parish, and may pursue a small contract with a mobility management firm for program administration.¹⁶

St. James Parish serves all trip requests in RPTA's service zone. RPTA funds the delivery of trips by St. James Parish, and may pursue a small contract with a mobility management firm for program administration.

Pros

- Reduce overall operating costs in overlap areas
- Expand transit access in areas poorly served by current RPTA service
- Consolidate funding across services that overlap

Cons

· Loss of RPTA direct oversight of transit service

Estimated cost savings

\$20-\$50 per vehicle hour, depending on type of partnership and trip volume provided by St. James

¹⁶RPTA could also pursue a partnership where St. James only serves a portion of RPTA trips. However, this partnership may require RPTA to still purchase or directly operate its own transit service. Depending on demand patterns serviced by St. James, RPTA may also be able to dispatch the remaining trips to TNCs, precluding the need for contracted or direct operations.

2.1 Traditional purchased operations and maintenance or direct operations + technology.

The following model itemizes expected costs if RPTA chooses to purchase transportation and technology separately (or provide operations in-house). Upfront

costs include one-time (or initial) expenses required to start the service. Ongoing operational costs include all recurring expenses throughout service delivery. As shown in the "Estimated Range" column of the Ongoing Operational Costs table, the attractiveness of this model is largely tied to the cost per vehicle hour of the contractor or RPTA if directly operated.

| Cost | Estimated range | Description |
|----------------------------|--|---|
| Type of cost | US\$ (one-time expenses) | Details of cost category |
| Vehicle acquisition | ~\$35,000 per van ~\$50,000 per WAV van ~\$66,000 per cutaway bus | Cost of acquiring vehicles for the service (assuming they are not already available). This may include vehicle registration costs, wraps (branding), retrofitting for accessibility, and more. |
| Driver acquisition | Depends on RPTA recruiting process and requirements. Provided by third-party operator if purchased transportation. | Cost to hire and train drivers for the service. Note that drivers providing ADA-compliant services may need additional, specialized training. |
| Hardware and data plans | \$200 -500 per tablet plus ongoing data plan subscription | Cost to purchase tablets, mounts, chargers, and dispatcher hardware (computer, phone, etc.) Each device will require an active data plan. A Mobile Device Management (MDM) plan may also be required to ensure tablets are only used for business purposes. |
| Software installation fees | \$20,000 - \$50,000 | Software installation fees vary depending on the provider provider and the size of the deployment. |
| Marketing | \$10,000 - \$40,000 | Cost to market the service prior to launch, ensuring riders are aware of any changes. This includes the cost of providing referral incentives (e.g., refer a friend and get \$5). |

Ongoing Operational Costs

| Cost | Estimated range | Description |
|---|---|---|
| Type of cost | US\$ (one-time expenses) | Details of cost category |
| Vehicle maintenance | Demand-response cost per operating hour - comparison statistics | RPTA would either contract with a 3rd-party vehicle operator to manage ongoing vehicle maintenance, or would provide maintenance with its own staff. |
| Driver pay | RPTA \$97 St. James Parish \$58 Terrebonne Parish \$67 | Dependent on employment model but typically uses salaried agency/municipality drivers. |
| Operations management / customer service | Jefferson Parish \$76 | A third-party contractor or RPTA would manage the service. Usually this requires at least one person at all times. This individual would act as a dispatcher, receiving phone bookings, managing driver issues, and more. |
| Software licensing fees | \$20,000 - \$60,000 / year | Software installation fees vary depending on the provider and the size of the deployment. |

Thttps://www.transit.dot.gov/ntd

2.2 Turnkey bundled service costs assumptions / inputs.

The turnkey bundled service model may allow RPTA to benefit from a contractor with distributed costs across multiple services, as well as better integration of technology, to achieve lower overhead. Variable costs are distilled into a fully-loaded vehicle hour cost, which includes recurring technology fees, vehicle leases, driver pay, and customer service. Fixed costs include IT, local operations support, insurance, vehicle branding, etc.

| Category | |
|--|-------------|
| Fixed costs* | ~\$205,000 |
| Variable costs per hour* | |
| Vehicle cost | \$13.00 |
| Driver pay | \$16.00 |
| Incremental WAV driver pay ¹⁸ | \$2.00 |
| Customer service cost ¹⁹ | \$25.00 |
| Fully-loaded cost - 3 vehicles* | \$54 - \$72 |
| Fully-loaded cost - 4 vehicles* | \$46 - \$62 |
| Fully-loaded cost - 5-10 vehicles* | \$36 - \$58 |

^{*}Costs based on Via operational experience and market research. Costs are representative and not fully inclusive of all fixed and variable line items (IT, local operations support, insurance, vehicle branding, etc.)

 $^{^{\}mbox{\tiny 19}}$ Customer service cost is per service hour, rather than per vehicle hour.



Turnkey bundled service examples.

Birmingham On-Demand | Birmingham, AL The City of Birmingham partnered with Via Transportation to provide operations, vehicles, and technology for an on-demand transit service that serves areas in central and western Birmingham. These Birmingham communities were historically dissatisfied with their existing fixed transit service, and Birmingham On-Demand was launched to fill service gaps with a more flexible transit option. The service provides access to key areas of employment and important trip generators, such as a hospital, university, and regional transit center, and has become an important transportation mode for lowincome communities, with 60% of ridership having household income below \$50,000. The service utilizes 6-seat vans (as shown below), which allow for lower maintenance and fuel costs than cutaway buses. Customers can book and monitor trips in a

2. On-Request Microtransit Ride Service | Lancaster, CA

mobile app. Fares are \$1.50 for a one-way trip.

Antelope Valley Transit Authority (AVTA) partnered with a local operator, AV Transportation Services, and technology provider, RideCo, to provide a turnkey demand-response transit service in rural northern Los Angeles County communities, serving an approximately 1,000 square mile area. The

service replaced legacy paratransit technology in order to increase service efficiency and quality, and the service accommodates a variety of use cases, including ADA customers, general population, evening service, and non-emergency medical transportation (NEMT). Customers can schedule rides by phone or through a mobile app on their smartphone. When booking a ride, customers select a 30 minute pickup window and can monitor rides in real-time. Fares are \$1.50 for a one-way trip.

3. Arlington On-Demand | Arlington, TX

In September 2017, the Arlington City Council opted to replace a low-volume fixed route bus, the Metro Arlington Xpress ("MAX"), with an ondemand turnkey bundled service provided by Via Transportation. Before MAX, Arlington was the largest U.S. city without public transportation. In December 2017, Via launched Arlington On-Demand, which today features a fleet of 22 custom-branded Mercedes Metris vans. The service provides first and last mile connections to the regional transit system with service to and from the CentrePoint Transit Station, which connects to commuter rail, fixed route bus, and airport shuttles. Customers book rides using a mobile app or by phone, and can pay with a credit or debit card, or a prepaid card for unbanked users. Customers pay a flat \$3 fare per person per trip to travel anywhere within the service zone.

2.3 Partnerships.

Pursuing partnerships with neighboring and local transit providers could allow RPTA to expand transit access, reduce operating costs, and increase funding. We recommend that RPTA develop partnerships with St. James Parish and St. Charles Council on Aging given the overlap in service area and customer base. While JeT and RTA provide neighboring transit services, extending their fixed route networks into RPTA's service zone would be quite limited at best (only serving small areas of St. Charles), and the customer travel patterns for JeT and RTA may not justify an extension to serve their residents.

St. James Parish Transit. St. James runs an independent deviated fixed route service along Highways 44 and 18, which includes both the east and west bank, and also transports St. James residents to locations in RPTA's service zone as well as Jefferson Parish. Given the demand flow from St. James toward the New Orleans area, a partnership between RPTA and St. James could coordinate services that already may overlap, increasing pooling and funding, and potentially lowering overall operational costs. A possible agreement structure would be allowing St. James to serve RPTA customers in corridors with overlapping routes and demand patterns. Further, St. James is part of RPTA, which may help expedite the formation of a successful partnership.

St. Charles Council on Aging and other local partnerships. St. Charles Council on Aging, which is based in Hahnville, spends ~\$275k per year on transportation for seniors and receives FTA funding. It is likely seniors using this service may have trip origins and destinations similar to RPTA customers. By partnering with the Council, RPTA could consolidate resources (i.e., add much needed vehicle capacity), generate efficiencies by serving a larger customer base, and potentially increase its funding. In this partnership structure, RPTA would provide service and the Council would reimburse RPTA. In particular, RPTA may be able to jointly apply for FTA 5310 funds with the Council.

Jefferson Transit (JeT) and New Orleans Regional Transit Authority (RTA). JeT provides fixed route transit access throughout Jefferson Parish and in parts of Orleans Parish (e.g. New Orleans CBD), while RTA

provides fixed route service throughout Orleans Parish, including bus and streetcar routes, with several transit lines that extend to Kenner in Jefferson Parish. RTA's enabling legislation authorizes RTA to contract service to parishes outside its jurisdiction if such a contract is "not in conflict with the overall master plan of the authority." JeT's governing code does not specify processes for extending service beyond its jurisdiction. For both JeT and RTA, extending fixed route service into RPTA's service zone would require the political will, funding, and clear benefits to current JeT and RTA customers. It is unlikely these elements are fulfilled given travel patterns for JeT and RTA customers are primarily focused on access to New Orleans if originating from Kenner. Further, even if an agreement is reached, JeT or RTA would likely only add several stops in St. Charles, which would not serve most of the RPTA service zone.

SECTION 3

Transit service analysis.

| 3.1 | Demand-response |
|-----|---|
| 3.2 | Hybrid |
| 3.3 | Fixed routes |
| 3.4 | Transportation Network Companies (TNCs) |

Transit service analysis.

In order to weigh the feasibility of service alternatives that could meet the transit needs identified by the project team, two main variables were considered — vehicles hours and quality of service — across several service models: demandresponse, fixed route, hybrid, and TNC partnership.

For each model, we assessed the number of vehicle hours required to serve different levels of demand, which is a function of fleet size, service hours, demand patterns, and shift lengths. The more vehicle hours that are required, the more expensive the service will be to operate. We also examined quality of service, which is measured by several factors. This includes wait time, which is the time between requesting a ride and being picked up (in a dynamic ondemand service) or the difference between the scheduled pickup time and the actual pickup time (in a pre-scheduled service), and walking distance, which refers to the distance (if any) a rider is asked to walk to meet a vehicle.

We concluded that an improved demand-response service

would most cost effectively serve the transit needs of RPTA's current and potential ridership and flexibly allow for growth. We summarize our findings below.

Demand-Response. A prescheduled, demand-response should provide the most cost-effective coverage as compared to other service models, balancing efficiency, convenience, and quality of service.21 We examined several different demand-response service designs, including the current RPTA service, reduced service in the west bank, separate zones for St. Charles and St. John parishes, and the impact of the proposed Baton Rouge-New Orleans Intercity Rail System. We concluded that, given expected ride volume and trip dispersion, adjusting the demand-response service design from its current form has minimal impact on service efficiency.²² However, the acquisition of demand-response transit technology, adding an additional vehicle to address capacity constraints, and implementing negotiated trip times as a new business rule could allow RPTA to provide a more efficient and higher quality service.

| | Service characteristics | | Estimated annual operating costs (includes tech) | | | | |
|---------------------------------------|-------------------------|--------------------|--|----------------------|-----------------------------------|----------------------------------|--|
| | Rides per day | Peak fleet size | Annual vehicle hours | Current (\$97/hr) | Terrebonne Parish (\$67/hr) | St. James Parish (\$58/hr) | Average turnkey bundled Ser- vice (\$50/hr) |
| RPTA 2019 | Max 70 | 3 | 12,300 | 1,200,000 | | | |
| Current demand including trip denials | 90 | 4 | 14,400 | 1,420,800 | \$988,800 | \$859,200 | \$720,000 |

²⁰ For fixed route, this is measured by service frequency (e.g., the next bus is coming in 30 minutes).

²¹ In addition to a prescheduled service, we also examined a service where all trips can be booked on-demand, meaning a vehicle will arrive 5-45 minutes after it has been requested. RPTA currently lacks the trip volume and density to support a cost-effective on-demand service. An on-demand service will perform better in denser, higher-demand areas of the parishes, and may become more feasible as demand grows over time.

²² The exception is separate St. Charles and St. John zones, which would require significantly more vehicle hours to run both services independently, while reducing where customers can travel.

Fixed Route. Fixed route service would not be not effective or efficient in St. Charles and St. John parishes due to the lack of population density and the wide dispersion of trip demand. We examined five potential routes connecting the more populated areas, and we found that fixed route service would require substantially more vehicle hours for far less coverage than demand-response. This service model would require substantial investment from RPTA without a commensurate increase in ridership to justify the investment.

Hybrid. This model refers to a bus that is responsive to demand, but has limited stops — a hybrid between demand-response and fixed route. This model potentially allows for greater service efficiency than demand-response by limiting where vehicles will travel to pickup; and fixed route by only deploying vehicles if there is demand. However, given the low density and rural nature of the RPTA service area, it is likely that many customers will not be within walking distance of designated stops, and therefore may find the service inconvenient or inaccessible, resulting in very low ridership.

TNC Partnership. Transportation Network Companies (TNCs) may be able to replace a portion of RPTA trips at lower cost — in this model, RPTA might partner with one or more TNCs and subsidize trips taken by eligible RPTA customers. However, there are several potential drawbacks limiting the feasibility of TNCs being a standalone option: (1) TNCs are not available at all times and in all areas of St. John and St. Charles parishes; (2) RPTA would need to supplement TNCs with an accessible service, which may offset cost benefits; (3) federal funding may not be provided if the TNC service does not meet certain criteria.

3.1 Demand-response.

Unlike fixed route service, where vehicles regularly run on a preset route and schedule, demand-response provides for greater flexibility, allowing operators to build and adjust routes based on actual demand and enabling door-to-door pickups and dropoffs. RPTA's current service is demand-response, which is very common among rural transit providers due to lack of demand density and the resulting wide dispersion of origins and destinations.

Despite providing potentially greater coverage than fixed route alternatives, RPTA's current service suffers from a high rate of trip denials — which means those calling RPTA and requesting a ride are denied service because RPTA does not have capacity to serve the trip — as well as lateness, which may discourage riders from attempting to use the service. These factors suggest that even if demand-response is the preferred mode, RPTA should adjust service delivery.

Based on our analysis, we recommend the following:

- prevent trip denials, and improve the customer experience. Advanced transit technology could allow RPTA to provide more trips with fewer vehicle hours, by leveraging routing and matching algorithms. Dynamically updated trip manifests will reduce lateness, given drivers can be automatically re-routed based on live service events (e.g., traffic, road closures).
- Increase fleet size to address capacity constraints. To meet existing RPTA demand (including trip denials), our simulations show that RPTA needs four vehicles at peak, which would require the acquisition of an additional vehicle. Controlling operating costs (on a per vehicle hour basis) could help RPTA to grow its fleet while controlling budget.
- Implement negotiated trip time windows. RPTA currently denies trips that do not fit into its run schedule, which can fill up quickly. By implementing negotiated trip time windows, RPTA could negotiate a pickup or dropoff time within one hour of the scheduled time, allowing for considerably greater routing flexibility. This process can be aided by scheduling software which can automatically determine the optimal negotiated time and overall run schedule.

Below, we show the results of simulating different demand scenarios within the current RPTA service zone. Through these simulations using Via's proprietary tool, we derived the number of vehicles required at peak and estimated the annual vehicle hours. These results assume the use of a technology platform with algorithmic routing. We then estimated annual operating costs by multiplying annual vehicle hours by each cost per hour scenario, and added technology costs to this figure.

| | Service characteristics | | | Estimated annual operating costs (includes tech) | | | |
|---------------------------------------|-------------------------|--------------------|----------------------------|--|--|----------------------------------|--|
| | Rides per day | Peak fleet size | Annual vehicle hours | Current (\$97/hr) | Terre- bonne Parish (\$67/hr) | St. James Parish (\$58/hr) | Average turn- key bundled service (\$50/hr) |
| RPTA 2019 | Max 70 | 3 | 12,300 | \$1,200,000 | | | |
| Current served demand | 70 | 3 | 11,700 | \$1,152,900 | \$801,900 | \$696,600 | \$585,000 |
| Current demand including trip denials | 90 | 4 | 14,400 | \$1,420,800 | \$988,800 | \$859,200 | \$720,000 |
| Medium demand increase | 150 | 7 | 23,800 | \$2,350,600 | \$1,636,600 | \$1,422,400 | \$1,190,000 |
| High demand increase | 250 | 10 | 35,800 | \$3,532,600 | \$2,458,600 | \$2,136,400 | \$1,790,000 |

3.2 Hybrid.

With advanced technology, a hybrid demand-response and fixed route service could operate as a dynamic bus, where customers can access transit at selected stops, but vehicles are only deployed if there is demand. Without new technology, RPTA could operate a deviated fixed route system, where a bus operates on a fixed route and schedule, but will accommodate pickups or dropoffs at a specific address if it's within a certain distance from the route (e.g., 3/4 mile).

A dynamic bus would work as follows:

 There would be selected stops throughout RPTA's service zone, with accessible locations in most towns. RPTA would ultimately choose the number and location of stops, but the stops could also be flexibly adjusted to meet demand if desirable.

- 2. A technology platform determines the most efficient routes based on actual demand.
- Vehicles are not used if demand doesn't require it, reducing vehicle hours and miles relative to a fixed route (or deviated fixed route) alternative.

This model does result in a significant reduction in annual vehicle hours relative to RPTA's current service. However, given the low density of the RPTA service area it is likely that many customers will not be within walking distance of designated stops, and therefore may find the service inconvenient or inaccessible. RPTA could allow the dynamic bus to also provide door-to-door service for ADA customers, which would increase the number of annual vehicle hours.

| | Service characteristics | | | Estimated annual operating costs (includes tech) | | | |
|--------------------------------|-------------------------|--------------------|----------------------------|---|--|----------------------------------|--|
| | Rides per day | Peak fleet size | Annual vehicle hours | Current (\$97/hr) | Terre- bonne Parish (\$67/hr) | St. James Parish (\$58/hr) | Average turn- key bundled service (\$50/hr) |
| RPTA 2019 | Max 70 | 3 | 12,300 | \$1,200,000 | | | |
| Dynamic bus with limited stops | 90 | 3 | 10,400 | \$1,026,800 | \$714,800 | \$621,200 | \$520,000 |

3.3 Fixed routes.

Although traditional fixed route transit is effective along densely populated urban corridors, it is not cost-effective in lower-density areas where many potential customers would live beyond a reasonable walking distance from a bus stop. In the RPTA service area, at present fixed route service would be inefficient due to lack of population density, dispersion of trip origins and destinations, and the accessibility needs of RPTA riders. If fixed route service were implemented at the expense of the existing demandresponse service, geographic transit coverage would decrease, and many RPTA customers would lose access to critical mobility. In the map on page 36, we present several potential routes, based on conversations with RPTA and analysis of existing conditions. While we do not recommend the implementation of these routes at this time, as development proceeds it may make sense to implement one or more of these routes in the future.

- Airline Highway (Hwy 61) Route would operate between MSY and the Golden Grove truck stop across the St. James Parish line, linking two of RPTA's current transfer points to neighboring parishes. This route includes key destinations in LaPlace, such as Ochsner Medical Complex and Walmart, as well as connections throughout the east bank in both St. Charles and St. John parishes.
- Garyville Route would run from Main Street and Airline Highway in Laplace to River Road, to LA 54, connecting residents and industrials, such as Cargill

- and Marathon, between Garyville and LaPlace, linking to the Airline Highway Route.
- LaPlace Loop runs along Hwy 61 and local roads within the LaPlace area, linking Belle Terre Blvd, Hwy 51, and E 5th Street to key trip generators on Airline Highway.
- Destrehan Line runs along State Highway 48 from
 Destrehan to St. Rose, providing connections to the
 post office, industrials along River Road (e.g., Valero),
 and grocery stores, and covers populated areas of the
 east bank in St. Charles.
- Luling Loop cycles between Luling and Boutte, along
 Hwy 18, Paul Maillard Rd, Hwy 90, and Barton Ave,
 providing connections to key local destinations, such as
 the St. Charles Parish Hospital, Walmart, and the new
 River Parishes Community College campus in Boutte.

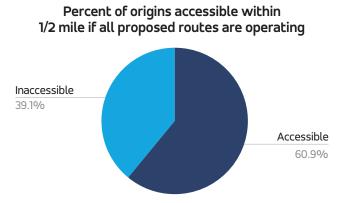
Our analysis of fixed routes is summarized as follows:

• Higher costs than demand-response. Fixed route service with significant coverage requires substantially more vehicle hours than demand-response. Assuming RPTA pays a similar cost per vehicle hour (and fixed route operating costs are in fact sometimes higher than demand-response costs), fixed route service would be much more expensive, as shown in the chart below. Further, RPTA would need to provide complementary ADA service for those unable to access the fixed route bus, adding to costs.²³

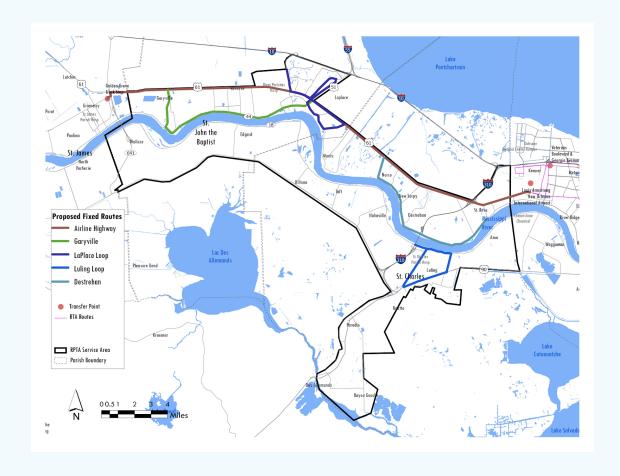
| Fixed route | Frequency (Minutes) | Vehicles | Round-trip length (miles) | Round-trip length (min- utes) | Annual vehicle hours | Estimated annual operating cost (\$97/Hr) |
|---------------------|------------------------|----------|------------------------------|-------------------------------------|-------------------------|--|
| RPTA 2019 (DR) | | 3 | | | 12,300 | \$1,200,000 |
| Airline Highway | 60 | 3 | 60.2 | 181 | 13,00 | 1,261,000 |
| Hwy 48 (River Road) | 60 | 1 | 19.2 | 58 | 4,400 | \$426,800 |
| LaPlace Loop | 60-80 | 1 | 17 | 56 | 4,400 | \$426,800 |
| Garyville Route | 80 | 1 | 24.6 | 74 | 4,400 | \$426,800 |
| Luling Loop | 30 | 1 | 10 | 30 | 4,400 | \$426,800 |
| Total | | 7 | | | 30,600 | 2,968,200 |

²³This is based on current RPTA demand-response operating costs.

• Reduced coverage. Any proposed fixed route network would reduce possible trip origins and destinations as compared to a door-to-door demand-response service. While RPTA, in theory, currently serves all trip requests within the service area, a fixed route network would require residents to walk to designated bus stops, which will be too far away for certain customers and inaccessible for those with mobility challenges or those who lack first- and last-mile transportation to and from bus stops.



| | Percent of trips accessible within 1/4 mile | Percent of trips accessible within 1/2 mile |
|--------------------|--|--|
| Airline Highway | 21% | 28% |
| Garyville Loop | 7% | 11% |
| Hwy 48 (Destrehan) | 4% | 10% |
| LaPlace Loop | 22% | 26% |
| Luling Loop | 6% | 6% |



3.4 Transportation Network Companies (TNCs).

TNCs could replace a large proportion of RPTA trips at a lower cost than the current service; however, the overall cost of a service incorporating TNCs may meet or exceed the cost of other alternative operating models, and quality of service may be limited, because of the following considerations:

- Supplemental service would be necessary to ensure accessible vehicle options, and adds substantial operating costs. TNCs would not be able to accommodate ADA requirements, cash fares, and phone bookings
- Trips are available for some, but not all, locations and at most, but not all times. Trips originating west of LaPlace are a particular challenge.

- Receipt of FTA funding is dependent on a number of conditions being met, including:
 - The TNC service is generally considered shared ride service (few if any private rides)
 - Equivalent service is provided for ADA customers
 - Title VI issues are addressed (e.g., phone booking for customers without smartphones)
 - FTA driver requirements are met (e.g., drug and alcohol testing)

Below, we estimate the costs of utilizing TNCs to serve RPTA customers, while also providing a supplementary service for those who require accessible vehicles or those who live outside the TNC availability area. We derived the average cost per TNC trip using an internal tool, which used actual RPTA trips data.

| | Rides per day | Avg cost per trip | Estimated annual trips | Trips served by TNC | Trips served by accessible vehicle | TNC cost | Accessible vehicle cost (\$97 Per hour) | Estimated annual operating cost |
|---------------------------------------|------------------|----------------------|------------------------------|---------------------------|---|-----------|--|--|
| RPTA 2019 | Max 70 | \$68.75 | 17,486 | | | | | \$1,200,000 |
| TNCs serve majority of trips | 90 | \$16.57 | 21,840 | 16,380 | 5,460 | \$271,417 | \$529,620 | \$801,037 |

TNC partnership examples.²⁴

Pinellas Suncoast Transit Authority (PSTA) | Pinellas County, FL

In a partnership with Uber and United Taxi, PSTA paid up to \$5 toward first-/last-mile Uber and United Taxi rides to and from selected bus stops or transit stations. The objective was to provide more costeffective first- and last-mile transit connections in areas that would lose fixed route service. On Uber, the \$5 discount is given when a person enters the code "UBER2PSTA" in the payment section of the Uber app. PSTA expanded this program to provide unemployed or low-income residents up to 25 discounted Uber, taxi, or wheelchair transport rides to and from work per month when PSTA fixed route service is unavailable. TD Late Shift participants must pre-enroll with PSTA to become eligible for the program. Participants pay \$11 per month for a discounted PSTA transit pass (regular value \$70) and an additional \$9 per month for up to 25 Uber, United Taxi, or Care Ride rides per month.

Livermore Amador Valley Transit Authority (LAVTA) | Livermore, CA

LAVTA partnered with Uber and Lyft to replace eliminated bus routes with ridehail services for firstand last-mile connections. LAVTA also partnered with DeSoto Cab Company to provide wheelchair accessible rides and allow for cash payment and ride requests by phone. The service, called "GoDublin!", provides a 50% discount (up to \$5) for trips that start and end within Dublin city limits (a six-squaremile region). Only shared rides booked through UberPOOL, Lyft Line, or DeSoto Share are eligible for the promotion.

Network Companies (TNCs)



SECTION 4

Evaluation of funding.

| 4.1 | Federal Funding |
|-----|---------------------|
| | Programs |
| 4.2 | State Mass |
| | Transit Fund |
| 4.3 | Fares |
| 4.4 | Additional Potentia |
| | Funding Sources |

Evaluation of funding.

Founded in 2009 as part of Hurricane Katrina recovery efforts, RPTA has largely relied on federal disaster recovery grants requiring no local funding match. ²⁵ As these grant programs have expired, RPTA's operational costs have exceeded current funding sources, including federal FTA grants which do require a local match. As a result, RPTA has relied on dwindling carryover funds from previous grants to cover as much as 20%-25% of annual operating costs.

To help meet this budget shortfall, the St. Charles Parish Government recently increased their funding contribution from \$125,000 to \$275,000 per year. However, if funding sources and operating costs remain the same, RPTA will still be short about \$240,000 - \$300,000 on an annual basis.

To assess RPTA revenues, we examined federal and state grant programs, local partnerships, Medicaid reimbursement, and alternative fare structures. We concluded that:

 A demand-response service maximizes federal funding. A demand-response service allows for RPTA to receive a greater amount of FTA 5311 grant funds, which is the most significant revenue contributor, relative to other service models, such as fixed route and a TNC partnership. RPTA may also be able to increase its 5311 allocation by demonstrating greater project need (e.g., more service vehicles, higher ridership, partnerships with local agencies).

- New partnerships may bring additional funding sources. RPTA has the potential to increase funding with local partnerships, such as a partnership with St. Charles Council on Aging, or by pursuing a contract for Medicaid reimbursement for non-emergency medical trips (NEMT) at the state level.
- Fare-structure changes may increase revenue but could reduce ridership while minimally addressing budget shortfalls. We examined both flat fare price increases and a distance-based fare model which may result in higher fare revenues. However, some customers may be sensitive to price increases, and therefore reduce their consumption of RPTA's service, and the increased revenues would still remain a small fraction of current operating costs.

A Regular FTA formula funding requires grant recipients to contribute to the total capital or operational costs incurred.

Below, we summarize RPTA's current funding sources:

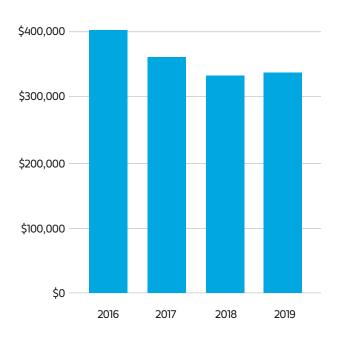
| Recurring funding type ²⁶ | Amount |
|--|---|
| FTA 5311 Non-Urbanized Area Grants | ~\$338,000 (assuming pre-COVID reported costs) |
| FTA 5307 Urbanized Area Grants (operating assistance) | \$56,000 - \$63,000 |
| State Mass Transit Fund | \$75,000 |
| Fares | \$35,000 - \$36,000 (assuming pre-COVID ridership) |
| St. Charles Parish government | \$275,000 |
| St. John Parish government | \$125,000 |
| Total | ~\$910,000 |
| Carryover funds | \$240,000 - \$300,000 |

4.1 Federal funding programs.

RPTA currently receives funding from both FTA's urbanized and non-urbanized area grant programs, given the mix of urbanized and non-urbanized areas in RPTA's service zone. A demand-response service maximizes available federal grant funding, as compared to fixed route service, due to a larger area and population served that is eligible for 5311 funding. A fixed route service would likely reduce 5311 funding given lower coverage and eligible trips, with 5307 funding remaining at similar levels.

FTA 5311 Non-Urbanized Area Grants — RPTA receives the majority of its federal grant funding — about \$338,000 per year — from the FTA's 5311 program, which provides capital, planning, and operating assistance to states to support public transportation in rural areas with populations of less than 50,000. Typically, the federal share is 80% for capital projects, 50% for operating assistance. The FTA's 5311 grant program is allocated by the Louisiana Department of Transportation and Development

RPTA's 5311 Funding



ERPTA also received a one-time grant of \$749,528 from the CARES Act, which is expected to fill budget shortfalls until June 2021.

(DOTD), and each year RPTA must apply and demonstrate project need for the receipt of federal funds.

In our 5311 funding analysis, we found the following:

- RPTA could potentially increase its 5311 funding allocation. RPTA's current 5311 grant allocation is significantly less than 50% of operating costs, even excluding other non-local funding sources. DOTD may allocate a funding amount lower than RPTA's eligible federal share if DOTD determines that the project budget exceeds project need (e.g., number of passenger trips, passenger miles), or if there are physical limits based on the allocation formula (e.g., population, non-urbanized service area). To potentially obtain a larger 5311 funding allocation, RPTA must demonstrate clear project need and potential, such as:
 - Higher ridership
 - o Larger fleet size
 - Commitments from other local agencies to purchase or share service²⁷

FTA 5307 Urbanized Area Grants — RPTA currently receives about \$60,000 per year in operating assistance from the FTA's 5307 program, which requires a 50% local match. RPTA also receives capital assistance (e.g., replacement vehicles, replacement radios), which requires a 20% local match. The 5307 program provides transit capital and operating assistance to urbanized areas, defined as an incorporated area with a population of 50,000 or more. As RPTA's service zone becomes more urbanized, the Authority may become eligible for additional 5307 funds.

RPTA's 5307 operating assistance



4.2 State mass transit fund.

DOTD's Mass Transit Program provides funding for eligible cities or parishes for transit systems. To fund this program, DOTD transfers \$5 million in federal highway funds on an annual basis. Program revenues have remained constant since at least FY16-17. RPTA currently receives \$75,000 from this program, and a greater allocation would likely require redistributing funding from other recipients.

4.3 Fares.

Fare recovery ratio, or the percentage of operating costs recouped by fare revenue, is a function of ridership, fare price, and operating costs. RPTA only recoups about 3% of operating costs with current revenue, which is largely due to low ridership and high operating costs. While adjusting fare structure may result in some increased revenue, fare revenue will continue to cover a tiny fraction of total operating costs if RPTA does not grow ridership or reduce operating costs.

Fares need to strike a balance between being affordable and ensuring the service is financially viable. In the tables below, we examine two different fare models: (1) a flat fare with potential price increases; and, (2) distance-based fares. The FTA strongly advises public participation in any process that considers increasing fare prices to ensure customers are not adversely affected.

Consumption of transit reacts to cost, like other goods and services. This means that if RPTA increases fare prices, ridership could decline. However, transit customers tend to be less sensitive to price changes, especially certain demographics such as commuters. For both fare structure models, we assume a price elasticity factor of -0.25, which reflects industry standards and RPTA ridership.²⁸

Flat Fares.

| Expected ridership ²⁹ | Fare structure | Estimated annual fare revenue |
|----------------------------------|-------------------|-------------------------------------|
| 17,500 - 21,800 | \$2 (current) | \$35,000 - \$43,600 |
| 15,750 - 19,620 | \$3 | \$45,900 - \$57,200 |
| 14,000 - 17,440 | \$4 | \$52,500 - \$65,400 |

²⁷ Source: Louisiana State Management Plan, Section 5311, Transit Assistance Program for Nonurbanized Areas

²⁸Source: TCRP Report 95, Chapter 12, Transit Pricing and Fares

²⁹ Expected ridership range assumes demand from 2019 and a 20% increase in the demand peak from 2018 based on the acceptance of former trip denials.

Distance-based fares.

Distance-based fares encourage passengers to travel to the nearest suitable destination, resulting in shorter trips and ensuring more trips can be completed. However, distance-based fares result in more expensive trips for those living in rural areas who need to travel longer distances. In the table below, we illustrate three different distance-based fare models.

| Trip distance | Percentage of current RPTA trips | Fare model 1 | Fare model 2 | Fare model 3 |
|---------------|--|--------------|--------------|--------------|
| 0-5 miles | 40% | \$2 | \$2 | \$2 |
| 5-10 miles | 22% | \$2.50 | \$2 | \$4 |
| 10-15 miles | 9% | \$3 | \$4 | \$6 |
| 15-20 miles | 19% | \$3.50 | \$4 | \$8 |
| 20-25 miles | 8% | \$4 | \$6 | \$8 |
| 25+ miles | 2% | \$4.50 | \$6 | \$8 |

In the table below, we calculate the estimated fare revenue for each distance-based model.

| Expected ridership | Distance-based fare model | Estimated annual fare revenue |
|--------------------|---------------------------|-------------------------------|
| 15,960 - 19,880 | 1 | \$42,000 - \$52,260 |
| 15,360 - 19,130 | 2 | \$41,700 - \$51,900 |
| 11,920 - 14,840 | 3 | \$40,340 - \$50,260 |

³⁰This does not reflect trip denials, given RPTA does not track relevant origin and destination data. Denied trips may affect the distribution (e.g., if RPTA tends to deny longer trips).

4.4 Additional potential funding sources.

Below, we outline potential new funding sources for RPTA, as well as discuss possible limitations:

| Funding source | Description of funding |
|--|--|
| NEMT trips reimbursed by Medicaid | RPTA customers that are insured by Medicaid can be reimbursed for medical transportation (e.g., trips for doctors' appointments). Public transportation providers can contract with the state agency responsible for Medicaid administration for reimbursement for eligible medical trips taken by their customers. For example, Louisiana's Department of Health and Hospitals has contracted with the New Orleans RTA to provide public transportation to Medicaid recipients through the NEMT program. |
| FTA 5310 - Enhanced Mobility of Seniors & Individuals with Disabilities | This federal program provides funding for the purpose of assisting private nonprofit groups in meeting the transportation needs of older adults and people with disabilities when the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs. Although this program is intended for private nonprofit organizations, public entities that coordinate services for the elderly and disabled are eligible for funding. RPTA could most likely access this funding source through partnerships with local organizations that serve the elderly and disabled. |
| Partnerships with local organizations | As discussed in Section 2, partnering with local organizations that provide similar transportation services, such as St. Charles Council on Aging, could enable RPTA to receive reimbursement for trips that serve the local organization's target group. Further, St. Charles Council on Aging currently receives FTA funding, so RPTA could potentially jointly apply for FTA 5310 grants with the Council. |

APPENDIX A

Alternative demand-response service designs.

Baton-Rouge / New Orleans intercity rail station in LaPlace.

It is estimated that the proposed passenger rail line between Baton Rouge and New Orleans would serve about 860 boardings per week from the LaPlace stop.³¹ In our simulations, we assumed increased RPTA demand due to train access. We also assume that the train would replace RPTA's LaPlace-Kenner trips, which has the potential to increase service efficiency due to the associated distance of these trips. We concluded that, if intercity train service is initiated, RPTA would likely need fewer vehicles to serve comparable demand levels under the current service design.

| | Service characteristics | | | Estimated annual operating costs (includes tech) | | | |
|------------------------------|-------------------------|--------------------|----------------------------|--|-----------------------------------|----------------------------------|---|
| | Rides per day | Peak fleet size | Annual vehicle hours | Current (\$97/hr) | Terrebonne Parish (\$67/hr) | St. James Parish (\$58/hr) | Average turn- key bundled service (\$50/ hr) |
| RPTA 2019 | Max 70 | 3 | 12,300 | \$1,200,000 | | | |
| Medium demand increase | 150 | 6 | 19,500 | \$1,927,500 | \$1,927,500 | \$1,167,000 | \$975,000 |
| High demand increase | 250 | 8 | 29,300 | \$2,890,100 | \$2,011,100 | \$1,747,400 | \$1,465,000 |

Partnership model.

As discussed in Section 2, securing partnerships with local agencies may allow RPTA to reduce vehicle hours and associated operational costs. To simulate this potential effect, we assumed an RPTA partnership with St. James Parish, in which St. James would serve 40% of RPTA's current demand levels, including trip denials. We concluded that RPTA would reduce vehicle hours but much will depend on the structure of the agreement and the location and aggregation of demand served by each entity. For example, if RPTA primarily serves shorter trips in certain municipalities, such as LaPlace and Luling/Boutte, then RPTA's reduced service would be much more efficient.

| | Service characteristics | | Estimated annual operating costs (includes tech) | | | | |
|---------------------------|-------------------------|--------------------|--|----------------------|-----------------------------------|----------------------------------|---|
| | Rides per day | Peak fleet size | Annual ve- hicle hours | Current (\$97/hr) | Terrebonne Parish (\$67/hr) | St. James Parish (\$58/hr) | Average turn- key bundled service (\$50/ hr) |
| RPTA 2019 | Max 70 | 3 | 12,300 | \$1,200,000 | | | |
| Part- nership model | 54 | 3 | 10,500 | \$1,036,500 | \$721,500 | \$627,000 | \$525,000 |

³¹LaPlace Multi-Modal Transportation Center Plan (link <u>here</u>).

Limited West Bank trips.

Given very low population density in the west bank and limited bridge access between locations on either bank, we modeled limits on west bank trips to several hours in the mornings and evenings. Our simulations assume current RPTA demand including trip denials. We concluded that there is only a modest reduction in annual vehicle hours relative to RPTA's current business rules (which don't limit west bank trips), given the service would still require four vehicles at peak to serve RPTA current demand levels (plus trip denials).

| | Service characteristics | | Estimated annual operating costs (includes tech) | | | | |
|----------------------------------|-------------------------|--------------------|--|----------------------|-----------------------------------|----------------------------------|---|
| | Rides per day | Peak fleet size | Annual ve- hicle hours | Current (\$97/hr) | Terrebonne Parish (\$67/hr) | St. James Parish (\$58/hr) | Average turnkey bundled service (\$50/hr) |
| RPTA 2019 | Max 70 | 3 | 12,300 | \$1,200,000 | | | |
| Limited West Bank trips | 90 | 4 | 13,800 | \$1,362,600 | \$984,600 | \$824,400 | \$690,000 |

Parish only services.

To test the feasibility of separate St. John and St. Charles services, we created two distinct service zones and only allowed trip requests within each zone (preventing interparish trips). Independent services would require significantly more overall vehicle hours than one combined service, resulting in higher costs, both fixed and variable, for both parishes. Further, eliminating interparish trips reduces the value of the service given a significant portion of current trips involve traveling between parishes.

| | Service characteristics | | Estimated annual operating costs (includes tech) | | | | |
|------------------------|-------------------------|--------------------|--|----------------------|-----------------------------------|----------------------------------|---|
| | Rides per day | Peak fleet size | Annual ve- hicle hours | Current (\$97/hr) | Terrebonne Parish (\$67/hr) | St. James Parish (\$58/hr) | Average turnkey bundled service (\$50/hr) |
| RPTA 2019 | Max 70 | 3 | 12,300 | \$1,200,000 | | | |
| St. Charles only | 40 | 2 | 7,000 | \$691,000 | \$481,000 | \$418,000 | \$350,000 |
| St. John only | 60 | 3 | 10,600 | \$1,046,200 | \$728,200 | \$632,600 | \$530,000 |

APPENDIX B

Board executive summary.

RPTA background.

• RPTA's current service suffers from high operating costs and inefficiencies, and there is a need for improved public transportation in the River Parishes. In particular, the current service lacks the efficiency/capacity to serve all residents who request a ride, while deterring other potential customers with inconsistent service quality.

| RPTA cost per revenue hour | Regional cost per revenue hour for demand-response | National averages per revenue hour for demand-response |
|----------------------------|---|--|
| \$97 | St. James Parish \$58 Direct operations Terrebonne Parish \$67 Direct operations Jefferson Parish \$76 Purchased transportation | Direct operations \$60 Purchased transportation \$66 |

• RPTA has substantial budget challenges. Founded in 2009 as part of Hurricane Katrina recovery efforts, RPTA has largely relied on federal disaster recovery grants requiring no local funding match. As these grant programs have expired, RPTA has struggled to either increase local funding or lower operational costs to align with the reduced budget. RPTA's funding will soon only meet about 75-80% of its annual operating expenses. Unless RPTA can find a way to reduce its costs, it seems that some degree of service reduction is inevitable.

Current operating model.

The RPTA utilizes a "purchased transportation" model:

- Vehicles: RPTA owns/provides 6 vehicles; 3 service or "revenue" vehicles and 2 spare vehicles; 1 supervisors/ utility vehicle.
- Other capital costs: RPTA incurs all other capital costs, including radios, computers, software, and office equipment.
- Staffing overview
 - Drivers: The Transdev contract cites a "sufficient number" of drivers to operate three

buses simultaneously. The exact number was not disclosed.

- o Admin/support: Transdev provides two dispatchers, one operations manager, one grants manager,¹ and one utility person. The contract with Transdev did not specify if these are full-time or part-time employees. Separately, Solutient supplies accounting services and operational oversight, with one part-time employees for these functions.
- Corporate: Indirect costs/overhead margins have not been disclosed by Transdev.
- Percentage of routes not being serviced: A demand-response service does not run on fixed routes but insteads varies its routes by daily demand patterns. Transdev has disclosed that between 10%-20% of trip requests are denied per day, but does not track the address of the denied trip requests, which prevents precision in determining particular unserved demand patterns. That said, we estimate that adding capacity and more efficient routing will address this issue.

¹f RPTA pursues a new operating contract, the grants management function may be administered more cost-effectively by Solutient or by a St. John or St. Charles Parish part-time government employee.

Commercial overview.

| 2020 revenue | 2020 cost | 2020 P&L | 2021 budget |
|--------------|--------------------------|--------------|---|
| (annualized) | (annualized) | (annualized) | |
| \$1,086,455 | \$1,387,636 ² | -\$358,386 | RPTA needs to achieve ~\$63 per vehicle hour in order to expand service to accommodate trip denials at current recurring funding levels. ³ We estimate CARES Act funding fills budget shortfalls until about Spring/Summer 2021, at current recurring funding levels. ⁴ |

Considerations for improvement.

- A technology platform could reduce operating costs and improve quality of service for demand-response. As technology advances, some providers allow for automated, algorithmic routing, which has the potential to increase service efficiency with higher rates of vehicle sharing and reduction in the number of staff required to manage and operate the service. Further, some providers also have a mobile application where riders can book trips, pay fares, and monitor their vehicle in real-time, as well as allow both pre-scheduled and on-demand rides using the same technology platform.
- RPTA could likely achieve lower operating costs through alternative operating models.

| Purchased transportation | |
|--|---|
| Traditional Operations & Maintenance Model (Current Model). RPTA covers capital costs, acquires technology, and bids out operations. | Pros Competitive vendor pool may offer lower costs Implementation of technology may create efficiencies and quality of service gains Cons RPTA still separately covers capital costs Separate operations and technology RFPs require additional administrative hassle RPTA relies on vendor instead of direct in-house management To achieve savings, RPTA may need to exclude grants management and procurement from the purchased transportation contract by in-housing these services within a member government or through a separate contract |
| | Estimated Cost Savings • \$10-\$40 per vehicle hour, depending on new vendor operating rates and fleet size |

²Includes capital and operational costs.

³This assumes ~\$910,000 in recurring operational funding over 14,400 vehicle hours estimated for expanded service. RPTA's current service averages about 12,300 vehicle hours per year.

[&]quot;This is based on RPTA's reported cash balance in September 2020. The CARES Act provided a one-time federal grant of \$749,528.

Purchased transportation

Turnkey Bundled Service.

One contractor provides all aspects of the transit service, including technology, vehicles, drivers, and operations management.

Pros

- Distributed costs across multiple services, lowering RPTA fixed costs
- Configured technology in the provision of service directly by operator, maximizing efficiencies
- Greater flexibility to incrementally expand service (e.g.,adding an additional vehicle)

Cons

- RPTA relies on vendor instead of direct in-house management
- To achieve savings, RPTA may need to exclude grants management and procurement from the purchased transportation contract by in-housing these services within a member government or through a separate contract

Estimated Cost Savings

 \$30-\$50 per vehicle hour, depending on new vendor operating rates and fleet size

Direct operations

Pros

- RPTA has direct control over operations, using their employees to supply the necessary labor to operate the revenue vehicles and manage the service
- RPTA may be able to leverage resources from parish governments, helping control costs

Cons

- RPTA would need to obtain operations know-how to set up and manage service
- · RPTA would need to hire and train employees

RPTA directly operates the transit service.

RPTA takes operations in-house and does not use third-party vendors for primary functions.

Estimated Cost Savings

\$10-\$40 per vehicle hour; however, upfront costs may be higher, while savings may be delayed

Upfront costs include technology installation and licensing, driver devices (e.g., tablets), a vehicle storage facility, and employee acquisition costs.

Partnerships

Intergovernmental agreement with St. James Parish.

St. James Parish serves all trip requests in RPTA's service zone. RPTA funds the delivery of trips by St. James Parish, and may pursue a small contract with a mobility management firm for program administration.⁵

Pros

- · Reduce overall operating costs in overlap areas
- Expand transit access in areas poorly served by current RPTA service
- · Consolidate funding across services that overlap

Cons

Loss of RPTA direct oversight of transit service

Estimated Cost Savings

 \$20-\$50 per vehicle hour, depending on type of partnership and trip volume provided by St. James

Recommended Forward Action Plan

- Issue RFP for more cost-effective purchased transportation. R PTA should determine which alternative operating model is most appropriate and scope an RFP based on this decision. In the interim, RPTA should temporarily extend its current contract to provide enough time to develop a competitive RFP process.
- 2. Outreach to St. James Parish. RPTA should proactively engage St. James to explore a potential partnership between the two agencies. RPTA should examine a reimbursement model where St. James provides trips for RPTA's customers in areas in RPTA's service zone that the St. James transit service currently travels through.
- Outreach to St. Charles Council on Aging. RPTA should proactively engage St. Charles Council on Aging to explore mutual cost advantages from service consolidation.

⁵ RPTA could also pursue a partnership where St. James only serves a portion of RPTA trips. However, this partnership may require RPTA to still purchase or directly operate its own transit service. Depending on demand patterns serviced by St. James, RPTA may also be able to dispatch the remaining trips to TNCs, precluding the need for contracted or direct operations.

APPENDIX C

Peer agencies.

APPENDIX C: PEER AGENCIES

| | Location | Purchased transportation (PT) or directly operated (DO) | Cost per passenger | Cost per vehicle revenue hour | Service Area Density | Service area population | Unlinked passenger trips | Passengers per vehicle revenue hour | Vehicle revenue miles | Average trip length (Miles) | Vehicle Revenue hours |
|---|----------------------|--|-----------------------|-------------------------------------|-------------------------|-------------------------------|--------------------------------|--|-----------------------------|-----------------------------------|-----------------------------|
| River Parishes Transit Authority | LaPlace, LA | PT | \$65 | \$97 | 690 | 98,704 | 18,227 | 1.5 | 237,496 | 13.0 | 12,249 |
| Hall Area Transit | Gainesville, GA | DO | \$59 | \$76 | 554 | 199,999 | 8,577 | 1.3 | 96,829 | 11.3 | 6,726 |
| City of Wilsonville | Wilsonville, OR | DO | \$48 | \$145 | 900 | 72,028 | 21,743 | 3.0 | 85,238 | 3.9 | 7,200 |
| Tuscaloosa County Parking and Transit Authority | Tuscaloosa, AL | DO | \$44 | \$68 | 798 | 136,487 | 14,989 | 1.6 | 125,608 | 8.4 | 9,650 |
| City of Peoria | Peoria, AZ | DO | \$42 | \$112 | 725 | 126,911 | 20,823 | 2.7 | 82,980 | 4.0 | 7,688 |
| Link Transit | Wenatchee, WA | DO | \$42 | \$114 | 552 | 108,660 | 52,740 | 2.7 | 233,053 | 4.4 | 19,644 |
| Greater Lynchburg Transit Company | Lynchburg, VA | DO | \$41 | \$55 | 1,123 | 80,846 | 22,326 | 1.4 | 165,214 | 7.4 | 16,427 |
| Chattanooga Area Regional Transportation Authority | Chattanooga, TN | DO | \$41 | \$64 | 580 | 167,674 | 51,322 | 1.6 | 439,578 | 8.6 | 32,709 |
| Southeast Area Transit District | Preston, CT | PT | \$41 | \$43 | 520 | 158,629 | 6,577 | 1.1 | 85,461 | 13.0 | 6,254 |
| Indian River County | Vero Beach, FL | PT | \$39 | \$61 | 703 | 151,825 | 32,501 | 1.6 | 385,784 | 11.9 | 20,703 |
| Richland County Transit | Mansfield, OH | PT | \$35 | \$82 | 953 | 70,556 | 13,982 | 2.3 | 67,051 | 4.8 | 5,977 |
| City of Abilene | Abilene, TX | DO | \$32 | \$70 | 1,092 | 120,099 | 70,704 | 2.2 | 439,687 | 6.2 | 32,257 |
| Virginia Regional Transit | Purcellville, VA | DO | \$31 | \$60 | 1,067 | 153,600 | 44,997 | 1.9 | 404,423 | 9.0 | 23,088 |
| Centre Area Transportation Authority | State College, PA | PT | \$30 | \$54 | 1,133 | 104,273 | 32,725 | 1.8 | 263,968 | 8.1 | 17,923 |
| Missoula Urban Transportation District | Missoula, MT | DO | \$29 | \$60 | 1,048 | 73,340 | 31,777 | 2.1 | 165,998 | 5.2 | 14,986 |
| City of Edmond | Edmond, OK | PT | \$28 | \$97 | 1,019 | 91,743 | 9,863 | 3.4 | 41,828 | 4.2 | 2,868 |
| Treasure Valley Transit | Nampa, ID | DO | \$24 | \$43 | 705 | 148,011 | 45,055 | 1.8 | 264,678 | 5.9 | 25,108 |
| St. James Dept of Human Resources | Convent, LA | DO | \$23 | \$58 | N/A | N/A | 41,805 | 2.5 | 268,265 | 6.4 | 16,834 |
| Gaston County | Gastonia, NC | PT | \$20 | \$45 | 580 | 211,127 | 21,042 | 2.3 | 221,183 | 10.5 | 9,310 |
| City of Joplin | Joplin, MO | DO | \$19 | \$48 | 714 | 75,000 | 38,735 | 2.5 | 204,023 | 5.3 | 15,506 |

Transit Feasibility Study

Provided by VIQ