ROCHESTER PUBLIC TRANSIT

Rochester **Transit Development Plan**

FINAL PLAN
DECEMBER 2022

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EXECUTIVE SUMMARY

The Transit Development Plan (TDP) is the City of Rochester's guiding document for managing and improving all aspects of Rochester Public Transit's (RPT) services over a five year-period. The plan is focused on 2023-2027 and covers fixed-route and paratransit services, capital assets and technology, fares and funding, and current and upcoming transit system needs like planning for Link bus rapid transit (Link) and integrating electric buses into the fleet. While this plan considers the service impacts of Link and how fixed-route bus service will need to change once this service starts, this plan is primarily focused on fixed-route and paratransit service since there is a separate planning and design process underway focused on Link. Rochester's last TDP was completed in 2017, and this plan builds upon the analysis, findings, ideas, and recommendations from that plan. This plan also considers changes in context since 2017, including development patterns and changes in travel patterns resulting from the COVID-19 pandemic.

COMMUNITY PROFILE

RPT analyzed population and land use data to evaluate how Rochester has changed since the last TDP in 2017 and how well transit is currently serving community transportation needs. This analysis found that Rochester is growing, becoming denser and more diverse, and continues to be an employment hub for the region. As of 2019, there were approximately 91,000 jobs located in Rochester, a 7.4 percent increase from 84,700 jobs in 2013 (the year of data used in the previous TDP). Having such a high concentration of jobs presents both opportunities and challenges for transportation. As the number of people working in Rochester grows, so will the need for alternatives to single-occupancy vehicle commutes.

Review of relevant plans demonstrated that Rochester is expected to experience growth—in population, employment, and geographic extent—over the next few decades. Rochester's transit system has an important role to play in facilitating and shaping this growth. While attention should be given to growth patterns downtown and along major corridors, travel patterns will be changing throughout Rochester and the transit system will need to balance speed of service with coverage and access.

PROVIDER PROFILE

RPT is a small urban transit agency located in Rochester, Minnesota and is one of five small urban transit systems in the state. RPT operates 32 fixed bus routes from approximately 5:00 AM–10:30 PM on weekdays and 6:30 AM-7:30 PM on weekends and holidays. Riders who have disabilities and cannot use fixed-route service are eligible to apply to use Zumbro Independent Passenger Service (ZIPS), which provides origin-to-destination paratransit service. To use ZIPS, riders must schedule their trip at least one day in advance. ZIPS operates 5:00 AM-10:30 PM on weekdays and 6:30 AM-7:30 PM on weekends and holidays (times represent the first and last pick up of the day).

FIXED-ROUTE SERVICE AND ROUTE PROFILES

RPT evaluated the performance it's fixed-route bus services both as a network and for each individual route. The data from this evaluation established a foundation for recommending service improvements. The evaluation found that RPT's fixed-route bus service has multiple high productivity routes and reaches most Rochester residents. In addition to system strengths, the fixed-route evaluation identified opportunities for improvement, such as making routes operate in both directions and easier to understand as well as improving on-time performance.

PARATRANSIT PROFILE

ZIPS is a vital transportation service for Rochester community members with disabilities who cannot use fixed-route service. In 2021, 23,371 rides were provided on ZIPS. ZIPS annual total ridership was decreasing before the COVID-19 pandemic and continued to decrease during the pandemic; ridership returned to pre-pandemic levels in 2021. While performance has improved in several areas over the last five years, ZIPS is still not meeting some key performance goals such as on-time arrival. Total operating costs for ZIPS have declined but costs per trip have increased slightly.

PEER ANALYSIS

RPT was compared to five similar transit providers in the United States using data from the National Transit Database (NTD). The five peer agencies selected by for this analysis included:

- **Duluth Transit Authority –** *Duluth, MN*
- **Kalamazoo Metro Transit –** *Kalamazoo, MI*
- **StarTran –** *Lincoln, NE*
- **SolTrans –** *Solano County, CA*
- **Connect Transit –** *Bloomington-Normal, IL*

In general, RPT fixed-route service is efficient but was slower than peers to recover from the COVID-19 pandemic. RPT generally performed similarly to its peers in terms of fixed-route and paratransit ridership productivity, and better in terms of financial efficiency in 2019 before the pandemic. In 2021, after impacts from COVID-19 reduced ridership and fare revenue, the transit system compared less favorably to its peers.

MARKET ANALYSIS

RPT analyzed demographic and socioeconomic characteristics to identify areas within Rochester where transit service is expected to be most successful for all-day service and peak-only service, respectively. Key destinations for travelers, and modeled travel demand were also considered. Characteristics evaluated included:

- Population and job density
- Indicators of higher propensity to use transit such as residents from low-income, zero-car, and one-car households
- Destination anchors and points of interest including schools, colleges and universities, healthcare facilities, and retail hubs, which are mapped alongside demographic and socioeconomic indicators

Generally, travel patterns and forecasted transit demand aligned with the locations of major Rochester employers (Mayo Clinic, IBM, City of Rochester, Olmsted County), suggesting a strong market for commuter services.

Based on the regional travel demand model, as Rochester grows, jobs are expected to continue concentrating downtown, while population continues to grow along the city boundary. Providing transit access to some major retail and service destinations is challenging due to their locations on the periphery of the city and the limited access nature of some roadways serving them.

Overall, the market analysis identified the greatest demand for transit in downtown Rochester. Other, harder to serve locations throughout the city—areas near Meadow Park, Slatterly Park, Homestead Park, Cimarron Park, Northgate Park, and Crossroads Shopping Center —were also identified as key locations for transit demand.

FARE ANALYSIS

Analysis of RPT's current fare structure and projected ridership found that the current fare structure should be adequate to support the agency's operations over the five-year period of this plan. At the same time, the City has room to implement new fare products that may help to achieve other City policy goals or provide additional convenience for riders.

A detailed assessment was conducted of RPT's current fare policies, practices, and infrastructure and compared those existing conditions to industry best practices and RPT's peer agencies. RPT also analyzed potential fare structure alternatives and identified opportunities to build on RPT's fare policies, practices, and infrastructure.

RPT has an opportunity to go beyond this baseline of supporting planned operations to build on its existing fare policies, practices, and infrastructure to reflect the agency's guiding principles for fare structure and best practices used by peer agencies. RPT can leverage this opportunity by evaluating and potentially piloting fare structure alternatives such as a low-income fare project, new fare products like a single- or seven-day pass, and implementing mobile ticketing for fixed-route and paratransit service.

PUBLIC AND STAKEHOLDER ENGAGEMENT PHASE 1

RPT conducted broad engagement efforts from September-November 2021 to collect feedback from as wide a cross-section of the Rochester community as possible as well as elected officials and City partners. RPT's goal for this first phase was to determine what aspects of its service the community saw as working well, where it could be improved, and most importantly, what the community's priorities were for transit service in Rochester. From this feedback, RPT developed guiding principles that it could apply to draft recommendations that it presented to the community in Phase 2 of public engagement for the TDP.

RPT gathered more than 700 survey responses, conducted multiple focus groups, and spoke with people at community events. Residents participated in a community working group and acted as liaisons to their community and gathered feedback and brought it back to RPT.

Common themes that emerged throughout Phase 1 of the public and stakeholder engagement process included:

- The quality of bus operators' customer service was frequently cited as RPT's strengths by riders
- Riders and decision-makers both support a local tax to increase transit funding (68 percent of survey respondents were supportive of a local tax to help pay for transit services)
- Respondents commonly identified increased frequency, extended service hours, and the need for crosstown connections as priorities for fixed-route service improvements
- Respondents said snow clearance and ADA accessibility considerations were common barriers to accessing transit service
- Feedback about customer information and customer experience pointed to improvements for information at stops and onboard vehicles, information about fares, and improvements to transit technology

STRENGTHS, CHALLENGES, AND OPPORTUNITIES

Through a detailed analysis, high-level themes emerged of what RPT does well, where they could improve, and what opportunities or strategies might be most useful to make transit work better for Rochester.

RPT's system had multiple strengths at the time of the plan, even with the impacts of COVID-19 on ridership and staffing. Aspects of RPT services were considered a strength if it was commonly mentioned or received high satisfaction ratings in surveys and other feedback or if it compared favorably to the performance of RPT's peer agencies or national trends in transit. The strengths identified included:

- Most Rochester residents live within walking distance of a bus stop
- RPT services are accessible to those most in need of transit
- RPT serves locations where people travel most
- RPT services are highly productive
- RPT receives high marks for customer service and rider experience

RPT also found multiple areas for improvement in its analysis of system performance compared to the goals set in the last TDP. RPT also heard multiple key themes regarding aspects of service where satisfaction was low in feedback from the general public and project partners. Challenges identified with RPT service and facilities included:

- Buses don't operate frequently enough
- Buses struggle with on-time performance
- Service can be hard to understand
- Service doesn't serve trips between destinations outside of downtown well
- Improved facilities and maintenance are needed at bus stops
- There is not enough easy information available about the bus

Based on these strengths and challenges, RPT has developed opportunities to improve its service. These included:

- Make bus route simpler
- Combine select routes
- Adjust hours of operation and frequency
- Explore alternative service types
- Simplify service schedules
- Improve bus stop waiting environments
- Expand customer communications
- Implement systems or methods that result in higher quality data
- Continue to improve on-time performance
- Adopt communication and fare payment technology

PUBLIC AND STAKEHOLDER ENGAGEMENT PHASE 2

In Spring of 2022, RPT conducted the second round of public and stakeholder engagement, during which 113 survey responses were gathered that focused on gathering responses to specific ideas for improving RPT bus service. RPT hosted three public open houses—two virtual and one in-person. The Community Working Group (CWG) met another three times with the study team and engaged with their communities on several questions about the service ideas and piloting microtransit in Rochester.

The following were some of the common themes from the second phase of engagement:

- General support for the initial service ideas
- Need for service or more service (such as night service) to major Rochester destinations including shopping areas, employment hubs, and tourist stops
- When prioritizing routes for increased frequency, it's most important to consider the route's ridership, destinations served, and whether the route serves more people with low-incomes
- Overwhelming consensus that timing and frequency of service are just as important as the route itself
- Overall support for the microtransit idea, but respondents had questions and needed additional information about how it would function

MISSION, GOALS, AND PERFORMANCE MEASURES

RPT, like most other organizations, uses a statement of the agency mission, goals, and performance measures to guide its work both day-to-day and over the long-term. RPT regularly reviews and updates these foundational documents with the TDP. Regular updates help to keep RPT responsive to community needs and helps the agency to continually push to improve.

The updated mission statement for RPT is:

RPT's mission is to provide an efficient and accessible public transit system that is convenient, safe, reliable, cost-effective, and adaptable and supports City of Rochester's strategic priorities for affordable living, quality services for quality living, and economic vibrancy and growth management.

The updated goals for RPT, not listed in order of priority, are:

- **Service Quality:** Provide high-quality transit service that attracts and retains riders
- **Equity:** Advance the City's equity goals through transit service and access
- **Accessibility:** Provide transit service that is accessible to all riders
- **Environmental Sustainability & Resiliency:** Invest in fleet and infrastructure improvements that promote environmental sustainability and resiliency; support City goals for increasing the share of people who travel by means other than driving alone
- **Community Connectivity:** Provide convenient connections for people to reach important community destinations by transit
- **Fiscal Sustainability & Efficient System Management**: Operate a safe, efficient, and fiscally sustainable transit system

FIXED-ROUTE SERVICE RECOMMENDATIONS

RPT developed four service scenarios, one with transit service similar to current levels (cost-neutral) and one with expanded service for both before and after bus rapid transit (BRT) service starts. These scenarios were based on public and stakeholder feedback regarding the initial service ideas. In general, recommended changes to routes attempted to streamline service routes; standardize schedules (i.e., no more differences between weekday and evening/weekend routes); run service for longer periods of time; and connect routes to one another (or interlined). As a result, some destinations are served differently, and some new routes are proposed. The service scenarios can be summarized as follows:

- In the **cost-neutral scenarios**, improve evening and weekend bus service, reduce the need to transfer downtown by providing three sets of newly interlined routes that create north-south and east-west connections, and increase frequency on two routes
- In the **expansion scenarios**, which builds upon the cost-neutral scenario (i.e., all changes are in addition to the changes proposed in the cost-neutral scenario), two express routes, two crosstown routes, and two local routes are added, while four additional routes see improvements in the level of service
- **Post-BRT** service plans adjust service along 2nd Street, rerouting the majority of routes to avoid congestion once Link is operational

The cost-neutral scenarios could be implemented while keeping RPT's operating budget at or close to what it is now. These scenarios were built under the assumption that RPT would not have new funding resources to implement service changes and keep RPT's annual service hours within two percent of its current level–112,340 hours service hours as of June 2022.

The expansion scenarios include recommended service changes that would grow RPT's service hours by up to 24 percent, driven by the addition of six new routes as well as improvements to level of service (span and headways) on other routes. Increased fare revenue from more riders on RPT's existing routes or another source of local funding will be needed to implement the service recommended in the expansion scenario.

Fixed-route ridership forecast

Based on the proposed recommendations, RPT's ridership is expected to increase compared to baseline ridership. The average weekday ridership is estimated to increase by 18 percent, while weekend ridership is estimated to increase eight percent. To understand the impact of proposed service changes, ridership estimates were developed for the post-BRT expansion scenario, which includes the full breadth of recommendations. Critically, implementation of just the cost-neutral scenario, or only some of the service changes proposed in the expansion scenarios will affect these ridership estimates.

Title VI Analysis

A Title VI Service Equity Analysis quantifies the impact of service changes and on non-white and low-income residents. A Title VI Service Equity Analysis is focused on changes to service and does not provide insight regarding the equity of existing service. The Federal Transit Administration (FTA) requires agencies in urbanized areas with a population greater than 200,000 and more than 50 fixed-route vehicles in peak service to complete a Title VI Service Equity Analysis. While Rochester does not meet either of these thresholds, RPT conducted an equity evaluation to further their commitment to ensuring that the benefits and burdens of proposed changes are shared equitably.

The equity evaluation completed on the cost-neutral and expansion scenarios ensures that changes in RPT service do not adversely impact non-white and/or low-income populations, comparing the percent service change across these population groups. While the increase in service expected for non-white and low-income groups is slightly below the expected increase for white and non-low-income groups, (1.3 and 5.4 percent, respectively), the resulting comparison ratios are both higher than the threshold of

0.80. Therefore, this analysis identifies no disproportionate burdens to non-white or low-income populations as a result of these proposed service changes.

Microtransit

Introducing microtransit in Rochester is recommended for locations where people need transit service, but population densities are lower, making it is less effective to serve those areas with fixed-route transit service. While there are several areas within Rochester that would likely benefit from microtransit, it is recommended to initially pilot microtransit in one area of Rochester. This will allow RPT to make adjustments to this new type of service and make sure it is functioning well before deploying it in additional locations. RPT will need to conduct additional investigation into specifics of the pilot service before launch.

PARATRANSIT RECOMMENDATIONS

Between 2017 and 2021, ridership on ZIPS decreased from roughly 32,000 trips to 23,400, or about 27 percent. In addition to COVID-19, issues with on-time performance, reliability, and service providers for people with disabilities starting their own transportation programs most likely precipitated this decline. Addressing ZIPS reliability and communications will be key to regaining ridership.

Based on recent trends in ridership, and assuming implementation of the proposed improvements, RPT expects ridership to return at a rate of roughly five percent growth per year. At that rate, the current ZIPS annual ridership is expected to grow from the 2021 annual ridership of 23,370 to 38,067 by 2031. To meet that demand, 15 paratransit vehicles will be needed by 2031. Funding strategies to meet these capital needs are discussed in the TDP Financial Plan. In the short- and long-term as ZIPS service grows, adopting transit technology such as trip scheduling, mobile booking, and real-time bus tracking, along with improved customer communication, can improve the rider experience and functionality of the ZIPS system.

Based on analysis of ZIPS system performance and rider feedback, RPT is recommending adoption of four performance goals, implementation of multiple improvements to address these issues, and investment in various capital assets.

CAPITAL AND ASSETS PLAN

RPT owns a significant set of capital assets, all of which require financial resources to maintain and replace. As RPT's assets age and the agency plans for future expansions of service, its vehicles, facilities, and other infrastructure need to be maintained and eventually replaced to keep them in a state of good repair and to keep RPT's service running smoothly.

RPT examined the state of these assets and identified the likely necessary costs to maintain the system in a state of good repair over the next 10 years, as well as the costs associated with system growth. As RPT expands their service offerings through the implementation of the BRT system, a possible microtransit pilot, and transitioning more of its bus fleet to battery electric, long-term capital needs are likely to increase as well.

Some of the key findings from the capital and assets plan include:

- RPT has adequate vehicles for planned service, but many are beyond their useful life
- RPT operations and maintenance facilities need additional capacity for system growth
- Additional transit amenity infrastructure is desired by riders
- Link will require many new capital assets
- Capital assets required for microtransit pilot will depend on operational decisions
- Zero-Emission Transition Plan will guide RPT's fleet transition

ORGANIZATIONAL AND STAFFING PLAN

RPT requires dedicated staff to manage service, operations, and planning. The City of Rochester currently employs a team of six staff to manage the system as well as a contracted operator that manages day-to-day delivery of transit

service. Since RPT contracts with a third-party for service, the agency's full-time staff largely assist with long-term planning, administration, and financial management. RPT conducted a national and peer agency benchmarking analysis to determine how RPT's staffing compares with other agencies. That analysis showed that RPT's staffing levels are low for the amount of service the agency operates relative to peer agencies and national averages. RPT should increase its current staffing levels by adding administrative staff and dedicated facility maintenance staff. Additionally, RPT will need to increase staffing levels for proposed growth to the fixed-route system. RPT should use the labor ratios as a guideline for estimating future staffing needs. RPT should take the following actions related to staffing for current fixed-route and demand response service:

- Hire two to three additional administrative staff in the near-term to support its current service
- Add two to three facility maintenance staff in the near-term to support its current service; RPT should evaluate whether it is possible to contract this function out
- Account for hiring additional staff for future service growth scenarios and should use the labor force ratios in this analysis as a guideline to budget for that growth
- Hire additional administrative staff as service expands. The proposed fixed-route service growth scenario in this TDP would require five to seven additional administrative staff

FINANCIAL PLAN

As a steward of public funds, RPT's overall financial goal is to ensure that the system is providing quality transit services meeting the needs of the community while keeping the system financially sustainable—meaning that costs do not exceed revenues. As part of the TDP, RPT analyzed system costs and revenues and evaluated how they will likely change over the next five years to create an overall picture of the system's financial health, including both capital and operating expenses and revenues throughout the life of the plan.

Based on projected changes to revenues and costs over the five year period of this plan, RPT expects operations of its services to remain financially sustainable, even with the impacts of COVID-19 on ridership. Challenges will potentially arise in funding for capital improvements as the City of Rochester has mainly sourced local matching funds for these projects from directly generated revenues like fares. RPT's farebox recovery rate in 2022 (18 percent) is not high enough to replenish transit capital funds; however, RPT expects this situation to improve based on ridership growth observed in 2021 and 2022.

RPT receives operating revenues from three main sources—Federal operating grants, state operating grants, and directly generated revenues like fares or advertising on buses. Operating grants from the FTA and Minnesota Department of Transportation (MnDOT) cover roughly 80 percent of operating costs each year. The remaining 20 percent must be covered by directly generated revenues, meaning RPT must have enough ridership to support the services it provides.

RPT expects that it will have a small operating shortfall in 2022, largely due to ridership levels that are still in recovery from the impacts of COVID-19. Federal funding, specifically for transit operations, from the Coronavirus Aid, Relief, and Economic Security (CARES) Act and American Rescue Plan (ARP) Act will offset this shortfall. Based on growth trends in ridership observed over 2021 and 2022, RPT expects that it will not have operating budget shortfalls for its regular fixed-route and paratransit services for any of the remaining years. RPT projects that by 2027, based on expected changes to costs and revenues, the agency will have an operating surplus that can then be reinvested into capital needs such as bus replacements or facilities improvements.

IMPLEMENTATION PLAN

The TDP will be implemented over a period of five years (2023-2027). While there are many

variables and unknowns over this five year period (most notably the rate of ridership rebound, transit funding, and initiation of Link operations), RPT developed a preliminary schedule to guide plan implementation. This schedule assumes full implementation of service expansion over the plan's five-year period as ridership continues to recover and resources allow.

Year 1

Year 1 will focus on the introduction core routes (Routes 102, 204, 409, 516, and 519) in replacement of the existing evening, weekend, and holidays routes (21, 22, 23, 24, 25, and 26). This will include:

- Modifications will be made to Routes 102, 204, and 409
- In coordination with the modifications to Route 204, modifications will also be implemented for Routes 202 and 217, including the discontinuation of Route 217
- In coordination with modifications to Route 409, Route 418 will be discontinued
- Route 519 will be introduced as a modified, interlined route of existing Routes 309 and 411
- Route 307 will be modified in coordination with implementation of Route 519
- Route 516 will be introduced as an interlined route of existing Routes 101 and 206
- Route 103 and Route 116 will become peak-only routes
- With the introduction of the core routes (102, 204, 409, 516, and 519), existing Routes 21, 22, 23, 24, 25, and 26 will be discontinued

Year 1 will also focus on the introduction of new routes. This will include Route 538, which is an interlined route of existing Routes 408 and 203, and Route 570X, which will serve the new 75th Street Park-and-Ride. With the introduction of Route 570X, service will be reduced on Route 560X.

Year 2

Year 2 will focus on simplifying existing routes, including Route 103, 116, 306, 314, 412. Depending on the ridership of Route 419, Route 421 will be introduced in Year 2 or 3.

Year 3

Year 3 will depend on the availability of additional resources and will introduce two new routes in southern Rochester, Route 208 and Route 512. Route 205 will be modified with the introduction of Route 208 and will become a peak-only route.

Year 4

Link will be launched in Year 4, and post-BRT routing downtown will be implemented for all routes. If additional resources are available, Route 511 will be introduced in northern Rochester.

Year 5

Year 5 will depend on the availability of additional resources and will add additional frequency on high-ridership routes and will introduce service to the Rochester airport (Route 350X).

Transit Service Adaptive Management Plan

In March 2020, RPT implemented multiple service changes in response to orders from the State of Minnesota, Olmsted County health officials, and changing ridership demand resulting from the COVID-19 pandemic. The selective suspension of service sought to balance the transportation needs of essential workers with budgetary restraints and a lack of demand. Today, RPT's operation largely resembles pre-COVID-19 service; however, the pandemic continues to evolve, and the possibility of new public health emergencies makes it prudent to plan for modified operations.

Any future plan for modified operations should prioritize routes providing core service (Route 102, 204, 409, 516, and 519), in other words the routes that operate during weekdays, evenings, and weekends. Additional priority should go to routes that operate in areas with high concentrations of likely transit users (Routes 103, 306, 307, 314, 412, 413, 4191[1], and 560X).

[1] In the event Route 421 is operational at the time of a service modification, the cost-neutral alignment of Route 419 should be operated to provide enhanced coverage.

INTRODUCTION

The Transit Development Plan (TDP) is the City of Rochester's guiding document for managing and improving all aspects Rochester Public Transit's (RPT) services over a five-year period. The plan is focused on 2023-2027 and covers fixed-route and paratransit services, capital assets and technology, fares and funding, and current and upcoming transit system needs like planning for Link bus rapid transit (Link) and integrating electric buses into the fleet. While this plan considers the service impacts of the Link and how fixed-route bus service will need to change once this service starts, this plan is primarily focused on fixed-route and paratransit service, since there is a separate planning and design process underway focused on Link. Rochester's last TDP was completed in 2017, and this plan builds upon the analysis, findings, ideas, and recommendations from that plan. This plan also considers changes in context since 2017, including development patterns and changes in travel patterns resulting from the COVID-19 pandemic.

RPT began work on the TDP in June 2021. Throughout Fall 2021 RPT engaged residents, businesses, and community organizations to learn about what was working well and not working well with existing transit services by conducting a survey and hosting focus group discussions. During this time, RPT also analyzed demographic and employment data of those living and working in Rochester as well as development and travel pattern data and performance of existing transit services. During Winter 2021-2022, RPT used the findings from the data analysis and public feedback to develop service ideas. The service ideas were shared with the public online, on buses, and at an in-person open house to gather feedback to inform the plan recommendations. RPT used this feedback to develop the recommendations in this plan.

The analysis for the TDP was comprised of several elements including:

ANALYSIS

- Community Profile
- Provider Profile
- Fixed-Route Service and Route Profiles
- Paratransit Profile
- Peer Analysis
- Market Analysis
- Fare Analysis
- Public and Stakeholder Engagement Round 1

FINDINGS

The findings from this analysis were then documented in:

- Needs Inventory
- Strengths, Challenges, Opportunities, and Strategies

IDEAS

Based on the findings of the analysis, the RPT developed ideas for the plan that were outlined in:

- Strengths, Challenges, Opportunities, and Strategies
- Mission, Goals, and Performance Measures
- Initial Service Ideas
- Public and Stakeholder Engagement Round 2

RECOMMENDATIONS

RPT used the public and stakeholder feedback to turn the ideas into the plan recommendations, which include:

- Service Recommendations
- Capital and Asset Plan
- Organizational and Staffing Plan
- Financial Plan
- Implementation Plan

COMMUNITY PROFILE

RPT analyzed population and land use data to evaluate how Rochester has changed since the last TDP in 2017 and how well transit is serving current community transportation needs. Complete documentation of this analysis can be found in the Community Profile Technical Memo.

ROCHESTER IS GROWING, BECOMING DENSER, AND MORE DIVERSE

Planning a high-quality transit system for Rochester requires understanding the demographic and socioeconomic characteristics of Rochester residents that are likely to impact their demand for transit. Analysis of multiple demographic factors showed that populations with either a higher propensity or need for transit are currently primarily concentrated near downtown and in northwest and southeast Rochester. Since the previous TDP, several of the demographic and socioeconomic characteristics that indicate greater likelihood to ride transit have increased. These trends indicate that transit service may be most effective and provide the most benefit within downtown and along those major corridors.

Population Density ↑

Population density in Rochester has increased 10 percent from 3.1 people per acre to 3.3 people per (unit). Total population has also increased from 108,179 to 118,924.

People of Color ↑

People living in Rochester who identify as people of color has increased from 21.5 percent of the population to 25 percent—an increase of approximately 6,500 people.

People with Low-Incomes ↓

People living in Rochester with low-incomes has decreased from 23 percent of the population to 20.8 percent, approximately 150 people.

People with Disabilities ↑

The percent of people living in Rochester with a disability increased from nine to 11 percent—an increase of approximately 3,200 people.

Youth ↑

The percent of people living in Rochester who are youth (ages 15-24) has increased from 12 to 15 percent which is approximately 4,500 people.

Older Adults ↑

The percent of people living in Rochester who are older adult (ages 65+) has increased from 13 to 16 percent—an increase of approximately 4,900 people.

People per Vehicle ↑

The ratio of people of driving age to vehicles in Rochester has increased from 1.15 to 1.19.

ROCHESTER IS A GROWING REGIONAL EMPLOYMENT HUB

Rochester continues to be an employment hub for the region. As of 2019, there were approximately 91,000 jobs located in Rochester, a 7.4 percent increase from 84,700 jobs in 2013 (the year of data used in the previous TDP). Having such a high concentration of jobs presents both opportunities and challenges for transportation. As the number of people working in Rochester grows, so will the need for alternatives to single-occupancy vehicle commutes.

Rochester's jobs are primarily located downtown (as shown in **Figure 1** below) and people from within and outside Rochester need to commute downtown to access them. In addition to downtown, Rochester has several other job centers that people will need access to in other parts of the city.

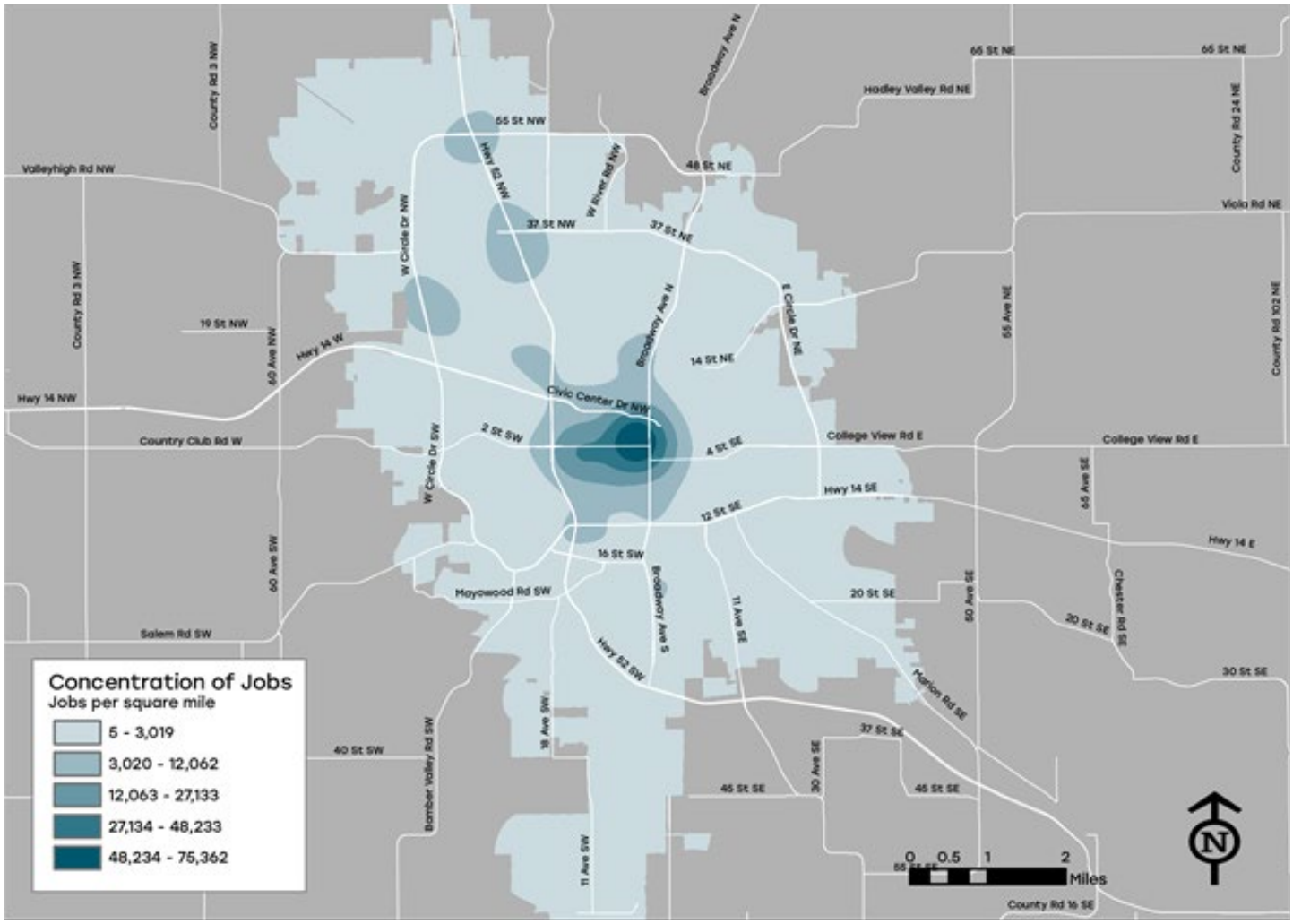


FIGURE 1: Concentration of jobs in Rochester (2019); Source: Longitudinal employer-household dynamics data

ROCHESTER IS POISED FOR GROWTH AND EXPANSION

RPT reviewed relevant plans from the City of Rochester, Olmsted County, Rochester-Olmsted Council of Governments (ROCOG), Destination Medical Center (DMC) and other regional partners, including Rochester's Comprehensive Plan, the ROCOG Long-Range Transportation Plan, and DMC's Integrated Transit Studies. All plans reviewed highlighted that Rochester is expected to experience growth over the next few decades—growth in population, employment, and geographic extent. Rochester's transit system has an important role to play in facilitating and shaping this growth. While attention should be given to growth patterns downtown and along major corridors, travel patterns will be changing throughout Rochester and the transit system will need to balance speed of service with coverage and access.

Primary Transit Network identifies future high-frequency transit corridors

Rochester developed a Primary Transit Network (PTN) Strategy in its 2040 Comprehensive Plan that identifies the corridors best suited for high-frequency transit as determined by the presence of jobs and housing (shown in **Figure 2**). The PTN aims to relieve downtown traffic congestion by developing a network of routes with a 10- to 20-minute frequency and multiple locations for people to transfer between routes. The City of Rochester desires development along these corridors to emphasize density, affordable housing, a mix of uses, and buildings facing toward the street to create a more walkable and transit-supportive environment.

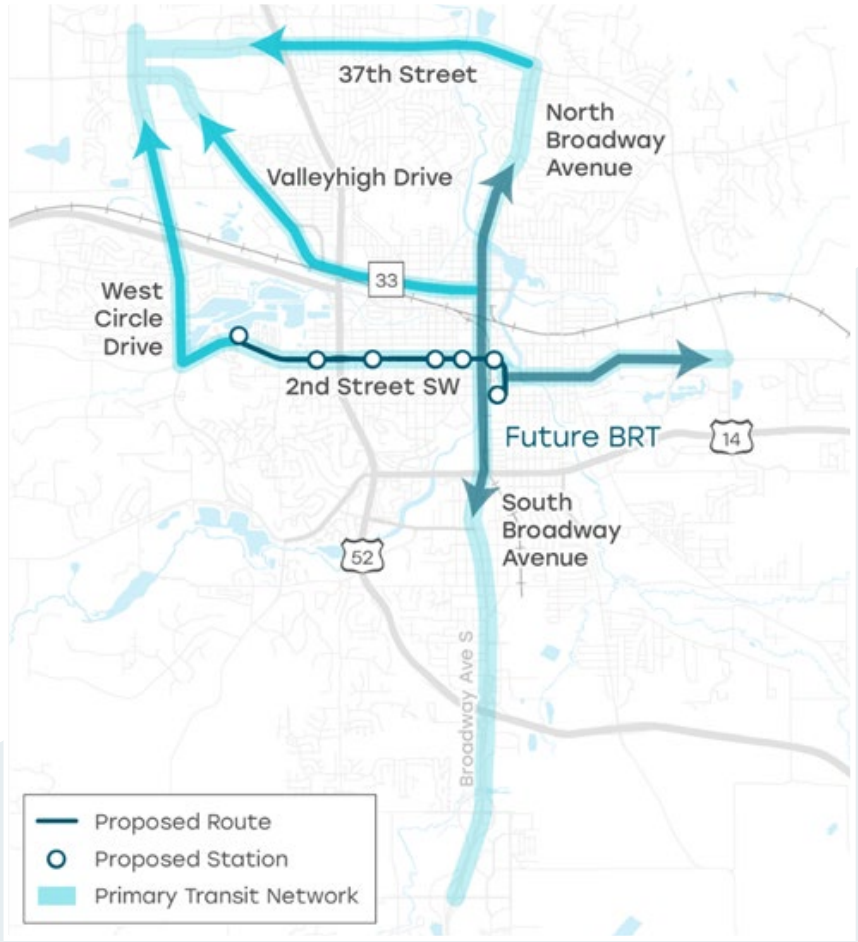


FIGURE 2: Rochester's PTN; Source: City of Rochester[2]

[2] https://www.rochestermn.gov/government/departments/public-transportation/link/project-phases

PROVIDER PROFILE

RPT is a small urban transit agency located in Rochester, Minnesota and is one of five small urban transit systems in state. As of 2021, the system provided a total of 767,140 rides, including 743,769 on fixed-route service and 23,371 on paratransit service, and 108,841 service hours.

RPT operates 32 fixed bus routes within its service area of approximately 51 square miles (shown in **Figure 3** on the following page). While operating times vary by route, RPT bus service generally runs service 5:00 AM–10:30 PM weekdays and 6:30 AM-7:30 PM on weekends and holidays. RPT offers three express routes that operate between four park-and-rides and downtown Rochester and 29 neighborhood routes. The neighborhood routes include 19 routes that operate all day, two routes that operate during peak-only periods, two routes that offer limited service (i.e., “shopper” routes that only operate one day per week), and six routes that operate during evening and weekend periods.

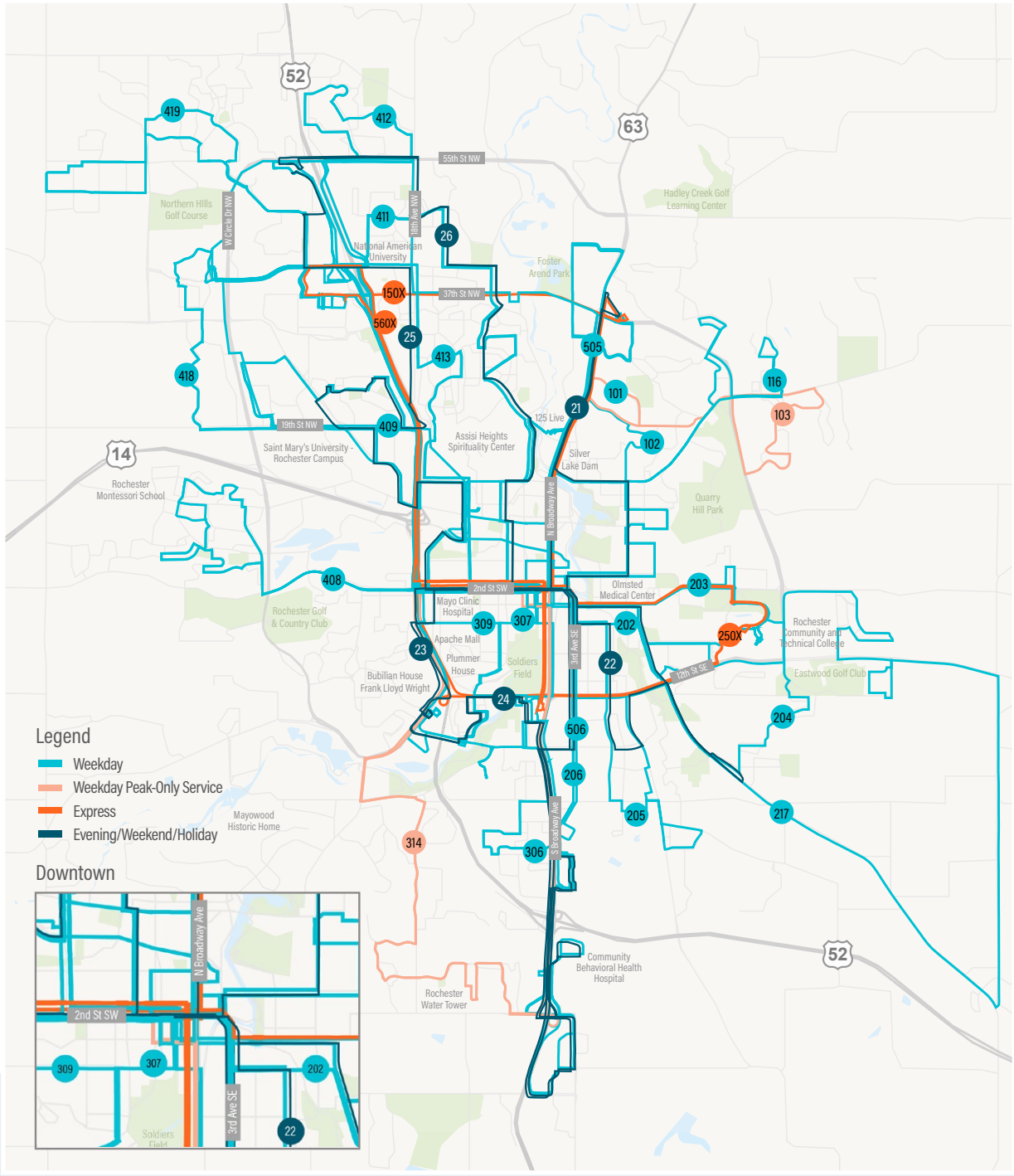


FIGURE 3: Existing RPT fixed-route system map

Riders who have disabilities and cannot use fixed-route service are eligible to apply to use Zumbro Independent Passenger Service (ZIPS), which provides origin-to-destination paratransit service. To use ZIPS, riders must schedule their trip at least one day in advance. The ZIPS service area extends from 75th Street North to 60th Street South and from 60th Avenue West to 80th Avenue East (shown in **Figure 4** on the following page). ZIPS operates 5:00 AM-10:30 PM on weekdays and 6:30 AM-7:30 PM on weekends and holidays (times represent the first and last pick up of the day).

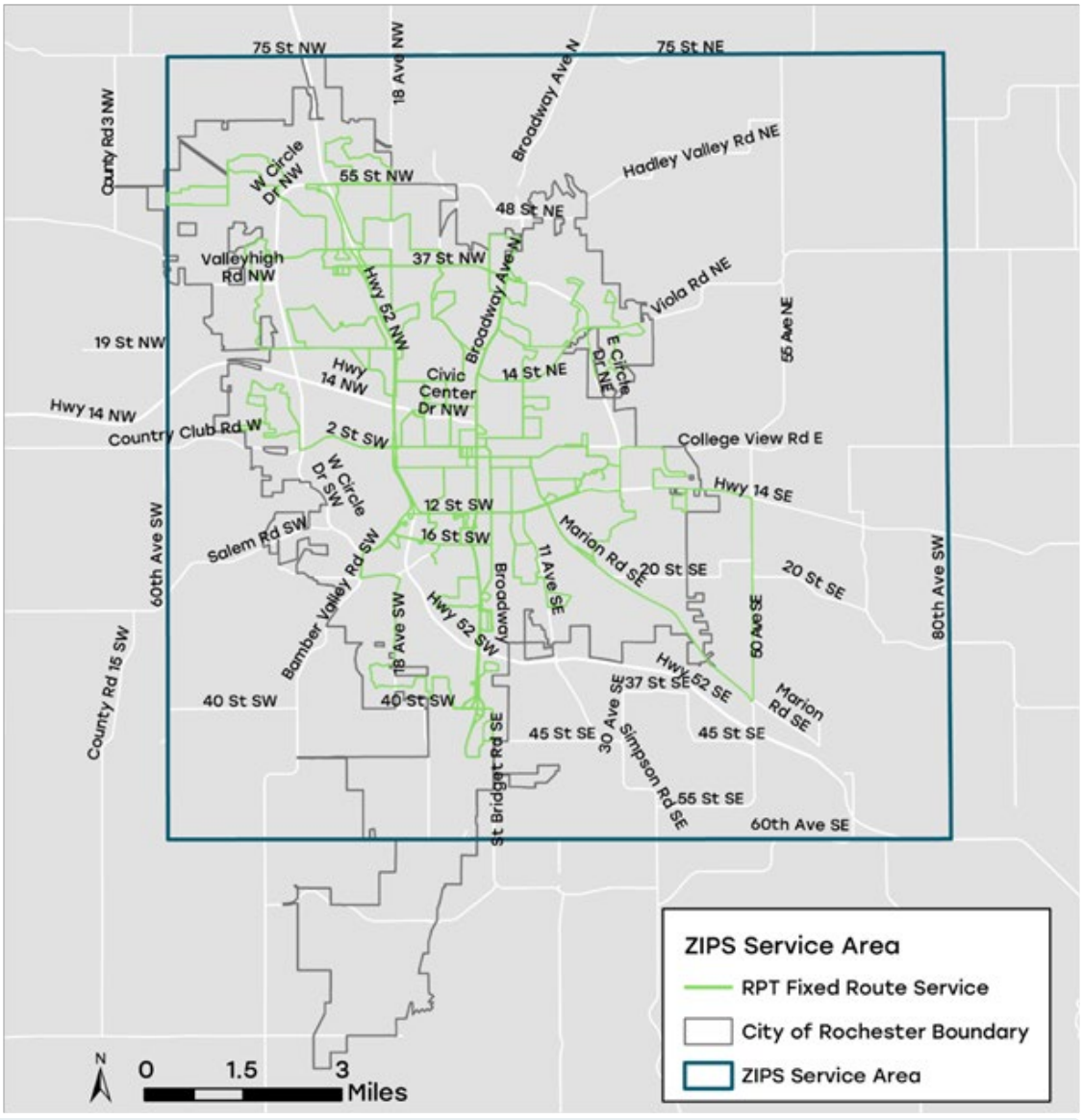


FIGURE 4: Zips service area

As of 2021, RPT had a fleet of 75 buses, including 64 diesel transit buses used to provide fixed-route service and 11 cutaway buses for ZIPS demand-response service. All of RPT's fleet is ADA accessible. In 2018 and 2020, the FTA awarded Rochester grants for the procurement of four 60-foot battery electric buses and infrastructure necessary for the operation. In 2022, the first two New Flyer Xcelsior-60 buses arrived, and the next pair are expected to arrive in 2023. These buses will allow RPT to test alternative fuel buses to inform future plans for transitioning to a zero-emission bus fleet.

Rochester is making significant investments in its public transit system with the implementation of bus rapid transit (BRT) along 2nd Street. The BRT will connect a new 13-acre transit-oriented development, the West Transit Village, with the Downtown Waterfront Southeast area. This $150 million investment in Rochester's busiest transit corridor includes business access and transit lanes; seven stations with off-board fare collection, heating, light, and real-time signage; transit signal priority; and 12 new buses.

A full overview of RPT can be found in the **Provider Profile Technical Memo.**

FIXED-ROUTE SERVICE AND ROUTE PROFILES

RPT evaluated the performance its fixed-route bus services both as a network and for each individual route. The data from this evaluation established a foundation for recommending service improvements. The evaluation found that RPT's fixed-route bus service has multiple high-productivity routes and reaches most Rochester residents. In addition to system strengths, the fixed-route evaluation identified opportunities for improvement, such as making routes operate in both directions and easier to understand as well as improving on-time performance.

RPT evaluated fixed-route service in three main categories:

1. Ridership and productivity of the service
2. Operating costs and efficiency
3. On-time performance

RPT used five guiding design principles, based on transit best practices, to evaluate RPT's current system strengths and what could be improved. These principles include:

- **Intuitive design.** Service should be simple and easy to use
- **Direct routes.** Routes should operate along a direct path so that it is easy to understand
- **Regular frequencies.** Service should operate at regular intervals
- **Bidirectional service.** Routes should provide service in both directions of travel
- **Strong anchors**. Routes should serve well-defined markets
- **Coordination between routes.** Service should be well-coordinated at major transfer locations

While following each principle on every route is not always feasible, a well-designed route should address as many of these principles as possible and balance the trade-offs between them when each one cannot be met.

The full evaluation of the RPT system and each individual route can be found in the **Existing Service and Route Profile**.

RPT'S FIXED-ROUTE SERVICE HAS MULTIPLE STRENGTHS RESULTING IN HIGH-PRODUCTIVITY ROUTES

RPT's current fixed-route service has several important strengths including serving different rider "markets" well and being within walking distance of most Rochester residents. As a result, many RPT routes are well used such as express routes with service between park-and-ride lots and downtown (e.g., Routes 150X, 250X, and 560X) and two-way neighborhood routes with all-day service that serve strong anchors (e.g., Routes 101, 411, and 413).

In general, RPT routes serve well-defined markets including strong commuter markets, particularly by express routes between park-and-ride lots and destinations downtown. The system also provides regular service to and from big box retail stores after they close, providing regular service to shift workers who rely on transit to commute.

RPT'S FIXED-ROUTE SERVICE COVERS MOST OF ROCHESTER, ESPECIALLY WHERE SERVICE IS NEEDED MOST

RPT's fixed-route network provides high levels of coverage, especially in areas where people are more likely to need and/or use transit. Fixed-route service is within a five-minute walk for 82 percent of Rochester residents and within a 10-minute walk for 97 percent.

RPT FIXED-ROUTE PRODUCTIVITY AT A GLANCE

The RPT fixed-route system experienced significant decreases in all measures of productivity (riders per amount of service provided) due to the COVID-19 pandemic, but still performs favorably when compared nationally to transit agencies of similar size.

Weekend transit service retained the highest level of productivity compared to 2019, pre-COVID-19.

Express service is the most productive by all measures, owing to fulfilling a clear demand created by limited parking downtown, high-frequency of service, and only operating during peak demand periods.

Evening service had the lowest productivity performance of all service types which may warrant adjustments to ensure appropriate allocation of resources for this important service.

COVID-19 DRAMATICALLY REDUCED RPT FIXED-ROUTE RIDERSHIP AND REQUIRED RESOURCE-INTENSIVE RESPONSES

Ridership on RPT routes shrank drastically at the start of the COVID-19 pandemic in the United States. RPT provided 189,000 passenger trips in April 2019; the agency provided fewer than 12,000 passenger trips in April 2020. As of August 2022, RPT ridership rebounded to roughly 84,000 passenger trips, making average daily ridership about 48 percent of 2019 performance figures. Despite the decline in ridership, RPT continued to provide transit service throughout the pandemic, which was a high expense but made transit available for those who rely on it.

While RPT has recovered some ridership through restoring service, demand remains low compared to pre-pandemic levels. This is likely due to several key factors. First, major employers in Rochester's downtown implemented, and continue, "work from home" arrangements for staff which did not need to be on-site. Many of these employees were previously RPT riders. Second, the City of Rochester and Mayo Clinic changed parking policies downtown for a time early in the pandemic, freeing up access to convenient parking for many downtown employees. As parking charges and restrictions were reinstated, RPT ridership saw marked increases. Finally, in general the public reduced discretionary travel during early stages of the pandemic, especially via public transit to reduce their contact with other people.

The ongoing pandemic and sustained higher levels of teleworking represent a challenge to recovering RPT ridership to pre-pandemic levels. At the same time, there are significant opportunities to reimagine the agency's operations to better serve current riders. RPT can also work to reach new customers to serve a larger proportion of a population that is projected to grow significantly in the coming years.

ON-TIME PERFORMANCE AND SERVICE LEGIBILITY MAIN CHALLENGES FOR FIXED-ROUTE SERVICE

While RPT's system has its strengths, the analysis also highlighted a number of areas where RPT could improve its fixed-route service. RPT's transit service can be complicated and unreliable. In 2021, according to available data through RPT's bus tracking equipment, buses arrive at stops on-time just over 50 percent of the time, and many regularly arrive at stops early. In addition, some routes are circuitous and operate in only one direction or during limited time periods. These complications may be confusing to riders, especially those who only ride occasionally.

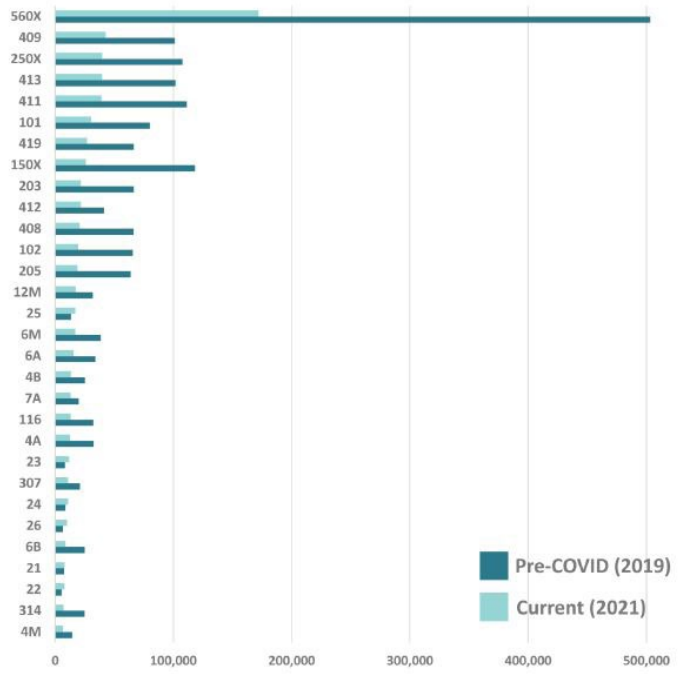


FIGURE 5: Pre- and post-COVID-19 ridership[3]

[3]Routes 217, 418, 505, and 506 resumed operations too late in the period of analysis for inclusion in this assessment.

PARATRANSIT PROFILE

ZIPS is a vital transportation service for Rochester community members with disabilities who cannot use fixed-route service. In 2021, 23,371 rides were provided on ZIPS. ZIPS annual total ridership was decreasing before the COVID-19 pandemic and continued to decrease during the pandemic; ridership returned to pre-pandemic levels in 2021. While performance has improved in several areas over the last five years, ZIPS is still not meeting some key performance goals such as on-time arrival. Total operating costs for ZIPS have declined but costs per trip have increased slightly.

The data from this evaluation established a foundation for recommending ZIPS improvements. The full evaluation of ZIPS can be found in the Paratransit Profile.

RPT evaluated ZIPS service in four main categories:

1. Service provided
2. Ridership and productivity of the service
3. Operating costs and efficiency
4. On-time performance

ANNUAL RIDERSHIP WAS DECREASING EVEN BEFORE THE COVID-19 PANDEMIC

Most ZIPS ridership is in city center and ridership has been decreasing, even prior to the COVID-19 pandemic. RPT provided nearly 32,000 rides on ZIPS in 2017 which dropped to roughly 23,000 rides in 2019, a decrease of 38.4 percent. Ridership decreased even further due to COVID-19, with approximately 16,000 rides provided on ZIPS in 2020. In recent years, ZIPS ridership has increased, with 2021 ridership up two percent from 2019 levels. Most of ZIPS ridership occurs in the center of the city with few trips starting in the southernmost and eastern most areas of the service area (see **Figure 6**).

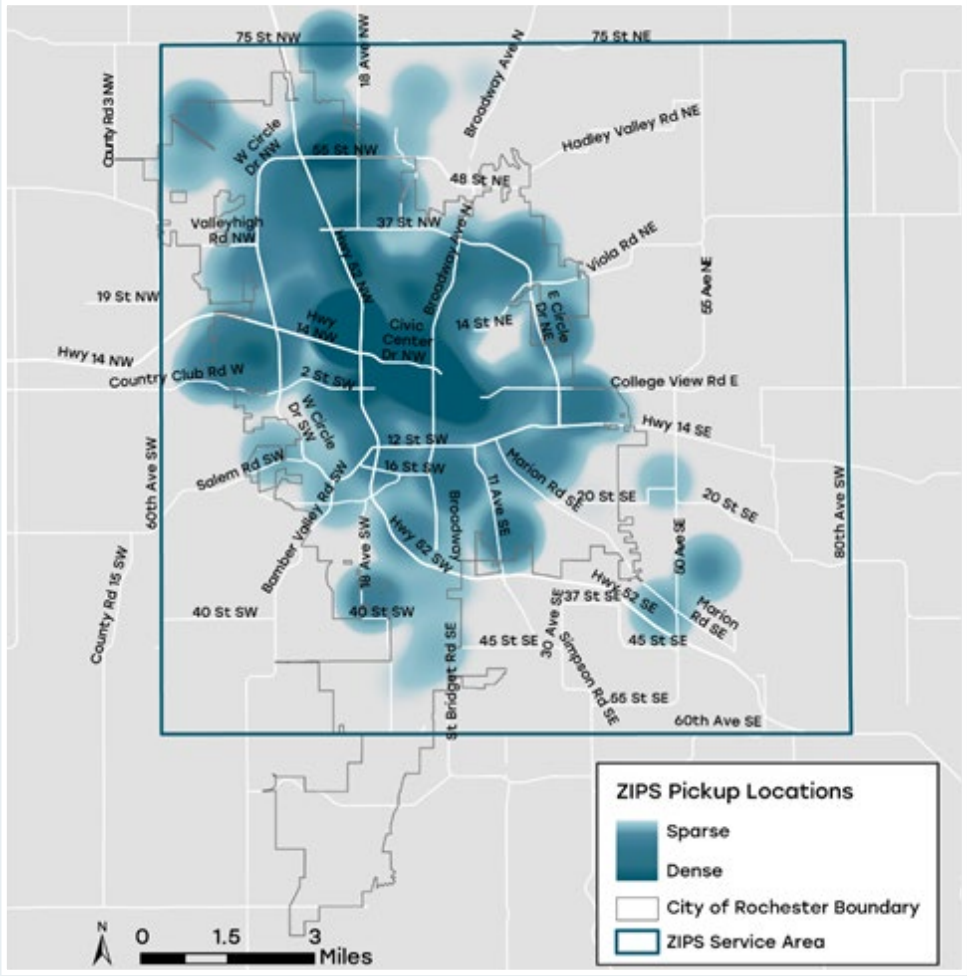


FIGURE 6: Zips pick up locations

AMOUNT OF ZIPS SERVICE PROVIDED DECLINED OVER PAST FIVE YEARS

RPT measures the amount ZIPS service provided based on both distance (revenue miles) and time (revenue hours). Between 2017 and 2021, service levels decreased both in terms of revenue miles and hours. Revenue hours decreased from 10,978 to 10,689 and revenue miles decreased from 205,401 to 174,584. Both service metrics were also higher in 2015, as documented in the 2017 TDP. Before the COVID-19 pandemic began, revenue hours operated remained relatively constant while revenue miles were decreasing. With the beginning of the COVID-19 pandemic, both service measures decreased rapidly.

A THIRD OF ZIPS RIDES PROVIDED BY OVERFLOW SERVICES

During periods of high demand and after 5:00 PM on weekdays, ZIPS often fulfills trip requests through contracted taxis or accessible vans rather than the standard ZIPS buses—this is referred to as overflow service. The portion of total ZIPS rides provided by overflow services increased between 2017-2019, from 28 percent in 2017 to approximately 36 percent in 2019.

ZIPS OPERATING COSTS HAVE DECLINED BUT COSTS PER TRIP HAVE INCREASED SLIGHTLY

ZIPS total operating cost decreased from $649,028 in 2017 to $530,647 in 2021. RPT evaluates operational and financial productivity of ZIPS in terms of passengers per revenue mile or revenue hour or in the operational cost per trip. Between 2017 and 2021, the number of ZIPS passenger trips per revenue mile increased. Since 2018, ZIPS passenger trips per revenue hour have decreased and has fallen short of the goal set in the 2017 TDP. Despite a decrease in total operating costs, ZIPS operating costs per trip were $22.71 in 2021, higher than the goal of $18 set in the 2017 TDP.

ZIPS ON-TIME PERFORMANCE IMPROVED, STILL SHORT OF GOAL

On-time performance is one of the most critical performance measures from a customer perspective and highlights the transit service's ability to reliably serve its ridership. Congestion (or lack thereof) on roadways, high passenger loads, inaccurate scheduling, and operator shortages can lead to late and/or early stops. ZIPS considers a trip to be on-time if it arrives within ten minutes before or after the scheduled pick up time (the standard required by the FTA).

ZIPS on-time performance has improved to 74 percent, up seven percentage points from the 67 percent on-time performance documented in the 2017 TDP. While the performance from October 2019 represents an improvement in on-time performance, it falls short of the performance goal of 90 percent on-time performance for ZIPS established in the 2017 TDP.

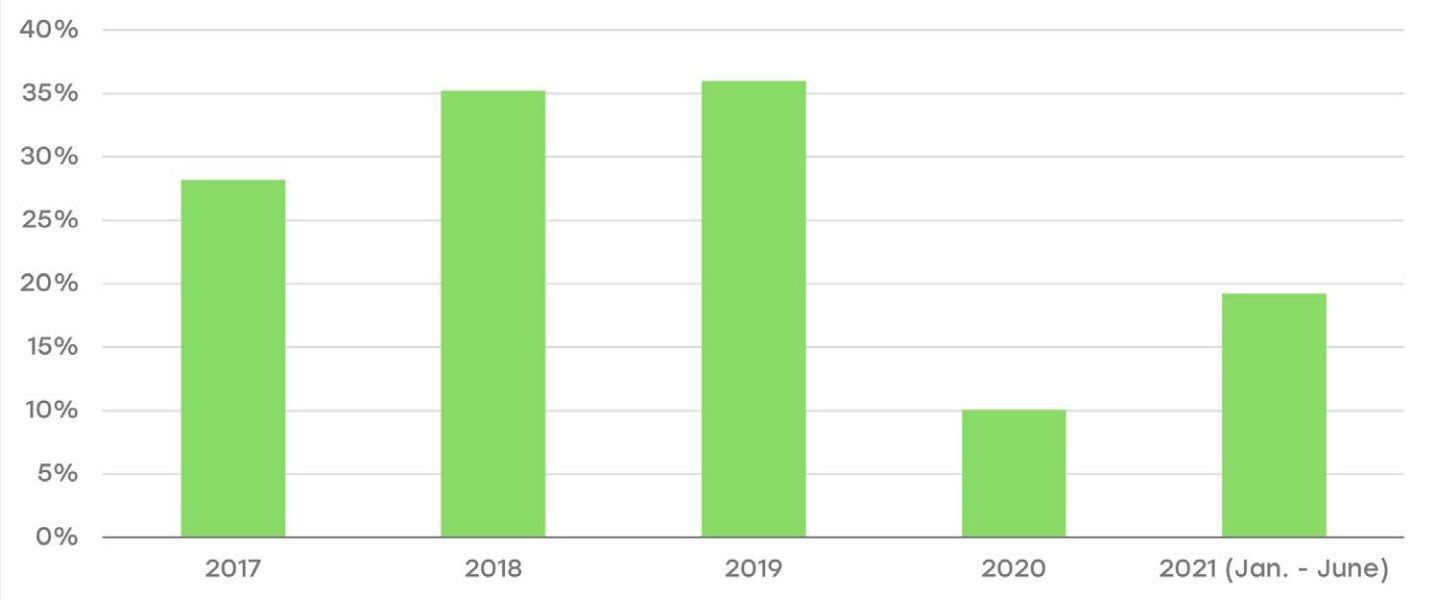


FIGURE 7: Overflow as a proportion of all reservations

DEMAND FOR ZIPS SERVICE FORECASTED TO GROW

From 2016 to 2019, RPT fixed-route service ridership increased an average of 7.5 percent each year. During the same period, ridership on ZIPS decreased of an average of 14.5 percent annually. The decline in ZIPS ridership can be attributed to common issues with driver shortages and driver retention that many transit agencies have faced in recent years. This forced RPT to use other private services to keep up with service demand, which likely led to service reliability challenges for riders using these overflow services, discouraging some from using the service.

RPT has taken active steps to address these challenges over the past year, including recruiting additional drivers and purchasing smaller vehicles that do not require special licensure to drive to increase the eligibility pool of potential drivers. RPT has also been coordinating with existing centers for adults with disabilities to address some of these challenges with service.

In recent years, ZIPS ridership has increased, with 2021 ridership up two percent from 2019 levels. As the trend over the past year has shown, ZIPS reliability is expected to continue to increase ridership in the coming years.

In addition to ridership trends, local demographic trends and Rochester's distinction as a major medical destination are likely to attract more riders.

Based on data from the United States Census Bureau, between 2010 and 2020, Rochester's population over the age of 65 and non-institutionalized population with disabilities has increased faster than the Olmsted County average. Rochester's population has historically had a relatively high proportion of people with disabilities, and this population may continue to increase due to the convenience to the Mayo Clinic.

The combination of the demographic changes in the service area as well as the improvements to the ZIPS transit system's reliability supports a steady annual growth in ridership. Based on percent changes in the population over 65 and the non-institutionalized population with disabilities, RPT used a five percent growth rate to project ZIPS ridership growth from 2021 to 2031. Using these assumptions, RPT expects ZIPS annual ridership to reach roughly 31,300 trips by the end of this five-year plan and 38,000 by 2031 (see **Figure 8**).

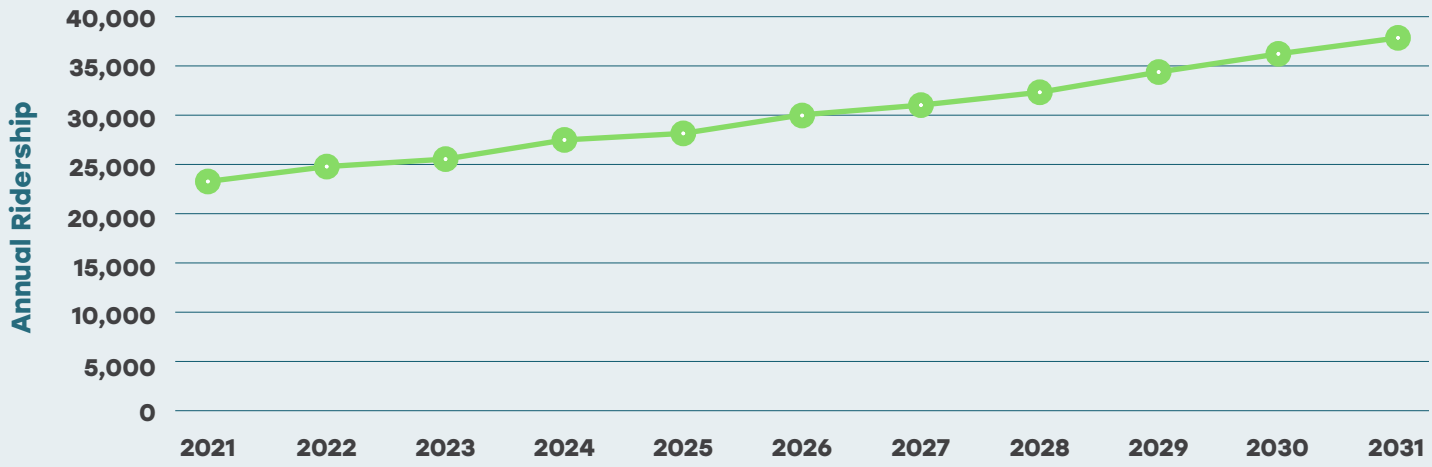


FIGURE 8: Zips annual ridership forecast

PEER ANALYSIS

RPT was compared to five similar transit providers in the United States using data from the National Transit Database (NTD). Conducting a peer analysis provides context for evaluating RPT fixed-route and paratransit system performance and insight into how well RPT is doing on various service elements compared to systems that share similar characteristics.

In general, RPT fixed-route service is efficient but was slower than peers to recover from COVID-19 pandemic. RPT generally performed similarly to its peers in terms of fixed-route and paratransit ridership productivity, and better in terms of financial efficiency in 2019 before the pandemic. In 2021, after impacts from COVID-19 reduced ridership and fare revenue, the transit system compared less favorably to its peers.

RPT used a number of factors to select peer agencies, including amount of service provided, community size, community characteristics, and kinds of service. Other factors considered were the presence of BRT service, the use of battery electric buses (BEBs), and/or a high percentage of ridership coming from a single entity such as a university or large company.

The five peer agencies selected by for this analysis included:

- **Duluth Transit Authority –** Duluth, MN
- **Kalamazoo Metro Transit –** Kalamazoo, MI
- **StarTran –** Lincoln, NE
- **SolTrans –** Solano County, CA
- **Connect Transit –** Bloomington-Normal, IL

The complete peer analysis documentation can be found in the **Peer Analysis Technical Memo**.

FIXED-ROUTE SERVICE PEER ANALYSIS

RPT provides a high amount of fixed-route service compared to peers

RPT ranked second among peers in terms of revenue hours and revenue miles per capita in 2021. This indicates that relative to its service area population, RPT provides more service than its peer agencies.

RPT's ridership has not recovered from COVID-19 as well as some peer agencies

RPT's passengers took over 2.1 million trips in 2019, only two percent less than the peer group average. However, RPT's passengers in 2021 took only 743,800 trips, 40 percent less than the peer group average for that year. This may be attributed to the types of travel markets peer agencies served compared to RPT, potentially with more of a focus on essential travel than commuting which has experienced significant shifts since 2020.

RPT fixed-route service highly productive in 2019 compared to peers, less so after impacts of COVID-19

RPT's revenue per passenger and farebox recovery were the highest among peers in 2019. In that year, RPT earned close to $1.60 per passenger in fare revenues and recovered over 30 percent of its operating cost from fares. RPT's high financial productivity at the time was due in large part to a high demand for travel into downtown Rochester for work combined with limited parking. This resulted in very well-used and financially efficient bus routes serving park-and-rides and high ridership neighborhood routes serving commuters.

RPT's ridership in 2020, like most (if not all) transit agencies in the United States, experienced a marked drop with the onset of COVID-19 and a slow steady recovery. RPT's ridership was hit particularly hard in part because of its focus on serving commuters working in downtown Rochester, and the dramatic growth in working from home particularly for office and knowledge workers. In 2019, RPT ranked third among peers in terms of passengers per revenue hour. In 2021, RPT dropped to sixth place among its peers. Transit markets more oriented toward essential workers and travel tended to experience less decline in ridership and farebox recovery.

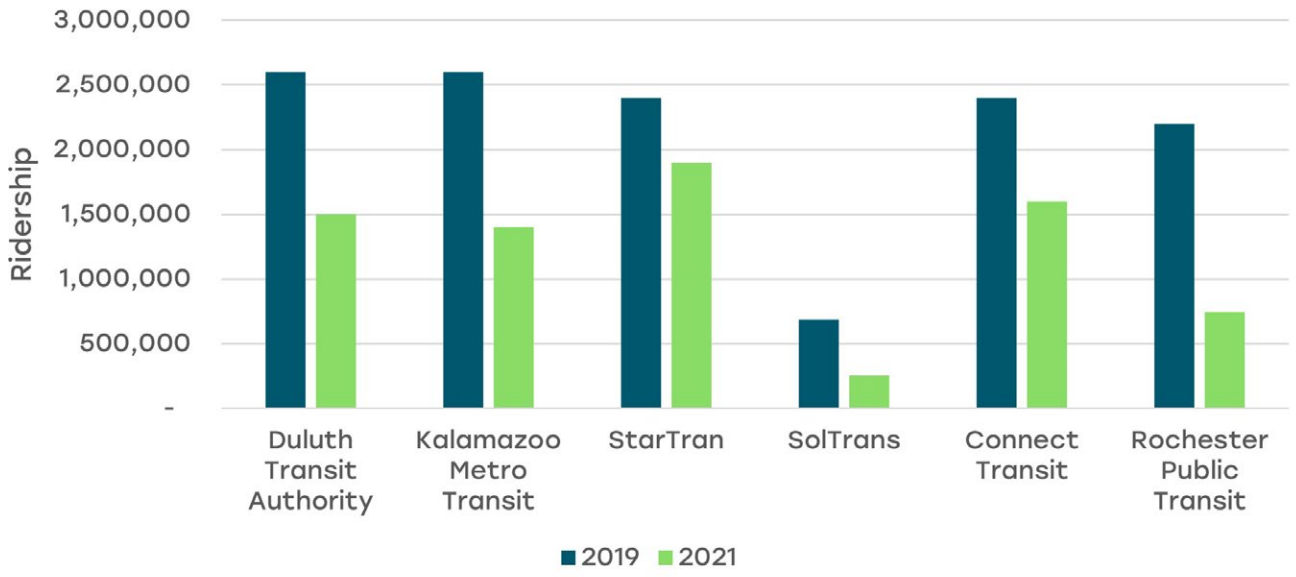


FIGURE 9: Ridership compared to peers

Compared to its peers, RPT uses its resources efficiently

RPT had an operating cost of $4.81 per passenger on fixed-route service in 2019. Only two peer agencies had a lower operating costs per passenger—Connect Transit in Bloomington-Normal, Illinois and Kalamazoo Metro Transit in Michigan. This is due to a combination of 1) how productive fixed-route services are in terms of ridership and fares, and 2) an agency's cost to run its fixed-route service per mile and/or hour. RPT had a combination of relatively high productivity and a middle-of-the-pack cost to operate its services.

Table 1 on the following page documents RPT's fixed-route performance relative to that of its peer systems.

ZIPS SERVICE PEER ANALYSIS

Ridership on ZIPS service was comparable to half of peers

ZIPS ridership ranked third among the selected peer agencies for paratransit overall ridership with 38,600 trips in 2019. The agency had the same ranking for paratransit passenger trips per capita that year. Two of the agencies—StarTran in Nebraska and Kalamazoo Metro Transit—had markedly more paratransit ridership in 2019. This skewed the overall average for peer agencies high. These agencies also had significantly more population in their service areas, larger service areas, and may have implemented different service approaches resulting in higher paratransit ridership. For example, RPT provides a high amount of fixed-route service within its service area compared to its peers which may take ridership away from paratransit. Rochester also has a high number of private transportation providers specializing in special needs and medical transportation, likely due to Mayo Clinic's presence.

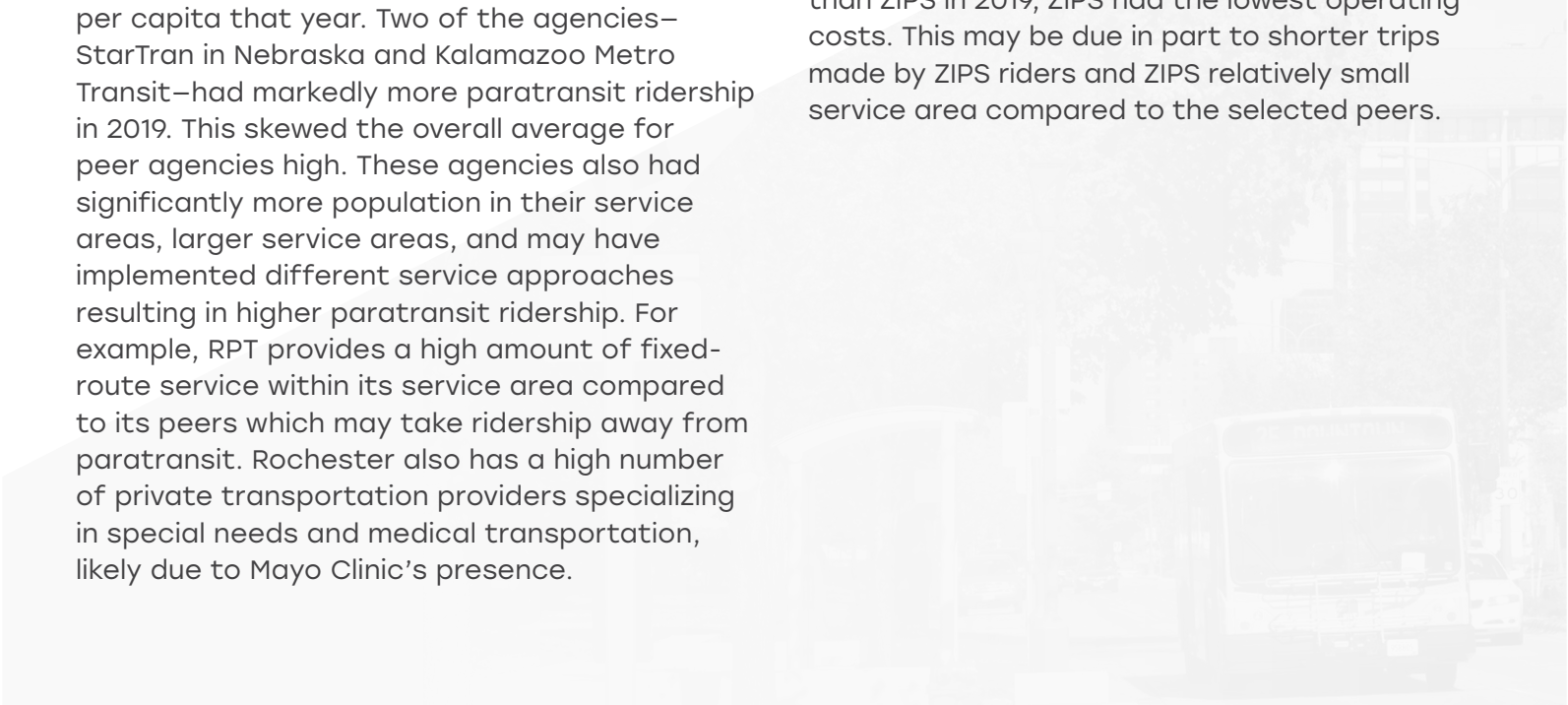
Ridership on ZIPS recovered more slowly than peers after COVID-19

In 2021, ZIPS service had not yet rebounded from the COVID-19 pandemic, while peer services had begun to see increases in use. ZIPS paratransit revenue miles, revenue hours, and passenger trips were between 40 and 55 percent lower in 2021 compared to 2019, while most other peer agencies experienced smaller declines or no decline.

ZIPS passengers also traveled fewer miles than the passengers at peer agencies in 2019. RPT has a smaller service area than most of the selected peer agencies, which could contribute to this result.

RPT's cost to operate paratransit was lower than its peers

In 2019, ZIPS operating cost was $638,700, about 75 percent lower than the peer group average of $2.5 million; again, this average was skewed by StarTran and Kalamazoo Metro Transit with operating costs of $3 million and $5 million, respectively. Even compared to the two peer agencies with lower paratransit ridership levels than ZIPS in 2019, ZIPS had the lowest operating costs. This may be due in part to shorter trips made by ZIPS riders and ZIPS relatively small service area compared to the selected peers.



System	Service Provided			Passenger Productivity				Cost Efficiency			
	Revenue Miles per Capita (2021)	Revenue Hours per Capita (2021)	Unlinked Passengers Trips per Capita (2021)	Passengers per Mile		Passengers per Hour		Operating Cost per Mile (2019)	Operating Cost per Hour (2019)	Operating Cost per Pass. (2019)	Farebox Recovery (2019)
				2019	2021	2019	2021				
Duluth Transit Authority	16.28	1.30	12.14	1.29	0.75	16.79	9.37	$8.43	$109.78	$6.54	14%
Kalamazoo Metro Transit	5.91	0.52	6.56	1.48	1.11	19.83	12.66	$6.39	$85.64	$4.32	24%
StarTran	6.41	0.47	7.45	1.33	1.16	18.11	15.73	$6.40	$87.22	$4.82	24%
SolTrans	2.94	0.25	1.56	1.12	0.53	13.74	6.26	$10.32	$126.78	$9.23	9%
Connect Transit	9.13	0.76	12.18	1.89	1.33	22.61	16.13	$7.17	$85.83	$3.80	11%
Rochester Public Transit	**13.22**	**0.91**	**6.91**	**1.24**	**0.52**	**18.35**	**7.58**	**$5.98**	**$88.22**	**$4.81**	**33%**
Peer Average	**8.98**	**0.70**	**7.80**	**1.42**	**0.90**	**18.21**	**11.29**	**$7.45**	**$97.25**	**$5.58**	**19%**
RPT's Percentage Difference from Average	**47%**	**30%**	**-11%**	**-12%**	**-42%**	**1%**	**-33%**	**-20%**	**-9%**	**-14%**	**72%**

TABLE 1: Fixed-route performance indicators, RPT and peer systems

MARKET ANALYSIS

RPT analyzed demographic and socioeconomic characteristics to identify areas within Rochester where transit service is expected to be most successful for all-day service and peak-only service, respectively. Key destinations for travelers, and modeled travel demand were also considered. Characteristics evaluated included:

- Population and job density
- Indicators of higher propensity to use transit such as residents from low-income, zero-car, and one-car households
- Destination anchors and points of interest including schools, colleges and universities, healthcare facilities, and retail hubs, which are mapped alongside demographic and socioeconomic indicators

Generally, travel patterns and forecasted transit demand aligned with the locations of major Rochester employers (Mayo Clinic, IBM, City of Rochester, Olmsted County), suggesting a strong market for commuter services. Based on the regional travel demand model, as Rochester grows, jobs are expected to continue concentrating downtown, while population continues to grow along the city boundary. Providing transit access to some major retail and service destinations is challenging due to their locations on the periphery of the city and the limited access nature of some roadways serving them.

Overall, the market analysis identified the greatest demand for transit in downtown Rochester. Other, harder to serve, locations throughout the city—areas near Meadow Park, Slatterly Park, Homestead Park, Cimarron Park, Northgate Park, and Crossroads Shopping Center —were also identified as key locations for transit demand. Complete documentation of the market analysis and RPT's findings are available in the **Market Analysis Technical Memo**.

TRANSIT PROPENSITY ANALYSIS

RPT used use a series of datasets representing demographic and employment characteristics to determine which geographic areas are likely to have a higher demand and need for transit service. The datasets used are described in **Table 2**.

DATASET	DESCRIPTION
Transit-oriented populations index	Combines population characteristics to identify concentrations of people who are more likely to ride transit
Activity destinations index	Identifies locations where residents might travel to for non-work trips or for lower-paying jobs
Commuter origins index	Identifies locations likely to serve as the origin of a transit commute
Employment destinations index	Identifies where jobs are concentrated

TABLE 2: Datasets Used For Transit Propensity Analysis

All-day transit demand identified in downtown, southeast, and northeast Rochester

Combining the areas where people who are more likely to ride transit live and the areas to which people are most likely to ride transit (people with low-incomes, people with disabilities, people with less access to a vehicle, older adults, and youth), downtown Rochester and the surrounding areas, Meadow Park, the Marion Road SE between Highway 14 and 20th Street SE, and the neighborhood around Cimarron Park are the areas of Rochester most likely to support all-day transit service (**Figure 10**).

Peak-period transit demand identified in downtown, northeast, northwest, and southeast Rochester

Based on the home locations of people who take transit to work as well as locations with a large number of workers or students, areas that could be served by peak service, include downtown and the surrounding neighborhoods, northwest Rochester, and southeast Rochester (**Figure 11**). While Rochester has historically had a strong transit commuter market, the COVID-19 pandemic reduced in-person work and peak-hour commuter travel. Demand for peak-hour transit is expected to recover over the five year time horizon of this plan.

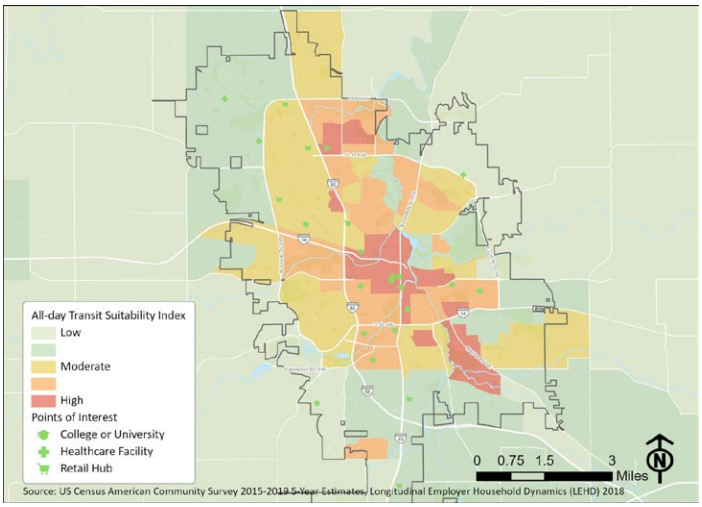


FIGURE 10: All-day transit demand map

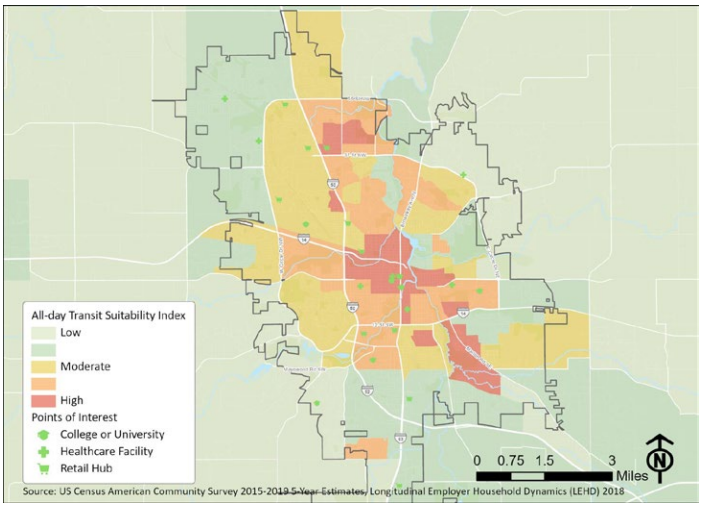
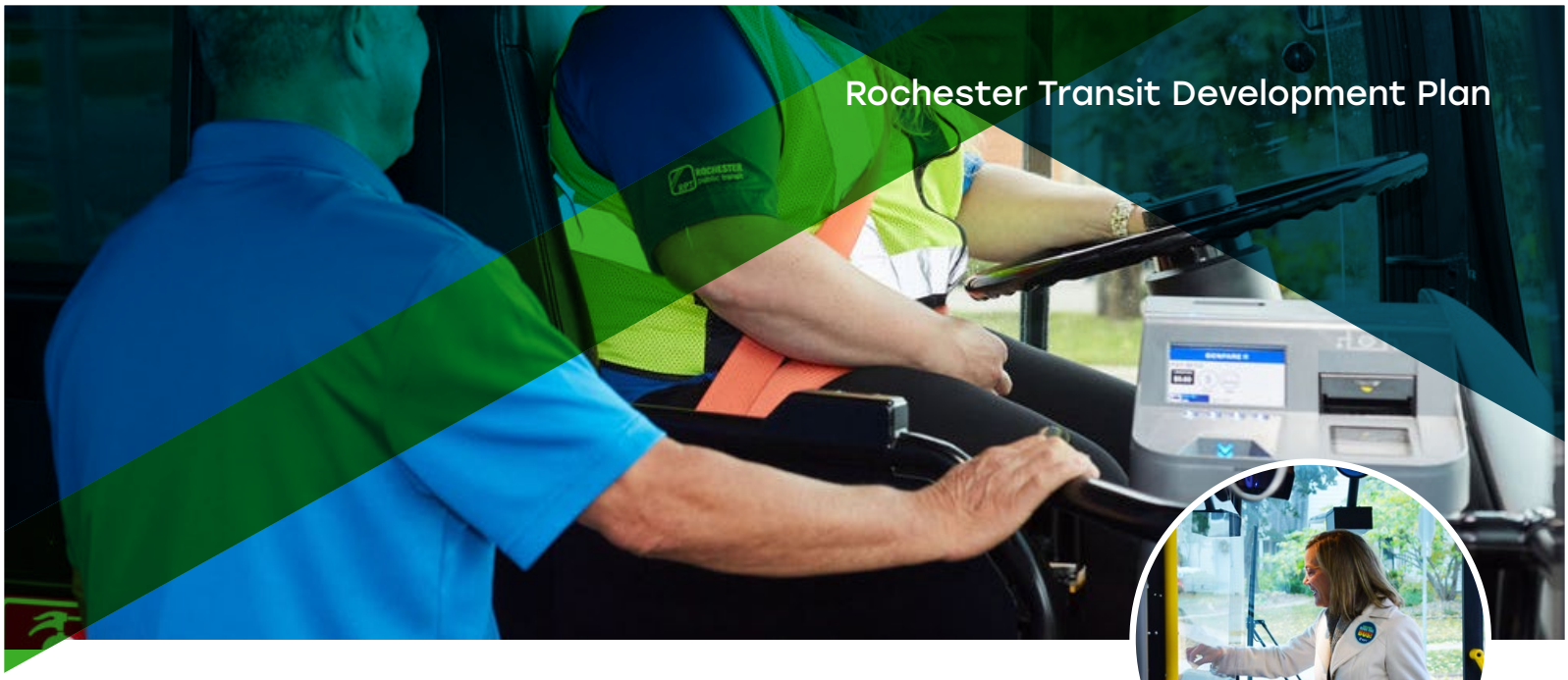


FIGURE 11: Peak-period transit demand map

TRAVEL ANALYSIS

To identify key travel patterns and corridors for transit service, it is important to understand an area's most prevalent travel patterns, regardless of mode, as people using transit generally want to access the same destinations as people using all other modes. RPT conducted a travel analysis based on the region's travel demand model developed by ROCOG. This assessment highlighted the importance of transporting people in and out of downtown Rochester. The travel analysis also identified retail and service destinations along the Broadway corridor to the south and Highway 52 corridor to the west and north.



FARE ANALYSIS

Analysis of RPT's current fare structure and projected ridership in the Financial Plan of this TDP found that the current fare structure should be adequate to support the agency's operations over the five-year period of this plan. At the same time, the City has room to implement new fare products that may help to achieve other City policy goals or provide additional convenience for riders.

A detailed assessment was conducted of RPT's current fare policies, practices, and infrastructure and compared those existing conditions to industry best practices and RPT's peer agencies. RPT also analyzed potential fare structure alternatives and identified opportunities to build on RPT's fare policies, practices, and infrastructure.

RPT has an opportunity to go beyond this baseline of supporting planned operations to build on its existing fare policies, practices, and infrastructure to reflect the agency's guiding principles for fare structure and best practices used by peer agencies. RPT can leverage this opportunity by evaluating and potentially piloting fare structure alternatives such as a low-income fare project, new fare products like a single- or seven-day pass, and implementing mobile ticketing for fixed-route and paratransit service.

Complete documentation of this analysis and RPT's findings are available in the **Fare Analysis Technical Memo**.

RPT'S FARE STRUCTURE PRINCIPLES

RPT's 2017 TDP defined five qualitative criteria to guide the agency's fare structure:

1. **Equity:** How equitable is the fare structure?
2. **Administrative Ease:** How easily is the fare structure administered?
3. **Patron Comprehension:** How easy is the fare structure for people to understand?
4. **Fiscal Integrity:** Will the fare structure provide a reasonable level of revenue?
5. **Promotion of Transit Use:** Can the fare structure be used to promote ridership?

The fare recommendations in this TDP are informed by those guiding principles.

RPT FARE STRUCTURE LESS COMPLEX THAN PEERS

Compared to its peer agencies (see Peer Analysis), RPT's fare structure is less complex in terms of the variety of pass and fare types. A straightforward fare structure supports RPT's guiding principles for fares of patron comprehension and administrative ease, but a more complex fare structure like RPT's peers could also have positive impacts on revenue or ridership, advancing the principles of fiscal integrity and promotion of transit use.

ALTERNATIVE FARE STRUCTURES POSE TRADEOFFS FOR RPT

Possible fare structure changes such as low-income fare product, peak/off-peak fares, mode differentiated fares, and a completely fare-free system would likely yield different benefits and tradeoffs for RPT. A fare elasticity analysis was conducted to evaluate the potential impacts of these four potential fare structure alternatives based on ridership, fare revenue, and operating cost data. The fare elasticity analysis highlighted that RPT could introduce modifications to its existing fare structure to achieve different goals, since some changes would increase ridership, while others would increase fare revenue. The elasticity analysis found that fare changes could have impacts on ridership between -2.7 percent to 2.0 percent (15 percent for fare-free) and impacts on fare revenue between -12.3 percent to 14.7 percent (-100 percent for fare-free).

SOURCE: https://www.genfare.com/fare-management-solutions/mobile-link/

FARE STRUCTURE CHANGES NOT RECOMMENDED FOR RPT IN THE NEAR-TERM

RPT and Mayo Clinic have agreed to fare-free operations for Link, which was not reflected in this analysis. It's recommended that RPT wait until after the fare-free BRT service is implemented and has operated long enough for the service to be evaluated before implementing any of the fare structure alternatives evaluated in this analysis.

If RPT were to pursue a different fare structure alternatives in the future, RPT should implement that fare product as a pilot with an established timeframe and evaluation plan. This pilot should be considered with an understanding of impact on Title VI and with an eye towards RPT's fare structure guiding principles of equity, administrative ease, patron comprehension, fiscal integrity, and promotion of transit use.

RPT LAUNCHING MOBILE TICKETING

Offering mobile ticketing is an industry best practice and is offered by all RPT's peer agencies. RPT is in the process of launching a mobile ticketing service. The following are recommendations for implementation of mobile ticketing:

- Offer mobile ticketing for both fixed-route and ZIPS service through one shared application
- Use a mobile ticketing application that uses flash passes so the payments can be used for trips on ZIPS vehicles as well as on taxi and other non-transit vehicles
- Evaluate the potential for cash-to-fare purchasing for mobile tickets
- Evaluate the potential to offer one application that includes both mobile ticketing and transit information to reduce customer confusion and improve user experience

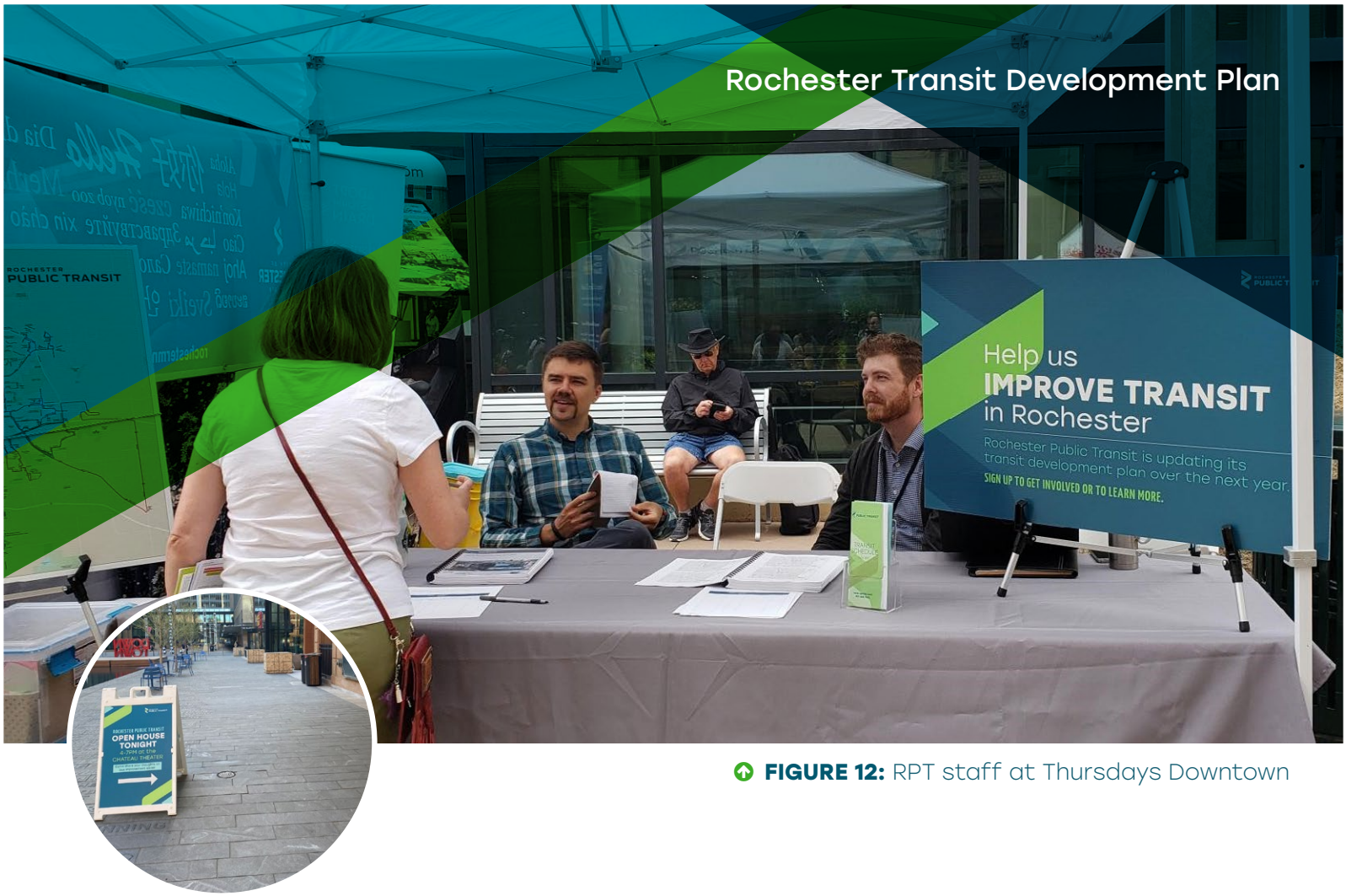


FIGURE 12: RPT staff at Thursdays Downtown

PUBLIC AND STAKEHOLDER ENGAGEMENT PHASE 1

RPT conducted broad engagement efforts from September-November 2021 to collect feedback from as wide a cross-section of the Rochester community as possible as well as elected officials and City partners. RPT's goal for this first phase was to determine what aspects of its service the community saw as working well, where it could be improved, and most importantly, what the community's priorities were for transit service in Rochester. From this feedback, RPT developed guiding principles that it could apply to draft recommendations that it presented to the community in Phase 2 of public engagement for the TDP.

RPT gathered more than 700 survey responses, conducted multiple focus groups, and spoke with people at community events (seen in **Figure 12** above). Residents of Rochester participated in a community working group and acted as liaisons to their community and gathered feedback and brought it back to RPT.

COMMUNITY WORKING GROUP

RPT facilitated a Community Working Group (CWG) of riders from diverse backgrounds to influence the plan goals and service recommendations. CWG members acted as liaisons to their community for the planning process, having conversations with their neighbors, friends, and families regarding various aspects of transit service and helping the team to reach people less likely to respond to more standard engagement methods. RPT met with the CWG six times at strategic points throughout the project. Between meetings, CWG members had conversations with members of their community to collect input relevant to the TDP.

PHASE 1 ENGAGEMENT FINDINGS

Common themes that emerged throughout Phase 1 of the public and stakeholder engagement process included:

- **The quality of bus operators' customer service was frequently cited as RPT's strengths by riders**
- **Riders and decision-makers both support a local tax to increase transit funding (68 percent of survey respondents were supportive of a local tax to help pay for transit services)**
- **Respondents commonly identified increased frequency, extended service hours, and the need for crosstown connections as priorities for fixed-route service improvements**
- **Respondents said snow clearance and ADA accessibility considerations were common barriers to accessing transit service**
- **Feedback about customer information and customer experience pointed to improvements for information at stops and onboard vehicles, information about fares, and improvements to transit technology**

More information about the first phase of public engagement and the RPT's findings are available in the Phase 1 Public Engagement Summary.

STRENGTHS, CHALLENGES, AND OPPORTUNITIES

Through a detailed analysis, high-level themes emerged of what RPT does well, where it could improve, and what opportunities or strategies might be most useful to make transit work better for Rochester. Complete documentation of items can be found in the **Strengths, Challenges, Opportunities, and Strategies Technical Memo**.

STRENGTHS

RPT's system had multiple strengths at the time of the plan, even with the impacts of COVID-19 on ridership and staffing. An aspect of RPT service a strength if it was commonly mentioned or received high satisfaction ratings in surveys and other feedback or if it compared favorably to the performance of RPT's peer agencies or national trends in transit.

Most Rochester residents live within walking distance of an RPT stop

Roughly 82 percent of Rochester residents live within ¼ mile, which is about a five-minute walk of a transit stop. Further, 97 percent live within a half mile of a transit stop, or about a ten-minute walk. ZIPS provides paratransit service for the entirety of Rochester, as well as slightly beyond, well exceeding federal requirement to provide paratransit service within ¾ of a mile of transit routes.

RPT services are accessible to those most in need of transit

RPT bus routes are located in areas where those who are most likely to rely on transit live (people with low-incomes, people without access to a vehicle, people with a disability, etc.). For example, 93 percent of Rochester residents living at or below the poverty level live within a quarter mile of a transit stop.

Furthermore, all RPT buses used on fixed-route and ZIPS services are equipped with wheelchair accessible ramps, wheelchair securement, automated annunciators and

other features to make service accessible to people with various disabilities. ZIPS survey respondents expressed appreciation for the independence that ZIPS service provides.

RPT fixed-routes serve locations where people who ride transit often travel

In general, RPT bus routes serve the locations where people who ride transit often travel, such as large places of employment, shopping, or medical and social services. Public engagement participants noted that RPT's reliable park-and-ride services and service into downtown are among its service strengths. In addition, the system also provides regular service to and from big box retail stores after they close, providing regular service to shift workers who rely on transit to commute.

Many RPT fixed-routes are highly productive

RPT's express routes (Routes 560X, 150X, and 250X) carry the most passenger per hour and are 60 percent more productive than the fixed-route system average. In addition to the express routes, neighborhood routes serving major commercial destinations, public services like County offices, and Rochester Community and Technical College (Routes 204, 206, 409, and 413) also carry a higher number of riders per hour.

The Service Profile Report identified route-specific service strengths. These route-specific service strengths show that high ridership, service area, performance measures related to productivity, and service design are common strengths for many RPT routes.

RPT got high marks for customer service and rider experience

Public feedback for both fixed-route and ZIPS paratransit repeatedly cited RPT operators' customer service as a strength. Participants also noted that buses are clean, the service feels safe and is easy to use, fares are affordable, and that DoubleMap is a good resource.

Around 80 percent of all respondents ranked ZIPS drivers "Excellent" or "Good" on a series of six questions about customer service. Survey respondents also ranked the overall experience of making a reservation with ZIPS and the professionalism and courtesy of reservationists highly. Over 80 percent of respondents reported being satisfied with the following aspects of ZIPS service: application process to become a ZIPS user, in-vehicle safety, safety while traveling to/from vehicle to destination, cost, and operating hours.

CHALLENGES

RPT also found multiple areas for improvement in its analysis of system performance compared to the goals set in the last TDP. RPT also heard multiple key themes regarding aspects of service where satisfaction was low in feedback from the general public and project partners.

Most bus routes run at low frequencies especially at off-peak times

Of the 32 routes RPT currently operates, only one runs more frequently than every 30 minutes. The 560X runs every 10 minutes during peak periods and is RPT's highest ridership route by far. Low service frequency was the most often cited barrier to transit use in the public survey and was commonly cited as an issue throughout the engagement process. Low service frequency can lead long wait times, especially if riders miss their bus or transfers between routes.

RPT operates a limited amount of service during off-peak times

Many engagement participants said that off-peak service is inadequate and that RPT needs additional service during evenings, weekends, and midday hours. Off-peak service is especially important for shift workers. RPT currently operates six routes during weekends and evenings (some weekday routes do operate later into the evening as well) which run every half hour during the week and hourly on the weekends. Of the 23 weekday routes that RPT operates (including express routes), 15 run during the midday period from 9:00 AM-3:00 PM. Furthermore, only two of those routes, Route 203 and Route 412, operate with 30-minute service frequency during the midday and the rest run hourly during the midday period.

Both fixed-route and paratransit services struggle with on-time performance

RPT defines "on-time" for fixed-route service as zero minutes early to five minutes late. As of 2019, 60 percent of fixed-route service was on time, while 21 percent of service was early and 19 percent was late. ZIPS considers a trip to be on-time if it arrives within ten minutes before or after the scheduled pick up time. As of 2019, 74 percent of ZIPS service was on-time. Although ZIPS on-time performance improved since the last TDP, on-time performance and reliability continue to be service issues that riders identified during public engagement efforts.

FIGURE 13: Map of existing Route 409 and its one-way loop

RPT services can be hard to understand and learn how to use

Many RPT bus routes operate in ways that make it challenging for people to understand how to ride the bus. One example of this challenge is that several routes one-way include loops (shown in **Figure 13**). This type of operation is a challenge for riders because the route may not operate in the direction in which they need to travel, and riders must remember the direction it travels and on which side of the street it will pick them up. Many RPT routes are circuitous and operate on numerous roadways. This presents a challenge for riders to remember where each bus travels compared to if each route focused its operations on one or two streets. RPT currently has a separate set of routes that operate during evenings and on weekends and holidays. This is challenging for riders, since they must learn two sets of routes rather than having one set of routes for the system.

Bus routes don't serve trips between destinations outside of downtown well

All RPT bus routes currently start and end in downtown Rochester. While there are benefits to this design of the transit system, one challenge it presents is that it creates indirect travel patterns for those desiring to travel between locations outside of downtown. For example, those desiring to travel between northeast and northwest Rochester currently must travel south into downtown and back north to make this east-west connection. The other challenge with this design is that the routes are spread across several stops throughout downtown, and the current schedules do not provide enough time in the schedules for riders to transfer between them.

RPT facilities and maintenance present challenges to accessing transit

Public feedback highlighted a challenge with the RPT system related to transit facilities and a desire for an increase in transit amenities throughout the system, particularly shelters, benches, and information at bus stops. Riders also noted a challenge with bus stop accessibility, particularly in places where the sidewalk network does not connect to the bus stop. This issue is an even greater challenge during the winter months, since riders noted that snow and ice are often not cleared, which makes it dangerous to access, board, and alight the bus.

FIGURE 14: Passenger boarding an RPT bus in the winter

Information for riders is insufficient

RPT and ZIPS riders emphasized that the transit information currently available in Rochester is insufficient. While the downtown transit center has route maps and system information, most RPT bus stops only have a sign with the RPT logo. This is a challenge since the signs don't tell riders which route serves the stop or where the route travels. Public feedback highlighted an appreciation for the DoubleMap real-time map and information, but it is problematic when the website is not functioning, and riders are relying upon it. Both RPT and ZIPS riders commented throughout the public engagement efforts that there are not enough resources available to teach people new to transit how to ride and that there are not well established and timely customer communication and feedback channels available. ZIPS operations currently rely heavily on people calling into dispatch to book, modify, or cancel rides or to inquire about the status of their driver. This is challenging as it puts strain on the limited number of ZIPS dispatchers and creates long phone wait times for ZIPS riders.

OPPORTUNITIES

Based on these strengths and challenges, RPT has developed the following opportunities to improve its service.

Make bus routes simpler

Implementing more two-way service and direct routing would improve service productivity and functionality. Ten of RPT's routes would benefit from two-way service. For some of these routes, RPT could remove or shorten the one-way loop portions of the routes or RPT could split the alignment into two routes, if necessary, to implement two-way service eliminating period service deviations.

Combine select routes

Exploring changes in route design and/or combining routes (interlining) could improve cycle time efficiency and maximize the utility of limited agency resources. RPT should consider combining routes with pattern changes to streamline alignment (e.g., 4A/4B/4M and 6A/6B/6M), combining routes that have similar destinations (e.g., Route 7A) and simplifying routing.

Adjust hours of operation and frequency on individual routes to match demand

Adjusting spans and service levels can help RPT to achieve a more optimal allocation of limited resources. For some routes, RPT should consider shortening the span of service due to low ridership on the first or last trips or modifying routes to be peak-only due to low midday ridership. For other routes, RPT should consider extending evening service to better serve shift workers.

Explore alternative service types

RPT should explore potentially replacing low-productivity services with microtransit or another service alternative at certain times of day. This could be particularly effective for evening service on some routes.

Simplify service schedules

RPT should identify ways to reduce confusion for occasional riders and potential new riders. RPT should work towards achieving this objective by standardizing service schedules and by reducing or eliminating changes in bus routes throughout the day (period service deviations). RPT should continue to simplify route numbering and schedules based on time of day to make the system more understandable and easier for riders to use.

Improve bus stop waiting environments

RPT should improve on winter maintenance at bus stops by creating a snow removal plan that includes dedicated staffing for bus stop maintenance. RPT should improve bus stop accessibility by conducting an audit of bus stops for ADA boarding areas and developing a prioritized list of stops in need of ADA access improvements. RPT should also audit bus stops to ensure that all active bus stops are clearly marked with a bus stop sign. RPT should develop guidelines for bus stop amenities (e.g., shelters, seating, lighting, heating, and transit information) and should identify funding opportunities for these improvements.

Expand customer communications

RPT riders identified a need for improved communications about fares, detours, and how-to-ride information. RPT should create an inventory of all of its customer communication materials and strategies and compare them to industry best practices and peer agency practices. ZIPS riders also identified a need for expanded customer communications, such as providing more information about the service and how it works. RPT should assess its current customer communications strategies and compare that to the level of information that ZIPS' peer agencies provide to their customers.

Implement systems or methods that result in higher data quality and easier-to-use data reports

The data analysis done for the RPT Fixed-route Service Profiles suggests that there are areas for improvement with RPT data, including automatic vehicle location (AVL) and automatic passenger counter (APC) data. RPT should assess these data sources to more thoroughly identify where there are issues with accuracy and work with the equipment vendor to improve the accuracy of the data collection equipment and reporting.

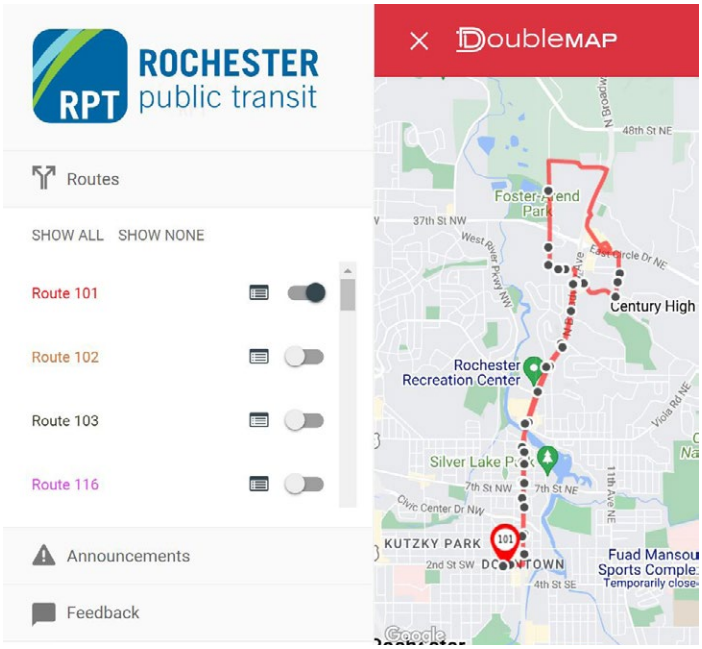
RPT should also audit its bus stop database to ensure that all active bus stops are correctly reflected in the agency's data. This will ensure that the transit data that RPT riders' access through DoubleMap and other third-party transit apps is consistent with their experience using RPT's service.

Continue improvements to on-time performance

Revising run times can help RPT to achieve higher levels of on-time performance and to reduce early arrivals with its fixed-route service. RPT should also build on the progress in improving ZIPS on-time performance that it has made since the last TDP by looking for ways to optimize trip scheduling to improve service reliability and on-time performance.

Adopt communication and fare payment technology improvements

RPT should adopt transit technologies to improve the ZIPS customer experience. RPT should explore the potential to provide real-time ZIPS vehicle tracking through DoubleMap or to provide this service through another application. ZIPS could also add online scheduling options for ZIPS riders.



PUBLIC AND STAKEHOLDER ENGAGEMENT PHASE 2

In Spring of 2022, RPT conducted the second phase of public and stakeholder engagement, during which 113 survey responses were gathered that focused on gathering responses to specific ideas for improving RPT bus service. RPT hosted public open houses—two virtual and one in-person. The CWG met another three times with the study team and engaged with their communities on several questions about the service ideas and piloting microtransit in Rochester.

The following were some of the common themes from the second round of engagement:

- General support for the initial service ideas
- Need for service or more service (such as night service) to major Rochester destinations including shopping areas, employment hubs, and tourist stops
- When prioritizing routes for increased frequency, it's most important to consider the route's ridership, destinations served, and whether the route serves more people with low-incomes
- Overwhelming opinion that timing and frequency of service are just as important as the route itself
- Overall support for the microtransit idea, but respondents had questions and needed additional information about how it would function

More information about the second round of public and stakeholder engagement is available in the **Phase 2 Public Engagement Summary**.

INITIAL FIXED-ROUTE SERVICE IMPROVEMENT IDEAS

RPT developed an initial set of ideas to improve service based on analysis of existing RPT bus service and the initial public and stakeholder engagement feedback received. These ideas focused on addressing key opportunities discussed previously using a variety of improvements, including improving evening and weekend bus service, reducing the need to transfer downtown, introducing new routes, prioritizing more frequent service, and introducing microtransit service.

Improving Evening and Weekend Bus Service

One idea presented to the public and stakeholders was operating some weekday routes on the evenings and weekends instead of having a separate set of routes. This would allow riders to learn one set of routes rather than needing to know two separate sets of routes based on the time of day or day of the week. Seventy-one percent of survey respondents supported running a set of the weekday routes during the evening and on weekends. The routes presented to the public for evening and weekend service are shown in **Table 3** and **Figure 15**.

Current Evening/ Weekend Routes	Proposed Evening/ Weekend Routes
21	102
22	204
23	409
24	101-206
25	411-309
26	

TABLE 3: Comparison of current and proposed evening/weekend routes

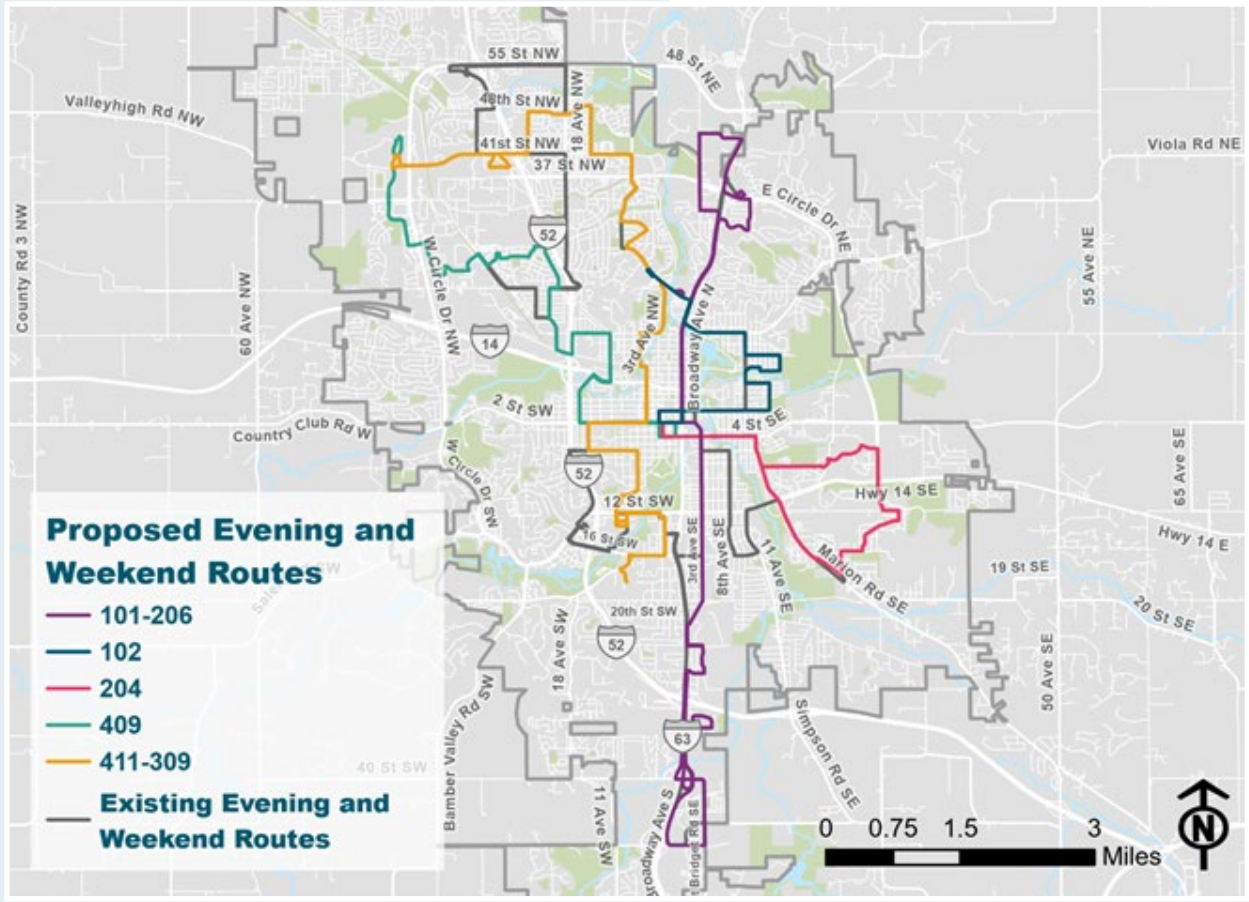


FIGURE 15: Evening and weekend route ideas presented to the public[4]

[4] Routes 204 and 411-309 changed slightly after the second round of public engagement

Reducing the Need to Transfer Downtown

RPT also shared the idea of combining some north-south routes to reduce the need for passengers to transfer at the downtown transit station. This change would address the identified need of making connections to places beyond downtown Rochester. These ideas included combining Routes 101 and 206 to create a longer route along Broadway and 3rd Avenue between Chateau Shopping Center in the north and Shoppes on Main in the south and combining Routes 309 and 411 to provide a connection from northwest Rochester through downtown to Apache Mall (**Figure 16**). Fifty-seven percent of survey respondents support combining Routes 101 and 206, and 54 percent support combing Routes 411 and 309.

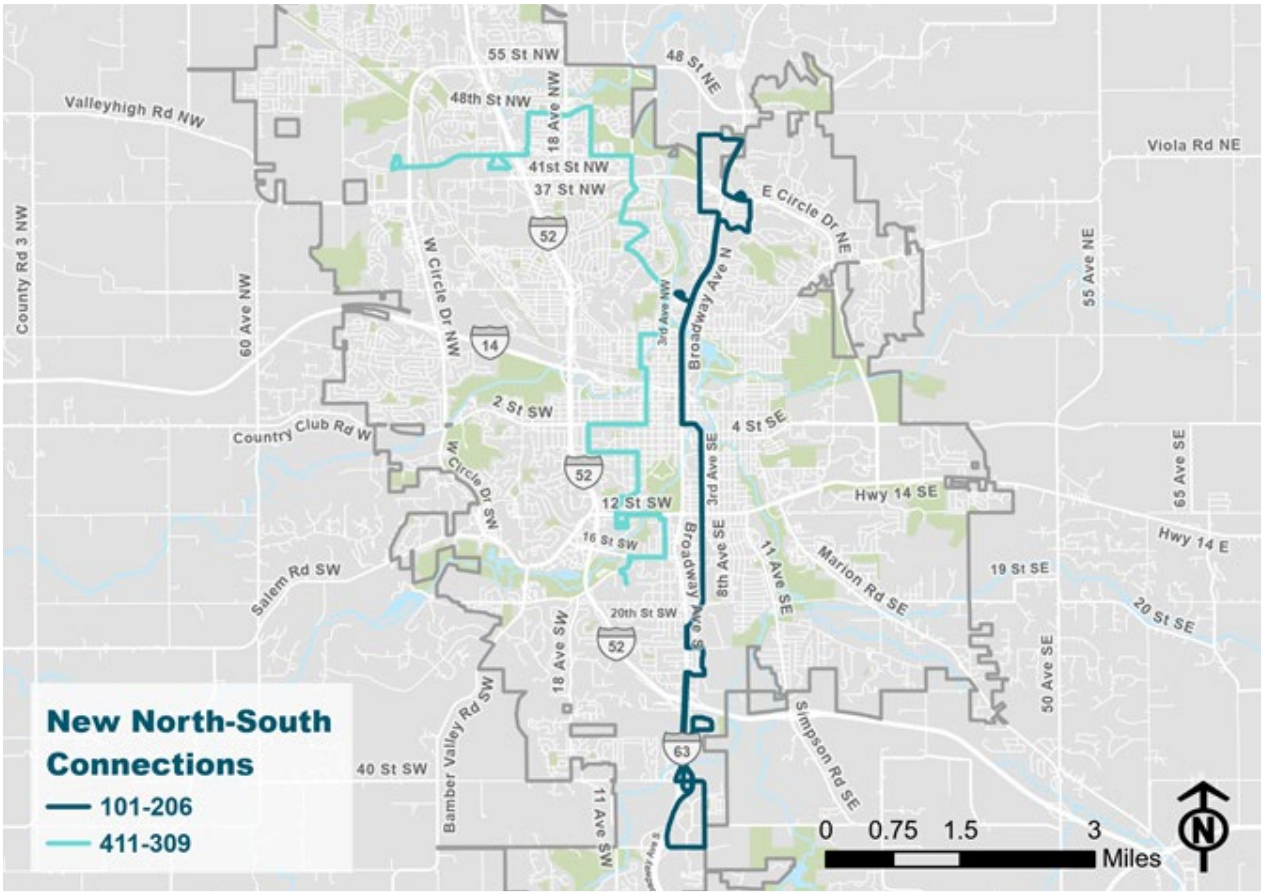


FIGURE 16: New north-south connection ideas presented to the public

Ideas for New Routes to Improve Weekday Service

RPT also developed ideas for new bus routes that would provide connections between destinations outside of downtown and allow for more transfers between routes, based on feedback from riders (**Figure 17**). These new routes address the need to better serve destinations outside of downtown Rochester. Survey respondents identified the route to the airport as the new route idea that they liked most (46 percent selected it as their first choice, followed by the crosstown route in northern Rochester (25 percent selected Route 511 as their first choice).

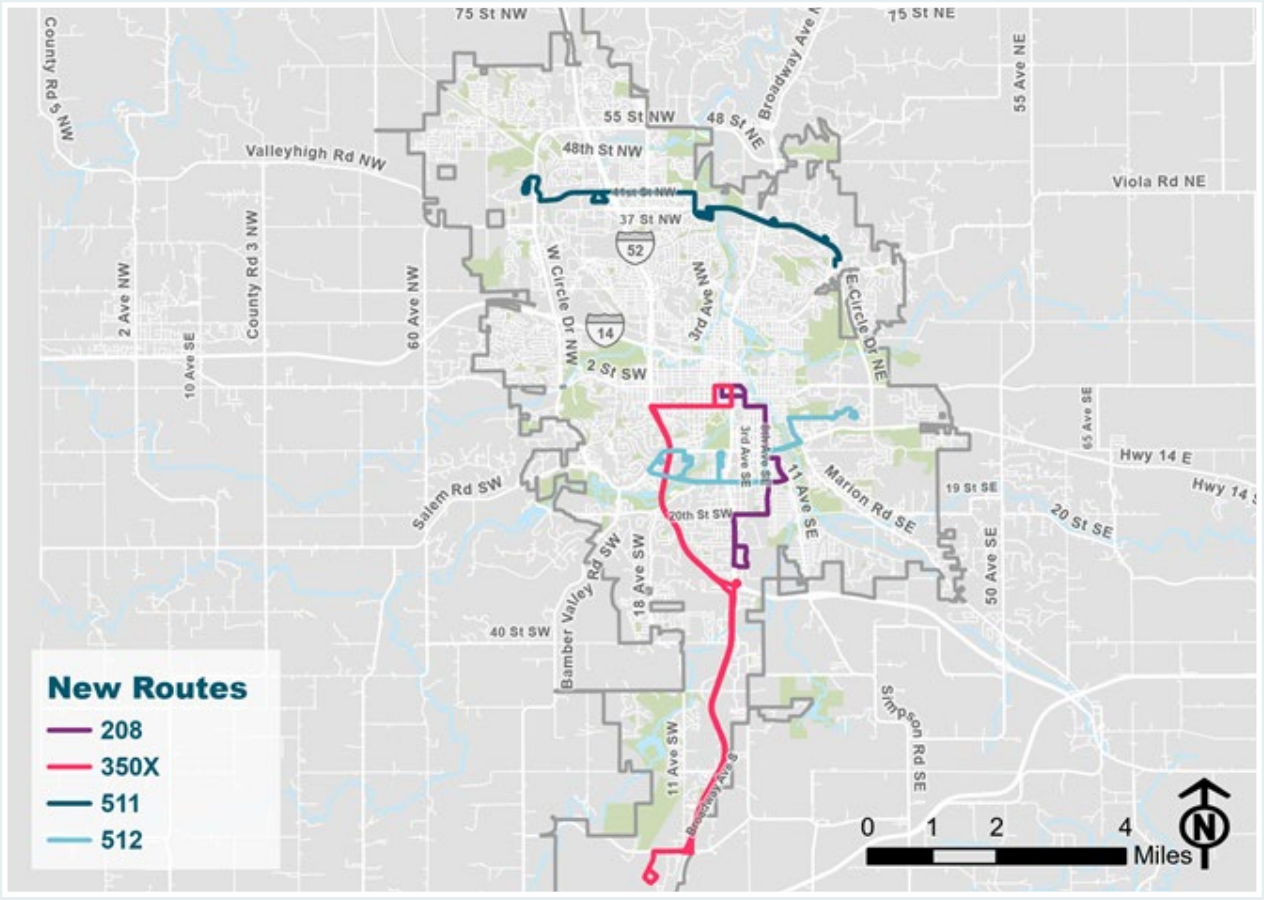


FIGURE 17: New route ideas presented to the public

Prioritizing Bus Routes for More Frequent Service

One of the main things RPT heard from riders and Rochester communities was the desire for buses to come more frequently. Based on current route ridership levels, RPT presented select routes as candidates for having more frequent service (**Table 4**). The top two routes that survey respondents identified for higher frequency were Route 101 (25 percent) and Route 411 (20 percent), followed by Routes 206, 250X, 409, 419, and 560X (13-14 percent).

15 minutes or better	409
	408
	306
20 minutes or better	411-309
30 minutes or better	101-206
	512

TABLE 4: Frequency improvements presented for public feedback

Microtransit

In order to provide service where people need transit service, but population densities are lower, RPT presented the idea of a new type of service called microtransit. Microtransit is on-demand shared transportation that uses technology to operate efficiently and effectively. Rides can be requested on-demand or in advance for pick up and drop-off at certain locations within a defined zone (**Figure 18**). RPT shared two potential locations for RPT to consider piloting this service are southwest Rochester and southeast Rochester (**Figure 19**).

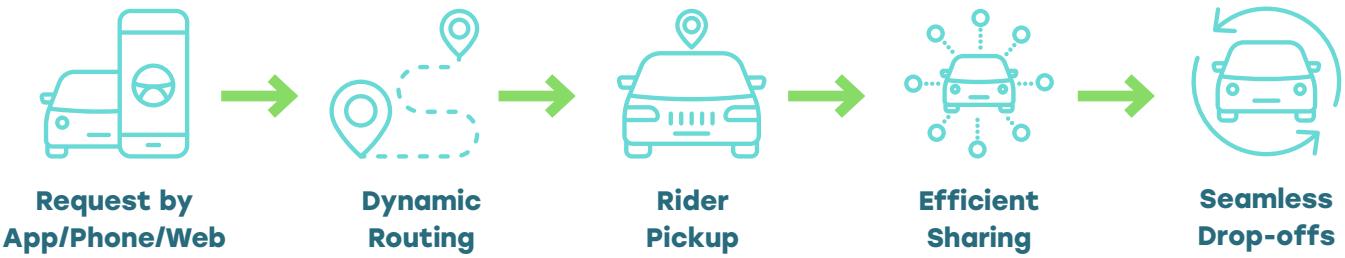


FIGURE 18: Microtransit operational process

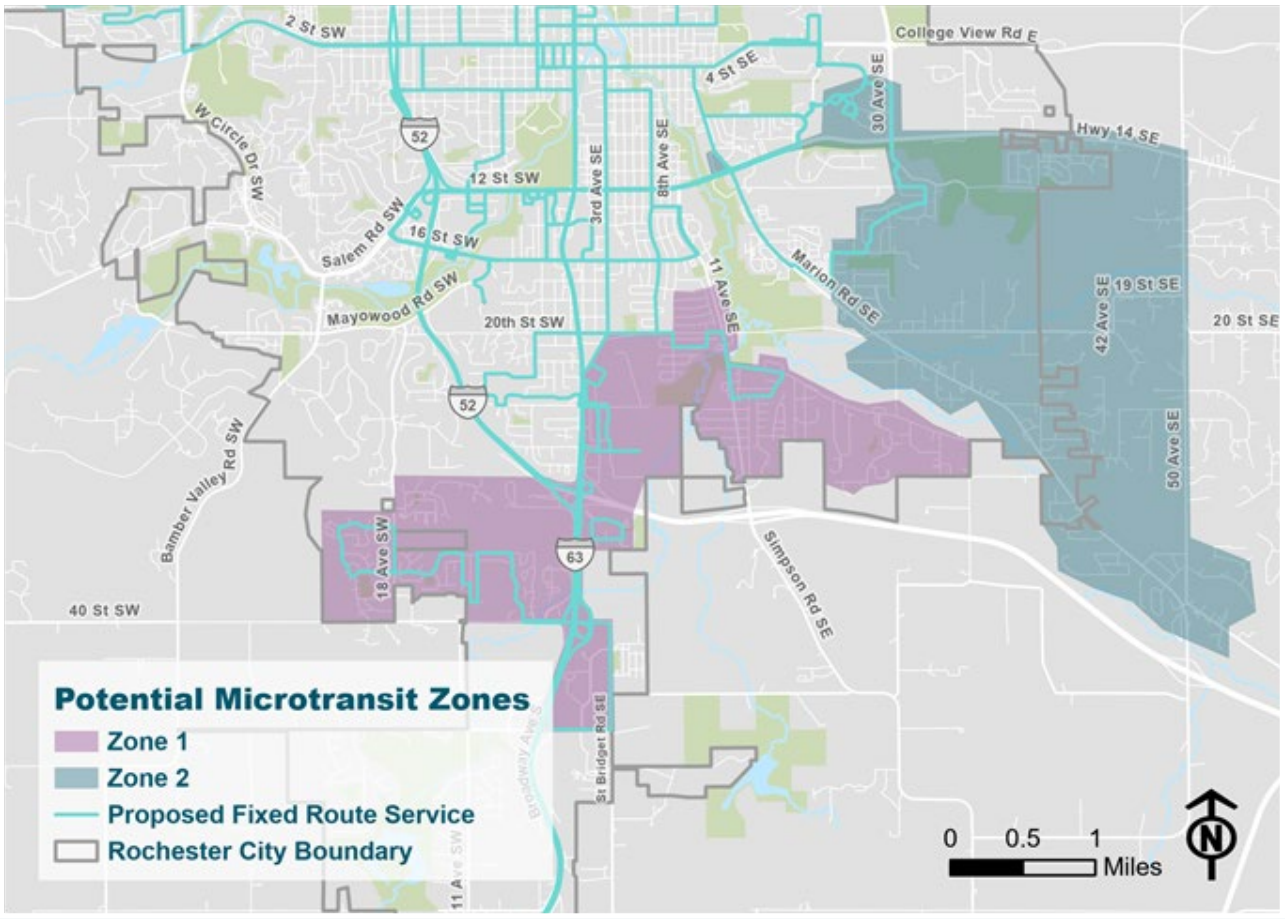


FIGURE 19: Potential microtransit zones

POTENTIAL STRATEGIES TO IMPROVE ZIPS

In addition to presenting the public and stakeholders with fixed-route service ideas, RPT team shared potential strategies to improve ZIPS. The potential strategies presented included:

Online/mobile booking

Mobile fare payments

Real-time bus tracking and arrival updates

Improved customer communications system

Technology improvements for increased reliability and decreased travel time

MISSION, GOALS, AND PERFORMANCE MEASURES

RPT, like most other organizations, uses a statement of the agency mission, goals, and performance measures to guide its work both day-to-day and over the long-term. RPT regularly reviews and updates these foundational documents with the TDP. Regular updates help to keep RPT responsive to community needs and helps the agency to continually push to improve. RPT uses the following definitions for each pillar of this foundational document:

- **Mission Statement –** A mission statement is a brief description of why an organization exists and what general purpose it serves. RPT's mission statement identifies its primary services, customers, and goals. The mission statement is used as the guiding star for RPT's day-to-day operations and approach to providing transit service.
- **Goals –** Goals describe the general, high-level outcomes that RPT aspires to achieve. RPT uses goals to inform its work plans for the five-year period covered by the TDP and as a basis for performance measures.
- **Performance Measures –** Performance measures are data and metrics used to track how well the agency is doing in achieving its goals. Performance measures are usually more narrowly focused on a specific aspect of what it means for RPT to be successful. For example, one of the agency's goals in the previous TDP was to "increase ridership", so one of its performance measures was "unlinked passenger trips" a standard measure of ridership.

This update to RPT's mission, goals, and corresponding performance measures for fixed-route and paratransit service builds on the agency's 2017 TDP and the City's mission and comprehensive plan – Planning to Succeed 2040. RPT used various sources to inform updates to these foundational

documents including project stakeholders, public engagement, existing City of Rochester plans, the Minnesota Department of Transportation's Greater Minnesota Transit Improvement Plan, and peer agency analysis. The updated mission statement, goals, objectives, and performance measures then guided TDP recommendations.

RPT is proposing to have the same mission and goals for fixed-route and paratransit service with individual objectives and performance measures that reflect service differences. RPT developed high-level strategies to achieve each goal over the next five years and performance measures so RPT can monitor progress on each strategy and goal.

MISSION STATEMENT

The updated mission statement for RPT is:

RPT's mission is to provide an efficient and accessible public transit system that is convenient, safe, reliable, cost-effective, and adaptable and supports City of Rochester's strategic priorities for affordable living, quality services for quality living, and economic vibrancy and growth management.

RPT GOALS

The updated goals for RPT, not listed in order of priority, are:

- **Service Quality:** Provide high-quality transit service that attracts and retains riders
- **Equity:** Advance the City's equity goals through transit service and access
- **Accessibility:** Provide transit service that is accessible to all riders
- **Environmental Sustainability & Resiliency:** Invest in fleet and infrastructure improvements that promote environmental sustainability and resiliency. Support City goals for increasing the share of people who travel by means other than driving alone
- **Community Connectivity:** Provide convenient connections for people to reach important community destinations by transit
- **Fiscal Sustainability & Efficient System Management:** Operate a safe, efficient, and fiscally-sustainable transit system

Goal 1: Service Quality

Provide high-quality transit service that attracts and retains riders.

SERVICE QUALITY STRATEGIES

- **Strategy 1.1 -** Implement service and infrastructure improvements that improve travel time and reliability
- **Strategy 1.2 -** Improve system usability through improving service design and transit information
- **Strategy 1.4 –** Launch a marketing program to encourage riders to return to transit or start using transit
- **Strategy 1.5 –** Improve ZIPS private contractors' reliability and customer service
- **Strategy 1.6 –** Begin implementing direct, frequent service on appropriate Primary Transit Network corridors.

SERVICE QUALITY PERFORMANCE MEASURES

Measure	System	Level
On-time performance	Fixed-Route	Zero minutes early to five minutes late. 95% of trips should operate within the on-time range.
	Demand Response	90% of trips on time within published pick up window (10 minutes before/ after)
Frequency	Fixed-route	30 minutes or better during peak hours, 60 minutes, or better off peak
Ridership	Both	5% increase in ridership per year

TABLE 5: Service quality performance measures

Goal 2: Equity

Advance the City's equity goals through transit service and access.

EQUITY STRATEGIES

- **Strategy 2.1 –** Prioritize transit investments that benefit transit-dependent populations and historically-disadvantaged populations
- **Strategy 2.2 –** Improve service for shift-workers and those who commute outside of traditional peak hours
- **Strategy 2.3 –** Provide shelters and benches at bus stops based on ridership warrants and equity considerations
- **Strategy 2.4 –** Ensure compliance with Title VI requirements

EQUITY PERFORMANCE MEASURES

Measure	System	Level
Shelters	Fixed-Route	Shelters at 100% of bus stops with at least 25 boardings per day or major transfer points by 2027. Higher priority for installation is given for stops in areas with concentrations of transit-dependent or historically-disadvantaged populations.
Benches	Fixed-Route	Benches at 100% of bus stops with at least 15 boardings per day by 2027. Higher priority given for stops in areas with concentrations of transit-dependent or historically-disadvantaged populations.
Access to Transit	Fixed-Route	Percent of transportation-disadvantaged and historically disadvantaged populations within ¼ mile walking distance to transit stops equal to or greater than percent of overall population within ¼ mile walking distance to transit stops.
Access to jobs - Low-wage jobs	Fixed-Route	85% of low-wage jobs within ¼ mile of a transit stop
	Demand Response	85% of low-wage jobs covered by service area

TABLE 6: Equity performance measures

Goal 3: Accessibility

Provide transit service that is accessible to all riders.

ACCESSIBILITY STRATEGIES

- **Strategy 3.1 –** Invest in improvements to rider information systems on vehicles and at facilities
- **Strategy 3.2 –** Develop a rider training program for fixed-route services
- **Strategy 3.3 –** Improve bus stops to better riders who use mobility devices
- **Strategy 3.4 –** Provide paratransit service that is complementary to fixed-route service and which, at a minimum, meets the requirements of the Americans with Disabilities Act (ADA)

ACCESSIBILITY PERFORMANCE MEASURES

Measure	System	Level
Stops with ADA pads	Fixed-route	35 ADA-compliant boarding and alighting areas added per year
Bus Annunciators	Fixed-route	100% of buses equipped with functioning automatic vehicle annunciators

TABLE 7: Accessibility performance measures

Goal 4: Environmental Sustainability & Resiliency

Invest in fleet and infrastructure improvements that promote environmental sustainability and resiliency. Support City goals for increasing the share of people who travel by means other than driving alone.

ENVIRONMENTAL STRATEGIES

- **Strategy 4.1 -** Increase the share of people in Rochester who choose to travel by transit instead of other means–especially driving alone.
- **Strategy 4.2 –** Develop a Zero-Emission Vehicle Transition Plan that meets Federal Transit Administration requirements.
- **Strategy 4.3 –** Study the feasibility of additional strategies such as solar integration at transit facilities.

ENVIRONMENTAL PERFORMANCE MEASURES

Measure	System	Level
Zero-Emissions Vehicle fleet	Both	4 Zero-Emission Vehicles added per year[5]

TABLE 8: Environmental sustainability and resiliency performance measures

[5] This performance measure may need to be updated once RPT develops a Zero Emission Fleet Transition Plan

Goal 5: Community Connectivity

Provide convenient connections for people to important community destinations by transit.

CONNECTIVITY STRATEGIES

- **Strategy 5.1 –** Increase the percent of residences, employers, and destinations within a quarter mile of transit service.
- **Strategy 5.2 –** Improve connections between transit routes.
- **Strategy 5.3 –** Coordinate transit service planning with the City's land use and development plans to improve connectivity as the city grows.
- **Strategy 5.4 –** Coordinate with other City departments to improve bicycle, pedestrian, and micromobility connections to transit stops.

PERFORMANCE MEASURES

Community Connectivity performance measures are provided in **Table 9**.

Measure	System	Level
Residential service availability - all residents	Fixed-Route	75% of service area population within ¼ mile of a transit stop
	Demand Response	75% of population covered by service area
Access to jobs - All jobs	Fixed-Route	75% of all jobs within ¼ mile of a transit stop
	Demand Response	75% of all jobs covered by service area
Span of service	Both	Weekday hours - 20 hours; Saturday hours - 12 hours; Sunday hours - 12 hours
Revenue hours per capita	Fixed-Route	1
	Demand Response	0.1

TABLE 9: Community connectivity performance measures

Goal 6: Fiscal Sustainability & Efficient System Management

Operate a safe, efficient, and fiscally-sustainable transit system.

SYSTEM MANAGEMENT STRATEGIES

- **Strategy 6.1 -** Monitor both the overall system and individual route performance to most efficiently meet transit needs.
- **Strategy 6.2 –** Provide periodic reports to transit stakeholders, the Citizen's Advisory on Transit, and City Council regarding transit performance.
- **Strategy 6.3 –** Invest in facilities and fleet maintenance to ensure a state-of-good repair and safety.
- **Strategy 6.4 –** Pursue ownership of park and ride facilities to improve operations.

SYSTEM MANAGEMENT PERFORMANCE MEASURES

Measure	System	Level
Farebox recovery	Fixed-Route	30%
	Demand Response	15%
Road calls	Both	1 road call per 14,000 revenue miles
Spare ratio	Both	The ratio of spare vehicles to regular fleet vehicles should be less than 20% or as otherwise determined by FTA for EV buses
Fleet maintenance	Both	At least 75% of all regular fleet vehicles should be available for operations at all times
Accidents	Both	Fewer than 1 recordable accident per 100,000 revenue miles

TABLE 10: Fiscal sustainability and efficient system management performance measures

More information on the updated RPT mission, goals, strategies, and performance measures can be found in the **Mission, Goals, and Performance Measures Technical Memo**.

FIXED-ROUTE SERVICE RECOMMENDATIONS

RPT developed four service scenarios, one with transit service similar to current levels (cost-neutral) and one with expanded service for both before and after BRT service starts. These scenarios were based on public and stakeholder feedback regarding the initial service ideas. In general, recommended changes to routes attempted to streamline service routes; standardize schedules (i.e., no more differences between weekday and evening/weekend routes); run service for longer periods of time; and connect routes to one another (or interlined). As a result, some destinations are served differently and some new routes are proposed. The four service scenarios can be summarized as follows:

- In the **cost-neutral scenarios** (**Figure 20**), improve evening and weekend bus service, reduce the need to transfer downtown by providing three sets of newly interlined routes that create north-south and east-west connections, and increase frequency on two routes.
- In the **expansion scenarios** (**Figure 21**) which builds upon the cost-neutral scenario (i.e., all changes are in addition to the changes proposed in the cost-neutral scenario), two express routes, two crosstown routes, and two local routes are added, while four additional routes see improvements in the level of service.
- **Post-BRT** service plans adjust service along 2nd Street, rerouting the majority of routes to avoid congestion once Link is operational.

The cost-neutral scenarios could be implemented while keeping RPT's operating budget at or close to what it is now. These scenarios were built under the assumption that RPT would not have new funding resources to implement service changes and keep RPT's annual service hours within two percent of its current level–112,340 hours service hours as of June 2022.

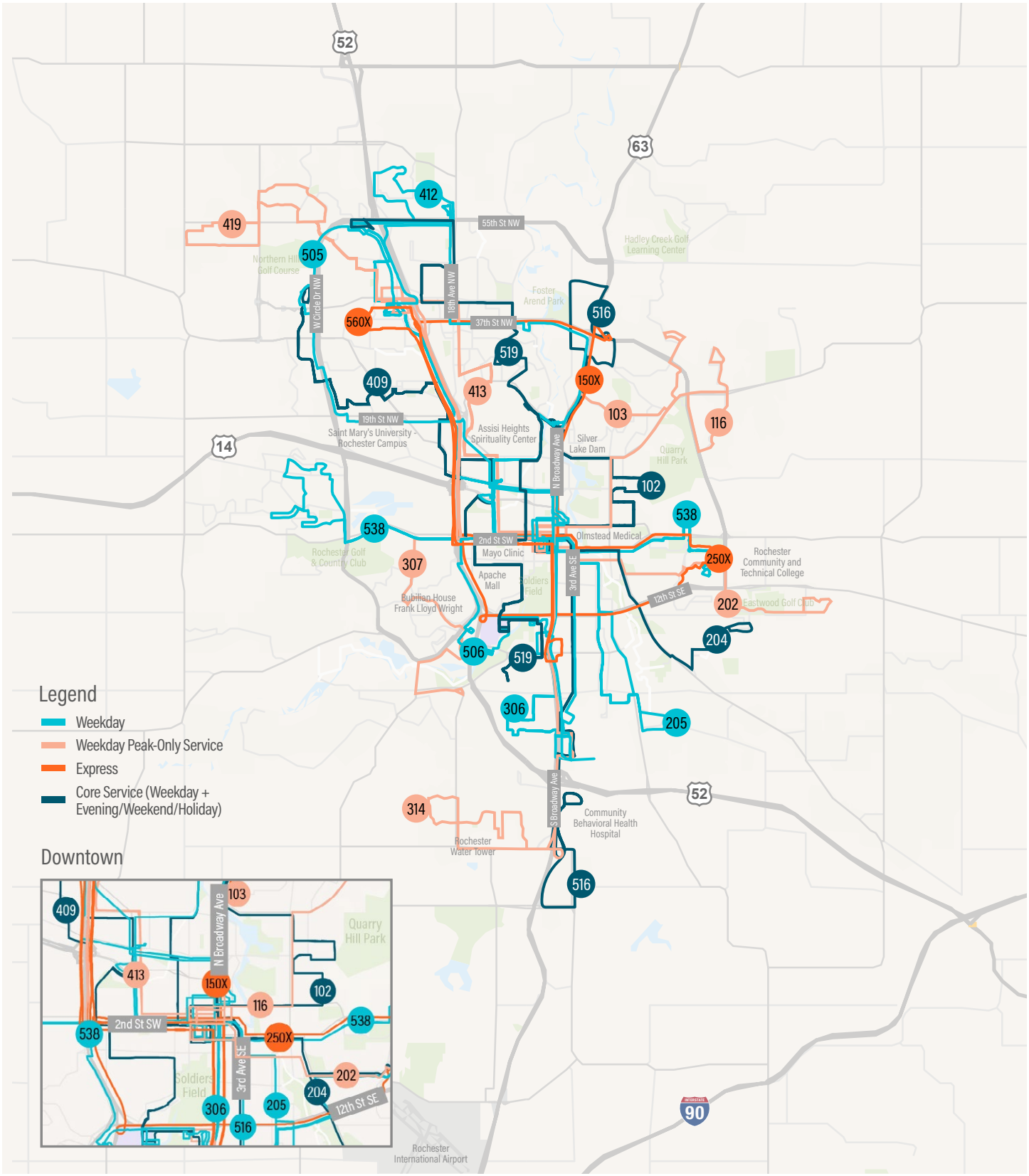


FIGURE 20: Cost-neutral scenario

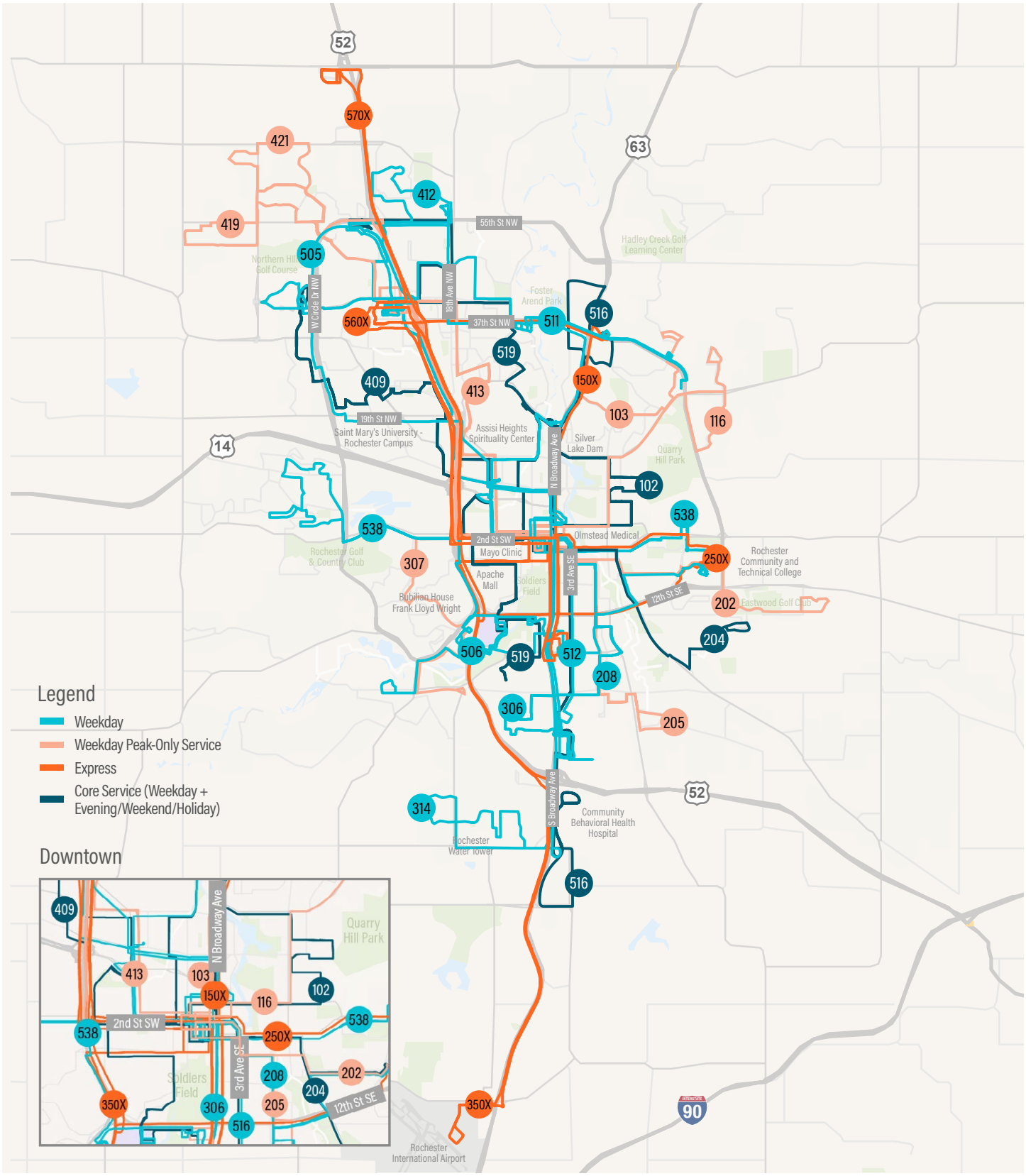


FIGURE 21: Expansion scenario

	Existing (June 2022)	Cost-Neutral		Expansion	
		Pre-BRT	Post-BRT	Pre-BRT	Post-BRT
Estimated Revenue Hours	112,340	113,790	112,058	139,271	137,322
Increase Compared to Existing	-	1.29%	-0.25%	23.97%	22.24%

TABLE 11: Estimated change In revenue hours by scenario[5]

The expansion scenarios include recommended service changes that would grow RPT's service hours by up to 24 percent, driven by the addition of six new routes as well as improvements to level of service (span and headways) on other routes (**Table 11**). Increased fare revenue from more riders on RPT's existing routes or another source of local funding will be needed to implement the service recommended in the expansion scenario.

Under the proposed service scenarios, the number of routes is reduced from RPT's existing 32 routes to 21 routes in the cost-neutral scenarios and 27 in the expansion scenarios. This is due to combining several routes or replacing some routes with others such as the Core Service routes for the current evening/weekend/holiday only routes. In total, 32 existing routes will be combined into a total of 21 routes and the vast majority of areas currently served will be continue to have coverage by the same or a new route.

Only two routes are proposed to be eliminated– the 217 and the 418. Those are served by the current 217 is part of the proposed microtransit service pilot and the service hours of the 418 are being added to extend other routes that will serve the neighborhoods currently served by it.

In addition, in both the cost-neutral and expansion scenarios six existing routes are replaced with three new interlined routes that provide one-seat rides across town. Because the expansion scenarios represent an unconstrained funding environment, six additional routes are proposed in these scenarios. These routes will provide weekday and express service as well as new crosstown connections. Additional service on routes can be implemented if and/or when additional resources are available.

Table 12 on the following page provides details on the routes by service type by scenario. More information on these scenarios and the route level changes are available in the **Service Recommendations Technical Memo**.

[5] These do not include Link service hours

Service Type	Number of Routes				
	Existing (June 2022)	Cost-Neutral		Expansion	
		Pre-BRT	Post-BRT	Pre-BRT	Post-BRT
Holiday / Evening / Weekend	6 (21, 22, 23, 24, 25, 26)	-	-	-	-
Weekday / Evening / Weekend / Holiday	-	5 (102, 204, 409, 516, 519)	5 (102, 204, 409, 516, 519)	5 (102, 204, 409, 516, 519)	5 (102, 204, 409, 516, 519)
Weekday Service	15 (101, 103, 116, 203, 204, 205, 206, 306, 307, 309, 408, 409, 411, 412, 413)	5 (205, 306, 412, 413, 538)	5 (205, 306, 412, 413, 538)	10 (103, 116, 208, 306, 314, 412, 413, 511, 512, 538)	10 (103, 116, 208, 306, 314, 412, 413, 511, 512, 538)
Weekday Service (peak-only)	6 (102, 202, 217, 314, 418, 419)	6 (103, 116, 202, 307, 314, 419)	6 (103, 116, 202, 307, 314, 419)	5 (202, 205, 307, 419, 421)	5 (202, 205, 307, 419, 421)
Express	3 (150X, 250X, 560X)	3 (150X, 250X, 560X)	3 (150X, 250X, 560X)	5 (150X, 250X, 350X, 560X, 570X)	5 (150X, 250X, 350X, 560X, 570X)
Shopper	2 (505, 506)	2 (505, 506)	2 (505, 506)	2 (505, 506)	2 (505, 506)
Discontinued	-	2 (217, 418)	2 (217, 418)	2 (217, 418)	2 (217, 418)
Combined/Replaced	-	11 (21, 22, 23, 24, 25, 26, 101, 203, 206, 408, 411)	11 (21, 22, 23, 24, 25, 26, 101, 203, 206, 408, 411)	11 (21, 22, 23, 24, 25, 26, 101, 203, 206, 408, 411)	11 (21, 22, 23, 24, 25, 26, 101, 203, 206, 217, 408, 411, 418)
Total Routes	32	21	21	27	27

TABLE 12: Routes by service type by scenario

ADDITIONAL SERVICE FORECASTED TO INCREASE RIDERSHIP

Based on the proposed recommendations, RPT's ridership is expected to increase compared to baseline ridership. The average weekday ridership is estimated to increase by 18 percent, while weekend ridership is estimated to increase eight percent. To understand the impact of proposed service changes, ridership estimates were developed for the post-BRT expansion scenario, which includes the full breadth of recommendations. Critically, implementation of just the cost-neutral scenario, or only some of the service changes proposed in the expansion scenarios will affect these ridership estimates.

Route level ridership data was used to develop the ridership estimates for the post-BRT expansion scenario. The monthly ridership data was expanded to estimate annual system-wide ridership and average daily ridership for weekdays and weekends. For new routes, ridership was estimated based on existing routes that offer similar service.

Ridership impacts due to changes in spans and headways were estimated using ridership demand elasticities—a measure of how much ridership change is caused by changes in service. Since increasing the span of service usually results in an increase in demand, the span elasticity value is positive . In contrast, the headway elasticity value is negative since an increase in headway (lower frequency) results in decreased demand.

Following the application of span and headway elasticities to routes with level of service changes, minor adjustments were made to the ridership estimates on some routes to account for benefits of the proposed service plan that were not yet captured in the analysis. This included a small increase in weekend ridership on routes providing new weekend service. While the level of service on weekend routes remained consistent with existing levels of service, some ridership improvements are anticipated by simplifying the weekend network and transitioning weekend routes to routes that also operate on weekdays. In addition, some ridership increases are expected because of new interlines, providing one seat rides across town; a small increase in weekday ridership was applied to these routes.

TITLE VI SERVICE ANALYSIS DID NOT FIND ADVERSE IMPACTS

A Title VI Service Equity Analysis quantifies the impact of service changes and on non-white and low-income residents. A Title VI Service Equity Analysis is focused on changes to service and does not provide insight regarding the equity of existing service. The FTA requires agencies in urbanized areas with a population greater than 200,000 and more than 50 fixed-route vehicles in peak service to complete a Title VI Service Equity Analysis. While Rochester does not meet either of these thresholds, RPT conducted an equity evaluation to further RPT's commitment to ensuring that the benefits and burdens of proposed changes are shared equitably.

The equity evaluation completed on the cost-neutral and expansion scenarios ensures that changes in RPT service do not adversely impact non-white and/or low-income populations, comparing the percent service change across these population groups. An index value of 1.0 indicates that all population groups experience the same level of change, and index value below 1.0 indicates that low-income/non-white populations experience a smaller increase in service than non-low-income/white individuals. While RPT does not have a specific threshold for what is considered a disparate impact, many transit agencies use a variation of the "four-fifths rule", which generally states that the benefits distributed to the low-income/non-white populations should be at least 80 percent of the benefits distributed to the non-low-income/white populations.

Population Group	Population of Service Change Area	Average Percent Service Change	Comparison Index
Non-white	27,516	27.9%	0.95
White	80,756	29.2%	
Low-income	17,497	24.4%	0.82
Non-low-income	90,775	29.8%	
Total	**108,272**	**28.9%**	

TABLE 13: Average service level change by population group

Based on this analysis, the proposed service changes result in a 28.9 percent increase in transit service availability across all population groups (**Table 13**). The average non-white individual in the service area sees a 27.9 percent increase in service, while the average white individual in the service area sees a 29.2 percent increase in service; this results in a comparison index of 0.95. The average low-income individual in the service area sees a 24.4 percent increase in service, while the average non-low-income individual in the service area sees a 29.8 percent increase; this results in a comparison index of 0.82.

While the increase in service expected for non-white and low-income groups is slightly below the expected increase for white and non-low-income groups, (1.3 and 5.4 percent, respectively), the resulting comparison ratios are both higher than the common threshold of 0.80. Therefore, this analysis identifies no disproportionate burdens to non-white or low-income populations as a result of these proposed service changes.

MICROTRANSIT PILOT WILL PROVIDE OPPORTUNITY TO TEST A NEW TRANSIT MODE IN ROCHESTER

Introducing microtransit in Rochester is recommended for locations where people need transit service, but population densities are lower, making it is less effective to serve those areas with fixed-route transit service. While there are several areas within Rochester that would likely benefit from microtransit, it is recommended to initially piloting microtransit in one area of Rochester. This will allow RPT to make adjustments to this new type of service and make sure it is functioning well before deploying it in additional locations. RPT will need to conduct additional investigation into specifics of the pilot service before launch.

PARATRANSIT RECOMMENDATIONS

Between 2017 and 2021, ridership on ZIPS decreased from roughly 32,000 trips to 23,400, or about 27 percent. In addition to COVID-19, issues with on-time performance, reliability, and service providers for people with disabilities starting their own transportation programs most likely precipitated this decline. Addressing ZIPS reliability and communications will be key to regaining ridership.

Based on recent trends in ridership, and assuming implementation of the proposed improvements, RPT expects ridership to return at a rate of roughly five percent growth per year. At that rate, the current ZIPS annual ridership is expected to grow from the 2021 annual ridership of 23,370 to 38,067 by 2031. To meet that demand, 15 paratransit vehicles will be needed by 2031. Funding strategies to meet these capital needs are discussed in the TDP Financial Plan. In the short- and long-term as ZIPS service grows, adopting transit technology such as trip scheduling, mobile booking, and real-time bus tracking, along with improved customer communication, can improve the rider experience and functionality of the ZIPS system.

Based on analysis of ZIPS system performance and rider feedback, RPT is recommending adoption of four performance goals, implementation of multiple improvements to address these issues, and investment in various capital assets. More information on the paratransit recommendations can be found in the **Paratransit Plan Technical Memo**.

ZIPS PERFORMANCE BASED GOALS SEEK TO ADDRESS PARATRANSIT CHALLENGES

To address the challenges identified with ZIPS service, RPT is recommending adoption of the following goals for ZIPS:

1. Achieve 90 percent or better on-time pick up and destination arrival
2. Reduce use of overflow services to less than 10 percent of all ZIPS trips
3. Improve customer satisfaction with communications
4. Achieve 90 percent or better of trips within the prescribed 45-minute travel time

RPT will need to regularly measure, review, and report on these goals in order to ensure they are achieved.

ZIPS OPERATIONAL CHANGES AIM TO ACHIEVE PERFORMANCE GOALS

To achieve the performance based goals recommended for ZIPS, RPT is recommending implementation of operational improvements. The majority of these recommendations include adopting transit technology to improve rider service and functionality of the system.

Additional drivers, dispatchers, and vehicles to address reliability

RPT's reliance on overflow services, which more often result in late pickups, is largely driven by staffing constraints. Like many agencies in recent years, ZIPS has struggled with driver recruitment and retention. While this is improving, RPT believes that if it is to achieve the goals stated above, it will need additional drivers. This could also mean that additional vehicles and dispatchers will be needed to accommodate trips currently being provided by overflow services.

More feedback channels seek to improve customer communications

Improvements to customer communication could include establishing more feedback channels for riders to provide comments to RPT. Improvements can be implemented both physically on buses and digitally on RPT's website, and may include:

- Advertisements on all vehicles displaying ways that riders can provide feedback to RPT
- New online systems to ease communication like a live customer service chat
- Updates provided via text message or notification from a mobile app about changes to their trip. Notifications should include changes from expected arrival time to their bus number

Physical and digital resources in multiple languages as well as resources that accommodate users with disabilities to make information accessible to all users should be prioritized. If RPT makes additions or changes to its communication channels, the updated information should be identical across buses, brochures, and other promotional materials.

Real-time arrival updates to provide assurance to riders

Bus arrival updates provide riders assurance and peace of mind for trip planning as well as a better user experience. Bus tracking would only be available on regular ZIPS buses, not overflow services.

Online/mobile booking seeks to provide additional flexibility

Online or mobile booking provides additional flexibility to riders to plan and book their trip in advance or make modifications to their reservation. Online and mobile booking allows riders to schedule 24/7 compared to the current limitation of booking ZIP rides between regular business hours before 5PM. This technology would likely also provide a tool for ZIPS dispatchers to manage scheduling rides.

Mobile fare payments seek to increase efficiency and flexibility

Mobile ticketing provides flexibility to riders with account-based systems that allow more options for fund management and eliminates the need for users to order new fare cards. Mobile fares can also be used by overflow service providers without needing to install fare validation equipment.

Implement rider training to improve customer experience and screening

Rider training provides those interested in using transit an instructional experience regarding how to ride the bus. It is flexible and adaptable based on each individual's abilities and previous experiences with transit and provides people an opportunity to ask questions or address concerns that will make them more comfortable riding. Rider training also helps individuals identify the transit service that is best suited for them based on their abilities and travel patterns.

CAPITAL AND ASSETS PLAN

RPT owns a significant set of capital assets, all of which require financial resources to maintain and replace. As RPT's assets age and the agency plans for future expansions of service, its vehicles, facilities, and other infrastructure need to be maintained and eventually replaced to keep them in a state of good repair and to keep RPT's service running smoothly.

RPT examined the state of these assets and identified the likely necessary costs to maintain the system in a state of good repair over the next ten years, as well as the costs associated with system growth. As RPT expands its service offerings through the implementation of the BRT system, a possible microtransit pilot, and transitioning more of its bus fleet to battery electric, long-term capital needs are likely to increase as well. More information on the Capital and Assets Plan can be found in the **Capital and Assets Plan Technical Memo**.

RPT HAS ADEQUATE VEHICLES FOR PLANNED SERVICE, MANY HAVE EXCEEDED THEIR USEFUL LIFE

RPT has 71 vehicles used for fixed-route service. To implement planned expansions, it would need 67 vehicles, including a 20 percent spare vehicle ratio. Many of RPT's vehicles have exceeded the recommended useful service life based on years in service[6] (these are two to six years beyond their federal useful life). However, only nine percent of vehicles in the fleet have exceeded or are approaching (less than 10 percent remaining) the end of their useful service life based on mileage. Forty-foot vehicles have a minimum useful life of 540,000 miles, while 20-foot vehicles have a minimum useful life of about 180,000 miles. This means that RPT has been consistently replacing vehicles as needed and is currently meeting the performance goals set in the Transit Asset Management Plan. RPT should continue to replace vehicles as needed to ensure reliable operations and manage life-cycle costs.

RPT OPERATIONS AND MAINTENANCE FACILITIES NEED ADDITIONAL CAPACITY FOR GROWTH

All of RPT's facilities are capable of adequately serving RPT's needs for the short-term, but these facilities will need additional capacity for the vehicles required with the growth of RPT service. RPT's existing facilities have 92 vehicle spaces. With the addition of Link and an expansion of RPT service, 106 vehicle spaces will be required.

ADDITIONAL TRANSIT AMENITY INFRASTRUCTURE DESIRED BY RIDERS

RPT owns other infrastructure that supports the operation. This includes the downtown bus stops, which have been in service for 12 years. As RPT services expand and the system improves, additional infrastructure, such as heated shelters, benches, lighting, real-time signage, and operator restrooms would be beneficial for system operations and the rider experience.

[6] Forty-foot transit buses have a federal useful life of 13 years or 540,000 miles, while 20 foot transit buses have a federal useful life of six years or 180,000 miles.

SHORT-TERM CAPITAL PLAN FUNDS BUSES, STOP IMPROVEMENTS, MORE

The City of Rochester develops annual Capital Improvement Plans (CIP) that covers a five-year period. The 2022-2027 CIP includes planned capital purchases for RPT, totaling $17.5 million. Of that, roughly $2.8 million or about 16 percent would be funded through local sources.

Projects include bus replacements, bus station upgrades, and transit signal priority (TSP) system improvements. Capital projects are funded by a combination of federal, state, and a variety of local funding sources. The local sources include the local tax levy for bus stop improvements (through 2023), retained earnings, and an operating transfer. Capital costs vary from year to year based on projects that are proposed to be funded that year.

Capital costs associated with Link are not included in this plan, as those costs are funded from separate funding sources.

FUTURE CAPITAL ASSETS NEEDS FOR FUTURE GROWTH

As existing assets reach the end of their useful life, any future growth in RPT service may require additional assets such as vehicles, facilities, and other infrastructure. The implementation of the service expansion recommendations in this plan, Link, and a potential microtransit pilot program may impact the system's capital needs. The awarded funds under the Grants for Buses and Bus Facilities program can potentially support the growth of RPT service. This program is a yearly competitive grant.

Service expansion not likely to require additional buses

The post-BRT fixed-route service expansion scenario outlined in the Service Recommendations section of this plan would require 56 vehicles during peak-periods, exclusive of spares. Based on the current 42 vehicles needed to operate at maximum service, RPT currently has 27 spare vehicles or 63 percent of its fleet serving as spares. FTA's spare ratio policy states that an agency's spare ratios should not exceed 20 percent of the number of vehicles operated in maximum service. The FTA considers an agency's spare ratio when reviewing projects proposed to replace, rebuild, or add vehicles. Even in the post-BRT growth scenario, the agency would need 67 vehicles, assuming a 20 percent spare ratio. Therefore, RPT should maintain the size of its fleet, and additional vehicle purchases are not likely to be required to implement the service expansion recommendations. This should be re-evaluated each year based on current fleet conditions.

Bus Rapid Transit and PTN will require many new capital assets

Construction of Link will have a significant impact on RPT's capital assets in the form of new battery electric vehicles and charging equipment, a maintenance facility, improved shelters, and other equipment associated with the project such as real-time arrival signage and a new park-and-ride facility. Maintenance and replacement cost of these assets are included in RPT's operations agreement with Mayo Clinic and will be planned and funded through a separate capital planning process.

RPT may implement additional BRT-like service as part of the PTN concept included in the City's 2040 comprehensive plan. These future PTN lines are likely to have significant capital needs similar to Link and should be planned in detail as implementation nears. Capital improvements associated with bus rapid transit projects are likely to include:

- Distinctive shelters
- Information signs, ticket vending machines, benches, and other station amenities
- TSP systems
- Improved signage
- Bicycle and pedestrian improvements
- Roadway treatments such as bus-only lanes

It is anticipated that each PTN line implemented will undergo a similar planning process to Link,

which requires significant long-term financial and capital planning. Therefore, these items are anticipated to be identified through future planning processes, and long-term replacement costs should be accounted for in future capital plans, once identified.

Capital assets for microtransit pilot depend on operational decisions

As RPT further investigates implementing a microtransit pilot program, there are two main options that will inform capital and financial planning.

- Service and equipment is owned and operated by RPT. In this scenario, the agency is primarily responsible for providing vehicles and operators, along with the necessary equipment to operate the service.
- Service that is operated by a third-party contractor. In this scenario, RPT would be responsible for the administration of the contract and ensuring compliance requirements are met, while the vendor would supply the software, vehicles, and operators.

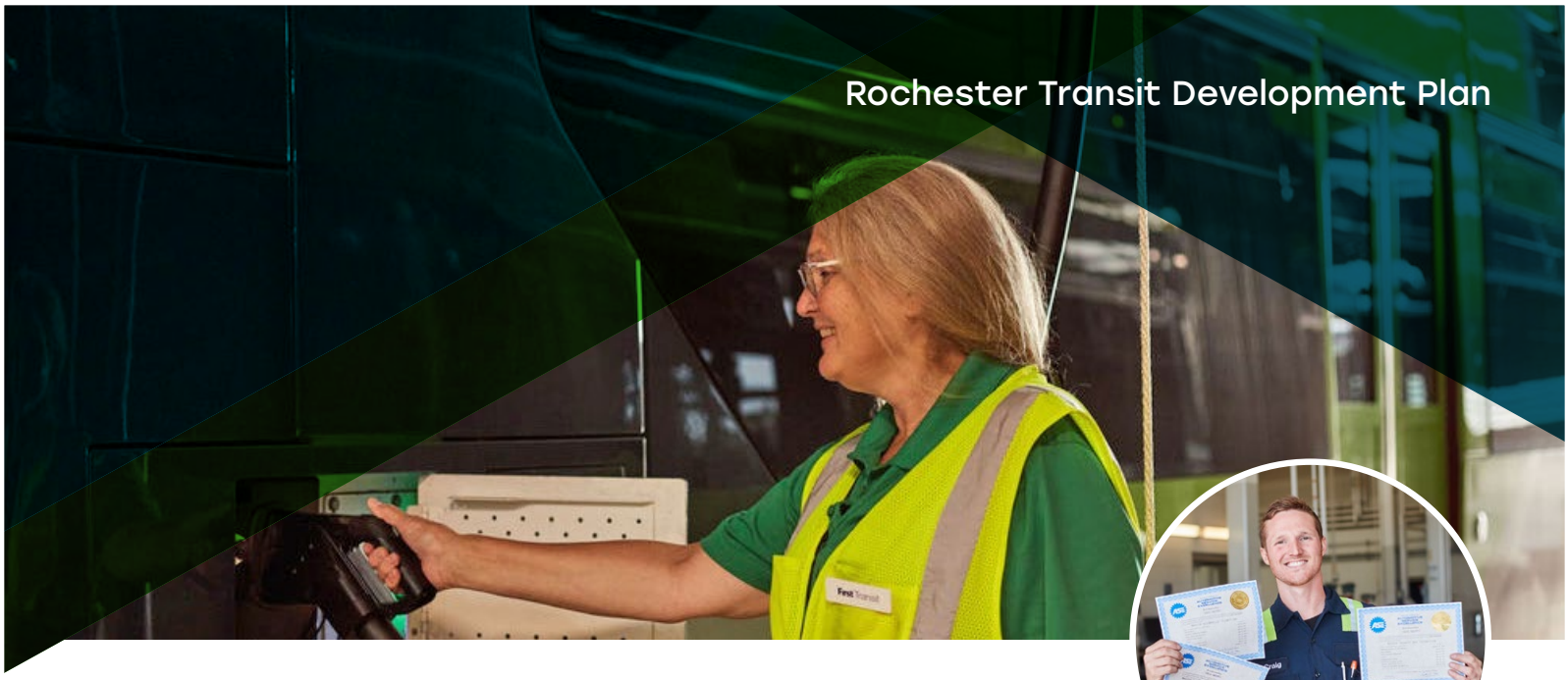
Costs for either option are dependent on a wide variety of variables, such as the size of the service area, number of service hours, numbers of vehicles required etc. However, other systems have found the costs of either option to be relatively similar. Therefore, it is recommended that RPT contract with a third-party provider to implement the microtransit pilot. Contracting with a third-party would reduce the staff time required by RPT to manage the service, as well as place the burden of purchasing and maintaining the equipment and software required on the operator. If the microtransit service becomes a permanent part of RPT's service, the operational model should be re-evaluated.

Zero-Emission Transition Plan will guide RPT's fleet transition

RPT procured two electric buses that were added to its fleet in Summer 2022 and will take delivery of two more in 2023. These buses were purchased with a grant from the Federal Transit Administration. According to the Bipartisan Infrastructure Law, in order for RPT to receive additional grant funding for zero-emission vehicles, the system must develop a Zero-Emission Transition Plan[7]. The regulation requires that the Zero-Emission Transition Plan include the following elements:

- A long-term fleet management plan, including RPT intends to use federal resources for its transition to a zero-emission fleet
- The availability of current and future resources to pay for the transition and implementation of a zero-emission fleet
- Policy and legislation impacting zero-emission fleet technologies
- Evaluation of RPT's existing and future bus operations in regard to a transition to a zero-emission fleet
- Evaluation of RPT's existing and future facilities in regard to a transition to a zero-emission fleet
- RPT's partnership with utility providers
- The impact of the transition on RPT's current workforce, including skill gaps and training/ retraining needs

[7] https://www.transit.dot.gov/funding/grants/zero-emission-fleet-transition-plan



ORGANIZATIONAL AND STAFFING PLAN

RPT requires dedicated staff to manage service, operations, and planning. The City of Rochester currently employs a team of six staff to manage the system as well as a contracted operator that manages day-to-day delivery of transit service. Since RPT contracts with a third-party for service, the agency's full-time staff largely assist with long-term planning, administration, and financial management. RPT conducted a national and peer agency benchmarking analysis to determine how RPT's staffing compares with other agencies. That analysis showed that RPT's staffing levels are low for the amount of service the agency operates relative to peer agencies and national averages. RPT should increase its current staffing levels by adding administrative staff and dedicated facility maintenance staff. Additionally, RPT will need to increase staffing levels for proposed growth to the fixed-route system. RPT should use the labor ratios as a guideline for estimating future staffing needs. RPT should take the following actions related to staffing for current fixed-route and demand response service:

- Hire two to three additional administrative staff in the near-term to support its current service.
- Add two to three facility maintenance staff in the near-term to support its current service. RPT should evaluate whether it is possible to contract this function out.
- Account for hiring additional staff for future service growth scenarios and should use the labor force ratios in this analysis as a guideline to budget for that growth.
- Hire additional administrative staff as service expands. The proposed fixed-route service growth scenario in this TDP would require five to seven additional administrative staff.

Full documentation of this analysis, findings, and recommendations is available in the **Organizational and Staffing Plan Technical Memo**.

LABOR FORCE RATIO COMPARISON SHOWS THAT RPT'S STAFFING LEVELS ARE LOWER THAN AVERAGE

National and peer labor force ratios are a common tool used as a rough guideline for evaluating and projecting transit agencies' future staffing needs. Labor force ratios evaluate staffing levels relative to an agency's fleet size and the amount of service that it operates. The labor force ratios in this analysis evaluated national and peer agency averages for employees per vehicle operated in maximum service (VOMS) and per revenue hour.

RPT's staffing levels are much lower than the national average across all categories (1.79 employees per vehicle operated in maximum service compared to a peer average of 3.11), and RPT's peer agencies' staffing levels are closer to the national average.

RPT should consider increasing its current staffing levels in the short-term and would need to increase its staffing levels in the longer terms as it grows its service. Since RPT's levels are lower than peer and national averages, subsequent staffing projections could be based on the peer agency labor ratios form this analysis so RPT's future staffing levels better align with industry standards.

LABOR RATIOS ANALYSIS SUGGESTS RPT NEEDS ADDITIONAL STAFF TO SUPPORT CURRENT SERVICE

Applying the peer agency average labor ratios to RPT's current service as of June 2022, RPT's administration staffing levels are two to three employees lower than its peers based on the RPT's current VOMS and vehicle revenue hours operated. RPT recently hired one non-permanent dedicated facility maintenance staff but should have two to three employees based on these labor ratios.

PROPOSED SYSTEM GROWTH WILL REQUIRE MORE STAFF

Applying the labor force ratios to this service expansion scenario, the most notable takeaway is that RPT would need to hire an additional five to seven general administrative staff to operate the amount of service planned in the post-BRT expansion scenario.

Implementation of BRT and microtransit service will require additional staff

RPT is planning to add BRT and is evaluating the potential for microtransit service. These new services would require additional operations, maintenance, and administrative employees. Staffing levels for BRT will be funded under an operating agreement with Mayo Clinic and is being planned for through a separate process than this TDP. If RPT decides to implement microtransit service, the agency will need to increase its full-time administrative staffing levels further to manage the service and will need to budget for additional costs to contract out operations and maintenance.

FINANCIAL PLAN

As a steward of public funds, RPT's overall financial goal is to ensure that the system is providing quality transit services meeting the needs of the community while keeping the system financially sustainable—meaning that costs do not exceed revenues. As part of the TDP, RPT analyzed system costs and revenues and evaluated how they will likely change over the next five years to create an overall picture of the system's financial health, including both capital and operating expenses and revenues throughout the life of the plan.

Based on projected changes to revenues and costs over the five year period of this plan, RPT expects operations of its services to remain financially sustainable, even with the impacts of COVID-19 on ridership. Challenges will potentially arise in funding for capital improvements as the City of Rochester has mainly sourced local matching funds for these projects from directly generated revenues like fares. RPT's farebox recovery rate in 2022 (18 percent) is not high enough to replenish transit capital funds; however, RPT expects this situation to improve based on ridership growth observed in 2021 and 2022.

Full documentation of this analysis is available in the **Financial Plan Technical Memo**.

OPERATING REVENUES EXPECTED TO EXCEED COSTS AS RIDERSHIP RECOVERS, FEDERAL FUNDS WILL BRIDGE GAP IN 2022

RPT receives operating revenues from three main sources—federal operating grants, state operating grants, and directly generated revenues like fares or advertising on buses. Operating grants from the FTA and MnDOT cover roughly 80 percent of operating costs each year. The remaining 20 percent must be covered by directly generated revenues, meaning RPT must have enough ridership to support the services it provides.

RPT expects that it will have a small operating shortfall in 2022, largely due to ridership levels that are still in recovery from the impacts of COVID-19. Federal funding, specifically for transit operations, from the Coronavirus Aid, Relief, and Economic Security (CARES) Act and American Rescue Plan (ARP) Act will offset this shortfall. RPT projected operating surplus or shortfall is shown in **Table 14** for each year 2022-2027.

	2022	2023	2024	2025	2026	2027
Operating Revenue	$9,988,000	$10,591,000	$11,424,000	$12,229,000	$13,842,000	$14,643,000
Operating Costs	$10,130,000	$10,478,000	$11,036,000	$11,543,000	$12,214,000	$12,891,000
Total System Operating Surplus or Shortfall	$(142,000)	$113,000	$388,000	$686,000	$1,628,000	$1,752,000

TABLE 14: Projected RPT revenue less expenses

Based on growth trends in ridership observed over 2021 and 2022, RPT expects that it will not have operating budget shortfalls for its regular fixed-route and paratransit services for any of the remaining years (**Table 14**). RPT projects that by 2027, based on expected changes to costs and revenues, the agency will have an operating surplus that can then be reinvested into capital needs such as bus replacements or facilities improvements.

It is important to note that these figures do not include the operations and revenues of the upcoming Link, which is expected to add significant operational costs as well as operational revenues. Detailed financial planning for Link is addressed through a separate planning process related to the FTA Capital Investment Grant that will substantially fund the project's construction.

UNCERTAIN RECOVERY FROM COVID-19 AND OTHER INSTABILITY MAIN RISKS TO RPT FINANCIAL PLAN

This financial plan is based on a set of assumptions and projections any of which, though they are based on analysis and trends, may prove to be inaccurate. The assumptions included in this analysis were intentionally developed to be conservative, in hopes of guarding against future inflation and funding uncertainty. Other considerations for the future that may impact the financial plan and projections include:

- **Federal funding uncertainty:** The 2021 infrastructure bill sets transit funding levels through 2026. Congress must re-authorize a new transportation spending bill at that time, leading to uncertainty for funding in 2027 and beyond.
- **Farebox recovery:** Revenue assumptions in this analysis are based on a conservative scenario for the rate of ridership recovery through 2026. If ridership and farebox recovery rates are lower than projected, revenue will also be likely to be lower.
- **Fare structure changes:** All projections are currently based on the system's current fare structure. While major fare structure changes are not recommended at this point, any changes are likely to impact revenue projections as well.
- **BRT Operating Contributions:** The analysis is based on an agreement between Mayo Clinic and the City of Rochester that includes Mayo Clinic providing an annual operating and capital contribution for BRT service.

IMPLEMENTATION PLAN

The TDP will be implemented over a period of five years (2023-2027). While there are many variables and unknowns over this five year period (most notably the rate of ridership rebound, transit funding, and initiation of Link operations), RPT developed a preliminary schedule to guide plan implementation. This schedule assumes full implementation of service expansion over the plan's five-year period as ridership continues to recover and resources allow.

YEAR 1

Year 1 will focus on the introduction core routes (Routes 102, 204, 409, 516, and 519) in replacement of the existing evening, weekend, and holidays routes (21, 22, 23, 24, 25, and 26). This will include:

- Modifications will be made to Routes 102, 204, and 409
- In coordination with the modifications to Route 204, modifications will also be implemented for Routes 202 and 217, including the discontinuation of Route 217
- In coordination with modifications to Route 409, Route 418 will be discontinued
- Route 519 will be introduced as a modified, interlined route of existing Routes 309 and 411
- Route 307 will be modified in coordination with implementation of Route 530
- Route 516 will be introduced as an interlined route of existing Routes 101 and 206
- Route 103 and Route 116 will become peak-only routes
- With the introduction of the core routes (102, 204, 409, 516, and 519), existing Routes 21, 22, 23, 24, 25, and 26 will be discontinued

Year 1 will also focus on the introduction of new routes. This will include Route 538, which is an interlined route of existing Routes 408 and 203, and Route 570X, which will serve the new 75th Street Park-and-Ride. With the introduction of Route 570X, service will be reduced on Route 560X.

YEAR 2

Year 2 will focus on simplifying existing routes, including Route 103, 116, 306, 314, 412. Depending on the ridership of Route 419, Route 421 will be introduced in Year 2 or 3.

YEAR 3

Year 3 will depend on the availability of additional resources and will introduce two new routes in southern Rochester, Route 208 and Route 512. Route 205 will be modified with the introduction of Route 208 and will become a peak-only route.

YEAR 4

Link will be launched in Year 4, and post-BRT routing downtown will be implemented for all routes. If additional resources are available, Route 511 will be introduced in northern Rochester.

YEAR 5

Year 5 will depend on the availability of additional resources and will add additional frequency on high-ridership routes and will introduce service to the Rochester airport (Route 350X).

TRANSIT SERVICE ADAPTIVE MANAGEMENT PLAN PREPARES FOR FUTURE PUBLIC HEALTH EMERGENCIES

In March 2020, RPT implemented multiple service changes in response to orders from the State of Minnesota, Olmsted County health officials, and changing ridership demand resulting from the COVID-19 pandemic. The selective suspension of service sought to balance the transportation needs of essential workers with budgetary restraints and a lack of demand. Today, RPT's operation largely resembles pre-COVID-19 service; however, the pandemic continues to evolve, and the possibility of new public health emergencies makes it prudent to plan for modified operations.

Any future plan for modified operations should prioritize routes providing core service, in other words the routes that operate during weekdays, evenings, and weekends. Additional priority should go to routes that operate in areas with high concentrations of likely transit users.

While any emergency will pose unique challenges and demands that necessitate a dynamic, flexible response, the following provides a framework for the prioritization of fixed-route operations.

Throughout the pandemic, society has leaned on its essential workers in the in the food service and healthcare industries. Not only do many essential workers depend on transit to reach their jobs, but many are also from population groups and communities that face historical disadvantage and marginalization (people of color, low-income households, non-native English speakers), which have been dramatically exacerbated by the pandemic's health and economic impacts. This adaptive service plan seeks to minimize the impact of service cuts to those that rely the most on transit and suggests a framework for a return to normal operations that prioritizes equity.

Core Routes

Core routes, in other words the routes proposed to operate during weekdays, evenings, and weekends (Route 102, 204, 409, 516, and 519) constitute critical coverage that should be maintained at all costs. Core routes operate along alignments that saw upwards of 55 percent ridership retention during the pandemic and provide coverage in areas with a high number of low-income and/or non-white residents.

Priority Routes

Priority routes, identified based on ridership retention during the pandemic and demographic data, should be prioritized amongst the non-core service routes. Priority routes operate along alignments that saw 40 to 55 percent ridership retention during the pandemic and provide coverage in areas with a high number of low-income and/or non-white residents. These routes include:

- Route 103
- Route 306
- Route 307
- Route 314
- Route 412
- Route 413
- Route 419[8]
- Route 560X

In general, service should match what is proposed in this TDP (i.e., though few peak-only routes are identified as priority routes, they should remain peak-only during any modified service plans). The exception to this rule is the 560X, which is identified as a priority route to ensure the continuation of some park-and-ride service; in a modified service plan, it is likely appropriate to reduce the frequency of Route 560X.

Return to Normal Operations

Routes not identified as core service or priority routes should be the lowest operational priority during modified service planning. Generally, routes that have not been prioritized operate along alignments that saw low ridership retention during the pandemic, provide a specialized/limited service (e.g., shopper routes), focus on peak-only service geared towards office commuters, and/or are new routes.

[8] In the event Route 421 is operational at the time of a service modification, the cost-neutral alignment of Route 419 should be operated to provide enhanced coverage.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