

# On-Demand Services Study

### **Final Report**

May 2025

Prepared for the Central County Transportation Authority ("Metro")



By Left Turn Right Turn Ltd.



#### **On-Demand Services Study**

#### Contributions and Acknowledgements:

Metro wishes to acknowledge the efforts of everyone who contributed to the preparation of this On-Demand Services Study.

We are grateful to those who dedicated their time and energy into the facilitation of this study, and the preparation of the plan by providing feedback through workshops, interviews and surveys. This includes the entire community, including residents, community partners, Metro Staff and Administration.

A special thanks is given to the following organizations for participating in our Project Working Group workshops:

- Bureau of Services for Blind Persons
- Disability Network Southwest Michigan
- Western Michigan University Seniors Day Services

## **Table of Contents**

1		I	Introduc	stion 1	-
2		C	Commu	nity Context 2	: <b>-</b>
	2.1	k	Kalamaz	oo Context 2	. –
	2.2	١	Metro Co	ontext 2	-
3		(	Current	State Assessment 4	
	3.1	١	Metro Co	onnect 4	
		3.1.	1	Service Performance 4	
		3.1.	2	Service Delivery 5	. –
	3.2	١	Metro Lir	nk 6	i -
		3.2.	.1	Service Performance 7	' -
		3.2.	2	Service Delivery 8	; -
4		5	Staff, Co	ommunity, and Stakeholder Engagement 10	) -
	4.1	S	Staff Find	dings 10	) -
		4.1.	.1	Metro Connect 10	) -
		4.1.	2	Metro Link 10	) -
	4.2	(	Commu	nity Stakeholder and Public Findings11	-
		4.2.	.1	Community Stakeholder Engagement 11	-
		4.2.	2	Public Surveys 12	-
5		(	Guiding	Framework 19	) -
	5.1	١	Metro Co	onnect SWOC Assessment 19	) -
	5.2	١	Metro Lir	nk SWOC Assessment 20	) -
	5.3	S	Strategic	Objectives23	; -
6		(	Options	Analysis 25	; -
	6.1	I	Industry	Scan and Peer Comparison25	, -
		6.1.	.1	Appleton, WI 25	<i>.</i> –
		6.1.	2	Grand Rapids, MI26	; -

7

e	6.1.3	Green Bay, WI	26 -
е	6.1.4	Peoria, IL	27 -
е	6.1.5	Toledo, OH	28 -
е	6.1.6	Findings	28 -
6.2	Costing	Assessment	28 -
6.3	Scenari	o Assessment	30 -
	Recom	mendations and Implementation Plan	34 -
7.1	Service	Delivery and Contract Recommendations	34 -
7	7.1.1	Short-Term Recommendations	34 -
7	7.1.2	Medium-Term Recommendations	37 -
7.2	Implem	entation Roadmap	40 -
7	7.2.1	Phase 1	40 -
7	7.2.2	Phase 2	41 -
7	7.2.3	Phase 3	41 -

## **List of Figures**

Figure 1: Metro Fixed Route and Metro Link Service Areas 3 -
Figure 2: Metro Connect Users in 2024 4 -
Figure 3: Metro Connect Cost Indicators 6 -
Figure 4: Distribution of Trips per Zone in 2024 7 -
Figure 5: Summary of Metro Connect survey results for "How satisfied are you with the following Metro Connect services?" 13 -
Figure 6: Summary of Metro Connect results for "Have you been unable to schedule a trip for the time you need to travel?" 14 -
Figure 7: Summary of Metro Link survey results for "How often do you use Metro Link in a typical month?" 14 -
Figure 8: Summary of Metro Link survey results for "What age group do you belong to?"

Figure 9: Summary of Metro Link survey results for "What is your annual household income?" 15 -
Figure 10: Summary of Metro Link survey results for "Do you have access to a personal household vehicle at the times you would like to travel?" 16 -
Figure 11: Summary of Metro Link survey results for "What is your preferred method to schedule your rides?" 16 -
Figure 12: Summary of Metro Link survey results for "How satisfied are you with the following Metro Link services?" 17 -
Figure 13: Summary of Metro Link survey results for "Have you been unable to schedule a trip for the time you need to travel?" 17 -
Figure 14: Quotes from Metro Link users 18 -
Figure 15: Metro Connect SWOC Summary. Color-Coded by most relevant (darker blue) to least relevant (white) 19 -
Figure 16: Metro Link SWOC Assessment. Color-Coded by most relevant (darker blue) to least relevant (white) 21 -
Figure 17: Sample of Metro Link stops 22 -

## **List of Tables**

Table 1: Metro Link and Metro Connect Service Efficiency 8 -
Table 2: Characteristics of Peer Agencies (Source: Federal Transit Administration)
Table 3: City of Appleton Service Delivery Model. Note red indicates a shared contract between services, black indicates separate contracts, and green indicates booking and scheduling being separate from the services contract26 -
Table 4: Interurban Transit Partnership Service Delivery Model. Note red indicates a shared contract between services, black indicates separate contracts, and green indicates booking and scheduling being separate from the services contract
Table 5: Green Bay Metro Service Delivery Model. Note red indicates a shared contract between services, black indicates separate contracts, and green indicates booking and scheduling being separate from the services contract27 -

Table 6: Greater Peoria Mass Transit District Service Delivery Model. Note red indicates a shared contract between services, black indicates separate contracts, and green indicates booking and scheduling being separate from the services contract
Table 7: Toledo Area Regional Transit Authority Service Delivery Model. Note red indicates a shared contract between services, black indicates separate contracts, and green indicates booking and scheduling being separate from the services contract
Table 8: Peer Agency Contractor Cost Comparison. Note that bold indicates the rate that is used for the         contract
Table 9: Service Delivery Model - Options 1a to 1c. Note red indicates a shared contract between services,black indicates separate contracts, and green indicates booking and scheduling beingseparate from the services contract 32 -
Table 10: Service Delivery Model - Options 2a to 2c. Note red indicates a shared contract between services,black indicates separate contracts, and green indicates booking and scheduling beingseparate from the services contract 32 -
Table 11: Service Delivery Model - Options 3a to 3c. Note red indicates a shared contract between services, black indicates separate contracts, and green indicates booking and scheduling being separate from the services contract33 -

## 1 Introduction

The Central County Transportation Authority (CCTA), operating as Metro, commissioned an On-Demand Services Study to assess the service delivery of their on-demand services – Metro Connect and Metro Link offered in Kalamazoo County. With both contracts set to expire at the end of 2025, Metro is reviewing their transit service delivery model and exploring how to operate two demand response services with greater efficiency. The objective of this study is to determine a way forward that best meets the needs of Metro and its riders.

As a first step of this analysis, developing an understanding of the current contractual and service planning conditions, as well as existing performance was critical. Through a series of discovery meetings, on-site investigations, data analysis and public engagement, the project team identified how the existing ondemand services have achieved recent success while also understanding current challenges and gaps. With this understanding and a peer agency review, several service delivery models were developed and assessed to determine the preferred solution.

## 2 Community Context

### 2.1 Kalamazoo Context

Situated in southern Michigan, Kalamazoo County is bordered by Allegan and Barry Counties to the north, Calhoun County to the east, Saint Joseph County to the south, and Van Buren County to the west. Spanning 580 square miles, there are many rural communities in the County like Fulton, Vicksburg, and Richland. However, with a County-wide population of just over 260,000, most residents live within the County's urbanized area which include the City of Kalamazoo and the City of Portage.

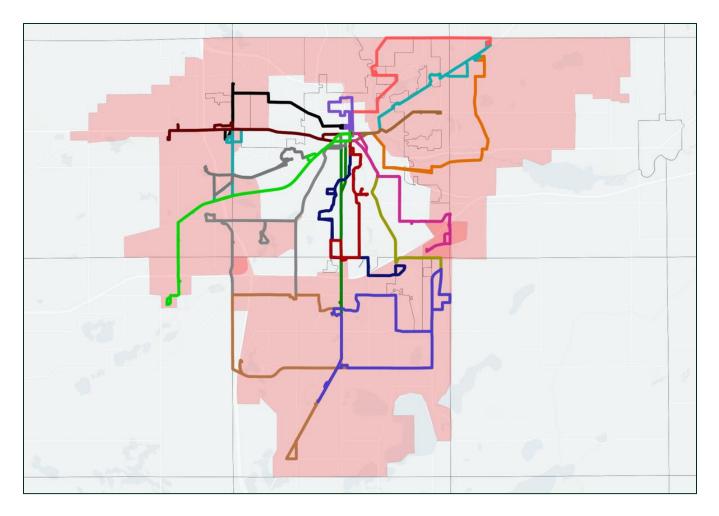
Home to multiple post-secondary institutions like Western Michigan University and Kalamazoo College, the City and County of Kalamazoo have a high proportion of people under the age of 25, with the overall median age of the County at 35 years old. Kalamazoo County is also known for its presence in the pharmaceutical and health industries with offices for Pfizer, Stryker, and Zoetis.

### 2.2 Metro Context

Metro offers a variety of transit services within Kalamazoo County from Monday to Sunday (no service on holidays). The types of service include the following:

- **Fixed Route**: Service within the County's urbanized area, which includes the City of Kalamazoo, the City of Portage, Kalamazoo Township, Oshtemo Township, Comstock Township and the City of Parchment.
- **Metro Connect (Access)**: Paratransit service provided in compliance with the Americans with Disabilities Act (ADA). Door-to-door service is provided to riders within <sup>3</sup>/<sub>4</sub> mile walkshed of the fixed route service.
- **Metro Connect (Demand-Responsive)**: Provides door-to-door service throughout the County. Discounted fares are provided for seniors (62+ years old) and people with disabilities.
- **Metro Link**: A real-time on-demand service that provides stop-to-stop service in designated areas of Kalamazoo (as shown in Figure 1).
- Metro Share: Service providing vehicles to agencies for seniors and individuals with disabilities.

In 2024, Metro's fixed route service, which consists of 21 routes and 720 stops, completed over 1,700,000 trips, while the on-demand services completed nearly 160,000 trips. Overall, Metro experienced a nearly 5% increase in annual ridership from 2023 to 2024.



#### Figure 1: Metro Fixed Route and Metro Link Service Areas

In addition to fare revenue, funding for Metro is provided through a mixture of federal and state grants, along urban and County-wide millages. The distribution of Metro's projected revenue for Fiscal Year 2025 for operations is:

- FTA operating assistance: 22%
- Michigan DOT operating assistance: 28%
- Urban millage: 22%
- County-wide millage: 13%
- Fares and other operating: 15%

The Urban Millage applies to residents in municipalities where there is fixed route service, whereas the County-Wide Millage applies to entirety of Kalamazoo County, including the urbanized area. Overall, Metro's funding is not overly reliant on one specific source but rather is distributed across multiple streams.

## 3 Current State Assessment

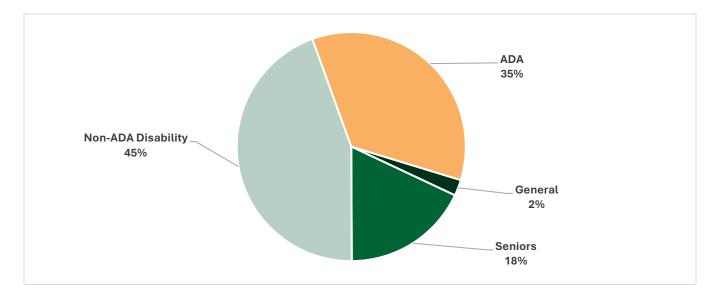
### 3.1 Metro Connect

Metro Connect is a shared-ride service provided by Metro and is available to all residents in Kalamazoo County. While it is primarily used as Metro's ADA paratransit service (Connect Access), Metro has a multi-fare structure that allows more residents to access the service including seniors and people living in rural areas of the County.

### 3.1.1 Service Performance

In 2024, Metro Connect serviced over 133,000 trips throughout the County across 69,414 revenue vehicle hours. Compared to 2023, ridership increased by roughly 4% with most of that due to an increase in non-ADA rides. Considering its responsibility to service the entire County and as a paratransit service, Connect experienced an impressive boardings per revenue vehicle hour of 1.92 in 2024.

As shown in Figure 2, 80% of rides are completed by people with disabilities. However, it should be noted that less than half of those users qualify for ADA eligibility and thus pay a slightly higher fare. Only 2% of ridership is comprised of the general public, while 18% of ridership are seniors.



#### Figure 2: Metro Connect Users in 2024

Connect is a reliable service, with 96% of trips considered on-time in 2024, which slightly exceeds its 95% target. Operations are busiest between 6 a.m. and 9:30 a.m. Connect rides can be booked by phone or e-mail. In 2024, phone bookings made up most bookings with 59% compared to 41% for e-mail. Many of the

e-mail bookings come from local community groups that book for several individuals at once. For the phone bookings, it was found that on average just over 20% of calls to the scheduling team went to voicemail. The existing contractual agreement states that if a call goes to voicemail during scheduling hours the contractor is required to return the call within 30 minutes.

### 3.1.2 Service Delivery

Metro Connect services are provided by First Student, Inc. ("First Student") who has delivered the service since 2009 over three successive contracts. The current service contract requires First Student to deliver the following:

- Operators
- Scheduling and Dispatch
- Vehicle Maintenance and Storage

As part of the service agreement, Metro Connect's fleet of 13 F550 Eldorado and Champion buses and 35 Ford Transit vans are leased to the contractor from Metro for \$1 per vehicle per year. On an average day, 41 vehicles from the fleet are used to provide service across the County.

The original RFP for Metro Connect services invited interested parties to use their own scheduling software, pending the review and approval of Metro. Alternatively, Metro proposed to provide the contractor with CTS Software, a cloud-based software for scheduling, mapping and storing passenger information, but requiring the contractor to be responsible for the maintenance and service fees over the course of the contract and as well as responsible for any necessary training expenses incurred. At the time of contract execution, First Student indicated that they had already secured an agreement with CTS Software and thus Metro was not required to procure the software for Metro Connect usage.

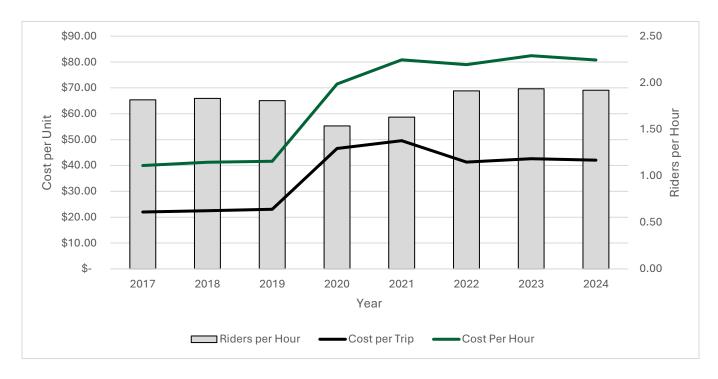
Metro and First Student staff use CTS Software to view and track vehicles. Operators are assigned a GPSenabled tablet at the beginning of their shift and can view their daily manifest and access trip and customer information while on the road. Additionally, staff can access the CTS Software database and can extract data for external analysis. The agreement also requires a very prescriptive number of staff that need to be provided including an on-site and alternate manager, two dispatchers, eight schedulers, and adequate maintenance crew equipped for daily service and repairs that can be completed in a timely manner. Operators are required to be trained in defensive driving, sensitivity training, map reading and various program policies and procedures. As per the agreement, the contractor provides some ongoing/refresher training to operators each year.

Under the current agreement, the contractor provides their services for a lump-sum rather than by service hour, with annual increases. The lump-sum is determined based on the estimated annual service hours,

#### **On-Demand Services Study**

trips, and mileage for a given year. If the actual amount exceeds any of two of the three estimates, the contract includes a cost per trip amount to adjust the invoiced amount.

As shown in Figure 3, both the cost per trip and cost per revenue vehicle hour roughly doubled in 2020 have remained largely consistent despite a gradual increase in ridership efficiency (riders per hour) since 2019.



#### Figure 3: Metro Connect Cost Indicators

Finally, to ensure that the contractor must meet minimum service standards, Metro included a performance penalty of 10% for each month where the contractor's on-time performance is less than 95%. Currently, Connect provides riders with a 30-minute pick-up window and is considered late when a vehicle arrives at a scheduled pick-up more than 15 minutes after the scheduled pick-up window. Weather conditions are considered when assessing the contractor's on-time performance.

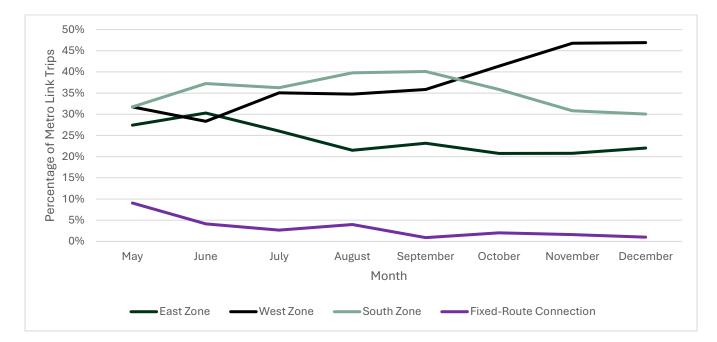
### 3.2 Metro Link

Since launching as a pilot service in April 2024, Metro Link has provided connectivity across three zones to neighborhoods in Kalamazoo that have limited or no fixed route service. The objective of the microtransit service pilot is to understand how it can be included in Metro's overall long-range service plans. Based on the findings from Metro's 2023 Comprehensive Operational Analysis (COA), microtransit could be established to provide service to areas within the Metro service area that are lower-density and have no or low-productive fixed-route bus service.

### 3.2.1 Service Performance

As indicated by the 2024 ridership data, rider usage experienced steep increases following launch through the summer and fall before levelling off around 4,000 monthly trips as reported by the contractor, Via Transportation Inc ("Via"). As a new service, modest but continued ridership growth should be expected as users become more aware and familiar of Metro Link throughout the course of the pilot.

In 2024, Metro Link had highest ridership in the West zone with 40% of total ridership followed by the South zone at 34% and the East zone at 23%. Additionally, as shown in Figure 4, the proportion of ridership traveling within the West zone increased to nearly 50% in November and December 2024, indicating greater desire for the service in that specific area. In contrast, the number of riders using Metro Link to access the fixed-route steadily decreased after some success immediately after launch.



#### Figure 4: Distribution of Trips per Zone in 2024

Metro Link posts a robust on-time performance of just under 98%. Per the service contract agreement, an on-time performance is dictated based on a user's wait time being under 30 minutes. This method aligns with Metro Connect's 30-minute window for on-time performance, but adjusts it based on the real-time nature of Metro Link's services.

Finally, during the first six months of operations, Metro Link's operating efficiency, the percentage of revenue vehicle hours to total vehicle hours, was under 50% with a riders per hour under two. Purely as a comparison, Table 1 shows the same data for Metro Connect. While these are both demand-responsive services that want to pursue efficient operations, Metro Link's service efficiency metrics are underperforming relative to Metro Connect and Via's estimates included in their RFP response. For

instance, the contractor's RFP response estimated 3 to 4.5 riders per vehicle hour, depending on zone for their service. It should be noted that with increased ridership in the fall of 2024, the Metro Link values may be slightly better than initially assessed. While ridership of a new service can take up to three years to stabilize, Metro Link should observe between 60-75% of their total ridership by the end of year one. Continuous ridership and performance monitoring is required to ensure that Metro Link ridership and efficiency metrics are trending in the right direction.

#### Table 1: Metro Link and Metro Connect Service Efficiency

	Metro Connect (2024)	Metro Link (Apr. – Sep. 2024)	Metro Link (Contractor Estimate)
Operating Efficiency	85%	49%	-
Riders per Revenue Hour	1.92	1.68	3.0-4.5

### 3.2.2 Service Delivery

The Metro Link service contract agreement runs through the end of 2025 with an option for three additional one-year extensions. The service provided is a full turn-key solution which includes the fleet of vehicles that meet the required service levels with at least 75% that are wheelchair accessible vehicles (WAV). Ridership data from the first six months of operations indicate that 7% of total ridership were non-ambulatory users.

The COA recommended a fleet of seven vehicles to service the three zones, however the Metro RFP for the services allowed the bidders to establish their own fleet size and gave an option for Metro-owned vehicles to be leased to the selected contractor. The proposed solution included eight in-service minivans, including Toyota Siennas or Chrysler Voyagers. Through the State of Michigan's Equitable Mobility Challenge, Metro received additional funding to support expanding the east and west zones with one additional in-service vehicle to each zone along with expanding the geographic area.

Metro Link's operators are independent contractors, while the on-site fleet supervisor is employed by the contractor. The contractor also provides a robust support staff including a daily operations manager, project manager, and launch manager.

The service contract states that the onboarding program provides operators with training in customer service, sensitivity training, disability awareness and ADA service requirements. However, Metro staff indicated that the training was only provided for assisting wheelchair users to board and alight with the original vehicle fleet. No supplemental training was provided on newer vehicles, nor for any other of the training requirements listed in the service contract.

#### **On-Demand Services Study**

Metro staff have access to an online dashboard that is intended to provide key data that is both summarized for the purposes of National Transit Database (NTD) reporting but also disaggregated so that Metro staff can conduct their own independent analysis if desired. While the RFP includes requirements for the contractor to meet a service-wide average estimated wait times of 20 minutes and maximum wait time of 30 minutes, there is no mention of performance penalties like in the Metro Connect contract.

Finally, under the current agreement, the contractor included an upfront fee of \$155,000 in preparation for service launch. Beyond those initial fees, services are charged per vehicle hour (including both revenue and non-revenue time), at \$67.35 in 2024 and \$70.04 in 2025.

## 4 Staff, Community, and Stakeholder Engagement

### 4.1 Staff Findings

Metro staff were engaged throughout the project. Discussions were intended to clarify the contract and reporting structure, discuss their experiences with Metro Connect and Metro Link services, and their future needs. Meetings were held with the Executive Director and staff to understand the pain points for each service. Discussions were also held with representatives from each of the services' contractors to understand the day-to-day operations. Additionally, LTRT collected operator input during ride-alongs for each service.

### 4.1.1 Metro Connect

Staff shared that the Metro Connect service has been vital for the community. Staff noted pleasant experiences with the delivery of the service and overall relationship with the contractor. Key strengths identified included clear and frequent communication, data transparency and comprehensive data reporting, responsive customer service for the riders, and a thorough understanding of the local community. In-depth familiarity of the unique needs and challenges of the community are especially important in delivering quality paratransit service.

While several aspects of Metro Connect have been working well, staff expressed a need to realize financial efficiencies and seek innovation. Metro staff noted that while the existing lump-sum agreement has increased in cost, it is not proportional to ridership changes or service growth. Accordingly, there was expressed interest in exploring service models that improve the financial sustainability of Connect. Staff were also aware that paratransit services have advanced across the industry. Metro stated interest in exploring innovative solutions to take advantage of these advancements by improving customer technologies, booking and scheduling software, and potentially co-mingling services.

### 4.1.2 Metro Link

Staff shared that the Metro Link service is well received by the community since its launch in April 2024. Staff appreciated the quick implementation and expansion of the service and stated that the innovative mindset was a key strength of the service. However, staff noted several persistent challenges with data reporting, the rider app, communication, and the overall management of the service.

Currently, Metro has access to summarized data and several summary dashboards presenting key metrics. Staff mentioned that while the summarized data is easy to download in the desired file format (e.g., excel, pdf, etc.), the provided data reporting has limited transparency and often requires significant in-house data manipulation to extract the desired metrics. Staff also noted frequent misalignments between expected and observed values for key service metrics including deadhead time and service hours, among others.

Additionally, Metro staff raised concerns about glitches with the Metro Link app. The extent of the glitches was unclear, although additional engagement activities revealed that the malfunctions appeared on both the rider and operator interfaces. One of the operator application glitches noted was that pick-up locations change while a trip was in progress, which led to confusion for both the operators and the passengers.

Metro staff expressed frustrations with the overall administration of the service, citing challenges with communications, unclear roles and responsibilities and limited understanding of the local context. Staff identified that there was a lack of clear communication pathways to request support and escalate issues. Of particular relevance, staff noted long wait times when seeking support for the data reporting issues. Additionally, staff noted instances where customer issues and vehicle maintenance remained unaddressed for significant periods of time due to ambiguity of roles and responsibilities. Staff also expressed issues with the service provider's limited understanding of the local community. Together, these issues present on-going difficulties for staff, affecting Metro's reputation and ability to make data-informed decisions or respond in a timely manner.

### 4.2 Community Stakeholder and Public Findings

In addition to staff, stakeholders and the community were engaged to collect input on their needs and experiences with Metro Connect and Metro Link. Community stakeholders (Section 4.2.1) were identified in consultation with Metro staff and engaged through in-person meetings on their experiences with Metro Connect. Community stakeholders included the Michigan Bureau of Services for Blind Persons (BSBP), the Disability Network Southwest Michigan (DNSWM), and the Western Michigan University (WMU) Seniors Day Program. Public input was collected through a survey for both Metro Link and Metro Connect (Section 4.2.1).

### 4.2.1 Community Stakeholder Engagement

As social service organizations and day programs, community stakeholders were primarily engaged to discuss their experiences with Metro Connect. Community stakeholders noted that many trips taken by their patrons were to attend medical appointments, day programs, or employment. A common challenge shared amongst the community stakeholders was the perceived need to book as far in advance as possible in order to secure a trip at their desired time to these destinations, especially during peak hours. Both BSBP and WMU Seniors Day Program noted individuals book their trips 7 days in advance. Similarly, WMU Seniors Day Program staff noted that when booking on behalf of their patrons, they also book 7 days in advance.

Community stakeholders noted that those booking over the phone experienced long hold times which made it challenging amongst their other commitments. Specifically, BSBP staff recounted instances of their patrons being unable to remain on the phone and lacking clarity on whether their requested trips were confirmed. Those that booked their trips through email were generally satisfied with the timeliness of their trip confirmation. WMU Seniors Day Program staff especially appreciated the ability to request multiple trips for several patrons through one email and receive confirmation for all requested trips within a few hours. Overall, community organizations noted a desire for more booking options (e.g., self-serve booking) and improved transparency during the booking confirmation process.

WMU Seniors Day Program staff shared anecdotes of inefficient routing. On occasion, riders have experienced long travel times on-board the vehicle, sometimes over 2 hours. Although these are rare instances, staff shared that these could cause additional challenges for people with intellectual and cognitive disabilities, and for the caregivers receiving them at the end of their trip.

A challenge mentioned was limited awareness and understanding of disabilities amongst operators. WMU Seniors Day Program staff indicated a desire for operators to be better informed about supporting people with disabilities. Operators currently undergo training to learn how to secure mobility devices on the vehicles. However, there is a lack of training for supporting ambulatory individuals. Sensitivity training and improved awareness of the various types of disabilities can improve the customer experience for Metro Connect users.

Despite these challenges, community stakeholders noted that both they and their patrons were appreciative of this service stating that many would not have another transportation option otherwise. One of the elements that worked well were the automated trip reminders. Currently, Metro Connect schedules automated phone calls to remind riders on the evening before their trip. Community stakeholders stated that these reminders were helpful for riders and caregivers to plan for their upcoming trip, as well as to remember to cancel if needed. Phone reminders were noted to be especially appreciated for trips booked 7 days in advance. Phone reminders, among other aspects of the service, support independence for people with disabilities.

### 4.2.2 Public Surveys

In addition to discussions with key community stakeholders, LTRT sought feedback from the general public. The general public was engaged through digital surveys, available by link and QR code to collect information about their travel experiences. Both surveys were distributed through Metro's webpage and social media channels. Print versions of the survey were made available on the vehicles during service. Additional attempts were made to expand the outreach for Metro Connect. LTRT directly reached out to the community stakeholders to leverage existing communication channels. Telephone interviews were also conducted with frequent Metro Connect users.<sup>1</sup>

### Metro Connect Survey Summary

The Metro Connect survey had limited success in collecting public feedback. The Metro Connect survey had a total of 13 respondents, including those that completed the survey through the telephone outreach. Survey respondents consisted of individuals who use the service at least 4 times a month. Of those respondents, most individuals indicated that they are impacted by physical disabilities (69%). However, many respondents (61%) indicated that they are impacted by more than one type of disability.

Although there were limited responses, the survey results suggested that that respondents were generally satisfied with the overall quality of service. Aspects of the booking process were identified as the pain points of their experience using Metro Connect, which aligned with findings from the community stakeholder engagements. Specifically, respondents were dissatisfied or very dissatisfied with the length of the phone call and the hold times. Despite identified challenges with the booking process, 77% indicated that they have always been able to schedule a trip for the time for the time they need to travel. Figure 5Figure 6 below summarize these key findings.

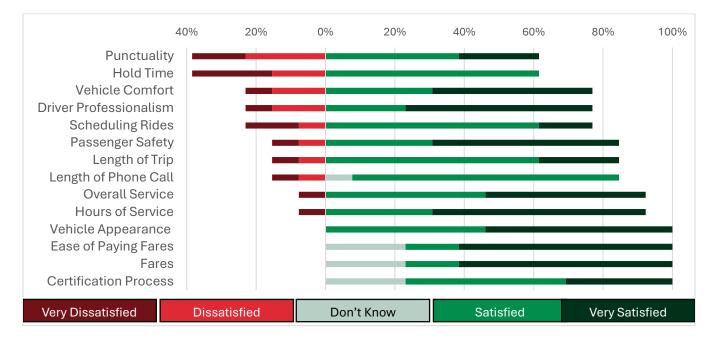


Figure 5: Summary of Metro Connect survey results for "How satisfied are you with the following Metro Connect services?"

<sup>&</sup>lt;sup>1</sup> Telephone interviews were conducted with 20 randomly selected individuals who frequently use Metro Connect. Out of the 20 individuals, only 5 individuals completed the survey. 4 individuals denied participating. LTRT left voicemails with information about the survey and contact information for individuals that did not respond initially.

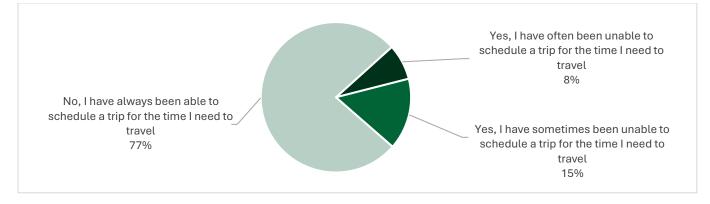


Figure 6: Summary of Metro Connect results for "Have you been unable to schedule a trip for the time you need to travel?"

Other concerns raised within the survey were related to operator expectations when supporting nonambulatory passengers. The concerns underlined sentiments shared by community stakeholders for greater operator awareness and training about different types of disabilities.

#### Metro Link Survey Summary

The Metro Link survey had a total of 126 respondents, 75% of which use the service at least once in a typical month, and 40% who use the service 10 or more times in a typical month. Survey respondents were distributed generally evenly across age groups, capturing the experiences of individuals under 20 years of age to over 62 years of age. Similarly, the survey captured the responses of individuals from varying annual household incomes. Of the total respondents, an overwhelming majority of nearly 80% indicated that they don't have access a personal household vehicle at the times I would like to travel, highlighting the importance of the Metro Link service in meeting their transportation needs. The following Figure 7Figure 10 summarize the overall profile of the Metro Link survey respondents.

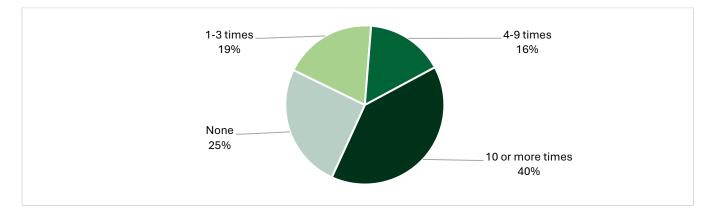


Figure 7: Summary of Metro Link survey results for "How often do you use Metro Link in a typical month?"

#### **On-Demand Services Study**

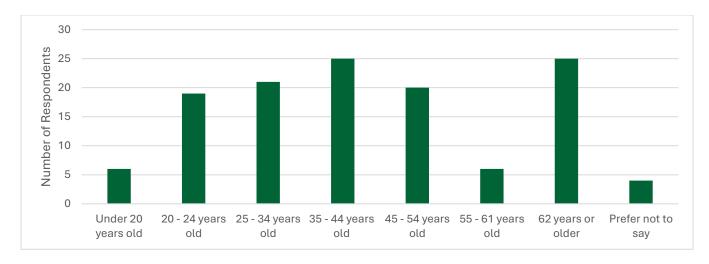


Figure 8: Summary of Metro Link survey results for "What age group do you belong to?"

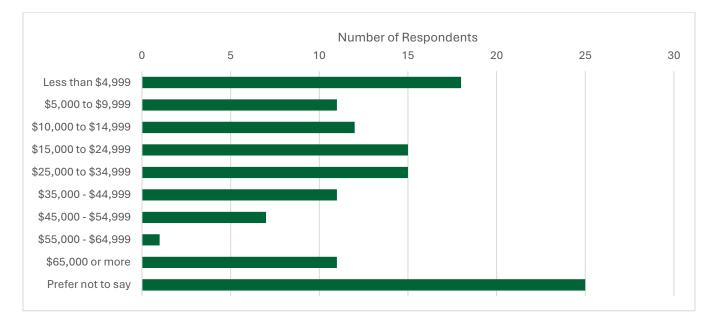


Figure 9: Summary of Metro Link survey results for "What is your annual household income?"

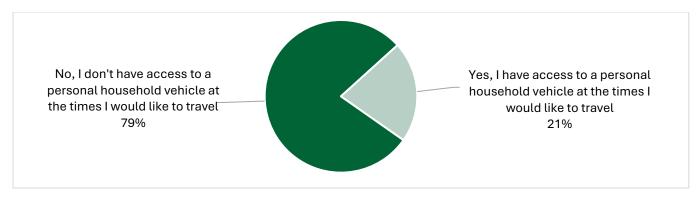
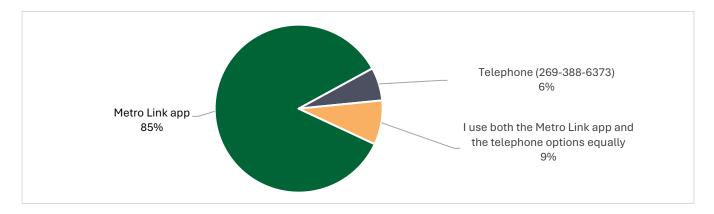


Figure 10: Summary of Metro Link survey results for "Do you have access to a personal household vehicle at the times you would like to travel?"

Metro Link users were asked about their preferred method of scheduling their trips, whether it is through the app, over the phone, or both. 85% of users responded that they prefer to book through the Metro Link app, as shown in Figure 11 below. This generally supports the data received from Via which also showed that the app was the most population booking method (98%).





When asked about their preferred method of payment, over half of the users (53%) answered that they prefer to use their Debit cards. While fewer respondents indicated they prefer to use credit card (18%) or Token Transit (29%), it is important to note that Token Transit was the most common payment method of users that indicated their annual household income is less than \$50,000. It should be noted that recent flaws with the Token Transit payment system have been identified by Metro including accounts that had no default payment method.

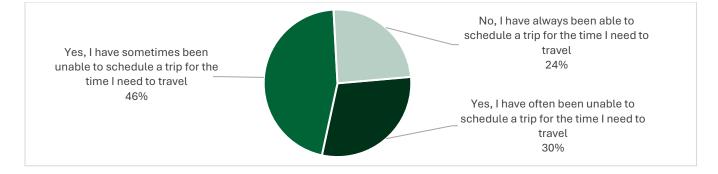
The Metro Link survey also questioned users about their satisfaction with various facets of the on-demand service, their preferred method of scheduling and paying for their rides, and their experiences with trip availability. Non-users were asked to comment on improvements that would encourage them to use the service. Metro Link users they were generally satisfied or very satisfied with the overall service as shown in Figure 12 below. Passenger safety, fares, and vehicle appearance were among the most satisfied aspects.

#### **On-Demand Services Study**

On the other hand, many users indicated that they were dissatisfied or very dissatisfied with the Metro Link app (34%) and the wait times for the service (27%). This coupled with the finding that over three-quarters of the users answered that they have often or sometimes been unable to book rides at their desired time of travel (Figure 13) suggests gaps in the delivery of the service. This could indicate potential misalignments between true demand for the service and the data and metrics measured by the system.



#### Figure 12: Summary of Metro Link survey results for "How satisfied are you with the following Metro Link services?"



## Figure 13: Summary of Metro Link survey results for "Have you been unable to schedule a trip for the time you need to travel?"

All survey respondents were also given the opportunity to provide a comment on aspects that would encourage them to either try the service (for non-users only) or improve their travel experiences (for users only). Non-users generally indicated that they don't currently use the service because they need to travel outside the Metro Link service areas. Another key theme for those not using their service was that the

#### **On-Demand Services Study**

6-6

service is not available at the times they would like to travel. Users similarly commented on improvements to the service design. Key themes included the design of the zones and stops. Specifically, users noted confusion with the pick-up locations, some citing safety concerns. Other key themes from the open-ended questions supported findings regarding the pain points of their travel experience noting frustrations with the application providing inaccurate information or not working, as well as long wait times of over 30 minutes. Interestingly, while users had indicated general satisfaction with driver professionalism, many users noted concerns with repeated instances of driver behavior.

6-6

The corner-to-corner concept [for Metro Link stops] isn't practical in Kalamazoo, [m]ostly since the city isn't designed for corner pickup. Hence, it's dangerous for both drivers and riders to do pickups and drop offs. Waiting time sometimes [is] too much.... I live in the east zone and they used to forget to put [a] driver there[,] and that makes me go to work late using the bus or I have to request an Uber... [M]any times drivers come from a different zone when I request a ride and that make the waiting time too much, 30 - 40 minutes.

[A]lso the app glitch[es] many times and sometimes it says no seats available.

Figure 14: Quotes from Metro Link users

## 5 Guiding Framework

### 5.1 Metro Connect SWOC Assessment

On February 13, 2025, Metro staff gathered for a workshop facilitated by LTRT. The purpose of the workshop was to assess current state conditions through several interactive activities including a Strengths, Weaknesses, Opportunities, and Challenges (SWOC) assessment and affinity mapping to define key themes for the On-Demand Services Study.

The first SWOC assessment, shown in Figure 15, focused on Metro Connect. The SWOC board had been pre-populated with notes by LTRT prior to the workshop, however staff were encouraged to add, remove or swap any of the notes. Additionally, the notes were color-coded to qualitatively group the notes by most (darker note) to least (lighter note) relevant.

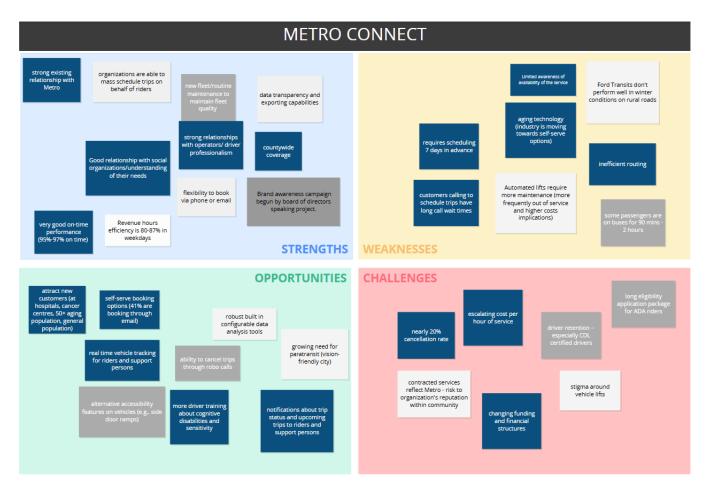


Figure 15: Metro Connect SWOC Summary. Color-Coded by most relevant (darker blue) to least relevant (white).

Overall, Metro staff were satisfied with the performance and delivery of the service by First Student, which aligned with feedback from community organizations and riders. Their longstanding involvement in Kalamazoo as Connect's contractor has allowed First Student and its operators to develop good relationships with community organizations and riders. While the service primarily serves ADA riders, Connect's ability to service anyone in the County and extend service coverage was identified as a strength for Metro. Additionally, Metro's success with federal and state funding has permitted them the ability to maintain a relatively new fleet and replace their vehicles before they develop maintenance and performance issues.

Through the current state assessment, the booking and scheduling software was identified as a weakness. While the software can support Connect's services, there are limitations surrounding its ability to provide efficient routing as well as challenges with the booking process. In response to that, modernizing the booking and scheduling software was identified as an opportunity for the service to provide a better rider experience. Similarly, while the existing software's functionality permits Metro staff to export significant amounts of data, there is an opportunity for built-in analysis tools and customizable summary reports.

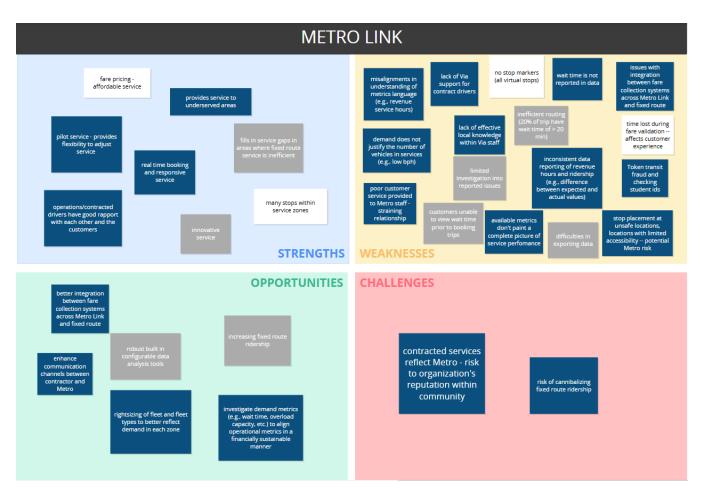
Like most transit agencies, Metro is dealing with escalating costs of services, which when paired with the reliance on state and federal for operating expenses, provides a challenge. Metro's ability to receive funding for capital expenditures like service vehicles allows Connect's costs to be lowered since vehicle procurement is not a requirement for the contractor.

Finally, there have been issues identified by operators and staff surrounding the ability of the smaller Ford Transit's to navigate in snowy conditions. However, these vehicles provide key flexibility for the contractor as operators are not required to have a Commercial Driver's License (CDL), which is needed to operate the larger cutaway vehicles. Acquiring a CDL license can be a time-consuming and costly process and there are no requirements for operators to remain at Metro once they receive their CDL.

### 5.2 Metro Link SWOC Assessment

The second SWOC assessment, shown in Figure 16, focused on Metro Link. Like the Connect SWOC assessment, the board had been pre-populated by LTRT, but staff were encouraged to add, remove, or swap any of the notes.

### **On-Demand Services Study**



#### Figure 16: Metro Link SWOC Assessment. Color-Coded by most relevant (darker blue) to least relevant (white).

From a service planning perspective, Metro Link has succeeded in providing service to areas of Kalamazoo that previously were unserved by or had limited connection to the fixed route network. Leveraging many of the innovative features that typically accompany microtransit, Link provides riders the ability for real-time booking and vehicle tracking, along with seamless payment methods. Additionally, much like Metro Connect, the operators of Metro Link have been an integral part of the quality of the service provided.

Despite these strengths, there have been a number of challenges with Metro Link. While the operators have assisted in delivering a positive user experience, staff have encountered challenges with receiving adequate support from the customer and client support group with Via, including lengthy response times to reported issues such as adjustments to the analytics dashboard. An assessment of Metro Link's dashboard indicated inconsistent data reporting of revenue hours and ridership along with a misalignment of how key performance indicators are measured. Issues like this can limit an agency's ability to analyze the service's performance quickly and accurately.

As mentioned in Section 4.2.2, recent flaws in the fare payment system have been identified. It was found that nearly half the riders did not have a default payment method, and that the driver app does not notify

the operators of the payment method when a rider boards. Additional challenges with the Token Transit app have led to Metro Link riders fraudulently bypassing payment altogether. From a booking perspective, while it is advantageous to book rides in real-time, riders are not able to see what the wait time will be for the ondemand vehicle prior to booking, which can create user frustration when assessing their travel time and alternatives.

A review of the services virtual stops revealed an opportunity to improve upon the rider experience. In its current layout (sampled in Figure 17 below), many of the virtual stops are in locations where there is limited or no pedestrian infrastructure. Most on-demand software provides the adaptability and flexibility to improve upon most of these limitations such as auditing and reassessing virtual stops in the network and provide agencies the ability to investigate demand metrics to align with operational metrics in a financially sustainable manner.

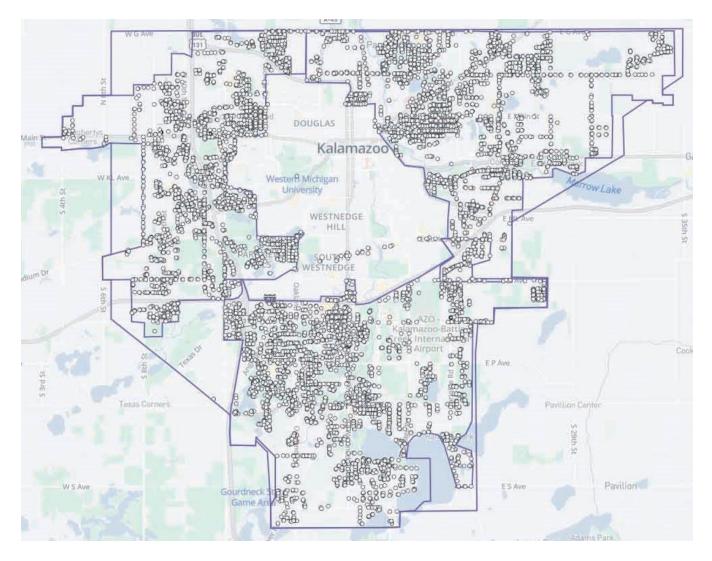


Figure 17: Sample of Metro Link stops

Overall, while the service provided by Metro Link appears to be successful, there are several opportunities that could improve the quality of the service for the rider and assessment of the service from a planning perspective for staff.

### 5.3 Strategic Objectives

The elements of the SWOC assessment were grouped into key themes by Metro staff and LTRT. Following the workshop, LTRT consolidated the key themes into strategic objectives for all Metro on-demand services. While the initial SWOC and key themes were developed separately between Connect and Link, the strategic objectives were established to address both services and any future on-demand service.

### Objective 1: Staff and operators have a deep understanding of the needs of riders and the community.

Metro staff and operators have demonstrated that they are a key component to the success of Metro's ondemand services. Their local knowledge along with the care and attention to detail they provide to riders strengthens the quality of the service and should be maintained to ensure excellent quality customer service.

# Objective 2: The booking process for on-demand rides is innovative, intuitive and user-friendly for individuals and community groups.

While there are multiple means to book a ride, there is an opportunity to improve that functionality to give riders and community organizations more options. Online booking tools and group bookings have become standard best practice over the years along with booking rides through smartphone applications. Metro shall strive to continue to provide convenient and innovative booking options to its riders.

# Objective 3: The on-demand scheduling and routing software will provide safe, efficient, and effective routing for all riders.

On-demand public transit provides agencies the flexibility to dynamically service riders. In providing this service, Metro must ensure that the scheduling and routing of the service optimizes both waiting and onboard trip time along with safe pick-up and drop-off locations for riders.

# Objective 4: Communication between Metro staff, the on-demand contractor(s), and the customer is fluid and seamless.

Communication between all relevant groups involved in Metro's on-demand services is a crucial component of its success. Metro's contractor(s) must make their availability a priority to both Metro staff and riders to assist with any issues that may arise or to adjust the service or any back-end analysis that is required.

### Objective 5: Metro and their contractor(s) are accountable for the agreed to services.

In a professional setting, clear accountability keeps parties responsible and aligned. Metro's on-demand service contracts shall include measures, such as performance penalties, which permit them to enforce

specific elements of their contractual agreements including key performance measures such as on-time performance and service availability.

# *Objective 6: The on-demand fleet meets the needs of the community while ensuring service reliability, flexibility, and cost-effectiveness.*

Metro shall ensure that the fleet provided for each of its on-demand services is right-sized to meet the needs of the community. Vehicle specifications shall be aligned with best practices and established to provide Metro with flexibility in providing their service. Additionally, fleet size shall strive to match the demand of the community, while ensuring an appropriate level of service.

# Objective 7: Key performance measures and targets are established and enforced by Metro Staff to assess contractor and service performance.

Evaluating service performance is a crucial component to understanding the effectiveness and usefulness of on-demand public transit. Therefore, to assess service performance and make data-driven adjustments to the service, staff shall have the ability to define, establish, and assess key metrics.

## 6 Options Analysis

### 6.1 Industry Scan and Peer Comparison

Peer agencies were assessed to gain further insight to how other municipalities and agencies approach the delivery of their on-demand services. Peer selection was based on similarities with Metro ridership, service area (both population and geography), and on-demand services offered. While there is no direct comparison for Metro, the amalgamation of these various peers provides a representative sample of on-demand service delivery models for a transit agency like Metro. The peers are listed in Table 2.

Location	Agency Name	2024 Ridership	Service Area Population	Urbanized Area
Appleton, WI	City of Appleton Valley Transit	720,173	276,683	108 mi <sup>2</sup>
Grand Rapids, MI	Interurban Transit Partnership (TheRapid)	6,537,679	621,711	274 mi <sup>2</sup>
Green Bay, WI	Green Bay Metro	863,392	179,907	114 mi <sup>2</sup>
Peoria, IL	Greater Peoria Mass Transit District (City Link)	1,965,916	240,110	146 mi <sup>2</sup>
Toledo, OH	Toledo Area Regional Transit Authority (TARTA)	2,265,114	399,700	241 mi <sup>2</sup>
Kalamazoo, MI	Central County Transportation Authority (Metro)	1,906,969	261,670	109 mi <sup>2</sup>

#### Table 2: Characteristics of Peer Agencies (Source: Federal Transit Administration)

Each peer agency, with one exception, has an existing ADA paratransit service along with a microtransit service that helps connect riders to the nearest fixed route or within their on-demand zone. The review assessed whether specific service components, such as vehicle ownership or operators, is the responsibility of the agency or the contractor.

### 6.1.1 Appleton, WI

Valley Transit is operated by the City of Appleton in the state of Wisconsin. As shown in Table 3, all primary transit service components are contracted out through two separate contracts. Both VTII and VT Connector are provided by the same contractor, however the booking and scheduling software is not included as part of the contract and is instead procured separately.

 Table 3: City of Appleton Service Delivery Model. Note red indicates a shared contract between services, black indicates separate contracts, and green indicates booking and scheduling being separate from the services contract.

Primary Transit Service	ADA Paratransit (VT II)		MT (VT Co	nnector)
Components	Contractor	Agency	Contractor	Agency
Vehicles	$\checkmark$		$\checkmark$	
Vehicle Maintenance	$\checkmark$		$\checkmark$	
Vehicle Storage	$\checkmark$		$\checkmark$	
Customer Service	$\checkmark$		$\checkmark$	
Booking and Scheduling Software	~		<ul> <li></li> </ul>	
Scheduling and Dispatch	$\checkmark$		$\checkmark$	
Operators	$\checkmark$		$\checkmark$	

### 6.1.2 Grand Rapids, MI

Interurban Transit Partnership operates The Rapid in Grand Rapids, Michigan. Somewhat like Valley Transit, The Rapid's ADA paratransit booking and scheduling software is procured separately from the ADA paratransit services. As shown in Table 4, the microtransit service, which operated as a pilot project until being discontinued in December 2024, leveraged the same booking and scheduling software from the paratransit service (Ecolane), while keeping the rest of the service components in house as a temporary measure.

 Table 4: Interurban Transit Partnership Service Delivery Model. Note red indicates a shared contract between services,

 black indicates separate contracts, and green indicates booking and scheduling being separate from the services contract.

Primary Transit Service	ADA Paratransit (GO!Bus)		MT (RapidConnect)	
Components	Contractor	Agency	Contractor	Agency
Vehicles		$\checkmark$		$\checkmark$
Vehicle Maintenance	$\checkmark$			$\checkmark$
Vehicle Storage	$\checkmark$			$\checkmark$
Customer Service	$\checkmark$			$\checkmark$
<b>Booking and Scheduling Software</b>	~		~	
Scheduling and Dispatch	$\checkmark$			$\checkmark$
Operators	$\checkmark$			$\checkmark$

### 6.1.3 Green Bay, WI

As shown in Table 5, the City of Green Bay, which operates Green Bay Metro, has both of its on-demand services under one full turn-key contract. This service delivery model has been in place over the course of two contracts including a recent procurement in late 2024. While the service contract is fully co-mingled,

the vehicles are not. The contractor must provide all vehicles but the fleet for the paratransit service is separate from the one for the microtransit service.

 Table 5: Green Bay Metro Service Delivery Model. Note red indicates a shared contract between services, black indicates separate contracts, and green indicates booking and scheduling being separate from the services contract.

Primary Transit Service	ADA Paratransit		MT (GBM On Demand)	
Components	Contractor	Agency	Contractor	Agency
Vehicles	$\checkmark$		$\checkmark$	
Vehicle Maintenance	$\checkmark$		$\checkmark$	
Vehicle Storage	$\checkmark$		$\checkmark$	
Customer Service	$\checkmark$		$\checkmark$	
Booking and Scheduling Software	$\checkmark$		$\checkmark$	
Scheduling and Dispatch	<ul> <li></li> </ul>		<ul> <li></li> </ul>	
Operators	<ul> <li></li> </ul>		$\checkmark$	

### 6.1.4 Peoria, IL

The Greater Peoria Mass Transit District operates CityLink in Peoria, Illinois. The current service delivery model, shown in Table 6, includes a co-mingled contract for both on-demand services except for vehicles and the booking and scheduling software. Like several of the other peer agencies, the booking and scheduling software is under a separate contract. Where CityLink differs is that the booking and scheduling software both services are provided by one contractor rather than two.

 Table 6: Greater Peoria Mass Transit District Service Delivery Model. Note red indicates a shared contract between services,

 black indicates separate contracts, and green indicates booking and scheduling being separate from the services contract.

Primary Transit Service	ADA Paratransit (CityLift)		MT (CountyLink)	
Components	Contractor	Agency	Contractor	Agency
Vehicles		$\checkmark$		$\checkmark$
Vehicle Maintenance	✓		<ul> <li></li> </ul>	
Vehicle Storage	$\checkmark$		$\checkmark$	
Customer Service	$\checkmark$		$\checkmark$	
Booking and Scheduling Software	~		~	
Scheduling and Dispatch	$\checkmark$		$\checkmark$	
Operators	<ul> <li></li> </ul>		<ul> <li></li> </ul>	

### 6.1.5 Toledo, OH

The Toledo Area Regional Transit Authority's (TARTA) service delivery model, shown in Table 7, provides a noticeably different structure compared to the other agencies. Apart from the paratransit and microtransit booking and scheduling software, which are each under separate contracts, all other primary transit service components are provided in-house by TARTA.

Table 7: Toledo Area Regional Transit Authority Service Delivery Model. Note red indicates a shared contract between services, black indicates separate contracts, and green indicates booking and scheduling being separate from the services contract.

Primary Transit Service	ADA Paratra	nsit (Move)	MT (Flex)			
Components	Contractor	Agency	Contractor	Agency		
Vehicles		$\checkmark$		$\checkmark$		
Vehicle Maintenance		$\checkmark$		$\checkmark$		
Vehicle Storage		$\checkmark$		$\checkmark$		
Customer Service		$\checkmark$		$\checkmark$		
<b>Booking and Scheduling Software</b>	$\checkmark$		$\checkmark$			
Scheduling and Dispatch	$\checkmark$		$\checkmark$			
Operators		$\checkmark$		$\checkmark$		

### 6.1.6 Findings

While no peers were exactly alike with respect to the preferred service delivery model, the findings did indicate some trends, including:

- An agency that provides both ADA paratransit and microtransit services have anywhere from one to three service contracts.
- Most agencies have the paratransit booking and scheduling software as a standalone contract to ensure more oversight in the technology.
- The booking and scheduling software is sometimes combined within one contract.
- Vehicle ownership is the most common service component that is provided by the agencies.

### 6.2 Costing Assessment

As discussed in Section 3, the Metro Connect fee is based on a lump sum that accounts for total trips, service miles and service hours. If two of these three factors over or underperform by more than 10%, then Metro's payment will be adjusted on a cost-per-trip basis. In contrast, the Metro Link services are paid on a cost-per-hour basis (note that this is separated from revenue vehicle hours).

While it is not unanimous, ADA paratransit services are typically paid on a cost-per-trip basis. The advantages of a cost-per-trip structure is that it encourages the contractor to complete every trip as quickly as possible, to minimize the number of vehicles on the road, and encourages trip pooling. Additionally, paratransit services are established to ensure that all riders can access transit rather than meeting a specific level of service.

In contrast, a cost-per-hour structure, which is more common for microtransit, does not necessarily encourage maximizing shared trips or shortest routes. Unlike paratransit services, microtransit services target a level of service to be provided across a region or zone. The level of service is typically benchmarked to specific key performance measures like average wait times or percentage of trip denials.

Through an assessment of various fee structures, shown in Table 8, the associated costs per unit (trip or vehicle hour) were calculated for the peer agencies.

Peer Agency	Service Type (Contractor)	Responsibilities Excluded	Fee Structure	Cost/Trip	Cost/ Vehicle Hour
Valley Transit	Both (Running Inc.)	Booking and Scheduling Software	Cost per trip Paratransit: \$17-\$17.85 per trip Microtransit: \$25.75 per trip	\$ 19.21 (avg)	\$ 30.82
Green Bay Metro	Both (Via)	Fuel	Microtransit: \$78.96 per vehicle hour*	\$ 29.92	\$ 78.96
			Paratransit: \$34.14 per trip* \$2.81 per trip (gas)	\$ 36.95	\$ 37.69
CityLink	Both (Transdev)	Vehicles Fuel	Fixed rate for overhead + cost per vehicle hour	\$ 34.30	\$ 74.69
Interurban Transit Partnership	Paratransit (Transdev)	Vehicles	\$29.69 per trip	\$29.69	\$55.39
Metro	Microtransit (Via)	-	Initial Upfront \$155,000 Cost per hour: \$67.35 in \$70.04 in 2025	\$33.00	\$ 70.04
Metro	Paratransit (First Student)	Vehicles	Lump Sum based on estimated hours, miles, and riders	\$ 42.60	\$ 68.67

Table 8: Peer Agency Contractor Cost Comparison	Note that bold indicates the rate that is used for the contract.
Table 6. Feel Agency Contractor Cost Companyon.	

\*likely included initial upfront cost

Like service delivery, there is no clear consistency within the fee structure across the peer agencies and Metro. However, the services that operate on a cost-per-trip basis do tend to operate more efficiently when assessing their cost-per-hour. This would suggest that in charging per vehicle-hour, these contracts incentivize spending more resources to deliver their service. As for co-mingling services, all three peer agencies in Table 8 have one service contract for microtransit and paratransit. However, only CityLink has the same fee structure between the services. Valley Transit, which is cost per trip, has a higher rate for their microtransit service. In contrast, Green Bay Metro has a cost-per-hour rate for microtransit and cost-per-trip rate for paratransit.

### 6.3 Scenario Assessment

On March 12, 2025, Metro staff gathered for a second workshop facilitated by LTRT. The purpose of the workshop was to present a long list of potential service delivery models for Metro Connect and Metro Link and identify the preferred model for Metro services in the future. LTRT presented the options in groups of three, which were:

### **Option 1: Microtransit Turn-Key Solutions**

As shown in Table 9, all Option 1 service delivery models maintain a full turn-key solution for Metro Link with varying contractual adjustments to the booking and scheduling paratransit software. Option 1a describes the status quo for Metro's on-demand services where there are two separate service contracts. Option 1b provides a slight deviation where the ADA paratransit software is removed from the Connect service agreement and is procured as a standalone product. Finally, Option 1c also removes the ADA paratransit software from the Connect agreement, but here it is added to the Link contract.

These options provide several modifications of a service delivery model that would give Metro varying control over the booking and scheduling software for Metro Connect, while maintaining Metro Link as a turn-key service. Metro staff have expressed interest to pull the booking and scheduling software out of the current Metro Connect delivery model, like Option 1b, to be able to have more control over its functionality. The service delivery of Option 1c could provide some challenges since there might be a limited pool of potential vendors that would be able to provide a full turn-key solution for Metro Link along with paratransit software.

Both Options 1b and 1c would limit the impact to Metro's on-demand the operating costs. Any financial impact of these options, including the status quo, would be associated more with adjusting the mechanism with which the cost of the service is calculated (i.e., lump-sum vs. per trip/hour).

### **Option 2: Co-Mingled Solutions**

The second group of options, as shown in Table 10, presents multiple co-mingling solutions. Option 2a provides a full turn-key solution that leverages Metro's existing fleet of Connect vehicles. Option 2b provides a similar delivery model of a co-mingled contract, except for the booking and scheduling software

for both services are pulled out into a separate contract. Finally, Option 2c would see Metro leverage potential state and federal grants to bring their Link fleet in-house.

Both Options 2b and 2c include a separate contract for the booking and scheduling software. This aligns with Metro's preference to directly control the functionality of the programs being used for both riders and staff. For that reason, staff indicated a strong preference for these two sub-options over Option 2a.

As indicated in the industry scan and peer review, there is no consensus for co-mingling of demandresponsive services or combining contracts. When engaging with Metro staff, they indicated that reducing demand-responsive services to one contract was not necessarily preferred. The most important factor to a singular service contract, without the software, would be to achieve cost savings through economies of scale.

Finally, many agencies are leveraging federal and state grants to purchase vehicles. The advantage of pursuing Metro-owned vehicles through these grants is a reduction in operating costs to provide the service. Typically, a transit agency could expect anywhere from a 10-15% decrease in operating costs for a turn-key solution where vehicles are provided by the agency.

### **Option 3: In-House Solutions**

The final group of options, shown in Table 11, emphasized many of the primary transit service components being brought in-house to Metro, apart from the booking and scheduling software. Option 3a would consist of just one contract for the software, while all other components would be the responsibility of Metro. Option 3b would include only bringing Metro Connect services in-house, while Metro Link would remain full turn-key. Finally, Option 3c would also have Metro Link as a turn-key solution, however the booking and scheduling software would be procured separately and in alignment with Connect.

The discussion with staff indicated very limited interest in any of the Option 3 solutions given the increased labor requirements to provide these services in-house. As mentioned for the Option 2 models, there is no concern from staff to have anywhere from one to three contractors. Based on this feedback, none of the Option 3 models were further assessed.

#### **On-Demand Services Study**

Table 9: Service Delivery Model - Options 1a to 1c. Note red indicates a shared contract between services, black indicates separate contracts, and green indicates booking and scheduling being separate from the services contract.

Primary Transit Service Components		Opti	on 1a			Opti	on 1b		Option 1c			
	Metro Connect		Metro Link		Metro Connect		Metro Link		Metro Connect		Metro Link	
	Contr.	Metro	Contr.	Metro	Contr.	Metro	Contr.	Metro	Contr.	Metro	Contr.	Metro
Vehicles		$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$	
Vehicle Maintenance	>		$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$	
Vehicle Storage	>		$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$	
Customer Service	>		$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$	
Booking and Scheduling Software	>		~		~		~		~		~	
Scheduling and Dispatch	$\checkmark$		~		~		~		~		~	
Operators	>		$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$	

Table 10: Service Delivery Model - Options 2a to 2c. Note red indicates a shared contract between services, black indicates separate contracts, and green indicates booking and scheduling being separate from the services contract.

Primary Transit Service Components	Option 2a					Opti	on 2b		Option 2c			
	Metro Connect		Metro Link		Metro Connect		Metro Link		Metro Connect		Metro Link	
	Contr.	Metro	Contr.	Metro	Contr.	Metro	Contr.	Metro	Contr.	Metro	Contr.	Metro
Vehicles		$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$			$\checkmark$		$\checkmark$
Vehicle Maintenance	$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$	
Vehicle Storage	$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$	
Customer Service	$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$	
Booking and Scheduling Software	~		~		~		~		~		~	
Scheduling and Dispatch	~		~		~		~		~		~	
Operators	$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$	

#### **On-Demand Services Study**

Table 11: Service Delivery Model - Options 3a to 3c. Note red indicates a shared contract between services, black indicates separate contracts, and green indicates booking and scheduling being separate from the services contract.

Primary Transit		Opti	on 3a			Opti	on 3b		Option 3c			
	Metro Connect		Metro Link		Metro Connect		Metro Link		Metro Connect		Metro Link	
Service Components	Contr.	Metro	Contr.	Metro	Contr.	Metro	Contr.	Metro	Contr.	Metro	Contr.	Metro
Vehicles		$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$			$\checkmark$		$\checkmark$
Vehicle Maintenance		$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$			$\checkmark$		$\checkmark$
Vehicle Storage		$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$			$\checkmark$		$\checkmark$
Customer Service		$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$			$\checkmark$		$\checkmark$
Booking and Scheduling Software	>		~		~		~		~		~	
Scheduling and Dispatch		~		~		~	~			~		~
Operators		$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$			$\checkmark$		$\checkmark$

## 7 Recommendations and Implementation Plan

### 7.1 Service Delivery and Contract Recommendations

The recommendations for Metro's on-demand services have been split into two groups: short-term and medium-term. The inclusion of short-term recommendations will not only provide opportunities for quick wins for the existing service delivery agreements, but also provide staff with the time to investigate the market for larger scale changes. Generally, these recommendations will provide Metro with more control over their on-demand services while providing opportunities to seek out more cost-effective solutions. This section presents those recommendations along with how they align with the strategic objectives presented in Section 5.3.

### 7.1.1 Short-Term Recommendations

To provide Metro the time to make larger scale changes to their service delivery models, it is recommended that Metro extend both the Metro Connect and Metro Link contracts through the end of 2026. Depending on the timing of the medium-term recommendations, it may also be necessary for Metro to extend the agreements into 2027. In extending these agreements, Metro should apply the following amendments that can provide immediate changes to each service.

### Metro Connect

### Recommendation #1: Fee Structure Adjustment for Metro Connect

The findings from this study point towards a shift in fee structure from the existing lump-sum agreement. The peer comparison in Section 6 indicated that a cost-per-trip fee structure would be preferred for Metro Connect. While this fee structure will be recommended in the medium-term, see Recommendation #7, as an interim step towards this fee structure, it is recommended that Metro implement the following changes for 2026:

- Provide a guaranteed fee based on a percentage of the previous year's (2025) fees, (to be renegotiated each year) however the Contractor shall provide a cost-per-trip fee for 2026 (to be re-negotiated each year).
- Payments are made monthly based on the number of trips completed, which are calculated based on the cost-per-trip fee.
- Fee adjustments:
  - If by the end of the year, the number of Connect trips have not reached the guaranteed fee of the previous year, then Metro shall top up the final invoice to the guaranteed fee.

• If the number of Connect trips surpass the guaranteed fee, then each additional trip shall be charged at the 2026 cost-per-trip rate.

If the service agreement is required to extend into 2027, then the baseline fee should be re-calculated based on the 2026 values. This interim fee structure will provide contractor with similar pay guarantees that they currently experience **but** also create a system where there is now a mechanism to review and change the target based on the previous year (if further contract extensions are required).

### Sample Language:

For 2026, the Contractor shall provide a cost-per-trip fee for a one-way Metro Connect trip.

The Contractor will receive a guaranteed fee (**xx% of 2025 Metro Connect fees**) for their services in 2026. The payments, which will be made monthly, will be based on the number of trips completed and the cost-per-trip in 2026.

Once the Contractor has completed sufficient trips to attain the guaranteed fee, all additional trips will be charged at the 2026 cost-per-trip fee.

In the event that the Contractor does not complete sufficient trips to meet the guaranteed fee before the end of the year, Metro's final monthly payment will be adjusted to achieve that value.

### Alignment with Strategic Objectives:

Objective 5: Metro and their contractor(s) are accountable for the agreed to services.

Objective 7: Key performance measures and targets are established and enforced by Metro Staff to assess contractor and service performance.

### Recommendation #2: Improve Self-Serve Booking Options

Presently, Connect users are only able to book via phone call or by e-mail. To align with best practice, an online self-serving booking option should be provided for users and community groups. This system should permit riders and those booking on their behalf to schedule, modify and (if needed) cancel their rides.

### Sample Language:

The system shall provide a device-agnostic web-based interface to allow customers to manage, confirm, cancel, or book trips within defined parameters. The system will provide customers with the ability to book and manage their trips via telephone, e-mail, and website.

The system shall permit organizations (approved by Metro) to book rides on behalf of their users through a single administrative account.

#### Alignment with Strategic Objectives:

Objective 2: The booking process for on-demand rides is innovative, intuitive and user-friendly for individuals and community groups.

#### Metro Link

#### Recommendation #3: Adjust Virtual Stop Placements and Service Design Parameters

The current state analysis indicated that Metro Link is a valuable service. However, based on feedback, the system can be sometimes difficult to navigate for riders and drivers. Therefore, it would be recommended that Metro review and re-assess the number of virtual stops in the network. Moreover, the stop placements should consider pedestrian access, safety, and accessibility. This will also provide Metro an opportunity to adjust the service design for Link in relation to the fixed-route network. If the desire is to funnel riders to the fixed-route system then perhaps virtual stops in the immediate vicinity of fixed-routes should be reconsidered.

#### Sample Language:

The Contractor shall provide trips between limited stop locations within the Metro Link zones. These stop locations shall be approved jointly by the Contractor and Metro to ensure that reasonable access to service is provided within an ¼ mile walking distance of 95% of municipal addresses, while minimizing delays to operations and ensuring the safety of customers and operators.

The Contractor's routing and scheduling algorithm shall pool riders at a common stop to minimize delays and detours to pick-up or drop-off multiple customers.

#### Alignment with Strategic Objectives:

Objective 3: The on-demand scheduling and routing software will provide safe, efficient, and effective routing for all riders.

### Recommendation #4: Introduce Performance Penalties for Service Delivery KPI

In line with the Metro Connect contract, it is recommended that the Metro Link contract include provisions that allow Metro to hold the Contractor responsible for failing to meet specific service delivery requirements. The provisions shall include exclusions based on poor weather.

#### Sample Language:

On-Time Performance – if the Contractor does not meet the target KPI then the cost of a single-fare (full price) for each trip below the threshold will be deducted from the next scheduled monthly payment.

Service Availability – If for any reason service is disrupted for a period of greater than one (1) hour, a deduction from the per month payment shall be made for each trip disrupted calculated in the amount of the cost-per-trip rate and deducted from the next scheduled monthly payment along with the lost fares from that time out of service.

### Alignment with Strategic Objectives:

Objective 5: Metro and their contractor(s) are accountable for the agreed to services.

### 7.1.2 Medium-Term Recommendations

The following itemizes a list of medium-term recommendations as they pertain to the delivery of Metro's on-demand services and how they align with the strategic objectives from Section 5. As previously stated, the timing of these recommendations may require the existing service contracts to be extended into 2027 to ensure that staff has sufficient time to appropriately scan the market prior to deciding on the preferred service delivery model for the future.

### Recommendation #5: Procure Booking and Scheduling Software

A finding from the peer review was that most agencies procure their ADA paratransit software separately from their services agreement. Additionally, staff indicated a desire for more control over the software and Connect users often mentioned how they would prefer more booking options. Additional control will give staff the ability to ensure that specific requirements for the software as they pertain to data analysis, rider booking, and overall administration of the software are provided. Therefore, another recommendation of this study is that Metro should proceed with procuring a booking and scheduling software separate from the operations contract.

In preparation for the procurement, it is recommended that Metro conduct demonstrations with a variety of scheduling providers such as TripSpark, RideCo, and Ecolane, as well as existing providers in CTS Software and Via. While the initial focus should be on Metro Connect, the procurement shall

include booking and scheduling provisions for microtransit as well. The procurement should be laid out to provide microtransit services as an add-on that can be triggered at Metro's discretion.

The estimated annual cost of booking and scheduling software is anticipated between \$1,200 to \$2,000 per vehicle, but Metro will have the opportunity during the demonstrations to get a better understanding of costs from the potential providers.

### Alignment with Strategic Objectives:

Objective 2: The booking process for on-demand rides is innovative, intuitive and user-friendly for individuals and community groups.

Objective 3: The on-demand scheduling and routing software will provide safe, efficient, and effective routing for all riders.

Objective 7: Key performance measures and targets are established and enforced by Metro Staff to assess contractor and service performance.

# Recommendation #6: Conduct RFEOI for Transit Service Providers Capable of Delivering ADA Paratransit and Microtransit

Throughout the study, Metro staff indicated in interest for co-mingling of the service contract should it provide an opportunity for cost savings. It is recommended that Metro methodically assess the market prior to the next round of transit services procurement.

Prior to procurement of transit services, Metro should conduct a Request for Expression of Interest (RFEOI) to gauge interest from potential contractors that would be able to provide on-demand transit services in Kalamazoo. The RFEOI shall include the option for interested parties to provide services for just one or both Metro Connect and Metro Link. This will also provide Metro the opportunity to better understand how vendors would approach co-mingling of the services and ultimately allow Metro to decide whether to proceed with a single contract for both Connect and Link services or to continue with separate contracts.

This interim step minimizes the risk of going to procurement for both services without knowledge of the interested parties. Depending on the duration of this process, Metro may want to extend the existing service contracts one more time (into 2027) to ensure that there is no gap in service availability and that the process for scanning the vendor market is not rushed.

### Alignment with Strategic Objectives:

Objective 6: The on-demand fleet meets the needs of the community while ensuring service reliability, flexibility, and cost-effectiveness.

#### Recommendation #7: Procure Transit Services for Connect and Link

Based on the outcomes of the RFEOI, Metro shall procure a new contract for demand-responsive services delivery that maximizes the potential interest from the market. As part of this, the results of the RFEOI shall also inform whether Metro triggers the microtransit scheduling component of the booking and scheduling software contract from Recommendation #5. Through this approach, Metro will maintain the option to control the booking and scheduling software while focusing the services contract more on the quality of the service including the operators, maintenance, and customer service.

Building on Recommendation #1, this procurement process will permit Metro to complete a shift in fee structure for both services. It is recommended that Metro request cost-per-trip fees for the following service (assuming Metro Link is continuing):

- Metro Connect ADA paratransit (Connect Access)
- Metro Connect conventional dial-a-ride (Demand-Responsive)
- Metro Link

In the procurement documentation, Metro should provide a three-year history of the annual number of trips for each trip type to provide the bidders a clear understanding of the estimated level of service.

#### Alignment with Strategic Objectives:

Objective 1: Staff and operators have a deep understanding of the needs of riders and the community.

Objective 4: Communication between Metro staff, the on-demand contractor(s), and the customer is fluid and seamless.

Objective 6: The on-demand fleet meets the needs of the community while ensuring service reliability, flexibility, and cost-effectiveness.

### Recommendation #8: Leverage State and Federal Grant Opportunities to Bring Metro Link Fleet In-House

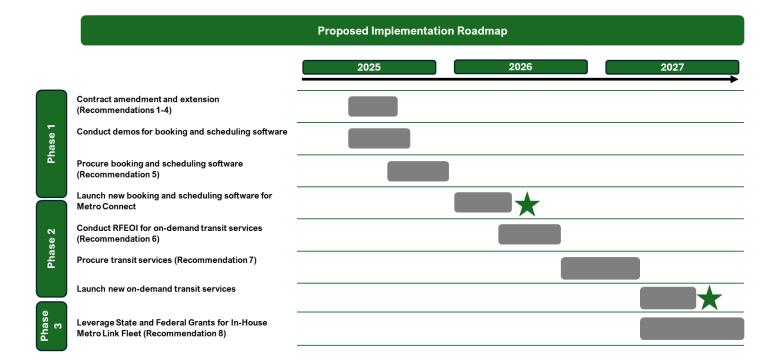
Like many other transit agencies and to reduce operating costs for microtransit services, Metro should leverage grant opportunities to procure a fleet of vehicles for Metro Link. Based on the outcomes of the Metro Link pilot, Metro should consider potential operating cost savings of bringing the Metro Link fleet in-house. Metro may also want to consider alignment with Connect vehicles in support of co-mingling and to realize economies of scale. As a medium- to long-term solution, Metro may want to consider lowfloor accessible vehicles with side-door entry for both on-demand services.

#### Alignment with Strategic Objectives:

Objective 6: The on-demand fleet meets the needs of the community while ensuring service reliability, flexibility, and cost-effectiveness.

### 7.2 Implementation Roadmap

The proposed implementation is broken down into three phases and is illustrated in Figure 18. These three phases are further described in the sections below. The implementation roadmap highlights when and how the different recommendations work together and identifies some of the supporting activities.





### 7.2.1 Phase 1

Phase 1 of the implementation roadmap commences with Metro conducting the contract amendment and extensions for both Metro Link and Metro Connect through 2026, while also scheduling and booking demos with software vendors. Following the demos, Metro shall procure a booking and scheduling system for

Metro Connect but ensure that the software is capable of supporting microtransit booking and scheduling as well. Metro should anticipate a 3–6-month period from contract award to launch. Phase 1 of the implementation roadmap concludes once the new Metro Connect booking and scheduling software is ready for launch.

### 7.2.2 Phase 2

While the launch of the new Metro Connect booking and scheduling is ongoing, Phase 2 can begin with the RFEOI process to assess the interested vendors for their on-demand services. Based on those findings, Metro shall develop the appropriate procurement material for their transit services including whether the booking and scheduling software contractor will be required to provide their software for Metro Link. Depending on the timing, Metro may want to extend their existing service contracts one more time into 2027. The purpose of the extension will be to ensure that staff have sufficient time to evaluate the vendor market prior to deciding on their approach for the next transit services procurement. The short-term recommendations, actioned in Phase 1, will have provided an initial update to the delivery of both services that should satisfy many of the needs discussed over the course of the study. However, if needed, Metro may wish to add additional amendments to a 2027 contract extension. The second phase will conclude once the new on-demand transit services (and potentially microtransit booking and scheduling) are ready for launch.

### 7.2.3 Phase 3

Once the new demand-responsive transit contracts are ready for launch, Metro can shift its focus to assessing the cost-savings and procurement opportunities for Metro Link vehicles. As Metro Link becomes a more permanent service offering, Metro should begin to assess funding and grant opportunities to support this initiative.