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FINAL REPORT

The Rapid Transit Master Plan

Interurban Transit Partnerhship (ITP)

March 24, 2025

Quality Information

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Image source: The Rapid

Introduction

A Transit Master Plan (TMP) is a tool used to manage periods of growth and change over a 20-year period. AECOM was tasked by The Rapid to develop a Transit Master Plan (TMP) for a 20-year planning horizon.

The Transit Master Plan (TMP) is focused on providing a planning, financial, and operational framework for developing and delivering sustainable transit projects, programs and policies over the next 20 years. The primary purpose of a TMP is to establish a forward-thinking vision of how transit will most effectively service the community that it serves.

Since its last TMP in 2010, The Rapid has filled an increasingly important role as a mobility provider and community partner throughout the Grand Rapids region.

Past TMP Accomplishments (2012-2020)

- ✓ Minimum 30-minute service on all routes weekdays 5:00 a.m.-7:15 p.m.
- ✓ New connection between Grand Valley State University (GVSU) and Rapid Central Station via Lake Michigan Drive (Laker Line BRT)
- ✓ Weekday evening hours until 11:15 p.m. on all routes (17 out of 21 routes every 30 minutes)
- ✓ 30-minute service on 7 of the busiest routes until 12:15 a.m.
- ✓ Doubled the number of routes with 15-minute service during morning and afternoon commute hours (from 6 to 12 routes)
- ✓ Saturday evening hours until 10 p.m. on all routes (except Route 17 Woodland/Airport)
- ✓ BRT serving Division Avenue, Medical Mile, and downtown Grand Rapids (Silver Line BRT)
- ✓ Go!Bus hours increased to match fixed route hours of service

This new TMP developed comprehensive solutions to answer the question of ***What will The Rapid be in the next 20 years?*** Subsequential questions include:

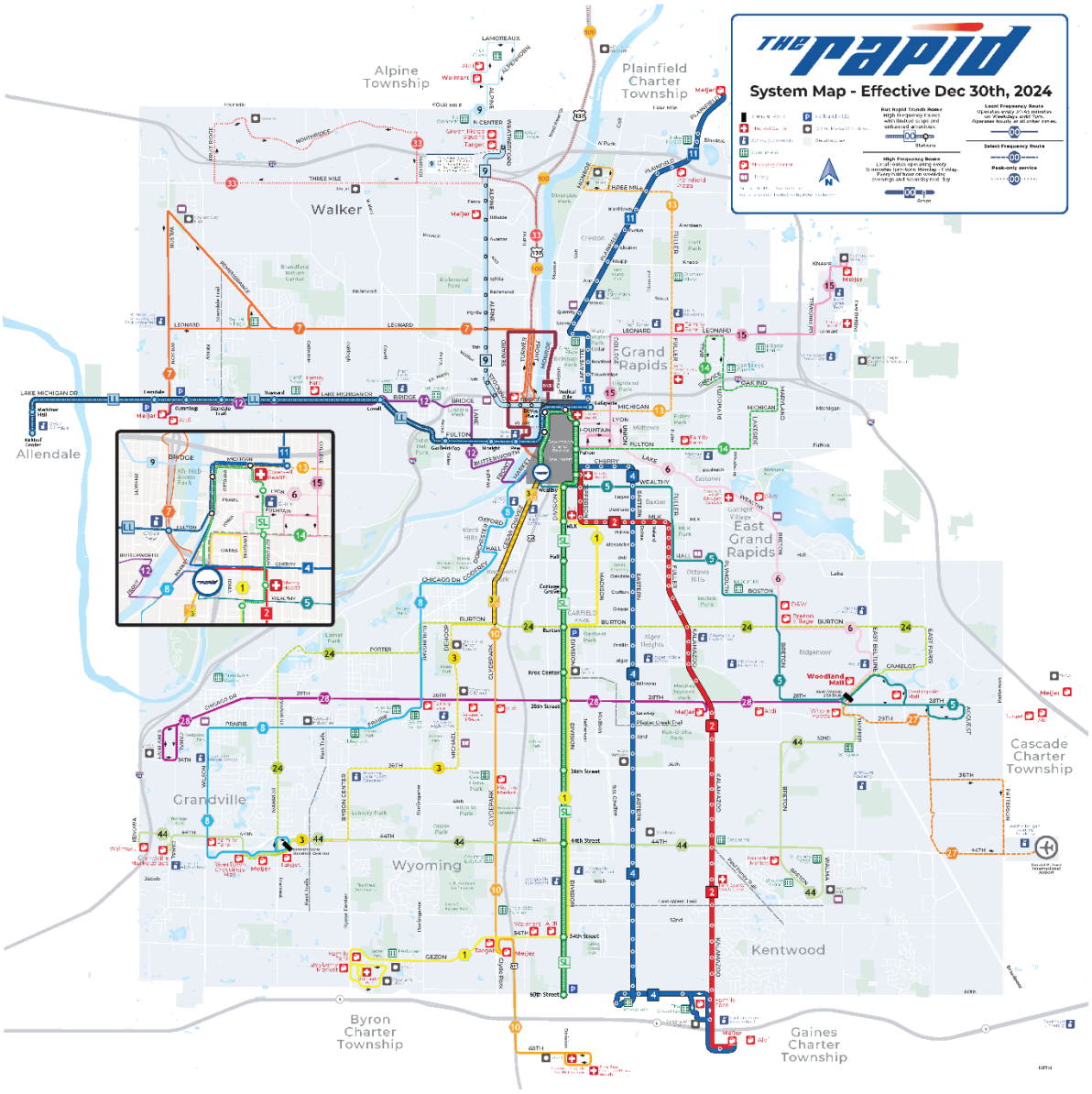
- Who and where will it serve?
- How will it serve those people and communities?
- How will it be funded?
- How will it be staffed and supported by vehicles and facilities?
- How will it build partnerships (with community stakeholders, i.e., housing, non-profits, business communities, municipalities, environmental and/or faith-based initiatives)?
- What is “success” and how will it be measured and ensured?

About The Rapid

In 2000, the Interurban Transit Partnership was formed to provide transit service in the Grand Rapids metropolitan area. The partnership named this transit system “The Rapid”. The Rapid operates under Michigan Public Act 196 of 1986 and has a 15-member board of directors that represent all municipalities within the service area.

The Rapid’s service area encompasses 185 square miles and 6 municipalities. Currently, The Rapid operates 28 fixed bus routes, 2 bus rapid transit (BRT) routes, demand response service for persons with disabilities, and coordinates car and vanpool programs for residents living outside the fixed-route service area.

Figure 1: Rapid System Map (December 2024)

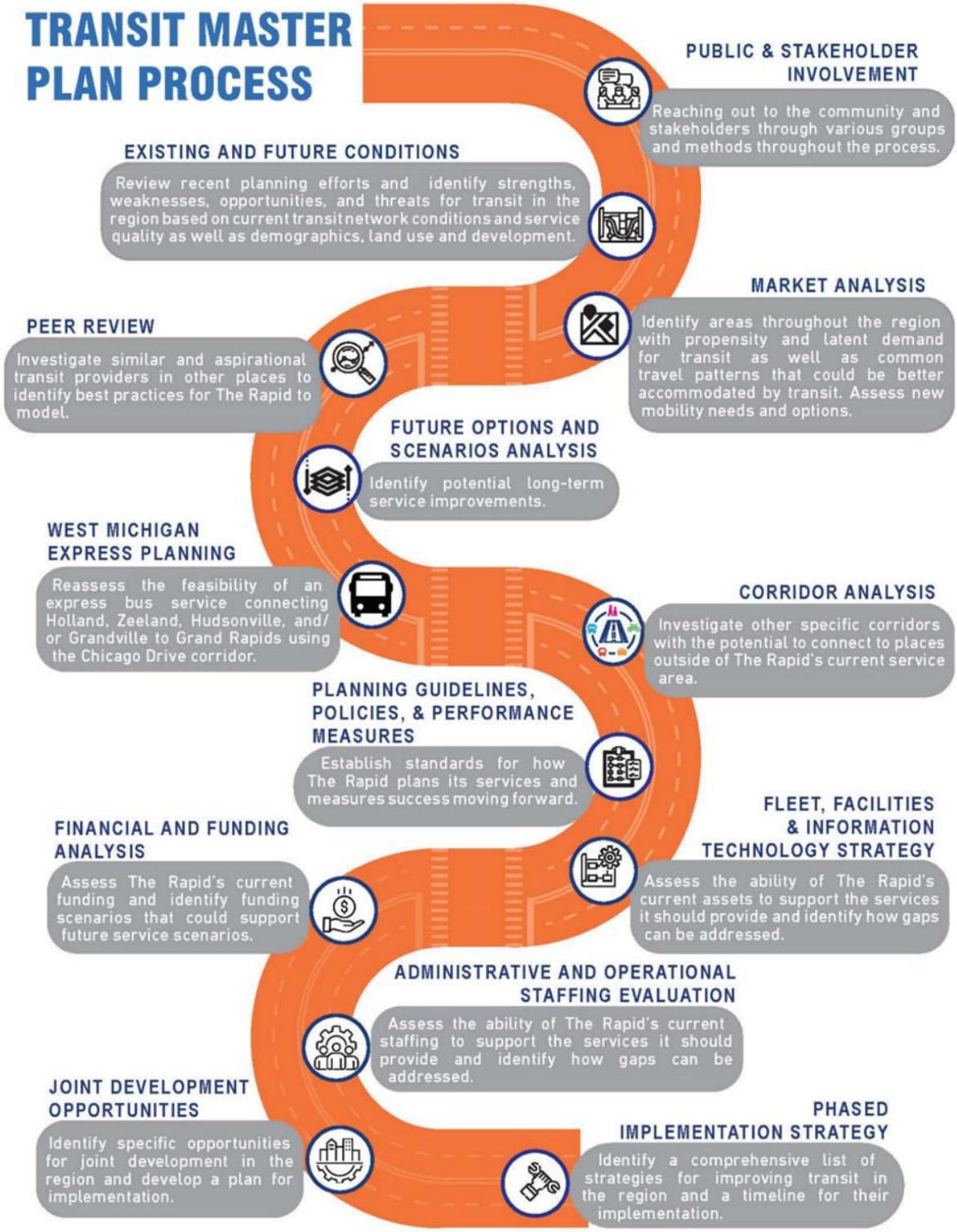


Source: The Rapid, accessed January 2025

TMP Process

The following diagram provides an overview of the two-year TMP process.

Figure 2: TMP Process Overview



Guiding Principles

The first step in the master planning process was development of Guiding Principles by The Rapid Board and the project team to help provide direction and a vision for the TMP. The Guiding Principles are based on The Rapid's mission, beliefs, and values, and steered decision making throughout the Transit Master Plan. Guiding principles were developed through a comprehensive goal-setting exercise over a three-month period with input from The Rapid Board, Rapid staff, the project Steering Committee (SC), Planning and Technology Committee (PTC), and Technical Advisory Committee (TAC).

The five Guiding Principles include the following:

At The Rapid, we are the transportation provider of choice and convenience because...

COMMUNITY | We reflect you and your needs.

GROWTH | We plan for action.

CONVENIENCE | We serve for user experience.

INTERNAL WORKFORCE | We value employee personal growth.
(Engaged and prepared to meet our future challenges)

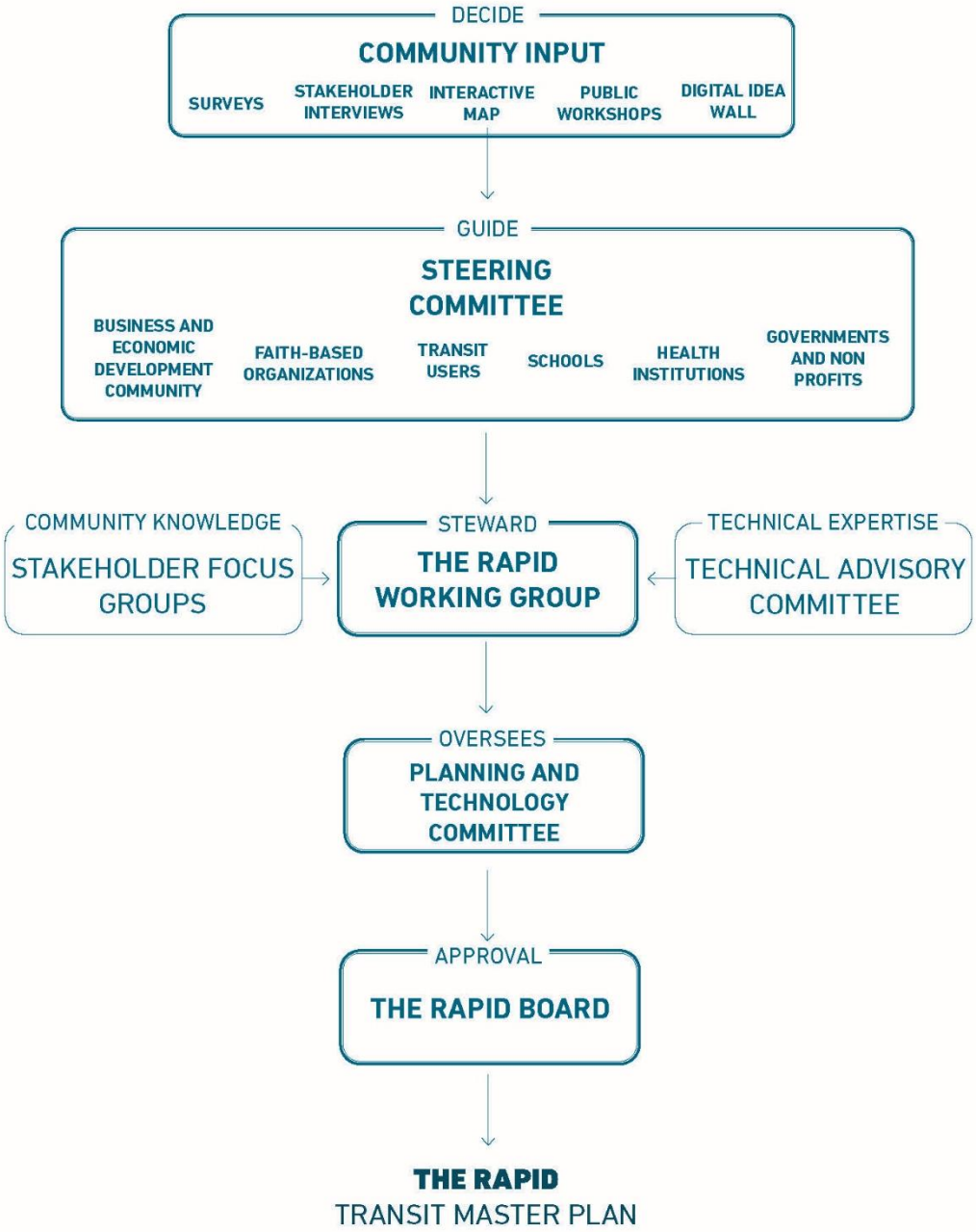
ADAPTABILITY | We're future-flexible.

Public and Stakeholder Involvement

The engagement process brought together professionals, specialists, stakeholders, and the greater Grand Rapids community to provide an understanding of the needs, wants, and goals of the community and key partners related to the future of transit.

Five key groups were engaged throughout the process, including: The TMP Steering Committee, Stakeholder Focus Groups, Technical Advisory Committee (TAC), Planning and Technology Committee and community members. These five groups and their role in the TMP process are outlined in **Figure 3** below.

Figure 3: TMP Stakeholder Groups and Roles



The engagement task focused on the key themes found through stakeholder discussions, input from the public open house, community meetings, and online feedback. The results of the engagement process helped to inform recommendations of the TMP.

The project team solicited input from the community through a series of public meetings, stakeholder meetings, committee meetings, focus groups, two online surveys, and a TMP roadshow which involved The Rapid staff presenting about the TMP at various community events and meetings.

An overview of the TMP public outreach effort is provided in **Figures 4-6** below.

Figure 4: Summary of All Public Engagement Touchpoints

220+ OPEN HOUSE ATTENDEES	**30** COMMITTEE MEETINGS	**25+** FOCUS GROUP STAKEHOLDERS
138 INTERACTIVE MAP COMMENTS	**90** WALL COMMENTS	**1,131** SURVEY RESPONSES

Figure 5: Fall 2023 Focus Group (left)

Figure 6: Spring 2024 Open House at Rapid Central Station (right)

Across all outreach activities, the common key takeaways included:

- Expanded service coverage / more destinations within the current service area (e.g., between Downtown Grand Rapids, surrounding jurisdictions, and the airport)
- Increased service frequency and type of service (e.g., light rail, bus-rapid transit corridor improvements, more modes, etc.)
- Improve service convenience, such as predictability, reliability / on time performance, frequency of stops and service, later service hours, and shorter transit trip travel times
- Need for transit to be marketed and accessible for all rider types and easy to understand and navigate
- Interest in service to other areas not currently in The Rapid service area
- Improve amenities at bus stops and bike/pedestrian infrastructure

Additional details of the TMP public engagement efforts can be found in the ***Public Engagement Summary***.

Technical Task Findings

In order to understanding existing conditions and identify future opportunities as part of the TMP process, the project team completed several technical tasks, as outlined in the TMP Process Overview in **Figure 1**. Full versions of the completed technical reports are available online and accessible through links provided in **Appendix C**.

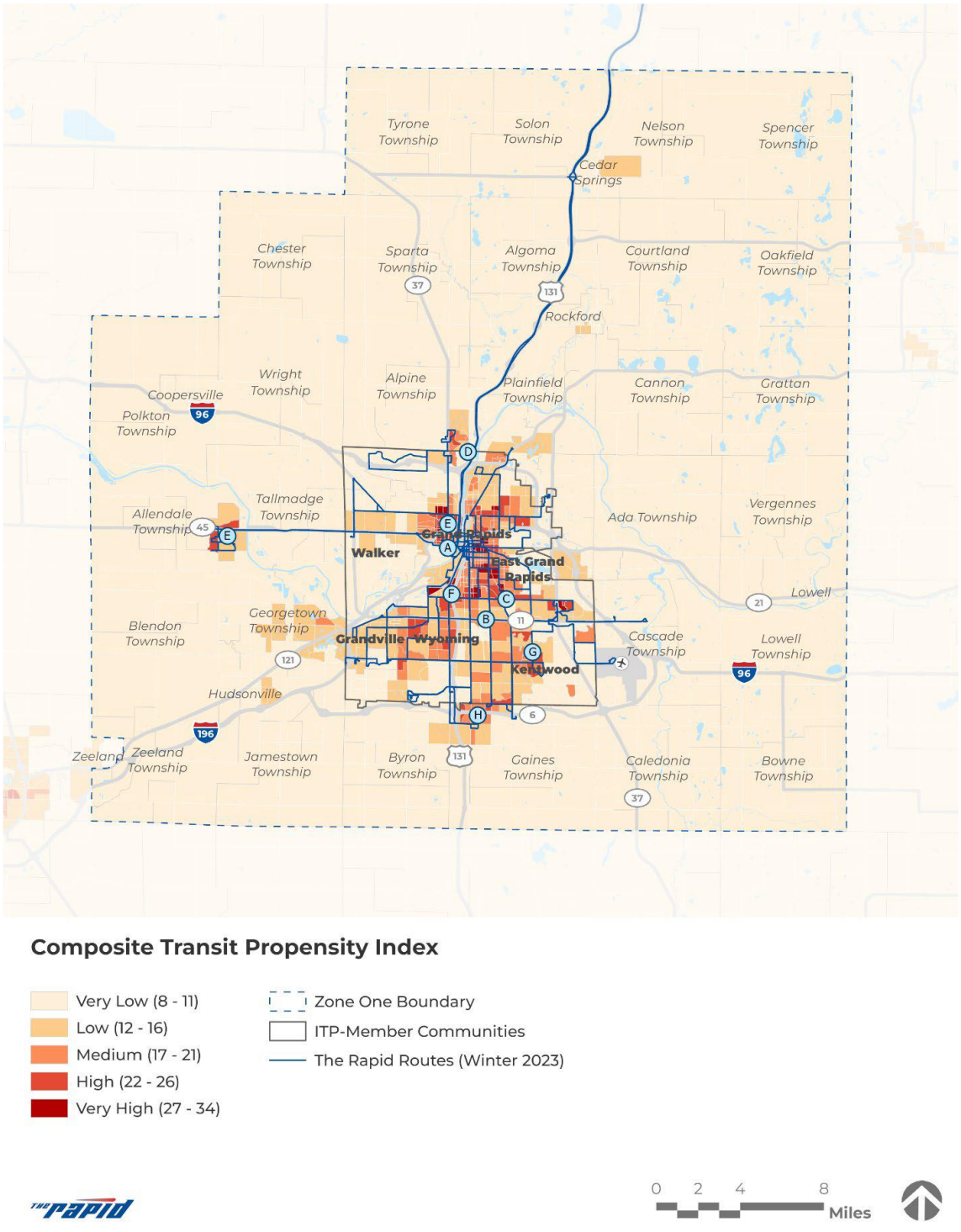
Existing and Future Conditions

This *Existing and Future Conditions Report* identified and evaluated the regional context for providing transit services and summarized existing service conditions and key factors that will influence The Rapid's delivery of transit services over the next 20 years. These include recent planning efforts and studies as well as current and future demographic, land use, development, and current transit conditions. The resulting composite transit propensity index and composite trip generation potential index are shown in **Figures 7** and **8**.

Current Conditions: Much of the ITP-member community area has existing population or employment densities supportive of 30 minute or better transit service. Downtown Grand Rapids and the West Grand and South East End neighborhoods are supportive of 15 minute or better service. Unserved communities with sufficient population and/or employment densities to support fixed route transit service outside of the ITP-member communities include further south along Division Avenue S to 76th Street SE, Georgetown Township between Bauer Road and Baldwin Street, and further north along Plainfield Avenue NE to the Grand River. Trip generators are fairly evenly distributed within the ITP-member communities with concentrated pockets along major freeways and arterials.

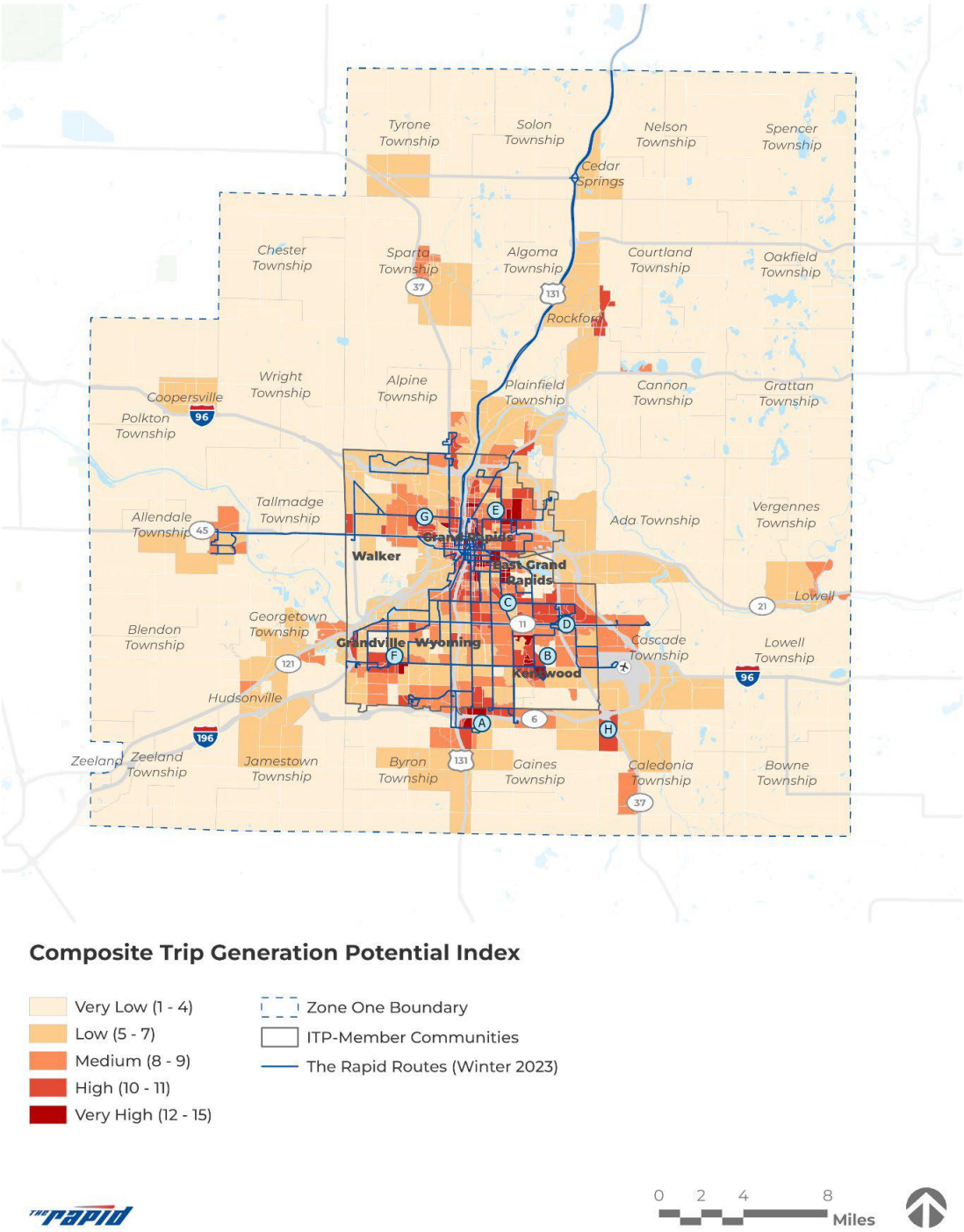
Future Conditions: While future household and employment growth is generally expected within the ITP-member communities, the surrounding communities outside the existing service area are expected to have greater growth. Significant concentrations of future mixed-use land use and growth in higher-intensity "multi-family residential" uses in Zone One present opportunities for potential future ridership growth. Areas with very high transit propensity that are more likely to need and utilize transit services include downtown Grand Rapids, West Grand Rapids, the Burton Street SE Corridor, and the South East End neighborhood. Additional clusters of high propensity include Alpine Township (Comstock Park/Alpine Center), Northern Wyoming, Central Kentwood, and Cutlerville.

Figure 7: Composite Transit Propensity Index (2021)



Source: 2021 American Community Survey (ACS) 5-Year Block Group Estimates, The Rapid

Figure 8: Composite Trip Generation Potential Index



Source: GVMC Single Source Online Web Map, Homeland Infrastructure Foundation-Level Data (HIFLD), Urban Footprint, AECOM

Note: Compared to other block groups, the area encompassed by the Gerald R. Ford International Airport is unique in that it contains only one activity center rather than a high density of smaller activity centers. Recognizing that the airport is a significant trip generator that may not be otherwise captured by this methodology, the airport footprint has been shaded light gray but is treaded as a key trip generation location.

Service Delivery: The *Existing and Future Conditions Report* found The Rapid's existing fixed route services are beginning to recover following the COVID-19 pandemic as indicated by gradual increases in ridership as well as annual passengers per revenue hour and revenue mile between FY2020 and FY2022. Despite significant improvements in FY2022, fixed route operating costs per passenger in FY2022 were nearly 1.9 times greater than in FY2019. Farebox recovery has remained below 20% since the onset of the COVID-19 pandemic, despite recent improvements, highlighting the importance of identifying new funding sources to supplement fare revenue in funding growing operational expenses.

SWOT Analysis

Building upon this conditions analysis, strengths, weaknesses, opportunities, and threats (SWOT) were identified to provide a guiding framework for the development of recommendations and strategies for the broader Transit Master Plan. This SWOT Assessment includes both internal elements specific to The Rapid as well as externalities which impact the environment in which The Rapid operates. Definitions for each type of factor are outlined below.

- **Strengths** are available and valuable assets of The Rapid's existing conditions that should be preserved or improved on.
- **Weaknesses** are drawbacks or short-term challenges of The Rapid's existing conditions that need to be addressed so they do not cause long-term problems.
- **Opportunities** are long-range positive trends affecting The Rapid as well as the positive paths it may follow.
- **Threats** are long-term weaknesses that can undermine attempts to meeting The Rapid's goals.

Table 1: SWOT Assessment

	STRENGTHS	WEAKNESSES
Community	Broadly shared prioritization of improved regional transit connectivity and broadly shared support for maintaining and expanding transit services Momentum built for investment and paradigm shifts through current coordinated jurisdictional planning efforts and State government Compared to Grand Rapids metro regional averages, The Rapid provides service to areas with greater concentrations of people who are a minority race/ethnicity, are in poverty, or live in zero-vehicle households	Lack of awareness of The Rapid and the transportation options it provides amongst the community Mismatch between residential density and employment density locations (people don't live near where they work)
Growth	Have established agreements with targeted locations outside the ITP-member communities to provide transit service to various institutions and key employment, shopping, and residential activity centers in adjacent townships	Recent and planned urban growth is mostly in outlying areas instead of the urban core, exacerbating pressure on limited resources Current operating funding limitations preclude The Rapid's ability to sustain existing services and expand services to accommodate regional growth both within and outside the current service area
Convenience	Have implemented two BRT lines Have implemented streamlined route design on-demand service within two major employment centers based on COA recommendations. Have invested in more frequent routes. Have partnered with third party trip planning applications to help new and existing customers better understand traveling by bus Pay-as-you-go fare capping system allows passengers to receive unlimited subsequent rides for free after hitting Single-day and/or calendar month fare caps	Long travel times and low frequencies make transit a much less convenient option than traveling by personal vehicle Insufficient weekend service (system is heavily reliant on weekday ridership) Go!Bus ticketing system and on-time performance The majority of existing bus stops do not have amenities such as shelters or benches or real-time arrival signage and displays.
Workforce	Strong leadership with proven track record of transit investment, commitment to safety, equity, and sustainability. Strong technical staff exist to plan and implement transit investment strategies.	Demand for transit service is greater than human resources can supply (nationwide driver shortage) Current vacancies as presented in the organizational chart Sufficient levels of operations and maintenance staff to provide future levels of service.

Adaptability	Applied lessons learned from the Silver Line to the Laker Line Already using smart cards and contactless payment for fares Implemented microtransit service after the last COA Have adopted a Climate Action Plan and Zero Emissions Bus Plan	Outside externalities including supply chain constraints and the lack of widespread industry adoption of zero-emission and autonomous vehicle technologies limit The Rapid's current ability to implement emerging vehicle technologies at a large scale The Rapid's ability to alter service in reaction to newly emerging demands is limited by The Rapid's current Collective Bargaining Agreement which precludes The Rapid from altering service outside of the three established periods (late August, early January, mid-May) Operating funding constraints limit The Rapid's ability to adapt and add new service

	OPPORTUNITIES	**THREATS**
Community	Increasing community awareness of The Rapid and the transportation options it provides Developing new partnerships with outlying areas to expand service and generate new revenue Potential for new West Michigan Express Service that will support and strengthen the core system and expand the network. Opportunity for stronger coordination with local area municipalities when planning for future growth	Potential general lack of understanding and support of the value and relevance of transit amongst the community may impede growth Broader community may be unaware of transit investment and expansion's return on investment for the entire community Community support may be negatively impacted if The Rapid is unable to provide new and/or expanded services outside the six-city are due to funding, policy, and workforce constraints
Growth	Expanding transit service into new areas, including in Ottawa County Continued investment in productive and frequent routes in the core system. Identifying Equitable Transit Oriented Development (ETOD) projects such as dense and affordable housing and matching the service to the travel patterns of these communities.	Cannot rely on current level of federal operating assistance; economic recovery from the COVID pandemic will reduce this funding Additional local and/or state operating funding is needed to support existing and expanded transit services into the future Growth in outlying areas has potential to exacerbate the issue of demand for service outstripping available resources Unknown travel patterns in a post-COVID era. Displacement of existing populations to suburban/exurban areas who utilize transit services will require additional resources to provide commensurate levels of service. Current internal governing policies requiring funding from outside entities to fund expanded service levels outside the six-city area limits the ability to respond to growing service demands and relying on outside funding may not be sustainable and reliable in the future.

Convenience	Building on successful innovation with additional BRT lines and Rapid Connect zones More transit-supportive land uses and walkable urban design are planned for the future Increasing the share of jobs and residences that can walk to a bus stop Potential to improve service reliability and convenience by implementing variable scheduling, enhanced transit signal priority, dedicated lanes, and/or increasing real-time information availability Continuously expanding the availability of technologies and amenities for improved customer experience	Tradeoff between coverage and frequency as the region grows and outlying areas demand new transit service if no new operating sources are identified As growth and congestion occur throughout the region, The Rapid's ability to provide reliable, timely service may be impaired if transit supportive infrastructure such as dedicated lanes or enhanced transit signal priority are not implemented
Workforce	Long-term planning for the kinds of departments and skillsets that will be needed into the future will be conducted through this TMP process	Challenge in transferring current skills and organizational structure to accommodate new and/or innovative roles and initiatives (*e.g.,* automation, zero-emission transition, TOD/real estate/joint development opportunities) Limited number of existing administrative staff impairs The Rapid's to pursue, manage, and implement grant opportunities will hinder The Rapid's ability to achieve desired outcomes. Limited existing administrative staff capacity reduces The Rapid's ability to conduct outreach and provide timely communications to bring awareness to newly-implemented services.
Adaptability	Continued monitoring of emerging and proven vehicle technologies across the industry Future collaboration to extend micromobility services to other jurisdictions in tandem with Rapid Connect to achieve desired outcomes and service effectiveness	Future technologies may worsen existing transportation challenges or contribute to new ones if not planned for or adapted to effectively Not addressing the aforementioned weaknesses will cause The Rapid to stagnate

Regional Connectivity and Market Analysis

This *Regional Connectivity and Market Analysis Report* builds upon the assessment of regional demographics and the performance of The Rapid's transit services outlined in the *Existing and Future Conditions Report* to identify travel patterns and key travel markets as well as current gaps in The Rapid's transit network and areas for potential expansion of service. These results, along with the public involvement results, will inform opportunities and scenarios for improving transit service in the short-, medium- and long-term future.

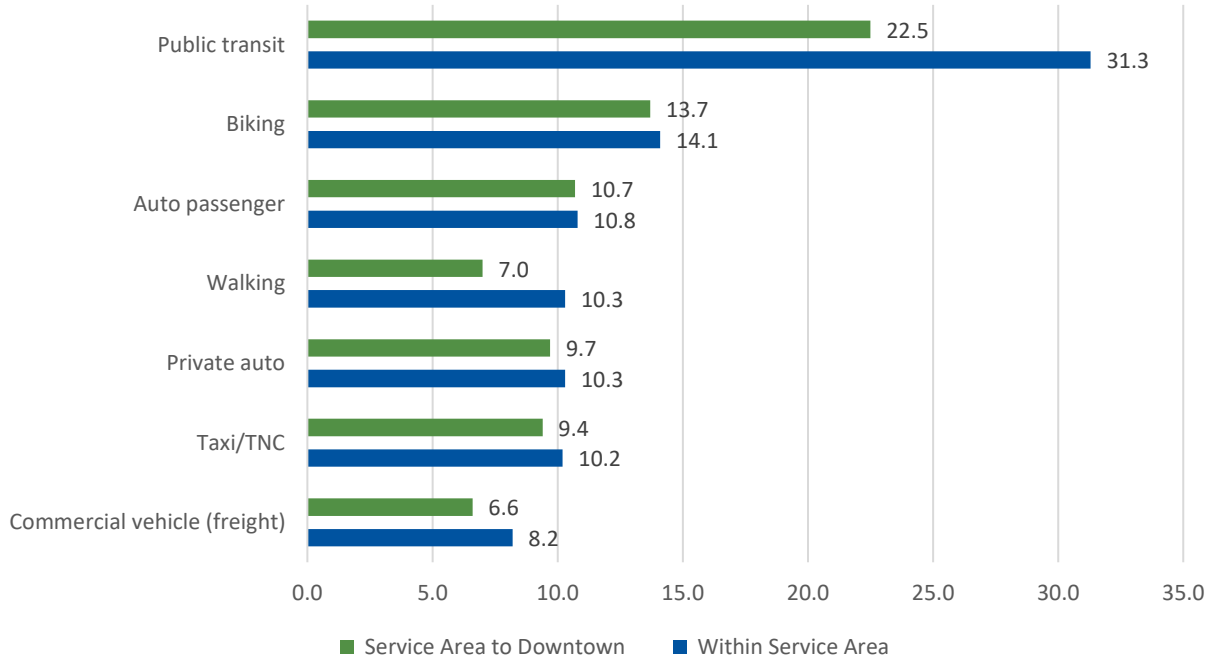
In the **Regional Connectivity Analysis** section of the report, trip characteristics and origin-destination desire lines are presented and analyzed to answer the questions: *How and why do people travel?* and *Where are people traveling to and from?*

How and why do people travel in the Grand Rapids region?

The number of trips per person going to downtown Grand Rapids is the same for both Zone One* and Service Area trips Trip generation is primarily associated with four trip purposes: home-related, shopping, working, or eating.

Nearly two thirds (~65-67%) of all trips from both Zone One* and The Rapid's Service Area are taken via private automobile (single-occupancy vehicles). Walking is the second most likely form of transportation for trips from The Rapid's Service Area to downtown (16%). Less than 2% of daily trips within the service area are taken by transit. On average, transit travel times are 2-3 times longer than other modes. Non-transit trips are typically less than 15-minutes long. Transit trips to downtown Grand Rapids are 23-28% shorter than other transit trips

Figure 9: Average Trip Duration (in minutes) by Transportation Mode within the Service Area and to Downton from the Service Area



Source: Fall 2021 Replica data for a typical weekday (Thursday)

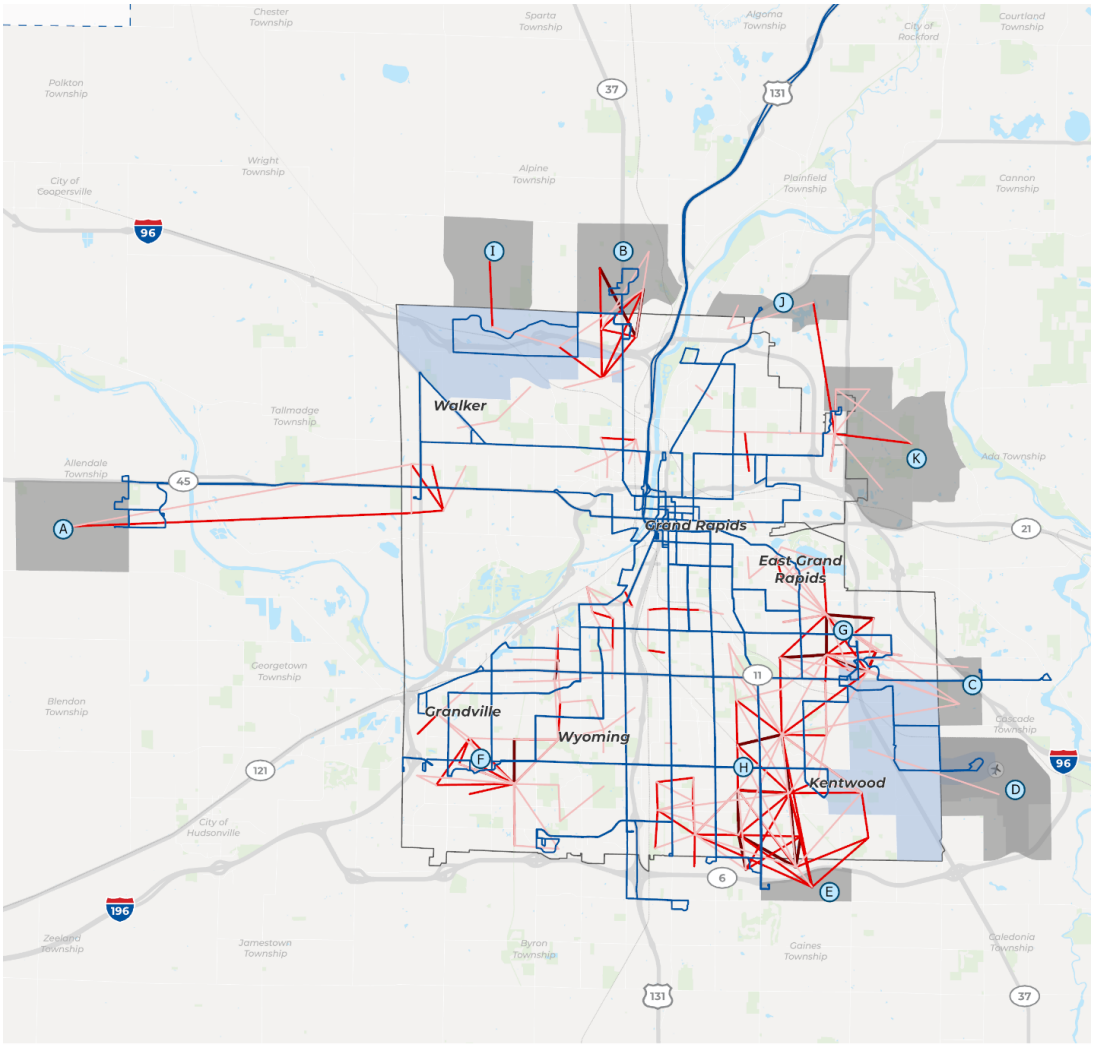
** Zone One includes the ITP-member communities as well as the rest of Kent County and parts of Ottawa County that intersect the Grand Rapid's urbanized area.*

Where are people traveling to and from?

Nearly all of the strongest desire lines are already served by or in close proximity to The Rapid's fixed route network or Rapid Connect zones. Some desire lines indicate opportunities for greater connectivity within and outside the ITP-member communities, as shown in **Figure 10**.

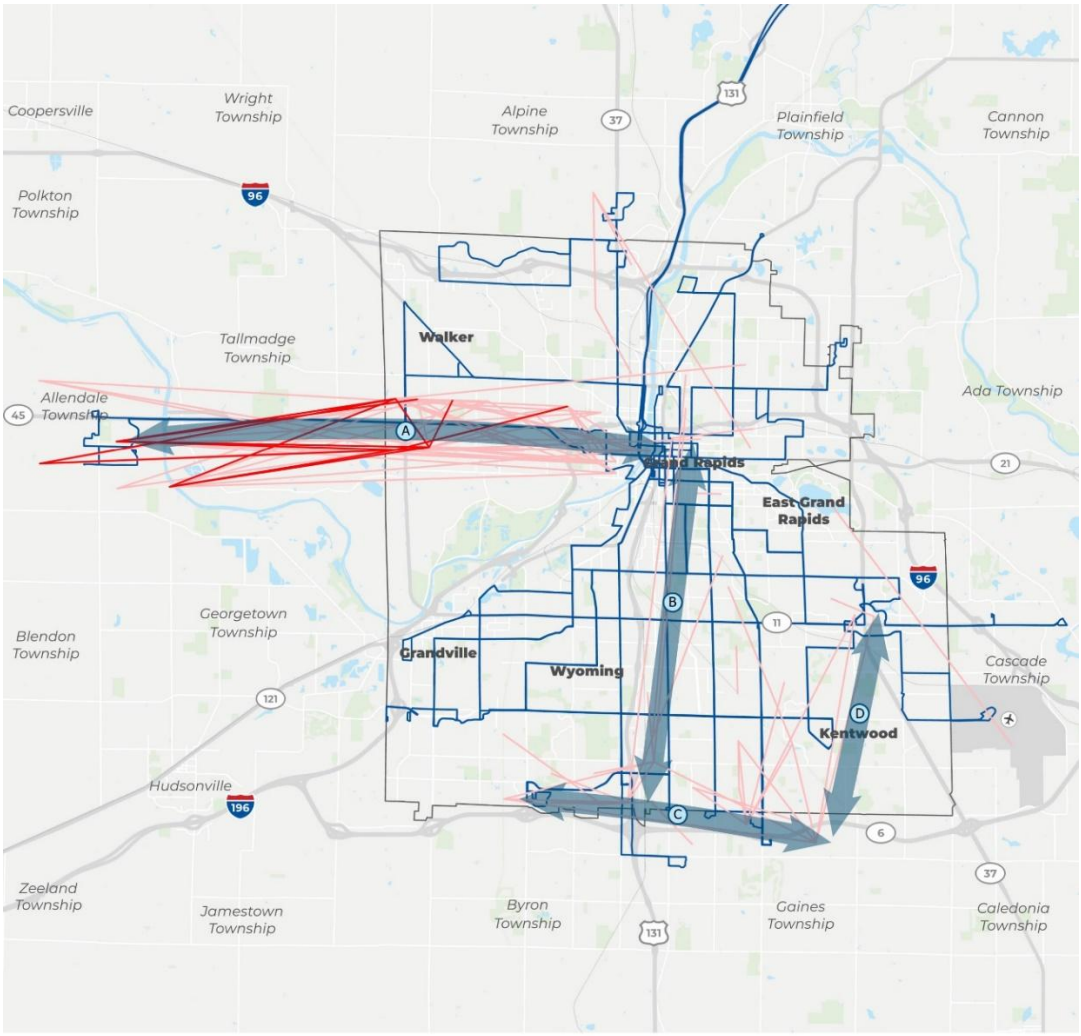
The strongest transit desire lines are served by The Rapid's existing BRT routes. Additional transit desire lines with opportunities for greater connectivity are shown in **Figure 11**.

Figure 10: Highest Volume Desire Lines for All Modes



Source: Fall 2021 Replica Origin-Destination Details for trips with origins in any TAZ within Zone One and destinations in any TAZ within Zone One

Figure 11: Highest Volume Public Transit Desire Lines



Source: Fall 2021 Replica Origin-Destination Details for trips with origins in any TAZ within Zone One, destinations in any TAZ within Zone One, and primary mode of public transit

In the **Market Analysis** section of the report, key transit locations, connections, and mobility options are reviewed. Areas of elevated transit propensity and demand as well as trip generation potential are analyzed to identify *Where does transit need to go?* Then, origin-destination desire lines are overlayed on this base layer to answer the question: *What locations need to be connected to each other?* Based on these baseline conditions, opportunities for improved transit connectivity and mode shift from automobile travel to transit are identified.

Where should transit services go?

As of Fall 2022, The Rapid's fixed route service was well aligned with key transit markets as a majority of the Zone 1 population (77%) and jobs (89%) in block groups with "Very High" or "High" transit market scores were within a quarter mile of a bus stop

Areas with sufficient transit demand as well as transit propensity and trip generation potential to support potential service extensions outside the ITP-member communities include extending Route 11 further north along Plainfield Avenue NE to the North Kent Center and Five Mile Road as well as serving Jenison (Georgetown Township) potentially by extending Route 28.

Areas with the strongest transit markets containing high transit demand propensity, and trip generation potential include…

- Within and adjacent to downtown Grand Rapids
- Northern Cutlerville east of US-131
- The Alpine Avenue NW Corridor (Comstock Park, Alpine Center, and West Grand neighborhoods)
- The Burton Street SW Corridor
- Surrounding the intersection of 44th Street SE and Breton Road SE in Kentwood
- Adjacent to colleges/universities including GVSU and Calvin University

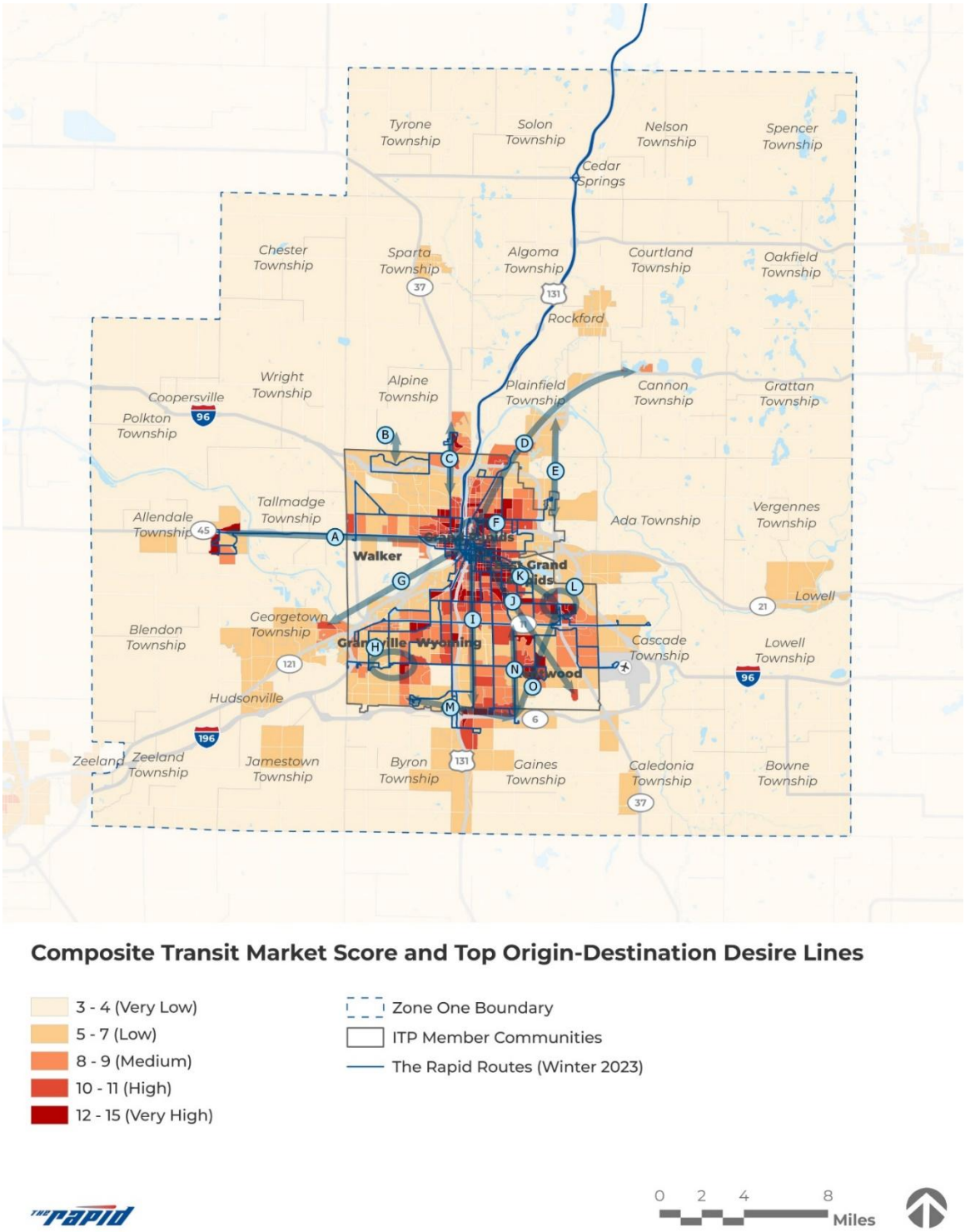
Which locations should be connected to each other by transit?

Based on a synthesis of transit market locations and origin-destination desire lines, there are approximately a dozen key connections throughout Zone One that should be connected by transit services. The majority of these connections are served by or in close proximity to at least one fixed route or Rapid Connect service.

Four connections, however, either lack existing service or require more than one transfer. Connections with opportunities for greater connectivity include:

- East Beltline Avenue
- Between Jenison and downtown Grand Rapids
- Between Gaines Marketplace to Woodland Mall/Calvin University
- Between UM Health – West Hospital and Gaines Marketplace

Figure 12: Composite Transit Market Score and Top Origin-Destination Desire Lines



Source: 2021 American Community Survey (ACS) 5-Year Block Group Estimates, GVMC Single Source Online Web Map, Homeland Infrastructure Foundation-Level Data (HIFLD), Urban Footprint, AECOM

In the **Emerging Mobility Options** section of the report, several emerging mobility options are introduced and potential applications for The Rapid to leverage these technologies to complement and/or supplement traditional fixed route services are highlighted.

Emerging mobility services including Microtransit, Mobility as a Service (MaaS), and Shared Mobility Services are often software-centric, small-scaled mobility services. Some of these emerging mobility services may be able to meet The Rapid's needs for new or expanded transit services. The benefits and challenges of each emerging mobility service are detailed in the *Regional Connectivity and Market Analysis Report*.

Microtransit

- Areas of lower fixed route demand including Jenison (Georgetown Township), East Beltline Avenue Corridor, and Cutlerville/along US-131 south of M-6
- Extension of the Kentwood Rapid Connect Zone to serve existing and growing employment centers near Davenport University and Amazon
- Along or in place of portions of underperforming routes such as Routes 24 and 27

MaaS

- Consideration of system-wide MaaS
- Mobility hubs at high-capacity transit stations, transit centers and high-volume stops, and regional shopping centers including, but not limited to, Rapid Central Station, Woodland Mall/Kentwood Station, Rivertown Transit Center, Alpine Center, GVSU, Calvin University, and Standale and Jenison Meijer Stores

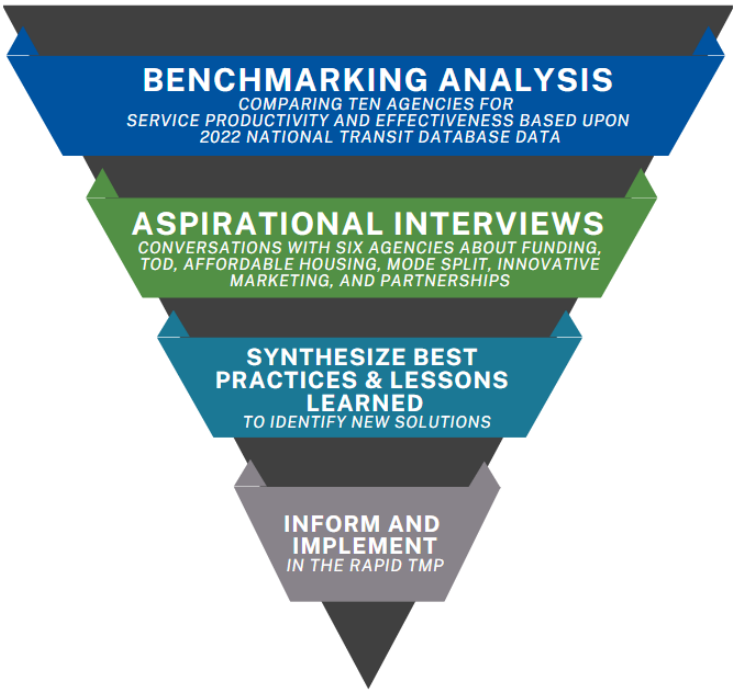
Shared Mobility

- Areas with high in-zone trip demand or young adult population density including between Calvin University, Woodland Mall, and the Surrounding Area, as well as Alpine Center, the West Grand Neighborhood, and between RiverTown Crossings and its surrounding area

Peer Review

This Peer Review Report includes a two-part assessment: **Benchmarking Analysis** and **Aspirational Assessment**. Together, the information in this report can be leveraged to transform service delivery for the Rapid service area and inform the vision of the 20-year Transit Master Plan (TMP) (**Figure 13**).

Figure 13: Peer Analysis Summary of Approach



Benchmarking Analysis Results

The Rapid outperforms peers in service productivity and cost effectiveness but has opportunity to improve in service effectiveness. The benchmark peer comparison measures The Rapid to ten peers across the nation, analyzing both fixed route and demand response service in FY 2022. The results show The Rapid provides superior service to its community at a higher financial efficiency compared to peers. The Rapid's fixed route services exhibit relatively lower passenger rates per mile and per hour than its counterparts, despite having the greatest revenue mile operation amongst its peers and serving a population-dense area. Considerations of service availability, trip length, and travel time from previous TMP tasks will help provide insight into specific routes that may be impacting The Rapid's service effectiveness compared to its peers.

Aspirational Peer Overview

Peers served to highlight effective strategies, tools, and lessons learned in key focus areas that align with goals, priorities, and interest areas of The Rapid established through the TMP process. Aspirational peers include Metro Transit (Minneapolis, MN), TheRide (Ann Arbor, MI), IndyGo (Indianapolis, IN), CapMetro (Austin, TX), LA Metro (LA, California), and Sound Transit (Seattle, WA). These six peers were selected for their expertise in sustainable funding, TOD, affordable housing, modal split, innovative marketing, and regional partnerships. Insights from the aspirational peers were used to inform best practices and lessons learned for implementation.

Strategies for Implementation

Results from the benchmarking peer analysis and aspirational peer interviews can be used to identity and achieve near-term (1-4 years), mid-term (5-10 years), or long-term (11-20 years) implementation goals. Based on the peer analysis review, three areas for The Rapid to prioritize were identified, specifically:

1. Identifying innovative and sustainable funding mechanisms
2. The role of the agency in Transit-Oriented Development and affordable housing
3. Approaches for encouraging the community to use transit

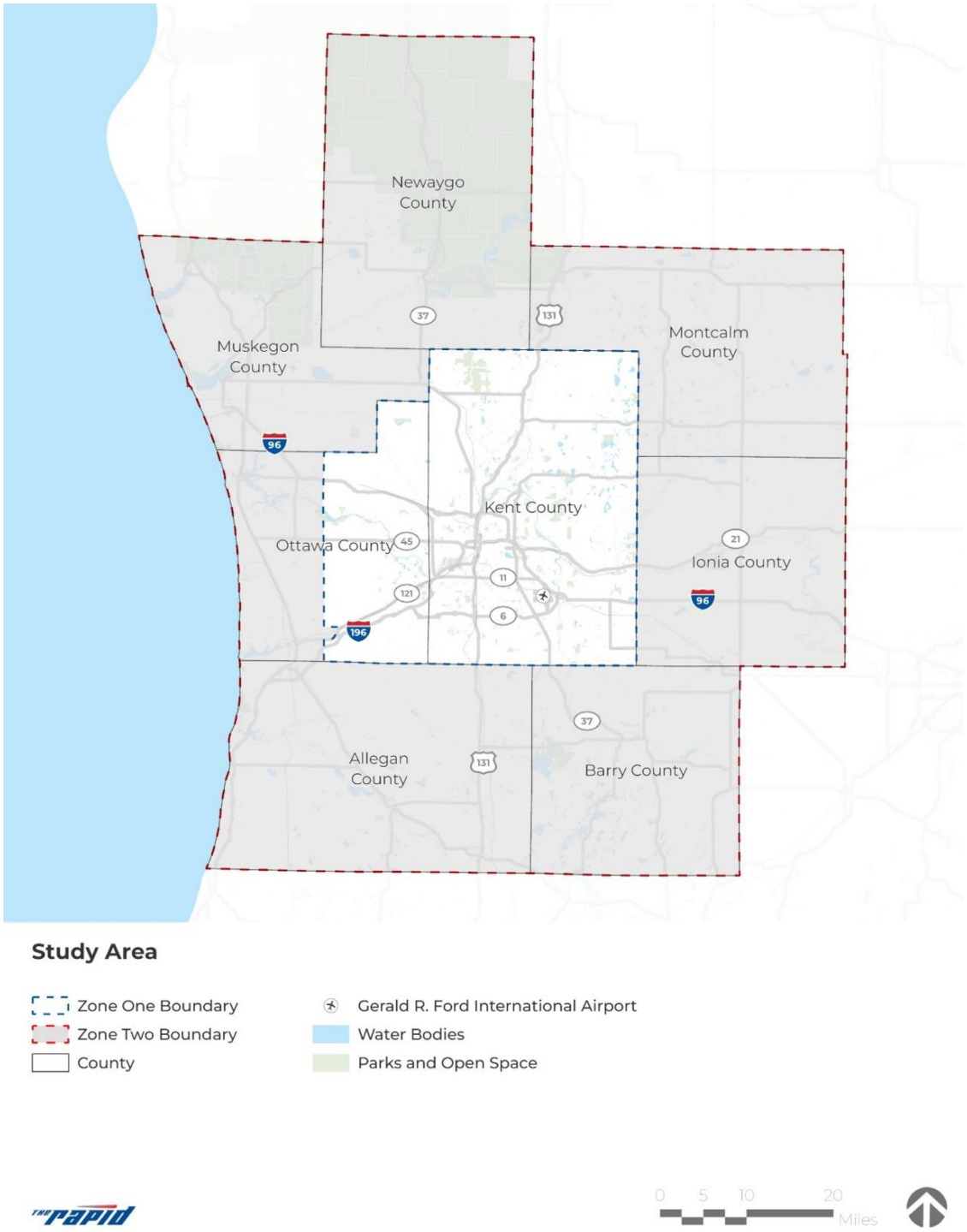
Intercounty Corridor Analysis

This Intercounty Corridor Connectivity Analysis builds upon the assessment of potential transit markets outlined in the ***Market Analysis*** task to identify rank and prioritize connections within and into the study areas of **Zone One** and **Zone Two**, as defined in **Figure 14**. The trip volume and corridor analyses in this report discusses the relationships between Zone One and Zone Two trip patterns. Trip volume helped to identify potential intercounty connections along major corridors. These corridors were then evaluated for current travel demand, expected future growth, and proximity to transportation dependent population groups. Findings from this analysis are discussed below for each zone.

Zone One is expected to experience the greatest increase in trip volume growth over the next 30-year period. The total number of trips that originate and end in Zone One were approximately 1.7M in 2020 and are expected to be 2.0M in 2050, a 17% increase, according to 2050 GVMC trip projections. This is likely due to high expected household and employment growth. Households are expected to grow by 26.7% and employment is expected to grow by 20%.

According to 2020 GVMC trip estimates, **Zone Two** is shown to have the highest number of trips in 2020 at 2.3M compared to all other trip patterns. However, using 2050 GVMC trip projections, Zone Two trip volume growth is only expected to increase by 5% to 2.5M in 2050. This is likely due to lower expected household and employment growth compared to Zone One. Households are only expected to grow by 16.8% and employment is expected to grow by 14.4%.

Figure 14: Intercounty Corridor Analysis Study Area



Note: Throughout the analysis, areas depicted as Zone Two does not include areas within Zone One. In other words, Zone One is hollow when referring to the geographic area that makes up Zone Two.

Trips within Zone One

There are several opportunities to increase intercounty connectivity within Zone One to meet current needs and potential future growth. Top connections and corridors include the following:

- Lake Michigan Dr NW from Grand Rapids to Allendale.
- Walker Ave NW from Alpine Ave NW to 4 Mile Road (Walker)
- Barry St/54th St SW/52nd St from Gerald R Ford Airport to I-196 (Grandville)
- 84th St SE from Byron Center to Caledonia
- Beltline Ave SE/Broadmoor Ave SE from Caledonia to Fulton St (East Grand Rapids)

Trips within Zone Two

There are a few opportunities to collaborate and implement regional connections within Zone Two to meet current needs and/or support future growth. The top corridor for intercounty connectivity is US Highway 31 between Muskegon, Grand Haven, and Holland. Other than US Highway 31, there are not many corridors with strong opportunities for intercounty connectivity. However, there are several opportunities for localized connectivity that may be explored in a microtransit or other study of context-sensitive services, as follows:

- Holland & Zeeland
- Greenville
- Ionia
- Allegan
- Fremont
- Newaygo
- Wayland
- Caledonia

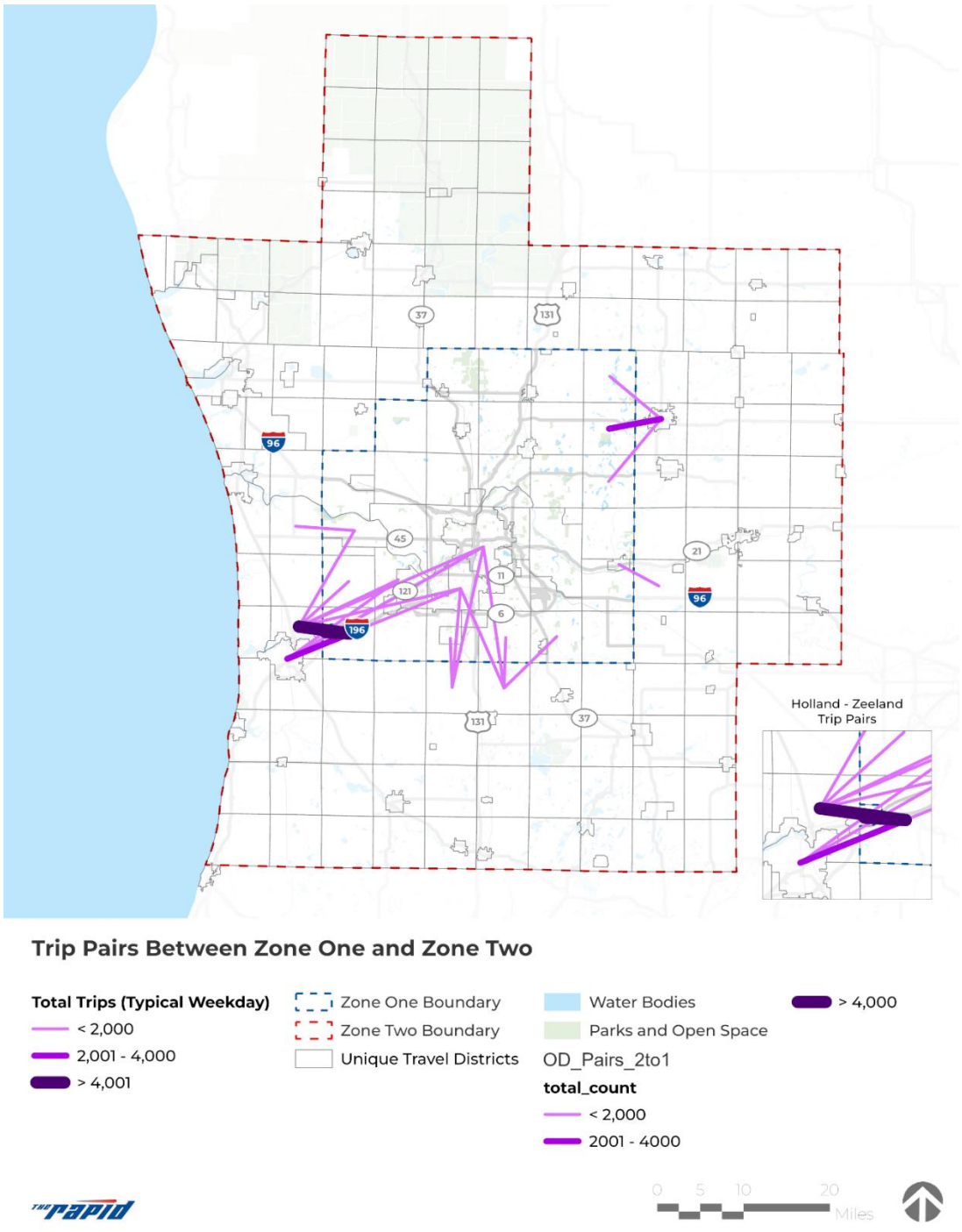
Trips between Zone One and Zone Two

Zone One has 60% more jobs and 12% more households than Zone Two, serving as a more job-dense attractor for trips. However, trip volume between the two zones is relatively low compared to trip volume within each zone. Bi-direction trips between Zone One and Zone Two are about 276,000 in 2020 and expected to be 300,000 in 2050. These bidirectional trips represent an expected growth rate of approximately 9% across the 30-year period.

There are several opportunities for existing routes to be extended or added to meet current and future intercounty connectivity needs between Zone One and Zone Two. Top connections and corridors include the following:

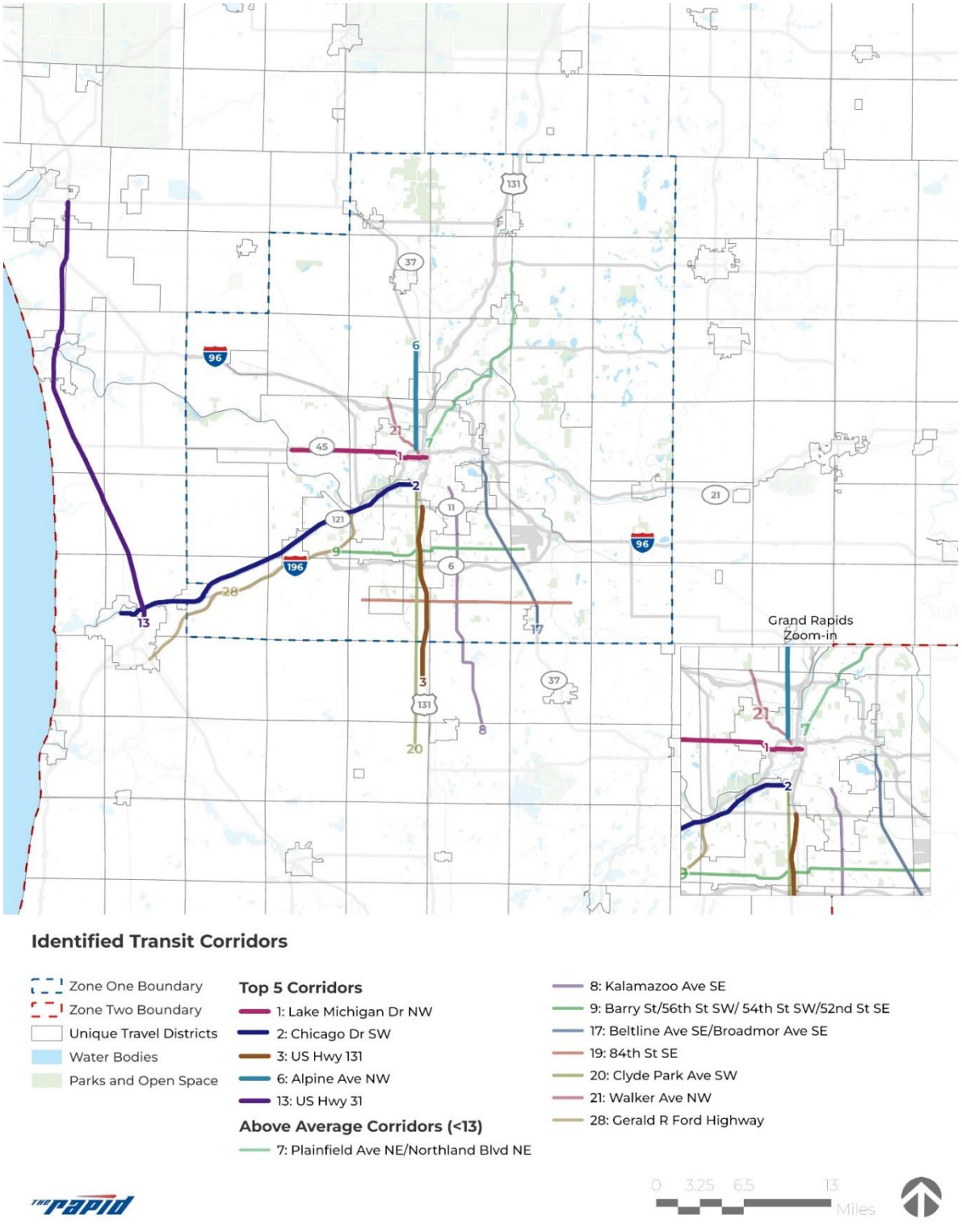
- Chicago Dr between City of Holland and Grand Rapids
- US 131 from Wayland to Grand Rapids.
- Alpine Ave NW from Grand Rapids to Alpine Township
- Plainfield Ave NE from Grand Rapids to Rockford

Figure 15: Strongest Trip Pairs Originating within Zone One and Ending within Zone Two Travel Districts



Data source: 2023 Replica Spring origin-destination trip pair volume

Figure 16: Top Five and Above Average Ranked Corridors



Map source: Corridor prioritization and ranking results

Potential Service Concepts

The *Intercounty Connectivity Analysis Report* considers service concepts for some of the top ranked corridors. Many service concepts require stakeholder feedback for prioritization, additional feasibility reviews, and implementation planning. Notably, many corridors also enter municipalities that are not part of the ITP Member Communities. Additional consideration must be given to service agreements and funding when exploring any service concepts.

The highest ranked corridor connecting areas **within Zone One** is **Lake Michigan Dr NW from Grand Rapids to Allendale**. Lake Michigan Dr ranked third overall with a composite score of 13.3. A potential service concept could be a microtransit pilot zone connecting the Laker Line and adjacent areas, such as Allendale Charter Township.

Currently, the Laker Line BRT serves most of the Lake Michigan corridor but terminates at Grand Valley State University (GVSU). The Laker Line BRT is the highest performing bus route in The Rapid's network with 16% of The Rapid's overall monthly ridership in October 2022 coming from Laker Line riders. The *2023 Allendale Charter Township Master Plan* identifies collaboration between the Township and The Rapid to extend service west of 48th Avenue as one strategy to accomplish the transportation goals outlined in the master plan.

The highest ranked corridor connecting areas **within Zone Two** is **US Highway 31 between Muskegon, Grand Haven, and Holland**. The US Highway 31 corridor ranked first overall with a composite score of 17.5. A potential service concept could b a limited or express bus service between Holland, Grand Haven, and Muskegon.

Currently, there are no transit services operating along the US 31 corridor between Holland, Grand Haven, and Muskegon. While this corridor is located within the Intercounty Corridor Analysis Study Area, it is far outside The Rapid's current service area. Operation of service along the corridor would involve coordination with both Holland and Muskegon, which currently operate transit services adjacent to the US 31 corridor. Notably, the *West Michigan Express Implementation Plan* recommends a Rapid-operated pilot express bus service along the Chicago Dr corridor, offering a potential connection between The Rapid service area and the US 31 corridor via transfers in Holland.

The highest ranked corridor connecting areas **between Zone One and Zone Two** is **US 131 from Wayland to Grand Rapids**. US 131 ranked second overall with a composite score of 13.3. A potential service concept could be an express or limited bus service between Wayland and Grand Rapids with park and ride stops potentially located in Wayand, Moline, Cutlerville, near 84th street, and in Kentwood.

Currently, there aren't any services that run along US 131, however there are several Rapid bus services that run parallel to it. The closest parallel services include bus routes 10 (15,766 monthly rides in October 2022), 1 (28,341 monthly rides in October 2022), and the Silver Line BRT (41,118 monthly rides in October 2022). Because local and high-frequency services are already available near the US 131 corridor, any additional future services may be limited or express bus services designed to collect riders from areas further south from the existing Rapid bus routes and provide quick connections to high activity centers.

West Michigan Express Feasibility Review and Implementation Plan

The West Michigan Express (WMX) initiative is a collaborative effort to link communities along the Chicago Drive (M-121) corridor - including Holland, Zeeland, Hudsonville, Grandville, and Grand Rapids with commuter-based public transportation for the purpose of enhancing economic growth and quality of life in the region. Currently, this corridor's most convenient travel mode is driving or other automobile-based travel modes. There is an existing Amtrak train that runs from the City of Holland to Grand Rapids, however the service is infrequent with one roundtrip per day and does not run during typical commuting times. The West Michigan Express initiative will explore commuter-based public transportation mobility options for the Chicago Drive corridor.

Building upon previous planning efforts, more detailed technical analysis was performed in the scope of the TMP to understand the feasibility of express bus route service under updated existing conditions. The existing condition metrics include distance and time from downtown Grand Rapids, transit market profile along the corridor, travel patterns, and ridership estimates.

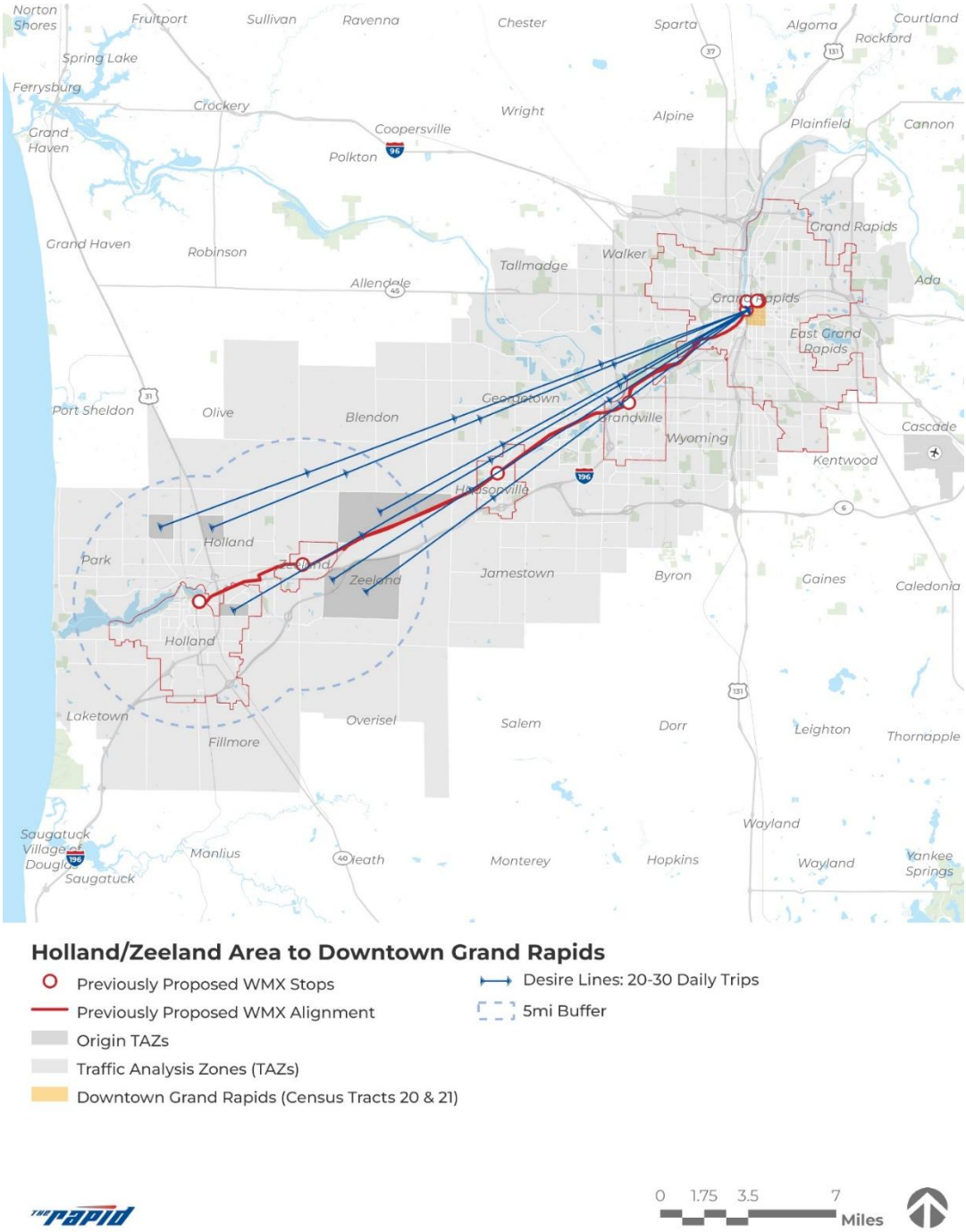
Based on the results of the **Feasibility Review**, a pilot express bus service connecting Holland, Zeeland, and Hudsonville to Downtown Grand Rapids is recommended as the first step of implementation. Because the potential WMX cities are places where people are accustomed to driving, it is anticipated that most riders would access the service via park-and-rides, even considering Holland and Zeeland both have existing transit service that could connect to WMX stops. Similarly, it is expected that most riders would walk to their final destination upon arrival in Downtown Grand Rapids; or connect to The Rapid's existing fixed route network.

The table below shows the reasoning for including or not including previously proposed WMX stops in the recommended pilot service. Most notably, because Grandville is closer to Downtown Grand Rapids than express bus routes typically serve, and because it is already served by multiple fixed routes in The Rapid system, it is not recommended as a stop location for the initial pilot

Table 2: WMX Feasibility by Stop

	Holland	Zeeland	Hudsonville	Grandville
Distance from Downtown	Appropriate distance (more than 10-20 miles from downtown)	Appropriate distance (more than 10-20 miles from downtown)	Appropriate distance (10-20 miles from downtown)	Inadequate distance (less than 10 miles from downtown)
Density	Regionally average density	Regionally high density	Regionally average density	Regionally average density
Travel Patterns	Regionally low volume of trips to downtown	Regionally low volume of trips to downtown	Regionally average volume of trips to downtown	Regionally high volume of trips to downtown
Additional Considerations	N/A	N/A	Strong TOD visioning	Already has multiple fixed routes to downtown
Overall Feasibility	**Medium**	**High**	**High**	**Low**
Include in WMX Pilot	✓	✓	✓	✗

Figure 17: Desire Lines from Holland / Zeeland Area



The **Implementation Plan** builds on the Feasibility Review by identifying park-and-ride locations for future express service, refining the proposed alignment to serve those park-and-rides, developing a schedule, calculating vehicles and operating hours needed to provide service, developing cost estimates, and identifying funding options. Potential park and ride locations, service characteristics, including a guaranteed ride home program, and next steps, are detailed in the *West Michigan Express: Implementation Plan Report*.

Fleet, Facilities, and IT Strategy

The *Fleet, Facilities & IT Strategy Report* establishes the existing conditions of The Rapid's fleet, facility, and IT assets. It explores how this infrastructure can be utilized or expanded to align with agency priorities. The report also identifies recommendations that are underway, and near-, mid-, and long-term that will either be added to, or work in alignment with the Transit Master Plan (TMP).

In addition to a review of the Rapid's Information Technology (*IT) Strategic Plan, Zero-Emission Bus (ZEB) Rollout Plan For Clean Transportation*, and *Transit Asset Management Plan*, AECOM staff interviewed members of The Rapid's Maintenance, Operations, and Facilities Staff to understand the existing state of its assets in these three areas and identify any opportunities for the TMP.

Recommendations for each asset category are detailed in the *Fleet, Facilities, and IT Strategy Report*, based on the existing conditions of The Rapid's fleet, facility, and IT assets and a review of agency priorities.

Joint Development

Joint development is real estate development that occurs on transit agency property or through some other type of development transaction to which the transit agency is a party.

Joint development is physically or functionally related to a transit facility, and it often involves the coordinated improvement of a transit facility and the affected real property. Transit agencies actively participate in joint development, generally by contributing property or funding; they benefit from joint development by deriving revenues, increased ridership, or transit improvements.

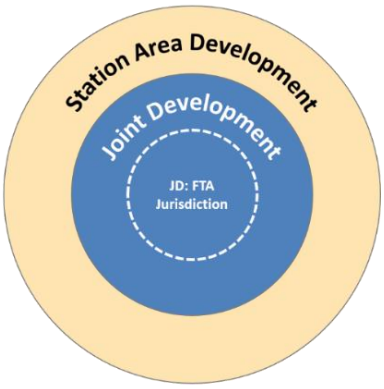
Transit agencies that get involved in joint development generally report three reasons for doing so:

1. Raise revenue from the joint development transaction itself, thus "monetizing" an agency real property asset to help fund capital improvements or on-going operations;

2. Increase ridership and, consequently, farebox revenue;

3. Promote TOD in the broader station area or corridor as a strategy for placemaking, equity, sustainability, and smart growth.

Figure 18: JD in Context (Guide, p. 6)



The *Joint Development Memo* is organized as follows:

- **Part 2.0: Best Practices Tailored to The Rapid**

  Identifies joint development best practices from around the country that are relevant to The Rapid and describes how they can be adapted and applied. Best practices are described by the following steps in the joint development process:

  - *Programmatic Foundations*
  - *Project Identification*
  - *Project Planning Process*
  - *Choosing a Development Partner*
  - *Negotiating and Executing a Transaction*
  - *Economics of Joint Development*
  - *Creative Business Models*

- **Part 3.0: Case Studies**

  Provides a series of case study examples from other transit systems that have been curated for this Memorandum. They include programmatic initiatives at five systems with broad similarities to The Rapid, as well as a dozen illustrative projects from other cities. Case studies were chosen because they illustrate one or more of the following:

  - *Transit agencies*:: case studies involving transit agencies that run bus systems in mid-sized or even small metropolitan areas;
  - *Projects and settings:* joint development projects in small or mid-sized downtowns, at park & ride lots, or at non-revenue operation and maintenance (O&M) facilities;
  - *Transactions*: projects occurring both on and off transit agency property, and projects utilizing the business models discussed in Section 2.7 above.

- **Part 4.0: Evaluation of Rapid-Owned Sites**

  Evaluation of the suitability and potential for joint developments on eleven Rapid-owned sites based on agency priorities and joint development best practices. The eleven sites were also categorized as they fall into one of three typologies based on site characteristics. From this analysis, sites with the highest potential for each typology and key considerations for redevelopment are included below.

  - *Transit Oriented (Re)development:* focuses on a site's redevelopment potential while retaining The Rapid's existing administrative or operations uses.
    - *Rapid Operations Center*
    - *Rapid Central Station / Administrative Building / Amtrak Station*
  - *Park and Ride Facility:* focuses on existing park and ride sites, or identification of potential sites for future park and rides. Depending on the site's size, joint development may accommodate other land uses, such as commercial and multifamily apartments.
    - *60th Street Park and Ride*

- *Mobility Hub:* focuses on redeveloping a site to be a primary Rapid bus transfer station and mobility hub. Depending on its scale as a mobility hub site is designed to provide passengers with access to multiple modes of transportation in a central location.
    - *Kentwood Station*

- **Part 5.0: Site Plan Concepts**

  Based on the site evaluation methodology, *The Rapid Central Station / Administrative Building / Grand Rapids Amtrak Station* combined site was selected to develop conceptual site plans. The intent of this conceptual site planning is to set parameters: to determine what reasonably fits on the site; what provisions must be made to accommodate, preserve, or improve existing and future transit service; and to sort out, before writing an RFQ or RFP, which aspects of the eventual development program are "must-haves", and which are flexible. At the end of this conceptual site planning exercise, a series of next steps and considerations are identified for The Rapid to successfully pursue each site option.

Figure 19: Option 1: Multimodal Hub

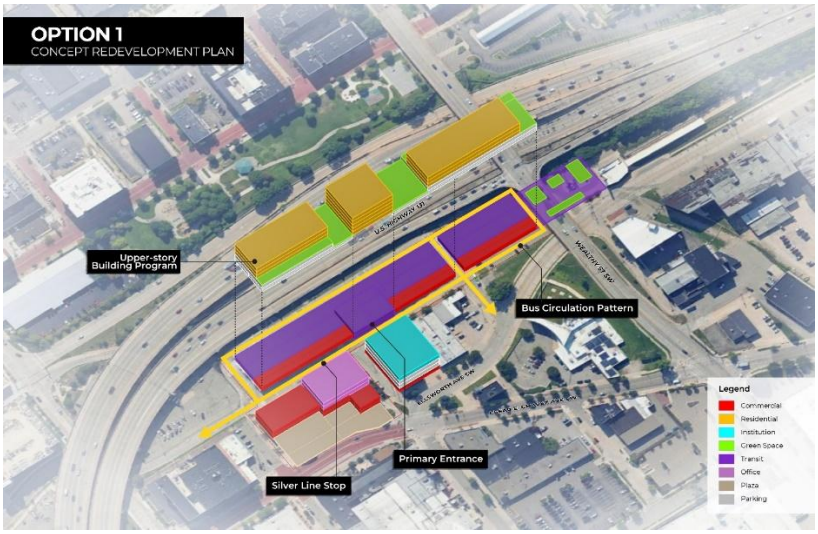


Figure 20: Option 2: Combined Central Station and The Rapid Admin Building

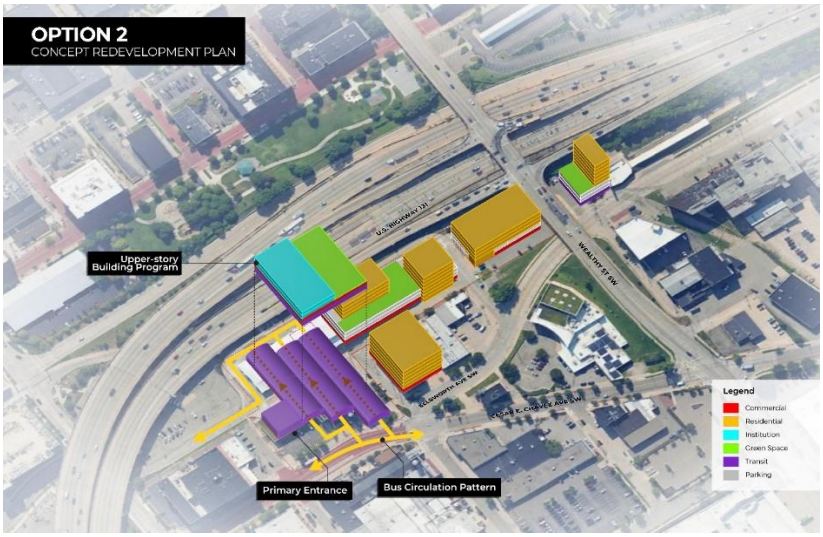


Figure 21: Option 3 – Green Corridor

Next steps would be to identify a vision and priorities within the eventual development program and make provisions to accommodate, preserve, or improve existing and future transit service before writing an RFQ or RFP. Additional asks would include a market study and benchmark analysis to understand redevelopment potential. The Rapid would also want to undertake a detailed station feasibility analysis of the various options to provide transit services at a redeveloped Central Station.

Recommendation Concepts

All key findings from TMP technical tasks and all comments received through the public and stakeholder feedback process were aggregated then comprehensively reviewed for key themes, opportunities, and gaps. This robust process revealed six common concept categories that pervaded all findings. These six categories are summarized below.

Community Awareness and Education: Increase community awareness and engagement through education and marketing programs.

Existing Service Improvements: Enhance rider experience by improving existing service, operations, and rider amenities.

Future Service Expansion: Increase connectivity within and outside of the ITP Service Area.

Transit-Oriented Development: Explore tools to foster transit-supportive places using plans, policies, and public investments.

Innovation and Technology: Pursue innovative technology to streamline Rapid operations, improve rider convenience, and align mobility services.

Regional Partnerships: Strengthen regional partnerships to align mobility planning efforts and implement TMP recommendations.

Foundational to the six recommendation concepts above, two additional concepts became clearly critical to The Rapid's long-term success: **Sustainable Funding** and **Workforce Development** (staffing).

These two concepts will impact implementation of recommendations out of the TMP. As such, any and all recommendation strategies will be evaluated within the context of funding and staffing conditions, as detailed in the next section.

Foundational Concepts

A SWOT[1] assessment in the ***Existing and Future Conditions Analysis*** identified two challenges that may restrict implementation of potential future service opportunities: **Funding** and **Staffing**. These challenges are described below and are foundational to understand recommendations in context with these challenges.

Funding Options

Implementation of future strategies and initiatives will be dependent on the outcome of one of three funding alternatives:

A. **Cost Neutral:** Continue with existing funding
B. **One-Time Funding:** Strategically prepare for and pursue discretionary (or 'one time') funding opportunities
C. **Sustainable Funding:** Pursue long-term sustainable funding sources for operations

Current Revenue Sources

The ITP currently utilizes a variety of revenue-generating and tax-derived funding sources to collect the operating and capital funds needed to operate The Rapid.

Operating Expenses (OE): Associated with the operating costs of providing transit services and/or the operation of the transit agency. Operating expenses are typically classified by function or activity, and the goods and services purchased, including Labor, Materials and Supplies, Purchased Transportation, and Other Operating Expenses. Operating funds are typically annually recurring from various sources, such as fares and **directly generated** revenue, **local funds**, **state funds**, and **federal assistance**. In 2021, The Rapid expended $22.2M in operating funds and $46.1M in 2022..

Capital Expenses (CE): Related to the purchase of capital equipment and financing capital projects. Capital expenses are non-annually recurring. These can include purchase of land, improvements to land, easements, buildings, building improvements, vehicles, machinery, equipment, infrastructure, and all other assets that have useful lives over one year. The Rapid's capital funds are sourced from **state funds** and **federal assistance**. In 2021, The Rapid expended $16.3M in capital funds and $9.4M in 2022.

Source: FTA National Transit Database (NTD) Glossary and Annual Agency Profile

The Rapid's **directly generated** operating revenues include fares, concessions, and advertising (8.2% of 2021 OE and 11.5% in 2022), all of which directly or indirectly depend on ridership levels, making them vulnerable during periods of decreased ridership.

Local **tax-derived** operating sources consist of millage rates (6.8% of 2021 OE and 6.7% in 2022), which require periodic renewal through public elections and can be negatively

[1] SWOT – Strengths, Opportunities, Weaknesses, and Threats

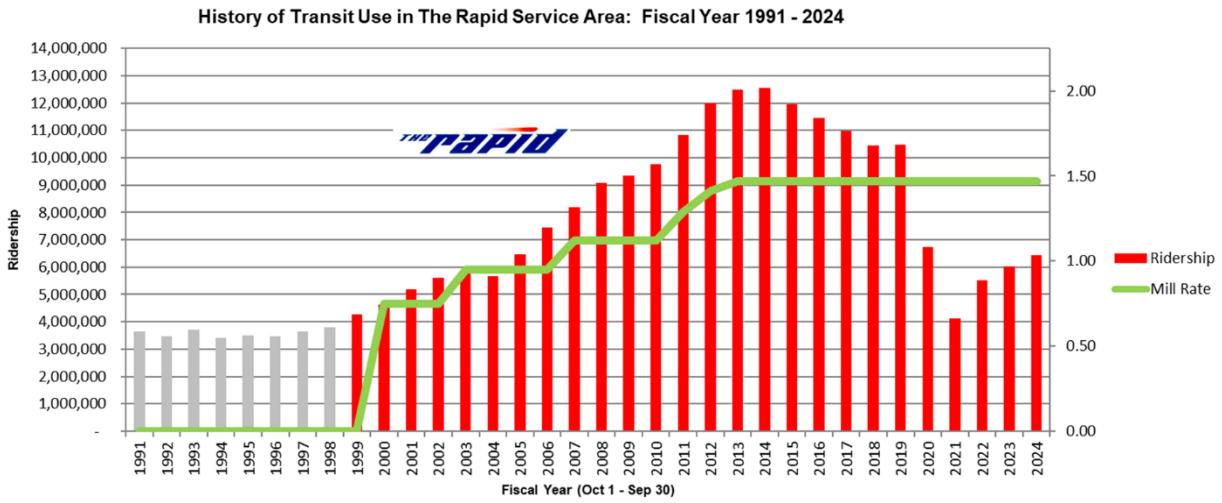
affected if a higher volume of millage renewal items are on the ballot during a given election year. Another local tax-derived source is general revenue, which is a politically competitive source of funding as general revenue is typically already allocated. A history of The Rapid's ridership and millage rate is provided in **Figure 21.**

State funding is received through assistance for both operating (36.5% in 2021 and 33.6% in 2022) and capital needs (19.2% in 2021 and 19.4% in 2022).

Federal funding includes both locally and federally decided discretionary grants, as well as formula grants. Federal funding is primarily used for capital expenses (80% of 2018 CE) but can sometimes also be used for planning purposes and is therefore reported under operating expenses (3.9% of 2018 OE).

As discussed in the *Existing and Future Conditions Report*, additional local and/or state operating funding is needed to sustain existing transit services, as well as support any future expanded services or transit agency initiatives in the TMP Recommendation Concepts.

Figure 22: History of Ridership and Millage Rate



Source: The Rapid, 2024

Potential Revenue Sources

Evaluation of potential funding mechanisms began with a comprehensive brainstorming phase, where potential funding tools were identified from the 2022 National Transit Database (NTD), encompassing both current and new approaches that could be explored for future implementation. A list of each existing – and possibly new – funding mechanism can be found in **Table 3**.

Each funding tool was evaluated based on its revenue potential and applicability to capital, planning, or O&M uses. The evaluation process also considered implementation challenges associated with each funding mechanism, including legislative requirements and restrictions, and other political or operational obstacles. The evaluation details are provided in **Appendix A – Funding Toolbox**.

Among the new funding tools considered, sales tax, and local income/payroll tax stand out for their higher revenue potential. These new funding tools can be used for either operating or capital revenue depending on enabling legislation. Implementing a sales tax, however, involves significant challenges, including the need for legislative approval and potential political resistance due to its regressive nature and uneven tax burden distribution.

Blending the sales tax with another type of tax, like a rental car tax, could help achieve a more politically balanced approach, as demonstrated in regions like Raleigh-Durham. Other peer examples include the Southwest Ohio Regional Transit Authority generating $45,376,932 from a sales tax in 2022 and the Madison County Transit District in Illinois raising $12,456,884. Similarly, the local income/payroll tax, though requiring legislative action, has shown effectiveness in generating substantial revenue, with the Transit Authority of River City in Louisville generating $50,865,563 in 2022. Despite their potential, both tools would require legislative action for adoption within the state of Michigan.

Other funding sources with greater feasibility include federal grants and value capture mechanisms. Federal grants encompass a number of formula grants and local and federal discretionary grants for capital funding. Value capture methods, such as joint development, tax increment financing (TIF), and transportation development districts (TDD) have “Moderate” revenue potential. Value capture mechanisms are typically only a source of capital revenue, but value capture can sometimes be a source of both capital and operating revenue depending on the terms of the specific mechanism. Value capture can be exemplified by the Transportation Development Districts (TDDs) in Kansas City, Missouri, used for including operations, maintenance, and debt service on capital construction bonds. Implementation challenges would be dependent on the real estate market conditions and local regulations

Table 2: Funding Tools Summary

Name of Funding Tool	Description	Current ITP Source
Directly Generated Revenue		
Fares	Directly generated passenger fare revenue.	Yes
Concessions	Directly generated revenue through the sale of vending and non-fare merchandise.	Yes
Advertising	Directly generated revenue from sales of advertising on transit vehicles or at stops.	Yes
Sale of Transportation Services	Revenue from sale of (non-public transportation) services such as employer funded or special event shuttles. Does not include contributions reported as fares or local agency/ municipality revenue agreements for public transportation services. *Note, the above is a definition sourced from NTD. The Rapid currently provides service under a contract with GVSU, GRCC, DASH, and Ferris as Sale of Transportation Services.*	Yes
Park and Ride fees	Directly generated revenue from daily and overnight parking fees at high-demand transit commuter lots.	No
Tax-Derived Sources (Local)		
Millage rate	Local property taxes.	Yes
(Local option) Gas Tax	Added local tax on purchases of gasoline. See State Gas Tax in *Formulaic - State Operating Assistance* below.	No
Lottery Tax	Tax on Lottery proceeds.	No
Alcohol Tax	Added local sales tax on purchases of beer, wine and/or liquor.	No
Tobacco Tax	Local sales tax on purchase of tobacco or other nicotine-release products.	No
General Revenue	Contribution from county or municipality general budget includes contributions reported as local agency/municipality revenue agreements for public transportation service.	Yes
Marijuana Tax	Excise tax on marijuana establishments and the sale of marijuana.	No
Sales Tax	Added local tax on general purchases.	No
TNC Tax	Tax on shared ride vehicles such as Ube/Lyft.	No
Rental Car Tax	Tax on rental vehicles.	No
Combined TNC/ Rental Car Tax	Tax on shared ride and/or rental car vehicles.	No
Motor Vehicle Tax	Annual personal property tax for registered vehicles.	No

Name of Funding Tool	Description	Current ITP Source
Local Income Tax/Payroll Tax	Tax on earnings or payroll.	No
Hotel/Motel Tax	Tax imposed on room rate to guests staying at hotels or motels.	No
Other State Sources		
Formulaic - State Operating Assistance	State formula funding for operations. Partially funded through state gas tax.	Yes
Formulaic - State Capital Assistance	State formula funding for capital projects.	Yes
Other Federal Sources		
Locally-Decided Discretionary Grants	Multiple programs e.g. CMAQ funding.	Yes
Federally-Decided Discretionary Grants	Multiple programs e.g. Low No, Bus and Bus Facilities.	Yes
Formula Grants	Multiple programs e.g. 5307 urban area formula grant.	Yes
Fees/Fines		
Local Parking Fees	Diverts a portion of the parking /meter fees for city-controlled parking spaces to fund transit projects or services.	No
Local Vehicle Registration Fee	One-time fee on registration of a new vehicle. Includes vehicles purchased out of state for new residents (Divert portion of an existing fee to transit).	No
License and Title Fees	One-time fee associated with license renewal or title sale/transfer (Diverts portion of existing fee to transit).	No
Fine for Emissions Violation	Diverts a portion of citation-based revenue to transit funding.	No
Fare Evasion Fine	Fee or citation revenue collected as a result of fare policy enforcement/violations.	Not reported
Fines for Traffic and Parking Violation	Diverts a portion of citation-based revenue to transit funding. Funds are allocated for parking and all Mobile GR-related initiatives in Grand Rapids.	Yes
Value Capture		
Joint Development - Sale of Land	Payments from development (can be cash or in-kind; sale).	No
Joint Development - Land Lease	Payments from development (can be cash or in-kind lease).	No
Tax Increment Financing (TIF)	Tax increment from district.	No

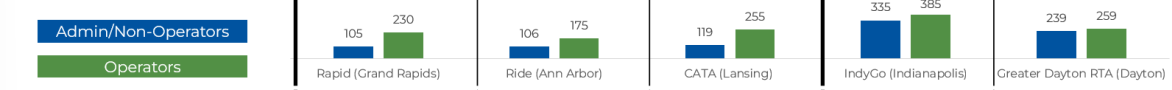
Name of Funding Tool	Description	Current ITP Source
Transportation Reinvestment Zones (TRZ), Public Improvement Districts (PID) / Management Districts, Transportation Development District (TDD)	Naming conventions vary state to state, but generally a mechanism for capturing the value of incremental investment in a limited district or zone.	No

Staffing Options

Analysis in ***Existing and Future Conditions Analysis*** and a National Transit Database (NTD) peer comparison of transit administrative staff, shown in **Table 4,** found that The Rapid is presently operating with a lower ratio of administrative staff to number of revenue hours, compared to peers.

Table 4: Peer Comparison of Staffing

	The Rapid	The Ride	CATA	IndyGo	Greater Dayton
Service Area (sq miles)	155	130	136	370	274
Buses in Max Service	99	75	89	133	60
Revenue Hours	504,554	352,599	412,425	666,606	414,599
Ratio of Non-Operator Hours to Revenue Hours	0.40	0.48	0.50	0.94	1.24
Number of Employees					



Source: National Transit Database, 2022

This ratio may impair The Rapid's ability to pursue, manage, and implement new and/or innovative agency initiatives out of the TMP. Limited staff may also impair The Rapid's ability to conduct outreach and bring awareness to newly implemented or improved services, which may hinder The Rapid's ability to achieve desired TMP outcomes.

Implementation of future opportunities for many of the previously discussed recommended concepts will be dependent on the outcome of one of three staffing options:

1. **Existing Staff:** Strategy has an expected moderate to low demand on current staff and could be feasibly achieved without additional staffing support needed.
2. **External One-Time Assistance:** Strategy has an expected moderate to high draw on current staff but may be feasibly achieved with external one-time assistance, such as contracted professional services or partnership through local or regional jurisdictions.
3. **Additional Staffing:** Strategy has an expected moderate to high draw on current staff and may not be feasibly achieved without additional long-term staffing support. May apply to proportional increase in staff relative to revenue hours or staffing to support new administrative initiatives.

Note: some strategies in the planning stage will be feasible with existing staff or external assistance, but additional staff may be needed for program expansion or implementation of a major new initiative

Implementation Timing

The timing of when each recommendation strategy is implemented will be important context, in addition to funding and staffing foundational concepts, as some recommendation strategies are dependent on various factors, such as additional funding / staffing, outcomes of feasibility reviews, and changing demographic or economic conditions, among others.

Implementation timing is broken down into three categories: near-term, mid-term, and long-term, as follows:

- **Near Term**: within the next 5 years
- **Mid Term:** within the next 5-10 years and/or after completion of near-term strategies
- **Long Term:** within the next 10-20 years and/or dependent on the completion of near and mid-term strategies

All recommendation strategies are evaluated within the context of funding and staffing options, as well as implementation phase (near, mid, or long term), and detailed in the following section. Strategies feasible under existing funding and/or staffing were prioritized in the near-term category. Strategies were also prioritized according to feedback from the public and advisory committees, in accordance with the findings of the ***Public Engagement Summary*** report.

Recommendation Strategies

All recommendation strategies are identified in the following pages. Strategies feasible under existing funding and/or staffing were selected for near-term implementation. All other strategies were included for mid- or long-term implementation.

Throughout the TMP process, improving existing services and expanding transit services was broadly prioritized by project stakeholders and members of the public, in addition to shared support of improved regional transit connectivity.

As such, near-term recommendation strategies for Future Service Expansion and Existing Service Improvements are detailed on one-page summaries at the end of this section, including next steps for the first 1-5 years of implementation.

Community Awareness and Education

Increase community awareness and engagement through education and marketing programs.

Strategies	Funding Options	Staffing Options
Underway		
Active participation with GVMC's TDM Mobility Manager program to advance outcomes of the **Regional TDM Plan**.	Cost-Neutral Sustainable	Existing
Near Term (<5 years)		
Explore additional ITP **community marketing and/or outreach** strategies and programming. Examples of such programs include: • Community "adopt-a-stop" • Youth education program (with schools) • Community transit ambassador • Expand coordination with local stakeholders to promote placemaking during new stop placement and design processes	Cost-Neutral One-Time Sustainable	Existing External One-Time Additional
Partner with external stakeholders to increase **advertising and marketing** opportunities that promote transit use.	Cost-Neutral Sustainable	Existing External One-Time
Engage **tourism and visitors'** organizations to promote transit services to tourists, visitors, and to special events.	Cost-Neutral Sustainable	Existing External One-Time

Existing Service Improvements

Enhance rider experience by improving existing service, operations, and rider amenities.

Strategies	Funding Options	Staffing Options
Near Term (<5 years)		
Examine and identify options to improve the effectiveness of **microtransit**.	Cost-Neutral One-Time Sustainable*	Existing External One-Time
Review feasibility of implementing **first-mile / last-mile** mobility solutions (e.g., micromobility) to ITP member communities.	Cost-Neutral One-Time Sustainable*	Existing External One-Time Additional
Continue to invest in existing productive routes with above-average ridership by increasing **service efficiency, frequency, and on-time performance** (OTP).	Sustainable	Existing
Explore tools and resources to support **expanded service hours**, such as earlier or later weekday service, and extended service on weekends.	Sustainable*	Additional
Perform a route network design study which incorporates additional **mobility hubs/transfer centers** within the ITP service area, in tandem with joint development and mobility hub strategies.	Cost-Neutral Sustainable*	External One-Time Additional
Explore opportunities to coordinate **fares and technology** with regional multi-modal providers. Examples of opportunities include implementation of the West Michigan Express pilot and development of a mobility wallet.	Cost-Neutral Sustainable*	Existing External One-Time
Establish on-board customer convenience standards to improve the **on-board customer experience**.	Cost-Neutral Sustainable*	Existing
Examine and upgrade **customer facing technology** (such as websites, apps, and/or dynamic signage) in alignment with the ITP Strategic Technology Plan and in support of goals towards the development of a multi-modal mobility wallet.	Cost-Neutral Sustainable*	Existing External One-Time
Establish **bus stop design** guidelines (i.e. right-of-way accommodations for stop locations).	Cost-Neutral Sustainable*	Existing External One-Time

**Required for long-term implementation and/or program expansion*

Strategies	Funding Options	Staffing Options
Mid Term (5-10 years)		
Evaluate opportunities for **high-capacity services (such as Bus Rapid Transit (BRT)),** building upon existing corridors with high-performing routes.	Cost-Neutral Sustainable*	Existing External One-Time Additional
Study operational needs of potential **new or relocated operations facilities**, in conjunction with joint development recommendations.	Cost-Neutral Sustainable*	Existing External One-Time
Implement a **high-frequency core network redesign** along key corridors, especially as ridership and demand increases, based on the results of route network design study in the near-term.	Sustainable*	Existing External One-Time Additional
Long Term (10-20 years)		
Continue to evaluate feasibility for **Light-Rail Transit (LRT) services or Commuter-Rail Transit (CRT) services** along existing high-capacity bus corridors, especially as ridership increases and regional demand grows.	Cost-Neutral One-Time Sustainable*	Existing External One-Time Additional

**Required for long-term implementation and/or program expansion*

Future Service Expansion

Increase connectivity within and outside of the ITP Service Area.
Note, any concepts that expand service outside the existing ITP member communities will require additional funding.

Strategies	Funding Options	Staffing Options
Near Term (<5 years)		
Cultivate opportunities & relationships (outside of ITP service area) to provide **service area extensions** or other context-relevant services to non-ITP member jurisdictions. Advance opportunities with private sector employers and institutions for providing contracted last-mile service connections within and outside the ITP service area.	Cost-Neutral One-Time Sustainable*	Existing Staff
Execute the **West Michigan Express pilot** express bus implementation plan along Chicago Dr corridor, including a guaranteed ride home program.	One-Time Sustainable*	Existing External One-Time Additional
Review feasibility of **top recommended intercounty service concepts** in partnership with regional stakeholders, following the West Michigan Express feasibility review and implementation planning process as a model. Intercounty service concepts for review are as follows: • **Alpine Ave: Extension of route 9 and/or new Alpine Rapid Connect Zone** • **Walker Ave**: New bus service and/or realignment of the Walker Rapid Connect Zone • **Beltline Ave/Broadmoor Ave**: Express bus between Grand Rapids and the airport. • **Plainfield Ave**: Extension of route 11 and/or new Plainfield Rapid Connect Zone • **Barry St/54th Ave**: New bus service between Grandville and the Airport • **US-131**: Express or limited bus service between Wayland and Grand Rapids with park and rides in Wayland, Moline, Cutlerville, and Kentwood	One-Time Sustainable*	Existing External One-Time Additional

**Required for long-term implementation and/or program expansion*

Mid Term (5-10 years)		
Continue to cultivate opportunities & relationships (outside of ITP service area) towards adding **adjacent municipalities/townships** to expand the ITP service area as regional interest grows.	Cost-Neutral	Existing Additional
Revaluate feasibility of **second priority intercounty service concepts** in partnership with regional stakeholders, following the West Michigan Express feasibility review as a model. Intercounty service concepts for review are as follows: • **Lake Michigan Dr: Laker Line extension and/or Allendale Charter Township Rapid Connect Zone.** • **Zone Two**: Limited or express bus along US-31 or developing context-sensitive services in areas of localized connectivity	Cost-Neutral One-Time Sustainable*	Existing External One-Time Additional
Long Term (10-20 years)		
Reevaluate intercounty corridors to identify **next priority intercounty service concepts**, especially as areas experience growth.	Cost-Neutral One-Time Sustainable*	Existing

**Required for long-term implementation and/or program expansion*

Transit-Oriented Development

Explore tools to foster transit-supportive places using plans, policies, and public investments.

Strategies	Funding Options	Staffing Options
Near Term (<5 years)		
Broaden transit-supportive **streetscape and roadway** design guidelines.	Cost-Neutral One-Time	Existing External One-Time
Establish **mobility hub** standards and policies.	Cost-Neutral One-Time	Existing External One-Time
Establish TOD and development **design guidelines**.	Cost-Neutral One-Time	Existing External One-Time
Leverage redevelopment potential of Rapid-owned real estate, such as The **Rapid Central Station**, by executing joint development strategies.	Cost-Neutral One-Time Sustainable*	Existing Additional
Mid Term (5-10 years)		
Leverage redevelopment potential of The Rapid-owned real estate, such as The **Rapid Operations Center** or **60th and Division Station**, as the surrounding markets strengthen.	Cost-Neutral Sustainable*	Existing Additional
Establish a **team of staff** dedicated to advancing TOD strategies, including management of real property asset monetization.	Sustainable	Additional

**Required for long-term implementation and/or program expansion*

Innovation and Technology

Pursue innovative technology to streamline The Rapid operations, improve rider convenience, and align mobility services.

Strategies	Funding Options	Staffing Options
Near Term (<5 years)		
Consolidate wayfinding and fare payment apps into a **mobility wallet** and/or Mobility as a Service (MaaS) platform by coordinating with regional stakeholders and continuing to evaluate emerging technology. Examples include the developing Mobile GR Mobility Wallet and ongoing technology innovations, such as predictive AI.	Cost-Neutral One-Time Sustainable*	Existing External One-Time Additional
Explore dynamic and emerging **wayfinding and passenger information technologies** at stops and stations, including real-time information displays.	Cost-Neutral One-Time Sustainable*	Existing External One-Time
Explore and evaluate **microtransit and paratransit operational / scheduling software** to improve coordination and efficiencies between the two services.	Cost-Neutral One-Time Sustainable*	Existing External One-Time
Refine the **ZEB (EV/Hydrogen) Transition** Plan to incorporate new service options and technology improvements through periodic updates.	Cost-Neutral One-Time Sustainable*	External One-Time
Mid Term (5-10 years)		
Strengthen regional mobility coordination opportunities by assessing **Mobility as a Service (MaaS)** options as technology advances.	Sustainable	Existing External One-Time
Review **autonomous vehicle integration** feasibility as technology advances.	Sustainable	Existing External One-Time

**Required for long-term implementation and/or program expansion*

Regional Partnerships

Strengthen regional partnerships to align mobility planning efforts and implement TMP recommendations.

Strategies	Funding Options	Staffing Options
Near Term (<5 years)		
Transit-Oriented Development: Engage with local stakeholders to evaluate mobility and land use needs and opportunities within key redevelopment areas, especially in the context of The Rapid TOD/Joint Development strategies and ITP Member Communities' Master Plans.	Cost-Neutral One-Time Sustainable*	Existing External One-Time
Service Expansion: Engage with local communities to establish service agreement standards that allow service extensions, or other context-relevant service expansion, in non-ITP member jurisdictions.	Cost-Neutral Sustainable*	Existing
Regional Coordination: Endorse the GVMC's efforts to align regional mobility services by contributing to the GVMC TDM working groups and by engaging with jurisdictions to implement TDM strategies.	Cost-Neutral One-Time Sustainable*	Existing
Mobility Hubs: Collaborate with local governments to select and develop future mobility hub sites.	Cost-Neutral One-Time* Sustainable*	Existing
One Time Funding: Support regional transit and mobility initiatives by pursuing discretionary funding opportunities in partnership with GVMC and member jurisdictions.	Cost-Neutral	Existing External One-Time
Regional Growth: Collaborate with regional economic development corporations to align mobility solutions and regional growth needs, such as marketing contracted services and last-mile solutions to private sector employers and institutions.	Cost-Neutral	Existing External One-Time

**Required for long-term implementation and/or program expansion*

RECOMMENDATION CONCEPTS

COMMUNITY AWARENESS AND EDUCATION AWAE-1

AWAE – 1: Explore additional ITP community marketing and/or outreach strategies and programming.
Examples of such programs include:

- » Community “adopt-a-stop“
- » Youth education program (with schools)
- » Community transit ambassador
- » Expand coordination with local stakeholders to promote placemaking during new stop placement and design processes


Source: The Rapid TMP

NEXT STEPS

Y 1	Coordinate with local stakeholders to develop outreach programming
Y2	Implement community marketing and/or outreach strategies and programming

CONTEXT: Community awareness and education was noted as an important part of the TMP in stakeholder and public outreach. The Spring 2024 engagement highlighted the need to expand education on transit ridership for youth and supporting riders who have language barriers with community transit ambassadors.
Example of programs include:

- »Engage local residents and businesses in maintaining and enhancing bus stops.
- »Collaborate with schools to educate youth about transit ridership and its benefits.
- »Train volunteers to assist riders, including those facing language barriers and promote assistance programs.
- »Promote placemaking during the design and placement of bus stops.

IMPACT: Building community stakeholder programming and marketing strategies encourages collaboration within the community. Partnerships with schools, community members through “adopt-a-stop “, transit ambassadors, and local stakeholders enables The Rapid to support the Grand Rapids and surrounding areas communities in an impactful way.

IMPLEMENTATION: To implement this strategy, The Rapid will continue stakeholder focus groups, gather feedback from transit riders, partner with local businesses, and utilize social media to build connections with community members.

FUNDING SCENARIOS

- Cost Neutral
- One-Time
- Sustainable Funding

STAFFING SCENARIOS

- Existing Staff
- External Assistance One-Time
- Additional Staff Needed

RECOMMENDATION CONCEPTS

COMMUNITY AWARENESS AND EDUCATION AWAE-2

AWAE – 2: Partner with external stakeholders to increase advertising and marketing opportunities that promote transit use.

Source: The Rapid TMP

NEXT STEPS

Y 1	Identify and establish partnerships with external stakeholders to develop joint advertising and marketing initiatives.
Y2	Implement advertising and marketing that promotes transit use

CONTEXT: Increasing advertising and marketing efforts through partnerships with external stakeholders could raise awareness about The Rapid transit services.

IMPACT: Partnering with external stakeholders will amplify marketing efforts leading to increased transit ridership and greater community engagement. This strategy could also foster stronger community engagement.

IMPLEMENTATION: To implement this strategy, The Rapid will develop a stakeholder engagement plan, create marketing materials, and evaluate the success of marketing campaigns.

FUNDING SCENARIOS

- ✓ Cost Neutral
- ✗ Discretionary Funding*
- ✓ Sustainable Funding

*Discretionary funding may be used to operate services as a pilot.

STAFFING SCENARIOS

- ✓ Existing Staff
- ✓ External Assistance One-Time
- ✗ Additional Staff Needed

RECOMMENDATION CONCEPTS

COMMUNITY AWARENESS AND EDUCATION AWAE-3

AWAE – 3: Engage tourism and visitors' organizations to promote transit services to tourists, visitors, and to special events.

NEXT STEPS

Y 1	Partner with tourism and visitors' organization stakeholders
Y1	Promote transit services at events through potential fare discount programs for events

CONTEXT: The Rapid service area hosts major events and tourist attractions such as ArtPrize which could be trip generators for The Rapid. Stakeholder outreach discussions highlighted the importance of encouraging transit usage to events and for tourists or visitors. Stakeholders noted that transit needs to be safe and easy to use for visitors, tourists, and eventgoers.

IMPACT: Promoting transit usage over single-occupancy vehicle usage will reduce vehicle congestion at events and destinations. Visitors can utilize transit to travel throughout the service area without the need for a vehicle. First and last mile connections can also be facilitated through multi-mobility options like electric scooters or bikes.

IMPLEMENTATION: There is community and stakeholder interest in improving the promotion of transit services to tourists, visitors, and to special events. The Rapid can cultivate relationships with tourism and visitors' organizations to encourage transit usage. The Rapid could also promote transit services at events through potential fare discount programs at events.

FUNDING SCENARIOS

- ✓ Cost Neutral
- ✗ Discretionary Funding*
- ✓ Sustainable Funding

*Discretionary funding may be used to operate services as a pilot.

STAFFING SCENARIOS

- ✓ Existing Staff
- ✓ External Assistance One-Time
- ✗ Additional Staff Needed

RECOMMENDATION CONCEPTS

EXISTING SERVICE IMPROVEMENTS

ESI - 1: Examine and identify options to improve the effectiveness of microtransit

Image source: The Rapid

NEXT STEPS

Y 1 Review the results of The Rapid's ongoing microtransit study

Y 2 Implement recommended changes to Rapid Connect operations

Microtransit is an emerging mobility option that helps expand service coverage. Additional assessment of The Rapid's existing microtransit operations are necessary to operate the service more effectively.

CONTEXT: Launched in January 2022, Rapid Connect is an on-demand service that provides a flexible curb-to-curb mobility option within two service areas located in Kentwood and Walker that have been historically underserved by public transportation. Rapid Connect operations were evaluated as part of the TMP Existing and Future Conditions Assessment and microtransit was evaluated in the Regional Connectivity and Market Analysis as an emerging mobility option.

IMPACT: With an average trip length of 3-3.5 miles, Rapid Connect and other microtransit service models have the potential to fill first/last-mile gaps between fixed-route transit and low-density areas not traditionally served by transit. With the defined boundaries of microtransit zones, the service model also lends itself well to contracted services.

IMPLEMENTATION: The Rapid is currently undergoing a microtransit study to improve existing microtransit zones and potentially add additional zones.

FUNDING SCENARIOS

- ✓ Cost Neutral
- ✗ Discretionary Funding*
- ✓ Sustainable Funding

*Discretionary funding may be used to operate services as a pilot.

STAFFING SCENARIOS

- ✓ Existing Staff
- ✓ External Assistance
- ✗ Additional Staff Needed

RECOMMENDATION CONCEPTS

EXISTING SERVICE IMPROVEMENTS ESI-2

ESI - 2: Review feasibility of first-mile / last-mile shared mobility solutions

Image source: WOODTV

NEXT STEPS

- Y 1 Engage with regional stakeholders and ITP Member Communities
- Y 2 Define implementation strategy
- Y 3 Secure funding and pilot implementation

Review feasibility of implementing first-mile / last-mile mobility solutions (such as micromobility) to other jurisdictions, in tandem with Rapid Connect microtransit services.

CONTEXT: Nonmotorized travel and micromobility was a community interest expressed during public engagement feedback as well as by regional agency stakeholders, such as GVMC in the Nonmotorized Transportation and Micromobility Plan and the City of Grand Rapids' recent E-Scooter and E-Bike Share Program Pilot.

IMPACT: Similar to microtransit, micromobility has the potential to fill first-mile / last-mile gaps between fixed-route transit and areas not traditionally served by transit. An additional benefit of shared mobility is access to a wide variety of transportation modes without burdens of individual ownership.

IMPLEMENTATION: There are two approaches to shared mobility implementation. The first is to support regional facilitation of micromobility rollout. The second is direct implementation of shared mobility solutions by The Rapid within the existing service area. Selection between the two approaches will be dependent on interest from ITP Member Communities and the implementation approach of regional mobility partners.

FUNDING SCENARIOS

- Cost Neutral
- Discretionary Funding*
- Sustainable Funding

*Discretionary funding may be used to operate services as a pilot.

STAFFING SCENARIOS

- Existing Staff
- External Assistance
- Additional Staff Needed

RECOMMENDATION CONCEPTS

EXISTING SERVICE IMPROVEMENTS ESI-3

ESI - 3: Continue to invest in existing productive routes

Image source: The Rapid

NEXT STEPS

Y 1-5 Prioritize service improvements for high-performing routes identified in the TMP

Y 3-5 Secure long-term sustainable operating funds

A core network of reliable, high-performing routes builds community confidence in a transit system and serves as a baseline upon which to build robust systems with a variety of service types and contexts.

CONTEXT: Since the last TMP, The Rapid has invested in more frequent routes and streamlined route design. However, the current TMP process detailed how long travel times and low service frequencies make transit a less convenient option than traveling by personal vehicle.

IMPACT: Discussions during community focus group sessions identified many community benefits to improving existing services, including but not limited to attracting talented workforces to the region and new riders.

IMPLEMENTATION: Community feedback throughout the TMP expressed a strong preference for The Rapid to remain focused on investing in the current system prior to regional connections. As The Rapid is generally operating within a tight operating budget, prioritization of routes for investment is critical to implementation. Once sustainable operating funding is secured, The Rapid could build on this strategy and the mid- and long-term strategies for a high-frequency core network redesign could be considered.

FUNDING SCENARIOS

- ✓ Cost Neutral
- ✗ Discretionary Funding
- ✓ Sustainable Funding

STAFFING SCENARIOS

- ✓ Existing Staff
- ✗ External Assistance
- ✗ Additional Staff Needed

RECOMMENDATION CONCEPTS

EXISTING SERVICE IMPROVEMENTS

ESI - 4: Explore tools and resources to support expanded service hours

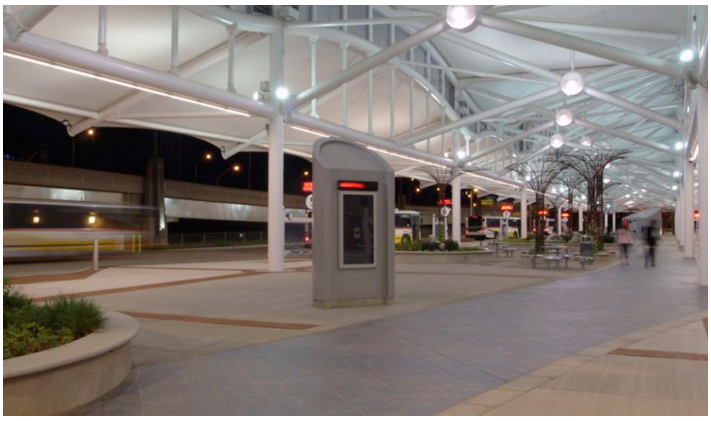


Image source: Birdair

NEXT STEPS

Y 1-3 Secure long-term sustainable operating funds

Y 3 Determine extended service hour span

Extended service hours could include earlier or later weekday service, as well as extended service hours on weekends.

CONTEXT: The current Rapid system is heavily reliant on weekday ridersip. 65-71% of respondents to the fall engagement survey identified service hours as one of the most important improvements to the current travel system. This was also identified during focus groups as important from an economic perspective for third-shift workers.

IMPACT: Expanded service hours represent an opportunity to capture the share of the economy dedicated to warehousing and logistics, health care, and other jobs with shifts that don't line up with typical office hours. Additionally, increasing service hours improves the liklihood that The Rapid is operating when a rider desires to use the service, improving overall customer experience and perception of transit as a viable alternative to driving.

IMPLEMENTATION: As The Rapid is generally operating within a tight operating budget, expansion of service hours will not be feasible without service cuts elsewhere. Once sustainable operating funding is secured, The Rapid may add service hours. Additional impacts include increased operations and maintenance resources, such as vehicle wear and tear and staffing.

FUNDING SCENARIOS

- ✗ Cost Neutral
- ✗ Discretionary Funding*
- ✓ Sustainable Funding

STAFFING SCENARIOS

- ✗ Existing Staff
- ✗ External Assistance
- ✓ Additional Staff Needed

RECOMMENDATION CONCEPTS

EXISTING SERVICE IMPROVEMENTS

ESI-6

ESI-6: Explore opportunities to coordinate fares and technology with regional multi-modal providers. Examples of opportunities include implementation of the West Michigan Express pilot and development of a mobility wallet.

NEXT STEPS

Y 1	Continue to coordinate with current planning efforts for potential new regional transit services.
Y2-Y3	Evaluate fare payment systems that allow for integration between service providers.

CONTEXT: With the potential for new transit routes in the region, including the West Michigan Express and other transit options that may be recommended through the Kent County Mobility Study, there may be a need for a regional fare payment system to connect the Rapid with other transit services.

IMPACT: The Rapid currently uses the Wave fare payment system which allows riders to tap a reloadable card or use their mobile device to pay for rides. The Wave is integrated into the Rapid's fare capping program. As future transit services are implemented, there may be a need to integrate the Wave or other fare payment systems to allow for a seamless transfer between services.

IMPLEMENTATION: Assess the ease of integration of services with fare payment systems of vendors including Wave. Begin to coordinate the implementation with the other regional transit providers to plan for options for fare categories, mobility wallet, transfers, fare capping, and management of the overall fare program.

FUNDING SCENARIOS

- ✓ Cost Neutral
- ✗ Discretionary Funding*
- ✓ Sustainable Funding

*Discretionary funding may be used to operate services as a pilot.

STAFFING SCENARIOS

- ✓ Existing Staff
- ✓ External Assistance
- ✗ Additional Staff Needed

RECOMMENDATION CONCEPTS

FUTURE SERVICE EXPANSION FSE-1

FSE - 1: Cultivate service opportunities and relationships outside the ITP service area

Image source: Rapid TMP

NEXT STEPS

- Y 1 Identify and strategize stakeholder engagement opportunies
- Y 1 Review and formalize flexible service agreement processes
- Y 2 Identify operationally cost-neutral transit solutions for regional stakeholders

Cultivating service opportunities and relationships outside the ITP Service Area helps to build implementation partnerships and champions context-relevant service expansion in areas in need of transportation services.

CONTEXT: Engagement with various community stakeholder groups during the TMP process identified areas of opportunitiy or need for transit services outside the current ITP service area. At the time of the TMP planning process, there was not an existing process to facilitiate or fund these service opportunities.

IMPACT: Laying the groundwork for The Rapid to offer more flexible service agreement options for various community stakeholder groups to provide transit services, may make transit more feasible in targeted need-specific areas, potentially closing transit gaps across the region.

IMPLEMENTATION: While there may be community interest in extending transit services, operational and funding considerations are critical to implementation. Beginning by cultivating relationships outside the current service area positions The Rapid to offer solutions as needs and opportunities solidify. One such example might include outcomes of the concurrent Kent County Mobility Study.

FUNDING SCENARIOS

- ✓ Cost Neutral
- ✓ Discretionary Funding*
- ✓ Sustainable Funding

*Discretionary funding may be used to operate services as a pilot.

STAFFING SCENARIOS

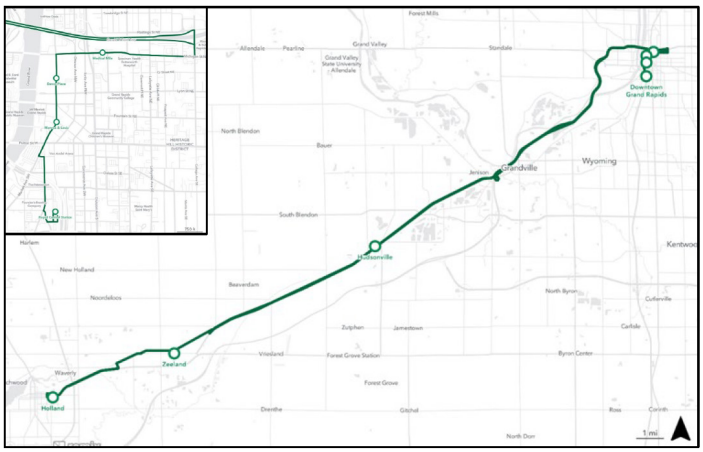
- ✓ Existing Staff
- ✗ External Assistance
- ✗ Additional Staff Needed

RECOMMENDATION CONCEPTS

FUTURE SERVICE EXPANSION

FSE-2

FSE - 2: Continue towards implementation of the West Michigan Express (WMX) Pilot



NEXT STEPS

- Y 1 Build consensus with the WMX Task Force and broader community
- Y 2 Secure funding, define pilot period, and procure other operational resources
- Y 3 Market service and begin pilot

The West Michigan Express (WMX) Pilot is a recommended express bus service plan along the Chicago Road corridor, with stops in Holland, Zeeland, Hudsonville, and Grand Rapids.

CONTEXT: The West Michigan Express (WMX) Pilot was developed out of a collaborative effort between The Rapid and The WMX Task Force to review feasibility of previous WMX planning efforts. The WMX Task Force was formed in 2017 to link communities along the Chicago Drive (M-121) corridor - including Holland, Zeeland, Hudsonville, Grandville, and Grand Rapids with commuter-based public transportation.

IMPACT: Currently, this corridor's most convenient travel mode is personal vehicle travel or other automobile-based travel modes. Goals of the WMX Pilot are to gather data and generate familiarity with the service among the public. At the end of the pilot, The Rapid can evaluate service performance and plan for potentially long-term implementation of services following the pilot.

IMPLEMENTATION: A pilot implementation plan was developed during the TMP, including implementation phasing. The two most critical steps will be finalizing service concepts with community stakeholders and securing funding for the pilot.

FUNDING SCENARIOS

- ✗ Cost Neutral
- ✓ Discretionary Funding*
- ✓ Sustainable Funding

*Discretionary funding may be used to operate services as a pilot.

STAFFING SCENARIOS

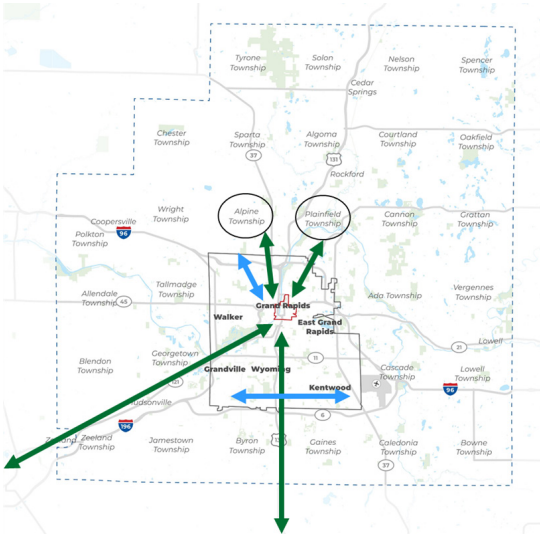
- ✓ Existing Staff
- ✓ External Assistance
- ✓ Additional Staff Needed

RECOMMENDATION CONCEPTS

FUTURE SERVICE EXPANSION

FSE-3

FSE - 3: Review feasibility of top recommended intercounty service concepts



NEXT STEPS

- Y 1 Engage corridor stakeholders to finalize service needs
- Y 1 Evaluate feasibility of each service concept and corridor
- Y 2 Secure funding and plan for pilot implementation

Intercounty service concepts are early ideas for potential future services along or near corridors identified in the TMP Intercounty Corridor Analysis. Areas of potential future concepts include Alpine Avenue and Alpine Township, Walker Avenue and the City of Walker, Plainfield Avenue and Plainfield Township, Barry Street / 54th Avenue between Grandville and the Airport, and finally, US-131 south of The Rapid service area.

CONTEXT: Intercounty service concepts were developed based on results of the Intercounty Corridor identification and prioritization analysis, as well as interest in areas for potential service expansion throughout TMP public engagement activities.

IMPACT: Future service expansion concepts will offer users mobility mode alternatives to personal vehicles when traveling across the region. In addition to closing mobility gaps for those who rely on transit, increased regional connectivity has the potential to bring economic benefits to residents and businesses within the connected communities.

IMPLEMENTATION: All recommended intercounty service concepts (with the exception of Walker Ave and Barry St/54th Ave) connect to areas outside of The Rapid's current service area. Service expansion would require interlocal service agreements, in addition to more funding.

FUNDING SCENARIOS

- ✗ Cost Neutral
- ✓ Discretionary Funding*
- ✓ Sustainable Funding

*Discretionary funding may be used to operate services as a pilot.

STAFFING SCENARIOS

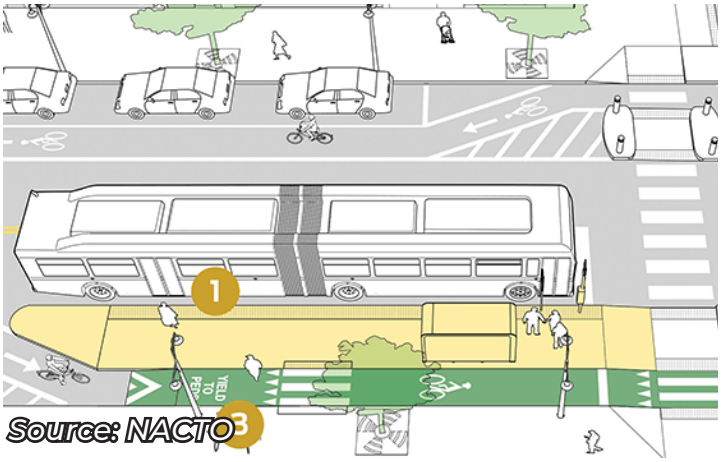
- ✓ Existing Staff
- ✓ External Assistance
- ✓ Additional Staff Needed

RECOMMENDATION CONCEPTS

TRANSIT-ORIENTED DEVELOPMENT

TOD-1

TOD – 1: Broaden transit-supportive streetscape and roadway design guidelines. Transit-supportive streetscape and roadway design guidelines will facilitate convenient and efficient transit usage.



NEXT STEPS

Y1	Engage community stakeholders
Y2	Develop streetscape and roadway design guidelines

CONTEXT: Current roadway and streetscape designs often prioritize vehicle throughput over multimodal access. Updating these guidelines ensures alignment with TOD principles and supports walkability, safety, and transit efficiency.

IMPACT: Transit supportive streetscape and roadway design supports bicycle and pedestrian modes and improves access, safety and connectivity to transit service. The implementation of the guidelines will make transit a more attractive mode and improve overall customer experience.

IMPLEMENTATION: Collaborate with service area city planning and public works departments, as well as the Grand Valley Metropolitan Council, to align with comprehensive plans, zoning, design guidelines, and capital improvement plans.

FUNDING SCENARIOS

- ✓ Cost Neutral
- ✗ Discretionary Funding*
- ✓ Sustainable Funding

*Discretionary funding may be used to operate services as a pilot.

STAFFING SCENARIOS

- ✓ Existing Staff
- ✓ External Assistance One-Time
- ✗ Additional Staff Needed

RECOMMENDATION CONCEPTS

TRANSIT-ORIENTED DEVELOPMENT

TOD-2

TOD – 2: Establish mobility hub standards and policies.

Source: CoMoUK

NEXT STEPS

Y1	Conduct existing conditions and needs assessment of potential mobility hub locations
Y2	Develop design standards and guidelines

CONTEXT: Mobility hubs enhance multimodal connectivity and improve transit access. Standardizing mobility hub design and function ensure efficient implementation and consistency for passenger facilities across The Rapid service area. The guidelines will provide guidance and direction for The Rapid and potential developers with siting, planning, amenities, and funding opportunities.

IMPACT: Enhances the rider experience with improved multimodal connections and customer experience. Mobility hubs can help to improve access to active transportation modes, micromobility, ridesharing and electric charging stations. The Rapid can explore other customer amenities that can be included at hubs including retail, wifi and real time information.

IMPLEMENTATION: Using ridership data, land use, and equity considerations, The Rapid can select sites for mobility hubs and create design standards and guidelines. Each mobility hub can be scaled based on potential usage and available funding.

FUNDING SCENARIOS

- ✓ Cost Neutral
- ✗ Discretionary Funding*
- ✓ Sustainable Funding

*Discretionary funding may be used to operate services as a pilot.

STAFFING SCENARIOS

- ✓ Existing Staff
- ✓ External Assistance One-Time
- ✗ Additional Staff Needed

RECOMMENDATION CONCEPTS

TRANSIT-ORIENTED DEVELOPMENT

TOD-3

TOD – 3: Establish TOD and development design guidelines.

NEXT STEPS

Y1 Review existing conditions of TOD and development in the service area

Y2 Develop TOD and development design guidelines in collaboration with local jurisdictions

CONTEXT: TOD and development design guidelines encourage transit-supportive development. The guidelines will also provide direction for joint-development partners on the design elements preferred for developers to include in development plans. Other key considerations for the TOD guidelines include compactness and density of development, mixed use types and feasibility, public realm, equity and parking considerations.

IMPACT: Creating comprehensive TOD and development design guidelines will help The Rapid better define the framework for the vision of TOD at their facilities that will feed into the final development plans.

IMPLEMENTATION: Conduct public workshops and developer engagement to understand local

FUNDING SCENARIOS

- ✓ Cost Neutral
- ✗ Discretionary Funding*
- ✓ Sustainable Funding

*Discretionary funding may be used to operate services as a pilot.

STAFFING SCENARIOS

- ✓ Existing Staff
- ✓ External Assistance One-Time
- ✗ Additional Staff Needed

RECOMMENDATION CONCEPTS

TRANSIT-ORIENTED DEVELOPMENT

TOD-4

TOD – 4: Leverage redevelopment potential of Rapid-owned real estate, such as The Rapid Central Station, by executing joint development strategies.

Source: Birdair

NEXT STEPS

Y1	Conduct feasibility and market analysis study
Y2	Develop joint development vision and strategies
Y3	Identify development partners and issue RFPs

CONTEXT: The Rapid has the opportunity to leverage the joint development potential for the Rapid Central Station and other surrounding sites including Amtrak and the Rapid Administrative Building.

IMPACT: Encourages using underutilized real estate to benefit the community including potential housing, retail, or civic spaces near transit. This opportunity could improve density in the area, diversify uses, increase transit ridership, and develop a potential long term revenue source for the agency.

IMPLEMENTATION: Conduct community engagement to align development with local needs, develop a market feasibility study for joint development opportunities, and collaborate with development partners. A key part of the process is the identify a vision and priorities and develop a market and feasibility study for the site. This would allow the Rapid to have the basis for a site definition, conceptual TOD program and pro forma before preparing a solicitation.

FUNDING SCENARIOS

- ✓ Cost Neutral
- ✗ Discretionary Funding*
- ✓ Sustainable Funding

*Discretionary funding may be used to operate services as a pilot.

STAFFING SCENARIOS

- ✓ Existing Staff
- ✓ External Assistance One-Time
- ✗ Additional Staff Needed

RECOMMENDATION CONCEPTS

REGIONAL PARTNERSHIPS

RP-1

RP - 1: Strengthen regional partnerships to align mobility planning efforts and implement TMP recommendations

» **Transit-Oriented Development:** Engage with local stakeholders to evaluate mobility and land use needs and opportunities within key redevelopment areas, especially in the context of The Rapid TOD/ Joint Development strategies and ITP Member Communities' Master Plans.

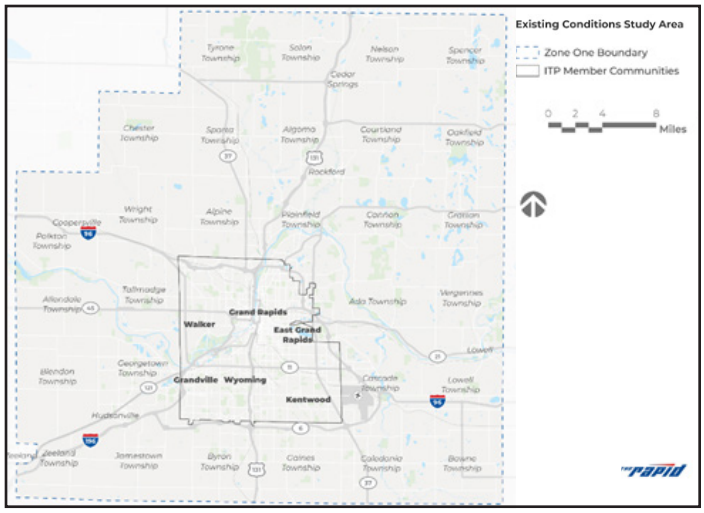
» **Service Expansion:** Engage with local communities to establish service agreement standards that allow service extensions, or other context-relevant service expansion, in non-ITP member jurisdictions.

» **Regional Coordination:** Endorse the GVMC's efforts to align regional mobility services by contributing to the GVMC TDM working groups and by engaging with jurisdictions.

» **Mobility Hubs:** Collaborate with local governments to select and develop future mobility hub sites.

» **One Time Funding:** Support regional transit and mobility initiatives by pursuing discretionary funding opportunities in partnership with GVMC and member jurisdictions.

» **Regional Growth:** Collaborate with regional economic development corporations to align mobility solutions and regional growth needs, such as marketing contracted services and last-mile solutions to private sector employers and institutions.



NEXT STEPS

Y 1	Form the TMP Implementation Stakeholder Committee
Y 1	Engage Stakeholder Committee members to identify transit coordination opportunities within their organizations
Y 3	Develop standard processes and formalize transit agency involvement

CONTEXT: The most critical implementation strategy for the TMP is embedded in regional coordination. Throughout the TMP, coordination with local and regional stakeholders to bring about transit-supportive development and collaborate to find service expansion opportunities was heavily discussed in the Steering, Technical Advisory, and Planning and Technology Committees. The benchmarking peer analysis and aspirational peer interviews also identified goals and strategies for implementation, including coordination with regional partners and stakeholders in order to implement strategic goals.

IMPACT: While transit services can drive private sector development interest through capital investments, they do not have any direct land use control outside of properties they own. Likewise, transit services can be negatively impacted by development form and density that are unsupportive of transit mobility needs. Strengthening partnerships with regional agencies and stakeholders help transit agencies stay relevant and involved in decisions by other agencies that may impact service delivery.

IMPLEMENTATION: Implementation of Regional Coordination is embedded in all TMP Recommendation Strategies. For example, development of the recommended TOD design guidelines can only be implemented in partnership with land authority jurisdictions. Similarly, any funding tool in the toolbox that requires state-level legislative changes will require support from elected and appointed officials within and beyond The Rapid's service area.

FUNDING SCENARIOS

- ✗ Cost Neutral
- ✓ Discretionary Funding*
- ✓ Sustainable Funding

*Discretionary funding may be used to operate services as a pilot.

STAFFING SCENARIOS

- ✓ Existing Staff
- ✓ External Assistance
- ✗ Additional Staff Needed

Roadmap to Implementation

The TMP Roadmap is a guide for how to implement the recommendation strategies according to their implementation phases, once they have been prioritized via funding options, staffing options, and public feedback. The roadmap includes strategies for implementation and a phasing strategy.

Phasing Strategy

The cyclical review of TMP progress, existing conditions, and implementation of TMP Recommendations and Implementation Strategies are visually represented in the following diagram.

TMP Implementation Years 1-15 +

**If needed – funding tools identified and implemented in the near-term may be sufficient to implement mid and long term strategies. Therefore, exploring additional funding tools may not be needed in the mid-term and long-term. Evaluation of operational funding projections is recommended during evaluation at the end of each 5-year cycle.*

Note: The phasing strategy for the remaining 16-20 years repeats the same as the process for years 11-15.

Implementation Strategies

Implementation strategies as near-term recommendation strategies that set The Rapid up for successful implementation of the TMP. These include a TMP Implementation Stakeholder Committee, exploration of additional funding sources, additional staffing needs, and a periodic cycle to review and evaluate the TMP outcomes according to performance measures.

TMP Implementation Stakeholder Committee

The most critical implementation strategy for the TMP is the Implementation Stakeholder Committee. The purpose of this committee would be to take on and champion components of the TMP recommendations that are beyond the jurisdiction of the transit agency. For example, development of the recommended TOD design guidelines by The Rapid can only be implemented in partnership with land authority jurisdictions within The Rapid's service area. Similarly, any funding tool in the toolbox that requires state-level legislative changes will require support from elected and appointed officials within and beyond The Rapid's service area.

The stakeholder committee could be comprised of the following:

- Jurisdictional implementation partners, such as staff and elected officials from cities, regional councils, and counties
- The Rapid Board and staff
- Community leaders
- Transit advocates

Additional Funding Mechanisms

The next most important implementation strategy for TMP implementation is the identification of additional funding mechanisms from the Funding Toolbox, detailed in **Appendix A**. Throughout the TMP process, the need for a long-term sustainable increase in operating funds was critical to expand many of the service expansion opportunities and innovative strategies described in the *Recommendation Strategies* section..

Additional Staffing Needs

Similar to funding mechanisms, additional administrative staffing will be needed to implement some of the new initiatives identified in the TMP. Any increase in service area or operations due to the TMP recommendations will likewise require an increase in operations and maintenance staff.

Periodic Review and Reevaluation of the TMP

The value of periodic review and reevaluation of TMP outcomes allows the TMP to serve as a dynamic, living document that can respond to changing demographic, economic, political, or environmental conditions. Reevaluation of the TMP should occur at least once every 5 to 10 years until 20-years pass and it is time to renew the TMP process.

The review and reevaluation processes are as follows:

1. **Review TMP Progress**
   Review of TMP progress identifies the implementation status of all "near term" (under 5 years) recommendations. Those that are implemented should be evaluated against performance measures and discussed through community input.

   For example, The Rapid may have implemented bus stop design standards and begins installation of new stop amenities, but they do not have the desired effect on ridership or are they are not received positively by the community. The Rapid may put installation of new bus stop amenities on hold and add "review and update bus stop design guidelines" to the next 5-years (mid-term) of recommendation strategies.

2. **Re-Analyze Existing Conditions for Significant Changes**
   Analysis of updated existing conditions following the methodology set out in the ***Existing and Future Conditions*** and ***Market Analysis*** provide insight into whether existing conditions are trending away from assumptions built into the TMP process. Additionally, The Rapid may choose to check in with aspirational peer agencies from the Peer Review to monitor how their approach to recommended peer strategies may have changed over time.

   Measures that may be updated from ***Existing and Future Conditions*** and ***Market Analysis*** include but are not limited to the following:

   - Operating budget projections, revenue, and expenses by source
     Source: The Rapid Five-Year Financial Projection
   - Recommendations from ongoing planning efforts or development plans
     Source: Regional and local plans, studies, and developments
   - Existing and future household and employment growth and density
     Source: GVMC Metropolitan Transportation Plan (MTP) Projections and ACS 5-Year Estimates
   - Demographics: Transit-Propensity
     Source: ACS 5-Year Estimates
   - System-wide and per-service ridership trends (BRT, Fixed-Route, On-Demand Service, PASS, and Go!Bus Paratransit)
     Source: The Rapid ridership reports for each fiscal year
   - Origin-Destination Trip Pairs
     Source: Replica
   - Regional mode-split
     Source: ACS 5-Year Estimates or Replica
   - Travel time by mode
     Source: Replica
   - Service Design and Delivery Performance *(see section on performance measures)*
     Source: The Rapid performance metrics and community feedback

3. **Re-Set TMP Strategies (as needed)**
   Once existing conditions have been evaluated, The Rapid may choose to adjust strategies for the next five years. For example, if after the end of the first five years, The Rapid identified an area of rapid growth, densification, or general development activity, The Rapid may add "Examine and identify service concepts" for the new area to the next phase of TMP strategies.

   In another example, out of the six intercounty corridors identified for feasibility review in the first five years, The Rapid may find an express bus along the US-131 corridor was the most feasible corridor and service concept. As such, The Rapid may add "Develop a service plan and implement an express bus along the US-131 corridor."

   In a final example if The Rapid was to secure a sustainable and long-term source of additional operational funds, then a few of recommendation strategies recommending The Rapid "review" or "study" an initiative could be adjusted to implement in the mid or long term.

Performance Measures

Performance Measures provide a framework for how The Rapid designs and monitors service changes. They are created to set benchmarks for The Rapid to improve productivity and achieve a sustainable system that meets the mobility needs of the agency. Although The Rapid currently monitors key performance metrics, it is important to continue to update performance measures over time based on the agency's goals and vision.

The section below identifies the process for defining performance measures and service standards to establish a framework for effective management, evaluation, and planning for both the fixed route and demand response services. The standards guide future service evaluation; set standards for future service changes including expansion and reduction of service; and ensure compliance with the Americans with Disabilities Act (ADA), Title VI, and other local, state and federal requirements.

Performance measures are used following the four steps below:

1) **Service Types:** define existing service types and the key characteristics of each type.
2) **Guidelines and Best Practices:** identify underlying principles for providing effective public transit and best practices for design.
3) **Performance Measures:** provide a consistent framework for measuring the quality and efficiency of the transit system as well as providing a tool for the effective management, evaluation, and planning of transit services.
4) **Service Standards:** define how service performance is evaluated and establish benchmarks for determining whether changes are needed. These standards support overall goals and intent of the guidelines.
5) **Service Evaluation** describe the evaluation process from identifying ongoing issues, developing goals and solutions, and evaluating potential solutions.

Any service changes made through implementation of the TMP should be monitored for effectiveness. **Table 5** provides an overview of recommended performance measures to monitor and report performance. These recommended performance measures were selected based on information retrieved from the *Future and Existing Conditions Report*, *Regional Connectivity and Market Analysis*, *Peer Review* and *Public Engagement Summary*.

Appendix B details performance measures from **Table 5.**

Table 5: Performance Measures Overview

Stop and Route Design
Stop Design
Route Design
Service Level
Productivity
Cost Effectiveness
Reliability
Service Delivery
Transit Dependency
Desire Lines
Incidents of Service Interruption
Load Maximums
Operational efficiency
Planning and scheduling
Customer Feedback
Economic Prosperity & Impact
Others
Rider Experience and Comfort
Accessibility and Mobility
Sustainability

In addition to the performance measures listed above, other types of metrics were introduced through the TMP process including additional equity performance metrics. Examples of these types of metrics were assessed from equity plans in Houston and Los Angeles, including:

Employment

- Number of jobs accessible by transit
- Work sites with Workers with Jobs Paying Less than $15,000 Annually

Housing

- Number of housing units affordable to low income accessible by transit
- Homes with Workers with High Education or Less

Demographics

- Single parent households

Access

- To medical and health resources

Appendix A – Funding Toolbox

Name of Funding Tool	Description	Current ITP Source	Peer Examples* (for New Revenue Types)	Funding Options	Potential Revenue Est.**	Primary Uses (Capital or O&M)	Implementation Challenges
Directly Generated Revenue							
Fares	Directly generated passenger fare revenue.	Yes	Current ITP Revenue Source	Annual / Recurring	Moderate	O&M	This is a current revenue source. It is already implemented. Key challenge is in dependence on ridership to maintain current funding levels.
Concessions	Directly generated revenue through the sale of vending and non-fare merchandise.	Yes	Current ITP Revenue Source	Annual / Recurring	Low	O&M	Current Source. Concession revenue levels may be susceptible to depressed ridership conditions.
Advertising	Directly generated revenue from sales of advertising on transit vehicles or at stops.	Yes	Current ITP Revenue Source	Annual / Recurring	Low	O&M	Current Source. Maintaining advertisers and current revenue levels may be susceptible to depressed ridership conditions (note, this may not apply to external advertising such as bus wraps).
Sale of Transportation Services	Revenue from sale of (non-public transportation) services such as employer funded or special event shuttles. Does not include contributions reported as fares or local agency/ municipality revenue agreements for public transportation services. *Note, the above is a NTD definition. The Rapid provides Sale of Transportation Services under a contract with GVSU, GRCC, & DASH..*	Yes	Over 120 Agencies across multiple states (median revenue over $200,000, ~3-5% total revenue).	Annual / Recurring	Low	O&M	Current Source. The Rapid contracts service with regional institutions and municipalities. No major challenges. Agency must follow federal reporting rules for transportation services. Fare revenue may not be collected for privately funded trips. Care to ensure providing only public transit service exclusively and not charter services.

**Based on 2022 NTD Revenue reporting standards and supplemented by ITP staff review*

*****Potential Revenue**: **Low**: if lost, should not fundamentally change service revenue (<2%); **Moderate**: if lost, may impact service revenue (~10%); **Significant**: if lost, would have significant loss on service revenue. If gained, could fundamentally change the system.*

Name of Funding Tool	Description	Current ITP Source	Peer Examples* (for New Revenue Types)	Funding Options	Potential Revenue Est.**	Primary Uses (Capital or O&M)	Implementation Challenges
Park and Ride fees	Directly generated revenue from daily and overnight parking fees at high-demand transit commuter lots.	No	Houston MTA ($732,348, 1.3% total revenue); Flint MTA ($42,465, <1% total revenue).	Annual / Recurring	Low	O&M	No legislative challenges. Feasibility is dependent on having high demand parking lots (preferably over-capacity lots) at which ridership levels are not expected to be negatively impacted by fee to park.
Tax-Derived Sources (Local)							
Millage rate	Local property taxes.	Yes	Current ITP Revenue Source	Annual / Recurring	Significant	O&M	Must be renewed every few years via public election. May be subject to property tax fatigue (option to collaborate with other cities). Current millage rate is to expire in 2029.
(Local option) Gas Tax	Added local tax on purchases of gasoline. See State Gas Tax in *Formulaic - State Operating Assistance* below.	No	The Greater Cleveland Regional Transit Authority ($1,406,523, 2022); City of La Crosse (WI) ($33,235, 2022).	Annual / Recurring	Low	Legislation dependent	Legislative action needed. Currently the state does not allow for local option registration and motor fuel taxes.
Lottery Tax	Tax on Lottery proceeds.	No	Maricopa County Mass Transit (AZ) ($11,476,800, FY2022/23)	Annual / Recurring		Legislation dependent	Legislative action needed. Current revenue funds allocated to school aid fund.
Alcohol Tax	Added local sales tax on purchases of beer, wine and/or liquor.	No	Not reported	Annual / Recurring	Low	Legislation dependent	Legislative action needed. The current alcohol taxes in Michigan are earmarked for specific funds: the General Fund, School Aid Fund, and Convention Facility Fund.
Tobacco Tax	Local sales tax on purchase of tobacco or other nicotine-release products.	No	Not reported				

**Based on 2022 NTD Revenue reporting standards and supplemented by ITP staff review*
*****Potential Revenue**: **Low**: if lost, should not fundamentally change service revenue (<2%); **Moderate**: if lost, may impact service revenue (~10%); **Significant**: if lost, would have significant loss on service revenue. If gained, could fundamentally change the system.*

Name of Funding Tool	**Description**	**Current ITP Source**	**Peer Examples*** (for New Revenue Types)	**Funding Options**	**Potential Revenue Est.****	**Primary Uses** (Capital or O&M)	**Implementation Challenges**
General Revenue	Contribution from county or municipality general budget includes contributions reported as local agency/municipality revenue agreements for public transportation service.	Yes	Current ITP Revenue Source	Annual / Recurring	Moderate	O&M	Politically competitive funding source.
Marijuana Tax	Excise tax on marijuana establishments and the sale of marijuana.	No	Oregon and Washington allow for local tax on top of state sales tax, but no reported instances of direct transit funding	Annual / Recurring	Low	Legislation dependent	Legislative action needed. Current distribution of revenue is allocated towards municipalities and counties in which marihuana business is located, the school aid fund, and transportation fund (repair and maintenance of roads and bridges).
Sales Tax	Added local tax on general purchases.	No	Southwest Ohio Regional Transit Authority ($45,376,932, 2022), Madison County Transit District (IL) ($12,456,884, 2022)	Annual / Recurring	Moderate-significant	Legislation dependent	Current legal framework prohibits transit agencies from presenting a sales tax proposal to the state legislature. Implementing a sales tax would require a constitutional change. State constitution limits transit agencies from seeking funding through voter referendums.
TNC Tax	Tax on shared ride vehicles such as Ube/Lyft.	No	San Francisco MTA (~$7,000,000, FY2020/21); D.C. (6% of total fare, 83% of revenue); NY MTA ($2.75 per trip or $0.75 per rider if pooled, 100% revenue)	Annual / Recurring	Low	Legislation dependent	Legislative action needed. The funds received from registration fees the Limousine, Taxicab, and Transportation Network Company Act are required to be used to cover the costs of enforcing and administering this act.

**Based on 2022 NTD Revenue reporting standards and supplemented by ITP staff review*

*****Potential Revenue**: **Low**: if lost, should not fundamentally change service revenue (<2%); **Moderate**: if lost, may impact service revenue (~10%); **Significant**: if lost, would have significant loss on service revenue. If gained, could fundamentally change the system.*

Name of Funding Tool	**Description**	**Current ITP Source**	**Peer Examples*** (for New Revenue Types)	**Funding Options**	**Potential Revenue Est.****	**Primary Uses** (Capital or O&M)	**Implementation Challenges**
Rental Car Tax	Tax on rental vehicles.	No	Colorado Front Range Passenger Rail (projected $50,000,000 annually); Research Triangle Regional Public Transportation Authority and Piedmont Authority for Regional Transportation (NC) report combined revenues for TNC + rental car tax ($13,631,243 and $5,161,931, respectively, 2022)	Annual / Recurring	Moderate	Legislation dependent	Legislative dependent, but generally more politically acceptable since financial burden falls on primarily out-of-state residents.
Combined TNC/ Rental Car Tax	Tax on shared ride and/or rental car vehicles.	No	Research Triangle Regional Public Transportation Authority (NC) ($13,631,243, 2022), Piedmont Authority for Regional Transportation (NC) ($5,161,931, 2022)	Annual / Recurring	Low	Legislation dependent	Legislative action needed. TNC and rental car taxes are enforced separately. See 'TNC Tax' and 'Rental Car Tax' above.
Motor Vehicle Tax	Annual personal property tax for registered vehicles.	No	New Orleans Regional Transit Authority ($7,419,740, 2022), City of Fayetteville (NC?) ($638,198, 2022), City of Winston Salem (NC) ($306,979, 2022)	Annual / Recurring	Low	Legislation dependent	Legislative action needed. Currently the state does not allow for local option registration and motor fuel taxes.

**Based on 2022 NTD Revenue reporting standards and supplemented by ITP staff review*
*****Potential Revenue**: **Low**: if lost, should not fundamentally change service revenue (<2%); **Moderate**: if lost, may impact service revenue (~10%); **Significant**: if lost, would have significant loss on service revenue. If gained, could fundamentally change the system.*

Name of Funding Tool	Description	Current ITP Source	Peer Examples* (for New Revenue Types)	Funding Options	Potential Revenue Est.**	Primary Uses (Capital or O&M)	Implementation Challenges
Local Income Tax/Payroll Tax	Tax on earnings or payroll.	No	IndyGo ($66,529,739); Transit Authority of River City (Louisville $50,865,563)	Annual / Recurring	Moderate-significant	Legislation dependent	Legislative action needed. Currently, the cities of Grand Rapids, Walker, Muskegon Heights, Muskegon, Big Rapids, Ionia, and Portland in the Grand Rapids metropolitan area collect a local income tax at varying rates. In all of these municipalities, the majority of income tax revenue is allocated to the General Fund, with some funds designated for the maintenance of streets, sidewalks, and other public facilities.
Hotel/Motel Tax	Tax imposed on room rate to guests staying at hotels or motels.	No	New Orleans Regional Transit Authority ($9,855,868 (approved CY23 budget))	Annual / Recurring	Low	O&M	No legislative action needed as this is already being collected (Kent County) but would require reallocation of existing funds, which may pose political challenges. A recent trend of local governments and organizations advocating for the use of hotel/motel tax revenues to support public transit has been growing (e.g., Montrose, CO; Des Moines (DART), IA; Central Florida; Chittenden County, VT).
Other State Sources							
Formulaic - State Operating Assistance	State formula funding for operations. Partially funded through state gas tax.	Yes	Current ITP Revenue Source	Annual / Recurring	Significant	O&M	N/A
Formulaic - State Capital Assistance	State formula funding for capital projects.	Yes	Current ITP Revenue Source	Annual / Recurring	Significant	Capital	N/A

**Based on 2022 NTD Revenue reporting standards and supplemented by ITP staff review*

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Name of Funding Tool	Description	Current ITP Source	Peer Examples* (for New Revenue Types)	Funding Options	Potential Revenue Est.**	Primary Uses (Capital or O&M)	Implementation Challenges
Other Federal Sources							
Locally-Decided Discretionary Grants	Multiple programs e.g. CMAQ funding.	Yes	Current ITP Revenue Source	One time	Grant Dependent	Capital	N/A
Federally-Decided Discretionary Grants	Multiple programs e.g. Low No, Bus and Bus Facilities.	Yes	Current ITP Revenue Source	One time	Grant Dependent	Capital	N/A
Formula Grants	Multiple programs e.g. 5307 urban area formula grant.	Yes	Current ITP Revenue Source	Annual / Recurring	Grant Dependent	Capital	N/A
Fees/Fines							
Local Parking Fees	Diverts a portion of the parking /meter fees for city-controlled parking spaces to fund transit projects or services.	No	Not reported.	Annual / Recurring	Low	O&M	No legislative action is needed as this is already being collected. However, revenue potential is likely low based on political challenges in diverting from current obligations. *"Revenues derived from the extra tax levy authorized by this section may be used for the improvement of city streets in such amounts and on such projects as shall be mutually agreed upon by the county road commission and the governing bodies of the cities and approved by the board of supervisors." (Source: MCL – Section 224.20a)*
Local Vehicle Registration Fee	One-time fee on registration of a new vehicle. Includes vehicles purchased out of state for new residents (Divert portion of an existing fee to transit).	No	Town of Chapel Hill (NC) ($435,776, 2022); City of Madison (WI) ($6,868,623, 2022).	Annual / Recurring	Moderate	O&M	Permitted under Michigan Vehicle Code (Act 300 of 1949) 257.801j: "Regional transit authority may charge an additional tax on vehicle registrations but amount limited to no more than $1.20 for each $1,000 in value."

**Based on 2022 NTD Revenue reporting standards and supplemented by ITP staff review*
*****Potential Revenue**: **Low**: if lost, should not fundamentally change service revenue (<2%); **Moderate**: if lost, may impact service revenue (~10%); **Significant**: if lost, would have significant loss on service revenue. If gained, could fundamentally change the system.*

Name of Funding Tool	Description	Current ITP Source	Peer Examples* (for New Revenue Types)	Funding Options	Potential Revenue Est.**	Primary Uses (Capital or O&M)	Implementation Challenges
License and Title Fees	One-time fee associated with license renewal or title sale/transfer (Diverts portion of existing fee to transit).	No	Marin County Transit District (CA) (554,193, 2022); City of Greensboro (NC) ($1,074,409, 2022).	Annual / Recurring	Low	O&M	Politically competitive funding source.
Fine for Emissions Violation	Diverts a portion of citation-based revenue to transit funding.	No	Not reported	Annual / Recurring	Low	O&M	Legislative action needed. 324.5521 Emissions control fund has limitations on permitted expenditures.
Fare Evasion Fine	Fee or citation revenue collected as a result of fare policy enforcement/violations.	No report in NTD	Tri-County Metropolitan Transportation District of Oregon ($154,790, 2022), South Florida Regional Transportation Authority ($5,468, 2022)	Annual / Recurring	Low	O&M	May be susceptible to depressed ridership conditions.
Fines for Traffic and Parking Violation	Diverts a portion of citation-based revenue to transit funding. Funds are allocated for parking and all Mobile GR-related initiatives in Grand Rapids.	Yes	Current ITP Revenue Source	Annual / Recurring	Low	O&M	Present in Kentwood, Grand Rapids, and Wyoming (Silver Line corridor), but outside these areas, legislative action is required. Civil fines are to be “exclusively applied to the support of public libraries and county law libraries."

**Based on 2022 NTD Revenue reporting standards and supplemented by ITP staff review*

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Name of Funding Tool	Description	Current ITP Source	Peer Examples* (for New Revenue Types)	Funding Options	Potential Revenue Est.**	Primary Uses (Capital or O&M)	Implementation Challenges
Value Capture							
Joint Development - Sale of Land	Payments from development (can be cash or in-kind; sale).	No	Not a reportable revenue category, but multiple agencies use as a limited timeframe revenue source, especially when pursuing transit-oriented development	One time	Moderate	Capital or O&M	Deals are complex; depend on the real estate market.
Joint Development - Land Lease	Payments from development (can be cash or in-kind lease).	No		Annual / Recurring	Moderate	Capital or O&M	Deals are complex; depend on the real estate market.
Tax Increment Financing (TIF)	Tax increment from district.	No		One time	Moderate	Capital (via bonding)	Complex; subject to what is allowed under state TIF enabling law. Success depends on pace of development. Combining TIF with TIFIA (as a borrowing vehicle) can mitigate timing issue.
Transportation Reinvestment Zones (TRZ), Public Improvement Districts (PID) / Management Districts, Transportation Development District (TDD)	Naming conventions vary state to state, but generally a mechanism for capturing the value of incremental investment in a limited district or zone.	No	Transportation Development Districts in Kansas City, City of Missouri ($118,424, 2022) (3% on undeveloped surface lots).	Annual / Recurring, often paired with bonding to achieve a one-time funding goal	Moderate	Capital (via bonding)	Dependent on development.

**Based on 2022 NTD Revenue reporting standards and supplemented by ITP staff review*
*****Potential Revenue**: **Low**: if lost, should not fundamentally change service revenue (<2%); **Moderate**: if lost, may impact service revenue (~10%); **Significant**: if lost, would have significant loss on service revenue. If gained, could fundamentally change the system."*

Appendix B – Performance Measures

Table 2 in the *Performance Measures* section provides an overview of performance measures. This appendix described performance measures for The Rapid to consider when measuring success of TMP Implementation .

Stop and Route Design

Stop Design: Stop Spacing, Placement, and Level of Amenities

Bus stop design guidelines consider both the larger system design as well as the small-scale conditions around the bus stop. Stop design guidelines include:

- Stop spacing and its effect on run time or ridership
- Stop placement, such as far side, near-side, or mid-block, and its effect on run time
- Number or level of rider amenities, such as bus shelters, bus bulb outs, and rider information systems, and their effects on rider comfort and experience.

Route Design: Route Classifications, Connectivity, Directness, and Service Duplication

Route classifications, such as local, express, or commuter, allow The Rapid to identify performance measures based on the type of route and its function within the larger network.

Route connectivity measures how well routes are designed to integrate with other routes and schedules within the larger network. The effect of route connectivity may be measured by the share of transit trips compared to trip patterns completed by all-modes.

Route directness is how closely a route follows the straight line between origin and destination. Route directness may be measured by route distance as a ratio of straight-line distance.

Service duplication, also known as route overlap, can be analyzed by using the following metrics:

- Route overlap analysis
- Headways comparison
- Passenger load factors on overlapping routes
- Accessibility analysis within a defined catchment area
- Cost per passenger-mile on duplicate routes
- Ridership density along overlapping segments

Service Efficiency

Productivity: Passengers per Hour

Productivity measures efficiency and is expressed as a rate of output amount per input amount. The Rapid monitors the productivity of a route by evaluating the number of passengers per hour. This is used to understand how many people are using The Rapid routes relative to the cost to operate service.

Cost Effectiveness: Cost per Trip (or, per mile)

Measuring cost effectiveness is another way to measure overall service effectiveness. This standard can track cost per passenger or the cost per mile.

Reliability: On-Time Performance, Travel Time Reliability, Frequency, and Span
Reliability is an indicator of how consistently The Rapid adheres to an existing service schedule and consistent travel time. It is also an indicator of how likely the service will be operating when a rider wants to use it. Reliability can be measured by on-time performance, travel time, service frequency (or headway), and span – the number of hours a day a route is in service.

Farebox recovery ratio
Farebox recovery shows the amount of the total revenue that is generated by passenger fares and is a key indicator of cost efficiency.

Revenue to non-revenue hour
Non-revenue hours are deadhead hours that include the time for the operator to travel between the bus yard and the scheduled starting point of the service. This also includes the hours of paid operator time before and after shifts.

Service Delivery

Transit Dependency
Transit Dependency evaluates the level of need for transit services among a population. The Federal Transit Administration (FTA) uses five metrics to measure dependency: households classified as impoverished (median household income), population over 65, population reporting a disability, households with zero access to a vehicle (zero-car households), and minority population.

Desire Lines
Desire lines measure the volume of trips between an origin and destination, indicating the demand or "desire" for a trip between two locations. Similar to route directness, desire lines can show how closely a route follows the straight line between origin and destination. Similar to route connectivity, trip volume of desire lines can also be used to compare the share of transit trips to those completed by all-modes.

Incidents of Service Interruption
Incidents of service interruption are an indicator of successful service delivery and can be used to quantify the frequency and duration of disruptions. Interruptions can be measured by the percentage of service hours impacted by delays, cancellations, or other interruptions. It may also be measured by the percentage of delayed trips or average delay time.

Economic Prosperity & Impact
Investment in public transportation has a positive economic effect on a community. Metrics may include job creation, business activity, land value appreciation, workforce mobility (share of residents with access to major employers via public transit) and reduced traffic congestion.

Load Maximums
Load maximums measure how close a route (or system) is operating to its maximum capacity. Load maximums use passenger counts during peak times.

- Service quality: load maximums can indicate whether a service is overcrowded and therefore uncomfortable
- Operational efficiency: identifies where a larger vehicle may be necessary to accommodate higher passenger volumes
- Planning and scheduling: maximum loads inform route adjustments, vehicle assignment, and headway adjustments

Customer Feedback – Customer Surveys and Public and Stakeholder Lines of Communication
Feedback from riders, stakeholders, and the greater community helps to provide qualitative and quantitative measures of overall service performance, including perceptions of reliability, comfort, safety, convenience, accessibility, etc.

Others

In addition to performance measures that provide insight into service design, level, and delivery, there are several other categories that dive deeper into the impact of transit on the broader community and environment. These include the following.

Rider Experience & Comfort – Safety, Efficiency, Reliability, Route Connectivity, Transit Amenities
As discussed above, metrics for safety, efficiency, reliability, connectivity, and design of amenities at bus stops and transfer centers all lend to a rider's overall sense of comfort and a positive experience. When a rider has an overall positive perception of transit, they are more likely to complete their daily trips using transit and encourage others in their network to do the same.

Accessibility & Mobility – Adjacent development density, and activity centers
Beyond service operations, the adjacent development form and activity centers have an impact on service performance. As development density decreases, so does the performance of fixed-route transit services. Matching the right service to the adjacent development density improves overall service performance. Likewise, improvement of development form along fixed-route transit corridors has a positive impact on ridership. One approach to matching the right service to the adjacent development density is an inventory of transit-adjacent development opportunities with guidelines identifying service levels and to what thresholds to achieve enhanced modes.

Sustainability – Vehicle miles traveled, active transportation use
Transit is a more sustainable mode of transportation than single-occupancy vehicles (SOV) – Even more so with The Rapid's renewable CNG fueling system. Observing changes in vehicle miles traveled (VMT) within the service area relative to ridership is a metric that could be used to quantify the environmental impact of a switch from SOVs to a more sustainable transportation mode.

Appendix C – Additional Project Reports

The following list and links connect to online copies of the various technical reports and analyses completed throughout the TMP process.

Existing and Future Conditions Report

https://www.transitthriving.org/s/ConditionsMemo_V3_Branded_2023_07_20_v3.pdf

Regional Connectivity and Market Analysis Report

https://www.transitthriving.org/s/MarketAssessmentMemo_V2_Branded_2023_07_24.pdf

Intercounty Corridor Analysis Report

https://www.transitthriving.org/s/Rapid-Task-6-Memorandum_v2_09052024.pdf

Peer Review Report

https://www.transitthriving.org/s/2024-03-01_TheRapidTMP_Peer-Review-Report_v2.pdf

West Michigan Express

- **Feasibility Review Report:** https://www.transitthriving.org/s/TheRapidTMP_WMXFeasibilityReview_FINAL_Branded_Fix_0808.pdf
- **Implementation Plan Report:** https://www.transitthriving.org/s/TheRapidTMP_WMXImplementationPlan_v2_1112024.pdf

Joint Development

- **Memo:** https://www.transitthriving.org/s/Joint-Development-Memo-DRAFT_v3_09042024-compressed.pdf
- **Appendix:** https://www.transitthriving.org/s/Joint-Development-Memo-DRAFT_v3_09042024-compressed_Appendix.pdf

Public Engagement Summary

https://www.transitthriving.org/s/24-1004-The-Rapid_Engagement-Summary_HR.pdf