



MOTA Strategic Plan

Mecosta Osceola Transit Authority (MOTA)
Feasibility Study

Mecosta and Osceola Counties, MI

June 10, 2026





Contents

Contents	2
1 Background	4
1.1 Introduction	4
1.2 Key Findings Summary	4
1.2.1 Service Operations & Ridership	4
1.2.2 Facilities & Fleet	5
1.2.3 Revenue & Expenses	6
2 Growth Profile	7
2.1 High Transit User Populations	7
2.1.1 People with Disabilities & Aging Adults	7
2.1.2 Poverty & Low-Income Households	9
2.1.3 Zero- and One-Car Households	9
2.2 Service Area Concentrations	10
2.2.1 High Transit User Populations & Areas	10
2.2.2 Transit Propensity Index	11
2.2.3 Trip Origins & Destinations	13
2.3 Service Concentration Summary	14
2.3.1 Mecosta County	15
2.3.2 Osceola County	16
3 Emerging Trends & Funding Strategies	17
3.1 Emerging Trends	17
3.1.1 Intelligent Transportation Systems & Smart Mobility	17
3.1.2 Remote Mini Operations Facility (Hub)	21
3.1.3 Operations Innovations	22
3.1.4 Micromobility & First/Last Mile	22
3.1.5 Regional Transit Agency Cooperation & Mergers	24
3.1.6 Funding Strategies	28
4 Implementation Plan	30
4.1 Priorities and Values	30
4.2 Strategic Actions	31
4.2.1 Service Actions (S)	31
4.2.2 Operations Actions (O)	34
4.2.3 Facility Actions (F)	38
4.2.4 Planning Actions (P)	40
4.3 Consolidation Scenarios	45
4.3.1 No-Merger Scenario	45
4.3.2 Merger Scenario	46



Tables

Table 1: High Transit User Demographics & Municipalities.....	10
Table 2: Highest TPI Areas	11
Table 3: Trip Origin & Destination Municipalities, 2025	13
Table 4: Projections for 65-85+ Age Range Increases in 5, 10, and 25 years	14
Table 5: Mecosta County Municipalities with the Most High-Transit User Demographics & Characteristics	15
Table 6: Osceola County Municipalities with the Most High-Transit User Demographics & Characteristics	16
Table 7: Demand-Response Transit Mobile Ticketing Platforms.....	19
Table 8: Common APC Technologies.....	20
Table 9: Strategic Action Implementation Table	42

Figures

Report Figures

Figure 1: Transit Propensity Index (TPI)	12
Figure 2: Out-of-County Trip Origins & Destinations, 2025	14
Appendix Figures: Existing Condition Maps and Data	48
Figure 3: Study Location Map	49
Figure 4: Population Density	50
Figure 5: Disabled Populations	51
Figure 6: Senior Population 65+	52
Figure 7: Low-Income Households	53
Figure 8: Zero- and One-Car Households	54
Figure 9: MOTA In-County Unlinked Trips, 2025.....	55



1 Background

1.1 Introduction

Mecosta Osceola Transit Authority (MOTA) commissioned a Feasibility Study in 2025 to assess the feasibility of service expansion, a new or expanded facility, and the feasibility of a potential regional transit agency merger. The goal of this study is to develop possible service options, including operational and general capital over the next five years.

The intent of this Strategic Plan is to set forth strategies and implementation steps that will guide MOTA through two potential service configurations – No Agency Merger and an Agency Merger. Key findings about MOTA and the potential merger agency - City of Big Rapids Dial-a-Ride (DART) – first set the foundations the strategies are developed from. The region's growth profile (**Section 2**) and emerging demand-response transit trends (**Section 3**) also inform the strategies explored in **Section 4**. Guided by input from MOTA leadership, staff, and stakeholders, this Plan organizes MOTA's many priorities into implementable and dynamic goals.

1.2 Key Findings Summary

The key findings outlined in this section were determined during the data collection and research phases of the Existing Conditions and Service Profiles Report, which was the initial MOTA Feasibility Study deliverable. These findings were also provided during the Public and Stakeholder Engagement phase that began in Fall 2025 and went through Spring 2026. They were also shared with MOTA's leadership in preparation for their 2026 Strategic Planning Workshop. This section includes findings pertaining to MOTA and DART service operations, facilities and fleet, ridership, and revenues and expenses. They, in conjunction with the Existing Conditions and Service Profiles Report, provide the context that this Strategic Plan is based on.

1.2.1 Service Operations & Ridership

MOTA, established in 1979, provides a demand-response service to residents of Mecosta and Osceola Counties. One of its services is non-emergency medical transportation (NEMT) through the Rides to Wellness program. MOTA is governed by six board members, three from each county. MOTA operates 27 vehicles that are all equipped with wheelchair lifts.

The City of Big Rapids established the Dial-a-Ride (DART) service in 1975 to provide curb-to-curb service within the city, making it an early example of zoned microtransit. DART is governed by the City of Big Rapids under its Department of Public Works. DART operates a demand-response service and a fixed-route Ferris State University (FSU) campus shuttle that loops between nine stops on and around campus. DART operates a total of eight vehicles that are all equipped with wheelchair lifts.

MOTA ridership grew by one-third in 2024, corresponding with an increase in service hours and miles. MOTA's costs, revenue hours, and revenue miles have grown faster than its ridership since the pandemic, however, total unlinked trips have now recovered to over 50% of pre-pandemic 2019 levels. DART's demand-response ridership spiked in



2020-2021 when the campus shuttle was suspended due to the pandemic and then returned to its previous trend when the lockdown ended.

Public and stakeholder feedback stressed the desire for MOTA to expand its hours of operation to seven days a week and to provide rides for second and third shift employment. The feedback also centered around the need for more service awareness and an online reservation platform. Stakeholders were interested to learn more about how a transit agency merger would be beneficial to the operations and ridership of both agencies and to the region's residents. They also stressed a desire for MOTA to focus on providing better quality existing demand-response services prior to seeking an expansion of services to include a fixed-route service.

1.2.2 Facilities & Fleet

MOTA's operations facility is in Big Rapids Township on 16 Mile Road. In normal traffic conditions, it takes MOTA buses at least 55 minutes to reach its northernmost service area and 30 minutes to reach its southern. In 2026, MOTA's fleet consists of 19 demand-response buses, six Rides to Wellness (NEMT) vans, three administrative vehicles, and a tractor, however, its facility only has space for seven vehicles. Some vehicles are parked in a fenced parking lot at the Big Rapids facility but nine vehicles are always forced to park outside that area due to capacity constraints. The 12,095 square foot facility zoned Commercial by the Township,¹ is also at its administrative workspace capacity with less than 600 square feet of space. Additionally, the operations and dispatch area is 500 square feet. The remaining facility is comprised of an 11,009 square foot garage and maintenance area. Located less than a mile from the MOTA operations facility, the DART operations facility is located at 201 North Bronson Avenue in the City of Big Rapids. Zoned Industrial by the City,² the 6,100 square foot facility was constructed in 1969 and purchased by the City in 2010. New garage doors and internal space construction occurred in 2020. DART experiences minor facility constraints. There is enough room to park six buses inside the facility and there is a designated area to park the remaining two buses outside. There are three offices, one bathroom, a small lobby area, and a driver break area inside the garage. The study location map in the Appendix (**Figure 3**) identifies the facility locations, the municipalities, and the street network used by MOTA to service them. The average age of MOTA's revenue fleet is 4.3 years with an average mileage of 125,259 miles. MOTA purchased two new vehicles in 2025 that have less than 500 miles. The average age of DART's seven, 21 seat fleet is 5.7 years with an average mileage of 122,345 miles. DART purchased its smaller 14 seat bus in 2024, and it has approximately 22,000 miles. FTA recommends replacing vans at approximately five to seven years of service or 150,000 to 200,000 miles. MOTA's spare vehicle ratio is 18.75% for its demand-response service and 20% for Rides to Wellness, while DART's is 14.29%. Both systems' spare ratios are considerably lower than the FTA target spare ratio of 25% to 40% for fleets with less than 50 vehicles. This may interfere with operations at MOTA and DART if vehicles are unable to provide revenue service.

¹ (2025). *Zoning Map*, Big Rapids Charter Township, retrieved October 14, 2025, <https://bigrapidstowshipmi.gov/zoning-map/>.

² (2020). *City of Big Rapids Zoning Map*, retrieved October 14, 2025, <https://cms6.revize.com/revize/bigrapids/Document%20Center/Departments/Community%20Development/Zoning/Zoning%20Map.pdf>



1.2.3 Revenue & Expenses

In the 2024 Federal Fiscal Year (FFY2024), MOTA expended \$2,162,835 on operating services. State support comprises 40% of the total funding while local (property tax millage) comprises 42% and federal sources comprise 13%. Fares comprise a small portion of MOTA's funding with a farebox recovery of 5%. In the same period, DART spent \$899,335 on operating its two services. The fixed-route FSU campus shuttle service accounted for 15% of costs while the city-wide demand-response service comprised the remaining 85%. DART's funding is primarily from State of Michigan sources at 40%. Local government funding (property taxes) is DART's second largest funding source at 31% followed by federal government funding at 18%. DART's operating sources include a higher farebox recovery ratio than MOTA, at 11%. In 2025, DART obtained \$100,903 from its passenger farebox. The FSU fixed-route service is also funded by Ferris State University. In 2025, this accounted for \$76,602 of DART's funding.

MOTA's fares are kept affordable by maintaining a 0.5-mill millage, paid for by all Mecosta and Osceola residents, except for City of Big Rapids residents who instead rely on city-funded DART. MOTA's general service fare is \$2.00 per ride, with half-price fares for seniors, children, people with disabilities, and veterans. Seniors over 80 years old may ride for free. Its Rides to Wellness fares are \$15.00 each way, or \$45.00 per hour for out-of-county travel, with half-price fares for veterans. DART's fares for the demand-response and fixed-route campus shuttle services are \$2.50, or half-price for seniors, children under age 16, and people with disabilities. DART does not provide a Rides to Wellness service.



2 Growth Profile

According to the 2024 U.S. Census, American Community Survey estimates, Mecosta County has a population of 40,321, with 7,847 (19%) of the population residing in the City of Big Rapids. Osceola County's population is estimated at 23,122 with 2,521 (11%) of the population residing in Reed City. Appendix **Figure 4** provides the population distribution in Mecosta and Osceola counties. Most of the population in both counties are working adults between 18 and 64 years of age (approximately 60%), which is consistent with the State of Michigan. According to the Michigan center for Data and Analytics (MCDA), Mecosta County is projected to increase its population by 1% between 2025 and 2045 whereas Osceola County is projected to decrease by 1%. This is also consistent with the projected populations for most of Michigan's counties.³

Although the total population of the counties is projected to change by +/- 1% over the next 20 years, there are other important growth factors that transit agencies, especially a demand-response agency, should consider as they strategically plan to maintain and expand service operations.

2.1 High Transit User Populations

The demographic populations that use demand-response transit (DRT) the most are people with disabilities, older adults, people with limited or no access to a vehicle, those living in poverty and/or in low-income households, and residents of low-density or rural areas. Paratransit services are one of the largest components of demand-response transit and are tailored to serve riders with disabilities. Small urban and rural DRT studies consistently show that older adults rely heavily on DRT services due to limited mobility, lack of driving ability, and/or the lack of a fixed-route option.⁴ It is therefore important to determine where those populations are concentrated when planning for MOTA's service operations.

2.1.1 People with Disabilities & Aging Adults

The townships in Osceola County with the highest distribution of disabled people per census tract are Marion, Middle Branch, Highland, and Richmond. The townships in Mecosta County with the highest distribution are Aetna, Austin, Deerfield, and Mecosta. Appendix **Figure 5** identifies those areas and the areas with a concentration of less disabled populations.

Multiple sources provide correlations between the likelihood of having a disability and aging. A 2023 study found that 46% of Americans 75 years old or older reported having a disability compared with 24% of adults 65 to 74 years old, 12% of adults 35 to 64 years

³ (2024). *Vintage 2024 Population Projections*, Michigan Center for Data and Analysis (MCDA), retrieved October 6, 2025, <https://www.michigan.gov/mcda/insights/2025/03/06/mich-county-popproj-2050>

⁴ (2024). Analyzing gender and age differences in travel patterns and accessibility for demand response transit in small urban areas: A case study of Tennessee, *Journal of Transport and Land Use*, retrieved February 12, 2026, https://jtlu.org/index.php/jtlu/article/view/2454?utm_source=copilot.com



old, and 8% of adults under 35 years old.⁵ Currently, the greatest regional concentration of seniors 65+ (401 to 700) live in Mecosta County, specifically located in Fork, Chippewa, Wheatland, Morton, and Austin townships. Although less than Mecosta County, Osceola's senior concentration (301 to 350) is located predominantly in Richmond and Hersey townships. As shown in Appendix **Figure 6** there is overlap between the disabled and senior populations when looking at the second greatest distribution of seniors (351 to 400). That overlap occurs in Richmond Township in Osceola County and in Aetna and Mecosta townships in Mecosta County.

Projections⁶

Of the demographics discussed in this section, age range population projections are the most accessible. Projections for the next five, 10, and 25 years indicate that the population in Mecosta and Osceola counties is getting older. The age range populations in both counties are projected to decrease in all three timeframes until the 65 to 69 age range in Mecosta County and the 70 to 74 age range in Osceola County. The 85+ age range is projected to increase the most in all three timeframes. While specific township projections are not available, it is useful to use the existing condition information provided above, to estimate where those populations may live. Since seniors rely on demand-response transit the most, MOTA needs to strategically plan for the anticipated increase in demand.

Near-Term (5 Years)

In Mecosta County, the 85+ population is projected to increase by 26% within the next five years, followed by the 75 to 79 age range with a 24% increase. The 70 to 74 and 80 to 84 age ranges are projected to increase by 14% each and the 65 to 69 age range by 13%. In Osceola County, the 80 to 84 age range is projected to increase the most by 24%, followed by the 85+ population with a 23% increase. The 75 to 79 age range is projected to increase by 18% and the 70 to 74 age range by 14%. The 65 to 69 population in Osceola County is projected to decrease within this timeframe.

Mid-Term (10 Years)

In Mecosta County, the 85+ population is projected to increase by 52% within the next years, followed by the 80 to 84 age range with a 46% increase and the 75 to 79 population with a 44% increase. The 70 to 74 and 65 to 69 age range populations are projected to increase by 29% and 7%, respectively. Similarly, the 85+ population in Osceola County is projected to increase by 55% followed by the 80-84 age range with a 49% increase and the 75 to 79 and 70 to 74 age ranges with 36% and 11% population increases. As is the case for the near-term, the 65- to 69-year-old population in Osceola County is projected to decrease within this timeframe.

⁵ (2023). *Nearly half of the oldest Americans have disabilities*, American Psychological Association, retrieved February 12, 2026, https://www.apa.org/monitor/2023/11/older-adults-disabilities?utm_source=copilot.com

⁶ DTMB, Michigan Labor market Information, Population Projections, State of Michigan & Mecosta and Osceola counties, retrieved February 16, 2026, <https://milmi.org/DataSearch/POPPROJ>



Long-Term (25 Years)

As previously mentioned, the senior population increase in both counties is projected to be most significant within the next 25 years with the 85+ population projected to increase by 198% in Mecosta County and by 160% in Osceola County. The 80 to 84 age range is projected to increase by 88% in Mecosta County whereas the 75 to 79 population is projected to increase by 47% and the 60 to 74 and 65 to 69 ranges by only 11% and 4%, respectively. Osceola County's 80 to 84 population is projected to increase by 54% and the 75 to 79 population by 15%. As was the case in the other two timeframes. Osceola County's 65 to 69 population is projected to decrease.

2.1.2 Poverty & Low-Income Households

Per the U.S. Census, poverty rates are higher in Mecosta and Osceola counties than in Michigan with 19.2% of Mecosta residents earning below the poverty rate, 15.8% of Osceola residents earning below the poverty rate, and 13.4% earning below the poverty rate in Michigan. The City of Big Rapids has the highest poverty rate in Mecosta County with 35.4% of its residents living below the poverty rate. Reed City in Osceola County has the second highest at 23.6%, followed by Mecosta Village in Mecosta County at 22.6%. Aging populations tend to increase risk of poverty unless income growth outpaces demographic change.

As shown in Appendix **Figure 7**, low-income households follow this in that the greatest number of low-income households per block group (\$35,000 or less annual household incomes) are located in the City of Big Rapids. The second greatest number of low-income households regionally (151 to 250) are in rural and small urban areas in Middle Branch, Hersey, and Richmond townships (Osceola County) and Fork, Aetna, Morton, Wheatland, Chippewa, and Martiny townships (Mecosta County).

2.1.3 Zero- and One-Car Households

The reasons why a household may have zero or one car include that residents may have disabilities, may be aging out of being able to drive, may not be able to afford a car, or may prefer more active modes of transportation, including transit. Most households with zero or one car in the region are in the northeast and west areas of the City of Big Rapids. Low-income household concentrations are also located in Mecosta County's Morton (including Mecosta Village) and Austin townships and in Richmond Township (including Reed City), Middle Branch, and Marion townships in Osceola County (see Appendix **Figure 8**).



2.2 Service Area Concentrations

The identification of service area concentrations will assist MOTA in its strategic planning and implementation. The data used in this analysis is primarily based on existing conditions except for senior population projections, as summarized in **Section 2.1.1**. The service area concentrations were determined by assessing where high transit user populations live based on the analysis provided in **Section 2.1**, conducting a regional Transit Propensity Index (TPI) analysis (**Section 2.2.2**), and summarizing MOTA's 2025 trip origin and destination data (**Section 2.2.3**). This section provides the summary findings from each of these analyses, which will assist MOTA in implementing potential service configuration strategies identified in **Section 4**.

2.2.1 High Transit User Populations & Areas

Table 1 summarizes the information provided in **Section 2.1** by providing the correlation between the demographics that tend to use demand-response transit the most and where those populations are located. This information is also included in the Implementation Strategy discussed in **Section 5**. Strategically, these are the areas where MOTA should focus its planning. Of the 16 municipalities included in the table, five municipalities include more than one high transit user demographic in Mecosta County and four include more than one in Osceola County.

Table 1: High Transit User Demographics & Municipalities

	Mecosta County	Osceola County
Aging Adults	Fork, Chippewa, Wheatland, Morton, Austin	Richmond, Hersey
Disabled Populations	Aetna, Austin, Deerfield, Mecosta	Marion, Middle Branch, Highland, Richmond
Poverty	City of Big Rapids, Mecosta Village	Reed City
Low-Income Households	City of Big Rapids, Fork, Aetna, Morton, Wheatland, Chippewa, Martiny	Middle Branch, Hersey, Richmond
Zero- or One-Car Households	City of Big Rapids, Morton, Austin	Richmond, Middle Branch, Marion



2.2.2 Transit Propensity Index

A Transit Propensity Index (TPI) measures how likely people in a given demographic group are to use public transit compared to the national average. An input includes the demographic characteristics analyzed in Section 2.1 and summarized in Section 2.2.1. Weights are assigned to each characteristic by their anticipated effect on transit reliance. They are then each indexed with a numerical score and mapped in **Figure 1**. Therefore, TPI is used to determine where most trips potentially originate. Identifying communities with high transit propensity assists in more equitable service distribution planning. Each characteristic was measured at the census block group level (except for people with disabilities, which is measured by census tracts).

In Mecosta and Osceola Counties, the highest transit propensity (81 to 100%) is found in the county seats, the City of Big Rapids and Reed City, respectively. The northeast quarter of Big Rapids Township, where MOTA and DART facilities are located, also shows some of the highest propensity

Demographic Characteristics	Weight
Population density	0.35
65+ Population	0.15
Low-income	0.15
Zero- or one-car	0.15
People with a disability	0.2
Total	1

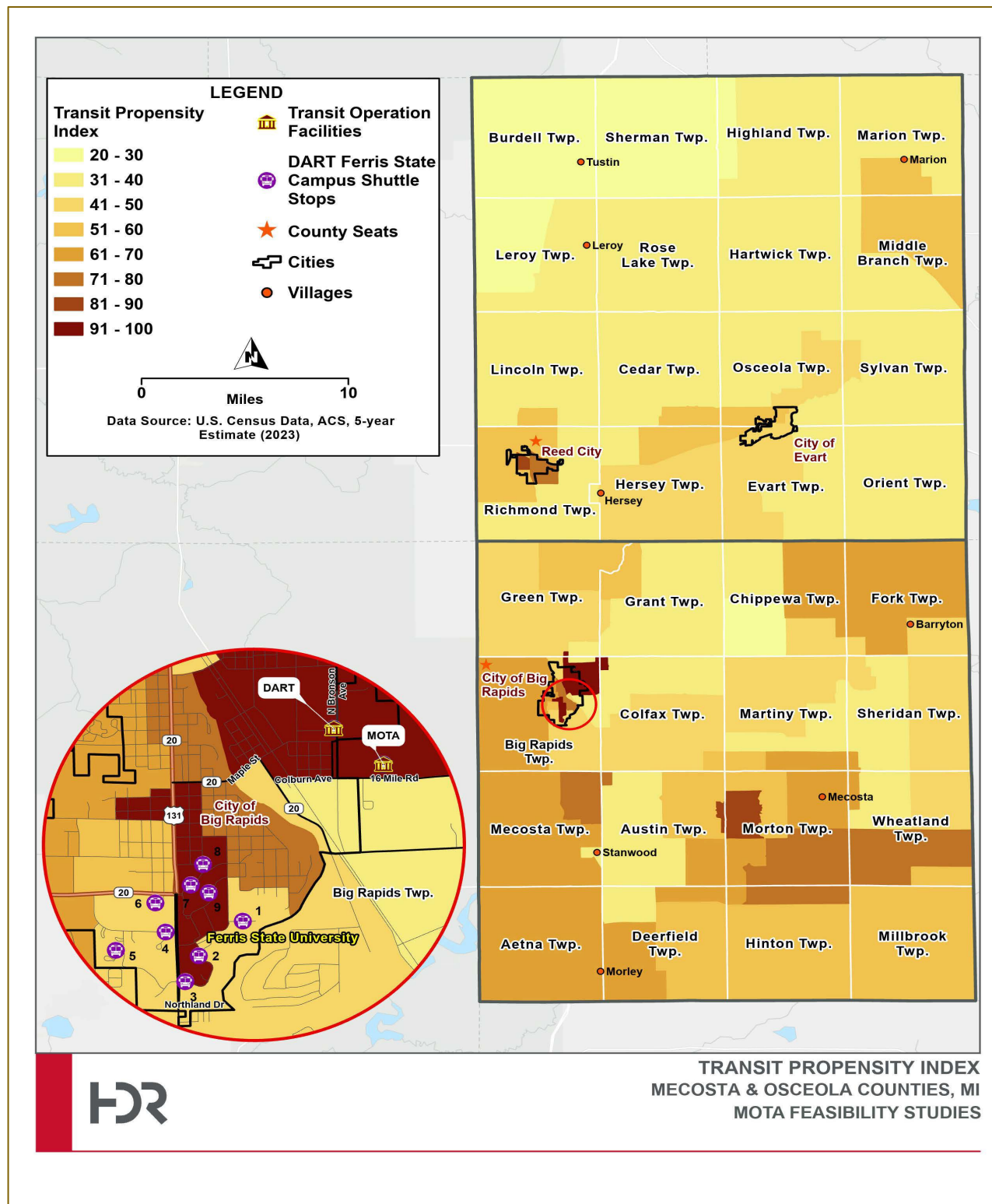
in the region. TPI is also highest in a small area in the northwest corner of Colfax Township, bordering Big Rapids Township. Additional areas in Mecosta County with higher TPIs are Morton, Mecosta, and Wheatland townships. Osceola County does not have any other areas with the highest TPI. However, communities surrounding Reed City in Richmond Township, a relatively large portion of Middle Branch Township, and smaller areas of Hersey, Cedar, Osceola, Evart, Lincoln, and Marion townships have middle-range indexes of (51 to 60%). The block group where Ferris State University (FSU) is located in the City of Big Rapids also has one of the highest TPI. This is due to the student population and that DART is currently running fixed-route transit there. **Table 2** identifies the municipalities with TPIs from 51 to 100% and **Figure 1** illustrates this data.

Table 2: Highest TPI Areas

TPI %	Mecosta County	Osceola County
81-100	Big Rapids (NE), Colfax (NW), City of Big Rapids (NE/S)	Reed City (NW)
71-80	Morton (W), Austin (E)	Richmond (Reed City area)
61-70	Aetna (all), Mecosta (most), Big Rapids (W), City of Big Rapids (center), Austin (SE), Deerfield (SW/NE), Morton (SW/NE), Hinton (NW), Martiny (S), Sheridan (SW), Wheatland (NW)	N/A
51-60	Millbrook (all), Hinton (most), Deerfield (E), Wheatland (SE)	Middle Branch (most), Richmond (W), Hersey (NE), Cedar (SE), Osceola (SW), Evart (NW), Marion (S), Lincoln (S)



Figure 1: Transit Propensity Index (TPI)





2.2.3 Trip Origins & Destinations

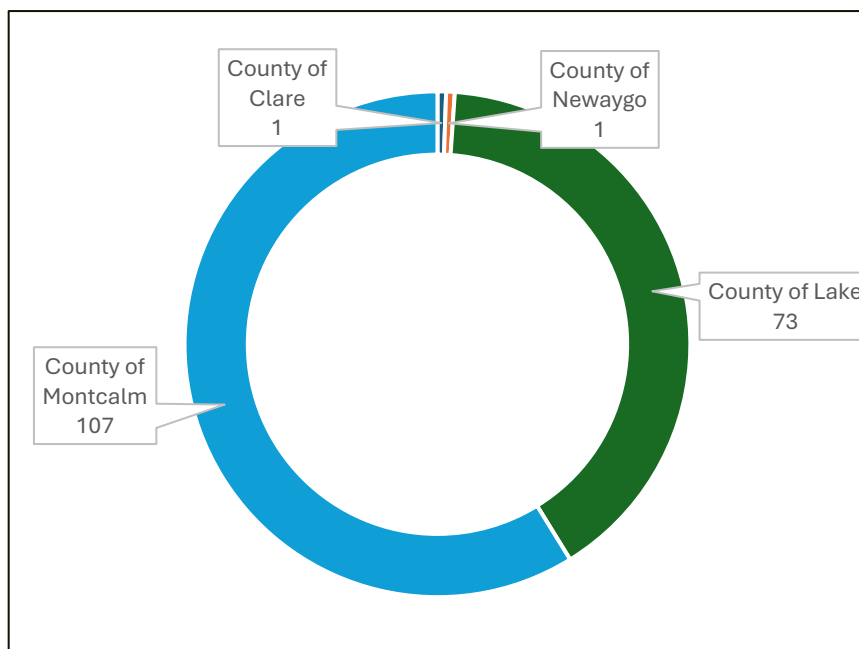
Analysis of data determined the municipalities where existing trips most commonly originate and end for MOTA's in-county (primary) and out-of-county services. As shown in **Table 3** and Appendix **Figure 9**, the majority of in-county trip origins and destinations in Mecosta County are in Big Rapids Township, followed by those in Mecosta, Green, and Austin townships. The majority of trips in Osceola County originate or end in the City of Reed City, in Lincoln Township, and the City of Evart. The least number of origin and destination trips in Mecosta County are to and from the townships of Millbrook and Hinton and in Osceola County Hartwick and Burdell townships. Most out-of-county trip destinations from Mecosta and Osceola counties are to Montcalm and Lake counties, as shown in **Figure 2**. **Table 3** provides the percentage of the total 35,618 known origin and destination rides in each municipality. It should be noted that the data identified an additional 453 unknown rides.

Table 3: Trip Origin & Destination Municipalities, 2025

Mecosta Municipalities	Percentage of Rides	Osceola Municipalities	Percentage of Rides
Big Rapids Twp.	13.8	City of Reed City	9.5
Mecosta Twp.	11.9	Lincoln Twp.	3.8
Green Twp.	7.1	City of Evart	3.7
Austin Twp.	5.1	Hersey Twp.	3.3
Grant Twp.	3.9	Rose Lake Twp.	2.5
City of Big Rapids	3.8	Richmond Twp.	2.3
Wheatland Twp.	3.7	Orient Twp.	1.8
Morton Twp.	3.5	Middle Branch Twp.	1.2
Chippewa Twp.	3.3	Highland Twp.	1.1
Colfax Twp.	3.2	Marion Twp.	1.1
Martiny Twp.	1.8	Cedar Twp.	1.1
Deerfield Twp.	1.6	Sherman Twp.	0.9
Fork Twp.	1.0	Sylvan Twp.	0.9
Sheridan Twp.	0.8	Evart Twp.	0.7
Aetna Twp.	0.6	Osceola Twp.	0.6
Hinton Twp.	0.1	LeRoy Twp.	0.3
Millbrook Twp.	0.04	Burdell Twp.	0.13
		Hartwick Twp.	0.08



Figure 2: Out-of-County Trip Origins & Destinations, 2025



2.3 Service Concentration Summary

Existing census data and Michigan Department of Technology, Management and Budget (DTMB) population projections indicate that most of the high-transit user demographic concentrations are greater in Mecosta and Osceola counties than that of the State of Michigan. This suggests that this region is especially in need of demand-response transit services.

For instance, the projected increase of the 65 to 85+ age range is greater for Mecosta and Osceola counties than that of Michigan within the next five, 10, and 25 years (see **Table 4**). Likewise, poverty rates are higher in Mecosta and Osceola counties than in Michigan with 19.2% of Mecosta residents earning below the poverty rate, 15.8% of Osceola residents earning below the poverty rate, and 13.4% earning below the poverty rate in Michigan. It is evident that there is high-transit demand in the region and this section summarizes where MOTA should focus its services in Mecosta and Osceola counties.

Table 4: Projections for 65-85+ Age Range Increases in 5, 10, and 25 years

	Mecosta	Osceola	Michigan
2025-2030	17%	11%	12%
2025-2035	29%	17%	17%
2025-2050	43%	20%	18%



2.3.1 Mecosta County

Of Mecosta County's 21 municipalities, 14 have high transit user demographic concentrations and/or have characteristics such as a high TPI or are a top origin-destination municipality (O/D). **Table 5** lists these municipalities in order of the number of demographic concentrations and characteristics each have. Of these 14 municipalities, the three with the most demographic concentration types and TPI/O/D characteristics are Austin and Morton townships and the City of Big Rapids. These communities are where service concentration should be focused on since they have the most high-transit user populations, i.e., aging adults, disabled individuals, low-income households, people in poverty, etc. The data also suggests that these communities have high transit propensity indexes (TPI) and are in 2025 among the top communities that trips originate and end in.

Table 5: Mecosta County Municipalities with the Most High-Transit User Demographics & Characteristics

Municipality	Demographic Concentrations/Characteristics
Austin Twp.	Aging Adults, Disabled, 0-1 Car, High TPI, Top O/D
Morton Twp.	Aging Adults, Low-Inc. HHs, 0-1 Car, High TPI
City of Big Rapids	Poverty, Low-Inc. HHs, 0-1 Car, High TPI
Big Rapids Twp.	High TPI, Top Origin-Destination Municipality
Chippewa Twp.	Aging Adults, Low-Income Households
Wheatland Twp.	Aging Adults, Low-Income Households
Aetna Twp.	Disabled, Low-Income Households
Mecosta Twp.	Disabled, Top Origin-Destination Municipality
Fork Twp.	Aging Adults
Deerfield Twp.	Disabled
Martiny Twp.	Low-Income Households
Colfax Twp.	High TPI
Green Twp.	Top Origin-Destination Municipality
Mecosta Village	Poverty



2.3.2 Osceola County

Of Osceola County's 22 municipalities, eight (8) have high transit user demographic concentrations and/or have characteristics such as a high TPI or are a top origin-destination municipality (O/D). **Table 6** lists these municipalities in order of the number of demographic concentrations and characteristics each have. Of these eight municipalities, Richmond Township and its county seat Reed City and Hersey Township have the most high-transit user demographic concentrations and high TPI/top O/D characteristics.

Table 6: Osceola County Municipalities with the Most High-Transit User Demographics & Characteristics

Municipality	Demographic Concentrations/ Characteristics
Richmond Twp.	Aging Adults, Disabled, Low-Inc. HHs, 0-1 Car, High TPI
Reed City	Poverty, High TPI, Top Origin-Destination Municipality
Hersey Twp.	Aging Adults, Low-Inc. HHs, Top Origin-Destination Municipality
Middle Branch Twp.	Disabled, Low-Inc. HHs, 0-1 Car
Marion Twp.	Disabled, 0-1 Car
Lincoln Twp.	Top Origin-Destination Municipality
Evart Twp.	Top Origin-Destination Municipality
Highland Twp.	Disabled



3 Emerging Trends & Funding Strategies

The latest innovations in public transit provide a menu of opportunities for MOTA to consider pursuing. This section provides information about each of these emerging trends in order of MOTA's leadership and stakeholder priorities and what was heard from the general public as their priorities. Some of these emerging trends will be further discussed in **Section 4** within potential service configuration discussions.

3.1 Emerging Trends

3.1.1 Intelligent Transportation Systems & Smart Mobility

COMPUTER AIDED DISPATCH / AUTOMATIC VEHICLE LOCATION (CAD/AVL)

A core technology component for modern transit systems is the use of Computer Aided Dispatch and Automatic Vehicle Location (CAD/AVL) systems. A CAD/AVL uses satellite-based Global Positioning System (GPS) hardware on the vehicle combined with software at the transit operations facility so that managers and dispatchers can see the location of every vehicle in service, in real time.⁷ CAD/AVL can offer a number of benefits to transit operations, such as more accurate scheduling and dispatching. Also, CAD/AVL can also be combined with other technology to multiply the benefits. For example, integrating dispatch with the customer service system could allow for shorter wait times, fewer standbys, and more ride sharing or trip clustering.

These systems require a capital investment to implement as well as annual licensing fees and other possible operating costs. (See section **4.2.2 04** for a discussion of possible cost scenarios for MOTA.)

Michigan DOT is supportive of rural transit agencies adopting CAD/AVL. A 2022 MDOT report set a statewide goal of increasing number of agencies using and integrating CAD and AVL technologies.⁸

AI-DRIVEN ROUTING AND DYNAMIC OPTIMIZATION

AI-based dispatching is greatly assisting smaller agencies. It lowers operating costs because it reduces the greatest costs in demand-response transit. Non-revenue mileage is reduced due to trip grouping, reducing empty travel between pickups. Better trip matching means that fewer vehicle-hours are needed to serve the same number of trips. Driver utilization is also more effective since AI can balance workloads and unnecessary overtime. Additionally, the rider experience is enhanced because AI enables trips to be more predictable. AI routing does this by assigning passengers to the best vehicle in seconds, which leads to shorter wait times and more accurate pick-up windows using real travel-time patterns. Once real-time data and AI models are implemented, agencies

⁷ Caltrans (2025). *Technology Components*. Cal-ITP. Retrieved December 17, 2025, <https://dot.ca.gov/cal-itp/technology-components>

⁸ (2022). *Statewide Technology Plan for Rural Public Transit Agencies*. Michigan Department of Transportation. <https://www.michigan.gov/mdot/-/media/Project/Websites/MDOT/Travel/Mobility/Public-Transportation/Publications/Statewide-Transit-Technology-Plan-Rural-RTAs.pdf>



can identify underserved zones, evaluate if zones should expand or not, predict peak hours, and plan fleet sizes for each time of the day. The hard data also supports grant proposals, especially useful for rural agencies trying to justify funding.

STEPS: FROM PHONE-BASED DISPATCH TO AI-DRIVEN ROUTING

The following steps can be followed to get reliable, real-time vehicle locations and trip status with minimal disruption, make MOTA's existing demand-response data optimizer ready, help dispatchers without taking control away, and incrementally grow the model.

1. Start with CAD/AVL-lite + Analytics (3-6 months)

This involves using phones and tablets in vehicles with a driver app or even a simple web app that shows the daily manifest, allows drivers record the trip status, and streams GPS every few seconds. This would develop a live map of all the vehicles and provide basic trip statuses, i.e., on-time/late, next stop, etc. This enables the dispatchers to determine actual vs. scheduled times, travel times by corridor and time of the day, and traffic and no-show patterns.

2. AI Suggestions (6-9 months)

This involves adding a routing assignment engine that suggests vehicle assignments, which the dispatcher can override. The system tracks the overrides and outcomes and records other constraints. When the dispatcher overrides a suggestion, they record their override reason which then refines the system.

3. Pilot in Limited Zone (9-12+ months)

A pilot can be in a limited physical zone (one county or several townships) or in a limited off-peak time period. The agency then turns on continuous re-optimization which can recalculate trip assignments every 30 to 120 seconds while new trips are booked, vehicles run early or late, and riders cancel. The agency can also optimize the system to determine key performance indicators such as the maximum wait and ride times and vehicle hours per mile and then can compare these with pre-AI information to determine if wait times have decreased, if more trips have been made with the same fleet, and how dispatchers' workloads are impacted. If the pilot does not show improvement, the agency pauses and rebalances the system for optimization.

MOBILE TICKETING

Mobile and online options have become integrated deeply into modern life. Rural agencies are adopting technology that used to be only for big cities. This is one of the fastest-growing segments in the U.S. because transit customers now expect to be able to request and pay for trips through a web platform, a mobile app, or both. This was one of the most mentioned MOTA stakeholder and public priorities. Public survey respondents that rated MOTA's existing performance as fair, poor, or very poor, for example, stated this was due to having a difficult time reserving rides. Common feedback included waiting on hold too long and speaking with a stressed dispatcher. Stakeholders also stressed that they would like an easier way to reserve rides on their clients' behalf.



Integrating a ticketing system with CAD/AVL and mobility management allows for a fully synchronized experience for the customer, dispatcher, and the transit operator.

As such, the rider can request a trip, provide key details, and pay the fare and the mobility managers can schedule and dispatch the trip and align the customer's subsidy and funding profile to fund the trip. This makes it an amenity for the riders and an efficiency improvement for the agency. Options range from credit/debit card-based systems, such as Open Loop, to vendor-provided turnkey operations, such as Token and Pingo.

Table 7 lists common mobile ticketing platforms that are commonly used in Michigan at transit agencies that provide demand-response transit services. The table provides examples of Michigan agencies where each of the mobile ticketing platforms are deployed, fare integration information, and includes notes identifying which are leading platforms in Michigan and which types of communities they are generally deployed.

Table 7: Demand-Response Transit Mobile Ticketing Platforms

Platform / Provider	MI Microtransit Agencies Deployed	Fare Integration Types	Notes
Via / Via Mobility	Ann Arbor-TheRide; Flint MTA; Detroit DOT Connect	In-app payments, agency fare system integration, vouchers	Leading DRT platform; Most widely used in MI; often integrates with external fare systems like Masabi.
Masabi / Justride – Mobile Ticketing	Ann Arbor-TheRide; Flint MTA; Detroit DOT Connect; Detroit Suburbs SMART Flex; Lansing CATA	Mobile ticketing, account-based fares, smartcards, validators, integration with DRT apps.	Dominant mobile ticketing provider in MI; A fare payment platform, <i>not a DRT system</i> ; commonly integrated into DRT apps.
RideCo	Ann Arbor-TheRide; Detroit Suburbs SMART Flex; Lansing CATA	In-app payments, agency fare integration.	Strong in municipal DRT and paratransit.
Pingo / Spare	City of Big Rapids DART; Western Washtenaw Area Express (WAVE); Bay City Metro Transit; Muskegon Heights MATS; Marquette County – Marq-Tran	In-app payments, agency fare integration, smartcard support.	Popular with rural and small-city agencies. Strong adoption for modernizing dial-a-ride.
Token Transit	Bay Metro Transit; MATS; Marq-Tran; Saginaw STARS; Jackson JATA; Battle Creek BCGo; Allegan County Transportation; Clare County Transit; Iosco County Transit	Mobile ticketing, QR-code validation, stored-value passes, agency fare integration.	Mobile fare payment app widely used by smaller transit agencies, especially small and rural agencies in MI; integrates easily with DRT platforms.



Open Loop	Detroit DOT; Detroit Suburbs SMART; Ann Arbor-TheRide	Open-loop EMV payments (contactless bank cards), account-based ticketing, mobile wallet support.	Generally concentrated in larger agencies. Fare payment system enabling tap-to-pay with bank cards; integrates with DRT and fixed-route systems.
------------------	---	--	--

PRE-PAID TRIP FARE CARDS

In addition to mobile ticketing, more small and rural demand-response transit agencies are incorporating fare cards. These cards may be ‘smart’ with an embedded chip that stores fare value or passes or can be less sophisticated (and cheaper) punch cards. Either way, this allows the passenger to purchase pre-paid trips, which increases convenience for the passengers, drivers, and dispatchers. Agencies report that they incentivize the purchase of these cards by offering one or two free trips. They have also reported that ridership has increased as a result.

AUTOMATED PASSENGER COUNTING (APC)

Automating the collection of passenger boarding/alighting data simplifies administrative tasks and replaces manual counting for more accurate ridership data. With an APC system that is certified for recording National Transit Database (NTD) data, these required reports can be made faster and with greater accuracy. **Table 8** provides information about the most used APC technologies.

Table 8: Common APC Technologies

Technology	Accuracy	Cost	Strengths	Limitations
Infrared / Laser (2D/3D)	High	Medium	Reliable, mature tech	Can struggle with tightly packed crowds
AI Vision Sensors	Very high	Medium–High	Handles complex scenarios, filters objects	Requires more processing power
Pressure Mats	Low–Medium	Low	Simple, cheap	Maintenance issues, lower accuracy
MDT-Integrated Systems	Varies	Medium	Good for unified data systems	Depends on sensor quality
Multi-Sensor APC	Very high	High	Most robust, advanced features	Higher cost
Bluetooth/Wi-Fi Detection	Low (estimates only)	Low	Good for crowd trends	Not suitable for official counts



COORDINATED TRIP BOOKING

Missed medical appointments and demand-response no-shows are a common source of inefficiency in both the medical and transportation sectors. New innovations are offering the possibility of coordinating appointment and transportation scheduling. MOTA stakeholders mentioned the need for a smoother integration of Medicaid- and Medicare-paid rides. Via (**Table 7**) is one of the vendors that are acting as mobility-as-a-service (MaaS) transit technology companies with experience integrating Medicaid (and to a lesser extent Medicare) trips into demand-response transit scheduling systems. Agencies such as Iowa's Region-8 RTA are taking on that role themselves, managing regional and multi-county scheduling and booking without taking on the role of a Medicaid broker. MDOT's JARC

As an example of innovation in this area, an FTA-funded pilot project at the Heart of Iowa Regional Transit Agency (HIRTA) allows healthcare staff and patients to access the same trip planning and booking system so that both the appointment and the transportation can be scheduled at the same time. The system also provides the patient with information and wayfinding assistance on their smartphone or tablet. HIRTA implemented their pilot with USDOT assistance, but MOTA could consider something similar by partnering with a regional hospital, such as Corewell Health.⁹

3.1.2 Remote Mini Operations Facility (Hub)

Rural transit agencies may see value from a remote “mini” operations and maintenance facility. These small, “satellite” stations allow for the staging of some assets in the more distant parts of the service area, reducing deadhead to the main garage. An “outpost” garage typically has limited capabilities—major repairs are not performed here. Instead, the focus is on pre/post-trip inspections, interior cleaning, secure overnight storage, or other minor issues (wiper-blade or light bulb replacement, etc.).¹⁰ Having a secure driver comfort facility also reduces deadhead and increases labor optimization.

Additionally, a satellite operations hub may make recruitment easier, if drivers can be hired to serve these remote communities. It also could benefit the community in the event of an emergency to have some buses staged at the satellite location.

A recent example in Healdsburg, CA demonstrated that this strategy could improve efficiency by reducing non-revenue operations, otherwise known as deadhead. The Healdsburg facility supports vehicle parking/storage, operator reporting, and light servicing, but not a full maintenance garage.

In Michigan, several transit agencies are using this strategy. For example, the Eastern Upper Peninsula Transportation Authority (EUPTA) operates a secondary facility for Dial-

⁹ Federal Transit Administration (2025). *HIRTA Deployment Overview*. Intelligent Transportation Systems Joint Program Office. Retrieved December 17, 2025, <https://www.its.dot.gov/research-areas/ITS4US/deployments/iowa/>

¹⁰ APTA (2011). *Architectural and Engineering Design for a Transit Operating and Maintenance Facility*. APTA Standards Development Program. https://www.apta.com/wp-content/uploads/Standards_Documents/APTA-BTS-BMF-RP-001-11.pdf

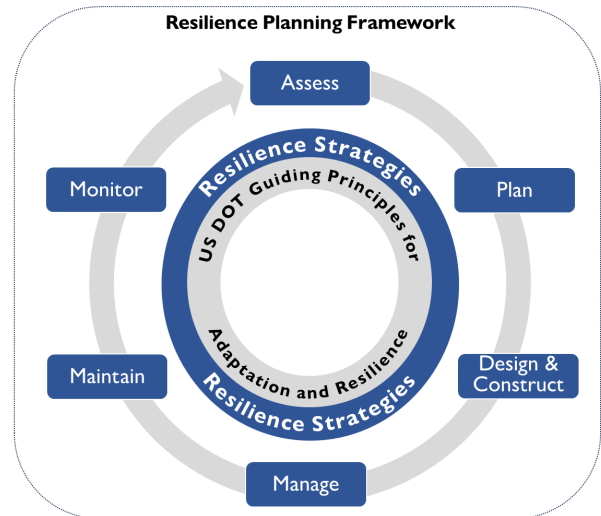


A-Ride service in Newberry, 70 miles distant from the main garage, to facilitate operator reporting and vehicle staging.¹¹

3.1.3 Operations Innovations

RESILIENCY PLANNING

As climate change and other factors continue to intensify and accelerate natural threats to communities, it will become ever more important for transit agencies to prepare their responses to these events. Agencies, large and small, are drafting resiliency plans so that they are in the best position should the worst happen. Guidance released by the FTA's Volpe Center for Transit Research in 2024 presents a framework for resiliency planning that makes it a continuing activity for the agency.



ZERO-EMISSIONS BUSES/VANS

Many transit agencies are now in the process of converting to zero-emission buses (ZEBs). While this industry is still maturing, the benefits are already becoming clear. They include improved local air quality, quieter and smoother customer experience, and potential savings on fuel costs. The Transit Cooperative Research Program (TCRP) 'Guide to Deploying Zero-Emission Transit Buses' notes that both hydrogen-powered Fuel Cell Electric Buses (FCEBs) and Battery Electric Buses (BEBs) demonstrated greater efficiencies than diesel or compressed natural gas buses under the Federal Transit Administration's testing.¹² The first step toward a zero-emissions future is to create a ZEB Transition Plan based on the agency's goals.

3.1.4 Micromobility & First/Last Mile

It is often said that every transit trip starts and ends with a pedestrian trip. A proven strategy to increase transit ridership is to make the first and/or last mile of the trip safe and convenient. Considerable innovation has occurred in this space over the past five years. This could be an area where Mecosta and Osceola counties, and the City of Big Rapids, may see opportunities for investment. Note that these strategies are more oriented toward fixed-route systems, such as future popular destination stops (route loop) and DART's Ferris Shuttle.

¹¹ Eastern Upper Peninsula Transportation Authority (n.d.). *Sault Ste. Marie Area*. EUPTA.net. Retrieved April 3, 2026, from <https://www.eupta.net/bussing-system/>

¹² Linscott, M., & Posner, A. (2021). *Guidebook for Deploying Zero-Emission Transit Buses* (p. 1). National Academies Press. <https://doi.org/10.17226/25842>



BIKE SHARE

Bike share systems have become an essential part of the mobility landscape in modern cities. With the advent of electric bikes, the range of a transit traveler can extend even farther. For example, the Kansas City Area Transportation Authority (KCATA) has incorporated bike share and e-scooter programs under the KCATA brand.¹³ This strategy requires density of both population and destinations, so might be best in Big Rapids, with a focus on Ferris State University students.

SECURE BIKE LOCKERS

Enabling transit riders to safely store their bikes at either end of a trip can also extend their potential range and access. Transit agencies have often added a simple bike rack as an amenity to transit stops, but innovative new designs offer the potential to increase safety and reduce the risk of theft. For example, the Oone Pod is smaller than a shipping container, but stores 24 bikes, with access secured by smartphone app.¹⁴ These would be best deployed at fixed-route hubs or park-and-ride facilities.



CARPOOL, VANPOOL, AND TRAVEL DEMAND MANAGEMENT

Travel Demand Management (TDM) strategies aim to make the most out of transportation systems already in place, including public transit, mostly by incentivizing travelers to choose better options, with the goal of improving mobility, reducing congestion, and lowering vehicle emissions. Common TDM tactics include pre-tax purchasing of transit passes; promotion of telecommuting; support for active transportation and micro-mobility; and offering carpool or vanpool options.¹⁵

TDM strategies might be good fit for MOTA. For example, MOTA could negotiate with major employers to offer discounted passes for employees.

A carpool/vanpool program based at MOTA could be a step toward making commuter transit viable in the Mecosta-Osceola region. By matching prospective participants in a database, MOTA could organize specific pools of workers heading to the same destination in a single car. Or, by engaging with a vanpool provider, MOTA could enable participants to rent a larger vehicle through a federal subsidy. The FTA recognizes vanpool as a public transit mode that is eligible for formula funding.

¹³ American Public Transportation Association (2021). *First Last/Mile Solutions*. Retrieved November 10, 2025, <https://www.apta.com/research-technical-resources/mobility-innovation-hub/first-last-mile-solutions/>

¹⁴ Oonee (2025). *Pod*. Retrieved November 10, 2025, <https://www.oonee.us/pod>

¹⁵ Association for Commuter Transportation (2026). *What is TDM?* Actweb.org. Retrieved February 24, 2026, from <https://www.actweb.org/what-is-tdm>



3.1.5 Regional Transit Agency Cooperation & Mergers

JOINT AGREEMENTS & MOUs

The most basic level of regional cooperation is for agencies to form issue-specific partnerships to address specific issues or capitalize on specific opportunities. Intergovernmental Agreements (IGAs) or Memoranda of Understanding (MOUs) can cover policy issues, such as synchronizing fare structures, encouraging transfers, or partnering in major capital investments. An example of this is provided below. Section 4.1.3 provides MOTA and DART specific strategies for implementation.

Advantages

- No structural changes needed
- Solves specific problems
- Brings immediate benefits
- Builds trust and cooperation

Challenges

- May leave structural issues unaddressed
- Logistic challenges for more distant partners
- Limited scope of potential subjects

CONCORD AND LIVERMORE, CA

During the service disruptions caused by the COVID-19 crisis, Livermore Amador Valley Transit Authority (Wheels) and Central Contra Costa County Transit Authority (County Connection) used an IGA to test a partnership to provide ADA paratransit service across county borders. The pilot project, called One-Seat Ride, allowed customers to reach destinations across counties without transfers, supporting essential travel. Following the success of the pilot, Wheels and County Connection agreed to consolidate the paratransit services in both areas into a joint agency, showing how IGAs and MOUs can lead to more partnership.¹⁶

ADVISORY COMMITTEE OR PARTNERSHIP BOARD

A more formal coordination mechanism, which is also often used as a step towards consolidation, is the establishment of a committee or board endowed with some level of authority to move the agencies toward closer cooperation. An Advisory Committee is the simplest approach. It would meet monthly or quarterly to review service and policy details to maximize agency efficiency and rider convenience. A Partnership Board approach is more formal. It is established with a

Advantages

- Builds public support
- Focuses federal planning funds on regional solutions
- Can work on quick-win coordination
- Can have a multi-county perspective
- Builds clout with the Legislature

Challenges

- Will take patience to see results
- Needs legislative support for implementation

¹⁶ (2022, April 18). *Wheels and County Connection Consolidate Paratransit Services*. County Connection. Retrieved March 8, 2026, from <https://countyconnection.com/wheels-and-county-connection-consolidate-paratransit-services/>



mandate to act and move toward a predetermined goal. While the stated aim of such a board might be a future merger or regional authority, it can act in the interim much like the Advisory Committee to identify “low-hanging fruit” partnership opportunities. This gives the community time to see the benefits of cooperation and builds trust between the member agencies, while also keeping the goal in-mind. If successful, a Partnership Board will see its goal enacted and will either dissolve when the goal is reached or may become a consolidated agency’s board.

CHARLOTTESVILLE, VA

In Charlottesville, VA, a Partnership Board was mandated by state law and was directed to study consolidation of the city’s transit authority with the county-wide agency in surrounding Albemarle County. The legislation authorized the formation of an authority but did not give it the power to collect revenue. For seven years, the board studied merger and funding concepts, but the communities took no action. In 2016, city and county officials formed the Regional Transit Partnership (RTP) to engage community stakeholders and elected officials without being bound to the terms of the legislation. Housed at the region’s Metropolitan Planning Organization (MPO), the RTP developed a regional transit vision plan and a regional transit governance study to advance consolidation dialogue. In 2025, Charlottesville and Albemarle County agreed to form CARTA - Charlottesville Albemarle Regional Transit Authority. RTA is in the process of shutting down as CARTA seeks legislative approval for funding.

BALTIMORE, MD

Authorized by a 2023 state law, the Baltimore Regional Transit Commission (BRTC) was formed as an Advisory Committee to the statewide transit agency- Maryland Transit Authority (MTA) and to draw it closer to Baltimore City. BRTC is housed within the Baltimore Metropolitan Council (the city’s MPO), which provides staff support.

Formed in the wake of the cancellation of a long-planned light-rail project, BRTC was given a range of mandates, inclusive of determining if a regional authority should be developed.¹⁷ Since its inception in early 2024, BRTC has held 13 meetings where MTA’s performance and budgets are reviewed, and it proposes service adjustments and capital projects. It acts much like an authority’s board of directors to an entity that had previously only answered to the governor.¹⁸ Similar to Charlottesville, this board can continue to provide useful coordination assistance while weighing the merits of forming a regional authority in the future.

¹⁷ Gordon, W. (2024, February 21). Would Baltimore be better off with a regional transit authority? *Greater Washington*. <https://ggwash.org/view/92626/would-baltimore-be-better-off-with-a-regional-transit-authority>

¹⁸ (2025, September 4). *Baltimore Regional Transit Commission*. Baltimore Metropolitan Council. Retrieved November 4, 2025, <https://baltometro.org/committee/baltimore-regional-transit-commission/>



REGIONAL TRANSIT AUTHORITY

The Regional Transit Authority structure allows for a closer joining of key functions, while also maintaining each partner agency's unique, local features. A regional authority can be an efficient vehicle for the administration of a large area—even without directly interoperable services or service areas.

SOUTH CENTRAL TRANSIT AUTHORITY, PA

In 2014, Lancaster and Berks counties in central PA formed the South Central Transit Authority (SCTA). This regional authority was structured as a *third* entity in the region, immediately becoming the transit operator for the transit services of Red Rose Transit Authority (RRTA) and Berks Area Reading Transportation Authority (BARTA).

Technically, SCTA leases transit service from these agencies, and provides management services in return. SCTA provides all management, planning, marketing, public outreach, and grant application/administration. The same employees still work for BARTA and RRTA and are represented by their respective unions. All capital assets also continue to be held by BARTA and RRTA; however, only SCTA acquires new assets.

Eventually, SCTA will directly own all vehicles and facilities. This structure allowed the formation of SCTA to proceed much faster than a traditional merger or consolidation would allow. The SCTA board has 10 members, which includes the five members of RRTA's board and the five members of BARTA's board.

The regional authority approach allows considerable consolidation of functions and efficiencies and affords opportunities for coordination over issues such as purchasing or fare policy. At the same time, both the Red Rose and BARTA brands continue to be represented by their respective counties. Riders see few changes, with their familiar buses and drivers looking the same.

Advantages

- Increased clout at the state level
- Potential to expand service & taxing area
- Stronger purchasing position when negotiating with vendors
- Lower administrative expenses
- Opportunities for coordinated service
- Maintaining service that meets each county's unique needs

Challenges

- Complex arrangement
- Three independent entities
- Employees not unified—two unions plus management
- Legacy ownership of assets may linger for many years



CONSOLIDATION OR MERGER

A direct consolidation of services with an agency merger would simplify operations over the long term; however, the merger process is not without challenges. As the two agencies come together, they may need to resolve differences between union contracts or other workforce issues, and existing employees may have anxiety over their role in the new entity. Meanwhile, the travelling public may also face anxiety about whether the merged agency will be able to maintain or improve service quality and if fares or taxes will increase.

A detailed financial assessment will give the two agencies a common foundation from which to negotiate the terms of the merger. FTA and MDOT will need to be included as stakeholders, in addition to the City of Big Rapids and the two counties. Merging the two services together would solve ongoing issues of customer confusion but could also raise anxiety with riders over their service: a system-wide service overhaul with a robust public engagement might be needed.

Advantages

- Supports service expansion
- Pools resources and clout
- Eliminates redundancies
- Resolves customer confusion

Challenges

- Difficult to reverse
- Blending workforces & unions
- Public anxiety over service & costs
- Requires a data & assets analysis of both agencies and detailed negotiations.

WASHINGTON COUNTY, PA

The fixed-route service in the city of Washington, PA merged in 2015 with the county-wide demand-response authority. Prior to the merger, Washington City Transit (WCT) existed as a department of the city. Washington County Transit Authority—organized under Pennsylvania’s municipal authorities’ laws—combined with WCT and rebranded the agency as Freedom Transit. Freedom Transit is governed by a seven-member Board of Directors, appointed by the Washington County Commissioners. The resulting synergies have brought considerable benefits to transit in the region. With service now integrated, customers now are clear about how to get the rides they need. Service was able to expand beyond the city limits to key destinations, including employment clusters, such as the racetrack/casino, and to accept local match contributions from municipalities that benefit from the service. Freedom Transit is currently constructing a new integrated operating garage, something that might not have been possible for either of the original agencies.¹⁹

CORNING, NY

Corning-Erwin Area Transit System (CEATS), operated by the City of Corning, NY, and the county it is located in operates Steuben County Transit (SCT). Both run complimentary services with little overlap. A 2023 consolidation study examined a range of partnership concepts, focusing on operational improvements, customer service, and

¹⁹ (2026, January 1). *About Freedom Transit*. Freedom Transit. Retrieved February 24, 2026, from <https://freedom-transit.org/about-us/about-freedom-transit/>



finance. The study concluded that a merger was the best option and outlined the next steps, including possible challenges ahead.²⁰

TITLE VI AND CIVIL RIGHTS CONSIDERATIONS

Please be aware that any of these options have the potential to impact the service to the public and may require adherence to applicable civil rights legislation, such as Title VI. Any change to the transit system must result in equitable outcomes that do not disadvantage vulnerable populations. A Title VI assessment may be needed to complete any coordination or consolidation.

3.1.6 Funding Strategies

Agencies that understand how these emerging trends align with federal and state priorities are those winning grants, expanding service, and modernizing the fastest. Traditional federal demand-response transit funding comes from FTA and the state from the following programs.

- Section 5310 – Seniors & Individuals with Disabilities
- Section 5311 – Rural Transit
- Section 5307 – Urbanized Areas
- CMAQ – Congestion Mitigation & Air Quality
- Rural Surface Transportation Grants
- State-level mobility innovation funds

Rural mobility is currently a national priority especially when agencies deploy modern fare collection tools. This is due to FTA's goals for modern fare collection, equity goals, and digital transformation initiatives. Agencies seeking to adopt these systems can justify funding as part of a broader modernization strategy, which FTA is increasingly interested in. Data transparency is also becoming a funding requirement. Agencies that can provide General Transit Feed Specification (GTFS) Flex feeds, real-time performance dashboards, and cost-per-trip analytics are better positioned for grants.

Planning Efforts

Funding & Operations Plan

Small rural and urban demand-response transit agencies are developing strategic operations plans to guide their grant pursuits and investment priorities. These plans can be developed as an Excel spreadsheet and/or in a Word document with additional narrative. Agencies report that they use their funding plans to organize and track opportunities and expenditures. Although it may take time to develop initially, they report that once a framework is established, it is easy to maintain and invaluable to executing their goals.

²⁰ Creighton & Manning; MCA (2023, August), Public Transportation Consolidation Study Final Report: Prepared for The City of Corning, NY & Steuben County, NY, retrieved February 16, 2026, [City of Corning-Steuben County Public Transportation Study Final Report\(1\).pdf](#)

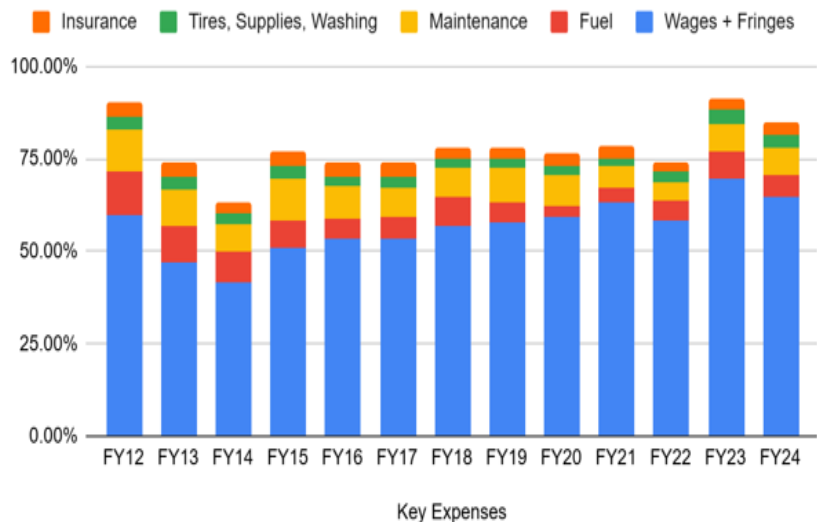


The agency strategically lists its investments in order of priority. This table includes costs and desired acquisition timeframes as well as applicable details such as place of purchase and the person who is (or will be) responsible for the purchase. Relevant funding sources are also identified in this table for each investment.

Separately, a table of funding sources and revenue is also developed. This table includes grant program details, contacts, and deadlines, including those on the Federal, State, and foundation levels. It also includes additional funding source information, such as businesses to reach out to for sponsorship.

The use of Excel enables making charts and graphs with ease. These visuals are imperative for internal and external use. An example, from another agency, of a useful expense graph is shown to the right.

In addition to tables and charts, these plans often include a vehicle purchase plan since MDOT requires that agencies plan out vehicle requests for four years during every fiscal year application. Multi-year budgeting determines the level where the organization can meet the anticipated demand. Some agencies develop six-year fleet request plans inclusive of replacement and expansion vehicle needs.



Strategic Business and Marketing Plan

Rural agencies are also now developing Strategic Business and Marketing Plans and a variety of presentations of this key information. This plan is primarily intended to build a case for support by stakeholders and potential investors. The plans often include the following components:

- Agency Overview – What makes MOTA unique? MOTA's mission, vision, values.
- Goals, Objectives, and Strategies, I.e., percentage to increase ridership and ride utilization by annually by leveraging technology, etc.
- Current Service Area and Market
- Similar Transit Systems to Benchmark
- Operations Plan
- Financial Plan

Newsletters and feature stories are often developed from this plan. They may include short, accessible videos, for instance about how MOTA serves its riders and survey responses and feature short stories about riders' positive experiences.



4 Implementation Plan

Implementation strategy actions were derived from the previous sections of this plan as well as from the Existing Conditions and Service Profiles Report and the feedback obtained from MOTA's public survey, its stakeholder workshops, and its strategic leadership meeting.

To strategically guide implementation, the actions are considered through a SWOT analysis (strengths, weaknesses, opportunities, and threats) and a SOAR analysis (strengths, opportunities, aspirations, and results). The strategies were also considered in the context of a potential MOTA/DART merger, which determines if they are appropriate for both scenarios (no merger or merger), or only for one or the other. Merger implications are also included, if applicable. In some cases, a similar action could be taken in both scenarios, however, the information detailed in **Section 4.2** and outlined in **Table 9**, are pertinent to initial implementation goals. The recommended strategies are also developed into no-merger and merger scenarios in **Section 4.3**.

4.1 Priorities and Values

Values, goals, and priorities were considered at each level of engagement—public survey, stakeholder workshops, and at the MOTA leadership meeting. These priorities set the direction of the strategic plan and identify which actions should be prioritized in implementation.

At the leadership meeting, participants (MOTA Board and leadership staff) ranked the values and outcomes that they would like to see MOTA aspire to in the following order:

Value or Outcome	Rank
Help those with mobility challenges	1
Easier access to jobs	2
Improve residents' health	3
Increase worker productivity	4
Expand freedom	5

More than 100 responses were submitted to the public survey between October 8, 2025, and February 27, 2026. Respondents suggested support for several potential strategies, including:

- Workforce transportation
- Extended hours & days of service
- Online reservations
- Fixed-routes and predetermined pick up/drop off locations
- On-demand services
- Real-time arrival information
- In-town service in Big Rapids



Participants at the two stakeholder workshops—held online and in-person in Evart and Big Rapids—expressed support for similar priorities, such as:

- Fixed-route bus service
- Expanded hours and other actions to support second and third-shift workers
- Improving public awareness of existing services

4.2 Strategic Actions

MOTA's strategic position can be expressed with the SWOT paradigm and enhanced by considering the aspirations and results that can guide implementation. SWOT is a useful way to consider strategic objectives by looking at internal (strengths and weaknesses) and external (opportunities and threats) factors. Aspirations (goals) and results (performance measures) are then added to guide the key actions.

4.2.1 Service Actions (S)

- **S1: Develop a Service Plan** focusing on the Service Area Concentrations outlined in **Section 2.2** and summarized in **Section 2.3**. Include timeframes for service enhancement and growth.
 - **SWOT Condition: (Opportunity)** Many small urban and rural demand-response transit agencies are taking the time to develop and track a Service Plan to plan for the implementation of service goals with a phased approach.
 - **Aspirations:** Improve existing services and expand services based on a detailed **Service Plan**.
 - **Results:** MOTA can strategically tackle its service enhancement and growth goals in a phased approach.
 - **Merger Implications: (No Merger)** A similar plan could be created in a merger scenario; however, it would not be an initial goal.
 - **Implementation Costs:** An updated service plan would likely cost \$250,000. Pursue federal rural formula funding through MDOT or discretionary grants.
 - **Operating Costs:** None.
 - **Capital Requirements:** None.
 - **Facility Needs:** None.
- **S2: Conduct a General Market Analysis**, including O/D data, of workers traveling to industrial areas and other high-employment clusters to estimate transit performance. Consider adding park-and-ride facilities to collect riders at hub locations. Also consider Travel Demand Management (TDM) strategies, such as directly working with employers to provide passes, offering an Emergency Ride Home feature, starting a carpool matching program, or procuring a vanpool contract.



- **SWOT Condition: (Opportunity)** Regional leadership is supportive of workforce transit services to employment hubs, such as the manufacturing districts in Big Rapids and Reed City.
- **Aspirations:** Regular commuter service between higher-density suburbs and employment zones.
- **Results:** Sustainable ridership on commuter service. Increased support from employers. Steps toward employment prioritization of rides.
- **Merger Implications: (Merger)** Fixed-route commuter service into Big Rapids needs explicit City support for success.
- **Implementation Costs:** A limited market study could be done for under \$100,000. Consider partnering with municipal or business groups or with the college.
- **Operating Costs:** None.
- **Capital Requirements:** None.
- **Facility Needs:** None.
- **S3:** Perform a **Microtransit Market Analysis** to assess the costs & benefits of dedicating resources to serving these areas, especially microtransit or circulator service in Reed City and/or Evart.
 - **SWOT Condition: (Opportunity)** Current study has identified zones of transit propensity in Osceola County.
 - **Aspirations:** Analysis data leads MOTA to improve service for Osceola County residents.
 - **Results:** Areas experiencing growth are supported with mobility.
 - **Merger Implications: (Both)** This is more important without the merger since MOTA will need to look beyond the City of Big Rapids for growth opportunities.
 - **Implementation Costs:** An independent study could be done for under \$100,000. Other strategies could be to work with MDOT for technical assistance, or to work directly with a microtransit vendor—although this last approach could limit flexibility on implementation of a microtransit service.
 - **Operating Costs:** None.
 - **Capital Requirements:** None.
 - **Facility Needs:** None.
- **S4:** Adopt a **Transit Development Plan (TDP)** to optimize service for future growth. A TDP would look at current services to look for ways to provide more benefit to residents using the same available funding.
 - **SWOT Condition: (Strength)** MOTA ridership grew by one-third in 2024, corresponding with an increase in service hours and miles, and is now back to 50% of the pre-pandemic, 2019 peak.



- **Aspirations:** Total ridership to surpass the 2019 pre-pandemic peak.
- **Results:** Unlinked Passenger Trips
- **Merger Implications:** (*No Merger*) A similar plan could be created in a merged scenario, but it might not be an initial goal.
- **Implementation Costs:** A TDP for MOTA would likely cost less than \$100,000.
- **Operating Costs:** None.
- **Capital Requirements:** None.
- **Facility Needs:** None.
- **S5:** Add limited **fixed-route service** in and around Big Rapids. A merged agency could estimate ridership on routes with stops at key locations such as shopping (Walmart, Meijer, etc.), employment hubs, and residential neighborhoods. FSU could continue to subsidize as long as service density at the campus was maintained. Consider capital costs of expansion, such as stops and vehicles.
 - **SWOT Condition:** (*Opportunity*) Ridership statistics imply that there is latent demand for fixed-route service within Big Rapids, beyond the Ferris State campus. DART's demand-response ridership spiked in 2020-2021 when the campus shuttle was suspended and then returned to its previous trend when the lockdown ended. This could show that many shuttle riders were not necessarily associated with campus activity and were forced to switch to the demand-response system to maintain mobility. This conclusion could justify expanding the shuttle to a city-wide fixed-route service.
 - **Aspirations:** City of Big Rapids is served by a fixed or flex-route network of 1-3 routes.
 - **Results:** Sustainable ridership on fixed/flex routes in and around Big Rapids supported by 5311 and state funding commensurate with the service and continued university backing.
 - **Merger Implications:** (*Merger*) This could only occur in a merged scenario since DART is unlikely to be able to expand beyond the FSU agreement due to its vehicle/driver count and MOTA is unable to offer this service in the City of Big Rapids.
 - **Implementation Costs:** Expanding the FSU Shuttle into 1-3 fixed-routes could incur some planning costs, keeping in-mind Title VI requirements for public notification and input. This could be planned for under \$100,000.
 - **Operating Costs:** Assuming an additional 24 hours per day of bus service in Big Rapids at the 2024 cost per Vehicle Revenue Hour (\$63.85), the two fixed routes would need an additional \$459,720 per year.



- **Capital Requirements:** Up to three additional revenue vehicles may be needed. MOTA/DART would be responsible for installing stops and stations, although sponsorships might cover some of those costs. \$400,000.
- **Facility Needs:** Storage for the additional buses should be taken into account when considering the new operating and maintenance facility.

4.2.2 Operations Actions (O)

- **O1:** Create a **one-page monthly newsletter** that is emailed to stakeholders and posted on social media. Examples it can include are asks for specific help to advertise events or services, provide the education video link/s, and summarize the rider steps.
 - **SWOT Condition:** (*Opportunity*) MOTA's stakeholders stated they are very willing to disseminate concise information. They also reported that more contact from MOTA would be valuable.
 - **Aspirations:** Rely more on regional organizations and other stakeholders to market and educate about MOTA's services.
 - **Results:** Keep MOTA on the top of everyone's minds. Establish better relationships with stakeholders and increase stakeholders.
 - **Merger Implications:** (*No Merger*) A similar campaign could be established in a merger scenario; however, it would not be an initial goal.
 - **Implementation Costs:** Web design and hosting costs should be low.
 - **Operating Costs:** Staff time devoted to this could run to 10 hours per week. Printing costs should be considered if a physical edition is included.
 - **Capital Requirements:** None.
 - **Facility Needs:** None.
- **O2:** Develop a detailed **Funding and Operations Plan** that includes a **Vehicle Replacement Plan** with the expected annual orders to replace retiring buses and support expected service expansion over the next ten years, as part of the Transit Asset Management Plan.
 - **SWOT Condition:** (*Strength*) MOTA's revenue vehicle fleet is performing well.
 - **Aspirations:** A **Funding and Operations Plan**, including a 10-year Vehicle Replacement Plan—is created, followed, and revised annually or as needed.
 - **Results:** Revenue vehicle fleet is at optimal size and in a state of good repair. Average age of fleet is maintained below 5 years /150,000 miles.
 - **Merger Implications:** (*Both*) In a merged scenario, develop a joint strategy for fleet asset management across all modes & services.



- **Implementation Costs:** Funding and operations consultant support could be in the \$100,000 range. Consider requesting technical assistance from MDOT or applying for competitive grants.
- **Operating Costs:** None.
- **Capital Requirements:** None.
- **Facility Needs:** None.
- **O3:** Develop a **Strategic Business and Marketing Plan** to raise awareness of available transportation services in key populations. Also develop a detailed **Outreach Plan** that includes strategies to connect with these populations. Examples include Customize messages to target populations, attend K-12 sporting events, provide information to administration/school districts, etc.
 - **SWOT Condition: (Threat)** Key customer sectors lack awareness of MOTA's services. Over 40% of survey respondents have not used MOTA services before. Of those people, the majority are not disabled, have annual household incomes of \$50,000 to \$99,000, live in the Big Rapids 49307 zip code, and are most interested in the Demand-Response service. These "choice riders" could make a significant difference in the success of MOTA's ridership goals.
 - **Aspirations:** Through a broad marketing campaign, Mecosta and Osceola residents regard MOTA as their best transportation option, where applicable, and embrace the perspective that public transit is available to everyone.
 - **Results:** Public surveys show increasing awareness and approval of MOTA's services. Unlinked Passenger Trips increase for key demographic sectors, including those who would generally not use the services (i.e., families, people with vehicles, K-12 students, etc.).
 - **Merger Implications: (Both)** Even without an agency consolidation, this joint marketing campaign could be a good target for cooperation through an MOU.
 - **Implementation Costs:** A joint strategic and marketing plan could be done for under \$100,000. Seek technical assistance from MDOT or pursue competitive grants. Consider partnering with the college.
 - **Operating Costs:** Implementation of a joint marketing strategy would take investment by both agencies.
 - **Capital Requirements:** None.
 - **Facility Needs:** None.
- **O4:** Procure upgraded **CAD/AVL** vehicle hardware and dispatch software. Implement updated training for staff to maximize customer service quality. Consider additional optimization software such as AI-Drive Routing & Dynamic Optimization, Automated Passenger Counting, etc. to find efficiencies that can be redistributed for additional hours of service.



- **SWOT Condition: (Weakness)** Survey respondents criticized on-time performance and said that wait-times are too long. Service hours/days do not meet the needs of some key workers.
- **Aspirations:** Modern transit technology, including dispatch software and vehicle location hardware, empower dispatchers to optimize resources, reducing uncertainty and delay for customers.
- **Results:** Service reliability measures (on-time performance; asset down-time) improved.
- **Merger Implications: (Both)** In a merged scenario, systems will need to be aligned between the services, including vehicle tracking hardware and dispatch software and procedures. Training would need to be aligned for drivers, dispatchers, and customer service agents across services and modes.
- **Implementation Costs:** None.
- **Operating Costs:** \$40,000-\$160,000 is an estimate, based on TRB research, adjusted for inflation.
- **Capital Requirements:** \$400,000-\$800,000 is a typical range for a rural agency with 30 revenue vehicles, based on TRB research, adjusted for inflation.²¹
- **Facility Needs:** None.
- **O5: Procure and/or update customer-facing technology** (e.g. **mobile ticketing**) to improve expectations, facilitate engagement with MOTA's services, and relieve management chores.
 - **SWOT Condition: (Weakness)** Customer-facing systems lack expected online features, such as booking or fare payment.
 - **Aspirations:** MOTA's community profile is raised as the public knows how to use web and app-based tools to make trips. Meanwhile, back-office chores, such as managing cash, are lightened or eliminated.
 - **Results:** Use of cash for fare payment declines to a manageable level. Overall fare revenue increases as the easier-to-use systems encourage more ridership. No-shows and cancellations are reduced as customers are able to use the app to manage their trips.
 - **Merger Implications: (No Merger)** In a merged scenario, MOTA and DART will need to adopt the same system. In the event of a merger, DART's existing technology should be the starting position, but there is room to consider enhancements.
 - **Implementation Costs:** Exact costs depend on specific deployment options and vendors, but assuming the use of an account-based system

²¹ Schweiger, C. L. (2003). *TCRP Synthesis 48 - Real-Time Bus Arrival Information Systems* (p. 20). Transportation Research Board. https://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_syn_48fm.pdf



with visual validation by bus operators (no on-vehicle hardware), setup costs would be minimal.

- **Operating Costs:** Operating costs for a Fare-Payment-as-a-Service (FPAas) system vary based on the vendor. When including subscription fees, back-office services, bank/transaction fees, and per-ticket fees, operating costs would be between \$20k-\$80 per year.²²
- **Capital Requirements:** On-vehicle equipment may include mobile Internet modems, if they are not already installed, at ~\$500 per bus.
- **Facility Needs:** None and may alleviate the need for an on-site counting room.
- **O6:** Develop and administer **customer service-centric trainings**; Consider reward programs for high-performance standards in customer care.
 - **SWOT Condition:** (*Weakness*) Survey respondents criticize careless or rude drivers and customer service representatives (CSRs).
 - **Aspirations:** Operators, CSRs, and dispatchers have access to training opportunities that advance customer service skills.
 - **Results:** Customer complaint calls are reduced and ridership increases.
 - **Merger Implications:** (*Both*) In a merged scenario, coordinate training and reward program. In a no-merge scenario, this could be an opportunity for cooperation in a joint program.
 - **Implementation Costs:** None.
 - **Operating Costs:** Training events offered by the Michigan Public Transportation Association (MPTA) are often subsidized by the state's Rural Transit Assistance Program (RTAP) and are free to agency staff. Reward or incentive programs may incur some ongoing costs.
 - **Capital Requirements:** None.
 - **Facility Needs:** In-house training programs will require space.
- **O7:** Undertake **Coordinated Trip Booking** and **Mobility Management** by determining how the region's transportation providers can access the same system as the ride generators. For example, when hospitals can directly book trips through MOTA for patients when they are discharged. Use a Mobility Management approach to align riders with available funding and subsidy sources to streamline systems for both customers and CSRs.

²² National Center for Applied Transit Technology (2022, November 8). *Fare Background Systems Payments and Policies*. New Fare Payment Systems and Payment Technology. Retrieved March 27, 2026, from <https://n-catt.org/guidebooks/new-fare-payment-systems-and-payment-technology/fare-background-systems-payments-and-policies/>



- **SWOT Condition:** (*Threat*) Human service and other transportation providers are uncoordinated with MOTA. DHHS & MI Works clients need more awareness of available services.
- **Aspirations:** Regional human services providers could be part of a coordinated system with MOTA to better serve clients and improve operations.
- **Results:** No-shows decline as coordination and mobility management align needs with services.
- **Merger Implications:** (*Both*) This concept's effectiveness would magnify in a merged scenario, with human services clients throughout the region having coordinated access to transportation in and away from Big Rapids.
- **Implementation Costs:** Systems may incur significant costs, or be done with existing resources, depending on the extent of the system. Technology and transit innovation grants could be available. However, keep in mind that this is an eligible use of federal 5311 capital funds.²³
- **Operating Costs:** Up to one FTE of staff time may be needed, but most of that could come from rebalancing priorities for existing staff.
- **Capital Requirements:** Existing phone and in-person booking would be compatible; however, dedicated kiosks or other technology would require investment.
- **Facility Needs:** None.

4.2.3 Facility Actions (F)

- **F1:** Expand facility capacity for **MOTA's Needs**. Follow outcomes and strategies provided in the 2025-2026 Facility Feasibility Study to acquire facility capacity.
 - **SWOT Condition:** (*Weakness*) Facility limitations at MOTA's Big Rapids location restrict potential to expand service.
 - **Aspirations:** Operating and maintenance assets are sized adequately to support existing needs and expected service expansion in Mecosta and Osceola Counties.
 - **Results:** Improved operational efficiency and potential for expanded service.
 - **Merger Implications:** (*No Merger*) In a no-merger scenario, concentrate on expanding current capacity to support county service needs.
 - **Implementation Costs:** See Facility Feasibility Study.
 - **Operating Costs:** See Facility Feasibility Study
 - **Capital Requirements:** See Facility Feasibility Study.

²³ (2024). *Circular 9040.1H* (pp. IV-5). Federal Transit Administration.
<https://www.transit.dot.gov/sites/fta.dot.gov/files/2024-10/C9040.1H-Circular-11-01-2024.pdf>



- **Facility Needs:** See Facility Feasibility Study.
- **F2: Expand facility capacity for the Needs of a merged MOTA/DART agency.** Follow outcomes and strategies provided in the 2025-2026 Facility Feasibility Study to acquire facility capacity.
 - **SWOT Condition: (Weakness)** Facility limitations at MOTA's and DART's Big Rapids locations restrict potential to expand service.
 - **Aspirations:** Operating and maintenance assets are sized adequately to support existing needs and expected service expansion in Big Rapids as well as the rest of the two counties.
 - **Results:** Improved operational efficiency and potential for expanded service.
 - **Merger Implications: (Merger)** Constructing a new facility, or expanding the existing facility, becomes more realistic if it includes a combination with DART.
 - **Implementation Costs:** See Facility Feasibility Study.
 - **Operating Costs:** See Facility Feasibility Study.
 - **Capital Requirements:** See Facility Feasibility Study.
 - **Facility Needs:** See Facility Feasibility Study.
- **F3: Operate a Satellite Mini-Hub in Osceola County.** An ideal location in Osceola could be identified by looking at current trip O/D data and the transit propensity index map. MOTA should look to purchase a 2,000-6,000 square foot, fenced, outdoor lot that either can be fitted with block heaters and accommodate a small, pre-engineered metal building or has an adequate existing structure.
 - **SWOT Condition: (Weakness)** Service to NE Osceola generates significant and costly deadhead.
 - **Aspirations:** MOTA is served by a satellite mini-hub in a key location in Osceola County, allowing buses to be staged safely for service to these destinations. The hub also provides community resiliency support in case of emergencies and can reduce stress on the system from minor mechanical or staffing issues.
 - **Results:** Reduced deadhead; increased ridership in Osceola County; better resiliency; net operating savings.
 - **Merger Implications: (No Merger)** This becomes more important without the merger, as MOTA will need to look beyond Big Rapids for growth opportunities.
 - **Implementation Costs:** Planning or site-selection may be necessary.
 - **Operating Costs:** The facility can be staffed with, at most, 1.0 FTE, with total operating costs from \$50,000-\$150,000 per year.
 - **Capital Requirements:** A facility to accommodate 10-15 vehicles might cost from \$500-\$1,500,000 to purchase, renovate, and fit-out.



- **Facility Needs:** This is an additional facility for MOTA.

4.2.4 Planning Actions (P)

- **P1:** Conduct a detailed **Consolidation Study** to further determine the feasibility of and the plan for a merger or regional authority for MOTA and DART.
 - **SWOT Condition:** (*Opportunity*) Big Rapids is open to consolidation of DART with MOTA.
 - **Aspirations:** Regional and city-wide consensus is reached on the optimal structure for public transit in the bi-county region.
 - **Results:** Transit service is put on sustainable footing into the future to support economic and life activities.
 - **Merger Implications:** (*Merger*) If the consolidation concept is supported by leadership at both organizations, move forward with it.
 - **Implementation Costs:** Costs for similar studies are under \$100,000.
 - **Operating Costs:** None.
 - **Capital Requirements:** None.
 - **Facility Needs:** None.
- **P2:** MOTA and DART form a **Partnership Board** to coordinate services and goals in the short term, and to discuss the potential of a future merger or regional authority in the long term.
 - **SWOT Condition:** (*Threat*) The total population in Mecosta and Osceola Counties is expected to grow slowly or possibly decline. However, the 65+ population is projected to grow within the next 5, 10, and 25 years.
 - **Aspirations:** MOTA and DART work closer together to support their communities with a foundation of quality mobility.
 - **Results:** A partnership committee makes short-term improvements to both systems through coordination and cooperation while building support for a closer relationship in the future.
 - **Merger Implications:** (*No-Merger*) MOTA and DART will not be able to meet the region's mobility challenges without closer coordination and cooperation.



- **Implementation Costs:** None.
- **Operating Costs:** Potential staff time for membership activities, or consultant support.
- **Capital Requirements:** None.
- **Facility Needs:** None.



Table 9: Strategic Action Implementation Table

ID	Implementation Strategy	Aspirations/Goals	Results	No - Merger	Merger	Merger Implications & Notes	SWOT	SWOT Conditions, Problem Statements, and Objectives
Service Actions								
S1	Develop a Service Plan focusing on the Service Area Concentrations outlined in Sec. 2.2 and summarized in Sec. 2.3. Include timeframes for service enhancement and growth.	Improve existing services and expand services based on a detailed Service Plan .	MOTA can strategically tackle its service enhancement and growth goals in a phased approach.	Y	Not Initial Goal	A similar plan could be created in a merger scenario; however, it would not be an initial goal.	O	Increasingly, small urban and rural demand-response transit agencies are taking the time to develop and track a Service Plan to plan for the implementation of service goals with a phased approach.
S2	1) Perform a General Market Analysis , including O/D data, of workers traveling to industrial areas and other high-employment clusters. 2) Identify origin zones that are already feeding these clusters. 3) Construct park-and-ride facilities in origin zones to capture riders. 4) Offer fixed-route commuter trips serving these destinations. 5) Consider implementing Travel Demand Management (TDM) strategies , such as directly working with employers to provide passes, starting a carpool matching program, or procuring a vanpool contract. 6) Consider an "Emergency Ride Home" program to increase participation, if feasible.	Regular commuter service between higher-density suburbs and employment zones.	Sustainable ridership on commuter service. Increased support from employers. Steps toward employment prioritization of rides.	N/A	Y	Fixed-route commuter service into Big Rapids needs explicit City support for success.	O	Regional leadership is supportive of workforce transit services to employment hubs, such as the manufacturing districts in Big Rapids and Reed City.
S3	Perform a Microtransit Market Analysis to assess the costs & benefits of dedicating resources to serving these areas, especially microtransit or circulator service in Reed City and/or Evart.	Analysis data leads MOTA to improve service for Osceola County residents.	Areas experiencing growth are supported with mobility.	Y	Y	This is more important with no-merger since MOTA will need to look beyond the City of Big Rapids for growth opportunities.	O	Current study has identified zones of transit propensity in Osceola County.
S4	Adopt a Transit Development Plan to optimize services for future growth.	Total ridership surpasses 2019 peak.	Ridership growth continues.	Y	Not Initial Goal	A similar plan could be created in a merger scenario; however, it would not be an initial goal.	S	MOTA ridership grew by 1/3 in 2024, corresponding with the increase in service hours and miles.
S5	A merged agency could estimate ridership on routes with stops at key locations such as shopping (Walmart, Meijer, etc.), employment hubs, and residential neighborhoods. FSU could continue to subsidize if service density at the campus was maintained. Consider capital costs of expansion, such as stops and vehicles (Secs. 2.1, 2.2, 2.3.1, 2.3.2).	City of Big Rapids is served by a fixed or flex-route network of 1-3 routes open to all.	Sustainable ridership on fixed/flex routes in and around Big Rapids with 5311 and state funding commensurate with the service.	N/A	Y	This could only occur in a merger scenario since DART is unlikely to be able to expand beyond the FSU agreement due to its vehicle/driver count and MOTA is unable to offer this service in the City of Big Rapids.	O	Ridership statistics imply that there is latent demand for fixed-route service within Big Rapids, beyond the Ferris State campus. DART's demand-response ridership spiked in 2020-2021 when the campus shuttle was suspended and then returned to its previous trend when the lockdown ended. This could show that many shuttle riders were not necessarily associated with campus activity and were forced to switch to the demand-response system to maintain mobility. This conclusion could justify expanding the shuttle to a city-wide fixed-route service.
Operations Actions								
O1	Create a one-page monthly newsletter that is emailed to stakeholders and posted on social media. Examples it can include are asks for specific help to advertise events or services, provide the education video link/s, and summarize the rider steps.	Rely more on regional organizations and other stakeholders to market and educate about MOTA's services.	Keep MOTA on the top of everyone's minds. Establish better relationships with stakeholders and increase stakeholders.	Y	Not Initial Goal	A similar campaign could be established in a merger scenario; however, it would not be an initial goal	O	MOTA's stakeholders stated they are very willing to disseminate concise information. They also reported that more contact from MOTA would be valuable.



ID	Implementation Strategy	Aspirations/Goals	Results	No - Merger	Merger	Merger Implications & Notes	SWOT	SWOT Conditions, Problem Statements, and Objectives
O2	Develop a detailed Funding and Operations Plan that includes a vehicle replacement plan with the expected annual orders to replace retiring buses and support expected service expansion and an asset management strategy (Sec. 3.1.6)	A Funding and Operations Plan is created, followed, and revised annually or as needed.	Fleet is at optimal size and in a state of good repair. Average age of fleet is maintained below 5 years /150,000 miles.	Y	Y	In a merged scenario, develop a joint strategy for fleet asset management across all modes & services.	S	Current fleet is performing well.
O3	Develop a Strategic Business and Marketing Plan to raise awareness of available transportation services in key populations (Sec. 3.1.6). Also develop a detailed Outreach Plan that includes strategies to connect with these populations. Examples include Customize messages to target populations, attend K-12 sporting events, provide information to administration/school districts, etc.	Under a broad marketing campaign, Mecosta & Osceola residents are aware that MOTA is their public transit agency and is available to everyone.	MOTA's services are seen as a first-choice transportation mode. Rides are increased for all including those who would generally not use the services. I.e., families, people with vehicles, K-12 students, etc. Increases ridership revenue and keeps more SOVs off the road.	Y	Y	In a no-merger scenario, this joint marketing campaign could be a good target for cooperation through an MOU.	T	Key customer sectors lack awareness of MOTA's services. Over 40% of survey respondents have not used MOTA services before. Of those people, the majority are not disabled, have annual household incomes of \$50,000 to \$99,000, live in the Big Rapids 49307 zip code, and are most interested in the Demand-Response service.
O4	Procure CAD/AVL vehicle hardware and dispatch software. Implement updated training for staff to maximize customer service quality. Consider additional optimization software such as AI-Drive Routing & Dynamic Optimization, Mobile Ticketing, APC, etc. (Sec. 3.1.1).	Mobility management policies and services match riders with trips. Modern maintenance management systems improve efficiency and reliability.	Service reliability measures (on-time performance; asset down-time) improved.	Y	Y	In a merger scenario, systems will need to be aligned between the services, including vehicle tracking hardware and dispatch software and procedures. Training would need to be aligned for drivers, dispatchers, and customer service agents across services and modes.	W	Survey respondents criticized on-time performance
O5	Procure and/or update customer-facing technology to fully modernize reservation, operation, and fare collection. Use these new capabilities to better deploy existing resources to reduce wait times and extend service span (Sec. 3.1.1).	MOTA's use of modern demand-response reservation, operations, and fare management software allows for extended hours and reduced wait times through more efficient use of existing resources.	MOTA offers 7-day service at times that meet customer needs, including workforce transportation. Wait times are reduced	Y	Y	DART's current software is more modern than MOTA's. In a merger scenario, both agencies will need to align their systems. Without a merger, MOTA will need to procure new systems through a capital project.	W	Survey respondents say wait times are too long. Service hours/days do not meet the needs of some key workers. Customer-facing systems lack expected online features.
O6	Develop and administer customer service-centric trainings ; Consider reward programs for high-performance standards in customer care.	Increase training opportunities for drivers and dispatchers.	Customer complaint calls are reduced and ridership increases.	Y	Y	In a merger scenario, coordinate training and reward program.	W/O	Survey respondents criticize careless or rude drivers and customer service representatives (CSRs).
O7	Undertake Coordinated Trip Booking and Mobility Management by determining how the region's transportation providers can access the same system as the ride generators. For example, when hospitals can directly book trips through MOTA for patients when they are discharged (Sec. 3.1.1).	Regional human services providers could be part of a coordinated system with MOTA to better serve clients and improve operations.	No-shows decline as coordination and mobility management align needs with services.	Y	Y	In a merger scenario, human services clients throughout the region would have coordinated access to transportation.	T	Human service and other transportation providers are uncoordinated with MOTA. DHHS & MI Works clients need more awareness of available services.



ID	Implementation Strategy	Aspirations/Goals	Results	No - Merger	Merger	Merger Implications & Notes	SWOT	SWOT Conditions, Problem Statements, and Objectives
Facility Actions								
F1	Expand facility capacity for MOTA's Needs. Follow outcomes and strategies provided in the 2025-2026 Facility Feasibility Study to acquire facility capacity.	Operating and maintenance facility is sized adequately to support service expansion in Mecosta and Osceola Counties.	Improved operational efficiency and potential for expanded service.	Y	Y	In a no-merger scenario, concentrate on expanding current capacity to support county service needs.	W	Facility limitations at MOTA's Big Rapids location restrict potential to expand service.
F2	Expand facility capacity for MOTA's and DART's Needs. Follow outcomes and strategies provided in the 2025-2026 Facility Feasibility Study to acquire facility capacity.	Operating and maintenance facility is sized adequately to support service expansion in Big Rapids and throughout both counties.	Improved operational efficiency and potential for expanded service.	N	Y	Constructing a new facility, or expanding the existing facility, becomes more realistic if it includes a combination with DART.	W	Facility limitations at MOTA's and DART's Big Rapids locations restrict potential to expand service, within Big Rapids and throughout the counties.
F3	Operate a Satellite Hub in Osceola County. 1) Identify the ideal location , based on current trip O/D analysis and transit propensity index. 2) Request funding for a study to plan the facility, including operating cost estimates. 3) Procure new facility and operate. 4) Evaluate utility and benefits.	MOTA is served by a satellite mini-hub in a key location in Osceola County, allowing buses to be staged safely for service to these destinations. The hub also provides community resiliency support in case of emergencies and can reduce stress on the system from minor mechanical or staffing issues.	Reduced deadhead; increased ridership in Osceola County; better resiliency.	Y	N	This becomes more important in the no-merger scenario, as MOTA will need to look beyond Big Rapids for growth opportunities. An Osceola Hub may be implemented in a merger scenario, but it would not be an initial goal.	W	Service to NE Osceola generates significant deadhead.
Planning Actions								
P1	MOTA and DART conduct a detailed Consolidation Study to further determine the feasibility of and the plan for a merger or regional authority (Sec. 3.1.5).	Regional and city-wide consensus is reached on the optimal structure for public transit in the bi-county region.	MOTA and DART consolidate or adopt a regional authority structure.	Y	Y	It is important to do this study to determine if a merger should or should not occur.	O	Big Rapids is open to consolidation of DART with MOTA
P2	MOTA and DART form a Partnership Board to coordinate services and goals and to discuss the potential of a future merger or regional authority (Sec. 3.1.5).	MOTA and DART work closer together to support their communities with a foundation of quality mobility.	MOTA and DART form a coordinating partnership that includes service interoperability and discusses merger and regional authority options.	Y	Y	MOTA and DART will need to better cooperate to meet the region's challenges.	T/O	The total population in Mecosta and Osceola Counties is expected to grow slowly or possibly decline. However, the 65+ population is projected to grow within the next 5, 10, and 25 years.



4.3 Consolidation Scenarios

This section details the two potential scenarios – No-Merger and Merger. These scenarios are linked to the recommended strategic actions in **Section 4.2** with a reference to the applicable Service (S), Operations (O), Facility (F), and Planning (P) action/s (See **Table 9** as a reference).

4.3.1 No-Merger Scenario

A decision not to pursue a merger with DART at this time should not be the end of cooperation between MOTA and the City of Big Rapids. The future of the Mecosta and Osceola region will depend on the success of both entities.

The primary recommendation for a *No-Merger Scenario* recommends forming a formal **Partnership Committee (Section 3.1.5)** to develop closer cooperation structures going forward.

I. Foundation Steps

- a. P2: Establish a formal cooperation entity between MOTA and the City of Big Rapids/DART. An officially chartered Partnership Board, with a mandate from City, County, and/or state leadership, and a mandate to move toward a partnership or consolidation goal, would add accountability to the effort. Or, for a simpler approach, appoint key staff from DART and MOTA to meet monthly at a set time to coordinate services and brainstorm cooperation opportunities.

II. Cooperative Quick Wins

- a. O3: Joint Marketing Plan
- b. O6: Joint Customer-Centric Training Program

III. Core Priorities

- a. O1: Monthly Transit Newsletter
- b. S1: Service Plan
- c. S2: Market Analysis
- d. S5: Transit Development Plan
- e. O2: Funding and Operations Plan with Vehicle Replacement Schedule
- f. F2: Implement the Facility Feasibility Study

IV. MOTA Investments

- a. O4: CAD/AVL Procurement
- b. O5: Mobile Ticketing
- c. F1: Operating Facility



Table 10: No-Merger Scenario Potential Costs

Strategic Action	Implementation	Capital	Operating
S1 Service Plan	\$ 250,000	\$ -	\$ -
S3 Microtransit Market Analysis	\$ 100,000	\$ -	\$ -
S4 Transit Development Plan	\$ 100,000	\$ -	\$ -
O1 Monthly Newsletter	\$ -	\$ -	\$ -
O2 Funding, Ops, Vehicle Plan	\$ 100,000	\$ -	\$ -
O3 Strategic Business & Marketing Plan	\$ 100,000	\$ -	\$ -
O4 CAD/AVL Upgrade	\$ -	\$ 600,000	\$ 100,000
O5 Customer-Facing Technology	\$ -	\$ 15,000	\$ 80,000
O6 Customer Service-Centric Training	\$ -	\$ -	\$ -
O7 Coordinated Booking/Mobility Management	\$ -	\$ -	\$ -
F1 Facility for MOTA Needs	TBD	TBD	TBD
F3 Satellite Mini-Hub	\$ 50,000	\$ 1,000,000	\$ 75,000
P2 Partnership Board	\$ -	\$ -	\$ -
Total costs of all strategic actions:			
	\$ 700,000	\$ 1,615,000	\$ 255,000

4.3.2 Merger Scenario

I. Merger Track

- a. P1: Consolidation Study
- b. O2: Funding and Operations Plan with Vehicle Replacement Schedule

II. MOTA Adaptations

- a. O4/O5: Adapt DART's CAD/AVL and mobile ticketing technology to work for both systems.

III. Consolidated Goals

- a. F2: Implement the Facility Feasibility Study
- b. F1: Consolidated Operating Facility
- c. O6: Joint Training Program
- d. O2: Merged Funding and Operations Plan with Vehicle Replacement Schedule

IV. Merged Service Opportunities

- a. S3: Study fixed route service to Big Rapids and Reed City
 - i. Conduct a *Market study* with origin/destination data of workers traveling to industrial zones and other high-employment clusters.
 - ii. Identify origin zones that are already feeding these clusters.
 - iii. Add park-and-ride hubs near origin zones to capture riders.



- iv. Offer fixed-route commuter trips from these hubs to employment clusters at times that meet worker needs. Consider a contracted *vanpool* service as an alternative, to compare feasibility and performance options.
- v. Consider TDM alternatives, such as working directly with employers to provide passes, starting a carpool matching program, and offering an *Emergency Ride Home* benefit system participants.

Table 11: Merger Scenario Potential Costs

Strategic Action	Implementation	Capital	Operating
S2 General Market Analysis	\$ 100,000	\$ -	\$ -
S3 Microtransit Market Analysis	\$ 100,000	\$ -	\$ -
S4 Transit Development Plan	\$ -	\$ -	\$ -
S5 Fixed-Route Service	\$ 100,000	\$ 400,000	\$ 460,000
O2 Funding, Ops, Vehicle Plan	\$ 100,000	\$ -	\$ -
O3 Strategic Business & Marketing Plan	\$ -	\$ -	\$ -
O4 CAD/AVL Upgrade	\$ -	\$ 600,000	\$ 100,000
O6 Customer Service-Centric Training	\$ -	\$ -	\$ -
O7 Coordinated Booking/Mobility Management	\$ -	\$ -	\$ -
F2 Facility for Merged MOTA/DART Needs	TBD	TBD	TBD
P1 Consolidation Study	\$ 100,000	\$ -	\$ -
Total costs of all strategic actions:	\$ 500,000	\$ 1,000,000	\$ 560,000



Appendix Figures: Existing Condition Maps and Data



Figure 3: Study Location Map

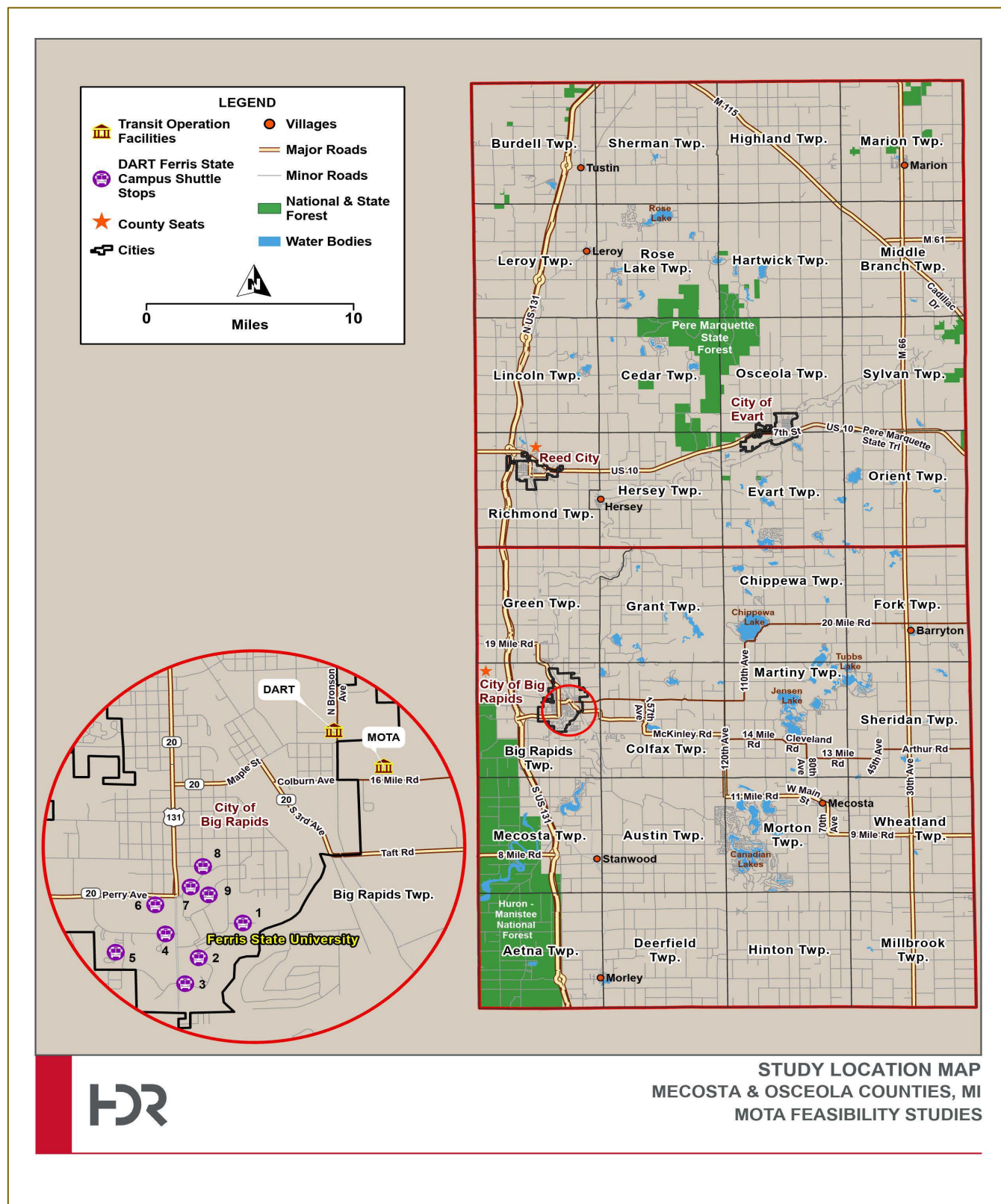




Figure 4: Population Density

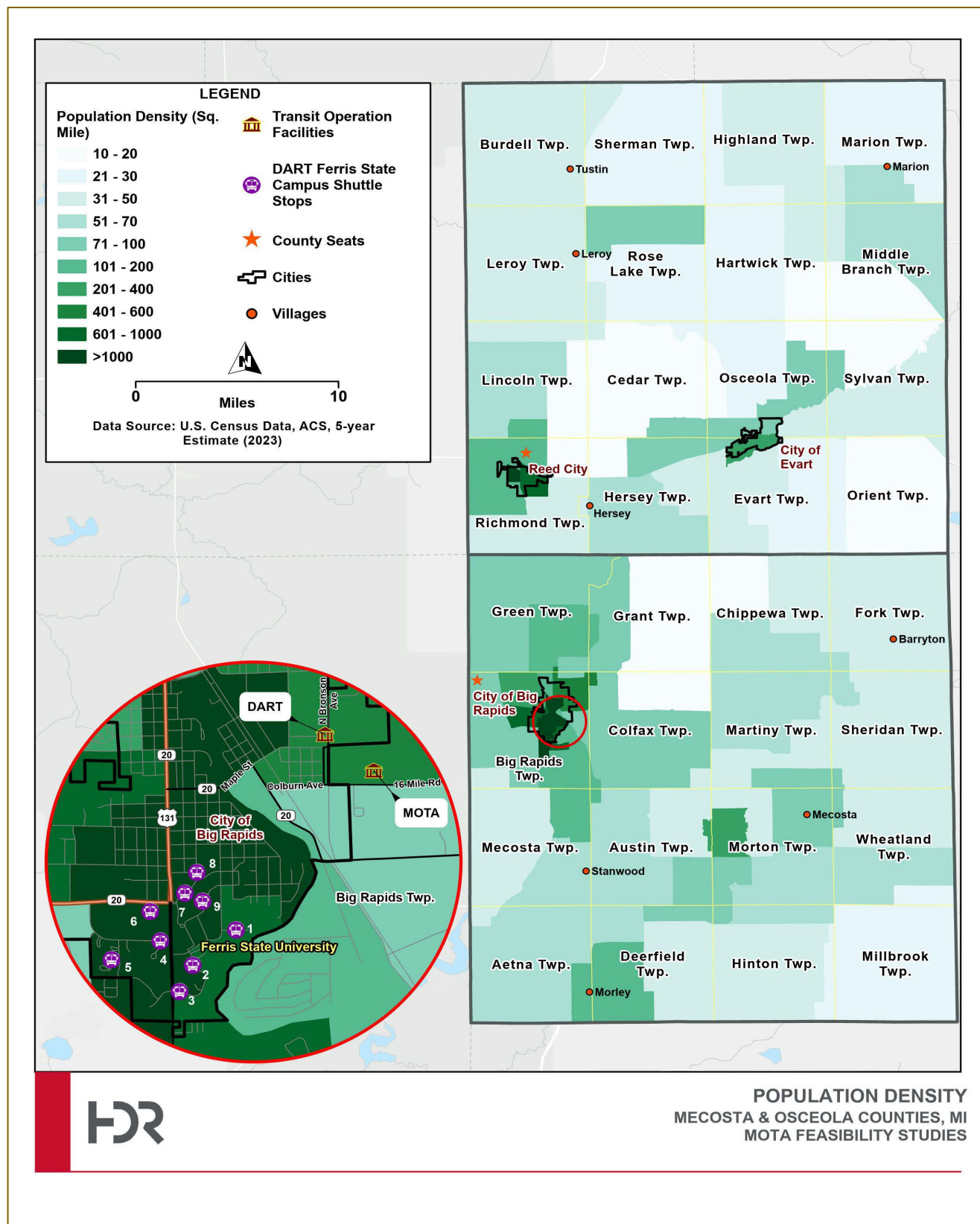




Figure 5: Disabled Populations

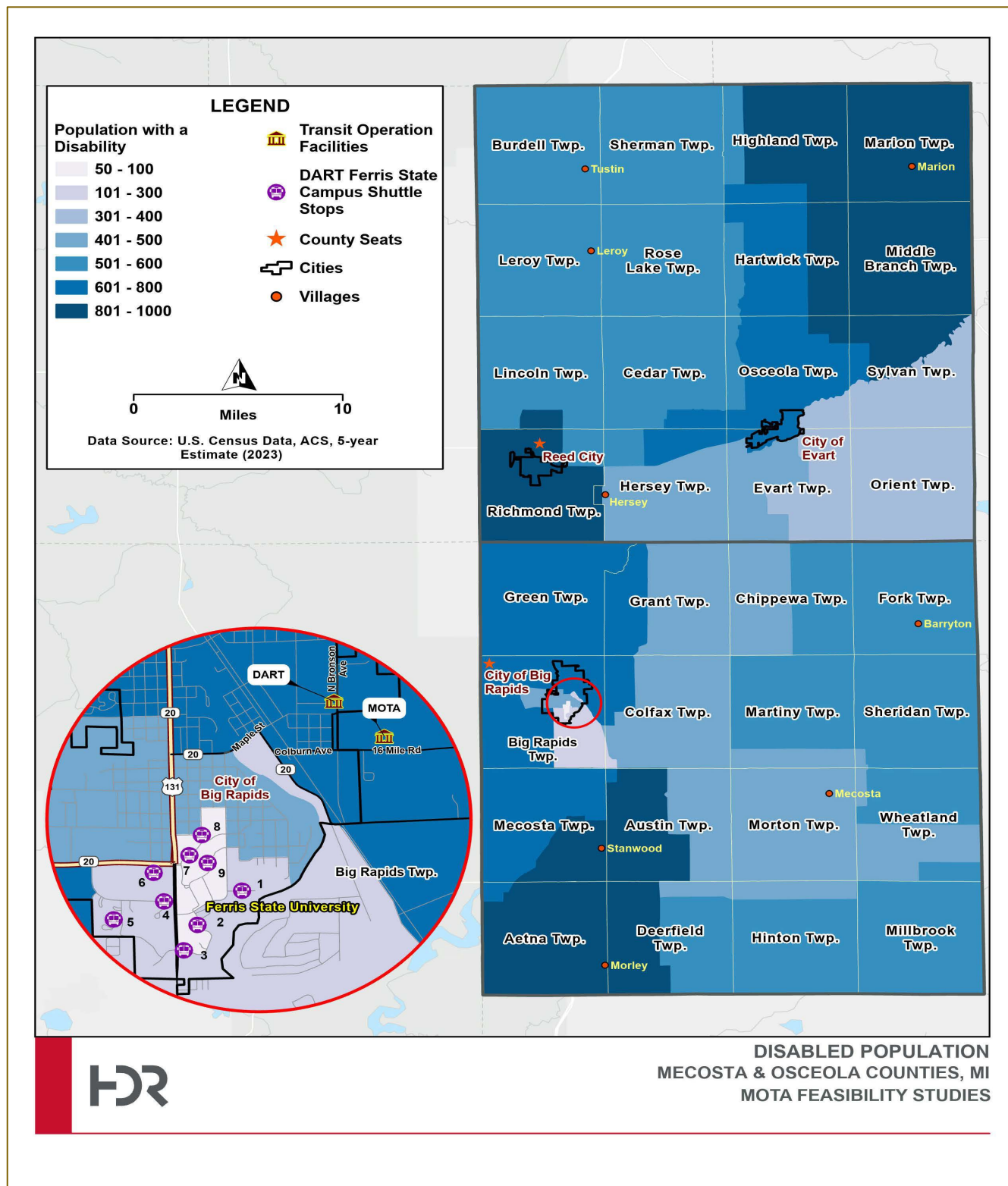




Figure 6: Senior Population 65+

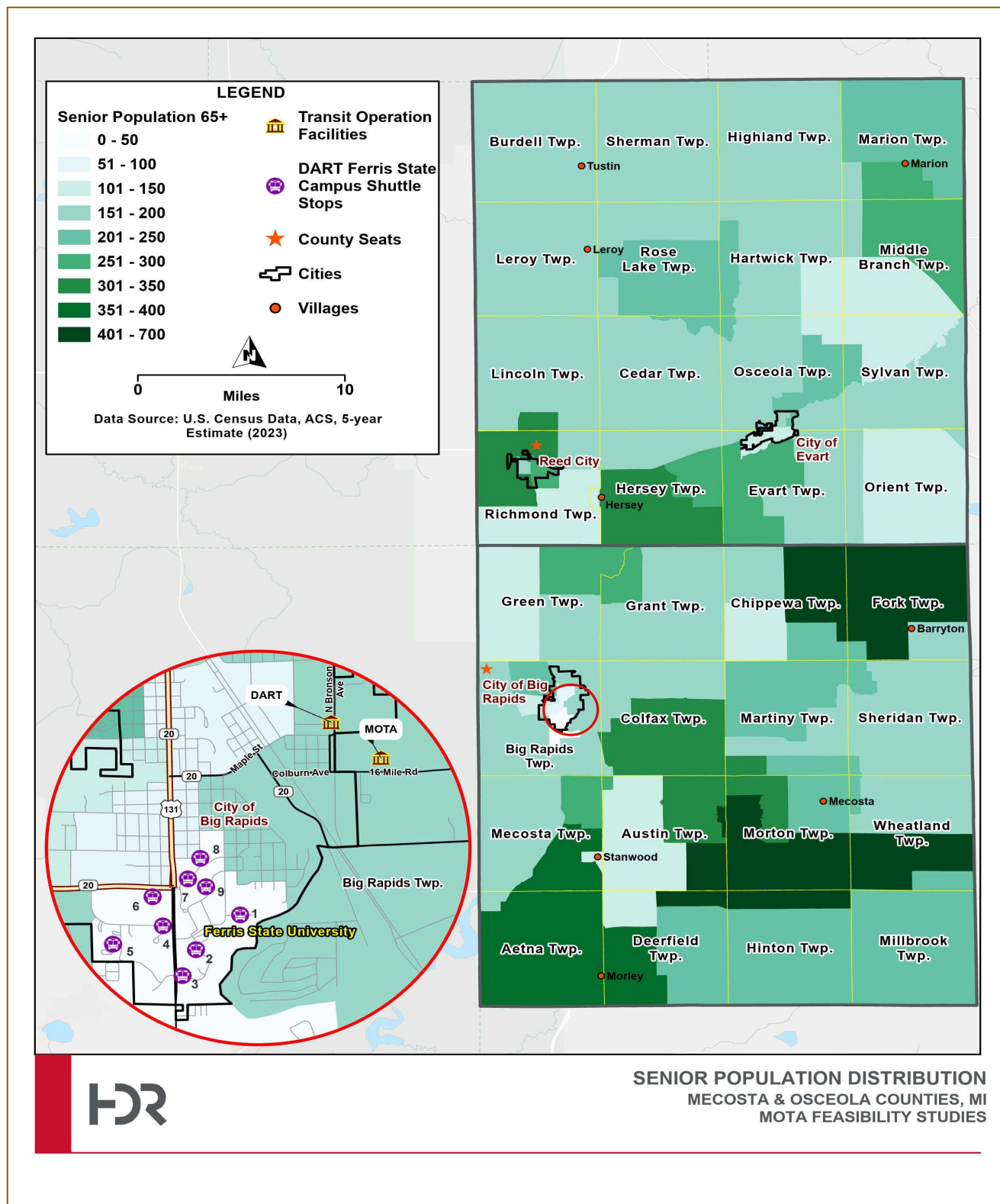




Figure 7: Low-Income Households

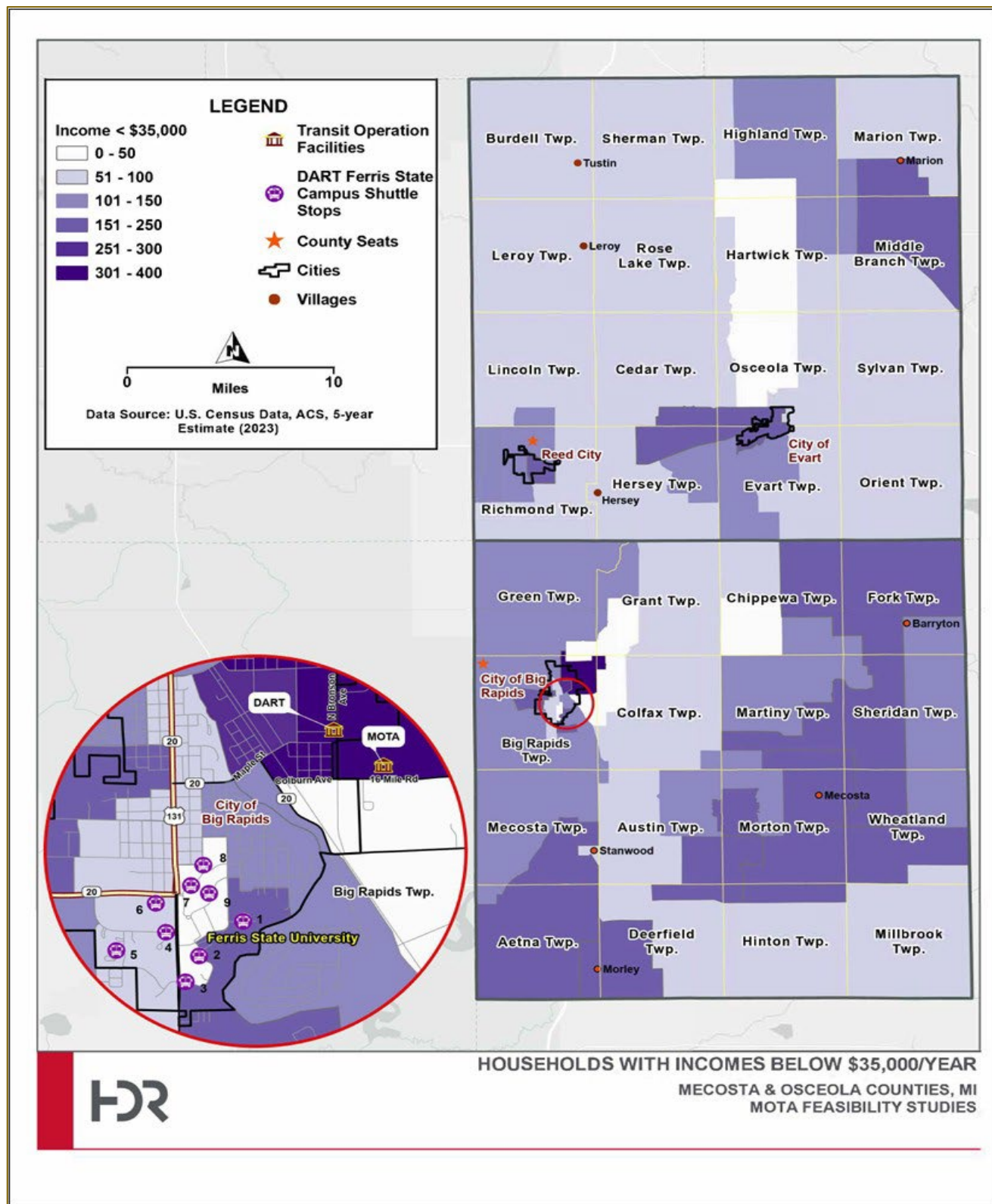




Figure 8: Zero- and One-Car Households

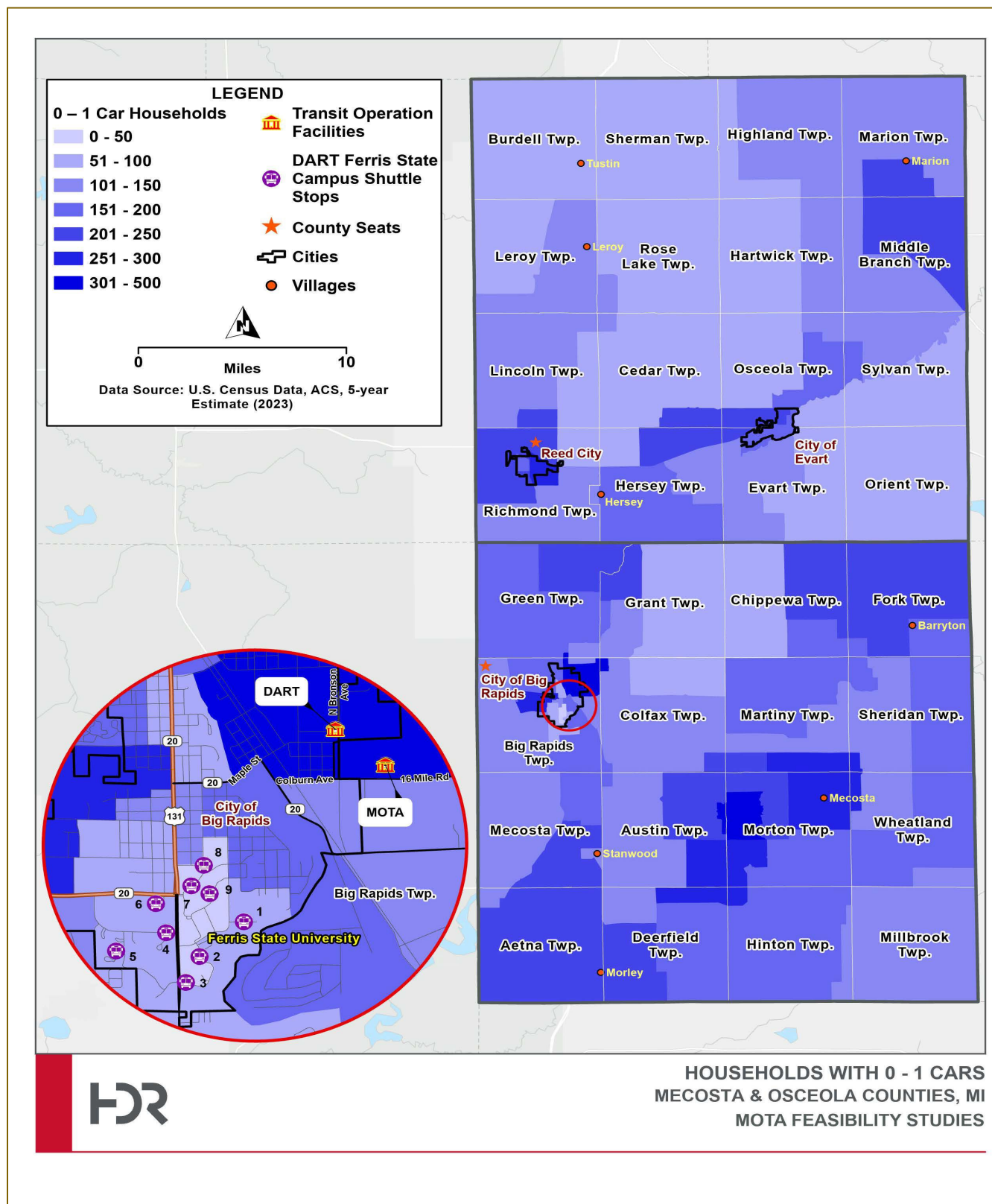




Figure 9: MOTA In-County Unlinked Trips, 2025

