# Cass County Transportation Authority County-Wide Transit Service Plan



# Final Plan

November 2021



# **Table of Contents**

Overview of the Plan	1-1
Chapter 2: Existing Conditions	
Introduction	2-1
Background	2-1
COVID-19 Impacts	2-2
Governance	2-2
Organizational Structure	2-2
CCTA Services	2-3
Fare Structure	2-3
Funding Sources	2-4
Federal Programs	2-4
State Programs	
Local Funding	
Farebox Recovery	
Funding Summary	
Existing CCTA Facilities, Fleet, and Technology	
Operating Expenses	
Ridership Data	
Operating and Performance Data	
Peer Review	
Marketing and Outreach	
Other Transportation Services	
City of Dowagiac Dial-a-Ride Transit (DART)	
Summary – Strengths, Weaknesses, Opportunities and Threats	
Strengths	
Weaknesses	
Opportunities	
Threats	2-16
Chapter 3: Transit Needs Assessment	
Introduction	
Customer (Rider) Survey Results	3-1

Use of Public Transportation and Trip Purpose	3-2
Customer Satisfaction	3-2
Open Ended Comments	3-3
Customer (Rider) Profile	3-3
Community Survey Results	3-4
Primary Mode of Transportation	3-4
Awareness and Use of Public Transportation Services	
Possible Public Transit Improvements	
Need for Additional or Improved Public Transportation / Support	
for Additional Funding	3-7
Demographics of Community Survey Respondents	3-8
Community Survey Summary	3-10
Stakeholder Interviews	3-10
Driver and Operations Staff Questionnaire	3-11
MDOT/MSU Survey Results	
Previous Plans and Studies	3-12
Cass County Master Plan	3-12
Ascension Borgess-Lee Hospital Community Health Needs	
·	2 12
Assessment - June 2019	
Summary of Needs Assessment and Next Steps	
Summary of Needs Assessment and Next Stepser 4: Review of Demographics and Land Use	3-13
Summary of Needs Assessment and Next Stepser 4: Review of Demographics and Land Use  Introduction	4-1
er 4: Review of Demographics and Land Use Introduction	4-1
er 4: Review of Demographics and Land Use  Introduction	4-1 4-1 4-1
Summary of Needs Assessment and Next Stepser 4: Review of Demographics and Land Use  Introduction	4-1 4-1 4-1 4-1
er 4: Review of Demographics and Land Use  Introduction	4-14-14-14-14-2
Summary of Needs Assessment and Next Steps  Population Analysis	4-14-14-14-14-24-3
er 4: Review of Demographics and Land Use  Introduction	3-13 4-1 4-1 4-2 4-3 4-4
er 4: Review of Demographics and Land Use  Introduction	3-134-14-14-14-24-34-4
Summary of Needs Assessment and Next Steps  er 4: Review of Demographics and Land Use  Introduction	3-134-14-14-24-34-44-6
er 4: Review of Demographics and Land Use  Introduction  Population Analysis	3-134-14-14-24-34-44-44-64-7
er 4: Review of Demographics and Land Use  Introduction	3-134-14-14-24-34-44-64-84-9
er 4: Review of Demographics and Land Use  Introduction	3-134-14-14-14-24-44-64-74-9
er 4: Review of Demographics and Land Use  Introduction	3-134-14-14-14-34-44-64-74-84-10
Summary of Needs Assessment and Next Steps  er 4: Review of Demographics and Land Use  Introduction	3-134-14-14-14-24-44-44-64-74-94-11
Summary of Needs Assessment and Next Steps  Per 4: Review of Demographics and Land Use  Introduction	3-134-14-14-14-24-44-44-64-74-104-114-11
er 4: Review of Demographics and Land Use  Introduction	3-134-14-14-24-44-44-64-74-114-114-12
Summary of Needs Assessment and Next Steps  er 4: Review of Demographics and Land Use  Introduction	3-134-14-14-14-24-44-44-64-74-104-114-13
er 4: Review of Demographics and Land Use  Introduction	3-134-14-14-14-34-44-64-74-104-114-124-134-13

#### **Chapter 5: Service and Organizational Alternatives and Considerations**

Introduction	5-1
Potential Service Improvements	5-2
Scheduled Connector Routes	5-2
Scheduled Connector Route Overview	5-5
Modified Demand Response Service	5-7
Proposed Restructured CCTA System	5-7
Possible Service Expansions	5-8
Summary of Possible Service Expansions	5-11
On-Demand Services	5-11
Organizational Considerations	5-15
Assess Opportunity to Further Coordinate or Consolidate CCTA and	
Dowagiac Dial-a-Ride Organizational Structures	5-15
Expand Marketing Efforts	5-15
Consider Millage Campaign	5-18
Expand Use of Local Advisory Committee (LAC)	5-18
Chapter 6: Implementation Plan	
Introduction	6-1
Service Plan	6-1
Short-Term Improvements	6-2
Mid-Term Improvements	6-5
Long-Term Improvements	6-9
Conceptual Financial Plan for Operating	6-11
Organizational Plan	6-13
Short-Term Improvements	6-13
On-Going Improvements	6-13
Implementation Plan Overview	6-17

# Chapter 1: Introduction

This report is the culmination of a County-Wide Transit Service Plan conducted by Cass County Transportation Authority (CCTA). This planning process is one that should be undertaken on a periodic basis by every transit system, and provided the opportunity to:

- Build upon and help to formulate and document goals and objectives for transit in Cass County,
- Review and assess current transit services,
- Identify unmet transit needs, and,
- Develop an appropriate course of action to address the objectives in the short-range future.

The completed County-Wide Transit Service Plan will serve as a guide for CCTA, providing a roadmap for implementing service and/or organizational changes, improvements, and/or potential expansion over a five year timeframe. It can also serve as a basis for preparing grant applications for transit funding.

#### Overview of the Plan

While much of the planning process is interrelated, the County-Wide Transit Service Plan is presented through the following chapters:

- Chapter 2 provides a review and assessment of current CCTA services.
- Chapter 3 provides an assessment of transit needs in Cass County based on outreach efforts that included input from current CCTA riders, key stakeholders, and the broader community.
- Chapter 4 reviews the land use and demographic characteristics that affect transit needs and services in Cass County.
- Chapter 5 presents potential service and organizational alternatives to improve current services.
- Chapter 6 provides final recommendations, including budgeting and implementation considerations over the next five years.

# Chapter 2: Existing Conditions

#### Introduction

This chapter provides an assessment of existing conditions, with a particular focus on transportation services operated by CCTA. Along with the needs assessment and demographic analysis, this information serves as the basis for the development of possible service and organizational alternatives.

# **Background**

CCTA reports that the Cass County transit services began in 1988, starting as a system that coordinated transportation for human service agency clients while offering limited county-wide public transportation. While a public transit system, CCTA has historically been an agency-based service heavily dependent on agreements with human service organizations. Revenues from these agreements have been used as the required matching component for federal and state funding programs that CCTA receives through the Michigan Department of Transportation (MDOT).

While CCTA continues to provide transportation for clients from these agencies, there has been a steady and significant decrease in the revenues obtained through these agreements, particularly as human service agencies move away from a model where multiple people need to be transported to one location and instead need more individualized trips. The dependency on human service agency revenues, and the decline in this funding, was a key aspect of the planning process.

At the outset of the planning process, CCTA noted that currently, public transit services in Cass County are limited, with no evening and weekend service available to the community. This lack of service has impacts on individuals in the County with limited mobility options and affects the County's economy by reducing access to employment, shopping, medical, recreational, and other key community services and locations. The needs assessment conducted for the County-Wide Transit Service Plan helped to identify and document the impact limited transit services have on Cass County residents, and was used to develop potential alternatives for expanding transit services.

#### **COVID-19 Impacts**

In the past year and a half CCTA has gone through operational and organizational changes in response to the ramifications of the COVID-19 pandemic. At times operating hours have been reduced, and services that were previously contracted out to a private company have been brought in-house when that company closed in 2020 and CCTA had to assume all operations. While COVID-19 has had significant impacts on CCTA, the assessment of existing conditions and analysis of operating data and information was focused primarily on services that were provided before the pandemic. Looking ahead, it is anticipated that improvements to the CCTA system will be in a post-COVID-19 environment and be a component of a vision for public transit services in Cass County after the pandemic.

#### Governance

CCTA is governed by a Board of Directors composed of key agencies and organizations in the community. CCTA is organized under the State of Michigan Public Transportation Act (Act 196 of 1986), which authorizes the formation of public transportation authorities with certain general powers and duties. The current Board includes the following representatives:

- Cass County Medical Care Facility (current chair)
- Cass County Council on Aging
- Cass County Government
- Dowagiac City Manager
- Southwestern Michigan College
- Woodlands Behavioral Healthcare Network

#### **Organizational Structure**

CCTA is overseen by a Transportation Coordinator and an Operations Manager. An organization chart is provided in Figure 2-1 below.

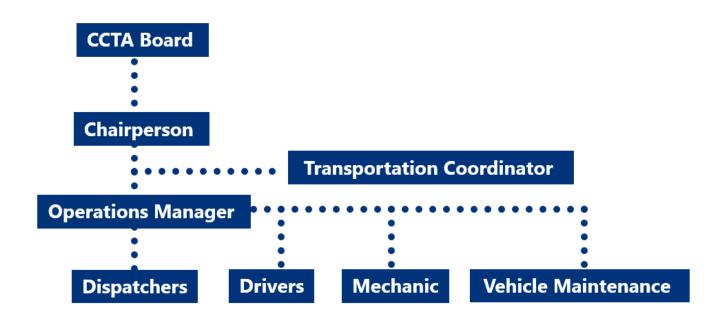


Figure 2-1: Cass County Transportation Authority (CCTA) Organizational Chart

#### **CCTA Services**

CCTA is an origin to destination county-wide curb-to-curb public transportation system, through which customers call to schedule rides at least 24 hours in advance. Rides are reserved on a first-come-first-served, basis. CCTA office hours for reserving a trip are from 6:00 a.m. to 5:00 p.m., Monday through Friday. Services typically operate from 6:00 a.m. to 6:00 p.m., Monday through Friday, though due to the COVID-19 pandemic hours have reduced to 8:00 a.m. to 5:00 p.m.

Although a general public transit system, as noted in the background section, historically the focus of CCTA has been on serving human service agency clients. However, this demand has decreased as human service agencies have modified their service delivery or reduced their operations. In the past, CCTA has also provided specific services for older adults in Cass County, such as shopper shuttles.

CCTA also operates the City of Dowagiac Dial-a-Ride (DART) services under a contract with the city and using city owned vehicles. More information on the DART system is included in the latter part of this chapter.

#### **Fare Structure**

The current CCTA fare structure is show in Table 2-1.

#### **Table 2-1 CCTA Fares**

Type of Trip	Fares Within 5 miles from Base	Fares Beyond Five Miles from Base
Customers Ages 13-59	\$3.50	\$5.50
Seniors (Ages 60 and older) / Individuals People with Disabilities	\$1.75	\$2.75
Youth Ages 5-12 Accompanied by Adult / Students	\$1.75	\$2.75
Children (Ages under 5)	Free	Free

# **Funding Sources**

#### **Federal Programs**

CCTA receives Federal Transit Administration (FTA) Section 5311 Program funds administered by MDOT. This formula program is used to provide federal funding to assist transportation services in rural areas. According to the MDOT FY2022 Application Instructions for Public Transit Programs, in the past few years, Michigan has provided operating assistance that is equivalent to 18% of eligible expenses to rural public transportation providers currently receiving state funds under the State Operating Assistance Program to further supplement their eligible operating expenses. Starting from FY2019, MDOT has provided local agencies with the option to use all or part of their allocation for operating or capital.

In FY2020, CCTA also received federal funding through the CARES Act that provides operating and capital assistance to transit systems to prevent, prepare for, and respond to the COVID-19 pandemic.

#### **State Programs**

The State Operating Assistance Program is also administered by MDOT. This program is an operating assistance program used to provide state funding to assist transportation services in both urbanized and rural areas. Program funds may be used for operating and administrative assistance. In FY2020 the State formula for this program was 36.7916% of eligible expenses.

#### **Local Funding**

As noted earlier, local funding to support CCTA has primarily come through contract revenue with human service agencies. While this has historically been the primary revenue generator, CCTA reported that there has been a significant decrease in these funds over the last decade. In FY2020 revenues through agency contracts were \$72,215.

CCTA's local revenue also includes the operating contract with the City of Dowagiac to operate DART services. In FY2020 CCTA received \$127,649 through this contract.

Many county transit systems in Michigan are supported locally through a millage. The millage rate is the rate at which property taxes are levied on property, and a mill is 1/1000 of a dollar. In 2013 Cass County conducted a vote on a potential millage to support transit services. This vote failed by an overall 56-44% margin, with voters in most communities not supporting the measure. The millage was supported by the majority of voters in Calvin, LaGrange, and the City of Dowagiac.

#### **Farebox Recovery**

In addition to federal, state, and local sources, CCTA is supported through fares collected from customers. In FY2020 \$17,289 was recovered through fares, about 3% of overall revenues.

# **Funding Summary**

Table 2-2 provides a summary of funding through the various sources. For the 2018-2020 period these numbers are reconciled amounts, while 2021 is from the CCTA budget submitted to MDOT.

**Table 2-2: Historical Funding** 

Year	2018	2019	2020	2021
Federal	\$114,516	\$112,518	\$163,441	\$151,322
State	\$242,313	\$229,839	\$163,531	\$149,539
Local	\$356,297	\$267,407	\$199,864	\$220,000
Farebox Recovery	\$21,154	\$21,492	\$17,289	\$15,000

Sources:

2018-2020 - MDOT Revenue/Expense Reports

2021 CCTA Budget to MDOT

#### **Existing CCTA Facilities, Fleet, and Technology**

CCTA is located at 400 East State Street in Cassopolis. This location houses the administrative offices, dispatch, and vehicle maintenance facilities. CCTA has applied to MDOT for facility improvements that would involve an expanded vehicle storage area and administrative office improvements.





**SOURCE: GOOGLE MAPS** 

Table 2-3 provides information on the eleven vehicles that make up the CCTA fleet as of the most recent MDOT report.



**Table 2-3: CCTA Vehicle Inventory** 

Vehicle	Model Year	Vohislo Typo	Seating	Capacity	Mileage
Number	Model fear	Vehicle Type	Ambulatory	Wheelchair	Mileage
57	2019	Medium Duty	18	2	1,307
56	2019	Medium Duty	20	2	5,439
48	2015	Medium Duty	18	2	120,879
52	2016	Medium Duty	18	2	86,745
54	2019	Light Duty Cutaway	8	2	36,643
45	2013	Light Duty Cutaway	8	2	186,271
53	2018	Light Duty Cutaway	8	2	41,123
51	2016	Light Duty Cutaway	8	2	97,532
55	2019	Full Size Van	14	2	16,285
44	2012	Light Duty Cutaway	8	2	219,185
50	2015	Small Light Duty Van	3	2	100,123

Source: Michigan Public Transit Facts, Vehicle Listing Report

The CCTA annual application package to MDOT provides a replacement schedule for capital items, used to determine the depreciable/useful life of a new asset, including those based on the vehicle manufacturer's designated life cycle and the results of independent FTA testing. Based on the MDOT replacement schedule eight vehicles are within useful life timeframe, while three vehicles are beyond useful life criteria. Through the annual application process with MDOT, CCTA has requested replacements for these vehicles in FY 2021 or FY2022.

Vehicle replacements and facility improvement requests to MDOT are summarized in Table 2-4.

Table 2-4: CCTA Capital Requests to MDOT

Requested Year	Capital Item	Federal Amount	State Amount	Local Amount	Total Amount			
Capital Requests	Capital Requests to MDOT for FY2021:							
2021	Small Bus (Replace #45)	\$65,600	\$16,400	-	\$82,000.00			
2021	12-Passenger Van W/Lift (Replace #50)	\$44,000	\$11,000	-	\$55,000.00			
2022	Small Bus (Replace #44)	\$65,600	\$16,400	-	\$82,000.00			
Capital Requests	to MDOT for FY2022:							
2022	Small Bus (Replace #48)	\$65,600	\$16,400	-	\$82,000.00			
2022	Facility Improvements (Add 8,500 sq. ft in vehicle storage and 500 sq. ft for additional office space.	\$784,000	\$196,000	-	\$980,000.00			
2023	Small Bus (Replace #51)	\$65,600	\$16,400	-	\$82,000.00			
2023	Medium Duty Bus (Replace #52)	\$85,600	\$21,400	-	\$107,000.00			
2024	12-Passenger Van W/Lift (Replace #55)	\$44,000	\$11,000	-	\$55,000.00			
2025	Small Bus (Replace #53)	\$65,600	\$16,400	-	\$82,000.00			

Source: CCTA Capital Requests to MDOT

CCTA currently uses Flexiroute, a web-based passenger scheduling system based in the United Kingdom.

# **Operating Expenses**

CCTA's operating expenses for FY2020 were skewed by the impacts of the COVID-19 pandemic. However, Table 2-5 provides line item amounts for operating expenses from the CCTA FY2021 budget. As indicated in the table, the majority of expenses are for salaries and wages and fuels and lubricants that tie directly with service operations.

Table 2-5: FY2021 Budget

Line Item	Amount
Operators Salaries & Wages	\$300,000
Other Salaries & Wages	\$45,000
Dispatchers' Salaries & Wages	\$40,000
Advertising Fees	\$500
Audit Costs	\$4,500
Other Services*	\$60,000
Fuels and Lubricants	\$38,000
Tires and Tubes	\$4,000
Other Materials and Supplies	\$7,200
Utilities	\$7,000
Liability Insurance	\$35,000
Other Insurance	\$3,500
Travel, Meetings, and Training	\$5,000
Association Dues/Subscriptions	\$750
Other Misc. Expenses	\$1,500
Total Expenses	\$551,950

Source: MDOT Revenue Schedule Report

Does not include \$140,000 budgeted for operating Dowagiac DART

# **Ridership Data**

An overview of system ridership for the last seven years is provided in Table 2-6. Through this period, ridership remained fairly steady, showing some slight decreases over time. There is then a significant decline in 2020 ridership that is the result of implications from the COVID-19 pandemic.

Table 2-6: CCTA Ridership Data

Year	Total Passengers	Change from Previous Year
2014	27,123	<del>-</del>
2015	25,349	-6.5%
2016	26,789	5.4%
2017	25,948	-3.1%
2018	25,866	-0.3%
2019	24,988	-3.4%
2020	13,103	-47.6%

Source: CCTA - Comparison of Annual Operations Data Worksheet

<sup>\*</sup> Includes Coordinator, software maintenance, HVAC service, lawn service, AVL

# **Operating and Performance Data**

Transit services are typically evaluated for both efficiency (doing things right) and effectiveness (doing the right things):

- Efficiency is usually analyzed by operating cost per hour, mile, and passenger trip.
- Effectiveness, emphasized by passenger productivity, is usually analyzed by passenger trips per mile
  and hour. The most useful single measure is the passenger trips per hour, as it reflects usage
  concerning the amount of service provided. Generally speaking, the majority of transit operating
  costs are hourly (wages and benefits), so higher values of trips per hour reflect better use of
  resources.

Table 2-7 provides an overview of the operating and performance data for CCTA for the FY2014-FY2020 period. As shown in this table, costs per hour and mile have remained fairly steady until FY2020 and the impact of the COVID-19 pandemic. Passenger trips per mile remained consistent throughout the period, and trips per hour remained steady until FY2020.

**Table 2-7: CCTA Operating and Performance Data** 

Performance Characteristic	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
Total Passenger Trips	27,123	25,349	26,789	25,948	25,866	24,988	13,103
Total Miles	270,328	249,197	255,339	238,969	258,829	247,967	147,890
Total Vehicle Hours	12,287	11,610	12,126	11,394	11,855	11,747	7,135
Total Eligible Expenses*	\$692,735	\$565,681	\$592,080	\$575,767	\$601,790	\$604,735	\$444,479
Cost/Hour	\$56.38	\$48.72	\$48.83	\$50.53	\$50.76	\$51.48	\$62.30
Cost/Mile	\$2.56	\$2.27	\$2.32	\$2.41	\$2.33	\$2.44	\$3.01
Cost/Passenger Trip	\$25.54	\$22.32	\$22.10	\$22.19	\$23.27	\$24.20	\$33.92
Passenger Trips/Mile	0.10	0.10	0.10	0.11	0.10	0.10	0.09
Passenger Trips/Hour	2.21	2.18	2.21	2.28	2.18	2.13	1.84

Source: FY2014-2017 = CCTA, FY2018-2020 MDOT Reconciled Performance Indicator Reports

FY2020 reflects impact of COVID-19 pandemic beginning in March 2020

While MDOT does not have prescribed performance measures for rural transit services in Michigan, there are industry guidelines that can serve as a tool to assess and monitor the effectiveness and efficiency of these services. Using these guidelines, a more specific review of services provided by CCTA in 2019 (the last full year before the impacts of the COVID-19 pandemic) indicates the following:

- Cost Per Hour: Typically this cost should be between \$40 to \$60 per hour, so at \$52.92 in 2019 CCTA is within this range.
- Cost Per Mile: The typical acceptable range for this performance measurement is between \$2.00 and \$4.00 per hour, so at a cost per mile of \$2.51, CCTA is meeting this criterion.

- Cost Per Passenger Trip: Typically, the cost per passenger trip should be within the \$7.00 to \$20.00 range, so at \$28.31 CCTA is higher than the industry norm.
- Passenger Trips Per Mile: The results of this performance indicator should be within the .15 and .30 range, so at .09 passenger trips per mile CCTA is not meeting this measure.
- Passenger Trips Per Hour: Typically, a rural transit system should provide between 2.5 and 5 passenger trips per hour, so at 1.84 CCTA in 2019 CCTA did not meet this standard.

Since CCTA did not meet three of the five typical industry performance measures in FY2019, the development of alternatives and options that are discussed in Chapter 5 focus on opportunities to provide more effective services.

It should be noted that rural demand response services like those operated by CCTA – with the need for customers for call for nearly every trip and with the numerous daily variables – is the most difficult type of transit to operate. The cost per trip is also higher than any other transit mode. Demand response service productivity is inherently low and is impacted by a variety of uncontrollable factors. Therefore, the development of alternatives discussed in Chapter 5 also include examining potential opportunities to improve productivity.

#### **Peer Review**

While each transit system is unique, with particular factors that drive their statistics, other rural transportation providers in Michigan can provide context for CCTA's operating data. This peer review can be helpful to see how CCTA compares to similar programs. Table 2-8 presents a comparison to other similar transit providers in Michigan that operate similar county-wide demand response services in rural areas.

Table 2-8: Peer Review with Similar Transit Providers

	Cass County Transportation Authority	Benzie Transportation Authority	Charlevoix County Transit	Clare County Transit Corporation	Manistee County Transportation	Roscommon County Transit Authority
County Population*	51,523	17,753	26,244	30,757	24,528	23,884
County Square Miles	508	860	1,391	575	1,281	580
Total Eligible Expenses	\$604,735	\$1,673,889	\$1,949,775	\$1,580,592	\$2,435,772	\$2,098,779
Passenger Trips	24,998	104,879	81,253	92,620	155,849	89,547
Vehicle Miles	247,967	627,436	588,021	543,259	594,021	568,015
Vehicle Hours	11,747	30,731	28,483	26,915	38,709	27,904
Cost/Trip	\$24.19	\$15.96	\$24.00	\$17.07	\$15.63	\$23.44
Cost/Mile	\$2.44	\$2.67	\$3.32	\$2.91	\$4.10	\$3.69
Cost/Hour	51.48	54.47	68.45	58.73	62.93	75.21
Trips/ Mile	0.10	0.17	0.14	0.17	0.26	0.16
Trips/ Hour	2.13	3.41	2.85	3.44	4.03	3.21
Total Vehicles	11	22	20	26	23	28

<sup>\*2018</sup> or 2019 estimates

Source for Performance Data: MDOT Michigan Public Transit Facts, Performance Indicators, 2019

#### The peer review provides the following observations:

- Despite serving counties with smaller populations, the operating budgets for each were significantly larger than the one for providing transit services in Cass County. Even taking into account the City of Dowagiac's FY2019 operating expenses of \$193,906, far less is being spent on overall transit services in Cass County when compared to the peer transit systems. As a result, CCTA provided far fewer passenger trips, and operated far fewer miles and hours in FY2019, when compared to the other transit systems.
- In most cases the peer transit systems are serving much larger counties, their cost per trip was similar to CCTA, or for three systems significantly less.
- However, CCTA's cost per mile and cost per hour were the lowest of the transit systems in the peer review.
- Trips per mile and trips per hour were less than all other peer review systems.

In addition to a peer review of rural transit systems in Michigan operating similar services to CCTA, it is also helpful to consider public transportation services in the region, particularly in counties adjacent to Cass County. Table 2-9 provides a comparison of CCTA services in FY2019 to those in Berrien, St. Joseph, and Van Buren Counties.

**Table 2-9: Peer Review to Adjacent Counties** 

	Cass County Transportation Authority	Berrien County	St. Joseph County Transportation Authority	Van Buren Public Transit
County Population*	52,293	153,401	61,043	75,448
County Square Miles	508	1,581	521	1,090
Total Eligible Expenses	\$604,735	\$826,785	\$1,946,381	\$1,940,067
Passenger Trips	24,998	39,681	68,302	93,657
Vehicle Miles	247,967	309,830	694,764	559,169
Vehicle Hours	11,747	14,643	35,280	40,788
Cost/Trip	\$24.19	\$20.84	\$28.50	\$20.71
Cost/Mile	\$2.44	\$2.67	\$2.80	\$3.47
Cost/Hour	51.48	56.46	55.17	47.56
Trips/ Mile	0.10	0.13	0.10	0.17
Trips/ Hour	2.13	2.71	1.94	2.30
Total Vehicles	11	21	17	20

<sup>\*2018</sup> estimates

Source for Performance Data: MDOT Michigan Public Transit Facts, Performance Indicators, 2019

This comparison provides the following observations:

- Similar to the peer review, this comparison points out that two of the three adjacent counties have operating budgets that are significantly larger than CCTA's budget.
- CCTA's cost per trip and cost per hour is similar to these counties, and like the peer review, CCTA's cost per mile is the lowest.
- Trips per mile and trips per hour are less than transit services in Berrien and Van Buren Counties though similar to services in St. Joseph County.

As noted in the peer reviews the counties in Michigan that are operating similar transit services, even those with much less population, have larger operating budgets than CCTA. Again, recognizing that each community and each transit system is unique, it can be helpful to compare the transit investment in each jurisdiction. Table 2-10 provides this comparison and highlights that the amount of investment per capita in Cass County (taking into account funding for both CCTA and Dowagiac DART) is far less than these other jurisdictions in Michigan.

Table 2-10: Peer Review on Transit Investment

	County Population*	Transit Operating Budget**	Transit Investment Per Capita
Cass County	51,523	\$798,641	\$15.50
Benzie County	17,753	\$1,673,889	\$94.29
Charlevoix County	26,244	\$1,949,775	\$74.29
Clare County	30,757	\$1,580,592	\$51.39
Manistee County	24,528	\$2,435,772	\$99.31
Roscommon County	23,884	\$2,098,779	\$87.87
St. Joseph County	61,043	\$1,946,381	\$31.89
Van Buren County	75,448	\$1,940,067	\$25.71

<sup>\*2018</sup> or 2019 estimates

Source for Performance Data: MDOT Michigan Public Transit Facts, Performance Indicators, 2019

# **Marketing and Outreach**

Online information on CCTA is available through the "My Way There" website that is managed by the Southwest Michigan Planning Commission (SWMPC), as no information on CCTA services can be found through the Cass County website. The My Way There site provides information on the system's services, fares, governance structure, and policies. This site also provides contact information for scheduling rides, as well as contact information for the Operations Manager and Transportation Coordinator/Title VI Coordinator.

# **Other Transportation Services**

#### City of Dowagiac Dial-a-Ride Transit (DART)

As noted earlier the City of Dowagiac receives funding for a separate dial-a-ride system that is contracted out to CCTA to operate. DART operates Monday through Friday from 8:00 a.m. to 5:00 p.m. within the City limits, with an additional service area that includes Southwestern Michigan College. The DART website notes the following location as the borders for the service area:

- North to the Dowagiac Conservation Club
- South to Dowagiac Auto
- West to Apostolic Lighthouse Church
- East to Daily Road

Table 2-11 details the fare structure for DART services:

Table 2-11: DART Fares

Type of Trip	Regular (18-62 years old)	Youth/Student (under Age 18)	Senior 62+/ Disabled	SMC Students
Rides Within City Limits: One Way	\$2 11 punch ticket \$20	\$1 11 punch ticket \$10	\$1 11 punch ticket \$7.50	-
To/From Outside of City Limits: One Way	\$4 10 punch ticket \$30	\$2 11 punch ticket \$20	\$2 10 punch ticket \$15.00	\$2 11 punch ticket \$20

Table 2-12 provides performance data for the DART system for FY2018 through FY2020.

Table 2-12: DART Performance Data

Performance Characteristic	FY2019	FY2020
Total Passenger Trips	24,009	18,983
Total Miles	48,652	42,336
Total Vehicle Hours	3,881	3,060
Total Eligible Expenses	\$193,906	\$155,794
Cost/Hour	\$49.96	\$50.91
Cost/Mile	\$3.99	\$3.68
Cost/Passenger Trip	\$8.08	\$8.21
Passenger Trips/Mile	0.49	0.45
Passenger Trips/Hour	6.19	6.20

Source: MDOT Michigan Public Transit Facts, Performance Indicators

The My Way There website also lists the following transportation services in Cass County:

- Cass County Council on Aging (COA) operates a volunteer driver program that provides transportation for older adults and individuals with disabilities to out-of-county medical facilities. Through this service, volunteers use their own vehicles, though Cass County COA has an accessible vehicle for people who use wheelchairs. The My Way There website also notes that the COA serves as a pickup location for veteran shuttle bus services to the Battle Creek VA Medical Center.
- Go! RideShare is a secure free on-line commuter matching service available to anyone who lives in Berrien, Cass, or Van Buren Counties who is interested in sharing the ride to work. Commuters who register with Go! RideShare are sent an email once a match is found of people or co-workers who are going the same direction at approximately the same time of day.

- Non-emergency medical transportation funded by the federal Medicaid program is available through the Michigan Department of Health and Human Services' Cass County office.
- Transportation services are available for Pokagon Band citizens and members of federallyrecognized tribes with a Pokagon Band Department of Health Services referral. When all other
  means of transportation are exhausted, tribal members are eligible to receive transportation to and
  from medical appointments, as long as they live within the ten county service area and have
  satisfied Health Services eligibility requirements.
- The Disabled American Veteran (DAV) Shuttle offers service from two designated pick-up points in Cassopolis and Niles to Battle Creek Medical Center for treatment. Battle Creek Medical Center is also the transportation transfer point for veterans that need to go on to Ann Arbor or Detroit for additional medical treatment.

# **Summary – Strengths, Weaknesses, Opportunities and Threats**

While critical information was obtained through a needs assessment detailed in Chapter 3 of this plan, this section summarizes some of the strengths, weaknesses, opportunities, and threats that were identified at the outset of the planning process during the evaluation of existing conditions.

#### **Strengths**

- CCTA is led by staff with extensive experience and knowledge of the system and the overall service environment.
- Overall the CCTA fleet is in good shape, and any older vehicles are scheduled to be replaced in the next several years.
- CCTA has a facility that meets current and future demands and allows the system to complete maintenance in-house, and the facility is scheduled for improvements in the near future.
- CCTA has a Board of Directors that represents key organizations in the community, and members that are highly engaged in the planning process.

#### Weaknesses

- CCTA is not meeting several key performance measures when comparing services to typical industry standards when operating rural transit.
- As indicated in the peer review, overall operations funding for transit services in Cass County is less than similar counties in Michigan.
- While the highly experienced team that leads CCTA is a strength, a succession plan may be needed to ensure future consistency in the management and operations of the system.
- Marketing of current CCTA services appears to be limited, with information not available to residents through the Cass County website.

#### **Opportunities**

- While Cass County Public Transportation and Dowagiac DART are now both operated by CCTA, they are separate entities when submitting funding applications to MDOT and for other administrative requirements. There can be consideration of the advantages and disadvantages of a single organizational structure that would oversee all public transit services in Cass County.
- Every transit system in Michigan is required to have a Local Advisory Council (LAC), and half of the LAC must be people representing older adults or individuals with disabilities. The LAC for CCTA meets annually to fulfill this requirement, though this council could meet more often and be used by CCTA to obtain ongoing input on services and possible improvements, beyond what is provided by the CCTA Board of Directors.
- COVID-19 has had significant impacts on CCTA and other transit systems across the country, and it
  is anticipated that the post-pandemic period will feature a new normal that includes changes in
  travel patterns and how transit services are operated. However, this also provides CCTA with an
  opportunity to fully assess service design and to consider new approaches that have arisen
  nationally for operating transit services.

#### **Threats**

The primary threat is that CCTA is very dependent on revenues that are obtained through service
contracts with human service agencies, revenue that has served as the local portion of operating
grants. With the decline in these revenues other sources for local funds to support the transit system
in the future need to be identified.

# Chapter 3:

# **Transit Needs Assessment**

#### Introduction

This chapter provides an assessment of transit needs in Cass County based on input received through a variety of outreach efforts, with a particular focus on feedback from current customers, key stakeholders, and the broader community. Combined with the review of existing conditions and a demographic data analysis (that is presented in the next chapter), this qualitative data provides the foundation to formulate potential service and organizational improvements that are provided in subsequent chapters in this plan.

This chapter is divided into the following sections:

- **Customer (Rider) Survey Results** Summary of a customer survey that provided information on trip characteristics, typical travel patterns, desired service improvements, and satisfaction levels.
- **Community Survey Results** Summary of a broader community survey that provided the opportunity to gather opinions from the general public on transit services in Cass County.
- **Stakeholder Interviews** Review of the feedback received from local stakeholders regarding existing transit services and priorities for the future through individual discussions.
- **Driver and Operations Staff Questionnaire** Review of the feedback received from CCTA drivers and operations staff regarding current services and to identify opportunities to improve transportation in the future.
- MDOT/MSU Survey Results Summary of a demand response survey conducted by a research team from Michigan State University (MSU) for MDOT to assess customer satisfaction and trip purpose for CCTA.
- Previous Plans and Studies Review of recent plans relevant to the needs assessment and the transit planning process.

# **Customer (Rider) Survey Results**

An important task for the Transit Service Plan was the administration of a rider survey to receive feedback on public transit services from customers and develop a rider profile. With input from CCTA staff, an on-board survey was prepared for these purposes, and distributed by CCTA drivers. A copy of the on-board survey is provided in Appendix A.

As a result of the COVID-19 pandemic, ridership on CCTA services is significantly lower than the pre-pandemic period. Consequently, the response rate to the customer survey was also lower. Overall 13 surveys were collected, and the results are discussed in the following section.



#### **Use of Public Transportation and Trip Purpose**

- Customers were asked how often they utilize public transportation, and a majority of the respondents stated that they use it 2-3 times per week or more.
- Five respondents reported that they have been using public transportation for more than five years, while another four indicated that they have been riding these services between 3-5 years.
- The top two purposes for the use of public transportation were errands/shopping and medical. However, a few respondents also stated that they take public transportation to get to work and the Council of Aging site.
- When asked how they would make these trips if public transportation was not available, the top responses indicated that they would not make the trip or would rely on family or friends.

#### **Customer Satisfaction**

Riders who completed the customer survey were asked to rate their satisfaction with public transportation in a variety of areas:

- A majority of respondents reported that they were highly satisfied with the overall service. They also noted that they were most satisfied with:
  - Driver customer service
  - Phone customer service
  - Availability of information
  - Cleanliness of the buses
- Only a few respondents noted that they were dissatisfied with any aspect of current public transportation services, primarily the hours of service.

#### **Open Ended Comments**

The respondents were also asked what they liked most about public transportation in Cass County and the comments included:

- Friendly and helpful drivers
- Clean buses

Accommodating and convenient

When asked what they liked least about the public transportation system, the comments included:

- Lack of weekend service
- · Long wait times for pick-up
- Service area limitations

Limited availability, and a need for more buses

Some of the areas that respondents mentioned when asked about destinations that cannot be reached by current public transportation services included:

- Walmart
- Dollar Tree
- Grocery stores

- Doctor offices in Niles and St. Joseph
- Township meetings

Current customers were asked to name their top three improvements for public transportation services in Cass County, and answers included:

- Expanded service to include weekends and longer hours
- Shorter time waiting for bus

- Scheduled service
- Immediate response service instead of having to make appointment

#### **Customer (Rider) Profile**

Several questions on the survey asked riders to provide information about themselves. While the responses to the survey were limited, their responses were summarized to form a customer profile:

- Most respondents live in Dowagiac.
- Seven of the respondents were in the 60-69 age group, and another three were over 70 years of age.
- When asked about their employment status, a majority of respondents checked retired, with the next two top answers being homemaker or other (which included that they were disabled).
- When asked about annual household income, most customers reported that their income was \$14,999 or less.
- A majority of respondents reported that they do not have a valid driver's license.
- Nearly all customers that responded to the survey stated that they did not have access to a working vehicle.

- Just slightly less than half of respondents indicated that they have an internet enabled "smart" phone.
- When asked about possible assistance needed on a daily basis, most respondents checked none, but wheelchair, walker, and cane were also noted.

# **Community Survey Results**

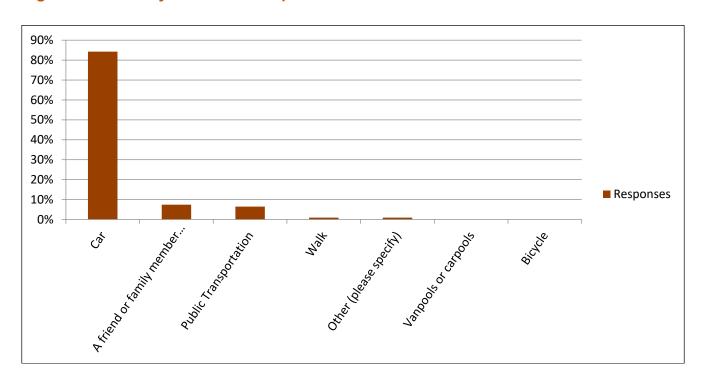
In addition to the rider survey, a broader community survey was developed, and can be found in Appendix B. This survey provided the opportunity to gather opinions from the general public on CCTA services and public transportation as a whole. The survey was distributed on-line through the Cass County website, and publicized through a press release and other outreach efforts.

Overall, 108 completed surveys were received, and key results are summarized in the following section.

#### **Primary Mode of Transportation**

Community survey respondents were asked their primary mode of transportation. Not surprising, over 84% reported using a car. About 6.5 % reported public transportation as their primary mode of transportation. Overall results are shown in Figure 3-1.

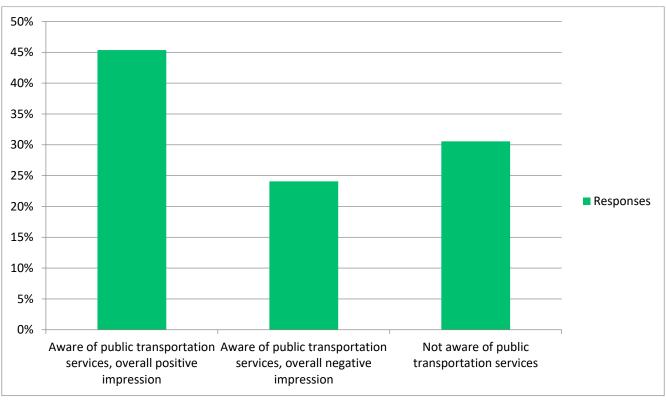




#### **Awareness and Use of Public Transportation Services**

The community survey asked respondents to indicate their awareness and impression of public transportation services in Cass County. About 45% of the respondents checked that they were aware of the public transportation services and that their overall impression was positive. On the other hand, 24% of the respondents knew about the services, but had a negative impression. Overall results are provided in Figure 3-2 on the next page.

Figure 3-2: Awareness of Public Transportation Services



Respondents were also asked about their use of public transportation. The top answer was that they prefer to drive, though the next top answers were that public transportation hours were too limited and they were not aware that service was available. Overall results are show in Table 3-1.

**Table 3-1: Reasons for Not Using Public Transportation** 

Reason Given	Percentage
I prefer to drive	53%
The hours of operation are too limited	33%
Not aware service was available	22%
Need my car before/after work/school	21%
I have to call to reserve a trip	19%
No service is available near my home/work/school	18%
Other (please specify)	13%
Need my car for emergencies/overtime	11%
The fare is too expensive	9%
I have to wait too long for the bus	7%
Trip is too long/takes too much time	7%
Buses are unreliable/late	5%
I have limited mobility and it is hard for me to use the bus	5%
The bus is uncomfortable	1%
It might not be safe/I don't feel safe	1%

#### **Possible Public Transit Improvements**

When the survey participants were asked whether they would use public transportation services if they met their travel needs, about 79% stated that they would. They were also asked what service were most needed, and top responses were:

- Evening service
- Saturday service
- Scheduled service that doesn't require a reservation
- Expanded service outside Cass County

The three improvements that received the fewest responses included lower fares, cleaner buses, and safer buses.

Overall responses to possible service improvements are provided in Figure 3-3.

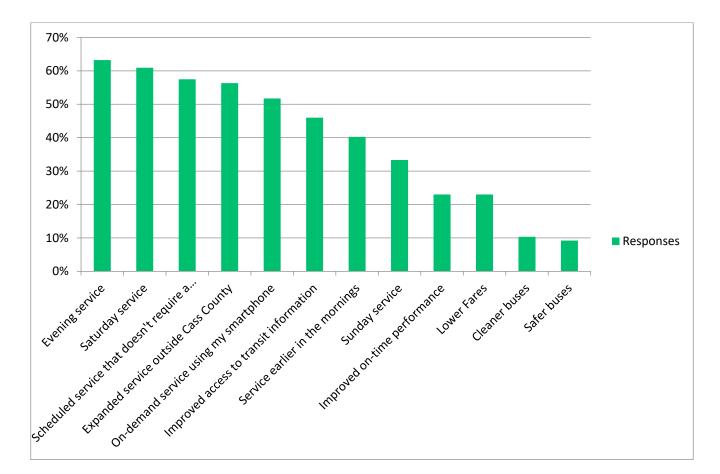


Figure 3-3: Possible Public Transit Service Improvements

Specific locations mentioned by respondents that need to be served by public transportation, and possible service design noted, included:

- Both Southwestern Michigan College (SMC) campuses (Niles and Dowagiac)
- Shopping areas and doctor offices outside of Cass County
- Walmart locations outside of Cass County
- Fixed route service throughout Cass County

# **Need for Additional or Improved Public Transportation / Support for Additional Funding**

Community survey respondents were asked if they thought there was a need for additional or improved public transportation in Cass County, and if they would support additional funding to expand public transportation in the future. Although as indicated earlier the vast majority of survey respondents reported that car is their primary mode of transportation, the responses to these survey questions showed extensive support for the need for improved services and for additional funding:

- Over 91% responded that there is a need for additional or improved public transportation in Cass County.
- A similar number, just over 90%, responded that they would support additional funding to expand public transportation in Cass County in the future.

#### **Demographics of Community Survey Respondents**

The community survey included several demographic and socioeconomic status questions to develop a profile of the survey respondents, and this information is provided in the following section.

As indicated in Figure 3-4 the majority of respondents live in Dowagiac, with many others living in Cassopolis and Edwardsburg.

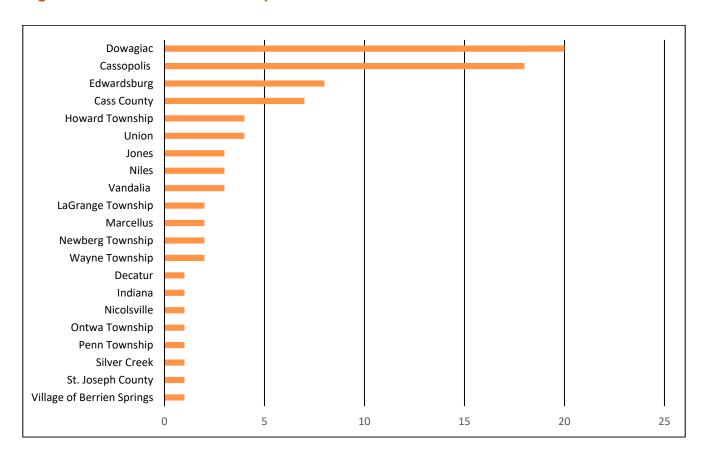


Figure 3-4: Communities of Respondents

The most common age group of respondents was 55-66 years old, as shown in Figure 3-5. When asked about employment status, a majority of respondents indicated that they were employed, full-time, with the next largest response being retired, shown in Figure 3-6. Over 91% of respondents have a valid driver's license and a majority of respondents have either one or two cars in their household.

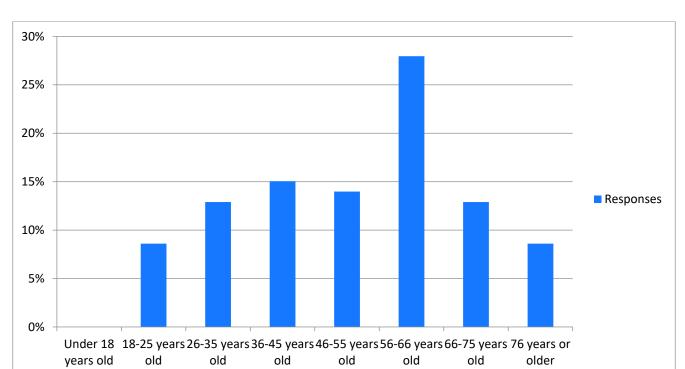


Figure 3-5: Community Survey Respondent - Age Group





#### **Community Survey Summary**

While overall this survey provided important information from the broader community, several key takeaways include:

- Need for expanded hours (evening and weekends)
- Connection to shopping areas, doctor offices, and other key destinations located outside Cass County
- Scheduled service with connections to grocery stores, both SMC campuses, and other key locations
- Service availability for residents of all ages
- Improved on-time performance
- Same day service

#### Stakeholder Interviews

In addition to the survey process individual interviews were conducted with stakeholder agencies and organizations, or these stakeholders had the opportunity to provide their input through a questionnaire. Overall the following stakeholders provided feedback on the level of awareness of current public transit service in Cass County; unmet needs and service issues; and opportunities to provide improved transit services in the county:

- Ascension Borgess-Lee Hospital
- Cass County Council on Aging
- Cass County Government
- Cass County Medical Care Facility
- Cass Family Clinic
- Disability Network Southwest Michigan
- Niles Dial-A-Ride
- Southwestern Michigan College
- Southwest Michigan Planning Commission
- Village of Cassopolis
- Village of Marcellus
- Woodlands Behavioral Healthcare Network

Overall, these stakeholders expressed the need for greater transit service availability. Many mentioned the lack of service to key destinations outside Cass County as a weakness of current public transportation system. An overwhelming number of stakeholders mentioned the introduction of a scheduled route system that would provide daily trips to grocery stores, human service agencies and other important locations. The need for a dedicated funding source, including a possible millage or expanded partnerships between different agencies, was also mentioned.

Specific improvements and recommendations for public transit services in Cass County included:

- Expanded service hours, particularly in evenings and on weekends.
- Ability to schedule trips for the next day beyond the current 11:00 a.m. cutoff time.
- Opportunities for same day service.
- Expanded service area, especially for trips outside Cass County.
- Scheduled services through which customers would not need to call to schedule trips, but could meet bus at designated locations and times.
- On-demand service options that utilize smart phone technology.
- Possible consolidation of the two transit systems in Cass County into one entity.
- Increased marketing efforts to raise awareness of available transit services.

#### **Driver and Operations Staff Questionnaire**

A questionnaire seeking input on current services and possible improvements was distributed by Cass CCTA to their drivers and operations staff. Front-line staff are the most public-facing employees in any transit system, and their position gives them a unique perspective on current needs. Four staff provided feedback, and a summary of their comments is included below. A copy of the questionnaire is provided in Appendix C.

Many staff members stated that a strength of the system were the employees. On the other hand, a major weakness of the system was the lack of drivers and buses to handle the needs of the community. Many of the staff members have been told my customers that there is a need for a connection with surrounding counties, as well as locations in Indiana. Another improvement that staff members have heard from customers or believe is needed is evening and weekend service.

Staff members were also asked about opportunities for improvement and many mentioned the possibility of utilizing smaller vans to increase hours, as well as the increase in part-time staff. Increasing advertising to increase awareness of the services and more funding were some common ideas for improvements. Overall, most staff mentioned expanded hours and availability as their vision for public transportation in Cass County.

# MDOT/MSU Survey Results

In July 2018, a Michigan State University (MSU) research team under contract with the Michigan Department of Transportation (MDOT) conducted a demand response survey to assess customer satisfaction and trip purpose for the CCTA. A report included the following summary of the survey results:

- Overall, Cass County Transit survey respondents provided positive feedback.
- Customer satisfaction was very high, as indicated by the majority of respondents who answered very satisfied in this category.

- The results of the trip purpose category showed that the most common destination was related to Council on Aging.
- The demographic questions showed that the most common group of Cass County Transit riders are Caucasian/White who are 65 years of age and older, and are retired.
- Customer comments showed that people are generally happy and grateful for the service.
- There exists a desire for expanded hours and weekend service, as well as the ability to travel to Niles, Indiana, and Three Rivers.

#### **Previous Plans and Studies**

A review of relevant plans and studies was also conducted as part of the overall needs assessment. Primary focus was on local plans and studies, and this section provides a summary of this review.

#### **Cass County Master Plan**

Chapter Four of this plan discusses Future Land Use Plans for Cass County and six local participating municipalities, including:

- Village of Edwardsburg
- Village of Vandalia
- Township of Pokagon

- Township of Silver Creek
- Township of Volinia
- Township of Wayne

The plan discussed Urban Growth Areas, which included primary growth areas and secondary growth areas. The primary growth areas included Cassopolis, Dowagiac and Edwardsburg and focused on providing full range of housing options and densities. The secondary growth areas included Barron Lake, Marcellus, Union and Vandalia. The next section of the plan focused on highway commercial areas and four locations were identified:

- Intersection area of M-152/M-51 and extending south to Dowagiac River wetlands in recognition of existing mixed commercial and industrial character in segment of Wayne and Silver Creek Townships.
- Intersection area of U.S.-12/M-205, in recognition of existing mixed commercial and industrial character of the immediate area.
- Intersection area of M-40/M-60, in recognition of commercial uses in immediate area and location's convenience for many residents and travelers in regional area.
- CR-217 from U.S.-12 south to state line in Mason and Porter Townships

The plan also included a section regarding Rural Residential Areas, which focused on areas that had less of a presence from farming activities, but a greater presence of residential development and land division patterns that substantially undermine long-term economically viable farming. Finally, there was a section regarding the Pokagon Band of Potawatomi Indians, noting that the tribe assists county agencies in providing important social and emergency services.

# **Ascension Borgess-Lee Hospital Community Health Needs Assessment - June 2019**

Through a stakeholder interview with Ascension Borgess-Lee Hospital, this needs assessment was identified. The study process found multiple needs within the community, which included:

- Develop Employment Opportunities
- Increase Health Service Options
- More Transportation Options
- Education Through Faith-Based Environments
- Healthy Affordable and Available Food

The needs assessment noted that Cass County has been designated as a healthcare provider shortage area (HPSA) and the lack of public transportation services act as a severe barrier to health care for many. A focus group, key informant interviews, and stakeholder surveys were conducted. During the informant interviews, a major issue discussed was the lack of transportation options, as well as an increase in behavioral health issues and lack of health education. When the stakeholders were asked to name the barriers to healthcare, one of the top five responses was transportation problems.

# **Summary of Needs Assessment and Next Steps**

The needs assessment is combined with the review of existing conditions, and the demographic data analysis, to formulate potential service and organizational improvements that are detailed in Chapter 5 of this plan. Overall, the needs assessment detailed in this chapter provides insights for consideration of the following possible improvements:

- Expanded service hours in evenings and on weekends
- Expanded service area to access destinations outside Cass County
- Scheduled services that reduce or eliminate the need to make a reservation.
- Opportunities for same day service
- On-demand service options
- Greater flexibility with scheduling trips
- Consideration of one entity for managing and operating transit services in Cass County
- Increased marketing efforts to raise awareness of available transit service options

# Chapter 4:

# Review of Demographics and Land Use

#### Introduction

The purpose of this chapter is to assess transit needs in Cass County through an analysis of demographic and land use data. Data ranging from underserved and unserved population subgroups to major trip generators are documented and analyzed. The analysis includes a general population profile, identification and evaluation of population groups more likely to depend on transit services, and a review of the demographic characteristics pertinent to a Title VI analysis. Data sources include the 2010 Census and American Community Survey (ACS) 2019 5-year estimates. In conjunction with the needs assessment discussed in the preceding chapter, this information helped to guide the alternatives and recommendations included in Chapter 5 of the plan.

#### **Population Analysis**

#### **Historical Population**

Table 4-1 shows the U.S. Census population data for the State of Michigan and Cass County in 2000 and 2010, and the 2015-2019 ACS 5-year estimates were also included to display more recent population changes in the study area. As indicated in this table:

- Cass County's population has remained fairly stable between 2000 and 2019, though a slight population decline is projected since 2010. This is counter to the overall State of Michigan that is projected to have a slight increase in population between 2010 and 2019.
- When looking at the major communities in Cass County, only four experienced an increase in population between 2010 and 2019: Jones, Marcellus, Union, and Vandalia.

**Table 4-1: Historical Populations** 

Location	Population			Percent Change		
	2000	2010	2019	2000-2010	2010-2019	
Michigan	9,938,444	9,883,640	9,965,265	-0.55%	0.83%	
<b>Cass County</b>	51,104	52,293	51,523	2.33%	-1.47%	
Cassopolis	1,740	1,774	1,692	1.95%	-4.62%	
Dowagiac	6,147	5,879	5,743	-4.36%	-2.31%	
Edwardsburg	1,147	1,259	1,255	9.76%	-0.32%	
Jones	1,634	1,622	1,628	-0.73%	0.37%	
Marcellus	1,161	1,198	1,297	3.19%	8.26%	
Niles	12,278	11,600	11,211	-5.52%	-3.35%	
Union	3,827	1,659	2,217	-56.65%	33.63%	
Vandalia	429	301	381	-29.84%	26.58%	

#### **Population Forecast**

Cass County's overall population is expected to experience a growth rate of 4.2% between 2020 and 2045, as found in the Michigan Bureau of Labor Market and Strategic Initiatives Population Projections. Through examining the projected growth for the population aged 65 and over, it is projected to increase by 16.1% between 2020 and 2045. However, for the population under the age of 65, it is projected to only increase by 0.9%. A higher increase in the aging population indicates that expanded transportation services in Cass County may be necessary to support the needs of a population with higher dependence on mobility options beyond a personal car.

Table 4-2 provides the projected population change over time for both the over 65 population and the under 65 population groups.

**Table 4-2: Cass County Population Projections 2020-2045** 

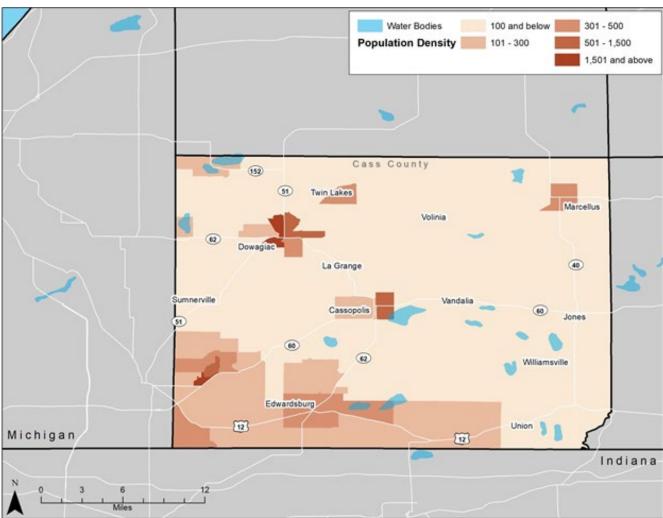
Cass County Projected Population Change							
	2020	2025	2030	2035	2040	2045	% Change 2020-2045
Population age 65 and over	11,228	12,451	13,437	13,705	13,549	13,040	16.1%
Population age 65 and under	40,155	39,579	39,706	40,110	40,567	40,497	0.9%
Total Population	51,383	52030	53,143	53,815	54,116	53,537	4.2%

# **Population Density**

Population density is often used as a determinate for the type of public transportation service that is feasible in an area. Typically, an area with a density range of 1,000 – 2,000 persons per square mile will be able to sustain frequent daily fixed route bus service. Whereas, an area with a population density below 1,000 persons per square mile may be better suited for deviated fixed route, flex schedule, or dial-a-ride service.

To better display the relative population density within Cass County, U.S. Census block groups with over 1,500 persons per square mile were placed into the highest category of population density. Figure 4-1 illustrates the results of this assessment and shows that the highest population densities are located near Dowagiac, Cassopolis, and West of Edwardsburg.





# **Transit Dependence Populations**

#### **Transit Dependence Index (TDI)**

Identifying the relative size and location of segments within the general population that are more likely to depend on transit services is important when defining public transportation needs. Transit dependent populations include individuals who may not have access to a personal vehicle or may be unable to drive due to reasons such as age or disability. Determining the locations of transit dependent populations helps to focus planning efforts for public transportation services.

To provide an objective measure when mapping population groups, a relative measurement was used based on the study area's average for each demographic characteristic. To rank the socioeconomic need, block groups are classified relative to the study area as a whole using a five-tiered scale of "Low" to "Very High."

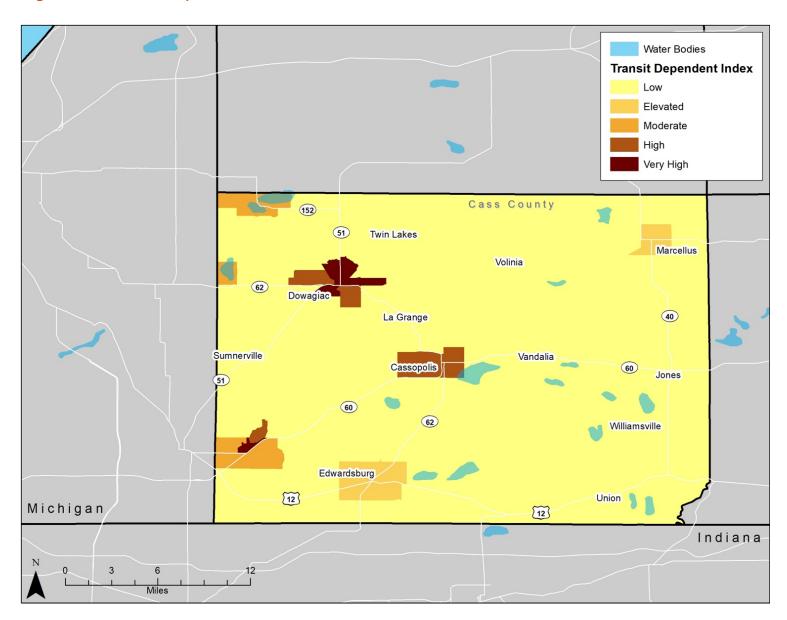
A block group classified as "Low" can still have a significant number of potential transit dependent persons; as "Low" means below the study area's average. At the other end of the spectrum, "Very High" means greater than twice the study area's average. The exact specifications for each score are summarized in Table 4-3.

**Table 4-3: Relative Ranking Definitions for Transit Dependent Populations** 

Number of Vulnerable Persons or Households	Score
Less than and equal to the study area's average	Low
Above the average and up to 1.33 times the average	Elevated
Above 1.33 times the average and up to 1.67 times the average	Moderate
Above 1.67 times the average and up to two times the average	High
Above two times the average	Very High

Figure 4-2 displays the TDI rankings for block groups within Cass County. According to the TDI, very high transit needs areas are found around Dowagiac and West of Edwardsburg. Areas that are classified as "high" needs are found around Dowagiac and Cassopolis.

**Figure 4-2: Transit Dependent Index** 



#### Transit Dependence Index Percentage (TDIP)

The Transit Dependence Index Percentage (TDIP) provides a complementary analysis to the TDI measure. It is nearly identical to the TDI measure with the exception of the population density factor. By removing the population density factor, the TDIP measures the degree, rather than the amount, of potential people in an area that may have higher transit needs. It is particularly helpful when assessing rural areas, as while those areas may have fewer people the TDIP will identify areas where a high percentage of residents have transit needs. Therefore, the TDIP represents the percentage of the population within the block group with above average socioeconomic characteristics. It also follows the TDI's five-tiered categorization of very low to very high.

Figure 4-3 shows transit need based on the percentage of the population. According to the TDIP, census block groups to the East and West of Dowagiac have the highest transit needs.

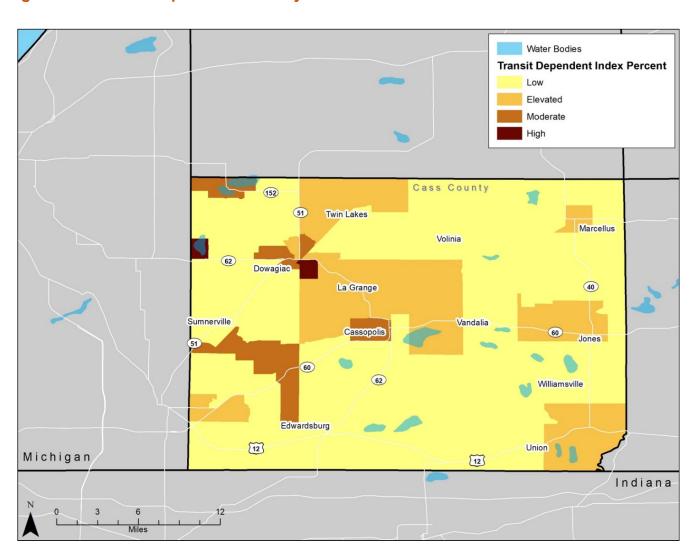


Figure 4-3: Transit Dependent Index by Percent

#### Older Adults (65+)

One of the socio-economic groups analyzed by the TDI and TDIP indices is the senior adult population, which are individuals ages 65 and older. Persons in this age group may begin to decrease their use of a personal vehicle and rely more on public transit.

As noted in the section on Cass County's population projections, this group is expected to grow significantly. There are two census block groups that are classified as "very high:" both to the northwest of Dowagiac. The two census block groups near Vandalia and to the east of Union are classified as "high" needs. There is one census block group to the north of Dowagiac and one to the west of Edwardsburg that are classified as having "moderate" needs. Figure 4-4 illustrates the overall distribution of senior adults in Cass County.

Water Bodies Persons 65 Years & Older Low Elevated Moderate High Very High Cass County 152 51 Twin Lakes Marcellus Volinia Dowagiac (40) La Grange Sumnerville Vandalia Cassopolis 60 Jones 60 62 Edwardsburg [12] Michigan [12] Indiana

Figure 4-4: Percentage of Older Adults (65+) by Block Group

#### Individuals with Disabilities

People with disabilities often rely on public transit for their transportation needs. Figure 4-5 illustrates the relative percentage of individuals with disabilities by block group in Cass County. Overall, there were no census block groups that are classified as "very high." However, there are two census block groups that are classified as "high." Those two census block groups are located near Twin Lakes and East of Dowagiac.

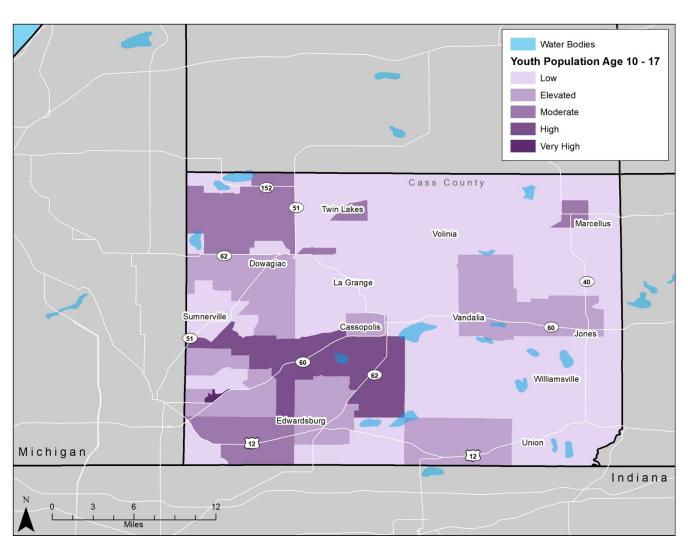
Water Bodies **Individuals With Disabilities** Low Elevated Moderate High Cass County Twin Lakes Marcellus Volinia Dowagiac La Grange 40 Sumnerville Vandalia Cassopolis Jones 62 Williamsville Edwardsburg [12] Union Michigan **12** Indiana

Figure 4-5: Percentage of Individuals with Disabilities by Block Group

# **Youth Population**

Young people ages 10 to 17, who are either too young to drive or have limited access to a personal vehicle, are more likely to benefit from the increased mobility provided by public transit. Examining the percentage of the population that is in the 10-17 age group, there is only one group that is classified as having a "very high" percentage of young adults, which is found in the southwest area of Cass County, to the West of Edwardsburg. However, there are only two groups classified as "high" needs, located to the south of Summerville and Cassopolis. Figure 4-6 illustrates the areas with high concentrations of youth populations.

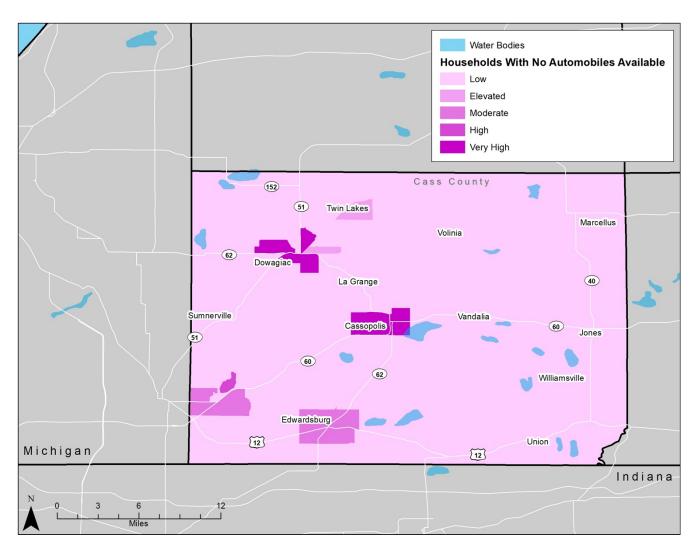
Figure 4-6: Youth Population



#### **Autoless Households**

Households that do not have access to at least one personal vehicle are more likely to depend on public transit. Although autoless households are reflected in both the TDI and TDIP measures, displaying this segment of the population separately is still important. Figure 4-7 displays the relative number of autoless households in Cass County. There is a cluster of census block groups near Dowagiac and Cassopolis that are classified as "very high."





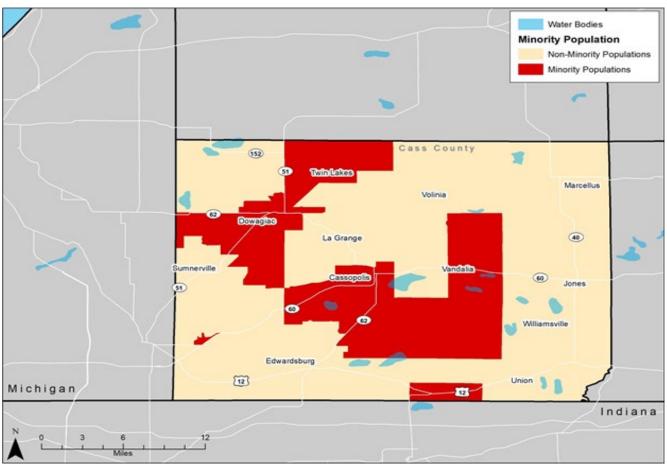
# **Title VI Demographic Analysis**

Through the Civil Rights Act of 1964, Title VI prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving federal subsidies. This includes agencies providing federally funded public transportation. The following section examines the minority and below poverty level populations of Cass County.

# **Minority Population**

In accordance with Title VI of the Civil Rights Act of 1964, it is important to ensure that areas with a higher than average concentration of racial and/or ethnic minorities are not negatively impacted by proposed alterations to existing public transportation services. To determine whether an alteration would have an adverse impact it is necessary to first understand where concentrations of minority individuals reside. Figure 4-8 provides a map of the service area showing the Census block groups shaded according to whether they have minority populations of above or below the service area average of 14%. Above average concentrations of minorities are located in the middle of the County as well as towards the west, including near Twin Lakes, Dowagiac, Cassopolis, and Vandalia.

Figure 4-8: Minority Population



# **Below Poverty Level Population**

Individuals living below the federal-poverty line face financial hardships that make owning and maintaining a personal vehicle difficult. For this segment of the population, public transportation may be the more affordable. Figure 4-9 provides a map that shows the census block groups according to whether the poverty rate is above or below the study area average of 12.1%. According to the map, areas with populations below the poverty level in Cass County are located in Volinia, Vandalia, Jones, East of Williamsville, La Grange, Cassopolis, and North of Edwardsburg.

Water Bodies Low-Income Populations Non-Low-Income Populations Low-Income Populations Cass County 152 Twin Lakes Volinia 62 La Grange 40 **62** Edwardsburg 123 Michigan [12] Indiana

Figure 4-9: Distribution of Below Poverty Populations

# **Limited-English Proficiency**

In addition to equitably providing public transportation to individuals of diverse socioeconomic backgrounds, it is also important to recognize the variety of languages spoken in the study area so that public information can be provided to individuals who speak languages other than English. According to the American Community Survey's five-year estimates for 2015-2019, English is the predominately spoken language in Cass County. As shown in Table 4-4, only 3.2% of Cass County residents are non-English speakers. Spanish, which makes up 1.8% of the Cass County population, is the most significant individual language.

**Table 4-4: Limited English Proficiency for Cass County** 

Cass County			
Population Ages 5 and Older		48,948	
Language Spoken	Number	Percent	
English Only	47,397	96.8%	
Non-English	1,551	3.2%	
Spanish	886	1.9%	
Speaks English Less than "Very Well"	192	0.49%	
Indo-European	244	0.50%	
Speaks English Less than "Very Well"	38	0.08%	
Asian and Pacific Islander	322	0.66%	
Speaks English Less than "Very Well"	69	0.14%	
Other Languages	99	0.20%	
Speaks English Less than "Very Well"	17	0.03%	

SOURCE: AMERICAN COMMUNITY SURVEY, FIVE-YEAR ESTIMATES (2015-2019), TABLE DP02.

#### **Land Use Profile**

#### **Major Trip Generators**

Identifying land uses and major trip generators in the study area complement the above demographic analysis by indicating where transit service may be most needed. Trip generators attract transit demand and include common origins and destinations, like multi-unit housing, major employers, medical facilities, educational facilities, and shopping centers. Figure 4-10 identifies major trip generators in and around Cass County.

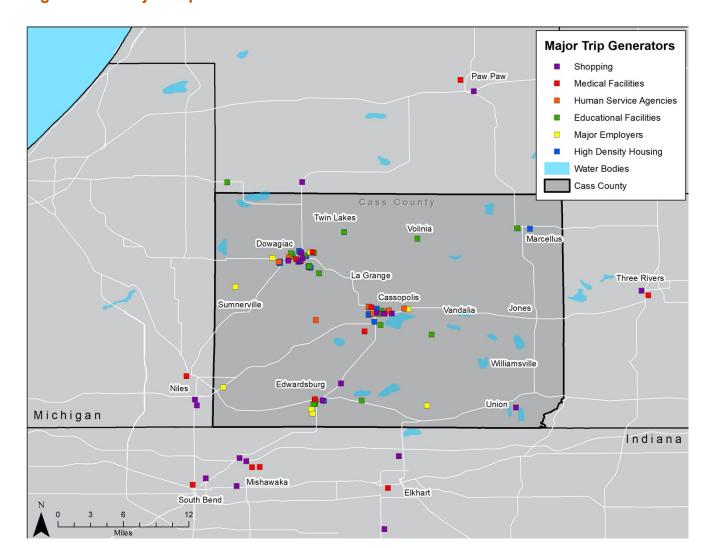


Figure 4-10: Major Trip Generators

#### **Educational Facilities**

Many individuals that comprise the school age population are unable to afford or operate a personal vehicle; therefore, it may be assumed that this segment of the population is one that is reliant upon public transportation. Southwestern Michigan College is a public community college whose main campus is located within Dowagiac. It offers three years with a low tuition rate before finishing the last year at Ferris State University. Table 4-5 provides an overall list of educational facilities.

**Table 4-5: Educational Facilities in Cass County** 

Name	Address	
Cassopolis Middle School	725 Center Street, Cassopolis, MI 49031	
Cassopolis Ross Beatty High School	22721 Diamond Cove, Cassopolis, MI 49031	
Sam Adams Elementary School	114 S. Depot Street, Cassopolis, MI 49031	
Adult/Alternative Education Center	22721 Diamond Cove, Cassopolis, MI 49031	
Dowagiac Union Schools	243 S Front, Dowagiac, MI 49047	
Justus Gage Elementary	301 Oak St, Dowagiac, MI 49047	
Kincheloe Elementary	25121 Gage St, Dowagiac, MI 49047	
Patrick Hamilton Elementary	614 Spruce Street, Dowagiac, MI 49047	
Sister Lakes Elementary	68079 M-152 Benton Harbor, MI 49022	
Dowagiac Middle School	67072 Riverside Dr, Dowagiac, MI 49047	
Union High Schools	701 W Prairie Ronde, Dowagiac, MI 49047	
Pathfinders Alternative & Adult Education	501 N Paul St, Dowagiac, MI 49047	
Edwardsburg High School	69358 Section St, Edwardsburg, MI 49112	
Edwardsburg Middle School	69230 Section St, Edwardsburg, MI 49112	
Edwardsburg Intermediate School	27157 US 12, Edwardsburg, MI 49112	
Eagle Lake School	23889 Avenue C, Edwardsburg, MI 49112	
Edwardsburg Primary School	69100 Section St, Edwardsburg, MI 49112	
Alternative Learning Center	69410 Section St, Edwardsburg, MI 49112	
Heritage Southwest Intermediate School District	61682 Dailey Rd, Cassopolis, MI 49031	
Calvary Bible Academy	27032 Marcellus Highway, Dowagiac, MI 49047	
Calvin Center Elementary School	19088 Brownsville Rd, Cassopolis, MI 49031	
Marcellus Elementary School	301 West Arbor St, Marcellus, MI 49067	
Marcellus Middle/High School	303 West Arbor St, Marcellus, MI 49067	
Marcellus Volinia Outcomes	54080 Gards Prairie Rd, Decatur, MI 49045	
Southwestern Michigan College	58900 Cherry Grove Rd, Dowagiac, MI 49047	

#### **Human Service Agencies**

Public transit is often vital in ensuring transit dependent populations have access to human service agencies and organizations. Human service agencies provide assistance and resources to residents seeking support in a spectrum of issues including, but not limited to, senior health care, human services, and childhood education. Table 4-6 provides an overall list of human service agencies in Cass County.

**Table 4-6: Human Service Agencies in Cass County** 

Name	Address	
Michigan Department of Health and Human Services – Cass County Office	325 M-62, Cassopolis, MI 49031	
Cass County Council on Aging	60525 Decatur Rd, Cassopolis, MI 49031	
Great Start	61682 Dailey Rd, Cassopolis, MI 49031	
Helping Hands	130 South Broadway, Cassopolis, MI 49031	
Cass District Library	319 M-62, Cassopolis, MI 49031	
Cassopolis Family Clinic Network	261 M-62, Cassopolis, MI 49031	
Head Start	1121 Follett Dr, Cassopolis, MI 49031	
Front Street Crossing (COA Location)	227 S Front St, Dowagiac, MI 49047	
Forest Glen Assisted Living	29601 Amerihost Dr, Dowagiac, MI 49047	
Woodlands Behavioral Healthcare Network – Main Location	960 M60 E, Cassopolis, MI 49031	
Woodlands Behavioral Healthcare Network	1124 Austin St, Cassopolis, MI 49031	
L.A.D.D., Inc.	300 Whitney St, Dowagiac 49047	

#### **Major Employers**

The major employers displayed in Table 4-7 have at least 100 employees. Some of the major employers in Cass County include the Pokagon Band of Potawatomi, Southwestern Michigan College, and Lee Memorial Hospital.

Figure 4-7: Major Employers in Cass County

Name	Employees	Address
Postle Aluminum	460	201 N Edwards St, Cassopolis, MI 49031
Southwestern Michigan College	267	58900 Cherry Grove Rd, Dowagiac, MI 49047
Lee Memorial Hospital	260	420 West High St, Dowagiac, MI 49047
Edwardsburg Public Schools Inc	250	69410 Section St, Edwardsburg, MI 49112
Cass County	220	120 N Broadway, Cassopolis, MI 49031
North American Forest Products	214	27263 May St, Edwardsburg, MI 49112
Pokagon Band of Potawatomi	200	58620 Sink Rd, Dowagiac, MI 49047
K&M Machine-Fabricating Inc	178	20745 M-60, Cassopolis, MI 49031
Ameriwood	157	202 Spaulding St, Dowagiac, MI 49047
Best Plastics Inc	140	19300 Grange St, Cassopolis, MI 49031
Midwest Energy and Communications	140	60590 Decatur Rd, Cassopolis, MI 49031
Dowagiac Union School District	135	243 S Front, Dowagiac, MI 49047
Duo-Form Acquisition Corp	135	69836 Kraus Rd, Edwardsburg, MI 49112

Name	Employees	Address
Marcellus Community Schools	130	303 West Arbor Street, Marcellus, MI 49067
Autocam Corp	125	201 Percy St, Dowagiac, MI 49047
Delta Machining Inc	107	2361 Reum Rd, Niles, MI 49120
Lysons Industries Inc	100	30000 M-62 West, Dowagiac, MI 49047
City of Dowagiac	87	241 S Front St, Dowagiac, MI 49047
Pokagon Band of Potawatomi	200	58620 Sink Rd, Dowagiac, MI 49047

#### **Major Shopping Destinations**

Shopping centers are trip destinations in which residents may purchase essential items such as groceries or general merchandise. These centers are an attractive trip end for many residents since they also serve as a place of employment. For the purposes of this study, shopping destinations are defined as a concentration of stores such as a mall or retail outlet, large retail establishments, and major supermarkets. It is important that the selected shopping destinations do not simply represent recreational shopping locations, but general merchandise and food outlets, as transit dependent persons are more likely to rely on transit services for essential needs.

Some shopping options in Cass County are limited, for instance there is no Walmart in the county and that retail location is often a major destination for people who typically depend on public transit services. Therefore Table 4-8 provides a list of major shopping destinations both in Cass County and in the surrounding area.

Figure 4-8: Regional Shopping Destinations

Name	Address
Donker's Shopping Center	107 W Railroad St, Dowagiac, MI 49047
Eastgate Plaza	812 E State St, Cassopolis, MI 49031
Gateway Shopping Center	68977 M-62, Edwardsburg, Mi 49112
Belle Plaza	1950 S 11th St, Niles, MI 49120
Village Commons	69045 M-62, Edwardsburg, MI 49112
Harding's Friendly Market - Dowagiac	102 Park Pl, Dowagiac, MI 49047
Harding's Friendly Market - Cassopolis	445 E State St, Cassopolis, MI 49031
Mill's Grocery	69564 Sunset Blvd, Union, MI 49130
Save A Lot	609 N Front St, Dowagiac, MI 49047
Downtown Dowagiac	200 Depot Dr, Dowagiac, MI 49047
Midway Grocery	57901 M-51, Decatur, MI 49045
Family Fare Supermarkets	56151 M 51 S, Dowagiac, MI 49047
Dussel's Farm Market and Greenhouses	21765 M-60, Cassopolis, MI 49031

Name	Address	
Walmart Supercenter - Niles	2107 S 11th St, Niles, MI 49120	
Walmart Supercenter - Paw	644C+G8, Paw Paw, MI	
Walmart Supercenter - Three Rivers	101 S Tolbert Dr, Three Rivers, MI 49093	
Walmart Supercenter - Elkhart	175 Co Rd 6, Elkhart, IN 46514	
Walmart Supercenter - Mishawaka	316 Indian Ridge Blvd, Mishawaka, IN 46545	
University Park Mall	6501 Grape Rd, Mishawaka, IN 46545	
Town and Country Shopping Center	2400 Miracle Lane, Mishawaka, IN 46545	
<b>Eddy Street Commons</b>	1234 N Eddy St, South Bend, IN 46617	
Southgate Crossing	27751 Co Rd 26, Elkhart, IN 46517	

#### **Medical Facilities**

Medical facilities represent a significant destination for users of public transportation. Older adults and persons with disabilities often rely more heavily upon services offered by medical facilities than other population segments. Medical Facilities in the study area include Cass County Medical Care Facility, Edwardsburg Family Medicine, Lee Memorial Hospital, and Woodlands Behavioral Health Center. There are also hospitals and medical facilities outside Cass County that residents need to access, so Table 4-9 lists the major medical facilities in Cass County and in the surrounding area.

**Table 4-9: Regional Medical Facilities** 

Name	Address
Ascenion Borgass - Lee Hospital	420 W High St, Dowagiac, MI 49047
Cass County Medical Care Facility	23770 Hospital St, Cassopolis, MI 49031
Cass Family Clinic	261 M-62, Cassopolis, MI 49031
The Timbers of Cass County	55432 Colby St, Dowagiac, MI 49047
<b>Edwardsburg Family Medicine</b>	27082 Main St, Edwardsburg, MI 49112
Lee Memorial Medical Care	420 W High St, Dowagiac, MI 49047
Lee Memorial Medical Group	420 W High St, Dowagiac, MI 49047
Woodlands Behavioral Health Center	960 M-60, Cassopolis, MI 49031
Elkhart General Hospital	600 East Blvd, Elkhart, IN 46514
Three Rivers Hospital	701 S Health Pkwy, Three Rivers, MI 49093
Memorial Hospital of South Bend	615 N Michigan St, South Bend, IN 46601
Bronson LakeView Hospital	408 Hazen St, Paw Paw, MI 49079
Pawating Hospital	31 N Saint Joseph Ave, Niles, MI 49120
St. Joseph Regional Medical Center	5215 Holy Cross Pkwy, Mishawaka, IN 46545
St. Joseph County VA Clinic	1540 Trinity Place, Mishawaka, IN 46545

#### **High-Density Housing**

Multifamily residents tend to drive fewer miles and use public transportation more frequently than residents of single family housing. The majority of the high density or multi-unit housing is located in Dowagiac and Cassopolis. Table 4-10 provides an overall list of high-density housing in Cass County.

Table 4-10: High Density Housing in Cass County

Name	Address
Riverside Apartments	550 Riverside Dr, Dowagiac, MI 49047
Green Park Townhomes	400 Green Park Dr, Mason, MI 48854
Rotary Villa	300 Cleveland St, Dowagiac, MI 49047
Fairview Apartments	417 Graham St, Cassopolis, MI 49031
Vineyard Place	508 Vineyard Place Dr, Dowagiac, MI 49047
Woodland Apartments	500 Woodland St, Marcellus, MI 49067
Indian Hills Apartments	400 Cleveland St, Dowagiac, MI 49047
Stone Lake Woods Inc	335 W State St, Cassopolis, MI 49031
Chestnut Towers	100 Chestnut St, Dowagiac, MI 49047
Eagles Wood Apartments and Senior Residence	29509 Amerihost Dr, Dowagiac, MI 49047
Stone Lake Manor CO American Pref	145 Stone Lake St, Cassopolis, MI
Edwardsburg Manor	69138 Gateway Dr, Edwardsburg, MI
Eagles Trace Apartments	29553 Amerihost Dr, Dowagiac, MI
Lake Wind Apartments - Medallion Mgt	705 S Broadway, Cassopolis, MI
Cedar Sands Apartments	600 Riverside Dr, Dowagiac, MI
Parkside Apartments	240 E. Railroad St, Dowagiac, MI

# **Employment Travel Patterns**

In addition to considering locations of major employers, it is also important to account for commuting patterns of residents working inside and outside of the study area. According to the ACS five-year estimates from 2015-2019, the majority of residents in the study area work in Michigan (58%), but only about 35% of residents work in Cass County. It is interesting to note that about 42% of residents work outside of Michigan, which could be due to the close proximately to Indiana. Table 4-11 provides journey to work data for Cass County.

**Table 4-11: Journey to Work Patterns for Cass County** 

Cass County		
Workers (Ages 16+)	22,9	993
Employment Location	Number	Percent
In State of Residence	13,428	58.40%
In County	7,958	34.61%
Outside of County	5,470	23.79%
Outside State of Residence	9,565	41.60%
Means of Transportation to Work	Number	Percent
Car, Truck, or Van - Drove Alone	18,822	81.86%
Car, Truck, or Van - Carpooled	2,512	10.93%
Public Transportation	18	0.08%
Walked	479	2.08%
Taxicab, Motorcycle, Bicycle, Other	220	0.96%
Worked at Home	942	4.10%

SOURCES: ACS, FIVE-YEAR ESTIMATES (2015-2019), TABLE B08007 AND TABLE B08130

Another source of data that provides an understanding of employee travel patterns in the Census Bureau's Longitudinal Employer-Household Dynamics (LEHD) dataset. Table 4-12 lists the top ten employment destinations for Cass County residents. According to the data, the number one employment destination is Elkhart City, IN. There are two in county destinations, which include Dowagiac City and Cassopolis Village, however, Niles City partially falls within Cass County limits.

**Table 4-12: Top Ten Employment Destinations for County Residents** 

Place	Number	Percent
Elkhart City, IN	2,623	11.1%
South Bend City, IN	1,761	7.5%
Mishawaka City, IN	1,103	4.7%
Dowagiac city, MI	1,052	4.5%
Niles City, MI	740	3.1%
Cassopolis Village, MI	688	2.9%
Goshen City, IN	481	2%
Kalamazoo City, MI	361	1.5%
Three Rivers City, MI	349	1.5%
Granger CDP, IN	309	1.3%

SOURCE: CENSUS BUREAU, ONTHEMAP APPLICATION AND LEHD ORIGIN-DESTINATION EMPLOYMENT STATISTICS, 2018.

# Chapter 5:

# Service and Organizational Alternatives and Considerations

#### Introduction

This chapter discusses potential service and organizational alternatives for CCTA to consider in efforts to improve transit services in Cass County. These alternatives were developed based on a review of current services, the analysis of demographics and land use, and input from customers, residents, and key stakeholders. Feedback on these alternatives from CCTA staff and Board of Directors was then used to further define and detail the preferred options for inclusion in the implementation plan that is provided in the next chapter.

The service and organizational alternatives discussed in this chapter include a summary of potential advantages and disadvantages, as well as estimates of costs and ridership. The cost information for the service alternatives is expressed as the fully allocated costs, which means all program costs on a per unit basis are considered when contemplating expansions.

The service alternatives focus on:

- Scheduled Connector Routes
- Modified Demand Response Service
- Expanded Evening Service
- New Saturday Service
- On-demand Services

It should be noted that the proposed services are conceptual in nature, and the proposed connector routes represent a fundamental change in service delivery towards more scheduled services while maintaining demand response services as appropriate. Based on input from CCTA staff and Board of Directors the potential service alternatives were further detailed in the implementation plan included in Chapter 6. Overall, more specific service planning would still be needed before future implementation.

The organizational alternatives focus on:

- Assessing the Opportunity to Further Coordinate or Consolidate CCTA and Dowagiac Dial-a-Ride Organizational Structures
- Expanded Marketing Efforts
- Consideration of a Millage Campaign
- Greater Use of the Local Advisory Committee (LAC)

Overall, these alternatives are meant to serve as the foundation for a renewed – but realistic – vision for public transportation in Cass County. They are designed to meet customer needs while improving the efficiency and effectiveness of transit services within available resources, while also detailing opportunities to expand services if additional funding is identified and obtained.

# **Potential Service Improvements**

#### **Scheduled Connector Routes**

Through the rider survey, current customers named scheduled services as one of their top three improvements for public transportation in Cass County. In addition, through the broader community survey, respondents noted scheduled services that do not require a reservation as one of the top improvements that should be considered. The need to access shopping, medical, and other locations outside Cass County were mentioned by both riders and community residents through the two surveys.

From a financial standpoint, demand response transportation that is currently operated county-wide by CCTA is the most expensive form of transit to operate on a per trip basis. As a result, many rural and small urban communities look to other service designs that can accommodate the needs of their customers, including the use of more scheduled services.

Therefore, this alternative recommends the implementation of scheduled services that would connect Cass County communities to key destinations in the region. While scheduled stops could be considered for areas like Dowagiac, the lack of infrastructure such as sidewalks in that area and the overall rural nature of Cass County means that current dial-a-ride or demand response services would continue to be a primary service mode. However, there are opportunities where those services could be used as feeder services into scheduled connector routes that would provide Cass County residents with access to locations outside the county, and respond to the need expressed by both current customers and by the broader general public.

The proposed scheduled connector routes would also respond to input from a number of stakeholders who were interviewed for the needs assessment, who supported the introduction of a scheduled services that would provide regular trips to key destinations, especially to shopping and services not available in Cass County. These scheduled connector routes would also provide opportunities for customers to connect with transit systems in adjacent counties and in Northern Indiana.

The following seven scheduled connector routes are proposed, and are followed by some common characteristics between the routes, specifics on each, a summary of this alternative, and an overall map of potential services:

- Dowagiac Niles Connector
- Cassopolis/Vandalia Three Rivers Connector

- Cassopolis/Niles Connector
- Edwardsburg/Milton Township Elkhart Connector
- Edwardsburg/Milton Township Mishawaka Connector
- Marcellus Paw Paw Connector
- Marcellus Three Rivers Connector

#### **Common Connector Route Characteristics**

- Scheduled routes would provide customers with specific days and times that services would be available, and that they can use when making plans to access key local destinations. More information on the marketing of these services is provided in Chapter 6.
- Each route would begin with demand response services through which customers would be picked up through advanced scheduling.
- Extensive marketing efforts would be needed to educate current and future customers on these services. The CCTA staff would also play a key role in the transition of some demand response to scheduled services, as they will need to work with customers on how their trips can be completed on the new scheduled services.

#### **Schedule Connector Route Specifics**

#### **Dowagiac - Niles Connector**

- Service would originate with scheduled pickups in Dowagiac
- Two connector routes are proposed:
  - Dowagiac Niles A would travel to Niles, with specific stops to potentially include Four Winds Casino, Southwestern Michigan College's Niles campus, Walmart, and other shopping in that area, and transfer opportunities to Niles DART Route 2
  - Dowagiac Niles B would travel to Niles, with specific stops to potentially include both Southwestern Michigan College campuses, Walmart, and other shopping in that area, and transfer opportunities to Niles DART Route 2
  - Other stops identified through future community input may also be added

#### Cassopolis/Vandalia – Three Rivers Connector

- Service would originate with scheduled pickups in Cassopolis and Vandalia
- Connector service would travel to Three Rivers, with specific stops to include:
  - Walmart
  - Meijer
  - Other stops based on feedback from CCTA staff and Board of Directors

#### Cassopolis - Niles Connector

- Service would originate with scheduled pickups in Cassopolis and Howard Township
- Connector service would the travel to Niles, with specific stops to include:
  - Southwestern Michigan College
  - Walmart and other shopping in that area, (also providing transfer opportunities to Niles DART Route 2)
  - Other stops based on feedback from CCTA staff and Board of Directors

#### **Edwardsburg – Elkhart Connector**

- Service would originate with scheduled pickups in Edwardsburg and Milton Township
- Connector service would the travel to Elkhart, with potential stops to include:
  - Walmart on CR6 (transfer opportunities to Interurban Trolley Blue Line North Pointe)
  - o Other stops based on feedback from CCTA staff and Board of Directors

#### **Edwardsburg – Mishawaka Connector**

- Service would originate with scheduled pickups in Edwardsburg and Milton Township
- Connector service would the travel to Mishawaka, with potential stops to include:
  - Walmart (transfer opportunities to TRANSPO)
  - University Park Mall (transfer opportunities to TRANSPO)
  - St. Joseph Regional Medical Center (transfer to TRANSPO)
  - VA Center
  - o Other stops based on feedback from CCTA staff and Board of Directors

#### Marcellus - Paw Paw Connector

- Service would originate with scheduled pickups in Marcellus
- Connector service would the travel to Paw Paw, with specific stops to potentially include:
  - Walmart (connections to Van Buren Public Transit Paw Paw Concord Loop)
  - Family Fare (connections to Van Buren Public Transit Paw Paw Concord Loop)
  - Walgreens (need to call for stop on Paw Paw service)
  - Bronson Lakeview Hospital
  - Other stops based on feedback from CCTA staff and Board of Directors

#### Marcellus - Three Rivers Connector

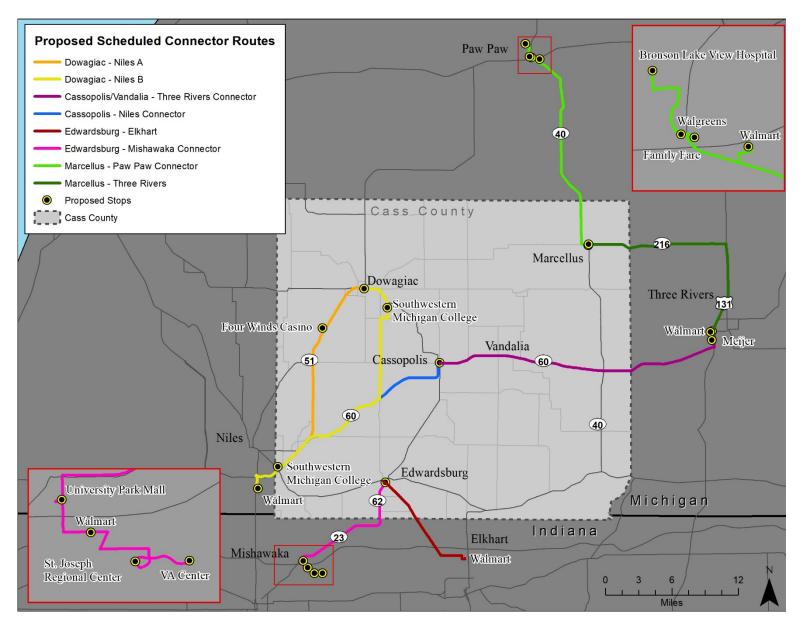
- Service would originate with scheduled pickups in Marcellus
- Connector service would the travel to Three Rivers, with specific stops to potentially include:
  - Walmart
  - Meijer
  - Other stops based on feedback from CCTA staff and Board of Directors

# **Scheduled Connector Route Overview**

	Advantages		Disadvantages
•	Connects key residential areas with important and popular destinations with scheduled service.	•	Would be a major change to current service delivery and require extensive marketing campaign.
•	Responds to comments expressed by current CCTA customers and the broader community by providing scheduled services that would connect key residential areas with major destinations outside Cass County.	•	Would require CCTA dispatch staff to educate customers about new scheduled service.  May require the need to recruit and hire additional drivers.
•	Provides opportunity to operate more cost effective scheduled services.		additional drivers.
•	Utilizes vehicles in existing fleet.		
	Expenses		Ridership
•	Assuming four hours of service three days a week for each connector route, this would result in approximately 624 annual vehicle hours for each.	•	Assuming three passenger trips per hour, it is estimated that each connector route would result in 1,872 annual passenger trips.
•	Using a projected operating cost of \$60.00 per hour, estimated annual operating expenses for each connector route would be \$37,440.		

Figure 5-1 provides a visual representation of the proposed scheduled route connectors.

**Figure 5-1: Proposed Scheduled Connector Routes** 



# **Modified Demand Response Service**

The introduction of scheduled services would have the following impact on CCTA's current demand response services:

- As noted in the description of the specific scheduled connector routes, demand response service
  would serve as a "feeder" service through which local pickups would be scheduled and made before
  heading to destinations along the route. In this way, customers would still have the convenience of
  pickup at their residence, while CCTA would know in advance if there were no requests for a
  particular run and if so, would not need to operate that trip.
- It is anticipated that with the introduction of the proposed scheduled connector routes, some current demand response trips would be shifted on to these services.
- Demand response service would continue to be provided for trips within Cass County and outside the operation of the scheduled routes.

# **Proposed Restructured CCTA System**

Taking into account the proposed scheduled connector routes, and the modified demand response services, Table 5-1 provides a summary of planned levels of service. For planning purposes it is assumed there will be one operating hour for each run on the various routes, and annual operating hours would be appropriated evenly for each major community served by the routes. Operating hours for demand response services that would begin each route are included in the projected annual hours for countywide services.

While possible service expansions are discussed next in this chapter, the intent of this projection is to ensure the revised system would fit within FY2019 service hours, and therefore be cost neutral and recognize that additional funding to expand services is uncertain. The primary takeaway from this proposed approach is that some hours previously allocated for county-wide demand response services (11,747 in FY2019) would need to be shifted to the scheduled connector routes.

Table 5-1: Cost Neutral - Planned Levels of Service

Service	Projected Annual Revenue Service Hours
County-Wide Services	7,587
Dowagiac Dial-a-Ride	3,881
Dowagiac - Niles Connector	1040
Cassopolis/Vandalia – Three Rivers Connector	624
Cassopolis – Niles Connector	416
Edwardsburg/Milton Township - Elkhart Connector	624
Edwardsburg/Milton Township – Mishawaka Connector	416
Marcellus – Paw Paw Connector	624
Marcellus – Three Rivers Connector	416
Totals	15,628

#### **Possible Service Expansions**

In discussions with MDOT, they noted that the funding to support transit services across Michigan have expanded through use of Coronavirus Aid, Relief, and Economic Security (CARES) Act monies. MDOT reported that last year the reimbursement was 70%, this year may be close to 100% in some instances, and next year appears to be approximately 40%. Historically, the federal share of operating costs is 18%, and the state share is 35% of eligible expenses. They recommended the historical amounts for future financial projections, through if additional funding for transit services is available in the future this section discusses possible considerations based on customer input and comments from the community and key stakeholders.

#### **Expanded Evening Service**

Through the customer survey, riders expressed the need for expanded service hours. Additionally, community survey respondents noted that the limited hours of operation were a primary reason for not using CCTA. This alternative proposes the following:

- An expansion of CCTA services in the evening, Monday through Friday.
- Through this expansion, hours of services marketed to the public would be extended from 5:00 p.m. to 7:00 p.m.

#### **Expanded Evening Service Overview**

	Advantages	Disadvantages
•	Responds to a top need expressed by current CCTA customers, and a factor prohibiting more members of the public from using CCTA services.  Provides customers with greater flexibility	<ul> <li>Requires additional operating costs for expanded service, including need for expanded dispatch coverage.</li> <li>Results in additional mileage on current buses, accelerating the vehicle replacement schedule.</li> </ul>
	in accessing key destinations, particularly employment opportunities that require later work hours.	<ul> <li>May require the need to recruit and hire additional drivers and dispatch staff.</li> </ul>
•	Utilizes vehicles in existing fleet.	
	Expenses	Ridership
•		Expanded evening service would not generate large ridership numbers. However, to the customers who need these trips they are critical.

#### **Saturday Service**

Another requested service expansion through the customer and community outreach was for weekend service. This alternative therefore proposes the following:

- Implementation of service on Saturdays for four hours. While this service expansion would be
  minimal it would provide the opportunity for Cass County residents to run errands and access
  services in the community on Saturday.
- It is anticipated that two vehicles would be utilized to provide this service.

# **Saturday Service Overview**

	Advantages		Disadvantages
•	Responds to a top need expressed by current CCTA customers.	6	Requires additional operating costs for expanded dispatch coverage.
•	Expands access to key destinations for a period of time on the weekends.	t	Results in additional mileage on current buses, thereby accelerating the vehicle replacement
•	Utilizes vehicles in existing fleet.	• 1	Schedule.  May require the need to recruit and hire additional drivers and dispatch staff.
	Expenses		Ridership
•	Assuming two vehicles would be needed to provide Saturday service for four hours, this would result in approximately 416 annual vehicle hours.  Using a projected cost operating cost of \$60.00 per hour, estimated annual operating expenses for this expansion would be \$24,960.	**	While implementing Saturday service is a top priority of current customers, implementing this service may not lend itself to large ridership numbers. However, to the customers who need these trips especially to access jobs and other key locations in the community – they are critical.  Assuming passenger trips per hour would be similar to those in FY2019 (pre-pandemic), it is estimated that the Saturday service would result in 886 annual passenger trips.

# **Summary of Possible Service Expansions**

Table 5-2 provides a summary of the possible service expansions.

**Table 5-2: Summary of Possible Service Expansions** 

Project Description	Projected Annual Revenue Service Hours	Projected Annual Operating Expenses (3)	Estimated Annual Ridership <sup>(4)</sup>
Expanded Evening Dial-a-Ride Services, M-F (1)	1560	\$93,600	2492
Saturday Dial-a-Ride Services (2)	416	\$24,960	886

- (1) Assumes two hours of expanded services, using three vehicles.
- (2) Assumes four hours of Saturday service, using two vehicles.
- (3) Assumes projected operating cost of \$60.00 per hour
- (4) Evening service assumes projected 75% of typical ridership; Saturday similar to weekdays

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

A growing number of public transportation providers have begun operating service with an on-demand, e-hailing component. These services, often called microtransit, use mobile technology to provide dynamic routing through which customers use a smartphone application (app) to schedule and/or pay for a ride within a specific geofenced zone. On-demand services can provide more flexibility to customers than traditional demand response service. Riders can individualize service by selecting both their pick-up and drop-off locations, while dynamic routing capabilities allow drivers to quickly adjust pick-up locations to provide more efficient service.

In recent years, a variety of different companies have begun offering on-demand transit software and turnkey transportation solutions, and vendors of transit scheduling software are adapting their products to meet the microtransit emergence. Therefore, it is anticipated that on-demand services will continue to grow and CCTA will need to acquire new technology to meet this demand. In discussions with MDOT, they noted that the state is assessing opportunities to support local transit providers with the acquisition of new technologies, including the potential for a blanket contract for technology/software procurement similar to the current ones for vehicles. In this case, CCTA could purchase new technology to operate on-demand services off a state contract, and not need to go through a formal RFP process.

While CCTA will need to monitor these efforts, and, as appropriate, obtain new technologies that will allow for the provision of on-demand services, the following section provides an overview of the technology and the various considerations.

#### **Service Delivery**

Due to the need for e-hailing capabilities, on-demand services typically require the public transportation entity to partner with a mobility-based technology company. These partnerships can take many forms, differing in who operates the service, ensures compliance, and provides technology. Considerations include:

- Technological Platform: The technology company provides both a customer app and an onboard software system for service operators. These platforms allow for on-demand scheduling, dynamic routing, payment, and vehicle tracking. The technology product should be simple to use for customers and operators alike, and preferably collect trip data to store in a database to improve trip efficiency and analysis.
- **Service Provider**: There are three broad choices for operating a microtransit service maintaining the service in-house using agency vehicles and employees; contracting the service out to an established transit contractor; or contracting with the technology company to both create the mobile app and operate the service.

The companies that are currently promoting on-demand/microtransit services typically break them into these categories:

- **Software-as-a-Service (SaaS)** that offers a localized version of the vendor's platform, allowing transit systems to use their vehicles, drivers, and support staff to operate an on-demand service.
- **Transportation-as-a-Service (TaaS)**, which offers a turnkey approach through which the vendor provides the on-demand technology -- plus the drivers, vehicles, and overall operations.

#### **Overview of On-Demand Technology**

The following sections provide an overview of the processes used when requesting a trip, utilizing real time arrival information and onboard mobile equipment.

#### **Mobile Application**

On-demand/microtransit apps are generally grouped into two distinct categories – a white label app and an integrated app. White label apps are a blank slate for the transit provider to create and design the service's public interface. This provides a high level of customization, but it can also limit the use of the app to only the microtransit service. An integrated app uses an already existing app structure to incorporate the microtransit service. For example, some service providers have partnerships with Uber, Lyft, and other transportation network companies to include microtransit service as an option in their service menus. Regardless of the design and platform, the app must be publicly available for customers to download through common app outlets, to include the Apple App Store and Google Play Store.

#### **Alternative Interfaces**

In addition to the microtransit app, transit systems need to ensure that individuals without a smartphone or internet connection can still access the service. This would be satisfied by providing a phone number for a call center or local dispatcher to schedule real time trips. Some services have set up websites for trip requests, but this should be done in addition to a call-in option.

#### **Registration Process**

Like other online services, customers need to create an account to utilize the service. First time users of the app will likely be greeted with a home screen that allows them to log in to an existing account or to sign up with a new account. The account registration process must be simple and straightforward. Typically, providers require personal information that includes the user's first and last name, email address, and cell phone number. The user must also create a password for their account to keep it secure. Other considerations include an option for wheelchair accessibility.

#### Requesting a Trip

Once the customer is a registered user, the app then navigates them to a map that highlights their current location. This map will also show the user the location and boundary of the zones. If the customer attempts to request a trip pickup or drop-off that is outside of the zone, the app will not allow for that request and will generate an out-of-zone message.

Customers should be able to request their trip through two methods:

- Manually entering their pickup and drop-off locations via address or landmark.
- Select the app's drop pins to select their pickup and drop-off locations on the map.

Group trips should be encouraged as they will go a long way with productivity measures. During the pickup and drop-off selection process, it is important to include an option for the user to increase the number of passengers that will be traveling with them. Limits on the number of groups are largely determined by the vehicle's capacity.

Once the customer submits their trip request, the app will then generate an estimated wait time until pickup and identify a nearby location that the user must travel to in order to board the vehicle. If the wait time and location are suitable for the customer, they will then confirm their request which will go directly to the closest vehicle.

#### **Real Time Arrival Information**

One of the most exciting elements of an on-demand service/microtransit app is the real time arrival information. After a customer has booked their trip, the app then allows them to track their vehicle and receive real-time updates on the vehicle's estimated time of arrival. The app can be configured to send popup notifications to the customer's smartphone once the vehicle is a certain distance away, once it has arrived, or if it experiences delays.

# TO P. Manual reportables

#### **Onboard Mobile Tablet**

The onboard mobile tablet is the driver's connection to the ondemand service. Through a TaaS arrangement, these devices could

be included in the contracting requirements. Many microtransit providers acquire tablets and mounting kits through the software technology partner. Some trip planning software is specific to certain platforms (e.g. Android or iOS), but there are a range of options for procurement.

The tablet provides a constantly updated itinerary with turn-by-turn directions for the driver. The tablet also provides an interface for drivers to accept trips, mark no-shows, and view cancellations. In between trip requests, the tablet will even instruct the driver to return to a predetermined staging area to await a future request. The locations of these staging areas are key when considering response times and they can be modified in real time based on other vehicle's locations. The key is to ensure service is evenly distributed throughout the zone.

The tablets are relatively expensive capital equipment and will require additional monitoring. Many on-demand/microtransit services require their drivers to check out and return the tablets to a supervisor. The tablets will need charging capabilities onboard the vehicles and a charging station in the dispatch office/transit facility. The tablets should be kept in a locker or safe; there are many options for secure tablet storage with charging capabilities.

The service plan and operational capabilities are heavily influenced by the service model and characteristics of the geo-fenced zone. The distribution of vehicles within the zone will need to strike a balance between meeting the needs of high and low travel demand areas.

# **Organizational Considerations**

# Assess Opportunity to Further Coordinate or Consolidate CCTA and Dowagiac Dial-a-Ride Organizational Structures

As noted in previous planning documents, CCTA has taken over the operation of the City of Dowagiac Dial-a-Ride (DART) services under a contract with the city and using city owned vehicles. Currently both CCTA and the City of Dowagiac serve as subrecipients of federal and state funds through MDOT, and there are opportunities to reduce the oversight and administrative of these various services. Therefore, this alternative proposes an assessment of a more formal coordinated or consolidated organization structure.

A primary consideration is using the intergovernmental agreement between the City of Niles and the City of Buchanan in nearby Berrien County as an example. Through this agreement, Niles will provide service for Buchanan and serve as a singular subrecipient. The agreement notes that Buchanan wishes to cease being a direct provider of bus transit services to its citizens and members of the public and have Niles Dial-A-Ride ("DART") service provide these same services through operation and maintenance of the public transit system. MDOT was also involved in the development of the agreement, and in discussions with them expressed support for CCTA and the City of Dowagiac to explore a similar option in Cass County. A copy of the agreement is included as Appendix D, and Niles DART reports that the Niles City Council approved this agreement on August 9, 2021.

The Niles/Buchanan intergovernmental agreement has gone through a lengthy review and consensus building process, and a similar process may be needed in Cass County. However, the representation of the City of Dowagiac on the CCTA Board provides a foundation for these discussions and the opportunity to move forward using the Niles/Buchanan agreement as a template.

#### **Expand Marketing Efforts**

Through the community survey, over 30% of respondents reported that they were unaware of the services provided by CCTA. Increased marketing efforts to raise awareness of available transit services was also expressed by key stakeholders and CCTA drivers through the needs assessment. Therefore, this alternative proposes an expanded marketing campaign to ensure that the community is aware of the services offered by CCTA, and to counter any perception that the system is not open to all residents. It will also be critical that the implementation of the proposed scheduled connector routes be coupled with a broad marketing plan and specific strategies for building awareness.

Considerations for expanded marketing efforts include:

- Making incremental enhancements through use of the Rural Transit Assistance Program (RTAP)
   Marketing Toolkit, available at https://www.nationalrtap.org/Toolkits/Marketing-Toolkit. This
   toolkit provides a variety of resources for building marketing materials, including templates for
   creating rider brochures, bus stop signs, news releases, etc. It also includes copyright-free images
   that can be used as well as copyright-free examples of graphics. The toolkit also includes template
   utilities such as a Microsoft Excel Schedule Maker template and instructions for customizing
   templates in Microsoft Publisher.
- Implementation of a website specific to CCTA services. As noted in a previous planning document online information on CCTA is available through the "My Way There" website that is managed by the Southwest Michigan Planning Commission (SWMPC), and no information on CCTA services can be found through the Cass County website. A website specific to CCTA services would ensure the marketing of services to families and individuals more likely to obtain information through on-line sources. As noted in the RTAP Marketing Toolkit, new riders to transit are likely to turn to the Internet for travel information, and can be a useful tool for gatekeepers (such as human service agencies) who often are charged with planning trips for their clients. The toolkit provides some basic guidelines for developing a customer-focused website that CCTA can consider when creating a website.
- One of the goals of an effective branding effort is to create a positive image of the transit system.
  The RTAP toolkit notes that a logo is a graphic representation of the system's name, and should be
  used on everything associated with the transit system vehicles, signage, printed materials, the
  website, and driver uniforms using the same pallet of colors for every application. As part of
  future marketing efforts, and possible consideration of a new name for the system, a branding
  campaign will be needed. These options are further detailed in the Implementation Plan found in
  Chapter 6.

	Advantages	Disadvantages
•	Further promotes CCTA's services within the community.	<ul> <li>Requires staff time and some additional costs to develop and implement a marketing plan.</li> </ul>
•	Reinforces that CCTA services are open to the public, and not only available to specific population groups.	
•	Increases visibility of the system, in an effort to increase ridership, develop additional partnerships, and access possible funding opportunities.	
	Expenses	Ridership
•	Costs would vary depending on the extent of the marketing campaign. In-house efforts would be substantially less expensive than using an outside professional marketing firm, though results may be less effective.	<ul> <li>A broad marketing should further expand awareness of CCTA services, and should lead to increases in ridership.</li> </ul>

# **Consider Millage Campaign**

At the outset of the project, CCTA staff and Board of Directors expressed concerns about the steady and significant decrease in contract revenues obtained through human service agency agreements, and that provided much of the local support for federal and state grant programs. While many county transit systems in Michigan are supported locally through a millage, CCTA is not, as the last attempt to support transit services through a millage failed in 2013.

With the decline in human service agency contract revenue, CCTA will need to identify local funding sources. While initially this will include seeking funding from Cass County government, this alternative proposes a renewed attempt for a countywide millage. Considerations include:

- MDOT hired King Media to develop the "Make Your Connection Campaign Toolkit" as part of a statewide public information campaign that would help to position Michigan's public transit agencies as an essential frontline service that contributes to growth and economic growth and vitality of their communities. This toolkit provides a variety of resources that local systems like CCTA can tailor for specific outreach campaigns, including to support informational campaigns for ballot purposes. The toolkit is available through the MDOT website at –
   MDOT Make Your Connection Public Transportation Awareness Campaign (michigan.gov)
- The proposed scheduled connector routes that are further detailed in the Chapter 6 Implementation
  Plan can serve as a more tangible concept as opposed to simply demand response services to
  people in the community that would vote on a possible millage. In conjunction with the MDOT
  public awareness toolkit, these routes could be part of talking points for presentations, for social
  media posts, and for networking opportunities throughout the community.

# **Expand Use of Local Advisory Committee (LAC)**

CCTA has a Local Advisory Council (LAC) as required by MDOT. LACs vary greatly across transit agencies in Michigan, though each must:

- Have at least half its members represent seniors and people with disabilities.
- Have a composition of at least half with people representing seniors and people with disabilities.
- Meet at least once a year.
- Review and comment on the transit system's accessibility plan.

This alternative encourages the greater use of the current LAC to serve in an ongoing transit advisory capacity. It is important to have a forum for continuous input from community stakeholders beyond those serving formally on the Board of Directors, and to include stakeholders who have an interest in preserving and enhancing transit in the community and who face mobility challenges or work with individuals experiencing transportation issues on a daily basis.

A greater role for the LAC can help CCTA to better meet mobility needs in the community by serving as a link between the citizens served by various entities and public transportation. It can also serve as an effective community outreach tool, and allows for ongoing dialogue that provides the opportunity to educate stakeholders on the various constraints faced by the transit program. Potentially LAC members could help advocate for a possible millage discussed in the preceding alternative.

Working with the current LAC, CCTA can determine the appropriate method and meeting schedule that will ensure this ongoing input and enable LAC members to be more engaged in CCTA efforts.

	Advantages	Disadvantages
•	Provides an ongoing forum for dialogue between the community and CCTA.	<ul> <li>Takes staff time to organize and document additional LAC meetings and initiatives.</li> </ul>
•	Provides a venue for community networking.	
•	Can be a good community relations and marketing tool.	
	Expenses	Ridership

### Chapter 6: Implementation Plan

#### Introduction

This chapter is the culmination of the planning process, providing a proposed implementation plan for the preferred service and organizational improvements over the next five years. This plan was derived through an evaluation of existing services, a needs assessment that included an analysis of rider and community input, a comprehensive demographic review, and input from the CCTA staff and Board of Directors on a variety of service and organizational alternatives.

The implementation plan is divided into the following sections:

- Service Plan Discusses proposed improvements, broken into potential short, mid- and long-term implementation timeframes.
- **Conceptual Financial Plan for Operating** Provides estimated operating costs and funding sources based on the proposed service plan.
- **Organizational Plan** Discusses proposed organizational improvements, particularly those related to administration, funding, and marketing.
- Implementation Plan Overview Provides a summary of the proposed improvements.

#### **Service Plan**

The proposed plan is primarily based on the fundamental change in service delivery, shifting from a system that is fully demand response to one where scheduled connector routes are the foundation. As noted in the Introduction, the service plan is organized into three potential phases: short- (years 1-2), mid- (years 3-4), and long-term (year 5 and over). The connector routes are proposed to be implemented incrementally through these three phases based on current prioritization considerations, though these timeframes can be modified as conditions change or on future input from local stakeholders and the broader community.

Each of the improvements proposed in the service plan are derived from the alternatives in the preceding chapter, and therefore, only brief descriptions of the proposed improvements are provided.

The costs shown in this chapter are based on projected hourly operating costs. Depending on timing and implementation choices, costs may differ due to inflation or variable market costs. All proposed services will require additional operational planning before implementation.

#### **Short-Term Improvements**

#### **Implement Initial Connector Services**

#### **Improvement Highlights**

- Connects residential areas with important and popular destinations with scheduled service.
- Responds to comments expressed by current customers and the broader community by providing schedules services that would provide connections to major destinations outside Cass County.
- Allows CCTA to control costs with service that has specific operating hours.
- Utilizes vehicles in current fleet.

#### **Dowagiac - Niles Connector Service**

The initial connector service proposed for implementation is scheduled service that would originate with pickups in Dowagiac, and then travel to Niles. As discussed in Chapter 5 and shown in Figure 6-1, two variations are proposed in order to serve key destinations along the route and to include service to both Southwestern Michigan College campuses. This route would provide access to Walmart and other shopping in that area, and would also provide transfer opportunities to Niles DART Route 2.

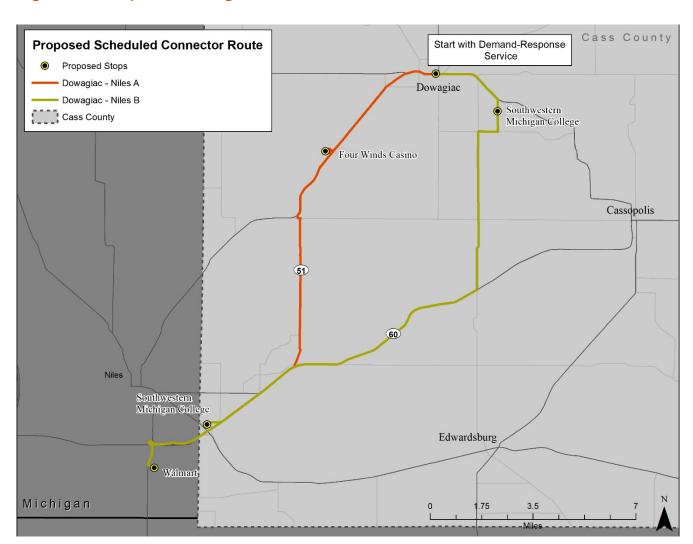


Figure 6-1: Proposed Dowagiac - Niles Connectors A and B

#### Edwardsburg/Milton Township - Mishawaka Connector Service

The other connector service proposed for implementation in the short-term is the route that would originate with pickups in Edwardsburg and Milton Township, and then travel to Mishawaka. Potential stops would include Walmart, University Park Mall, St. Joseph Regional Medical Center, the VA Center, and other stops identified through final service planning. The Edwardsburg/Milton Township – Mishawaka Route would also providing transfer opportunities to TRANSPO. The proposed route is shown in Figure 6-2.

Cass County **Proposed Scheduled Connector Route** Proposed Stops Edwardsburg - Mishawaka Connector Cass County Start with Demand-Response Edwardsburg Service 62 Michigan Indiana 23 Elkhart Mishawaka University 6 Walmart VA Center St. Joseph • Regional Center 1.25 2.5 Miles

Figure 6-2: Proposed Edwardsburg/Milton Township – Mishawaka Connector

#### **Implement Modified Demand Response Service**

With the initiation of connector service routes, current demand response services would be modified. In the short term that would involve demand response service in the Dowagiac, Edwardsburg, and Milton Township areas at the outset of that connect route and through which local pickups would be scheduled and made before heading to destinations along the route. In this way, customers would still have the convenience of pickup at their residence, while CCTA would know in advance if there were no requests for a particular run and if so, would not need to operate that trip.

In the short-term demand response services would continue to be provided for trips within Cass County and outside the operation of the scheduled routes, and then modified with the implementation of other connector routes through the mid-term and long-term phases that follow in this chapter.

Throughout the process in modifying demand response services CCTA should monitor efforts by MDOT to support new technologies for rural transit systems, and as appropriate consider on-demand services as discussed in Chapter 5.

#### **Improvement Highlights**

- Continues mobility for Cass County residents who live outside scheduled service areas.
- Continues transportation service outside hours of scheduled routes.
- Allows CCTA to control costs through reduction of more variable and less productive demandresponse services.

#### **Mid-Term Improvements**

#### **Continue Implementation of Connector Services**

#### Cassopolis/Vandalia - Three Rivers Connector

The next proposed connector service is the route that originates with pickups in Cassopolis and Vandalia, and then travels to Three Rivers. Specific stops would include Walmart, Meijer, and other stops identified through final service planning. The proposed route is shown in Figure 6-3.

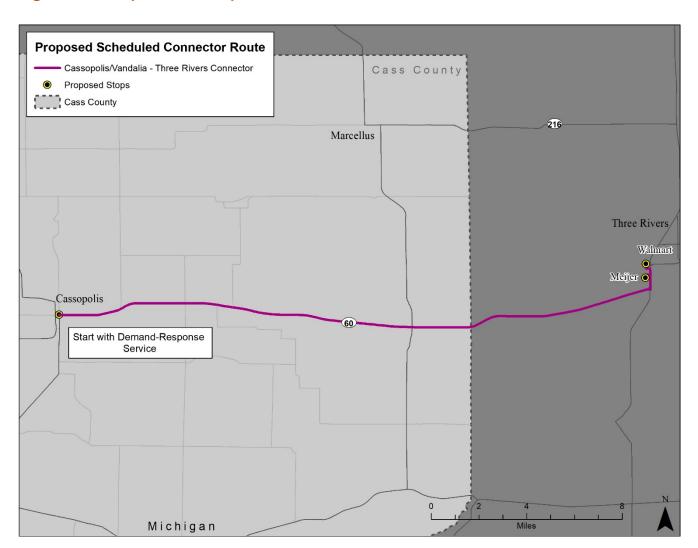
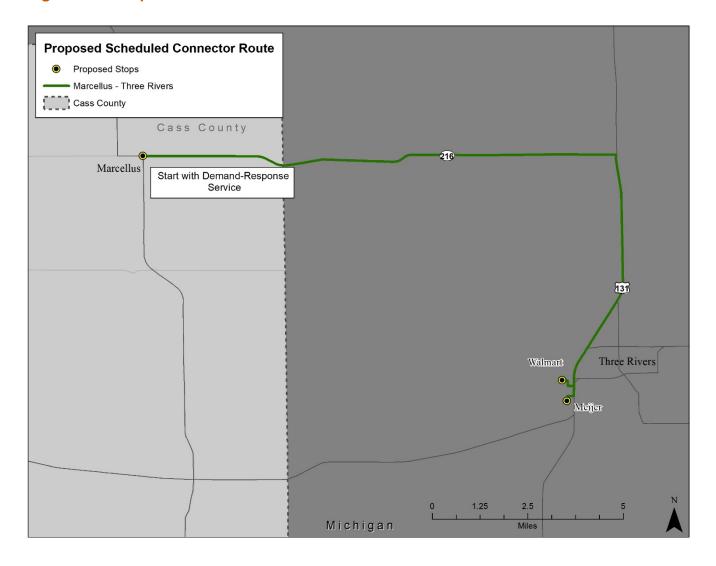


Figure 6-3: Proposed Cassopolis/Vandalia – Three Rivers Connector

#### Marcellus - Three Rivers Connector

This connector service is also proposed for implementation through the mid-term phase, and would originate with pickups in Marcellus and then travel to Three Rivers. Similar to the connector route from Cassopolis, specific stops would include Walmart, Meijer, and other stops identified through final service planning. The proposed route is shown in Figure 6-4.

Figure 6-4: Proposed Marcellus – Three Rivers Connector



#### Implement Edwardsburg/Milton Township - Elkhart Connector

It is also proposed that this connector service be implemented in the mid-term timeframe of the plan, and would originate with pickups in Edwardsburg and Milton Township, and then travel to Elkhart. Specific stops would include Walmart on CR6 and others identified through final service planning. This route would also allow for transfers to Interurban Trolley Blue Line – North Pointe in Elkhart. The proposed route is shown in Figure 6-5.

Cass County **Proposed Scheduled Connector Route** Proposed Stops Edwardsburg - Elkhart Cass County 60 Start with Demand-Response Service Edwardsburg 62 Michigan Indiana Elkhart Walmart Mishawaka 1.25 2.5 Miles

Figure 6-5: Proposed Edwardsburg/Milton Township - Elkhart Connector

#### **Long-Term Improvements**

#### **Complete Implementation of Connector Services**

#### Cassopolis/Howard Township - Niles Connector

This connector service would originate with pickups in scheduled pickups in Cassopolis and Howard Township, and then travel to Niles. Specific stops would include Southwestern Michigan College, Walmart and other shopping in that area, and other stops identified through final service planning. This connector would also provide transfer opportunities to Niles DART Route 2. The proposed route is shown in Figure 6-6.

Cass County **Proposed Scheduled Connector Route** Cassopolis - Niles Connector Dowagiac Proposed Stops Cass County Start with Demand-Response Cassopolis Service Niles Southwestern Michigan College Edwardsburg Walmart Michigan 62 Indiana

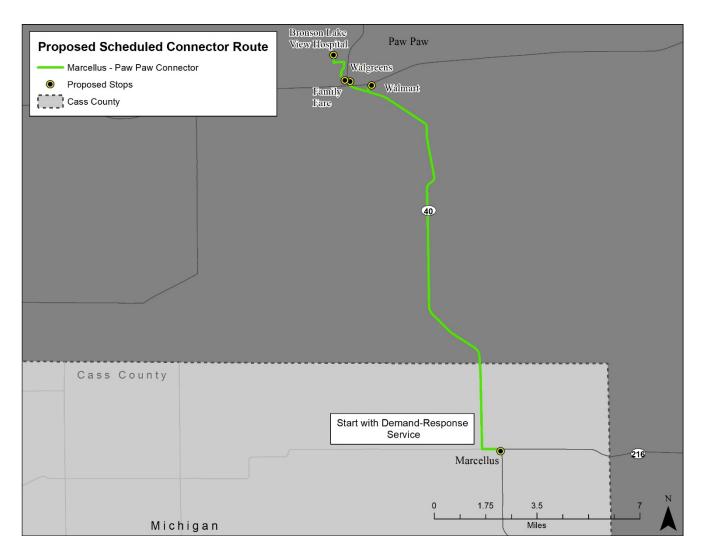
Figure 6-6: Proposed Cassopolis/Howard Township – Niles Connector

Mishawaka

#### Marcellus - Paw Paw Connector

This connector service would originate with pickups in Marcellus, and then travel to Paw Paw. Potential stops would include Walmart (with connections to Van Buren Public Transit - Paw Paw Concord Loop); Family Fare (also with connections to Van Buren Public Transit - Paw Paw Concord Loop); Walgreens (where a call be made for a stop on the Paw Paw service); Bronson Lakeview Hospital; and other stops identified through final service planning. The proposed route is shown in Figure 6-7.

Figure 6-7: Proposed Marcellus – Paw Paw Connector



#### **Expanded Evening Service**

Based on current funding projections service expansions are not proposed for implementation until the long-term phase, though ideally this schedule could be moved forward if fiscal conditions change. Through this service improvement CCTA demand response services would be expanded in the evening, Monday through Friday, from 5:00 p.m. to 7:00 p.m.

#### Improvement Highlights

- Responds to a top need expressed by current customers.
- Provides greater flexibility for Cass County residents in accessing key destinations, particularly employment opportunities.
- Utilizes vehicles in current fleet.

#### Saturday Service

Another requested service expansion through the customer and community outreach was for weekend service. This service expansion projects implementation of service on Saturdays for four hours.

#### **Improvement Highlights**

- While this service expansion would be minimal it would provide the opportunity for Cass County residents to run errands and access services in the community on Saturday.
- Responds to a top need expressed by current customers.
- Utilizes vehicles in current fleet.

#### **Conceptual Financial Plan for Operating**

MDOT's Office of Public Transportation (OPT) distributes federal and state funds for the provision of local public transit services in Michigan. CCTA develops and submits an annual grant application to OPT for funding to support operating and capital costs. OPT staff review all applications from across the state, and make funding recommendations. Therefore, any estimate for the amount of grant funding available to CCTA is somewhat speculative.

However, this Transit Service Plan can serve as an important role in the annual application process by providing CCTA with priorities in this effort. In addition, while MDOT's OPT does not require that projects funded through the annual application process be identified in a transit plan, a conceptual financial plan can help to support requests and budgets included in future applications.

Table 6-1 presents the conceptual financial plan for transit operations covering the Transit Service Plan's five-year horizon and the proposed service plan. The financial projections take into account the following:

- As discussed in Chapter 5, service hours for implementation of the proposed connector routes are
  to be shifted from current demand response service. Therefore the restructured CCTA system is
  projected to remain within the current level of service.
- The projected state and federal shares of the total operating budget are based on the recommended percentages in MDOT's OPT FY 2022 application, 37.5350% through the State Operating Assistance Program and 18% through the federal Section 5311 Program. As noted by MDOT in the FY 2022, these percentages are the best estimate, and will change once all applications are submitted.
- Since no increases in federal or state funding are currently anticipated, these amounts remain constant throughout the five-year projections. Therefore, additional local support would be needed to meet inflationary increases in the budget and to implement any service expansions. As a result, local funding is projected to increase each year to balance the overall conceptual financial plan.

**Table 6-1: Conceptual Operations Financial Plan** 

			Year		
Projects	1	2	3	4	5
Baseline Operating Cost with Inflation (1)	\$937,680	\$965,810	\$994,785	\$1,024,628	\$1,055,367
Restructured CCTA System	-	-	-	-	-
Expanded Evening Service	-	-	-	-	\$105,348
Saturday Dial-a-Ride Services	-	-	-	-	\$28,093
Projected Operating Expenses	\$937,680	\$965,810	\$994,785	\$1,024,628	\$1,188,807
Anticipated Funding Sources for Operating	1	2	3	4	5
Projected Operating Assistance (2)					
Federal	\$168,782	\$173,846	\$179,061	\$184,433	\$189,966
State	\$351,958	\$362,517	\$373,392	\$384,594	\$446,219
Subtotal Federal/State Funding	\$520,741	\$536,363	\$552,454	\$569,027	\$636,185
Local					
Passenger Fares <sup>(3)</sup>	\$28,130	\$28,974	\$29,844	\$30,739	\$35,664
Local Funding (4)	\$388,809	\$400,473	\$412,487	\$424,862	\$516,958
Subtotal Local	\$416,939	\$429,448	\$442,331	\$455,601	\$552,622
Total Projected/Proposed Operating Revenues	\$937,680	\$965,810	\$994,785	\$1,024,628	\$1,188,807

<sup>(1)</sup> Year 1 based on projected annual operating hours x projected operating cost of \$60.00 hour; assumes 3% annual inflation each year thereafter.

<sup>(2)</sup> Based on funding percentages in MDOT FY2022 application and confirmed with MDOT.

<sup>(3)</sup> Farebox recovery for Year 1 based on CCTA FY2021 budget; future years based on similar percentage of overall budget.

<sup>(4)</sup> Local funding needed to balance budget.

#### **Organizational Plan**

In conjunction with proposed service modifications there are organizational and administrative improvements that were discussed in Chapter 5, and are important components of the implementation plan.

#### **Short-Term Improvements**

#### Consolidate CCTA and Dowagiac Dial-Ride Organizational Structures Through Intergovernmental Agreement

As discussed in Chapter 5, the intergovernmental agreement between the City of Niles and the City of Buchanan in nearby Berrien County can serve as the template for a similar process to consolidate the CCTA and Dowagiac administrative structures. MDOT has expressed support for this agreement that would reduce administrative needs, both at the state and local levels. This agreement is proposed to occur in the short-term, taking into account the support for this effort and the representation of the City of Dowagiac on the CCTA Board.

#### **Conduct Millage Campaign**

As also discussed in Chapter 5, there is a pressing need to identify local funding sources to support public transportation services. While initially this support could include seeking funding from Cass County government or local jurisdictions, it is proposed that in the near future CCTA conduct a millage campaign using resources provided by MDOT and using the final transit service plan as a community engagement resource. The exact timing of this campaign will need to be determined by the CCTA Board of Directors, and if it would be more conducive to have the millage vote in conjunction with a larger turnout election year (i.e. 2022 or 2024), or in an off-year such as 2023.

#### **On-Going Improvements**

#### **Expand Marketing Efforts and Rebrand System**

As noted through the community survey over 30% of respondents reported that they were unaware of the services provided by CCTA. Chapter 5 discussed a variety of marketing considerations, and it is proposed that these efforts are a major component in the implementation of connector service and ongoing over the next five years. Marketing of the service can begin after the re-branding, and in conjunction with implementation of service changes. Marketing is intended to reach a wide audience:

- General public
- Existing customers
- Retailers
- Major employers

- Colleges and universities
- Senior centers
- Human service agencies
- Health care facilities

This section provides additional details on opportunities to improve marketing of current and future transit services in Cass County.

#### **Market Scheduled Services**

The marketing of the proposed scheduled routes will be key to the success of these services. It will be vital that Cass County residents are aware that the scheduled services are available, and that they can plan accordingly for trips to shopping and other essential destinations in the region.

While the final routing and scheduling for the connector services will dictate marketing materials, Table 6-2 provides an example of the information that should be a component of this effort. Overall, it demonstrates the need to highlight the community served, the timeframes for services, and the fares. Details on the scheduling process will also need to be added to any future marketing materials.

**Table 6-2: Scheduled Service Example** 

Community Served	Destination	Route Day	Departures	Returns	One-Way Fare	Reduced Fare
Dowagiac	Niles	Monday through Friday	7:00 a.m., 1:00 p.m.	9:00 a.m., 3:00 p.m.	\$5.50	\$2.75
Cassopolis/Vandalia	Three Rivers	Monday, Wednesday, Friday	7:00 a.m., 1:00 p.m.	9:00 a.m., 3:00 p.m.	\$5.50	\$2.75
Cassopolis	Niles	Tuesday, Thursday	7:00 a.m., 1:00 p.m.	9:00 a.m., 3:00 p.m.	\$5.50	\$2.75
Edwardsburg/Milton Township	Elkhart	Monday, Wednesday, Friday	7:00 a.m., 1:00 p.m.	9:00 a.m., 3:00 p.m.	\$5.50	\$2.75
Edwardsburg/Milton Township	Mishawaka	Tuesday, Thursday	7:00 a.m., 1:00 p.m.	9:00 a.m., 3:00 p.m.	\$5.50	\$2.75
Marcellus	Paw Paw	Monday, Wednesday, Friday	7:00 a.m., 1:00 p.m.	9:00 a.m., 3:00 p.m.	\$5.50	\$2.75
Marcellus	Three Rivers	Tuesday, Thursday	7:00 a.m., 1:00 p.m.	9:00 a.m., 3:00 p.m.	\$5.50	\$2.75

#### **Implement CCTA Website**

One of the aspects of the scheduled connector routes is to make using public transit services in Cass County easier to ride. Schedules can then be provided on the website, allowing customers and agency staff that work with people with mobility needs to go there for information. The website, supported by print materials should make it easy to know what services are available and make it easier to use the system.

At a minimum the website should contain:

- General information about the system
- Days of week and hours of service
- Highlights on the staff and the trained vehicle operators
- Schedules for all services that are easily accessible and straightforward
- A simple How to Ride Guide
- Information on Title VI and Civil Rights

#### **Implement Branding Effort**

The most valuable form of advertising and building awareness of public transit services in Cass County is the vehicles. CCTA's buses are all over the service area and are seen by residents of Cass County on a regular basis. CCTA is similar to many rural transit systems, in that they use plain white buses that have an institutional look to them, and are rarely noticed by the public.

Through a branding campaign CCTA has the opportunity to develop an image, and establish the system as a critical part of the community infrastructure. Even though CCTA buses current display signage that notes "public transportation", this campaign also provides a chance to promote that services are open to everyone in the community, and not just older adults and people with disabilities. This is particular important if routes are implemented that serve Southwestern Michigan College students.

This branding and marketing effort should be treated as a business decision, designed to help promote the system and ultimately encourage and increase ridership and service. It can involve applying a new brand to the system with a new name and paint scheme. In addition there can be branding for different type of services, i.e. a different paint scheme for vehicles used to operate the connector routes.

Branding of the system and each of its distinct services is an effort that should begin as soon as possible and be implemented in conjunction with the marketing effort and introduction of service changes. It may be possible to take advantage of local resources, such as the Southwestern Michigan College's Graphic Design degree program. The final design should be done professionally, and in a way that the system will be noticed in a positive way.

The following are several steps that can be considered in the branding campaign:

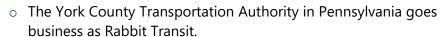
• **System name and nickname** – This is the starting point. All branding and marketing efforts will start with the name that people will use. While Cass County Transportation Authority is the legal name for the system, and services are marketed as Cass County Public Transportation, the name used by the system and the riders can be different. In addition to transit systems in Michigan (such as the Interurban Transit Partnership that goes by The Rapid), some examples from across the country include:

 District Three Public Transportation in rural southwest Virginia recently began operating as Mountain Lynx Transit. As noted in the pictures below, this system went through a full rebranding, going from plain white buses to a dynamic paint scheme and logo that is much more recognizable in the community.





- North Central Regional Transit District in New Mexico is known by residents as "The Blue Bus", as seen to right based on a more appealing paint scheme that was part of a rebranding campaign.
- Hill Country Transit in Texas in called "The Hop"





Overall, the system name/nickname should:

- Be recognizable
- o Identify with the area if possible
- Be catchy
- Avoid acronyms in most cases
- Vehicle colors and paint scheme This requires something
  eye catching that will be noticed and can instill pride. Is there
  a local color that symbolizes the area? The color of the bus
  matters, and as noted earlier it is best to avoid the institutional
  white paint scheme. The Country Bus operated by a transit
  system in Texas is pictured to the right, and depicts a bus that
  is easily recognizable and fits within the region's landscape.



• **Logo** – The system should have a logo that conveys the image expressed in the branding effort. It should be professionally designed, yet relatively simple for the system to reproduce and put on vehicles.

• **Provide the opportunity to highlight sponsors** – Having sponsor names on the sides of the vehicles perhaps in a corner, can lend credibility to the system. More information on sponsorship program considerations is provided in the next section.

#### **Consider a Sponsorship Program**

Transit has a long history of providing advertising on and in buses for additional revenue, but a sponsorship program is more than simply advertising. While success varies from community to community, in particular large corporations have been known to participate in sponsorship programs through which transit vehicles serve as rolling billboards and outreach materials highlight companies supporting the transit system. Since sponsorship and advertising funds can be an important source of local funding, this program can help expand services.

The sponsorship program efforts should be considered at the end of the rebranding campaign, with new vehicles in the new paint scheme and the new name. Potential sponsors will want to be associated with a first-class service that the community can take pride in. While many of the possible sponsors are located outside Cass County, if properly packaged the value to businesses in the region such as large retailers, hospitals, and other health care facilities can be highlighted. Smaller locally based companies may also have interest. Possible services for sponsorship can include:



- Recognition on the website and any system literature
- Decal on the side or back of the bus (example to the right)

#### Implementation Plan Overview

Table 6-3 provides a summary of the proposed improvements and potential timeframes for implementation.

#### **Table 6-3: Implementation Plan Overview**

#### **Proposed Improvement**

#### **Short-Term**

Implement Dowagiac - Niles Connectors

Implement Edwardsburg/Milton Township – Mishawaka Connector

Implement modified demand response service

Consolidate CCTA and City of Dowagiac DART organizational structures through Intergovernmental Agreement

Conduct Millage Campaign

Monitor MDOT's assessment of new technologies for rural transit systems

Begin rebranding of system when implementing new connector routes

Implement website specific to CCTA services

#### **Mid-Term**

Implement Cassopolis/Vandalia – Three Rivers Connector

Implement Marcellus – Three Rivers Connector

Implement Edwardsburg/Milton Township - Elkhart Connector

Continue to modify demand response services in conjunction with additional connector service implementation

Implement new technologies in consultation with MDOT

Continue rebranding efforts when implementing new connector routes

Consider Sponsorship Program

#### Long-Term

Implement Cassopolis/Howard Township – Niles Connector

Implement Marcellus – Paw Paw Connector

Implement Expanded Evening Service

Implement Saturday Services

Continue to modify demand response services in conjunction with additional connector service implementation

# Appendix A Customer (Rider) Survey

### Cass County Public Transportation CUSTOMER SURVEY

Cass County Public Transportation is conducting a Transit Master Plan to identify transportation needs and identify how transit can adapt to meet these needs. This is your opportunity to help design what public transportation will look like in Cass County in the future, so please take a few minutes to complete the following brief survey. Your answers will be kept anonymous. Thank you!





If you received this survey while taking a trip using Cass County Public

Transportation or Dowagiac DART, please return the completed survey to your driver. Otherwise please submit the completed survey to:

Cass County Public Transportation 400 E. State Street Cassopolis, MI 49031

Attn: Julie

1.	How often do you use public	transportation?		
	•	nore 🔲 A few times per m		month
2.	How long have you been usir	ng public transportation?		
	Less than one year	☐ Between 1 and 3 years	☐ Between 3 and 5 years	☐ More than 5 years
3.	When using public transporta	ation, what are the main purp	ooses of your trips? (You may ch	neck more than one)
		☐ Work☐ Council on Aging Sitenment Agency	☐ School ☐ Social / Recreation ☐ Other:	
4.	If public transportation was r	not available how would you	make these trips?	
	•	☐ Family/Friends ☐ Wo ☐ Bicycle ☐ Otl	•	
5.	What do like most about pub	olic transportation in Cass Cou	unty?	
6.	What do like least about pub	olic transportation in Cass Cou	inty?	
7.		ike to go in Cass County or in tion available for these trips?	the region on a regular basis, b	ut you cannot because
		fues from where to where	n	

						2
8. If there were improve	ments to public tr	ansportation in C	ass County, wh	at would be your t	op three choic	es?
1)	(2	)		_ (3)		
O. Place water very cetical	faction with multi	. Avononovkokion i	. the fellowing	0,000		
9. Please rate your satisf	raction with public	transportation ii	the following	areas.		
	Strongly Satisfied	Satisfied	Neutral	Dissatisfied	Strongly Dissatisfied	
Overall service						
Days of service						
Hours of service						
On-time performance						
Cost of services						
Trip scheduling process						
Phone customer service						
Driver customer service						
Availability of						
information on services						
Travel time on vehicle						
Usefulness of website						
Sense of safety and security						
Cleanliness of vehicles						
Cicaminess of venicies						
10. Do you have any addi	tional comments of	on public transpo	rtation in Cass (	County?		
101 Bo you have any addr	cional comments (	on public transpor	rtation in cass (	sourcy.		
Please answer a few o	unestions about y	vourself				
ricase allswer a lew t	questions about	yoursen.				
In what community do	you live?					
How old are you?	, you nve:				<del>_</del>	
☐ Under 18 ☐ 18-2	29 🗖 30-39	<b>4</b> 0-49	<b>50-59</b>	<b>G</b> 60-69	<b>7</b> 0-79	□ 80+
Do you need any of the					_ ,0,5	_ 00:
☐ Wheelchair ☐ W	-				t □None	
Do you have a valid dr						
Do you have access to						
Do you have an intern	_					
Do you consider yours		•	es 🖵 No			
Which one of the follo	•			(עוממ		
☐ Caucasian/White	_		•	• • •		
☐ American Indian/A		-				
What is your employm			•			
☐ Employed (Full-tim	•	☐ Student (Ful		Retired 🚨 U	nemployed	
☐ Employed (Part-tin	•	☐ Student (par	•	Homemaker	☐ Other	
What is your annual h	•	••	-			
☐ \$14,999 or less		<b>\$15,000</b>	) - \$29,999	\$30,000	- \$44,999	
<b>45,000 - \$59,999</b>		<b>\$60,000</b>	) - \$74,999	\$75,000+	-	

# Appendix B Community Survey

### **Cass County Public Transportation Community Survey**

Cass County Public Transportation is currently conducting a Transit Service Plan to identify transportation needs, and to assess how transit can adapt to meet these needs. An important task for this effort is to solicit input from our residents. *This is your opportunity to help design what public transportation will look like in Cass County in the future,* so please take a few minutes to complete the following brief survey by May 21, 2021. Individual survey responses will be kept confidential and will not be identified by the name of the respondent.





#### First, please tell us about your typical travel patterns.

1.	What is your <b>primary</b> mode of transportation? Please check only one.
	☐ Car ☐ Public Transportation ☐ Walk ☐ Bicycle
	☐ A friend or family member drives ☐ Vanpools or carpools
	☐ Other:
2.	Are you aware of the public transportation services that are available in Cass County? What is your
	impression of these services?
	☐ Aware of public transportation services, overall positive impression
	☐ Aware of public transportation services, overall negative impression
	☐ Not aware of public transportation services
3.	Do you use the public transportation services that are provided in Cass County?
	☐ Yes ☐ No
4.	If you <b>DO NOT</b> use any form of public transportation, please indicate why not (check all that apply).
	☐ I prefer to drive.
	Need my car before/after work/school
	☐ Need my car for emergencies/overtime
	☐ The hours of operation are too limited
	☐ I have to call to reserve a trip
	☐ I have to wait too long for the bus
	☐ Trip is too long/takes too much time
	☐ The bus is uncomfortable
	☐ Buses are unreliable/late
	☐ The fare is too expensive
	☐ No service is available near my home/work/school
	☐ Don't know if service is available
	☐ It might not be safe/ I don't feel safe
	☐ I have limited mobility and it is hard for me to use the bus
	□ Other:

5. Would you use public transportation if ☐ Yes ☐ No	there was a service	that met your travel nee	ds?
Next, please provide your thought improvements.	s on unmet trans	portation needs and	possible
6. Do you think there is a need for addition ☐ Yes ☐ No (If you checked "No", we have a substitution of the company of the co		•	s County?
<ul> <li>7. Please indicate what improvements you (Check all that apply):</li> <li>□ Evening service</li> <li>□ Saturday service</li> <li>□ On-demand service using my smare</li> <li>□ Expanded service outside Cass Couteners</li> <li>□ Improved on-time performance</li> <li>□ Improved access to transit information</li> <li>□ Other:</li> </ul>	Service Sunday tphone Schedu unty Safer b Cleane	e earlier in the mornings of service alled service that doesn't uses of buses fares	
8. Are there specific locations/services in you feel should be in the future? Plea	ase be as specific as	oossible.	
<ol><li>Would you support additional funding</li><li>Please tell us a little about yourself.</li></ol>	to expand public tra	nsportation in the future	e? 🗖 Yes 🚨 No
<b>10.</b> Please indicate the community where	you live:		
<b>11.</b> Do you have a valid driver's license?	☐ Yes ☐ No		
<b>12.</b> How many working cars/trucks/SUVs, □ 0 □ 1 □ 2 □ 3 □ 4 o	/motorcycles are in y or more	our household?	
•	6-35 years old 6-45 years old	<ul><li>46-55 years old</li><li>56-65 years old</li></ul>	☐ 66-75 years old ☐ 76 years or older
• •	nt, full-time 🔲 R	yment status? You may etired	ployed
•	ne level? <i>Please ched</i> 30,000 - \$44,999 45,000 - \$59,999	k only one. □ \$60,000 - \$74,99 □ \$75,000 or highe	

16. How would you classify yours	elf?		
☐ African American/Black	Caucasian/White	☐ Native Ame	erican
□ Asian	☐ Hispanic/Latino	Other	Prefer Not To Answer
<b>17.</b> Please provide your commen	ts regarding the need for imp	proved public trans	portation in Cass County.

## Appendix C Driver and Operations Staff Questionnaire

### **Cass County Public Transportation Driver and Operations Staff Questionnaire**

Cass County Public Transportation is conducting a Transit Master Plan to assess current services and identify opportunities to improve transportation in the future, and will serve as a guide for implementing future service improvements. Please take a few minutes to complete the following questionnaire and provide your input.

	ide for implementing future service improvements. Please take a few minutes to ete the following questionnaire and provide your input.
	What do you consider to be the strengths and weaknesses of public transportation in Cass County?
• ]	Based on input you receive from your customers:  o Are there geographic areas or specific destinations that need new or improved service?
	<ul> <li>Are there specific days and hours when new or improved services are needed?</li> </ul>
	<ul> <li>Are there other opportunities to improve services?</li> </ul>
	What do you think is the most important thing that could be done to improve transit services in Cass County?

	Thanks!
Please s Cass Co	share any additional comments you may have concerning public transportation in ounty.
• 1	Are there specific services that you would like to see implemented?
• 1	What is your vision for public transportation in Cass County?

# Appendix D Intergovernmental Agreement for Transit Service

#### INTERGOVERNMENTAL AGREEMENT FOR TRANSIT SERVICE

This Intergovernmental Agreement for Transit Service ("Agreement") is made this \_\_\_\_\_ day of \_\_\_\_\_\_, 2021 ("Effective Date") by and between the City of Niles, Michigan a Michigan home rule City, having the address of 333 North 2<sup>nd</sup> Street, Niles Michigan 49120 ("Niles") and the City of Buchanan, Michigan, a Michigan home rule city, having the address of 302 North Redbud Trail, Buchanan, Michigan 49107 (hereinafter "Buchanan") (each individually a "Party" and collectively the "Parties").

WHEREAS, Buchanan wishes to cease being a direct provider of bus transit services to its citizens and members of the public and have Niles Dial-A-Ride ("DART") service provide these same services through operation and maintenance of a public transit system for Buchanan pursuant to the terms of this Agreement;

WHEREAS, the Parties are authorized to enter into this Agreement under Michigan Public Act 35 of 1951, being MCL 124.1, et seq.; and

WHEREAS, the Parties find it in the best interest of the public health, safety and welfare to provide such transit service to Buchanan and the Parties now wish to formally memorialize their obligations related to providing the transit services specified in this Agreement.

NOW THEREFORE, in consideration of the mutual promises herein and other good and valuable consideration, the receipt and adequacy of which is acknowledged, the Parties agree as follows:

#### 1.0 Service.

1.1 General. Throughout the term of this Agreement, shall provide transit service as set forth below, in compliance with all applicable law, including without limitation applicable Federal law.

The City of Niles's DART agrees to provide demand response and/or deviated fixed route transit service to the citizens of Buchanan and the surrounding area from 7:00 a.m. to 5:00 p.m. Monday through Friday and 10:00 a.m. to 3:00 p.m. on Saturday, with the exception of major holidays, training dates, and inclement weather closures as determined by the City of Niles and DART management.

- 1.2 Additional Service. Additional transit service may be provided by Niles DART, in its discretion, as Niles determines appropriate given the demand for service, available resources, and cost allocation. Additional transit service shall be at Niles' sole cost, unless the parties enter into a dated written amendment to this Agreement for additional services at a rate different from that set in this Agreement.
- 1.3. Buses. Niles shall provide buses sufficient to operate during posted service hours. Buchanan shall not be responsible for capital rolling stock acquisition or for costs associated with replacement of buses necessary to provide service.

1.4 Marketing. Niles DART shall provide all marketing and advertising products, materials, route maps, and schedules for the Service.

#### 2.0 Term and Termination.

- 2.2 Termination. Either Party may terminate this Agreement for cause at any time during the Term of this Agreement upon one hundred eighty (180) calendar day's prior written notice, for cause.
- **3.0 Payment.** During the term of this Agreement, Buchanan shall pay Niles DART for the Service the entire amount of Buchanan's revenue generated from its dedicated transportation millage (approximated to be \$90,000.00 per year). Payment shall be remitted in an annual lump sum payment within sixty (60) calendar days of date of collection by Buchanan. Any unexpended millage fund balance held by Buchanan shall be transferred to Niles as of the Effective Date, except for a reserve amount of \_\_\_\_\_ to be retained by Buchanan to address pending claims and cover required audit expenses. In the event of termination before the end of a fiscal year, the millage amount to be paid to Niles shall be prorated for the days of Service provided in that fiscal year.

#### 4.0 Operation.

- 4.1 General. Niles DART agrees that the Service shall be operated consistent with the description under Section 1 of this Agreement, which may be modified from time to time upon execution of a dated written amendment to this Agreement, and consistent with the general practices and procedures of Niles DART.
- 4.2 Signage and Bus Stops. As of the signing of this agreement, there are no active bus stops, signs or shelters in the City of Buchanan. No new signs, stops, or shelters shall be erected on municipal property without the prior dated written agreement of the Parties. Costs associated with any construction, improvement, and/or maintenance of signage, bus stops, and/or bus shelters located on municipal property within the city limits of Buchanan shall be established as a part of the aforementioned agreement.
- 4.3 Fares. Buchanan's passenger fares shall remain at the currently charged rates for the Term of this Agreement. Upon renewal, fares will be set in accordance with the DART Fare Change policy, which requires a public hearing and review by the Niles City Council.
- 4.4 Hours of Operation. The Service shall be provided consistent with days and hours of operation, including holiday closures, of Niles DART.
- 4.5 General Manager. The Niles DART General Manager, or designee, shall be solely responsible for the day-to-day operations of the Service, including coordination and oversight of all transit-related consultants, oversight of all marketing activities, providing information about

the Service to the public and business community, applying for and tracking grants, ridership and routing analysis, capital rolling stock maintenance; and acquisition, facility acquisition, construction and maintenance costs; complaint monitoring and response, and all other job functions as noted in the General Manager's Niles DART job description.

**5.0 Bus Transfers.** In additional consideration for entering into this Agreement, Buchanan shall transfer, subject to any existing liens and MDOT restrictions, without cost, titles for all buses currently being used by public transit services by Buchanan, as allowed by Michigan law and regulations, to Niles for the Term of this Agreement or until this Agreement is terminated pursuant to Section 2.2, whichever occurs first. The buses subject to transfer are listed by make, year and vehicle identification number in Exhibit A to this Agreement. Unless otherwise agreed in a dated writing by the parties, title to the buses shall be surrendered by Niles to Buchanan immediately upon the ending date of the Term of this Agreement or the date of termination pursuant to Section 2.2, whichever occurs first if Buchanan intends to use the buses for the provision of public transit services. If the buses, or replacement buses subsequently received by Niles, will no longer be used for the provision of public transit service for Buchanan, MDOT must be consulted to determine proper disposition.

#### 6.0 Miscellaneous.

- 6.1 Governing Law and Venue. This Agreement shall be governed by the laws of the State of Michigan and any disputes concerning the provisions hereof shall be brought in the court of competent jurisdiction locate in the County of Berrien, State of Michigan.
- 6.2 No Waiver. Delays in enforcement or the waiver of any one or more defaults or breaches of this Agreement by any Party shall not constitute a waiver of any of the other terms or obligations of this Agreement.
- 6.3 Integration. This Agreement constitutes the entire agreement between the Parties and supersedes all prior oral or written communications, discussions, negotiations and drafts.
- 6.4 Third Parties. There are no intended third-party beneficiaries to this Agreement.
- 6.5 Notice. Any notice under this Agreement shall be in writing, and shall be deemed sufficient when directly presented or sent pre-paid, first class U.S. Mail to the Party at the address set forth on the first page of this Agreement.
- 6.6 Modification. This Agreement may only be modified or amended upon a dated written agreement of the Parties. No agent, employee, or representative of either Party is authorized to modify any term of this Agreement, either directly or impliedly by a course of action.
- 6.7 Governmental Immunity. Both Parties and their officers, attorneys and employees, are relying on, and do not waive or intend to waive by any provision of this Agreement, the monetary limitations or any other rights, immunities or protections provided by Michigan law. Notwithstanding any provision herein, Buchanan shall, to the extent allowed by law, indemnify

and hold Niles harmless for any claim or cause of action or liability for same for any occurrence or incident prior to the date of this Agreement.

- 6.8 Assignment; Subcontracting. Neither Party shall assign or otherwise transfer any interest in this Agreement, or enter into any assignment of or subcontract for the provision of any of the Services to be performed under this Agreement, without the prior dated written consent of the other party.
- 6.9 Liens. Niles shall not permit the placing of any liens or security interests on the buses listed in Exhibit A to this Agreement.
- Independent Contractor Relationship. The relationship of Niles DART to Buchanan is and 6.10 shall continue to be that of an independent contractor and no liability or benefits, such as worker's compensation, pension rights or liabilities, arising out of or related to a contract for hire or an employer/employee relationship, shall arise or accrue to either party or either party's agents or employees as a result of the performance of this Agreement. Nothing contained herein shall be deemed or construed by the parties hereto, nor by any third party, as creating an agency relationship, or a partnership or joint venture between the parties hereto, it being understood and agreed that none of the provisions contained herein, nor any acts of the parties hereto, shall be deemed to create any relationship between the parties hereto other than an independent contractor relationship.
- Severability. If any one or more provisions of this Agreement or the application thereof to any person or circumstances shall to any extent be declared or determined to be invalid or unenforceable, the validity, legality and enforceability of the remainder of this Agreement, or the application of such provisions to persons or circumstances other than those as to which it is invalid or unenforceable, shall not be affected or impaired thereby, and each provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.
- Captions. The headings of the sections and other subdivisions in this Agreement are for convenience only and shall not be used to construe or interpret the scope or intent of this Agreement or in any way affect the same.
- 6.13 Mutual Waiver of Consequential Damages: The parties waive claims against each other for consequential, special and exemplary damages caused by, related to or arising out of this Agreement or the failure to perform properly any obligation arising out of or relating to this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the Effective Date.

Heather Grace, City Manager Nicholas Shelton, Mayor City of Buchanan, MI City of Niles, MI 333 N 2<sup>nd</sup> Street 302 N Redbud Trail Niles, MI 49120

Buchanan, MI 49107