

PUBLIC TRANSIT

Over the last four years a comprehensive effort has been made to understand the current role of public transit and mobility in Berrien and Cass Counties. This effort included several transit focused studies that called for the establishment of a structure to build and sustain coordination efforts and for improved integration between countywide rural and small urban service. This was documented in the following completed studies from 2010-2012; Berrien County Coordinated Human Service Transportation Plan, Berrien County Transit Study, Niles Dial a Ride Transit Study, and the Pokagon Band of Potawatomi Transit Feasibility Study. In 2011 the KFH group was selected to conduct a three-year countywide transit feasibility study with the purpose of identifying opportunities to create a countywide transit system in Berrien County. The study will provide detailed analysis of the following opportunities:

- Allow for additional rider benefits, such as better and increased services within the County and services that cross county and state borders;
- Provide a more effective mechanism to address regional transportation issues;
- Provide greater opportunities for the creation of local dedicated funding sources for transit; and
- Achieve economies of scale with regard to capital, operating, administrative, and human resources.

Since 2010 a Mobility Manager has been in place that is funded through a grant from the Federal Transit Administration and is administered by Twin Cities Area Transportation Authority (TCATA). Working with the SWMPC and other agencies the Mobility Manager is responsible for short-range planning, management activities and projects for improving coordination among public transportation and other transportation service providers with the intent of expanding the availability of services to people with disabilities, older adults and low-income individuals.

CONSIDERATIONS OF TRANSIT IN THE STUDY AREA

- There are three independently operated public transit systems that have service areas located in the study area. Niles Dial a Ride (Niles DART) service area encompasses the City of Niles, Niles Township and the City of Buchanan. Buchanan Dial a Ride (Buchanan DART) provides service to the City of Buchanan and Buchanan Township. The communities that are located in Cass County are served by Cass County Public Transit. Berrien Bus provides limited service to all of the designated rural areas of Berrien County and should be considered the “spine” for connecting people with transit systems in the adjacent designated urban areas in the county.
- Transit is a critical transportation link for older adults, people with disabilities, and low income households. Many of the needs of these groups are being met, but there are large gaps in services that need to be addressed.

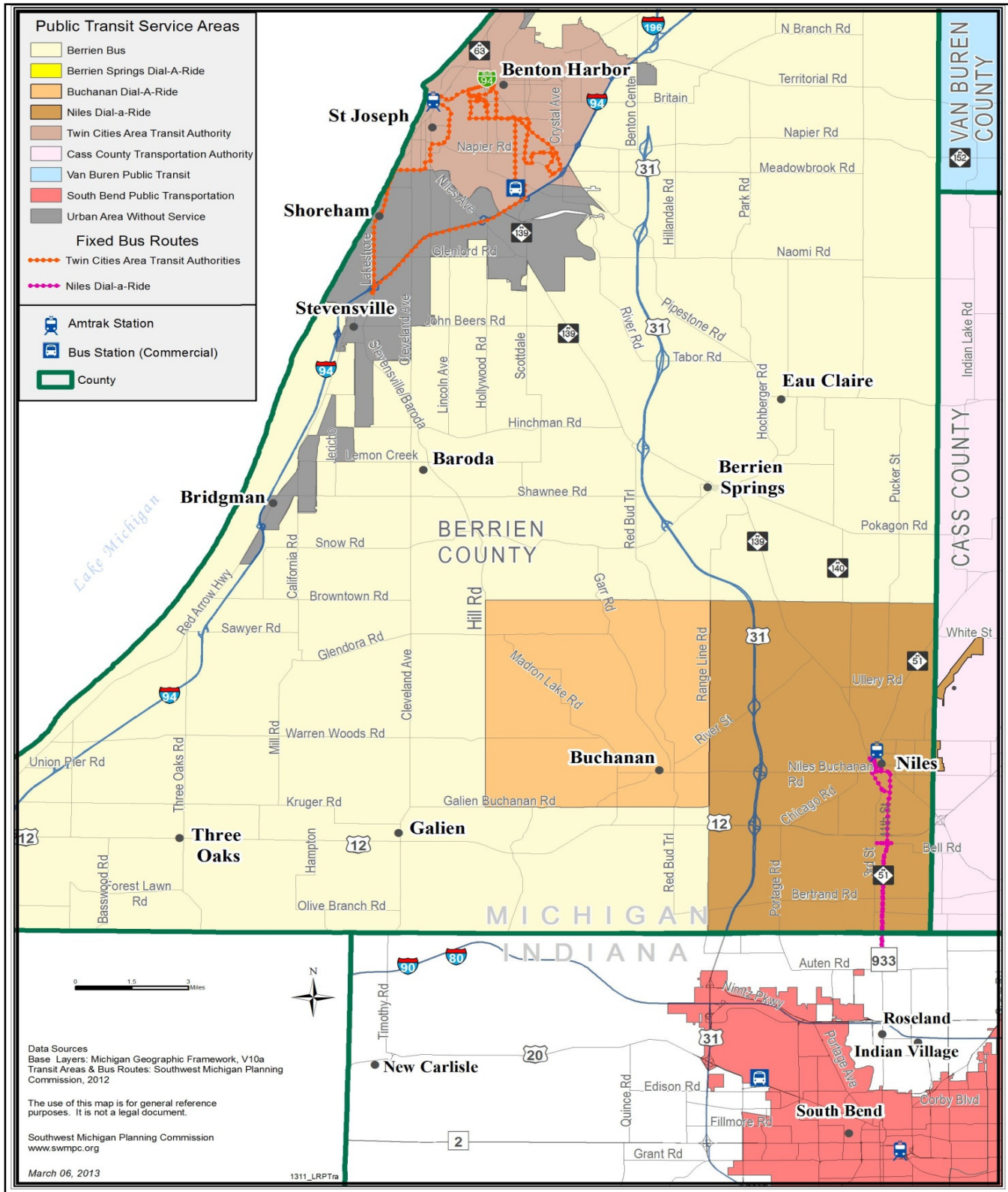
- Some level of public transit service is provided in the seven communities that encompass the study area. However, many of these areas are limited in the amount and frequency of service they receive, especially in more rural areas of the county.
- The three independently operated transit agencies have combined annual budgets totaling over \$1.5 million. Two out of the three transit agencies receive local support in the form of a millage.
- Public transit services increase resident access to education, training, jobs, shopping, and other life sustaining activities in the NATS study area. In 2011 Niles Dial a Ride and Buchanan Dial a ride provided almost 39,000 trips to life enhancing activities.

TRANSIT OVERVIEW

The NATS study area receives services from four public transit providers. Two of which (Niles DART and Buchanan DART receive funding through the MPO and provide service within the study area. Because of this, these two providers will be examined in greater detail.

The two other providers; Cass County Public Transit, is the designated rural provider for Cass County and Berrien Bus provide services within the designated rural areas of the Berrien and Cass County. Both of these rural providers serve as the “spine” by bringing people in from rural areas into the urbanized activity centers of Niles, Buchanan, Benton Harbor, St. Joseph and Dowagiac. An additional system, Transpo, connects people to the South Bend, Indiana region. Transpo is the urban transit provider in the South Bend, Indiana urbanized area. Map 18 provides an overview that includes the four different providers in the study area. You can also view a table that highlights the different transit providers in Appendix C.

Map 18 - Public Transit Provider Service Areas



Trip Generators

There are five main activity centers in the study area, these activity centers include:

- Niles
- St. Joseph
- Benton Harbor
- Dowagiac, Cass County
- South Bend-Mishawaka area in St. Joseph County, Indiana

The five identified activity centers offer health care facilities, education facilities, retail stores, recreational attractions, government buildings, and human service/social agencies. Many of the destinations within the activity centers also serve as employment centers.

Table 23 provides an overview of the major transportation generators for people living in the study area and the public transit provider that would serve that destination. Example: City of Niles to Andrews – Niles DART provides service from City of Niles origin to Niles DART office where a passenger would transfers to Berrien Bus to reach their final destination at Andrews University.

Table 23 - Transit Trip Generators

Trip Generator	City	County	Type	Transit Serving Destination
Andrews University	Berrien Springs	Berrien	Education	Berrien Bus
Department of Human Services	Benton Harbor	Berrien	Medical/Education	Berrien Bus
Berrien County Court	City of St. Joseph	Berrien	Legal	Berrien Bus
Berrien County Court	City of Niles	Berrien	Legal	Niles DART
Lakeland Hospital	City of St. Joseph	Berrien	Medical	Berrien Bus
Lakeland Health Services	Royalton Township	Berrien	Medical	Berrien Bus
Mall Drive	Benton Township	Berrien	Shopping	Berrien Bus
Lakeland Dialysis Niles	Niles Township	Berrien	Medical	Niles DART
Four Winds Casino	New Buffalo	Berrien	Employment	Berrien Bus
Lake Michigan College	Benton Township	Berrien	Education	Berrien Bus
Eleventh Street Corridor	Niles	Berrien	Shopping	Niles DART
Lakeland Rehabilitation Services	Niles Township	Berrien	Medical	Niles DART
Lake Michigan College	Niles	Berrien	Education	Niles DART
Four Winds Casino	Dowagiac	Cass	Employment	Cass County Public Transit
Pokagon Health Services	Dowagiac	Cass	Medical	Cass County Public Transit
Southwest Michigan College	Dowagiac Township	Cass	Education	Cass County Public Transit
Grape Road Corridor	Mishawaka	St. Joseph	Shopping	TRANSPO
St. Joseph Regional Health Center	Mishawaka	St. Joseph	Medical	TRANSPO
The South Bend Clinic	South Bend	St. Joseph	Medical	TRANSPO
Memorial Hospital	South Bend	St. Joseph	Medical	TRANSPO

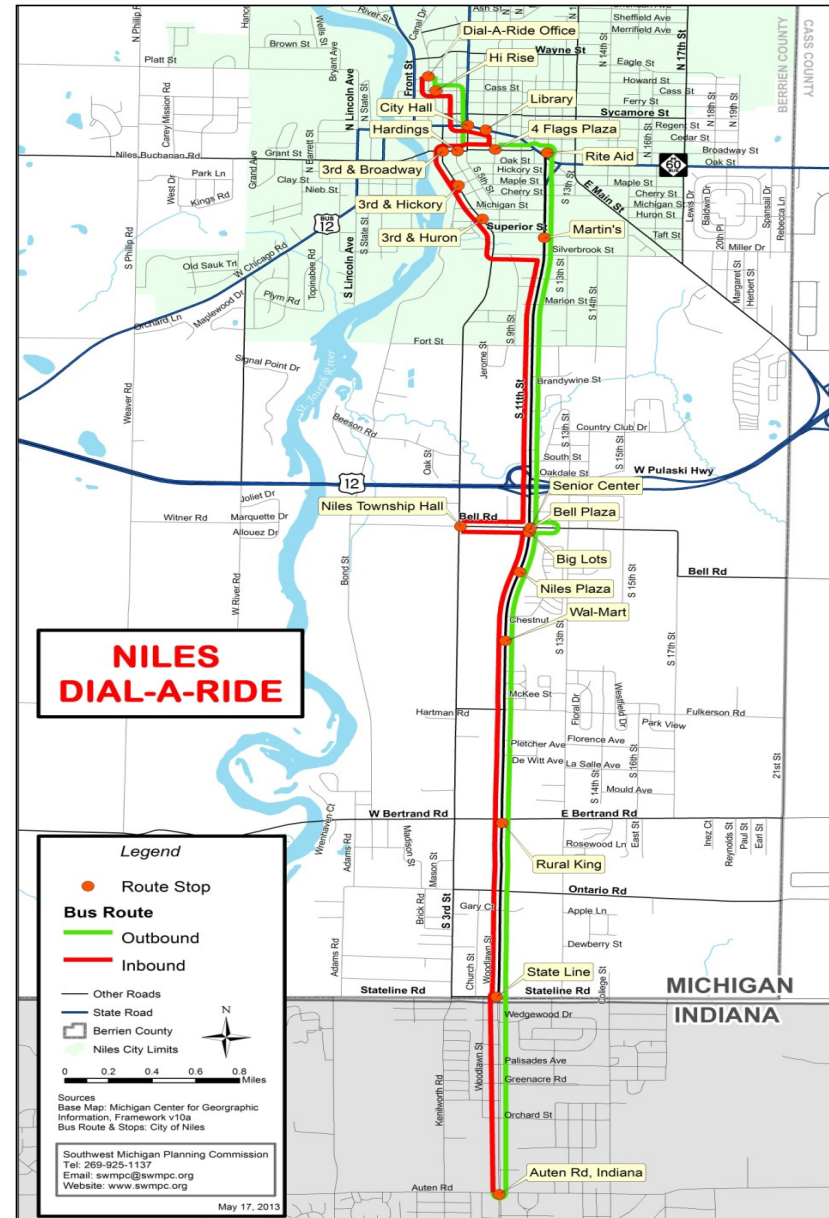
A closer examination of the transit agencies will be provided in this section. Niles Dial a Ride and Buchanan Dial a Ride will be examined much more closely as they are the primary service providers in the study area. A brief discussion of the two remaining agencies, Cass County Public Transit and Berrien Bus will be included.

NILES DIAL A RIDE

Niles Dial a Ride provides curb-to-curb service to the general public in the City of Niles and Niles Charter Township. Curb-to-curb customers are encouraged to call dispatch at least twenty-four hours in advance of their requested trip. Same day trips may be scheduled depending on availability.

Niles Dial a Ride also operates an hourly deviated fixed-route service that is available Monday – Friday from 10:00am to 5:00pm. The route stops at twenty-two origins and destinations that include; major retail, apartment and senior living facilities and also connects with Transpo at the state line to provide a connection to South Bend. Bus shelters are available at many of the stops and the stops are signed. The transportation facility located in downtown Niles offers a waiting area where passengers can connect to other public transit providers including Cass County Public Transit and Berrien Bus. Map 19 provides an overview of the fixed route service that Niles DART currently provides.

Map 19 - Niles DART Deviated Fixed Route Service



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Governance and Administration

Niles DART is organized under the State of Michigan Home Rule Act which authorizes cities to form transit systems. The City Council of Niles serves as the Niles DART Board. The Board is supported by a Local Advisory Council that meets on a quarterly basis to provide feedback and recommendations about Niles DART services. In 2011 DART allowed the operational contract for transit services to expire with an independent private contractor and brought the operation of services back in-house at the City of Niles. A Community Development Director oversees the entire management staff and reports to the City Council. The Transportation Coordinator acts as the Executive Director of the transit system and reports directly to the Community Development Director and is responsible for all administrative duties performed by the system.

Fare Structure

Passenger fares depend on the service type, the origin, and destination and the age or disability of the passenger. Reduced fares are available for adults age 60 and older and individuals with a disability. Passengers who qualify for a reduced fare are issued a reduced fare card to indicate they are eligible for the reduced rate. Table 24 indicates the fare structure that is currently in place at Niles DART.

Table 24 - Niles DART Fare Structure

Service Type	Geographic Location	Fare
Demand Response	Within the City of Niles	\$3.00/\$1.50 Reduced Fare
Demand Response	Niles and Bertrand Township	\$4.00/\$2.00 Reduced Fare
Deviated Fixed Route	Within the City of Niles	\$2.00/\$1.00 Reduced Fare

Additional fare items can be issued to those who frequently use the Niles DART. These fare media include:

- \$10.00 Punch Card
- \$1.00 Tokens (For use by human service agency clients)
- \$15.00 Summer Fun Pass (Unlimited rides for youth during the summer months)

Funding

Niles DART operating costs are covered by a combination of federal, state and local funding as well as passenger fares. Over the last four years the City of Niles transit millage, (Niles DART's only source of local government funds) contributed to nearly 28 percent of Niles DART's operating revenue. Niles Township and Bertrand Township do not contribute any local operating revenue to the Niles DART system, but there is a \$1.00 increase added to the fare structure for passenger trips into or out of those townships.

Because Niles DART is located within the South Bend/Elkhart, Indiana urbanized area, there is a Memorandum of Understanding in place between the Michiana Area Council of Governments, the South Bend Public Transportation Corporation, Niles DART, and the Southwest Michigan Planning Commission to define the process by which federal funds, made available from the U.S. Department of Transportation Federal Transit Administration (FTA), are allocated between Niles DART and the South Bend Public Transportation Corporation. A copy of this agreement can be found in Appendix A.

More than 50 percent of Niles DART's operating revenue is derived from the FTA and MDOT state operating funds. As shown in Table 25, a large portion of the Niles DART operation and capital funds are derived from multiple funding sources. Additional analysis of funding sources to be utilized by Niles DART and the other transportation agencies for the fiscal years of 2014-2017 can be found in the MPO Financial section of this plan.

Table 25 - Niles DART Operating and Capital Revenues FY 2008-2011

FY	Federal	State	Local	Farebox	Total
2008	\$120,598	\$224,492	\$194,295	\$89,600	\$628,985
2009	\$111,649	\$190,144	\$113,141	\$63,367	\$478,301
2010	\$162,610	\$190,144	\$109,235	\$57,268	\$519,257
2011	\$103,104	\$190,144	\$189,446	\$61,095	\$543,789

Source: MDOT PTMS Data

Table 25 shows the average operating and capital revenue from 2008-2011. Funding from the Federal Transit Administration (FTA) Sections 5307 and 5311 Programs accounted for approximately 51 percent of the system's operating revenue on average for FY 2009 and FY 2010. In March 2011, the system opted to discontinue receiving Section 5311 program funds so that it could maximize preventive maintenance funding provided by the Section 5307 program. This decision was made because the City was directed that it could no longer receive funding from both of these Federal programs.

Facilities

The Niles DART transportation facility, located at 623 N. Second Street in downtown Niles and is owned by the City of Niles. The facility includes vehicle storage, administrative offices, a large passenger waiting area and maintenance. This location also serves as a stop on the fixed route as well as a transfer point to Buchanan Dial A Ride, Cass County Public Transit and the Berrien Bus transit systems.



Vehicles

The Niles DART fleet includes five cutaway vehicles. All of the vehicles are wheelchair accessible. Vehicles are equipped with two-way radios. In 2008 a Ford 250 was purchased and is used to plow snow.

Vehicle Utilization

Niles DART passenger demand varies at different times of the day. To meet the demand, Niles DART assigns vehicles as indicated in Table 26.

Table 26 - Niles DART Vehicle Service

Time of Day	Number of Vehicles / Mode of Service
Weekdays	
7:00 am to 11:30 am	2 vehicles/demand response
11:30 am to 5:00 pm	3 vehicles/demand response
10:00 am to 5:00 pm	1 vehicle /deviated fixed route
Saturdays	
10:00 am – 3:00 pm	2 vehicles/demand response

SYSTEM PRODUCTIVITY

The FTA and MDOT-Passenger Transportation Division evaluate public transit services for effectiveness, which can be analyzed by passenger trips per mile or hour. Niles DART measures vehicle hours based on the hours that a vehicle is scheduled or actually travels from the time it pulls out from its garage to go into revenue service to the time it pulls in from revenue service.

Table 27 highlights Niles DART productivity rate by service type. The industry standard for deviated fixed route productivity is five to six passengers per hour. According to the ridership and operating statistics in Table 27, the demand response mode of service in FY 2011 provided approximately 3.31 passengers per hour, whereas the deviated fixed route produced 4.25 one-way passenger trips per hour. On a national level, the average demand response passenger per hour productivity goal is at least two passengers per hour.

Table 27 - Niles DART System Productivity

Fiscal Year	Demand Response		Fixed Route	
	Passengers Per Mile	Passengers Per Hour	Passengers Per Mile	Passengers Per Hour
2008	0.32	3.99	0.21	2.37
2009	0.32	3.79	0.28	3.41
2010	0.31	3.8	0.35	4.73
2011	0.28	3.31	0.33	4.25

Source: Niles DART Transportation Development Plan

BUCHANAN DIAL-A-RIDE

Buchanan Dial A Ride (Buchanan DART) is a same day curb-to-curb shared ride transportation service that provides service to residents of the City of Buchanan and Buchanan Township. The service operates from 7:00 a.m. to 5:30 p.m. Monday through Friday and 9:00 a.m. to 3:00 p.m. on Saturdays. Customers must schedule trips at least one hour before the desired departure time. Regular shuttle service to Niles is available six days a week with twenty-four hour notice. The shuttle will deviate off the route to pick up passengers with advanced reservations between communities on the shuttle route. Buchanan DART provides connections to Berrien Bus at designated locations that allow customers to transfer and access locations outside of Buchanan. This is possible because the systems share the same facility, dispatchers, and brokered management firm, Transportation Management Inc.

Governance

Buchanan DART is organized under Public Act 279 and is overseen by five elected officials who serve on the Buchanan City Commission. The Buchanan City Commission is supported by a Local Advisory Council that meets on a quarterly basis to provide feedback and recommendations regarding the provision of transit services. In 2011 the Buchanan City Commission entered into an operational contract with Berrien County who sub-contracts with Transportation Management for transit services.

Fare Structure

Passenger fares depend on the service type, the origin and destination and the age or disability of a passenger. Reduced fares are available for older adults age 60 and older and individuals with a disability. Passengers who qualify for a reduced fare are issued a reduced fare card to indicate they are eligible for the reduced fare, see Table 28.

Table 28 - Buchanan DART Fare Structure

Service Type	Geographic Location	Fare
Demand Response	Within the City of Buchanan	\$1.50/\$.75 Reduced Fare
Demand Response	Buchanan Township	\$4.00/\$2.00 Reduced Fare
Buchanan/Niles Shuttle	City of Buchanan, Buchanan Township Niles,	\$4.00/\$2.00 Reduced Fare

FTA and MDOT evaluate public transit services for *effectiveness (doing the right things)* which can be analyzed by passenger trips per mile or hour. Buchanan Dial a Ride measures vehicle hours based on the hours that a vehicle is scheduled or actually travels from the time it pulls out from its garage to go into revenue service to the time it pulls in from revenue service.

According to the ridership and operating statistics in Table 29 Buchanan Dial A Ride service has experienced a 26 percent decline in ridership over the last four years, expenses have increased by 31 percent during that same time period and there has been an 11 percent increase in the vehicle miles traveled. All of these factors illustrate why the cost per passenger trip has increased from \$12.50 in 2008 to \$22.50 in 2012.

Table 29 - Buchanan DART System Expenses Relative to Ridership

Fiscal Year	Passengers	Expenses	Vehicle Miles	Vehicle Hours	Cost/Pass	Cost/Hour	Passengers Per Vehicle Hour
2008	11,643	\$147,892	39,109	3,417	\$12.70	\$42.56	3.5
2009	11,882	\$175,786	47,330	3,626	\$14.55	\$47.69	3.3
2010	8,166	\$172,340	41,580	3,564	\$21.11	\$48.36	4.0
2011	9,551	\$192,052	46,570	3,771	\$20.11	\$50.93	2.5
2012	8,632	\$194,187	43,384	3,718	\$22.50	\$52.25	2.3

Source: MDOT PTMS

Facilities

Dispatching, maintenance, vehicle storage, administration and a passenger waiting areas are shared with Berrien Bus in Berrien Springs. This is possible because Berrien Bus is also under contract Transportation Management for the provision of transit services in the designated rural areas of Berrien County.

Vehicles

Buchanan DART has three cut-away buses, two vehicles operate during peak hours and the third bus is used for backup. Vehicles are scheduled for replacement in 2015.

Funding

Table 30 shows the different funding streams that the transit system receives.

Table 30 - Buchanan DART Revenue 2008-2012

FY	Federal	State	Local	Farebox	Total
2008	\$22,762	\$ 55,141	\$ 89,294	\$12,562	\$179,759
2009	\$24,732	\$65,013	\$91,269	\$14,244	\$195,258
2010	\$27,814	\$47,707	\$85,581	\$11,007	\$172,109
2011	\$27,310	\$69,729	\$90,934	\$14,729	\$202,702
2012	\$29,833	\$69,976	\$89,429	\$12,637	\$201,875

Source: MDOT PTMS

Federal and state revenues for Buchanan DAR have increased 10 percent over the last five years. Despite a 25 percent decline in ridership from 2008 as shown in Table 31, passenger fares have increased 36 percent and vehicle miles increased by 10 percent during the same period. It is unclear why this trend is happening since ridership is down and there has not been a fare increase over the last five years.

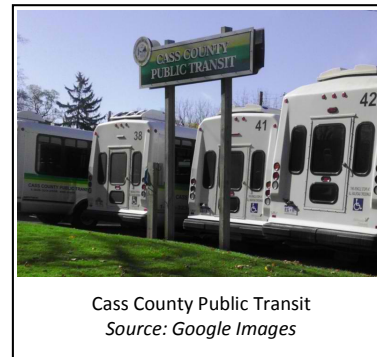
Table 31 - Buchanan DART System Average Fares Against Vehicle Miles

Fiscal Year	Total Passengers	Vehicle Miles	Farebox	Average Fare
2008	11,643	39,109	\$12,562	\$1.07
2009	11,882	47,330	\$14,244	\$1.32
2010	8,166	41,580	\$11,007	\$1.34
2011	9,551	46,570	\$14,729	\$1.54
2012	8,632	43,384	\$12,637	\$1.46

Source: MDOT PTMS

CASS COUNTY PUBLIC TRANSIT

Cass County Public Transit is a curb-to-curb, 24-hour advance reservation county-wide public transportation system serving the census-designated rural areas of Cass County. Cass County Public Transit also has a fixed, scheduled, shared ride service daily to and from Cassopolis to Niles, Edwardsburg, and Marcellus two times a day, and three times daily to Union and Dowagiac. Services are available to the general public, and rides are reserved on a first come first-served basis. Hours of operation are Monday through Friday 5:00 a.m. - 5:00 p.m. Because Cass County Public Transit offices and garage are located in Cassopolis, this community receives the highest frequency of service. Immediate request dial-a-ride service is available within Cassopolis from 8:00 a.m. to 5:00 p.m. Monday through Friday.



Cass County Public Transit also operates regularly scheduled curb-to-curb services for several human service agencies in Cass and Berrien Counties, including Cass County Mental Health (Woodlands), Cass County Council on Aging, Cass County Medical Care (nursing home), Michigan Works, and Cass Family Clinic in Niles. Cass County Council on Aging also contracts with Cass County Public Transit to provide shopping trips two times per month (first and second Thursday of the month) to Niles for \$5.00 roundtrip for people over 60 years and older to several retail shopping locations such as Wal-Mart, Shelton's, Martins, Lunch).

BERRIEN BUS

Berrien Bus is a curb-to-curb, advance reservation county-wide public transportation system serving the census

Berrien Bus also operates regularly scheduled curb-to-curb services for several human service agencies in Berrien County, including Berrien County Mental Health (Riverwood), Berrien County Juvenile Center and Blossomland Learning Center.

Berrien Bus provides scheduled daily shared ride service between certain areas within the county and must be reserved twenty four hours in advance. The shared ride service will deviate off the route to pick up passengers with advanced reservations between communities on the shuttle route. This information is displayed in Table 32.

Table 32 - Berrien Bus Scheduled Daily Shared Ride Service

Service		Pickup Times	Fare*
From:	To:		
Berrien Springs	St. Joseph / Benton Harbor	7:30 am, 10:am, 1:00 pm	\$5.00
Benton Harbor	Berrien Springs	8:30 am, 10:45 pm 1:45 pm, 4:00 pm	\$5.00
St. Joseph	Berrien Springs	8:45 am, 10:30 am, 1:30 pm, 4:15 pm	\$5.00
Berrien Springs	Niles	8:00 am, 2:00 pm	\$5.00
Niles	Berrien Springs	8:45 pm, 2:15 pm	\$5:00
Niles	Benton Harbor	8:30 am, 12:00pm	\$5.00
Watervliet/Coloma	Benton Harbor	9:15 am, 12:00 pm, 3:00 pm	\$5.00
Benton Harbor/ St Joseph	Watervliet/Coloma	2:00pm	\$5.00
Berrien Springs	Berrien Springs	8:00am - 4:00 pm	\$2.50

Seniors, disabled, and children pay half fare.

TRANSIT DEPENDENT COMMUNITY DEMOGRAPHIC CHARACTERISTICS

Transit dependent populations are individuals considered by the transportation profession to be dependent upon public transit based on income, age, or disability. These characteristics prevent individuals in this demographic from driving and/or owning a reliable automobile, leaving ridesharing, public transit, and other community transportation options as the only forms of transportation available. Community specific demographic data is very useful for the understanding of citizen's current and potential travel trends, as well as the gaps it highlights in current transportation services.

Niles DART and Buchanan DART service areas are comprised of five communities: the City of Niles, Niles Charter Township, the City of Buchanan, Buchanan Township, and Bertrand Township. The four communities have a population of 36,400 people that reside in one of 14,800 households. The communities of Niles and Buchanan have population densities that can support more frequent fixed or flexed route services, while some of the townships with much lower population densities support less frequent demand response services that feed into the activity centers of Niles and Buchanan.

The service areas also are home to an older population with the median age of forty six in Bertrand Township and forty two in Buchanan Township. These demographic details are shown in Table 33. Both of these communities have a population older than the state of Michigan's median age of thirty-nine and Berrien

County's median age of forty-one. In Appendix B, we have also mapped where the populations of transit dependent populations are living. These factors need to be considered in planning future transportation services for older adults who one day will be faced with turning over their car keys. This issue will be explored in further detail in the following pages.

Table 33 - Population Characteristics

Transit Service Areas Population Characteristics	Niles Twp.	Niles	City of Buchanan	Buchanan Twp.	Bertrand Twp.	Michigan
Population	14,164	11,600	4,456	3,523	2,657	9,883,640
Pop. Density	380	2,003	1,782	110	77	175
Median Age	41	36.	38	42	46	39
Households	5,687	4,806	1,901	1,375	1,031	3,872,508

Source: 2010 US Census

Table 34, Transit Service Areas Economy, highlights the need to provide for more transportation options in the study area due to the unemployment rate, income per capita, and household income. The income per capita in the City of Niles is only \$17,353, which includes all adults and children and is 44 percent lower than the per capita in Michigan. This further emphasizes the need to provide for multiple modes of transportation for those who simply cannot afford to own their own personal automobile.

Table 34 - Transit Service Areas Economy

Transit Service Areas Economy	Niles Twp.	Niles	City of Buchanan	Buchanan Twp.	Bertrand Twp.	Michigan
Unemployment Rate	8.20%	8.20%	8.20%	8.20%	8.20%	9.80%
Income Per Capita	\$20,423	\$17,353	\$19,573	\$18,681	\$24,840	\$23,797
Household Income	\$40,403	\$33,867	\$37,583	\$40,317	\$56,940	\$46,932

Source: Bureau of Labor Statistics

Table 35 indicates the commute time for those using different modes of transportation options. While there is some deviation among the individual categories to the overall statewide percentage, these deviations are not unexpected. The study area is largely rural and many people in this part of the study area live in Michigan and commute to northern Indiana for work and shopping destinations.

Table 35 - Population Travel Behavior

Transportation	Niles Twp.	City of Niles	Buchanan Twp.	City of Buchanan	Bertrand Twp.	Michigan
Commute Time Minutes	23.6	22.4	28.4	23.9	22.5	26.3
COMMUTE MODE						
Auto (alone)	87.81%	84.88%	81.85%	85.72%	85.00%	82.51%
Carpool	7.55%	10.39%	9.33%	6.75%	3.92%	9.28%
Mass Transit	0.20%	0.18%	0.32%	1.04%	0.15%	1.35%
Work at Home	2.70%	2.26%	7.32%	3.81%	7.61%	3.45%

Source: US Census

Table 36 focuses on the occupations that are most prevalent in the study area. About 27 percent of the public transit service area population is employed in the service sector, warehousing, and transportation occupations. The majority of these occupations require shifts that begin or end after Buchanan DART and Niles DART hours of operation cease and many times public transit is not a commute option. With roughly 27 percent of the population employed in occupations that operate during non-traditional work hours it will be important for the transit systems to use thoughtful analysis in considering if their current routes or services go where needed and if the services operate early or late enough.

Table 36 - Population Occupations

Population by Occupation	Niles Twp.	City of Niles	Buchanan Twp.	City of Buchanan	Bertrand Twp.	Michigan
Management, Business, and Financial Operations	9.03%	9.07%	9.55%	9.55%	13.20%	14.04%
Professional and Related Occupations	13.78%	14.50%	12.31%	12.31%	15.32%	20.61%
Service	15.47%	16.70%	13.59%	13.59%	12.14%	14.45%
Sales and Office	25.21%	24.73%	23.78%	23.78%	21.43%	26.75%
Farming, Fishing, and Forestry	0.75%	0.19%	0.00%	0.00%	0.00%	0.70%
Construction, Extraction, and Maintenance	10.47%	8.81%	14.37%	14.37%	12.47%	9.42%

Source: Bureau of Labor Statistics

COMMUNITY MOBILITY OPTIONS FOR OLDER ADULTS

Reductions in mortality have resulted in increases in life expectancy that have contributed to the growth of the elderly population, especially in the oldest age brackets. This is in contrast to the early days of our nation when high fertility and high mortality kept the nation “young.”

In 2010, the U.S. Census Bureau reported that the dependency ratio, or the number of people 65 and older to every 100 people of traditional working ages, is projected to climb rapidly from 22 in 2010 to 35 in 2030. This

time period coincides with the time when baby boomers are moving into the 65 and older age category. This group of older adults may not be able to drive personal vehicles into their later years.

Age differences among older adults must be taken into account in transportation planning. In particular, people between the ages of sixty and seventy can have a different set of needs compared with people age eighty and above.

The need for more specialized demand-response transit service is likely. This is a much more expensive service and may require the reduction or elimination of other transit services currently being provided. It will be important for communities to consider all of the mobility options for people who need specialized transportation services. Table 37 illustrates how this population continues to grow.

Table 37 - Senior Population

YEAR <i>Age of Population</i>	2000 <i>60-69</i>	2010 <i>60-69</i>	Percent Change	2000 <i>70-79</i>	2010 <i>70-79</i>	Percent Change	2000 <i>80+</i>	2010 <i>80+</i>	Percent Change
BERRIEN COUNTY									
Bertrand Township	197	346	76%	167	185	11%	79	113	43%
City of Buchanan	303	431	42%	298	248	-17%	238	213	-11%
Buchanan Township	319	416	30%	233	244	5%	96	127	32%
City of Niles	822	1060	29%	861	629	-27%	627	567	-10%
Niles Charter Township	1221	1671	37%	994	1000	1%	462	745	61%
CASS COUNTY									
Howard Township	520	931	79%	462	404	-13%	183	243	33%
Mason Township	226	305	35%	130	173	33%	55	88	60%
Milton Township	209	514	146%	144	220	53%	56	114	104%
Ontwa Township	577	758	31%	389	456	17%	165	248	50%

Source: US Census

Coordination with Senior Centers

Table 38 highlights the various Senior Centers in the study area and includes details regarding bus service, trips, and per limited supplemental transportation available to adults sixty years and older from seven independently operated senior se located throughout Berrien County and one senior center in Cass County. While all of these are not within the study area, it that there are many providers of transit service. Each of the eight centers is supported financially by a countywide s approximately two million dollars annually in funding. This funding helps support activities, transportation, and facilities. provides transportation services to older adults (sixty and older) in their respective service areas. However, the frequency i one senior center to the next.

Table 38 - Senior Service Providers

Senior Center	Communities Served	Destinations	Transportation Hours	Number of Vehicles	Popular Destinations
Benton Harbor Senior Center	Benton Harbor, Benton Twp.	St. Joseph, Royalton Twp. Lincoln Twp. St. Joseph Twp. City of Benton Harbor, Benton Twp.	Monday-Friday 9:00-4:00pm	Three-12 passenger vans (One lift equipped)	Lakeland Hospital Napier Ave. Royalton Twp.
City of Buchanan Senior Center	City of Buchanan, Buchanan Township	City of Buchanan, City of Benton, Harbor, Bertrand Twp. Battle Creek, Niles Twp	Monday-Friday 9:00-4:00pm	One-5-6 passenger van	Lakeland Hospital Niles
Central County Senior Center	Berrien Twp. Sodus Twp., Oronoko Twp. Pipestone Twp. Berrien Twp. Baroda Twp, Village of Baroda Village, Berrien Springs	Berrien County, Kalamazoo, Battle Creek	Monday-Friday 8:30-4:30pm	Five-vehicles ranging in size from 7 passenger to 24 passenger (One lift equipped)	Lakeland Hospital Napier Ave. Royalton Twp. Meijer-Benton Harbor
Niles Senior Center	City of Niles, City of Buchanan, Niles Twp	City of Niles, City of Buchanan Battle Creek (hospital) Medical destinations in South Bend	Monday-Friday 8:00-4:00pm	One-4-5 passenger mini vans	Lakeland Hospital Niles South Bend Medical trips
North Central Senior Services	City of Coloma, Coloma Twp, Hagar Twp, Watervliet Twp, City of Watervliet	Berrien County	Monday-Friday 9:00-3:00pm	Two-6 passenger vans and One-4 passenger sedan	Royalton Watervliet Meijer-Benton Harbor
St. Joseph Lincoln Senior Services	City of St. Joseph, St. Joseph Charter Twp. Lincoln Twp. Royalton Twp. Village of Stevensville	City of St. Joseph, St. Joseph Twp. Lincoln Twp. Royalton Twp. Village of Stevensville, Benton Twp. City of Benton Harbor	Monday-Friday 9:00- 12:00pm	One-12 passenger bus, One-7 passenger van, One-5 passenger SUV	Lakeland Hospital Napier Ave. Royalton Twp.

Senior Center	Communities Served	Destinations	Transportation Hours	Number of Vehicles	Popular Destinations
River Valley Senior Services	City of New Buffalo, Three Oaks Twp. Galien Twp. Lake Twp. City of Bridgeman	New Buffalo, Three Oaks, Galien Twp. Lake Twp. Bridgeman, St. Joseph, Watervliet, Battle Creek, Benton Harbor, Royalton Twp.	Monday-Friday 9:00-4:00pm	One-12 passenger van	Lakeland Hospital Meijer-Stevensville
Cass County Council on Aging	Cass County	Cass County, Battle Creek, Kalamazoo, South Bend, IN	Monday-Friday 8:00-5:00pm	One-23 passenger van with no lift	Dailey medical trips Niles Kalamazoo

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TRANSIT UNMET NEEDS AND ISSUES

In order to determine community needs regarding public transportation within and outside the study area several sources were used to uncover current issues and unmet needs.

Sources used to determine the unmet needs and issues were derived from the following plans:

1. Cass County Transportation Forum, 2010
2. Michiana Area Council of Governments Human Service Coordinated Public Transportation Plan, 2010
3. Berrien County Human Service Coordinated Public Transportation Plan, 2010
4. Berrien County Human Service Transportation Forum, 2009
5. Niles Dial A Ride Transit Development Plan, 2012

Service and Connectivity:

- Trips from Cass County to destinations in the Niles, Buchanan, and South Bend service areas can require up to three transit agencies; Cass County Transit, Niles DART, and Buchanan DART.
- There is no dialysis center or obstetrics unit located in Cass County. Residents must cross county lines into Niles to access service.
- Lack of specialized transportation services that allow trip-chaining – Mother needs to stop at a daycare before stopping at work location. Senior needs to stop at pharmacy after leaving doctor's appointment but before arriving at home.
- There is no intercity bus service (Greyhound) within the NATS study area. Residents must travel to South Bend or Benton Harbor, which can require the use of three different public transit systems.
- There is no public taxi service in the County of Cass.
- Use current demand-response services more efficiently to expand capacity of current services offered by integrating countywide rural service, small urban dial-a-ride services, and fixed-route services.
- Berrien Bus provides limited service to all of the designated rural areas of Berrien County and should be considered the "spine" for connecting people with transit systems in the adjacent designated urban areas in the County. It is possible that in the future, the three urban systems and the County rural system could be blended into one Berrien countywide system.

Visibility and Understanding of Transit:

- In the 2010 *Berrien County Human Services Coordination Plan* and the 2012 *Pokagon Band of Potawatomi Indians Tribal Transit Plan* focus groups indicated that one of the barriers that prevented older adults and others from using public transportation and specialized services was the

lack of good information sources on how to use transportation other than a personal automobile. In 2011 Niles DART conducted a public survey as part of their Transit Development plan.

- Table 39 highlights the issues facing public transit systems in regards to visibility and understanding of transit, by community of respondent.
- 72 percent of respondents from Niles Charter Township do not ride any of the transit systems that provide service in the NATS region.
- 45 percent of respondents from the same township were not familiar with the transportation provided by any of the local systems.
- According to these results, residents that reside within the City of Niles are both more aware of the services available and more likely to use them.

Table 39 - Awareness and Ridership Survey

Category	Niles		Niles Charter Twp.		Bertand Twp.		Response Totals	
	<u>Familiar With</u>	<u>Ride</u>	<u>Familiar With</u>	<u>Ride</u>	<u>Familiar With</u>	<u>Ride</u>	<u>Familiar With</u>	<u>Ride</u>
Niles DART	60.7% (51)	54.3% (44)	45.5% (5)	27.3% (3)	0	0	58.3% (56)	50.5%(47)
Berrien Bus	36.9% (31)	18.5% (15)	27.3% (3)	9.1% (1)	100 (1)	100 (1)	36.5% (35)	18.3%(17)
Buchanan DART	25.0% (21)	7.4% (6)	18.2% (2)	9.1% (1)	0	0	24.0% (23)	7.5%(7)
Cass County Transportation	11.9% (10)	1.2% (1)	9.1% (1)	0	0	0	11.5% (11)	1.1%(1)
None of the Above	27.4% (23)	40.7% (33)	45.5% (5)	72.7% (8)	0	0	29.9% (28)	44.1% (41)
Total Number of Respondents	84	81	11	11	1	1	96	93

Source Niles DART Public Survey, 2011

Hours:

- Cass County Public Transit, DART, and Buchanan Dial A Ride system hours preclude use by commuters and riders who work later shifts. There is no service after 5:00 p.m. on weekdays. There is no public service on Sundays in Berrien or Cass counties.
- Amtrak Rail service is available out of Niles but hours do not correspond with public transit hours of operation.

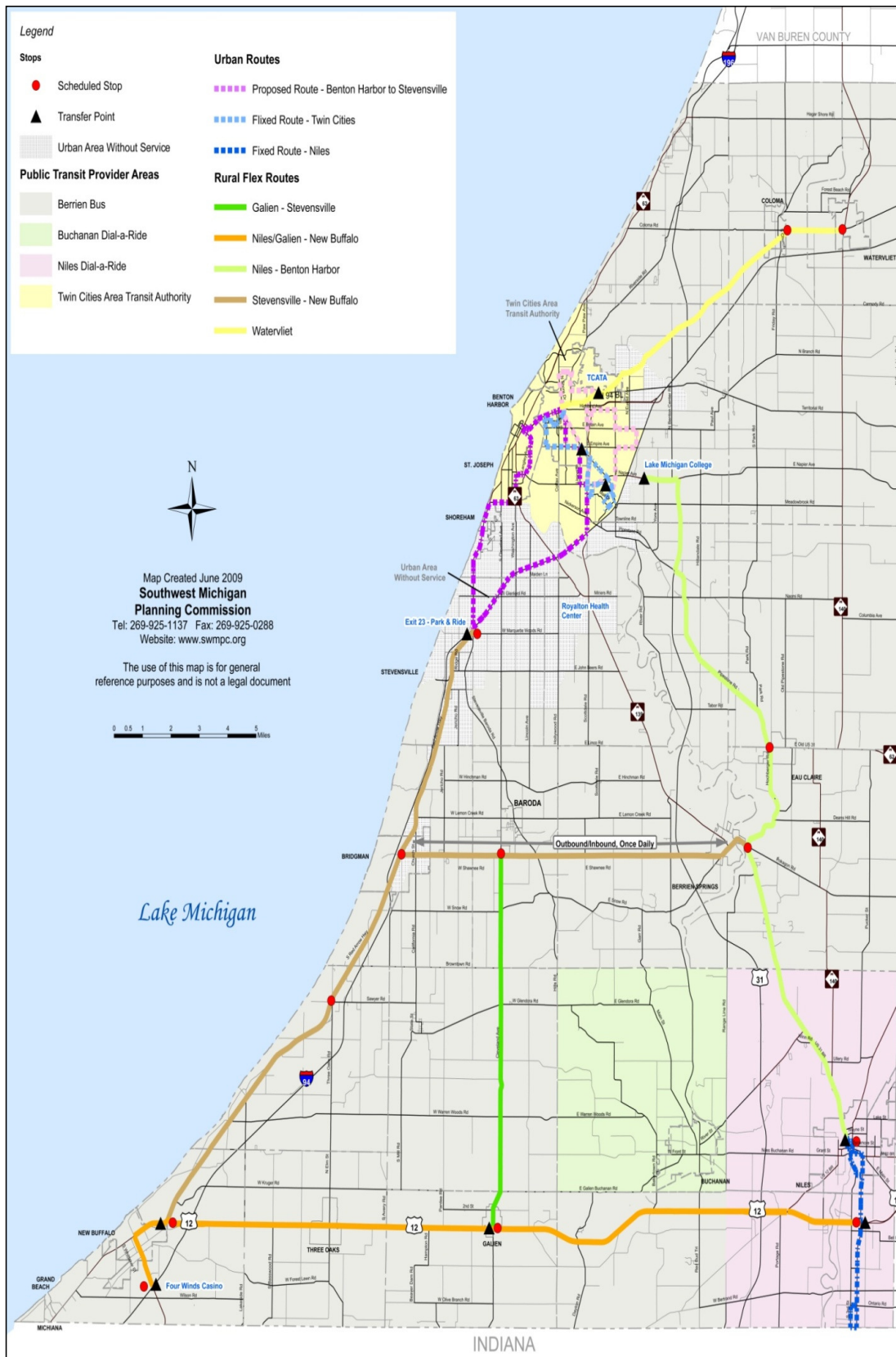
Berrien County Public Transit Feasibility Study:

- The *Berrien Countywide Public Transit Feasibility Study* is currently examining the possibility of either creating a countywide system or developing a consolidation plan.
- The Plan hopes to make travel between communities in Berrien County more seamless; the same fares, transfer procedure, schedule formatting, etc.
- Without this effort to move toward a more seamless countywide system, the four individual public transit systems may find themselves in a position where the State mandates a consolidation at which point it would be too late to transition at an orderly, locally-managed pace.
- It has been documented in the draft *Berrien Countywide Public Transit Feasibility Study* that there are two main barriers to the near-term effort for a countywide system; 1). Political - the sense of surrendering local authority of the transit system; 2). Systems structure and funding - the three urban systems receive local funding from local city millages (Niles DART, Buchanan DART, TCATA) while the rural system receives no local funding. Two of the systems are strictly demand-response and two of the systems are fixed route and demand response.

With this in mind, a proposed conceptual routes have been created in Map 20, including a combination of fixed routes in higher density areas and flex-route service in lower density areas with scheduled transfer points throughout the service area.

Since there are only two transit systems in Cass County, Cass County Public Transit and Dowagiac Dial a Ride, the main focus has been on the reformation of the four systems in Berrien County. More analysis needs to be performed to fully understand the issues facing Cass County transit providers.

Map 20 - Proposed Routes for Berrien County Transit



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