

Benzie Bus Transit Development Plan



Final Report

February, 2015



Prepared by:
KFH Group, Inc.
4920 Elm St, Bethesda MD 20814
301-951-8660

Study and plan paid for by grants from:



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Chapter 1

Introduction

This document presents a Transit Development Plan (TDP) for Benzie Bus as the culmination of a Transit Service and County Assessment Study. The study process involved determining the transit needs of Benzie County, analyzing existing transportation services and their ability to meet those needs, and recommending both organizational and service initiatives aimed at improving service delivery. The TDP provides a short-term vision of public transportation in Benzie County, and includes strategies that will help guide transportation decisions over the next six years.

The planning process was guided by a project team that included community stakeholders, members of the Benzie Bus Board of Directors, and Benzie Bus staff. This group met periodically to review interim documents, to provide input on transportation needs and potential improvements, and to guide the overall direction of the study. A full listing of the project team members is included in Appendix A.

REPORT CONTENTS

The Benzie Bus TDP is presented in the following order:

- This chapter provides an overview of Benzie Bus and discusses goals and objectives for the study.
- Chapter 2 details current services operated by Benzie Bus, including ridership, funding, and operating expenses. This chapter also identifies other human service transportation and private transportation services that are available in the area.
- Chapter 3 provides an assessment of current and potential transit needs in Benzie County. It includes analysis of demographic trends and current land uses, appropriate information from other plans, and extensive public input derived from customers and the community during the planning process.
- Chapter 4 presents potential service and organizational alternatives to improve current transit services.

- Chapter 5 discusses operational considerations and provides an operations plan that includes a summary of services to be provided by Benzie Bus.
- Chapter 6 discusses capital considerations and provides a capital improvement plan.
- Chapter 7 discusses financial considerations and provides a financial plan with capital and operating budget forecasts.
- Chapter 8 proposes a process for periodically monitoring TDP progress, particularly for assessing and evaluating services.

STUDY GOALS AND OBJECTIVES

During a kick-off meeting in June 2014, the project team identified several objectives for the study. These included:

- Strengthening regional connectivity while continuing to value the Benzie County residents that make up the core of the Benzie Bus current ridership.
- Improving the reliability and convenience (in travel time and minimal transfers) of the system, especially in an effort to facilitate employment trips.
- Continuing to foster dialogue within the community, educating residents about available services.

The Board of Directors (described in further detail below) also reaffirmed the system goals that they had established in December 2012:

- Collaborate with the Bay Area Transportation Authority (BATA) to establish and enhance an efficient fixed-route bus service between Benzie County and Traverse City.
- Develop, implement, and assess the progress of plans designed to promote the use of and bring about the substantial shift in ridership to fixed-route service between Benzie and Traverse City and away from dial-a-ride service.
- Craft, enact, and measure the progress of plans designed to decrease the average cost per ride from the level identified in the Board's FY 2012 financial audit.
- Identify, prioritize, and pursue collaborations and partnerships between the Authority and other entities, both public and private, to better meet the public's transportation needs while increasing revenues and/or decreasing expenses.
- Identify, develop, and implement a strategic planning process with the active involvement of the Board, staff, and community.

BENZIE BUS

Institutional and Management Structure

The Benzie Transportation Authority was established in 2006 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 Authority has been operating public transit as Benzie Bus since January 2, 2007.

Benzie Bus is an independent governmental unit and is led by a Board of Directors whose primary purpose is to assure that Benzie Bus fulfills its mission. A list of current Board members is included in Appendix B. The Board's purpose is to:

- Develop goals and objectives and ensure that these are met.
- Provide fiduciary oversight.
- Set service policies, standards, and organizational priorities.
- Provide vision for strategic planning efforts.
- Hire the Transit Director and oversee his or her performance.
- Serve as a liaison to elected officials.

Beyond the Board of Directors, community stakeholders participate on a Local Advisory Committee (LAC). Formed as part of the community involvement process by Michigan public transit agencies, the LAC is comprised of individuals with disabilities, older adults, and individuals with a strong interest in the transportation challenges for people in these two population groups. The current Benzie Bus LAC membership is included in Appendix C.

Mission /Vision Statement

The Benzie Bus mission is as follows: "Benzie Bus connects people of all ages and abilities to our community and promotes independence and prosperity through a safe and convenient public transit system."

Benzie Bus envisions a future in which:

- All people can live, learn, work, and play conveniently and independently without driving.
- People choose to travel via public transportation because it is a safe, affordable, modern, and efficient way of getting where they want to go.
- Employers and employees prosper with convenient transportation solutions that support and strengthen communities and the local economy.
- Families are strengthened and sustained through cost-effective and convenient transportation choices for all family members.

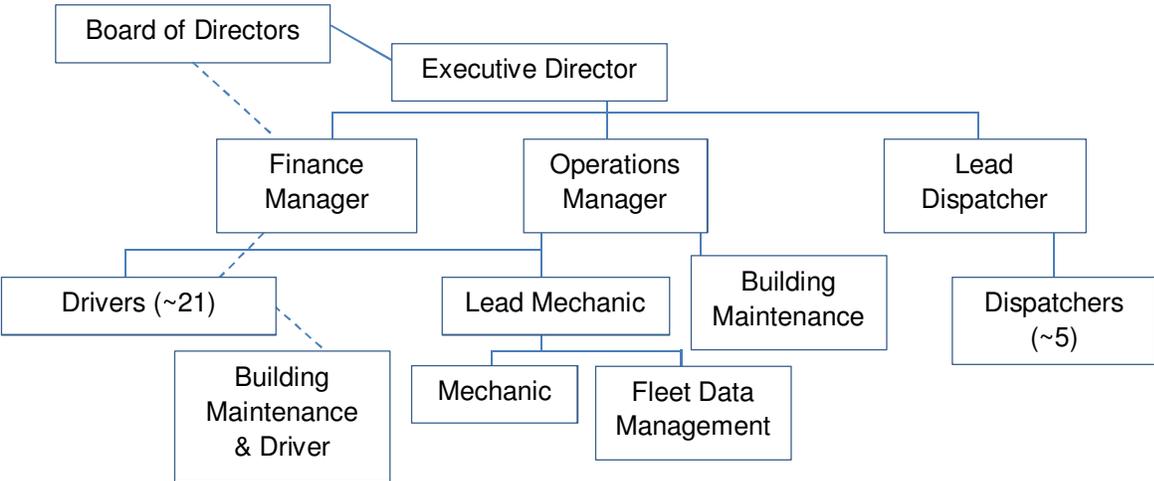
Beliefs and Values

In addition to the mission and vision statement, the organization provides a detailed description of its beliefs and values on its website.¹ Benzie Bus believes that the community has a moral and economic obligation to provide transportation alternatives to people of all ages and abilities. It describes its transportation system as customer-centered, and as a steward of the public trust and the rural landscape. Benzie Bus supports an environmentally sustainable future, provides transportation through broad-based collaboration, values its employees, and strives to be a leader in transportation technology.

Organizational Structure

Benzie Bus has approximately 31 employees. Figure 1-1 provides the current organizational chart for Benzie Bus.

Figure 1-1: Benzie Bus Organization Chart



¹ For the full text of “Beliefs and Values”, see <http://www.benziebus.com/aboutbenziebus.htm>.

Chapter 2

Existing Transportation Services

INTRODUCTION

This chapter details the current transportation services provided by Benzie Bus. It includes a description of the system and a review of current revenues, operating expenses, and ridership. It also summarizes information on other transportation services in the region.

SERVICE DESCRIPTION AND FARE STRUCTURE

Benzie Bus provides dial-a-ride and scheduled service within Benzie County and the surrounding area Monday through Friday 5 a.m. to 8 p.m. and Saturday 7 a.m. to 5 p.m. Scheduled services include the Flex Route between Glen's Market in Frankfort (now Family Fare) and the Benzie Bus facility, the Interlochen Connection between the Benzie Bus facility and Ric's Food Center, the Thompsonville Connection between Thompsonville and Benzonia Plaza, and the TC Express between Frankfort and Traverse City (Figure 2-1).

Benzie Bus dispatchers schedule dial-a-ride trips to feed into the scheduled services. Though the scheduled services have published time tables (e.g. with the Flex Route running every two hours between 6:30 a.m. and 5 p.m.), riders must still make reservations for the service or the bus will not make the trip. Benzie Bus requests reservations 24 hours in advance, but same-day reservations must be made at least four hours in advance.

Benzie Bus fares are \$3.00 for a regular one-way trip. Seniors (60+), children age 6 to 12, and individuals with disabilities pay \$1.50. Children age five and under ride free with an adult and a proper car seat. Riders are also able to purchase discount punch cards with 12 one way rides for the price of ten.

Benzie Bus instituted several service modifications in recent months. These involved:

- Reinstating Saturday hours in June 2014.
- Reducing Flex Route service from every hour to every other hour and adding zone bus dial-a-ride trips during that time.

- Implementing the TC Express in late June. The service makes four round trips per day, Monday through Friday, with stops in Frankfort, Beulah, Benzie Bus Station, Lake Ann, and Traverse City.
- Offering a “Summer Fun Shuttle” covering Crystal Lake, Frankfort, and Elberta.
- Extending dispatch hours from 6 a.m. to 7:30 p.m. on weekdays and 7 a.m. to 2 p.m. on Saturdays.
- Accepting text and email reservations through the dispatch office.
- Accepting Visa/Mastercard.

Benzie Bus is also instituting other changes as a result of a strategic planning workshop. Fifty-two participants brainstormed ideas and action items for improvement in May 2014. The workshop led to the creation of an internal Process Improvement Team (PIT), which is now meeting monthly. The team takes suggestions from staff, and among other tasks has analyzed ridership by 15 minute increments for all vehicles on a sample day, noting periods of peak ridership and periods of extra capacity. Other projects identified during the workshop include updating an employee handbook, ordering staff uniforms, distributing a bi-weekly “Benzie Buzz” internal newsletter, developing a marketing and PR plan, and meeting with area businesses and organizations about potential bus shelter sites and sponsorship.

FUNDING SOURCES

Federal Programs

Benzie Bus receives Federal Transit Administration (FTA) Section 5311 Program funds through the Michigan Department of Transportation (MDOT). This program provides capital, planning, and operating assistance to states to support public transportation in rural areas with populations less than 50,000. Capital expenses are funded at up to 80 percent of net project costs, while operating expenses are funded at up to 50 percent of net project costs. According to the MDOT FY2016 application for public transit programs applicants should use 16 percent of total eligible expenses as an estimate when developing their operations budget. Benzie Bus also receives monies through the Rural Transit Assistance Program (RTAP) that is funded through Section 5311 program funds and can be used for training and related services in rural areas.

State Programs

The primary source of state funding for operating transit services in Michigan is through the State Operating Assistance Program administered by MDOT. While this program can reimburse transit systems up to 60 percent of eligible expenses for non-urbanized areas under 100,000 population, according to the MDOT FY2016 application the current percentage is 36.34. The application notes that this is subject to change once all budgets from across the State are submitted.

Local transit systems in Michigan can also apply to MDOT for capital assistance programs, primarily funded through a variety of Federal programs. The State Capital Assistance Program is used to provide the required 20 percent match for the Federal Capital Assistance Programs, though as noted in the FY2016 application it is not known if the State budget will support the full amount and there may be a need for local transit agencies to provide a portion of the match.

Local Funding/Millage

In 2006, Benzie County voters approved a 0.5 millage request (58 vs. 42 percent) that allowed for the establishment of Benzie Bus. With a turnout of 34 percent, it was the first time in Michigan's history that a public transportation ballot passed on the first attempt. In May 2011, Benzie Bus sought a millage renewal that passed by a three to one margin. The millage will be up for a vote again in the fall of 2015.

Farebox Recovery/Contract Fares

In addition to federal, state, and local sources, Benzie Bus is supported through fares collected from customers. Farebox revenues were \$130,566 in FY 2014. Benzie Bus also has contracts with local agencies that pay for their clients' bus tickets. These include the Council on Aging, Benzie Area Christian Neighbors (BACN), the Drop-In Center, Centra Wellness, Child and Family Services, the Benzie Manistee Department of Human Services, the Probate Office, Michigan Works, and Frankfort and Benzie Schools. Table 2-1 provides a summary of overall operating revenues for Benzie Bus through these funding sources for FY 2011 through FY 2014.

Table 2-1: Benzie Bus Revenues

Funding Source	FY 2014	FY 2013	FY 2012	FY 2011
Revenue- Federal (S. 5311 and RTAP)	\$242,170	\$226,889	\$284,271	\$213,792
Revenue- State	\$598,626	\$564,921	\$592,443	\$555,396
Revenue - Millage	\$551,488	\$544,352	\$538,690	\$532,302
Revenue- Other Local	\$17,638	\$10,755	\$14,698	\$88,689
Farebox	\$130,566	\$138,851	\$162,093	\$153,156
Federal Percent	16%	15%	18%	14%
State Percent	39%	38%	37%	36%
Millage Percent	36%	37%	34%	34%
Other Local Percent	1%	1%	1%	6%
Farebox Recovery Ratio	8%	9%	10%	10%

Sources: MDOT PTMS database: http://www.michigan.gov/mdot/0,4616,7-151-9625_21607_54940_61135---,00.html, Benzie Bus reports to MDOT

Operating Expenses

Operating expenses for Benzie Bus for FY 2011 through FY 2014 are provided in Table 2-2 along with FY 2015 operating budget. As indicated in this table, overall operating expenses have remained fairly constant through the period.

Ridership

Transit ridership is measured by unlinked passenger trips, defined as the number of passengers who board public transit vehicles. Passengers are counted each time they board a vehicle no

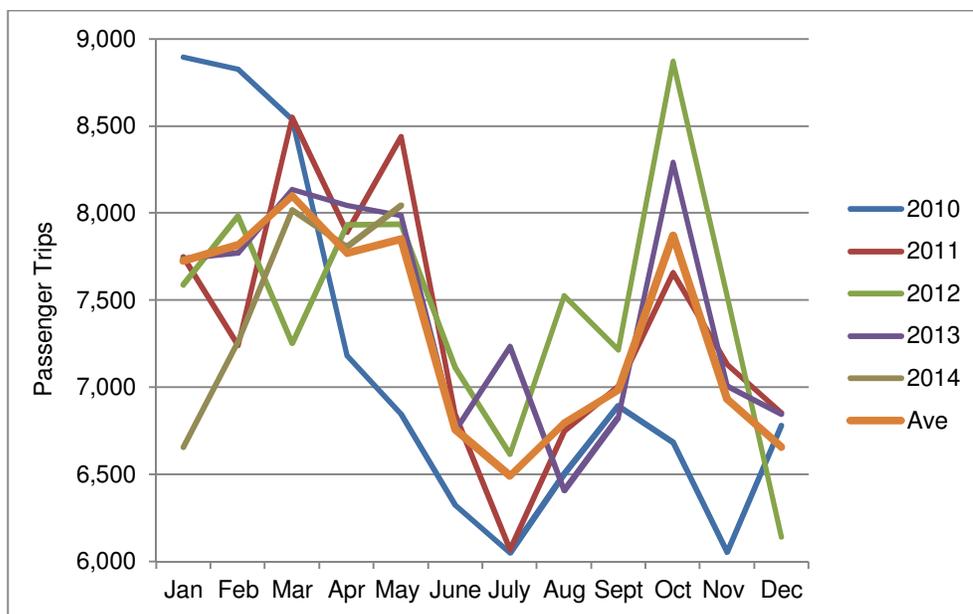
matter how many vehicles they use to travel from their origin to their destination.¹ Since transferring riders are counted every time they board, the assessment of ridership data needs to account for service changes that offer customers more one-seat rides.

Benzie Bus ridership has grown since providing 68,000 one way trips in the first year of operations in 2007. In FY 2013, Benzie Bus ridership totaled 89,382 passenger trips (including transfers, as reported to MDOT in the PTMS database). Reported ridership declined in FY 2014 to 83,320 passenger trips, though this reflects service changes that reduced the need for customers to transfer as often. About half of the riders paid regular fare and about half qualified for reduced fare.

As shown in Figure 2-2, ridership on Benzie Bus is generally highest in the spring and fall, with a noticeable drop in numbers during the summer months. This may be because regular riders have access to other sources of transportation in the summer through visiting friends and family. Ridership ranged from about 6,500 to 8,000 trips per month between 2010 and 2014.

Ridership information for the period of January through May 2014 also highlights common travel patterns, based on the services that Benzie Bus offered during that time (Figure 2-3). Out of approximately 34,000 trips where the location of the on and off stop was known, most trips occurred within the Township of Benzonia (slightly more than 10 percent). As shown in Table 2-3, this was followed by trips within the City of Frankfort, trips between the Township of Benzonia and the Township of Homestead, and trips from the City of Frankfort to the Township of Benzonia. More than half of all the trips (52 percent) occurred within or between Benzonia, Frankfort, and Homestead. Similarly, the most boardings (on stops only) occurred in the Township of Benzonia, the City of Frankfort, the Township of Homestead, and the Township of Crystal Lake (Figure 2-4).

Figure 2-2: Benzie Bus Ridership by Month



¹ National Transit Database (NTD) Glossary

Table 2-2: Benzie Bus Operating Expenses, FY 2015 – FY 2011

Expenses	FY 2015 (budgeted)	FY 2014 (actual)	FY 2013 (actual)	FY 2012 (actual)	FY 2011 (actual)
Operators Salaries + Wages	\$466,029	\$489,500	\$547,187	\$590,415	\$540,728
Other Salaries + Wages	\$255,000	\$246,009	\$264,425	\$232,397	\$242,362
Dispatchers' Salaries + Wages	\$146,119	\$135,401	\$131,655	\$132,573	\$119,635
Fringe Benefits	\$203,409	\$210,347	\$221,860	\$140,330	\$205,905
Pensions	-	-	-	\$39,397	\$42,738
Advertising Fees	\$10,000	\$12,849	\$3,872	\$2,006	\$1,585
Audit Costs	\$5,360	\$5,360	\$4,900	\$4,900	\$4,785
Other Services	\$47,050	\$88,684	\$61,441	\$44,294	\$46,347
Fuels and Lubricants	\$158,000	\$151,760	\$188,203	\$195,000	\$183,918
Tires and Tubes	\$10,000	\$12,557	\$7,451	\$8,938	\$7,239
Major Purchases	\$5,000	\$3,500	\$1,250	-	-
Other Materials and Supplies	\$60,700	\$71,446	\$45,699	\$43,490	\$40,523
Utilities	\$39,000	\$45,022	\$35,987	\$29,151	\$30,624
Liability Insurance	\$45,000	\$40,363	\$34,236	\$41,574	\$47,933
Other Insurance	\$1,000	\$646	\$1,949		\$163
Taxes and Fees	\$1,500	\$804	\$1,471	\$1,043	\$1,032
Travel, Meetings, and Training	\$3,000	\$3,556	\$2,830	\$489	\$773
Association Dues/Subscriptions	\$4,000	\$3,388	\$2,868	\$555	\$630
Other Misc. Expenses	-	-	\$177	\$7,736	\$812
Interest on Short Term Debt	\$1,800	\$1,649	\$1,761	\$4,175	\$4,107
Operating Leases & Rentals	\$2,500	\$2,307	\$2,300	\$5,270	\$18,684
TOTAL	\$1,464,467	\$1,525,148	\$1,561,522	\$1,523,733	\$1,540,523

Source: Eligible Expenses, Benzie Bus reports to MDOT.

Figure 2-3: Benzie Bus Trips, January 2014 - May 2014

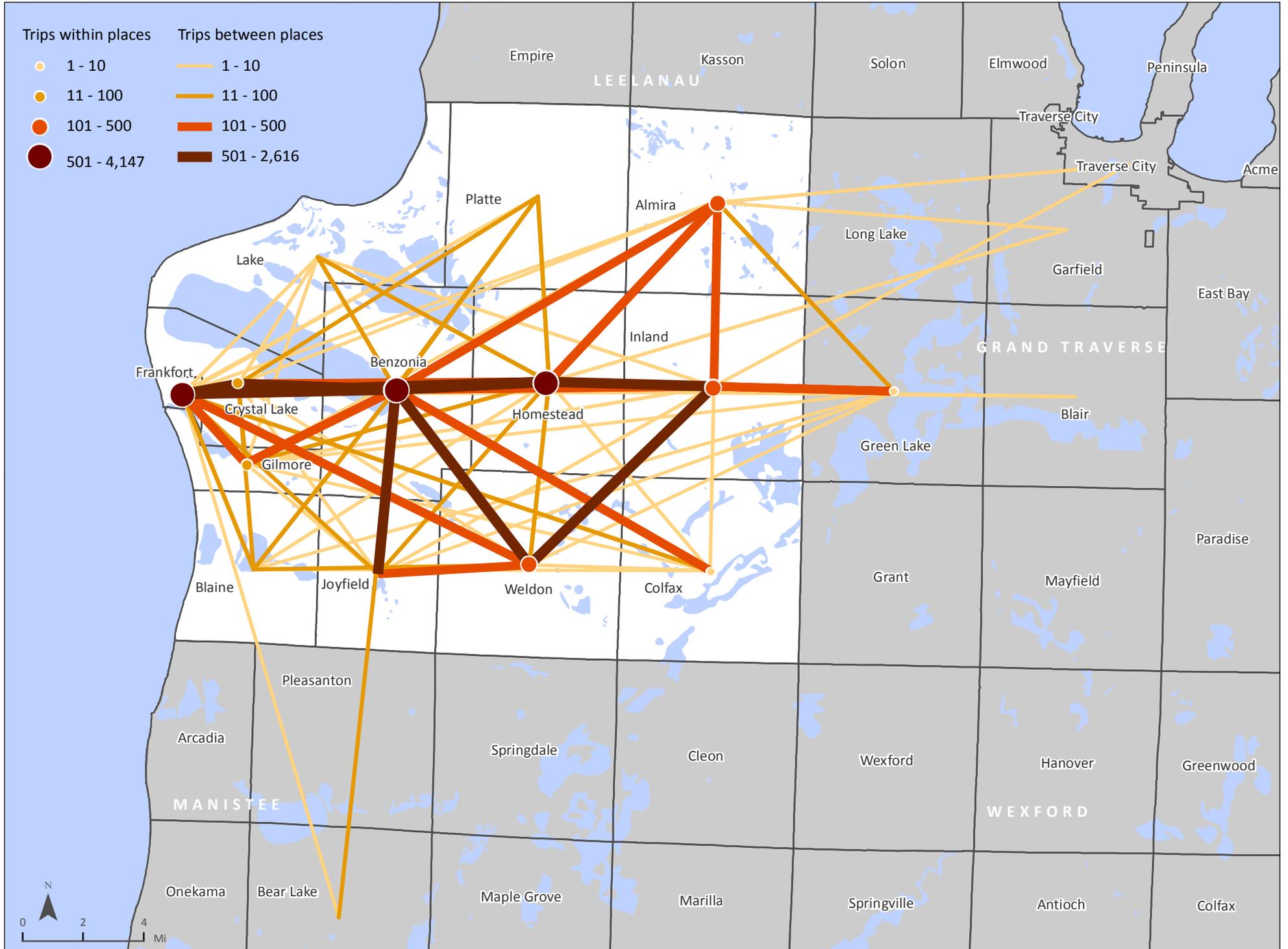


Figure 2-4: Benzie Bus Trips, January 2014 - May 2014

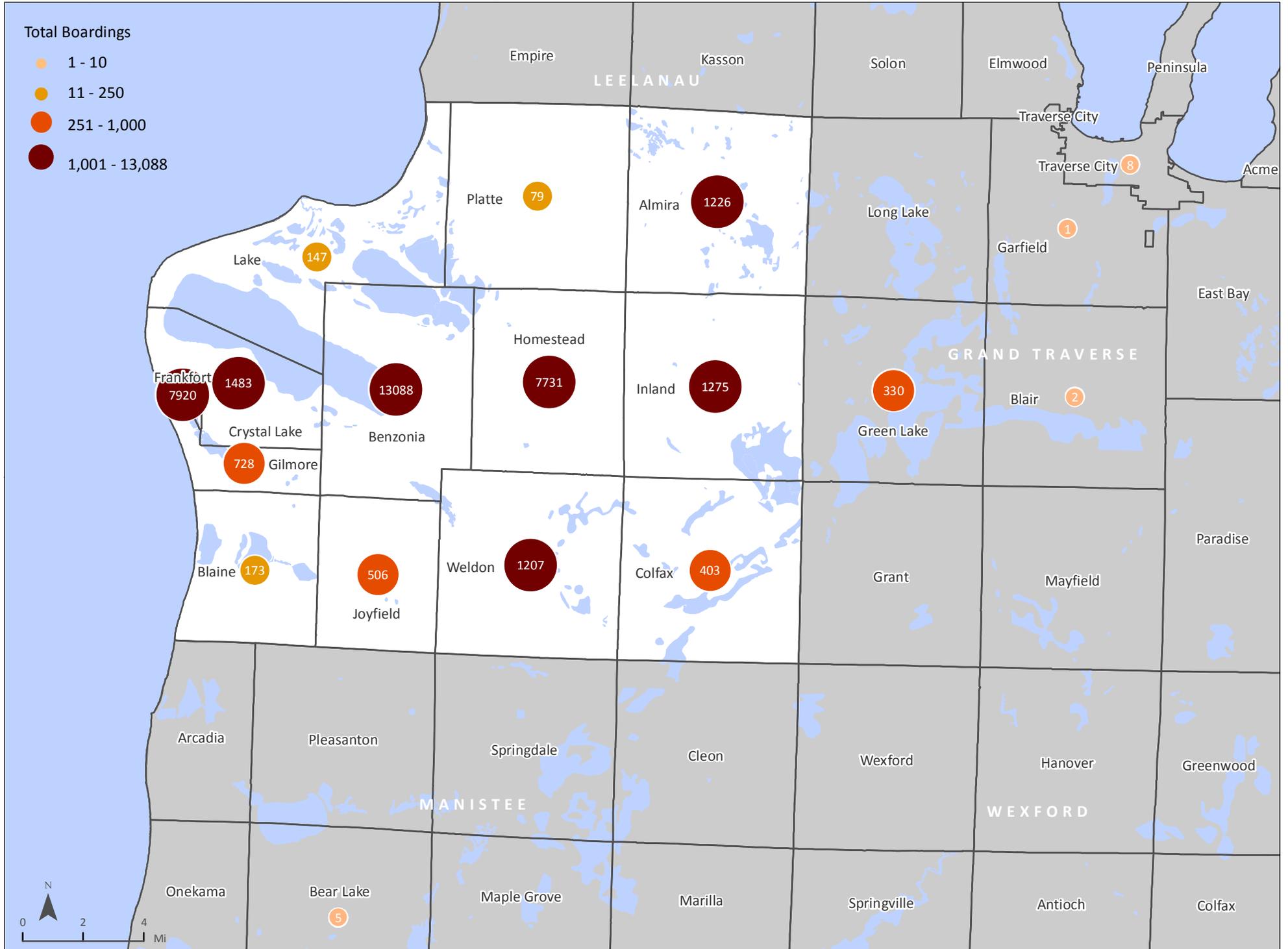


Table 2-3: Top Ten Most Common Trip Patterns, January - May 2014

On Stop Location (boarding)	Off Stop Location (alighting)	# of Trips	Percent of Trips (with known on/off)
Township of Benzonia	Township of Benzonia	4,147	12%
City of Frankfort	City of Frankfort	3,497	10%
Township of Benzonia	Township of Homestead	2,616	8%
City of Frankfort	Township of Benzonia	2,582	8%
Township of Homestead	Township of Benzonia	2,476	7%
Township of Benzonia	City of Frankfort	2,395	7%
Township of Homestead	Township of Homestead	1,842	5%
Township of Benzonia	Township of Weldon	977	3%
Township of Weldon	Township of Benzonia	838	2%
City of Frankfort	Township of Homestead	680	2%

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, and by farebox recovery. Effectiveness emphasized by passenger productivity is usually analyzed by passenger trips per mile and per hour. The most useful single measure is the passenger trips per hour measure, as it reflects usage in relation to 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 2-4 provides an overview of the performance data for Benzie Bus for FY 2011 through 2014.

Table 2-4: Benzie Bus Performance

	FY 2014	FY 2013	FY 2012	FY 2011
Total Passenger Trips	83,320	89,382	88,811	69,852
Total Miles	532,825	638,980	667,391	658,554
Total Vehicle Hours	30,064	35,179	35,650	33,883
Cost/Trip	\$18.30	\$17.47	\$17.16	\$22.05
Cost/Mile	\$2.86	\$2.44	\$2.28	\$2.34
Cost/Hour	\$50.73	\$44.39	\$42.74	\$45.47
Farebox Recovery Ratio	8%	9%	10%	10%
Passenger Trips/ Hour	2.77	2.54	2.49	2.06
Passenger Trips/ Mile	0.16	0.14	0.13	0.11

Using standard performance measures for public transit services in rural areas, nearly all the operating data categories for FY 2014 fell within normal or acceptable ranges. The only exception was cost per passenger trip (typically below \$18 per trip). As indicated earlier, service changes

reduced the need for customers to transfer as often so ridership numbers were lower from FY 2013 to FY 2014. The service modifications also resulted in less operating hours and miles, so despite the lower number of unlinked passenger trips, the number of trips per hour and mile increased between the two years. Benzie Bus also tracks its fuel usage, and gallons of fuel per trip. It averaged .68 gallons per trip in CY 2013, and about .63 in the first five months of 2014.

Additional guidance on service monitoring and evaluation is provided in Chapter 8 of this plan.

Peer Comparison

Other rural transportation providers in Michigan can provide context for Benzie Bus' operating data. While each system is unique, with particular factors that drive their statistics, it is helpful to see how Benzie Bus compares to similar programs. The peer systems presented in Table 2-5 all offer some combination of dial-a-ride and/or scheduled service. The following comparisons can be made in regard to FY 2013 operating data:

- Benzie Bus provided fewer trips with roughly the same vehicle miles and hours.
- Benzie Bus had a higher cost per trip than the peer average, but a lower cost per mile and cost per hour.
- In FY 2013, Benzie Bus had the lowest operating expenses but also provided the fewest trips per hour (2.5 compared to the 4.3 peer average).

Table 2-5: Peer Characteristics and Performance (FY 2013)

	Benzie Bus	Peer Average	Cadillac Wexford Transit Authority	Clare County Transit Corp.	Roscommon County Transp. Authority	Manistee County Transp.
Vehicles	22	--	23	31	25	23
2010 County Population	17,525	--	32,735	30,926	24,449	24,733
2010 Pop. Density	54.8	--	57.9	54.8	47.1	45.6
Operating Expenses	\$1,561,522	\$1,826,102	\$2,035,028	\$1,628,985	\$1,795,741	\$1,844,653
Passenger Trips	89,382	132,911	119,228	125,700	150,340	136,375
Vehicle Miles	638,980	617,299	650,406	630,728	715,495	472,568
Vehicle Hrs.	35,179	31,521	30,997	33,709	34,217	27,161
Cost/Trip	\$17.47	\$13.88	\$17.07	\$12.96	\$11.94	\$13.53
Cost/Mile	\$2.44	\$3.03	\$3.13	\$2.58	\$2.51	\$3.90
Cost/Hour	\$44.39	\$58.59	\$65.65	\$48.32	\$52.48	\$67.92
Trips/ Hour	2.5	4.3	3.9	3.7	4.4	5.0
Trips/ Mile	0.14	0.22	0.18	0.20	0.21	0.29

Vehicle Inventory / Maintenance

The current Benzie Bus fleet consists of 19 vehicles and is detailed in Table 2-6. The maintenance of vehicles is provided by Benzie Bus employees except for major repairs. Useful life criteria are based on FTA vehicle replacement standards. Some highlights from a review of this vehicle inventory include the following:

- Capacity ranges from a five person van to a 24 seat medium duty bus.
- Only two vehicles are not equipped to accommodate wheelchairs.
- Fourteen vehicles are used in regular service delivery and five are used as spares. The spare ratio (the percentage of vehicles based on fleet size held in reserve to replace vehicles that are out of service) is slightly greater than the FTA guideline of 20 percent.
- Of the 14 vehicles used in regular service delivery, nine have exceeded useful life criteria. An aggressive replacement plan will be needed in future years just to maintain current services.

Table 2-6: Benzie Bus Vehicle Fleet (December 2014)

Vehicle ID	Year	Seating/WC Capacity	Vehicle Type	Current Miles	Useful Years	Useful Life Criteria (Years/Miles)	Status
1A	2009	14/2	Sprinter	209,673	7	Met - 7/200,000	
2A	2009	14/2	Sprinter	211,929	7	Met - 7/200,000	
3A	2009	14/2	Sprinter	210,929	7	Met - 7/200,000	
7A	2009	14/2	Sprinter	214,005	7	Met - 7/200,000	
8A	2009	14/2	Sprinter	209,625	7	Met - 7/200,000	
9	2009	15/2	Cutaway	317,385	5	Met - 5/150,000	
13	2011	15/2	Cutaway	133,404	5	5/150,000	
15	2008	15/2	Cutaway	238,969	5	Met - 5/150,000	
16	2008	15/2	Cutaway	260,376	5	Met - 5/150,000	
18A	2009	14/2	Sprinter	205,199	7	Met - 7/200,000	
20A	2010	24/2	Med Duty	145,629	7	7/200,000	
21	2012	6/0	Van	35,754	4	4/100,000	
22	2012	5/1	Van	22,186	4	4/100,000	
23	2013	15/2	Cutaway	44,238	5	5/150,000	
24	2014	15/0	Cutaway	0	5	5/150,000	New
25	2015	15/2	Cutaway	0	5	5.150,000	New
4	2006	15/2	Cutaway	280,704	5	Met - 5/150,000	Spare
10	2009	15/2	Cutaway	300,221	5	Met - 5/150,000	Spare
11	2009	15/2	Cutaway	304,898	5	Met - 5/150,000	Spare
12	2009	15/2	Cutaway	278,493	5	Met - 5/150,000	Spare
19A	2009	14/2	Sprinter	205,090	7	Met - 7/200,000	Spare

Replacement and expansion vehicles are typically funded through the FTA Section 5311 Program. However, Benzie Bus has purchased one vehicle per year over the past several years with Congestion Mitigation and Air Quality (CMAQ) funding. In addition, the seven Sprinters are clean fuel vehicles purchased with funding from the American Reinvestment and Recovery Act (ARRA). In 2013, a fuel conversion of dual gasoline and liquefied petroleum gas was added to five vehicles, leading to a reduction in fuel costs of about \$30 per day, per vehicle when in service.

Facilities/Technology

The administration and operations offices of Benzie Bus are located in the center of Benzie County, on US 31 about three miles east of Honor. In 2009, Benzie Bus received federal and state funding to purchase this nine-acre site. Those funds along with ARRA funding enabled the complete renovation of the existing building, and the construction of a new six bay maintenance facility. The garage was completed and functional in October 2010, and the renovation of the entire site was completed in August 2011.

Benzie Bus dispatchers currently use PCTrans software for ride scheduling. In regard to possible technology improvements, dispatch staff expressed an interest in a software program that would offer routing and Automatic Vehicle Location (AVL) capabilities. Another desired feature for any future software upgrade would be an auto reminder prompt for riders at a set interval before their scheduled trip. BATA, for example, recently implemented Mobilitat software (approximately \$65,000).²

Dispatch and drivers are also using newly purchased “Push to Talk” phones. These phones allow for streamlined communication, with dispatch and drivers able to talk to one another individually or as a group. They also allow dispatch to see the location of each phone on a map, though only in 15 minute updates.

Marketing/Public Outreach

Benzie Bus markets its services through word of mouth, its webpage, and its recently launched Facebook page. It has also participated in community events like the Benzie County Chamber of Commerce Expo, at which it had a presence with free ride tickets, brochures, and reusable shopping bags. Benzie Bus also offered free rides for 4th of July 2014 and a free shuttle from Frankfort High School to the Frankfort Art Fair and Elberta Solstice in summer 2014. The system is also pursuing a mentoring program that matches new riders with experienced riders, particularly to aid seniors who might be uncomfortable trying the bus for the first time.

Benzie Bus was also a co-sponsor of the Michigan Land Use Institute's "Buses Without Borders: Expanding Transit Connections" event in February 2014. The event gathered local stakeholders and transportation experts to discuss how to build a model regional transit system in northwest Lower Michigan. This interest in building a transit network beyond county borders reflects the service Benzie Bus now offers to Traverse City.

² See p3-12, “Mobility Management & Coordination Strategies.” Smart Growth America. October 2013. <http://smartgrowthamerica.org/documents/traverse-city-mm-final-report.pdf>.

OTHER TRANSPORTATION SERVICES

- **Bay Area Transportation Authority (BATA)** - BATA provides service for Grand Traverse County and Leelanau County. It has both dial-a-ride (branded City and Village Links) and fixed routes (branded City and Village Loops). BATA operates seven days a week, with the City Link service having the longest span (6 a.m. to midnight). Benzie Bus riders can transfer to BATA at Ric's in Interlochen (BATA's #12 Village Loop) or at Meijer or Munson Medical (BATA's #4 City Loop).
- **Benzie County Council on Aging (COA)** – The COA offers a variety of services to Benzie County seniors: meal delivery, congregate meals, personal care, household chore help, etc. The COA provides transportation for its day trips, but otherwise purchases tickets from Benzie Bus for its clients. The tickets are free to residents 60 and over.
- **Benzie County Department of Human Services (DHS)** – The DHS provides some transportation for its clients, primarily to medical appointments. The agency relies on volunteer drivers.
- **Benzie County Department of Veterans Affairs/ Grand Traverse Area Disabled American Veterans (DAV) Chapter 38** – Benzie County veterans are eligible for medical transportation by volunteer drivers using a DAV van. This includes medical appointments at the Traverse City Veterans Clinic and the VA hospitals in Saginaw, Detroit, and Ann Arbor.
- **Centra Wellness** – Located off of Frankfort Highway in Benzonia, Centra Wellness provides services and support for individuals with mental illness and intellectual/developmental disabilities. Staff provide limited transportation for these clients.
- **Intercity Bus** - Indian Trails intercity service runs just east of Benzie County (US 131) between Grand Rapids and Petoskey with a stop in Traverse City. The service operates one round trip per day. Amtrak Thruway also provides intercity bus service for rail passengers transferring in Kalamazoo and Grand Rapids. Similar to Indian Trails, the Amtrak north-south route has stops in Cadillac and Traverse City but bypasses Benzie County.
- **Manistee Transit** - directly south of Benzie County, Manistee Transit provides dial-a-ride service within Manistee County, Monday through Saturday, with some service to Traverse City. Manistee Transit offers connectivity with Benzie Bus at the Benzonia Plaza Shop N Save through an inter-local agreement.
- **Private Providers** – A variety of companies offer airport, taxi, and shuttle/tour bus transportation in the region. These companies specialize in sightseeing and special events (Northern Michigan Party Rides in Lake Ann, Celtic Transport Logistics in Traverse City, Buses by the Bay in Traverse City, etc.). Cab companies like Cherry Capital Cab, TC Shuttle & Car Service, and Chippewa Cab also operate out of Traverse City. However, due to the nature and price of their services, these providers are not feasible sources of daily transportation for Benzie County residents.

Chapter 3

Transit Needs Analysis

INTRODUCTION

This chapter documents the qualitative and quantitative need for public transit in the Benzie Bus service area. It documents community input obtained from an extensive outreach process. This chapter also uses previous studies, demographic data, and land use to assess the need for transit in and surrounding Benzie County. Data sources include the 2010 Census and the American Community Survey (ACS) 2008-2012 5-year estimates. Overall, this input and data provide a collective transit needs analysis that is the foundation for the development of alternatives and recommendations included in the next chapter.

PUBLIC OUTREACH

To better understand the travel needs and perspectives of both current and potential Benzie Bus customers, KFH Group and the Benzie Bus staff conducted extensive stakeholder outreach. The following section describes these efforts. It includes the results of an on-board rider survey, several “Meeting on a Bus” events, a general public community survey, and an employer survey.

On-Board Rider Survey

Benzie Bus conducted a rider survey in April 2014, yielding approximately 100 responses. Most respondents had ridden the bus for more than 3 years (41%). Most were riding frequently, either 5 days per week or more (31%) or 3-4 days per week (26%). Respondents indicated a desire for Saturday and week night service.

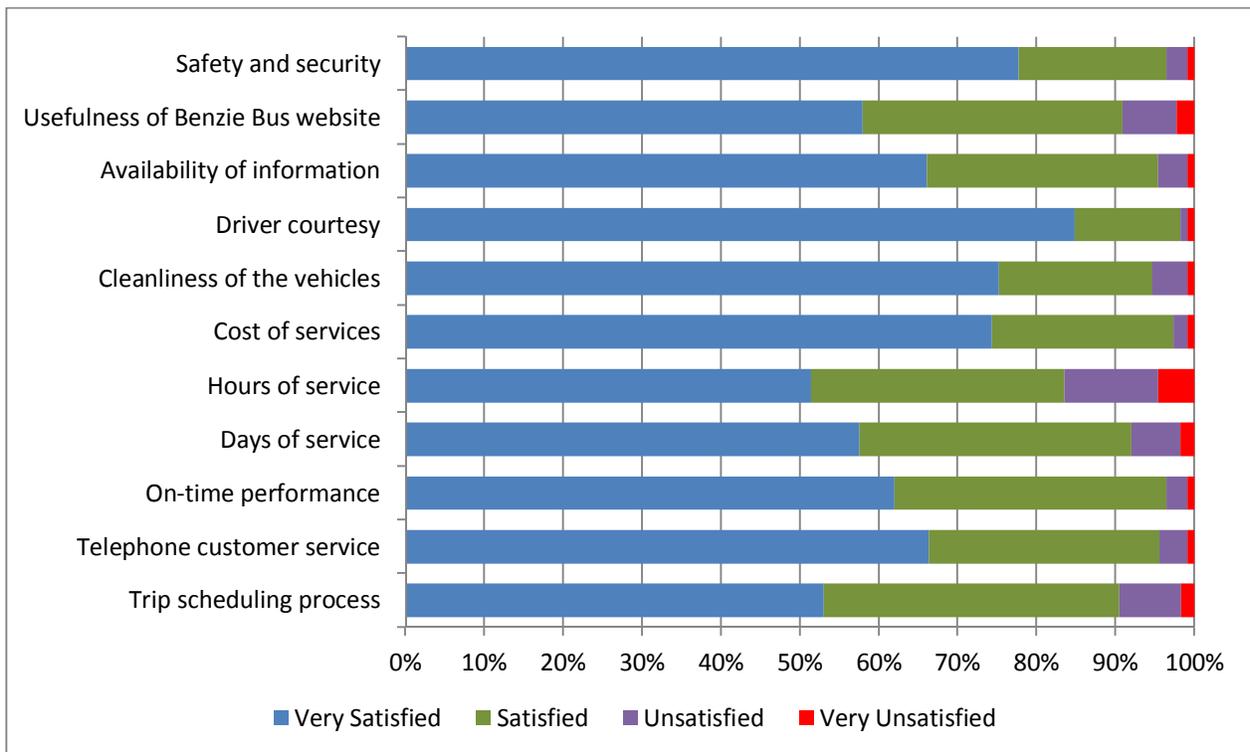
To supplement the April survey, Benzie Bus drivers distributed another on-board survey as part of this study for a week at the end of July 2014. A total of 117 surveys were completed. The full survey results are provided in Appendix D.

Rider respondents were almost all Benzie County residents, primarily from Benzonia, Frankfort, and Thompsonville. Most were frequent riders, with about three quarters riding at least once a

week. More than half had been riding for over two years, though 24 riders (21%) said they had been riding for less than six months. Most had heard about Benzie Bus through family and friends. The majority of current Benzie Bus riders lack a valid driver’s license (58%) and/or access to a car (79%).

When asked about their satisfaction with Benzie Bus, riders rated driver courtesy, safety and security, and cost of services most highly. In contrast, hours of service, the trip scheduling process, and the usefulness of the Benzie Bus website were categories with the most “unsatisfied” or “very unsatisfied” responses (see Figure 3-1).

Figure 3-1: Satisfaction with Benzie Bus



When asked what they like the best about Benzie Bus, riders’ top three responses were:

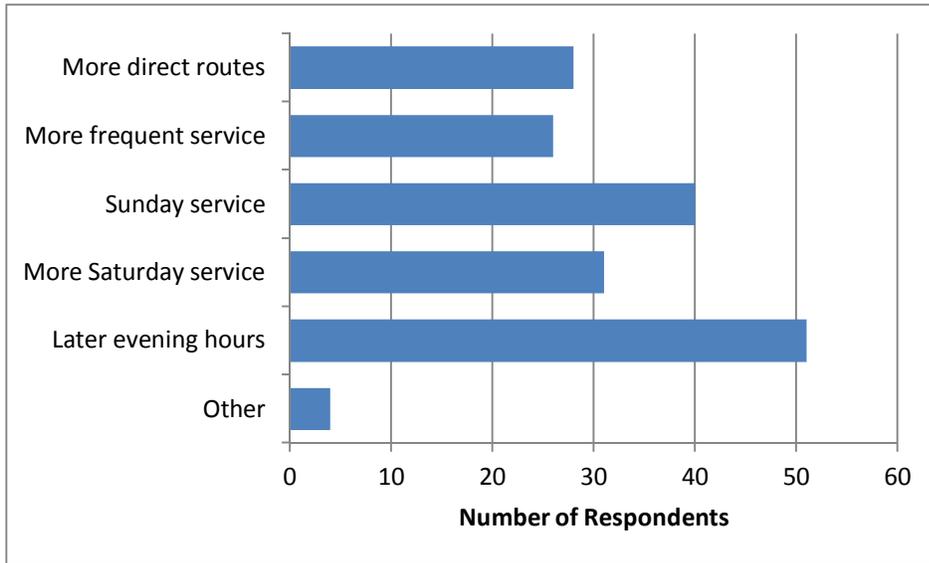
1. friendly/courteous drivers
2. getting me where I need to go/availability
3. convenience

When asked what they like the least, riders said (other than nothing):

1. hours of service
2. noise/rattling lifts
3. getting to work/other destinations late or too early

Most current riders (80%) did not name places that they need to go on a regular basis that Benzie Bus does not serve. However, later evening hours and Sunday service were the most popular requests for improvements (see Figure 3-2).

Figure 3-2: Priority Improvements (Riders)



Meeting-On-A-Bus Outreach Day

KFH Group, Benzie Bus staff, and project team members held a “meeting-on-a-bus” outreach day on July 31, 2014. The outreach occurred at four locations: 1) Lake Ann Grocery, 2) the Gathering Place in Honor, 3) Glen’s Market in Frankfort, and 4) the Beulah Music in the Park summer concert. Residents and visitors had an opportunity to learn about current services, fill out the community survey, have refreshments, and see and tour a vehicle.

The outreach day resulted in 118 completed hard copy surveys (discussed in depth in the next section). In general, many individuals said they were not familiar enough with Benzie Bus to offer service suggestions, and some residents and visitors declined to fill out a survey. However, the visibility of Benzie Bus throughout the day helped raise overall awareness of the system, and may lead to new riders in the future.

Community Survey

A general public community survey was another mechanism used to solicit information concerning transit needs in Benzie County. A total of 335 individuals completed the community survey, 167 online and 168 in hard copy. The survey was available online through surveymonkey.com during July and August 2014. A link to the survey appeared on the Benzie Bus website and Facebook page, and on the Betsie Valley District Library homepage. The same survey was available in hard copy at approximately 25 locations throughout the County, including the

Benzie County Government Center and Department of Human Services, Frankfort City Hall, the library branches, Honor Bank, Paul Oliver Hospital, the Congregational Summer Assembly, Crystal Mountain, etc. About 70 percent of the hard copy surveys were collected during the July 31st outreach day.

Publicity for the survey (and the study overall) appeared in the Record Patriot and the Grand Traverse Insider during the first week of August. Interlochen Public Radio also announced the effort. The full survey results are provided in Appendix D. The following summary describes both the hard copy (H) and online (O) results.

Most community survey respondents described themselves as year round Benzie County residents (76% H, 89% O). Frankfort, Honor, and Beulah (H) and Benzonia, Frankfort, and Beulah (O) were the top three respondent residences. Traverse City was the most common destinations named in both surveys, followed by Frankfort, Benzonia, and Honor. As expected, driving alone was the primary mode of transportation for most respondents.

Benzie Bus fared well in terms of public opinion: roughly 87 percent (both surveys) were aware of the services and had an overall positive impression. More of the hard copy respondents were unaware of Benzie Bus (10% vs. 2%), likely because more were also visitors/tourists. For both surveys, about 20 percent of respondents said they currently use Benzie Bus. Most of these individuals stated that they rode less than one a week, unlike the much more frequent riders that answered the onboard survey.

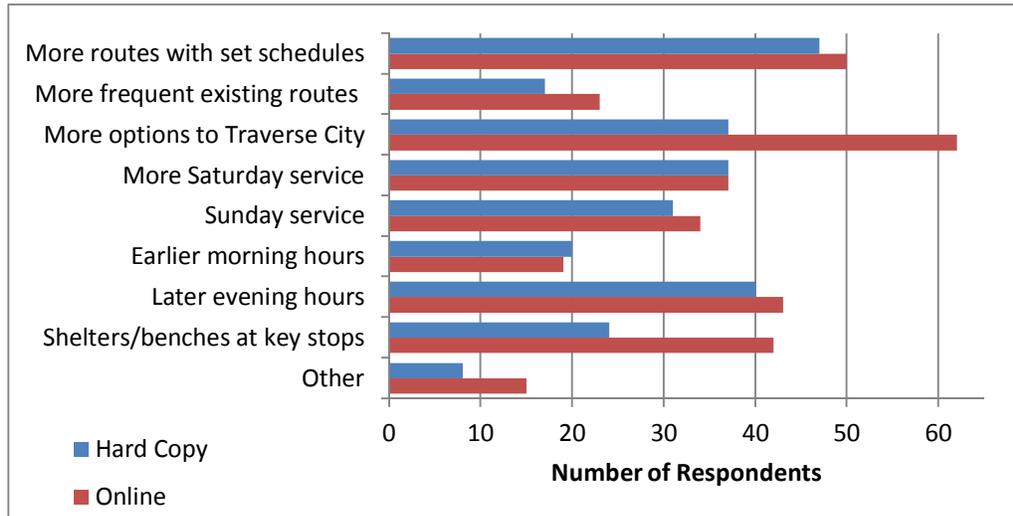
These reasons were most cited as to why respondents do not use Benzie Bus (H/O):

- Need a car for work or school (52/56%)
- Trip is too long or takes too much time (18/42%)
- Hours of operation are too limited (20/27%)
- Have to make a reservation in advance (15/20%)

For both surveys, about 65 percent said that they would consider using Benzie Bus if there were services that met their travel needs. Online respondents were more likely to say that they would not consider Benzie Bus at all (12% vs. 4%) instead of “not at this time” (23% vs. 12%). Online respondents were also slightly more likely to say that there is a need for additional or improved Benzie Bus service in Benzie County and/or the region (75% vs. 61%).

A follow up question asked for specific locations that need additional or improved service. Cross-county connectivity was a common theme, both for Benzie residents (e.g. commuting to Traverse City) and Benzie workers (e.g. commuting from Bear Lake and Arcadia). Many comments also mentioned the need for interoperability and better connections with BATA and Manistee Transit. Though not specific locations, respondents also noted the need for Sunday service, and for a return to the hourly flex service.

When asked about other needed improvements (Figure 3-3), online respondents named more options to Traverse City and more routes with set schedules as top requests. Hard copy respondents also named more routes with set schedules, followed by later hours.

Figure 3-3: Priority Improvements (Community)

Survey respondents largely affirmed their support for Benzie Bus: 63 percent of online respondents and 70 percent of hard copy respondents plan to vote for the millage that is up for renewal in 2015. Others were undecided (13% H, 18% O) or did not know about the millage (14% H, 12% O). The majority of open ended comments were also positive. Though some said that public transit was a waste of tax payer money due to too few passengers and idle buses (e.g. at Shop N Save), many others reiterated the importance of Benzie Bus as a transportation option. For example:

“I am very pleased the service exists because it works well for my children for after school transportation.”

“It's nice to see a good service such as public transportation in our area, it is a backbone of a healthy community.”

“Public transit is essential to a great community!”

Employer Survey

Many current riders use Benzie Bus for work trips, and the system has an opportunity to expand this role in the future. Available online throughout August 2014, a survey specific to area employers gathered input on employee transportation needs and employer interest in collaboration with Benzie Bus. The survey was publicized through the Benzie County Chamber of Commerce and the Frankfort-Elberta Chamber of Commerce.¹

Nineteen different employers responded to the survey, representing locations in Benzonia, Beulah, Frankfort, Honor, Interlochen, and Thompsonville. The number of employees ranged widely, with a median of six. The employers stated that their employees commute primarily from

¹ Crystal Mountain, Magna, and Munson Medical received individual emails with the survey link in an effort to capture Benzie County's major employers. However, of those, only Crystal Mountain responded.

Frankfort, Thompsonville, Honor, Beulah, and Benzonia. Though driving alone to work is the norm, some employees do carpool, walk, bike, or use Benzie Bus.

The most common shift times were the traditional 8 or 9 am to 4 or 5pm. However, employees also fill evening and night shifts (e.g. at McDonald's, Dinghy's, Crystal Mountain, etc.). Only two employers noted that they offer any type of transportation assistance (one through carpool assignment and one through Benzie Bus). Though less than a quarter said that their employees have indicated that transportation to work is an issue, almost forty percent said that transportation is an issue in hiring and retaining employees. A third expressed interest in partnering with Benzie Bus for employee transportation.

Public Outreach/Unmet Needs Summary

The input obtained through the public outreach process indicated support for Benzie Bus by both riders and the community overall. Most residents and visitors have a positive impression of the system, though they feel that there is still need for additional and improved services. Benzie Bus should still use the momentum gained from these outreach efforts to strategically improve the convenience and quality of its services.

Along with input from the project team and other key stakeholders, the public outreach process suggested the following potential system improvements:

- Consider implementing later evening and Sunday service as resources allow.
- Increase frequencies on key routes, returning to hourly flex service.
- Explore software options to increase routing efficiencies and reduce no shows.
- Address fare structure to incentivize scheduled service over dial-a-ride.
- Explore employer partnerships, particularly with major employers in Benzie County and in Traverse City.
- Work with BATA and Manistee Transit to strengthen cross county connectivity.
- Address the reservation policy for scheduled service; consider set schedules regardless of requests.
- Revise schedules and other print materials for ease of understanding.
- Increase passenger comfort with appropriate vehicle assignment and better secured wheelchair lifts.
- Explore opportunities to increase student ridership, particularly for after school activities.

COMMUNITY SUMMIT

The results of the public outreach efforts were documented in an interim report that was distributed to the project team, and used as the foundation for a community summit hosted by Benzie Bus. "Planning Ahead: A Community Summit for Improving Public Transit Services in Benzie County" was held on September 24, 2014, and was attended by approximately forty participants: a mix of Benzie Bus staff, Board members, representatives of human service agencies, riders, and other community members. Publicity for the event included sending email and hard copy flyers to individuals on the Benzie Bus distribution list, a notice on the Benzie Bus website, and a postcard mailing to roughly 9,500 households. In order to alert as many interested

community members as possible, the postcard mailing used address information obtained through the County's voter roll.

The goals of the summit included confirming the transit needs identified through the surveys, and importantly, obtaining additional input on priorities for the future. The summit began with a brief review of the study process, existing services, and an analysis of the summer survey efforts. Next was a discussion of potential alternatives to address the themes that emerged through the surveys. Attendees then broke into small groups to prioritize the possible improvements (high, medium, or low, with caveats); the alternatives included in this technical memorandum reflect the results of that exercise.

Planning Ahead: Improving Public Transit in Benzie County



Join Benzie Bus for a community transportation summit. Discuss current services and prioritize future improvements!

Date: Wednesday, September 24, 2014

Time: 8:30 am – 11:30 am*

*Registration/light breakfast begins at 8 am

*Optional lunch discussion 11:30 am – 1 pm

Location: Benzie County Government Center, 448 Court Place

RSVP or Questions: 231-325-3000 or Karin@benziebus.net

See the summit agenda at www.benziebus.com. If you are unable to participate, submit your ideas to hchase@kfhgroup.com by Sept. 24th. *To schedule a ride to the summit, call Benzie Bus at 231-325-3000.*

The summit participants named expanded evening service and increased frequency on the Frankfort-Honor and Thompsonville-Honor corridors as high priorities. Publicizing the current trips to Traverse City and improving the safety and connectivity of transfers to Manistee County were other high priorities. Small group discussions raised the issues of providing transportation for after school sports and other community events, making the reservation process easier, and offering day passes. Other themes included:

- Benzie Bus as a potential facilitator of overall mobility, beyond its current role as a transit provider (ridesharing/carpooling, Park & Rides, etc).
- Emphasis and messaging on the environmental benefits of using Benzie Bus, in acknowledgement of the “green” values held by many in the community.
- Additional cooperation with area employers, possibly for route sponsorship.
- The need for on-call transportation late into the night to discourage driving under the influence.



Community members discuss transit needs and possible improvements at the September summit. Photos by KFH Group.

PREVIOUS STUDIES AND DATA

The following section is a review of recent studies and plans relating to transportation, land use, and the need for public transit in the region. It begins with the 2002 Corradino Group study that was the basis for the Benzie Bus service, and then proceeds from most recent studies onward.

Benzie County Transportation Study - Corradino Group (2002)

Sponsored by the Benzie County Human Services Collaborative Body with a grant from MDOT, this study made recommendations on coordination and transportation options for the County, ultimately leading to the creation of Benzie Bus. The study documented existing conditions (demographics, the transportation network, etc.) and mapped transportation generators including resorts, hospitals, senior centers, and schools. It noted that employment opportunities occur in the County's population centers, but most jobs are outside the County in Traverse City. Seasonal population variation was also mentioned; it estimated that the population increased from around 16,000 in the winter and spring to more than 25,000 in late summer (as of 2002).

At the time of the study, existing transportation resources included BATA service (Frankfort to Traverse City), BATA's Health Ride (door-to-door service for medical appointments), Manistee-Benzie Community Mental Health (for individuals with disabilities), Benzie County Elders (for seniors), and Northwest Michigan Human Service Agency (for Head Start). Private providers were limited to Classy Cab and TC Cab in Traverse City.

The study included a peer analysis of non-urban Michigan transit agencies, documented Benzie County opportunities and constraints, and presented four alternatives: coordinated agency transportation, a county public transportation system, joining BATA, and joining Manistee County Transit. The study concluded that it was an appropriate time for Benzie County to establish public transit, ultimately recommending that it join with BATA and have BATA act as operating entity. It described a system of demand response service within Benzie County and feeder routes to Traverse City on M115, US 31, and County Highway 610.

Assessment of the Service Needs of Senior Households Residing in Benzie County, Michigan (2014)

Prepared for the Benzie Council on Aging, this assessment drew on stakeholder interviews and a household survey to identify the needs of Benzie County's senior population. Key issues included difficulty in getting access to food/groceries and isolation in rural areas. According to survey respondents, one of the most highly ranked potential actions that the Council on Aging could take was "make it easier for me/us to use the Benzie Bus so that we can leave the house for socialization." Among other recommendations, the assessment prioritized improving access to Benzie Bus to the Council on Aging.

Northwest Michigan Regional Transportation Plan (2014)

Prepared for the Northwest Michigan Council of Governments, this plan notes that a combination of seasonal visitors and continued population growth in the region over the next twenty years will "put a significant strain on the ability of the transportation system to meet mobility needs..." It

also mentions that one of the largest flows of commuters in the region is workers going from Benzie County to Grand Traverse County (approximately 2,900 workers).

The Regional Transportation Plan discusses past transportation planning efforts, including a 2013 report that resulted from a statewide livable communities demonstration project.² “Mobility Management & Coordination Strategies” makes recommendations for the Grand Traverse region, with the first two priorities being to improve coordination between transportation providers and to integrate transit with the tourist economy. Specific near-term implementation steps included developing a regional transit pass/fare coordination policies, developing cost allocation models, coordinating transfers with intercity buses, partnering with leaders in the tourism industry, and improving both online and non-web based information/outreach.

Lakes to Land Regional Initiative (2012)

The Lakes to Land Regional Initiative began in 2012 as a joint planning effort among eight townships and two cities in northwestern Michigan. It includes the southwestern corner of Benzie County: the City of Frankfort and the Townships of Crystal Lake, Gilmore, Blaine, and Joyfield. Each jurisdiction is working to develop a master plan, a recreation plan, and a collaborative implementation strategy. Several visioning sessions have occurred as part of the Regional Initiative. Notably, participating residents in Blaine Township and Gilmore Township mentioned “continue bus” and “public transportation” when asked about envisioning the future.

BATA Transit Service and Coordination Study (2011)

The BATA Transit Service and Coordination Study prepared by Vlecides Schroeder Associates, Inc. resulted in many changes to the BATA system. Since 2011, BATA has reduced the number of vehicles it devotes to dial-a-ride, shifting to a “Link” and “Loop” model. Five key City Loop routes are meant to connect with less frequent Village Loops and the Link dial-a-ride services.

BATA’s primary goals for the study were to eliminate duplicative services and reorganize in a way that would increase efficiencies. BATA recognized that it needed to improve the frequency on its Village Loop routes to hourly (called Village Connectors at that time) while still providing service for passengers with disabilities. Regarding regional connectivity, the study noted that linking to neighboring transit agencies is beneficial for everyone involved. BATA potentially increases its ridership, and other agencies eliminate “the need to expend time and mileage traveling the full distance into downtown Traverse City...”

At the time of the study, BATA’s dial-a-ride was in competition with its scheduled services. Benzie Bus finds itself in a similar situation currently; although many people ride scheduled services like the Flex Route, there is little incentive to do so while Benzie Bus still offers parallel dial-a-ride throughout the County. The dial-a-ride is critical for those with disabilities, but it is also much more costly to provide.

² See <http://smartgrowthamerica.org/documents/traverse-city-mm-final-report.pdf>.

Benzie County Recreation and Cultural Master Plan (2009)

The Recreation and Cultural Master Plan focuses on non-motorized transportation. It inventories major trails, like the Betsie Valley Trail and the Beach to Beach Trail (in progress), both of which function as potential links to Benzie Bus and add to the overall mobility of County residents. The public input process for the Master Plan included surveying residents on the recreational facilities that they wanted to see added in the County. Most responses concerned extending/ paving/ clearing snow from the Betsie Valley Trail, adding more non-motorized trails for walking and hiking, and adding motorized trails for ATVs, etc. The Master Plan also referenced the Northwest Michigan Council of Government's Non-Motorized Transportation Plan and Investment Strategy (2008), which prioritized funding projects for 13 counties.

Expanding Transportation Choices in the Grand Traverse Region (2009)

Prepared by the Michigan Land Use Institute, this report responds to public support for investment in public transportation, as highlighted in the Grand Vision. The overarching theme of the report was that the region's transit agencies are already serving individuals with disabilities, seniors, and non-drivers well; the next step is to attract a broader market of commuters by expanding coverage and frequency on fixed routes and marketing those services. It characterizes the Grand Traverse region as having a high amount of commuter traffic to Traverse City, saying that "while the area may be rural, there is an urban need for increased commuter options."

The report primarily discusses BATA's Village Loops (previously called Village Connectors), which are rural fixed routes to outlying areas of Grand Traverse and Leelanau Counties. It critiques the overlap of service with BATA's demand response buses, and the lack of marketing for the Village Loops. The report notes that all the transit agencies in the six-county Grand Traverse region operate demand response or dial-a-ride service, but it specifically describes Benzie Bus as "innovative" for using demand response buses as feeders to its flex routes.

Interviews with Village Loop riders found that they primarily learned about the services through word of mouth. They chose to ride the bus because it freed up time otherwise spent driving, was good for the environment, saved them money on gas and parking, and provided a social atmosphere with other riders. Having coordinated transfers to local routes within Traverse City was another important factor.

The Grand Vision (2008)

The Grand Vision was designed to create a regional land use and transportation plan with a broad base of public support, and it resulted in multiple reports completed between 2007 and 2010. Covering six counties, the Grand Vision's "area of influence" includes Benzie County. Two workshops were conducted in Benzie County in 2008.

One of the Grand Vision's guiding principles is to improve the region's transportation network, providing expanded transportation choices. A specific goal was to adopt a balanced transportation investment strategy, with the objective of facilitating mode shifts through expanded transit service. Another goal was to create a multi-modal system that is viable for all users in every

season. The Grand Vision acknowledges that there are challenges to increasing public transit service given the region's preferred development pattern of village nodes. It envisions "connecting villages with each other and with city centers beyond county lines." It lists the following tools to reach the transportation vision (<http://www.nwm.org/userfiles/filemanager/1134/>):

- Reduce VMT for home to work trips in the region
- Access management
- Context Sensitive Solutions (CSS) and Complete Streets
- Take a regional approach to transit
- Transit Oriented Design (TOD) and station area planning
- Pedestrian / bike master plans
- Walkability audits

Benzie County 2020 Comprehensive Plan (October 2000)

The 2020 Comprehensive Plan documents the County's population and land use trends, with the purpose of providing policy and decision-making guidance for future land and infrastructure development. The County's two major economic sectors are recreation/tourism and agriculture. The northeastern quadrant of the County (Almira Township, the Village of Lake Ann) has had the most residential growth in the past two decades, as development pressure moves out from Traverse City. Most commercial development is located in Beulah, Benzonia, Honor, Elberta, and Frankfort; as well as along US 31 between Honor and Grand Traverse County line.

The Plan identifies Urban Service Districts, areas where the County will consider expanded infrastructure and services through the year 2020. These districts would be the location of any new medium density residential development and nearly all commercial or industrial development. The Urban Service Districts roughly correspond to, east to west, Lake Ann/Hardwood Acres CDP, Bendon CDP, Thompsonville, Honor, Beulah/Benzonia, and Frankfort/Elberta.

The Plan's fundamental principles include the idea that scenic character should be preserved or enhanced wherever feasible, and that future development should primarily take place in a compact development pattern. The Plan also states that the County's "single most important feature" is its scenic rural character. Regarding transportation, congestion on certain roads during peak summer tourist months is identified as an issue.

The Comprehensive Plan is largely silent on public transportation, as it was completed before the start of Benzie Bus. However, several of the more recent master plans for the communities within the County reference Benzie Bus. The Frankfort Master Plan (adopted May 2010) notes that Frankfort residents and visitors have consistently identified walkability and non-motorized transportation as an essential community amenity. The Village of Elberta Master Plan (adopted January 2012) states the objective of improving public transportation in order to link Elberta to adjacent communities. Among other transportation resources, it identifies Benzie Bus as helping to create visibility and access to Elberta's amenities. A public forum held during the development of Elberta's plan identified enhanced access to public transit as a goal for the future of the village.

POPULATION PROFILE

The following section describes a general population profile for Benzie County. It identifies and evaluates specific populations, groups that are most likely to depend on public transportation.

Benzie County is located along Lake Michigan, bordered by Leelanau County to the north, Manistee County to the south, and Grand Traverse County to the east. There are 19 communities within Benzie County: the City of Frankfort; the Villages of Elberta, Beulah, Benzonia, Honor, Lake Ann, and Thompsonville; and 12 townships: Almira, Benzonia, Blaine, Colfax, Crystal Lake, Gilmore, Homestead, Inland, Joyfield, Lake, Platte, and Weldon. Major road corridors include US 31 (connecting Benzie County to Grand Traverse and Manistee), M115 (a diagonal connection through the County), and M22 (along Lake Michigan). Benzie County has an abundance of natural resources, including the Sleeping Bear Dunes National Lakeshore, the Pere Marquette State Forest, and the Betsie River State Game Area.

As seen in Table 3-1, the Benzie County population was 17,525 in 2010, an increase of 10 percent from 2000 (15,998). Almira Township and Benzonia Township made up the greatest share of residents, while Platte, Blaine, and Weldon were the most sparsely populated. Due to the County's appeal to visitors and tourists, it is not uncommon for the population to double during the summer season.³

Over the last decade, the County has experienced a higher rate of population growth than the surrounding counties. As documented in the socio-economic trends update to the County Comprehensive Plan,⁴ this growth is fueled by two distinct factors: in-migration of retirees in the western parts of the County, and in-migration of younger families in eastern Benzie County. The townships of Lake and Crystal Lake and the City of Frankfort are retiree destinations, while the townships of Almira, Homestead, Inland, and Colfax are bedroom communities of Traverse City. Almira and Inland in particular had growth rates of 30 percent between 2000 and 2010, as compared to 10 percent for the County and a decline for Michigan overall.

The presence of retirees also influences the age structure of the County. Lake Township has the oldest population by far, with almost half of its residents age 65 and over. In contrast, the median age in the townships of Almira and Inland is less than 40. The overall County median age is 46, with about 21 percent of the population age 65 and over. Projections by the University of Michigan show the aging trend will continue; seniors will increase to 26 percent of the County population by 2030.

In addition, projections show that Benzie County will have population growth greater than the statewide average between 2010 and 2040.⁵ The counties near Traverse City, characterized as "tourist-oriented and retiree-friendly," will be one of the fastest growing areas of the state over the next thirty years. Along with neighbors Leelanau and Grand Traverse, Benzie County is also expected to have job growth greater than 150 percent of the statewide average between 2010 and 2040.

³ The Benzie County Convention & Visitors Bureau estimates an increase as high as sevenfold, based on hotel room stays and other lodgings.

⁴ See http://www.benzieco.net/PDF/Planning_Zoning/Socio-Economic_Trends_BCCP.pdf.

⁵ Grimes, D. and G. Fulton, The Economic and Demographic Outlook for Michigan through 2040. University of Michigan. March 2012. <http://irlee.umich.edu/clmr/Docs/Outlook-Michigan-thru2040.pdf>.

Table 3-1: Population of Benzie County, Michigan

Place	1990 Pop.	2000 Pop.	2010 Pop.	1990 - 2000 Change	2000 - 2010 Change	65+ (2010)	Median Age (2010)
Michigan	9,295,297	9,938,444	9,883,706	7%	-1%	14%	38.9
Benzie Co.	12,200	15,998	17,525	31%	10%	21%	46.2
Almira	1,449	2,811	3,645	94%	30%	11%	38.9
Benzonia	2,405	2,839	2,727	18%	-4%	27%	50.6
Blaine	424	491	551	16%	12%	31%	53.3
Colfax	415	585	657	41%	12%	12%	41.5
Crystal Lake	759	960	957	26%	0%	31%	55.7
Frankfort	1,546	1,513	1,286	-2%	-15%	36%	54.6
Gilmore	794	850	821	7%	-3%	23%	48.3
Homestead	1,477	2,078	2,357	41%	13%	15%	42.5
Inland	1,096	1,587	2,070	45%	30%	11%	39.7
Joyfield	626	777	799	24%	3%	18%	45
Lake	508	635	759	25%	20%	48%	64.3
Platte	253	342	354	35%	4%	22%	51.4
Weldon	448	530	542	18%	2%	21%	46.6

Population Density

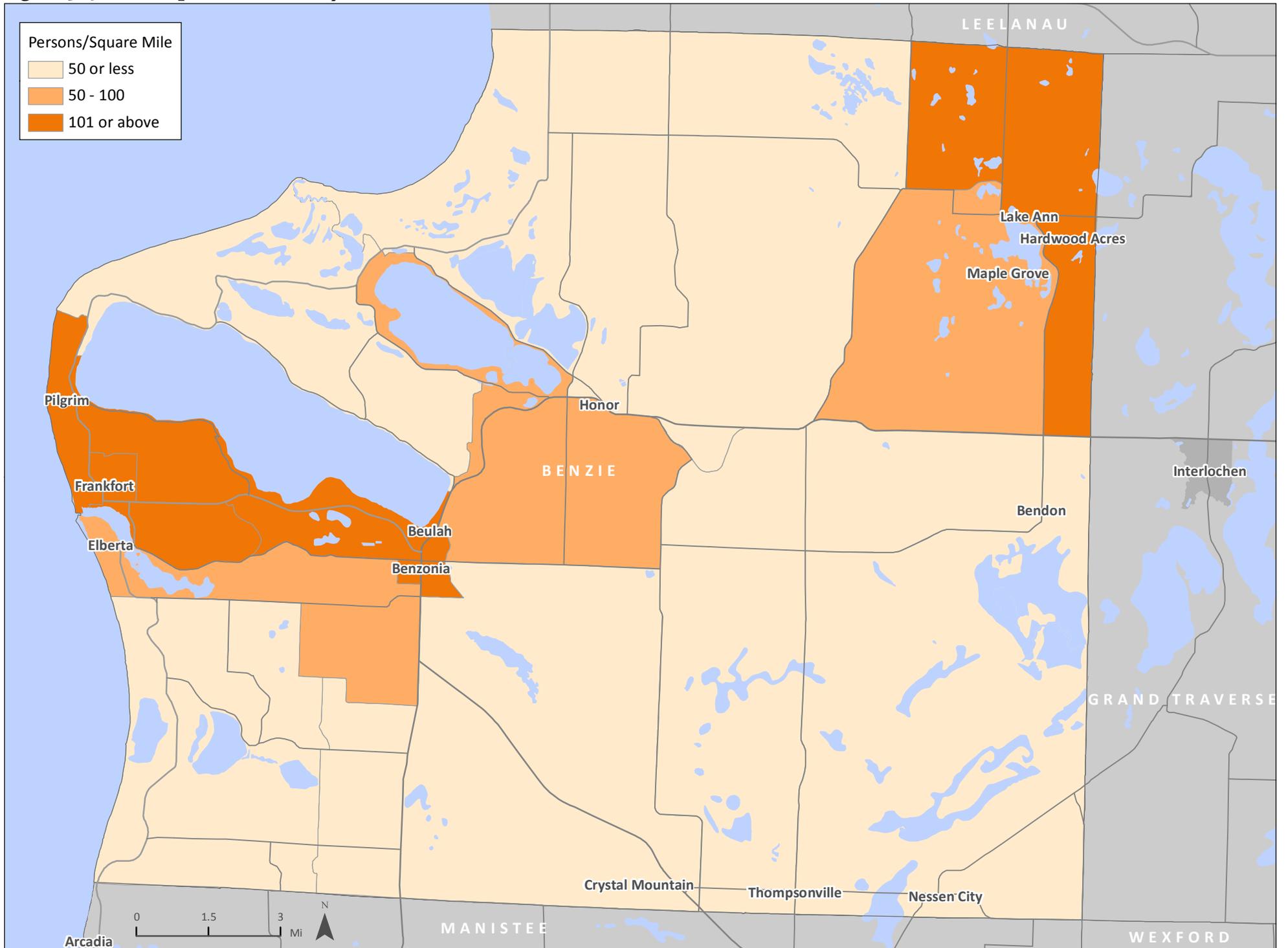
Population density is often an effective indicator of the types of public transit services that are most feasible within an area. While exceptions exist, places with high density (in persons per square mile) are better able to sustain frequent, daily fixed-route transit service. As density falls, dial-a-ride/demand response or deviated fixed-route services may be more appropriate. Figure 3-4 portrays Benzie County's population density by Census block group. The block groups with the highest population density are clustered near Frankfort, Benzonia, and Lake Ann.

Transit Dependent Populations

Transportation needs are defined in part by identifying the relative size and location of those segments within the general population that are most likely to depend on transit services. Determining the location of these transit dependent populations allows for an evaluation of the extent to which current transit services meet community needs.

The transit dependence index (TDI) is an aggregate measure displaying relative concentrations of transit dependent populations. Five factors made up the TDI calculation, as shown in the following formula:

Figure 3-4: 2010 Population Density



$$\text{TDI} = \text{PD} * (\text{AVNV} + \text{AVE} + \text{AVY} + \text{AVBP})$$

PD: population density, or population per square mile

AVNV: amount of vulnerability based on no vehicle households

AVE: amount of vulnerability based on elderly populations

AVY: amount of vulnerability based on youth populations

AVBP: amount of vulnerability based on below poverty populations

In addition to population density, the factors above represent specific socioeconomic characteristics of Benzie County residents. For each factor, individual block groups are classified according to the prevalence of the vulnerable population relative to the County average. The factors are then put into the TDI equation to determine the relative transit dependence of each block group (very low, low, moderate, high, or very high).

The transit dependence index percentage (TDIP) provides a complementary analysis to the TDI measure. The TDIP measures degree rather than amount of vulnerability; it does not highlight block groups that are likely to have higher concentrations of vulnerable populations only because of population density. The TDIP for each block group was calculated with the following formula:

$$\text{TDIP} = \text{DVNV} + \text{DVE} + \text{DVY} + \text{DVBP}$$

DVNV: degree of vulnerability based on autoless households

DVE: degree of vulnerability based on elderly populations

DVY: degree of vulnerability based on youth populations

DVBP: degree of vulnerability based on below poverty populations

Figure 3-5 displays the overall TDI rankings for Benzie County. The center of the County and the northeastern corner have block groups with a TDI classification of high, roughly corresponding to Benzonia, Beulah, Honor, Thompsonville, and Lake Ann. Figure 3-6 shows the TDIP, again highlighting the block group covering Benzonia. It is important to note that block group size in rural places like Benzie County can at times obscure fine grain trends. However, the TDI and the TDIP still suggest areas of potential need for transit service in relation to the County overall.

Autoless Households

Households without at least one personal vehicle are more likely to depend on the mobility offered by public transit than those households with access to a car. Although autoless households are reflected in both the TDI and TDIP measures, displaying this segment of the population separately is important since many land uses in Benzie County are at distances too far for non-motorized travel. Figure 3-7 displays the relative number of autoless households.⁶ The greatest numbers occur between Frankfort and Benzonia.

⁶ The classification scheme of “very low” to “very high” (for autoless households, senior adults, and individuals with disabilities) depicts each block group relative to the County average. It is important to note that a block group classified as “very low” can still have a significant number of potentially transit dependent persons; “very low” in this scheme only means below the County average. At the other end of the spectrum, “very high” means a number greater than twice the County average.

Figure 3-5: Transit Dependence Index

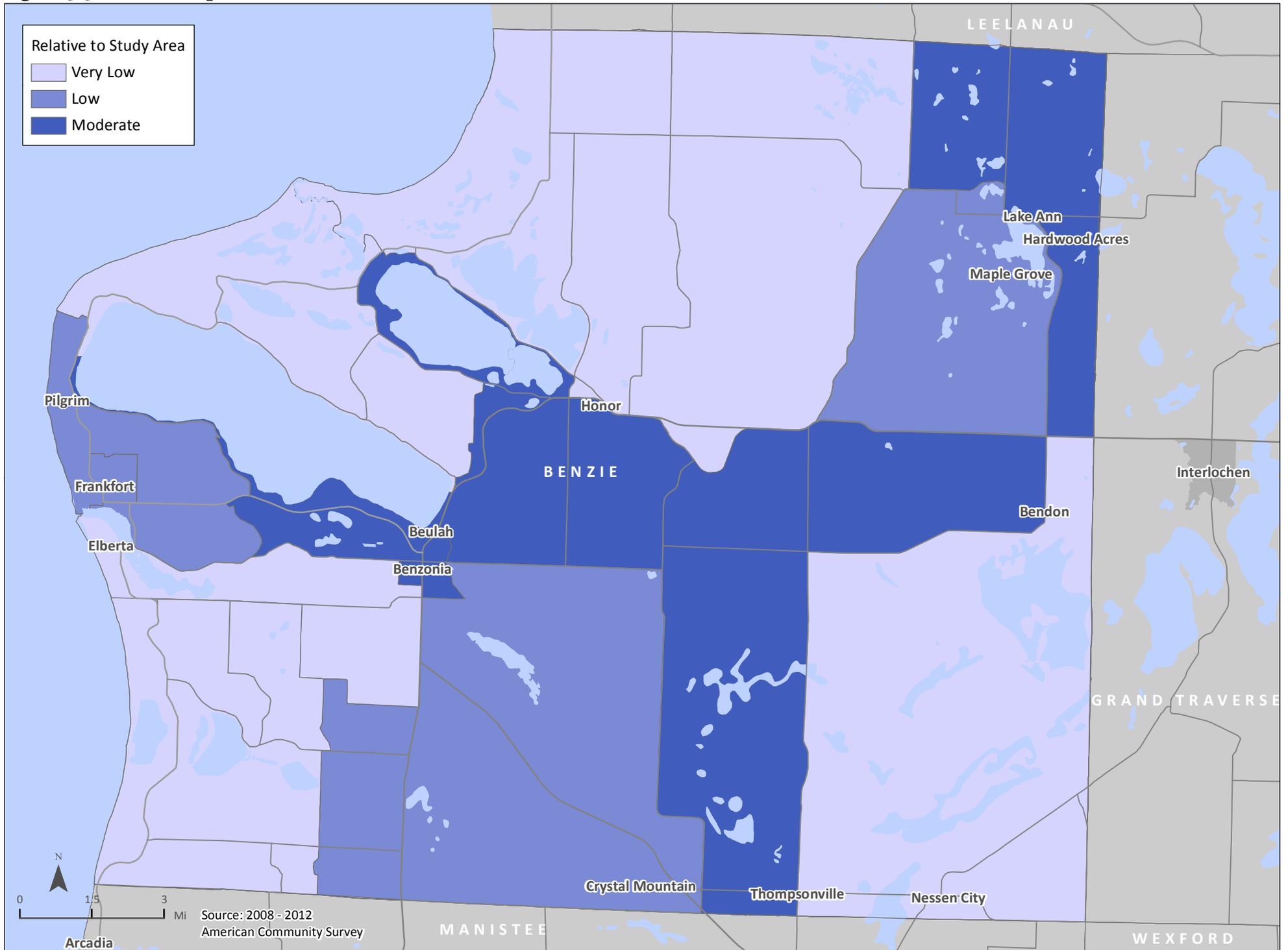


Figure 3-6: Transit Dependence Index Percentage

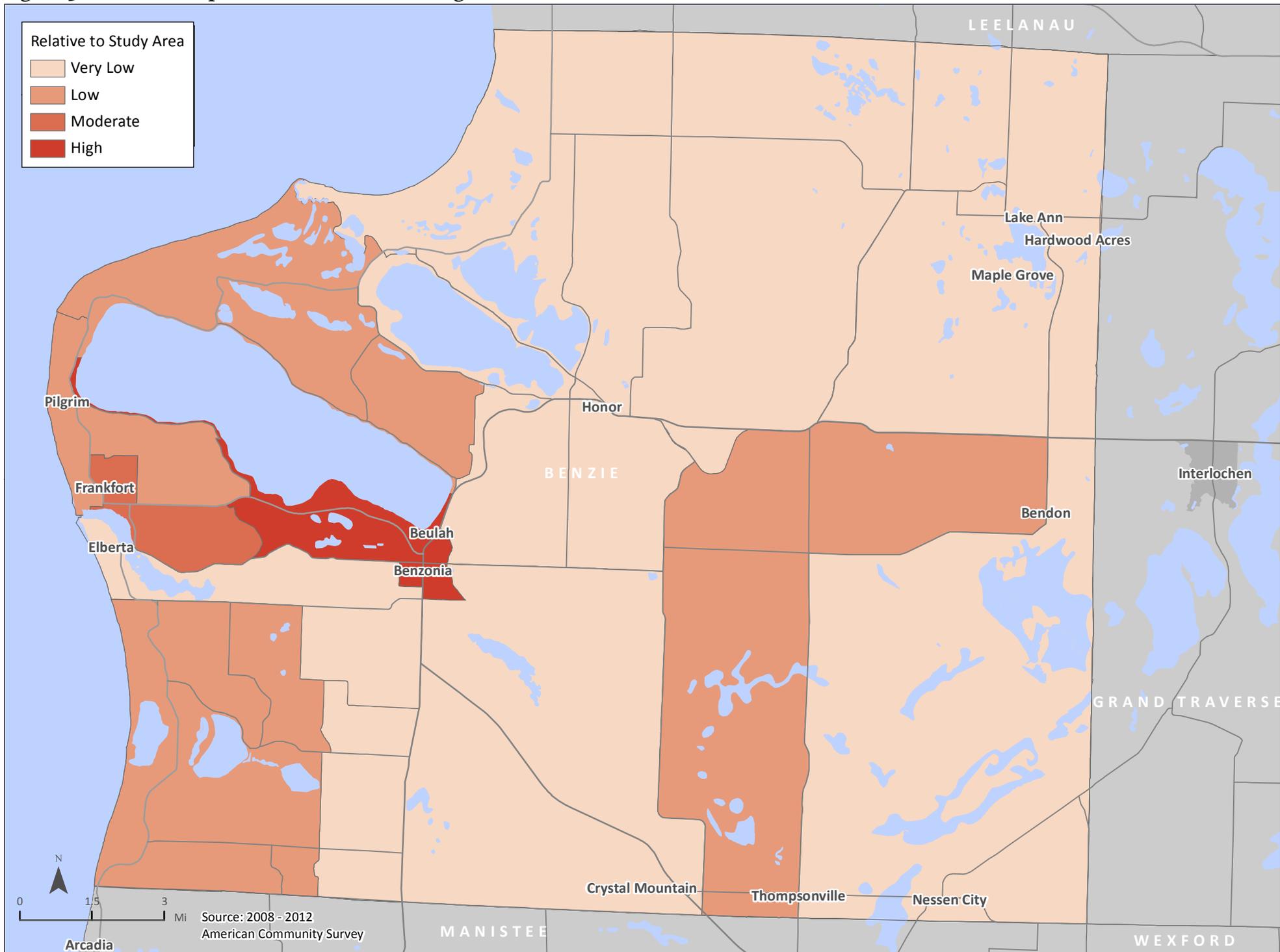
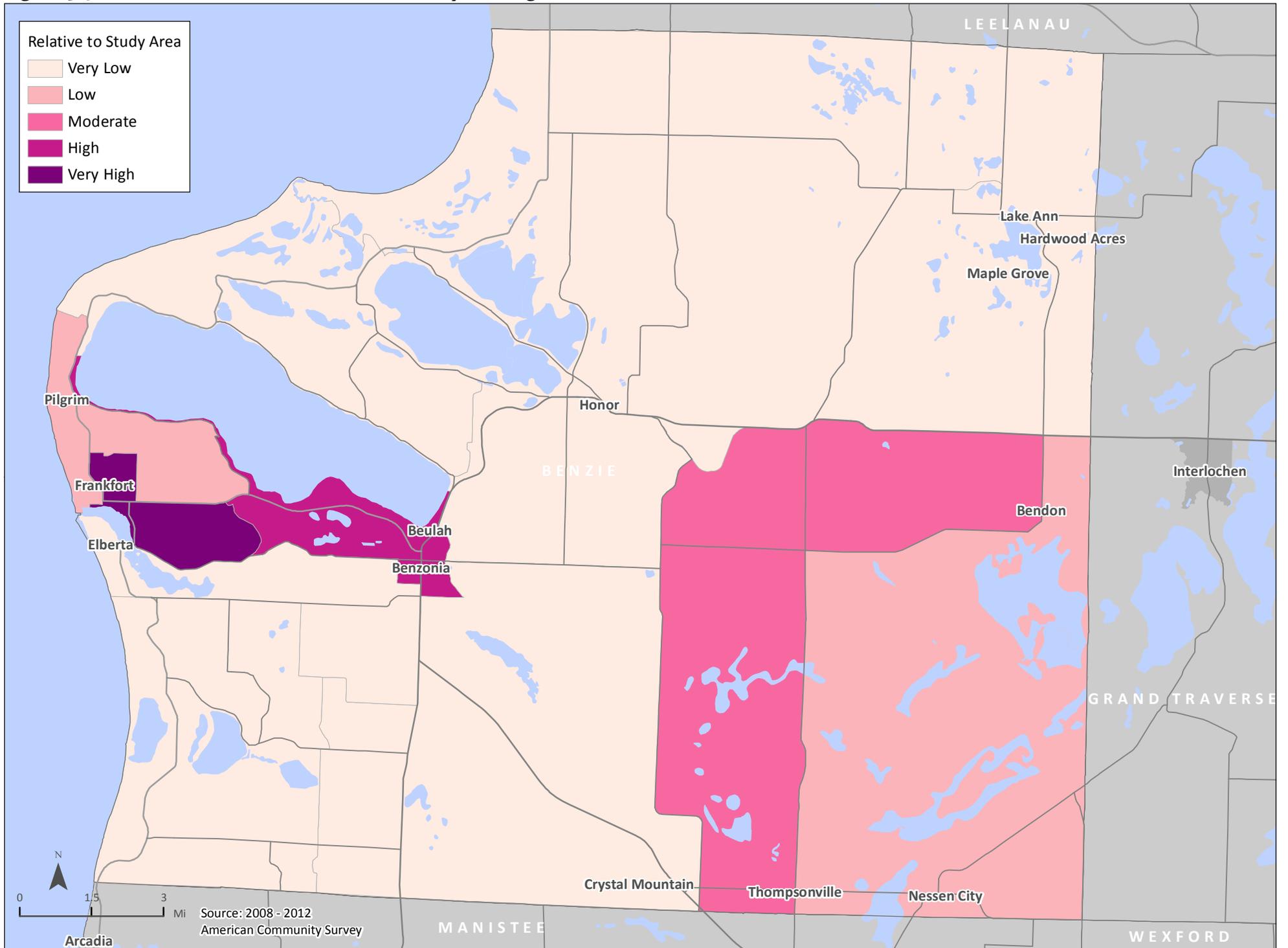


Figure 3-7: Autoless Households, Benzie County, Michigan



Senior Adult Population

Another socioeconomic group analyzed by the TDI and TDIP indices is the senior population. Individuals 65 years and older may scale back their use of personal vehicles as they age, leading to greater reliance on public transportation compared to those in other age brackets. Figure 3-8 displays the relative concentration of seniors in Benzie County. The block groups classified as high are in areas near Honor and Frankfort.

Individuals with Disabilities

Due to changes in Census and American Community Survey reporting, the 2008-2012 ACS provides the most recent data available to analyze the prevalence and geographic distribution of individuals with disabilities. However, unlike the factors above, the data is only available at the tract level, not the block group. Though it cannot show finer trends, this information is still important to consider; those with disabilities may be unable to operate a personal vehicle and consequently more likely to rely on public transportation. Shown in Figure 3-9, the Census tract that covers the eastern part of the County has the highest numbers of individuals with disabilities.

Low-Income Population

Those who earn less than the federal poverty level may face financial hardships that make the ownership and maintenance of a car difficult. Figure 3-10 depicts the percentage of below-poverty individuals per block group. Areas with a classification of high include the block groups covering the center of the County, from Honor to Thompsonville.

LAND USE PROFILE

Identifying land uses and major trip generators in Benzie County complements the above population profile by indicating where transit services may be most needed. Trip generators attract transit demand and include common origins and destinations like multi-unit, subsidized, and senior housing, major employers, medical facilities, educational facilities, non-profit and governmental agencies, and shopping centers. Trip generators are mapped in Figure 3-11.

The majority of trip generators in Benzie County correspond to the US 31 and M115 corridors. Most are clustered in Frankfort, Benzonia, Beulah, and Honor. Community/government facilities include libraries, township halls, the Benzie Recovery Center, and the Gathering Place. Major employers within Benzie County include Crystal Mountain (approximately 675 total employees), Magna (approximately 400 total employees), Graceland Fruit, Paul Oliver Memorial Hospital, Smeltzer Orchard, the Benzie County government, The Maples, and Honor Bank.⁷ Given their broad geographic draw, trip generators outside of the County are also depicted; these include shopping centers, Northwestern Michigan College, and Munson Medical in Traverse City.

⁷ Traverse City Area Chamber of Commerce, employers ranked by county and number of employees (2011). <http://tchamber.org/expertise-and-information/>. Current numbers (cited in text) provided to Benzie Bus by Crystal Mountain and Magna.

In addition to considering the locations of major employers, it is also important to take into account the commuting patterns of residents working inside and outside of the County. Benzie County is closely linked to the employment center of Traverse City. According to ACS five-year estimates, about half of Benzie County workers 16 years and older work at locations within the County, and half work outside the County but within the state.⁸ As noted earlier, the 2014 Northwest Michigan Regional Transportation Plan verifies the dominant flow of workers from Benzie County to Grand Traverse County (approximately 2,900 workers). This pattern highlights the need for transit options that cross county lines, in addition to reliable, frequent service within Benzie County.

⁸ American Community Survey, 2008-2012 five year estimates. Table B08130.

Figure 3-8: Seniors (65+), Benzie County, Michigan

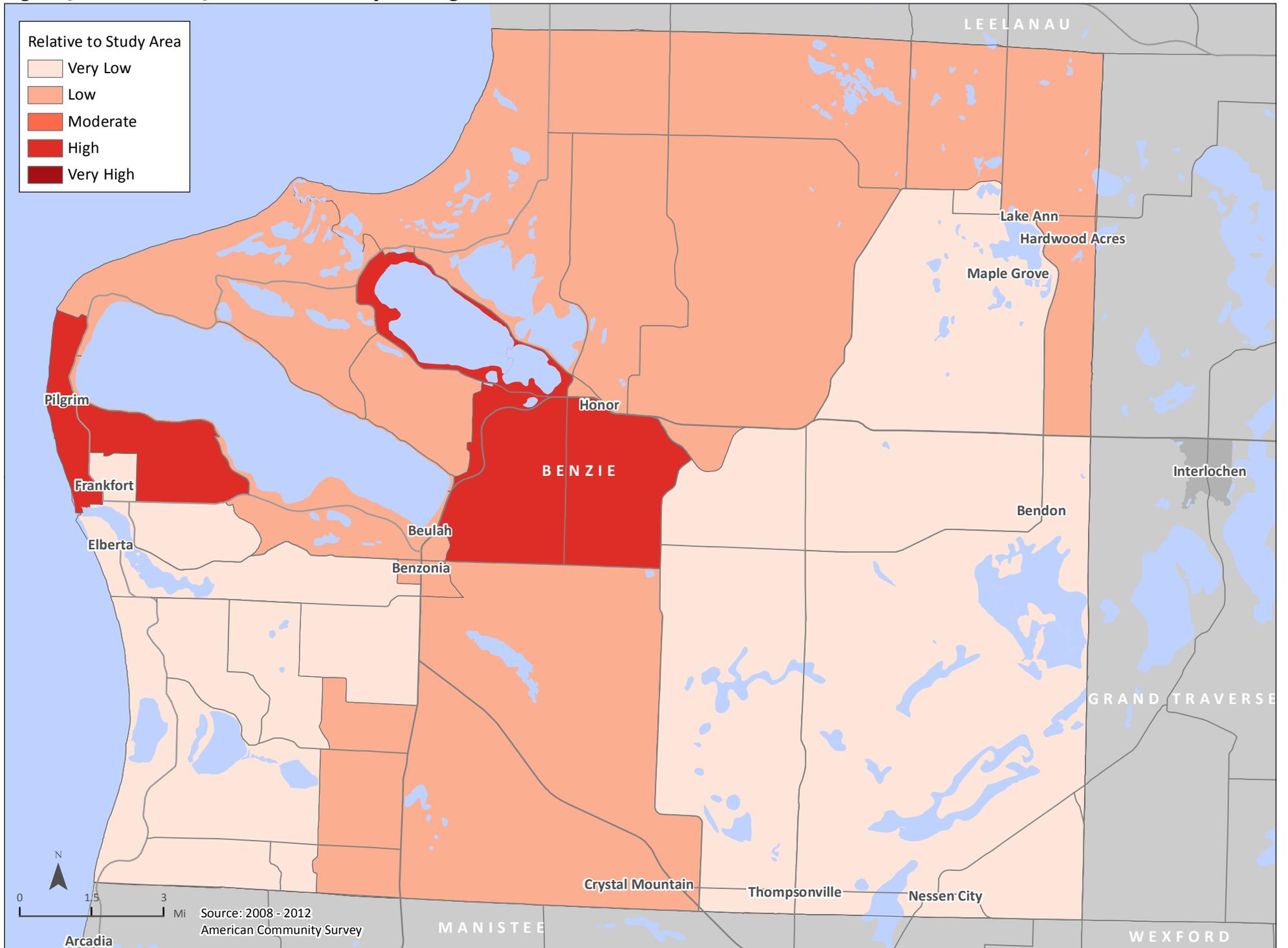


Figure 3-9: Individuals with Disabilities, Benzie County, Michigan

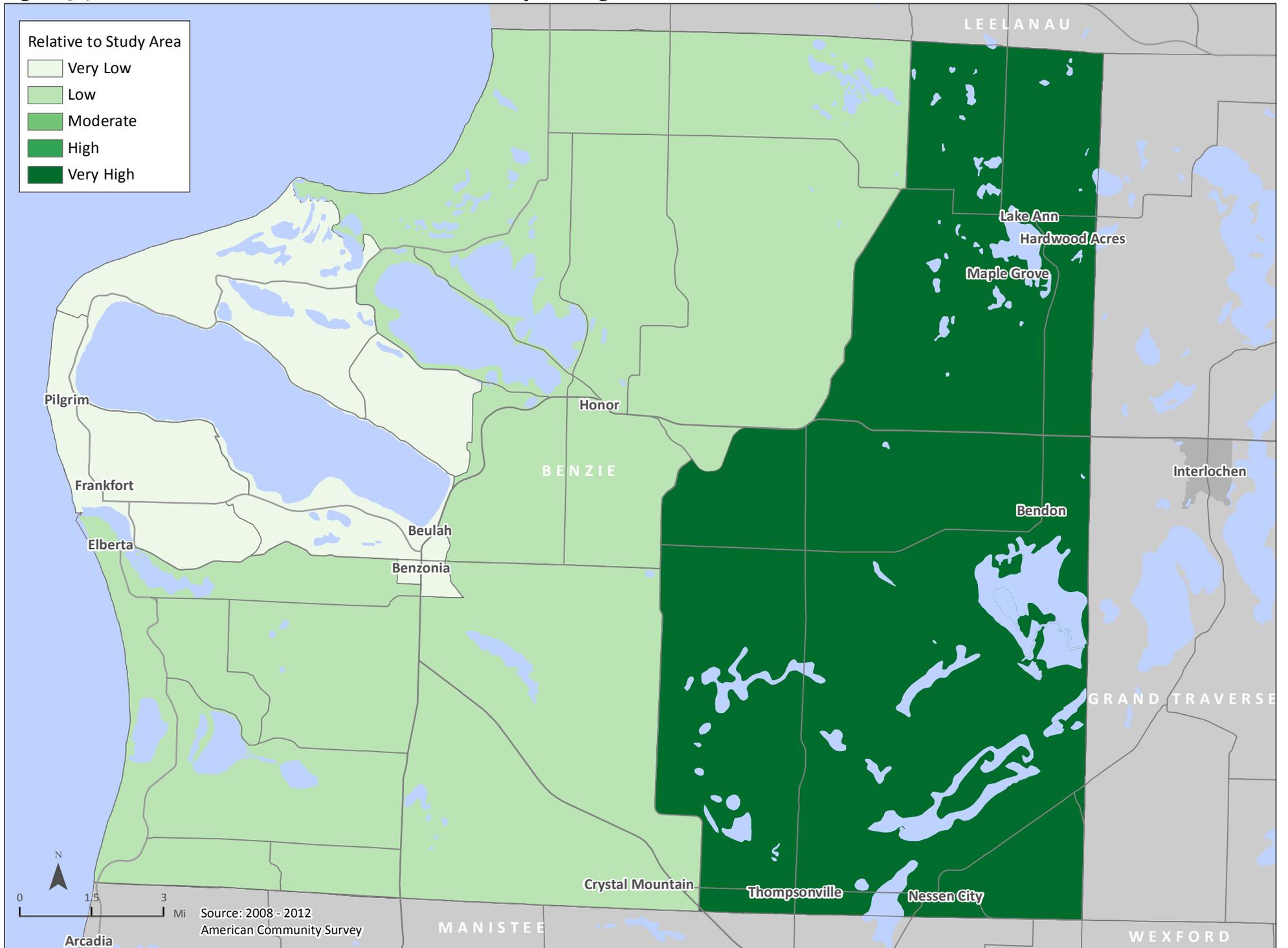
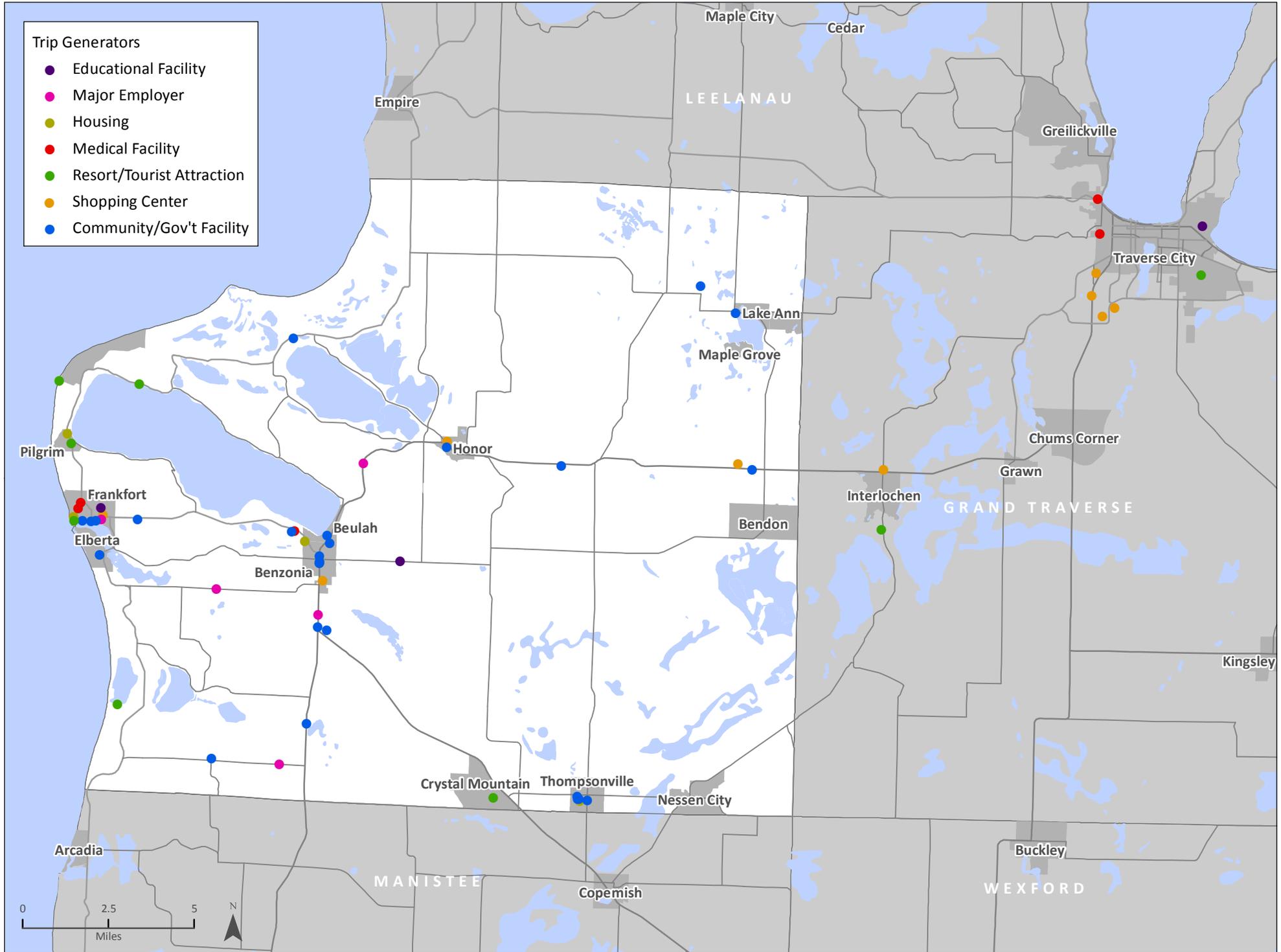


Figure 3-11: Benzie County Major Origins and Destinations



Chapter Four

Service and Organizational Alternatives

INTRODUCTION

This chapter presents potential service and organizational alternatives to improve current Benzie Bus services. The alternatives were developed by assessing existing Benzie Bus services, evaluating transit needs identified through extensive outreach efforts, and analyzing demographic data and projected development and economic growth. Benzie Bus staff and the project team reviewed the alternatives in November 2014, and favored alternatives are detailed in subsequent chapters of the TDP.

POTENTIAL SERVICE ALTERNATIVES

This section discusses the potential service alternatives for Benzie Bus. As noted earlier, these alternatives were developed based on the review of existing transit services, the needs analysis, outreach results, and input from the project team. Each potential alternative is detailed with advantages, disadvantages, and likely impacts on ridership, revenues, and costs.

The alternatives focus on the following:

- Expanding scheduled service and implementing route adjustments.
- Modifying the reservation policy based on scheduled service improvements.
- Modifying the fare structure to encourage use of scheduled services.
- Expanding dial-a-ride evening services.
- Implementing new Sunday service.
- Revising marketing materials and increasing public information.
- Improving passenger comfort and amenities.
- Considering software improvements.

Expand Scheduled Service / Implement Route Adjustments

Currently Benzie Bus services are a mix of dial-a-ride and scheduled services. Though dial-a-ride provides customers with door-to-door service, it is also the most expensive form of transit to operate on a per trip basis. It is very labor intensive, with the need for customers to contact the Benzie Bus office for virtually all trips. The variable nature of dial-a-ride services also makes it difficult to keep vehicles to their scheduled pickup/drop off times. 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.

This alternative proposes that Benzie Bus build upon its current scheduled services, placing a greater focus on the corridors between Frankfort, Beulah, Honor, and Thompsonville. Participants at the community summit identified service between these communities as high priorities. Three different options are presented for consideration, with the following common characteristics:

- Scheduled services are intended to make Benzie Bus more convenient and dependable by minimizing travel time and the need for transfers.
- Scheduled services would operate from approximately 7 a.m. to 8 p.m. on weekdays and until 5 p.m. on Saturdays.
- Saturday service that was reinstated in June 2014 would be maintained, while the area currently served by the Flex Route would return to more frequent service.
- Routes would either have the ability to deviate, serving destinations within three quarters of a mile, or utilize complementary paratransit.
- Since the current Flex Route may not continue to deviate or “flex,” a new naming scheme is recommended to discern different routes.
- Dial-a-ride services would continue to operate outside the hours of the scheduled services (see the alternative on expanded evening services), as well in areas of the County farther than three quarters of a mile from the scheduled routes.
- Routes would operate every run, and not require reservations unless a “flex” pickup or drop-off is needed. A proposed modified reservation policy is discussed as a subsequent alternative in this memorandum.
- No modifications to the TC Express are proposed at this time; general transit industry guidelines recommend waiting 12-18 months before making modifications to new services. However, the options below all complement the current TC Express by adding a mid-day connection to Interlochen.

Option 1:

This option proposes operating two vehicles to achieve hourly service on the Frankfort - Benzie Bus corridor (via Shop N Save). Operating as the proposed Blue Route (or the Frankfort - Honor

Flex), it is based on the timing of the current Flex Route, with a return to hourly frequencies. A third vehicle would operate as the proposed Gold Route (or the Thompsonville Flex) and provide hourly service between Thompsonville and Benzonia except for a three hour mid-day gap, allowing for timed connections at Shop N Save. The Gold Route would also make one trip to Ric's in Interlochen at mid-day, connecting to BATA.

This option has the advantage of being immediately understandable to riders, with less need for printed schedules. Its downside is that the hourly service to and from Thompsonville may be more than current demand. It also uses three vehicles throughout the day, leaving fewer resources to devote to dial-a-ride.

Option 2:

This option uses one vehicle to provide core service every two hours between Frankfort and Benzie Bus via Shop N Save on the Blue Route (the current Flex Route). However, a second vehicle would operate as the Gold Route and alternate between Thompsonville and Frankfort and Thompsonville and Benzie Bus, offering a one seat ride twice a day to both destinations. In combination, the Gold Route would provide eight round trips per day between Thompsonville and Shop N Save. This route would also supplement service on the Frankfort - Benzie Bus corridor, making the service seem closer to hourly to riders.

Depending on project team consensus, the Gold Route could instead do all trips between Thompsonville and Frankfort, or all trips between Thompsonville and Benzie Bus (i.e. tailored to the greatest need for a one seat ride from Thompsonville rather than alternating trips). A third vehicle (primarily doing dial-a-ride service) would make a mid-day scheduled trip to Interlochen under this option.

Option 3:

This option concentrates service between Frankfort and Honor Plaza on the Blue Route, assuming that the Benzie Bus facility is not, by itself, a destination. This option also assumes that Benzie Bus vehicles can complete the trip (and any necessary deviations) between Frankfort and Shop N Save and Honor Plaza in roughly twenty-two minute segments. The shorter distance would allow for a frequency of every 1.5 hours using one vehicle (from every 2 hours as in Option 2). As in Option 2, a second vehicle would provide service to and from Thompsonville as the Gold Route. The Thompsonville - Frankfort service would occur consistently ever 3.5 hours, as would the Thompsonville - Honor Plaza service. Together, Thompsonville to Shop N Save would be served every hour and forty-five minutes. Also like Option 2, the second vehicle would supplement the service on the Frankfort - Honor Plaza corridor, making frequencies seem like every 45 minutes for riders during several chunks of the day. Similar to Option 2, a third vehicle (primarily doing dial-a-ride) would make the mid-day scheduled trip to Interlochen.

Figure 4-1 shows conceptual maps for Option 1, 2, and 3. Table 4-1 provides sample schedules, and Table 4-2 provides a summary of the options. Appendix E also includes a sample rack card.

Figure 4-1: Proposed Routes

- Blue Route (Frankfort - Honor Flex)
- Gold Route (Thompsonville Flex)
- Proposed Stops

Option 1:

Blue Route hourly
Gold Route hourly, 3hr midday gap

Option 2:

Blue Route every 2hrs (seems hourly with Gold)
Gold Route alternating hourly and every 2hrs

Option 3:

Blue Route every 1hrs 30min (seems like 45min with Gold)
Does not extend to Benzie facility
Gold Route every 1hr 45min

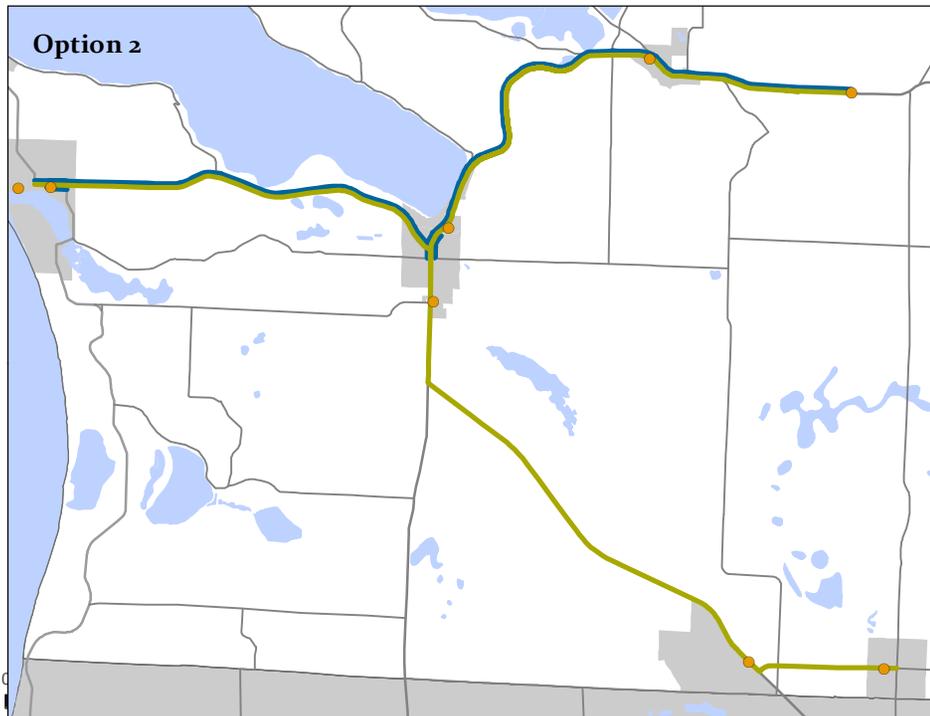


Table 4-1: Sample Schedules

Option 1

Blue Route	AM				PM								
Frankfort <i>City Hall</i> <i>Family Fare</i>	7:00	8:00	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00
Benzonia <i>Benzonia Plaza</i> <i>Gov't Center</i>	7:30	8:30	9:30	10:30	11:30	12:30	1:30	2:30	3:30	4:30	5:30	6:30	7:30
Honor <i>Honor Plaza</i>	7:45	8:45	9:45	10:45	11:45	12:45	1:45	2:45	3:45	4:45	5:45	6:45	7:45
Benzie Bus	8:00	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00
Honor <i>Honor Plaza</i>	8:15	9:15	10:15	11:15	12:15	1:15	2:15	3:15	4:15	5:15	6:15		
Benzonia <i>Gov't Center</i> <i>Benzonia Plaza</i>	8:30	9:30	10:30	11:30	12:30	1:30	2:30	3:30	4:30	5:30	6:30		
Frankfort <i>Family Fare</i> <i>City Hall</i>	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00		

Gold Route	AM				PM							
Thompsonville <i>Crystal Mtn</i>	7:00	8:00	9:00	10:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00
Benzonia <i>Benzonia Plaza</i>	7:30	8:30	9:30	10:30	1:30	2:30	3:30	4:30	5:30	6:30	7:30	8:30
Thompsonville <i>Crystal Mtn</i>	8:00	9:00	10:00	--	2:00	3:00	4:00	5:00	6:00	7:00	8:00	--
Benzie Bus	--	--	--	11:00	--	--	--	--	--	--	--	9:00

Option 2

Blue Route	AM		PM				
Frankfort <i>City Hall</i> <i>Family Fare</i>	7:00	9:00	11:00	1:00	3:00	5:00	7:00
Benzonia <i>Benzonia Plaza</i> <i>Gov't Center</i>	7:30	9:30	11:30	1:30	3:30	5:30	7:30
Honor <i>Honor Plaza</i>	7:45	9:45	11:45	1:45	3:45	5:45	7:45
Benzie Bus	8:00	10:00	12:00	2:00	4:00	6:00	8:00
Honor <i>Honor Plaza</i>	8:15	10:15	12:15	2:15	4:15	6:15	
Benzonia <i>Gov't Center</i> <i>Benzonia Plaza</i>	8:30	10:30	12:30	2:30	04:30	6:30	
Frankfort <i>Family Fare</i> <i>City Hall</i>	9:00	11:00	1:00	3:00	5:00	7:00	

Gold Route	AM		PM						
Thompsonville <i>Crystal Mtn</i>	7:00	9:00	10:00	12:00	1:00	3:00	4:00	6:00	7:00
Benzonia <i>Benzonia Plaza</i> <i>Gov't Center</i>	7:30	9:30	10:30	12:30	1:30	3:30	4:30	6:30	7:30
Frankfort <i>Family Fare</i>	8:00	--	--	--	2:00	--	--	--	--
Benzonia <i>Gov't Center</i> <i>Benzonia Plaza</i>	8:30	--	--	--	2:30	--	--	--	--
Thompsonville <i>Crystal Mtn</i>	9:00	10:00	--	1:00	3:00	4:00		7:00	--
Honor <i>Honor Plaza</i>	--	--	10:50	--	--	--	4:50	--	--
Benzie Bus	--	--	11:00	--	--	--	5:00	--	8:00
Honor <i>Honor Plaza</i>	--	--	11:10	--	--	--	5:10	--	
Benzonia <i>Gov't Center</i> <i>Benzonia Plaza</i>	--	--	11:30	--	--	--	5:30	--	
Thompsonville	--	--	12:00	--	--	--	6:00	--	

Option 3

Blue Route	AM				PM				
Frankfort <i>City Hall</i> <i>Family Fare</i>	7:07	8:37	10:07	11:37	1:07	2:37	4:07	5:37	7:07
Benzonia <i>Benzonia Plaza</i> <i>Gov't Center</i>	7:30	9:00	10:30	12:00	1:30	3:00	4:30	6:00	7:30
Honor <i>Honor Plaza</i>	7:52	9:22	10:52	12:22	1:52	3:22	4:52	6:22	7:52
Benzonia <i>Gov't Center</i> <i>Benzonia Plaza</i>	8:15	9:45	11:15	12:45	2:15	3:45	5:15	6:45	8:15
Frankfort <i>Family Fare</i> <i>City Hall</i>	8:37	10:07	11:37	1:07	2:37	4:07	5:37	7:07	

Gold Route	AM		PM					
Thompsonville <i>Crystal Mtn</i>	7:00	8:45	10:30	12:15	2:00	3:45	5:30	7:15
Benzonia <i>Benzonia Plaza</i> <i>Gov't Center</i>	7:30	9:15	11:00	12:45	2:30	4:15	6:00	7:45
Frankfort <i>Family Fare</i>	7:52	--	11:22	--	2:52	--	6:22	--
Benzonia <i>Gov't Center</i> <i>Benzonia Plaza</i>	8:15	--	11:45	--	3:15	--	6:45	--
Thompsonville <i>Crystal Mtn</i>	8:45	--	12:15	--	03:45	--	07:15	
Honor <i>Honor Plaza</i>	--	9:37	--	1:07	--	4:37	--	8:07
Benzonia <i>Gov't Center</i> <i>Benzonia Plaza</i>	--	10:00	--	1:30	--	5:00		
Thompsonville <i>Crystal Mtn</i>	--	10:30	--	2:00	--	5:30		

Overall Advantages/Disadvantages

- Uses trip data and stakeholder feedback to maximize service to and from key origins and destinations.
- Expanding scheduled service will help solidify the presence and trip patterns of Benzie Bus for the community, making Benzie Bus more appealing to new and/or occasional riders.
- Addresses a need for greater frequency articulated in the community survey.
- Attempts to minimize transfers (especially for those traveling to and from Thompsonville), offering more convenient one seat rides.
- From an operations standpoint, the costs to provide scheduled service are less variable and easier to ascertain than the costs to provide dial-a-ride.
- Scheduled services are potentially more productive than dial-a-ride (more trips per service hour and mile).
- The adjustments would require an education campaign to alert riders and reduce confusion during implementation.
- Any route and schedule adjustments would require Benzie Bus to update its print and web materials.
- A focus on scheduled services with clearly identified stops would require installation of additional bus stop signs.

Table 4-2: Scheduled Service Options

	Option 1	Option 2	Option 3
Frequency Frankfort - Honor (i.e. Blue Route)	Hourly	Every 2hrs, with additional trips on Gold Route	Every 1hr 30min, additional trips on Gold Route (ends in Honor)
Blue Route Annual Hours	7,800	3,900	3,900
Frequency Benzonia - Thompsonville (i.e. Gold Route)	Hourly, 3hr midday gap	Alternating hourly and every 2hrs	Every 1hr 45min
Gold Route Annual Hours	3,900	3,900	3,900
Interlochen Trip Annual Hours	Included in Blue Route	650	650
Scheduled Service Total Annual Hours	11,700	8,450	8,450
Hours remaining for Dial-a-Ride/TC Express*	23,300	26,550	26,550
Projected Operating Costs for Proposed Scheduled Service**	\$519,363	\$375,096	\$375,096

* Assumes 35,179 annual service hours (as in FY2013).

** Assumes FY2013 cost per hour of \$44.39 that includes both scheduled and dial-a-ride services. Actual cost strictly for scheduled services may be lower.

Expenses

- Table 4-2 provides projected service hours and costs for the three options, using the FY 2013 operating cost per hour (\$44.39). This cost per hour included a mix of scheduled services and dial-a-ride, so it is anticipated that the cost for scheduled services only would be slightly lower.

- This alternative would involve costs for redesigning and printing schedules.
- Additional bus stop signs would be needed for key stops (~\$100 each).

Ridership

- The adjustments are intended to increase service quality and convenience, and thus should increase ridership over time.

Modify the Reservation Policy

Benzie Bus has time points for its scheduled services, and it publicizes these on its website and on rack cards. However, riders must still make reservations (4 hours in advance) for the scheduled service or the bus will not make the trip. Although the website and the rack cards clearly state that the routes do not run without reservations, this may still be a source of confusion for new or potential riders.

Benzie Bus is at a point in its development as a system where it should consider deviated fixed routes that run regardless of requests. As noted previously, scheduled services add to a transit system's convenience and reliability; riders will be able to go to a stop at a certain time and be sure of their transportation. Amending the reservation policy will also encourage the use of scheduled routes over dial-a-ride, as scheduled routes will no longer involve the hassle of calling ahead. Community survey respondents confirmed that the need to make a reservation in advance is one reason why they do not currently use Benzie Bus. According to Benzie Bus staff, the Flex Route between Frankfort and the Benzie Bus facility runs almost 99 percent of the time. Demand for the other scheduled services is more variable.

This alternative proposes that Benzie Bus begin running scheduled routes as proposed in the previous alternative every scheduled time. Benzie Bus will need to advertise the policy change, letting riders know that they no longer need to call ahead. However, riders would still need to call if their trip necessitates a deviation from the route, and/or a transfer to a dial-a-ride vehicle.

Advantages/Disadvantages

- Makes Benzie Bus more appealing for riders. Survey respondents who do not currently use Benzie Bus cited the need to make a reservation as one reason for not riding.
- Reduces call volume to dispatch office and allows operational staff to focus on other aspects of service.
- Will require rider education/marketing efforts. Benzie Bus will also need to update its rack cards and website.
- Modifying the reservation policy comes with the risk that vehicles may run without riders on some trips.

Expenses

- Reducing call volume may allow for a shift in dispatch hours to other operational or administrative responsibilities.
- Running all trips will increase the operating costs of scheduled services; however these costs could be offset by a decreased need for more expensive individual dial-a-ride trips and for dispatch office coverage.

Ridership

- Amending the reservation policy is unlikely to impact ridership in the near term. However, in conjunction with other service enhancements, it should help to increase ridership over time.

Modify the Fare Structure

Benzie Bus fare is currently \$3.00 for a regular one-way trip, with free transfers. About half of current riders pay a discounted fare of \$1.50. In addition, riders pay the same fare regardless of whether they use scheduled services or dial-a-ride. Though in some cases riders are using both, the existing fare structure has the effect of putting scheduled service in competition with dial-a-ride. Riders do not have an incentive to use scheduled service, even if their mobility allows them to easily reach a designated stop.

The relationship between fares and ridership, or demand elasticity, is a critical consideration for fare policy. In general, ridership decreases as fares increase. Previous research calculates demand elasticity as -0.3 to -0.4 , meaning that a 10 percent increase in fares results in a 3 to 4 percent decrease in ridership.^{1,2} Fare elasticity varies in different contexts: riders may be less sensitive to a fare increase if their trip is non-discretionary, or if they have limited access to substitute modes. This analysis uses -0.3 , recognizing that the majority of Benzie Bus riders do not have an alternative means of travel and are likely less sensitive to a fare increase than are choice riders.

This alternative proposes adjusting fares to incentivize scheduled services. Three options are available for consideration by Benzie Bus and the project team in order to establish a clear distinction between the two different services:

- Reducing fares for scheduled services and increasing fares for dial-a-ride.
- Maintaining fares for scheduled services and increasing fares for dial-a-ride.
- Reducing fares for scheduled services and maintaining fares for dial-a-ride.

Table 4-3 details the impacts of these modifications to ridership and farebox recovery. It should be stressed that the calculations are imprecise since the split between scheduled service and dial-a-ride is an estimate based on a sampling of passenger data. It is also unclear how many customers currently transfer between the two services.

Other considerations include the timing of any fare modifications related to the proposed scheduled service and reservation policy alternatives. For example, the reservation policy may do more to change behaviors (and change ridership) than anything to do with fares. The goal for Benzie Bus for this alternative is to incentivize scheduled service but not lose fare revenue in the process, or create ill will in the community by raising fares. In addition, any change to the fare structure would involve an appropriate public notice process.

¹ Hanly, M., and Dargay, J. (1999). Bus Fare Elasticities: A Literature Review. Report to the Department of the Environment, Transport and the Regions.

² Pham, L., and Linsalata, J. (1991). Fare Elasticity and its Application to Forecasting Transit Demand. APTA. www.apta.com/resources/reportsandpublications/Documents/effects_of_fare_changes.pdf.

Table 4-3: Possible Fare Change Outcomes

Proposed Fare Changes	Estimated Ridership*	Estimated Fare Revenue*
Reduce Scheduled Service Fare (\$2.00) Increase Dial-a-Ride Fare (\$4.00)	13% increase	----
	8% decrease	----
	4% increase overall	6% decrease overall
Maintain Scheduled Service Fare (\$3.00) Increase Dial-a-Ride Fare (\$4.00)	No change	----
	8% decrease	----
	3% decrease overall	9% increase overall
Reduce Scheduled Service Fare (\$2.00) Maintain Dial-a-Ride Fare (\$3.00)	13% increase	----
	No change	----
	8% increase overall	15% decrease overall

*Assumes that for every 10% fare increase there is a 3% loss in ridership.

*Assumes that 40% of current trips are dial-a-ride and 60% are scheduled (Flex Route or TC Express).

Advantages/Disadvantages

- Raising dial-a-ride fares while maintaining scheduled service fares would increase farebox revenue. However, this would be hardship for some customers unless a scheduled route could meet their travel need.
- An increase in fares may cause ill will with some residents, while others may see it as appropriate. These factors need to be taken into account in relation to the upcoming millage vote.
- A decrease in fares for scheduled services would encourage some customers to use these services and help to increase ridership, though monies through farebox recovery ratio could be lower.
- While farebox recovery may be lower, the costs to provide scheduled service are more predictable as compared to providing dial-a-ride.
- Productivity (trips per hour and mile) on the overall system should improve as customers are encouraged to use scheduled routes.

Expenses

- Expenses to implement the fare change would be minimal. Staff would need to advertise the fare change to the public and to current riders. Since some riders are accustomed to dial-a-ride, a marketing campaign may be necessary to encourage them to change their habits.
- As outlined in Table 4-3, some of the fare change options are projected to reduce farebox recovery.

Ridership

- Table 4-3 provides estimates of each option's impact on annual ridership.

Expand Evening Dial-a-Ride Service

Benzie Bus provides dial-a-ride service from 5 a.m. to 8 p.m. on weekdays and from 7 a.m. to 5 p.m. on Saturday. Despite a recent extension in dispatch hours (previously 6 a.m. to 5 p.m. on

weekdays), riders gave hours of service the most “unsatisfied” or “very unsatisfied” rankings in the onboard survey. Similarly, hours of service was the most common response from riders when asked what they liked the least.

The current service span can be problematic for those who work outside of traditional shifts, especially in health care and hospitality. Though riders can request and take dial-a-ride trips until 8 p.m. on weekdays, the overwhelming call for later evening hours may in part be due to limited scheduled service. For example, the last scheduled service leaving Frankfort is either at 4 p.m. on the Flex Route or at 5:45 p.m. on the TC Express.

While much of the focus of the previous alternatives is on providing mobility through schedule services, this alternative recognizes that the nature of later trips is more conducive for dial-a-ride services. This alternative proposes extending service hours until 10 p.m., Monday through Friday, and until 7 p.m. on Saturday. Future considerations could include late night service on the weekends for people patronizing local restaurants and bars. This could help address safety concerns related to drinking and driving.

Advantages/Disadvantages

- Addresses a need articulated by riders and the general public.
- Would offer transportation options for evening activities and for jobs that require later shifts.
- Extended hours would increase annual operating expenses.

Expenses

- Using FY 2013 cost per hour of \$44.39, two additional evening hours Mondays through Saturday would cost about \$27,700 annually in operating expenses for each vehicle needed in service.
- No additional capital would be required. The increased use of current vehicles would slightly accelerate vehicle replacement.
- Assuming a farebox recovery of 9 percent, the net deficit for this service would be about \$25,200 per vehicle in service.

Ridership

- While expanding evening hours is the top priority of current customers, additional hours would likely have lower ridership than current services. Using an estimate of 1.25 passenger trips per hour, extended evening service would generate approximately 780 passenger trips annually per service hour.

Implement Sunday Service

Benzie Bus does not currently operate on Sundays. As a result, riders must find other Sunday transportation options or not make their desired trips. After later evening hours, respondents to the onboard survey chose Sunday service as the next most useful potential improvement.

This alternative proposes that Benzie Bus initiate Sunday service as funding permits. The span of service could replicate Saturdays (7 a.m. to 5 p.m.) or be shorter (9 a.m. to 2 p.m.). While a top

need through the rider survey, it is anticipated that demand for services would not be extensive, and therefore dial-a-ride would probably be the most effective service mode. Given stakeholder input, Sunday service should be a lower priority than expanded evening hours.

Advantages/Disadvantages

- Offers additional mobility for employment, essential shopping, and trips to places of worship.
- Addresses a need expressed in rider surveys.
- Requires additional operating costs.
- Sunday ridership will likely be lower than that on current Monday through Saturday services.

Expenses

- Using a cost per hour of \$44.39, Sunday service for five hours would result in approximately \$11,500 in annual operating expenses per vehicle in service.
- Using a farebox recovery of 9 percent, the net deficit for this service would be about \$10,500 annually per vehicle in service.
- Current fleet vehicles could be used, so no immediate additional capital costs would be incurred.

Ridership

- While Sunday service is critical for residents who lack transportation options, this service would likely have relatively low ridership. Using an estimate of 1.25 passenger trips per hour, Sunday service would generate about 325 additional passenger trips annually per vehicle in service.

Revise Marketing Materials and Increase Public Information

Benzie Bus has initiated several marketing efforts in recent months, including new rack cards, a Facebook page, and a revamped website. This alternative recommends that Benzie Bus continue these efforts, enhancing communications with riders and the public through online and print materials. Limited public information is not an issue for regular riders, but it poses a barrier for riders who are unfamiliar with the system.

Benzie Bus revised its schedule/map brochure for newly designed new rack cards in summer 2014. Though the rack cards have the advantage of highlighting services by community, additional improvements are possible. One strategy is to reformat the rack cards by route, similar to the TC Express card. Each should include time points for all stops; currently riders cannot tell when they will arrive at their destination, only when they should depart. The system-wide route map will continue to allow riders to see at a glance all the services that are available. Discounted fares should also be listed, along with the system's Title VI statement. Regardless of content changes, any route adjustments that occur as a result of this study would also necessitate reprinting.

Benzie Bus can augment its marketing efforts through physical improvements like bus stop signs and shelters. Community survey respondents indicated that having shelters/benches at key stops was a priority improvement. Benzie Bus already installed 17 bus stop signs and hopes to install

one shelter (at Family Fare in Frankfort, formerly Glen's) in spring 2015. Staff should prioritize additional locations for signs and shelters, implementing these as resources allow.

Benzie Bus can also draw on feedback from the September community summit to inform its messaging (e.g. press releases and advertising). Participants noted the environmental benefits of transit, stressing that many residents value the rural landscape and are mindful of their environmental footprint. Benzie Bus can stress the environmental benefits of transit (e.g. touting its recent award for propane vehicles) to reach potential riders and new segments of the community.

Another possible rider communication/information enhancement is adding destination signs to the Benzie Bus vehicles. While signs can simply be placed in the front windshield of a bus, scrolling and/or electronic destination signs will solidify the presence of scheduled routes and be helpful for new riders. Depending on costs, this could occur as retrofits to current vehicles or as new vehicles are purchased.

Typically transit systems spend at least 1 percent of their operating budget on a marketing and outreach efforts. Based on the FY2014 operating expenses for Benzie Bus this would have been around \$15,000. However, some guidance suggests that the budget for an effective marketing plan should be in the 3-5 percent range. When developing an appropriate budget for an expanded marketing and outreach plan an additional guideline that can be considered is appropriating between \$800 and \$1,200 per vehicle annually. Therefore for a fleet of twenty vehicles the annual marketing budget would be between \$16,000 and \$24,000.

Advantages/ Disadvantages

- Makes Benzie Bus more user-friendly by providing riders with additional information regarding stops and routes.
- Increases public awareness/visibility of Benzie Bus within the community.
- Greater outreach efforts may require need to expand budget for marketing and outreach, and installation of signs and shelters requires capital expenditures.

Expenses

- This alternative would involve ongoing printing and other related marketing costs.
- Retrofitting an existing vehicle with a destination sign would typically cost between \$1,000 and \$4,000.
- According to Benzie Bus staff, bus stop signs are generally about \$100 installed, and a shelter is approximately \$10,000.

Ridership

- Expanding marketing and public information efforts may result in a small increase in ridership.

Improve Passenger Comfort and Amenities

After hours of service, current riders named noise and rattling lifts as what they liked least about Benzie Bus. This alternative proposes that Benzie Bus investigate low cost ways to better secure its

wheelchair lifts. In addition, operations staff should be mindful of vehicle assignment, only sending appropriate vehicle makes/models for dial-a-ride trips. These strategies will lead to a more comfortable experience for riders while ensuring that the fleet can still serve individuals with disabilities.

The expansion of scheduled services will also require Benzie Bus to be more sensitive to locations where customers meet the bus at specific stops. Accessibility (e.g. sidewalks), amenities (e.g. benches), and other factors should be considered.

Advantages/ Disadvantages

- Makes using Benzie Bus more pleasant for riders.
- Improving accessibility to and amenities at bus stop locations may be outside the control of Benzie Bus.

Expenses

- This alternative would involve minimal costs, with some staff time needed in ensuring lifts are properly secured and in meeting with appropriate business and governmental contacts about bus stop issues or concerns.

Ridership

- Enhancing passenger comfort may lead to an increase in ridership, especially on scheduled routes.

Consider Scheduling/Dispatch Software Improvements

Benzie Bus staff expressed interest in upgrading from the current dispatch/scheduling software to one that offers routing, auto reminder prompts for riders, and real time Automatic Vehicle Location (AVL) capabilities. Many transit systems the size of Benzie Bus have implemented this type of technology, and a more sophisticated system has the potential to increase dial-a-ride routing efficiencies, track on-time performance, reduce rider no shows, and improve safety by tracking vehicles and providing directional navigation. New software could also make data collection and analysis less onerous, e.g. reporting data by route rather than by vehicle.

A variety of scheduling/dispatch software programs are currently on the market. Costs vary greatly based on the “bells and whistles” included with each, and a system that includes AVL, Mobile Data Computers (MDCs), Interactive Voice Response (IVR) and other technology can range from \$250,000 to \$500,000 plus an annual service fee. Some transit systems, especially in rural areas, acquire scheduling software that is beyond their needs, is not implemented effectively, or is not adapted to by staff. Therefore, the process to select a new software program is a critical one that will require a detailed assessment in the future. Appendix F provides a mini-guide as part of this assessment. In addition, the transition to more scheduled services may reduce the need for more sophisticated scheduling software, and instead require a greater focus on AVL.

Advantages/Disadvantages

- Can improve service quality by offering a faster reservation time and less call backs for information.
- Can improve staff productivity by assisting dispatchers in making decisions and increasing their capabilities in terms of vehicles per dispatcher.
- Enhances safety through real-time tracking of vehicle locations and the ability to monitor vehicle operating speed.
- Generates appropriate reports and aids in tracking performance over time. Maintenance software can also help track vehicle performance.
- Reduces dependency on individuals, as technology puts some of the system “memory” in the computer as opposed to in a dispatcher’s brain.
- Unless Benzie Bus can piggyback on another procurement, a thorough Request for Proposal process is recommended to obtain the most suitable software.
- Costs for acquisition and for continuous support may be higher than need.
- A transition to more scheduled services may decrease the number of trips that need to be scheduled.

Other Considerations

- Benzie Bus would have to work with its dispatchers to select and implement any software upgrade, ensuring a smooth transition with thorough training.

Expenses

- Software upgrades range greatly in cost, so Benzie Bus must carefully define its desired outcomes.

Ridership

- Implementing software improvements is unlikely to impact ridership in the short term. However, other productivity gains may result.

Table 4-4: Summary of Service Alternatives

Alternative	Description	Projected Expenses	Ridership
Expand Scheduled Service / Implement Route Adjustments	Intended to minimize travel time and the need for transfers. Routes operate every run without reservations (Monday - Friday 7 a.m. to 8 p.m., Sat. 7 a.m. to 5 p.m.).	Annual operating costs range from \$519,000 to \$375,000. May be cost neutral if hours devoted to dial-a-ride are reduced.	Should increase ridership over time.
Modify the Reservation Policy	Scheduled routes will operate every run without reservations. Reservations still required for deviations and dial-a-ride.	Increases operating costs. May be offset by fewer dial-a-ride trips and less need for dispatch.	May result in small ridership gains.
Modify the Fare Structure	Incentivizes scheduled service by charging different fares for dial-a-ride and scheduled service.	Will impact fare revenue, but minimal costs to implement.	Impact varies depending on fare scenario.
Expand Evening Dial-a-Ride Service	Extended hours Monday - Friday until 10 p.m., Sat. until 7 p.m. Offers mobility for employment and social activities.	\$27,700 annually per vehicle for 2 hours of service, with a net deficit of \$25,200.	Additional 780 trips annually per vehicle.
Implement Sunday Service	Sunday dial-a-ride service from 7 a.m. to 5 p.m. or 9 a.m. to 2 p.m. Offers mobility for employment, shopping, religious services, etc.	\$11,500 annually per vehicle for 5 hours of service, with a net deficit of \$10,500.	Additional 325 trips annually per vehicle.
Revise Marketing Materials and Increase Public Information	Reformatted rack cards, vehicle destination signs, and additional signs/shelters will help generate public awareness. Will make Benzie Bus more user friendly for riders.	Involves costs for ongoing printing, destination signs, and signs/shelters.	May result in small ridership gains.
Improve Passenger Comfort and Amenities	Involves better secured lifts, proper vehicle assignment, and bus stop assessment.	Minimal costs.	Should increase ridership overtime.
Consider Scheduling/Dispatch Software Improvements	Can improve service quality, staff productivity, and vehicle safety. Will aid in reporting and performance tracking. Costs for acquisition/continuous support may outweigh need.	Wide price range. Should be decided through an RFP process.	Unlikely to impact ridership in short term.

POTENTIAL ORGANIZATIONAL ALTERNATIVES

This section presents potential organizational alternatives and administrative opportunities for consideration by Benzie Bus. As with each service alternative, each organizational alternative is detailed with advantages, disadvantages, and likely impacts on ridership, revenues, and costs. While the organizational alternatives are interrelated with the potential service alternatives, they are more specific to considerations that affect the way that transit is guided and administered in Benzie County.

The proposed organizational alternatives focus on the following:

- Implementing a mobility management program that would serve as the foundation for the remaining alternatives that involve expanded outreach, coordination, and community involvement.
- Strengthening employer partnerships.
- Enhancing coordination with BATA and Manistee Transit.
- Increasing outreach to student riders.
- Increasing the role of the Local Advisory Committee.

The key organizational alternative is a proposed mobility management program. While the flexible nature of mobility management allows stakeholders to design a program that best fits their community, in general mobility management involves:

- Emphasizing the movement of people through a range of providers and services.
- Making more efficient use of transportation resources.
- Designing local and regional solutions to fit community needs and visions.

Implement a Mobility Management Program

While mobility management is something most transit providers have been involved with for years, this term has recently come to represent a formal definition of a transportation strategy that focuses on customers and their needs, and the meeting of these needs through the coordinated use of a variety of transportation resources.

Participants at the community summit broached the idea of Benzie Bus playing a greater role in countywide and regional transportation efforts. This alternative proposes that Benzie Bus implement a formal mobility management program. An additional position that would lead this program would provide capacity support to Benzie Bus as the system grows, allowing current staff to maintain a manageable workload.

The functions of the mobility management program could involve:

- Leading efforts to improve access to information on the variety of transportation services available in the community and in the region. This could include:
 - Coordinating with the Michigan Association of United Ways and its transportation resources database used for the regional 2-1-1 call center.

- Working with the Michigan Public Transit Association (MPTA) in its efforts regarding a regional Non-Emergency Medical Transportation brokerage.
- Providing referrals to the MichiVan program sponsored by MDOT that supplies fully insured passenger vans to commuter groups.
- Cultivating greater local and regional partnerships with transportation providers, human service agencies, employers, and other appropriate organizations and agencies. This could include:
 - Working to promote and encourage the use of commuter assistance and employer-oriented transportation services, including ridesharing, vanpooling, and Park & Ride arrangements.
 - Exploring opportunities for additional services to fill specific mobility needs in the community, e.g. a volunteer driver program.
 - Participating in local and regional land use planning that impacts transportation services.
- Coordinating individualized travel training and trip planning activities.
- Identifying new funding sources and partnerships to support expanded transportation services, mobility management services, and coordination efforts.

Advantages/ Disadvantages

- Mobility management is an eligible project through funding from the S. 5310 and S. 5311 Programs administered by MDOT. Even though a mobility management program may include typical operating expenses such as salaries and fringe benefits, mobility management is an approved capital expense under S. 5310 and S. 5311—therefore reducing the required local match.
- While funding is available through S. 5310, this is a competitive program and mobility management is a lower priority than other types of projects. In addition, Benzie Bus would need to lead an update of the current coordinated public transit-human services transportation plan for the County, as S. 5310 projects selected for funding must be included in that plan.
- A formal mobility management program would help to establish Benzie Bus as a one-stop center for information and assistance on a variety of travel modes.
- Enhances the organization's image by demonstrating commitment to coordinating various transportation options and being good stewards of tax payer monies.
- Improves service to current and potential customers by connecting them with additional transportation options beyond Benzie Bus.
- Implementing a mobility management program involves monetary costs, but it could provide other community savings and benefits by:

- Allowing greater access to medical services, therefore avoiding more acute and expensive medical problems.
- Helping reduce welfare dependency and unemployment.
- Providing greater ability for local residents to live independently, and therefore reducing care facility costs.

Expenses

- Based on input from the project team on the functions of a mobility manager, a proposed job description with an estimated annual salary can be developed.

Ridership

- A mobility manager could result in increases in ridership over time through expanded outreach and education efforts. Greater impact would be evident through improved coordination and serving as one-stop center for a variety of transportation options.

Strengthen Employer Partnerships

Many current riders use Benzie Bus for work trips (more than forty percent according to survey respondents), and the system has an opportunity to expand this role. Additional communications and ongoing marketing to human resources staff and employees (e.g. Crystal Mountain, Munson Medical, Magna, Shop N Save, Graceland Fruit, Paul Oliver Hospital, and Smeltzer Orchards) can only help to broaden the Benzie Bus ridership base. In addition, several respondents to the employer survey indicated that they may be interested in partnering with Benzie Bus for transportation, perhaps by purchasing tickets for employees. Participants at the community summit also discussed the possibility of pursuing employer-sponsored routes.

Building upon the proposed mobility management program, this alternative recommends that Benzie Bus continue to conduct outreach to major employers in the region, gaining a better understanding of how to serve Benzie County workers. Benzie Bus staff can draw on the contacts cultivated during this study, including the area's Chambers of Commerce. Implementing the service alternatives outlined in the previous technical memorandum may also encourage the use of Benzie Bus for commuting. For example, extended evening hours and increased frequency will cater to employees making time sensitive trips or working later shifts.

Advantages/ Disadvantages

- Promotes dialogue between Benzie Bus and key employers.
- Employer partnerships could provide Benzie Bus with additional sources of local operating funds.
- Requires staff time for outreach, cultivation, and ongoing communications. However, greater employer outreach can be a function of the proposed new mobility manager.

Expenses

- The expenses associated with strengthening partnerships are minimal (i.e. staff time).

Ridership

- Employer partnerships may generate additional ridership. This assumes employer financial contributions, as well as the implementation of new and/or modified services geared toward employee work trips.

Enhance Coordination with BATA and Manistee Transit

As noted under the mobility management alternative, one of the proposed functions of this program would be to expand efforts to coordinate transit services with surrounding providers. Despite current efforts, stakeholders and survey respondents noted the need to improve cross-county connectivity and interoperability with BATA and Manistee Transit. The community summit discussion also reiterated the need for more transit options for Benzie residents commuting to the Traverse City area.

Currently, Benzie Bus links with Manistee Transit at US 31 and County Line Road (602). According to Manistee Transit staff, this occurs at 10 a.m. and 4 p.m., if requested (usually three times per week). The Manistee Transit transfer is a safety concern due to the transfer of passengers on the side of the road. It lacks any kind of shelter, leaving passengers at the mercy of the weather. The transfer location is private property, and the property owner is rightfully concerned about the liability of installing a shelter. The systems have considered a nearby park as an alternative, but this location would be inaccessible during the winter.

Manistee Transit also provides trips to the Biederman Cancer Treatment Center in Traverse City. Patients leave Manistee at about 7:30 a.m. every weekday and return at 11:30 a.m. Another important regional consideration is the construction of a new Meijer in Manistee, to be completed by spring 2015. This will likely become a destination for Benzie County residents, as an alternative to going to Traverse City.

Benzie Bus officially links with Ric's in Interlochen. BATA's #12 Village Loop serves Ric's hourly from 6:37 a.m. to 8:37 p.m. on weekdays and three times a day on weekends. However, requests from Benzie Bus riders to make the trip to Ric's are inconsistent. Most riders would already have had to transfer within Benzie County before transferring to BATA. In addition, the TC Express now offers a faster and more seamless trip to Traverse City. TC Express riders can transfer to BATA at Meijer or Munson, though the transfer is not free (or timed) at these locations as it is at Ric's.

Since the travel needs of many Benzie County residents are regional in nature, it is crucial that Benzie Bus continue to work with BATA and Manistee Transit on current and possible transit connections. This can be challenging since each system is funded locally and each organization may have different priorities. However, siting a Manistee shelter, continuing to coordinate medical trips, and timing the TC Express to meet BATA's #4 City Loop are possible issues to explore in the near future.

Benzie Bus should also continue to participate in the transportation subcommittee and on the Board of Networks Northwest. This forum is another way to identify and implement improved regional services.

Advantages/Disadvantages

- Seamless inter-county transfers extend the reach and utility of Benzie Bus.
- Offers residents additional mobility, especially those living near county borders.
- Commitment of staff time to strengthen county-to-county relationships.
- The transit systems may disagree on how best to increase regional mobility, and will have to come to consensus on any joint services or policy changes.

Expenses

- The expenses associated with this alternative would be minimal, unless expansion routes are developed. Greater efforts to provide regional connectivity could be a function of the proposed mobility manager.

Ridership

- Coordination with BATA and Manistee Transit may boost ridership over time.

Increase Outreach to Student Riders

Feedback from the community survey indicated the importance of Benzie Bus as a transportation option for students. Respondents noted that the services generally work well for after school transportation; several respondents would like to see Benzie Bus catering to and playing a larger role transporting middle and high schoolers. Engaging with students and providing services that are useful to them may help shift attitudes over time about the acceptability of using transit in places like Benzie County.

This alternative recommends that in conjunction with the proposed mobility management efforts Benzie Bus continue to explore opportunities to increase student ridership. This could involve greater outreach at school-related activities (e.g. taking the meeting on a bus to football games or other school-sponsored events).

Advantages/Disadvantages

- Outreach to students may expand the market for Benzie Bus and help improve overall community awareness and support for the services.
- Additional dialogue with educators, students, and families may provide Benzie Bus with useful feedback on future improvements.

Expenses

- The expenses associated with this alternative (staff time) are minimal, and as noted earlier could be a responsibility of the proposed mobility manager.

Ridership

- Increased outreach to students may increase ridership slightly over time.

Increase the Role of the Local Advisory Committee

MDOT Administrative Rule 202 of Act 51 requires that every transit system seeking state funding has a local advisory committee (LAC) in place to represent individuals with disabilities and seniors, and to review the system's accessibility plan.³ The LAC must have at a minimum three members, with 50 percent of the membership representing those 65 and over and persons with disabilities. At least one member must be jointly approved with the area agency on aging.

This alternative recommends that Benzie Bus clarify the role and membership of the LAC, and explore opportunities to increase the role of the LAC in providing important community input. The Benzie Bus LAC meets quarterly and is composed of eleven individuals. Though currently meeting the state's requirement, Benzie Bus can do more to use the LAC as a resource and a link to the Benzie County community. Ideally, the LAC should help Benzie Bus staff understand the changing transportation needs of seniors and individuals with disabilities, as well as the mobility needs of the community as a whole.

Some considerations moving forward include:

- Discussing and defining the future role and responsibilities of the LAC, particularly beyond just reviewing the accessibility plan.
- Determining the future role of the project team, and the opportunities for merging the separate groups while still maintaining the requirements of the LAC. The project team provides expertise and represents different stakeholders that will continue to be useful in the future.
- Determining an appropriate meeting schedule (possibly quarterly) that provides continuity and ensures engagement, but does not take an inordinate amount of time from these volunteer members.

Advantages/Disadvantages

- Provides a forum for dialogue and fosters community relations.
- Requires staff time to organize LAC meetings and initiatives.

Expenses

- Maintaining a more engaged LAC primarily involves costs in staff time.

Ridership

- While the LAC does not have a direct effect on ridership, members may generate ideas or cultivate partnerships that will help publicize Benzie Bus.

³ See Comprehensive Transportation Fund Administrative Rules (revised July 1997), Act 51 of the Public Acts of 1951, as amended. www.michigan.gov/documents/mdot/MDOT_ComprehensiveTransportationFund_398858_7.pdf.

Chapter 5

Operations Plan

INTRODUCTION

This chapter proposes an operations plan for Benzie Bus, using current services as a base and incorporating preferred service improvements as presented in Chapter 4. The operations plan also takes into account input from the project team on the potential staging of these improvements. Chapters 6 and 7 provide the companion capital and financial plans to support the operations plan.

PROPOSED STRATEGY AND PHASING

The proposed operations plan involves selections and combinations from the menu of alternatives presented in the previous chapter. The plan takes into account the need to improve services while maintaining expenses near current funding levels, in addition to the need to expand services when funding opportunities become available. The phasing of improvements therefore reflects incremental service expansions that would be implemented over the next six years if funding is available. Overall, the service modifications in the plan are intended to respond to the improvements deemed most important by current Benzie Bus customers and other key stakeholders.

The operations plan is divided into short-term (typically 1-2 years), mid-term (3-4 years), and long-term (5-6 years) projects. While the plan is constrained based on reasonably expected revenues, it is also designed to allow Benzie Bus to adapt to changing circumstances and to consider accelerated implementation. The proposed phasing indicates approximate timing and priority, however, implementation of any component is often a function of funding availability. Acceptance of this plan does not obligate Benzie Bus or MDOT to fund any particular element at any time.

PROPOSED PHASING OVERVIEW

The operations plan includes the following projects, detailed below:

Short-Term Projects

- Modify Flex Route into Blue Route¹
- Modify the Reservation Policy
- Modify the Fare Structure
- Monitor and Improve Service to Traverse City
- Revise Marketing Materials and Increase Public Information
- Improve Passenger Comfort and Amenities
- Increase the Role of the Local Advisory Committee

Mid-Term Projects

- Implement Gold Route
- Expand Evening Dial-a-Ride Service

Long-Term Projects

- Implement Sunday Service
- Implement a Formal Mobility Management Program
- Consider Scheduling/Dispatch Software Improvements

SHORT-TERM PROJECTS

Modify Flex Route into Blue Route

- The current Flex Route would be modified and operated as the Blue Route, as detailed in Option 3, Chapter 4. Scheduled service would be concentrated between Frankfort and Honor Plaza, eliminating the segment from Honor to Benzie Bus. Deviations on this route would also be eliminated, requiring establishment of Americans with Disabilities Act (ADA) complementary paratransit services. These services are discussed in a later section of this chapter.
- These modifications would allow the route to be completed in a shorter timeframe, and allow increased frequency on the Frankfort-Honor corridor without adding vehicle hours.
- Operating the Blue Route for thirteen hours daily, Monday through Friday, and for ten hours on Saturday would result in approximately 3,900 annual vehicle hours and 98,400 annual vehicle miles.
- Figure 5-1 displays the Blue Route with proposed stops, as well as the Gold Route with proposed stops (discussed under Mid-Term Projects).

¹ Blue and Gold are placeholder names only; Benzie Bus will decide on the actual color/naming scheme.

Figure 5-1: Proposed Routes and Stops



Modify the Reservation Policy

- In conjunction with the transition of the Flex Route to Blue Route, the reservation policy would be modified so that customers who use this route no longer have to make a reservation.
- The Blue Route (and any other future scheduled services, e.g. the Gold Route) would need to operate as scheduled so that customers are confident that they can go to a stop at a certain time and the bus will serve that location. Benzie Bus should also continue to monitor ridership on the TC Express, possibly running this route without reservations as well.
- The Benzie Bus website and rack cards for this route will need to be updated as part of outreach efforts to educate customers of the change.

Modify the Fare Structure

- Also in conjunction with the transition to the Blue Route the fare structure would be modified to encourage customers to use schedule services, as opposed to dial-a-ride services.
- Based on project team input, the preferred fare structure would be \$2.00 for the Blue Route. The fare for dial-a-ride services would remain \$3.00. Benzie Bus could also consider introducing a day pass in conjunction with these changes, or a premium fare for last minute dial-a-ride requests.

Table 5-1: Proposed Fare Structure

Scheduled Service Full Fare	\$2.00
Scheduled Service Reduced Fare	\$1.00
Scheduled Service 12 Punch Card	\$20.00
Scheduled Service 12 Punch Card Reduced	\$10.00
Dial-a-Ride Fare	\$3.00
Dial-a-Ride Reduced Fare	\$1.50
Dial-a-Ride 12 Punch Card	\$30.00
Dial-a-Ride 12 Punch Card Reduced	\$15.00

Monitor and Improve Service to Traverse City

- As discussed in Chapter 3, when asked about needed service improvements, community survey respondents named more options to Traverse City as a top priority.

- While no immediate modifications to the TC Express were proposed as part of this plan, since this route has been operating less than a year, early ridership numbers are positive. When combined with the Interlochen Route, Benzie Bus estimates that at least eight percent of overall ridership is now going to Traverse City.
- The services to Traverse City should be monitored closely to determine potential improvements and expansions. Possible considerations include more frequent trips on the TC Express and more destinations served through this route. These service expansions would require modifications to the proposed Operations Plan, and a possible shift of resources from other services to Traverse City routes.
- As noted in the organizational alternative in Chapter 4 regarding enhanced coordination, any expansion of services should be planned and implemented through work with BATA and other regional stakeholders. This coordination would be consistent with the Governor's Regional Prosperity Initiative that is encouraging local, private, public and non-profit partners to create vibrant regional economies.

Revise Marketing Materials and Increase Public Information

- As discussed in Chapter 4, Benzie Bus can build upon current marketing efforts to increase information available to the public and to reinforce its brand. However, as also noted in Chapter 4 this may require an expanded budget to support this outreach plan.
- Proposed outreach strategies beyond current efforts could involve:
 - Rack cards by route that include time points for key stops.
 - A system-wide route map that allows riders to see at a glance all available services.
 - Inclusion of discounted fares and the system's Title VI statement on all marketing materials.
 - Greater outreach regarding the environmental benefits of Benzie Bus and how transit complements efforts to preserve the County's rural nature.
 - Additional bus stop signs and shelters.
 - The addition of destination signs to the Benzie Bus vehicles to reinforce the presence of scheduled routes and to help new riders.

Improve Passenger Comfort and Amenities

- The transition to more scheduled services will require a greater focus on customer comfort. Key locations where customers meet the bus at specific stops should be assessed on an ongoing basis for accessibility (e.g. sidewalks) and amenities (e.g. benches or shelters). Appropriate work with public works staff and other stakeholders will be needed.
- Vehicles should also be evaluated on a regular basis to ensure customers have a positive experience while riding. As noted in Chapter 4, this should include making modifications to reduce noise and to assign the most appropriate vehicle for the service or trip.

Increase the Role of the Local Advisory Committee

- While MDOT requires that Benzie Bus have the LAC in place, the role of this committee can be expanded so that it serves in a greater advisory capacity and promotes ongoing dialogue with the community.
- The current LAC membership can be maintained to meet the state's requirement. It can also be bolstered with other community stakeholders (including those serving on the project team) so that Benzie Bus staff can obtain wide ranging input on the mobility needs of the County.

MID-TERM PROJECTS

Implement Gold Route

- After Benzie Bus implements the Blue Route and the fare structure modification, it can then implement the Gold Route as described in Option 3, Chapter 4 (see Figure 5-1 for the proposed route and stops).
- Operating the Gold Route for thirteen hours daily, Monday through Friday, and for ten hours on Saturday would result in approximately 3,900 annual vehicle hours and 97,700 annual vehicle miles.

Expand Evening Dial-a-Ride Service

- Dial-a-ride services would be extended until 10 p.m., Monday through Friday, and until 7 p.m. on Saturday.
- Expanding evening dial-a-ride services would require approximately 624 annual vehicle hours and 11,042 annual vehicle miles per vehicle operated in service.

LONG-TERM PROJECTS

Implement Sunday Service

- Sunday service would be implemented with a span of service similar to Saturday (7 a.m. to 5 p.m.).

- It is anticipated that Sunday services would initially be provided through Dial-a-Ride services, and then evaluated to determine if scheduled service is appropriate and cost effective.
- Operating Sunday service for ten hours each Sunday would result in approximately 520 annual vehicle hours and 10,809 annual vehicle miles per vehicle operated in service.

Implement a Formal Mobility Management Program

- Some of the organizational alternatives discussed in Chapter 4, such as greater employer/student outreach and expanded coordination with BATA and Manistee Transit, will likely be a function of current positions within Benzie Bus.
- In the longer term, Benzie Bus can consider a formal mobility management program, taking into account funding opportunities that may arise and the workload on current staff as the system progresses.

Consider Scheduling/Dispatch Software Improvements

- Benzie Bus can benefit from upgrading its current dispatch/scheduling software to one that offers routing, auto reminder prompts for riders, and real time Automatic Vehicle Location (AVL) capabilities. Benzie Bus will need to undertake an RFP process, selecting and implementing software that is appropriate to the system.

ADA PARATRANSIT SERVICES

The implementation of any scheduled services that do not flex from the route would result in the need to implement ADA complementary paratransit services. The ADA requires transit agencies to provide this service to people with disabilities who cannot use a fixed route bus. In general, paratransit service must be provided within $\frac{3}{4}$ of a mile of the route, the same hours and days, for no more than twice the regular scheduled route fare.

Demand for ADA paratransit services will likely be limited since the population density along the scheduled routes is low. For planning purposes, it is projected that annual service hours and miles will be three percent of projections for operating scheduled services. However, Benzie Bus will need to establish an eligibility process for customers with disabilities. Resources available through Easter Seals Project ACTION and other technical assistance programs can assist in this process. A recommended reference publication is Easter Seals Project ACTION's *Determining ADA Paratransit Eligibility: An Approach, Guidance and Training Materials*.

Some general guidelines for providing ADA paratransit services include:

- **Eligibility:** The following individuals are eligible for ADA complementary paratransit service, whether their disability is permanent or temporary:

- Any individual with a disability who is unable to independently use the scheduled route service because of a physical or mental impairment.
 - Any individual with an impairment-related condition that affects their ability to navigate natural or architectural barriers when traveling to/from a bus stop.
 - Any individual with a disability who requires an accessible bus when one is not available.
 - Visitors who present documentation that they are eligible for paratransit in the jurisdiction where they live or who otherwise certify that they are unable to independently use scheduled route transit. Visitors are eligible for any combination of 21 days during any 365-day period.
- **Eligibility Process:** Public providers of ADA complementary paratransit must establish a process for determining eligibility. Required elements are:
 - The process must strictly limit eligibility to individuals included in the categories listed in Federal 49 CFR Part 37.123.
 - All materials in the process must be in accessible formats upon request.
 - If the eligibility determination process goes on longer than 21 days, applicants are presumed eligible and must receive service (until/unless the applicant is later found to be ineligible).
 - The determination of eligibility, including specific reasons for denial, must be in writing.
 - Each eligible individual must receive documentation from the paratransit provider that states he or she is ADA paratransit eligible.
 - For those determined to be ineligible or conditionally eligible (e.g., unable to use fixed-route service for some trips due to weather or variable health conditions) there must be an appeal process.
- Optional elements in the eligibility process may include:
- In-person interviews and/or functional assessments, or some form of medical or professional verification, provided these are not overly burdensome to the applicant.
 - Requiring individuals to be periodically recertified for ADA paratransit eligibility at reasonable intervals.

OVERALL PLANNING SERVICE LEVELS

Table 5-2 summarizes levels of service for the proposed projects, with assumptions to project hours and miles for certain services. The assumptions provide an appropriate foundation for planning future service levels. Table 5-2 also identifies an implementation year for each project for planning purposes, but actual implementation may be impacted by the availability of funding and other changing conditions.

Table 5-2: Planned Levels of Service

Proposed Phase	Specific Service	Annual Revenue Hours	Annual Revenue Miles (1)
Short-Term	Blue Route	3,900	98,418
	TC Express	3,120	87,360
	Dial-a-Ride (2)	20,740	367,324
	ADA Paratransit (3)	117	2,072
	Total Service	27,877	555,174
Mid-Term	Blue Route	3,900	98,418
	TC Express	3,120	87,360
	Gold Route	3,900	97,696
	Dial-a-Ride (4)	16,563	293,355
	ADA Paratransit	234	4,144
	Total Service	27,717	580,973
Long-Term	Blue Route	3,900	98,418
	TC Express	3,120	87,360
	Gold Route	3,900	97,696
	Dial-a-Ride (5)	18,123	320,984
	ADA Paratransit	234	4,144
	Total Service	29,277	608,603

(1) Blue Route, TC Express, and Gold Route revenue miles based on current or projected mileage for each route; Dial-a-Ride and ADA Paratransit based on FY2014 average vehicle speed.

(2) Current Dial-a-Ride hours of 5 a.m. - 8 p.m. M-F and 7 a.m. - 5 p.m. Sat.
Includes Thompsonville service and Interlochen Connection.
Based on overall FY2014 service hours less Blue Route and TC Express hours.
Assumes 10% reduction based on implementation of Blue Route.

(3) ADA paratransit hours assume services are needed for 3% of scheduled route service.

(4) Expanded hours of 5 a.m. - 10 p.m. M-F and 7 a.m. - 7 p.m. Sat.
Includes Interlochen Connection. Assumes two vehicles for expanded evening services.
Assumes 20% reduction based on implementation of scheduled routes.

(5) Expanded hours of 5 a.m. - 10 p.m. M-F; 7 a.m. - 7 p.m. Sat; 7 a.m. - 5 p.m. Sun.
Includes Interlochen Connection. Assumes two vehicles for expanded evening services.
Assumes two vehicles for expanded evening services and three vehicles for Sunday service.
Maintains 20% reduction based on implementation of scheduled routes.

Chapter 6

Capital Considerations / Capital Improvement Plan

INTRODUCTION

This chapter discusses the major capital projects needed to support the provision of public transportation by Benzie Bus for the six-year period covered by this plan. Funding assistance through MDOT for capital items includes replacement and expansion buses, rehabilitation of existing buses, equipment for communication, maintenance, and/or for operational support, as well as facility construction and renovations. Estimated costs associated with these capital projects are provided, and also included in the proposed Financial Plan found in the next chapter.

REPLACEMENT SCHEDULE FOR CAPITAL ITEMS

MDOT provides local transit systems with a prescribed schedule for use in determining depreciable/useful life of capital assets. Included in Appendix G, this “Replacement Schedule for Capital Items” is especially important when assessing the current and future Benzie Bus fleet. Useful life standards indicate that different types of vehicles in the Benzie Bus vehicle inventory have different expected lifespans:

- Vans: the useful life of a van (minivan, full size, ADA van) is 4 years or 100,000 miles.
- Light Duty or School Buses: the useful life for light duty or school buses is 5 years or 150,000 miles.
- Medium-Duty Buses: the useful life for medium-duty buses is 7 years or 200,000 miles.

The builders of these vehicles are required to designate the projected life cycle when the vehicles are submitted for testing by the FTA, and the vehicles are designed to meet these standards. If vehicles greatly exceed the expected life, the consequent maintenance costs for over-age vehicles can significantly increase operating costs. In addition, the reliability of vehicles generally declines as they age, particularly after their design life is exceeded. This decrease in vehicle reliability also affects operating costs and impacts the quality of service for passengers. A vehicle replacement and expansion program is necessary to maintain a high quality fleet and to dispose of vehicles

that are beyond their useful life. In addition, this plan recommends modified and expanded services that will impact the current and future fleet.

VEHICLE REPLACEMENT AND EXPANSION CONSIDERATIONS

Table 6-1 details the Benzie Bus fleet with current mileage; projected mileage based on current services and service modifications proposed in Chapter 5; useful life status in relation to the MDOT capital replacement schedule; and projected replacement years. The vehicle inventory includes two new buses that are scheduled for delivery in 2015.

- The current Benzie Bus fleet is an older one, with fourteen of the nineteen vehicles in the current fleet having exceeded useful life criteria.
- Three vehicles in the current fleet, including one used in regular service, have over 300,000 miles.
- While the delivery of the two new buses in 2015 will help, an aggressive replacement plan will be needed in future years to maintain and to expand services. Both daily vehicle assignment and the implementation of expanded services will impact projected mileage. However, based on useful life criteria, three buses currently used for regular service should have been replaced in 2014 and another nine should be replaced by 2016. Table 6-1 provides a proposed schedule for replacement of these vehicles in the next three years or transition to use as spares.
- With fourteen vehicles in the fleet used for regular service delivery and five used as backup, the current spare ratio of 26 percent is higher than the MDOT guideline of 20 percent. The disposal of one or two of the older spare vehicles that have over 300,000 miles would reduce the ratio to approved guidelines.

Table 6-1: Benzie Bus Vehicle Inventory with Projected Replacement Years

Vehicle ID	Model Year	Vehicle Type	Mileage as of 12/1/14	Ave. Mileage/Yr (1)	FY16 (2)	FY17	FY18	FY19	FY20	FY21	Useful Life Status/ Criteria	Replacement Yr Based on Useful Life (3)	Projected Replacement Yr (4)
1A	2009	Sprinter	209,673	41,935	230,640	272,575	316,606	360,638	406,766	452,894	Met	2016	2017
2A	2009	Sprinter	211,929	42,386	233,122	275,508	320,013	364,518	411,142	457,767	Met	2016	2016
3A	2009	Sprinter	210,929	42,186	232,022	274,208	318,503	362,798	409,202	455,607	Met	2016	2016
7A	2009	Sprinter	214,005	42,801	235,406	278,207	323,148	368,089	415,170	462,251	Met	2016	2017
8A	2009	Sprinter	209,625	41,925	230,588	272,513	316,534	360,555	406,673	452,790	Met	2016	2017
9	2009	Cutaway	317,385	10,000	322,385	332,385	342,885	353,385	364,385	375,385	Met	2014	Spare
13	2011	Cutaway	133,404	44,468	155,638	200,106	246,797	293,489	342,404	391,318	5/150,000	2016	2016
15	2008	Cutaway	238,969	39,828	258,883	298,711	340,531	382,350	426,161	469,972	Met	2014	2016
16	2008	Cutaway	260,376	20,000	270,376	290,376	311,376	332,376	354,376	376,376	Met	2014	Spare
18A	2009	Sprinter	205,199	41,040	225,719	266,759	309,850	352,942	398,086	443,230	Met	2016	2017
20A	2010	Med- Duty	145,629	36,407	163,833	200,240	238,467	276,695	316,743	356,791	7/200,000	2017	2017
21	2012	Van	35,754	17,877	44,693	62,570	81,340	100,111	119,776	139,441	4/100,000	2019	2018
22	2012	Van	22,186	11,093	27,733	38,826	50,473	62,121	74,323	86,525	4/100,000	2021	2018
23	2013	Cutaway	44,238	44,238	66,357	110,595	157,045	203,495	252,157	300,818	5/150,000	2018	2018
24*	2014	Cutaway	0	40,000	30,000	70,000	112,000	154,000	198,000	242,000	5/150,000	2019	2019
25*	2015	Cutaway	0	40,000	10,000	50,000	92,000	134,000	178,000	222,000	5/150,000	2020	2020
4	2006	Cutaway	280,704										
10	2009	Cutaway	300,221										
11	2009	Cutaway	304,898										
12	2009	Cutaway	278,493										
19A	2009	Sprinter	205,090										

(1) Based on current services; assumes #9 and #16 transition to spares; projected mileage beginning in FY 18 increased based on proposed modifications.

(2) Projected mileage at the start of the FY, e.g. October 1, 2015 for FY 16

(3) Projected based on anticipated mileage/age of vehicle; actual year will vary based on funding availability and actual vehicle use.

(4) Assumes replacement of no more than 3 vehicles in one year. Actual replacement will be based on application to MDOT/subsequent approval.

* Vehicle #24 due for delivery in January 2015; vehicle #25 due for delivery in July 2015

Vehicle Replacement Plan

Taking into account the current vehicle fleet and the recommended service projects, Table 6-2 provides an overall plan for vehicle replacement. The recommended service modifications described in Chapter 5 can be implemented using the current fleet, and therefore no expansion vehicles are included in the plan. However, the vehicles in the fleet will incur additional mileage and therefore need to be replaced sooner.

Table 6-2: Vehicle Replacement Plan

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Number of Vehicles							
Replacement	4	5	3	1	1	TBD	14
Expansion	0	0	0	0	0	0	0
Total	4	5	3	1	1	0	14

Estimated Vehicle Replacement Costs

The typical source of funding for vehicle replacement in areas like Benzie County is the federal S. 5311 Program. However, the MDOT FY 2016 funding application notes that while a portion of these formula funds may be used for bus replacement, local transit systems should apply for flex funds and S. 5339 funds to support capital needs. Benzie Bus has also purchased one vehicle per year over the past several years with Congestion Mitigation and Air Quality (CMAQ) funding. CMAQ is listed as a possible capital funding program in the FY 2016 MDOT application along with several other eligible programs. As in the past Benzie Bus will need to continue to work with MDOT to identify the most conducive funding source during the annual application process.

The FY 2016 MDOT application also includes estimated vehicle prices for vans and small buses as of October 1, 2015 (included in Appendix G). As shown, prices vary based on the vehicle type, type of engine, size of vehicle, and other factors. Actual costs will also vary based on the time of purchase. However, estimated prices for each new replacement vehicle were used to develop the capital budget included in the next chapter.

FACILITIES/PASSENGER AMENITIES

The Benzie Bus facility was completed in August 2011. Given the projects recommended in Chapter 5, the facility will have ample capacity for the six-year time frame of this plan. However, another capital project is the continued installation of signs and shelters. Benzie Bus currently has 17 signs installed. One shelter is planned for spring 2015. Based on the proposed emphasis on more scheduled services and on the subsequent outreach and customer education, additional signs and shelters are included in the Financial Plan. In particular, the installation of shelters and/or benches should be considered at the following key locations as resources allow -- and in coordination with representatives from these locations and with appropriate zoning officials:

- Glen's/Family Fare
- The Maples
- Paul Oliver Hospital
- Anchor Place Apartments
- Gateway Village
- Government Center
- Beulah Library
- Benzonia Plaza
- Honor Plaza
- Crystal Mountain
- Thompsonville Library
- Diamond House Apartments
- Grove Place

Destination signs on Benzie vehicles will also solidify the presence of scheduled routes and aid new riders. These can be either simple signs placed inside the vehicle windshield or more sophisticated scrolling and/or electronic versions. This could occur as retrofits to current vehicles, though it is anticipated that they will be included on new vehicles as they are purchased. Therefore no additional costs are included in the Financial Plan.

TECHNOLOGY

Benzie Bus would like to upgrade its current dispatch/scheduling software to one that offers additional features like routing and AVL. As noted in Chapter 4, this software is constantly changing and can vary greatly in price. Therefore, this plan does not include a recommendation for a specific software upgrade, but instead proposes that Benzie Bus work with MDOT in future years to assess the current technology needs and to use a thorough RFP process in the selection of the most appropriate software system.

Chapter 7

Financial Plan

This chapter provides a financial plan for funding existing and proposed transit services for Benzie Bus for the six-year planning period. There are a number of unknown factors that will likely affect transit funding during this timeframe. Therefore the budgets were primarily constructed with current information from the FY 2016 MDOT application for funding public transit programs in Michigan, using the funding ratios included in this application. The exact revenue available each year will depend on the availability of funding from the FTA Section 5311 Program, MDOT, the local millage, and any other potential sources.

The costs shown in this chapter are based on projected hourly operating costs and estimates of capital costs. Depending on the timing and the final choices, in any given year the costs could differ due to the effects of inflation and energy costs. For service expansions, the costs shown are incremental—above the base year funding of the current system—and for service restructuring, the costs are net of the current operating costs of that service. For each phase, the costs of expansions or new programs become part of the base year. All modified and new services are presented as conceptual services that would need final operational planning prior to implementation.

OPERATING EXPENSES AND FUNDING SOURCES

Table 7-1 provides the conceptual Financial Plan for transit operations, including operating, maintenance, and administrative expenses. The base year includes the proposed implementation of the Blue Route, along with current services, and then as noted adds the projects discussed in Chapter 5. As the table indicates:

- While the shift from dial-a-ride to scheduled services would maintain service hours at the current level, it is projected that annual operating expenses would grow slightly in the first four years due to inflation costs.
- Implementation of Sunday services would have the greatest impact on overall annual operating costs.
- Assuming implementation of all proposed service modifications and expansions the Benzie Bus operating budget is projected to grow from about \$1.4 million to \$1.7 million over the six-year planning period.

Table 7-1: Conceptual Operations Financial Plan

Projects (1)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Blue Route	3,900	3,900	3,900	3,900	3,900	3,900
Gold Route	-	-	3,900	3,900	3,900	3,900
TC Express	3,120	3,120	3,120	3,120	3,120	3,120
Dial-a-Ride	20,740	20,740	16,563	16,563	18,123	18,123
ADA Paratransit	117	117	234	234	234	234
Total Projected Service Hrs	27,877	27,877	27,717	27,717	29,277	29,277
Projected Operating Expenses (2)						
Cost Per Revenue Hour	\$50.73	\$52.25	\$53.82	\$55.43	\$57.10	\$58.81
Blue Route	\$197,847	\$203,783	\$209,896	\$216,193	\$222,679	\$229,359
Gold Route	\$0	\$0	\$209,896	\$216,193	\$222,679	\$229,359
TC Express	\$158,278	\$163,026	\$167,917	\$172,954	\$178,143	\$183,487
Dial-a-Ride	\$1,052,141	\$1,083,705	\$891,412	\$918,155	\$1,034,771	\$1,065,814
ADA Paratransit	\$5,935	\$6,113	\$12,594	\$12,972	\$13,361	\$13,762
Total Projected Operating Expenses	\$1,414,201	\$1,456,627	\$1,491,715	\$1,536,467	\$1,671,632	\$1,721,781
<i>(1) Assumes implementation of Blue Route in Yr 1, Gold Route and Saturday expansion in Yr 3, Sunday expansion in Yr 5.</i>						
<i>(2) Cost per hour for Year 1 based on FY2014 costs, assumes 3% rate of inflation each year thereafter.</i>						
Anticipated Primary Funding Sources						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Farebox/Other						
Farebox Recovery (3)	\$131,374	\$135,315	\$138,575	\$142,732	\$155,289	\$159,947
Net Projected Operating Expenses	\$1,282,827	\$1,321,312	\$1,353,140	\$1,393,734	\$1,516,343	\$1,561,834
Federal (4)						
Section 5311	\$205,252	\$211,410	\$216,502	\$222,997	\$242,615	\$249,893
Subtotal, Federal	\$205,252	\$211,410	\$216,502	\$222,997	\$242,615	\$249,893
State (5)						
State Operating Assistance	\$513,921	\$529,338	\$542,089	\$558,352	\$607,471	\$625,695
Subtotal, State	\$513,921	\$529,338	\$542,089	\$558,352	\$607,471	\$625,695
Local						
Millage	\$563,654	\$580,564	\$594,548	\$612,385	\$666,257	\$686,245
Total Projected Operating Revenues	\$1,414,201	\$1,456,627	\$1,491,715	\$1,536,467	\$1,671,632	\$1,721,781

(3) Based on percentage in FY2015 budget of 9.3 percent.

(4) Based on percentage (16%) in MDOT FY2016 application for public transit programs.

(5) Based on percentage (36.34) in MDOT FY2016 application for public transit programs.

VEHICLE PURCHASE EXPENSES AND FUNDING SOURCES

Table 7-2 offers the financial plan for vehicle replacement over the six-year period. It includes the replacement of 14 vehicles between FY 2016 and FY 2020. The MDOT FY 2016 application notes that all capital requests should use a ratio of 80 percent federal funds and 20 percent state match. However, it also notes that it is unknown if the state budget will support the match at this level, and that local transit agencies will be notified as soon possible if there is a need for a local match.

Table 7-2: Financial Plan for Vehicle Replacement

Number of Vehicles	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Minivan with Ramp	2	2	2	0	0	
Light Duty, Small Bus	0	0	1	1	1	TBD
Small Bus	2	3	0	0	0	TBD
Total	4	5	3	1	1	
Vehicle Costs – based on the highest cost for each vehicle category in the FY 2016 MDOT application						
Minivan with Ramp	\$38,000	\$38,000	\$38,000	\$38,000	\$38,000	
Light Duty, Small Bus	\$67,000	\$67,000	\$67,000	\$67,000	\$67,000	
Small Bus	\$81,000	\$81,000	\$81,000	\$81,000	\$81,000	
Total Projected Costs	\$238,000	\$319,000	\$143,000	\$67,000	\$67,000	
Anticipated Funding Sources						
Federal	\$190,400	\$255,200	\$114,400	\$53,600	\$53,600	
State	\$47,600	\$63,800	\$28,600	\$13,400	\$13,400	
Total Projected Funding	\$238,000	\$319,000	\$143,000	\$67,000	\$67,000	

OTHER CAPITAL EXPENSES AND FUNDING SOURCES

The financial plan for other capital expenses discussed in Chapter 6 is provided in Table 7-3. These expenses are those associated with passenger amenity and information improvements, particularly the installation of additional signs and shelters. Similar to the vehicle replacement, an 80 percent federal / 20 percent state ratio is used to project funding for these capital items.

Table 7-3: Financial Plan for Other Capital Expenses

Projects	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Bus Shelters	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	TBD
Bus Stop Signs	\$1,000	-	\$1,000	-	-	TBD
Total Projected Expenses	\$21,000	\$20,000	\$21,000	\$20,000	\$20,000	
Anticipated Funding Sources						
Federal	\$16,800	\$16,000	\$16,800	\$16,000	\$16,000	
State	\$4,200	\$4,000	\$4,200	\$4,000	\$4,000	
Total Projected Revenues	\$21,000	\$20,000	\$21,000	\$20,000	\$20,000	

Chapter 8

Monitoring and Evaluation

This chapter provides guidance with efforts to periodically monitor and evaluate current services, as well as future modifications and expansions that result from this plan. Monitoring and evaluation is particularly important to ensure that Benzie Bus is meeting its goals and objectives (described in Chapter 1) and improving system performance (detailed in Chapter 2). Overall these efforts should include:

- Assessing specific services using general industry performance measures,
- Developing service standards that balance the customer’s perception of services and the organization’s goals with the quality of service that is affordable and practical given resources and funding, and
- Continuing to coordinate services with regional programs and planning efforts.

SERVICE PERFORMANCE EVALUATION GUIDELINES

Currently Benzie Bus collects and assesses service data by vehicle. The current process should be melded with the following guidelines to develop an overall program that Benzie Bus can use to evaluate and assess the system on a regular basis.

Data Collection

Data collection can be difficult and expensive, resulting in the utilization of additional staff simply to collect data. This is counter-productive. However, it is critical to collect data by service, not just by vehicle. It is important to concentrate on data collection that has value, and focus on basic operating data (e.g. one-way trips, revenue miles, and revenue hours).

Develop Relevant Performance Measures

There is no value in tracking irrelevant measures. Each measure must have a distinct purpose. Performance measures should:

- Be supportive of, and directly linked to, goals and objectives,
- Allow for continual system improvement over time,

- Separate different service types and areas to compare “apples to apples,” and
- Link to management and staff performance.

Proposed Performance Measures

- **Passenger productivity** – separated by service type (scheduled routes /dial-a-ride) in order, as noted above, to compare apples to apples:
 - Passenger trips per vehicle hour
 - Passenger trips per vehicle mile
- **Cost measures** - track and allocate cost measures by specific route, service type, or other disaggregated level:
 - Cost per passenger trip
 - Cost per revenue hour
- **Safety indicators**
 - Preventable and non-preventable accidents per 100,000 miles

While each system is unique, the following service standards are proposed to monitor current and future services and to make objective, performance-based service planning decisions. These measures are based on industry standards for rural transit services.

	Benzie Bus FY 2014	Successful	Acceptable	Needs Review
Operating Cost per Hour	\$50.73	< \$40	\$40-\$60	> \$60
Operating Cost per Mile	\$2.86	< \$2.00	\$2.00-\$4.00	>\$4.00
Operating Cost per Passenger Trip	\$18.30	< \$7.00	\$7.000-\$18.00	> \$18.00
Farebox Recovery Ratio	8%	>15%	7-15%	< 7%
Passenger Trips per Mile	0.16	> 0.30	0.15-0.30	< 0.15
Passenger Trips per Hour	2.77	> 5	2.5 – 5	< 2.5

Monitoring Performance

The following guidelines are useful when assessing service performance:

- Identify current performance based on the above measures for each service type,
- Develop standards and measures for each service type based on modest improvement over the present level,
- Monitor all standards on a monthly basis with reports that show trends and compare service to previous months and the same month of the previous year,
- Evaluate performance based on the measures on a quarterly basis, and make adjustments as necessary,
- Should any services fail to meet the performance standards for three consecutive months, review the specific route or service and identify strategies to improve performance, or

update the performance standards as warranted by changes in circumstance (new services should operate at least 12-18 months before major modifications are implemented),

- Assess the performance standards at least semi-annually, and
- Develop an easy-to-review performance measure “dashboard” for presentation to the Board of Directors, the LAC, and other appropriate stakeholders.

In addition, Chapter 2 included a peer comparison of Benzie Bus and other Michigan transit providers. Benzie Bus staff can use this data to monitor service performance in the future and make performance-based service planning decisions.

Staff can also draw on measures and information included in the Corradino Group’s “System Condition Measurement for Local Transit” report that was submitted to MDOT in 2010. According to MDOT, this report is being updated and should be in place in early 2015. The areas that MDOT would like local transit systems to focus on involve:

- Asset management,
- Training standards,
- A service assessment every three years,
- A customer satisfaction survey conducted every three years,
- Increased coordination with other transportation providers, and
- Service assessment in relation to the performance measures provided earlier in this chapter.

QUALITY OF SERVICE ASSESSMENT

Beyond service performance evaluation is the assessment of the quality of current services, typically through comparison to service standards. These standards are benchmarks, often developed in the following categories to evaluate the quality of service delivered to customers:

Availability

- Response time - defines how far in advance customers must schedule a trip.
- Service span - measures the days and hours per day services are available.
- Service coverage - measures the geographic area where services are available.

Comfort and Convenience

- Reliability (on-time percentage) – measures the degree to which vehicles arrive at scheduled times.
- Travel time - compares time for scheduled or shared ride services to an exclusive-ride trip.
- No shows – measures the impact of no shows on productivity and operating costs as well as inconvenience to customers already on board vehicles.

The Transit Cooperative Highway Research Program (TCRP) *Report 165: Transit Capacity and Quality of Service Manual, Third Edition* provides specific guidance on quality of service issues and the factors influencing both. The manual contains background, statistics, and graphics on various types of public transportation, and it provides a framework for measuring transit availability, comfort, and convenience from the passenger and transit provider points of view. Benzie Bus can use this resource to develop appropriate standards and assess quality of service in the future. It is available at <http://www.trb.org/main/blurbs/169437.aspx>.

COORDINATION WITH OTHER SERVICES, PLANS, AND PROGRAMS

The goals and objectives for this study (detailed in Chapter 1) included strengthening regional connectivity and collaborating with BATA to improve access to destinations in Traverse City. The proposed service changes in this plan complement these efforts by adding a mid-day connection to Interlochen and the BATA route that serves this location.

However, as noted in Chapter 4, no modifications or expansions to the TC Express were proposed since it is still a new service. Benzie Bus should closely monitor this service during the next 12-18 months to determine if any modifications are appropriate.

In addition, Benzie Bus and BATA should have a continuous discussion on regional connectivity opportunities. BATA's recent strategic plan includes a greater focus on an improved fixed route structure to outlying areas such as Interlochen, allowing greater connectivity to Benzie Bus and transit systems in adjacent jurisdictions. Benzie County residents, though, would prefer more direct trips to Traverse City. Coordination with BATA and regional stakeholders will be essential in finding solutions that works for all parties.

Chapter 3 included a review of various transportation and land use plans for the region. The purpose of this review was to ensure that this plan is consistent with local and regional transportation efforts. Likewise, Benzie Bus staff should continue to participate in regional planning efforts to ensure that projects recommended in this plan are included in other area plans and studies, where fitting (e.g. participation in the Directors Network). Benzie Bus should also continue to monitor the efforts of the Michigan Public Transit Association (MPTA) to improve statewide coordination of Non-Emergency Medical Transportation (NEMT) funded through Medicaid and to ensure public transit systems are an integral component of this service.

Appendix A:

Project Team

Douglas Durand, Benzie Council on Aging

Mary Carroll, Benzie Chamber of Commerce

Bruce Ogilvie, Frankfort Zoning Board of Appeals & Planning Commission

Susan Kirkpatrick, Frankfort Planning Commission & Oliver Art Center

Anne Noah, Crystal Mountain Resort

Josh Stoltz, BTA Chairperson

Irene Nugent, BTA Board Member

Eric VanDussen, BTA Board Member

Bill Kennis, BTA Executive Director

Chad Hollenbeck, BTA Operations Manager

Jennifer Kolinske, BTA Human Resources and Accounting Manager

Appendix B:

Benzie Bus Board of Directors (2014)

Joshua Stoltz, Board Chairperson

John Nuske, Benzie County Road Commission

Joann Worden-Morrell, Citizen at Large

Roger Griner, ex-officio Commissioner

Amy Herczak, Citizen at Large

Jessica Carland, Citizen at Large

Irene Nugent, Citizen at Large

Eric VanDussen, Citizen at Large

Eugene Allen, Citizen at Large

Appendix C:

Local Advisory Committee (2014)

Mary Carroll

Douglas Durand

Matt Goodlin

Richard Heniser

Susan Kirkpatrick

Ingemar Johansson

Anne Noah

Bruce Ogilvie

Beverly Popp

Dorene Strang

Kelly Thayer

Appendix D: Survey Results

On-Board River Survey Results (117 total responses)

1. Are you a County resident? If so, where do you live?

	#	%
I am a Benzie County resident	105	93%
I am a visitor/tourist	8	7%
Top three responses: 1) Benzonia, 2) Frankfort, 3) Thompsonville		

2. What Benzie Bus service are you currently riding?

	#	%
Dial-A-Ride service	64	56%
Flex Route	16	14%
Interlochen Connection	13	11%
Thompsonville Connection	15	13%
East TC/TC Express	7	6%

3. Did you/will you have to transfer buses to complete your trip?

	#	%
Yes	52	46%
No	60	54%

4. What is the purpose of your trip today?

	#	%
Work	49	42%
Errands/Shopping	26	22%
Social/Recreation	23	20%
Medical	17	15%
School	2	2%

5. How often do you ride Benzie Bus?

	#	%
5 days per week or more	32	27%
3 or 4 days per week	30	26%
1 or 2 days per week	23	20%
A few times a month	22	19%
Less than once a month	10	9%

6. How long have you been riding?

	#	%
Less than 6 months	24	21%
6 months to a year	8	7%
1 to 2 years	20	17%
more than 2 years	64	55%

7. How did you find out about Benzie Bus?

	#	%
Friend/Family	66	72%
Benzie Bus Brochure	17	19%
Agency Staff	4	4%
Benzie Bus Website	5	5%
Other	22	
Other top three responses: 1) newspaper, 2) saw buses, 3) COA		

8. Do you have a valid driver's license?

	#	%
Yes	48	42%
No	67	58%

9. Did you have access to a car for this trip?

	#	%
Yes	24	21%
No	89	79%

10. Please rate your satisfaction with Benzie Bus in the following areas:

	Very Satisfied	Satisfied	Unsatisfied	Very Unsatisfied
Trip scheduling process	53%	37%	8%	2%
Telephone customer service	66%	29%	4%	1%
On-time performance	62%	35%	3%	1%
Days of service	58%	35%	6%	2%
Hours of service	51%	32%	12%	5%
Cost of services	74%	23%	2%	1%
Cleanliness of the vehicles	75%	20%	4%	1%
Driver courtesy	85%	13%	1%	1%
Availability of information	66%	29%	4%	1%
Usefulness of Benzie website	58%	33%	7%	2%
Safety and security	78%	19%	3%	1%

11. What do you like best about Benzie Bus? (top three of 108 responses)

1) friendly drivers, 2) getting where I need to go/availability, 3) convenience

12. What do you like least about Benzie Bus? (top three of 76 responses)

1) nothing, 2) hours of service, 3) noise/rattling

13. Are there places in Benzie County or the region where you would like to go on a regular basis, but cannot because there is no public transit available for the trip?

	#	%
Yes	83	80%
No	21	20%

If yes, from where to where? Top response of 17: church/Sundays

14. If Benzie Bus made improvements, what would be most useful to you?

	#	%
Later evening hours	51	50%
More Saturday service	31	30%
Sunday service	40	39%
More frequent service	26	25%
More direct routes	28	27%
Other	4	

15. Provide comments concerning public transportation in Benzie County/the region.

- Y'all are doing just fine
- Sundays would be nice in the morning and early afternoon.
- Direct route to TC will be helpful to many people
- A very needed and appreciated service. Thank you!
- It's a great service. I like the regular route better. For my needs it was better.
- Thank God for Benzie Buses!
- I think I covered it all basically in the "like least" section.
- Although I appreciate Benzie Bus they kind of zigzag. Direct routes would be nice. PS- I hardly ride Benzie Bus.
- Very efficient and friendly staff. Treat everyone without bias or discrimination based on income, race, sexual orientation, etc.
- I used to ride Wed the 6am bus but now I have to drive because I would get on the bus at 5:40 not 6am. To ride more no sleep more.
- Keep up the good service
- Drivers are friendly
- Regular bus from Tville to Benzie early. And bus back in evening every day.
- I would just really like you to return the Interlochen hours back to the way they were, and maybe go a bit later in the evenings.
- Benzie Bus is awesome.
- I don't like the every other hour to Rics. I ride the bus at least 10 times a week and have noticed the major changes that have happened. The Sat. service I was really looking forward to but b/c of the hours of service, it doesn't benefit me. I would love for you to extend evening hours and start Sat. service at 6am-10pm.
- I feel the Benzie Bus is doing real good, and to keep up the good work.
- I was picked 1 hr late but I called 11 minutes late for 2 hr notice- get charge I pay more in cancel kids then regular.
- I need help coordinating between Benzie Bus and BATA. Need a coordinated schedule flyer instead of all the little ones.
- More trips to Tville. I ride very regular and have changing work schedule as does my partner. Some drivers' driving is extremely scary, two that I know of for sure (fast).

- Closer time pickup not 1hr or more than needed time to get where we need to be
- More phone operators
- Better connecting service with other bus systems
- Prior flex service was excellent. New service costs me 33-50% more time. Local Frankfort service will be problem. RE safety: drivers read clipboards on highway
- I work 8-430 another pickup time between 335 and 635 would be great.
- Flex hours and days people have to work
- More overnight hours and Sunday and Saturday busing to TC
- Need connections to TC
- As I am 94, legally blind and hard of hearing it would be very hard for me without it.
- I would like to go to church same day
- Like Benize Bus tremendously
- I'm thankful for the Benzie Bus service. You people are the best! Thank you.
- Great! Tammy was super!!
- The bus service is one of the factors that make me want to purchase property in this area. Bike racks are great! Might be helpful to allow pets in carriers so bus can take people to vet's office.
- I would be very willing to be a companion rider and help with people learning the routes so that ridership can be increased.
- You guys are doing great!
- I have to get to work 3 hours before I have to start. I do not like this every other hour run in Benzonia. When I work twelves I have to sit at the bus for an hour before I even get to go to Rics. I would really like longer hours during the week and earlier hours on Sat. or possibly Sunday.
- They are very well doing their jobs, and they are making people happy every day you get on the buses all days with the people.
- You could have saved some money using regular copy paper instead of card stock, which is so very expensive.
- Courteous and helpful. Need service from Arcadia.
- Every is very nice and caring.

Hard Copy Community Survey Results (168 total responses)

1. Are you a County resident? If so, where do you live?

158 responses	#	%
I am a year round Benzie County resident	121	77%
I am a Benzie County resident for part of the year	18	11%
I am a visitor/tourist	19	12%

Top three responses: 1) Frankfort, 2) Honor, 3) Beulah

2. What is your primary mode of transportation for the following trips?

168 responses	Drive Myself	Ride with Family/ Friends	Public Transit	Walk/ Bike	Other	NA
Work	74%	4%	2%	4%	2%	14%
School	53%	6%	3%	0%	0%	38%
Medical	81%	9%	4%	0%	1%	6%
Social/Rec	81%	11%	5%	2%	1%	0%
Shopping/Errands	85%	9%	4%	1%	2%	0%

3. Where do you travel to the most? 160 responses

Top three responses: 1) Traverse City, 2) Benzonia, 3) Frankfort

4. Are you aware of the public transit services provided by Benzie Bus?

If yes, what is your impression of the agency?

161 responses	#	%
Aware of Benzie's transit services, overall positive impression	141	88%
Aware of Benzie's transit services, overall negative impression	4	3%
Not aware of Benzie Bus	16	10%

5. Do you currently use Benzie Bus?

150 responses	#	%
Yes	30	20%
No	120	80%

6. How often do you take the bus?

27 responses	#	%
Less than once a week	13	48%
About once a week	6	22%
2-4 times a week	4	15%
Every day	4	15%

7. What are your reasons for not using Benzie Bus?

79 responses	#	%
Did not know about public transit	9	11%
Need my car for work/school	41	52%
No service near my home/work/school	9	11%
Trip is too long/takes too much time	14	18%
The bus is uncomfortable	2	3%
I have limited mobility/hard for me to use the bus	2	3%
The hours of operation are too limited	16	20%
The days of operation are too limited	7	9%
Have to wait too long for the bus	8	10%
Buses are unreliable/late	3	4%
Have to make a reservation in advance	12	15%
The fare is expensive	2	3%
Using the bus/finding info about the service is confusing	2	3%
Other	60	

8. Would you consider using Benzie Bus if there were services that met your travel needs?

134 responses	#	%
Yes	88	66%
No	5	4%
Not at this time	41	31%

9. Is there a need for additional or improved service in the County/region?

105 responses	#	%
Yes	64	61%
No	41	39%

10. Please indicate the locations that need additional or improved service.

- 7 days a week service to Thompsonville
- Arcadia
- Arcadia/Bear Lake (partnership w/ Manistee Co transit?)
- at least a couple miles across county lines
- Better hours/more routes
- Copemish area
- Crystal Mt; regular stops within County
- Did not like to call 24 hrs in advance to go to Frankfort to dental appt.
- direct route to TC
- Elberta. My babysitter currently has to wait an hour for the bus to go home when her mother is picked up from The Maples @ 4 --the same time she gets done
- Elderly and special needs direct to Traverse
- I go to Leelanau County mostly
- interchange with Manistee system
- more flexible hours for Thompsonville
- more group activities- ballgames- Sunday service
- More info available.

- more people would use if it would pick up on nights
- more people would use it if they could be picked up from work at 11pm or 12pm
- More routes to TC.
- More times to Crystal Mountain, if provided, later in day
- more times/later times and ways to make a short last minute notice ride
- My children go to Benzie Central however, we live in Manistee County and I feel the bus should come to my residence.
- My daughter uses the TC/Frankfort or Beulah runs now, but was having problems making connections.
- not knowledgeable enough
- Perhaps for work related travel
- Scheduling fringe of County routes! (5-10 mile radius)
- Shop & Save
- Should be able to cross county lines at least a few miles to pick people up.
- Should go outside county lines at least a few miles for people have no access
- Should have hourly basis instead of every 2 hrs for areas like Thompsonville
- Sunday church service
- Sunday for people going to church.
- TC
- TC and Leelanau County
- The whole area -- you have redefined EXPRESS :(
- Thompsonville
- To Bear Lake- people at work (crystal mt) don't live in Benzie Co. and need rides
- Traverse City
- Turtle Creek Casino
- Waiting to see how the TC runs progress
- Weekends

11. What other improvements are needed?

90 responses	#	%
More routes with set schedules	47	52%
More frequent existing routes	17	19%
More options to Traverse City	37	41%
More Saturday Service	37	41%
Sunday service	31	34%
Earlier morning hours	20	22%
Later evening hours	40	44%
Shelters/benches at key stops	24	27%
Other	8	

12. The millage for Benzie Bus is up for renewal in 2015. Do you plan to support it?

142 responses	#	%
Yes, I'm planning to vote for the millage	100	70%
No, I'm planning to vote against the millage	4	3%
I'm undecided right now	18	13%
I don't know about the millage	20	14%

13. Please indicate your age.

160 responses	#	%
Under 18	4	3%
18-24	9	6%
25-64	85	53%
65-79	56	35%
80+	6	4%

14. Do you have a valid driver's license?

159 responses	#	%
Yes	145	91%
No	14	9%

15. How many working vehicles are available in your household?

162 responses	#	%
0	11	7%
1	46	29%
2	69	43%
3 or more	36	22%

16. Which best describes your current employment status?

159 responses	#	%
Full or part time	79	50%
Retired	69	43%
Student	5	3%
Unemployed	4	3%
Other	5	3%

17. What is your annual household income?

125 responses	#	%
Under \$19,999	20	16%
\$20,000 - \$39,999	41	33%
\$40,000 - \$59,999	23	18%
Over \$60,000	41	33%

18. How would you classify yourself?

154 responses	#	%
African American	0	0%
Asian	0	0%
Caucasian/White	150	97%
Hispanic/Latino	2	1%
Native American/Indian	3	2%
Other	0	0%

19. Provide any other comments about public transit in Benzie County.

- Appreciate the service. Helps with kids.
- Appreciate the services for seniors.
- Benzie Bus is a wonderful service for this county.
- Big waste of taxpayer money. I suspect our road repair money goes into bus service and bike trails. They don't maintain the roads anymore.
- Did not know it's for everyone.
- Drivers are courteous, very helpful and efficient
- Excellent transportation
- GLAD it is there if needed.
- Glad to see you exploring/expanding based on data.
- Great addition to County
- great asset to the community
- Great job!
- Great system- state needs to take lessons! you have done a wonderful job of servicing BC citizens. Keep up the good work.
- Has very nice bus drivers!
- Have ridden it before- good service.
- Have used Benzie Bus in past- no problems.
- I know there is a huge need and am fully supportive of public transportation
- I like it. I'm stuck in MI. Used to getting around. Want to make more possible for me here.
- I really enjoy riding the bus and appreciate your services greatly. Thank you.
- I really feel a more set schedule bus is in order. I feel you only cater to a small percentage of the folks who could, or would, use the bus if it were available on Sat. later and Sundays.
- I see buses sitting in parking lots all the time- seems like they are always idle and not moving people. Also, 3 buses to get from my house on Leelanau Ave to Glen's to Shop N Save to Crystal Mtn and over an hour is ridiculous. Not to mention after we left Shop N Save we back tracked to the Benzie drop off- picked up 2 young men and then took them home and I was late for work! Very disappointing service.
- I think having the Benzie Bus is a great thing even though I don't currently use it I think it is great to have it as an option.
- I think it's a great service. Need more PSAs about it and hours and fees for
- I think it's wonderful for those who need it.
- It is a good service but needs to be adjoining county friendly. Benzie to Manistee, GT without switching buses.
- It's a great service and improves the community.
- It's a lot of help to the community. Benzie Bus and all the co-workers in my opinion are remarkable.
- Just need to try it sometime.
- Keep doing what you're doing.
- Later would help all restaurant employees
- Liked the 1 hr turn around Frankfort to bus garage as was the original schedule better than what it is now
- Lots of people live in northern Manistee and work in Benzie. Would be nice for us to be able to use public transit.
- More people would use it if it ran nites to work and home
- My 95 year old mother no longer drives. I wish she felt comfortable using it. I would vote for the millage, but I can't vote.

- Needs improvement on schedules, don't have to make reservations
- Needs to include Manistee Co that is within the Benzie School District
- on demand services beneficial (not always on a set schedule)
- Provides important service
- Public transit is essential to a great community!
- So glad it exists! Trips take too long.
- So glad we have it available.
- The Benzie Bus is a great asset to the county, but needs some improving.
- The cost per rider mile has been a concern of the folks I know.
- Think it is great for kids transportation.
- Transport to all Benzie students' housing.
- Unable to use Benzie Bus- in Manistee County. Heard others would take advantage if combined with other transit services like Manistee Co- meet somewhere maybe?
- You are doing a good job. We as a culture are so used to having a vehicle and its flexibility. I hope to use the bus more. As I'm retired and have more flexibility.

Online Community Survey Results (167 total responses)

1. Are you a County resident? If so, where do you live?

165 responses	#	%
I am a year round Benzie County resident	147	89%
I am a Benzie County resident for part of the year	8	5%
I am a visitor/tourist	10	6%

Top three responses: 1) Benzonia, 2) Frankfort, 3) Homestead Township

2. What is your primary mode of transportation for the following trips?

150 responses	Drive Myself	Ride with Family/ Friends	Public Transit	Walk/ Bike	Other	NA
Work	77%	6%	1%	2%	1%	13%
School	24%	8%	6%	2%	3%	58%
Medical	82%	13%	1%	0%	1%	3%
Social/Rec	76%	18%	2%	1%	1%	1%
Shopping/Errands	81%	13%	3%	1%	1%	2%

3. Where do you travel to the most? 139 responses

Top three responses: 1) Traverse City, 2) Frankfort, 3) Benzonia

4. Are you aware of the public transit services provided by Benzie Bus?

If yes, what is your impression of the agency?

149 responses	#	%
Aware of Benzie's transit services, overall positive impression	129	87%
Aware of Benzie's transit services, overall negative impression	17	11%
Not aware of Benzie Bus	3	2%

5. Do you currently use Benzie Bus?

147 responses	#	%
Yes	33	22%
No	114	78%

6. How often do you take the bus?

34 responses	#	%
Less than once a week	23	68%
About once a week	4	12%
2-4 times a week	4	12%
Every day	3	9%

7. What are your reasons for not using Benzie Bus?

89 responses	#	%
Did not know about public transit	2	2%
Need my car for work/school	50	56%
No service near my home/work/school	4	5%
Trip is too long/takes too much time	37	42%
The bus is uncomfortable	6	7%
I have limited mobility/hard for me to use the bus	0	0%
The hours of operation are too limited	24	27%
The days of operation are too limited	15	17%
Have to wait too long for the bus	18	20%
Buses are unreliable/late	7	8%
Have to make a reservation in advance	18	20%
The fare is expensive	2	2%
Using the bus/finding info about the service is confusing	11	12%
Other	37	

8. Would you consider using Benzie Bus if there were services that met your travel needs?

111 responses	#	%
Yes	72	65%
No	13	12%
Not at this time	26	23%

9. Is there a need for additional or improved Benzie Bus service in the County/region?

146 responses	#	%
Yes	110	75%
No	36	25%

10. Please indicate the locations that need additional or improved service.

- "Urban" routes within Frankfort/Elberta during the summer.
- A direct stop at Cedar Run Eye Center near Munson hospital
- Airport runs to Cherry Capital Airport
- All over the county
- All over. Would be great to have some sort of public transit routes or something. Coming from a city I know that is next to impossible with how everything is spaced out. More efficient, more reasonable, more visible service would be great.
- Allowing kayaks to use bus as it once previously did!
- Areas just outside the county lines connecting to Benzie; Mesick, Bear Lake, Kaleva for those who work in Benzie County but are in either Wexford or Manistee Co. But know some of those are difficult with different authority rules.
- Areas where families requiring transportation need to get to work, med, or shopping
- As an alternative for kids to riding school bus. Also more times leaving from school after practices etc. Maybe a set route for kids going home late.
- Benzie is growing and additional transportation is always needed.
- Benzie to Munson at scheduled work times.
- Commuter service to primary and other employers. More frequent service to Crystal

- Mountain, especially in the winter. Direct service to Traverse City and Manistee.
- Connection with BATA on filling demand for TC
- Daily runs to Traverse City. Drop off and boarding along the way. Also, bus services to local churches on Sunday.
- Expand horizons. Wouldn't go down my road during the winter even though the prior year they had.
- Express service to TC--the hospital, downtown, NMC, using a line route along US 31, with your dial-a-ride and several stops with parking along the way.
- Honor
- Hook ups between Benzie County and T.C.
- I find it crazy that some of the routes require 1 hour of travel time for what should be a 20 minute drive. I understand it isn't a taxi service, but routing should be more direct. For example, a friend of mine lives up by the high school and works at Crystal. It seems silly to go back to Shop N Save to wait for the transfer to get to Crystal when you could come down Pioneer.
- I have a friend who is a single mother, with 4 young children. They all want to attend Church on Sundays but have no vehicle. She also has to stay home when school is in session to be able to be accessible, so it is harder for her to shop, go to appointments, etc. Saturdays would benefit her very much!
- I have heard that the Benzie Bus is always late and people can rely on it for important things.
- I love the idea of the shuttle in Frankfort/Elberta on busy days. I think something like this could probably be expanded to Beulah, as well probably. And/or the CSA. It would be nice to get those people who are coming into the beach for the day to realize that they don't really need a car when they get here. Leaving their car behind is more convenient because they don't have to find parking, etc. So that would be my suggestion: try to get more people to use the shuttle and keep the cars out of Frankfort/Elberta, where there is a parking problem in the summer.
- I think there should maybe be a bus for people to be able to go to Church on Sunday for those who don't drive.
- Improve service where several times a day the bus can be boarded at pre designated locations, Frankfort, honor, Beulah, Benzonia, lake Anne
- Inter county service- to TC and to Manistee
- Inter-city routes between Manistee, Benzie County and Traverse City. Eventually, perhaps, Cadillac and Suttons Bay, Empire, Glen Arbor.
- It's not so much the location, but the time availability. My son rides the bus from the Glen Lake School's county line bus stop in Lake Ann to our home in Honor in the afternoons, but Benzie Bus cannot transport him to this same location to catch the bus in the morning, which makes it very difficult for our family. Sure you can say, we live in Honor, so send him to Benzie because transportation within our district would be provided, but Glen Lake is our school of choice because the academics, sports program and school community is preferred by my husband and me.
- Late night shuttle for night life
- Limited service in early mornings, late evenings for our hospitality and healthcare workers. Sunday service would be a dream. Definitely need shelters, could be solar, and partner with local artists and businesses for advertisements.
- More affordable transportation- smaller vehicles to & from when necessary to go to TC, etc, when ridership is low

- More park n ride lots and more regular schedule
- More routes going to Frankfort. Used to have every hour, now it is every even hour. A little more inconvenient
- More shuttles to Traverse City, and beyond regular business hours for later shopping; bus services on Sunday to take elderly and/or otherwise homebound persons to church
- More summer shuttles, shuttles from Crystal Mtn in the winter to restaurants in Frankfort - help skiers who want to drink but not drive
- Need to be able to go to/from Crystal Mountain from Blaine Township without having to go to Shop N Save to wait /transfer busses. Takes way too long.
- Parks
- Regular routes and stops
- Reliable transportation to work/medical appts in TC are a huge concern. I understand you have been working on it.
- Return to old flex schedule, every hour instead of every other hour
- Rides to TC area (BATA).
- Rural areas need access at times.
- Rural areas- teenagers living here have trouble getting around as it is, improved service would be a big help.
- Summer shuttles to National Park beaches and locations. Bike and ride opportunities along the Betsie Valley Trails. Consistent loops around Benzie linking with Empire, Interlochen, Bear Lake and especially the Crystal Mtn areas.
- Sundays for church services.
- TC and Manistee connections
- A lot of people cannot attend church on Sunday because of no transportation. Contrary to what some people believe, church is important to many.
- To TC and simply being on time. And why the need to schedule so far in advance if u all are late any way
- To the schools & home after 6pm
- To Traverse City
- Traverse City
- Traverse City
- Traverse City
- Traverse City commute, Manistee commute
- T-ville, Copemish
- Weekend Service expansion, Express Service to Traverse City and Manistee for shopping and doctor's appointments - connect with BATA or Manistee Transportation for in-City destinations, enclosed shelters at many locations - with light and heat using solar power
- Weekends and evenings
- Wifi on buses, more/different drop offs in TC
- Would love to have service on Sundays so the disabled can get to church!

11. What other improvements are needed?

103 responses	#	%
More routes with set schedules	50	49%
More frequent existing routes	23	22%
More options to Traverse City	62	60%
More Saturday Service	37	36%
Sunday service	34	33%
Earlier morning hours	19	18%
Later evening hours	43	42%
Shelters/benches at key stops	42	41%
Other	15	

12. The millage for Benzie Bus is up for renewal in 2015. Do you plan to support it?

146 responses	#	%
Yes, I'm planning to vote for the millage	92	63%
No, I'm planning to vote against the millage	10	7%
I'm undecided right now	26	18%
I don't know about the millage	18	12%

13. Please indicate your age.

146 responses	#	%
Under 18	14	7%
18-24	12	8%
25-64	96	66%
65-79	21	14%
80+	3	2%

14. Do you have a valid driver's license?

145 responses	#	%
Yes	133	91%
No	13	9%

15. How many working vehicles are available in your household?

146 responses	#	%
0	3	2%
1	27	19%
2	83	57%
3 or more	33	23%

16. Which best describes your current employment status?

145 responses	#	%
Full or part time	106	73%
Retired	24	17%
Student	16	11%
Unemployed	4	3%
Other	4	3%

17. What is your annual household income?

137 responses	#	%
Under \$19,999	15	11%
\$20,000 - \$39,999	41	30%
\$40,000 - \$59,999	29	21%
Over \$60,000	52	38%

18. How would you classify yourself?

143 responses	#	%
African American	1	1%
Asian	1	1%
Caucasian/White	137	96%
Hispanic/Latino	2	1%
Native American/Indian	4	3%
Other	1	

19. Provide any other comments about public transit in Benzie County.

- Always had good experiences.
- Because the school is so far from so many kids' homes, I think the Benzie bus could play a larger role with transporting the kids.
- Bring back hourly flex and routes to Rics.
- Do not like the way the BB has conducted business in the past year
- Every day I see many buses in the parking lot at the plaza and all I see is a HUGE waste of our money. I am VERY disappointed with the whole Benzie Bus program. I think you should switch the buses for cars/taxis as they don't use as much gas and I only see about 1-3 people per bus and that is a huge waste of money. With as poor as our county is there should be another use for the money sunk into the buses.
- Generally, the Benzie Bus is great. The drivers very friendly and helpful. The dispatchers are friendly and helpful.
- Glad to have it although it has not been convenient to use. The pickup service has never been available when I needed it.
- good except for new scheduling policies & rumors that some drivers won't assist w/helping on & off
- Good idea in theory, depends too much on federal grant money, could be better run and more self-sufficient if less dependent on government funding and used the (local) funding it has more wisely, i.e. scheduled routes with designated stops and fewer personal pick-ups. Leave those to specific vehicles for the handicapped and senior's unable to use regular routes or take them to the regular stops rather than having the all the buses used as a taxi service, Perhaps a bus service isn't practical in such a rural area or the planners just need to do more work on this and also decide what will happen when the federal monies eventually run out.
- Great service for some but need to improve bus comfort (noise, comfort for longer commutes). Modernize technology (GPS, scheduling, ticketing, etc). Make a cool, attractive, and fun brand. .
- Great service. Continue to strengthen focus on commuters and families. Continue to work with chambers and the business community. Great job serving recent community events; helps raise Benzie Bus' profile and reaches new people.
- Great!

- Has made me late to work twice; Later hours would be greatly appreciated
- Having the Benzie Bus is great! It seems to be improving more and more! Keep up the good work!
- I am really glad to see it here, I have consumers that use it all the time.
- I am very pleased the service exists because it works well for my children for after school transportation.
- I can't wait to start using the TC express. It's a matter of my routine and schedule. Thank you for starting it back up!
- I currently don't use the bus, but expect to in the next few years
- I don't currently use the bus system, but definitely am glad it is an option, and would use it. We recently were down to 2 vehicles and coordinating my son's work schedule with mine, has been difficult. The Benzie Bus is an option we are considering if we can't get his vehicle running. I also referred a young lady without much parental support, and not transportation to use your services for very necessary appointments. I imagine many residents of Benzie County do not have the flexibility that I am fortunate to have at work, and this is a great option for those families.
- I have used Benzie bus many times and I LOVE it!!!
- I heard that each trip costs the tax payers \$23. If that is true this program should be discontinued.
- I hope this survey is useful to you.
- I think bus is great and so does my husband, Next year I might not get a driver's license because of cataracts. I really don't know about fares, tips , etc.
- I think BB is a great thing for our community. It would be nice to have late night service and I think weekends are a MUST
- I think you guys do a great job on limited resources. From what I can tell, your in-county service is very good, esp. for older folks, but providing truly convenient service to TC would help some workers and allow college students and other workers to remain in Benzie. It would need some aggressive marketing to make it work, but I think such a route could eventually do quite well.
- I use the bus 3x/wk in winter only, because my dirt road ices up
- I used the bus a few years ago to shuttle my middle school child. However, the routes were long and unreliable. I hope things have improved so I can start using it again for my middle/high school children to use for after school practices, etc. An easier route to Traverse City to meet needs of going to the college. Either earlier/later routes.
- I will vote for the millage if I am a resident of Benzie County at the time it comes up for renewal, but at this time I am not sure that I will still reside in Benzie.
- I would love to see more people use the Benzie Bus as a regional transportation system, but I'm afraid that we're not quite there yet. Keep working at it and keep holding ideas sessions, and hopefully it will build to that. Build partnerships with BATA to ensure this, too.
- I'm always impressed by the people skills of the drivers and dispatch staff.
- I'm not sure people understand the signs that are around. (like the one in Market Square Part) Are they bus stops, advertisement, or what. Several people have mentioned them.
- I'm work at Labadies' Summer Place Casuals which is next to Benzie Bus
- It has always really pissed me off that as a county BUSINESS, my tax money PAYS for your BUSINESS that has buses sitting at Shop-n-Save with their engines running needlessly (while the drivers visit each other),buses running up & down our roads with none or one passengers, while breaking down the asphalt and tearing up corners by turning too sharp.

If you think that Benzie County needs this BUSINESS, then it should be ran just like any other BUSINESS WITHOUT TAXPAYER MONEY FUNDING IT. What's next...taxpayer funding for ALL county businesses??!!

- It is a great service for the community, Allows access for those without transportation
- It is an asset and through effective communication and partnerships, the service can be enhanced.
- It needs to be supported by schools and kids need to know that it's a viable option.
- It should have direct routes as well as routes to pick up peeps
- It's a great service although I feel that there could be improvements regarding high school students. It seems like they are overlooked in lieu of "workers". My children (class of 2010 and 2013) both reported obstacles to using the bus as transportation to or from school events because students were not considered a priority. They and their friends eventually gave up on taking the bus- something that was considered "cool" and a "green alternative" by the Benzie Central students. It's vital to get the youth involved in public transportation early- they may not vote right now but they will soon! If the students have a negative attitude or experience with the Benzie Bus they will not support it later.
- It's nice to see a good service such as public transportation in our area, it is a backbone of an healthy community.
- It's not uncommon to see multiple buses at Shop N Save at the same time; mostly empty.
- Keep it local. If I want to go to TC, I'll never take the bus, too many errands to run.
- More options going to Ric's and focus on needs of year-round Benzie residents
- More wayfinding
- My teenagers like to use the bus for transportation to work.
- Nothing to say
- Please focus on serving the Benzie county residents that pay taxes. We need more routes in the county.
- Public Transit is important to many residents in Benzie County. It needs to be steady, dependable, reliable, and go where people need to go, and it needs to be self-sustaining, although I know this will be difficult to achieve. Public Transportation is infrastructure that Benzie County needs to improve economic development and prosperity in its residents and businesses.
- Thank you so much for offering this fine service. It has been especially helpful to some in our church who have needed to get to medical appointments in TC.
- Thanks for all you do. This is a much needed service and we will support any mileages.
- The Benzie Bus system has been a wonderful service for this county.
- The bus does not seem to transport enough people to make it an economically efficient mode of transportation.
- The staff are wonderful! I have seen drivers help carry bags if they can for their older riders at the Shop N Save pick up - really a great service and a lot of pride in the work the staff do from everything I have seen and heard.
- The thing that upsets me the most is when a person needing daycare was taken to the home of the daycare provider to drop the child off and then had to have another stamp taken off her ticket to get back on the bus to be taken to work. These families are usually families with little income. That is a hardship.
- They should give you change back they took 3 of my dollars
- Vital service for many seniors in the area. Many need door to door service. Also great resource for working parents who have kids in after school programs. Also vital for many special needs citizens in our area. I will be happy to support funding for this very

important service. Would like to encourage Sunday midday service for those wishing to attend churches in our community...perhaps a 9-2 pm service.

- We are not regular Benzie Bus riders, but started using it for our son to transport him from his Glen Lake school bus to our home when my license was medically suspended. If we aren't able to get a route in place for him to get to the Glen Lake school bus in the morning we are going to be in a really bad position. At this point we have no idea what we're going to do when school begins this fall.
- When I lived in metro Detroit area I took the bus to work always. It was convenient and saved wear and tear on my vehicle and I relaxed/read/slept while the driver drove. It was worth the fare since I did not have to pay to park.
- Will only support the Benzie Bus if it can carry itself financially.
- Would like to have the bus not change schedules so often, makes it very confusing.
- You have very friendly bus drivers.

Appendix E: Sample Rack Cards



CONNECTING PEOPLE TO COMMUNITY

14150 US Highway 31
Beulah, MI 49617
231.325.3000
BenzieBus.com



Frankfort - Honor Flex AM
 Fare: \$3 one way, \$1.50 discounted

Frankfort	7:00	8:00	9:00	10:00	11:00
Benzonia Plaza	7:30	8:30	9:30	10:30	11:30
Gov't Center	7:40	8:40	9:40	10:40	11:40
Honor Plaza	7:45	8:45	9:45	10:45	11:45
Benzie Bus	8:00	9:00	10:00	11:00	12:00
Honor Plaza	8:15	9:15	10:15	11:15	12:15
Gov't Center	8:20	9:20	10:20	11:20	12:20
Benzonia Plaza	8:30	9:30	10:30	11:30	12:30
Frankfort	9:00	10:00	11:00	12:00	1:00

Frankfort - Honor Flex PM
 Fare: \$3 one way, \$1.50 discounted

Frankfort	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00
Benzonia Plaza	12:30	1:30	2:30	3:30	4:30	5:30	6:30	7:30
Gov't Center	12:40	1:40	2:40	3:40	4:40	5:40	6:40	7:40
Honor Plaza	12:45	1:45	2:45	3:45	4:45	5:45	6:45	7:45
Benzie Bus	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00
Honor Plaza	1:15	2:15	3:15	4:15	5:15	6:15		
Gov't Center	1:20	2:20	3:20	4:20	5:20	6:20		
Benzonia Plaza	1:30	2:30	3:30	4:30	5:30	6:30		
Frankfort	2:00	3:00	4:00	5:00	6:00	7:00		

Benzie Transportation Authority is committed to ensuring that no person is excluded from participation in, or denied the benefits of its transit services on the basis of race, color, or national origin, as protected by Title VI of the Civil Rights Act of 1964.



CONNECTING PEOPLE TO COMMUNITY

14150 US Highway 31
Beulah, MI 49617
231.325.3000
BenzieBus.com



Thompsonville Flex AM
 Fare: \$3 one way, \$1.50 discounted

Tville	7:00	8:00	9:00	10:00
Crystal Mtn	7:05	8:05	9:05	10:05
Benzonia Plaza	7:30	8:30	9:30	10:30
Crystal Mtn	7:55	8:55	9:55	---
Tville	8:00	9:00	10:00	---
Benzie Bus	---	---	---	11:00

Thompsonville Flex PM
 Fare: \$3 one way, \$1.50 discounted

Tville	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00
Crystal Mtn	1:05	2:05	3:05	4:05	5:05	6:05	7:05	8:05
Benzonia Plaza	1:30	2:30	3:30	4:30	5:30	6:30	7:30	8:30
Crystal Mtn	1:55	2:55	3:55	4:55	5:55	6:55	7:55	---
Tville	2:00	3:00	4:00	5:00	6:00	7:00	8:00	---
Benzie Bus	---	---	---	---	---	---	---	9:00

Benzie Transportation Authority is committed to ensuring that no person is excluded from participation in, or denied the benefits of its transit services on the basis of race, color, or national origin, as protected by Title VI of the Civil Rights Act of 1964.

Appendix F:

Software Implementation Guide

The following rules for rural transit technology are adapted from the KFH Group training “Assessing and Implementing Scheduling/Dispatching Modifications.”

- Rule 1:** Are staff and management committed to success? Has the staff bought into the technology? If not, success will be elusive.
- Rule 2:** Adjust your expectations to fit the capabilities of existing, successful technology.
- Rule 3:** Articulate the need for new technology and how it will be applied to your system.
- Rule 4:** Keep it simple – use functional specifications.
- Rule 5:** Do not purchase anything that you have not actually seen working in a real world environment.
- Rule 6:** Do not be a test site for a new product, unless you have surplus staff.
- Rule 7:** You should adapt your system to the technology – the technology will not adapt to you.
- Rule 8:** You must purchase a product (the software) and a service (the support). They are equally important.
- Rule 9:** Implement one technology at a time. Do not try to do too much at once.
- Rule 10:** Always check references, and those customers that are not references.
- Rule 11:** Staff and management training is critical for success.
- Rule 12:** Prepare yourself, your staff, customers, and the powers that be for a difficult implementation.

Appendix G:

Replacement Schedule for Capital Items and Estimated Vehicle Prices (MDOT FY 2016 Application)

REPLACEMENT SCHEDULE FOR CAPITAL ITEMS (Effective October 1, 2015)

1. New Assets:

The following schedule should be used to determine the depreciable/useful life of a new asset. This schedule is not intended to be all inclusive. If the asset is not listed on the schedule, the TA should use one of the following methods to determine the useful life:

- Generally accepted accounting principles.
- Independent evaluation.
- Manufacturer's estimated useful life.
- IRS Publication 946 (class life).
- Industry standards.
- Proven useful life developed at a Federal test facility.

Asset Class:	Description:	Depreciable/Useful Life:
Bus: Small body on van cut-away	Light duty chassis - less than 30 feet	Delivered prior to 1/1/08: 5 years or 150,000 miles. Delivered on or after 1/1/08: Altoona testing
Bus: Medium body on truck chassis/trolleys	Medium duty chassis - less than 30 feet	Delivered prior to 1/1/08: 7 years or 200,000 miles. Delivered on or after 1/1/08: Altoona testing
Bus: Medium body on truck chassis/trolleys	Heavy duty chassis - 30 feet to 34 feet	Delivered prior to 1/1/08: 10 years or 350,000 miles. Delivered on or after 1/1/08: Altoona testing
Bus: Large	Heavy duty chassis - 35 feet to 60 feet	Delivered prior to 1/1/08: 12 years or 500,000 miles. Delivered on or after 1/1/08: Altoona testing
Cars, minivans, standard van, van conversion:	Under 13,000 lbs. gross vehicle weight (g.v.w.)	4 years or 100,000 miles
Trucks	Light duty (under 13,000 lbs. g.v.w.)	4 years
Trucks	Heavy duty (over 13,000 lbs. g.v.w.)	6 years
Office furniture and fixtures	Desks, files, safes	10 years
Office equipment	Copiers, radios (digital/analog, 911, repeater, voice antenna, automatic vehicle locators), fax, phones	5 years

REPLACEMENT SCHEDULE FOR CAPITAL ITEMS (cont.)

Computers and peripheral equipment:	Computers, card readers, card punches, high speed printers, mass storage units, data entry devices	6 years
Software	Costs related to the purchase of the software should be capitalized. Costs of upgrades and enhancements that enable the software to perform tasks that it was previously incapable of performing should be capitalized. Fees paid for training, conversion costs and software maintenance are to be expensed.	3 years
Maintenance tools, equipment	Power/hand tools, lawn mowers, snow blowers	5 years
Maintenance equipment and fixtures	Vehicle hoist/lift (four/six post life, in-ground, drive-on, scissor lift-electric or hydraulic, transmission flush and exchange unit, floor sweeper/scrubber, pressure washer/steam cleaner (hot/cold)/parts cleaner/steamer - upholstery cleaner, portable/vehicle installed generator, brake lathes/milling machines/drill press/grinders, lubrication and fuel dispensing equipment, carbon monoxide detectors/fuel leak detectors, roller cabinets, portable tool stands, compressors, diagnostic equipment, tractors - utility, lawn and attachments (e.g. back blades, snow blowers, mower decks.)	12 years
Passenger bus shelter		10 - 15 years

REPLACEMENT SCHEDULE FOR CAPITAL ITEMS (cont.)

Buildings	Administration, maintenance garages, cold storage building/bus shelter	40 years
Land	Cannot be depreciated	0 years

2. Used Assets:

If a used asset is purchased, the transit agency must determine a useful life based on such factors as: type of construction, nature of the equipment, past usage patterns, age, mileage, and technological developments. The asset class will remain the same as listed above under new assets. Acceptable methods to determine useful life include, but are not limited to:

- a: Transit agency's independent auditor to recommend a useful life,
- b: Manufacturer's estimated useful life,
- c: Internal Revenue Service guidelines (IRS Publication 946 at <http://www.irs.gov/pub/irs-prior/p946--2013.pdf>),
- d: Industry standards.

ESTIMATED VEHICLE PRICES (Effective October 1, 2015)

Minivan

(Minimum 4 years or 100,000 miles)

6-passenger accessible with ramp	\$38,000
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Standard Van

(Minimum 4 years or 100,000 miles)

15-passenger	42,000
12-passenger Van with lift	45,000

Light-Duty, Small Bus

(Minimum 5 years or 150,000 miles)

138" wheelbase, without lift, gas engine	48,000
138" wheelbase, with lift, gas engine	53,000
138" wheelbase, without lift, diesel engine	62,000
138" wheelbase, with lift, diesel engine	67,000

Small Bus

(Minimum 7 years or 200,000 miles)

158" wheelbase, without lift, gas engine	53,000
158" wheelbase, with lift, gas engine	58,000
158" wheelbase, without lift, diesel engine	67,000
158" wheelbase, with lift, diesel engine	75,000
158" wheelbase, without lift, propane engine	67,000
158" wheelbase, with lift, propane engine	75,000
158" wheelbase, without lift, CNG engine	73,000
158" wheelbase, with lift, CNG engine	81,000
176" wheelbase, without lift, gas engine	56,000
176" wheelbase, with lift, gas engine	60,000
176" wheelbase, without lift, diesel engine	70,000
176" wheelbase, with lift, diesel engine	75,000
176" wheelbase, without lift, propane engine	70,000
176" wheelbase, with lift, propane engine	75,000
176" wheelbase, without lift, CNG engine	77,000
176" wheelbase, with lift, CNG engine	81,000

ESTIMATED VEHICLE PRICES (cont.)

Medium Duty Bus

(Minimum 7 years or 200,000 miles)

Class One (minimum 19,500 GVWR)

26-Foot without lift, gas engine	75,000
26-Foot without lift, diesel engine	80,000
26-Foot with lift, gas engine	80,000
26-Foot with lift, diesel engine	85,000
29-Foot without lift, gas engine	77,000
29-Foot without lift, diesel engine	82,000
29-Foot with lift, gas engine	84,000
29-Foot with lift, diesel engine	90,000
32-Foot without lift, gas engine	80,000
32-Foot without lift, diesel engine	85,000
32-Foot with lift, gas engine	86,000
32-Foot with lift, diesel engine	92,000

Class Two (Diesel Only, minimum 22,000 GVWR)

26-Foot without lift	114,000
26-Foot with lift	120,000
29-Foot without lift	114,000
29-Foot with lift	123,000
32-Foot without lift	116,000
32-Foot with lift	125,000

Medium Heavy Duty Bus (Diesel Only)

(Minimum 10 years or 350,000 miles)

27-Foot without Lift	133,000
27-Foot with Lift	137,000
33-Foot without Lift	137,000
33-Foot with Lift	139,000
37-Foot without Lift	140,000
37-Foot with Lift	145,000
40-Foot without Lift	142,000
40-Foot with Lift	149,000

ESTIMATED VEHICLE PRICES (cont.)

Heavy Duty Bus (Diesel Engine - Over 35-foot)

(Minimum 12 years or 500,000 miles)

Low floor with ramp	401,000
Low floor hybrid with ramp	580,000

Heavy Duty Articulated Bus (Diesel Engine)

(Minimum 12 years or 500,000 miles)

Low floor with ramp	500,000
Low floor with ramp	783,000

Note: Estimated bus prices are for base vehicles and do not include manufacturer options like air conditioning, auxiliary air heater systems, etc. Further information on manufacturer optional prices are available on OPT's web page, at www.michigan.gov/mdotptd, under "Procurement," "State Vehicle Contracts and Procurement" and then review each vehicle order packet.

Benzie Bus

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Mary Carroll, Benzie Chamber of Commerce
Bruce Ogilvie, Frankfort Zoning Board of Appeals & Planning Commission
Susan Kirkpatrick, Frankfort Planning Commission & Oliver Art Center
Anne Noah, Crystal Mountain Resort
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