Michigan Livable Communities Demonstration Project

Grand Vision

Mobility Management & Coordination Strategies

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October 2013



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1 Project Overview

"Mobility management involves creating partnerships with transportation providers in a community or region to enhance travel options, and then developing means to effectively communicate those options to the public" (American Public Transportation Association, 2013)

The Michigan Sense of Place Council, representing numerous state agencies under the direction of Governor Snyder, engaged in a partnership with Smart Growth America to provide technical advisory services to six communities of Michigan pursuing livable communities initiatives. The six communities were the City of Marquette, the Southeast Michigan Council of Governments (SEMCOG), ReImagine Washtenaw (Washtenaw County), the Tri-County Council of Governments, the City of Grand Rapids, and the Northwest Michigan Council of Governments. As part of the Federal Partnership for Sustainable Communities program, the program seeks to coordinate federal funding directed to housing, transportation, and other infrastructure in communities to create more livable places where people can access jobs while reducing pollution and also saving time and money. The assistance was in two primary areas – community mobility management and strategic transportation demand management (TDM). The focus of the effort for the Grand Traverse livability effort was on mobility management.

Mobility management is the state of the practice for planning and implementing effective and coordinated transit services for a variety of populations. Traditionally various programs targeted transportation services only to specific groups such as seniors, people with disabilities, veterans or low income households. Mobility management crafts a coordinated system that increases efficiency financially and operationally while providing individual customers with a range of options to meet their needs. Mobility management assists in integrating regional transit services as well, which can expand the reach, efficiency and level of service across regions both large and small. The full range of mobility management services may include customer relations, marketing, planning, land use development, system integration, finance, administration, legal, compliance, human resources, multimodal operations, information technology, engineering, construction, and varied non-operating functions. (Crain & Associates, Inc., et.al., 1997)

Regional coordination is the primary theme throughout the implementation recommendations developed for the Grand Traverse area. Coordination between transportation providers and a wide range of other stakeholders will improve and expand convenient and cost effective inter-county transportation options for commuters, tourists, human service clients and the general public. Coordination is also essential for creating and marketing high quality web-based and hard copy resources to make it easier for residents and visitors to navigate the region's entire suite of transportation service options. Finally, coordination can tie together regional land-use, transportation and other

types of planning in the short and long-term to ensure a holistic approach is taken to connecting transportation with community development. In combination, these recommendations should help the region and its communities become more vibrant, livable and sustainable, bringing about economic development and increased support for transportation services.

The project progressed in three distinct stages: 1) review of national leading practices and assessment of existing local resources and opportunities, 2) discussion of alternative approaches and strategies, and finally 3) development of an action strategy for implementation. This report is the culmination of these three phases and their associated findings.

2 State of the Practice

"Mobility management involves creating partnerships with transportation providers in a community or region to enhance travel options, and then developing means to effectively communicate those options to the public" (American Public Transportation Association, 2013)

Communities across the country, including the Grand Traverse Region, are looking for ways to increase the quality of life and mobility of residents, seeking to provide effective multimodal transportation options for residents and visitors to make connections within and between rural and urban communities. Mobility management strategies offer an effective approach to optimizing the value of transportation services through increasing access and reducing complexity. Mobility management encompasses and synthesizes a broad range of complementary strategies that include:

- Qualified, professional mobility management staff who coordinate public transportation and human service transportation
- Intelligent Transportation Systems (ITS) Technology designed and implemented using systems engineering. Information and federal requirements concerning systems engineering are included in Supplement A.
- Effective marketing and convenient service
- Creative, broad-based funding strategies including public-private partnerships, and strong community support and local funding that leverages federal and state funding
- Engagement in transportation demand management and local and regional planning efforts to ensure sustainable, transit oriented community design and growth patterns

Providing a coordinated, efficient transportation system requires great expertise in navigating through the complicated network of federal transportation funding sources and rules, and applying this understanding to the web of community partners and needs. In 2004 the Congressional Office of Management and Budget identified 62 federal programs that have transportation funding programs for the human service portion of community transportation. The spaghetti diagram in Figure 2-1 shows these programs, updated to include livability programs and other program changes. Layered onto the federal funding sources are the state and local governments, the transportation providers, and the supporting social services. The agencies, services, and needs most directly related to the discussion in the Grand Traverse Region are indicated by shaded shapes. Supplement A lists the non-FTA federal programs.

The person looking for a ride and the organizations offering rides can get lost in the complexity of navigating this network of often overlapping programs. In communities with poor coordination and a lack of expertise and the staffing resources to tackle this challenge, the result is typically low funding levels and missed opportunities, with duplicated transportation services in some areas and no service and limited hours in other areas.

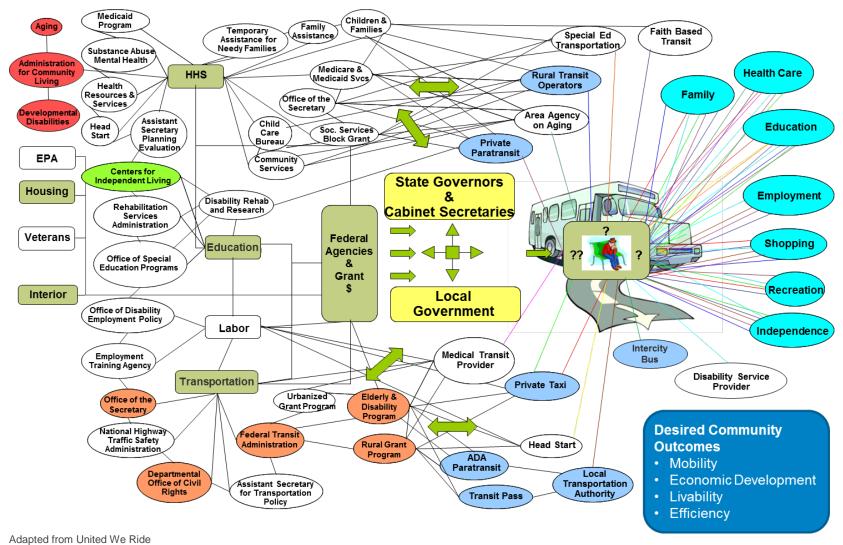


Figure 2-1: Shaded areas represent project focus for Grand Traverse region.

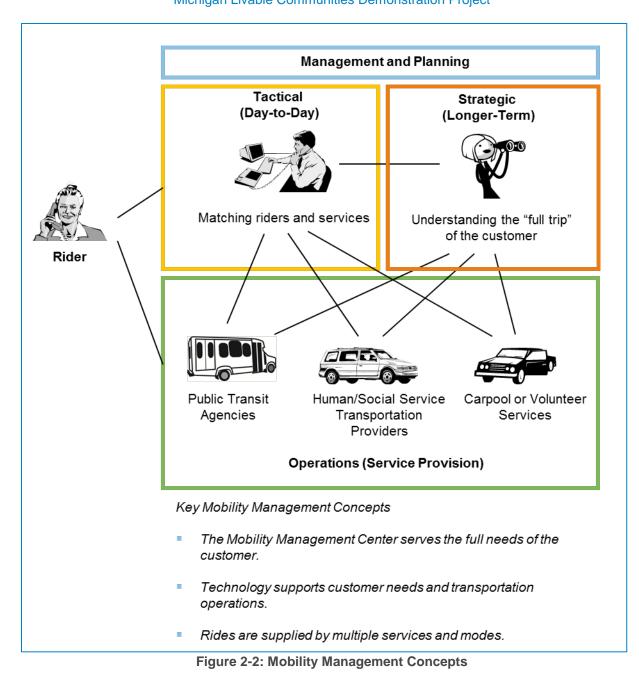
As illustrated in Figure 2-3 below, to effectively achieve the goals of maximizing transportation options and service coverage while also being efficient and cost-effective, a mobility management system must successfully serve two key functions:

- 1) A mobility manager must **plan and coordinate region-wide and long term**, by building working partnerships, coalitions and business relationships between multiple transportation service providers, social service providers and other stakeholders.
- 2) On the short term, day-to-day level of serving individual riders and maximizing ridership, they must be effective at creating and managing systems and communication strategies that help people find rides and get where they need to go. Mobility management should be focused on both customer needs and cost efficiency so that find-a-ride services are unbiased in pairing customers with the most cost-effective transportation service that fully meets their needs. Based on these two criteria, the most appropriate ride for a given client may be with public transit, a human service agency, or a private operator.

Combining these two responsibilities, fundamental practices include:

- Ongoing coordination and relationship building between the mobility manager and other stakeholders to achieve positive outcomes.
- Providing access to information to all target audience members for a variety of uses
- Increasing the role of technology in providing information access
- Coordination at multiple levels including local, state and federal
- Coordination between the worlds of transportation and social services
- Coordination of marketing strategies
- Integration of mobility management efforts into local and regional planning efforts
- Assistance with managing financial and other resource allocations.

The ideal community transportation system not only meets basic social service needs, but also provides significant economic benefit to employers, employees and commercial areas. Additionally, by maximizing ridership it should achieve meaningful reductions in traffic congestion and carbon footprint. To do this, services must be affordable and consist of routes and services that are designed using good data and stakeholder input to effectively serve a broad range of community needs.



Tools and Techniques for Strategic, Longer Term Mobility Management

The long term planning for mobility management encompasses all the tasks required to build and sustain an effective network of transportation services. These tasks include stakeholder coordination and partnership building; developing diverse, stable funding sources; and integrating transportation into community planning efforts. Tools and programs are summarized in the following table:

Table 2-1: Key Tools and Approaches for Strategic, Longer-Term Planning		
Approaches	Programs	
Coordination	 Human Service Coordination Plan- MDOT requires this to access funding from the FTA Senior and Disabled grant program but recommends it for all recipients. Following the MDT outline, the plan paves the way to coordination between transportation and human service providers while assessing community needs Develop a transportation inventory and assess resources Integration of mobility management efforts into community development and other types of planning Facilitate ways for different transportation providers to interact 	
Sharing costs and revenue	 Data tracking and analysis - miles, hours, rides, passenger-miles, costs, revenues. Cost allocation - for fixed route, a cost allocation formula uses variables for miles and hours. For demand response, it also considers number of passengers and passenger miles. Coordinated fare payment options, vouchers, and billing 	
Marketing	 Coordinated marketing appearance visually linking services Referencing other service types on websites Increasing the quality of customer service 	
Infrastructure	 Increasing the attractiveness of infrastructure such as benches, shelters, and bus stop signs Road and site design to minimize buses travelling through parking lots 	
Integrating public transportation into sustainability and livability	 Engagement in multi-modal planning by all appropriate government agencies, decision-makers and other stakeholders. Collaboration to promote and plan improved and expanded options for transit and carpooling; walking and biking; and transit oriented development. 	

Table 2-1: Key Tools and Approaches for Strategic, Longer-Term Planning

Tools and Techniques for Tactical, Day-to-Day Work

The table below breaks down the mobility management concept into its specific functions for day-to-day tactical mobility management – matching people to rides. This refers to both fixed route and demand response.

We have seen many local systems fall far short of their potential because the public has a low level of awareness of the services that are available. Failure to provide a positive experience and to market services can have a substantial impact on ridership and can significantly limit the effectiveness of the FTA funding being invested in other aspects of the system.

Table 2-2. Rey Tools and Approaches for Tactical, Day-to-day mobility management		
Approaches	Programs	
Finding available services	 Help people find services through printed and electronic transportation guides, 2-1-1 and other one call-one click services, Google Maps and other trip planners, clear and up-to-date maps, and web sites designed to meet the specific needs of a transit rider 	
	 When implementing technology such as the General Transit Feed Specification (GTFS), provide open data that all parties can use to develop applications that help customers find and use transportation services. 	
Customer assistance	Travel training and person-centered transportation plansFacilitate client eligibility	
Optimize operations	 Combine riders when possible on demand response systems Holistic brokerage to help people reserve a ride and to lower costs Technology tools to help fixed route riders such as actual arrival times. 	
	 Tools to operate demand response services more efficiently, like demand response software, vehicle tracking devices, shared data between services. 	

Table 2-2: Key Tools and Approaches for Tactical, Day-to-day Mobility Management

Organizational Structure

A quality that communities pursuing effective mobility management efforts all share is that the lead governmental and non-profit agencies have organizational cultures that value cooperation and collaboration and are willing to invest in coordination because they have a shared vision as well as a practical understanding of the benefits that can be achieved.

Mobility management functions can be assigned to existing staff, or a new position can be created. In this project we will loosely use the term "mobility manager" to apply to anyone carrying out some or all of the mobility management functions, regardless of job title.

Although conceptually simple, working through the coordination process and bringing community partners together can be challenging, because most partners focus on their core business or service and often have limited understanding of the transportation coordination options that may be available, and the potential benefits and cost savings that could be achieved.

Mobility management can fall short for one or both of the following two reasons:

- 1. Qualified staff is hired but have so many responsibilities for operating the local transit system that they have no time for mobility management tasks such as pursuing new funding sources, or building and coordinating coalitions and partnerships.
- 2. Low salary and low expectations for professional skills result in hiring unqualified personnel.

Across the country, many successful community or coordinated transportation systems serve rural, small urban, and metropolitan regions These systems can be categorized into three generalized structures as shown in Table 2-3. Regions can choose different organizational structures for different elements of their mobility management efforts. For example, the

provision of trips can be through a brokerage structure, while planning is through a lead agency structure.

Table 2-3: Coordination Structures		
Structure	Elements	
Lead Agency	In the lead agency model, one local organization is responsible for coordinating transportation services and activities within a defined geographic area. The lead agency may be a private or non-profit organization, social service or related agency, or public entity.	
Brokerage	In the brokerage approach, one entity acts as an agent to arrange rides for persons needing transportation among a group of operators that "bid" to provide services. Both the broker and transportation provider receive fees for services, which are rolled into transportation charges per capita, per trip or some unit, and/or per mile. Such charges are paid by individuals or insurance companies directly or via health and social service funding.	
Administrative Agency	In the last type, an administrative agency is a public agency or entity (often a transit authority) that has responsibility to coordinate social service or specialized transportation, in addition to its role in providing public transportation.	

Table 2-3: Coordination Structures

Funding and Partnerships

Diverse and often creative and entrepreneurial funding strategies are necessary to build and sustain an effective mobility management system, and to take advantage of opportunities to expand and improve services. It is essential for mobility managers to understand transit system funding as well as human service funding because public transit and social service staff often do not have the time or training to "unravel the spaghetti" of transportation funding illustrated in Figure 2-1. A mobility manager can identify opportunities to share resources and leverage various funding sources only if they develop an in-depth understanding of transit funding as well as funding sources such as Community Development Block Grants (CDBG), Medicaid, and Michigan Works!/Department of Labor.

Transit system revenue comes from a combination of federal, state, and local funding sources plus farebox revenue. Operations funding shown in Figure 2-4 is typical for small and medium sized systems in Michigan.

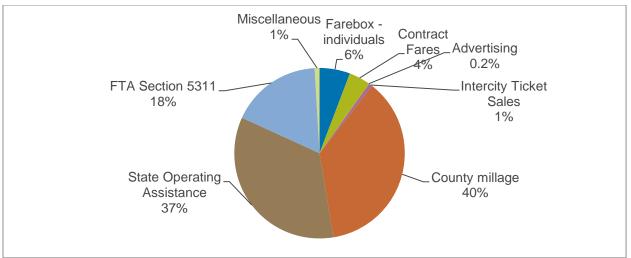


Figure 2-3: Approximate distribution of revenue for Michigan rural transit

The Federal Transit Administration's (FTA) 5307 Urbanized Area Formula Program for communities with population more than 50,000 and 5311 Formula Grants for Other than Urbanized Areas are the principal funding source for public transportation in communities with fewer than 250,000 people.

MAP-21 (Moving Ahead for Progress in the 21st Century Act) became effective on Oct. 1, 2012 and will remain in effect until Sept. 30, 2014. Under MAP-21, mobility management is considered a capital expense, eligible for 80 percent federal funding. The definition of mobility management is unchanged from previous transportation law, SAFETEA-LU provisions. Mobility management continues to be an eligible capital expense in every FTA grant program other than Section 5309. Coordination with human services will remain a requirement for FTA grantees across the range of all non-rail FTA programs.

Communities with high performing transportation systems are proactive about negotiating contracts and contributions with a variety of partners. Whenever possible, these relationships should be negotiated for expanded service that serves both targeted populations and the general public. The choice of whether to negotiate a contract or a contribution can be made on a case by case basis depending on the needs and preferences of different partners such as Universities, Colleges and other Educational Institutions; Large Employers; Social Service Agencies and Non-Profit Organizations; and Commercial Centers.

Finally, these communities achieve efficiencies through coordination with human services. Public transportation funds by themselves cannot meet the entire needs of the community. Human services must also contribute funds to meet the whole community's needs.

3 Local Practices and Opportunities

A Regional Approach to Transit

This project builds on an outstanding transportation planning process that is ongoing in this sixcounty region. Michigan Department of Transportation (MDOT), NWMCOG, BATA, MLUI and other partners have developed The Grand Vision, a vision for a regional approach to transit along with a variety of plans and action steps to achieve the vision. Based on the large amount of high-quality work that has been done and the high level of engagement by partners throughout the region, we believe the region's public transportation providers are well-positioned to implement mobility management strategies that will help achieve their goals.

The partners in the region have implemented a number of transportation planning best practices that will be important to achieving their vision:

- Leadership from a variety of partners The region benefits from high quality leadership and engagement in transportation planning and coordination from a number of partners, including the Northwest Michigan Council of Governments (NWMCOG), the Michigan Land Use Institute (MLUI), the Bay Area Transit Authority (BATA), and others.
- **Public involvement** There has been a high level of citizen and stakeholder involvement in developing and implementing the region's Grand Vision.
- **Planning process information sharing** Information about plans and planning processes is easily available to the public through the Grand Vision and NWMCOG websites, along with an excellent "Citizen's Guide to Transportation Planning in Northwest Lower Michigan".
- **Good plans** Viable and well-developed transportation plans that identify Traverse City as the region's economic hub, and focus on strategies to improve connections between communities.
- **Regional Transit Group** Managers of the region's public transportation organizations meet and coordinate on a regular basis.
- Extensive Service Coverage In addition to BATA's extensive fixed route service in Grand Traverse and Leelanau Counties, all six counties have county-wide public transportation coverage through dial-a-ride service. With a significant amount of transportation resources already in place, coordination and mobility management efforts can focus on strategies to use these resources more efficiently and effectively.
- **Complete Streets** A strong focus on establishing complete streets policies and upgrading street infrastructure to meet complete streets standards.

Existing Studies and Efforts

This project builds on three important studies and efforts. The four documents discussed below are complementary and fairly consistent in the regional transportation vision they promote and the actions they recommend.

The Grand Vision

The Grand Vision is an ongoing effort that began in 2005 and currently serves a region with about 200,000 people in the following six counties: Antrim, Benzie, Grand Traverse, Kalkaska, Leelanau and Wexford. The Grand Vision website¹ summarizes the effort as, "an ambitious, citizen-led vision for the future of land use, transportation, economic development and environmental stewardship."

Table 3-1: Regional Population ²		
6 Counties: 80 Townships, 4 Cities, 20 Villages		
Antrim County: Benzie County: Grand Traverse County: Kalkaska County: Leelanau County: Wexford County: TOTAL:	23,580 17,525 86,986 17,153 21,708 32,735 199,687	

The *Grand Vision Document* (Mead & Hunt et.al., 2009) was the product of over three years of collaboration between government, non-profits and the private sector as well as participation by more than 15,000 citizens. The "vision" is now being implemented in the six counties, through six issue area networks and a CORE team that all work to incorporate The Grand Vision principles into plans, developments, investments, and practices. The issue networks include Food & Farming, Energy, Growth & Investment, Housing, Natural Resources and Transportation.

Transportation Implementation

The Grand Vision's Transportation Network and NWMCOG are currently in the early stages of conducting a regional transit study. The *Grand Toolbox* (Mead & Hunt, 2010) provides a collection of implementation tools for citizens and local elected and appointed officials. This document includes several implementation strategies for working towards transportation goals. The following table includes the four strategies that are most relevant to this project.

¹ www.thegrandvision.org/quick-overview

² Census 2010

Tool	ble 3-2: Most Relevant Too Metrics	Time Frame	Costs
Take a regional approach to transit	Create a Grand Vision regional transit group Hold 1st Annual	Short-term: Organize a regional transit providers group	Low: Organize regional transit providers group
	Transportation Summit Conduct a Regional	Mid-term: Hold an annual transportation summit	Low/Medium: Hold an annual transportation summit
	Transit Study	Mid-term: Conduct a regional transit study	High: Regional transit study
Reduce VMT for home to work trips	Target VMT reduction goals at 5-years, 10-	Short: support Smart Commute week	Low: Promote Smart Commute week
in the region	years and beyond Journey to work statistics	Mid: allow live-work units and home based businesses	Low: Zoning revision to permit live work units
	Number of Home- based businesses		Medium: Support a community vanpool
	Participation in Smart Commute week		
Context Sensitive Solutions (CSS) and	Strength of advocacy coalition (members,	Short-term: Organize an advocacy coalition	Low: Organize advocacy coalition
Complete Streets	budget, presentations) Number of	Mid-term: Create educational material; initiate advocacy	Medium: Guidebook creation and publication
	participants in a CSS public involvement process	campaign; incorporate CSS and Complete Streets for new road design	High: Road reconstruction projects using
	Number of local complete streets ordinances		complete streets approach
Transit Oriented Design (TOD) and	TOD reference in Master Plan	Short-term: Revise planning tools	Low: Revise planning tools
station area planning	TOD provisions/ language in zoning ordinance	Mid-term: Infrastructure investment as needed	Mid/ high: Infrastructure investments as
	Infrastructure improvements to enhance transit stop locations	Mid-term: Regional transit plan	needed High-cost: Regional transit plan

Table 3-2: Most Relevant Tools from The Grand Tooolbox

Information & Resources

The Grand Vision website's Transportation Network page³ provides a wide variety of information and resources related to the work of the transportation issue network. This includes the 2011 Citizen's Guide to Transportation Planning and a video about the Buckley Transfer Station that effectively captures a picture of the current state of public transportation services in the area including the high level of community engagement and the ongoing collaboration between transit systems in the six counties.

2011 BATA Transit Service and Coordination Study

The *BATA Transit Service & Coordination Study* (Vlecides Shroeder Associates, Inc., 2011) is a high quality planning document that aligns with the Grand Vision and identifies opportunities to improve cost effectiveness as well as increase availability of fixed route and deviated route services. The recommendations are in the areas of existing services, new services, policy areas, and no change.

From the perspective of regional transit, one of the more significant recommendations restructures the BATA county dial-a-ride, branded as "County Ride", and the village connectors. The goal is to reduce redundancy and improve fixed route service from outlying areas into Traverse City. Figure 1 and Figure 2 illustrate the existing and proposed service zones. "Since the proposed zones no longer serve Traverse City, the new County Ride system is designed primarily to take passengers from a requested origin to the closest Village Connector transfer point (or, conversely, bring passengers to a requested destination from a Village Connector transfer point)."



Figure 3-1: Existing and Proposed Village Connectors and County Ride Service Zones

³ www.thegrandvision.org/transportation-network

Expanding Transportation Choices in the Grand Traverse Region: Connecting Villages and Towns with Public Transit

This report provides an analysis and recommendations that mirror issues identified in the 2011 BATA Transit Service and Coordination Study (Michigan Land Use Institute, 2009). It emphasizes the importance of improving public transportation services between towns and cities, and advocates for more fixed route service outside of Traverse City designed to meet commuter needs. It states that fixed-route bus service will increase bus ridership throughout the Grand Traverse region by providing commuters with fast, efficient, reliable transportation. It also highlights some tourism needs and includes good descriptions of the transit systems in the region, including findings from interviews of riders and drivers.

Recommendations from the report include:

- Transit agencies in the region need to emphasize fixed routes over demand response service to attract commuters and other choice riders.
- Increase the number of village connectors and phase out the inefficient and cost ineffective zone services (County Ride)
- Beyond being cost ineffective, DAR services are not as fast or direct as fixed-routes, and also require advance registration as opposed to the set frequency and regularity of fixedroutes; therefore, although DAR provides door-to-door service and alleviates some walking on passengers' part (unnecessary except for the special needs community), it is overall an inferior service for commuters.
- In the summer/seasonal months more passengers use the fixed-route village connector services; correspondingly, less service should operate in the winter months. Consider expanding summer service along these routes either via an express service, additional headways, or a related set of improvements
- Combine the use of bicycle, foot, carpooling, personal vehicle, and/or DAR to provide the "last-mile" connections needed to get people riding the Village Connecter services at sensible transfer center locations, such as village downtowns.
- Promote environmental benefits and cost-savings to non-riders

Transportation Providers

Effective mobility management requires coordinating as many regional transportation providers as possible. This section provides information about important transportation providers in the region.

Public Transportation

The Grand Traverse area has seven public transportation providers. Of these, five were included in the Grand Vision. Charlevoix and Manistee Counties have been added to regional discussions in more recent years. Information from the MDOT 2011 ridership report is shown in Table 3-3.

Agency	Contact	2011 Ridership
Antrim County Transportation	231-533-8644	46,067
Bay Area Transportation Authority	231-941-2324;	539,384
	www.bata.net	
Benzie Bus	231-325-3000;	69,852
	www.benziebus.com	
Cadillac/Wexford Transit Authority	231-779-0123	132,511
Charlevoix County Transit	231-582-6900, (231-	94,081
	448-2026 on Beaver	
	Island)	
Kalkaska Public Transit Authority	231-258-6808	105,907
Manistee County Transportation	231-723-6561	112,932

Table 3-3: Public Transportation in the Region

Detailed information about these providers is summarized in Chapter 3 of the 2011 BATA Transit Service and Coordination Study, and Chapter 2 of the Michigan Land Use Institute's 2009 report on Expanding Transportation Choices in the Grand Traverse Region: Connecting Villages and Towns with Public Transit. NWMCOG has produced a large-scale map that summarizes key data for five of seven of these providers⁴. A scaled down version is shown in Figure 3.

The public transit agencies have formed a Directors Network that convenes regularly to share information and to identify and implement collaborative projects that increase the efficiency and effectiveness of transit services across the region.

NWMCOG serves as a repository of regional transit information. Their web page⁵ offers quality information about current planning efforts as well as cross-transit agency schedules and summary of services. It also includes a route guide for the regional services from 2011/2012. Of note, neither the web site nor the guide includes intercity bus, Amtrak, or rideshare information. Only 2 of the 7 transit agencies have web sites.

⁴ http://www.nwm.org/userfiles/filemanager/326/

⁵ http://www.nwm.org/planning/transportation/public-transit/

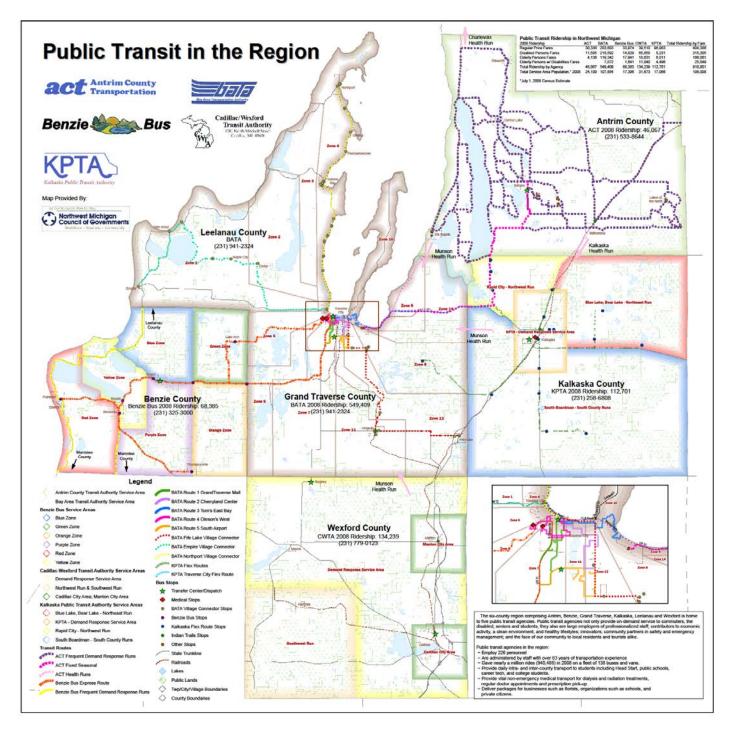


Figure 3-2: Summary of Key Public Transportation Characteristics (NWMCOG 2008)

Intercity Bus and Amtrak Thruway

The Grand Traverse region is served by Indian Trails (Trailways)⁶ Schedule 1484⁷ between Petoskey and Grand Rapids, one round trip per day, seven days a week. The bus is also an Amtrak Thruway Schedule 8532⁸. No passenger rail exists in the Grand Traverse region.

The Indian Trails bus route offers one trip north and one trip south every day serving the following communities included in the Grand Vision: Cadillac, Charlevoix, Manton, Kingsley, and Traverse City. Riders have less than an hour wait for a transfer in Grand Rapids to travel to Chicago, Kalamazoo, Lansing, Flint, and Detroit. All coaches are wheelchair accessible.

In Traverse City, the bus stop for intercity service is at BATA's Indian Trail station at 115 Hall Street. The location near the highway and a few blocks from downtown is convenient for both the bus and boarding or debarking passengers. Indian Trails lists this facility as a "Travel Center" where tickets can be purchased. Tickets can be purchased at the station, through Indian Trails, through Greyhound, or through Amtrak. Web purchases are currently only available through Greyhound and Amtrak, but the Indian Trails website indicates that online purchases will soon be available. Greyhound offers a roundtrip web fare to Chicago for \$176.40, and travel time is 12 hours. In the intercity bus industry, it is common to offer lower fares through the ticket agent compared to the web. A full-priced Amtrak round-trip ticket from Traverse City to Chicago costs \$121, and Amtrak requires that the Thruway ticket to Kalamazoo be purchased in conjunction with a train ticket. Travel time is 11 hours, including a 3-hour layover in Kalamazoo.

Departures from Traverse City:

- Depart 11:55 AM to Grand Rapids (arrives in Grand Rapids at 4:00 PM)
- Depart 8:45 PM to Petoskey, MI (arrives in Petoskey at 10:17 PM)

In the remainder of the state, Indian Trails operates four daily trips between Chicago and Flint, with less frequent service throughout northern Michigan. Riders can transfer onto Amtrak, other Indian Trails buses or Greyhound buses in Grand Rapids to travel across Michigan and the country.

⁶ <u>http://www.indiantrails.com/scheduled-service</u>

⁷ http://www.indiantrails.com/sites/default/files/1484.pdf

⁸ http://tickets.amtrak.com/secure/content/routeatlas/index.html

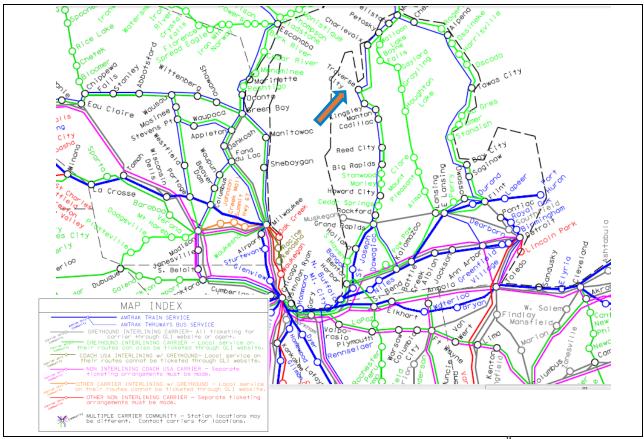


Figure 3-3: Intercity bus and train routes in lower Michigan⁹

For the Grand Traverse region the most obvious opportunity for improved service is to address the gap in service to access Indian Trails' other north-south routes through the lower peninsula. These routes also operate once a day, however, no east-west connector operates in the northern lower peninsula, and once-daily operations usually are inadequate to keep transfers less than an hour at all potential transfer points. This means that residents in the Grand Traverse region do not have viable intercity bus access to the north central and northeast areas of the lower peninsula, and poor access to East Lansing, Battle Creek, and Ann Arbor. This issue is especially problematic for riders in the region who could use intercity bus service to access Michigan State, University of Michigan and the state's five Veteran's Administration medical facilities.

This issue can be illustrated by a trip from Traverse City to Ann Arbor. Under the current level of service, access to East Lansing, Battle Creek, and Ann Arbor is poor with long layovers in Kalamazoo. For example, it takes 11 hours 20 minutes to travel from Traverse City to Ann Arbor, compared to just under 4 hours by car.

⁹ http://www.aibra.org/pdf/usmap.pdf

Connections to Airports

BATA's Cherry Capitol Airport route stops at the airport hourly, but accessing downtown Traverse City and other major destinations requires a transfer. Making this a viable transportation option for most visitors arriving at the airport would require restructuring of routes to eliminate the transfer.

Benzie Bus recently began providing demand response service to the airport.

Other Transportation Providers

In many communities, gaps in public transportation services are filled to varying degrees by human service agencies, private non-emergency medical transportation (NEMT) providers and taxi services. One of the goals of mobility management is to identify all transportation choices and foster communication and coordination between public and private providers to maximize the efficiency, effectiveness and quality of the services provided and to identify ways to address unmet needs.

In the Grand Traverse region, information about private transportation options is currently not centralized. The team identified one non-emergency medical transportation provider and seven taxi companies. A detailed list of providers and organizational descriptions are included in Supplement B.

Mobility Management & Coordination Partners

In addition to coordinating transportation providers, effective mobility management requires coordination with all the organizations that are stakeholders in addressing the area's transportation needs – including needs that are currently unmet. The following table lists a wide range of potential coordination partners identified from the following sources:

- Grand Vision Transit Focus Group List
- Grand Vision Regional Planning Partners
- Veterans' Services
- Private transportation providers

Through outreach and collaboration with these partners, the Grand Vision effort will likely find opportunities to improve service and increase funding. Additional information about these stakeholders is included in Supplement B.

Partner	Described in
Poordo and Networko	Supplement B
Boards and Networks	V
Human Services Collaborative Boards	X
Leelanau County Family Coordination Council	V
Traverse Bay Poverty Reduction Initiative (PRI)	X
Disability Network	X
Brickways Independent Living Centers	
GV Housing Solutions	
State / Federal / Tribal Government Agencies	
Michigan Department of Transportation (MDOT)	
Area Agency on Aging	
Veterans Administration (VA)	X
Northwest Michigan WORKS!	X
Grand Traverse Band of Ottawa and Chippewa Indians	Х
Adult foster care centers	
Medical	
Munson Health Center Dialysis Centers	
Northern Lakes Community Mental Health	
Non-Governmental Organizations	
Michigan Land Use Institute (MLUI)	Х
Traverse Area Recreational Trails (TART)	
NorthSky / Rotary Charities of Traverse City	Х
SEEDS Inc.	Х
Goodwill	
Business	
Chambers of Commerce	
Traverse Bay Economic Development Corporation (Traverse Bay EDC)	Х
Traverse City Downtown Development Authority (TC-DDA)	
Northern Lakes Economic Alliance	Х
Traverse Area Association of Realtors (TAAR)	
Local Governments & Agencies	
Northwest Michigan Council of Governments (NWMCOG)	Х
City and Village Governments	
County Road Commissions	
Townships	
Planning Departments	
Education	
Northwestern Michigan College (NMC)	Х
School Districts	

Technology & Communications

Effective use of technology will be essential for achieving the regional transportation vision. It will be necessary both for providing information to make transit easy for riders to use, and for managing the transportation network. While BATA and others have efforts underway to improve capabilities, currently technological capacity appears to be one of the weakest elements of the existing services in the region:

- Websites The quality of information available varies greatly between the five public transportation providers' websites. BATA recently completed significant website improvements and will soon offer trip planning. However, all the websites lack real time bus tracking and most lack other important elements. On all the websites, information about regional transit options is inconsistent and often lacking. For example, only Kalkaska provides links to the other public providers' websites and only Cadillac/Wexford provides information about Indian Trails intercity service. The Grand Vision Transportation Network website could potentially serve as a centralized regional transit information website, but currently none of the public transit websites appear to link to this site.
- Google Transit Feed Specification (GTFS) None of the providers in the six counties have implemented GTFS, although BATA plans to launch their GTFS soon and it is under discussion for other providers that operate flex routes. GTFS does not yet apply to demand response service, although within the next few years the specification may be improved to accommodate this type of service.
- **Dispatch Software** Dispatch software capacity varies greatly between the transit agencies. BATA recently implemented Mobilitat software. However, at \$60 to \$70 thousand Mobilitat is too expansive for the smaller agencies who are currently using either using Michigan-developed software, spreadsheets, or pen and paper.

Other Web-Based Resources

Residents or visitors trying to find information about transportation options in the Grand Traverse area have several web-based options available.

As discussed above, the BATA, Grand Vision and NWMCOG websites offer a wealth of information about public transportation options. Additionally, the MLUI Transportation Choices website¹⁰ is an excellent source of information about regional transportation.

Currently the 2-1-1 call center and website for the Grand Traverse area is operated out of Muskegon. The Michigan Association of United Ways has a federal veteran's transportation grant that will result in significant improvements in 2-1-1 service statewide, with a focus on finding rides for veterans.

Rideshare information is currently available through Northwest Michigan Ride Share Connection¹¹, which is a service of NWMCOG and is part of the NWMCOG website.

¹⁰ http://www.mlui.org/thriving-communities/projects/transportation-choices/#.UQDLBye9f0R

¹¹ http://www.nwm.org/planning/transportation/northwest-michigan-ride-share-connection/

Non-FTA Transportation Investments

While the Grand Traverse area is engaged in extensive transportation planning, human service transportation does not appear to have been a primary focus of these efforts to date. Non-FTA federal investments in human service transportation are typically a significant focus of mobility management efforts. These investments include Medicaid, Title III Older Americans Act, the Community Development Block Grants program, and the Michigan Works program. These funding sources can potentially be used to improve and expand transit service through partnerships with human service agencies and others. To date, the Grand Vision working group partners have not compiled data or other information necessary to assess potential opportunities.

4 Strategies and Alternatives

At this project's initial stakeholders' meeting in March of 2013, participants identified several desired outcomes:

- They want to help achieve a paradigm shift in which the public and decision-makers perceive the region's transit providers as viable and important resources for sustaining and improving the region's economy.
- They want to make transit more usable. This echoes a goal articulated in the 2009 MLUI Report, which states that by creating a system that works for more riders, agencies will create a system that has more community support.
- They want to develop strategies with outcomes that are achievable within a relatively short timeframe so they can point to initial successes and generate momentum toward the big picture goals.
- They want to develop strategies that will position the region to receive available federal funding.

Based on these desired outcomes and findings from research, interviews and stakeholder discussions, the project team developed strategies and alternatives for the Grand Traverse region. This section provides an overview of these strategies and alternatives.

Goals

The project team and stakeholder group identified the following goals for mobility management and coordination in the Grand Traverse region:

1. Improve coordination between transportation providers (public and private) and with businesses.

Build on the work that is already being done to plan and implement the next stage of coordination with a focus on eliminating barriers for customers who need to travel using multiple providers or modes.

- **2.** Incorporate infrastructure elements into mobility management implementation. Design for the bus rider as well as the walker, bicyclist, and driver. Design bus stops into state roads, commercial areas.
- **3.** Develop multi-modal trip planning resources to serve all target populations. *Make it easy for customers to find the ride that best meets their needs,*
- 4. Coordinate and integrate human services transportation into a broader mobility management effort.

Achieve efficiencies and serve unmet needs – especially to maintain independence for the rapidly growing demographic of seniors with transportation challenges.

Identified Strategies

The priorities for implementation relate to region's four goals as shown in Figure 4-1 and Table 4-1. The next chapter provides detailed discussion of the strategies outlined in the table.

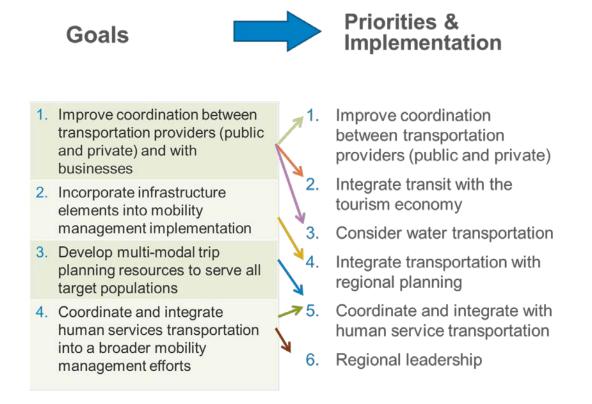


Figure 4-1: Goals related to implementation priorities

Table 4-1: Mobility Management Strategies

	Table 4-1: Mobility Management Strategies			
Implementation Step	Timeline	Cost		
Priority 1: Improve coordination between transportation providers (public and private)				
Identified Champions – MLUI, NWMCOG, BATA, Grand Traverse Ban	, ,			
Build relationships with people in other regions, such as with	Year 1	MM		
NWOTA and Shoreline Explorer, to share successes in coordinated				
regional service design				
Develop a regional transit pass or other fare coordination policies	Year 1	MM, P + \$10,000		
Develop and share cost allocation models for each public operator	Year 1	MM, P		
and use models as a basis for developing budgets and negotiating				
cost and revenue allocations.				
Coordinate local route timing to facilitate transfers where Indian	Year 1	MM		
Trails intercity buses stop in the region during local transit operating				
hours.				
Pursue new intercity connection between Traverse City and Grayling	Year 1	MM		
Explore creating a regional service	Years 2-5	MM		
Implement strategies for fare coordination and fare sharing.	Years 2-5	MM		
Use a cost allocation model as a basis for developing budgets and	Years 2-5	MM		
negotiating cost and revenue allocations.				
Develop a data-sharing network	Years 2-5	TBD		
Coordinate with Indian Trails intercity	Years 2-5	MM		
Explore passenger rail service between Traverse City and	Years 2-5	TBD		
Williamsburg				
Priority 2: Integrate transit with the tourism economy				
Identified Champions - MLUI, NWMCOG, BATA, Grand Traverse Ban	, ,			
Assess potential for partnerships and service expansion by reaching	Year 1	MM		
out to leaders in the tourism and events economy.				
Find opportunities to practice coordination around events	Year 1	MM		
Improve transportation information on the Internet	Year 1	MM + P		
Expand and improve non-web-based customer outreach efforts	Year 1	MM + \$2,000		
Take a customer-oriented approach to providing service	Year 1	MM		
Use free media coverage and other free publicity	Year 1	MM		
Priority 3: Consider Water Transportation				
Identified Champions - Grand Traverse Band (GTB)				
Select a service lead	Year 1	MM (GTB)		
Consider all the possible parties that may be interested in	Year 1	MM (GTB)		
connecting to a water ferry				
Create a Water Ferry Service Plan	Year 1	\$50,000 - \$70,000		
Pursue funding in preparation for start of service	Year 1	MM (GTB)		
Formalize service and financial commitments and expectations in	Years 2-5	MM (GTB)		
agreements with partners/service locations	Vecit	¢400k ¢400k		
Purchase boats	Year 1	\$160k - \$480k per		
Implement a first phase of apruise at the beginning of the tourist	Voora 2.5	vessel (12-50 pa)		
Implement a first phase of service at the beginning of the tourist	Years 2-5	~\$130k per route* ¹²		
Season	Vooro 2 F	TBD		
Expand services as the business plan is updated Test new visitor services	Years 2-5	TBD		
I EST HEM AISITOL SELAICES	Years 2-5	עמו		

¹² Rough estimate for 60 passengers & 3 round trips per day, 114 days per year using 12-30 passenger skiff

Grand Vision | Mobility Management Strategies

Michigan Livable Communities Demonstration Project

Implementation Step	Timeline	Cost
Priority 4: Integrate Transportation with Regional Planning		
Identified Champions – NWMCOG, MLUI, MDOT		
Consider modifying services to include express commuter service	Year 1	MM
and regular midday service until bus stops can be moved out of		
parking lots		
Improve bus stop infrastructure at two pilot locations	Year 1	\$9k - \$25k per
		location installed
Develop local guidelines for transit stops and development review	Year 1	MM
Build more well-connected bus stops	Years 2-5	TBD
Implement guidelines for transit stops and development review	Years 2-5	N/A
Priority 5: Coordinate and integrate human services transportation	on into a bro	ader mobility
management effort.		
Identified Champions – Independent Living Center, NWMCOG, MDO		
Develop a Human Service Coordination Plan	Year 1	MM
Engage in state level discussions and policy making	Year 1	MM
Collaborate with 2-1-1 and human service agencies to provide one-	Years 2-5	MM
call one-click information		
Support volunteer driver programs	Years 2-5	MM
Travel training programs	Years 2-5	MM
Coordination with schools	Years 2-5	MM
Priority 6: Regional Leadership		
Identified Champions – NWMCOG, MLUI, MDOT		
Research types of formal regional organizations that could be	Year 1	MM + P
created under current Michigan statutes.		
Decide whether one or more formal organizations or informal	Year 1	MM + P
working groups should be formed to lead ongoing efforts.		
Organize and establish the organizational structures and groups	Years 2-5	TBD
necessary for providing leadership.		
Implement moderately ambitious, achievable actions such as a	Years 2-5	TBD
centralized website and regional transit branding.		
As the leadership structure matures, focus on tackling more	Years 2-5	TBD
ambitious actions and also focus on addressing long term financial		
sustainability for improved and expanded regional transportation.		

MM Mobility manager: 0.5-1 Full Time Equivalent (assuming 1 FTE = \$80k, \$40k,-\$80k per year), role can be filled by a mix of people among existing or new staff.

P Planning: one-time-only cost of 0.5 to 1.5 FTE, depending on level of effort (\$40k-\$120k), role can be filled by staff, consultants, or mix.

5 Recommendations and Implementation

This chapter details a wide range of implementation steps that will help the Grand Vision partners achieve a dynamic and coordinated regional transportation network. Priorities are not necessarily listed in order of importance.

Many of these implementation steps are based on the extensive regional transportation coordination efforts of the Northwest Oregon Transportation Alliance (NWOTA) – a partnership of public transportation providers serving five largely rural counties along the Oregon coast and along the Hood River, west and northwest of Portland. The five NWOTA agencies and the Grand Vision partners share many of the same goals and challenges. NWOTA seeks to foster collaboration, improve transit connections between communities, and share resources to improve the cost effectiveness of their services and programs. NWOTA leaders have been very generous in sharing information about their efforts and they are eager to continue to share information with the Grand Vision partners.

Priority 1: Improve coordination between transportation providers (public and private)

The following actions address a wide range of strategies for achieving the Grand Vision goals of effective regional cooperation and integration. These strategies should provide economic and quality of life benefits for both Traverse City and outlying communities. For example, if residents in a community such as Kalkaska are faced with limited transportation options for accessing jobs and services in Traverse City, they will be more likely to relocate to the Traverse City area. In contrast, if transit provides affordable and reliable transportation they will be more likely to stay in Kalkaska.

This priority is focused on sustaining and improving the region's economy by making transit more usable and expanding transportation options for both residents and visitors.

Identified Champions

Michigan Land Use Institute, NWMCOG, BATA, Grand Traverse Band (GTB)

Funding and Resources

Partnerships, creativity, and successful grant writing are key to securing new funding. Funding strategies will vary between planning and ongoing operations, and will be a mix of FTA, other federal programs, state, local, and private sector opportunities. Initial targets for funding include MDOT FTA planning grants, the FTA 5311(c) Tribal Transit program, the GTB 2% program, and the Rotary Club. Key resources for pursuing ongoing funding are:

- Guides to applicable federal grant programs from the Partnership for Sustainable Communities and the Community Transportation Association of America
- Grants.gov federal grants
- Foundationcenter.org private funds
- Michigan DOT
- Local relationships and partnerships

Implementation Steps: Year 1

The implementation steps in year one focus on beginning to plan service improvements and expansion and developing the data necessary for service planning, as well as for negotiating revenue sharing for multi-agency services. Year one actions also focus on building partnerships to create the capacity to expand service.

Build relationships with people in other regions, such as with the Northwest Oregon Transit Alliance (NWOTA) and Maine's Shoreline Explorer, to share successes in coordinated regional service design.

Continue exploring different models for providing improved and expanded regional service. Many factors will need to be considered. The following examples highlight many important factors. Additional information about NWOTA and Shoreline Explorer are included in Supplement C. Examples from NWOTA's regionalization efforts are also incorporated into several of the other recommendations in this section.

Northwest Oregon Transit Alliance Model

A regional coordination model that potentially has much to offer the Grand Vision effort is the Northwest Oregon Transit Alliance (NWOTA). This effort was initiated by a partnership of public transportation providers serving five largely rural counties along the Oregon coast and along the Hood River, west and northwest of Portland. The effort was launched in 2010 with a special grant from the US Department of Energy (USDOE) General Innovation Fund. The grant allowed the transit alliance to launch a pilot program of regional strategies aimed at increasing transit use by commuters and visitors, and decreasing community dependence on fossil fuels. The grant also allowed the partners to develop and test strategies for improving the sustainability of current funding streams, and potentially generate new revenues for transit. This program is primarily focused on fixed route service.

- Sharing Capital Assets Each of the five counties retains their current ownership, authorities and responsibilities for their own physical assets, but cooperates with the others to share assets (such as the shared use of transit stop facilities) when appropriate.
- Operational Coordination Each transit agency is responsible for transit operations within their own service area, but cooperates with the others to improve the cost effectiveness and convenience of regional transit travel. This includes not only coordinating schedules and transfer locations, but in some cases sharing staff resources to tap the collective expertise available in all five counties.

 Regional Passes – NWOTA has implemented a regional pass program for visitors. A 3-day and a 7-day pass will be offered which will allow one round trip to/from the I-5 corridor and unlimited travel within the three coastal counties while the pass is valid.

Unified Branding – In late summer or early Fall 2013, NWOTA will be implementing regional branding that will provide a good example of how the Grand Vision partners could create unified branding while still preserving their own unique agency brands. The NWOTA partners have agreed that a universal brand is essential for unifying and marketing their collective identity and services. This brand is "North by Northwest Connector" along with a logo and the slogan "Be Driven". They are currently working on co-branding activities for all of the five agency partners. In addition to a centralized website, this involves redesign of the website home pages for each partners as well as printed schedules. The new designs will carry the CONNECTOR branding graphics along with each partner's existing logo. Bus stops improvements are also being installed at key locations in each county including bus stop signs with a CONNECTOR emblem as well as the individual agency's branding. All websites, hard copy materials, signs and bus graphics will use common graphic elements, colors and messaging to reinforce the idea that each agency's service is part of a larger system.

Shoreline Explorer Model

It is possible that including private transportation providers and human service agencies could offer the best opportunities to expand and improve regional transportation options. In this case, Maine's Shoreline Explorer model may be a good fit. The Shoreline Explorer is a public-private partnership between a regional public transit service, intercity bus, Amtrak and three private



regional public transit service, intercity bus, Amtrak and three private trolley services. It features unified branding, a centralized website, coordinated schedules and mobility management by a non-profit human services agency.

Develop a regional transit pass or other fare coordination policies

Regional passes and fare coordination will be important but challenging aspects of creating an effective regional public transportation system. As with all mobility management strategies, the fare system needs to be designed first and foremost to meet the needs of the target customers. If a three-day pass is ideal for tourists and a monthly pass is ideal for commuters, then both options should be offered. Just as importantly, passes should be easy to purchase.

BATA and Benzie Bus recently launched a punch card pass for the new Interlochen Connection coordinated service they are offering from the Benzie Bus Station to Interlochen to Traverse City. This effort can be treated as a pilot project, and the pros,

cons and lessons learned should be assessed and compared to regional pass models from other areas.

We recommend following NWOTA's process and creating a Fare Policy Committee (FPC) to identify priorities, establish goals and objectives for a regional fare policy, and make decisions regarding actions to be adopted. NWOTA's committee was composed of two representatives from each of the five NWOTA jurisdictions, and one transit director and one board member representing each agency's decision-making body. Two Oregon Department of Transportation (ODOT) representatives served on the FPC in an advisory capacity, while the transit agency members were decision-makers. FPC members met four times over five months to develop goals and objectives, fare policy language, and regional solutions, and to select a preferred regional strategy.

Regional passes could be an important tool for achieving a more coordinated, efficient transportation system that is easier to use for key populations. Several regional pass options may be a good fit for the Grand Traverse region:

- Commuter-Focused One-Month Passes A commuter-focused regional pass was
 rejected by NWOTA because Oregon Department of Employment statistics showed
 there was very limited cross-county commuting between the five partner counties. In
 contrast, this may be a good option for the Grand Traverse region where a significant
 number of employees commute from outlying counties into Grand Traverse County.
 Commuter-focused passes could be implemented between BATA and any of the
 other county transit services that transfer riders to BATA's village connectors.
- Tourist-Focused Short Term Passes Based on an analysis of their visitor travel patterns, NWOTA chose to implement three-day and one-week passes that give the buyer one roundtrip to and from the coast and then unlimited rides within three coastal county transit systems. Similarly, the Grand Vision partners would want to customize their pass benefits based on data about regional tourism. One possible option may include a BATA/Benzie pass for destinations including Crystal Lake, Interlochen, Traverse City and destinations along the shore in Leelanau County. Another option could be a pass for BATA services along with transportation services provided by the Grand Traverse Band of Ottawa & Chippewa Indians, providing for travel between the tribe's lodging and casino properties and other destinations.
- Multi-Purpose Discount Passes Ann Arbor has implemented a discount pass that includes discounts on transit fares and private taxi fares combined with discounts at a variety of businesses. This pass is largely funded through downtown parking revenues. This option offers a different model for a pass that could be targeted toward tourists or commuters in the Grand Traverse region. Discount passes could be created for use across multiple agencies and in multiple communities, or for a single-agency in one community. As in Ann Arbor, this model also offers opportunities for public/private partnerships.

The viability of regional passes will be closely linked to the design of inter-county services as well as other considerations. The information below is based on NWOTA's

Fare Policy Memorandum (David Evans and Associates, 2012) and email correspondence about how implementation has been proceeding since the document was published.

- Revenue Sharing Revenue sharing would need to be addressed using one of the strategies discussed in more detail in the Years 2-5 implementation steps below. For NWOTA, in the short term, the partners needed for the regional pass program to work already have a considerable amount of trust between them. For the first couple years, accountability for tracking and reporting pass sales is left up to each individual agency. The agency selling the pass currently keeps that revenue. If the pass program takes off in the future as hoped, the group will work out how to share revenue from pass sales, likely settling up at the end of each fiscal year. Another option considered by NWOTA was to use all revenue from pass sales to support NWOTA's administrative costs for the first couple years of the program.
- **Routes** As explained in detail in the NWOTA Inter-County Routes example under the 2-5 year implementation steps below, the NWOTA partners have been working to create more efficient inter-county routes designed primarily to serve tourists. In all cases their goal is to eliminate or greatly improve transfers at county boundaries.
- Where to Sell Passes NWOTA's Fare Policy Memorandum includes a detailed discussion of the pros and cons of options including having passes sold by drivers, transit agencies, intercity transit hubs, transit agency websites and other online venues, and local retailers. The NWOTA Fare Policy Committee recommended limiting sales venues to onboard and transit centers in the short term. In their one-tofive year objectives, they recommended exploring on-line sales and third party sales by venues including airports, visitor centers and other intercity transportation hubs.
- **Pass Design** NWOTA chose a design with an embedded strip of foil to help prevent counterfeiting. In addition, their passes are printed with unique numbers on each pass for tracking the number of passes sold, and for tracking which drivers have which passes to keep drivers accountable for protecting tickets from being lost or stolen. Because their passes do not have any electronic reader strips embedded in them they can be printed by most online or local print shops. The passes have a space on them for the driver or ticket agent to write the final day of validation.

Additional resources concerning fare coordination strategies are included in Supplement D.

Develop and share cost allocation models for each public operator and use models as a basis for developing budgets and negotiating cost and revenue allocations.

Whether service is demand response, fixed route, public, or private, sharing rides between providers will require a method to fairly share costs.

Knowing the true cost of services is an essential starting point for negotiating the details of a coordinated regional transportation network. A cost allocation model is not only important for negotiations between public transportation providers, it also valuable for

negotiating contracts with partners such as human service agencies and large employers.

In addition to allowing an agency to know the true cost of the services provided, a fully allocated cost model also allows equal comparison of costs between varying types of service, such as a commuter service that covers a longer distance at a higher average speed, and an in-town route that travels at a lower average speed with more stops. When combined with ridership, this establishes a baseline for developing a fair contract for service, or multi-agency fare structure.

Data is the backbone of any cost sharing structure. The best way to appropriately share costs and revenue is to have accurate passenger counts, passenger mile count estimates, and other statistical bases on which fare revenues are assigned. Electronic fareboxes and automatic passenger counters (APCs) that provide for accurate headcounts are two technologies that make this sort of data tracking much easier and should be considered in future procurements.

Some cost allocation models for non-emergency medical transportation (NEMT) can offer a good model for other types of transportation services. For example, in Washington State brokers pay NEMT providers based on a pre-negotiated rate, which may include mileage, time, a flat fee, or other factors. When arranging for shared trips, each funder is invoiced for their rider's portion of the trip.

Supplement E describes standard practice for calculating the cost of a ride. Implementation options for fare coordination and fare sharing should be tackled in years 2-5 and are discussed below.

Coordinate local route timing to facilitate transfers where Indian Trails intercity buses stop in the region during local transit operating hours.

We recommend including Indian Trails in regional coordination discussions. Intercity bus service is often neglected when communities plan transportation coordination. However, intercity bus service can offer a variety of important benefits, providing connectivity both within and outside the region for needs such as business trips, medical trips and tourist trips.

Important first steps are to use the same bus stops for local and intercity buses whenever possible, and to coordinating local route timing to facilitate transfers. Intercity schedules cannot change to coordinate with local transit, but partners can investigate opportunities to adjust local routes to coordinate with the intercity services. As part of this effort it will be important to ensure a high quality experience that includes safe, attractive bus stops.

Finally, the Grand Traverse region can include Indian Trails and Greyhound contact information in a service guide along with arrival and departure times and how to take transit to get to access Indian Trails stops.

Pursue new intercity connection between Traverse City and Grayling

As discussed in Chapter 3, the Grand Traverse region's most significant opportunity is to work with the MDOT intercity bus coordinator and Indian Trails to address the current gap in east-west service to access the Indian Trails north-south routes operating on the eastern side of the Lower Peninsula. Stakeholders should investigate the viability of daily service on an east-west bus route from Traverse City to Grayling and Standish. Additionally, they should explore the potential to increase the north-south routes to twice a day. A quick assessment would consider schedules, costs, and the ability to significantly reduce travel times for people in northern Michigan. The following figure illustrates this, with mark-ups of MDOT's map of Michigan's intercity bus system indicating the four VA medical facilities and the potential new connection.

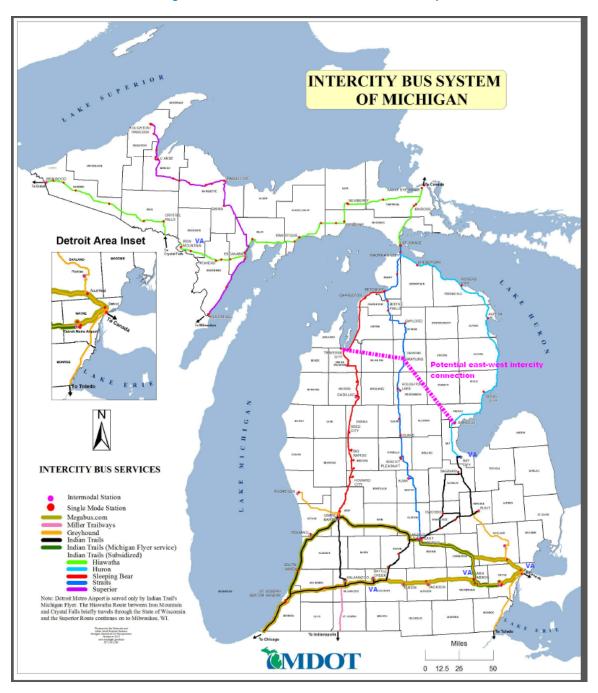


Figure 5-1: A new intercity route or increased frequency can shorten travel times by shortening distances or transfer times

If either of these options is viable, the FTA 5311(f) Intercity Bus program may help make them financially feasible. As usual, the available funding in this program is limited, and this need to reduce travel times for the region must rank higher than other needs in order to receive funding. Indian Trails is the primary recipient of 5311(f) funds in Michigan, but public transit agencies such as BATA and KPTA are also eligible to apply for Intercity Bus funds. Public intercity operators must meet requirements that are typically new to them, because effective service depends on interlining with the nationwide intercity bus

network. This requires Federal Motor Carrier Safety Administration (FMCSA) authority to operate interstate, and typically requires a new insurance policy through the private sector instead of state pooled insurance that many local governments use.

To be considered, intercity bus service must meet all of the following conditions:

- Connects two or more urban areas not in close proximity.
- Provides regularly scheduled fixed route service with limited stops.
- Has the capacity for transporting baggage carried by passengers.
- Provides meaningful connections to other intercity passenger services (if available).

MAP-21 includes a provision for private carriers such as Greyhound and Indian Trails to provide in-kind match if a carrier meets the following requirements:

- Proper operating authority and insurance
- Should be operated preferably 7 days a week but no less than 5 days a week
- Should not duplicate existing subsidized or unsubsidized intercity bus service
- Feeder service should allow for proper ticketing and (incidental to passenger service) package express service

Through participation in the National Bus Traffic Association, information about local feeder services should be made available to all customers of the nationwide intercity bus system.

If MDOT has maximized its intercity bus budget, or if this gap in service is deemed low priority, partners can explore other methods of jointly funding service from Traverse City to Grayling. While not optimal, this service could be launched as a pilot project operating once or twice a week to test for adequate demand.

Implementation Steps: Years 2-5

Explore creating a regional service

We recommend exploring the potential to create a shared regional intercity service. This is probably the most ambitious recommendation contained in this report. While it would be challenging to implement, it offers significant benefits over simply offering regional bus passes in conjunction with improved inter-county transfers. Effective regional services such as the Rail Runner in New Mexico and the San Francisco Bay Area Rapid Transit are most successful when local governments pool resources for a unified service.

Currently, most public transportation in the region stops at county lines, and the convenience of transferring to the adjacent county service varies greatly. In some cases direct service is offered, but limited resources prevent this service from meeting the needs of commuters. For example, Kalkaska offers round trip service to Traverse City three times a day, three days a week. While this could be effective for meeting many NEMT needs, it will not meet commuter needs.

A shared regional intercity service could include the elements described below. Alternately, or as interim action steps while a shared service is being developed, the regional partners could implement inter-county service improvements following one or more of the NWOTA examples described below.

- Routes and Coverage Service could consist of routes radiating out from Traverse City with at least one route serving each of the outlying counties. The routes could be fixed or deviated fixed routes. However, it would probably be ideal to have a limited number of fixed stops sited near community centers with good bicycle/pedestrian access and high quality bus stop infrastructure. This would achieve reliability, efficient travel times for commuters and other riders, and would provide a comfortable and convenient experience. A significant benefit would be the increase in efficiency achieved by eliminating transfers at county boundaries. Additionally, because the region experiences a long winter with a significant amount of bad weather, direct service would be much more attractive to commuters and other riders from outlying counties who would not have to wait for transfers in bad weather.
- **Regional passes** This service would not eliminate the needs for regional bus passes. Multi-service passes would still be important for riders transferring from the inter-county service to one or more of the local county services.
- Funding and Management Funding could be shared by all the partners and the service could be managed by an organization governed with representation from all the county transit agencies. The challenge of determining fair funding contributions from each county would be similar to the challenge of determining fare sharing and revenue sharing for regional passes.
- **Branding and Marketing** All of the county transit agencies could continue to operate their local services with their current branding. However, the regional service would have its own consistent brand throughout the region. For Grand Traverse, a unified brand that would be recognizable by visitors throughout the region would be particularly effective for making transit a bigger player in the regional tourist economy. As with NWOTA, a centralized website could be created.

NWOTA Inter-County Routes

The collaborative service recently launched between Benzie Bus and BATA's Village Connector is similar to the types of partnerships and services being developed by NWOTA in Oregon. The NWOTA partners are developing a high level of operational coordination and unified branding, and in some cases they are sharing capital assets. However, they are not creating a new regional service.

In the NWOTA region, some inter-county routes did exist before the project, but except for one route from Portland to Tillamook, all other inter-county travel on public buses required a transfer – usually in a remote area somewhere near the county line. There was some informal honoring of each others' tickets, but by and large, transferring to the next county also required payment of a new fare. Following are several examples of how the NWOTA partners are developing services to improve this situation:

- **Two-Way Buses** Benton and Lincoln counties were cooperating to provide "Coast to Valley" service from Corvallis to Newport. A bus from each county would travel to the county line and exchange passengers at a remote rest area then go back to their respective starting points. Now each county runs buses in opposite directions along the entire route with no transfer. This system is more efficient and is also equitable with no need for revenue sharing.
- Shared Operational Costs Between Tillamook and Lincoln counties, the transfer point used to be Otis (pop. 8), and the layover time was sometimes several hours. Now the Tillamook bus runs all the way into Lincoln City and Lincoln County Transit helps defray Tillamook's extra operational costs.
- Improved Transfer with Commercial Intercity Connection Between Clatsop and Tillamook counties, the transfer point has been a site south of Cannon Beach. Now the transfer site is being moved to a better location in mid-town Cannon Beach, where riders can also access a for-profit intercity passenger coach that serves Portland and the north coast.
- **Direct Service from Intercity Rail** Travel from Portland to Astoria on the northern tier of the system (along the Columbia River Highway US30) required three transfers and about 6-8 hours. Now Clatsop County is working on a significant operational improvement to provide direct service from the Amtrak station in Kelso, Washington, to Astoria without a transfer. However, there is still room for improvement between Portland and the coast via this route.

Implement strategies for fare coordination and fare sharing.

Following the year one tasks of developing a cost allocation model along with procedures for periodically updating key data, the partners will have the information they need to take the next step of determining how to share revenue and costs for multi-agency projects such as new and improved inter-county services and regional passes.

We do not recommend attempting to create a multi-county system based on electronic fare cards, although rapidly evolving technology may change this situation in coming years. Currently, both the complexity and cost of such a system would be prohibitive. This is one of the more complicated technology deployments with high relative initial investment and dedicated time from staff; the cost of smart cards has been recognized in the literature as a deterrent to smart cards; and demand response services or reservation-based services have little need for a smart card. It is worth noting that it took the San Francisco Bay Area multiple years to develop this type of system, and with today's technology the investment of time and money is generally only justified in a high ridership urban area.

For realistic, lower-tech solutions the Grand Traverse region should look to the NWOTA effort. NWOTA identified several alternative options for distributing the revenues among the agencies. It is important to note that in all cases the handling of revenues would need to be consistent with the requirements of grants – such as federal 5311, 5311(f) Intercity, and 5310 senior and disabled funding – received by regional partners.

- The agencies could continually track each pass user's trip origination/destination to aid in fare reconciliation at the end of the month or quarter;
- The agencies could divide the pass revenues evenly (thereby reducing the burden of tracking the location of boardings and alightings); or
- After covering the basic administrative costs for the regional pass program, NWOTA could use the remaining revenue to support the CONNECTOR operating costs. By investing this money in the nonprofit NWOTA organization, the pass revenue could be used as a grant match or could be applied to longterm strategies for growth and continued success.

The integration of the NWOTA fare system will require each agency to determine an average fare rate for its agency and to select a site manager for the system. The Fare Policy Committee determined that managing and administering the system could be done by NWOTA administrative staff.

Even though they found no other systems similar to the one they were working to create, they found that revenue sharing case studies from different systems (including a rail line between Delaware and Pennsylvania) offered relevant and valuable lessons including:

- Fare revenue sharing can be done with low technology solutions.
- Precise equity is only possible with extensive, reliable ridership data. Even between two robust transit systems, data collection may not be good enough to ensure that both agencies can be certain that they are fairly compensated.
- The NWOTA partner agencies must be realistic about their data collection efforts and their efforts to fairly share fares.
- Revenue sharing relies on good data collection. Without good rider data by segment, this revenue sharing system would not work.

- The partners need to agree on two key items: (1) average fare rate (this would average the cost of fares across zones and types of fares), and (2) reimbursement rates (this is a percentage to compensate the provider based on the cost of delivering service).
- Administrative resources are required to consolidate fare data, apply formulas for reimbursement, and distribute revenue.
- Regular intervals of revenue sharing should be established up front (e.g., quarterly or annually).

Use a cost allocation model as a basis for developing budgets and negotiating cost and revenue allocations.

Periodically update the cost allocation model using the latest data. Data quality should improve over the five-year implementation period as the partners implement and refine data collection and sharing procedures.

Develop a data-sharing network

Implement and refine data collection and sharing procedures.

Coordinate with Indian Trails intercity

Work with Indian Trails to coordinate and improve bus stops so that local and intercity buses use the same bus stops whenever possible, and to ensure that bus stops have good quality infrastructure and signage. These bus stops should be located near community centers with good bicycle and pedestrian access as well as vehicle parking.

Work with Indian Trails to explore potential funding sources to increase the frequency of service.

Explore passenger rail service between Traverse City and Williamsburg

MDOT owns an existing rail right-of-way with usable track that could provide a connection between Traverse City and the tribe's Turtle Creek Casino in Williamsburg. The viability of rail service should continue to be explored in partnership with the tribe. A feasibility assessment should include analysis of all the transportation goals that could possibly be connected to such a project. For example, could this rail line link to bus routes or van shuttles serving the airport, hotels on the shore and important destinations in Traverse City? The rail line vision is most likely to succeed if it involves multiple partners and helps achieve multiple goals.

Priority 2: Integrate transit with the tourism economy

"Part of Traverse City's popularity -- in addition to its breathtaking natural surroundings -is its charm. It's no wonder Traverse City is consistently voted as one of America's most charming small towns." – Traverse City Convention & Visitors Bureau

The transportation community has the opportunity to work with the full spectrum of leaders in the regional tourism and events economy to tap into their creativity and identify opportunities for partnerships and expanded service. Conversations with these stakeholders can explore opportunities involving events, businesses, and locations that

are attracting people who are already predisposed to riding a bike or riding a bus, getting around without a car. Another opportunity is to look at events that are creating congestion and parking problems.

Opportunities for partnerships include both longstanding events and attractions such as the National Cherry Festival, Sleeping Bear Dunes, Film Festival, casinos, and Grand Traverse Resort, as well as more recent additions such as the Microbrew & Music Festival, TC Cycle Pub. .

Following the NWOTA example, as the Grand Vision partners improve inter-county service, implementing region-wide unified branding and messaging on websites, hard copy materials, buses, bus stops and advertising will be particularly important for increasing ridership by tourists.





Goals and Strategies

This priority focuses on implementation of Goal 1 and corresponding strategy H in Table 1 of Section 1 above.

Identified Champions

Michigan Land Use Institute, NWMCOG, BATA, Grand Traverse Band (GTB)

Funding and Resources

Building partnerships within the tourism economy may be a good way to increase resources.

Implementation Steps: Year 1

Assess potential for partnerships and service expansion by reaching out to leaders in the tourism and events economy.

Year one should focus on relationship building and collecting ideas. A series of one-onone interviews with 20 key stakeholders would serve as an effective mechanism to accomplish this, followed by a well-organized community event. Outreach should include both long-established leaders as well as new players. Stakeholders include the following:

• Grand Traverse Band of Ottawa & Chippewa Indians – The partners should work with the tribe to explore options for collaborating to expand and improve regional transportation services. The Grand Traverse Band of Ottawa and Chippewa Indians is a key coordination partner as one of the largest employers in the area, the operator of key tourism destinations, an organization whose members need

transportation, a potential funder, and a potential transportation operator. The tribe would be eligible for FTA's Tribal Transit Program Section 5311(c) as well as any other FTA program open to governments serving rural areas. The Tribal Transit Program (TTP) provides direct funding to federally-recognized Indian tribes for the purpose of providing public transportation service on and around Indian reservations in rural areas. Eligible projects include capital, operating, and planning studies. Funding is available at 100% federal share, although FTA is interested in the Tribe's financial commitment to proposed projects and the ability to leverage other funding. Funds are competitively allocated (Federal Transit Administration, 2012).



Sleeping Bear Dunes pathway



• Sleeping Bear Dunes National

TC Cycle Pub

Lakeshore Park System – As a unit of the National Park Service, the Sleeping Bear Dunes park system potentially offers significant funding opportunities for expanding and improving tourist oriented services that include this destination. BATA should work with park officials to analyze visitation data and explore the best structure for their relationship – such as an intergovernmental agreement. We recommend against a concessionaire relationship since that removes flexibility to use FTA funds for operating.

- **Major employers** The lodging industry in particular likely has significant needs for reliable and affordable employee job access. Services developed in partnership with this industry could potentially be shared with other large employers.
- Event organizers and leaders of tourism Event organizers and other tourism leaders including the lodging industry, are important partners to engage for exploring service expansions and modifications along with funding strategies for convenient transportation options for tourists and other customers. These discussions should include developing strategies for improving transit service to the airport.
- **Private transportation providers** Meet with private transportation providers to explore opportunities to collaborate and coordinate services. Such opportunities could include cross-advertising on websites; service to festivals and other events;

increasing service to high-demand destinations; and possibly public/private fare passes such as those discussed above.

Find opportunities to practice coordination around events

BATA is already coordinating with organizers of the National Cherry Festival to provide shuttle services. Similar contracts could be developed to serve other events, especially those that are already promoting other forms of transportation. Continuing to build and expand relationships in the tourism industry is the first step toward identifying these opportunities.



Improve transportation service to the airport

Providing high quality bus or van service to the airport is an excellent opportunity to introduce both visitors and residents to public and/or privately operated mass transit. A trip to or from the airport may be the first time an individual considers using transit, and if the experience is positive it will encourage them to try using transit for other trips. The Grand Vision partners should assess the quality and convenience provided by existing BATA and Benzie services, whether these services could be improved and whether service could be provided to other outlying counties.

It will be important to identify target populations such as tourists, business travelers and people accessing the university, and then determine how to design service to make it as viable and attractive as possible. Important considerations will include luggage capacity, efficient connections and possibly amenities such as providing free on-board Wi-Fi. This may be a good opportunity for public-private partnerships to ensure convenient transfers to provide efficient access between the airport and specific destinations.

Finally, it is important to seek opportunities to market new or improved services through a variety of strategies targeting visitors and residents who use the airport regularly. This should include featuring information on all relevant websites including the airport website.

It is important to note that while airports have a reputation for being uncooperative with public transit, based on recent interactions reported by Benzie Bus, the current management of Cherry Capital Airport is open to collaboration and easy to work with.

Improve transportation information on the Internet

The web, accessed from either a computer or a mobile device, is generally the first source where today's travelers – both tourists and locals – will look for transportation information. The Grand Vision partners should consider creating a centralized website designed to appeal to tourists, while at the same providing information for commuters and human service clients. To make a centralized site welcoming and attractive to tourists it should include both tourism-oriented language such as on Maine's Shoreline

Explorer website (www.shorelineexplorer.com/index12.html), as well as attractive photographs such as those on Get Around the Western U.P. (www.getaroundwup.com/). Following are several other good examples of transportation-focused web resources:

- Oregon TripCheck (tripcheck.com)
- Ride Connection (rideconnection.org)
- SF Bay Area 511 Traveler Information System (511.org)

Finally, regional stakeholders should work together to include information about transportation options, or a link to this information, on all relevant websites. The approach can be described as "no wrong door".

Additional examples and discussion about creating high quality web resources for customers in Supplement F.

Expand and improve non-web based customer outreach efforts

In addition to web-based information, a variety of other strategies can be used to promote transit services and educate visitors and other potential riders about how to use those services. Top priority actions are presented here, however there is no limit to the creative marketing and educational strategies that could be developed, such as putting promotional materials in hotel rooms with information about transit access to biking and boating opportunities.

The most important action is to ensure that the annual budget always has adequate funding for a coordinated marketing campaign. Ideally the partners should work with a successful local marketing firm that understands the region and how to target key populations. For the Grand Vision partners it will be important for marketing to be regional, with shared messaging across all providers tied to the Grand Vision. As the partners develop messaging for the region they can look to the messaging used for the many successful local transit funding ballot measures that have been passed throughout the nations. However, it will be important to focus on messages that have been successful in similar rural regions.

A hard copy brochure is still one of the most important tools. For a transit planning project we recently completed in Helena, MT we conducted a community survey that received hundreds of responses and indicated that a good brochure is the most important communications tool for current riders and was second only to the website for people who were not currently riding. Quality brochures with well-designed maps and schedules are essential for making a transit easy to use and are also important for branding. Color-coded route names are useful to ease understanding of the service, but be aware of the needs of people with impaired vision and color blindness when deciding how color-coded routes are described. Brochures should also include a riders' guide explaining how to use the service.

The Humboldt Transit Authority in California created a guide to transit services throughout Humboldt County designed as a newspaper insert. The insert was included

in a paper distributed throughout the county, and also distributed by hand at a wide range of popular community destinations through local transit advocacy organizations (Supplement G).

Besides the buses themselves, bus stops can be the second most visible aspect of a transit service. Attractively designed shelters in high use areas provide a high level of visibility and should include posted timetables as well as other information such as the web address for the service.

Some communities have held highly successful transit promotion and education events staged as a component of community gatherings including fairs, outdoor concerts, and festivals. Such events can include elements such as hands-on demonstrations of how to properly place a bike on a bike rack, along with explaining how to understand routes and timetables, and information about resources that can be accessed on the web with mobile devices.

Supplement H includes detailed information about the Glacier National Park shuttle service's award winning integration of traveler information and interpretive information.

Take a customer-oriented approach to providing service

Achieving high quality customer service and a high level of customer convenience is important for any transit service, and these goals are even more critical when tourists are an important target population. Many transit systems fall far short of achieving their potential because management is primarily focused on operating buses and customer convenience is not adequately valued and funded. Failure to make a system easy to use and to provide a positive rider experience can have a substantial impact on ridership and can significantly limit the effectiveness of investments in all other aspects of the system.

Convenience and user-friendliness include all the factors that affect rider experience including on-time performance; clean, well-maintained buses; well-planned routes; well-signed bus stops that are ADA accessible and have attractive, comfortable shelters. Drivers and other personnel who interact with the public in person or over the phone should be friendly, knowledgeable and trained to work with people with disabilities. The Easter Seals Project ACTION program is a good resource for training in ADA requirements and serving people with disabilities. Making the system easy to use includes attractive and inviting hard copy and web-based route maps and schedules that are easy to use; and a website that is easy to navigate and includes an interactive trip planner and real-time bus arrival information. For systems that charge fares, it is important for riders to be able to easily find information about purchasing bus passes and to be able to conveniently buy passes.

All transit systems in the region have a strong focus on achieving these goals. In particular, BATA has developed an effective driver training program and a common service vocabulary that MDOT is interested in introducing statewide. BATA and the other regional partners should continue to make all aspects of customer service and customer convenience a high priority.

Use free media coverage and other free publicity

A wide variety of creative strategies can be used to get media coverage that builds public awareness of transit services. The Grand Vision partners should take advantage of all opportunities to get free news coverage from local print and electronic media. Opportunities include any changes or improvements to the service such as improved routes or installation of new shelters and benches, as well as human interest stories that could be developed with tourism or human service partners.

Targeted free publicity can be achieved by setting an objective of making several presentations every year to audiences including civic organizations, senior citizens groups, human services organizations and the university. Annual presentations to Service performance reports should be presented at least annually at the city and county commissions' regularly scheduled public meetings. A standard PowerPoint presentation could be developed which could be used for all events, and modified as necessary for specific audiences.

Priority 3: Consider Water Transportation

The region, led by the Grand Traverse Band of Indians, has started investing in boat docks that can be used for ferry service between the peninsulas and to islands in Lake Michigan. This service could cut down travel time extensively. For example, travel between tribal headquarters in Peshawbestown and Old Mission State Park is 39 miles by road, or 50 minutes without traffic. By comparison the trip is 6 miles, or 30 minutes by boat. The GTB is interested both from the perspective of carrying tourists to its resort and casinos and from providing more convenient transportation for tribal members throughout the region to access tribal resources at its headquarters in Peshawbestown. The following map shows potential routes. The orange route was selected to begin exploring financial feasibility.

Goals and Strategies

This priority focuses on implementation of Goal 1 F and G in Table 1 of Section 1 above.

Identified Champions

Grand Traverse Band (GTB)

Funding and Resources

Planning is eligible under various Federal Highways and Federal Transit programs including FTA 5311(c) Tribal Transit. Ongoing operations may be self-supporting. If not, services must be carefully designed to avoid charter regulations in order to receive FTA or FHWA funds.

Diversity can be the key to success. In a California example, a tribe partnered with a National Park to attract planning funding for a river transit service that also served visitors.

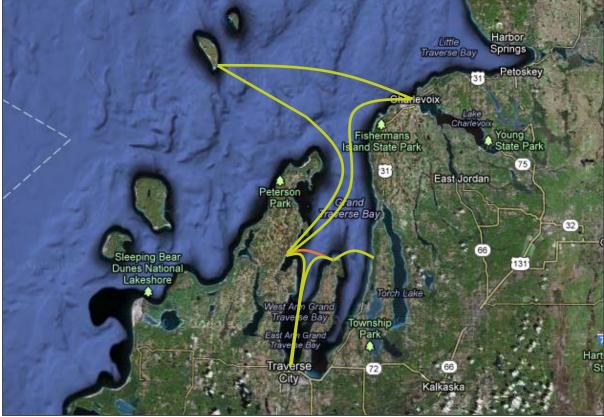


Figure 5-2: Potential ferry routes

Implementation Steps: Year 1

Select a service lead

The organization leading creation of the ferry service could be the Grand Traverse Tribe, a public land agency, a local or regional transit member, or a private party. Depending on the service lead, costs and restrictions on funding availability may vary.

Consider all the possible parties that may be interested in connecting to a water ferry

Besides tribal members and facilities, other interested parties may be those tied to tourism, human service agencies in Leelanau, Antrim, and Charlevoix Counties, economic development, MDOT, and businesses currently operating ferries.

Create a Water Ferry Service Plan

This may be contracted out. The plan should include the following tasks:

- Begin with pre-planning outreach to all public and private transportation service and tourism service providers that may be interested in tying in to the new water service
- 2. Outline a service vision and corresponding service goals
- 3. Define proposed service including schedules, routes, preliminary service stops, and phasing
- 4. Determine watercraft type
- 5. Determine if additional facilities are needed

 Perform service operations cost modeling (The Volpe Ferry Lifecycle Cost Model is recommended: http://www.volpe.dot.gov/coi/ppoa/publiclands/projects/busandferrycost.html) and add costs for facilities if necessary. Keep in mind that costs can vary widely

depending on watercraft choice, fuel costs, how the service is managed and operated and other factors.

- 7. Formalize training program, outline licensing, and define insurance supplier
- 8. Determine ticket sales and marketing strategy that includes initial and long-term objectives

Pursue funding in preparation for start of service

For example, the Yurok Tribe used funds within its economic development office to invest in a new river transportation operation on the Klamath River in northern California. The plan concluded that ongoing operating costs may be negligible if the tribe successfully markets to tourists and uses profits from this part of the business to subsidize use by tribal members.

Investigators will need to coordinate with FHWA ferry programs and tribal or rural FTA programs to work through nuances and specific concerns relating to using DOT funding for water transportation.

Years 2-5 Steps

Formalize service and financial commitments and expectations in agreements with partners/service locations

This can include marketing, ticket sales, concessions, boat docks, operators.

Purchase boats

For example the Yurok Tribe purchased an existing business including its boats.

Implement a first phase of service at the beginning of the tourist season

Begin with a simple route and schedule and expand over time. Instead of letting demand for the service drive growth, grow only as fast as proper training and administrative support can be maintained.

Expand services as the business plan is updated

Initial operations will help build a more accurate estimation of costs and revenue, and will help refine successful partnerships and procedures.

Test new visitor services

Visitor services may include interpretive tours, private events, cocktail cruises, and other common water services in addition to scheduled trips.

Estimated Costs

It is beyond the scope of this project to study the feasibility of ferry service. However we were able to develop a ballpark estimate using the *Ferry Lifecycle Cost Model for Federal Land Management Agencies* developed by the Volpe Transportation Center (Kay 2011). This spreadsheet-based model estimates capital, operating, and total costs

for various vessels that could be used to provide service on a specific route. Using Peshawbestown to Old Mission, we assumed 60 passengers per day and 3 round trips. We also used the model's default values. The model outputs:

- Between \$360 and \$501 per vessel hour including operating and capital costs, depending on boat size.
- If assumptions are correct, the cost per passenger trip is \$19 to \$27.
- Three 12-30 passenger skiffs or two 31-50 passenger pontoons would be required to operate this route, including a spare.
- \$130,000 per year to operate 114 days per year, 3 hours per day using passenger skiffs. This equates to 3 round trips.
- The more service, the lower the cost per hour because of efficiencies of scale.
- If passenger loads or safety considerations lead to larger boats, the cost per vessel hour increases; cost per passenger may not since costs are divided between more passengers. The ability to transport cars increases costs.

User inputs and a summary of outputs are included in Supplement I. This model and the user's guide can be valuable in developing a business plan or feasibility study.

Priority 4: Integrate Transportation with Regional Planning

Transit works best when supported by good land use, road connectivity, and complete streets. The lack of coordination has resulted in commercial development site designs that require buses to drive through parking lots to drop off and pick up passengers. In many locations state highways have no bus stop infrastructure and no safe way for passengers to walk between the road and the entrance of the commercial buildings. Driving through large parking lots typically causes significant travel time increases and also increases safety concerns as drivers negotiate unpredictable parking lot traffic and pedestrians.

This is illustrated by the Interlochen Loop Route. Initial reports from the launch of BATA's new Village Connector service indicate that most of the Village Connectors are operating with efficient travel times because they have a limited number of stops linking residential/commercial nodes in rural areas on roads that are largely without commercial strip development. In contrast, on the Interlochen Loop Route that is coordinated with the Benzie Bus, travel time is a barrier for riders seeking to use the service for commuting to work. This appears to be the result of the development patterns and the need to travel through parking lots.

It will be important for the region to take steps to prevent these issues from reoccurring in other areas. The following short, medium and long term strategies and implementation actions are recommended to address these issues.

Identified Champions

Northwest Michigan Council of Governments, Michigan Land Use Institute, MDOT

Funding and Resources

For new construction, developers can often cover the cost of shelters and connectivity. Street side improvements may be incorporated into road construction costs with minimal impact when identified during the planning phase. After-the-fact application of these principals will require dedicated funding through FTA 5309 Capital Improvements, competitive livability grants, or creative funding such as described under Priority 1.

Implementation Steps: Year 1

Develop local guidelines for transit stops and development review

Establish a working group with the stakeholders necessary to draft guidelines for bus stops and development review that will have a strong chance of being adopted by government decision-making bodies. These guidelines would be designed to ensure that infrastructure for bus stops, bicyclists and pedestrians is fully considered and integrated as part of the planning process for road construction and upgrades, as well as new residential and commercial development. This effort should also address both the siting and site design of important government and commercial destinations. Finally, the group could explore policies to encourage development of commercial and residential nodes instead of strip development.

TCRP Report 19 (Texas Transportation Institute, 1996)provides detailed information that serves as a good starting point. Across the country examples exist that build upon this report and includes more recent concepts from ADA and complete streets literature, such as Missoula, Montana; Pierce County, Washington; and Louisville, Kentucky. Oregon DOT recently published a primer for transit in small cities which includes a good discussion of transit stops on highways, and examples of design that supports transit use (Oregon Transit and Growth Management Program, 2013).

Consider modifying services to include express commuter service and regular midday service until bus stops can be moved out of parking lots

To meet job access needs in the short term, an effective approach may be to provide both express commuter and regular midday service on some of the routes that go through multiple parking lots. Express service could operate during peak hours, would have fewer stops and would not include any stops that required driving through large parking lots. The regular service would continue to operate as the route is currently designed. The two services would probably need to be named and marketed as separate services.

Improve bus stop infrastructure at two pilot locations

Identify two locations where bus stops could be relocated so that they meet the following criteria:

- Efficient road-side location with a safe bus pull-out.
- Feasibility of installing high quality infrastructure including signage, a bench, and a shelter.

- Safe and convenient bicycle/pedestrian/wheelchair access exists or could be created both along the road, and from the road to the front door of nearby commercial destinations.
- The short-term tasks would be identifying the locations and communicating with MDOT and private landowners adjacent to the site to ensure that they are willing to collaborate on project implementation. The following diagrams illustrate the concepts for connectivity from Transit Cooperative Research Program (TCRP) Report 19: *Guidelines for the Location and Design of Bus Stops* (Texas Transportation Institute, 1996). Other infrastructure references are included in Supplement J.

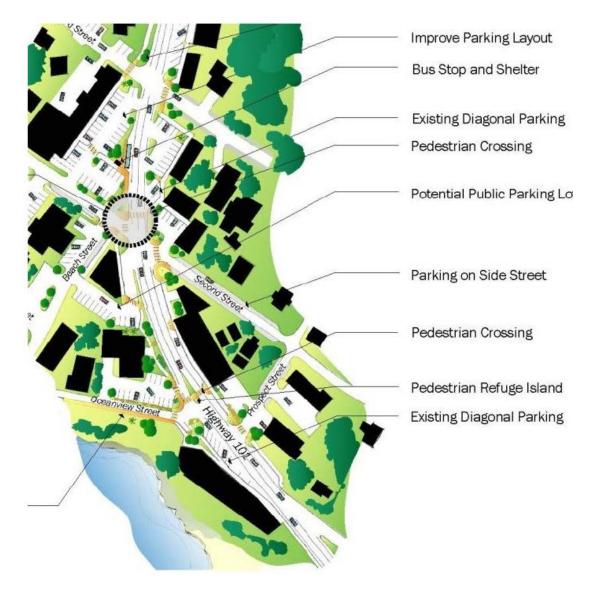
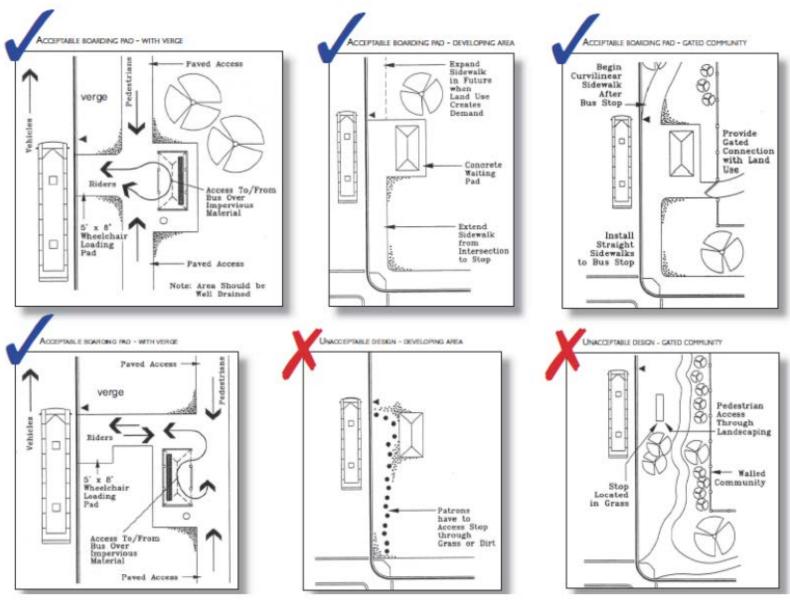


Figure 5-3: Plan for improvements on Main Street in Yachat, Oregon, which is also U.S. 101

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TCRP Report 19 Guidelines for the Location and Design of Bus Stops



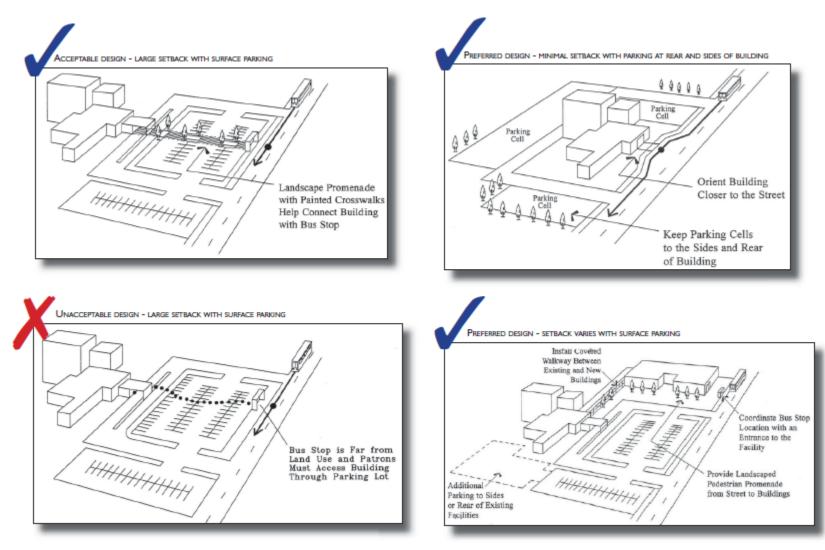


Figure 5-5: Safe pedestrian access between the bus and the front door without travel through the parking lot.

Implementation Steps: Years 2-5

Build more well-connected bus stops

Secure funding, design, and build more model bus stops. These projects could include building sidewalks, trails and/or bike lanes, as well as parking lot modifications to safely connect bus stops to the entrance of commercial destinations.

Implement guidelines for transit stops and development review

Work with local government bodies to adopt policies. Then participate actively in the development review process to implement the policies on a case-by-case basis. Active, constructive, collaborative participation in the process is essential for developing procedures for effective implementation, and for troubleshooting issues that will inevitably arise and that could have the potential to derail the policies.

Continue to implement and improve policies and procedures, and use models developed and lessons learned through the pilot projects to implement infrastructure improvements and transit-friendly development patterns region-wide.

Priority 5: Coordinate and integrate human services transportation

Most communities have significant needs for human service transportation. These needs are diverse and range from low income individuals with no disabilities who can easily ride fixed route transportation and can easily walk to and from bus stops; to people with disabilities who are accompanied by a caretaker and need curb-to-curb transportation in a wheelchair compatible vehicle. Matching each type of rider to the most appropriate and cost effective ride requires an understanding of their needs and of the regulations governing the funding source that is paying for the ride. Overall, cost efficiency will be maximized by coordinating all demand-response services to combine rides whenever possible, and using fixed route bus service whenever possible.

Because of the complexity of coordinating diverse human service agencies, clients and transportation funding sources, human service transportation coordination is often the primary focus of mobility management efforts. In the Grand Traverse region, even if tourists and commuters remain the primary target populations for coordination efforts, these efforts should also include human service needs. Including human service agencies in the region's collaborative efforts will be important because these efforts will:

- help address important needs for populations who have few transportation options;
- Increase the potential for finding creative strategies to expand and improve services;
- Potentially bring new funding sources to the table.

Identified Champions

NWMCOG, BATA, MLUI, Independent Living Center, Michigan 2-1-1.

Funding and Resources

Building partnerships within human service agencies can potentially bring a number of significant non-FTA transportation funding sources to the table.

Implementation Steps: Year 1

Develop a Human Service Coordination Plan

MDOT requires this to access funding from the FTA Senior and Disabled grant program but recommends it for all recipients of FTA funding. MDOT has created a Human Service Coordination Plan template that can serve as an effective tool for assessing community needs, while also paving the way to coordination between transportation and human service providers. MDOT's requirements are included in Supplement K.

Engage in state level discussions and policy-making

Ongoing state level policy discussions may have a significant impact on the future of human service transportation, especially non-emergency medical transportation (NEMT). These discussions are primarily focused on Medicaid, which is by far the most significant non-FTA transportation funding source.

Stakeholders in the Grand Traverse region may want to be engaged in these efforts to play a role in shaping the policies that will determine what options become available for allocating costs and coordinating NEMT and other transportation services. This engagement is important because Medicaid NEMT policies are in a state of transition throughout the nation and more change is likely with the implementation of the federal Affordable Care Act (ACA).

Key opportunities for engaging at the state level include the following efforts:

- Michigan Developmental Disabilities (DD) Council working group focused on getting rides to medical appointments, and the Michigan Disability Rights Coalition's effort to create an Alliance for Michigan Medicaid Access (AMMA)
- The Michigan Public Transit Authority (MPTA) Transit Coordinator's efforts focusing on medical transportation.

Key issues focus on whether Medicaid will pay the full cost of public transportation paratransit rides, whether Medicaid rides can be combined with other rides to achieve cost efficiency, and whether brokerages may be instituted for NEMT services.

Implementation Steps: Years 2-5

Collaborate with 2-1-1 and human service agencies to provide one-call one-click information

The staff at regional 2-1-1 call centers are typically eager to collaborate and have valuable information and resources available. The 2-1-1 database will have useful data such as transportation requests they received, the agencies they referred the requests to, and requests for which they were unable to find available service. 2-1-1 call centers regularly update their database with a variety of information about human service

agencies. 2-1-1 staff gather this information by periodically surveying agencies and by attending community collaborative meetings and participating on human service email lists. Any find-a-ride services that are developed in the Grand Traverse region should be closely coordinated with 2-1-1, and the underlying data should use the same data structure to ensure that data can be easily shared.

The statewide Veterans Transportation Initiative, Michigan 2-1-1, United Way, and the Information and Referral Service are creating a statewide web-based and phone-based, one-stop-shop for human service and veterans' transportation information. It will be important to make it easy to find this website. There should be links to the revised 2-1-1 site from each public transit website, all human services websites and possibly other stakeholder websites. This link should also be included on hard copy materials such as bus schedules.

The Grand Vision partners could explore the possibility of providing centralized trip planning services that go beyond the services offered by 2-1-1, to provide clients with comprehensive assistance in navigating transportation options. The first step would be to partner with 2-1-1 and human service agencies to create a comprehensive regional data inventory and directory of information on all human service transportation service options. This data inventory could be used for a wide range of planning and coordination efforts. For example, a directory could be published in hard copy and made available through the websites and other communications efforts of agencies serving target populations. The directory would also be a valuable resource for agency personnel who serve clients seeking these services.

Support volunteer driver programs

Volunteer driver programs are a cost effective approach to meeting human service transportation needs and have the added benefit of providing flexibility to meet the diverse needs of different populations. While volunteer driver programs should not be relied on as the region's primary source of these services, such programs can serve an important role in filling gaps in service.

A highly successful volunteer driver program has been developed in the Lansing area by Gale Capling with the Clinton Area Transit System. This model program provides cost effective service that is also highly effective at meeting client needs by combining NEMT trips with other stops such as grocery shopping. Originally funded through the FTA New Freedoms grant program, it received recognition as a New Freedoms best practice. We recommend exploring the potential to replicate this program in the Grand Traverse region.

Travel training programs

Using transit can be intimidating for many first time riders – especially the elderly and people with disabilities. Travel training programs targeted at and designed for these populations help people become comfortable using transit services by improving their knowledge of routes, stop locations, fares, and other aspects of fixed route bus service. It is important for travel training to include live demonstrations of how to board the bus,

pay, and navigate transit schedules and other information such as web based resources and mobile apps. Many communities around the nation have developed successful travel training programs through partnerships between human service agencies and transit providers. Trainings are often conducted at convenient locations such as senior centers or during events attended by target populations.

Coordinate with schools

As long as the buses are open to the general public, public transportation can contract with school districts and design routes to serve school-aged children. Similarly, school buses may offer opportunities to meet some human service transportation needs. Under Michigan law school buses cannot be used for general public transportation, however under certain circumstances when they are not being needed for school purposes students they can be used "by an organization or group for purposes of transporting senior citizens or retired or disabled persons, or by a nonprofit organization for purposes of transporting its members to or from an activity, event, or outing, if the school determines that suitable or economically feasible public or private transportation is not available for this purpose." The regulatory restrictions and requirements are detailed in Michigan's Pupil Transportation Act (Act 187 of 1990 Section 257.1865).

Priority 6: Regional Leadership

As they take steps to expand and improve transportation options in the region, the Grand Vision partners will need to decide whether to continue with the current informal leadership structure or whether to create one or more formal organizations to provide leadership.

A number of Mobility Management tasks could be handled by a regional organization including:

- Inter-county route planning.
- Coordinating data sharing.
- Coordinating regional funding efforts and revenue sharing
- Building relationships and facilitating stakeholder meetings with the private sector, human services and others to broaden and strengthen partnerships.
- Marketing, including developing and maintaining one-call one-click services such as a centralized website similar to Get Around the Western U.P.

Additionally, Transportation Demand Management (TDM) efforts could be handled by a regional organization. TDM and mobility management are closely related and complementary, so they could potentially be handled by the same organization. Both revolve around helping people find transportation options and better coordinating those options. However, TDM typically focuses on commuters and large employers, while mobility management typically focuses on people with disabilities, seniors, and people with low incomes (we have included tourists and event goers as an additional market segment for mobility management). It is important to recognize the differences between

the needs of the user groups and to tailor services, marketing, and coordination with the key players appropriately.

Goals and Strategies

This priority focuses on implementation of Goal 4 Strategy A in Table 1 of Section 1 above.

Identified Champions

Northwest Michigan Council of Governments, Michigan Land Use Institute, transit providers, leaders of the Grand Vision

Funding and Resources

Many communities had used FTA 5316 New Freedom funds for their mobility management, which was consolidated into the general public transportation programs und MAP-21. This means that the costs of mobility management now must show cost savings or increased access to compete for FTA 5311 rural general public funds against bus operations.

Where mobility management is tied to transportation demand management, Congestion Mitigation and Air Quality (CMAQ) funds can be used, especially in areas of nonattainment. Mobility management is an eligible cost under most FTA operating grants, including the rural general public program and the tribal transit program. Grants often are available through other federal programs outside the Department of Transportation. For example, Northwest Michigan and the Greater Yellowstone have leveraged Department of Energy grants. The new Administration for Community Living, part of the Department of Health and Human Services, may become interested in this type of work. Funds can also come from a partnership with local businesses. In short, finding funding requires the ability to successfully apply for and implement grants from public and private sources, and creativity in developing partnerships.

Implementation Steps: Year 1

Research types of formal regional organizations that could be created under current Michigan statutes.

The regional leadership approach taken by the Grand Vision partners will likely be determined by the scope and ambitiousness of the regional mobility management actions they decide to implement. It is important to note that the following models are not necessarily exclusive of each other. For example, in Oregon a non-profit foundation was created as a separate but complementary organization to support NWOTA's efforts. Similarly, the non-profit organization envisioned by MLUI could be complementary to any of the models presented below.

Staffing for regional mobility management could be incorporated into any of the models below. Many of the most effective mobility management programs around the nation are operated by non-profit organizations with a strong focus on human services coordination. In the Grand Traverse region, the most effective strategy for developing

funding for mobility management may be to focus on programs that will expand and improve regional transportation options for job access and for enhancing the tourismbased economy.

- Non-Profit Mobility Management and TDM Organization The Michigan Land Use Institute (MLUI) is working on a four to five-year plan for creation of a new program that would help facilitate and implement mobility management and TDM strategies with a focus on job access and economic development. The organization would build relationships with employers and would work with public transportation providers, the tribe and MDOT to design and implement programs.
- Friends of Regional Transit Foundation The Grand Vision partners could explore
 the potential to follow the Oregon model of creating a non-profit 501(c)(3) foundation
 that will serve as a "friends of transit" group assisting with fundraising for multi-modal
 transportation projects and programs. In NWOTA's service area, the North by
 Northwest Transportation Foundation is governed by a board of community members
 representing businesses, higher education and other civic interests in all five
 counties. Their goal is that the partnership between the Foundation and NWOTA will
 play a key role in supporting the success and sustainability of the regional system.
 As NWOTA identifies needs that the Foundation might be able to help fund, a formal
 request to the Foundation as part of a long term goal of overhauling the current
 grant-dependent funding model for transit and achieving true sustainability through a
 departure from dependence on unsecure revenue sources and the creation of
 reliable funding streams.
- Intergovernmental Agreement Model (e.g. NWOTA) This is an intermediate option between a friends group and a regional authority. The Northwest Oregon Transit Alliance was formed by intergovernmental agreement (IGA) and is considered a separate public entity under Oregon statute. When originally formed, one of the five partners was named as fiduciary for the purposes of administering their initial grant funding. NWOTA is now going through an amendment process to re-define the fiduciary provisions of their IGA. While not yet final, the new provisions should allow them to operate independently so that they don't have to use one of their parent agencies as a financial pass-through. NWOTA members are willing to share their insights about the process of creating a regional organization. One of the partners who played a lead role in this process is Jay Flint, who is a licensed attorney in addition to his roles as Executive Director for Sunset Empire Transportation District and Chair of NWOTA.
- **Regional Transit Authority (RTA)** If creation of an RTA is provided for under Michigan law, or if the partners want to lobby to create this authority, this option would go a step further than the NWOTA model. An RTA or something similar to it would likely be necessary for implementing a new regional intercity service as described in concept above under Priority 1.

A good example is the Rio Metro Regional Transit District in New Mexico. The Rio Metro RTA Board of Directors consists of 17 elected and appointed officials representing three counties and eight communities that operate local public transportation systems. The RTA was built based on longstanding relationships within the regional COG. The stakeholders worked through several sessions of the New Mexico legislature to pass the statutory authority to create an RTA. The RTA operates the regional Rail Runner Express rail service and also has authority to allocate bus transit funding between the member transit systems.

 Leadership through COG, MLUI and Working Groups - The partners could continue to proceed with their current, somewhat dispersed leadership structure. Improved and expanded regional transportation services would be implemented by collaboration and memorandums of understanding between two or more of the public transit agencies, also potentially including partners such as the tribe and private transportation providers.

Decide whether one or more formal organizations or informal working groups should be formed to lead ongoing efforts.

Don't let this process delay implementation of beneficial short term actions that don't require regional leadership, such as service improvements that can be coordinated between two adjacent counties.

Implementation Steps Years 2-5

Starting in year 2, the Grand Vision partners should organize and establish the organizational structures and groups necessary for providing leadership and implement moderately ambitious, achievable actions such as a centralized website and regional transit branding. As the leadership structure matures, the region can focus on tackling more ambitious actions and also focus on addressing long term financial sustainability for improved and expanded regional transportation.

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