# Personal Mobility in North Dakota: Trends, Gaps, and Recommended Enhancements

# **EXECUTIVE SUMMARY**

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North Dakota Department of Transportation

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### Disclaimer

The contents presented in this report are the sole responsibility of the Upper Great Plains Transportation Institute and the authors.



September 2, 2005

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#### PERSONAL MOBILITY IN NORTH DAKOTA

The North Dakota Department of Transportation (NDDOT) accepts your final draft of "Personal Mobility in North Dakota." The recommendations in the report will be reviewed by NDDOT to see which ones NDDOT may want to pursue.

If you have any questions, please call me at 701-328-4334.

DAVE LEFTWICH - LOCAL GOVERNMENT ENGINEER

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# Personal Mobility in North Dakota: Primary Findings & Recommendations

## **Primary Findings:**

- North Dakotans have and use cars personal vehicles are the primary mode of choice and necessity.
- Personal vehicles are not available to everyone and they are not always the best modal choice.
- North Dakota's commercial transportation system is fairly good but has tenuous components (intercity bus, Amtrak, and essential air service).
- Paratransit services exist in all North Dakota counties but service is not universally available.
- Public transit solutions to many personal mobility problems may be cost-prohibitive.

## **Primary Recommendations:**

- Expand rural paratransit services in marginally-served areas.
- Ensure connectivity within regions and among regional hubs.
- Promote non-traditional approaches to satisfy many unmet personal mobility needs (volunteer driver programs, commuter vanpools, etc.).

# **Executive Summary**

In September 2002, the North Dakota Department of Transportation (NDDOT) published *TransAction*, a long-range transportation plan for the state. One of the plan's goals is to improve North Dakota's transportation system to allow for optimal personal mobility.

In furtherance to *Transaction*, NDDOT contracted with the Small Urban & Rural Transit Center (SURTC) to conduct this personal mobility study. Its purposes are to:

- Identity desired levels of personal mobility for various segments of North Dakota's population and various geographic areas,
- Identify gaps that exist regarding personal mobility in North Dakota, and
- Provide state policy makers with options for enhancing of personal mobility for state residents.

SURTC created a steering committee to oversee the completion of this study. The committee was comprised of individuals with special insights into North Dakota's passenger transportation industry and the mobility needs of state residents. Their contributions to this study and their commitment to improved personal mobility are acknowledged and greatly appreciated.

Personal mobility is vitally important – it creates economic activity, facilitates personal well-being, and enhances quality of life. Personal mobility is easily taken for granted, especially by people who have direct access to a personal automobile. Not everyone, however, has access to personal transportation and certain types of travel are better accomplished by other means.

Unlike many urban states, North Dakota does not typically monitor personal mobility in terms of travel times, traffic congestion, pollution, land use, commuter choices, cost, reliability, quality, safety, etc. While these factors are certainly important in states like North Dakota, the ultimate concern, in many instances, is simply whether or not service is available. This study therefore focuses on the extent to which North Dakotans have access to mobility-enhancing facilities and services and presents recommendations concerning related enhancements.

Fortunately, North Dakota has the infrastructure in place to meet most of its residents' personal mobility needs:

- The vast majority of North Dakotans' personal mobility needs are satisfied with private automobiles. Approximately 93.4 percent of the state's housing units possess a vehicle, compared to 92.1 percent nationally.
- There are 40 dial-a-ride/paratransit services in North Dakota, many of which operate on a county-wide or multi-county basis (see corresponding map on following page). Some level of related service is available in each of the state's 53 counties.
- The state's four largest cities have fixed-route bus systems.
- North Dakota's eight largest urban areas have commercial air passenger service. Passenger boardings have increased by 43 percent over the past 25 years.
- Ten of North Dakota's 13 largest cities have intercity bus service.
- Amtrak's route through North Dakota has remained unchanged for the past 25 years and service levels have increased. Ridership rose by 4.6 percent in 2004.
- There are 14 taxicab operators in North Dakota. All of the 12 cities that have a population of 5,000 or more residents have commercial taxi service available.

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### North Dakota Multicounty Transit System Locations

Source: Enhancing Personal Mobility Services in North Dakota through Increased Coordination. Upper Great Plains Transportation Institute, 2004

West River Transportation

James River Senior Citizen's Center

Souris Basin Transportation

Williston Council on Aging

• Of the state's 213 school districts, 201 have some form of direct transportation services for students. Of the 12 districts that do not, seven provide financial support to families that transport students to and from school.

North Central Planning Council

www.surtc.org

Other

North Dakota State University

• The 2005 Legislature increased state funding for local transit systems from approximately \$1.5 million to \$2.25 million annually. Federal support for transit has also been increasing since 1991.

Despite having an infrastructure capable of satisfying many of its residents' personal mobility needs, North Dakota faces numerous mobility challenges.

- More than 17,000 North Dakotans do not have direct access to an automobile to satisfy their mobility needs.
- An aging population will make increasingly more state residents dependent on others to help meet their mobility needs.
- Continued out-migration is making it increasingly difficult to provide transit services to small towns and rural areas.
- Declining student populations portend drastic changes to the state's public education system and related student transportation services.

- The number of intercity bus services declined from 12 in 1981 to four in 2005. Two of these carriers have been in bankruptcy in recent years and one receives in excess of \$100,000 in state-administered federal aid annually to subsidize its operations. Since 1981, 19 cities with populations of 1,000 or more have lost bus service.
- Amtrak has been repeatedly targeted for federal budget cuts and the future of its service in North Dakota and elsewhere remains tenuous.
- Essential air service funding has helped maintain passenger service in Devils Lake, Dickinson, Jamestown, and Williston. EAS funding is a frequent budget-reduction target in federal budgets; the loss of this funding could threaten air service in affected communities.
- There are relatively high concentrations of mobility impaired individuals living in each of the state's eight largest urban areas and in counties with relatively large Native American populations.
- Even though there is some level of dial-a-ride/paratransit service available in every county, many communities do not receive service.

Based on mobility factors associated with age, income, disabilities, etc., a mobility needs index was developed to help identify the counties and cities with the greatest concentrations of need. This methodology is only an attempt to measure needs. It does not suggest that all these needs are unmet. To the contrary, some communities may have systems and services in place that are satisfying many of their residents' needs. Related county ratings are presented in the following table.

#### **Mobility Needs Index Values for North Dakota Counties**

Value	County
3.8	Cass
3.6	Burleigh, Ramsey, Walsh, Williams
3.4	Grand Forks, Morton, Ward
3.2	Barnes, Richland, Rolette, Stark, Stutsman
3.0	Eddy, Pembina, Traill
2.8	Benson, Dickey, Pierce, Ransom
2.6	Foster, McIntosh, McLean, Mercer, Nelson, Wells
2.4	Bottineau, Griggs, LaMoure, McHenry, Mountrail, Sioux
2.2	Adams, Cavalier, Emmons, Sargent
2.0	Renville, Towner
1.8	Hettinger, Kidder, Logan, McKenzie, Sheridan
1.6	Burke, Divide, Grant, Steele
1.4	Billings, Bowman, Dunn, Golden Valley, Oliver
1.2	Slope

The steering committee recognized that economic realities prevent the provision of high levels of universal service to all areas of the state. In an attempt to balance these realities with the needs of various geographic areas and demographic groups, the committee sought to identify base levels of required service for each of the groups and areas identified by the mobility grid on the following page.

# Mobility Goals Base Level Government Supported Services for Various Demographic Groups & Geographic Areas

Demographic Group / Geographic	Pre- School	Grades K-12	Adult	Seniors Age 60+	Low Income	Disabled
Area						
	Head	School	Weekly	Weekly	Weekly	Weekly
Rural Areas &	Start, &	&	Dial-A-	Dial-A-	Dial-A-	Dial-A-Ride,
Cities Under	Emerg.	Emerg.	Ride &	Ride &	Ride,	Voc. Rehab.
4,500			Emerg.	Emerg.	Medicaid,	&
					TANF, &	Emerg.
					Emerg.	
	Head	School,	Daily	Daily	Daily	Daily
Cities	Start,	Taxi, &	Dial-A-	Dial-A-	Dial-A-	Dial-A-Ride,
4,500 –	Taxi, &	Emerg.	Ride,	Ride,	Ride, Taxi,	Taxi, Voc.
20,000	Emerg.		Taxi, &	Taxi, &	Medicaid,	Rehab. &
			Emerg.	Emerg.	TANF, &	Emerg.
					Emerg.	
	Head	School,	Daily	Daily	Daily Fixed	Daily Dial-
Cities Over	Start,	Fixed	Fixed	Fixed	Route, Taxi.	A-Ride,
20,000	Fixed	Route,	Route,	Route,	Medicaid,	Fixed Route,
	Route,	Taxi, &	Taxi, &	Taxi, &	TANF, &	Taxi, Voc.
	Taxi, &	Emerg.	Emerg.	Emerg.	Emerg.	Rehab. &
	Emerg.					Emerg.
All Cities & Rural Areas	Connectivity within region to regional hub and from regional hubs to other hubs, both intrastate and interstate, via ground and air.					

By comparing this grid's mobility goals with a services inventory, researchers were able to identify gaps and to develop cost estimates for corresponding service enhancements. Related recommendations are presented later in this executive summary.

The steering committee stressed that providing the base levels of service outlined herein would not, in fact, satisfy many of the mobility needs of state residents. Supplemental services would be required to satisfy more than base level needs. The committee believes, however, that providing higher levels of service should be a local decision and that related programs should be tailored specifically to meet local needs. Meeting some personal mobility needs may also be outside the realm of government responsibility.

Given this differentiation between basic and supplemental services, this study developed two sets of recommendations. The first set relates to universal mobility needs, state level goals, and the provision of base levels of service throughout the state. The second set involves supplemental services which address mobility needs tailored specifically to a particular city, county, region, or demographic group.

Regardless of whether a recommendation involves basic or supplemental services, the implementation of related programs will require a strong partnership between state transportation agencies and local facilitators. While state agencies may be able to provide guidelines and

incentives to encourage the implementation of mobility programs, the true work must often be done at the local level.

In recognition of this fact, many of this study's recommendations promote mechanisms which facilitate state-local partnerships. Some of these mechanisms involve financial incentives which encourage local initiatives while others involve disincentives which also encourage local actions regarding existing services.

The need for local initiatives to establish many of the base level and supplemental services discussed here does not mean that there is not a role for state transportation agencies in this process. On the contrary, state leadership and technical and financial support may be crucial if related programs and services are to be created. Program success will be heavily dependent on state and local partnerships and ongoing coordination and cooperation.

In addition to definitive recommendations, this study also presents best practices information on mobility programs which have been designed and implemented in other parts of the country – areas which have low population densities and mobility challenges similar to those experienced in many parts of North Dakota. This study's recommendations and best practices suggestions are presented in the remaining pages of this Executive Summary.

As indicated earlier, it must be recognized that personal mobility needs are, in fact, personal. These needs vary from person to person and there is no single solution that will satisfy everyone.

Consequently, there is no one recommendation or program that will eliminate all of the state's personal mobility problems. Rather, addressing personal mobility needs must be done via a variety of approaches and programs, each designed to target needs that are common to various segments of the population. This is the approach taken relative to the following recommendations.

### 1. Base Level Service Recommendations

#### 1.1 Focus on basic access rather than service enhancements

This study's steering committee felt that it is important to differentiate North Dakota's personal mobility plan from those of other states which have higher population densities and more mature personal mobility systems. Correspondingly, the steering committee recommends that North Dakota's personal mobility planning efforts focus on ensuring availability of and access to services. Once services are in place, related enhancement initiatives may be undertaken.

### 1.2 Implement recommendations of coordination study

In November 2004, SURTC completed a transit coordination study for the North Dakota Department of Transportation (Enhancing Personal mobility Services in North Dakota through Increased Coordination). The steering committee endorses that report's recommendations. In summary, the coordination study suggested the following:

- Issue a Governor's directive to encourage transit coordination efforts at the state, regional, and local level.
- Establish a state-level coordinating body to promote coordination and communications among state agencies that fund personal transportation.
- Establish regional transportation coordination boards and employ regional transportation coordinators.
- Provide state funding to support start-up and ongoing operations of regional transportation coordination boards.
- Provide training and technical assistance to regional boards.

The implementation of the remaining recommendations of this study would be greatly facilitated by the regional and state board concept outlined above.

Federal Executive Order No. 13330 mandates that federal agencies work together to coordinate their transportation programs. State-level efforts among key transportation agencies and related directives to local service providers would further this effort and lead to related cost savings and, more importantly, service enhancements and increased personal mobility.

# 1.3 Promote the provision of base level public transportation/personal mobility services in North Dakota

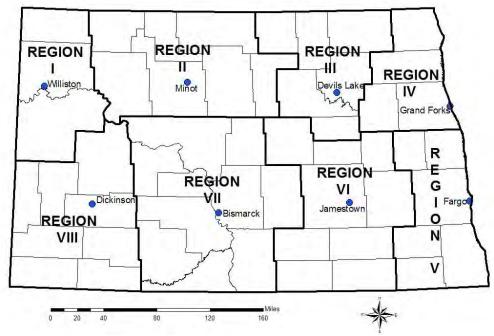
Fortunately, North Dakota has transit service providers in place that reach into all of the state's 53 counties. These operators may be potentially able to satisfy the majority of the personal mobility needs of the state's transportation needy. The gap analysis conducted as a part of this study indicated, however, that not all rural transit services provide comprehensive services to all parts of their respective counties and corresponding service levels should be expanded to satisfy the prescribed service goal.

Capital and operating expenses associated with expanded rural services were estimated based on three levels of service. These expansions would allow lower service-level systems to increase their offerings to levels comparable to some of the state's higher-achieving paratransit operations. These increases would lead to expanded services for two-thirds of North Dakota's rural systems and involve operating expense increases of 25-50 percent above 2004 levels (between \$850,000 and \$1.7 million). Capital costs for additional vehicles are estimated at \$1.5 to \$3 million.

# 1.4 Promote provision of public transportation/personal mobility services to and within regional hubs

Service systems should be designed in a hub and spoke manner to provide services within each county and each county system should be linked to that region's hub city. Services should also be in place to facilitate personal mobility within these regional hubs. This intra-region mobility goal will be achieved and done so in an efficient manner if the coordination recommendations discussed earlier are implemented.

## North Dakota Economic Planning Regions and Hub Cities



Source: Enhancing Passenger Mobility Services in North Dakota through Increased Coordination, 2004

North Dakota's four largest urban areas (Fargo-West Fargo, Bismarck-Mandan, Grand Forks, and Minot) all provide local transit services that meet this study's criteria for base level service. Fixed-route bus systems in Fargo-West Fargo and Grand Forks are the most comprehensive while Bismarck-Mandan has just started to receive fixed-route services and might be considered a work in progress. Minot's public transit service has the greatest need and opportunity to increase its services because the current service focuses primarily on one mobility sector, namely primary and secondary school students, and provides only limited service to the general public. The NDDOT should continue to encourage expansion of all four fixed-route services. Particular attention should be paid to the development of the Bismarck fixed-route system and encouragement of a broader market focus in Minot.

In addition to existing paratransit and fixed-route bus systems which provide mobility services within counties, regions, and regional hubs, commercial taxi services also play a vital role in North Dakota's personal mobility system. Taxi services are currently available in all eight of the state's hub cities. Many of the state's taxi operators receive capital and/or operating support from state or local government and coordinate their services with local dial-a-ride systems. The end result is longer hours of operation and higher levels of service for area residents.

Steps should be taken to continue and enhance this partnership. Including taxi services in the coordination recommendation presented earlier will further the achievement of this goal.

## **North Dakota Cities Offering Taxi Service**

(Taxi Providers by Town Listed in Parenthesis)



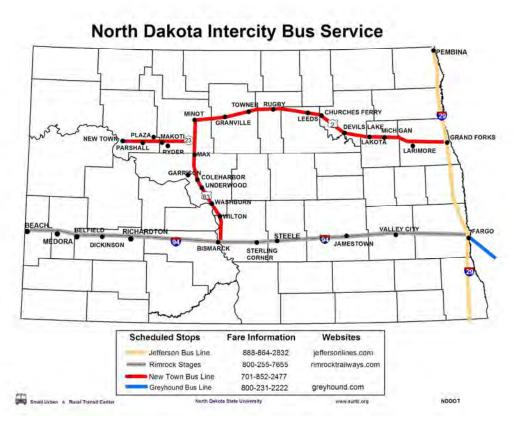
Source: Small Urban & Rural Transit Center, 2005

Two of the state's smaller urban areas, namely Beulah-Hazen (85 miles northwest of Bismarck) and Grafton (40 miles northwest of Grand Forks), do not have local taxi services as recommended by the mobility grid. Both of these communities are near the lower end of the population spectrum which calls for such services. Local needs assessments should be considered to determine if these services are, in fact, needed and to what extent government assistance may be needed and available to support their operations.

### 1.5 Pursue connectivity between regions (intra and interstate)

A logical extension of the hub and spoke system described in the preceding recommendation is the ability to travel between hubs. In some instances those hubs will be other regional hubs in North Dakota but in some cases related travel would tie into interstate travel. This connectivity is required to access things such as specialized medical services, vacation travel, etc.

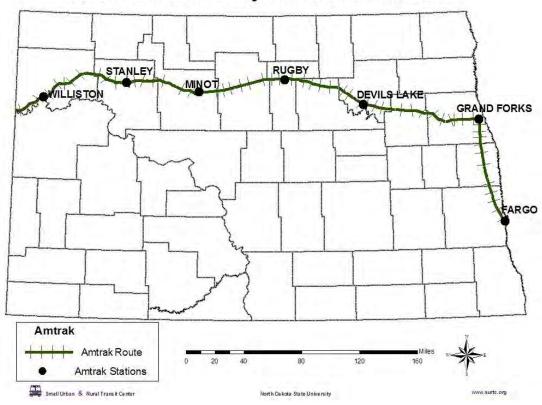
A bus advisory task force should be created to promote discussions involving the bus industry, state transportation agencies, and paratransit operators. The state should also consider conducting a needs assessment of the state's intercity bus industry. The future of this industry is essential if the state hopes to maintain and enhance connectivity between its regional hubs. A map of the state's intercity commercial bus routes is presented below.



Source: Small Urban & Rural Transit Center, 2005

Five of North Dakota's eight regional hubs also have access to Amtrak service. While service levels have increased in the past 20 years and passenger boardings are up in recent years, federal funding support for the entire Amtrak network is tenuous. NDDOT, the state's congressional delegation, and cities along Amtrak's route through North Dakota have been active supporters of continued service. This effort should be maintained to help ensure continued passenger rail service in and through North Dakota. If Amtrak service is discontinued in North Dakota, aggressive action should be taken to provide commercial bus transportation between Williston and Minot to thereby maintain the Williston region's connections to other major hub communities in North Dakota.

## North Dakota Intercity Amtrak Rail Service



Source: Small Urban & Rural Transit Center, 2005

All eight of North Dakota's regional hub communities have commercial airports with scheduled air passenger service. The vast majority of these services are to national hub airports such as Minneapolis or Denver vs. direct service to other in-state cities.

Air passenger services in Devils Lake, Dickinson, Jamestown, and Williston are available at least in part due to the provision of federal essential air service funding. EAS funding is a frequent budget-reduction target in federal budgets; the loss of this funding could threaten air service in affected communities.

As with Amtrak, state entities should continually monitor this situation and take steps to insure the maintenance of air passenger services in North Dakota's eight hub communities. The Aeronautics Commission should continue in its leadership role regarding air service in North Dakota. The Commission should also be a member of the proposed Mobility Task Force so air service can, to the greatest extent possible, be coordinated with those of other mobility facilitators.



Source: North Dakota Aeronautics Commission, 2004

# 1.6 Establish uniform performance measures for publicly supported transportation services and consider rewarding "achieving" programs

NDDOT and other state transit agencies should, in collaboration with grantees, review existing data reporting requirements and implement changes which will result in the submission of accurate and meaningful statistics. This information is vital to local and state administrators and state policy makers. At a minimum, grantees should be required to keep and report vehicle hours – a very common transit operating statistic. As part of this review, a detailed listing of definitions should be developed so that all systems report comparable data.

Once the data elements are agreed upon, corresponding information should be disseminated to grantee staff via guidelines and instructions, on-line help, and hands-on training sessions. Grantees should also receive assistance to develop a local performance evaluation framework that would include 8-10 measures that track efficiency, service quality, and safety. SURTC-lead workshops could help in developing and implementing this recommendation.

Implementing this recommendation would also allow NDDOT to collect and verify consistent and relevant data and to publish related annual statistical reports and systems profiles. This is a common practice of many states. Concurrently, NDDOT could work with grantees to streamline data reporting via the Internet to minimize the administrative burden for both grantees and the state. NDDOT has already taken steps in this direction by providing grantees with computer equipment that could be used in the data collection and submission process.

Once transit systems and NDDOT are comfortable with the performance evaluation process and the accuracy of the data, NDDOT should consider developing performance bonuses to reward systems that perform to a high level or show substantial improvement.

# 1.7 Survey state residents concerning unmet personal mobility needs and develop a personal mobility index to monitor changes in personal mobility

Occasional surveys of state residents should be conducted to ascertain existing mobility traits and unmet needs. The findings would enable policy makers and program administrators to design and implement programs that better meet unmet personal mobility needs.

Such a survey, if conducted on a regular basis over a period of years, could also be tied to the development of a personal mobility index that would assist with the monitoring of new and ongoing mobility enhancement efforts. Such an assessment would allow policy makers to determine if, in fact, the state's efforts were yielding the desired results. Program modifications could then be made based on the findings of such reviews.

### 1.8 Establish a personal mobility task force

The director of the North Dakota Department of Transportation should consider establishing a Personal Mobility Task Force comprised of at least the following:

- NDDOT director and transit personnel;
- NDDHS director and personal associated with Medicaid, TANF, Vocational Rehabilitation, Aging Services, etc.;
- North Dakota Aeronautics Commission;
- North Dakota Department of Public Instruction;
- Small Urban & Rural Transit Center;
- Fixed-route city bus system representative;
- Multi-county paratransit system representative;
- Operators representing state taxi and intercity bus systems;
- Amtrak; and
- Personal mobility advocacy groups.

This task force should meet at least semi-annually to proactively monitor trends related to personal mobility and the various modes of travel in North Dakota and to work together to maintain and enhance the personal mobility of state residents.

## 2. Supplemental Service Recommendations

Implementing the base level service recommendations outlined in the preceding pages would facilitate the satisfaction of only the most basic mobility needs of the state's mobility impaired. Service enhancements and additional forms of service would be required to address a wider range of mobility needs. Related recommendations concerning supplemental mobility services are presented in the following subsections.

Implementing these and other supplemental mobility services may require a considerable amount of local initiative. State encouragement and financial support may help jump start these efforts but long-term success will require local involvement, insights, management, and commitment.

# 2.1 Provide state incentives to encourage local initiatives that facilitate the achievement of state mobility goals

The Department of Transportation and the Department of Human Services should, to the extent possible, utilize available funds to initiate and operate local and regional surface transportation services that address the state's personal mobility goals. Programs should also be considered to provide implementation funding for creative mobility programs that are conceived by local, regional, and state-level mobility interests.

These efforts should be coordinated through the state coordinating council recommended earlier. The North Dakota Aeronautics Commission should be included in these discussions.

# 2.2 Promote coordination of public, social service, school, church, & commercial transportation services at the local, regional and state levels

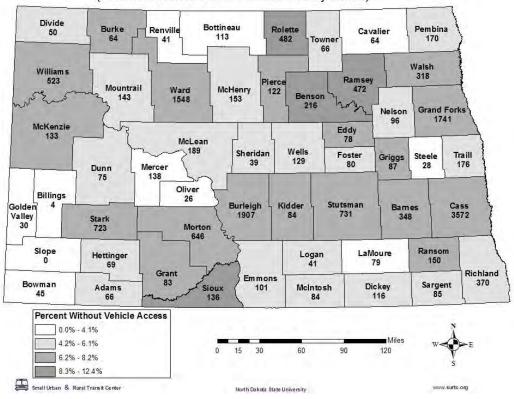
Efforts should be taken at both the state and local levels to coordinate all local transportation services. This coordination would result in lower aggregate operating costs and/or higher levels of service to area residents. This coordination would best be accomplished via the establishment and operations of state and local coordinating councils discussed earlier.

# 2.3 Promote friends and neighbors and faith-based approaches to satisfying as many mobility needs as possible, especially in rural areas

Efforts should be undertaken at state and local levels to identify local entities who are willing and able to serve as a clearinghouse to bring together volunteer drivers and persons who are in need of transportation. The map on the following page identifies the number of people in each county who do not have direct access to a personal automobile. This volunteer driver effort might be facilitated if the state developed a "how to" manual that could be used to promote the concept to potential operators.

## North Dakotans Without Vehicle Access by County

(Persons Without Vehicle Below County Name)



Source: Small Urban & Rural Transit Center, 2005

# 2.4 Encourage and facilitate ridesharing to help meet commuting-related transportation needs in both urban and rural areas of North Dakota

Efforts should be undertaken by the Department of Transportation to reestablish commuter ridesharing programs in North Dakota. These programs could be run at the state level or, as was the case with the volunteer driver programs discussed earlier, they could be promoted at the state level with actual programs being run locally by city or county governments, chambers of commerce, major employers, etc.

In addition to helping satisfy the mobility needs of state commuters, this program would help meet the workforce needs of employers and promote local economic development initiatives. Such a program would also reduce air pollution and help, in some instances, address local parking and traffic congestion problems.

# 2.5 Utilize transit-related ITS applications to enhance personal mobility and system efficiencies

ITS (intelligent transportation systems) applications should be used selectively to improve system efficiencies and safety and to improve personal mobility. Examples include utilizing automatic vehicle location (AVL) technologies for transit buses and global positioning systems (GPS) technologies for rural addressing and school bus routing.

Transit tracking technology would facilitate schedule adherence and allow route planners and management to increase the efficiency of their operations.

Geocoding addresses into a GIS program would provide a statewide database of information that could be used by various state and local agencies to improve personal mobility throughout the state.

### 2.6 Encourage and facilitate pedestrian and bicycle transportation

Planning for pedestrian and bicycle facilities is a part of the planning process that is undertaken by NDDOT and the state's largest cities. This process should be continued, both for the sake of people who commute as pedestrians and/or via bicycle, and for those who use these forms of transportation for recreational and/or personal health reasons.

### 3. Best Practices - Mobility Programs That Work

A number of communities around the country have initiated innovative programs to enhance the mobility of area residents. Some of these programs may hold potential for certain North Dakota communities.

### 3.1 Independent Transportation Network – Portland, Maine

ITN America / Independent Transportation Network operates within a 15 mile radius of Portland, Maine. Volunteer drivers use personal automobiles and, in some cases, accessible transit vehicles to provide local transportation services to residents.

Riders are charged for services that they receive. The fare structure includes a pick-up and mileage charge. Riders are sent a monthly billing statement for services rendered.

Drivers are compensated at a rate of 25 cents per loaded mile. They can receive either cash or a transportation credit which goes into their account. Their account balance may be retained until such time as the driver becomes a recipient of ITN services.

Drivers may also donate all or a portion of their account balance to other system users. Similarly, ITN sells gift certificates that may be credited towards user accounts. Park and Ride type credits may also be issued by local merchants who wish to encourage ITN users to patronize their businesses.

ITN America operates totally with monies generated from fares and grants. It also maintains volunteer insurance to supplement the liability insurance that must be maintained by volunteer drivers.

### 3.2 Volunteer Driver Program – Southeastern Minnesota

Semcac is a community action agency which serves several counties in southeastern Minnesota. One of Semcac's programs uses volunteer drivers to provide transportation services to senior citizens for medical and personal appointments. Riders must call at least 48 hours in advance to schedule a ride.

Riders are sent monthly letters requesting a donation to cover the cost of services provided. Local rides of 10 miles or less are \$5.50 per round trip. Longer rides are 76.5 cents per mile.

Volunteer drivers are compensated at a rate of 37.5 cents per mile, plus parking and meal expenses. Semcac has supplemental auto and liability insurance in place for the protection of both riders and drivers.

### 3.3 School Districts Coordinating Services with Transit Systems – Iowa

In Iowa, 23 transit agencies coordinate in some manner with more than 45 school districts. There are three main types of coordinated resources including capacity, specialized fleet equipped to serve passengers with disabilities, and infrastructure through which savings can occur. Transit ridership often experiences sharp, directional peaks, leaving unused capacity available in the off-peak direction. Since transit vehicles must also be equipped with a lift to accommodate disabled riders, school districts can contract with public transit to transport students with special needs to school as well. Available infrastructure such as fueling stations, tire purchases and vehicle maintenance can also be coordinated.

### 3.4 State Supported Commuter Ridesharing – State of Utah

Using Federal-aid highway trust funds, the Utah Department of Transportation makes interest-free loans to companies or individuals to purchase new vans for use as commuter vanpools. Vehicles must have a capacity of at least seven passengers and at least 70 percent of the vehicle's mileage must be used for work commutes.

To qualify, applicants must submit a qualifying application and pass a corresponding credit check. Two vehicle bids are required and program participants must make a 6.77 percent down payment on the vehicle plus applicable taxes and license fees. These expenses and subsequent loan payments and operating expenses are recovered via monthly fees charged to vanpool riders. Drivers typically ride free.

Vanpool riders typically experience reduced commuting costs (including related tax benefits), less stressful commutes, and increased riding comfort. Similar programs are offered by other states and by numerous transit authorities and government associations around the country.

NDDOT operated a comparable vanpool program from approximately 1979 through the mid-1980s. That program was eventually discontinued as fuel prices and interest rates declined and as major power plant construction projects were completed. While there is not an organized statewide effort in North Dakota to promote ridesharing via carpools and vanpools, such a program might satisfy some residents' personal mobility problems. SURTC is currently conducting a related feasibility study with funding support provided by the North Dakota Department of Commerce.

### 3.5 Regional Coordination of Transit Services – SW North Dakota

North Dakota Economic Planning Region 8 is comprised of seven counties in southwestern North Dakota. It is in the process of planning a new regional coordination effort that includes both the rural and city populations. The Southwest North Dakota Transportation Committee set goals and hired the Roosevelt-Custer Regional Council for Development to do initial research. The committee is working with the county commissioners, senior groups, schools, and area transit providers and is exploring the possibility of using the existing school and transit systems to provide rides to all rural and community residents in the region.

State highway maps were used to identify residential locations of everyone over the age of 65 in the seven county area. It may be determined that some type of volunteer services program may also be needed to accomplish the program's goals.

## 4. Recommendations Involving Further Research

This study presents a wide range of recommendations regarding basic and supplemental levels of service, all of which would enhance the personal mobility of North Dakotans. Even though many of these recommendations are interrelated, most can be implemented exclusive of one another.

Some of these recommendations, both base service and supplemental, involve administrative and operational issues which may be implemented without additional research. Others, however, may require further research to achieve maximum benefits, efficiencies, and effectiveness.

Recommendations which involve additional research include:

- Coordination Implementation/Local Needs Assessments implementing the
  recommendations of the coordination study will entail local needs assessments beyond
  what was done as a part of this state-wide personal mobility study. These assessments
  will allow local mobility services to be tailored to the needs of each respective city,
  county, and region.
- Regional Connectivity pursuing implementation of this recommendation would include a needs assessment study concerning North Dakota's intercity bus industry.
- Performance Measures this recommendation suggests a review of existing reporting requirements for local transit operators and the implementation of changes which will result in the timely submission of uniform, accurate, and meaningful statistics. Research could include the development of training materials to facilitate compliance by local transit operators and to instruct these operators on the use of performance measures to manage their systems and report results to the public and their policy boards.

- Mobility Index this recommendation suggests that state residents be surveyed concerning their personal mobility needs and that a related mobility index be developed to monitor changes over time.
- Friends & Neighbors Transportation the implementation of this recommendation would be facilitated by the development of a "how to" manual to facilitate the operations of local volunteer driver programs by churches, community action agencies, chambers of commerce, public-minded businesses, etc.

### 5. Summary

Personal mobility is vitally important to everyone. It facilitates personal livelihood and wellbeing and contributes to quality of life. This is true for North Dakotans and people everywhere.

North Dakota, given its rural nature, faces mobility challenges that are different than those of in many other states. While heavily populated states wrestle with traffic congestion, air pollution, high parking costs, frequency of transit services, etc., major issues confronting North Dakota and other rural states relate to matters such as availability of service, sparse population densities, and aging populations.

North Dakota is fortunate because the vast majority of its residents have a high degree of personal mobility. Further, the state has physical and service infrastructure capable of satisfying many of the mobility needs of residents who do not have direct access to a personal automobile. System refinements are needed, however, to make this infrastructure more responsive to residents' unmet needs.

Unfortunately, there is no one program or action that will satisfy all unmet mobility needs. This should be expected, however, because personal mobility needs vary from person to person and each situation requires a relatively unique solution.

This wide array of needs and related solutions is reflected in the wide range of recommendations presented in this study. Fortunately, having such a large number of recommendations actually makes implementation easier because they can be undertaken on a piece-meal basis over time as budgets and other factors permit.

Implementation of each recommendation will address the mobility needs of certain segments of the state's population. As each of this study's recommendations is implemented, the personal mobility of state residents will increase and overall efficiency and effectiveness of North Dakota's transportation system will be enhanced.